800226

R E P O R T

ON THE

S T A R C L A I M S

Atlin Mining Division

Lat. 58°13'-Long. 131°43'

N.T.S. 104-J-4

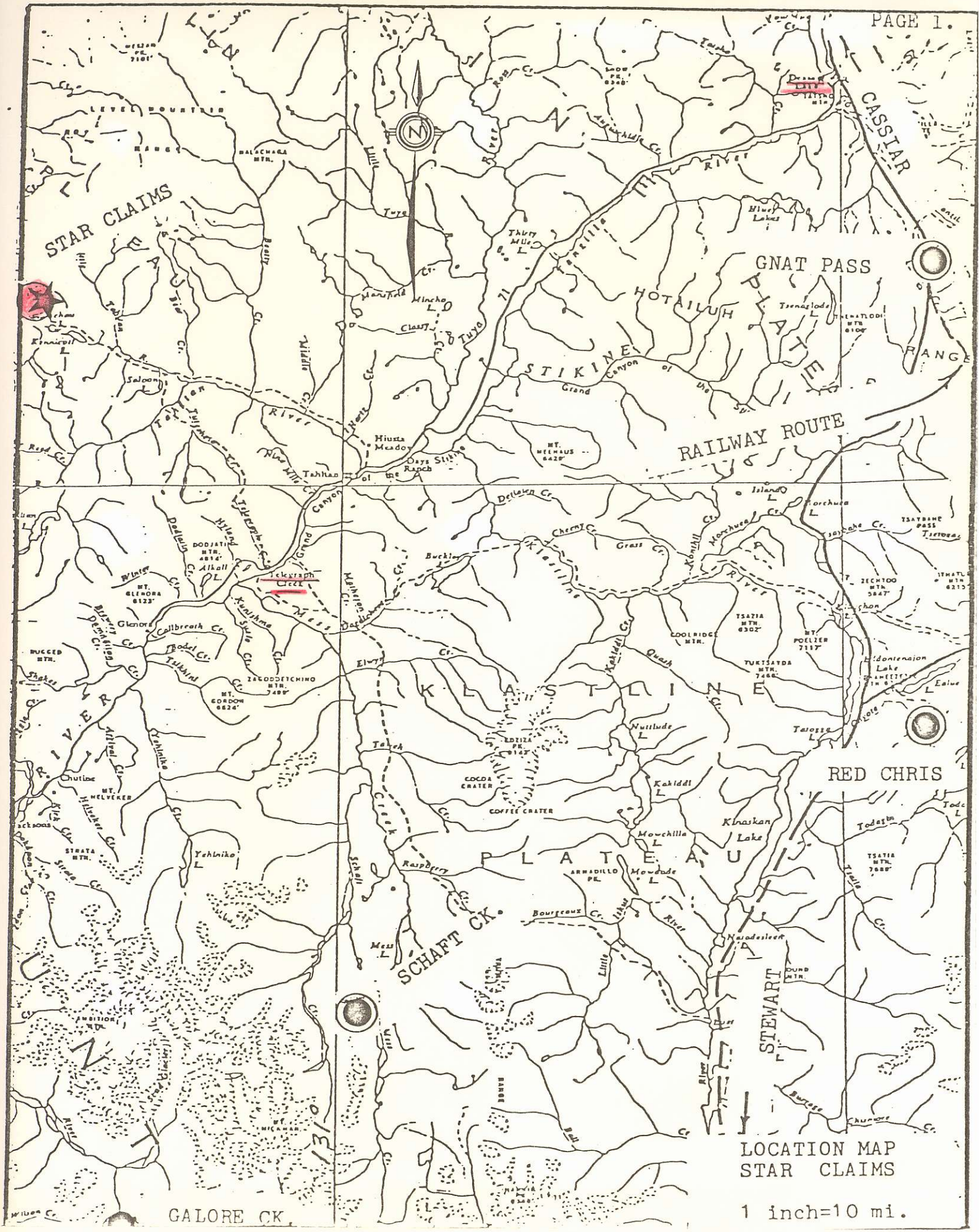
for

UNITED CAMBRIDGE MINES LTD.

by

T.E. Lisle, P.Eng.

November 27, 1980


STAR CLAIMS
GNAT PASS
RAILWAY ROUTE
STIKINE PLATEAU
KLASTLINE PLATEAU
RED CHRIS
SCHAFT CK.
GALORE CK.
STEWART
CASSIAR
LEVEL MOUNTAIN
RANGE
Telegraph Creek
Dease Lake
Stikine River
Tuya River
Klastline River
Mess Creek
Buckley Lake
Kakiddi Lake
Mowchilla Lake
Kinaskan Lake
Tatogga Lake
Todagin
Coffee Crater
Cocoa Crater
Armadillo Pk.
Mt. Helveker
Mt. Gordon
Mt. Gilmore
Mt. Poeltzer
Tsazia Mtn.
Coolbrith Mtn.
Tuktsayda Mtn.
Zechtoo Mtn.
Ithatlo Mtn.
Tsaybahe Pass
Hidontenajon Lake
Dodjatin Mtn.
Zagoddetchino Mtn.
Strata Mtn.
Ambition Mtn.
Mt. Michael
Mt. Meehaus
Hiusta Meadow
Days Stikine Ranch
Glenora
Telegraph Creek
Dease Lake
Tatogga Lake
Todagin
Stewart
Galore Ck.
Schaft Ck.
Red Chris
Location Map
Star Claims
1 inch=10 mi.

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* (With Dick Ck. Mo. anomalies & Proposed drilling)

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SUMMARY AND CONCLUSIONS

United Cambridge Mines Limited carried out a surface exploration program during 1980 on the Star Copper prospect located at Sheslay in the Atlin Mining Division. The program included line cutting, 43 km. of magnetic survey, 26 km. of induced polarization survey, fill in geochemical survey (214 samples) and geological surveys. Trenches at Dick Creek were also cleaned out with a bulldozer.

Exploration at Dick Creek has indicated a large porphyry type zone of copper mineralization within and peripheral to a large dike-like dioritic intrusion. The zone is partly marked by copper and molybdenum soil anomalies, high induced polarization chargeability and scattered high magnetics. Trenching and sampling in 1977 showed areas with important copper content over significant widths including: 0.33% Cu. over 70 meters in trench 1, and 0.417% Cu. over 179 meters in trench 2.

Induced polarization surveys indicate a broad zone of above background chargeability along the northeast flanks of the grid, including areas adjacent to Dick Creek intrusion and northeast of Copper Creek. This zone contains locally abundant pyrite both fracture controlled and disseminated, and lesser magnetite and chalcopyrite commonly associated with altered tuffaceous rock. Small copper-zinc anomalies are also present within this zone.

Surface exploration at Copper Creek, although not complete, did not indicate high priority targets of the type described above. Drill hole data has shown important copper content from core and sludge in one hole (G-2, 28.0' to 171.0' - 0.485% Cu.) however the better intercepts are present over narrower widths, largely in altered volcanic and related sedimentary rocks. Mineralized sections also locally contain important gold and silver content. (Appendix 2). The drilled zone is in a northerly trending belt of fragmental and sedimentary rocks that includes chert, tuff, breccia and minor rhyolite. The structure of this unit is not resolved.

RECOMMENDATIONS

Four drill holes aggregating 930 meters (Fig. 9) would initially explore to a depth of 240 meters, and are recommended for the prime target area west of Dick Creek as defined by surface surveys and trenching and sampling programs.

A fifth drill hole located at Line 2800 SE, 500 NE and drilled southwest at-45° for 110 meters would partly test an area of geochemical and induced polarization interest. This hole should also provide useful geological data on the sedimentary fragmented horizon trending northerly from Copper Creek.

Detailed geological surveys around Copper Creek, and the area southeast of Copper Creek should be continued to determine which targets of interest should be selected for future work.

COST ESTIMATE

1050 meters NQ & BQ Drilling	
Direct Costs - 100/meter	$105,000
Mobilization & Demobilization	
Helicopter & Fixed Wing Support	35,000
Geology	10,000
Engineering & Supervision	15,000
Assaying	5,000
Travel Assessment, etc.	10,000
	$180,000
Contingency	25,000
	$205,000

Contingent upon favourable results from initial drilling, a second more extensive follow-up drilling program will be required.

INTRODUCTION

United Cambridge Mines Limited carried out a surface exploration program on its Star Copper prospect, located at Sheslay in the Atlin Mining Division, between July 10 and October 14, 1980. The program included line-cutting, geochemical, magnetic, Induced Polarization, and geological surveys.

The purpose of the exploration was to investigate, in greater detail, an area containing the Copper Creek and Dick Creek prospects lying to the northeast of the Hackett River. Previous work in these areas resulted in the partial delineation of zones of copper mineralization of possible economic interest grading approximately 0.40% copper.

Due to difficulties encountered in obtaining reliable field personnel, the entire program as laid out was not completed. However, the work did produce the data necessary to proceed with the further exploration of the property.

22 Kilometers of new line were cut and picketed, 13.5 kilometers of old line brushed out and picketed, and 6.25 kilometers of line flagged for a total of 41.75 kilometers. Magnetic surveys were completed over the entire grid. Fill in geochemical surveys (214 samples) were collected from the lines 28 SE to 60 SE between Dick and Copper Creeks. 19.5 kilometers of Induced Polarization survey were completed on

the Dick Creek grid and 6.5 kilometers in 5 lines were completed at Copper Creek. New geological data was collected, mainly from the lines between Dick and Copper Creeks.

The program was under the direction of R.H. Seraphim Engineering Limited. The Induced Polarization and magnetic surveys were under contract to P.E. Walcott and Associates Ltd.

The data collected during this exploration phase is discussed in this report and compiled on the enclosed maps.

LOCATION - ACCESS

The claims are situated in the Atlin Mining Division and astride the Hackett River between elevations 610 and 1219 meters (2000 and 4000 ft.) N.T.S. 104-J-4. Lat. 58° 13' N. Long. 131° 43' W. The settlement of Telegraph Creek lies about 48 kilometers (30 miles) to the southeast. The location relative to roads in shown on Figure 1.

An airstrip was constructed in 1972 at Sheslay, about a mile northwest of the claim boundary. Current access is by fixed wing aircraft to the strip, or by helicopter from Telegraph Creek, Eddontenajon or Dease Lake.

Rough bulldozer trails along the Hackett River and on the upper slopes, particularly in the area of previous investigations, provide local access. The trails are suitable only for trailbikes or all-terrain type vehicles.

CLAIMS

NAME	UNITS		GROUP	RECORDED	EXPIRES
Star 1	20	98(7)	Hackett	July 5/76	July 5/82*
2	15	99(7)	Sheslay	July 5/76	July 5/83*
3	6	100(7)	Sheslay	July 5/76	July 5/83*
4	2	101(7)	Hackett	July 5/76	July 5/81
5	2	102(7)	Hackett	July 5/76	July 5/81
6	9	141(9)	Hackett	Sept. 30/76	Sept. 30/81*
7	6	142(9)	Hackett	Sept. 30/76	Sept. 30/81
8	1	143(9)	Hackett	Sept. 30/76	Sept. 30/83
9A*	9			Oct. 27/80	Oct. 27/81
10	4	145(9)		Sept. 30/76	Sept. 30/81
11	6	146(9)	Sheslay	Sept. 30/76	Sept. 30/82*
12	8	147(9)	Sheslay	Sept. 30/76	Sept. 30/82*
13	4	148(9)	Sheslay	Sept. 30/76	Sept. 30/82*

The Star 12 claim was reduced to 8 units during the year and, because field work was not sufficiently widespread for assessment requirements, the Star 9 claim was relocated as the Star 9A claim, in the name of Mr. N. Thompson.

HISTORY

Background to the Sheslay area was covered in a November 2, 1976 report for United Cambridge Mines Ltd. and is briefly summarized below:

* On acceptance of filed work.

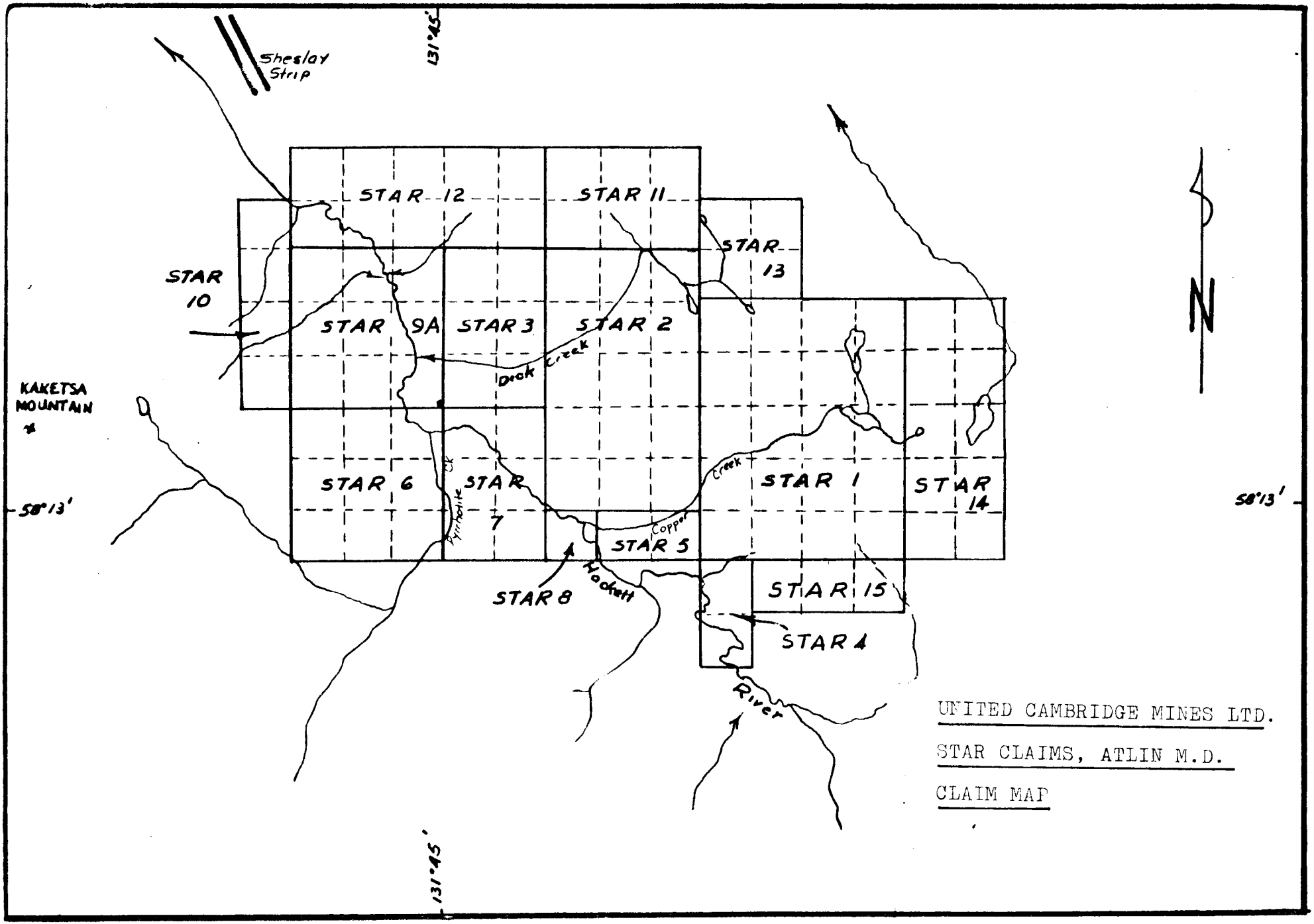

Sheslay Strip
131°45'
STAR 12
STAR 11
STAR 13
STAR 10
STAR 9A
STAR 3
STAR 2
Dick Creek
KAKETSA MOUNTAIN
STAR 6
STAR 7
Pyrrhotite Ck
Copper Creek
STAR 1
STAR 14
58°13'
STAR 5
STAR 8
Hackett
STAR 15
STAR 4
River
N
UNITED CAMBRIDGE MINES LTD.
STAR CLAIMS, ATLIN M.D.
CLAIM MAP

Fig 2.

Copper mineralization discoverd at Copper Creek in 1937 was partly tested by Brikon Exploration Ltd. who drilled four holes totalling 149 meters in 1956. Skyline Explorations Limited acquired the ground in 1968 and to 1972 with associates conducted geological and geochemical surveys and drilled 6 holes in the Copper Creek area. A zone on the south side of the Hackett River was also explored during the same period and this work resulted in the delineation of a mineralized zone (approximately 61 x 91 meters) grading 0.48% copper.

United Cambridge Mines Limited acquired the Copper Creek prospect in 1976 and discovered the Dick Creek prospect the same year. During 1976 and 1977 preliminary geochemical and geological surveys and a trenching program were completed at Dick Creek.

REGIONAL GEOLOGY

The Star Prospect is in the Stikine Arch, a structural unit suspected by many to be a former Island Arc. The Arch contains numerous porphyry copper prospects and deposits and continues to be explored extensively.

The Star claim block is near Sheslay and centered on the Hackett River which flows northwest along a prominent topographic lineament. Strong lineaments are evident both crossing and paralleling the major northwesterly trend. The Hackett River Valley within the claim area is partially

coincident with the eastern margins of the main mass of the Kaketsa stock, a Triassic intrusion (218 $\pm$ 8 my.) trending north to northeast.

A number of areas on the northeast side of the river are also underlain by intrusive masses which range in size from small dikes and sills to stocks. Many of these masses are similar to and are probably outliers of the Kaketsa stock which is comprised mainly of light coloured, medium grained diorite. Other areas, however, are underlain by dark coloured coarser grained gabbroic intrusive rocks which are perhaps unrelated to the Kaketsa stock. All of the granitic rocks intrude rocks of the Stuhini Group, an assemblage which includes andesite, basalt, chert, siltstone and related tuffaceous sedimentary rocks. Some of the latter are well pyritized.

GRID GEOLOGY

The grid area is underlain by an assemblage of volcanic and related sedimentary rocks, and by a number of small dioritic intrusions. Preliminary geologic data, shown on map #3, differentiates a number of rock types within four broad lithologic units which are briefly described.

1) Intrusive Rocks

Hornblende syenite? is present as narrow dikes mainly along the base line (3200 SE and 5600 SE). The rock has a brown cast, is fine grained, contains conspicuous hornblende

crysts to 2.5 cm. but lacks a typical intrusive texture.

Fine to medium grained hornblende diorite, similar to the main Kaketsa stock, is the most abundant intrusive rock within the grid. It is commonly pale grey, contains 5% to 10% hornblende with minor biotite, and is locally porphyritic. Copper mineralization is associated with a large dike-like? mass of this unit northwest of Dick Creek. Elsewhere, outcrops are small, locally pyritized and scattered.

Outcrops mapped as orange hornblende syenite display an erratic to pervasive orange colored feldspar but are texturally similar to the more common hornblende diorite. Orange to pink alteration is evident at several areas within the grid.

Hornblende diorite porphyry and feldspar porphyry form narrow dikes or sills and are locally grey, green or pink, the latter perhaps related to the alteration noted above.

Small outcrops of a distinct 'mafic diorite' are exposed near Copper Creek line 12 NW. The rock is medium grained, contains in excess of 10% hornblende and augite, is weakly pyritized and is probably related to larger masses of similar material exposed further to the east.

2) Volcanic Rocks

Volcanic rocks underlie much of the grid area and are locally interbedded with related sedimentary and fragmental horizons. The rocks are mainly dark grey to green

in colour and basaltic to andesitic in composition. Distinct varieties include two porphyritic flows that differ mainly in shape of contained feldspar laths, one being slender and feather-like and the other squat and stubby. Augite is a common component and where it is a distinctive feature the rock is named augite basalt. The remainder of the dark sequence includes fine grained varieties of volcanic rock including locally a distinct feldspathic andesite in which small ($\pm$ 2 mm.) feldspar laths are strongly lineated. The rocks are well pyritized locally.

At Copper Creek, pale grey to cream coloured rhyolite is evident in talus south of the drilled area, and locally is associated with pink chert breccia. Pale grey breccias with conspicuous chert fragments, and highly altered (epidotized) zones in the same area north of the creek are also suspected of being rhyolitic in composition. Distinct pale grey outcrops are present within the dark volcanic rocks on lines 40 SE to 52 SE northest of the base line. One sharp contact was noted. These rocks appear to be tuffaceous, highly altered, and are commonly present in areas displaying pink alteration, epidote and some evidence of chalcopyrite. They are also tentatively mapped as rhyolitic. The rhyolitic rocks occur within or close to a belt of sedimentary and fragmental rocks trending north from the

main bend in Copper Creek.

3) Sedimentary Rocks

The sedimentary rocks include a wide variety from chert to coarse grained tuff or greywackes that are difficult to distinguish from fine grained flows. The rocks vary from grey to green to brown and are locally well pyritized. Narrow laminae to 2 cm. of pink to cream coloured chert are present in the belt of sedimentary and fragmental rocks stretching from Copper to Dick Creeks. Attitudes of the sedimentary rocks vary widely over short distances. However, the data suggest a general trend of strikes from north to northeast with shallow to moderate easterly dips.

4) Volcanoclastic Rocks

Fragmental volcanic rocks occur commonly with sedimentary rocks in a narrow belt trending northerly from the drill area in Copper Creek. Three distinct types are recognized (a) Grey-green volcanic breccia or tuff-breccia with fragments of chert, tuff, & andesite ? varying to $\pm$ 1 cm. in a tuffaceous matrix. (b) Dark grey to green volcanic agglomerate with subrounded fragments of grey basalt to 15 cm. in a finer tuffaceous matrix and (c) Chert breccia - with angular fragments of pink chert to approximately 7 cm. in

diameter in a pale grey or highly altered tuffaceous rhyolitic ? matrix. Fragments locally resemble a pink aplite at Copper Creek.

Mineralization

Chalcopyrite, pyrite and magnetite occur mainly in fractures, locally in quartz veinlets, and to a lesser extent with minor bornite as disseminations in the large diorite intrusion northwest of Dick Creek. Mineralization is also present in the adjacent hornfelsed volcanic - sedimentary rocks. This area is highly oxidized, and marked by gossans containing azurite, malachite and tenorite.

Sampling of trenches in 1977 yielded 0.417% copper over 179 meters (Trench 2) an 0.33% copper over 70 meters (Trench 3). Sedimentary rocks lying generally north and up-slope from the intrusion contain disseminated and fracture controlled pyrite in the order of 2 to 5%. Samples of this rock yielded assays of approximately 0.10% to 0.20% copper and the area showed a strong I.P. response.

Minor amounts of chalcopyrite ($\pm$ 0.1% Cu) occur with pyrite, pyrrhotite? and magnetite in a skarn zone on the east side of Dick Creek. Mineralization in this area is stratabound and may be part of a larger mineralized system within the sedimentary-fragmental rocks

underlying the northern section of the entire grid, including the area of the Dick Creek intrusion. Other areas with disseminated and fracture controlled pyrite and lesser chalcopyrite and magnetite are present within the broad trend, and I.P. response is generally strong.

Chalcopyrite occurs in a strongly chloritized, and edpidotised zone on the southeast side of Copper Creek and in highly altered breccia zones (skarn) on the northwest side of the Creek. Geological detail of this area is lacking, however, the mineralization includes local strong concentrations (5%) of pyrite, pyrrhotite and minor magnetite, galena and sphalerite.

A review of data contained in early records reveals that a 60 foot surface sample at Copper Creek yielded 1.06% copper. Drilling in the immediate vicinity also indicates that intrusive rocks in the area occur as small dikes or sills, and although these rocks contain some sulphide, mainly pyrite, the important copper mineralization occurs in the volcanic-sedimentary rocks.

Vertical diamond drill hole G-2 located near the above 60 foot sample site yielded 143 feet grading 0.485% copper from core and sludge samples. (28 - 171 feet) The log showed that the best core samples within this intercept were near surface to a depth of 46.5 feet. Holes G1 and G2 show core samples grading >0.5% copper below 46.5 feet as narrow zones within lower grade mineralization. Gold is commonly

0.01 to 0.04 oz./ton (one intercept assayed 0.13 oz./ton); and silver $\pm$ 0.1 oz./ton.

Alteration

The northeasterly contact of the large intrusion northwest of Dick Creek is marked by zones of strong argillic alteration with some sericite, abundant gypsum and pyrite, and local areas of quartz veining in addition to sulphides and magnetite. Fine grained biotite is present in the same area, however, chlorite and epidote are more erratically distributed. A few narrow quartz-aplite zones to a meter in width with abundant potash feldspar are present, and numerous laumontite? filled fractures are present in areas more central to the intrusion. Sections of the intrusion display pervasive pink colouration not related to secondary potassic alteration.

Work in 1977 indicated that the mineralized zone was flanked in part on the northeast by a large pyritic zone. The pyrite is present mainly in fractures but also is disseminated in the sedimentary rocks of the area. Induced Polarization surveys indicate that the pyritic zone may be part of a larger pyritized complex lying along the northeast sections of the grid.

Copper mineralization at Copper Creek is present in areas displaying intense chlorite-epidote alteration. Actinolite, Tremolite, and Calcite are also present. Drilling also indicates that sections of the volcanic sedimentary assemblage are similarly altered with some sections also strongly altered by pink potash feldspar ?

Epidote is present in most of the volcanic rocks mapped between Copper Creek and Dick Creek. It commonly occurs in strong fractures or as large irregular clots within the volcanic rocks. Epidote is associated with a pink alteration believed to be secondary potash feldspar in the vicinity of the pale grey tuffaceous rhyolitic ? rocks noted northeast of the base line (lines 40 to 52 WE), and in outcrops on lines 20 to 24 SE.

Structure

Trenching at Dick Creek has exposed numerous faults with a common northwesterly trend. Many of these faults are indicated by prominent topographic lineaments. Less numerous east-west faults are also present. The upper section of Dick Creek flows approximately S 25° W in a broad drift covered valley. I.P. response shows a marked change in this area and a northeasterly trending fault is suspected. A strong fault of the same trend is exposed on line 20 NW north of Copper Creek.

A belt of volcanic and sedimentary rocks with abundant fragmental rocks trends northerly from the drilled zone at Copper Creek. Mineralization is present southeast of the creek in highly altered zones, and skarn type mineralization is present north of the creek and in other sections still further to the north. The belt is flanked in part to the east and west by massive andesitic to basaltic rocks that on the west show high magnetic relief. Measured attitudes in the northern section of the belt show northeasterly strikes with moderate southeasterly dips. The presence at Copper Creek of agglomerate, abundant breccia, and extensive alteration with sulphide, indicates that the belt of rocks may contain more than a simple stratigraphic sequence. In view of the apparent relationship of mineralization to volcanic strata, the geology of this zone should be re-examined to determine whether known or other mineralized volcanogenic zones constitute viable exploration targets.

Bedding attitudes in other sections of the grid show a diversity of attitudes that indicate faulting noted above, but also likely indicate intrusion and original structures. The pattern is sufficiently complex within the limited area mapped to render interpretation difficult.

GEOCHEMISTRY

Geochemical surveys were completed on the Copper Creek grid in 1970 by Skyline Exploration Limited and associated companies. Soils were analyzed for Cu., Pb., Zn. and Mo. and the data compiled on various scale maps of the area. Due to descrepencies in surveys between new and old grids, the precise location of sample sites is at variance with older maps and must await further definition.

Geochemical surveys were completed at Dick Creek in 1976 (Lines 20 NW - 28 SE). Samples were analyzed for copper and molybdenum and the results plotted on 1 inch to 400 foot scale maps. Soil samples were collected in 1980 from the lines between Copper and Dick Creek grids (28 SE to 60 SE) and samples analyzed for copper, lead and zinc. The 1980 sample results are compiled on Figures 7 to 9 with much of the earlier data. The data has not been statistically analyzed and is presented in simple form with arbitrary contour intervals.

Copper

Trenching at Dick Creek indicated that areas of possible economic interest were partly outlined by the 400 ppm isopleth. Similar relation of geochemistry to mineralization are evident on the Skyline property south of Hackett River. The drilled area at Copper Creek lies within or close to the 400 ppm isopleth.

The data indicates two broad anomalous areas within the grid, both located by earlier work, i.e. Dick Creek and Copper Creek. The 1980 survey revealed generally scattered areas of interest northeast of the base line. Chalcopyrite locally is present in pyritized tuffaceous and volcanic rocks in this area. Further examinations are required.because of broadly coincident magnetic and Induced Polarization responses.

Zinc

Minor amounts of galena and sphalerite were reported from drill core and from surface in the Copper Creek area, and the main surface exposure southeast of Copper Creek has a high concentration (>1000 ppm) of lead and zinc in the soils. The relationship of mineralization to lithology or alteration in this area requires further study.

The 1980 survey work revealed scattered anomalies near and northeast of the baseline (line 28 SE - 44 SE). These zones are partly coincident with areas providing higher copper assays and may be related to mineralized tuffaceous horizons within the volcanic-sedimentary rocks in that area.

Lead

The Copper Creek area shows a wide scattering of

anomalous assays (>100 ppm Pb) partly coincident with copper and zinc. The 1980 results indicate one anomalous area (line 48 SE - 52 SE) southwest of the base line, but generally show much lower concentrations. These results, when plotted with earlier data, indicate a bimodal distribution based largely on the two sample groups (Figure 5). This indication may or may not be a true representation of soil conditions, however, more study is obviously required.

MOLYBDENUM

Molybdenite is sparse in surface outcrops and low in surface soil assays. A number of small anomalies of possible interest (5-98 ppm Mo) are clustered around the northeast edge of the mineralized Dick Creek intrusion. This area is largely altered and oxidized. Molybdenum anomalies drilled at Copper Creek and southeast of Copper Creek did not yield encouraging results.

T.E. Lisle, P.Eng.

UNITED CAMBRIDGE MINES LTD.
GEOCHEMICAL SURVEY - COPPER.

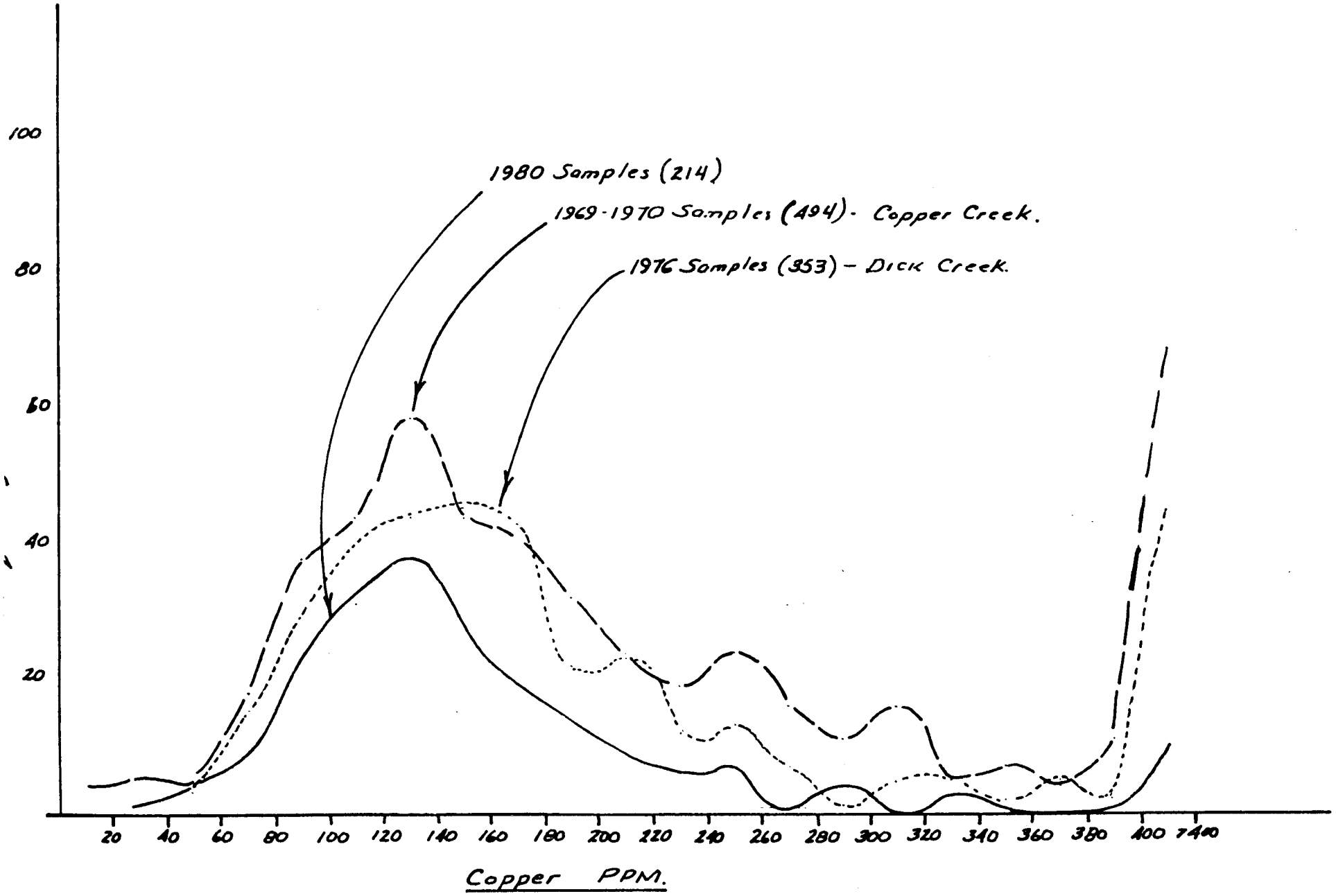


FIG. 3.

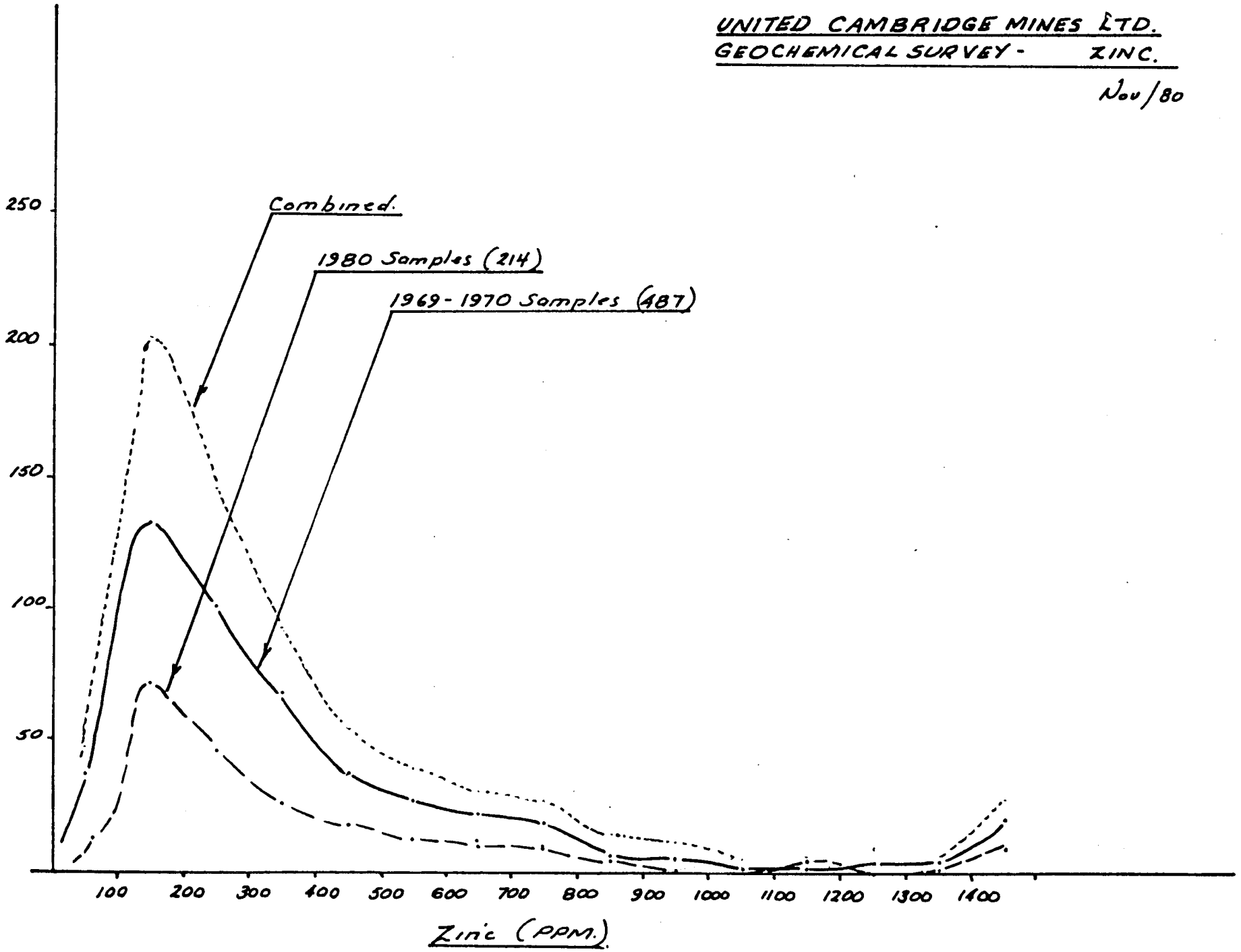

UNITED CAMBRIDGE MINES LTD.
GEOCHEMICAL SURVEY - ZINC.
Nov/80
Combined.
1980 Samples (214)
1969 - 1970 Samples (487)
250
200
150
100
50
100
200
300
400
500
600
700
800
900
1000
1100
1200
1300
1400
Zinc (PPM.)

FIG. 4

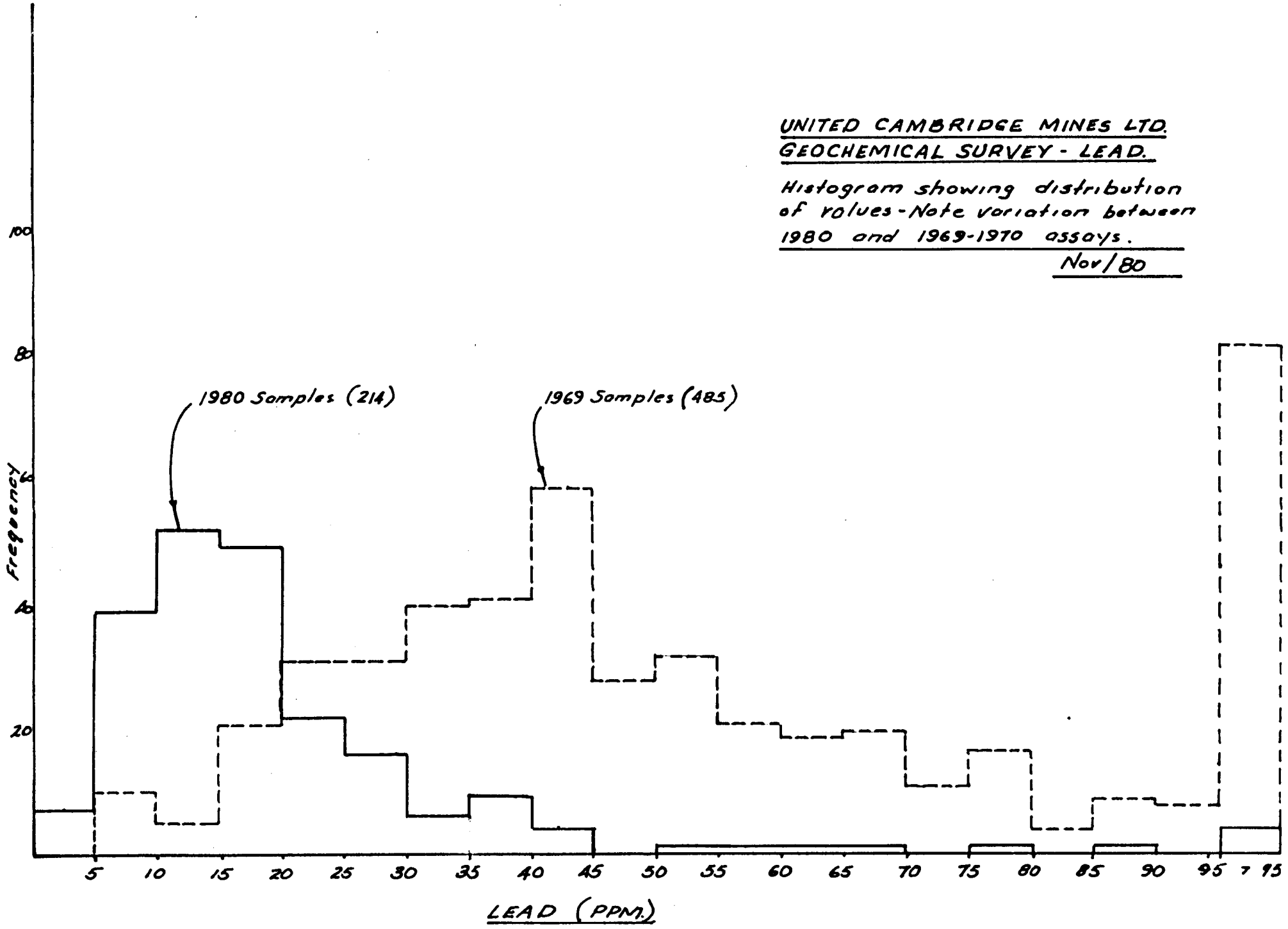

UNITED CAMBRIDGE MINES LTD.
GEOCHEMICAL SURVEY - LEAD.
Histogram showing distribution of values - Note variation between 1980 and 1969-1970 assays.
Nov/80
1980 Samples (214)
1969 Samples (485)
FREQUENCY
100
80
60
40
20
5
10
15
20
25
30
35
40
45
50
55
60
65
70
75
80
85
90
95
> 95
LEAD (PPM.)

FIG. 5.

REFERENCES

1. Miscellaneous assessment reports on Skyline and Copper Creek prospects.

2. British Columbia Department of Mines and Petroleum Resources Annual Reports, and Geological Field Work 1974 and 1975.

3. R.H. Seraphim, Ph.D., P.Eng. Kaketsa Project - March 29, 1976.

4. Private file reports including Slyline Exploration data 1969-1970.

5. Geophysical data, 1980 program - P.E. Walcott and Associates Ltd.

APPENDIX 1

CERTIFICATION

I, T.E. Lisle, of the District of North Vancouver, Province of British Columbia, hereby certify as follows:

1. I am a Geologist residing at 145 West Rockland Road, North Vancouver, B.C.

2. I am a Professional Engineer registered in British Columbia. I am a graduate of the University of British Columbia, 1964.

3. I have practiced my profession since graduation and was engaged intermittently in exploration geology for several years prior to 1964.

4. With Dr. Seraphim, I retain a "Prospector's Interest" in the Star Mineral claims.

5. The above report is based on field work carried out in 1976, 1977 and 1980, and on background data contained in the references cited.

DATED at Vancouver, B.C. this day of December, 1980.

T.E. LISLE, P.Eng.

A P P E N D I X 2

SELECT DRILL HOLE INTERCEPTS FROM COPPER CREEK DRILL LOGS -- SKYLINE DATA

Hole	From	To	% Rec.	Remark	oz./ T.Au.	oz./ T.Ag.	%Cu.	%Pb.	%Zn.
1	98'	103'	80	Andesite-Intense Ep.-Ch. Sulphide	Tr.	Tr.	0.13	0.02	--
1	103'	111'	50	Andesite-Intense Ep.-Ch. local "	Tr.	0.2	0.63	0.02	--
1	111'	121'	?	Broken intrusive dike	Tr.	0.1	0.02	0.01	--
1	167'	171'	90	Volc.-Intense Ep.-Ch. Alt.	Tr.	0.2	0.56	0.01	--
1	171'	178'	85	As above	Tr.	0.1	0.63	0.01	--
1	178'	212'	80	0.15 to 0.23% Cu.	Tr.	Tr.-0.2		0.01	--
4	621.6'	624'	100	Shear zone - Highly altered	Tr.	0.2	0.46	--	--
4	840.5'	842'	100	Massive Sulphide	Tr.	0.2	0.69	0.04	0.01
5	723.5'	725'	60	Andesite-chloritic	0.01	0.08	0.58	Tr.	--
5	725'	731'	100	" - Strong K-Spar., Qtz., Ch.	0.02	0.1	0.40	Tr.	--
5	731'	736'	100	" " " " "	0.01	0.1	0.32	Tr.	--

DRILL HOLE SUMMARY, COPPER CREEK AREA -- SKYLINE DATA

G-1	-55°	S49° W	450.0'
G-2	-80°	--	686.0'
G-3	-55°	S42° W	465.5'
G-4	-90°	--	878'
G-5	-90°	--	806.6'
G-6	-50°	S88° E	158.0'

ASSAY — LOG

P. H. Sevensma Consultants Ltd.
715 — 850 West Hastings St., Vancouver 1, B.C.

COMPANY The Colorado Corporation,
Skyline - Go Project

Property : Go Group

HOLE G-2.

Sample no.	From	To	Length	Rec.%	Rock type	oz/t. Au.	oz/t. Ag.	% Cu.	% Pb.		
70038	28.0'	32.5'	4.5'	85	Strongly alt.min. and.	.13	.2	2.60			
70039	32.5'	38.0'	5.5'	65	S. less alt. less cpy.	.02	.2	.88			
70040	38.0'	43.0'	5.0'	80	As from 28.0' - 32.5'	.01	.1	.46			
70041	43.0'	46.5'	3.5'	40	Fairly gd. min. cpy.py.	tr.	.4	4.02			
70042	46.5'	53.0'	6.5'	15	Very minor mal. core.	tr.	.1	.26			
70043	50.0'	60.0'	10.0'		Sludges 50' - 60'	tr.	.1	.51			
70044	60.0'	70.0'	10.0'		60' - 70'	.04	.2	.57			
70045	70.0'	80.0'	10.0'		70' - 80'	.01	.1	.61			
70046	80.0'	90.0'	10.0'		80' - 90'	.03	.2	.41			
70047	53.0'	66.0'	13.0'	10 - 15	Minor alt. and. rock.	.01	.1	.14			
70048	66.0'	72.0'	6.0'	35	Minor alt. and.	tr.	tr.	.01			
70049	72.0'	77.0'	5.0'	90	Alt. cpy.-py.-hemat.	.03	.1	.34			
70050	77.0'	82.0'	5.0'	85	" " " "	.02	.1	.37			
70051	82.0'	87.0'	5.0'	85	" " " "	.02	.1	.37			
70052	87.0'	92.0'	5.0'	85	" " " "	tr.	tr.	.05			
70053	92.0'	96.0'	4.0'	80	Less cpy.	tr.	tr.	.05			
70054	96.0'	101.0'	5.0'	85	Slight increase cpy.	.02	.1	.06			
70055	101.0'	106.0'	5.0'	85	Weaker cpy.	.01	.1	.07			
70056	106.0'	111.0'	5.0'	85	Slight increase cpy.	.01	.1	.10			
70057	111.0'	116.0'	5.0'	80	Slight decrease cpy.	.01	.1	.25			
70058	116.0'	121.0'	5.0'	85	Slight increase cpy.	.02	.1	.06			
70059	121.0'	126.0'	5.0'	85	" " "	.01	.1	.08			
70060	126.0'	131.0'	5.0	80	Slight increase cpy.	tr.	tr.	.20			
70061	131.0'	136.0'	5.0'	80	Significant cpy.	tr.	tr.	.19			
70062	136.0'	142.0'	6.0'	80	" "	.01	.1	.19			
70063	142.0'	147.0'	5.0'	80	" "	.01	.1	.66			
70064	147.0'	155.0'	8.0'	80	" "	tr.	.1	.14			
70065	155.0'	160.0'	5.0'	80	" "	tr.	.1	.06			
70066	160.0'	163.0'	3.0'	85	Andesite - cpy. - py.	.01	.2	.75			
70067	163.0'	165.0'	2.0'	85	Tuffaceous cpy. - py.	tr.	.1	.26			
70068	165.0'	171.0'	6.0'	85	Andesitic, cpy.,py.	tr.	.1	.81			

P. H. Sevensma

DICK CREEK GRID | COPPER CREEK GRID

CAMP

BASELINE

BASELINE (C) 1972

BASELINE (A) 1972

TO AIRSTRIP

DICK CREEK

COPPER CREEK

Data in this area mainly from 1977 program.

GEOLOGIC DATA SHOWN SOUTHEAST OF COPPER CREEK IS MAINLY FROM 1969-72 SKYLINE EXPLORATION LTD. MAPS.

LEGEND

1	INTRUSIVE ROCKS	(a) Hornblende syenite - dike? (b) Orange Hbld. syenite. (Altered hornblende diorite)? (c) Hornblende diorite - fine to medium grained. (d) Hornblende diorite porphyry - feldspar porphyry. (e) Mafic diorite.
2	VOLCANIC ROCKS	(a) Porphyritic Andesite - Slender feldspar phenocrysts. (b) " " - Stubby " " (c) Augite basalt, Olivene basalt. (d) Undifferentiated volcanics, commonly dark green - grey, locally feldspathic or fine grained. (e) Rhyolite and related tuff and breccia zones.
3	VOLCANICLASTIC ROCKS	(a) Volcanic breccia - tuff-breccia. (b) Agglomerate (c) Chert breccia
4	SEDIMENTARY ROCKS	(a) Fine grain tuff, cherty tuff, banded tuff, siltstone, etc. (b) Greywacke, Coarse tuff. (c) Chert
70		Bedding
56 / 20		Fractures - joints.
		Faults

Py. – Pyrite. Cpy. – Chalcopyrite. Po. – Pyrrhotite.
Mag. – Magnetite. Ep. – Epidote. Ch. – Chlorite.
Trem. – Tremolite. Act. – Actinolite K.Spar – Potassic Alteration
Mal. – Malachite. Az. – Azurite. Gyp. – Gypsum.

Data from 1977 and 1980 Field mapping programs. Some data in Copper Creek area from 1970 maps and outcrop locations are approximate

LEGEND

ROADS TRENCHES
CUT GRID LINES
FLAGGED GRID LINES
CREEKS
DRILL HOLES 1970 (Locations approximate)
FLOAT
HELIPORT
COPPER MINERALIZATION.

T. LISLE ENGINEER

UNITED CAMBRIDGE MINES LIMITED.

STAR MINERAL CLAIMS – ATLIN M.D.

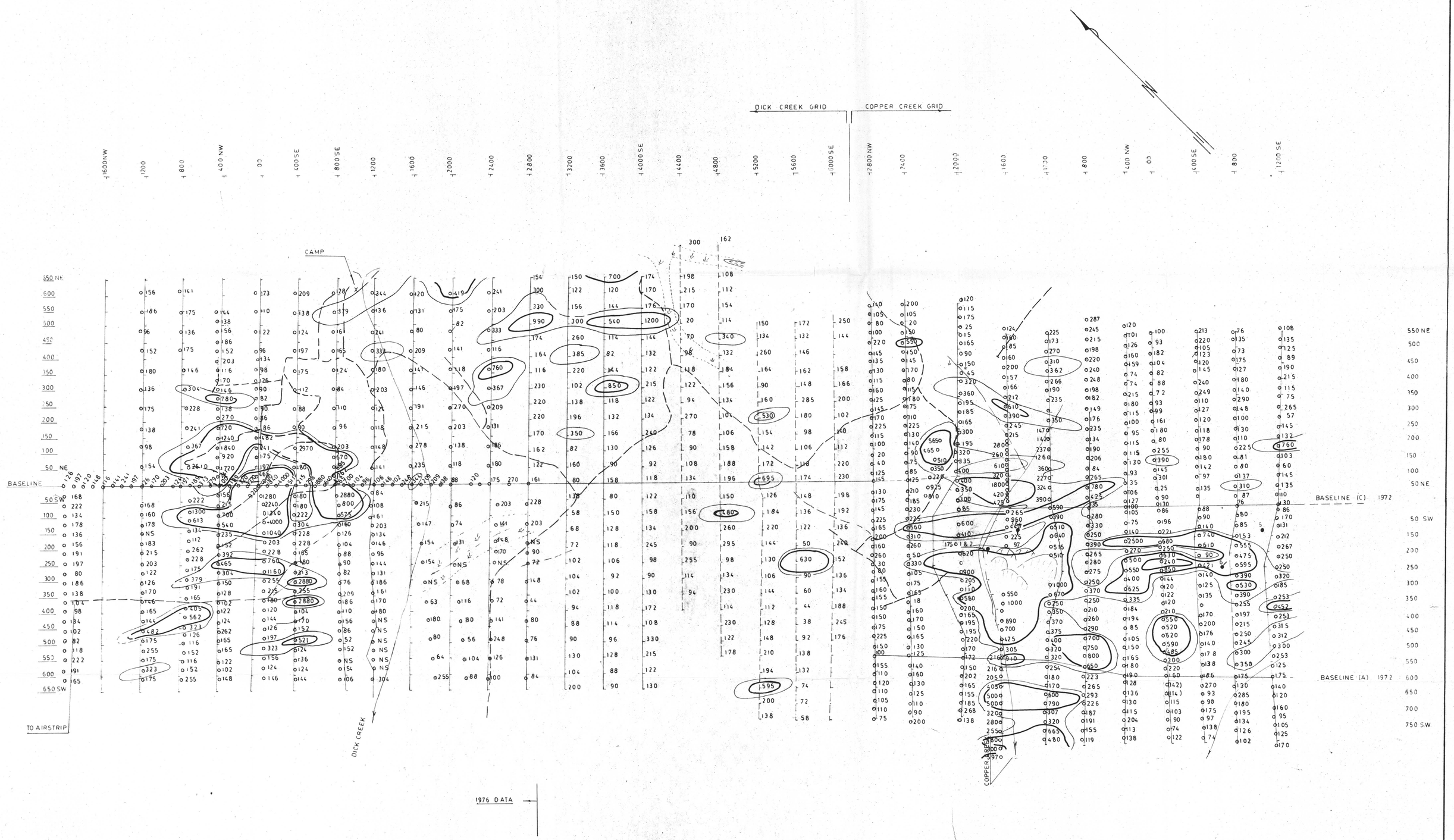
GEOLOGY

Scale 1:5000 October, 1980

0 50 100 150 200 250 300 350 400 450 500 Meters

This reference scale bar is accurate when the original image is set at the same ratio of centimetres to inches as can be used as a reference for the original size.

FIG. 6.



LEGEND

- ROADS TRENCHES
- CUT GRID LINES
- FLAGGED GRID LINES
- CREEKS
- DRILL HOLES 1970 (Locations approximate)
- 123 PPM Cu.
- 400 PPM CONTOUR
- 300 PPM "

Sample results on Copper Creek grid are plotted from 1969-1970 SKYLINE EXPLORATIONS LIMITED MAPS. Due to survey discrepancies, sample locations are approximate. For remaining data, not transferred, see Skyline maps.

UNITED CAMBRIDGE MINES LIMITED.

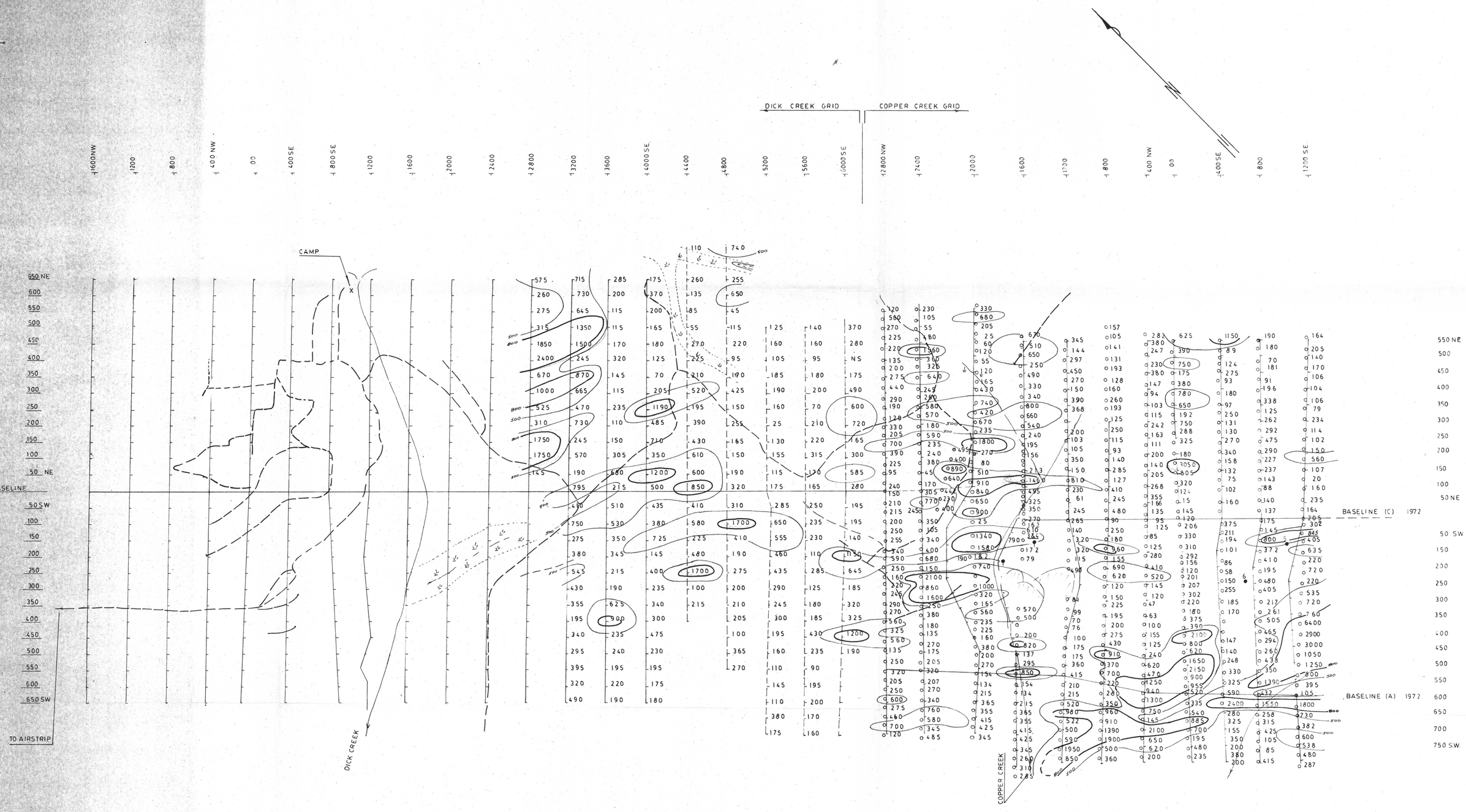
STAR MINERAL CLAIMS – ATLIN M.D.

GEOCHEMISTRY – COPPER.

Scale 1:5000 October, 1980

0 50 100 150 200 250 300 350 400 450 500 Meters

FIG. 7



LEGEND

- ROADS TRENCHES
- CUT GRID LINES
- FLAGGED GRID LINES
- CREEKS
- DRILL HOLES 1970 (Locations approximate)
- 123 PPM Zn.
- CONTOURS 500 AND 800 PPM.

Sample results on Copper Creek grid are plotted from 1969-1970 SKYLINE EXPLORATIONS LTD. MAPS. Due to survey discrepancies, sample locations are approximate. For remaining data not transferred, see Skyline maps.

UNITED CAMBRIDGE MINES LIMITED.

STAR MINERAL CLAIMS - ATLIN M.D.

GEOCHEMISTRY - ZINC.

Scale 1:5000 October, 1980

0 50 100 150 200 250 300 350 400 450 500 Meters

FIG. 8

DICK CREEK GRID | COPPER CREEK GRID

+1600NW | +1200 | +800 | +400 NW | 00 | +400SE | +800SE | +1200 | +1600 | +2000 | +2400 | +2800 | +3200 | +3600 | +4000SE | +4400 | +4800 | +5200 | +5600 | +6000SE | +2800 NW | +2400 | +2000 | +1600 | +1200 | +800 | +400 NW | 00 | +400SE | +800 | +1200 SE

STAR 11 | STAR 2 | STAR 13 | STAR 1

CAMP

650 NE | 600 | 550 | 500 | 450 | 400 | 350 | 300 | 250 | 200 | 150 | 100 | 50 NE

BASELINE

50 SW | 100 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 SW

STAR 3

TO AIRSTRIP

DICK CREEK

COPPER CREEK

BASELINE (C) 1972

BASELINE (A) 1972

550 NE | 500 | 450 | 400 | 350 | 300 | 250 | 200 | 150 | 100 | 50 NE | 50 SW | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 S.W.

LEGEND

- ROADS TRENCHES
- CUT GRID LINES
- FLAGGED GRID LINES
- CREEKS
- 6 — DRILL HOLES 1970 (Locations approximate)
- 34 — 34 PPM Pb.
- 100 PPM Pb CONTOUR
- 50 PPM Pb "
- 2 — PROPOSED DRILL HOLES
- Mo. ANOMALIES DICK CREEK. 5 – 98 PPM.

Sample results on Copper Creek grid are plotted from 1969-1970 SKYLINE EXPLORATIONS LTD. MAPS. Due to survey discrepancies, sample locations are approximate. For remaining data not transferred, see Skyline maps.

UNITED CAMBRIDGE MINES LIMITED.

STAR MINERAL CLAIMS – ATLIN M.D.

GEOCHEMISTRY – LEAD

(WITH PROPOSED DRILLING & MO. GEOCHEM. – DICK CREEK AREA.)

Scale 1:5000 October, 1980

0 50 100 150 200 250 300 350 400 450 500 Meters

FIG. 9