Vein typ best dev. through S.E.-dip bedding parallel.

800800

October 14, 1969.

President and Directors,
Kleanza Mines Ltd. (N.P.L.),
Suite 201-535 Thurlow Street,
Vancouver 5, B.C.

Gentlemen:

PROGRESS REPORT - EXPLORATION
HOPE SILVER PROPERTY
CEDAR RIVER AREA, SKEENA M.D., B.C.

PRELIMINARY:

This report summarizes exploration accomplished since the writer's previous visit of August 4-5, 1968, and is based on observations made during his visit of September 10-11, 1969. Mr. R.H. Bates of Kleanza Mines Ltd. provided field guidance and assistance during the recent examination.

Exploration at the property has been performed and/or supervised by Mr. Bates; relevant data provided by him, and incorporated into this report, include:

1. Plan - traverse and trench details on scales 1"=100'&20'.
2. Schedule of traverse station elevations.
3. Plan and section of x-ray diamond drill holes no's 1 & 2.
4. Descriptive notes re. lithology and structure.
5. Schedule of geochemical ('heavy-metal') determinations.
6. Certificates of Analyses re total Ag in soil samples.
7. Profiles re. E.M. orientation surveys on grid line 24W.

The recent field examination consisted of detailed geological mapping of current trench exposures, sampling of geochemically-indicated bedrock sections, and logging of d.d.h.no.1 core; the recent geological data are combined with previous mapping on accompanying Dwg. K69-5A, "Current Exploration and Geology."

A - GRID PREPARATION

An E-W base-line was established at roughly 3000 feet south of the main trench exposures. From this northerly-bearing cross-lines were established at 100'-200'-400' E-W spacing to cover the general exploration area between 16W-40W and 24N-40N- the spacing and lengths of individual lines being varied in accordance with the local coverage desired. Grid lines were stationed at 25'-100' intervals as locally required for soil-sampling.

B - GEOCHEMICAL SOIL SURVEYS

Soil sampling, based on B-zone material was carried out on:

Line 16W, 27N-33N @ 25-foot intervals.
Line 18W, 27N-33N @ 25-foot intervals.
Line 19W, 27N-33N @ 25-foot intervals.
Line 20W, 27N-33N @ 25-foot intervals.
Line 24W, 19N-81N @ 100-foot intervals.

All soil samples were field-tested for their cold-soluble content of heavy metals (Cu,Pb,Zn,etc.) via the G.S.C. method employing dithizone as an indicator.

Samples from line 24W were geochemical laboratory-tested for total p.p.m.Ag via the hot Hcl acid extraction and atomic absorption method.

In general, geochemical response was poor; consequently, only localized indications of bedrock mineralization resulted from these surveys.

Some heavy-metal positives were obtained in the immediate vicinity of the long-exposed main showings; however, these were not as numerous as might have been expected from the number and over-all extent of substantially mineralized pit and trench exposures. The writer attributes some part of the poor response to the general 'tight' cover of glacial silt and clay. Consequently, and pending a suggested check of several heavy-metal 'negatives' in the vicinity of the older workings, the writer is of the opinion that soil sampling does not particularly facilitate exploration in this locality.

Samples from line 24W only were submitted for geo-chemical-silver determination. The results ranged from under 0.5, to a maximum of only 2 p.p.m.-indicating only a minor geochemical contrast, and absence of obviously anomalous

groupings. Probably, some Ag determinations on soils taken near the mineralized exposures would allow a more conclusive evaluation of the 24W results.

C-ELECTROMAGNETIC SURVEYS

These were run on lines 24W and 20W consecutively, and over respective grid intervals of 10N-46N and 18N-42N respectively. Both lines were traversed at frequencies of 400 and 1600 c.p.s. On line 24W, at 400 c.p.s., 'cross-overs' were obtained at 15.5N, 31.25N, and 36N; no definite cross-overs derived from the 20W survey. The 1600 c.p.s. survey on line 24W provided corroborative 'cross-overs' at 15N and 31.25N; in addition, a minor independent cross-over was obtained at 19N. No cross-overs resulted from the 1600 c.p.s. survey on line 20W. The E.M. survey is obviously too restricted to provide adequate data for a general detection of spot occurrences or trends of possible geological or mineral conductors.

D- TRENCHING

Most trenching was done by bulldozer; a few small trenches or pits were hand-excavated. All bedrock exposures were washed clean to facilitate inspection, mapping, and sampling. Approximately 2000 lineal feet of trenching was accomplished over 14 trenches of varying lengths. As a consequence of locally thick covers of overburden bedrock exposures amounted to less than 25% of the gross trenched area; however, this partial exposure provided an adequate indication of the bedrock geology.

The 20 feet, or so, of overburden encountered in excavating no. 9 trench suggests possible future difficulties in exposing westerly extensions of the Hope mineralization; however, this particular trench may be situated within a very local area of heavy drift, and more moderate depths of overburden may occur within nearby intervals of the projected zone.

The total trench exposures indicate that the Hope prospect area is underlain by a sequence of black-carbonaceous to pale-sandy argillites, arkosic sandstones, and felsitic tuffs. Exposures of more massive rock within the trench no's 2-5 area provide local evidence that the bedded formations are occasionally cut by minor felsitic intrusives.

The assumed westerly extension of the Hope breccia vein or lode was not intersected by any of the 1969 trenches; prohibitive depths of overburden precluded any possible exposure via No. 9 trench. However, additional attempts at prospecting for possible direct westerly and southeasterly extensions of the Hope structure by way of further trenching and/or short-hole diamond drilling comprise the most immediate exploration priority. In this connection the determination of practicable trench and/or drilling sites along the westerly extension of the structure would be facilitated by seismic profiling.

Trench no. 6 exposes two distinct mineralized fracture zones. Of these the southerly, or hanging-wall member appears to be the principal structure, while the northerly member appears to be only a minor divergent footwall strand which pinches eastward through trenches no's 5 and 4, and presumably passes southward of trenches no's 3 and 2. Prospecting of the main strand could be accomplished by extending trenches no's 4 and 3 in a SSW direction towards the creek. In addition, prospecting for more distant hanging-wall units of the general zone might be best accomplished by 'dozer stripping of the creek channel and banks.

E - DIAMOND DRILLING

This consists of only two short X-ray holes drilled to test the dip-extension of the mineralization exposed in the most westerly pit and its probable strike extensions at some 80 feet to the west.

D.D.H.#1, collared in the bottom of No. 9 trench and drilled northerly at minus 53½°, was abandoned at 29.2 feet. Of this all but the bottom 6 inches was in coarse, caving overburden; therefor, with only X-ray equipment, it was not feasible or advantageous to case the hole into bedrock for a test of footwall elements of the structure.

D.D.H.#2 was collared approximately 35 feet south of the footwall of the shaft exposure, and drilled to the N.N.E. at minus 77° for 62.6 feet. The core log follows:

Depth, ft.	Description
0-4.1	Casing
4.1-7.5	Black chèrty argillite and gray quartzite.
7.5-21.9	Quartz-argillite breccia; general sparse dissem. Pyrite, chalcopyrite, galena, and tetrahedrite with some fair patches and bands; core lost at 16.9'-21.9'.

Depth, ft.	Description
21.9-25.3	Quartz stockwork with few ½"-½" quartz veins w. a few blebs and grains of Cu-Pb sulphides.
25.3-42.7	Coarse and fine quartz-argillite breccia; generally sparsely mineralized-mainly in argillite fragments, sparsely in quartz.
42.7-56.0	Thinly-bedded argillite and felsic tuff; trace mineralization in scant quartz veinlets.
56.0-62.0	Felsic tuff with minor quartz.
62.0-62.6	Fragments of graphitic argillite (shear).

The mineralized composite quartz breccia-vein structure, on a 70° southerly dip, was intersected from 7.5-42.7 feet for a true width of about 19 feet. Core recovery was poor within better mineralized intervals; therefor no samples were taken. The results suggest that the X-ray equipment provides adequate geological data, but is unsuitable for detailed sampling.

SUMMARY

The flat to gently sloping, drift-covered area contains few natural bedrock exposures; these occur only within exploratory tunnels, pits, and trenches. The relatively few exposures, however, provide fair evidence that the general prospect area is underlain by a mixed sequence of black carbonaceous, to pale sandy argillites, arkosic sandstones, and felsitic tuffs which are sporadically intruded by small felsite bodies of doubtful form or trend. Exposures on the access road also suggest the existence of an appreciably large body of dioritic rock to the west of No. 11 trench, and possibly within the 32W-40W section of the grid.

Bedding throughout the currently-trenched area has N.E. strikes and moderate N.W. dips; within the two westerly trenches, however, trends are northerly to northwesterly. The few bedrock exposures within northerly parts of no's 11 and 13 trenches and to the northwest of these indicate a general deflection of the bedding to W.S.W. strikes, with generally steep southerly dips. This transverse trend may reflect the general shape and trend of the above-noted dioritic body.

The westerly trenches disclose only occasional narrow bands of very sparsely mineralized quartz breccia. None of these, however, would appear to represent extensions of the main W.N.W.- trending shear-breccia lode. Currently, the writer infers a northerly deflection of the Hope structure along its W.N.W. course out of the main workings, and which would place it to the north of the no's 10-13 trenches.

RECOMMENDATIONS

The following are essentially a continuation of the Stage II recommendations made in the writer's April, 1969 exploration results:

1. Carry out bedrock depth determinations along the projected (plan) west-northwesterly course of the lode by way of shallow-seismic and/or power auger equipment.

2. Explore W.N.W. projection of lode by ripper-bulldozer cross-trenching at 50-foot strike intervals, or at feasible sections indicated by the step-1 (above) results.

3. Divert creek north of traverse sta. 17. Extend bedrock exposures towards creek via bulldozer-extensions of trenches no's 6 and 4, and a southerly step-out of no. 3. Follow up by stripping bed and banks of creek draw for some 200-300 feet down stream of the old crosscut tunnel.

4. Carry out cross-sectional diamond drilling of possible surface exposures of lode from steps 1 and 2 (above) trench exploration.

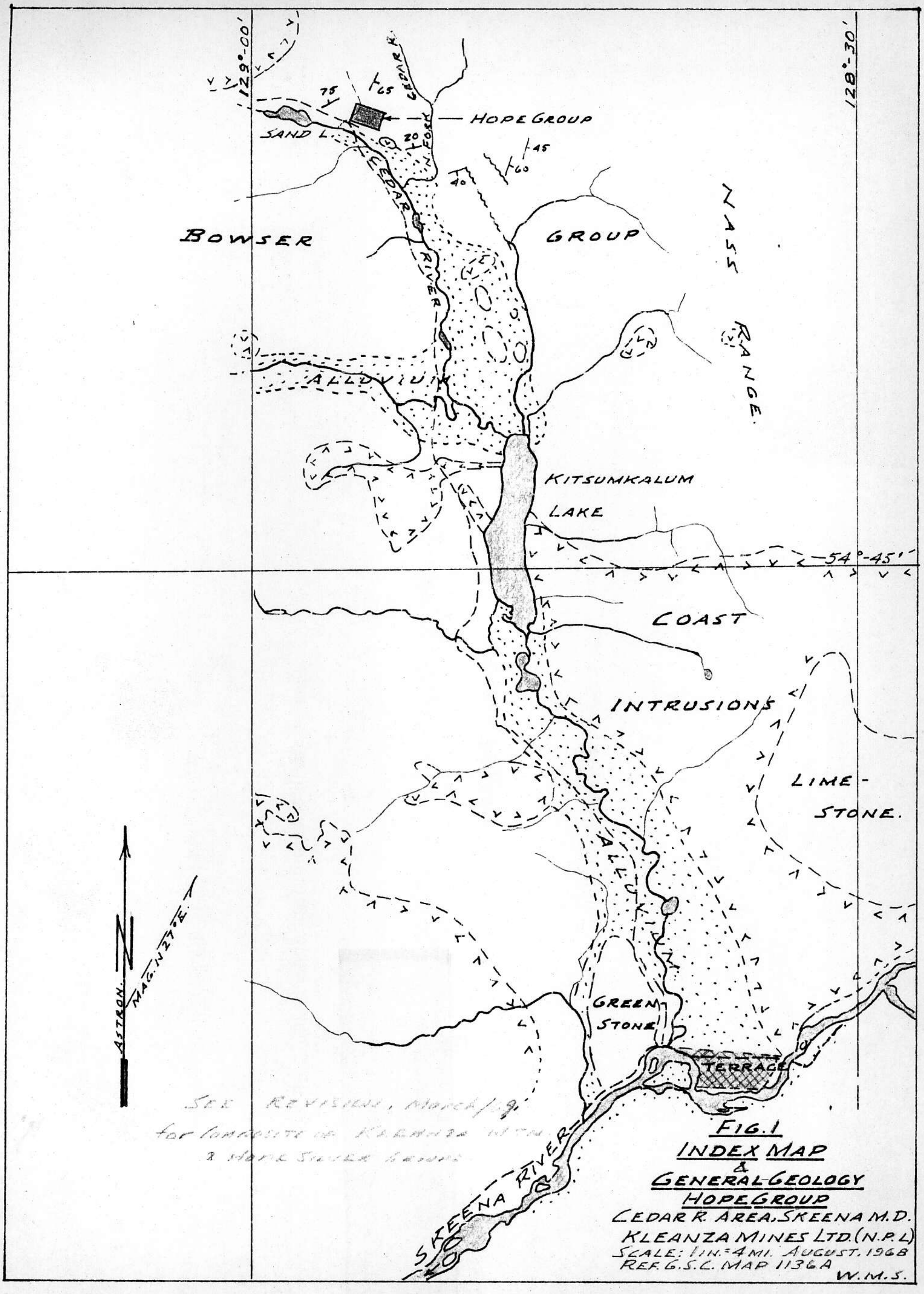
ESTIMATED DIRECT COSTS

1.	Estimate: 2 geophysical field days @$150.00-300.00		
	Travel & mobilization charges =	200.00	$500.00
2.)	Estimate 10 days (Cat.D-8) @ $300 per day plus		
3.)	Truck transportation charges =		3,500.00
4.	Provision for BQ-W.L. core drilling, 1,500' @$12/ft=		18,000.00
5.	Allowance, supervision & Engineering		1,500.00
6.	Provision, incidental & contingency expense =		2,500.00
	Total		$26,000.00

Respectfully submitted

W.M. Sharp

W.M. Sharp, P. Eng.



SEE REVISION, March/69 for composite of Kleanza Mtn. & Hope Silver Groups

FIG. 1
INDEX MAP
&
GENERAL GEOLOGY
HOPE GROUP
CEDAR R. AREA, SKEENA M.D.
KLEANZA MINES LTD. (N.P.L.)
SCALE: 1 IN. = 4 MI. AUGUST. 1968
REF. G.S.C. MAP 1136A
W.M.S.

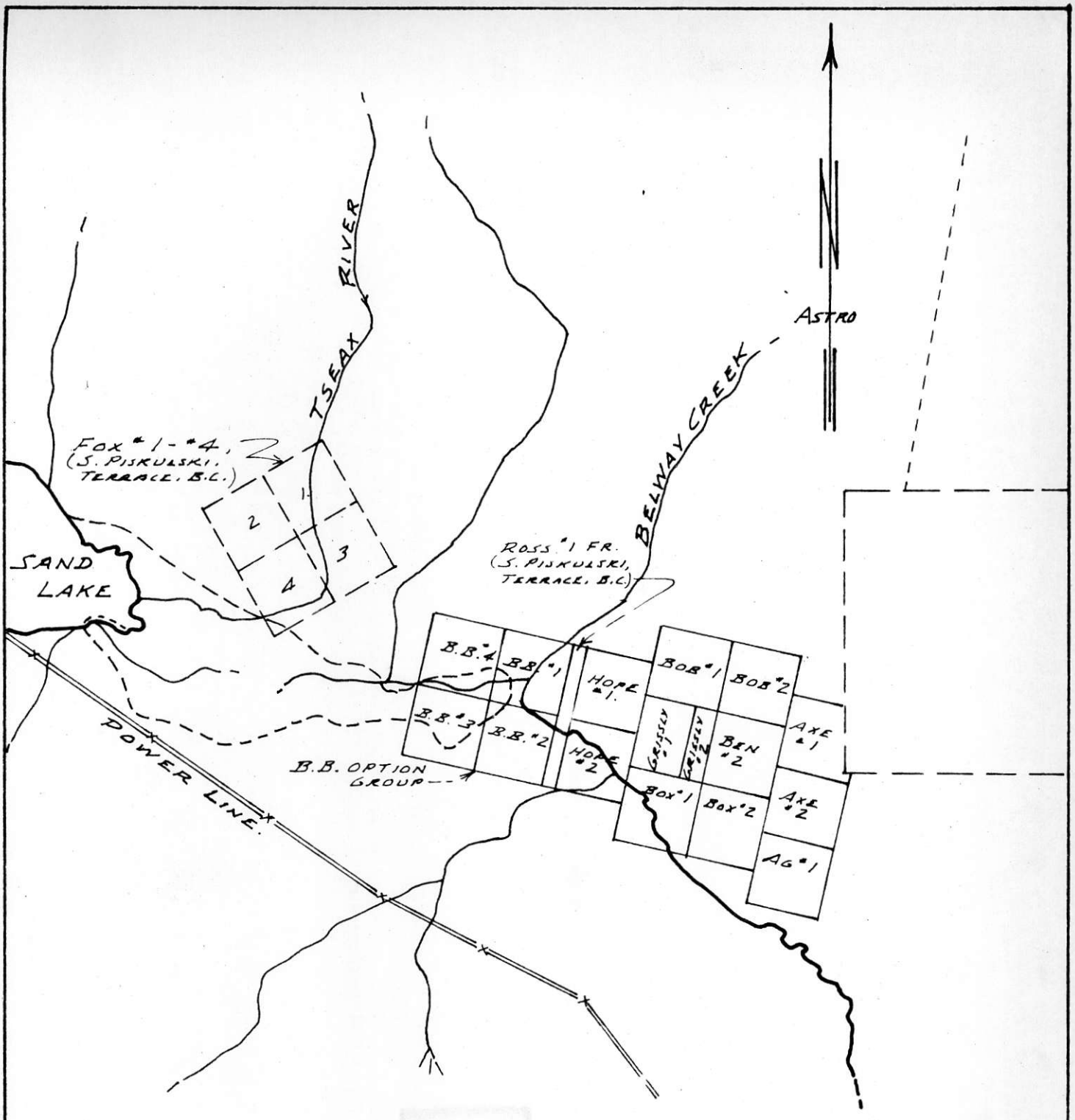


FIG. 3

CLAIM MAP

HOPE SILVER PROPERTY

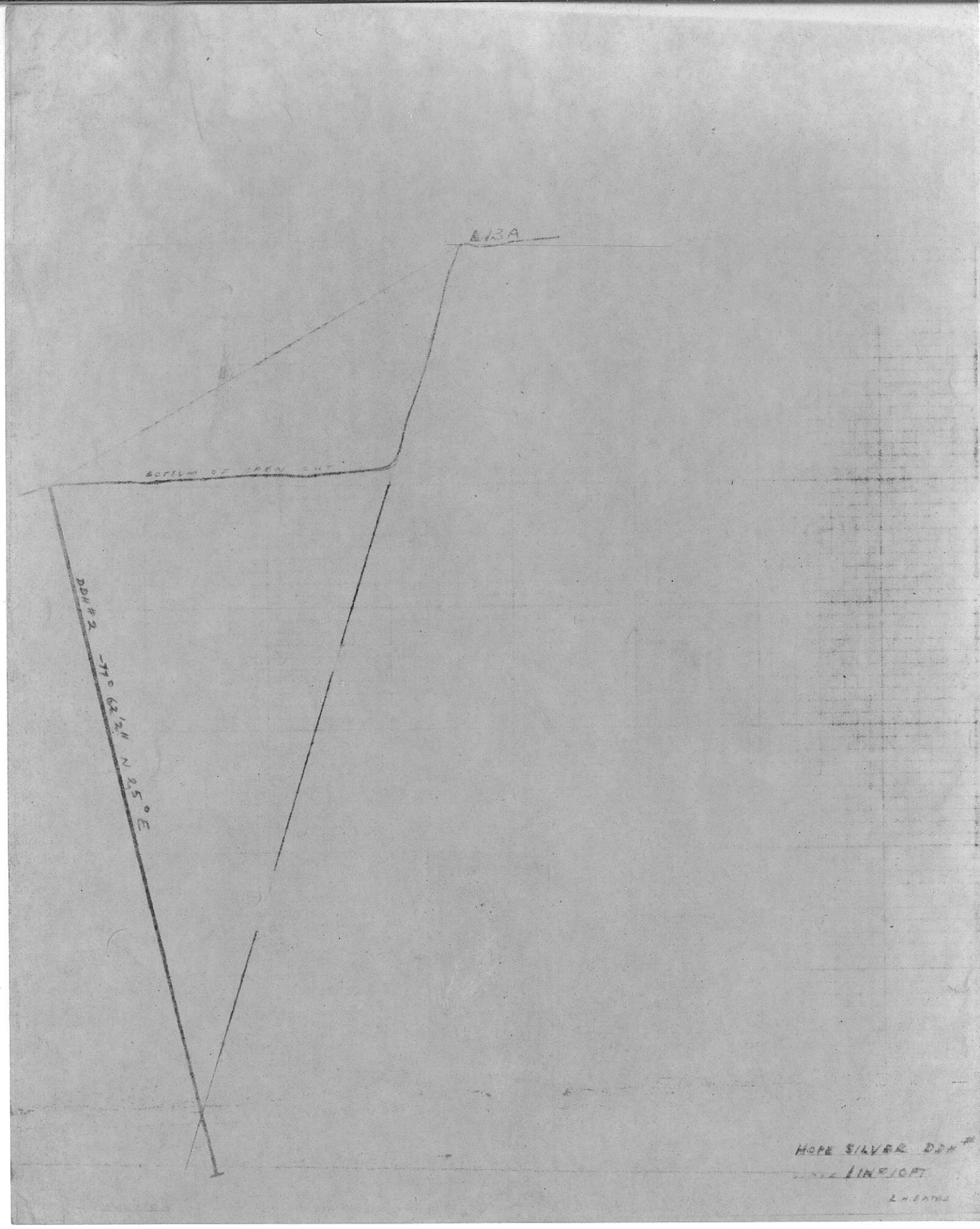
CEDAR R. SECTION, TERRACE AREA

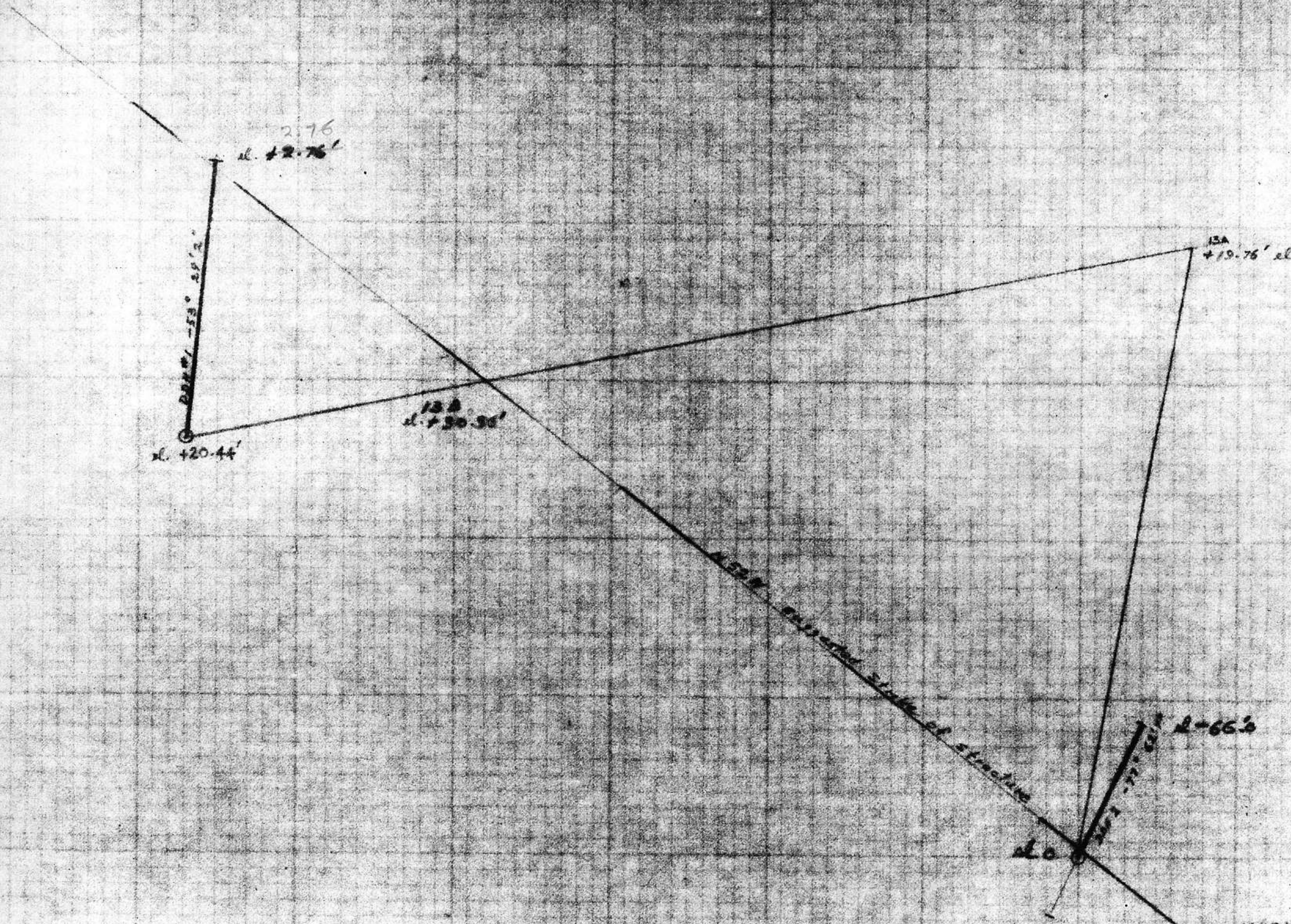
SKEENA MINING DIVISION, B.C.

KLEANZA MINES LTD (N.PL.)

SCALE: 1 IN. = 3000 FT. MARCH, 1969

REF. RH.B. & B.C.D.M. - W.M.S.

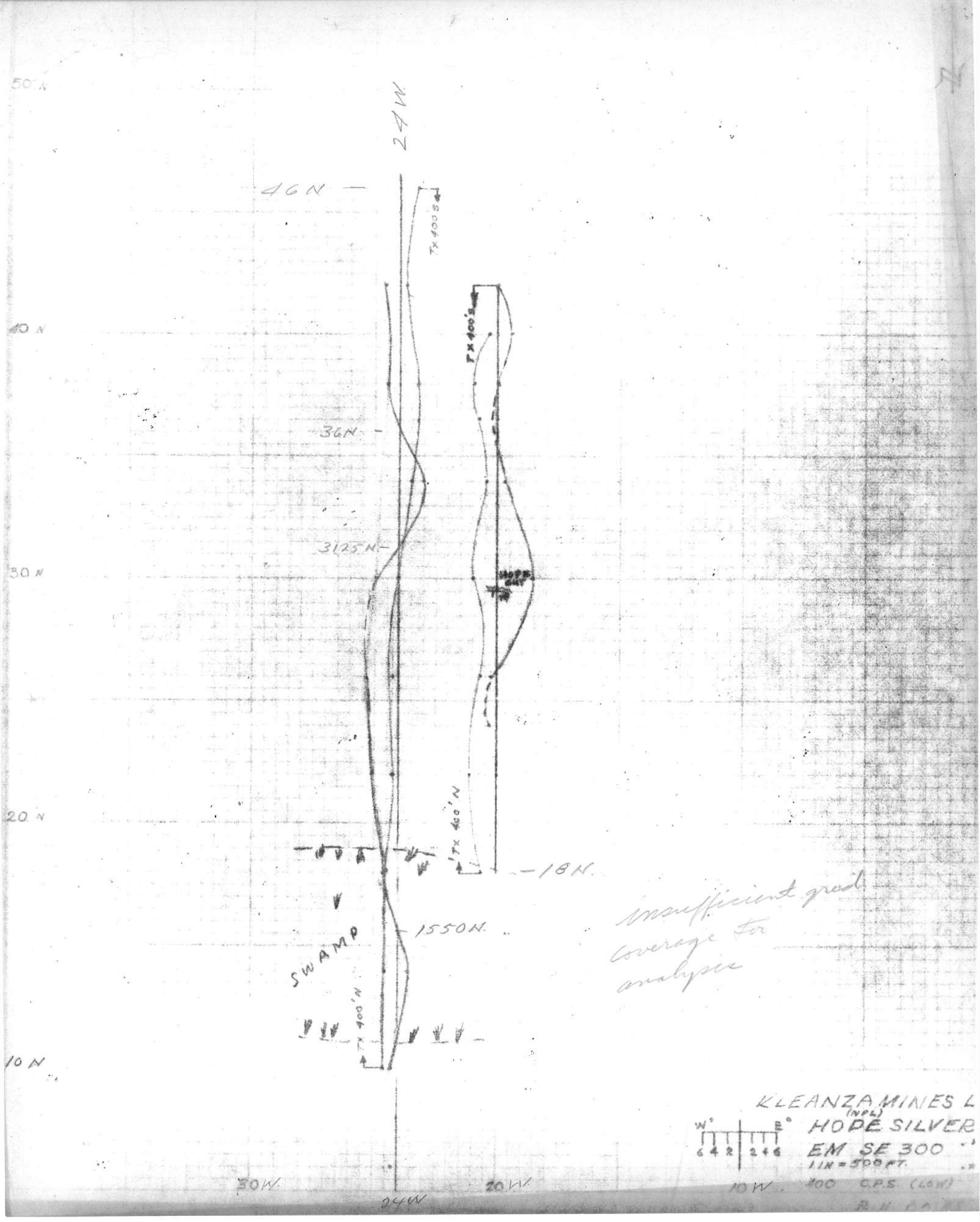

A
B
A'
B'
BOTTOM OF OPEN CUT
DDH #2 -77° 62½' N 25° E
HOPE SILVER DDH
1 INCH = 100 FT



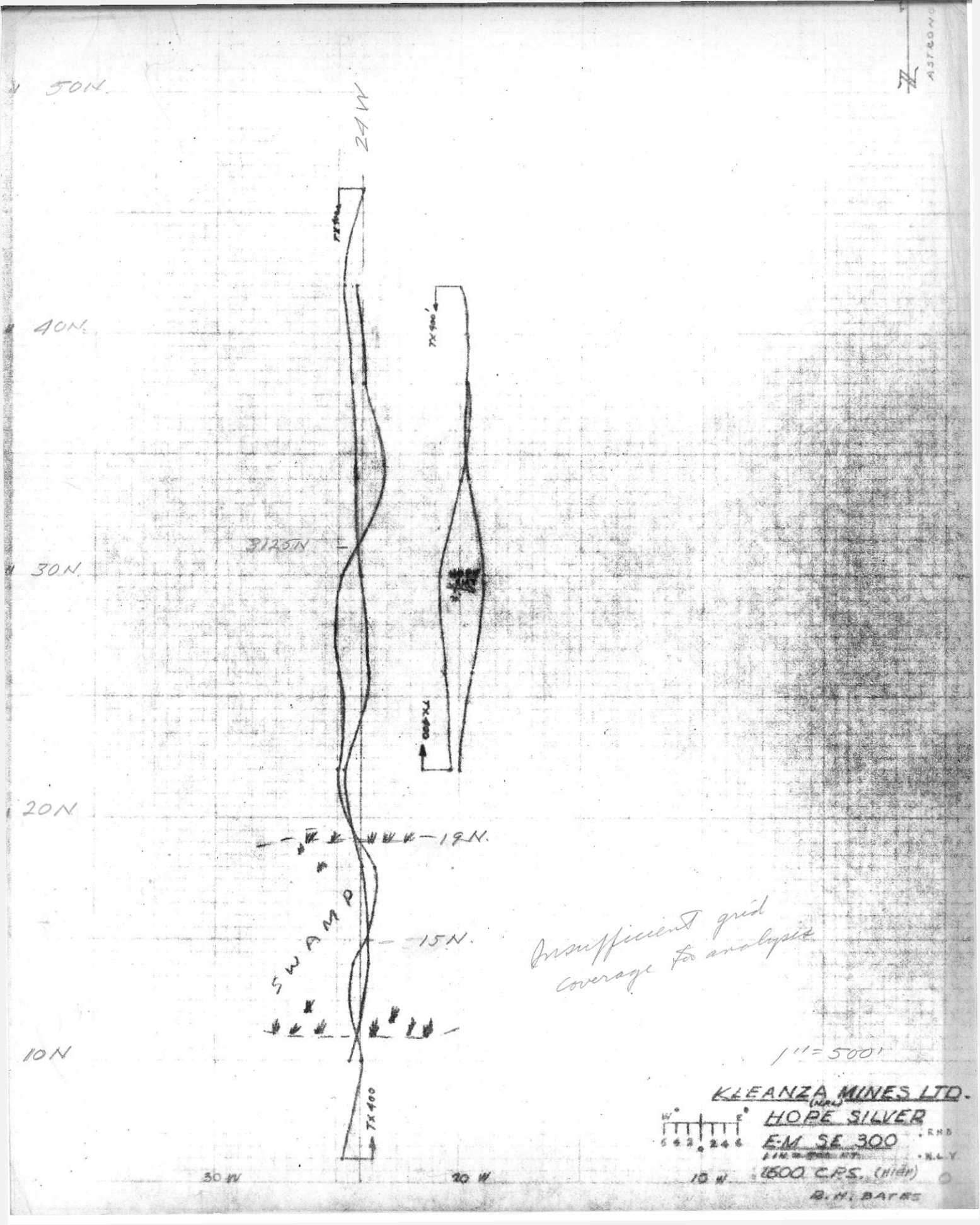
KLEANZA MINES LTD

PLAN OF D.D. HOLES

1 IN = 10 FT



50 N
40 N
30 N
20 N
10 N
24 W
46 N
TX 400 S
TX 400'S
36 N
3125 N
TX 400'N
18 N
1550 N
SWAMP
TX 400'N
insufficient grad coverage for analyses
KLEANZA MINES L
(NPL)
HOPE SILVER
W E
6 4 2 2 4 6
EM SE 300
1 IN = 500 FT.
400 C.P.S. (LOW)
30W
20W
10W
24W



Insufficient grid coverage for analysis

1" = 500'

KLEANZA MINES LTD. (N.P.L.)

HOPE SILVER

E-M SE 300

1600 C.P.S. (HIGH)

R. N. BATES

TO:

Kiwanza Mines Ltd.,

P.O. Box 580

Terrace B.C.

Certificate of Assay

COAST ELDRIDGE

PROFESSIONAL SERVICES DIVISION

WARNOCK HERSEY INTERNATIONAL LIMITED

125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

CTA

PHONE: (604)
TELEX 04-50
CABLE ADDRE
ELDRI

FILE NO. A.3-K.1-

DATE August 1

We Hereby Certify *that the following are the results of assays made by us upon submitted* ORE *sampl*

MARKED	GOLD		SILVER	Copper (Cu)	Total Molybdenum (Mo)	Lead (Pb)	Zinc (Zn)		
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT.	PER CENT.	PER CENT.	PER CENT	PE CE
		$							
73926					0.64 — (MOLYBDENUM CR.)				
73927	0.02	0.70	13.7	4.50		8.74	6.96		

Assay tickets in Fred Resstrawis Assay Book

#210 535 Howe ST.

Gold calculated at $ ..... per ounce

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and gain inherent in the fire assay process.

H Hayes

Provincial A

TO:

Klesnza Mines Ltd.,

P.O. Box 580

Terrace, B.C.

Certificate of Assay

COAST ELDRIDGE

PROFESSIONAL SERVICES DIVISION

WARNOCK HERSEY INTERNATIONAL LIMITED

125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

CTA

PHONE (604) 876-4
TELEX 04-50353
CABLE ADDRESS
ELDRICO

FILE NO. A.3-K.1-69-7

DATE August 15, 19

We Hereby Certify that the following are the results of assays made by us upon submitted ORE samples

MARKED	GOLD		SILVER						
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT.	PER CENT	PER CENT	PER CENT	PER CENT
		$							
7583	Trace	-	13.4						

№ 7583

FIELD COPY

TO: COAST ELDRIDGE
PROFESSIONAL SERVICES DIVISION
Warnock Hersey International Ltd.
125 E. 4th AVE., VANCOUVER 10, B.C.

Date July 28 / 1969

Project Hope Silver

Description S.G. more than average - ~~to~~ dense grey rock fractures → calcite (?)

TRACE, ↗ 13.4 oz/TON

Assayed for Au / Ag.

Pulps and rejec... of one year by special arrange...

C 21

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have

..... per ounce

Provincial Assaye

Kleanza Mines Ltd.,

P.O. Box 580

Terrace, B.C.

Certificate of Assay

COAST ELDRIDGE

PROFESSIONAL SERVICES DIVISION

WARNOCK HERSEY INTERNATIONAL LIMITED

125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

PHONE (604) [illegible]
TELEX 04-50353
CABLE ADDRESS: ELDRICO

Member Canadian Testing Association

FILE NO. A.3-K.2-69-7311

DATE August 5, 1969

We Hereby Certify that the following are the results of assays made by us upon submitted ORE samples

MARKED	GOLD		SILVER						
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT
		$							
7576	0.01	0.35	0.1	argillite —	one visible.	speck of (Hope	metallic Silver).	silvery mineral	

Gold calculated at $ .... per ounce

Note. Rejects retained one week.
Pulps retained one month.
Pulps and rejects may be stored for a maximum of one year by special arrangement.

Unless it is specifically stated otherwise, gold and silver values reported on these sheets have not been adjusted to compensate for losses and

H. Sharp

Provincial Assayer

Kleanza Mines Ltd.,

210 - 535 Howe Street

Vancouver, B.C.

Certificate of Assay

COAST ELDRIDGE

PROFESSIONAL SERVICES DIVISION

WARNOCK HERSEY INTERNATIONAL LIMITED

125 EAST 4TH AVE. VANCOUVER 10, B.C., CANADA

PHONE: (604) [illegible]
TELEX: 04-503[illegible]
CABLE ADDRESS: ELDRICO

FILE NO. A.3-K.1-69-7429

DATE August 7, 1969

We Hereby Certify *that the following are the results of assays made by us upon submitted* ORE *samples*

MARKED	GOLD		SILVER	Lead (Pb)	Copper (Cu)	Total Molybdenum			
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT.	PER CENT	PER CENT (Mo)	PER CENT	PER CENT	PER CENT
		$							
7577	0.01	0.35	6.2	8.22	0.92		Trench #s	High grade	(E. of adit work
7578	Trace	-	0.5	0.59	0.25		Breec. Qtz veins Tr. #2	" " "	
7579			4.1				white spotted drg. Barren looking		
7580						0.65	CROESUS HIGH GRADE (above peg.)		
7581						0.16	E.R. ANDERSON MO. CR.		(Aplitic?)
7582			3.9				Hope silver	chert dense,	No metallics visible

No 7579

FIELD COPY

TO: COAST ELDRIDGE
PROFESSIONAL SERVICES DIVISION
Warnock Hersey International Ltd.
125 E. 4th AVE., VANCOUVER 10, B.C.

Date July 27/69

Project Hope Silver

Description White Spotted (Argillite?) Country Rock

Assayed for Ag (4.1 g/ton)

ounce

ote

Pulps and
of one year by

Unless it is specifically
and silver values reported on the
not been adjusted to

H Sharp

Provincial Assayer


W. M. SHARP, P.Eng.
CONSULTING GEOLOGICAL ENGINEER
NORTH VANCOUVER, B.C.
KLEANZA MINES LTD. (N.P.L.)
PROPERTY: HOPE SILVER, CEDAR RIVER AREA
SKEENA MINING DIVISION, B.C.
TITLE: CURRENT EXPLORATION & GEOLOGY
LEGEND:
ARGILLITE: BLACK-CARBONAC. TO PALE-SANDY
FELSITIC TUFFS (LOC. DYKES) & ARKOSIC SEDIMENTS.
VEIN OR LODE BRECCIA: QZ. W. ARGILLITE, FELSITE, ETC.
FAULT OR SHEAR; QUARTZ OR SILICIFICATION
BEDDING: 1. DIP < 45° 2. DIP ≥ 45° 3. MINOR FRACTURING
GALENA, SPHALERITE, CHALCO-PYRITE, ETC.: VEIN, DISPERSED.
SCALE: 1 IN. = 50 FT.
DATE: OCT., 1969
DWN BY: W.M.S.
REVISION: E. PART OF K69-5
REF.: RN. BATES 100-SCALE
DWG/FIG. No. K69-5A.
34W
32W
30W
28W
26W
24W
22W
20W
18W
16W
36N
34N
32N
30N
28N
TRENCH No. 13.
TRENCH No. 11
TRENCH No. 10
TRENCH No. 9
TRENCH No. 14 (LOCATION ?)
TR. #12
TR. #8
TR. #7
TR. #6
TR. #5
TR. #4
TR. #3
TR. #2
TRENCH #1
E.M. CROSSOVER 400 C.P.S.
E.M. CROSS-OVER 400 C.P.S
H.M. GEOCHEM. NEG. 22N-50N
H.M. GEOCH NEG. 27N-35N
NO SOIL SAMPLES
RIDGE OUTCROP LEUCODIORITE
THIN-BDD. SANDY & SILTS.
BLUE-GRAY ARKOSIC
LACY QZ-CALCITE.
6"-12" QZ-ARKOSE BRECCIA.
QZ. BRECCIA
GRAY SANDY
2' CRUSHED W. QZ. PODS
3"-8" QZ-ARG. BRECCIA
2' QZ-ARG. BRECCIA
ALTERNATING GRAY SANDY & BLACK
4" QZ. & QZ-ARG. BRECCIA
QZ. VLTS.
2"-3" GOUGE W. 1/2" QUARTZ
FELSITIC DYKE (?) (F.GR. EQUIGRAN.)
CREEK