

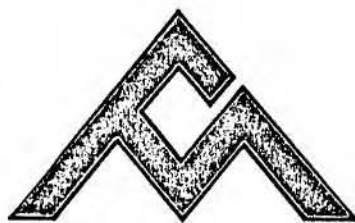
MINISTRY OF ENERGY, MINES
AND PETROLEUM RESOURCES

Rec'd MAY 9 1986

SUBJECT _____

FILE _____

VANCOUVER, B.C.



CHALICE MINING INC.

BIOGEOCHEMICAL REPORT
ON THE
VICTORY CLAIMS

PENROSE CREEK, GUN LAKE AREA

LILLOOET MINING DIVISION

BRITISH COLUMBIA

Lat. 50°50.7' Long. 122°54.5'

PROPERTY: 5KM. DUE WEST OF THE TOWN OF GOLD
BRIDGE ON IMMEDIATE WEST SIDE OF
GUN LAKE ~~2220~~
N.T.S. 92J/15W

WRITTEN FOR: CHALICE MINING INC.
Owner/Operator: P.O. BOX 2240
SECHELT, B.C. V0N 3A0

SURVEYED BY: BILL CHASE AND ASSOCIATES

WRITTEN BY: STEVEN HODGSON
CHALICE MINING INC.

DATED: MARCH 25, 1986

FILMED

GEOLOGICAL BRANCH
ASSESSMENT REPORT

14,892

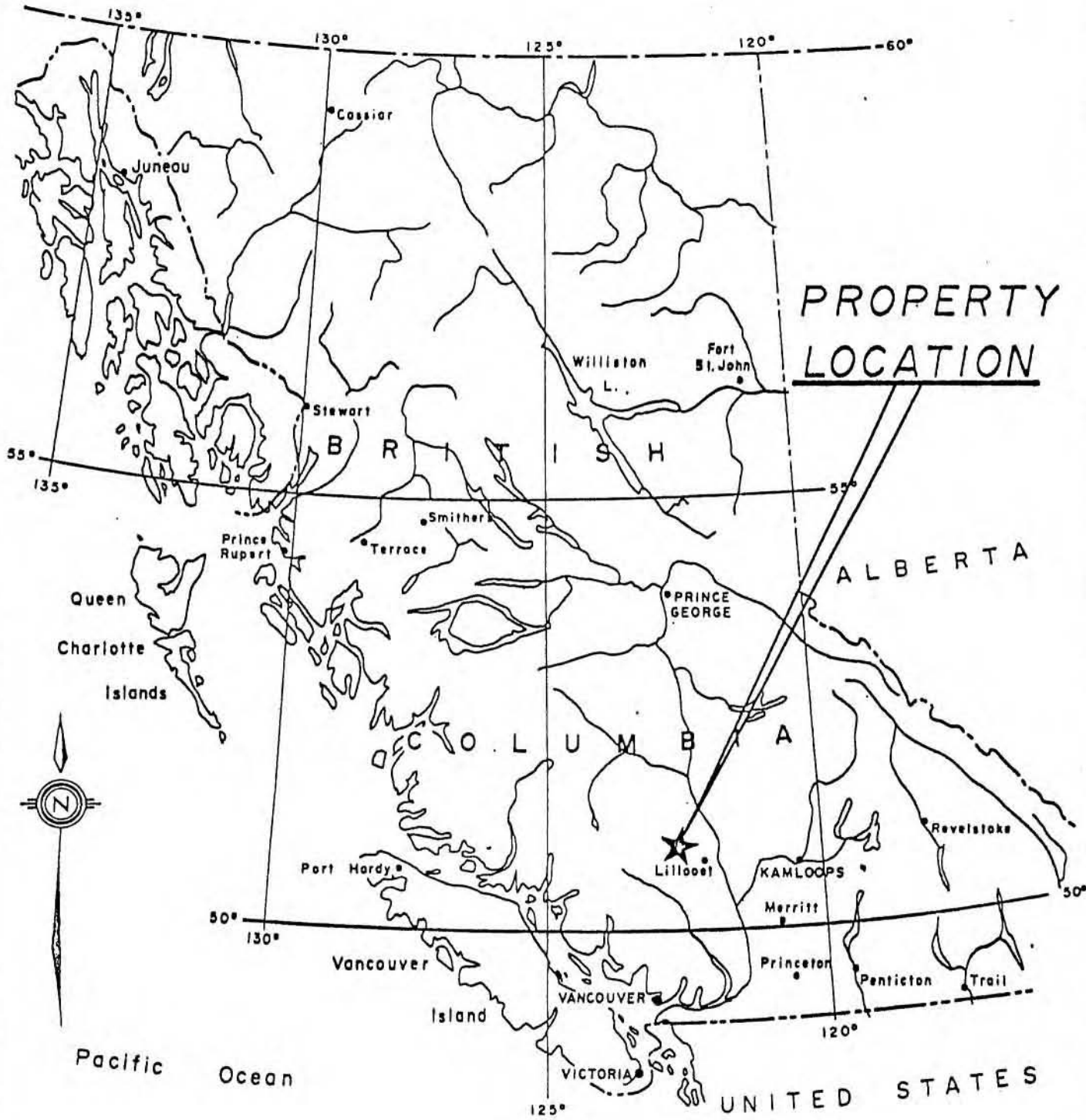
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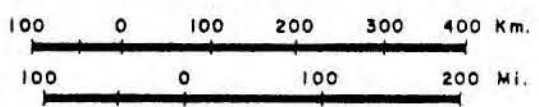
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Survey Map	1cm=125m	
Hg		8
As		9
Au		10
Sb		11





PROPERTY LOCATION

GOLD BRIDGE PROPERTY



BIOGEOCHEMICAL REPORT
ON THE
VICTORY CLAIMS
OF
CHALICE MINING INC.

Introduction and General Remarks

This report discusses the survey procedure, collection of material, laboratory procedure, and interpretation of biogeochemical surveys as a tool for the location of precious metal occurrences in the area of the Chalice Claims in Gold Bridge, B.C.

The object of this orientation survey was to determine the suitability of the biogeochemical technique for this particular terrain. An extensive four to nine foot layer of ash and tuffaceous material overlies virtually 60% of the Victory Claims, and normal geochemical soil surveys are useless. This survey performed by Bill Chase and Associates, collected fourteen samples, three of which were on the Veritas crown grant number 2358 and the remainder on a general North West South East, 120 trend of Penrose Creek on the Victory Claims. A total of seven hundred meters of survey was done over the claims. The three samples taken at the Veritas crown grant were collected over the dump site and above the adit in an attempt to gather background information and numbers as the Veritas vein contained native gold, pyrite, arsenopyrite and galena in a quartz vein.

The biogeochemical technique in this instance was a cost effective method versus soils and has given us some anomalous results to follow-up.

Property and Ownership

The property consists of one claim totalling twelve units as shown on Map 2 and as described below:

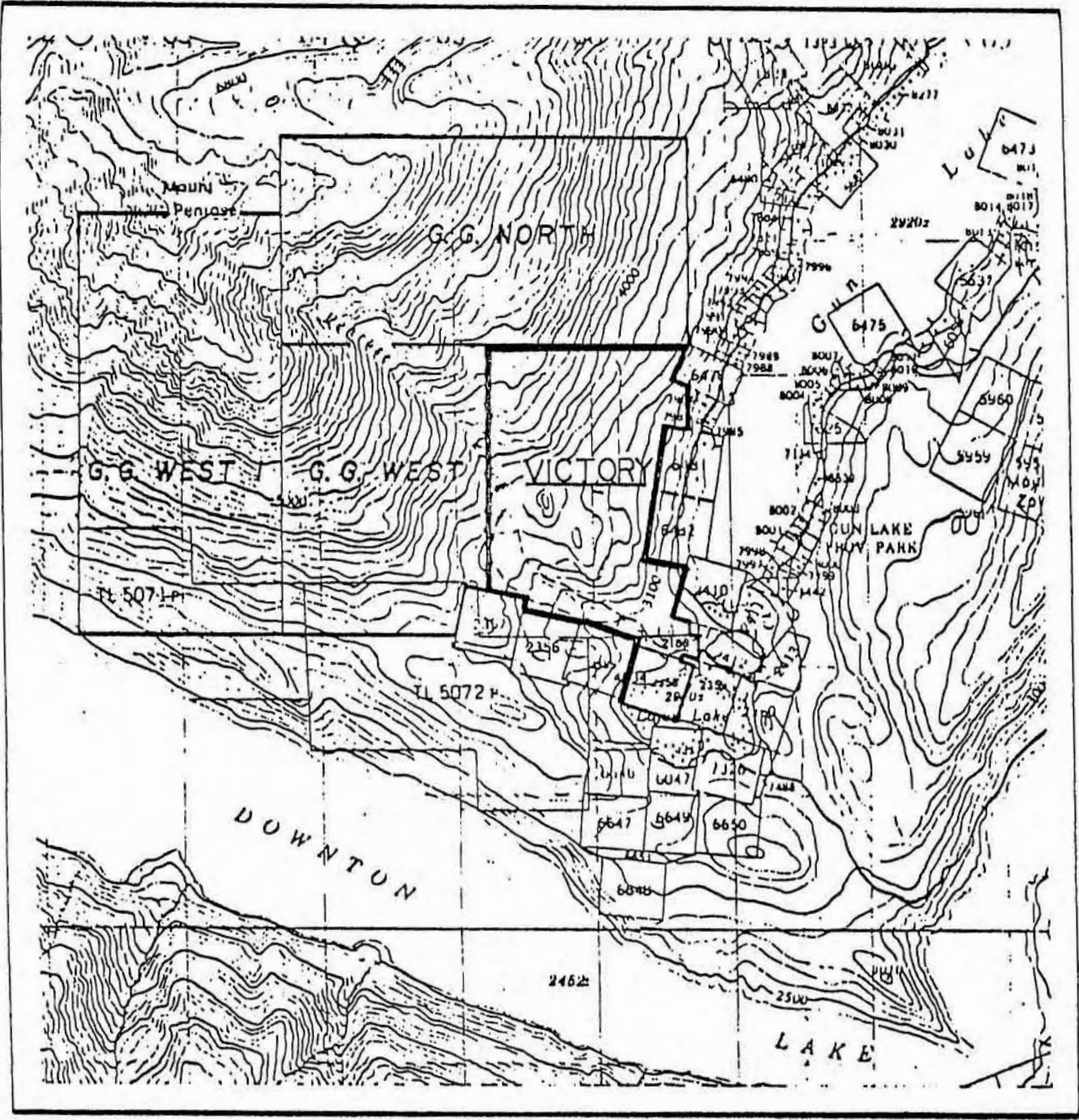
<u>Claim Name</u>	<u># Units</u>	<u>Record #</u>	<u>Expiry Date</u>
Victory	12	3102	March 1984

The claim is owned by Chalice Mining Inc. of Vancouver, B.C.

Location and Access

The property is located on the southeastern slope of Mount Penrose and abuts the western edges of Gun Lake and Lajoie Lake as well as the northern edge of Downton Lake.

The geographical coordinates are 50°52'N latitude and 122°56'W



50° 52'



CHALICE MINING INC.

GOLD BRIDGE PROPERTY

PENROSE CREEK, GUN LAKE AREA, B. C.

LILLOOET M.D.

CLAIM LOCATION MAP

SCALE: 1:50,000	DATE: MARCH 26	MAP: 2	H.T.S. 92 J/15 W
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longitude. Access can be gained by a series of 2-wheel drive roads from Gold Bridge which runs westerly towards and around Gun Lake. The distance from Gold Bridge to the property is about six kilometers.

Physiography

The property lies at the southeastern part of the Pacific Ranges which is a physiographic division of the Coast Mountains. The terrain is, in general, steep and mountainous with the general slope facing towards the south and southeast. The claims are dissected by the southeasterly-draining Penrose Creek.

Elevations vary from 762 meters a.s.l. at the southwestern corner of the property close to the edge of Downton Lake, to 2,627 meters a.s.l. at the northwestern edge of the property on Mount Penrose.

The main water source would be Penrose Creek as well as Downton Lake, Gun Lake, and Lajoie Lake.

The forest cover consists primarily of fir and spruce, moderate in density and with an undergrowth light to moderate.

History of Previous Work

The following is quoted from Sookochoff's September 1983 report on the property:

"The history of the area is centered around the Bralorne and the Pioneer Mines where lode gold production was carried on from the early 1900's.

The Bralorne and Pioneer situated on Cadwallader Creek within thirteen kilometers southwest of the Chalice property, in addition to other significant former properties such as the Ben d'Or and the Wayside are located within a mineralized belt on the western flank of the Ben d'Or Mountains.

During the early 1900's, production initially utilizing arrastras was carried out at these properties with the Bralorne producing to 1972 when it was shut down for economic reasons.

The history of the Chalice property stems from the Veritas crown grant where former exploration included a 'tunnel 225 feet long and several open cuts' on a vein cutting an augite-diorite and serpentine. A total of a 'thousand feet' of underground work in three tunnels is reported.

Preliminary geophysical and geochemical surveys were carried out by Chalice personnel in 1979 with a diamond drill hole put down on an anomalous zone.



In 1982 trenching by Chalice personnel was completed at the southwest corner of the Gwendolyn's Glory claim."

Geology

The following is also quoted from Sookochoff's same report:

"In the area of the Chalice property, Triassic sedimentary and volcanic rocks including variable metamorphosed units are intruded by three or more intrusive episodes including an ultrabasic or intrusive. Generally, the Triassic formations include the middle Triassic Fergusson group of cherts to limestone in addition to biotite schists, the younger Noel Formation, Pioneer Formation and the Youngest Hurly Formation which in addition to fine grained and sedimentary rocks, include conglomerate, agglomerates, and andesites.

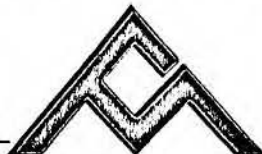
The individual formations are exposed to a greater irregularity towards the central Cadwallader Creek extending northwesterly to Mount Penrose west of Gun Lake. The band is generally enveloped by diorite to syenodiorite intrusives with localized ultrabasic and augite diorite. Bralorne intrusive plugs and northwesterly stretched stocks are associated with the central formations.

The major aerial structural feature is a broad northwesterly trending and plunging anticlinal arch centered east of Cadwallader Creek in the Ben d'Or range of mountains. The western limb in which the principal ore deposits of the area occur, extends into the Cadwallader Creek Valley, which reflects a major structure. The major structure results in secondary and minor folds which resulted in complex distortion of the formations in addition to providing a locus for the ultrabasic and gold associated Bralorne intrusives. The lenticular intrusives extend to the Chalice property area where topographical structural features are not as obvious as along the Cadwallader Creek Valley.

The gold bearing quartz fissure veins of the Bralorne intrusives and more specifically, the veins in the Bralorne and Pioneer Mines are conspicuous for the exhibited ribboning effect where quartz ribbons are separated by thin, dark-grey films of ground-up sulphides, sericite, white mica and gouge and occasional slickensided free gold.

The vein fissures extending from the augite diorite are persistent into the Pioneer greenstone with weaker indications in thinly bedded sediments and 'feathering out' in serpentine.

Associated indicator minerals that are found in the Bralorne Pioneer veins and reflect gold mineralization are mariposite, scheelite, arsenopyrite, sphalerite and galena. Other metallic minerals include pyrite, chalcopyrite, stibnite, tetrahedrite, marcasite and sylvanite(?) or calaverite(?).



On the Gun Lake road west of the southwest corner of the property, a reported sequence of mixed sandstone, siltstone and carbonate rich conglomerate with minor thin rhyolite/dacite volcanic members trending NW and dipping SW occur.

On the Chalice property the Veritas vein is described as a vein trending at 120° with a dip varying from 64° NE to vertical. The vein formed along a fracture system in altered volcanics (greenstone) which is locally intruded by a Bralorne-like-micro-diorite pluton. The micro-diorite is serpentized near the contact. Quartz veins are irregular lenses in NW trending shears. The outcrop and workings reveal one thousand feet of vein zone with a vertical height of four hundred feet (old workings). Veins are of milky white quartz 'three inches to four feet' wide with erratic sulphide content. The vein appears to be cut off by micro-diorite pluton.

On Penrose Creek along the western boundary of the property the geology is reported as altered volcanics and serpentines occurring as large inclusions (pendants) within micro-diorite. Calcite, ankerite, quartz stockworks occur in the serpentine with pyrite, chalcopryrite, and arsenopyrite. Carbonate quartz veins also occur within becciated green volcanics of a serpentine lens."

Biogeochemical Sample Collection and Laboratory Procedures

A small sample (one hundred grams minimum) of the one year old growth of the branches of the Douglas Fir is collected and put into a plastic bag.

The laboratory receives the sample, dries it and the entire sample is ground on a wiley mill to ten mesh. A ten gram sample is pressed and encased in plastic to prevent contamination. The gold, arsenic, and antimony are then subjected to Neutron Activation Analysis.

With the mercury a one gram sample is wet ashed and immersed in a nitric-perchloric acid bath then subjected to hydro-chloric acid and finished by flameless atomic absorption. Results were given in PPb for Au and Hg and PPM for As and Sb.

The laboratory used was:

Chemex Labs Ltd.
212 Brooksbank Avenue
North Vancouver, B.C.
certified by Hart Bickler

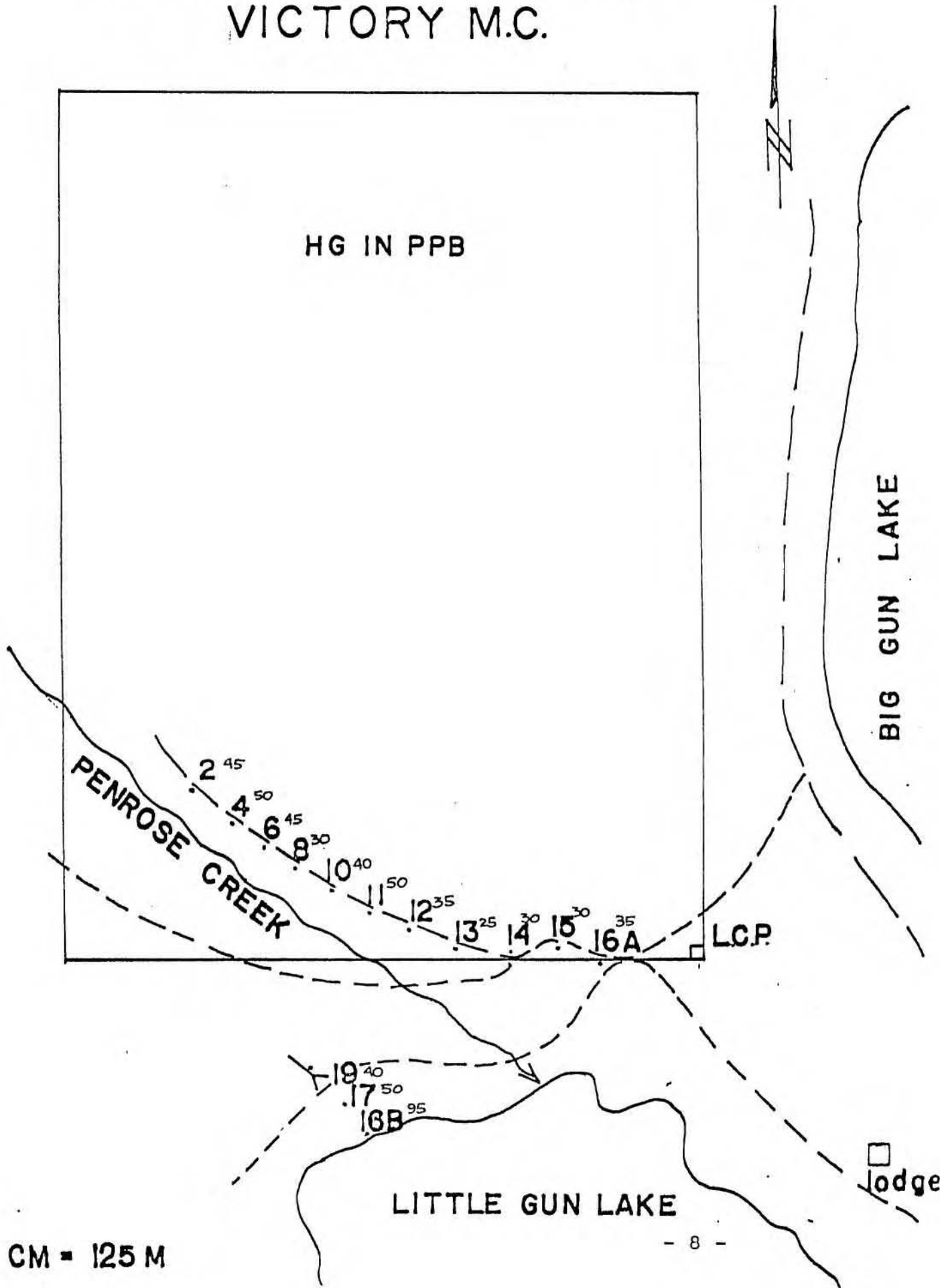


Discussion of Results

The survey was conducted as an orientation or experimental survey to ascertain if the biogeochemical methods were applicable to the Chalice Properties in Gold Bridge. From the limited number of samples taken, little can be said conclusively, yet one of the check samples taken over the Veritas dump and adit did show a significant elevation in arsenic and antimony (sample V-19). Three other samples in the survey also showed from ten to thirty times background in arsenic (sample V-12-14) and one showed four times background in gold (sample V-11). Only one sample (V-13) showed increased values in antimony. Additional experimentation will continue with the biogeochemical method as it has proven to be cost effective in this instance and gives indications that it may prove a useful tool for the location of precious metal occurrences on the Chalice property.

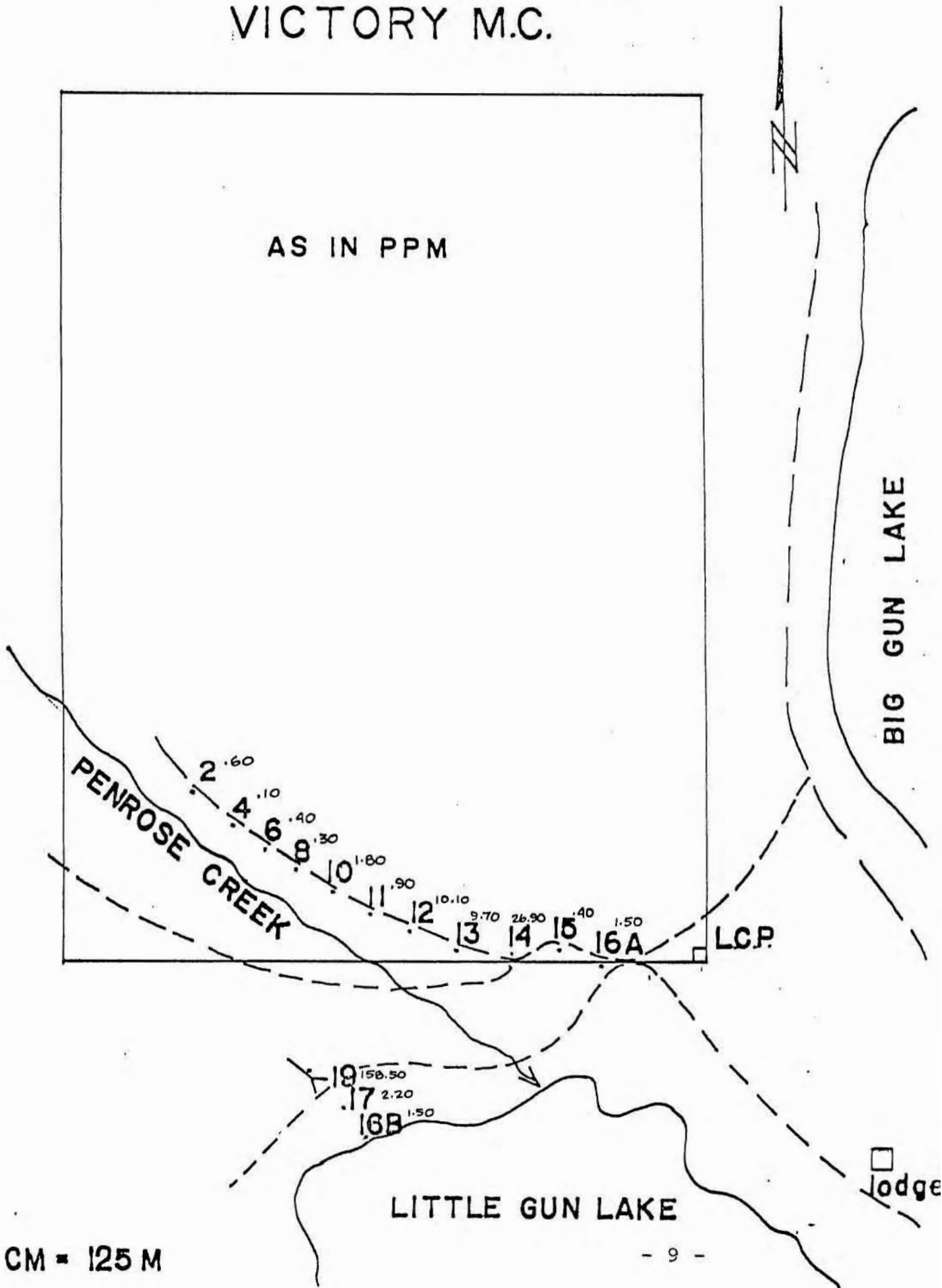


SAMPLE LOCATION MAP VICTORY M.C.

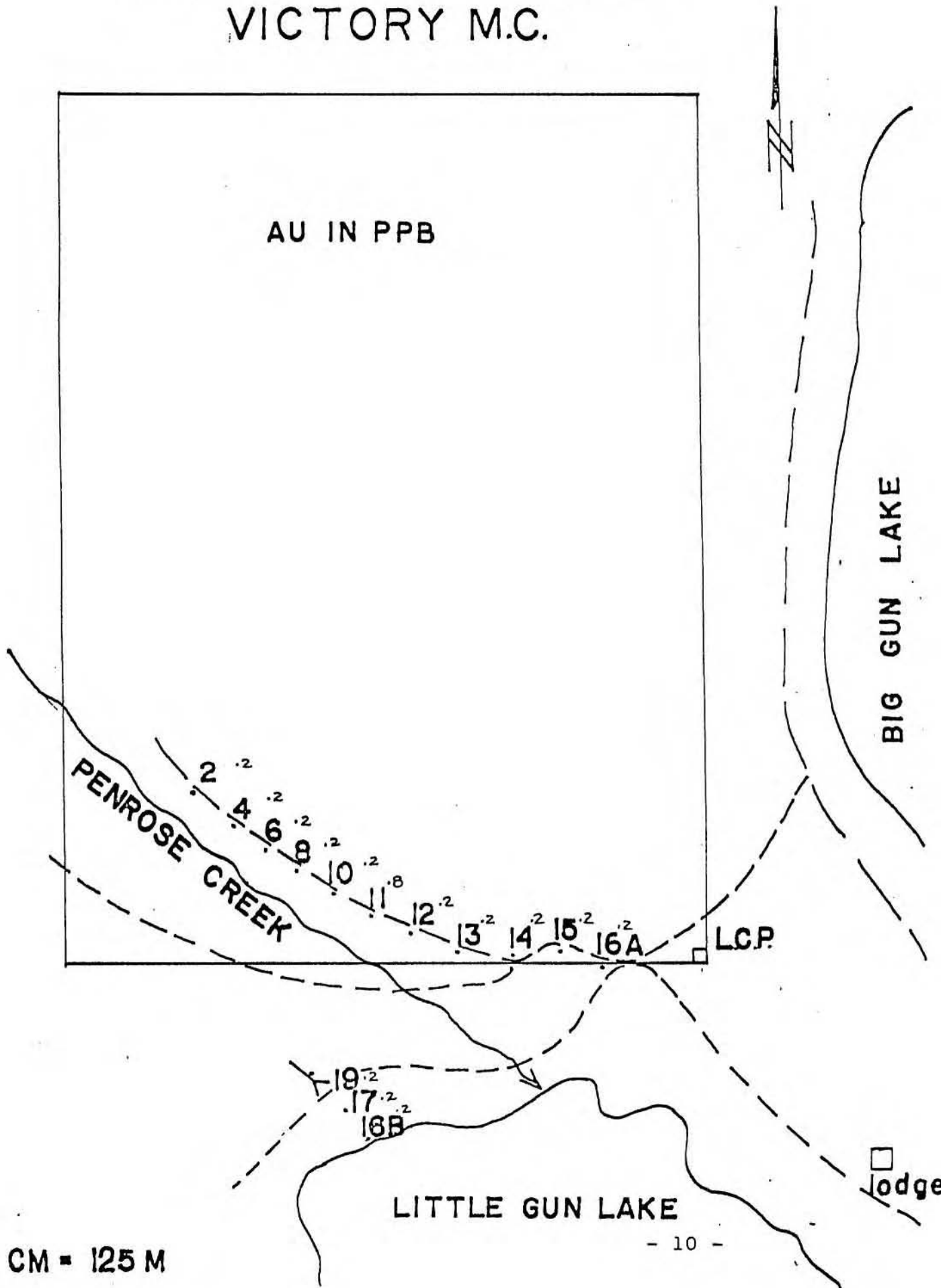


1 CM = 125 M

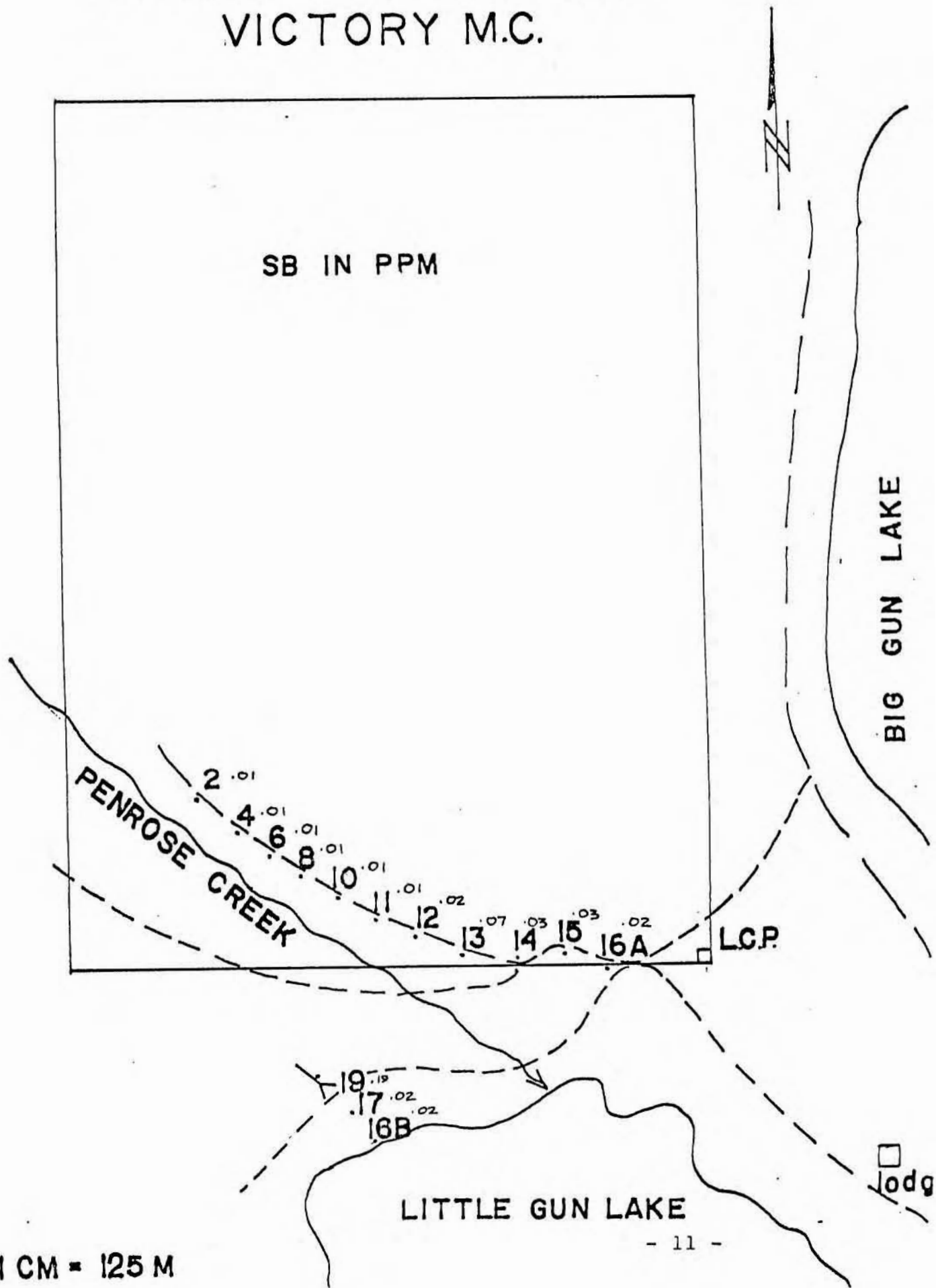
SAMPLE LOCATION MAP VICTORY M.C.



SAMPLE LOCATION MAP VICTORY M.C.



SAMPLE LOCATION MAP VICTORY M.C.



1 CM = 125 M

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AUTHORS QUALIFICATIONS

I certify that:

- 1) I attended Pasedena City College and the University of Colorado as a major in Geology.
- 2) I attended the Mineral Exploration course at Nelson, B.C. in 1979.
- 3) I have been a prospector in B.C. for ten years.
- 4) The information for the accompanying report was based on work personally supervised by myself and from previous assessment reports and government publications.

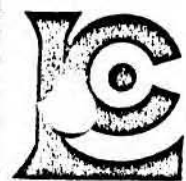


ITEMIZED COST STATEMENT

Bill Chase and Associates
February 22-26/86

2 men 1 day @ \$125.00 each	\$250.00
Room and Board 2 nights 2 men	161.93
Mobilization and Demobilization Vehicle 3 days @ \$30.00 per day	90.00
Fuel	143.44
2 days travel/ 2 @ \$62.50	250.00
Assay: Analyzed for Hg, As, Au, & Sb 14 samples @\$18.00 per sample	252.00
Delivered samples	40.00
Cost Report and Reproduction	250.00

TOTAL COST	\$1437.37
	=====



Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Brooksbank Ave.
North Vancouver, B.C.
Canada V7J 2C1
Phone: (604) 984-0221
Telex: 043-52597

CERTIFICATE OF ANALYSIS

TO : CHALICE MINING INC.

P.O. BOX 2240
SECHELT, B.C.
V0N 3A0

CERT. # : A8611033-001-A
INVOICE # : I8611033
DATE : 25-MAR-86
P.O. # : NONE
VERATIS

CC: BILL CHASE

Sample description	Prep code	Hg		As NAA		Au NAA		Sb NAA	
		ppb	ppm bio	ppm bio	ppb bio	ppm bio	ppm bio		
V-02	210	45	0.60	<0.2	0.01	--	--	--	--
V-04	210	50	<0.10	<0.2	0.01	--	--	--	--
V-06	210	45	0.40	<0.2	<0.01	--	--	--	--
V-08	210	30	0.30	<0.2	0.01	--	--	--	--
V-10	210	40	1.80	<0.2	0.01	--	--	--	--
V-11	210	50	0.90	0.8	0.01	--	--	--	--
V-12	210	35	10.10	<0.2	0.02	--	--	--	--
V-13	210	25	9.70	<0.2	0.07	--	--	--	--
V-14	210	30	26.90	<0.2	0.03	--	--	--	--
V-15	210	30	0.40	<0.2	0.03	--	--	--	--
V-16A	210	35	1.50	<0.2	0.02	--	--	--	--
V-16B	210	95	1.50	<0.2	0.02	--	--	--	--
V-17	210	50	2.20	<0.2	0.02	--	--	--	--
V-19	210	40	158.50	<0.2	0.19	--	--	--	--

Hart Buchler