

A Geochemical and Geological Report

on the

JAM CLAIM, HORSEFLY, B.C.

CARIBOO MINING DIVISION

N.T.S. 93-A-03W

Latitude 52° 13' N

Longitude 121° 21' W

Owner & Operator: Placer Development Limited, Vancouver, B.C.

By W.S. Pentland

July, 1984

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,473

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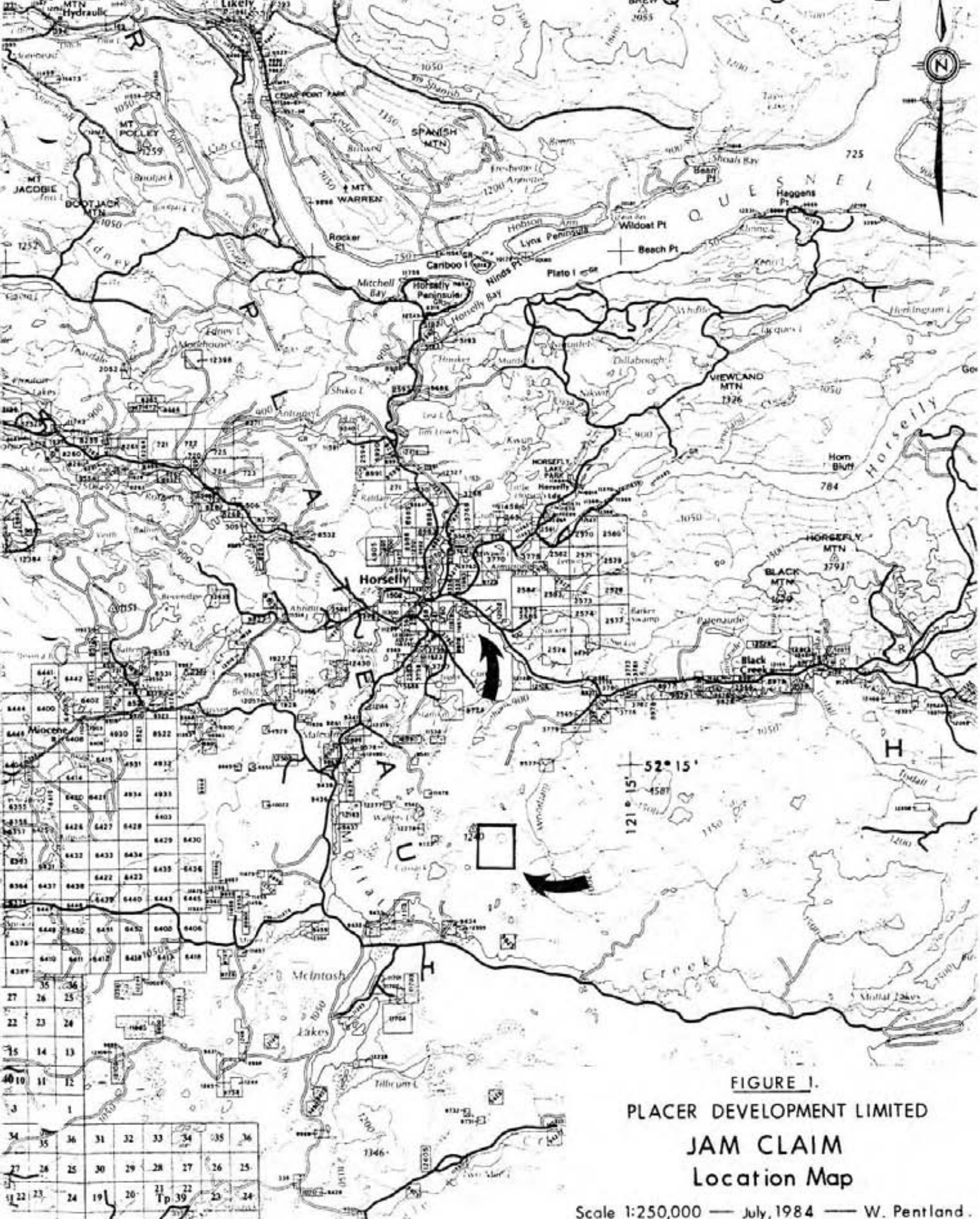
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Geochemical Laboratory

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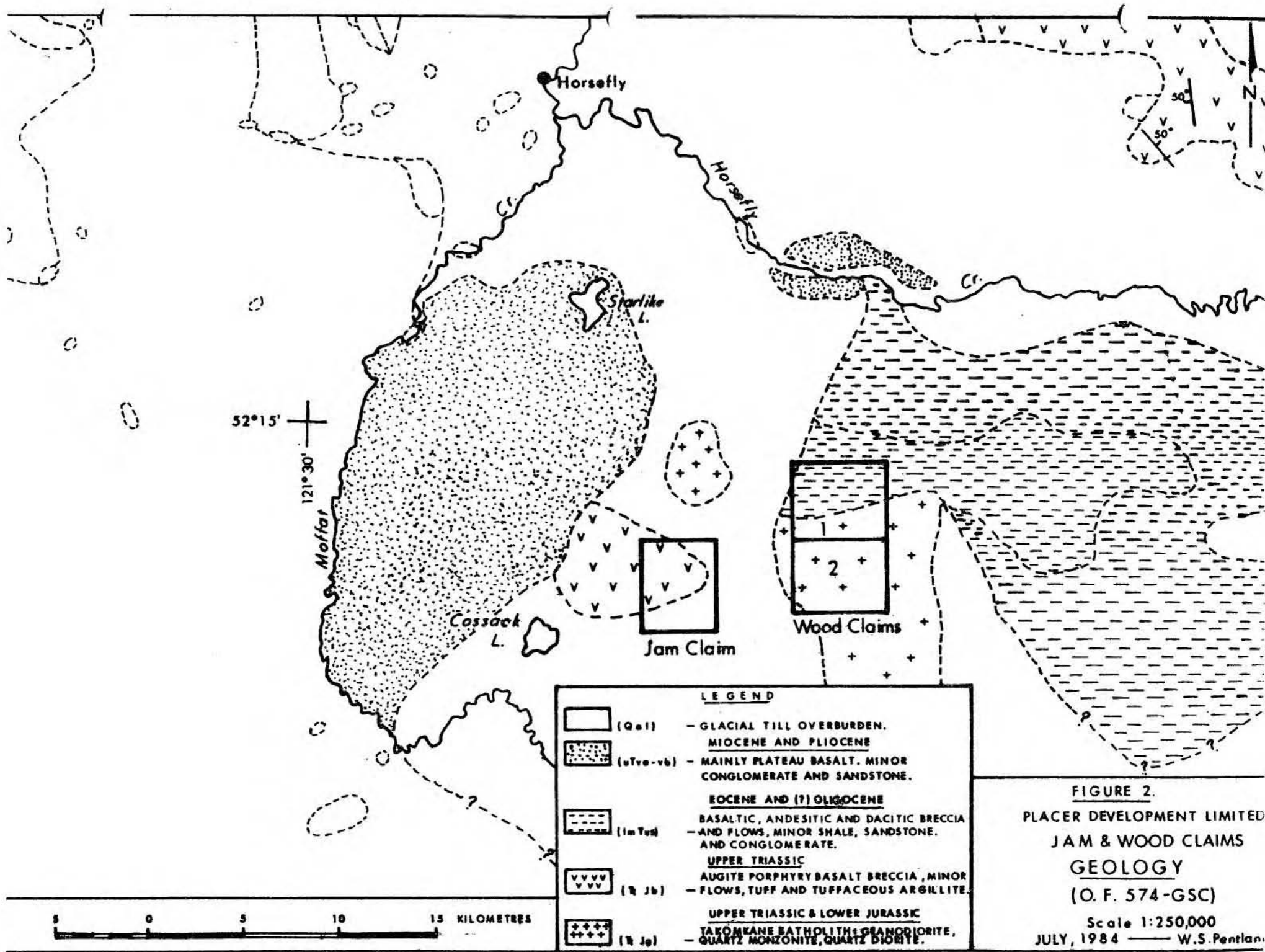


FIGURE 2.
 PLACER DEVELOPMENT LIMITED
 JAM & WOOD CLAIMS
 GEOLOGY
 (O. F. 574-GSC)
 Scale 1:250,000
 JULY, 1984 — W.S. Pentlan.

INTRODUCTION

The Jam Claim, consisting of 20 units, is located 15 kms south of the village of Horsefly, B.C. in the Cariboo Mining District. It is 4 kms northwest of Cossack Lake. The claim was staked in June 1983 on the basis of previous work done in the 1960's which indicated that low grade copper mineralization occurred in the area. It was thought there could be an association with gold.

Logging roads reach to within 2 kms of both the south and west boundaries of the claim. At this time however practical access is by helicopter.

Slopes on the property are fairly gentle with the main feature being a 500 meter hill in the north central sector. A second similar hill peaks a short distance beyond the northwest corner of the claim. The cover is quite open consisting mainly of lodgepole pine and spruce with a few fir, poplar and birch.

Outcrop on the property is restricted to the hill in the north central area noted above and the northwest corner. The remainder of the ground is covered with glacial till.

The present exploration work consisted of running two 2500 meter lines across the claims and collecting a total of 102 soil samples at 50 meter intervals. The soils were dried and a sample of the -80 mesh fraction geochemically assayed for gold, silver, copper and arsenic. In addition outcrops along the lines were also noted.

GEOLOGY (see Figures 2, 3)

Mapping by the Geological Survey of Canada shows a large part of the claim to be underlain by Upper Triassic rocks; mainly volcanics with possibly some sediments. During the staking of the claim a few outcrops of feldspar porphyry were noted in the northwest corner of the claim. However the present work has found numerous outcrops of generally unaltered medium grained monzonite and it is probable that the hill in the north central sector of the property is largely composed of monzonite of Lower Jurassic age.

Occasional small pink aplitic dikes were seen as well as one or two patches and stringer of epidote. A single grain of pyrite was noted.

Considerable magnetic basalt was noted in the till on most of line 114+00 W and the southern half of line 104+00 W. The possible presence of areas of basalt is further indicated by two magnetic highs on the property; one being located in the northwest corner and the second along the west side of the main hill. Large areas of Tertiary basalt have been mapped in the vicinity.

SOIL SAMPLING PROGRAM

A total of 102 samples were collected from stations at 50 m intervals on two lines 1000 meters apart. These were collected where possible from the "B" soil horizons but in some areas the soils were immature and the samples were a mixture of "B" and "C" horizons.

The samples were collected in Kraft paper bags and transported to the Placer Development Laboratory in Vancouver where samples of the -80 mesh fraction were geochemically assayed for gold, silver, copper and arsenic.

SOIL SAMPLING RESULTS (see Figures 4, 5)

The results for all the elements geochemically assayed, gold, silver, copper and arsenic, are uniformly low. There are no elements, either individually or in combination which indicate anything of an anomalous nature. Because of the lines being wide spread it cannot be categorically stated that the property has no potential for gold mineralization. However, on the basis of the present work, it would appear that such is the probable case. No further work is recommended at this time.


W.S. Pentland

WSP/dd
84.07.24

REFERENCES

- 1) Geology - O.F. 574 - Quesnel Lake
Geological Survey of Canada. 1964

- 2) Geology - Map 3-1961 - Quesnel Lake (west half)
Geological Survey of Canada. 1961

- 3) Airborne Magnetic Survey
Map 5234G Murphy Lake
Dept. of Energy, Mines and Resources. 1967

COST STATEMENT

1. *Labour - 4 men for 1 day	\$ 950.
2. Board and Room - 4 men @ \$50/man/day	200.
3. Helicopter - 1.5 hrs @ \$500/hour	750.
4. **Assaying - 102 samples @ \$9.55	975.
5. One Airfare - Vancouver - Williams Lk Return ...	185.
	<hr/>
	TOTAL \$ 3,060.

* Labour - W. Pentland - Sr. Geologist	\$325./day
M. Gareau - Geologist	250./day
R. Boyce - Geologist	225./day
M. Chan - Student	150./day

** Assay Charges - Gold	- \$5.00
Silver	- .90
Copper	- 2.00
Arsenic	.90
Preparation	- .75

BP/dd
84.07.05

STATEMENT OF QUALIFICATIONS

I, W.S. Pentland, with a business address in Vancouver, British Columbia, and a residential address in Delta, British Columbia, hereby certify that:

1. I am a geologist graduating from the University of British Columbia, Vancouver, British Columbia, with a B.A. in 1951.
2. From 1951 to 1984, I have worked in mineral exploration in various parts of Canada.
3. I personally examined the area and have assessed the results of the work.

Respectfully submitted,

W. Pentland
W.S. Pentland

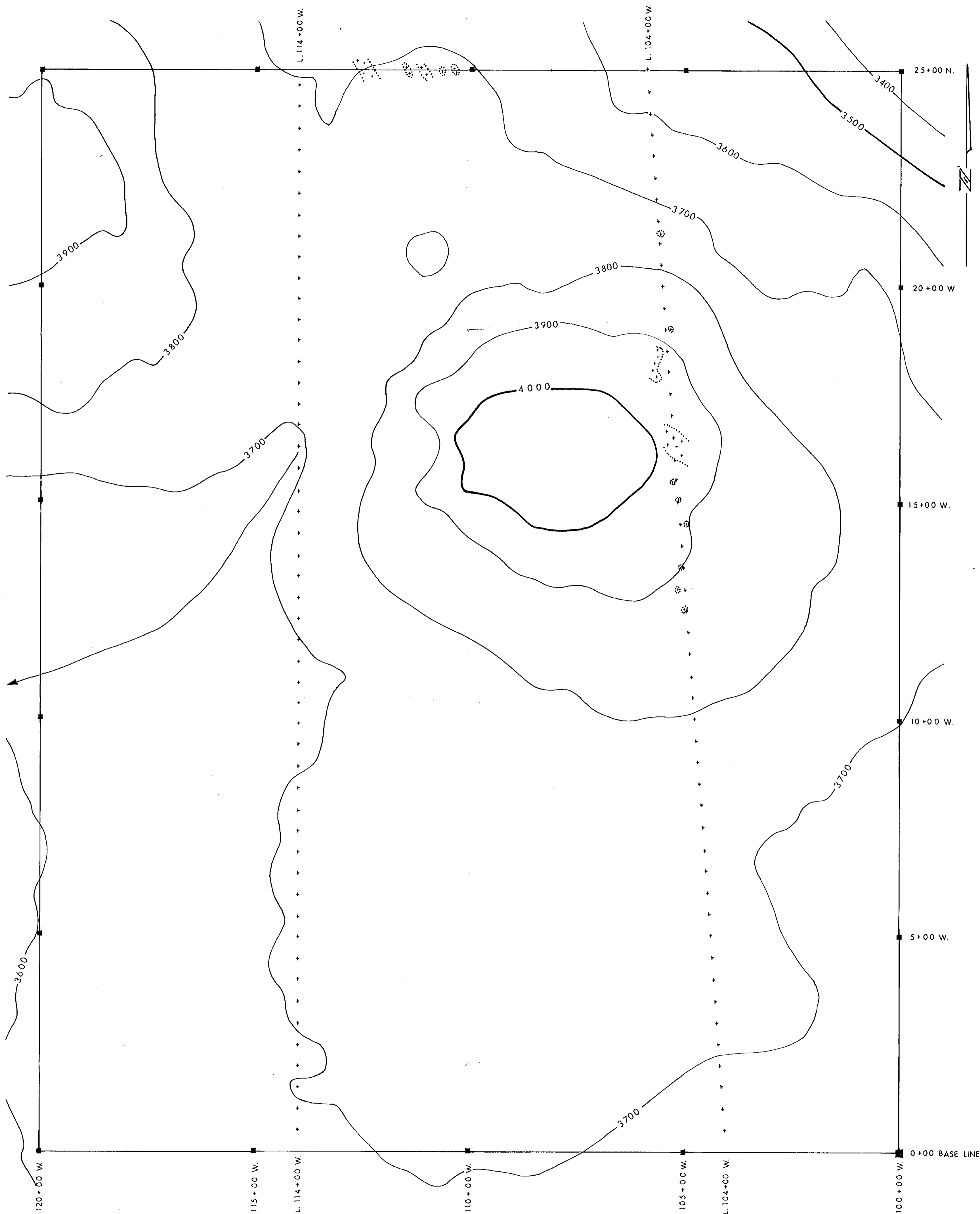
Dated this 25th day of July 1984,
Vancouver, British Columbia

APPENDIX

STANDARD ANALYSIS METHODS USED BY PDL GEOCHEM LAB ARE LISTED BELOW:
 ALL RESULTS EXPRESSED AS INDICATED IN UNITS COLUMN BELOW
 ANY EXCEPTIONS FOR THIS PROJECT ARE NOTED ABOVE

REMARKS: INTERNAL LAB STANDARDS HAVE BEEN INCLUDED FOR REFERENCE.
 SAMPLE NUMBERS FOLLOWED BY * ARE DUPLICATE ANALYSES.

	UNITS	T.G	ATTACK USED	TIME	RANGE	METHOD
MO	PPM	1	C HCL04/HNO3	4HRS	1-10000	ATOMIC ABSORPTION
CU	PPM	1	C HCL04/HNO3	4HRS	2-40000	ATOMIC ABSORPTION
ZN	PPM	1	C HCL04/HNO3	4HRS	2-30000	ATOMIC ABSORPTION
CD	PPM	1	C HCL04/HNO3	4HRS	2-30000	A.A. BACKGROUND COR.
NI	PPM	1	C HCL04/HNO3	4HRS	2-30000	A.A. BACKGROUND COR.
CO	PPM	1	C HCL04/HNO3	4HRS	2-30000	ATOMIC ABSORPTION
AG1	PPM	1	C HCL04/HNO3	4HRS	0.2-20	A.A. BACKGROUND COR.
AL	PPM	1	AQUA REGIA	2HRS	0.02-4.00	A.A. SOLVENT EXTRACT.
U	PPM	1	DIL HNO3	2HRS	1.0-1000	FLUORIMETRY SOLV. EX.
V	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	5-10000	ATOMIC ABSORPTION
W	PPM	1	C HF/HNO3/HCL/H2SO4	4HRS	5-5000	A.A. SOLVENT EXTRACT.
X	PPM	1	NA2CO3/KNO3 FUSION	30MIN	40-40000	SPECIFIC ION ELECTRODE
AS	PPM	1	C HCL04/HNO3	4HRS	2-10000	A.A. BACKGROUND COR.
BI	PPM	1	C HCL04/HNO3	4HRS	2-10000	A.A. BACKGROUND COR.
SI	PPM	1	C HCL04/HNO3	4HRS	2-20000	A.A. BACKGROUND COR.
FE	PPM	1	C HCL04/HNO3	4HRS	2-10000	ATOMIC ABSORPTION
MG	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	2-10000	ATOMIC ABSORPTION
PG	PPM	1	DIL HNO3/HCL	2HRS	5.0-10000	A.A. COLD VAPOR GEN.
HI	PPM	1	C HF/HI/OXALIC	4HRS	2-10000	ATOMIC ABSORPTION
BA	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	0.000000-1000000	ATOMIC ABSORPTION
CA	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	0.000000-1000000	ATOMIC ABSORPTION
SR	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	0.000000-1000000	ATOMIC ABSORPTION
BR	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	0.000000-1000000	ATOMIC ABSORPTION
SI	PPM	1	C HF/HCL04/HNO3/HCL	6HRS	0.000000-1000000	ATOMIC ABSORPTION
LOI	%	1	HF41 FUSION ASH 500 DEG C	15MIN 2HRS	0.0-99%	A.A. SOLVENT EXTRACT. WEIGH RESIDUE



LEGEND

- MONZONITE
- OUTCROP
- SOIL SAMPLE LOCATION

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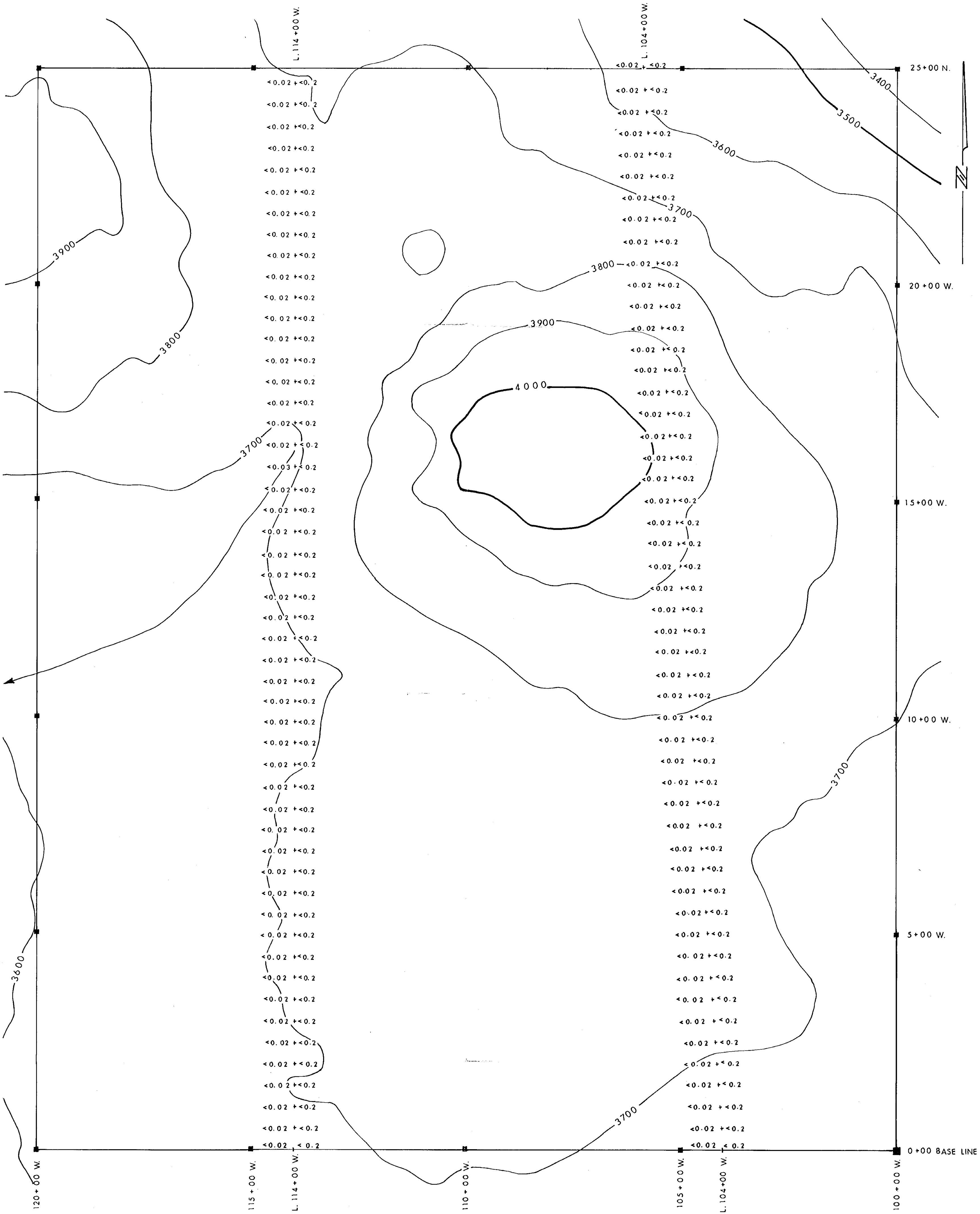
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Note: Strong magnetic deflection to West.
Soil lines are as shown and relative
to legal claim. Actual identity and
corner posts at North end lie to the
West.

FIGURE 3.

0 50 100 200 300 400 METRES

DRAWN: W.S.P.	SCALE: 1:5000	PLACER DEVELOPMENT LIMITED	
DRAFTING: A.K.	DATE: JULY, 1984	JAM CLAIM	OUTCROP MAP
APPROVED:	REVISED:	93-A-03 — CARIBOO M.D.	FILE REF. No.:



LEGEND

Au + Ag

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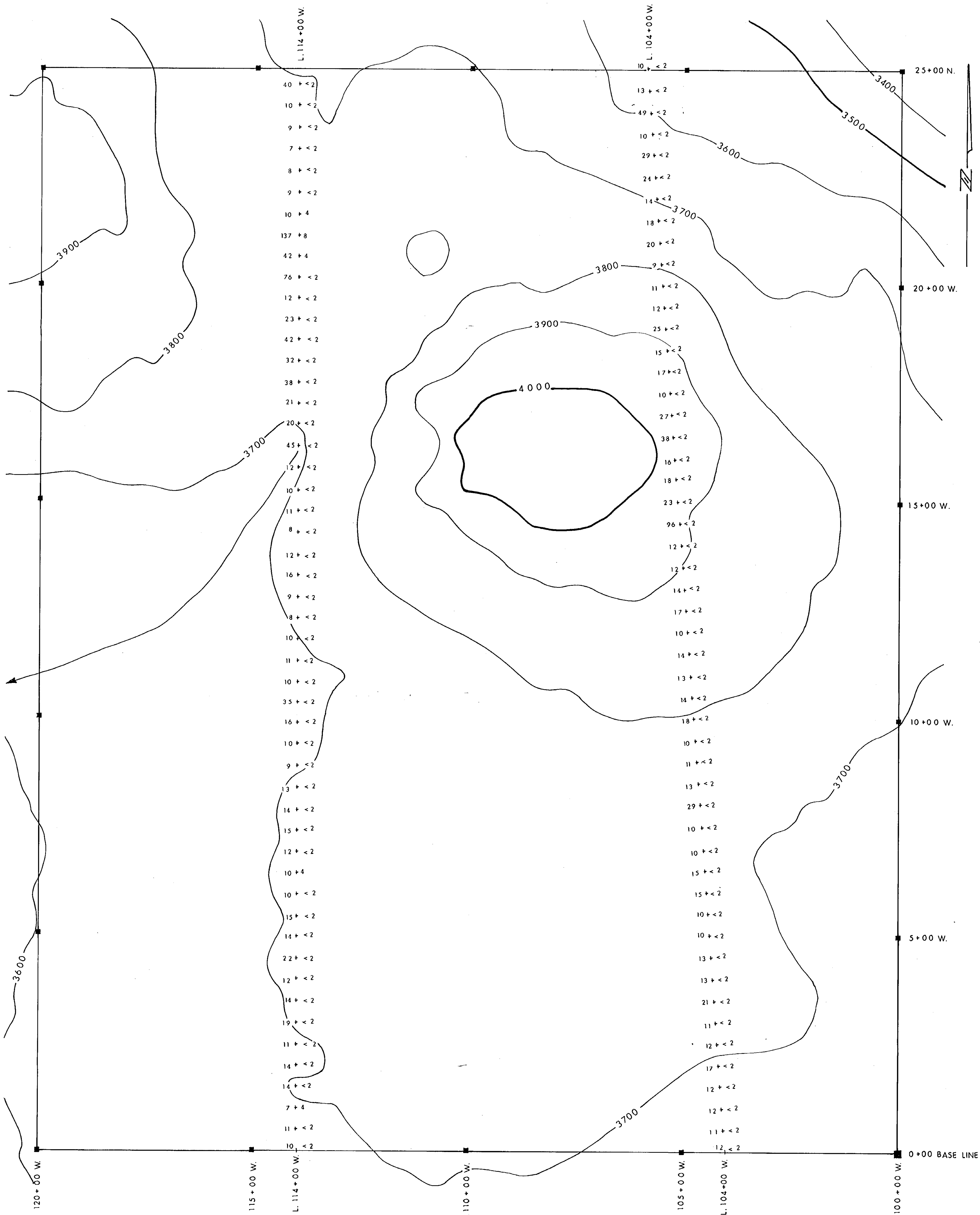
12,473

Note: Strong magnetic deflection to West.
Soil lines are as shown and relative to legal claim. Actual identity and corner posts at North end lie to the West.

FIGURE 4.



DRAWN: W.S.P.	SCALE: 1:5000	PLACER DEVELOPMENT LIMITED	Soil Sample Results
DRAFTING: A.K.	DATE: JULY, 1984	JAM CLAIM	Au - Ag in ppm
APPROVED:	REVISED:	93-A-03 — CARIBOO M.D.	FILE REF. No.:



LEGEND
Cu + As

**GEOLOGICAL BRANCH
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Note: Strong magnetic deflection to West.
Soil lines are as shown and relative to legal claim. Actual identity and corner posts at North end lie to the West.



DRAWN: W.S.P.	SCALE: 1:5000	PLACER DEVELOPMENT LIMITED	Soil Sample Results Cu - As in ppm
DRAFTING: A.K.	DATE: JULY, 1984	JAM CLAIM	
APPROVED:	REVISED:	93-A-03 — CARIBOO M.D.	FILE REF. No.:

FIGURE 5.