2657

GEOCHEMICAL SOIL SAMPLING SURVEY

on the

AG (3 to 30 incl.) MINERAL CLAIMS

PB FRACTION

SIS (1-8 incl., 14-18 incl.) MINERAL CLAIMS

SMITHERS AREA
OMINECA MINING DIVISION
BRITISH COLUMBIA

N.T.S. 4-MILE SHEET 93L.
LONG. 127°00, LAT. 54° 57' (Approx.)

NOVEMBER, 1969

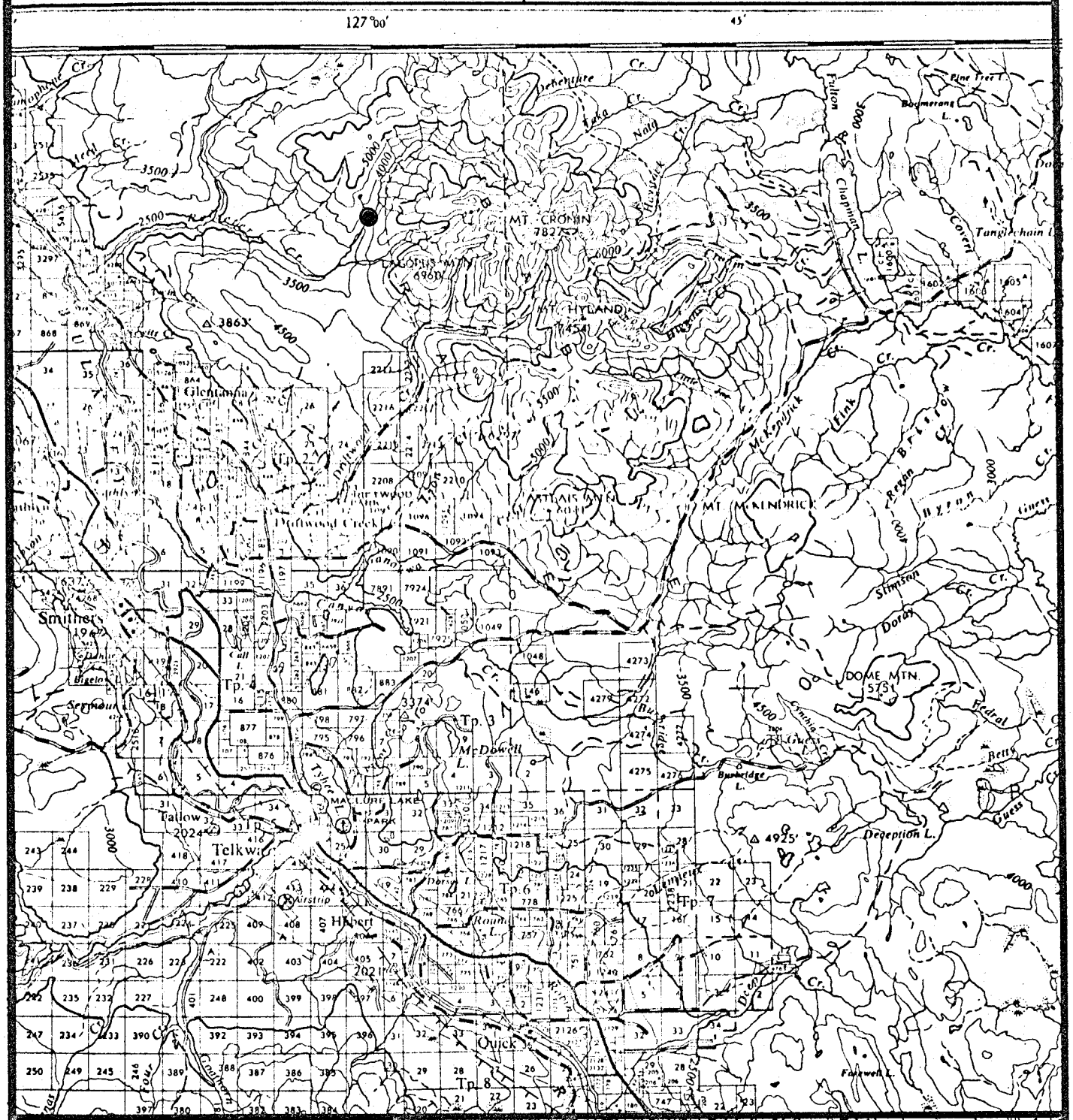
for

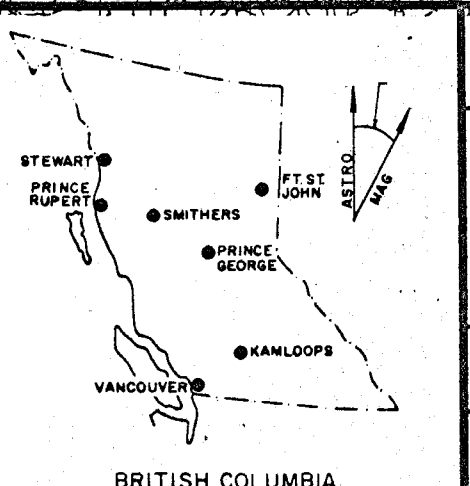
James W. Tutton

Minwealth Explorations Ltd.

E. O. CHISHOLM, M.A., P.ENG.
CONSULTING GEOLOGIST

VERSATILE DRAFTING LTD. | BASE FROM MAP | SERIES





LOCATION MAP

Minwealth Explorations Ltd. Property

4 0 4 8

SCALE IN MILES

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LIST OF CLAIMS

Claim Name	Record Number	Date Recorded
Ag 3 - 20	59998 - 60013	June 21, 1968
Ag 21 - 30	60375 - 60384	June 28, 1968
Pb Fraction	60374	June 28, 1968
SIS 1 - 18	77127 - 77144	July 30, 1969

INTRODUCTION

The claim group consists of 30 contiguous claims located at the headwaters of Reiseter Creek in the Smithers area, Omineca Mining Division, British Columbia, on the east side of Two Bridge Creek approximately two miles downstream from Top Lake. The property is accessible at present by helicopter only from the town of Smithers, 12 miles to the southwest. The claim group was staked on the basis of favourable geological conditions and reports of old workings in the area containing high grade silver bearing quartz veins. These were confirmed at a location known as the Cabin location on the eastern part of the area and a general soil reconnaissance survey for heavy metals was first undertaken without success. A more detailed arsenic soil and humus survey was undertaken as described herein and indicated zones of high arsenic concentration that warrant further follow-up by trenching to determine their significance. Their location with respect to known silver bearing structures in the area indicate lengthy linear structures that may be of significance due to the known association of arsenopyrite with silver bearing minerals.

GEOLOGY, TOPOGRAPHY AND COVER

The area is overlain by a varying thickness of glacial sand and gravel with sandstone boulders locally. Overburden is estimated to average 15 feet in depth on the flats and two to three feet on knolls and steep side hills.

The claims lie at the foot of a small mountain and the property averages approximately 10^{o} up slope. The lower part of the slope has a spruce swamp covering it. The claims are well drained with small and large creeks. The small creeks terminate locally in a swamp.

The property is blanketted with a thick cover of primary coniferous forest and the forest floor is uniformly carpeted with moss. The main branch of Reiseter Creek which drains Top Lake has cut a rounded valley or draw covering the southeast part of the claim group.

GEOLOGY

The regional geology of the area has been compiled on British Columbia Department of Mines Map 69-1 and shows the area to be underlain by mid-Jurassic basalts and andesite flows, tuffs and breccias. There are several intrusive stocks mapped near the property area. Elsewhere in the southern area such stocks are the host to porphyry copper deposits and are interesting exploration targets.

The claim area itself appears to be underlain by a quartz-monzonite stock. The contact area of the stock is intensely silicified and weakly mineralized with pyrite. A network of small quartz veinlets was noted in

the Cabin area on Two Bridge Creek near the east side of the claim group. The veins contain pyrite and silver bearing galena mineralization. The host rock is banded slatey argillite. A short tunnel, now covered, was driven on a narrow silver bearing quartz vein and silver values up to 80 oz. per ton were reported to have been found by early prospectors in the vicinity but these were not authenticated by the writer. The former owners of the property believed there might be sufficient narrow silver bearing veins there to make a large tonnage open pit silver deposit. However, there is insufficient work to support this suggestion. Overburden is widespread and surface prospecting by conventional methods is difficult due to heavy undergrowth.

A quartz monzonite porphyry is exposed at the joint corner of claims Ag 19, 20 and 21, 24. This is known as the "Box Car" area. A low promontory of bedrock is exposed measuring some 100 feet in diameter on the heavily forested mountain slope. Two short diamond drill holes were bored into the bedrock. Nothing of economic significance was intersected.

GEOCHEMICAL SURVEY

Sampling Method

(a) Moss is pulled back by hand to reveal the black-brown humus beneath the moss layer ("A" horizon).

(b) A fistfull of this underlying humus is put into a paper soil envelope by hand.

(c) Samples were taken on cut lines spaced 400 feet apart. Sample interval was 100 feet.

Reasons for Sampling Method

Ease and speed of survey and sensitivity of this horizon to arsenic. An orientation survey previously indicated that the "B" and "C" soil zones over known lead-zinc-silver showings did not respond to conventional heavy metal geochemical survey methods. An assay of mineralized specimens however revealed a high arsenic content and a preliminary soil test over the known showings pinpointed the mineralized area.

Recent literature has shown successful results in humus sampling. (Reference: Chapter 18, "GEOCHEMICAL PROSPECTING IN FENNOSCANDIA", entitled "Aspects of Geochemical Humus Investigation in Glaciated Terrain" by L.K. Kauranne.)

Assay Procedures

The soil envelopes containing humus samples were sent to Chemex Laboratories Ltd., 1416 Crown Street, North Vancouver, B.C., for arsenic analysis. Samples were ashed, arsenic was determined by the standard geochemical method utilizing silver-diethyl-dithio-carbonate. Arsenic is driven off as arsine gas by adding zinc metal to an aquaeous solution. The arsine collects in the silver-diethyl-dithio-carbonate complex. The detection limit is one part per million of arsenic.

Treatment Data

All results of geochemical tests were returned to the field as quickly as possible. Results in parts per million (p.p.m.) were plotted on field data sheets kept by the field soil sampler.

A map was prepared using a scale of 1" = 500 ft. showing values in parts per million of arsenic. The values were contoured according to the values and various arsenic levels were coloured to show the trends of higher than normal arsenic values. (See accompanying plan in folder.)

GEOCHEMICAL RESULTS AND CONCLUSIONS

The approximate threshhold value for arsenic in the area as determined statistically appears to be 10 parts per million. Anomalous values of significance are considered to be four times this amount, i.e., in the 40 to 100 p.p.m. range. A peak value of 2000 p.p.m. was obtained.

ANOMALOUS AREAS

Area A: shown on the accompanying plan located at co-ordinates 40 W. 24 N. Values were obtained above four times threshhold over an area roughly 1200 feet long by 200 feet wide. This appears to coincide with the silicified area known as the Box Car showing described above.

Area B: a similar anomaly located some 400 feet east of Area A and of similar magnitude, measuring some 400 feet in diameter. No rock is exposed and it is assumed it represents a similar silicified stockwork area.

Area C: located some 1500 feet east of Area C, shows a pronounced linear structure extending from co-ordinates 24 W. 00 N. to 7 W., 32 N. It has an indicated length of approximately 3400 feet and a width of under 100 feet. This linear indicates a strong northerly trending vein

structure that warrants trenching or pitting to determine its cause.

Area D: This is comprised of slightly higher than threshhold values in arsenic over a small area. It is significant however due to its location over the area where good grade silver values were reported to have been located by early prospectors in 1930. (Personal communication by G. Stewart, Nadina Explorations Ltd., Houston, B. C.)

It is recommended that the area of the anomalies be thoroughly searched for possible outcrops and trenched or pitted to bedrock where possible.

Respectfully submitted,

PROFESSIONAL ENGINEER
PROVINCE OF BRITISH COLUMBIA

Edward O. Chisholm, P.Eng.

SUMMARY OF COSTS — APPENDIX I

Line Cutting		$ 2,425.00
Geochemical Sampling	$ 895.36	
Analysis	1,092.09	
Freight	96.60	2,084.05
TOTAL		$ 4,509.05

AFFIDAVIT SUPPORTING SUMMARY OF COSTS APPENDIX II

I, Edward O. Chisholm, Consulting Geologist of 821-602 West Hastings Street, Vancouver 2, B. C., do hereby state that to the best of my knowledge and belief, the statement of costs presented in Appendix I of this report is both true and correct.

DATED AT VANCOUVER THIS 24 DAY OF JULY A.D. 1970

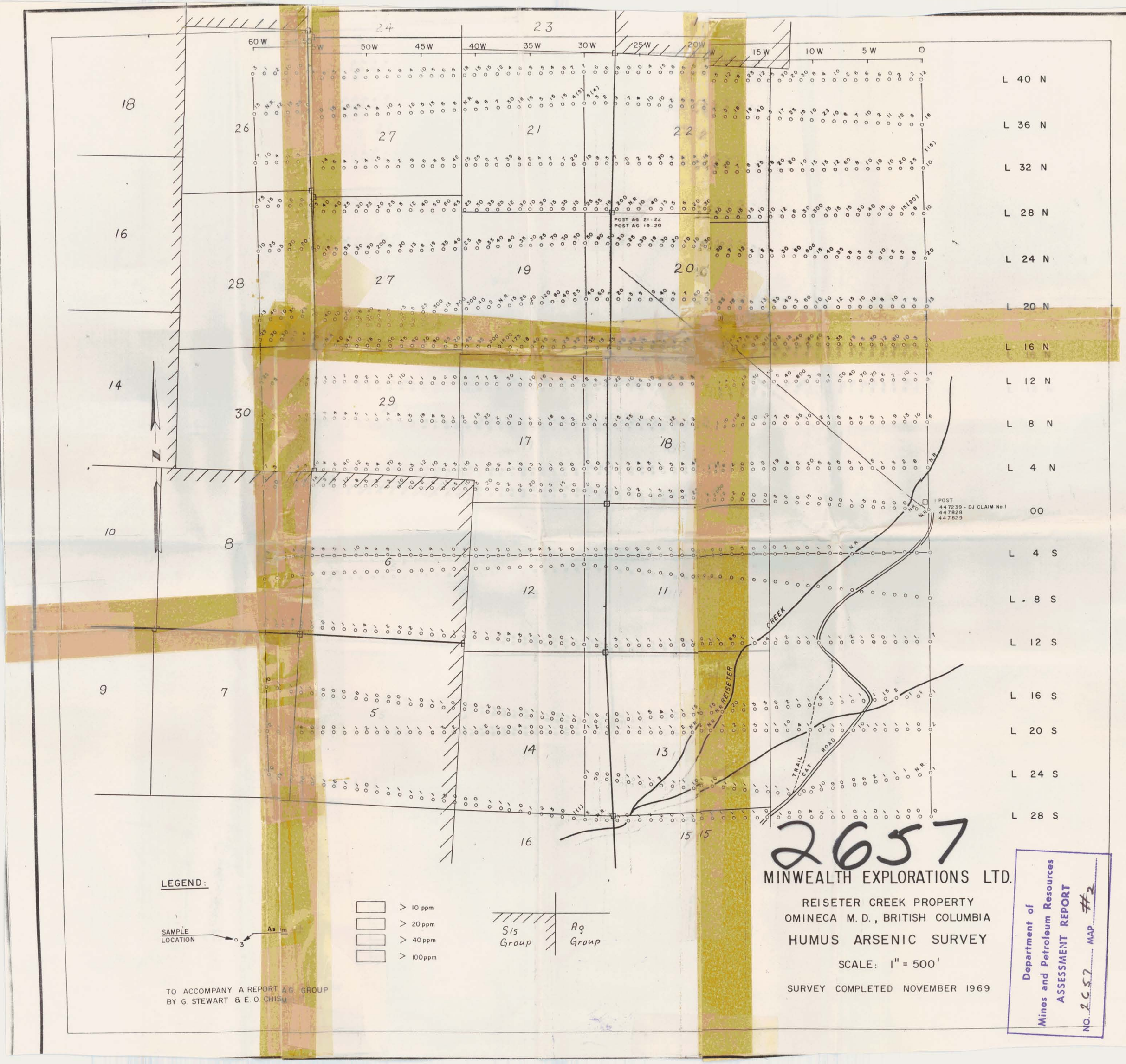
Edward O. Chisholm, P.Eng.

Witness

PERSONNEL

APPENDIX III

George W. Stewart	Party Chief - Geologist, Nadina Explorations Ltd.,	Houston, B. C.
R. P. Carroll	Linecutter	Smithers, B. C.
Stan Brooks	Soil Sampler	Box 305, Telkwa, B. C.


60 W
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40W
35W
30W
25W
20W
15W
10W
5 W
0
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L 28 N
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L 12 N
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L 4 S
L 8 S
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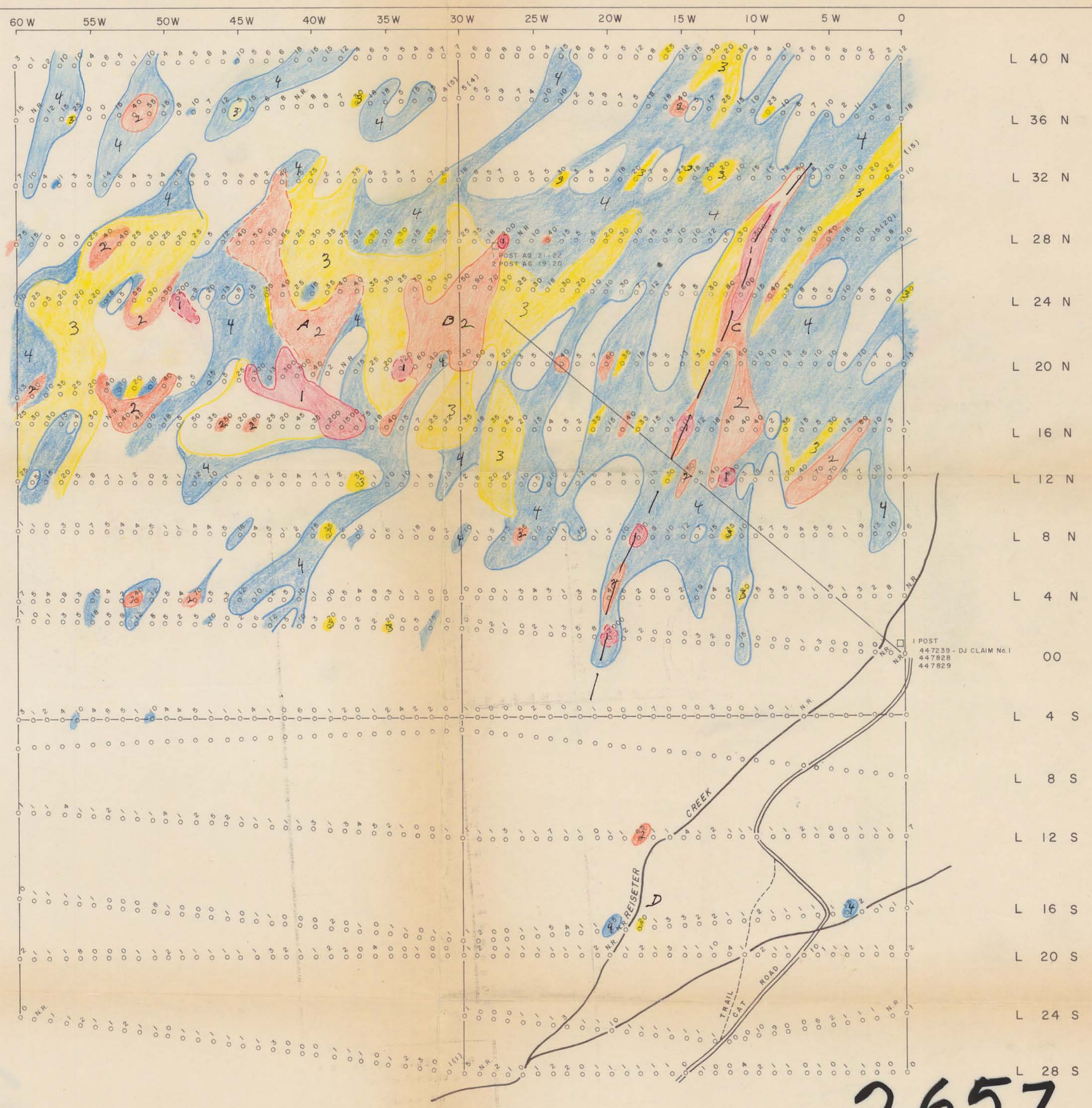
L 16 S
L 20 S
L 24 S
L 28 S
POST AG 21-22
POST AG 19-20
1 POST
447239 - DJ CLAIM No.1
447828
447829
REISETER CREEK
TRAIL
CAT ROAD
LEGEND:
SAMPLE LOCATION
As ppm
> 10 ppm
> 20 ppm
> 40 ppm
> 100ppm
Sis Group
Ag Group
TO ACCOMPANY A REPORT A.G. GROUP
BY G. STEWART & E. O. CHISM
2657
MINWEALTH EXPLORATIONS LTD.
REISETER CREEK PROPERTY
OMINECA M. D., BRITISH COLUMBIA
HUMUS ARSENIC SURVEY
SCALE: 1" = 500'
SURVEY COMPLETED NOVEMBER 1969
Department of Mines and Petroleum Resources
ASSESSMENT REPORT
NO. 2657 MAP #2



LEGEND:

SAMPLE LOCATION — As in ppm

4 > 10 ppm
3 > 20 ppm
2 > 40 ppm
1 > 100 ppm

TO ACCOMPANY A REPORT ON A.G. GROUP
BY G. STEWART & E. O. CHISHOLM.

2657

MINWEALTH EXPLORATIONS LTD.

REISETER CREEK PROPERTY
OMINECA M. D., BRITISH COLUMBIA

HUMUS ARSENIC SURVEY

SCALE: 1" = 500'

SURVEY COMPLETED NOVEMBER 1969