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92H/16

NITROCELL CANADA LTD.,

Hill Group

Nicola Mining Division

B.C.

July 28, 1972

W.G. Hainsworth P.Eng.

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W. G. HAINSWORTH

CONSULTING GEOLOGIST

INTRODUCTION

At the request of Mr. V.M. Prescott, managing director of NITROCELL CANADA LTD., this report has been prepared for the company concerning their recent claim block acquisition in the Aspen Grove area of British Columbia. The information contained herein is based on intensive study and evaluation of geological data pertaining to the area in general and information obtained during a visit to the property on November 22nd 1971.

The property is a copper prospect located in the Nicola Mining Division of British Columbia.

SUMMARY AND CONCLUSIONS

The twenty HILL claims of NITROCELL CANADA LTD., are located in the Nicola volcanics close to the contact with the Pennask Batholith.

Two sets of fracture systems, almost at right angles to one another, run to copper mineralization at the intersection of their planes. Mineralization may, or may not, continue beyond the junction. At the present stage of the property's development it is not known which of the systems was the more responsive to the mineralizing conditions.

Three adits, time of excavation unknown, have been driven on several of these shear structures along the sidehill of a ridge. The shears, as mentioned, are receptive to copper deposition in the sulphide and oxide versions. Assays taken from two of the adits by the writer ran good copper grades with weak gold and silver analyses.

The presence of copper, the strong structural design, and the favourable geological environment, all are factors which combine to warrant an intensive investigation of the property. The goal could be that of an underground high-grade copper operation. All investigation should be geared to that possibility.

RECOMMENDATIONS

The property should be examined through a two stage program. The first stage would be a reconnaissance program completely covering the twenty claims searching for targets. With the successful completion of this phase, the second stage would be the determination of the dimensions of the targets.

The first stage would utilize all surface surveys designed to show the presence of sub-surface mineralization and structure. For this purpose geochemical (soil analysis for copper) and geophysical (EM 16 for structural interpretation) surveys should be run along predetermined surface lines. In order to outline as many as possible shear intersections it is recommended that the lines be closely spaced, in the order of 200 feet. This tight grid spacing does not pose an expensive operation due to the openness of the terrain. It is also highly recommended that a geological survey be included at this point.

The second stage would be diamond drilling of the better targets resulting from the earlier phase. This initial drilling could well be expanded as targets proved themselves.

A later stage, and not elaborated upon at this point in time, would be underground exploration of the targets by means of adits.

An approximate budget for the above recommendations is presented.

Stage I

Line Cutting:

31 line for 7500' each	=	232,500 feet
1 base line for 6000'	=	6,000
2 tie lines for 6000' each	=	12,000

250,500 feet or 47.5 miles

47.5 miles line work @ \$60/ mile = \$ 2,750

Soil Sampling:

2500 samples collected, assayed @ \$2½/sample = 6,250

E.M. 16 Survey:

47.5 mile of readings @ \$60/mile	=	\$ 2,750
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Geological Survey:

47.5 miles of mapping @ \$50/mile	=	2,375
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Interpretation & Consultation	=	1,000
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Contingencies 10%	=	1,575
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\$ 16,700

Stage II

Diamond Drilling:

5000 feet @ \$10/foot	=	\$ 50,000
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Core Analysis:	=	3,000
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Interpretation & Consultation	=	2,000
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Contingencies 10%	=	<u>5,500</u>
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\$ 60,500

From the above figures it can be seen that the property can be thoroughly examined in two stages for expenditures slightly over the \$75,000 figure.

July 28, 1972
Vancouver, B.C.

W.G. Hainsworth P.Eng.

LOCATION & ACCESS

The claim block lies 18 miles southeast of the village of Merritt. Its co-ordinates are approximately 49° 55' North Latitude and 120° 28' West Longitude. The N.T.S. location of the property is 92 H - 16 e.

Access to the claims is made at a point 15 miles south from Merritt on Highway #5. This easterly entry, just south of Courtney Lake, is a typical dirt road of this dry belt area which is used by ranching, logging and mining personnel. The road cuts through the northwestern portion of the claim group 11½ miles from the main highway.

As neighbours, Bethlehem Copper has a large block of claims to the southwest of the NITROCELL block. To the north and northwest lie large claim groups belonging to International Mariners Resources Ltd.

PROPERTY

The NITROCELL CANADA claim block located in the Nicola Mining Division of British Columbia is composed of twenty (20) contiguous claims held by right of location.

The claims were recently purchased outright from V. Paulger of Kamloops, B.C.

Sufficient assessment work has been recorded against the claims to hold them in good standing for a year from their original recording date.

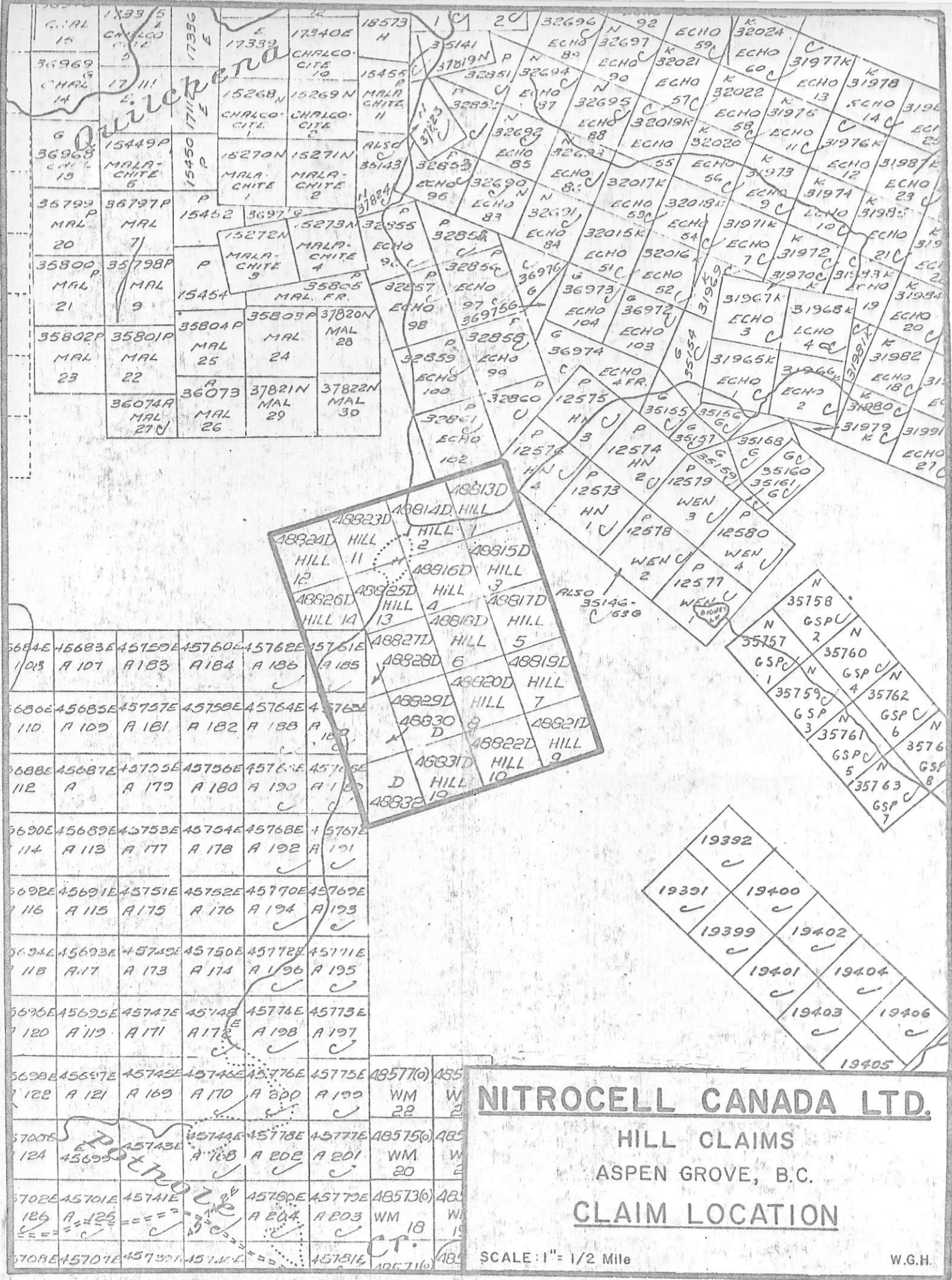
The claims were recorded in the Merritt Mining Recorders office on April 9, 1971.

The claims:

Bill 1-20 inclusive. Record numbers 48813-32 inclusive. In good standing until April 9, 1973.

TOPOGRAPHY

The topography of the claim can best be described as a modest rise



NITROCELL CANADA LTD.

HILL CLAIMS
 ASPEN GROVE, B.C.

CLAIM LOCATION

SCALE: 1" = 1/2 Mile

W.G.H.

starting in the western half, approximately 3900' above sealevel, to a height exceeding 4400' along the eastern boundary. The claims lie along the north-western flank of a two mile long ridge which peaks in the 4900' elevation.

The ground is typical of this dry belt area being predominately rolling pasture lands. Little timber is present except for small clumps of spruce, pine and fir normally located near low swampy areas.

The overburden does not appear to be very thick. The amount of rock exposures is modest due to the persistent but thin soil mantle.

HISTORY OF THE AREA

The Aspen Grove area is an integral portion of the well-established Princeton-Merritt-Kamloops copper belt. The mineral deposits of this area are represented by a number of diverse types. The principle copper deposits occur as vein structures, shear zone fillings and disseminated material.

The quartz-diorite intrusive mass which covers most of the northeastern portion of the Princeton map area has seen sporadic but intensive investigation during the last century. The early gold and platinum placer miners working the Tulameen and Similkameen Rivers and their tributaries in the early 1860's edged further inland to this large intrusive body. Small lode deposits along the creek beds were the initial discoveries. However this area despite scattered showings of base and precious metals was singularly unsuccessful in developing a producing mine during the first half of the Twentieth century. An exception to this was the Copper Mountain deposit near Princeton.

In 1964 Brenda Mines started their field program on one of the better known old properties. The program eventually led to the proving up of a large tonnage porphyry copper orebody. In 1968 Newmont of Canada using a new approach to the old Copper Mountain property developed a large reserve of low grade material at the present Ingerbelle Mine.

GEOLOGY

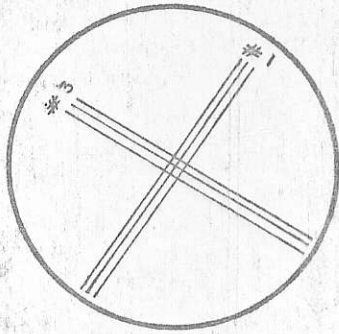
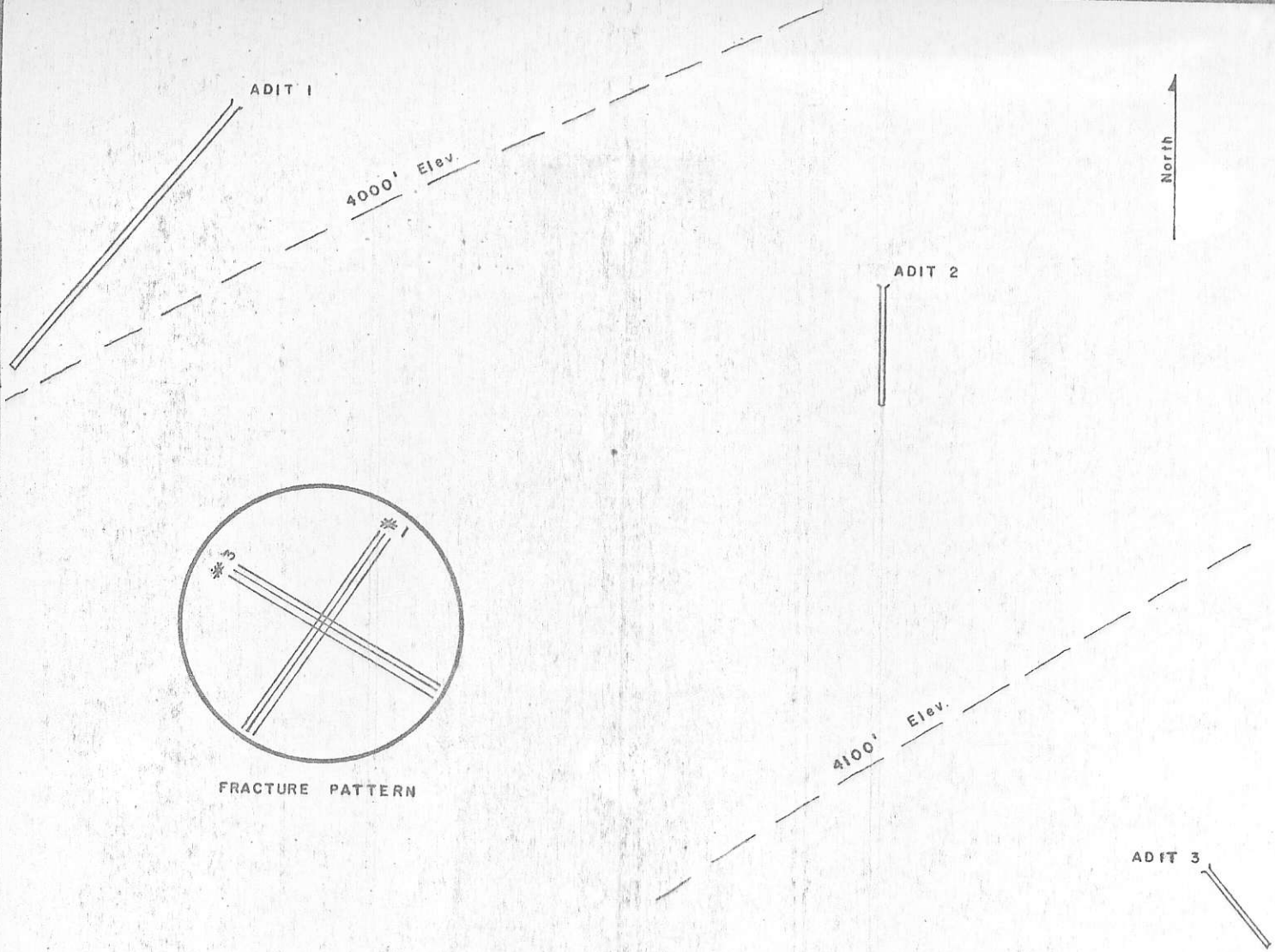
Geologically the large area under consideration covers part of the western margin of an intrusive mass that connects the Okanagan Batholith to the south with the Pennask Batholith on the north. Several offshoot plugs of the batholiths lie peripheral to the main bodies. Between the two batholiths and intruded by the connecting mass are stratified country rocks of the Nicola Group, which occur partly as an uninterrupted expanse to the west and partly as fair-sized isolated bodies further east within the intrusive structure.

The Coast intrusions, of which the Okanagan and Pennask batholiths are prodigies, are believed to represent a protracted and, possibly, intermittent period of intrusion continuing from Jurassic through to the Upper Cretaceous period. Three phases of this intrusion have been recognized. Government mapping of the area shows the various types to cut one another whereas in other localities the contacts are gradational. Characteristic of the three phases is a tendency to be acidic, carry large amounts of free quartz and to maintain a composition between granodiorite and quartz diorite.

Structurally the formations of the Nicola group have been folded into tight, north to northeast trending anticlines and synclines. Faulting is well developed in the area extending north from Princeton but is not as much in surficial evidence in the Aspen Grove area. The fault action, thought to be pre-intrusive, has had later movement which affected the Jurassic intrusive bodies.

The NITROCELL group of HILL claims lies a mile and a half west of the western boundary of the Pennask batholith.

The claims are represented on government geological maps as being completely underlain by Nicola volcanics. The writer verified the presence of these volcanics during the examination. In addition some granitic material was

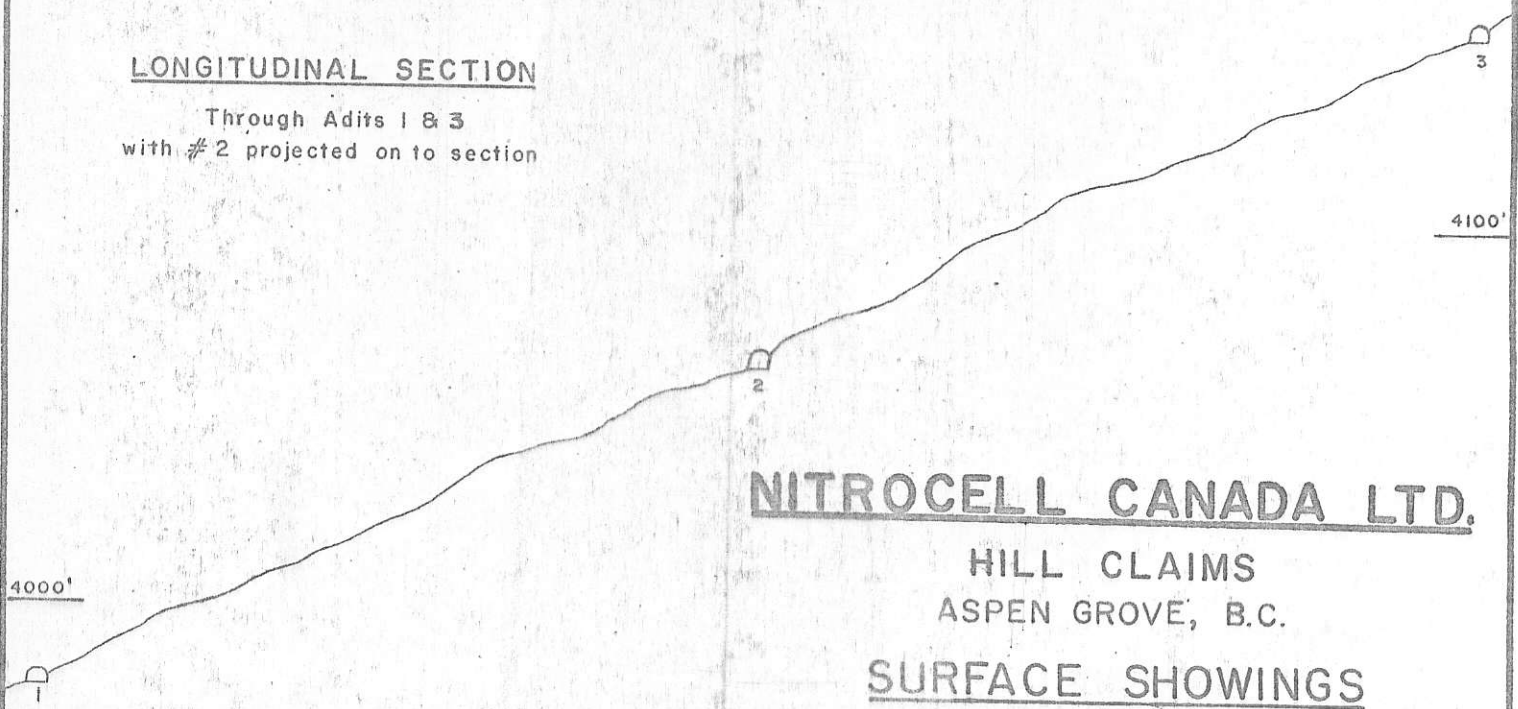


FRACTURE PATTERN

PLAN VIEW

LONGITUDINAL SECTION

Through Adits 1 & 3
with #2 projected on to section



NITROCELL CANADA LTD.

HILL CLAIMS
ASPEN GROVE, B.C.

SURFACE SHOWINGS

SCALE: 1" = 50'

W.G.H.

identified in one trench.

The general trend of the fracture systems in the volcanics on the NITROCELL claims is north to northwest with steep dips to the east. A strong set of northeast trending fractures also exists.

SHOWINGS

The showings on the property consist of three adits and several trenches. The adits date back several decades at least whereas the trenches have been put in quite recently.

The three adits are located at several points up the side hill of the ridge with the two trenches being at higher elevations.

Adit # 1: This adit is located a short distance from the road at valley level (3975' elev).

The host rock is Nicola andesites of a dark greenish to black colour in an aphanitic texture. The adit has been driven over a hundred feet into the side-hill on a bearing of S 40° W. Objective of the drive was a shear structure which resulted from two cross cutting fracture zones. The fracture zones run 120° and 35° azimuth. At their junction a strong shear results along the 35° set, which dips steeply to the east. Mineralization in the form of chalcopyrite and its accompanying oxide form, malachite, prevails at the intersection of the fractures. Strong oxidation is present. The width of the shear varies from 12" to 18" but mineralization often runs into the wall rock.

At a point 20 feet in from the portal the writer chipped a 3 foot sample (# 14152) from the back across a highly oxidized zone. The assay:

Cu: 2.58%; Au: Tr; Ag: 0.15 oz/t.

At another point in the same adit 30 feet from the face a 2 foot sample (# 14153) was chipped from the back across weakly mineralized shear rock.

The assay:

Cu; 2.62%; Au: 0.02 oz/t; Ag: 0.96 oz/t.

Adit # 2: This adit is located some 200 feet further up the sidehill at the 4050' elevation. It has been driven for 35 feet on a south bearing. Again the point of interest is a weakly mineralized shear varying from $2\frac{1}{2}$ feet at the portal to 2" at the face. No sample was taken from this working.

Adit # 3: This cribbed structure is located 200 feet further up the hill at elevation 4150'. The 30 foot drive shows a steep dipping mineralized shear striking S 40° E. A high-grade ore dump at the portal yielded the following from a grab sample:

Cu: 4.84%; Au: 0.02 oz/t; Ag: 1.36 oz/t.

Trench # 1: Thirty feet further up the hill from the last adit and at the 4175' elevation a trench has been ripped through the shallow overburden for several hundred feet. The trench shows a strong oxidation effect and is well stained with malachite and small amounts of azurite. Some sulphides, chalcopryrite and pyrite, were noticed but were not strong. Unfortunately the ripped rock was not cleared nor was the ripping taken below the oxidation level in order to show trench walls. A narrow dyke of fine-grained, acidic material appeared to cut the ripped area.

Trench # 2: At the 4350' elevation another trench showed very little mineralization.

With reference to sketch showing the adits etc, it would appear that #1 and # 3 adits are on diametrically opposite shears. Presumably the stronger and better mineralized of the two sets at the portal of each adit decided the direction that that particular drive would take. In the case of #2 adit the writer postulates that at the portal the strength of the shears and the mineralization was confusing to the miners so they drove due south. As they progressed south the shear would naturally weaken as they drove across and

out of the strikes of both fracture zones.

It should be noted that copper oxides are present in all adits and trenches. This could be due to either an oxide zone extending an unknown depth below the bedrock or to the breakdown of chalcopyrite brought about by the time element involved since the adit and trenches were opened.

The survey of the adits and trenches was by rough pace and compass during the examination.

The assays were for total copper and would include the oxide copper in the final figure. Assaying was done by General Testing Laboratories of Vancouver.

Respectfully submitted,

July 28, 1972
Vancouver, B.C.

W.G. Hainsworth P.Eng.

W. G. HAINSWORTH

CONSULTING GEOLOGIST

CERTIFICATE

I, WILLIAM G. HAINSWORTH, HEREBY CERTIFY:

1. That I am a geologist residing at #303 - 2187 Bellevue St., West Vancouver, British Columbia.
2. That I am a graduate of the University of Western Ontario, London Ontario with a B.SC. degree in Honours Geology and am a registered member of the Association of Professional Engineers of the Province of British Columbia.
3. That I have practiced my profession for twenty-two years.
4. That I have no financial interest, either direct or indirect in the subject properties, in the securities of Nitrocell Canada Ltd., nor in that of any of its affiliates and that I do not expect to obtain any such interest.
4. That the information contained in this report is based on my personal knowledge of the general area and specific examination of the property pertained to in the report on November 22, 1971.

Vancouver, B.C.

W.G. Hainsworth P.Eng.

July 28, 1972



MEMBER
CANADIAN TESTING

Mr. W.G. Hainsworth



Certificate of Assay

TO 7719 - 170 Granville
Vancouver 2, B.C.

GENERAL TESTING LABORATORIES DIVISION
SUPERINTENDENCE COMPANY (CANADA) LTD.
1001 EAST PENDER STREET VANCOUVER B. C.
PHONE (604) 254-1647
TELEX 04-507514

7111-2413
FILE No.
November 26, 1971
DATE

3 ore samples

We Herely Certify that the following are the results of assays made by us upon submitted

MARKET	GOLD		SILVER	Copper (Cu)					
	OUNCES PER TON	VALLE PER TON	OUNCES PER TON	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT
14151	0.02	0.70	1.36	1.81	---	---	---	---	---
14152	trace	---	0.15	2.58	---	---	---	---	---
14153	0.02	0.70	0.96	2.62	---	---	---	---	---

51.11

Net: Rejects retained two weeks
Pulps retained three months
Pulps and rejects may be stored for a maximum
of one year by special arrangement.

COPY

H. Sharples
H. Sharples

Gold calculated at 2 per ounce

Provisional Assay



Certificate of Assay

TO Mr. W.G. Hainsworth
#719 - 470 Granville
Vancouver 2, B.C.

GENERAL TESTING LABORATORIES DIVISION
SUPERINTENDENCE COMPANY (CANADA) LTD.
 1001 EAST PENDER STREET VANCOUVER 6, B.C.
 PHONE (604) 254-1647
 TELEX 04-507514

7111-2413
 FILE No. **November 26, 1971**
 DATE

3 ore

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

MARKED	GOLD		SILVER	Copper (Cu)					
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT
		\$							
14151	0.02	0.70	1.36	4.84	---	---	---	---	---
14152	trace	---	0.15	2.58	---	---	---	---	---
14153	0.02	0.70	0.96	2.62	---	---	---	---	---

SH:AT

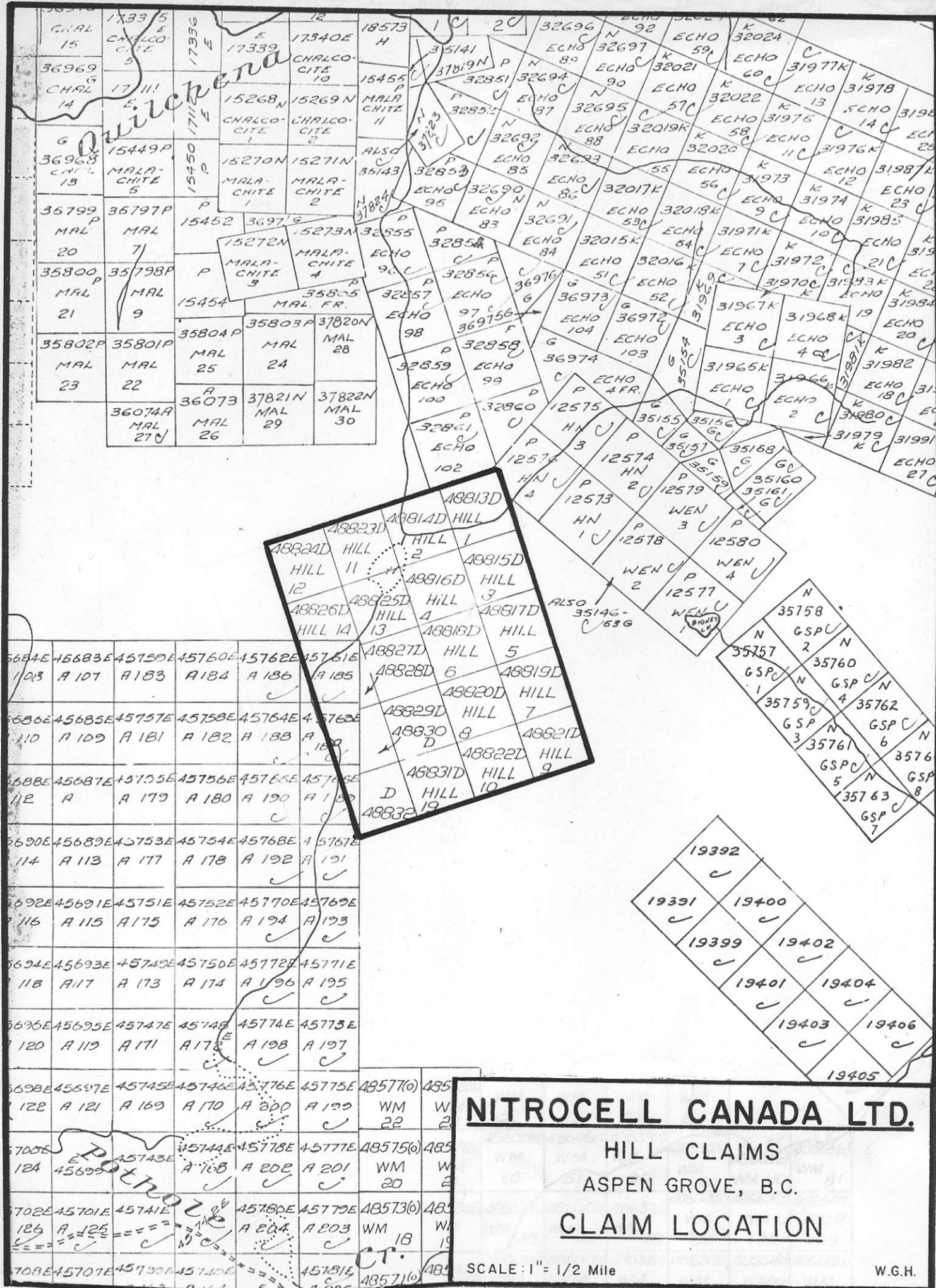
Note: Rejects retained two weeks .
 Pulps retained three months
 Pulps and rejects may be stored for a maximum
 of one year by special arrangement.

COPY

Gold calculated at \$.....per ounce

H. Sharples
 H. Sharples

Provincial Assayer



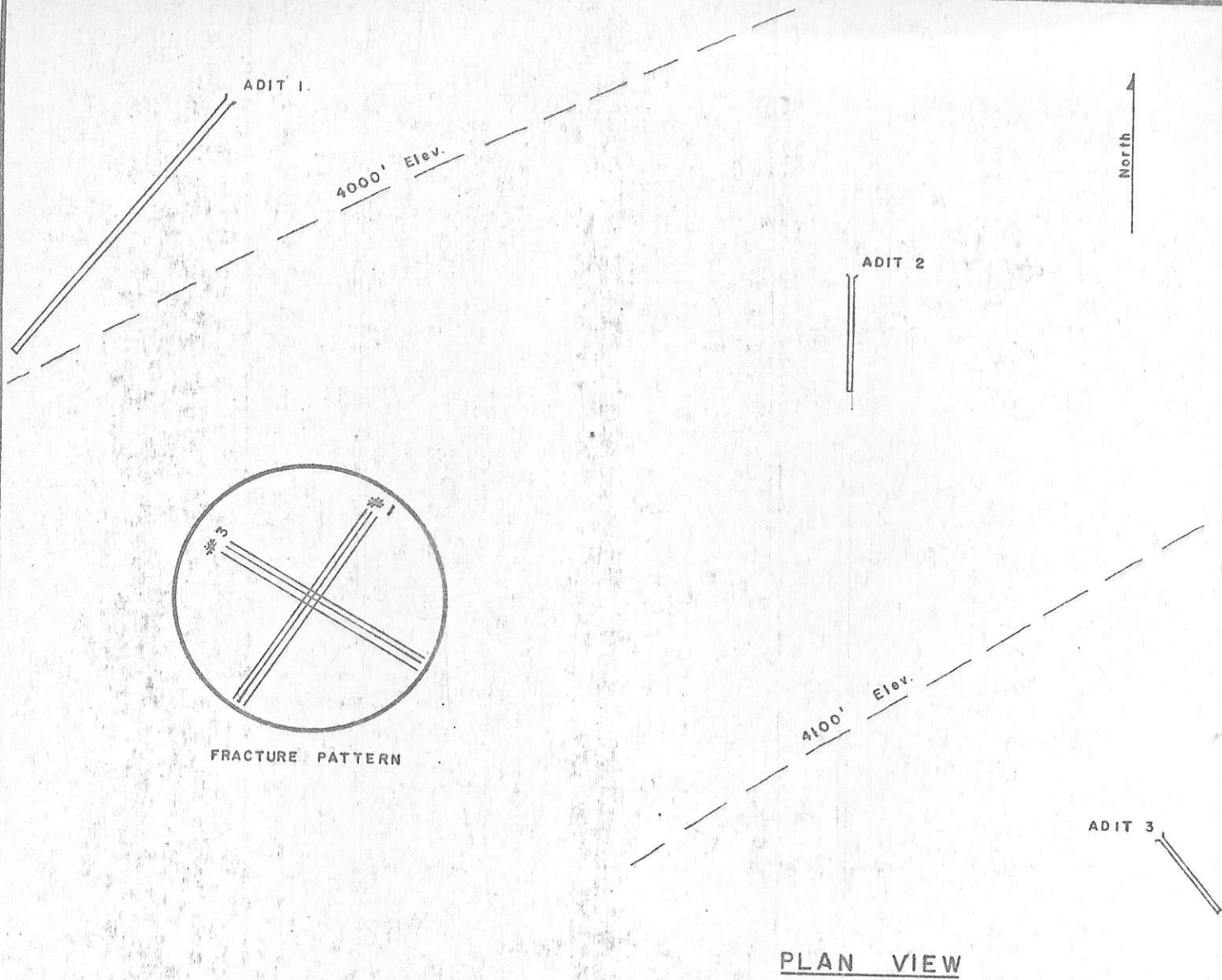
NITROCELL CANADA LTD.

HILL CLAIMS
ASPEN GROVE, B.C.

CLAIM LOCATION

SCALE: 1" = 1/2 Mile

W.G.H.

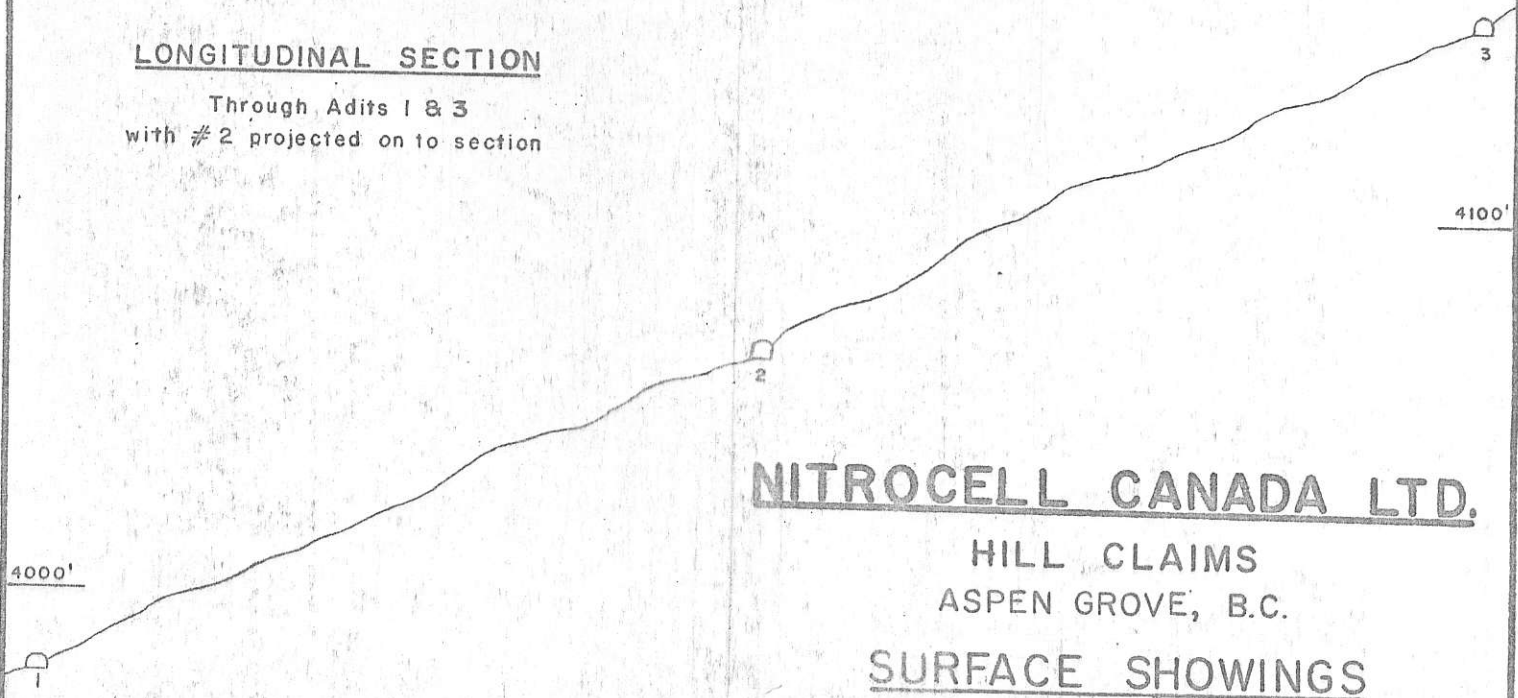


North ↑

PLAN VIEW

LONGITUDINAL SECTION

Through Adits 1 & 3
with # 2 projected on to section



NITROCELL CANADA LTD.

HILL CLAIMS
ASPEN GROVE, B.C.

SURFACE SHOWINGS

SCALE: 1" = 50'

W.G.H.



MEMBER
CANADIAN TESTING

Mr. W.G. Haines



Certificate of Assay

7111-2h13

TO 7119 - 470 Granville

GENERAL TESTING LABORATORIES DIVISION
SUPERINTENDENCE COMPANY (CANADA) LTD.

FILE No.

November 26, 1971

Vancouver 2, B.C.

1001 EAST PENDER STREET

VANCOUVER 6, B.C.

DATE

PHONE (604) 254-1647

TELEX 04-507514

3 ore

samples

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

MARKED	GOLD		SILVER	Copper (Cu)					
	OUNCES PER TON	VALUE PER TON	OUNCES PER TON	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT	PER CENT
		\$							
14151	0.02	0.70	1.36	4.84	---	---	---	---	---
14152	trace	---	0.15	2.58	---	---	---	---	---
14153	0.02	0.70	0.96	2.62	---	---	---	---	---

SNAT

Note: Rejects retained two weeks
Pulps retained three months
Pulps and rejects may be stored for a maximum
of one year by special arrangement.

COPY

Gold calculated at \$

H. Sharples
H. Sharples