

ARIS SUMMARY SHEET

District Geologist, Kamloops

Off Confidential: 89.05.09

ASSESSMENT REPORT 17502

MINING DIVISION: Kamloops

PROPERTY: Reg-Byr
LOCATION: LAT 50 34 30 LONG 120 20 30
UTM 10 5605720 688226
NTS 092I09W

CLAIM(S): Sunny
OPERATOR(S): Afton Operating
AUTHOR(S): Bond, L.A.
REPORT YEAR: 1988, 20 Pages

COMMODITIES
SEARCHED FOR: Gold, Copper

GEOLOGICAL
SUMMARY: The property is underlain by intrusive units of the Triassic Iron Mask Batholith to the east and north and Nicola Group volcanics to the west and south. Propylitization, albitization and weak chalcopryrite mineralization are associated with younger diorite phases of the batholith.

WORK
DONE: Drilling
PERD 213.4 m 2 hole(s);98mm

RELATED
REPORTS: 08028,10552,12419,14970

LOG NO: 0624	RD.
ACTION:	
FILE NO:	

PERCUSSION DRILLING REPORT

ON THE

**SUNNY MINERAL CLAIM
Record No. 3488
KAMLOOPS MINING DIVISION
NTS 92I/9W**

Latitude: 50°34.5' Longitude: 120°20.5'

**AFTON OPERATING CORPORATION
P.O. Box 937
Kamloops, B.C.
V2C 5N4**

FILMED

By

**LORNE A. BOND
SENIOR GEOLOGIST**

Kamloops, B.C.

May 18, 1988

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

17,502

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Introduction

The Sunny mineral claim, consisting of 9 units, is located approximately 11.5 km due south of downtown Kamloops. Elevation is around 1,000 metres above sea level with a moderate relief of 75 metres on the property.

The terrain is open grassland on gently rolling hills. A few scattered stands of pine and fir trees occur as well as some poplars in depressions and along water courses.

The property covers the eastern part of Edith Lake and ground to the east and south of the lake. The surface is owned by rancher G. Shannon. Edith Lake is an experimental aeration lake.

The property can be reached with a 2-wheel drive vehicle by following highway No. 5 from Kamloops to Knutsford, then south on paved road for approximately 3 km to the Edith Lake road turn-off, then for 3 km on good gravel road to Edith Lake.

Claim location and index maps are included as Figure 1.

This report describes a percussion drilling program carried out on the Sunny mineral claim between April 18 and April 30, 1988.

Property Description

The Sunny mineral claim, record number 3488(5) and consisting of 9 units, was purchased by Afton Operating Corporation of Vancouver, B.C. from Argenta Resources Ltd. of Vancouver, B.C. on April 4, 1986.

Afton Operating Corporation is the current owner.

The Sunny mineral claim is part of the Reg-Byr Claim Group which consists of the following:

*Note:

Expiry dates shown assume approval of assessment work described in this report and covered in a Statement of Exploration and Development submitted in May, 1988.

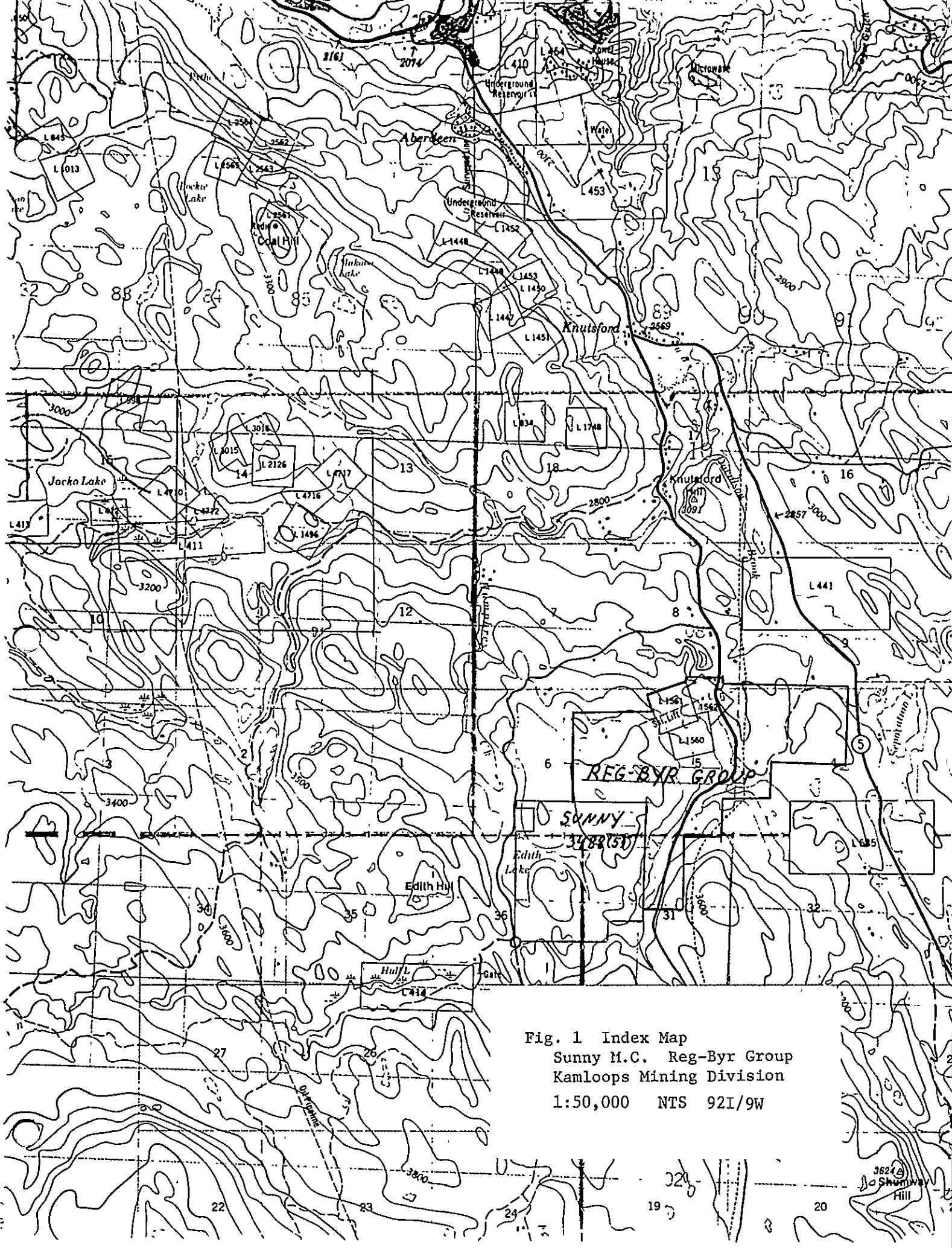


Fig. 1 Index Map
 Sunny M.C. Reg-Byr Group
 Kamloops Mining Division
 1:50,000 NTS 92I/9W

3624
 Shumway Hill

<u>Claim Name</u>	<u>Record No.</u>	<u>Expiry Date</u>
Sunny (9 units)	3488	19 May, 1991*
Wildrose 2	1013	31 Aug., 1991*
Reg 1-2	83115-16	20 Aug., 1991
Reg 3 (Fr.)	83117	20 Aug., 1991
Reg 4	83118	20 Aug., 1990
Reg 5	83119	20 Aug., 1990*
Reg 6-9	83120-23	20 Aug., 1990
Reg 10	83124	20 Aug., 1991
Reg 11-12	83125-26	20 Aug., 1990*
Reg 13	83127	20 Aug., 1991
Reg 14	83128	20 Aug., 1990*
Byr 1-5	74373-77	12 Nov., 1990*
Byr 7-10	74379-82	12 Nov., 1991
Ace 1	15319	19 July, 1990*

History and Previous Work

The Sunny claim is located on the margin of the copper-rich Iron Mask Batholith.

Exploration and mining in the area dates back to the 1890's with many former small producers.

In 1977, the Afton Copper Mine commenced production with reserves of 30 million tons of ore grading approximately 1% Cu with Au and Ag values. Afton Mine is located some 14 km northwest of the Sunny claim.

Recent work in the area of the Sunny claim has been carried on intermittently since 1968. The recorded work is listed as follows:

Assessment Report #2871, Ace, Mot Mineral Claims, Erin Exploration Ltd., Stadnyk, M.P., B.Sc., 1970

Soil geochemical survey for Cu. The three southern units of Sunny were included in this survey. A large (400 x 600 metres), but weak Cu-anomaly was delineated on the Mot 1-4 claims. The southwest quadrant of the Sunny claim covers most of this ground.

Assessment Report #4018, Mot Claim Group, Erin Exploration Ltd., White, G.E., B.Sc., 1972.

An I.P. Survey was conducted over the area of the 1970 Cu soil anomaly on the Mot 1-4 Cu claims. A weak charge-ability anomaly coincides with the Cu soil anomaly.

Assessment Report #8028, Sunny Claim, Jocelyn Resources Ltd., Sookochoff, L., P. Eng., 1970.

Reconnaissance VLF-EM, Magnetometer, geochemical and geological surveys were carried out.

Assessment Report #10552, Sunny Claim, Argenta Resources Ltd., Sookochoff, L., P. Eng., 1982.

A localized geochemical survey outlined a small and weak Cu-Zn anomaly in the central area of the Sunny claim.

Assessment Report #12419, Sunny Claim, Argenta Resources Ltd., Sookochoff, L., P. Eng., 1984.

Two geochemical soil lines north of the 1982 survey.

Assessment Report #14970, Sunny Claim, Afton Operating Corp., Lovang, G., 1986

Soil sampling program for copper and gold carried out on the southwest quadrant of the claim. Results were not indicative of any near surface significant mineralization.

In addition to the recorded work, a total of eight bulldozer trenches can be seen in the northeast quadrant of the claim. Presumably, these were put in by Copper Lake Explorations Ltd., prior to 1970 (probably in 1968). Copper Lake held 21 claims called the Totem Group in this area at that time.

Current Program and Results

During the period April 18 to April 30, 1988, the property was examined and a drilling program was completed.

Examination of old trenches on the east side of Edith Lake revealed favorable hydrothermal alteration patterns and weak chalcopyrite and pyrite mineralization with an apparent strike to the southeast into an area of general overburden cover.

It was decided to test for the extension of this favorable geology with two percussion drill holes inclined across the strike of this apparent trend (Fig. 2 - Drillhole Location Map).

H. Horning Percussion Drilling was retained for this work and two holes, each 350 feet (106.7m) in length and inclined 70 degrees to the northeast were completed between April 27 and April 30, 1988.

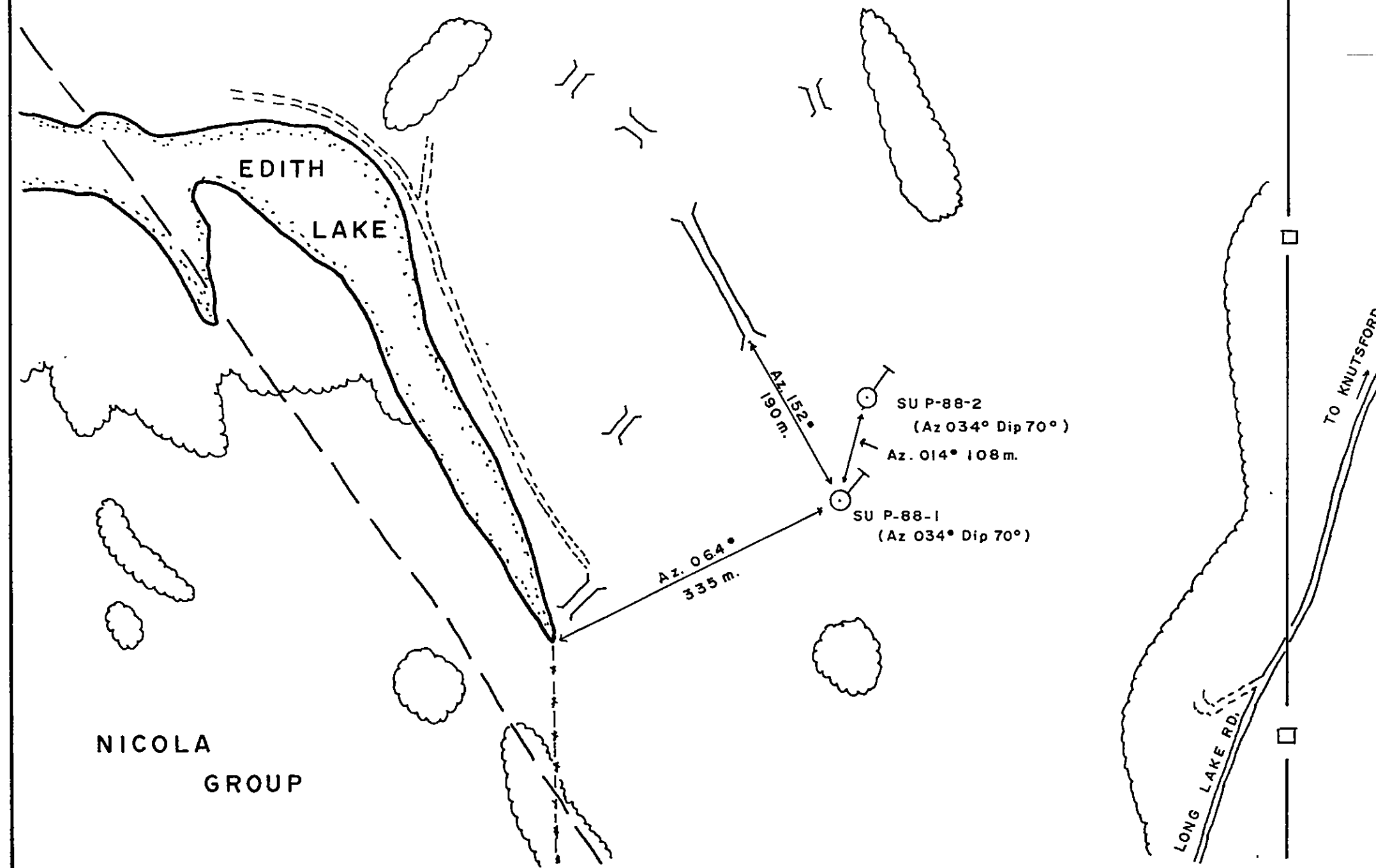
Samples were collected for each 10 foot (3.05m) advance and sent to the Afton Operating Corporation analytical lab for assaying. The samples were dried and broken down. Sample volume was reduced to 250 grams using a Jones riffle. This smaller sample was then pulverized. Reject material from the splitter was bagged, labelled and stored.

IRON MASK INTRUSIVES

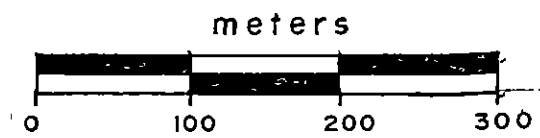
CLAIM
BOUNDARY

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,502



- GEOLOGICAL CONTACT
- == TRENCH
- ☁ TREE LIMIT
- - - - FENCE
- · - · - DIRT ROAD
- ~ ~ ~ GRAVEL ROAD
- DRILLHOLE



AFTON OPERATING CORP. KAMLOOPS, B.C.			
AREA SUNNY M. C.			
SUBJECT DRILLHOLE LOCATION MAP			
SCALE 1 : 5000	DESIGNED BY	DATE	BY
	CHKD BY		
	APP. BY		
DRAWING No. FIGURE 2	L. BOND		ISSUE

Assays for copper were performed by dissolution followed by atomic absorption spectrophotometry analysis. Gold assays were performed by fire assaying with atomic absorption analysis of the resultant bead in a methyl isobutyl ketone medium.

Both drill holes cut light colored diorites belonging to the younger Iron Mask intrusive units. Favorable hydro-thermal alteration and the presence of chalcopyrite were noted in both holes. Detailed logs of cuttings and assay results are included in the appendix.

Drilling Results:

SU P-88-1

(335m east of south end of Edith Lake on Az 064°)

Rock Description:

0-1.5m Overburden

1.5-106.7m Diorite with substantial albitization and moderate epidote-chlorite-carbonate alteration to 61m, weak alteration to 91.4m, and stronger albite-epidote-chlorite alteration from 91.4 to 106.7m. Increase in clay minerals from 33.5m to 61m.

Mineralization:

Chalcopyrite present from subcrop to 33.5m; present sporadically to 61m; then noted only occasionally to end of hole. Pyrite noted from 76.2m to 85.3m. Magnetite is present throughout.

SU P-88-2

(108m northeast of P-88-1 on Az 014°)

Rock Description:

0-12.2m Overburden

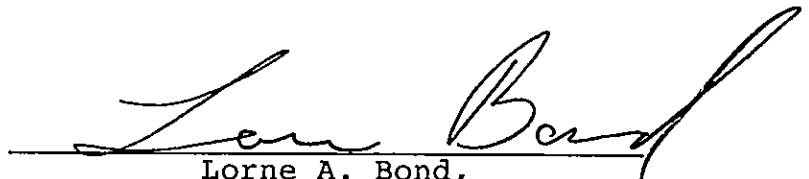
12.2-33.5m Diorite with oxidized zone indicated by the presence of hematite, trace native copper, and clay minerals; moderate albite and weak epidote-chlorite alteration.

33.5-106.7m

Diorite with increasing secondary biotite development to depth; weak albite and epidote-chlorite alteration.

Mineralization:

Pyrite, hematite, magnetite and trace native copper present from 12.2 to 33.5m; spotty chalcopyrite and magnetite from 55.9 to 79.3m; pyrite and chalcopyrite noted from 79.3 to 85.3m; chalcopyrite present from 85.3 to 106.7m.



Lorne A. Bond,
Senior Geologist
Afton Operating Corporation

STATEMENT OF COSTS

1.	Drilling - H. Horning Percussion Drilling		
	700 feet x \$6.50 per foot		\$ 4,550.00
2.	Assaying - 69 samples for Au and Cu		
	Preparation	\$ 2.40	
	Wet Sample Handling	1.50	
	Cu Assay	4.80	
	Au Assay	6.40	
		<u>\$15.10</u> x 69	\$ 1,041.90
3.	Pickup Rental		
	7 days at \$25. per day		\$ 175.00
4.	Salaries		
	Lorne Bond, Senior Geologist - program planning, supervision, survey control, report preparation		
	7 days @ \$225. per day		\$ 1,575.00
	Louis Tsang, Exploration Geologist - site inspection, logging of cuttings		
	2 days @ \$185. per day		\$ 370.00
			<hr/>
	Total		\$ 7,711.90
	Withdrawn from Afton PAC Account		\$ 2,288.10
			<hr/>
	Total assessment work applied		\$10,000.00

STATEMENT OF QUALIFICATIONS

I, Lorne Allan Bond, of the City of Kamloops, British Columbia do hereby certify that:

1. I am a qualified, practicing Geologist.
2. I am a graduate of Loyola College (University of Montreal), with a B. Sc. (1967) in Geotechnical Sciences.
3. I have practiced my profession since 1967 while employed with Sherritt-Gordon Mines Ltd., Cominco Ltd., and Afton Operating Corporation.
4. This report describes a percussion drilling program performed under my supervision between April 18 and April 30, 1988.

Lorne A. Bond
Senior Geologist
Afton Operating Corporation

May 17, 1988

STATEMENT OF QUALIFICATIONS

I, Louis Hee-Choi Tsang, of the City of Kamloops, British Columbia do hereby certify that:

1. I am a qualified, practicing geologist.
2. I am a graduate of the University of British Columbia with a B. Sc. (1972) in Geology and Geophysics.
3. I have practiced my profession since 1972 while employed with Granisle Copper Ltd., Highmont Operating Corporation and Afton Operating Corporation
4. I have logged the drill cuttings of two percussion holes that were drilled on the Sunny claim in April 1988.

Louis H.C. Tsang
Exploration Geologist
Afton Operating Corporation

May 11, 1988

Appendix I Logs of Drill Hole Cuttings

Appendix 2 Assay Results

INTER-OFFICE LETTER

DATE: May 13, 1988

COPIES TO:

TO: Lorne Bond

FROM: Joe Mihalech

WHEN FEASIBLE, CONFINE LETTER
TO ONE SUBJECT

RE:

AFTON'S ASSAYS, EDITH LAKE - DRILL SAMPLES

<u>Hole</u>	<u>Tag</u>	<u>Depth Interval (Meters)</u>	<u>Cu (%)</u>	<u>Au (opst)</u>	<u>Ag (opst)</u>
SUP88-1		5-10	.078	.0014	
		10-20	.006	L.0005	
		20-30	.005	L.0005	
		30-40	.036	.0005	
		40-50	.090	.0013	
		50-60	.038	.0007	
		60-70	.017	L.0005	
		70-80	.006	L.0005	
		80-90	.007	L.0005	
		90-100	.003	L.0005	
		100-110	.003	L.0005	
		110-120	.007	L.0005	
		120-130	.016	.0008	
		130-140	.004	L.0005	
		140-150	.015	.0053	
		150-160	.014	L.0005	
		160-170	.008	L.0005	
		170-180	.008	L.0005	
		180-190	.013	.0005	
		190-200	.023	L.0005	
		200-210	.006	L.0005	
		210-220	.014	.0011	
		220-230	.008	.0007	
		230-240	.008	.0005	
		240-250	.012	L.0005	
		250-260	.036	.0005	
		260-270	.021	L.0005	
		270-280	.023	L.0005	
		280-290	.011	L.0005	
		290-300	.016	L.0005	
		300-310	.015	L.0005	
		310-320	.013	L.0005	
		320-330	.010	L.0005	
		330-340	.012	L.0005	
		340-350	.011	L.0005	

Joe Mihalech
J. Mihalech,
 Chief Assayer

AFTON OPERATING CORPORATION

INTER-OFFICE LETTER

DATE: May 13, 1988

COPIES TO:

TO: Lorne Bond

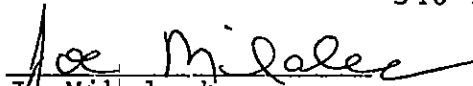
FROM: Joe Mihalech

WHEN FEASIBLE, CONFINE LETTER
TO ONE SUBJECT

RE:

AFTON'S ASSAYS ON AJAX DIAMOND DRILL SAMPLES

<u>Hole</u>	<u>Tag</u>	<u>Depth Interval (Meters)</u>	<u>Cu (%)</u>	<u>Au (opst)</u>	<u>Ag (opst)</u>
SUP88-2		5-10	.016	L.0005	
		10-20	.013	L.0005	
		20-30	.014	L.0005	
		30-40	.009	L.0005	
		40-50	.005	L.0005	
		50-60	.010	L.0005	
		60-70	.010	L.0005	
		70-80	.015	L.0005	
		80-90	.021	.0005	
		90-100	.015	.0005	
		100-110	.022	L.0005	
		110-120	.014	L.0005	
		120-130	.014	L.0005	
		130-140	.014	.0013	
		140-150	.013	L.0005	
		150-160	.011	L.0005	
		160-170	.010	L.0005	
		170-180	.013	L.0005	
		180-190	.027	.0006	
		190-200	.015	L.0005	
		200-210	.016	L.0005	
		210-220	.010	L.0005	
		220-230	.009	L.0005	
		230-240	.006	L.0005	
		240-250	.006	L.0005	
		250-260	.008	L.0005	
		260-270	.012	L.0005	
		270-280	.014	.0014	
		280-290	.008	.0005	
		290-300			
		300-310	.005	.0006	
		310-320	.004	.0005	
		320-330	.009	L.0005	
		330-340	.008	L.0005	
		340-350	.008	L.0005	


J. Mihalech,
Chief Assayer