

NEWCONEX CANADIAN EXPLORATION LTD.

BOX 40, TORONTO-DOMINION CENTRE

TORONTO 1, CANADA

TELEPHONE: 362-7591 CABLE: NEWCONEX, TORONTO

December 11, 1972. TORONTO DOMINION BANK TOWER

SUITE 4003

DELIVERED

Mr. G.S.W. Bruce, Dome Exploration (Canada) Ltd., 360 Bay Street, (Suite 702), Toronto 105, Ontario.

Dear Wally:

Enclosed is the report on the Webber Project for 1972 by Mark Rebagliati and Paul Richardson including recommendations and budget for the 1973 program.

There are ten areas designated for close attention. Obviously the small crew will not be able to attack all these areas in one season, but if the key parts of some of the areas are unavailable, that area can be set aside and others gone after.

In this connection it was deemed advisable because of the activity recent work on Cop-Ex might generate to try to stake about 40 claims to cover what was left of the critical area in Area 1. Mark Rebagliati went there 8 December to find that on 26 November someone else had staked them. It still might be sensible to do the seismic work recommended, but this will be decided later.

The recommendations on some large areas is to have them "geologically mapped". In all cases this means on a reconnaissance scale only. In all cases, also, the investigation will proceed in stages, and once sufficient negative information has been accumulated the investigation of the area will be stopped.

It is intended to use the magnetometer largely to locate airborne magnetic anomalies, and for other specific problems such as locating contacts. Large areas will not be covered with the magnetometer unless a reason is developed to warrant it.

Told Kat UK Dec 14/12

..../2

Sometime in the next few months airborne magnetometer maps will be released by the B.C. Department of Mines covering the area of interest south of Latitude 50°00' north. Airborne data on these maps were originally developed by Amax. It is the intention to try to stake as many as possible of the attractive magnetic anomalies shown by this work.

Although the recommendations are as given it is the firm plan to pay as much attention as possible to the activities of others in the area with the intention of optioning favourable ground.

During the winter any available data on the areas of interest will be assembled.

After you have had a chance to go over this perhaps we could get together to discuss it.

With best regards.

Yours very truly,

NEWCONEX CANADIAN EXPLORATION LTD.

and the car)

Patrick H. Taylor, Vice-President.

/lcl Encl.

BUDGET 1973			
<u>P-33</u>			
WAGES			
1st geologist12\$12nd geologist6½1st helper92nd helper4	,000 900 700 500	\$12,000 5,850 6,300 2,000 26,150	
Plus 15% for fringes		3,923 30,073	\$30,073
ACCOMMODATION		18	
2 men \$12.00 each per day for 6 mos. 2 men \$14.00 per day 4 mos.	v	4,320 1,680 6,000	6,000
MEALS			
\$9.00 per man day		5,940	5,940
VEHICLES (3)			
0.P. costs/mo Insurance 40 Rental fee 400 Cost per vehicle 740 month			
2 for 6 mos., 1 for 4 mos. 16 x 740			11,840
ASSAYS Soil samples 2,000 @ \$1.50 Rock assays 50 @ 7.00		3,000 350 3,350	3,350
CLAIM STAKING 250 @ 30		7,500	7,500
<u>SEISMIC SURVEY</u> 10,000 ft \$100 per 1,000 ft. <u>MAGNETOMETER</u>		1,000 2,500	1,000 2,500
Air photos l"=¼ mile 500 x \$1.00 Herculene mag. maps 10 @ \$18 Other supplies		500 180 1,500	
Travel to Victoria and Kamloops, hotel and meals		$\frac{300}{2,480}$	2,480
SUPERVISION 21 mp		2,000	2,000
37,000 Theo	bro	geted	\$72,683 30,000

	BUDGET 1973			
	<u>P-33</u>			
WAGES	MONTHS			
lst geologist 2nd geologist lst helper 2nd helper	12 6½ 9 4	\$1,000 900 700 500	\$12,000 5,850 6,300 2,000 26,150	
Plus 15% for fringes			<u>3,923</u> 30,073	\$30,073
ACCOMMODATION				
2 men \$12.00 each per day for 6 2 men \$14.00 per day 4 mos.	mos.		4,320 <u>1,680</u> 6,000	6,000
MEALS				
\$9.00 per man day			5,940	5,940
VEHICLES (3)				
O. costs/mo Insurance Rental fee Cost per vehicle month	\$300 40 <u>400</u> 740			
2 for 6 mos., 1 for 4 mos.	16 x 740			11,84
ASSAYS	,		2 000	
Soil samples2,000 @ \$Rock assays50 @			3,000 <u>350</u> 3,350	3,350
CLAIM STAKING 250 @ 3	0		7,500	7,500
SEISMIC SURVEY 10,000 ft.	- \$100 per 1,000 ft	•	1,000	1,000
MAGNETOMETER			2,500	2,500
Air photos l"=¼ mile 500 x \$1.0 Herculene mag. maps 10 @ \$18 Other supplies Travel to Victoria and Kamloops			500 180 1,500	
hotel and meals	,		300 2,480	2,480
SUPERVISION			2,480	2,480
			·	\$72,683

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#4513

WEBBER PROJECT

1972

ΒΥ

C.M. REBAGLIATI

NOVEMBER 30, 1972

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AEROMAGI	NETIC	MAP	1"=2 r	niles			

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I SUMMARY

The 1972 Webber Project was a continuation of the program to explore that part of the Quesnel Trough south of Kamloops.

A total of 1,252 silt samples were collected and several strong anomalies were discovered. All of the anomalies were found to have been staked by other parties. Several anomalies found in past years were also examined. The stream sediment sampling phase of the project has now been completed.

Geological mapping was carried out over a large area between the Allison and Summers Creek Faults. Approximately ninety-five copper-molybdenum occurrences were examined during the course of mapping.

Prospects with a broad zone of pyrite, pink feldspar and epidote alteration, and intrusive-like rocks have more potential than those without.

A list of specific proposals on prospects and favourable geological areas is included.

II CONCLUSIONS

- The detailed work on the areas recommended in the 1971 Report showed that most of these areas are of no further interest.
- The rugged terrain and lack of access in the area south of Copper Mountain makes further geochemical work impractical.
- 3. Geochemical sampling of the drainage systems in the project area has been completed.
- 4. Prospects with a broad zone of pyrite, pink feldspar and epidote alteration, and intrusive-like rocks were found to have more potential than those without.
- With more work planned in areas of extensive overburden, a magnetometer is necessary to more fully evaluate the ground.
- 6. Geological mapping aided by company geochemical data and published government aeromagnetic maps now appears to offer the best potential for future exploration.

III INTRODUCTION

The 1972 Webber Project was a continuation of the program to explore that part of the Quesnel Trough south of Kamloops. Reconnaissance geological mapping and geochemical sampling was used, particularly in areas where a number of copper occurrence were known to be present. The systematic follow-up of silt anomalies found during this, and past seasons was continued. Due to unusually heavy staking this year, an effort was made to evaluate each anomaly as soon as it was recognized.

The crew was assembled in the field on May 1, and field work continued until October. The field party led by C.M. Rebagliati consisted of Andrew Armstrong, who was replaced in June by Dragan Brabec, Douglas McCune, Al MacGregor, Richard Pasker and Joe Shearer.

Living accommodation and meals were obtained at Skye Blue Lodge on Allison Lake which lies along Hwy. 5 between Princeton and Merritt.

The 4 wheel drive vehicles, a Jimmy and a Carryall, and one 2 wheel drive Carryall were used for field transportation.

STREAM SEDIMENT SAMPLING

Stream sediment sampling in areas 92H/10, 92H/15 and the adjoining areas of 92H/9 and 92H/16 was completed. Special attention was assigned to the area bounded by the Otter Creek, Allison Creek and the Summers Creek Faults and to the area immediately east of Missezula Lake. Additional sampling was done in the drainage west of Hedley and on the west side of the Ashnola River Valley. In all, 1,252 silt samples were collected.

During the course of collecting the samples, particular effort was made to select samples that were free from organic matter. In some cases, the sample interval had to be altered in order to obtain a "clean" sample. It has been the experience of the writer that highly organic samples tend to have a higher background content in copper and made meaningful evaluation of the results much more difficult. Therefore, it was felt that the additional time and effort spent in collecting organic-free samples was well justified.

The samples were analyzed for copper, molybdenum, zinc and nickel by Acme Analytical Laboratories Ltd. of Burnaby by standard atomic absorption methods using a hot nitric-perchloric acid extraction. Most of the silt samples were also analyzed for extractable copper using

a cold 5% HCl digestion.

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A discussion of the anomalies examined is contained later in the report under the title "Field Work."

RECONNAISSANCE GEOLOGICAL MAPPING

The regional geology of the project area is described in Memoirs 243 and 249 published in 1948 and 1966 respectively by the Geological Survey of Canada.

During the past season, the reconnaissance geological mapping was centered around the Aspen Grove copper camp and was extended southward to the confluence of Summers and Allison creeks. Some mapping was done on the east side of the Summers Creek Fault. During the course of mapping, approximately ninety-five copper and copper-molybdenum occurrences were examined. These occurrences varied from narrow veinlets in tight fractures to broad areas of heavy sulphide mineralization. The status of each interesting showing was investigated, and in each case the ground had been staked by other parties.

In addition to the general information gathered, such as regional structures, occurrence of different rock types, abundance or lack of outcrop, etc., the examination of the numerous mineral occurrences led to an important observation being realized. It was found that (1) certain characteristics were common to all important prospects and that (2) if none of these were present the prospect did not warrant a detailed investigation. A description of each type follows.

TYPE 1

Each characteristic is important in itself, though when they occur together the potential of the prospect is enhanced greatly. The distinguishing features are as follows:

- 1. Pyrite occurs as disseminations and thin sheets along fracture and joint planes over areas ranging from a few tens of feet to a thousand or more feet. Pyrite is generally quite scarce in the Nicola Group with concentrations seldom reaching more than 1/2% to 1%. Within a pyrite zone, however, concentrations of 1-5% are common and concentrations up to 10-20% are not unusual.
- 2. Secondary orthoclase or pink albite is present in the form of veinlets, and also has flooded the host rock. The pink feldspar is accompanied by varying concentrations of epidote and sometimes magnetite. Occasionally the flooding has been intensive, and over short distance the rock becomes a pink feldspar-epidote rock.

- 3. Intrusive rock or a rock that has undergone a textural change that locally gives it the appearance of an intrusive rock is present. The latter appears as if it has been altered by some nearby intrusive activity.
- 4. The copper and molybdenum mineralization, if present, will occur within the intrusive rock and within the zone of pink feldspar-epidote alteration. While chalcopyrite may be present in the pyrite zone, it is rare. Pyrite may be present throughout, and it often extends out into the country rock where no signs of hydrothermal or intrusive activity are present.

TYPE 2

It was found that these more numerous and sometimes flashy copper occurrences have little economic potential. Generally they consist of a single veinlet or a few veinlets of chalcopyrite, chalcocite and native copper lying along narrow fractures in Nicola pyroclastics. In most cases this mineralization could not be traced for more than ten or twenty feet along strike or for more than a foot away from veinlets. These showings are pyrite-poor. Some pyrite may be present, but it is limited to within a few inches or at the most a few feet from the veinlets.

Some mineralization does occur in volcanic flows and in argillites, but these were within thin beds intercalated between thick piles of volcanic breccias and agglomerates.

FIELD WORK

A Work Recommended in 1971 Report

1. Hollis Creek Area 72 Figs. 4, 5 92-I-8

Twenty claims, Paul 1-20, were staked in the fall of 1971 to protect an area of silt samples having anomalous values in copper. In 1971, it was recommended that two percussion drill holes should be drilled to test the anomaly.

In 1972, it was decided that a detailed soil grid should be run over the area to define better the drill target. This survey confirmed the south half of the silt anomaly, and revealed a second area of high copper values 2,800 ft. to the west. An additional 20 claims, Paul 21-40, were staked to protect the anomaly. Subsequent geological mapping revealed that the claims are underlain by several types of metamorphic rocks including amphibolite chlorite schist, biotite chlorite schist, quartz hornblende feldspar gneiss and a garnetiferous quartzite. The schists and gneiss are irregularly distributed and grade from one to the other. Garnetiferous aplite and a gneissic guartz-diorite bound the area to the north and west. Moore Creek exposes sheared and schistose Nicola sedimentary and volcanic rocks which appear to be in fault contact with the metamorphic rocks to

the west. A south-flowing tributary of Moore Creek is believed to follow the contact closely.

The eastern anomaly is bounded on the east by the sheared and schistose Nicola rocks, and probably is underlain by the metamorphic rocks. The western anomaly is entirely underlain and surrounded by the metamorphic rocks.

Source and Cause of the Anomalies

Within both the anomalous areas, quartz veins varying from 2" to 48" carry minor to abundant amounts of pyrite and chalcopyrite. One heavily mineralized sample of vein material was assayed. Values of 1.18% Cu, 1.08 oz. Ag/Ton, 0.002 oz. Au/Ton were returned. Twelve rock samples taken in areas of high and background soil values within the western anomaly gave a range of values from 26 ppm Cu to 208 ppm Cu. These samples show a strong correlation between the high soil values and the highest rock values. The reverse is also true, indicating that if a concentration of copper occurred in the soil then the soil anomaly may be caused in part by local high bedrock values. The abundant outcrop within the western anomaly contained no visible copper sulphides except in or immediately adjacent to quartz veins.

Recommendations

The plans to drill the Hollis Creek property should be dropped and no further work is recommended.

2. Geological Mapping

Geological mapping was carried out in map areas 92H/9, 92H/10, 92H/15 and 92H/16 in the geologically favourable zone from Merritt to Princeton. Approximately ninety-five copper and copper-molybdenum occurrences were examined during the course of mapping. Extensive areas with potentially favourable geology were found to be covered by overburden.

3. Drainage Sampling

Sampling the remaining streams in areas 92H/10, 92H/15 and the bordering areas of 92H/9 and 92H/16 was completed. A total of 1,252 silt samples were taken. Several strong anomalies were discovered, but all had been staked by other parties.

4. Detailed Sampling in the following Areas was Recommended

for the 1972 Program

See Richardson and Ramsay Webber Project 1971, pages 23-24.

The location of each detailed figure is marked on the enclosed l=2 miles geology map.

(a) The Pipeline Near Sample K-6095 (92H/15E)

72 Fig. 4 92-H-15

Two - 2,000 ft. soil lines, with 200 ft. sample intervals, running at right angles were centered on sample K-6095. None of the 20 soil samples taken indicated the presence of copper mineralization. Outcrops in the area are rare, but one outcrop along the pipeline near sample K-6095 consists of a chloritized coarse-grained monzonite. Only a trace of pyrite was seen.

(b) The Power Line South of Tule Lake Near Sample K-6565 (92H/15E)

72 Fig. 1 92-H-15

Reconnaissance mapping revealed that the ground is underlain by Nicola pyroclastics which have been intruded by bodies of mineralized diorite and diorite breccia. Two lines of soil samples were run in this area and values ranging from 38 to 3,700 ppm Cu were obtained. The ground is held by David Minerals Ltd., who optioned it to Frontier Exploration Ltd., who in turn have optioned it to Amax. Amax did approximately 7,000 ft. of percussion drilling on the property this summer. Their results are reported to have been very discouraging.

(c) Near Sample K-6139 on the Tributary of Nillson Creek (92H/15W)

Resampling of this stream failed to confirm the presence of a copper silt anomaly.

(d) Teenamilsts Creek (921/2E)

72 Fig. 2 92-I-2

Two lines of soil samples around these organic rich silt samples failed to indicate anything of interest.

(e) <u>The South-Flowing Creek West of Indian Reserve No. 7</u> (92I/2E)

72 Fig. 1 92-I-2

Prospecting and a soil grid in the drainage area around the high values failed to indicate the presence of a mineral desposit. A check of the sample sites showed that the samples had a high organic content.

(f) The Creek East of Indian Reserve No. 1 (921/2W)

72 Fig. 3 92-I-2

The twenty-four soil samples taken from the area containing the high silt samples failed to indicate anything of interest.

B Other Areas Investigated

(a) McBride Creek and Tributaries 92-H-1

Samples ranging from 20 to 1,500 ppm Cu, from 1 to 30 ppm Mo and from 52 to 1,350 Zn were obtained from McBride Creek, its tributaries and from a stream a half mile to the north. Prism Mines Ltd. has held claims in this area for a number of years. However, it was thought that their claims may not cover all of the favourable geology. No anomalous values were obtained outside their claim boundaries. No further work is recommended.

(b) Swanson Creek 92-H-9

72 Fig. 1 92-H-9

Six samples taken from Swanson Creek gave anomalous values ranging from 5 ppm to 22 ppm Mo. Four check samples confirmed the anomaly.

A soil sample survey, on a grid with six eastwest lines 800 ft. apart and with a 400 ft. sample interval, was carried out over the interesting area. None of the 134 soil samples were anomalous in molybdenum or copper. The upper portion of Swanson Creek is a little swampy, and the samples all contained a few percent organic material. This, or the presence of a few molybdenum-bearing

quartz veinlets, may be the cause of the high molybdenum values. No further work is recommended.

(c) Creek South of Rampart Creek 92-H-9

72 Fig. 2 92-H-9

A silt sample from the first creek south of Rampart Creek showed a weak copper anomaly. A small soil grid and resampling of the stream failed to indicate the presence of any significant copper mineralization. The one high soil sample, with 245 ppm Cu containing mostly black organic matter was taken from swampy ground. No further work is recommended.

(d) Asp Creek Anomaly 92-H-10

72 Fig. 1 92-H-10

Silts from Asp Creek, as with other streams lying between Allison and Otter creeks and south of Thynne and Borgeson lakes, have a low copper content. Values generally fall between 11 and 35 ppm. One sample, 72W2157 had 200 ppm Cu, and immediate follow-up work of prospecting and silt and soil sampling at 200 ft. intervals was carried out. Several outcrops of Nicola vcleanics occur along the west bank of the stream above and below sample 72W2157. The only sulphides present are a few scattered grains of pyrite. There are, however, three or four 1 to 4 inch orthoclase-epidote veinlets exposed close to the high sample. These veinlets are barren of sulphides. Both the closely-spaced soil and silt samples failed to indicate the presence of any copper mineralization or to confirm the anomaly. The sample can be considered to be an erratic high, and no further work is recommended.

(e) Creek Draining Southward from Missezula Mountain

<u>92-H-10</u>

Two samples from a stream draining the southwest side of Missezula Mountain had anomalous values in copper. This stream cuts the western limit of the Summers Creek quartz diorite body which hosts Adonis Mines' Axe deposit. The samples were taken from zones of altered quartz-diorite and dioritized Nicola pyroclastics in areas peripheral to the main mineralized zone. The ground is presently held by Adonis Mines Ltd.

(f) Bluey Lake Road Area 92-H-15

72 Fig. 2 92-H-15

Twenty-one soil samples were taken at 100 ft. intervals along a 2,000 ft. line which was centered over an outcrop of mineralized volcanic breccia. In 1971, eleven 10 ft. contiguous chip samples were taken along the outcrop (Fig. 71-5). These samples averaged 1,485 ppm Cu (~0.15% Cu) over the 110 ft. Only one soil sample, which was taken next to the outcrop, returned an anomalous value. This indicates that the mineralization is very limited in extent. No quartz veinlets, secondary orthoclase or pink albite, or other important alteration minerals associated with porphyrytype deposits were observed. No further work is recommended.

(g) <u>Copper Anomaly 5,000 Ft. West of Gladstone Lake</u> <u>92-H-15</u>

A one-sample copper anomaly (189) ppm was found on a stream flowing into Gladstone Lake. As another party had recently staked the ground and was working on it no follow-up work was undertaken.

(h) Logans Creek Area 92-H-15

72 Fig. 3 92-H-15 1971 (Fig. 71-3)

This area was re-examined to check silt samples taken from an anomalous stream at different times of the year, and to check the reliability of normal soil sampling procedures in a relatively dry environment. The area was ideal because the silt anomaly had been confirmed in 1971 and the source of the copper was known to be from a small quartz monzonite stock mineralized with chalcopyrite and pyrite. In both cases, where silt samples were taken

during the late stage of spring freshet and during low water late in the summer, anomalous copper values were obtained. The soil sampling, under adverse soil conditions (caliche), indicated the presence of the known copper mineralization. The mineral rights to this ground are held by Harry Nesbitt.

(i) Anomalous Silt Sample 3,300 Ft. West of Miner Lake92-H-15

A southward-flowing stream, lying approximately 3,300 ft. west of Miner Lake, yielded one anomalous sample with 172 ppm Cu. A number of bulldozer trenches were found on the east bank of the stream near the high sample. Dioritized volcanic breccia and andesite exposed in the trenches contain pyrite and minor chalcopyrite along widely-spaced fractures. The ground has been held by other parties for several years.

(j) Stream One Mile South of Dillard Creek 92-H-16

A stream flowing westward into Summers Creek, approximately one mile south of Dillard Creek, was found to be highly anomalous in copper. The silt samples ranged from 118 ppm to 330 ppm Cu. Of the twenty-one samples taken nineteen were anomalous. Three samples taken from a small south-flowing tributary of this stream gave 500, 680 and 54 ppm Cu.

No anomaious values for Mo, Zn, or Ni were obtained. Immediate investigation revealed that the ground was held by Primer Group Minerals and Coynex Development On the Primer ground, a small diorite stock or Ltd. a number of diorite dykes cut the Nicola pyroclastics. An extensive pyrite halo envelops the diorite with local concentrations reaching 15%, although the average would be closer to 5%. A few quartz and pink feldspar veinlets in the pyroclastics and in the diorite carry weak chalcopyrite and pyrite. Pyrite is also abundant in the diorite as disseminations and as fracture fillings, minor chalcopyrite accompanies the pyrite along fracture planes. The copper mineralization, though widespread, is weak, but in one locality a narrow zone of brecciated diorite carries aboundant pyrite and chalcopyrite in a carbonate matrix.

A proposal for additional work in this area is included in the recommendations.

(k) Creek Two Miles West of Conant Lake 92-I-7

Four somewhat organic-rich silt samples (K2384 to K2387) taken in the 1970 field season yielded from 145 to 180 ppm Cu. The sample sites were revisited in 1972, and it was found that the area is underlain by gneissic rocks similar to those at Hollis Creek. Float

and outcrop of narrow quartz veins carrying a few percent pyrite were found. These or other quartz veins may contain a little chalcopyrite, thus contributing to the high copper content of the silts. Aeromagnetic maps show that the samples were taken in an area of low magnetic relief. No further work is recommended.

(1) <u>Aeromagnetic High West of the South End of Stump Lake</u> 72 Fig. 1 92-I-8

A line of soil samples, with samples taken at 200 ft. intervals, was run over a magnetic anomaly having a relief of 100 gammas. No anomalous values were obtained. An outcrop of serpentinized peridotite found in the small stream cutting the magnetic high explains the anomaly.

(m) Aeromagnetic High West of Stump Lake 72 Fig. 2 92-I-8

A line of soil samples, with samples taken at 200 ft. intervals, was run over a weak magnetic anomaly located approximately 12,000 ft. west of Stump Lake. This geochemical profile indicated the presence of copper mineralization.

The l"=4 miles government geology map shows the anomaly to be underlain by Nicola group rocks.

Additional work is recommended.

(n) Aeromagnetic Highs West of Peter Hope Lake 72 Fig. 3 92-I-8

A line of soil samples was taken to give a geochemical profile over the two magnetic highs which occur 3,000 ft. and 12,500 ft. west of Peter Hope Lake. The samples were taken at 200 ft. intervals over and immediately adjacent to the peaks and at 500 ft. intervals between them. No anomalous values were obtained.

IV RECOMMENDATIONS FOR 1973

A PREFIELD SEASON OFFICE WORK

- Make an air photo study of each proposed area using a l"=1/4 mile base map.
- Constantly review the status of claims held by other parties in the proposed areas and in other potentially favourable areas.
- Obtain any additional assessment reports that are now available.
- 4. A compilation of all geological information should be made and put onto 1:50,000 base maps from which prints can be made.
- 5. When the government releases the aeromagnetic data for the map areas 92-H/l-16, this data should be promptly evaluated and staking crews, already stationed in the area should be quickly mobilized.
- 6. Evaluate and select a magnetometer for use in the field.
- 7. As the discovery rate of one important prospect per year continues, the activities of other companies working in the project area should be kept under constant observation and review. This action would allow Newconex to take advantage of new discoveries by being able to enter into early negotiations.

Note

When staking claims in some cases it may be advantageous for Newconex if the claims are staked by someone not known by the mining industry at large to be connected to the company. The cost of transferring a claim is only \$1. The slight additional expenditure is well worth the convenience of not having professional "tie on" stakers rush into the area. The negotations with other claim holders as well should be easier if the company maintains a low profile.

B FIELD WORK FOR 1973

The proposals for 1973 are given the following priority. The locations of the proposal areas are marked on the accompanying 1"=2 miles geology map. A print of the available aeromagnetic data, at a scale of 1"=2 miles, is also enclosed.

Area 1

Pipeline Four Miles North of Princeton 92-H-10

72 Fig. 2 92-H-10

Geochemistry

In 1971, a gas pipeline was laid from Kingsvale to Princeton and thence to Oliver. Advantage was taken of the excavation to obtain deep soil samples. In all, 139 deep samples were collected from the twenty mile long section falling within NTS map sheet 92H/10. Of the 139 samples, 10 contained more than 200 ppm Cu, 17 contained from 100 ppm to 200 ppm Cu, and the remaining 112 contained less than 100 ppm Cu.

Approximately 4 miles north of Princeton, a 12,000 ft. section of the excavation yielded 8 of the 10 samples with more than 200 ppm Cu and 6 of the 17 falling between 100 ppm and 200 ppm Cu. This area lies in a broad alluvium-filled valley a short distance south of the confluence of Summers and Allison creeks. The unknown thickness of the alluvium raises one serious question. Do the anomalous soil values represent a transported anomaly or are they the results of a buried mineral deposit? If the depth of overburden is less than 50 ft. then the potential of the anomaly is greatly enhanced.

Geology

The government geology map of the area shows that the Princeton Group sediments overlie Nicola Group volcanic and pyroclastic rocks. No outcrops occur in the valley floor, but outcrops along the valley walls show that the cover of Princeton sediments, just south of the junction of Summers and Allison creeks, is less extensive than indicated on the government map. There is also evidence that the Princeton Group sediments may have been eroded from the valley floor, and the valley is underlain by Nicola Group. The most important feature, however, is that two of the three major faults in the district intersect beneath the alluvium where the high soil samples were obtained. Most of the important ore bodies within the Kamloops - Princeton Copper Belt lie on/or adjacent to major faults. It can, therefore, be concluded that the coincidence of a strong geochemical

constitutes an important exploration target.

Recommendations

- Stake or otherwise acquire the potentially favourable ground.
- Run three or more seismic profiles, centered over the high copper values, across the valley.
- 3. If it is found that the depth of overburden is less than 50 ft. drilling should be considered.

<u>Area 2</u>

Paska and Wyse Lakes Area 92-I-10

The salient features of this area are as follows:

- (a) Three adjacent streams have strong copper anomalies.
- (b) These streams drain a small but well defined aeromagnetic anomaly.
- (c) The area is underlain by Nicola Group volcanics.
- (d) A soil grid done in 1970 over a portion of the interesting area revealed a weak copper anomaly, approximately 2,000 ft. square in an area of no outcrops.

- Stake the portion of the interesting area that is open. The location of the KID and RED claims that lie east of the target area should be checked on the ground. Both of these claim groups may expire this winter, if so, this ground should also be staked.
- 2. Extend the soil grid to the south and east.
- 3. Extend the geological mapping.
- Re-examine the soil anomaly to determine if induced polarization, bulldozer trenching or drilling is warranted.

Area 3

Extension of the Iron Mask Batholith 92-I-9

The salient features are as follows:

- (a) A series of aeromagnetic highs which may represent a disrupted extension of the magnetic expression of the Iron Mask Batholith lie southeast of Shumway Lake between Wildhorse Mountain and Todd Lake.
- (b) The area has been mapped by the G.S.C. as being underlain by the Wildhorse Mountain Batholith. However, it is possible that part of this intrusive body may be the southeastward extension of the Iron Mask Batholith.
- (c) Few claims are presently held in this area by other parties.

- The area should be geologically mapped paying particular attention to the aeromagnetic highs.
- If warranted, selected areas should be covered by a soil grid and a ground magnetometer survey.

Area 4

Dillard Creek 92-H-16

From Quilchena Creek to Dillard Creek, a distance of 14 miles, the G.S.C. has mapped the occurrence of five small stocks. A sixth stock, not mapped by the G.S.C., lies one mile south of Dillard Creek, and contains pyrite and weak chalcopyrite mineralization. The area between the above stock and the stock on Quilchena Creek contains relatively few outcrops, and until recently had poor access by vehicle. This area has not been heavily explored in the past, and other stocks not mapped by the G.S.C. may be present.

Recommendations

Reconnaissance geological mapping should be carried out, from Quilchena Creek in the north to Dillard Creek in the south, to define smaller areas of specific interest.

Area 5

Bluey Lake Road 92-H-15

Reconnaissance mapping in 1972, a half mile north of the dirt road leading to Bluey Lake located a few small outcrops of fractured andesite containing 1% to 10% pyrite. Two small outcrops, one of quartzmonzonite and the other of syenite, occur a few hundred feet to the southwest. These rocks also contain pyrite. Few outcrops are present in this area. However, due to the nature of the mapping, it is quite likely that detailed mapping would locate more.

Recommendations

- 1. Geologically map the area in detail.
- Run a soil grid and a magnetic survey over the interesting area.

Area 6

West of Walloper Lake 92-I-7

The significant features are as follows: (a) Hay Brook, Neil Creek and the stream between are anomalous in copper.

- (b) A moderate, but well defined aeromagnetic low coincides with the anomalous samples on the upper part of the middle stream. The other anomalous samples on this creek and on Hay Brook lie on the northern flank of a magnetic high having a relief of 180 gammas.
- (c) The area is underlain by Nicola rocks.
- (d) Claim maps show that the most interesting area is open and it appears the staked ground to the east is lightly held.

- Stake the interesting area and keep a close watch on the claims to the east.
- 2. Map the area geologically.
- 3. Run a soil and ground magnetometer grid over the claims to be staked by Newconex.

<u>Area 7</u>

Aeromagnetic High West of Stump Lake

72 Fig. 2 92-I-8

The significant features are as follows: (a) The area is underlain by Nicola Group volcanics. (b) There is a weak aeromagnetic high.

(c) A soil profile indicated the presence of copper mineralization on the flank of the magnetic high.

Recommendations

- Geologically map the area underlying the aeromagnetic high.
- Run a soil grid and a ground magnetometer over the area.
 Area 8

Hamilton Mountain 92-I-1

Although it is not apparent on the maps, the 1970 and 1971 reports emphasize the abundance of pyrite in the Hamilton Mountain area. As the presence of more than 1/2% to 1% pyrite is uncommon in the Nicola Group rocks, the possible significance of the reported pyrite should not be overlooked.

It is recommended that the area be prospected, paying special attention to the amount and spacial distribution of the pyrite present.

Area 9

Greater Greenstone Mountain Area 92-I-10

The salient features of this area are as follows: (a) Three streams have strong copper anomalies that have not been explained.

(b) Three small stocks intrude the Nicola volcanics.

- (c) Strong aeromagnetic features are present.
- (d) Some porphyry-type copper mineralization is known to occur in this area.
- (e) Limited mapping done in the northeast corner by Newconex in 1971 shows that pyrite is widely distributed around the eastern edge of one of the stocks.
- (f) The extent of the pyrite zone was not delimited because the importance of widespread pyrite had not yet been realized.
- (g) The presence of extensive pyrite mineralization around the end of one stock suggests that other zones, which could contain copper sulphides, may be present within the general vicinity of the three stocks.
- (h) A string of small aeromagnetic depressions lies along the north, east and south sides of the strong magnetic anomaly. One of these depressions may represent a zone of pyritization where magnetite has been reduced to pyrite. Such a zone may also contain copper sulphides.

- The whole area should be geologically mapped giving first priority to lightly held ground.
- Some of the claims held within the proposal area may expire this winter. If possible Newconex should restake the ground.
- 3. Further action will depend on the results of the mapping.

Area 10

Upper Brussels Creek 92-I-10

The pertinent data are as follows:

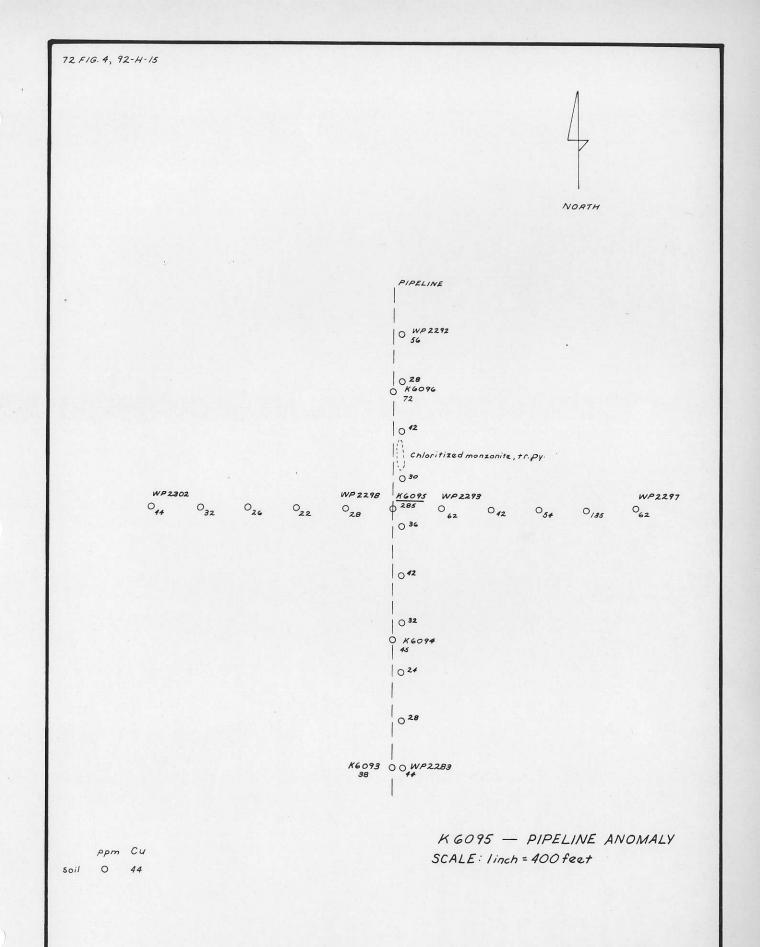
- (a) A strong copper silt anomaly occurs in the upper part of Brussels Creek.
- (b) The silt anomaly lies between two small but distinct magnetic highs.
- (c) The area is underlain by Nicola Group rocks.
- (d) In 1971, the creek was resampled and a limited amount of mapping was done. The anomaly was confirmed, two minor copper occurrences were found and one outcrop of diorite was mapped.

- The geological mapping should be extended to include the magnetic highs, the area between and all of the possible drainage area that could contribute to the silt anomaly.
- A soil grid and a ground magnetometer survey may be necessary depending on the results of the geological mapping.

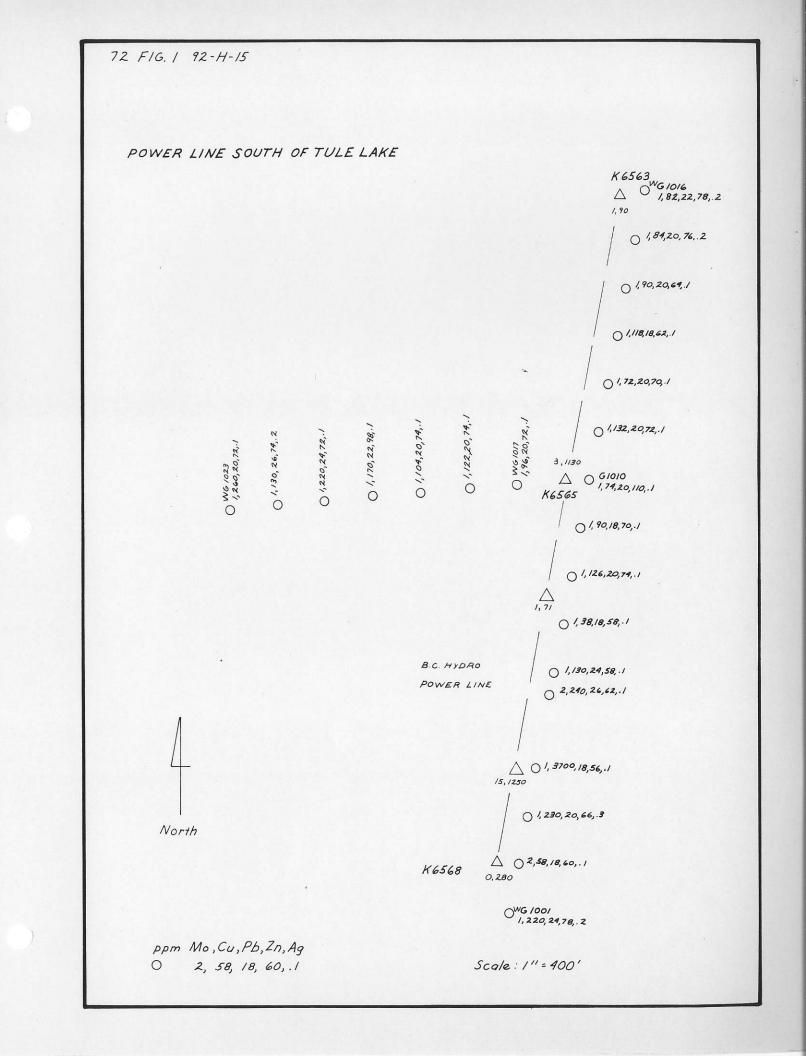
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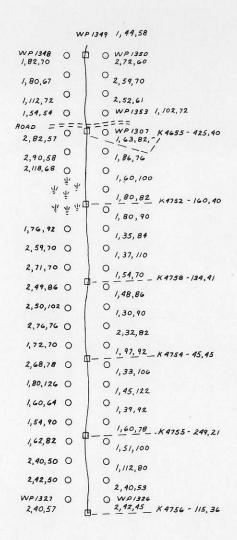


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72 FIG. 2 92-I-2

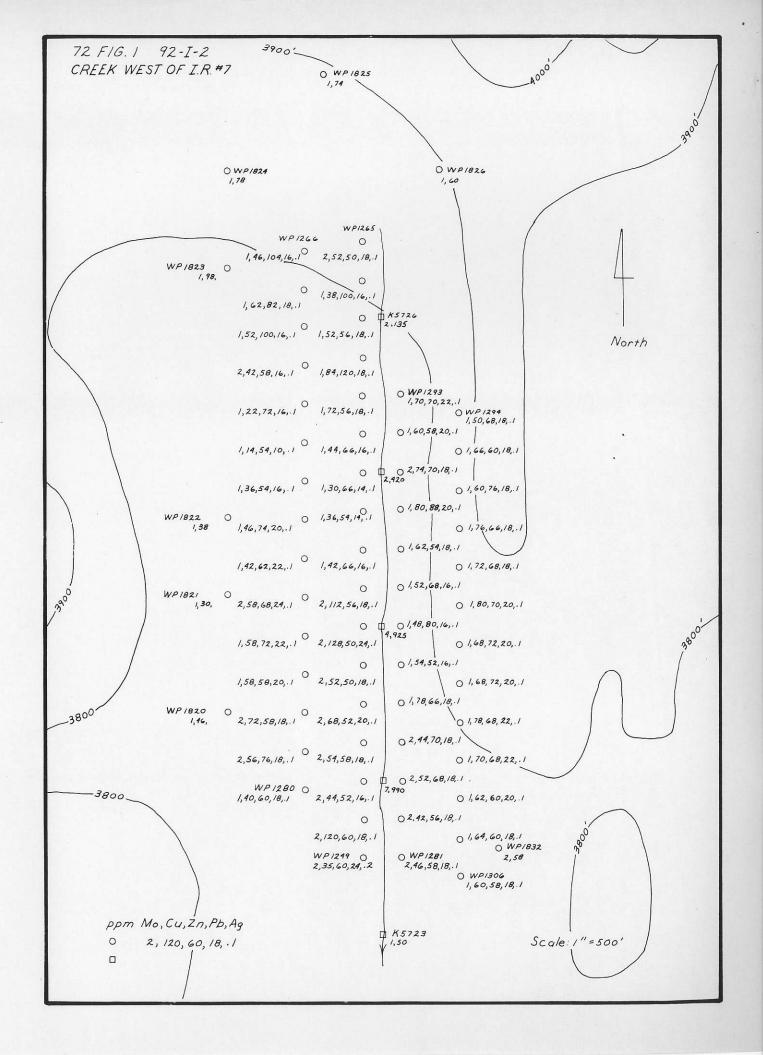
NORTH

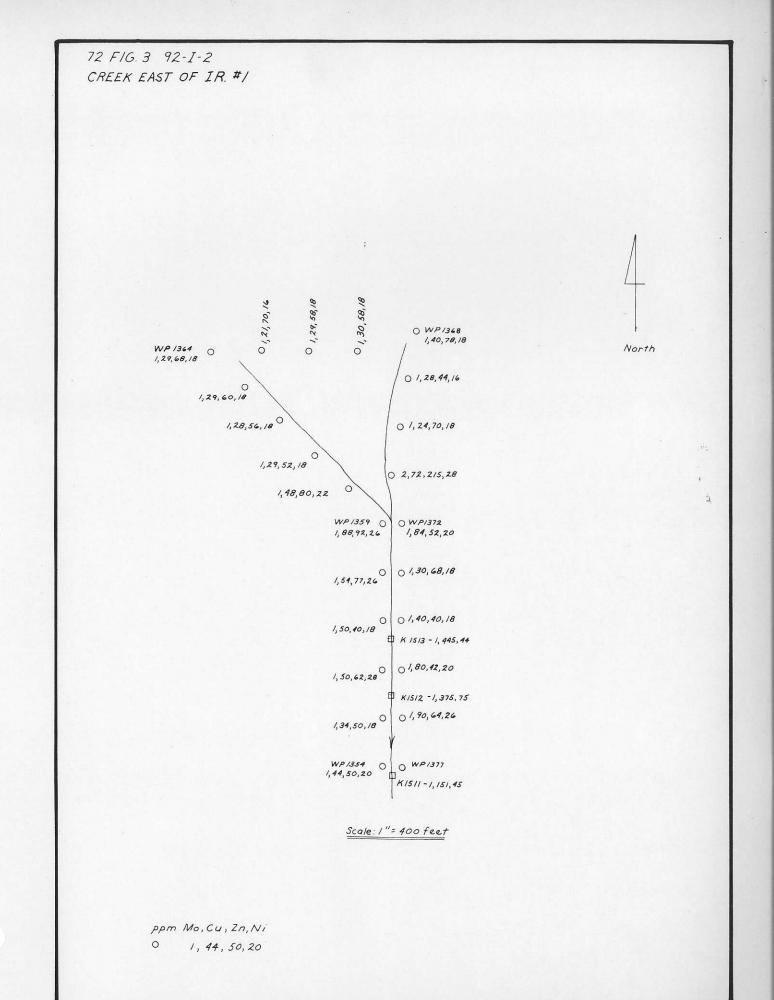


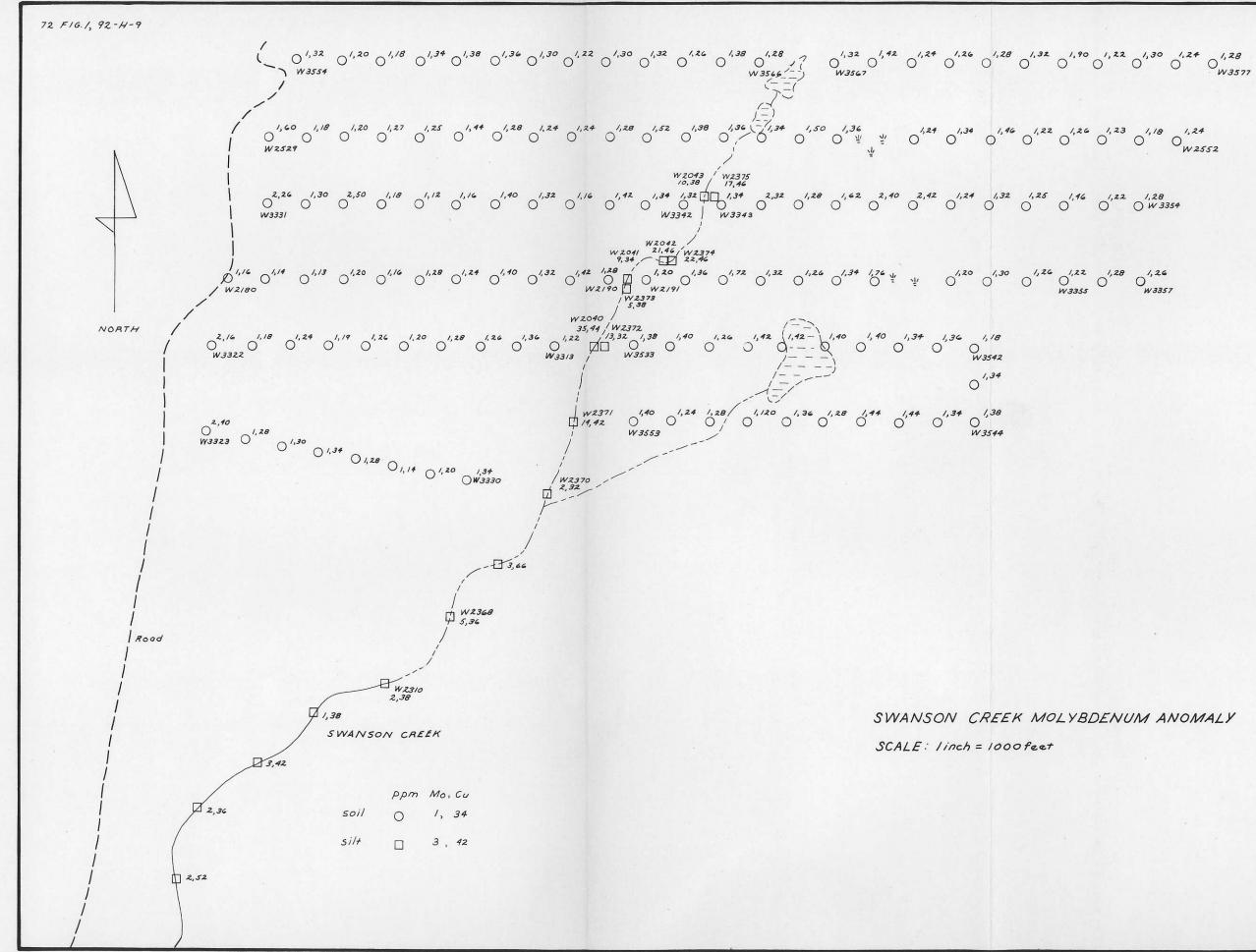
Mo, Cu, Zn 0 1, 76, 92 Cu, 2n K 1756 - 115, 36

Scale: 1 "= 1000'

TEENAMILSTS CREEK



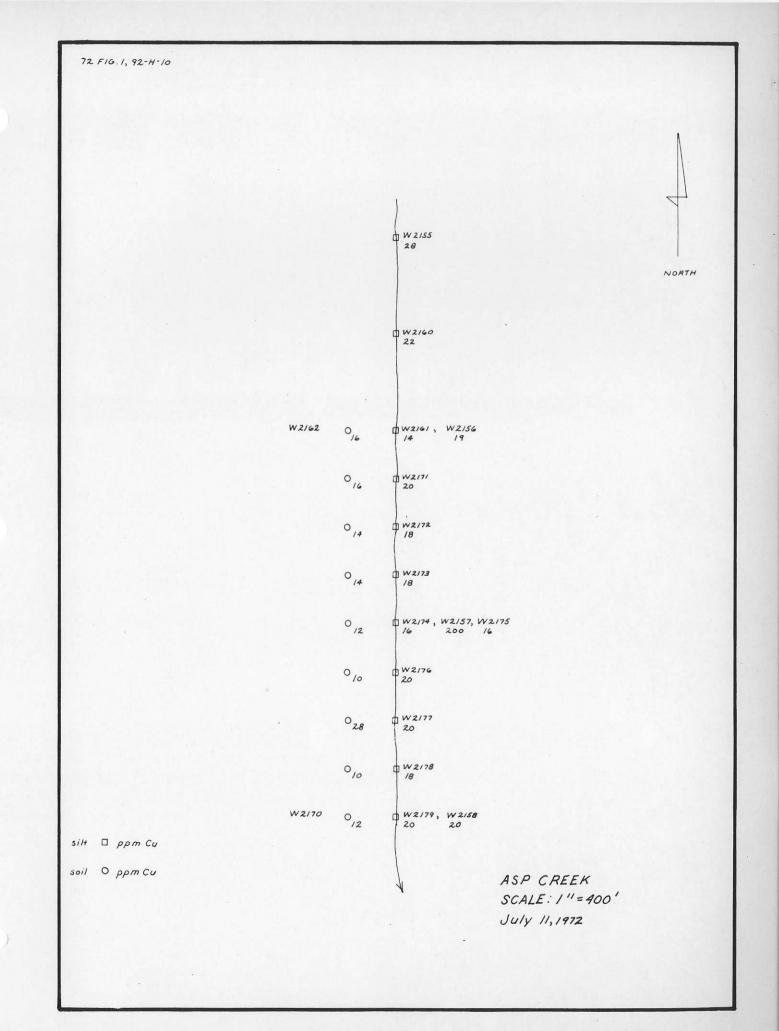


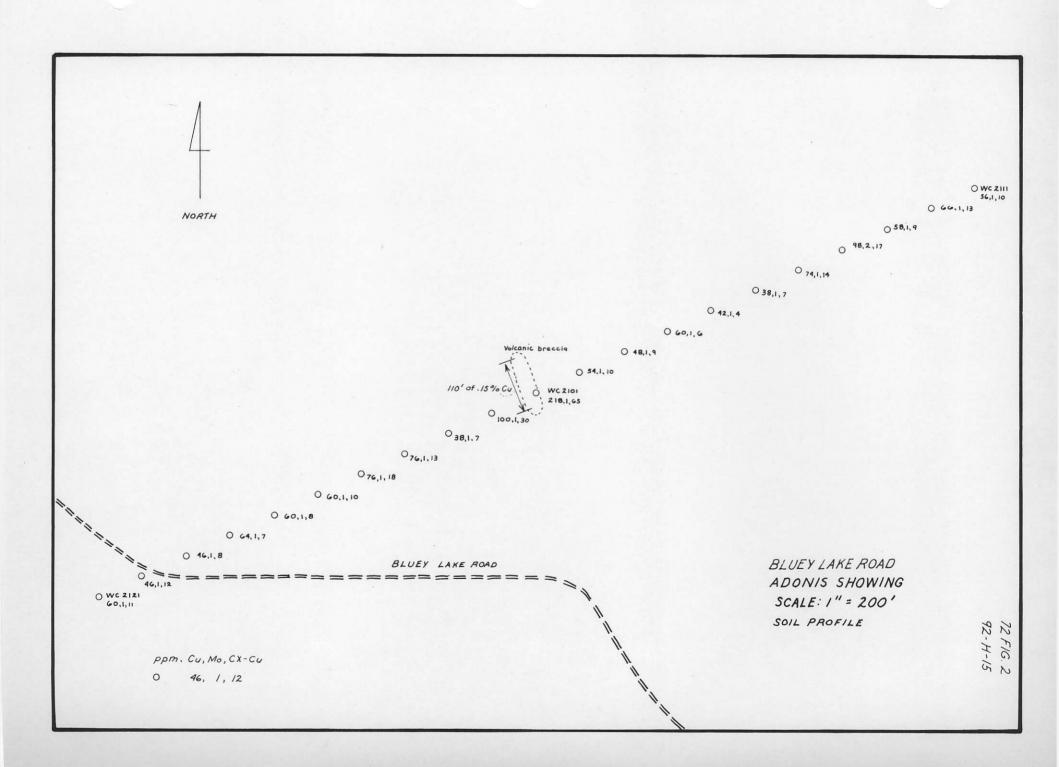


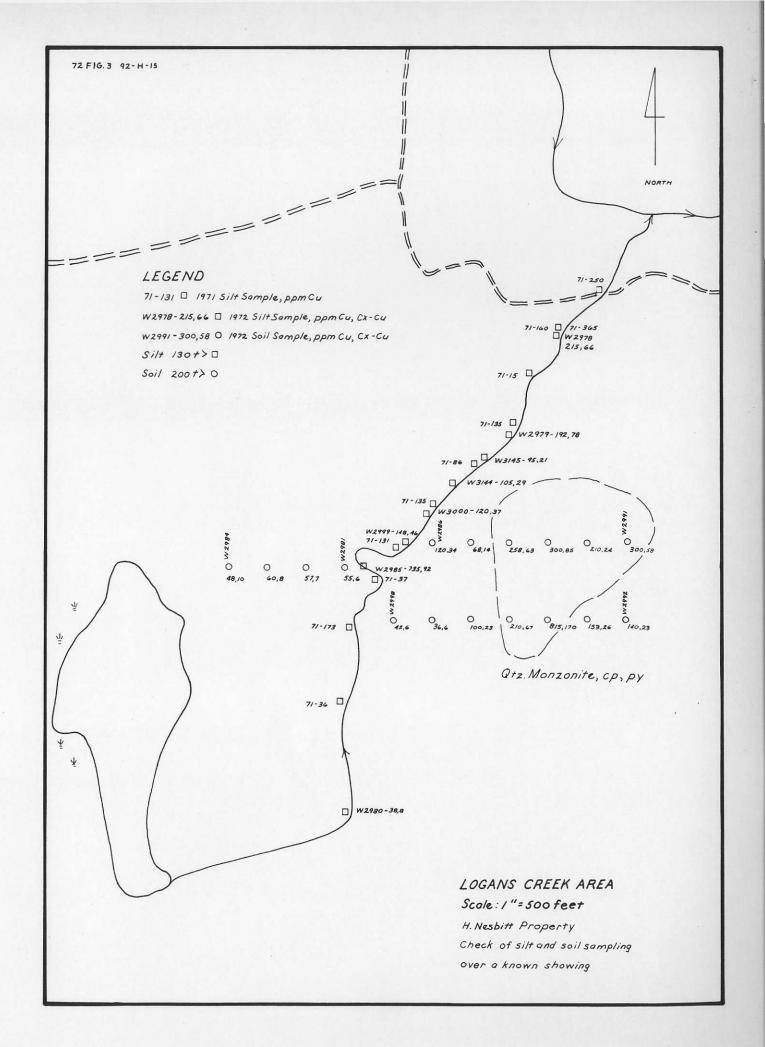
W 3357 01,34 0 1,38 W 3544

SWANSON CREEK MOLYBDENUM ANOMALY

72 FIG. 2, 92-H-9 CREEK SOUTH OF RAMPART CREEK Scole: / inch = 1000 feet North ONA,38 ONA,30 ONA,34 ONA,36 Ow2087 NA, 245 (orgonic) W2092 W2563 W2385 • MA, 32 W2363 W2385 • MA, 32 W2363 W2362 W2561 V2384 W2081 • W2560 NA, 16 NA, 19 NA, 14 NA, 14 MA, 28 W2560 W2560 W2383 1,34 0,15 0,2,20 0,2,26 0,2,22 0,34 0,32 W 2558 1,58 F W2557 1,62 W2588 O1,30 O1,32 O1,30 OW2585 U 2382 01,22 W2589 01,32 W 2556 W2571 O O W 2584 1,120 1,36 0 Ο 1,42 W2554 W2553 W2380 B 2,78 W2379 2, 48 ppm Mo, Cu soil () 1, 28 silt 🗌 1, 78 2,34 NA . not analyzed W2376 0 1,32 SUMMERS CK

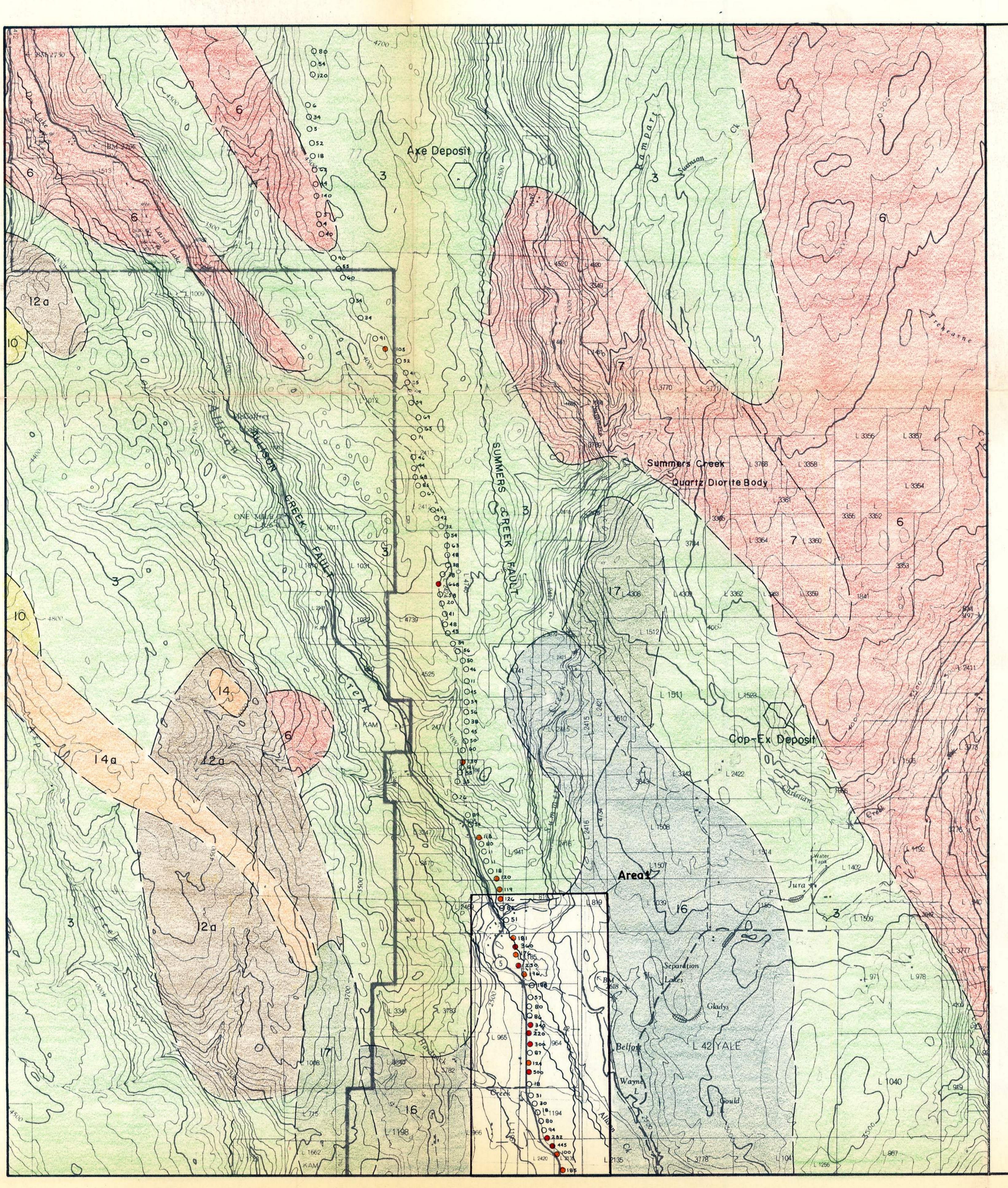






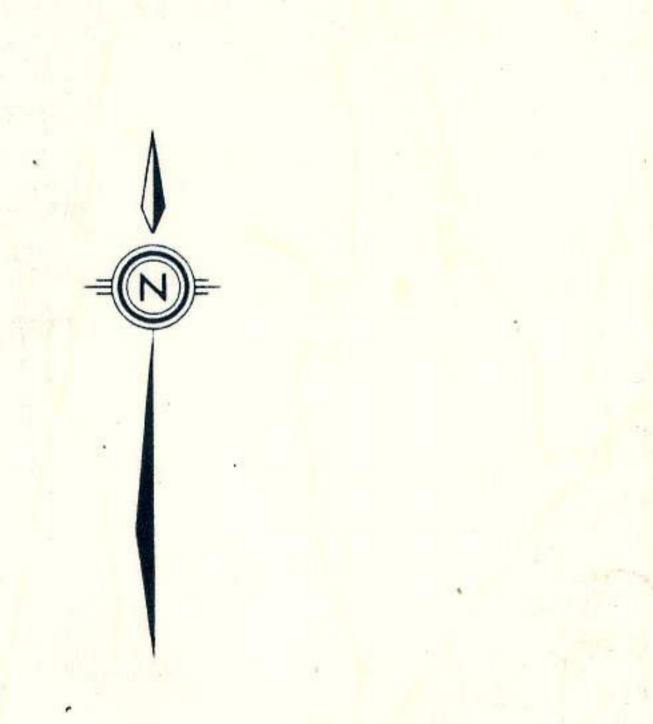
72 FIG. 1 92-1-8 AEROMAGNETIC HIGH SOUTH END OF STUMP LAKE 1500'. WG //60A 0', 58, 58, 20 0', 52, 62, 20, .2 0', 74, 74, 28, .4 0', 60, 82, 28, .2 0', 62, 82, 28, .2 0', 62, 82, 28, .2 0', 58, 80, 36, .8 0', 60, 66, 28, .3 0', 58, 68, 28, .2 0', 54, 78, 58, .6 0', 54, 78, 58, .6 0', 60, 88, 56, ./2 0', 44, 104, 30, .21500' From BM 2486 - 240° WG1160A 0 1,58,58,20,1 North Scale: 1 "= 1000' Ppm Mo, Cu, Zn, Pb, Ag 0 1, 44, 104, 30, .2 72 FIG. 2 92-1-8 AEROMAGNETIC HIGH WEST OF STUMP LAKE $\begin{array}{c} WG1/86 \\ () 2, 90, 72, 22, .1 \\ () 1, 100, 72, 20, .2 \\ () 2, .70, 82, 24, .2 \\ () 1, 100, 94, 22, .2 \\ () 1, 72, (0, 24, .2 \\ () 1, 74, 72, 24, .2 \\ () 1, 50, 68, 22, .1 \\ () 1, 64, 66, 22, .1 \\ () 1, 64, 100, 66, 20, .1 \\ () 1, 64, 100, 66, 100, 66, 100, .1 \\ () 1, 100, 66, 100, .1 \\ () 1, 100, .1 \\ () 1, 100, .1 \\ () 1, 100,$ North 7000' From BM 2466 - 295° ppm Mo, Cu, Zn, Pb, Ag Scale: 1 "= 1000' 0 2, 90, 72, 22, .1

72 FIG. 3 92-1-8 PETER HOPE LAKE AEROMAGNETIC HIGHS	PETER HOPE LAKE	
	$ \begin{array}{c} WG 1/87 & 0 & 1,32,56,16,.1 \\ & 0 & 1,40,46,16,.1 \\ & 0 & 1,26,44,14,.1 \\ & 0 & 1,42,49,18,.1 \\ & 0 & 1,42,49,18,.1 \\ & 0 & 1,40,68,18,.1 \\ & 0 & 1,40,68,18,.1 \\ & 0 & 1,40,68,18,.1 \\ & 0 & 1,36,72,16,.1 \\ & 0 & 1,36,72,16,.1 \\ & 0 & 1,35,72,16,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,22,.1 \\ & 0 & 1,54,56,18,.2 \\ & 0 & 1,32,48,18,.1 \\ & 0 & 1,24,46,16,.1 \\ & 0 & 2,34,50,18,.1 \\ & 0 & 1,24,46,16,.1 \\ & 0 & 1,38,72,16,.2 \\ & 0 & 1,44,60,16,.2 \\ & 0 & 1,44,60,16,.2 \\ & 0 & 1,40,54,18,.1 \\ \end{array} $	
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	01,72,76,26,.1	
	0 1,60,56,18,.1	
	O 1,50,58,18,.1	
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		ppm Mo, Cu, Zn, Pb, Ag
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sandstone, and conglomerate, coal indesite and basalt

# LATER

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ic breccia; 12b, mainly andesite and basalt basalt porphyry and volcanic breccia

> -----11 -----

PASAYTEN GROUP Mainly grit and shale; 11a, mainly purple lava. tuff, and breccia

# ROUP

desite and basalt

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# LOWER CRETACEOUS GROUP

eccia, grit, argillite; 9a, mainly conglomerate

AIN INTRUSIONS: syonogabbro, augite

ONS: 5, grey, slightly-gneissic-granodiorite; h, coarse-grained, siliceous-granite-and ght coloured granodiorite, quartz diorite,

renite, gabbro

4

inches centimetres This reference scale bar has been added to the original image. It will scale at the same rate as the image, therefore it can be used as a reference for the original size.


; argillite, tuff, limestone, chlorite and NEWCONEX CANADIAN EXPLORATION LTD. 72 FIG.2 92-H-IO

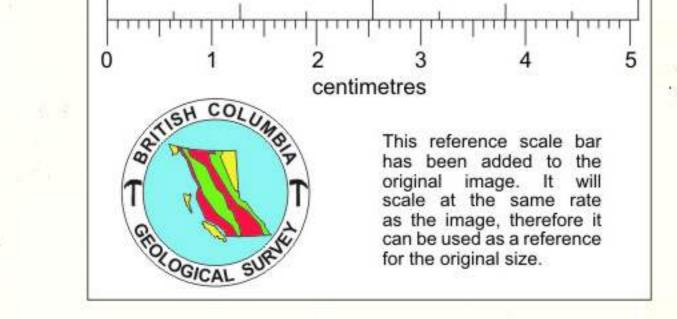
tion, ppmCu Scale 1:50,000 Drft.A.L.M. Date 30/11/72 Map by To Accompany: WEBBER PROJECT REPORT Date Author:

and agglomerates. May include some younger basalts 12. TRANQUILLE BEDS: conglomerate, sandstone, shale, tuff; thin coal seams

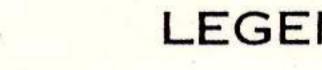
Conglomerate, sandstone, and shale

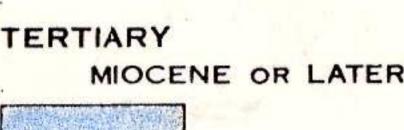
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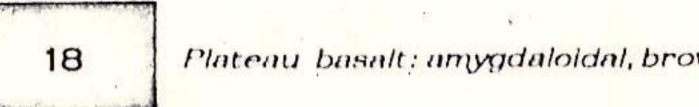


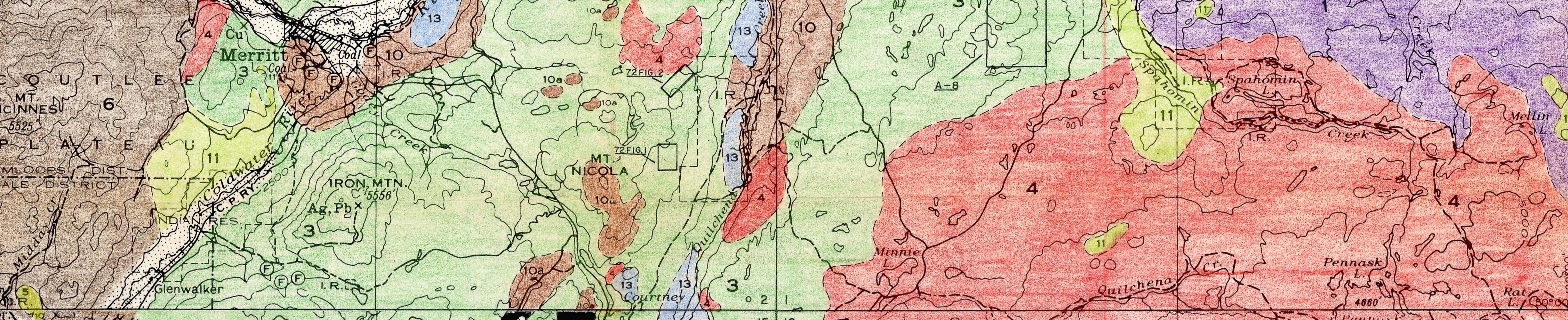


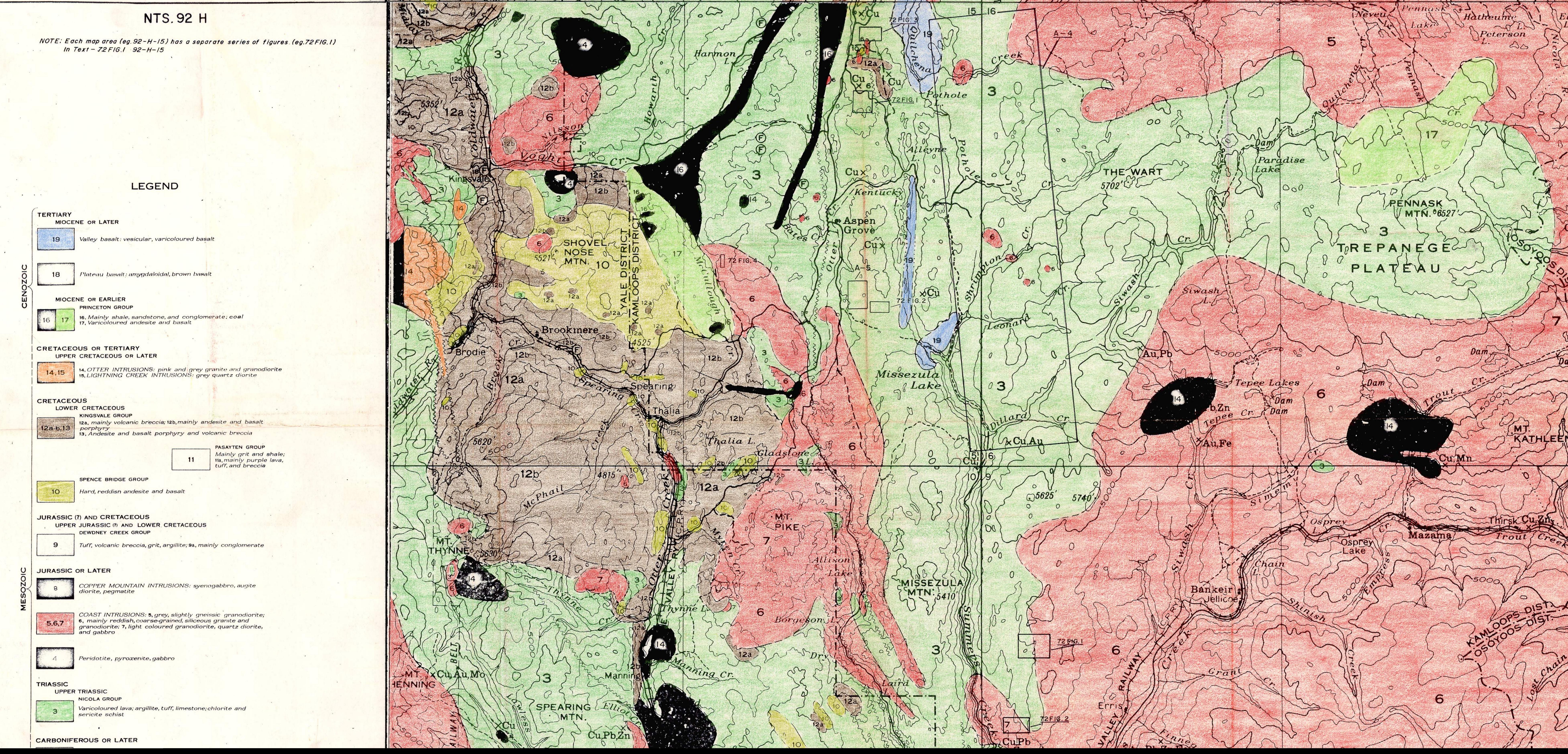
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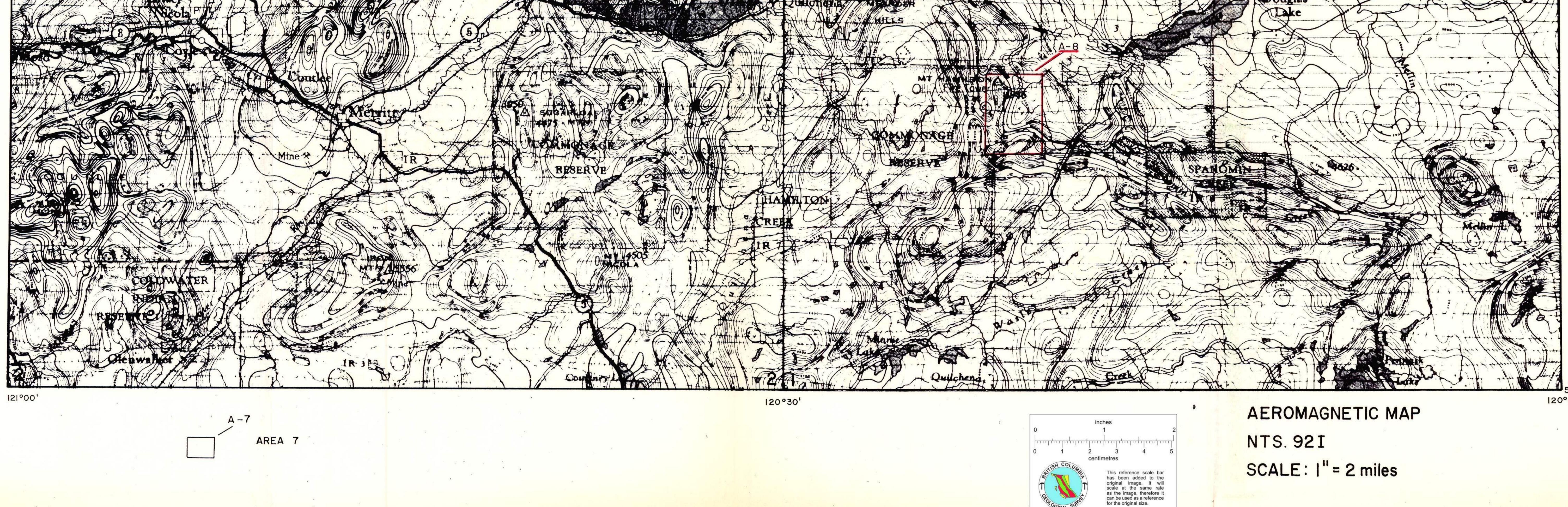








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