WEBBER PROJECT
1971

by

E.A. RAMSAY & P.W. RICHARDSON

Dome

#45L3

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AND

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DECEMBER, 1971

C O N T E N T S

C O N T E N T S (Cont'd)

LIST OF FIGURES

I INTRODUCTION

During the period May 10 to October 31, geological mapping and reconnaissance and detail geochemical sampling were done in the area between Merritt and Princeton. This was a continuation of the project begun in 1969 and continued in 1970. In addition, detail geological and geochemical mapping was done on anomalous areas found during the earlier two years. During the summer, the field party consisted of George Bell, Richard Pasker, Tom Gallagher, Mel Kaminski, Wade Thompson, Douglas McCune and E.A. Ramsay. Dr. G.R. Webber joined the party in the middle of July. During September and October, the party consisted of George Dodd, James Law, Donald Ramsay and E.A. Ramsay. P.W. Richardson administered the project from Vancouver, and visited the party several times.

The area covered in 1971 was more heavily staked than the areas covered in the two previous years when staked ground usually was avoided. This year, ground was sampled even if it was staked because it was thought that, if a staked property was found to justify further work, in most cases the owner would welcome a chance to option the ground to us.

In contrast to the two previous years, emphasis was placed on geological mapping prior to geochemical sampling in an effort to confine sampling to the more favourable areas.

The purpose of the geological mapping was to find areas of interest, such as alteration zones, that might not have been reported in the literature, and, in places of geological interest, to find nearby areas of overburden that would be large enough to conceal an economic mineral deposit. This approach resulted in a large reduction in the number of geochemical samples collected during the summer.

Most of the detail sampling and geological mapping in the areas of geochemical anomalies found during 1969 and 1970 was carried out by Dr. Webber using topographic maps prepared early in the season by Richard Pasker and one or two assistants.

Samples were tested in Merritt for citrate-soluble total heavy metals, and then were sent to Bondar-Clegg & Company Ltd. of North Vancouver for analysis by hot acid extraction and the atomic absorption method. During the early part of the season, the samples were tested for Cu, Pb, and Zn. In some instances, samples from detail areas were tested for Cu only. However, during the latter part of the season, all samples were tested for Cu and Mo.

During the summer, a gas pipeline was laid from Kingsvale to Princeton and thence to Oliver, and a power line was built from Douglas Lake to the Ingerbelle Mine. Where possible, advantage was taken of the excavations to obtain deep soil samples. Where the excavations had been

filled, samples were taken from the mounds. In some cases, check samples were collected on the mounds and from nearby undisturbed soils for comparison with the "C" horizon soils collected from the bottom of the excavations.

II GEOLOGY

The general geology of the northern half of the area is described by W.E. Cockfield (1948), and that of the southern half of the area by H.M.A. Rice (1947). A thesis by M.P. Schau (1968) describes the geology around Nicola Lake. The Annual Reports of the Minister of Mines and Petroleum Resources of British Columbia and numerous assessment reports give data on individual properties.

The rocks in the area under consideration in 1971 are mostly volcanic and sedimentary rocks of the Nicola Group. These are intruded by granitoid rocks of the Nicola and Guichon Batholiths, the Pike Mountain Stock, and other scattered stocks. The rock classification used is as follows:

(1) VOLCANIC ROCKS

- V_1 andesite
- V_2 augite porphyry
- V_3 volcanic diorite
- V_4 feldspar porphyry
- V_5 amygdaloidal basalt and amygdaloidal andesite
- V_6 volcanic breccia
- V_7 basalt
- V_8 tuff
- V_9 rhyolite

(2) SEDIMENTARY ROCKS

S_1 conglomerate

S_2 sandstone

S_3 siltstone

S_4 limestone

S_5 arkose

S_6 greywacke

S_7 argillite

(3) INTRUSIVE ROCKS

G_1 diorite (medium-grained)

G_2 granodiorite (medium-grained)

G_3 syenodiorite

G_4 diorite (coarse-grained)

G_5 granite (coarse-grained)

G_6 gabbro

G_7 quartz diorite

G_8 quartz monzonite

III DETAIL AREAS

1 North of Nicola Lake (92I/2E; Fig. 71-2)

A series of samples taken in a gully with drainage from the north into Nicola Lake detected slightly anomalous amounts of Cu and Mo (Samples K-5114 to K-5123). Sample K-5120, on a small tributary from the NW, was somewhat higher with 1125 ppm Cu and 7 ppm Mo. Additional samples were collected in this tributary, and the highest sample, K-5157, contained 1400 ppm Cu and 33 ppm Mo. A later stream sample, K-5670, consisting mostly of organic matter, contained 1530 ppm Cu and 5 ppm Mo, but sample K-5672, which was mostly clay, contained only 64 ppm Cu and undetectable Mo.

The upper part of the drainage basin is on staked ground owned by Toluma Mining & Development Co. Ltd. Extensive soil surveys by Toluma have found Cu and Mo anomalies, and numerous percussion and diamond drill holes have been drilled. It was decided that the anomalies came either from the area investigated by Toluma or from a local source of limited extent. No further work is proposed at present.

2 Logans Creek Area (92H/15E; Fig. 71-3)

This map was included because of the density of sampling in the area. The original high sample, K-5377

with 250 ppm Cu, indicated an anomalous stream. Additional samples were taken which confirmed the anomaly.

The surrounding area has several copper prospects which probably could have been found by following up the geochemical survey. The creek crosses Harry Nesbitt's Blue Jay Group of claims which Newconex looked at several years ago and which now is optioned to Rio Tinto.

3 Power Line West of Bluey Lake (92H/15E; Fig. 71-4)

During the field season, a southerly-trending power line was installed, and samples were taken from the piles of earth beside the holes which were dug for the posts.

A group of samples from K-5503 to K-5507 indicated copper highs of up to six times background. The highest was K-5504 with 233 ppm Cu. By the time these samples had been analysed and found to be anomalous, the holes had been filled. Check samples were taken from the mounds, and normal soil samples were collected from undisturbed soils nearby. In all cases, the check samples were lower than the original ones. No clear relationship was observed between analyses of the mound samples and the undisturbed soils. There are large outcrops of volcanic breccia in the area, and malachite occurs in some nearby trenches. Several old diamond drill sites were found. At present, the ground is held by Adonis Mines Ltd.

4 Upper Otter Creek (92H/15E; Fig. 71-5)

Except for two samples, the copper in this area is very low, but the molybdenum is relatively high with sample K-5265 having 27 ppm. The drainage is a swampy linear between a boulder till bench on the west and a gentle slope with scattered outcrops on the east. The samples taken from the swampy area have an anomalous molybdenum content, whereas those from the dry slope have only background amounts. To the east the rocks nearest the creek are andesites. Further east the rocks are volcanic breccias. There are a few scattered outcrops of diorite east of K-5755. No additional work is recommended.

5 Bluey Lake Road Area (92H/15E; Fig. 71-6)

This map is on a continuation of the power line, and shows an area 3000 feet south of that shown in Fig. 71-4. It illustrates the difference between near-surface and deep sampling. The original samples, K-5524 and K-5525, were resampled by K-5849 and K-5851 before the holes were filled in. The results were similar, but the samples of near-surface soil, K-5850 and K-5852, were much lower.

In addition, the map shows a series of rock samples taken on the face of a breccia outcrop. Except for sample 8573, which was a single specimen, these samples were each

across ten feet, and vary from 0.087% Cu to 0.26% Cu. Another chip sample, 8274, taken from a pit at K-5525, assayed 0.166% Cu. At present, the ground is held by Adonis Mines Ltd.

6 Section of Pipeline near Princeton (92H/10E; Fig. 71-7

This map illustrates the difference between deep sampling and surface sampling. The area is a low-lying terrace made up of glacial gravels and boulders overlying Tertiary sediments. It is probable that the glacial material was brought from the north down Summers Creek or Allison Creek. The source of the copper could be the glacial debris, or the copper could have come down one or the other valley in solution. The original source might be the deposit on the Axe Group which is optioned to Amax or some other deposit which has not yet been discovered.

Similar examples occur just north of this map area, and can be seen on the Reconnaissance Map 92H/10E.(Fig. 71-21)

7 Hollis Creek Area (92I/8W; Fig. 71-8)

This area is described in the report of 1970, and is shown on Fig. 17 of that report. The rocks on the west side of the area are schists and gneisses. These are overlain, on the SW by garnetiferous quartzite, and are intruded to the north by granodiorite. Very minor chalcopyrite was found in

the schist to the SW, but no copper mineralization was found in the granodiorite.

Additional stream sediment samples were taken, and a number of traverses were made to find the areas of outcrop and to determine the rock types. Several additional copper highs were discovered in the NE and SW parts of the area. Near the spring anomaly, an area 2400 feet in a north-south direction and 1600 feet in an east-west direction is covered with overburden. Twenty claims were staked to protect the area until it can be examined further. A proposal for additional work is included in the recommendations.

8 Greenstone Mountain Area (92I/10E; Fig 71-9)

The rocks in the area are andesites (V_1) and augite porphyry (V_2) intruded by a granite stock (G_5).

A topographic map was made of the creeks that were sampled the previous years, and this was used to control additional sampling. Some exceptionally high geochemical readings of both copper and molybdenum were found. The area of investigation was extended, but it became apparent that the published claim maps are inaccurate and that much of the area is staked. In addition, there is sufficient outcrop to preclude the presence of a large near-surface ore body. No additional work should be done at present.

9 Southwest of Ridge Mountain (92I/7E; Fig. 71-10)

This area was described in the 1970 report, and was illustrated by two maps in that report (Figs. 8 and 9).

Additional sampling and geological mapping were done. There were no outstanding samples. Much outcrop was found. Most of this was andesite (V_1) with some medium-grained diorite (G_1) and coarse-grained diorite (G_4). These rocks were not intensely altered, and it was decided that the area is of no further interest.

10 Upper Brussels Creek (92I/10E; Fig. 71-11

This area was covered in part during the 1970 season (Fig. 18) when some detail sampling was done. During 1971, additional detail samples were collected, and a square traverse was run upstream from the emergent area of the anomaly. The results of the soil sampling were negative, and it was decided that the area is of no further interest.

11 Face Lake Area (92I/10E; Fig. 71-12)

A sample taken late in the 1970 field season, K-4477, yielded 700 ppm Cu. The same site was resampled in 1971 by K-4640 which contained 725 ppm Cu and by another sample 50 feet upstream, K-5070, which contained 875 ppm. However, detail mapping indicated that the water was issuing from an esker with drainage on the other side of the esker 30 to

40 feet higher in elevation. Samples taken in this higher valley contained lower amounts of copper, although they were still above background. The decision was made to discontinue work in the area because the source of the anomaly is probably comminuted mineralized rock in the esker.

12 Anderson Creek Area (92I/9E; Fig. 71-13)

During the latter part of the 1970 field season, stream sediment samples in a small tributary of Anderson Creek showed a weak copper anomaly. The area was mapped, and additional samples were collected. The highest 1970 sample, K-4007 with 330 ppm Cu, was confirmed by sample K-5168 with 263 ppm Cu. Subsequent mapping showed abundant unaltered outcrop so the area is of no further interest.

13 Glimpse Lake Area (92I/8E & W; Fig. 71-14)

Part of this area was described in the 1970 report (Fig. 16). Although no very high samples had been found, scattered highs of two to four times background suggested that further work was justified. However, subsequent sampling and mapping indicated that the area is of no further interest.

14 Hamilton Mountain Area (92I/1W; Fig. 71-15)

During the 1970 field season, two widely separated high samples were collected in this area: K-2266 with 995 ppm Cu and K-2875 with 640 ppm Cu. Some detail work was done in the NW near sample K-2266 in 1970 (Fig. 14). The geology of the area was not interesting, but the abundance of pyrite in the outcrops to the west suggested that additional work was justified during the 1971 field season. A topographic map was prepared, and additional geochemical samples were collected. Two somewhat anomalous areas were indicated around K-5918 with 550 ppm Cu and K-5055 with 750 ppm Cu. However, the abundance of barren outcrop led to the conclusion that the area is of no further interest.

15 Coutlee Plateau (92I/2W; Fig. 71-16)

This area is underlain by the Kingsvale Group which has a lower copper background than the Nicola Group. The higher samples taken in 1970 were not outstanding, and no further work was done in the area at that time. However, further consideration of the low copper background in soils overlying Kingsvale rocks suggested that the samples were anomalous and were worth some additional work. A topographic map was prepared, and additional samples were collected. Nothing of interest was found, and it was decided to do no more work in the area.

IV DISCUSSION OF RECONNAISSANCE MAPS

Reconnaissance geochemical sampling was carried out in seven NTS map areas: 92I/2E and 2W, 92H/15E and 15W, 92H/10E, 92H/8E, 92H/7W. Five reconnaissance sampling maps (Figs. 71-17 to 71-21) accompany this report, and one map showing only a portion of maps 92H/8E and 7W is bound in the report (Fig. 71-22).

Map 92I/2E (Fig. 71-17)

The area is underlain mostly by Nicola Group rocks which are intruded on the NE by the Nicola Batholith and in the south by several stocks. Several patches of Tertiary volcanic and sedimentary rocks overly the older rocks.

Most of the samples shown on the map were taken in 1971. One area of interest was found in a creek flowing south into Nicola Lake and is discussed under Detail Areas (Fig. 71-2). In the south, Teenamilsts Creek had a high of 425 ppm Cu in K-4655, and west of Indian Reserve No. 7 a south-flowing tributary of Quilchena Creek had a series of highs up to 990 ppm and 7 ppm Mo in sample K-5723. Additional sampling is proposed for these two areas.

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1972

Map 92I/2W (Fig. 71-18)

The area is underlain mostly by Nicola Group rocks intruded by the Guichon Batholith in the north, the Coyle Stock in the west centre, and another small stock just west of Merritt. Most of the SW corner is underlain by rocks of the Kingsvale Group which also crop out south of the Craigmont Mine. Overlying the older rocks are patches of Tertiary volcanic and sedimentary rocks including the coal-bearing series at Merritt.

Most of the samples shown on this map were taken in 1970. No work was done in the Craigmont area because of the high density of staking nearby. In the NE, new reconnaissance sampling was done on Hector Creek, Jesse Creek and an unnamed creek between these two. Except for several small highs on the unnamed creek where K-5113 had 445 ppm Cu, there was little of interest in the NE corner. Several creeks in the south were sampled, but no anomalies were found. One area on the Coutlee Plateau, which is noted in the 1970 report, was mapped in detail, and additional samples were taken nearby (Fig. 71-15).

Map 92H/15E (Fig. 71-19)

The area is underlain mostly by Nicola Group rocks intruded by the Pike Mountain Stock in the south and a few scattered small stocks. The SW corner is underlain by

Kingsvale volcanic rocks, and Kingsvale rocks crop out west of Tule Lake. Tertiary sedimentary and volcanic rocks in narrow linear bands overlie older rocks. The north-trending faults are the outstanding structural feature.

The Aspen Grove area has widely distributed copper mineralization. The power line and pipeline excavations were sampled extensively. The following were sampled in some detail: Logans Creek Area, Power Line West of Bluey Lake, Upper Otter Creek, and Bluey Lake Road Area. The northern part of the power line and the NW part of the pipeline were sampled after the excavations were filled in. However, a number of highs were indicated from mound sampling. Sample K-6095 on the pipeline near Davis Lake had 285 ppm Cu. Samples on the power line south of Tule Lake included K-6565 and K-6567 with 1130 and 1250 ppm Cu respectively. These areas are considered in the recommendations.

1972

Couldn't find on the map.

Map 92H/15W (Fig. 71-20)

The area is underlain mostly by the Kingsvale and Spence Bridge Groups. Nicola Group rocks crop out in the north and west. The Nicola rocks are cut by Coast Intrusions north of Voght Creek and west of Kingsvale, by Otter Intrusions NW of Brodie, and by ultrabasic stocks on

Selish Mountain and south of Voght Creek. Some Tertiary volcanic and sedimentary rocks crop out along the east central section. The north-trending Otter Lake Fault System cuts all the rocks on the west side.

Sampling in this area was confined to the northern part around Selish Mountain and to the western part where a number of streams flow eastward into the Coldwater River. Most of the rest of the a rea is underlain by rocks of the Spence Bridge and the Kingsvale Groups which have a low sampling priority. The highest sample on a creek south of Salem Creek was K-5254 which contained 680 ppm Cu. This site was resampled by K-5877 which contained 668 ppm Cu. Other samples taken around this site were relatively low, and prospecting in the area revealed only outcrops of unaltered diorite.

On a tributary of Nilsson Creek, sample K-6139 contained 269 ppm Cu. Additional work is recommended here.

Map 92H/10E (Fig. 71-21)

This area is underlain mostly by Nicola Group rocks with some Kingsvale Group rocks in the NW, scattered Spence Bridge rocks near the centre, and Princeton volcanic and sedimentary rocks in the SE and SW.

The Otter Batholith intrudes the Nicola Group rocks on the west. The principal intrusion, however, is the Pike

Mountain body of the Coast Intrusions which occupies the north centre of the area.

The area was sampled from north to south using the pipeline trench and several creeks near Allison Lake. No significant anomalies were found in the creeks, but in the SE corner several anomalous samples were taken from glacial material in the trench. Some of these sites were resampled on the mound and nearby, and a detail map was prepared for part of the area. In all cases the mound and nearby soil samples contained less copper than those from the bottom of the trench. Further consideration must be given to the source of this copper.

1972

attached

Map 92H/7E (Fig. 71-22)

This area is underlain by Nicola Group rocks, but these are partly covered with Princeton Group sedimentary and volcanic rocks. South of Princeton the Nicola rocks are intruded by the Copper Mountain Stock and related intrusions which are associated with the Ingerbelle and Copper Mountain Mines.

Only eight samples were collected. These were from the pipeline trench in the NE (NW?) corner, and were in an area of glacial deposits overlying the Princeton Group rocks. The copper content was well above background, and consideration should be given to the source of the copper.

Map 92H/8W (Fig. 71-22)

This area is underlain by Nicola Group rocks which are intruded in the west by the Copper Mountain Stock and related rocks, on the northeast by rocks of the Coast Intrusions, and in the centre by a stock of Otter age. A few scattered patches of Princeton Group rocks lie on the older rocks.

Four miles of pipeline trench NE of Princeton were sampled on ground held by Joy Mining Ltd. A number of high copper soils were found. Sample K-6369 contained 1300 ppm Cu.

During both the detail and reconnaissance sampling programs, a major problem of geochemical prospecting in a dry climate was apparent. The dry climate causes salts, mostly $CaCO_3$, to be precipitated from the groundwater. The deposited salts are usually one to four feet beneath the surface of level ground but may reach the surface on hillsides. Caliche has a high pH, and copper would be precipitated from groundwater in its presence. As a result, copper anomalies sometimes do not reach the surface of the ground, and, in that case, cannot collect in the usual soil horizons.

Samples from the bottom of the pipeline trench and power line holes indicate that frequently there is more

copper in the "C" horizon than there is in the near-surface "B" horizon. In some cases, however, there was enough mixing of the fill to enable anomalies to be detected in the mounds over the excavations.

For this reason, it is recommended that where caliche is suspected to exist, sampling be deep enough to reach the caliche layer. This could be done by digging deep pits or by the use of mechanical samplers.

During the season, Summers Creek was sampled at about one mile intervals (92H/10E), and was found to be slightly anomalous below the Axe Group held by Amax Exploration Ltd. It has been reported that soil on the hillside between the deposit and Summers Creek contains several hundred ppm Cu (P.E. Fox - personal communication). It is possible that a weak anomaly such as the one in Summers Creek could be overlooked, whereas the anomaly in the soil on the hillside would be obvious.

V GEOLOGICAL MAPS

During the field season, twenty 4 inch = 1 mile maps were prepared to cover the same area as five of the reconnaissance geochemical maps. These are outlined on the Index Map inside the front cover (Fig. 71-1). The known geology was plotted on these maps, and the data obtained from geological traverses were added. The amount of additional data on the sheets varies greatly. The geological maps are not included in the report because of the difficulty of reproduction and because the maps will be changed extensively in 1972 if the recommendations are carried out. The maps are available for inspection in Vancouver.

GEOLOGICAL TRAVERSES

		Miles by Vehicle	Miles on Foot
92I/2E	a	24	8
	b	22	9
	g	43	0
	h	21	8
92I/2W	c	19	10
	d	0	0
	e	7	4
	f	11	7
92H/15E	a	33	1
	b	58	6
	g	33	5
	h	43	15
92H/15W	c	8	0
	d	20	5
	e	30	1
	f	14	0
92H/10E	a	40	5
	b	3	0
	g	6	5
	h	34	3
		469 miles	92 miles

VI CONCLUSIONS

1 No ore deposits were discovered.

2 Except for the Hollis Creek area, the detail work on the areas recommended in the 1970 report showed that these areas are of no further interest.

3 The spring anomaly in the Hollis Creek Area could have a local origin under the extensive overburden west of the springs.

4 The proposal to sample only areas found by geological investigation to be of special interest appears to be useful. Stream sediment and soil sampling in geologically unfavourable areas gave negative results.

5 The geological mapping confirmed the previously known faulting and mineralization, but in some areas the intrusive rocks shown on published maps were not plotted correctly or do not exist.

6 In certain cases, sampling along the pipeline and power line indicated that better results were obtained from deep samples than from near surface samples.

7 It is probable that the anomalous highs in the Face Lake Area and in the pipeline trench five miles north of Princeton (Fig.71-7) originated from transported glacial material.

VII RECOMMENDATIONS

A. OFFICE WORK IN 1972

1. Review the claim maps and the geochemical sample distribution maps from the 1970 report to determine whether additional work in staked areas not sampled in 1969 and 1970 would be worthwhile.
2. Obtain any additional assessment reports that are now available.
3. Study the air photos for geological and glacial lineaments, and purchase photos required to complete our present set.

B. FIELD WORK IN 1972

1. Drill two percussion drill holes to 200 feet in the Hollis Creek Area. (Fig. 71-8)
2. In areas 92H/10E (Fig. 71-21) and 92H/15E (Fig. 71-19) run additional traverses east and west from the highway to fill gaps in geological knowledge and to obtain information about the presence or absence of extensive areas of overburden cover in the geologically favourable zone from Princeton to Merritt.
3. Sample additional drainage in 92H/10E (Fig. 71-21) and 92H/15E (Fig. 71-19) and apply deep testing to any hillsides where this method is indicated by the presence of favourable geology or

3 Cont'd.

of somewhat anomalous streams with no obvious source for the copper.

4 Do detail sampling in the following areas:

(a) The pipeline near sample K-6095 (92H/15E). (Fig. 71-19)

(b) The power line south of Tule Lake near samples K-6565 and 6567 (92H/15E). (Fig. 71-19)

(c) Near sample K-6139 on the tributary of Nilsson Creek (92H/15W). (Fig. 71-20)

(d) Teenamilsts Creek (92I/2E). (Fig. 71-17)

(e) The south-flowing creek west of Indian Reserve No. 7 (92I/2E). (Fig. 71-17)

(f) The creek east of Indian Reserve No. 1 (92I/2W). (Fig. 71-18)

5 If justified by the office study, do additional reconnaissance sampling between Kamloops and Merritt on staked ground owned by others.

6 If time permits, do reconnaissance geological mapping and geochemical sampling south of Copper Mountain.

E. A. Ramsay

P. H. Richardson.

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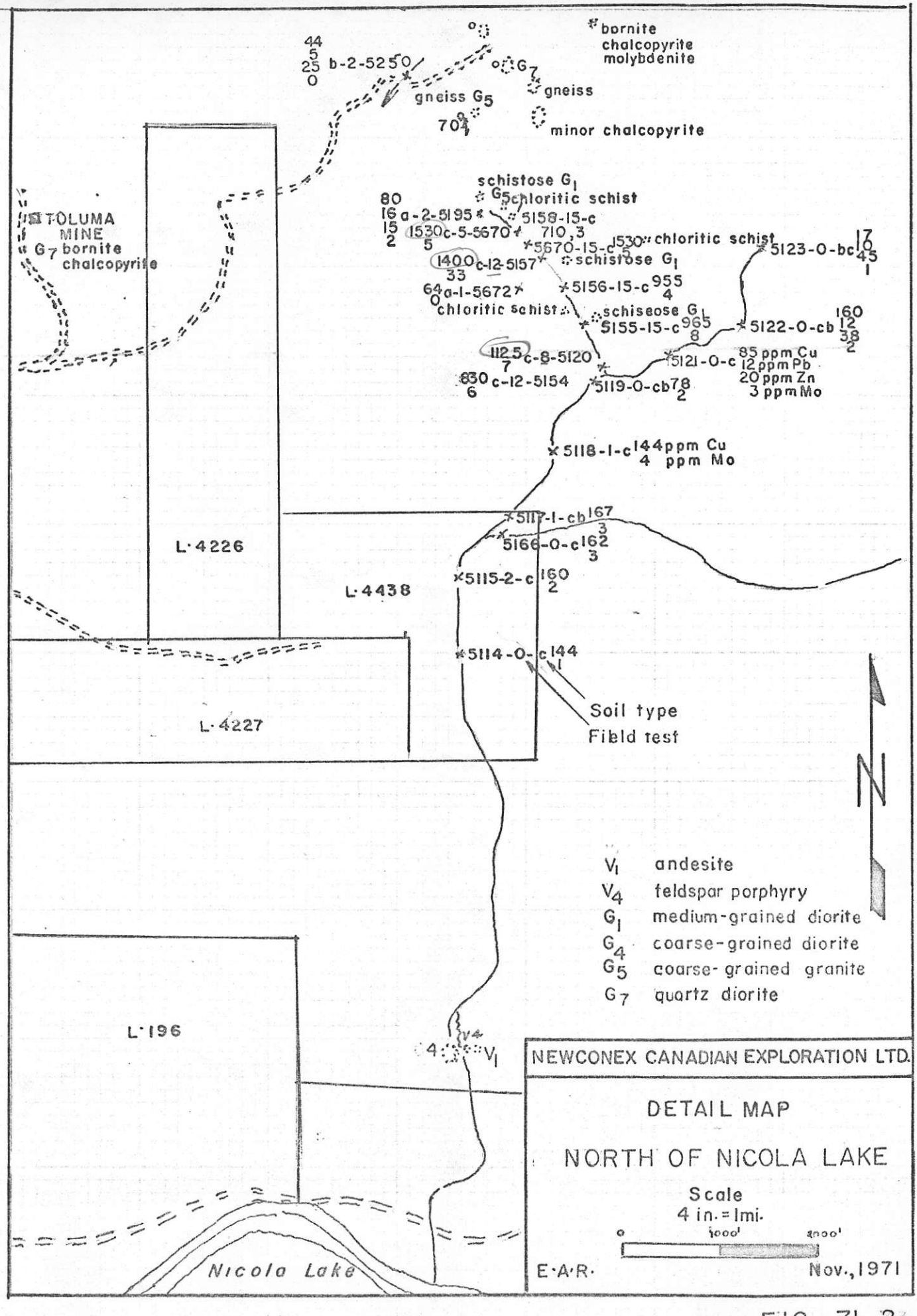
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G7 bornite chalcopyrite
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5121-0-c
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12 ppm Pb
20 ppm Zn
3 ppm Mo
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5119-0-cb
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144 ppm Cu
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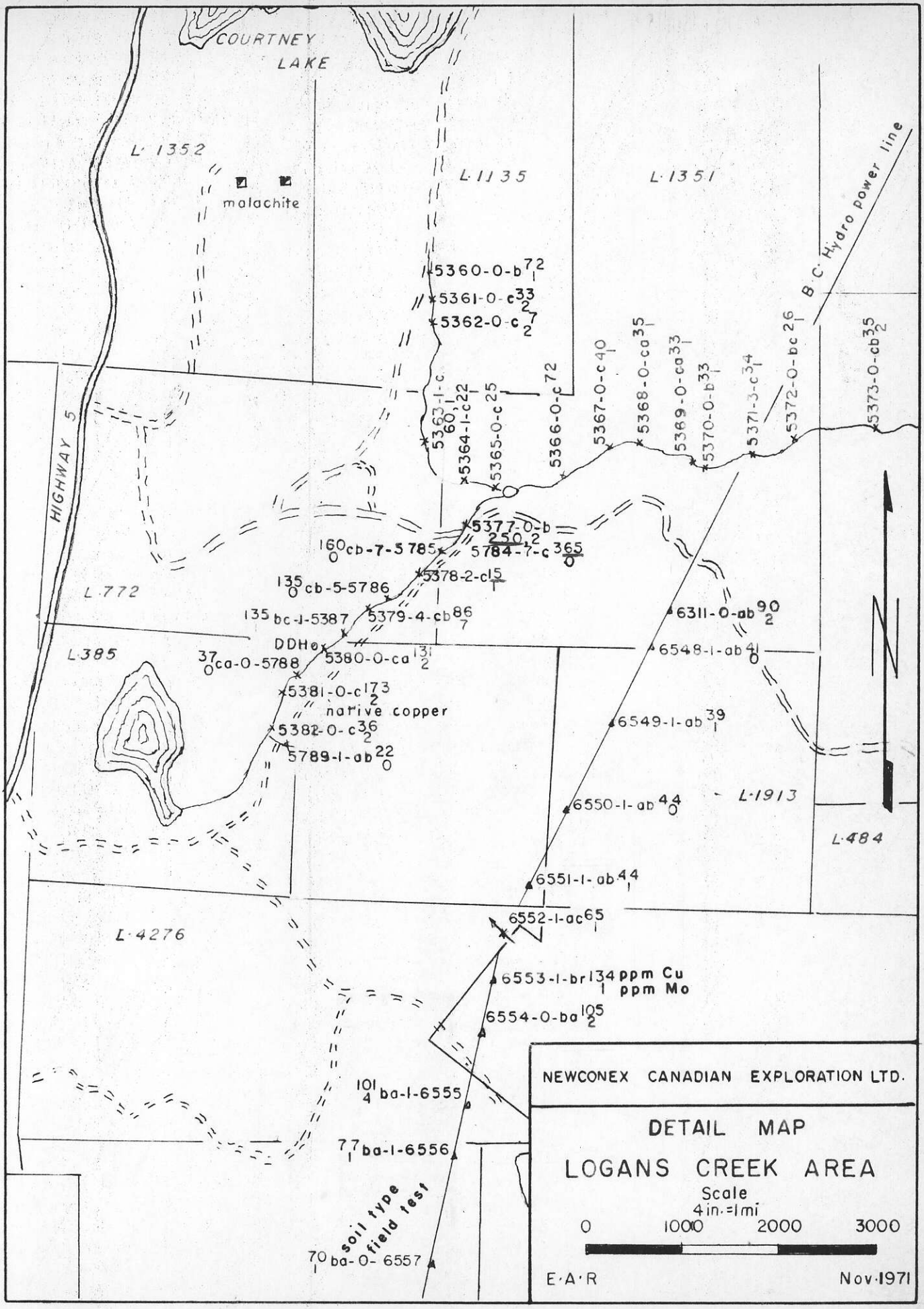
5117-1-cb
167
5166-0-c
162
5115-2-c
160
L·4226
L·4438
5114-0-c
144
Soil type
Field test
L·4227
L·196
V4
V1
Nicola Lake
N
V1 andesite
V4 feldspar porphyry
G1 medium-grained diorite
G4 coarse-grained diorite
G5 coarse-grained granite
G7 quartz diorite
NEWCONEX CANADIAN EXPLORATION LTD.
DETAIL MAP
NORTH OF NICOLA LAKE
Scale
4 in. = 1 mi.
0
1000'
2000'
E·A·R·
Nov., 1971

FIG - 71-2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soil type field test
NEWCONEX CANADIAN EXPLORATION LTD.
DETAIL MAP
LOGANS CREEK AREA
Scale 4 in. = 1 mi
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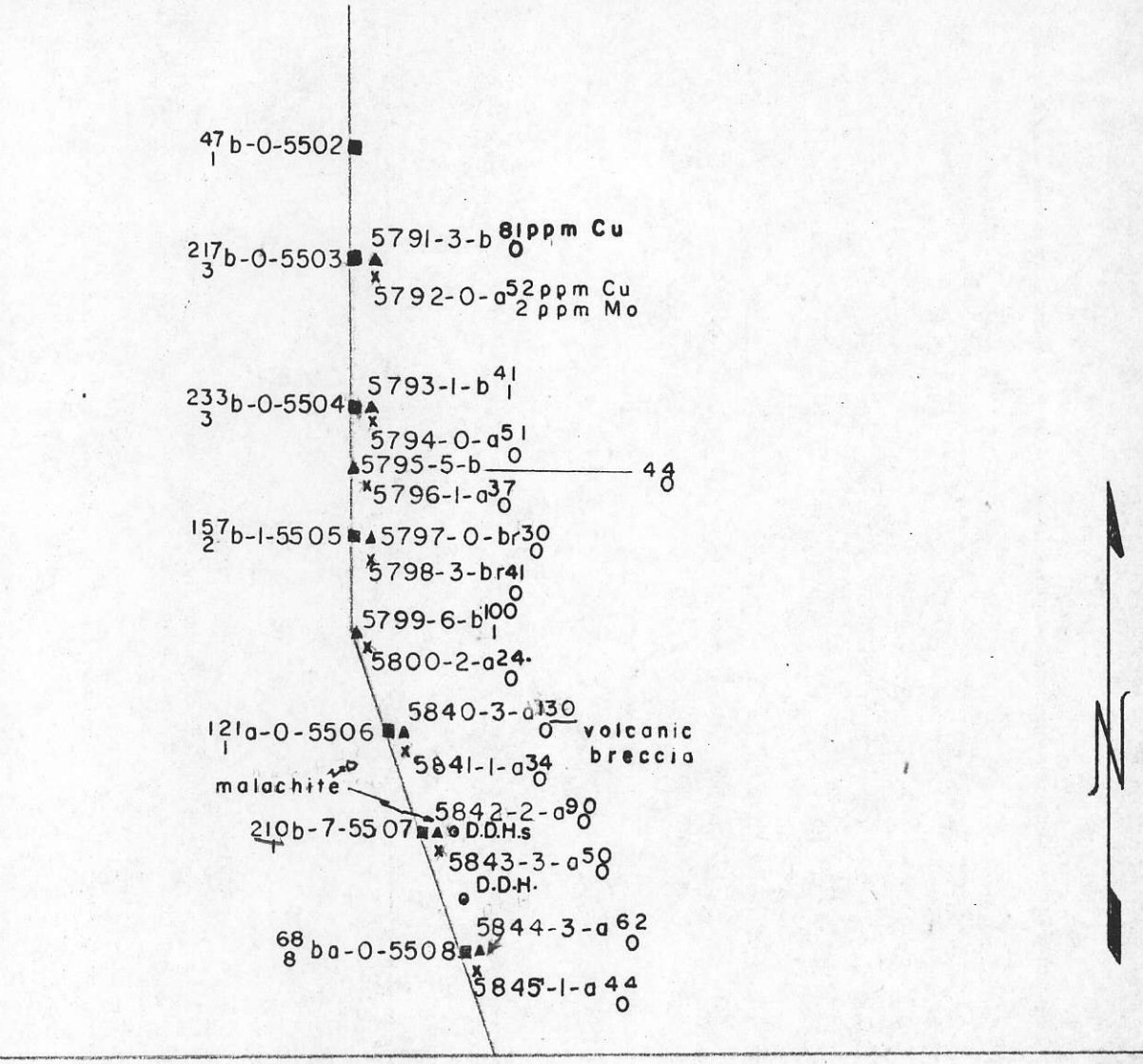
E·A·R
Nov·1971

FIG·71-3



LEGEND

0 1000' 2000' 3000'

- ■ Sample from pole hole
- ▲ Sample from mound
- X Near-surface sample
- a clay
- b silt-sand
- c organic
- r rock fragments

NEWCONEX CANADIAN EXPLORATION LTD.

POWER LINE

WEST OF BLUEY LAKE

Scale 1"=1000'

E.A.R Nov, 1971

FIG. 71-4

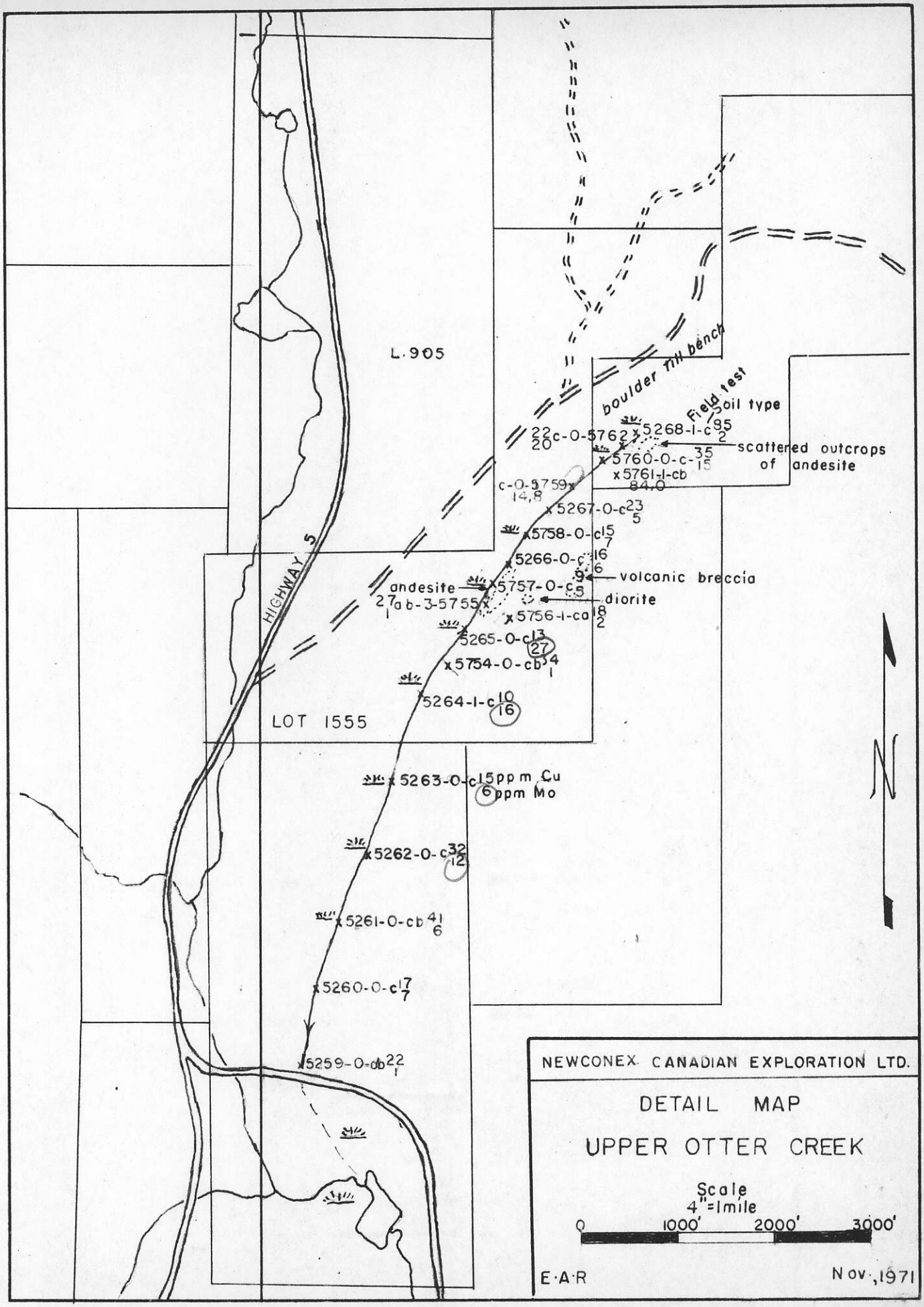

L.905
boulder till bench
Field test
soil type
22c-0-5762
5268-I-c 95 2
5760-0-c- 35 15
scattered outcrops of andesite
5761-I-cb 84.0
c-0-5759 14,8
5267-0-c 23 5
5758-0-c 15 7
5266-0-c 16 6
volcanic breccia
andesite
5757-0-c 5
diorite
27 ab-3-5755
5756-I-ca 18 2
5265-0-c 13 27
5754-0-cb 4 1
5264-I-c 10 16
LOT 1555
HIGHWAY 5
5263-0-c 15ppm Cu 6 ppm Mo
5262-0-c 32 12
5261-0-cb 41 6
5260-0-c 7 7
5259-0-cb 22 1
N
NEWCONEX CANADIAN EXPLORATION LTD.
DETAIL MAP
UPPER OTTER CREEK
Scale
4" = 1 mile
0 1000' 2000' 3000'
E.A.R
Nov., 1971

FIG. 71-5

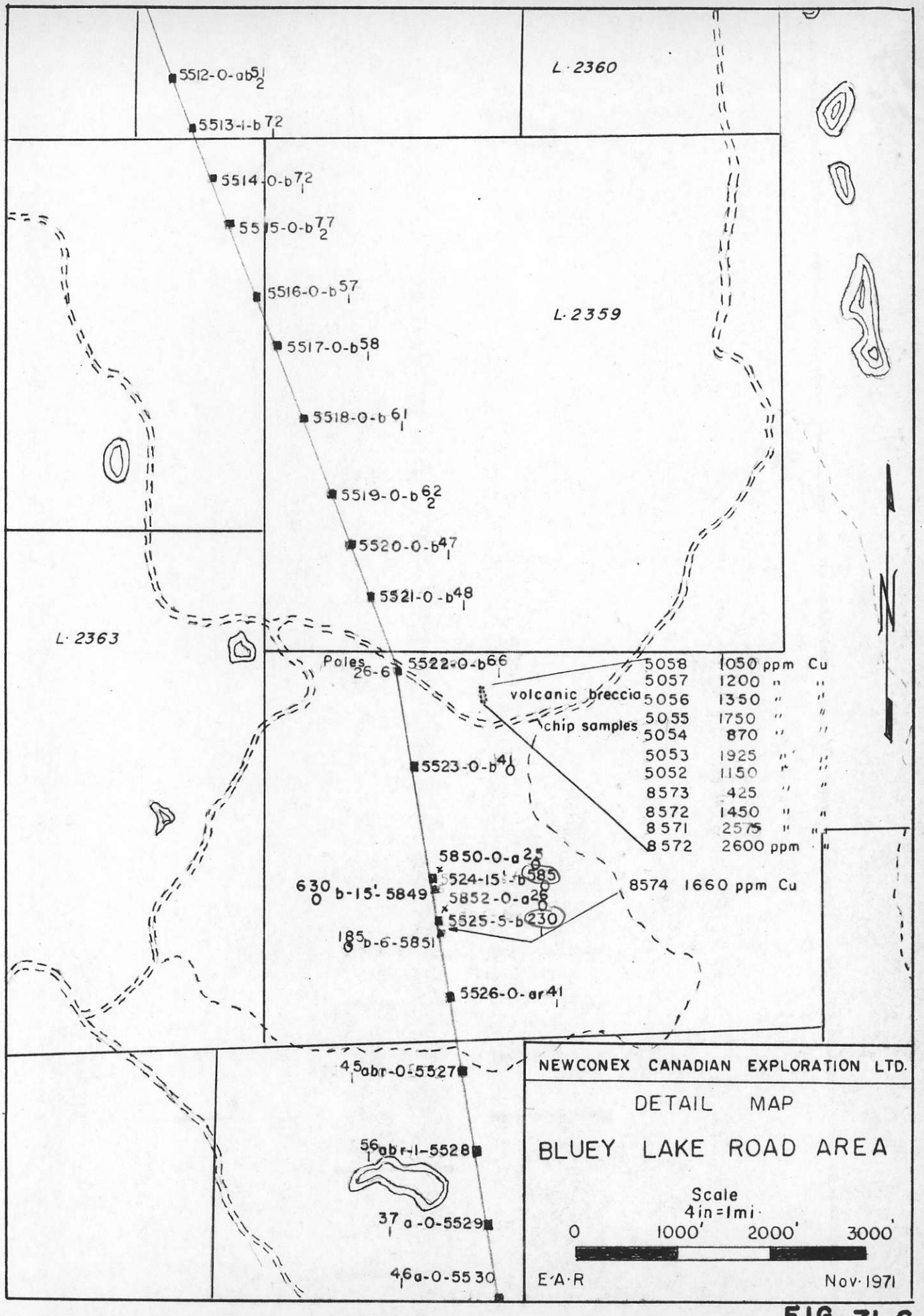

L·2360
L·2359
L·2363
5512-0-ab 5 1/2
5513-1-b 7 2
5514-0-b 7 2
5515-0-b 7 7/2
5516-0-b 5 7
5517-0-b 5 8
5518-0-b 6 1
5519-0-b 6 2/2
5520-0-b 4 7
5521-0-b 4 8
Poles 26-6
5522-0-b 6 6
5523-0-b 4 1 0
5850-0-a 2 5
5524-15'-b 585
630 0 b-15'-5849
5852-0-a 2 6
5525-5-b 230
185 8 b-6-5851
5526-0-ar 4 1
45 abr-0-5527
56 abr-1-5528
37 a-0-5529
46 a-0-5530
volcanic breccia
chip samples
5058 1050 ppm Cu
5057 1200 " "
5056 1350 " "
5055 1750 " "
5054 870 " "
5053 1925 " "
5052 1150 " "
8573 425 " "
8572 1450 " "
8571 2575 " "
8572 2600 ppm
8574 1660 ppm Cu
N
NEWCONEX CANADIAN EXPLORATION LTD.
DETAIL MAP
BLUEY LAKE ROAD AREA
Scale
4 in = 1 mi
0 1000' 2000' 3000'
E·A·R
Nov·1971

FIG. 71-6

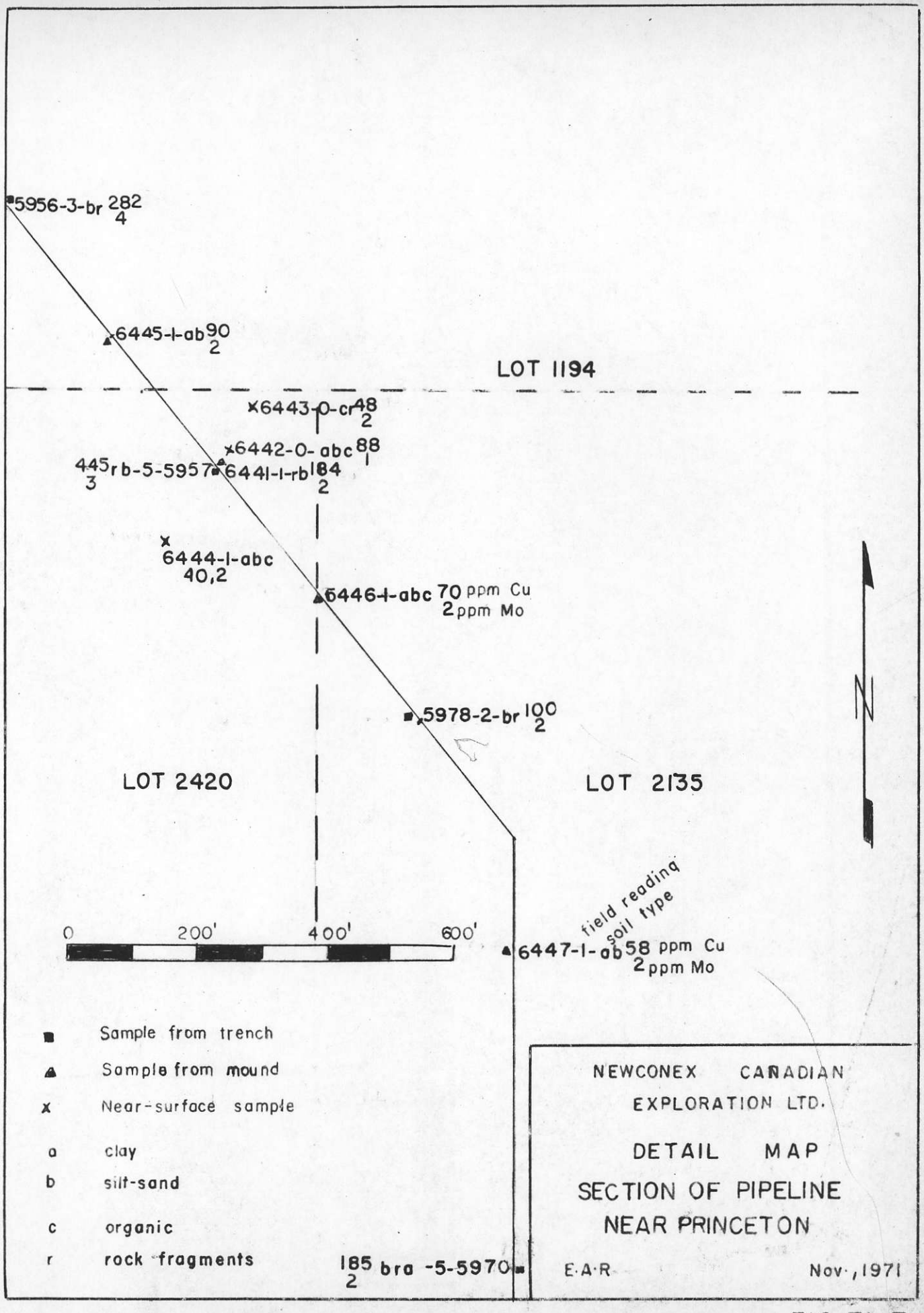

5956-3-br 282/4
6445-1-ab 90/2
LOT 1194
6443-0-cr 48/2
6442-0-abc 88/1
445/3 rb-5-5957
6441-1-rb 184/2
6444-1-abc 40,2
6446-1-abc 70 ppm Cu 2 ppm Mo
5978-2-br 100/2
LOT 2420
LOT 2135
N
0
200'
400'
600'
field reading
soil type
6447-1-ab 58 ppm Cu 2 ppm Mo
Sample from trench
Sample from mound
Near-surface sample
a clay
b silt-sand
c organic
r rock fragments
185/2 bra -5-5970
NEWCONEX CANADIAN EXPLORATION LTD.
DETAIL MAP
SECTION OF PIPELINE NEAR PRINCETON
E.A.R
Nov., 1971

FIG. 71-7

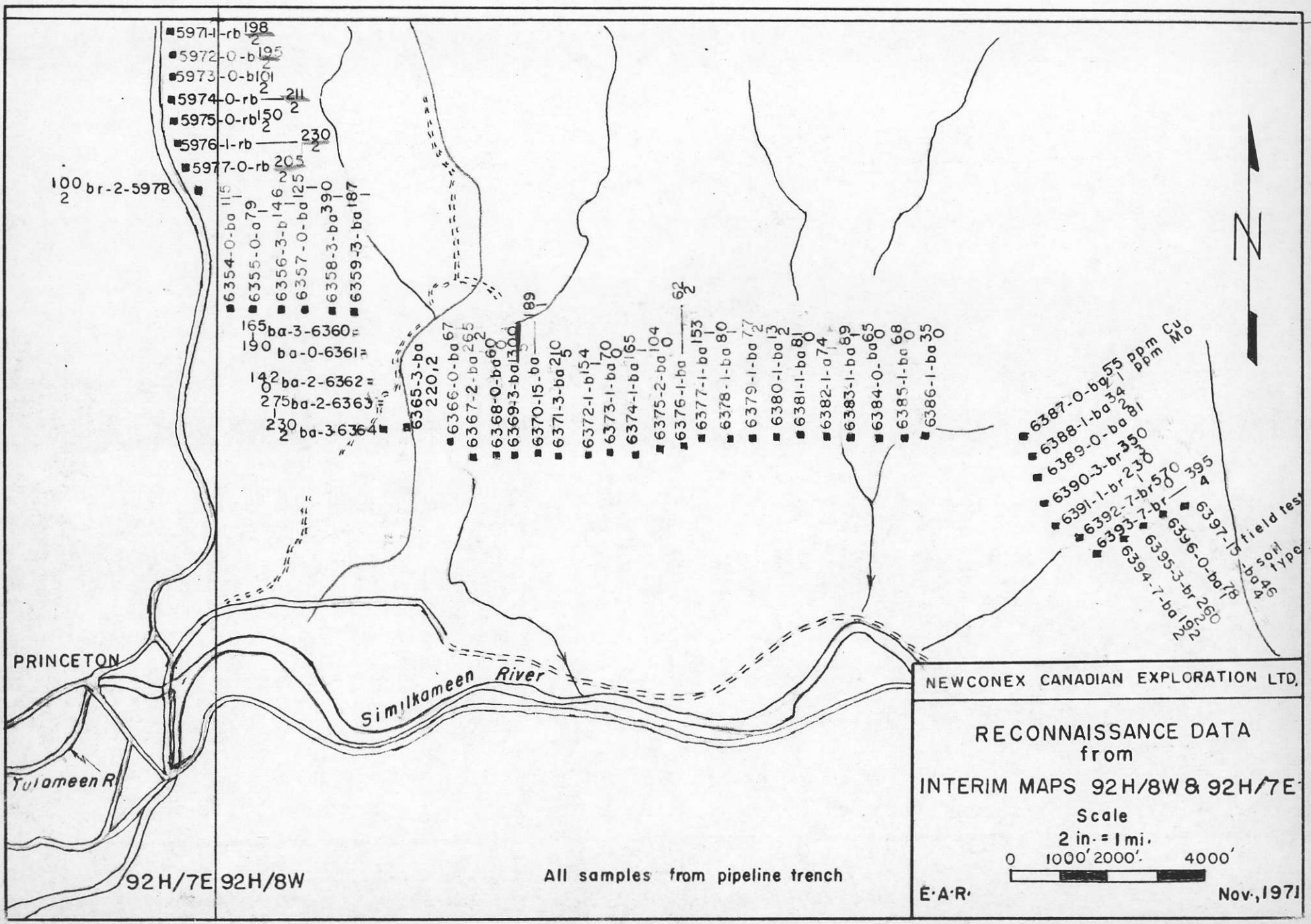

5971-1-rb 198
5972-0-b 195
5973-0-bl 101
5974-0-rb 211
5975-0-rb 150
5976-1-rb 230
5977-0-rb 205
100 br-2-5978
6354-0-ba 115
6355-0-a 79
6356-3-b 146
6357-0-ba 125
6358-3-ba 390
6359-3-ba 187
165 ba-3-6360
190 ba-0-6361
142 ba-2-6362
275 ba-2-6363
230 ba-3-6364
6365-3-ba 220,2
6366-0-ba 67
6367-2-ba 265
6368-0-ba 60
6369-3-ba 300
6370-15-ba 189
6371-3-ba 210
6372-1-b 54
6373-1-ba 70
6374-1-ba 165
6375-2-ba 104
6376-1-ba 153
6377-1-ba 80
6378-1-ba 77
6379-1-ba 13
6380-1-ba 81
6381-1-ba 74
6382-1-a 89
6383-1-ba 65
6384-0-ba 68
6385-1-ba 35
6386-1-ba
6387-0-ba 55 ppm Cu
6388-1-ba 34 ppm Mo
6389-0-ba 81
6390-3-br 350
6391-1-br 230
6392-7-br 570
6393-7-br 395
6394-7-ba 192
6395-3-br 260
6396-0-ba 78
6397-15 field test
-soil type
-ba 46
PRINCETON
Similkameen River
Tulameen R.
92H/7E 92H/8W
All samples from pipeline trench
N
NEWCONEX CANADIAN EXPLORATION LTD.
RECONNAISSANCE DATA
from
INTERIM MAPS 92H/8W & 92H/7E
Scale
2 in. = 1 mi.
0 1000' 2000' 4000'
E·A·R·
Nov., 1971

FIG. 71-22

MAP 886A

NICOLA

KAMLOOPS AND VALE DISTRICTS

BRITISH COLUMBIA

Scale, 2½ miles or 1 inch to 8 Miles

SHEET 92 I (East Half)

120°00' GEOLOGICAL SURVEY 120°00'

LEGEND

CENOZOIC

TERTIARY

MIOCENE OR LATER

13 — Valley basalt; mainly vesicular basalt

MIOCENE OR EARLIER

KAMLOOPS GROUP

11, 12 — 11. Rhyolite, andesite, and basalt; associated tuffs, breccias and agglomerates. May include some younger basalts. 12. TRANQUILLE BEDS: conglomerate, sandstone, shale, tuff, thin coal seams

10 — COLDWATER BEDS: conglomerate, sandstone, shale, and coal. 10a, similar to 10, but may include younger beds

MESOZOIC CENOZOIC

CRETACEOUS OR TERTIARY

9 — COPPER CREEK INTRUSIONS: granite, granodiorite, granite porphyry & otter

8 — Andesite, basalt, picrite, agglomerate, breccia, and tuff; minor conglomerate and sandstone

7 — Conglomerate, sandstone, and shale

CRETACEOUS

LOWER CRETACEOUS

KINGSVALE GROUP

6 — Rhyolite, andesite, and basalt; associated tuffs, breccias, and agglomerates; arkose, conglomerate

SPENCE BRIDGE GROUP

5 — Hard, reddish lava

MESOZOIC

JURASSIC AND(?) LATER

4 — COAST INTRUSIONS: granite, granodiorite, gabbro; 4a, iron Mask batholith; syenite, monzonite, diorite, gabbro; 4b, pyroxenite and peridotite. Probably not all of the same age, and may be in part post-Lower Cretaceous

TRIASSIC

UPPER TRIASSIC

NICOLA GROUP

3 — Greenstone, andesite, basalt, agglomerate, breccia, tuff; minor argillite, limestone, and conglomerate

PALAEOZOIC

CARBONIFEROUS AND PERMIAN

CACHE CREEK GROUP (?)

2 — Greenstone, generally slightly sheared. May include some Triassic rocks (3)

1, 1A — Argillite, quartzite, hornstone, limestone, sheared conglomerate, breccia, greenstone, and serpentine; 1A, limestone

A — Chlorite schist, quartz-mica schist, amphibolite, and granitic intrusions; commonly gneissic and largely of Palaeozoic age

Heavily drift-covered area

Fault

Synclinal axis

Fossil locality

Mineral occurrence

SYMBOLS FOR METALS

Silver	Ag
Gold	Au
Copper	Cu
Iron	Fe
Mercury	Hg
Lead	Pb
Tungsten	W

Road

Road (not well travelled)

Trail

Post Office

Forestry lookout

Land District boundary

Limit of Railway belt

Indian Reserve boundary

Intermittent lake and stream

Marsh

Sand bar

Contours (interval 500 feet)

Depression contour

Height in feet above mean sea-level

Geology by W.E. Cockfield, 1939, 1940, 1941, 1943

For Mineral Localities, see Map 887A, Nicola

Base-map compiled by the Topographical Survey, 1937, from information obtained from published Federal Government maps
Cartography by the Drafting and Reproducing Divisions, 1946

inches
0 1
0 1 2
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.

BRITISH COLUMBIA GEOLOGICAL SURVEY

PUB. 1937, REPRINTED, 1950.

PRINTED BY THE SURVEYS AND MAPPING BRANCH

MAP 889A

MINING PROPERTIES

SHEET 92 H (East Half)

PRINCETON

YALE, KAMLOOPS, SIMILKAMEEN, AND OSOYOOS DISTRICTS

BRITISH COLUMBIA

Scale, 2½ miles or 1 inch to 8 Miles

COPIES OF THIS MAP MAY BE OBTAINED FROM THE DIRECTOR, GEOLOGICAL SURVEY OF CANADA, OTTAWA

FIG. 71-1