SOIL GEOCHEMISTRY REPORT

FOR ASSESSMENT ON THE

TNT CLAIMS, PRINCETON AREA, B.C

Similkameen Mining Division
N.T.S. Mapsheet: 92H/8W
Latitude: 49° 29' N
Longitude: 120° 28' W

Owner: Mingold Resources Inc.
Operator: Mingold Resources Inc.
Report By: K.J. Taylor, B.Sc.
Date: July 15, 1989

TNT

Introduction

The TNT claims consist of 15 contiguous claim units staked by Mingold Resources personnel in May of 1987. They are located 4 kilometres northeast of Princeton, B.C. on the western slopes of Mt. Miner.

On May 25 and 26 a modest soil geochemistry grid was carried out over an area west of where prior rock sampling obtained up to 805 ppb (0.023 oz/t.) gold. The gold mineralization appears to be associated with intensely sheared and altered zones which trend northwesterly across the claims.

The report which follows describes the results of the soil geochemistry program along with an economic evaluation of the claim area.

Location & Access

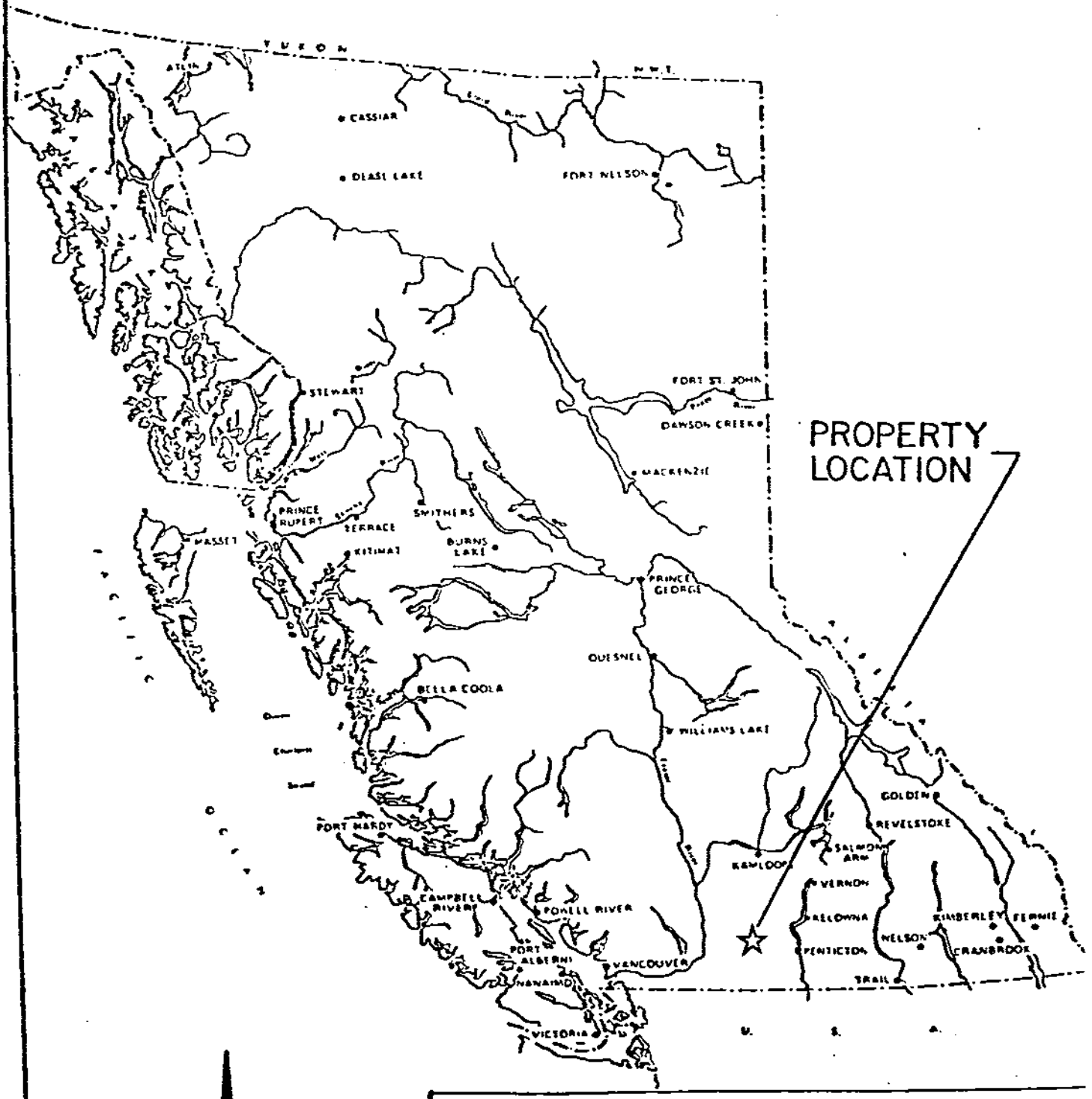
The claims occur 4 kilometres northeast of the town of Princeton, B.C. on NTS mapsheet 92H/8 (see Fig. 1 & 2). The centre of the block is at latitude 49° 29'N and longitude 120° 28'W. The area of previous trenching and drilling and the present soil geochemistry program lies in Deer Valley along the western slopes of Mt. Miner (locally known as Bald Mtn.). Elevations range from 670 meters in the valley bottom to 1000 meters at the summit of Mt. Miner.

Access is by Hwy. 5A north from Princeton to the Old Hedley Road then east for approximately 500 meters to the Deer Valley Road (Summerland Hwy.). This is followed northward for about 6 kilometres to a gravel ranch road heading easterly up onto the slopes of Mt. Miner.

The claims occur in the southern interior dry belt where summers are very hot and dry and winters cold. Vegetation is generally sparse with open grasslands sprinkled with Ponderosa pines being the norm.

Claim Status & Ownership

The TNT claims consist of 15 contiguous units (See Fig. 3) staked under the modified grid system by Mingold Resources Inc. on May 15, 1987. The claims were subsequently recorded on June 4, 1987 and are 100% owned by Mingold Resources Inc. Complete claim information is given in Table 1 below:



MINGOLD RESOURCES INC.

VANCOUVER OFFICE

LOCATION MAP

DRAWN BY	DATE	APPROVED BY
BRITISH COLUMBIA	0 100 200 300 KM	1

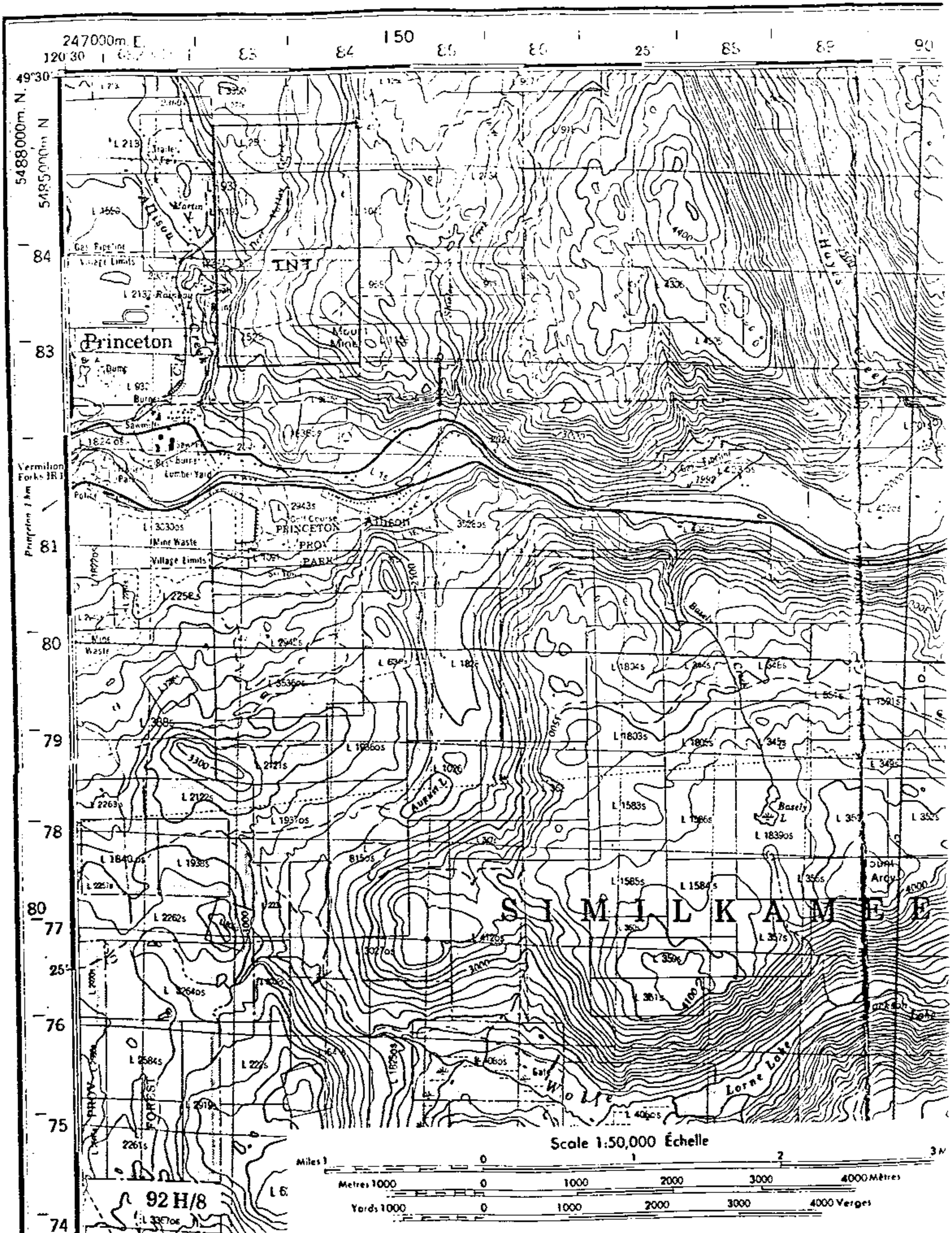

247000m. E.
120°30'
49°30'
5488000m. N.
5485000m N
Princeton
Vermilion Forks IR 1
Village Limits
Mine Waste
Gas Pipeline
Sawmill
Lumber Yard
Golf Course
PRINCETON PROV PARK
Allison
August L
Basely L
Lorne Lake
S I M I L K A M E E
Scale 1:50,000 Échelle
Miles 1 0 1 2 3
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Verges
92 H/8

Table 1 - TNT Claim Information

Claim Name	No. of Units	Date Staked	Date Recorded	Record No.	Expiry Date	Mining Division
TNT	15	May 15, 1987	June 4, 1987	2927	June 4, 1990*	Similkameen

* The expiry date shown includes the current assessment work for which the Statement of Work was submitted on June 2, 1989.

History

The earliest known work on the area of the TNT claims was in 1905 (Preto, 1974) however no details are known.

In 1929, W.C. McDougall of Olalla staked the area as the REGAL claims. Some diamond drilling was done in the area of previous development work however recovery was poor and grades of copper were too low.

No known activity occurred from 1930 to 1950. From 1951 to 1962, the Granby Mining Co. Ltd. held the ground, however no details of any of the work is available. Preto (1974) mentions that Granby did considerable trenching, some diamond drilling and geochemical and geophysical surveys.

In 1962, E. Mullins and G. Burr of Princeton restaked the main workings as the G.E. and VI claims. They were subsequently optioned by Climax Copper Mines Ltd. in 1963 who carried out geophysical surveys, including I.P., geological mapping and 1077 meters of diamond drilling in an unknown number of holes.

Granby re-optioned the claims in 1965 and drilled 41 percussion holes totalling 1792 meters. They also increased the ground holdings to 72 claims. From 1965 to 1970, no recorded work was done and the ground reverted back to Millins and Burr.

In 1970, Joy Mining Ltd. optioned the ground and increased the land position to 343 claims (G.D., DOT, ML, etc.). 152 meters of trenching and 1/4 sq. mile (.012 hectares) of stripping was done. Saracen Mines Ltd. appears to have operated the property for Joy in 1971. They carried out surface geological mapping at approximately 1:20,000, 103 kilometres of soil geochem at 30.5 meter spacings (estimated 3377 samples), 200 stream sediments, 37 kilometres of I.P., 3 diamond drill holes totalling 457 meters and constructed an acid leach plant for copper recovery. Reserves were reportedly "several hundred thousand tons of oxide-sulphide copper mineralization averaging about 0.50% total copper" The acid leaching of some highly oxidized material around the old Regal trenches was apparently unsuccessful.

In 1973, Bethlehem Copper Corp. optioned the claims and drilled 5 widely spaced diamond drill holes. They returned the ground to Millins and Burr in 1974 and apparently most of the ground was allowed to lapse.

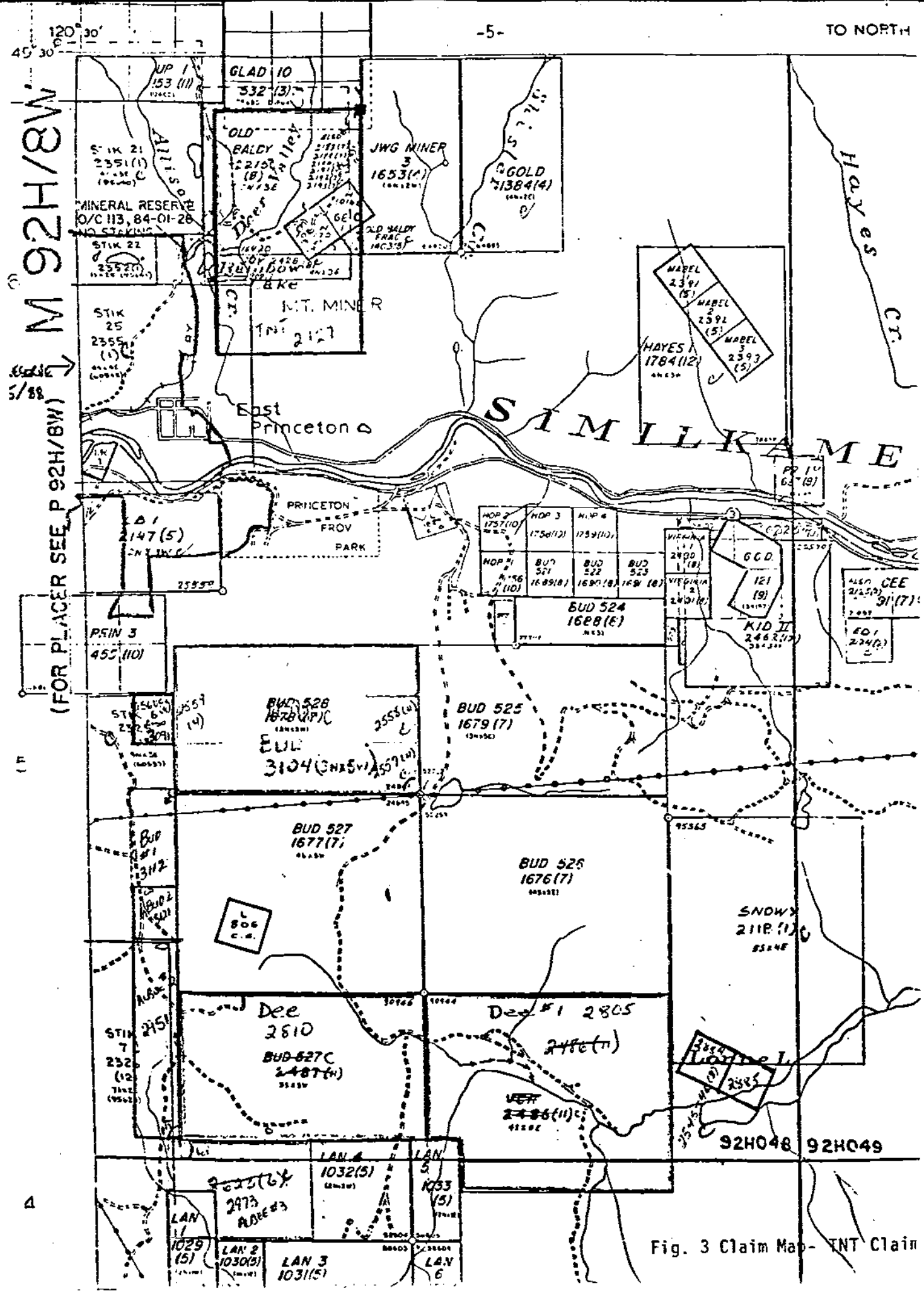


Fig. 3 Claim Map- TNT Claim

In 1977, Quintana Minerals Corp. restaked part of the area as the BTU claims and did 10 kilometres of linecutting and I.P.

J.M.T. Services Corp. restaked the eastern portion of the area as the JWG Miner and OLD BALDY claims in 1979. They drilled 4 short percussion holes totalling 68 meter that year.

In 1980, Superior Oil Co. and J.M.T. drilled 2 diamond drill holes on the IRLYBIRD claims which are presumed to be in the same area as the JWG MINER claims. Somehow the JWG MINER claims were included in ground influenced by the 1980 uranium moratorium and remained in limbo until their release in 1987.

In 1987, Mingold Resources Inc. staked the TNT claims which cover the western portion of the old REGAL - G.E. claims. Rock sampling of several of the old trenches indicated anomalous gold values to be accompanying some of the copper mineralization. The gold appears to be related to several northwesterly trending fault zones which contain primarily oxide copper mineralization. A soil geochem survey was subsequently carried out over the trenched area in 1987 and extended to the northwest in 1989.

Geology

The TNT claims occur within a northerly trending belt of highly fractured and altered andesitic volcanic rocks of the Upper Triassic - Lower Jurassic Nicola Group. This is the southern end of the Quesnel Trough structural regime where correlative Takla Group volcanics prevail. This lineal belt is well known for its volcanic hosted copper porphyry mineralization. In recent years, the gold potential of the belt has been the main focus of exploration especially since the discovery of the QR deposit in the Horsefly-Likely area.

On the TNT claims, the main area of copper mineralization is located north of Mt. Miner in the vicinity of the Granby trenches (see Fig. 4). This area is underlain by highly fractured and altered Nicola andesites and coeval pyroxene microdiorites. Mineralization consists of disseminations and fracture fillings of chalcopyrite and pyrite. The western Granby trenches are cut by two zones of intensely sheared, bleached and oxidized rock trending northwesterly (see Fig. 5). These probably represent major fault zones up to 100 meters wide and may be the source of the gold mineralization encountered in rock sampling. All primary rock features have been destroyed and only oxide copper minerals are visible.

On the Regal trenches similar oxide type mineralization is found. This mineralization reportedly occurs as part of a landslide block which presumably originated upslope in the Granby trenches area. This material is reported to contain several hundred thousand tons of oxide-sulphide copper mineraltion averaging about 0.50% total copper (Preto, 1974). Caprock is Middle Eocene Princeton Group which occurs to the north of the Regal trenches. The contact with the Nicola rocks is not exposed.

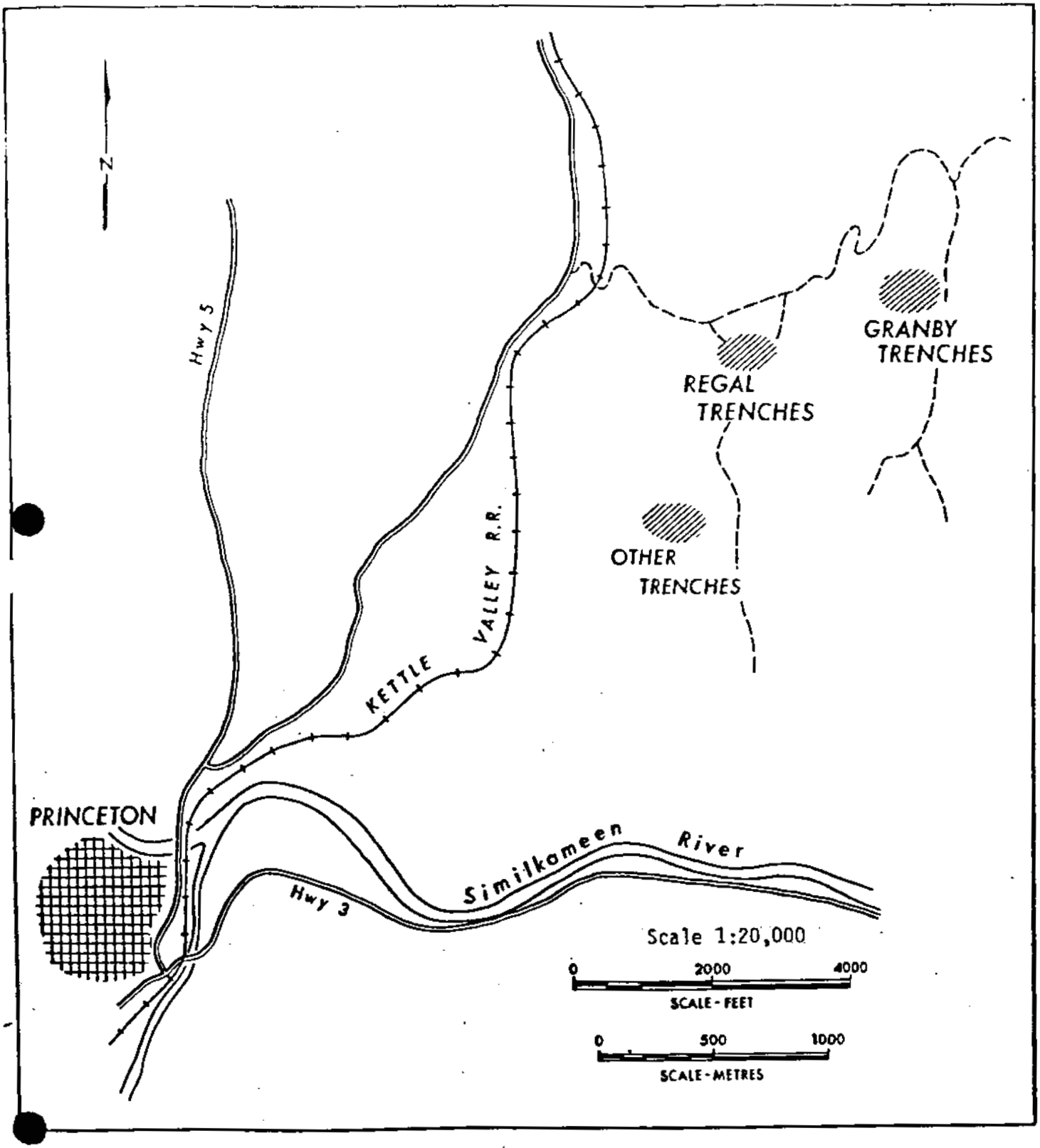


Fig. 4 **Location map, Granby and Regal trenches, GE, VI claims.**

Soil Geochemistry

The 1989 soil sampling program on the TNT claims was a continuation of the soil grid established over the Granby trenches area. The sampling focused on the northwesterly extension of two major shear-fault zones which appeared to be associated with the gold enriched parts of the porphyry system.

The original 50N baseline used for the 1987 soil grid was re-established and extended from 44E to 39E. Five north-south section lines (39E-43E) were flagged in at 100 meter intervals and stations marked every 25 meters using a hip-chain and compass. A total of 99 soils were collected as shown on figure 7.

Sampling and Analytical Procedure

Samples were collected every 25 meters from a depth of 10-25 cm and then placed in a gussetted Kraft soil envelope. Soils were mainly dark brown, silty material probably part of the "A" horizon. Some light rusty brown soil occurred where shear zone material was present. Samples were air-dried and then shipped to Acme Analytical Labs in Vancouver for geochemical analysis for copper, and gold. Gold was analyzed by atomic absorption with a 1 ppb detection limit. A 10 gram sample is ignited at 600°C, digested with hot aqua regia, extracted by MIBK and then analy by a graphite furnace atomic absorption unit. Copper was analy by ICP with a 1 ppm detection limit. In this technique a 0.5 gram sample is digested with 3 mls. of 3-1-2 HCl-$HN0_3$-H_20 at 95°C for one hour and then diluted to 10 ml. with water. This leach is then analy by a standard ICP unit.

Interpretation

The location of the soil grid in relation to the claim boundaries is shown in Fig. 6. The copper and gold values are shown on Fig. 7 with the gold values contoured at 20, 50 and 100 ppb. Copper values over 200 ppm are underlined.

The copper soil anomalies become quite spotty to the west possibly due to deeper overburden. An anomaly in the southwestern portion of the grid displays coincident gold anomalies over lines 40E and 41E.

Gold anomalies are considerably more spotty to the west however the highest gold value (390 ppb) to date occurs on line 39E at 52 + 75N. This is also the first gold anomaly not associated with high copper values. The anomaly is still open to the west. Although there still appears to be some association between the northwesterly trending shear-fault zones and the copper-gold mineralization, the soil results are suggesting more of an east-west trend to the anomalies. Additional soil sampling peripheral to the existing grids is necessary to properly define the overall trend of the mineralization. It appears from Preto's report (Preto, 1974) that little work has been done on the northwestern part of the mineralized area so some potential may lie along the western extension of the 390 ppb gold anomaly on line 39E.

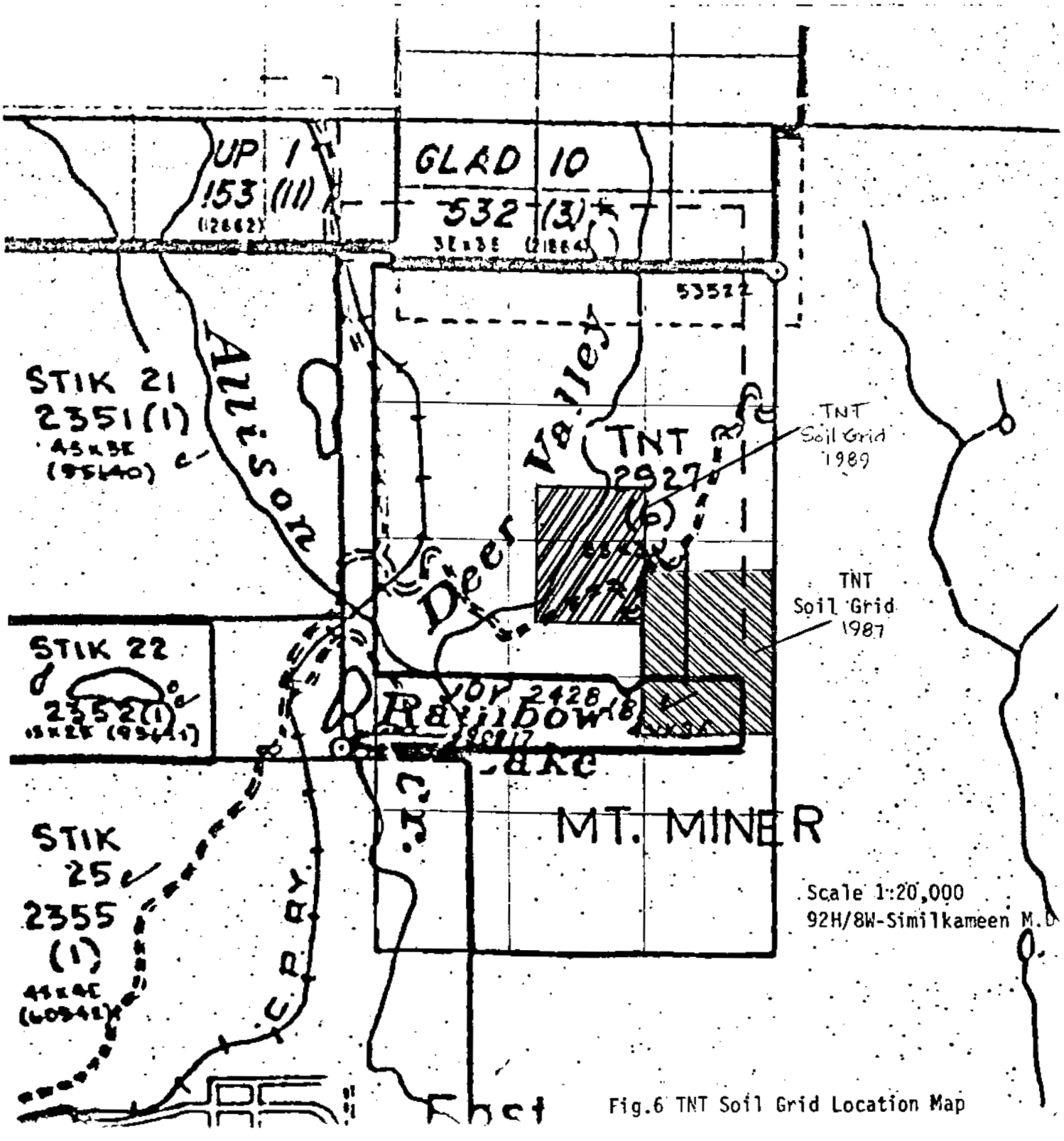


Fig.6 TNT Soil Grid Location Map

It is too early in the exploration scheme to make any viable economic evaluation of the property. Earlier work by other companies focused only on the copper mineralization which, although useful for suggesting future target areas, is untested for gold. The 1989 geochemical program indicates gold potential to the west possibly peripheral to the copper mineralization. A VLF-EM survey might prove useful for delineating the structure of the area which may bear some control on the gold mineralization.

Conclusions

The 1989 soil sampling program has extended the area of potential gold mineralization and has located a gold target without a coincident copper anomaly. This may open up the possibility of a gold-only zone adjacent to the copper porphyry system. Additional soil sampling and possibly a VLF-EM survey is warranted with eventually a drill program to test the in-site and depth potential of the zones. In addition, after the VLF-EM survey is completed. Steps should also be taken to locate the old reports spanning the 1951-77 period when several significant copper oriented exploration programs occurred.

K.J. Taylor
Senior Project Geologist

Bibliography

1763	McKechnie, N.D.	"G.E., Regal (Climax Copper Mines Limited)" in Minister of Mines and Petroleum Resources Annual Report, 163 pp 63-65
1974	Preto, V.A.	"G.E., VI" in Geology, Exploration and Mining in B.C., 1974 pp 117-118 and illustration.
1988	Taylor, K.J.	"Soil Geochemistry Report for Assessment on the TNT Claims, Princeton Area, B.C." Assess. Rpt., Aug. 24, 1988
MMAR's:		1918 pp. 214; 1929 pp. 278; 1965 pp. 161-162;
G.E.M.'s		1969 pp. 353; 1970 pp. 388; 1971 pp. 275; 1977 pp. E128; 1979 pp. 145; 1980 pp. 195; 1982 pp. 179

STATEMENT OF COSTS
TNT CLAIMS

Personnel

K. Taylor - Senior Project Geologist $200/day

Transportation (To/From Princeton - May 25, 26)

Wages - 1 day @ $200/day	200.00
Truck rental - 1 day @ $75/day	75.00
Fuel	60.00

Soil Survey (99 soil samples - May 25, 26)

99 soil analyses for Cu, Au @ $7.60 each	752.40
Wages - 1 day @ $200/day	200.00
Motel - 1 night (May 25) @ $40/night	40.00
Meals - 2 days @ $30/day	60.00
Truck rental - 1 day @ $75/day	75.00
Fuel	12.60
Supplies - bags, flagging, thread	20.00

Report Preparation

Writing/compilation - 2 days @ $200/day	400.00
Drafting - 4 hrs. @ $15/hr	60.00
TOTAL	**$1,955.00**

STATEMENT OF QUALIFICATIONS

I Kenneth James Taylor of 15732 - 92 B Avenue, Surrey, B.C. do hereby certify that:

1. I am a geologist with a B.Sc. in Geology from the University of British Columbia, 1973.
2. I have practised my profession continuously from 1973 to the present.
3. I have been involved with programs on the TNT claims and the surrounding area at various times from 1987 to the present.
4. I carried out the soil sampling program on the TNT Claims on May 24 and 25, 1989 in accordance with accepted industry standards.

K.J. Taylor
Senior Project Geologist

ACME ANALYTICAL LABORATORIES LTD.
852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6
PHONE(604)253-3158 FAX(604)253-1716

DATE RECEIVED: MAY 29 1989

DATE REPORT MAILED: June 2/89

GEOCHEMICAL ANALYSIS CERTIFICATE

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCl-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

SIGNED BY. C. Leong. D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

MINGOLD RESOURCES INC. PROJECT TNT FILE # 89-1295 Page 1

SAMPLE#	Cu PPM	Au* PPB
TNT 39E 55+00N	22	1
TNT 39E 54+75N	28	3
TNT 39E 54+50N	24	3
TNT 39E 54+25N	31	1
TNT 39E 54+00N	29	3
TNT 39E 53+75N	34	2
TNT 39E 53+50N	35	17
TNT 39E 53+25N	30	2
TNT 39E 53+00N	32	4
TNT 39E 52+75N	30	390
TNT 39E 52+50N	32	7
TNT 39E 52+25N	31	1
TNT 39E 52+00N	36	3
TNT 39E 51+75N	32	2
TNT 39E 51+50N	15	1
TNT 39E 51+25N	4	2
TNT 39E 51+00N	10	2
TNT 39E 50+75N	4	3
TNT 39E 50+50N	54	3
TNT 39E 50+25N	67	3
TNT 39E 50+00N	180	7
TNT 40E 55+00N	32	4
TNT 40E 54+75N	29	2
TNT 40E 54+50N	29	1
TNT 40E 54+25N	32	3
TNT 40E 54+00N	40	3
TNT 40E 53+75N	37	5
TNT 40E 53+50N	35	3
TNT 40E 53+25N	35	4
TNT 40E 53+00N	35	3
TNT 40E 52+75N	33	3
TNT 40E 52+50N	36	2
TNT 40E 52+25N	40	5
TNT 40E 52+00N	30	1
TNT 40E 51+50N	53	2
TNT 40E 51+25N	42	2
STD C/AU-S	63	49

SAMPLE#	Cu PPM	Au* PPB
TNT 40E 51+00N	56	1
TNT 40E 50+75N	38	1
TNT 40E 50+50N	171	60
TNT 40E 50+25N	59	5
TNT 40E 50+00N	49	2
TNT 41E 55+00N	25	1
TNT 41E 54+75N	31	2
TNT 41E 54+50N	28	1
TNT 41E 54+25N	26	1
TNT 41E 54+00N	36	6
TNT 41E 53+75N	99	1
TNT 41E 53+50N	145	12
TNT 41E 53+25N	156	3
TNT 41E 53+00N	61	2
TNT 41E 52+75N	190	8
TNT 41E 52+50N	156	4
TNT 41E 52+25N	85	2
TNT 41E 52+00N	87	1
TNT 41E 51+75N	94	1
TNT 41E 51+50N	84	1
TNT 41E 51+25N	140	3
TNT 41E 51+00N	81	4
TNT 41E 50+75N	92	6
TNT 41E 50+50N	149	15
TNT 41E 50+25N	406	64
TNT 41E 50+00N	116	3
TNT 42E 53+75N	211	9
TNT 42E 53+50N	40	2
TNT 42E 53+25N	236	10
TNT 42E 53+00N	114	7
TNT 42E 52+75N	130	3
TNT 42E 52+50N	79	2
TNT 42E 52+25N	223	3
TNT 42E 52+00N	248	6
TNT 42E 51+75N	290	3
TNT 42E 51+50N	110	2
STD C/AU-S	62	49

SAMPLE#	Cu PPM	Au* PPB
TNT 42E 51+25N	154	15
TNT 42E 51+00N	97	3
TNT 42E 50+75N	114	4
TNT 42E 50+50N	60	4
TNT 42E 50+25N	79	2
TNT 42E 50+00N	61	4
TNT 43E 55+00N	250	8
TNT 43E 54+75N	180	7
TNT 43E 54+50N	156	5
TNT 43E 54+25N	162	5
TNT 43E 54+00N	132	6
TNT 43E 53+75N	196	9
TNT 43E 53+50N	130	3
TNT 43E 53+25N	125	3
TNT 43E 53+00N	95	3
TNT 43E 52+75N	118	5
TNT 43E 52+50N	95	11
TNT 43E 52+25N	240	16
TNT 43E 52+00N	145	9
TNT 43E 51+75N	262	44
TNT 43E 51+50N	303	20
TNT 43E 51+25N	109	3
TNT 43E 51+00N	52	2
TNT 43E 50+75N	176	4
TNT 43E 50+50N	101	7
TNT 43E 50+25N	46	3
TNT 43E 50+00N	30	2
STD C/AU-S	58	53

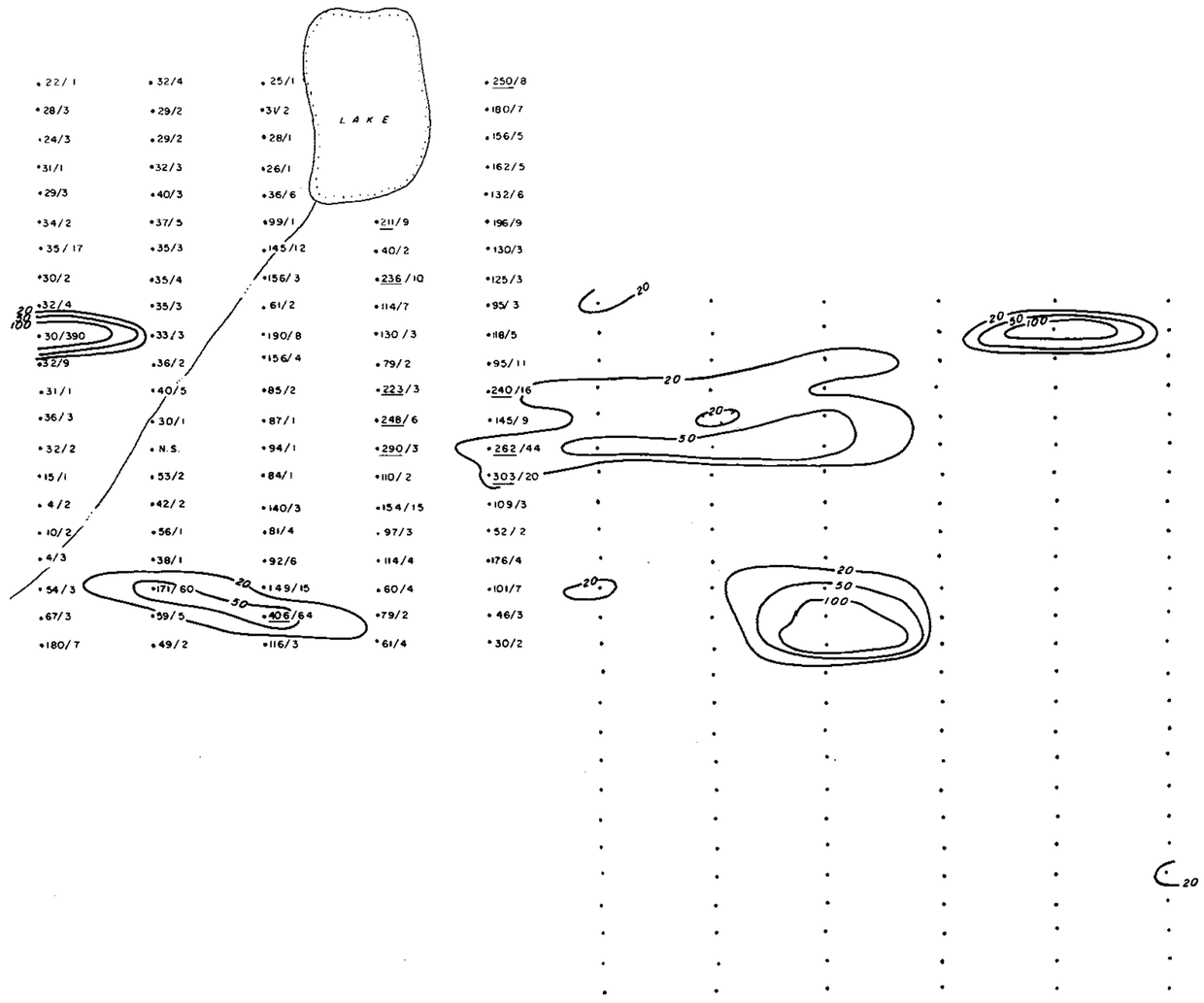
40E 42E 44E 46E 48E

54 N

52 N

50N

48N



GEOLOGICAL BRANCH
ASSESSMENT REPORT

19,043

LEGEND

•30/20 Soil sample site - Cu, ppm / Au ppb

Contours 20, 50, 100 ppb Au
Cu over 200 ppm underlined
Shear zones shaded

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MINGOLD RESOURCES INC.
VANCOUVER OFFICE

TNT CLAIMS
SOIL GEOCHEMISTRY - Cu, Au

DRAWN BY : K.T.	DATE : JULY 1989	APPROVED BY :
	SCALE 1:4000 0 50 100 METRES	PLATE Nº.

CHONG