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006773

MINTO AND YUKON RIVER PROJECTS

JUNE 1 - AUGUST 31, 1974

WON CLAIM GROUP

62° 51' 30" ⇒ 137° 55' 30"

NTS

115 - I - 11 + 13

Fort Selkirk Area
in office Cabinet #3
Drawer #3

Submitted by:
Werner Gruenwald
December 23, 1974

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SUMMARY

During the 1974 field season, the following were investigated:

1. Magnetic-Electromagnetic anomalies #1, #2, and #4 (from previous airborne survey).
2. Win claim group.
3. Won claim group.
4. Yukon River project area.

The above areas were all part of a northwest-southeast trending belt of Triassic intrusives and slightly older Triassic volcanic sediments and metamorphosed equivalents. Some recent basaltic lavas are found 10 miles north and south of Fort Selkirk. The Triassic intrusive is host to several copper occurrences, one of them being Silver Standard.

The magnetic-electromagnetic anomalies were found over the first two rock types, each containing minor amounts of magnetite. Moderately high copper values were found at anomalies #1 and #2. Anomaly #4 was geochemically low and geologically unimpressive.

The Win claims, situated 10 miles NNW of the Silver Standard property, were underlain by the Triassic intrusive, however, it was geochemically unresponsive and geologically unimpressive.

The Won claims contained anomalous copper and molybdenum values one mile south of Black Creek (62^{o} 51'30" : 137^{o} 55'30"). Additional claims were staked (Won 101-118) to protect the anomalous zone.

The high copper and molybdenum values were found in intrusive and metavolcanic rocks of Triassic age. Detailed geochemical, geological and geophysical (magnetic) surveys were carried out to define the limits of the anomaly, the mineralization and its source.

CONCLUSIONS

1. Magnetic-electromagnetic anomalies resulted from local concentrations of magnetite in volcanic and/or intrusive rocks, and in one case, graphitic schists intruded by a hornblendite (anomaly #2).
2. The Win claims were found to be underlain by unaltered, unmineralized and structurally unfavourable Triassic intrusive rock.
3. The anomalous copper and molybdenum values on the Won claims are attributed to the presence of a satellitic (?) intrusive mass which, during its emplacement, fractured, veined and mineralized some of the surrounding metavolcanics. Subsequent alteration of the quartz veinlets and fractures in the intrusive and metavolcanic rock resulted in the formation of several types of limonite. The limonite may well be responsible for some of the high copper and molybdenum values.

The Yukon River project covered the Triassic intrusive originally outlined, however, this area's lack of mineral showings and position relative to the Silver Standard property (i.e. on east side of Yukon River) were probable reasons for not locating any anomalous copper values.

RECOMMENDATIONS

The only area that would warrant further work would be the Won claim anomaly.

This anomaly could be tested by drilling three 400'-500' holes.

The following would be likely target areas.

	Location	
No. 1	12+80W : 35S T.P. #8	- Anomalous copper and molybdenum values present. - Intrusive rock at base of T.P. #8
No. 2	17+60W : 41S	- Anomalous copper and molybdenum values present, plus it is 500' uphill from No. 1
No. 3	T.P. #10 or slightly uphill	- Near intrusive rock and highly anomalous molybdenum values encountered in T.P. #7. - Situated in a magnetic low.


MINTO & YUKON RIVER PROJECT
– INDEX MAP –
KERR ADDISON MINES LTD.
Scale 1" = 32 miles
W.G. Nov/74.
Map No. 1
WON CLAIMS
WIN CLS
Airborne Mag-E.M Survey Area.
Yukon R. Project Area.
Silver Standard
Base Camp
Minto
Pelly Crossing
Carmacks
Dawson
Sixtymile (Glacier Creek P.O)
Closed In Winter
Fortymile River
Chandindu 7750
North Klondike R
Klondike River
Sulphur
Dominion Cr
Indian R
Granville
Australia Cr
Gravel Lake
Barlow
McQuesten River
North McQuesten R
South McQuesten
McQuesten L.
Keno Hill
Elsa
Mayo R
Mayo L.
Janet L.
Gordon Landing
Mayo
Minto Bridge
Hart River
Lake Cr
Stewart River
Ethel L
Nogold Cr
Big Kal L
Scroggie Cr
Lake Creek
Coffee Creek
R I V E R
T E R R I
Apex Mth 6630
Klotassin River
Big Creek
Mica Cr
Tatmain L
Needlerock
Diamain L
Macmillan
Kalzas R
Pelly
Drury L
Little Salmon L.
Little Salmon R
Nisling
Klaza River
Wellesley L
White River
Snag River
Snag Creek
Beaver Creek
Scottie Cr
Northway Jct.
Tanana
Ladue R
Dennison Fork
Mosquito Fork
Matson Cr
Sixty Mile River
Chisana River
Koidern
Donjek River
Onion Cr
Kluane River
Kluane
Tincup L
Dwarf Birch Cr
River
KLUANE RANGES
Burwash Flats
Burwash Landing
Brooks Arm
Talbot Arm
Kluane Lake
Destruction Bay
Aishihik
Aishihik L
Aishihik River
Sekulmun L
Nordenskiold River
Big Salmon
Lower Laberge
Lake Laberge
Upper Laberge
Fox L
Canyon
Champagne
Takhini River
Mendenhall River
Dezadeash R
Dezadeash L
Haines Junction
Kloo L
Slims R
Jarvis R
Kukawulsh R
Kathleen Lakes
Ibex R
Fish L.
WHITEHORSE
MacRae
McClintock
McClintock R
Robinson
Kusawa
Mush L
Bates L
Alsek R
8890
Mt Lucania 17150
Logan Glacier
Mt Logan 19850
ST. ELIAS RANGES
Seward Glacier
Mount St Elias 8008
Mount Vancouver 15700
Hubbard Glacier
Malaspina Glacier
Icy Bay
Gulf of Alaska
Yakutat Bay
Russell
Fiord
MOUNTAIN
64°
63°
62°
61°
60°
141°
140°
139°
138°
137°
136°
135°

INTRODUCTION:

The Minto and Yukon River projects were chosen after the discovery of high grade copper mineralization on the Silver Standard - Asarco property approximately 11.5 miles WNW of Minto Y.T.

Using Government aeromagnetic and geological data, plus an observed NW-SE trend of mineral occurrences, two claim groups were staked in late September early October 1973. These two claim blocks, the Win and Won, consisted of 54 and 88 claims respectively.

In early 1974, an airborne Magnetic-Electromagnetic survey was proposed in an area extending from 16 to 46 miles north west of Minto. Before commencement of the survey a number of test lines were flown over known mineral occurrences in the area to aid in data interpretation (generally 1 or 2 line flights). The subsequent low level survey was flown in mid May 1974 to cover the two claim blocks and areas surrounding them (see index map).

During June, three, two man crews were engaged in work on the two claim groups and the mag-E.M. anomaly follow-up.

A base camp established along the Klondike Highway (mile 131) was used during the remainder of the field season for the Yukon River project and as a base to supply field crews.

The Yukon River project, a geochemical reconnaissance programme involved stream sediment sampling by the writer and five student assistants during the period July 7 to August 2, 1974.

Detailed follow-up work on the Won group was done from August 4 - 31, followed by final camp close down on September 4, 1974.

MAGNETIC - ELECTROMAGNETIC ANOMALY FOLLOW-UP

(a) Introduction

Following the airborne magnetic and electromagnetic survey of May 14-17 1974, several anomalous areas were delineated (Anomalies #1, #2, #4, see Map 2A, 2B). These anomalous areas were examined by the writer assisted by Randy Gropp during the period June 2-10, 1974. Geochemical sampling and geological mapping were done in each of the areas.

(b) Terrain

All of the areas investigated were fairly heavily forested. Total relief is from 500' to 1000' (1500' to 2500'). Outcrops were observed at all camps with the most abundant rock exposures being found in the Anomaly #2 area.

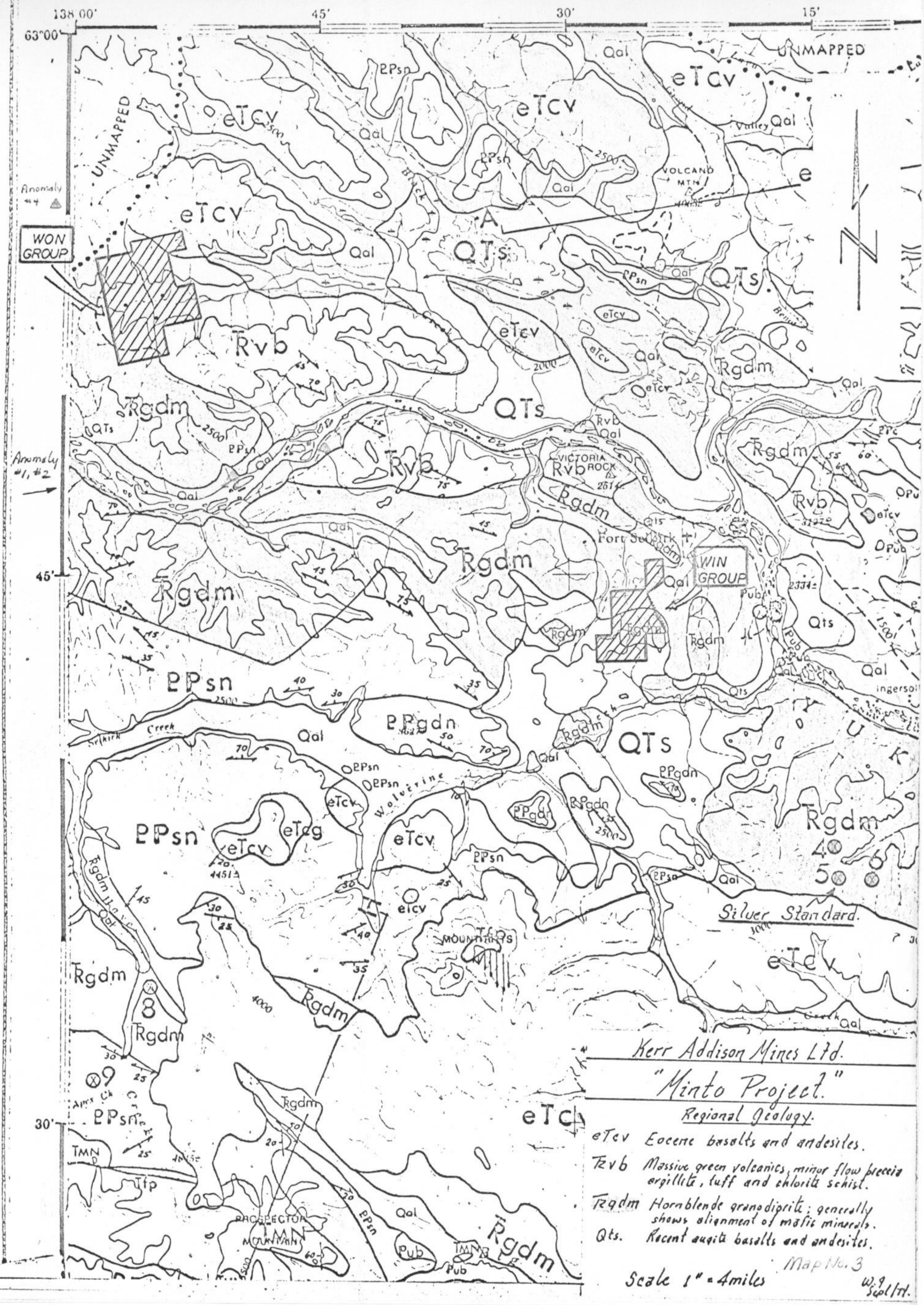
(c) Regional Geology

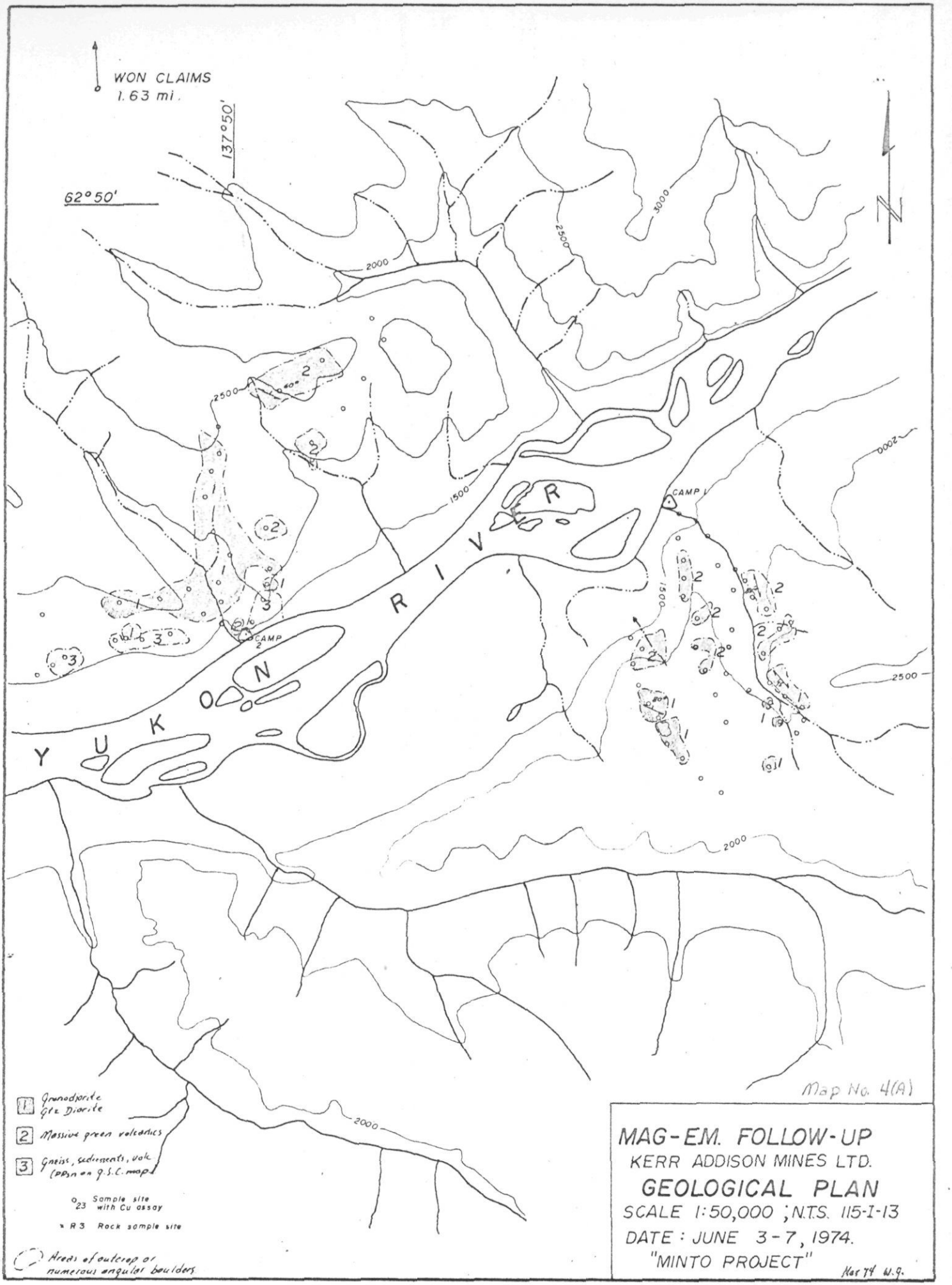
The majority of the anomalous areas as mapped by the G.S.C. consists of a WNW trending belt of Triassic hornblende-biotite granodiorite. A sequence of Triassic volcanics and minor sediments is shown NE of this intrusive body (see Map No. 3)

(d) Local Geology (see Map Nos. 4A, 4B)

The local geology of the camp areas fitted the government mapping quite well. The intrusives encountered consisted of an unaltered hornblende and/or biotite granodiorite with some porphyritic phases. The occasional quartz-K-feldspar-epidote vein and felsic dyke were noted in all the areas investigated. The volcanic rocks generally consisted of a fine to medium grained metavolcanic rock sometimes showing hornblende phenocrysts or schistosity due to chloritization and deformation of previous volcanic rocks (i.e. andesites).

N.T.S. 115 I


138 00'
45'
30'
15'
63°00'
45'
30'
UNMAPPED
UNMAPPED
Anomaly #4
Anomaly #1, #2
WON GROUP
WIN GROUP
eTcv
QTs
Qal
Rvb
Rgdm
PPsn
PPgdn
Pub
TMN
Tfp
VOLCANO MTN
VICTORIA ROCK
Fort Selkirk
Selkirk Creek
Wolverine
PROSPECTOR MOUNTAIN
Silver Standard
ingersoll
Kerr Addison Mines Ltd.
"Minto Project."
Regional Geology.
eTcv Eocene basalts and andesites.
Trvb Massive green volcanics, minor flow breccia argillite, tuff and chlorite schist.
Trgdm Hornblende granodiorite; generally shows alignment of mafic minerals.
Qts. Recent augite basalts and andesites.
Map No. 3
Scale 1" = 4 miles



Map No. 4(A)

MAG-EM. FOLLOW-UP

KERR ADDISON MINES LTD.

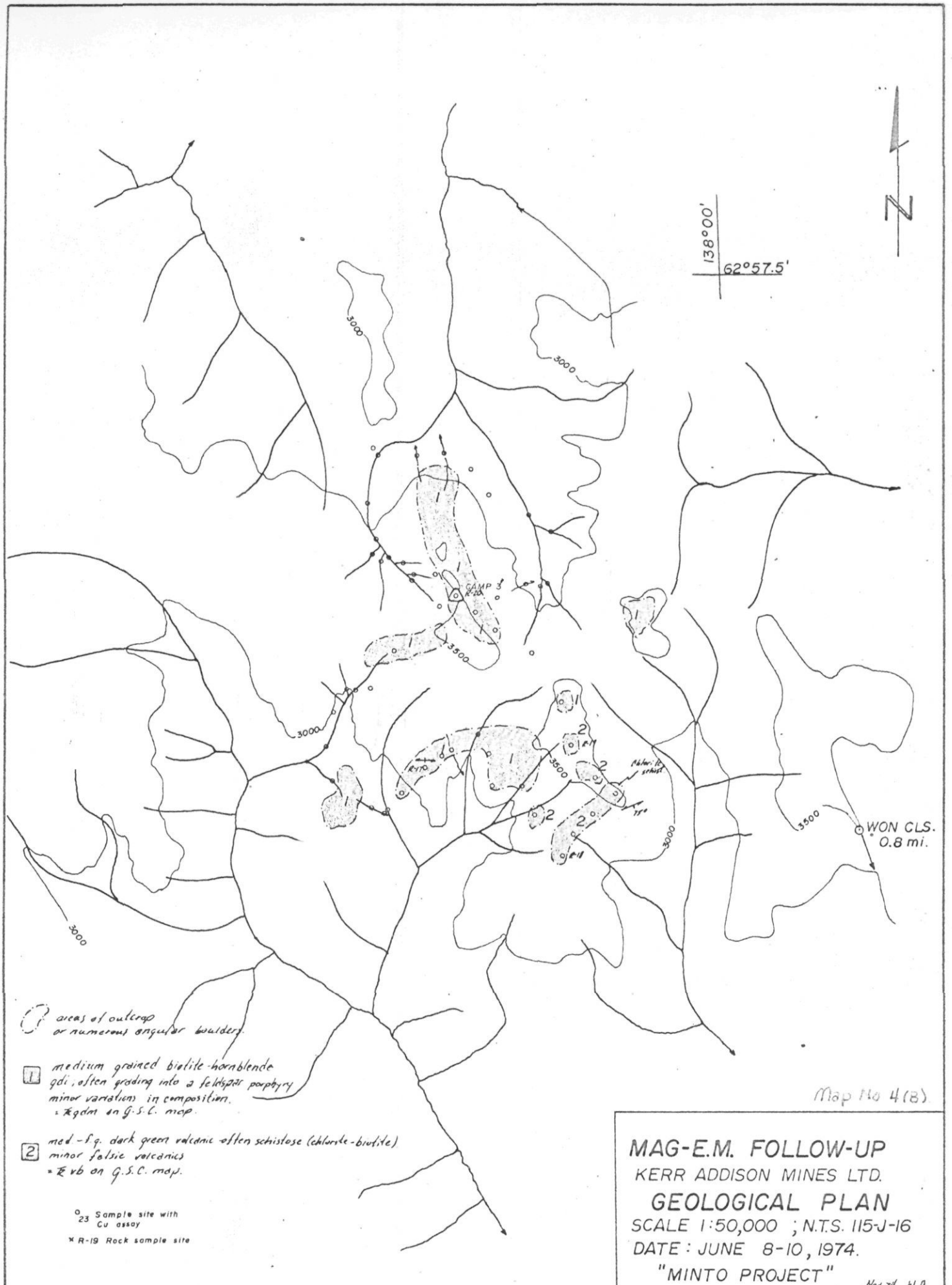
GEOLOGICAL PLAN

SCALE 1:50,000 ; N.T.S. 115-I-13

DATE : JUNE 3-7, 1974.

"MINTO PROJECT"

Mar 74 W.G.



Map No 4(B)

MAG-E.M. FOLLOW-UP

KERR ADDISON MINES LTD.

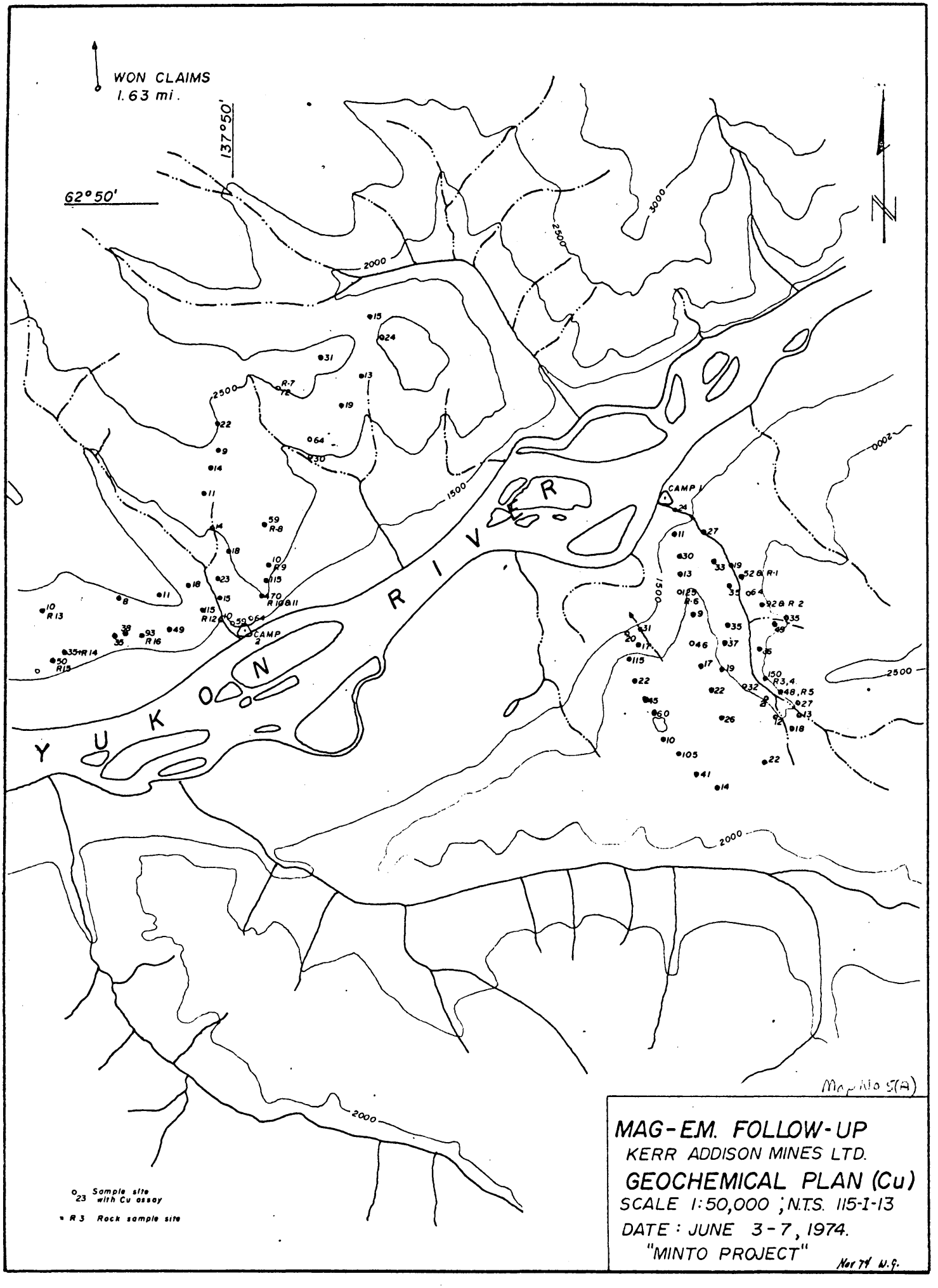
GEOLOGICAL PLAN

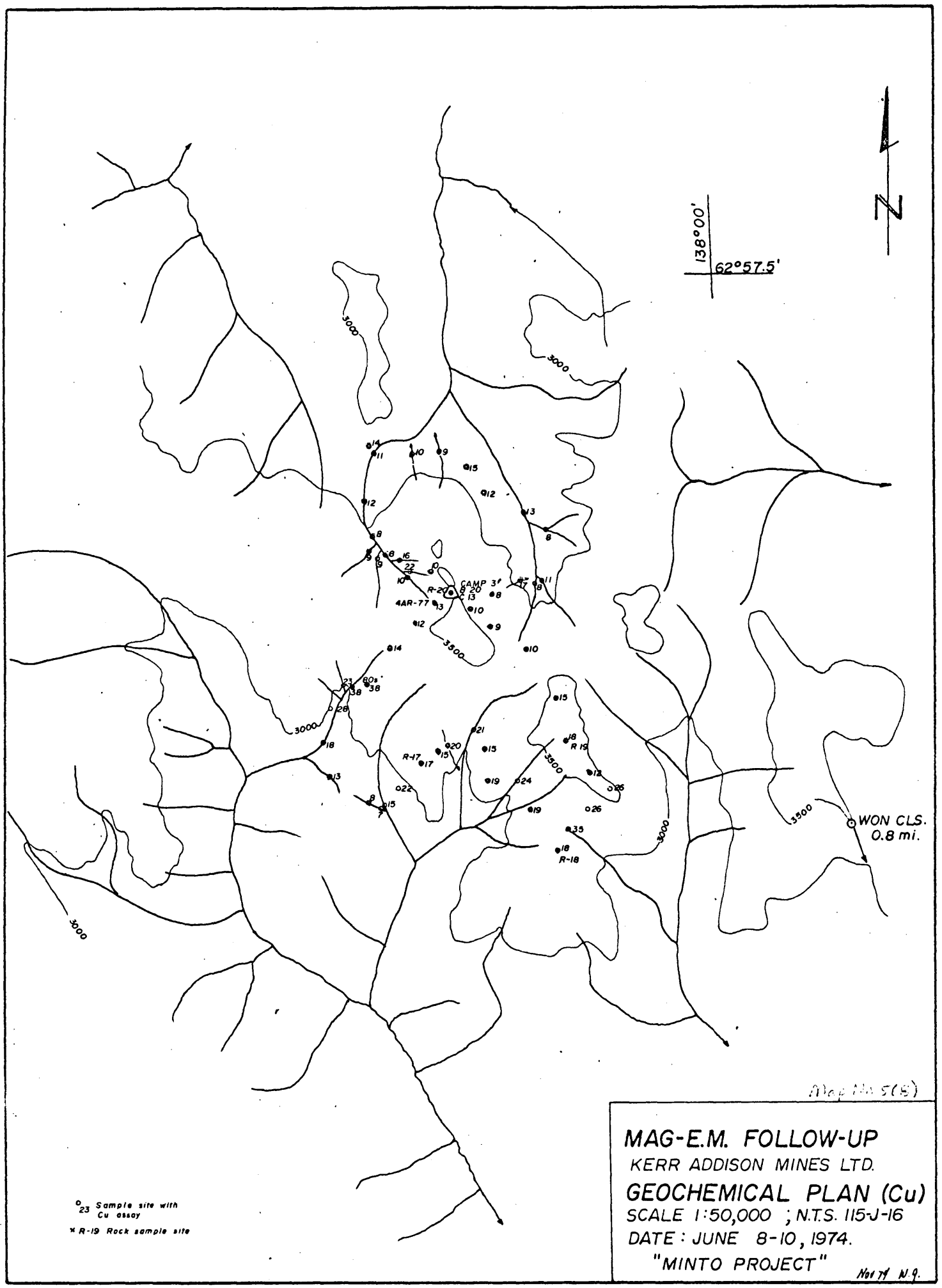
SCALE 1:50,000 ; N.T.S. 115-J-16

DATE : JUNE 8-10, 1974.

"MINTO PROJECT"

Nov 74 W.G.


WON CLAIMS
1.63 mi.
137°50'
62°50'
N
2000
2500
3000
1500
YUKON RIVER
CAMP 1
CAMP 2
R-1
R-2
R-3,4
R-5
R-6
R-7
R-8
R-9
R10&11
R12
R13
R14
R15
R16
2500
2000
1500
2000
2000
Map No 5(A)
MAG-EM. FOLLOW-UP
KERR ADDISON MINES LTD.
GEOCHEMICAL PLAN (Cu)
SCALE 1:50,000 ; N.T.S. 115-1-13
DATE : JUNE 3-7, 1974.
"MINTO PROJECT"
Nov 74 W.G.
o23 Sample site with Cu assay
• R3 Rock sample site


N
138°00'
62°57.5'
CAMP 3'
R-20
4AR-77
R-17
R-18
R 19
3000
3300
3500
WON CLS.
0.8 mi.
Map No 5(E)
MAG-E.M. FOLLOW-UP
KERR ADDISON MINES LTD.
GEOCHEMICAL PLAN (Cu)
SCALE 1:50,000 ; N.T.S. 115-J-16
DATE : JUNE 8-10, 1974.
"MINTO PROJECT"
Nov 74 N.Q.
o23 Sample site with Cu assay
* R-19 Rock sample site

Anomaly #2 had the most variable geology especially along the Yukon River where the banks are very steep. Mapped as PPsn by the G.S.C. it consists of a complex of gneissic rocks, graphitic schists and a large mass of hornblendite intruded by leucocratic dykes (granodiorite), probably from the nearby intrusive mass. Rock samples were taken and are located on Map Nos. 5A, 5B and descriptions are found in the appendix.

(e) Geochemistry (See Map Nos. 5A, 5B)

Soil samples, generally of the B horizon were taken to cover the geophysical anomalies as well as possible with the time available. Silt samples were taken where possible, however, they were abundant only at the Anomaly #4 area. All soil and silt samples were analyzed by Barringer Research for Cu, Zn, Pb, using hot and cold extraction methods respectively.

(f) Conclusions

The Anomaly #1 area gave erratic geochemical response with moderate copper anomalies at several scattered areas. Magnetic anomalies were in most cases over Triassic volcanics, all of which had magnetite (1-1.5%). No explanation could be given for the electromagnetic anomaly due to the presence of extensive overburden. No mineralization of economic significance was noted.

The anomaly #2 area was unresponsive, except for the area of hornblendite ¼ mile NE of camp. This outcrop was found to contain small amounts of malachite on fracture surfaces.

Airborne magnetic anomalies were over both the volcanic and intrusive rocks which contained only small amounts of magnetite (½%-1%). The electromagnetic anomaly (field strength) was probably caused by the graphitic schists in the area.

The anomaly #4 area was completely unresponsive geochemically. Geologically, the area consisted of a medium grained porphyritic hornblende-biotite granodiorite which was very weakly magnetic. Minor volcanic units were found further south (see Map 4B). No explanation could be found for the geophysical anomalies.

WON CLAIM GROUP

(a) Introduction

The Won claim group is situated approximately 17.5 miles WNW of Fort Selkirk. Access to the property is by a helicopter stationed at Carmacks, 75.5 miles to the SSE. Staking of this group took place in early October 1973, based on aeromagnetic and geologic data. During the period June 1-27, 1974, a geochemical and geological reconnaissance survey was carried out by two, two man crews. A magnetometer survey was initiated but was not completed due to lack of time and atmospheric activity. After this initial work, a copper-molybdenum anomaly was discovered on L-15W and extended to the south boundary of the claim block. To protect this area, an additional 18 claims (Won Nos. 101-118) were staked (see Map No. 7). Detailed follow-up work consisted of geochemical and geophysical surveys as well as geological mapping and digging of eleven exploratory test pits. The detailed follow-up work was done during the period August 4-31, 1974.

(b) Terrain

Approximately 75% of the claim block is covered by 'dead fall', young birch and alder growth. Coniferous growth is scattered over the property, being the heaviest on the southern extremity of the claim block.

Black Creek, a slow moving creek surrounded by swamps, flows through the claim block in a west-east direction.

The relief in the area is 1000'-1200' with hilltops being approximately 3200'-3500' A.S.L. The slopes in the area are generally moderate, however, steep (30^{o}) slopes do exist, especially along creeks on the south half of the claim block. Overburden depths range from 5'-10' on hillsides and hilltops to 10'-50'? in creek valleys. Permafrost is widespread with depths varying throughout the claim block. The shallowest permafrost (6"-1') was observed along Black Creek and the deepest (1'-3') on hillsides.

(c) Regional Geology

According to G.S.C. mapping (see Map No. 3), the claim group is situated in an area underlain by Triassic intrusives, volcanics and some Tertiary volcanic rocks. The Triassic intrusive rock (Trgdm) is described as a hornblende-biotite granodiorite, having a WNW-ESE trend. This is the same rock type as mapped on the Win claims, the mag-E.M. anomalies and on the Silver Standard-Asarco copper property.

The Triassic volcanics (Trvb) are classified as basalts, flow breccias, argillites, tuffs and locally hornblende chlorite schists. The small amount of volcanics in the NE corner of the claim block are described as Tertiary basalts and andesites of the Carmacks group.

Glaciation was not reported in this area, however, the deposits of clays and sandy soil at the follow-up camp would indicate that local glaciation may have taken place.

(d) Local Geology

Rock exposure comprises approximately 1% of the total claim area, therefore, much of the geological information was taken from soil sample sites and test pits. The vast majority of the sample sites revealed rock chips of a dark green slightly schistose metavolcanic. This rock was generally fine grained and ranged from quartz-mica schists to chlorite-hornblende schists, plus silicified varieties. Some fine grained grey argillite was noted on the west half of the claim block. Together, these two rock types comprise part of the Triassic volcanic unit (Trvb) on the G.S.C. map (see Map No. 3).

Prior to detailed follow-up work, only two areas of intrusive rock had been observed. One area was at 45+00W; 66+00N (See Map No. 8) that consisted of granodiorite pebbles in soil sample pits. The other area was the southern portion of the claim block from 15+00W to 60+00W and 90+00S to 100+00S. Here the soil sample pits contained fragments of granodiorite and quartz porphyry as well as the usual metavolcanics. This intrusive may correspond, or be related to the Trgdm of the G.S.C. mapping.

During the copper-molybdenum anomaly follow-up in August, intrusive bedrock (?) and rock fragments were found in a number of exploratory test pits and soil sample sites (see Map No. 10).

The largest area of intrusive rock occurrence is from the creek to the NW corner of Won #88. The rock encountered was a quartz-hornblende monzonite showing variable chloritization of the mafic minerals.

Alteration in T.P. #7 located in the eastern portion of the intrusive area shows strong alteration with only quartz, limonite, sericite and minor pyrite remaining. In most of the less altered rocks, pyrrhotite is always found, sometimes with a rusty alteration halo. Pyrrhotite and pyrite combined seldom exceed 2% of the rock. The only mineralization of any economic importance was a few grains of molybdenite surrounded by powellite in a rusty quartz vein from T.P. #7 (see Fig.2). Another area of intrusive rock occurrence is in the NW corner of Won #108 where the rock consists of a weakly altered and/or slightly rusty porphyritic quartz monzonite or quartz porphyry mineralized very weakly by pyrrhotite (1%). A third area of intrusive rock was encountered at 12+80W; 35S where T.P. #8 encountered a rusty weathering granodiorite or quartz monzonite containing 1-2% pyrrhotite.

Scattered occurrences of intrusive rock mixed with metavolcanics were found throughout much of Won #86 and parts of Won #80, #88 and #90 (see Map No. 10). A larger area may well be underlain by intrusive rock, however, the very rocky nature of the overburden was a major factor in some of the test pits not reaching bedrock. The majority of the test pits (T.P.1-5, #9, #10, #11) and soil sample sites encountered a greenish fine grained schistose metavolcanic rock variably mineralized with pyrrhotite and pyrite. Many of the rock chips seen had fracture surfaces covered with limonite ranging in colour from canary yellow to a deep brown.

Some of this yellowish limonite could be ferrimolybdite, an alteration product of molybdenite. Quartz veinlets are common and quite often rusty due to the presence of limonite (pyrite alteration).

Though the rock geochemistry gave highly anomalous molybdenum and copper values, the rock samples themselves showed no primary molybdenum mineralization suggesting the molybdenum and possibly the copper are tied up in the limonite and pyrite or is so fine grained that it is not visible. The common alteration products of copper were not observed, therefore, the mode of occurrence is still not known.

In viewing the test pit profiles (Fig. #2) it is obvious there has been some degree of intermixing of the metavolcanics and intrusive rocks. Test pits #9, #11 and especially #8 are cases in point. Solifluction or soil creep may be a possible explanation for this feature. If this is the case, the source of the intrusive and metavolcanic rock would be directly uphill with the length of transport being short. The high degree of angularity of the rock fragments argues for the short transport distance (¼ mile) hypothesis.

Approximately three quarters of a mile to the south of the follow-up area is the main intrusive mass described by the G.S.C. (see Map No. 3). Scattered over the hilltops and ridges are numerous boulders of light grey weathering "clean looking" granodiorite.

The intrusive encountered on the claim group may, therefore, be an offshoot of the main intrusive mass, covered by an undeterminable thickness of metavolcanics. The emplacement of this intrusion would have fractured the overlying metavolcanics, veined them with quartz and mineralized the veinlets and/or fractures with pyrite and a yet unrecognizable copper mineral. Subsequent hydrothermal activity would alter the pyrite resulting in the formation of limonite. Molybdenite may have undergone similar alteration to ferrimolybdite, accounting for the very small amounts of molybdenite remaining.

(e) Geochemistry

Sampling Procedures and Analysis

During June 1974, geochemical soil sampling of the Won claim group was carried out on a grid system, using sample spacings of 200' where possible, and line spacings of 1400'-1500' (see Maps Nos. 9A and 9B). A "B" horizon sample was the objective, however, permafrost and/or thick organic cover occasionally prevented this. In these cases, the deepest sample available was taken (generally mid to lower "A" horizon). When creeks were crossed, a silt sample was taken if the sediment was not too organic.

After the discovery of anomalous copper and molybdenum values on line 15W (see Maps Nos. 9A & 9B), a detailed soil sampling and test pitting programme was initiated in the area between L 0+00W and L 30+00W; 27+00S and 65+00S (see Maps Nos. 11A and 11B). Soil samples were taken at an average depth of two feet (lower "B" or upper "C" horizon).

Sample spacings were 100' or 200' on lines approximately 400'-500' apart. All samples were sent to Barringer Research in Whitehorse for analysis. Soils were analyzed for Cu, Zn, Pb, Mo, using a perchloric acid attack (hot extraction). Silt samples were analyzed for the same elements using a dilute HCl attack (cold extraction). Analysis for silver was done on selected anomalous soil samples. Results of all analyses were stated in parts per million (ppm).

After the detailed sampling and magnetometer surveys were completed, a series of eleven test pits were dug to investigate geochemical and magnetic anomalies as well as the area uphill from geochemical anomalies. Test pits varied in depth from 3' to 5.5' ending usually in large interlocking angular fragments. Geochemical sampling of the rock at the base of the test pits and all recognizable soil horizons below the "A" horizon was carried out. Analysis was for the same elements and by the same method as for all regular soil samples.

Geochemical Results

The initial geochemical survey (1"=1000') yielded a number of anomalous areas listed below in order of importance. Co-ordinates refer to Map Nos. 9A and 9B.

Area I

Line 15W : 34S to 60S Line 30W : 50S to 54S + 62S Line 45W : 52S : 56S	Extent of high copper values
Line 15W : 30S to 58S Line 45W : 50S to 60S	Extent of high molybdenum values

Area II

Line 30W : 84S, 86S Line 30W : 86S	Copper, Molybdenum

Area III

Line 45W : 42N to 44N Line 45W : 38N to 44N	Copper, Molybdenum

Area IV

Line 60E : 48S, 50S Line 75E : 48S	Copper only

Area V

Line 15E : 26N, 28N	Copper only

Areas I and II had by far the most anomalous values with copper up to460ppm and molybdenum up to 35ppm. It was for this reason that additional ground was staked to protect the anomaly and detailed work was concentrated on this anomaly.

Detailed geochemical sampling yielded a copper anomaly extending from the main creek (west of camp) to Line 30W : 50 to 55S. The anomaly trends approximately NNE-SSW, paralleling the creek, and has dimensions of 3600' x 2000'. Several smaller copper anomalies exist around the main anomaly, but are of lesser significance (See Map No. 11A). Copper values in the 200 to 300 ppm range were observed with background being approximately 40-60 ppm.

The molybdenum anomaly is much more confined and less complexly shaped, having dimensions of 2300' x 1800' (See Map No. 11B). This anomaly fits completely within the previously discussed copper anomaly, suggesting that the molybdenum anomaly may be very close to the mineralizing source (i.e. intrusive plug?), since molybdenum is less mobile than copper. Molybdenum values up to 100 ppm were observed with background in the area being 2 to 3 ppm.

Both copper and molybdenum were low on the east side of the creek, at first suggesting it may represent a fault, however, the thick glacial overburden and clays on the east side of the creek could also give a similar effect (i.e. prevents migration of Cu & Mo).

Test Pit Results (See Fig. 2)

Of the eleven test pits dug, eight (T.P. #1, #2, #3, #4, #5, #9, #10, #11)terminated in metavolcanics and three (T.P. #6 is questionable) in intrusive rock. Of the eight test pits ending in metavolcanic rock, five (T.P. #2, #3, #9, #10, #11) had highly anomalous values in copper and molybdenum. Test pits #1, #4, and #5 had low values in molybdenum and moderately high values in copper. These three pits may suggest that the mineralizing source (intrusive?) is within the mobility range of copper and outside the mobility range of molybdenum.

In viewing the metal content throughout the test pit profiles, a fairly high degree of variation in values can be seen with changing depth. The following illustrates some of the variations observed.

1) Copper values increasing - lower at base T.P. # 1,2,3,5,6,8,9,10,11
2) Copper values increasing to base of pit T.P. # 4,7
3) Molybdenum values increasing lower at base T.P. # 2,3,8,9,10,11
4) Molybdenum values increasing to base of pit T.P. # 4,6,7
5) Molybdenum values unchanging T.P. # 1,5

In cases 1 and 3, partial surface enrichment would appear to be active. Normal surface weathering would show an increase in metal content down to bedrock (i.e. 2,4) or at least nearly even values throughout the profile, (5). Topography, however, could complicate the picture especially if soil creep is active. This downhill soil movement would carry and possibly build up the Mo & Cu values over the bedrock surface giving the impression of slightly enriched metal values above bedrock.

(f) Geophysics

The initial programme for the Won claims called for a magnetometer survey, however, due to the slow rate of coverage and poor atmospheric conditions, the survey was abandoned. During the geochem anomaly follow-up, a detailed magnetometer survey was completed on a scale of 1"=400' using previously cut geochem survey lines. The instrument used was a Geometrics Model G.816, a digital field magnetometer with a ±1 gamma sensitivity. Readings were taken at 100' and 200' intervals and contoured on an interval of 100 gammas (200 gamma contours used in contouring magnetic highs - see Map No.12).

The completed survey indicated several magnetic highs (greater than 58,400 gammas) within a NW-SE trending area of moderate highs (greater than 57,900 gammas - coloured light green). On either side of this area are lower values, probably representing the regional magnetic intensity (57,700 - 57,900 gammas).

A magnetic low was indicated around T.P. 7 and 10, both of which are highly anomalous in copper and molybdenum and one of which (T.P. 7) terminated in rusty intrusive rock. This magnetically low area may represent an area of altered intrusive rock.

The major NW-SE trending magnetic feature could possibly represent a contact feature produced by emplacement of an elongate plug into the metavolcanic rocks. If this is the case, the dip of the intrusive contact would appear to dip steeply to the southwest (see Fig. 3).

The northwest side of the intrusive body may be further NE than shown or may simply be non-magnetic.

To investigate the property further, geophysically, an induced polarization survey (I.P.) was done on August 31, 1974. Line 12+80W was chosen as the first line to be followed by 17+60W, 8+60W and Base Line 2 if anomalous values were obtained.

The instrument used was a portable time domain unit, using a 12 volt battery power source. The Wenner array with an electrode spacing of 200' ("a" spacing) was used, which would give an effective penetration depth of 100'-150'.

Only a 2000' section of L-12+80W was completed when instrument malfunction prevented completion of the survey.

The results, namely normalized I.P. and resistivity, were plotted on a section with accompanying geochemistry and ground magnetics (see Fig. 1). Four definite I.P. peaks were evident with only three of them having corresponding resistivity lows. The largest I.P. effect (48 mv-sec) had a corresponding low resistivity of 2000 ohm-feet. This anomaly is situated at L-12+80W;31S and shows a low ground magnetic response. Soil samples, however, gave low molybdenum and slight copper values.

The second I.P. peak at 37S, though not as intense as the one above, did show a low resistivity (2700 ohm-feet). This represents a narrow feature since resistivity rises very sharply 100' either side of the resistivity low. The anomaly also corresponds with the north end of a broad magnetic high.

Copper and molybdenum were both anomalous at this point. The third I.P. anomaly was found at 47S, however, it was not as well defined as the previous two. Ground magnetics gave only background values and soil samples were only slightly anomalous in copper and molybdenum.

Having only one line of I.P. data available, a more detailed interpretation is not possible.

(g) Conclusions

The anomalous copper and molybdenum values observed on the southern Won claims are related to the emplacement of an intrusive plug (quartz porphry or quartz monzonite) into Triassic metavolcanic rocks. The intrusive plug is probably a steeply dipping offshoot of the main granodiorite mass to the south and is partially overlain by metavolcanic rocks. Emplacement of the intrusive resulted in fracturing of the overlying rocks and subsequent quartz veining and mineralization of the metavolcanics.

The later near surface weathering and/or hydrothermal activity altered the pyrite, pyrrhotite, molybdenite and possibly the copper mineral(s). The magnetic anomaly probably represents one contact of the intrusive mass where magnetite (±pyrrhotite) content is greater than average.

The molybdenum anomaly locates the mineralizing source area better than copper, since copper is more mobile. No values are found on the east side of the creek due to the presence of a fault, or more likely due to the presence of thick, fine grained overburden.

YUKON RIVER PROJECT

(a) Introduction

The Yukon River project area was chosen with several factors kept in mind, namely:

1. To stay within rocks of the same type and age as the Silver Standard property (Triassic intrusive - see Map No. 3)
2. To work in an area not heavily explored and/or staked.

In early July, a base camp was established along the Klondike highway at mile 131, thirty miles (by road) north of Carmacks, Y.T.

Five summer students and the writer carried out systematic geochemical and geological reconnaissance of the project area. Crews were "set out" and "picked up" by a Trans North Turboair 47GB3 helicopter contracted to Kerr Addison from July 7 to August 2, 1974. During the period August 2 to August 14, one crew continued the sampling programme in the remaining area supported by a Ranger stationed at Carmacks, Y.T. The remainder of the field season (August 14-31) was devoted to follow-up work on the Won claims.

(b) Terrain

The Yukon River project area consists of broad rounded peaks with their flanks and streams being of a moderate slope. Peaks in the northern two thirds of the area rise to 4000'-4400' (a.s.l.) while those in the southern third attain heights of 4500'-5600' (a.s.l.)

APPENDIX

Rock Sample Descriptions for

MAG E.M. ANOMALIES
WON CLAIM GROUP

ROCK SAMPLE DESCRIPTIONS

Located on Map Nos. 5(A), 5(B)

Anomaly #1

R-1 - Dark green metavolcanic rock showing definite lineation of mafic minerals.
- Non magnetic

R-2 - Schistose green metavolcanic rocks, fine grained.
- More biotite than R-1 above.
- Non-magnetic.

R-3 - Dark green, medium grained metavolcanic.
- Phenocrysts of hornblende in matrix of chlorite, plagioclase and hornblende.
- Weakly magnetic.

R-4 - Pinkish, medium grained dyke intruding metavolcanic of type R-3 above.
- Sharp contact present.
- Dyke consists of 10-12% quartz, 60% K-feldspar, 20% plagioclase, 5% epidote and magnetite.
- Dyke contact and surrounding metavolcanic are moderately magnetic.
- Rock found near contact of Trgdm and Trvb (G.S.C. map).

R-5 - Medium grained hornblende-biotite granodiorite showing slight lineation of mafics.
- 10-15% quartz, 25% hornblende and biotite (hb much greater than bi), 60% feldspar (Kspar > plagioclase), 2% epidote, sphene and magnetite.
- Slight to moderate magnetism.

R-6 - Dark green, fine grained metavolcanic showing lineation of mafics, (primarily hornblende).
- Non-magnetic.

Anomaly #2

R-7 - Dark green, fine grained, non-magnetic metavolcanic.

R-9 - Pink, coarse grained, mafic poor, K feldspar-quartz-mica rock composed of 65% K feldspar, 20% quartz, 10% plagioclase and 5% muscovite, biotite.
- Non-magnetic.
- Classified as a coarse grained granite.

R-10 - Dark green, coarse grained hornblendite composed of anhedral to subhedral hornblende crystals in random orientation.

- Minor quartz, biotite and malachite (fracture surfaces).
- Non-magnetic.
- This outcrop was cut by dykes of R-11 (below).

R-11 - A buff coloured, fine grained dyke, consisting of 75% Kfeldspar and plagioclase, 10% quartz and 15% hornblende (primarily from assimilation of hornblendite wallrock).

- Non-magnetic

R-12 - A light grey, medium grained biotite granodiorite, composed of 20% quartz, 15% biotite, 50% plagioclase, 10-15% K feldspar.

- Accessory minerals include sphene, epidote and magnetite, comprising 1-2% of the rock.
- Directive texture is present on a large scale.
- Non-magnetic.

R-13 - Dark green, medium grained hornblende gneiss showing lineation of hornblende crystals, and lenses of granular quartz and feldspar.

- Non-magnetic.

R-14 - Pale green, fragmental volcanic rock consisting of fine grained volcanic fragments, quartz fragments and K feldspar.

- Weakly magnetic.

R-15 - Pale green, schistose, fine grained volcanic rock.

- Composed of chlorite, quartz, feldspar and minor epidote.
- Some pyrite noted along fracture surfaces.
- Non-magnetic.

R-16 - Dark grey, fine grained biotite-quartz-feldspar schist. Excellent schistose texture with granular quartz and feldspar lenses between bands of biotite.

- This sample contain malachite which was observed to be associated with a small 1/16" thick fracture.
- No primary copper mineralization was noted.

Anomaly #4

R-17 - A pinkish medium grained quartz monzonite-biotite or granodiorite.

- Well developed foliation of mafic minerals.
- Biotite altered to chlorite and often accompanied by grains of epidote.
- Non-magnetic.

R-18
- A buff coloured, very fine grained mafic poor (less than 5%) volcanic rock (i.e. rhyolite).
- Composed almost entirely of quartz and feldspar.
- Non-magnetic.

R-19
- Dark green garnet-chlorite-amphibole schist (coarse grained).
- Non-magnetic.
- Very small hilltop outcrop underlain by the Triassic intrusive.

R-20
- Medium grained biotite-hornblende granodiorite or quartz diorite.
- Contains>10% quartz,≤70% feldspar (plagioclase greater than Kspar), mafics (biotite greater than hornblende) 20%, epidote, sphene, magnetite, clay minerals - 3%.
- Weakly Magnetic.

WON CLAIM ROCK DESCRIPTIONS

Test Pit #1

Sample No. 1B

- Pale green-grey, fine grained, quartz-chlorite schist.
- Rusty fracture surfaces
- Non-magnetic
- 1-2% pyrite + pyrrhotite

Sample No. T.P. 1 (base of pit)

- Rusty weathering, grey, fine-medium grained quartz-mica schist

  Quartz - 40%
  Micas - 35%
  Feldspars - 15%
  Accessories + limonite - 5-10%

- Small folds noted, micas follow the folds, therefore deformation is post metamorphic.
- No mineralization was noted.

Test Pit #2

Sample No. T.P. 2 (Upper C Horizon)

- Fine grained, dark green, silicified metavolcanic.
- 5-6% pyrite + pyrrhotite.
- Rusty fracture surfaces

Sample No. T.P. 2 (base of pit)

- Dark green-grey, fine grained, slightly schistose chloritized volcanic rock.
- Weakly magnetic.

Test Pit #3

Sample No. T.P. 3 - 1.5'

- Quartz phenocrysts 5% (rounded), others 20%
  Micas - 7%
  Feldspar - 65% (Kspar ≥ plagioclase)
  Hornblende - 2%
  Pyrrhotite - 2% (rusty haloes)

Sample No. T.P. 3 (base of pit)

- Rusty, fine grained, quartzose schist.
- Fracture surfaces show abundant limonite - some may be ferrimolybdite.

Test Pit #4

Sample No. T.P. 4 - 0-3'

- Dark grey, fine grained schistose metavolcanic.
- 3-4% pyrite + pyrrhotite.
- Weakly magnetic.

Sample No. T.P. 4 (base of pit)

- Rusty weathering, dark green quartzose metavolcanic rock.
- Hornblende and chlorite 60% of rock.
- 1% pyrite and pyrrhotite.

Test Pit #5

Sample No. T.P. 5 (base of pit)

- Fine grained, greenish, schistose quartz-mica schist.

Test Pit #6

Sample No. T.P. 6 - 3'

- Very rusty, nearly pure limonite rock.
- Some small buff carbonate veinlets and rusty quartz remains
- Minor (less than ½%) pyrite remains.

Sample No. T.P. 6 (base of pit)

- Very rusty rock consisting of silica, limonite and quartz - carbonate veinlets.
- Vestiges of micas remain (could be originally an intrusive rock).

Test Pit #7

Sample No. T.P. 7 (base of pit)

- Rusty, quartz rich altered intrusive, coated heavily with yellow to deep brown limonite.
- Micas now altered to sericite-chlorite mixture.
- Found a band of buff coloured oxidation material that fluoresces a rich yellow colour - probably powellite.
- Within this area of powellite is a cavity in quartz found to contain molybdenite flakes and yellow ferrimolybdite.

Test Pit # 8

Sample No. T.P. 8 (base of pit)

- Rusty weathering, medium grained intrusive having the following mode:

Micas	-	10%	
Quartz	-	15-20%	
Hornblende	-	5%	
Feldspar	-	65%	(Kspar greater than plagioclase)
Pyrrhotite + Limonite		3-4%	

- Rock name - quartz-mica monzonite.

Test Pit #9

Sample No. T.P. 9 (base of pit)

- Grey green, very fine grained quartzose metavolcanic rock.
- Some quartz veinlets noted.
- 1% pyrrhotite present.

Test Pit #10

Sample No. T.P. 10 (base of pit)

- Green-grey, fine grained slightly schistose metavolcanic.

Test Pit #11

Sample No. T.P. 11 (Intrusive 3')

- Grey, medium grained intrusive rock having the following mode:

Mafics	-	10% (3% euhedral biotite crystals, 4% anhedral, 3% hornblende).
Quartz	-	25-30%
Feldspar	-	60% (Kspar greater than plagioclase)
Accessory minerals		2% (magnetite, pyrrhotite)

- Some alteration of biotite and hornblende to chlorite.
- Rock name - quartz monzonite or granodiorite.

MISCELLANEOUS ROCK SAMPLES

RCA - 12 27+00W : 63S

- Grey, medium grained porphyritic intrusive rock containing the following minerals:

Quartz	-	10-15% (many grains are clear, smoky rounded grains)
Feldspar	-	70% (Kspar greater than plagioclase)
Accessory Minerals		1-2% (magnetite, pyrrhotite and sphene)
Mafic Minerals	-	10-15% (biotite + hornblende)

R-28 30+00W : 62S

- Buff, fine grained porphyritic intrusive rock.
- 5-8% quartz phenocrysts in a fine grained groundmass.
- The remainder of the rock is a fine grained mixture of quartz, feldspar, limonite and micas.
- Name - Altered porphyritic quartz monzonite? (quartz porphyry?)

Soil Site 15+00W : 31S

- Pale grey, medium grained intrusive rock, composed of:

Quartz	-	10-15%
Mafics	-	15% (biotite altered to chlorite, minor hornblende)
Feldspar	-	65% (Kspar greater than plagioclase?)
Limonite	-	5-6%
Pyrrhotite	-	1%

- Name - Quartz monzonite - granodiorite.

T.P. No. 1
(15W, 56S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	0'	
	B	2.5'	Angular meta volcanic rc fragment with rusty quartz veinlets.
70, 100, 2	T.P 1-1	3.5'	Very rusty horizon
	C1		75% fragments of meta volc rc
210, 93, 2	C2 T.P. 1-2	5'	Folded quartz-mica schist.
140, 72, 2	T.P. 1(R)		

PIT ELEVATION — 2440'
PIT DUG ON — 460 p.p.m. Cu

T.P. No. 2
(15W, 45S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	0'	
	B	2.5'	
305, 83, 74	T.P. 2-1		50-75% fragments of meta volc. (rest is soil)
	C1		Some rusty qtz veinlets.
240, 50, 48	C2 T.P. 2(R)	5'	Silicified schistose meta volcanic rock

2410'
22 p.p.m. Mo

T.P. No. 3
(17+60W, 52S)

Cu, Zn, Mo (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	0'	
		4"	Organic matter
92, 81, 5	B T.P. 3-3	1.5'	Brown-gray soil with meta volc chips.
165, 125, 34	B2 T.P. 3-2	3'	50-70% rc frag.
	C		Very rusty horizon containing 80% rock fragments.
285, 170, 50	T.P. 3-1	5'	Rusty, quartzose meta volcanic rock
170, 90, 36	T.P.-3(R)		

2655'
Mag high (59,050%)

T.P. No. 4
(28W, 41S)

Cu, Zn, Mo (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	3"	Organic matter
24, 44, 2	B T.P 4-1	3'	Brown gray soil volc. rc. fragments.
	C		Rusty brown streaks
56, 74, 4	T.P 4-2	4.5'	80-90% schistose meta volc rocks. 1-2% py, pyrrhotite.
150, 94, 6	T.P 4 (R)	5'	

2650'
Mag high (59,282%)

T.P. No. 5
(250'W of 27W, 63S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	2"	
21, 42, 2	B T.P. 5-1	1"	Brown-gray soil
170, 91, 2	C T.P. 5-2		Chloritized meta volc.
77, 63, 2	T.P. -5(R)	3'	Fine grained mica-qtz schist.

2985'
To check uphill extension

T.P. No. 6
(22+40W, 55+20S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	2"	Organic matter
53, 63, 2	B T.P. 6-1	1"	Green gray soil
	C		Very rusty zone consisting of 60-80% meta volc fragments cut by numerous qtz veinlets & mineralized by pyrite
200, 125, 7	T.P. 6-2	4.5'	Very rusty rock, only limonite & silica left.
135, 82, 7	T.P.-6 (R)		

2910'
To check uphill extension

T.P. No. 7
(8+60W, 46S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	0'	
		1.5'	Organic matter
20, 49, 37	B T.P. 7-1	2.5'	Highly weathered intrusive
490, 63, 230	C T.P. 7-2	3.0'	Intrusive fragments in permafrost
	(Permafrost)		Rusty quartz rich altered intrusive containing limonite, molybdenite (1%), and flourescent buff colored powellite.

PIT ELEVATION — 2300'
PIT DUG ON — Mag low (57,596%)
340 p.p.m. Cu, 100 p.p.m. Mo

T.P. No. 8
(12+80W, 35S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	3"	Organic matter
47, 43, 6	B T.P. 8-1	1.5	Weathered intrusive and some quartz fragments.
200, 67, 79	C1 T.P. 8-2	2.0'	Rusty zone
440, 165, 93	T.P. 8-3		Meta volc fragments at top of horizon changing to rusty weathering intrusive from 3' and down.
	C2		
430, 165, 91	T.P. 8-4		Rusty weathering intrusive (2% pyrr) Qtz monzonite or Granodiorite.
155, 260, 22	T.P. 8(R)		

2495'
350 p.p.m. Cu, 96 p.p.m. Mo

T.P. No. 9
(17+60W, 41S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A	0'	
		0.5'	Organic matter
71, 47, 5	B T.P. 9-1	1.0'	Orange brown soil
	C		Meta volc with some intrusive rc fragments
410, 190, 60	T.P. 9-2		
315, 135, 15	T.P. 9(R)		Becoming more chloritized and schistose.
	Permafrost at 4'		

2555'
395 p.p.m. Cu, 58 p.p.m. Mo

T.P. No. 10
(225' N45°E of T.P No. 2)

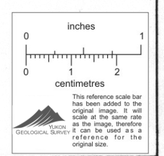
Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A		
	B		Angular meta volc fragments
350, 59, 66	T.P. 10-1		
	C1	3'	Extremly rusty zone (meta volc rx)
600, 90, 200	T.P 10-2	3.5'	
	C2		Massive to slightly schistose meta volc cut by highly weathered and Fe stained qtz veins.
520, 66, 160	T.P. 10-3	5.5'	
305, 49, 89	T.P. 10(R)		

2390'
Mag low, and half way between T.P. 2 & 7

T.P. No. 11
(17+60W, 47S)

Cu, Zn, Mo. (p.p.m.)	HOR.	FT.	DESCRIPTION
	A		Granodiorite fragments at surface of horizon
	B		Quartz veined meta volc
270, 73, 30	T.P. 11-1		
270, 140, 42	C1 T.P. 11-2	2.5'	Rusty horizon.
130, 110, 9	C2 T.P. 11-3	2.75' / 3.25'	Green gray soil
	C3 T.P. 11-4		Angular meta volc fragments veined by quartz.
345, 120, 22		5'	
	D Bedrock.		Bedrock foliation 0°/75°E
280, 115, 24	T.P. 11(R)		Fe stained, qtz veins and small scale folds.

2590'
290 ppm Cu, 50 p.p.m. Mo



WON CLAIM GROUP
DAWSON MINING DISTRICT, YUKON.

NOTE: To accompany Detailed geology and rock sample description.

FIG. 2

TEST PIT PROFILES

KERR ADDISON MINES LTD.

PROJECT: MINTO
OFFICE: VANCOUVER
TEST PITTING BY: I. McCartney, J. Conley.

N.T.S. 115-1-13

SCALE 1" = 2.0' (VERTICAL) W.G. Nov/74

NOTE:
Won Nos 9-46, 49-58, 61-100 were recorded Oct 11/73

Won Nos 101-118 were recorded July 19/74

WON NO. 57 | WON NO. 12

Outline of 1"=400' Geochem and Mag. Detail (See Map)

LEGEND

- CLAIM LOCATION LINE
- CLAIM BOUNDARY
- SAMPLE SITE
  Cu or Zn or Mo assay (p.p.m) on right
- LINE MARKER
- 12,25,2 STREAM (WITH SILT SAMPLE ASSAY)
- 50 GEOCHEM CONTOUR
- 56 CLAIM NUMBER

GEOCHEM CODE

COLOR NO. Cu Zn Mo (p.p.m.)

'MINTO PROJECT'

WON CLAIM GROUP
DAWSON MINING DISTRICT, Y.T.

CLAIM MAP

KERR ADDISON MINES LTD.

PROJECT: MINTO
OFFICE: VANCOUVER
SURVEYED BY: B. Lumley, G. Conley } Party B (June 1-24, Aug 4-18, Aug 22-31)
T. McCartney, G. Keyes } Party C.

MAP NO. 7

N.T.S. NO. 115-I-13

SCALE: 1"=1000'

NOTE: SAMPLE ANALYSIS
SOILS - TOTAL EXT (HClO4)
SILTS - PARTIAL (HCl)
USING ATOMIC ABSORPTION

Sept/74 N.G.

Van copy

NOTE:
Won Nos 9-46, 49-58, 61-100 were recorded Oct 11/73

Won Nos 101-118 were recorded July 19/74

Outline of 1"=400' Geochem and Mag. Detail (See Map)

'MINTO PROJECT'

LEGEND

- CLAIM LOCATION LINE
- CLAIM BOUNDARY
- SAMPLE SITE Cu or Zn or Mo assay (p.p.m) on right
- LINE MARKER
- STREAM (WITH SILT SAMPLE ASSAY)
- GEOCHEM CONTOUR
- 56 CLAIM NUMBER

GEOCHEM CODE

COLOR NO. Cu Zn Mo (p.p.m.)

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

WON CLAIM GROUP
DAWSON MINING DISTRICT, Y.T.

NOTE: SAMPLE ANALYSIS
SOILS - TOTAL EXTRACTION
SILTS - PARTIAL (HCl)
USING ATOMIC ABSORPTION

CLAIM MAP

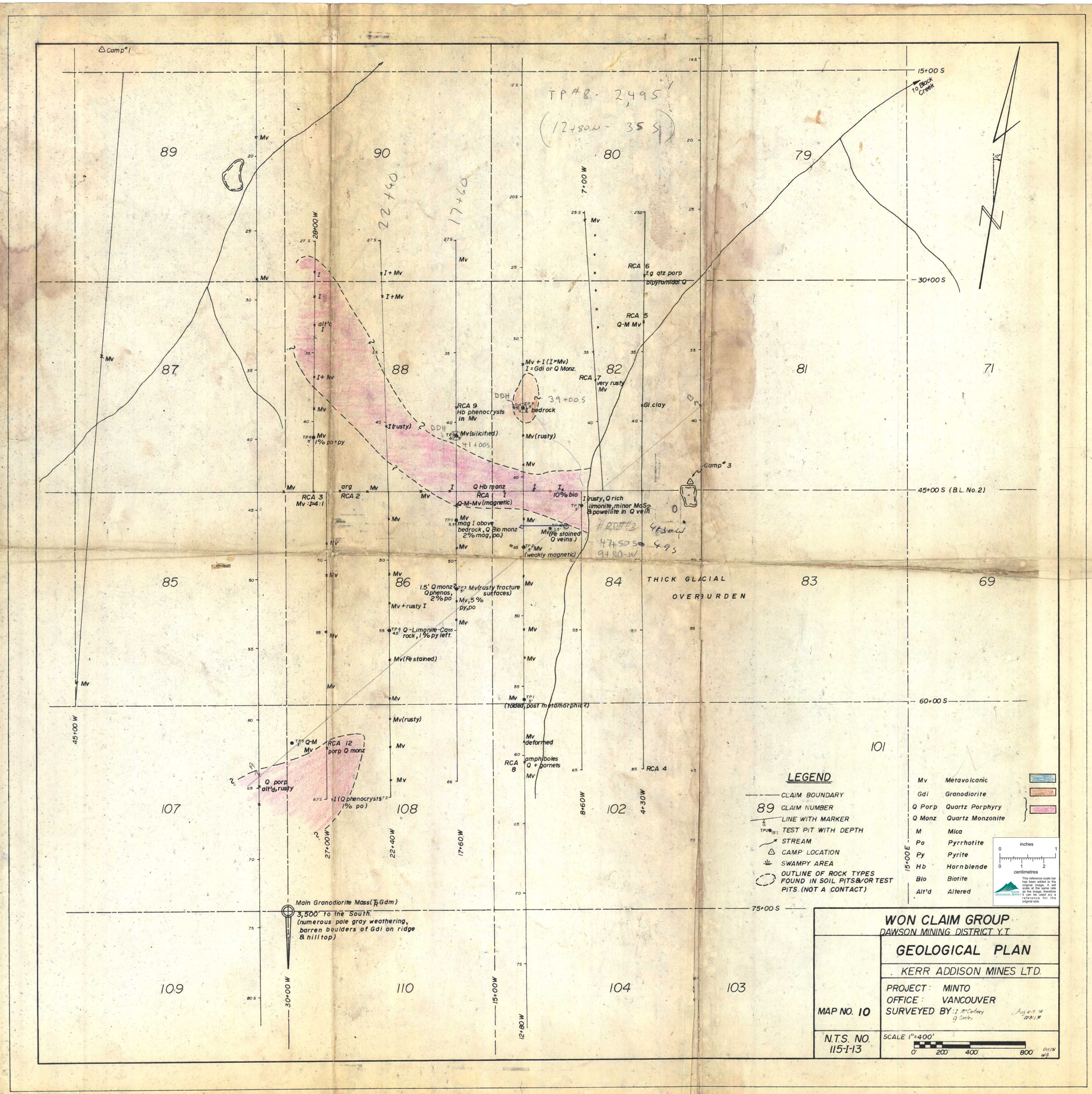
KERR ADDISON MINES LTD.

PROJECT: MINTO
OFFICE: VANCOUVER
SURVEYED BY: B. Lumley, G. Conley } Party B
T. McCartney, Q. Keyte } Party C
June 1-24, Aug 9-18, Aug 22-31

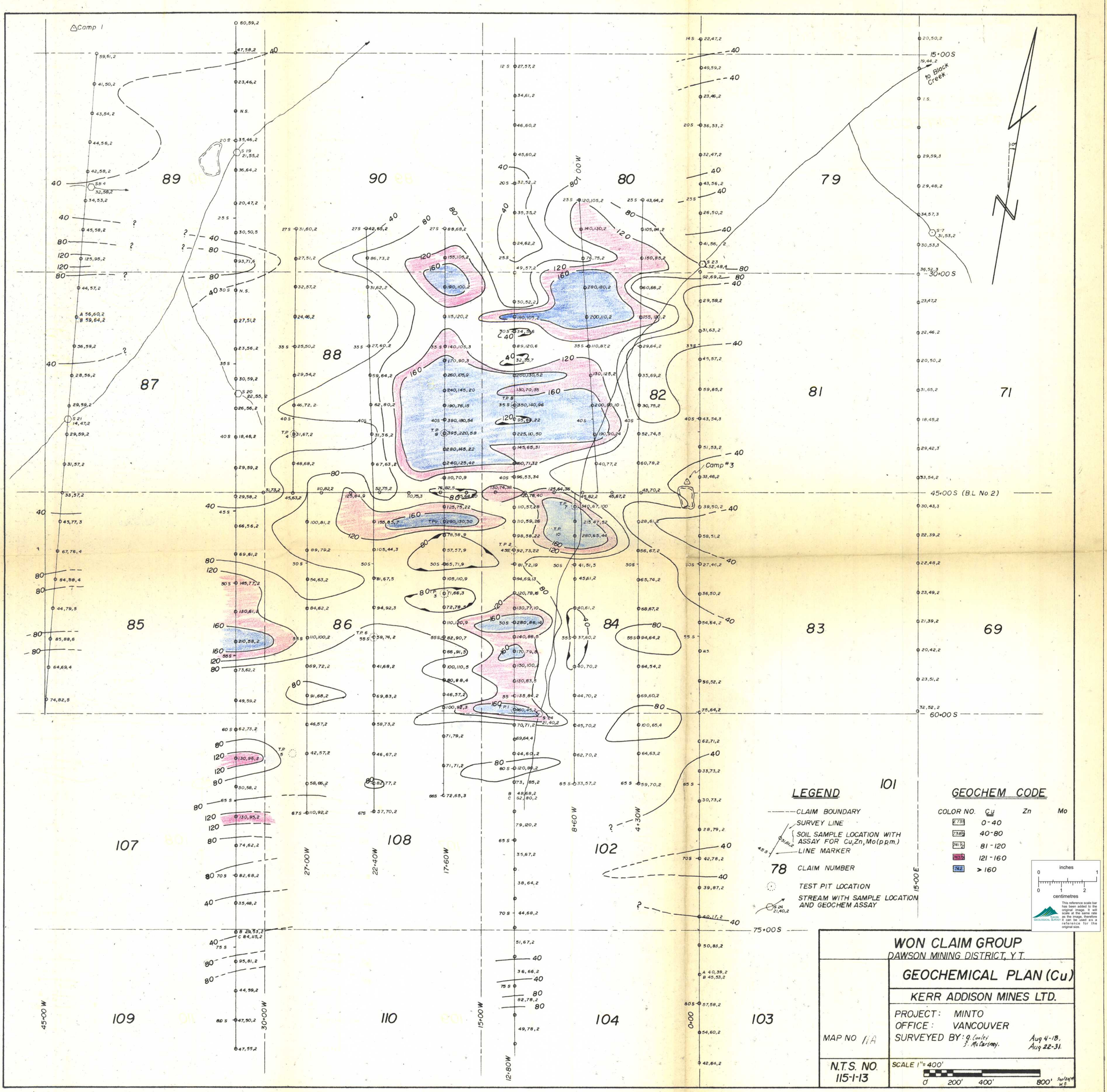
MAP NO. 7

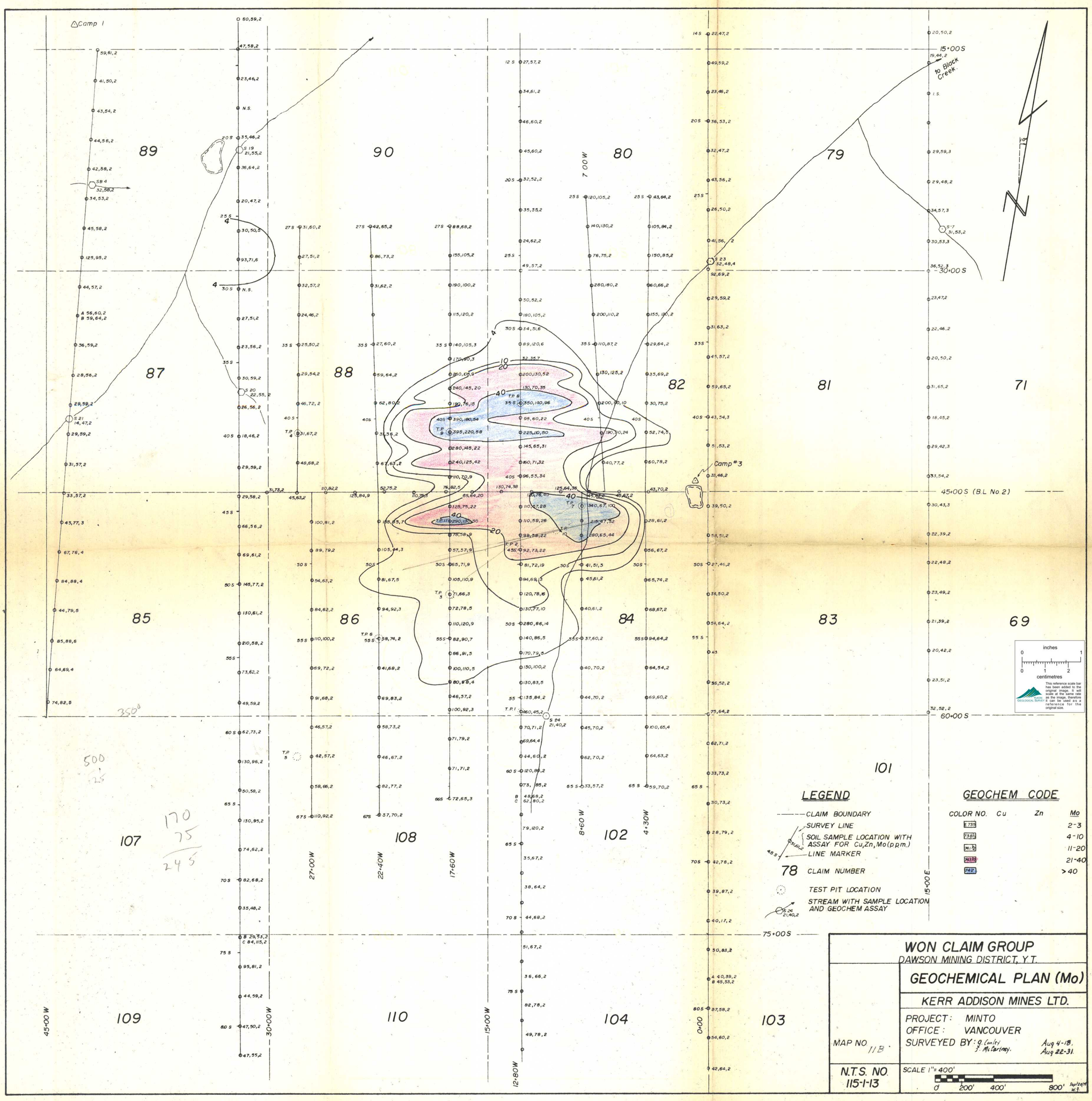
N.T.S. NO. 115-I-13

SCALE: 1"=1000'
0' 500' 1000' 2000' Scale 1/24000



WON CLAIM GROUP
DAWSON MINING DISTRICT Y.T.
GEOLOGICAL PLAN
KERR ADDISON MINES LTD.
PROJECT: MINTO
OFFICE: VANCOUVER
SURVEYED BY:
MAP NO. 10
N.T.S. NO. 115-I-13
SCALE 1"=400'
0 200' 400' 800'
LEGEND
CLAIM BOUNDARY
89 CLAIM NUMBER
LINE WITH MARKER
TEST PIT WITH DEPTH
STREAM
CAMP LOCATION
SWAMPY AREA
OUTLINE OF ROCK TYPES FOUND IN SOIL PITS &/OR TEST PITS (NOT A CONTACT)
Mv Metavolcanic
Gdi Granodiorite
Q Porp Quartz Porphyry
Q Monz Quartz Monzonite
M Mica
Po Pyrrhotite
Py Pyrite
Hb Hornblende
Bio Biotite
Alt'd Altered
THICK GLACIAL OVERBURDEN
Main Granodiorite Mass (Gdm) 3,500' to the South. (numerous pale gray weathering, barren boulders of Gdl on ridge & hilltop)
Camp #1
Camp #3
to Black Creek
15+00 S
30+00 S
45+00 S (B.L. No. 2)
60+00 S
75+00 S
45+00 W
30+00 W
28+00 W
27+00 W
22+40 W
17+60 W
15+00 W
12+80 W
8+60 W
7+00 W
4+30 W
15+00 E
TP #8 2,495
(12+80N - 35 S)
RCA 3 Mv I=4:1
RCA 2
RCA 5 Q-M Mv
RCA 6 f.g qtz porp bipyramidal Q
RCA 7 very rusty Mv
RCA 9 Hb phenocrysts in Mv
RCA Q-M-Mv (magnetic)
RCA 12 porp Q monz
RCA 8
RCA 4
Q Hb monz
Mv + I (I>Mv) I = Gdi or Q Monz.
I bedrock
Mv (silicified)
Mv (rusty)
10% bio
I rusty, Q rich limonite, minor MoS2 & powellite in Q vein
Mv mag I above bedrock, Q Bio monz 2% mag, po.
Mv (Fe stained Q veins)
Mv (weakly magnetic)
1.5' Q monz Q phenos, 2% po
Mv (rusty fracture surfaces)
Mv, 5% py, po
Mv + rusty I
Q-Limonite-Cass rock, 1% py left.
Mv (Fe stained)
Mv (rusty)
(folded, post metamorphic?)
Mv deformed
amphiboles Q + garnets
Q porp alt'd, rusty
I (Q phenocrysts 1% po)
Mv 1% po + py
I (rusty)
I + Mv
alt'd I
Gl. clay
DDH 1
39+00 S
41+00 S
#DDH 3
47+50 S
9+80 W


Camp 1
89
90
80
79
88
87
82
81
71
85
86
84
83
69
107
108
102
101
109
110
104
103
15+00S
to Black Creek
30+00S
45+00S (B.L No 2)
60+00S
75+00S
Camp #3
45+00W
30+00W
27+00W
22+40W
17+60W
15+00W
12+80W
8+60W
4+30W
0+00
15+00E
LEGEND
CLAIM BOUNDARY
SURVEY LINE
SOIL SAMPLE LOCATION WITH ASSAY FOR Cu,Zn,Mo(p.p.m.)
LINE MARKER
78 CLAIM NUMBER
TEST PIT LOCATION
STREAM WITH SAMPLE LOCATION AND GEOCHEM ASSAY
GEOCHEM CODE
COLOR NO. Cu Zn Mo
0-40
40-80
81-120
121-160
>160
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.
WON CLAIM GROUP
DAWSON MINING DISTRICT, Y.T.
GEOCHEMICAL PLAN (Cu)
KERR ADDISON MINES LTD.
PROJECT: MINTO
OFFICE: VANCOUVER
SURVEYED BY: G. Conley, J. McCartney. Aug 4-18, Aug 22-31.
MAP NO 1A
N.T.S. NO. 115-1-13
SCALE 1"= 400'
0 200' 400' 800'
Seltzer W.G.



LEGEND

- CLAIM BOUNDARY
- SURVEY LINE
- SOIL SAMPLE LOCATION WITH ASSAY FOR Cu, Zn, Mo (p.p.m.)
- LINE MARKER
- 78 CLAIM NUMBER
- TEST PIT LOCATION
- STREAM WITH SAMPLE LOCATION AND GEOCHEM ASSAY

GEOCHEM CODE

COLOR NO.	Cu	Zn	Mo
E 735			2-3
738½			4-10
741½			11-20
743½			21-40
747			>40

WON CLAIM GROUP

DAWSON MINING DISTRICT, Y.T.

GEOCHEMICAL PLAN (Mo)

KERR ADDISON MINES LTD.

PROJECT: MINTO
OFFICE: VANCOUVER
SURVEYED BY: G. Conley, J. McCartney. Aug 4-18, Aug 22-31.

MAP NO 11B

N.T.S. NO. 115-I-13

SCALE 1" = 400'

0 200' 400' 800'

WON CLAIM GROUP

DAWSON MINING DISTRICT Y.T.

MAGNETOMETER SURVEY

KERR ADDISON MINES LTD.

INSTRUMENT USED:
GEOMETRICS MODEL G 816
(Measuring total field intensity)

MAP NO. 12

PROJECT : MINTO
OFFICE : VANCOUVER
SURVEYED BY : J. McCartney, G. Conley — Aug 4-18/74

N.T.S. NO. 115-I-13

SCALE 1"=400'
0' 200' 400' 800'

LEGEND

- CLAIM BOUNDARY
- SURVEY LINE
- MAGNETIC INTENSITY (TOTAL FIELD) 57,000γ to 58,000γ RANGE (ONLY THE LAST FOUR DIGITS ARE SHOWN)
- LINE MARKER
- ISOMAGNETIC LINE
- STREAM
- T.P.2 ● TEST PIT LOCATION

COLOR CODE

COLOR NO.	MAGNETIC INTENSITY (gammas)
735	< 57,700γ
736	57,700 - 57,800γ
2465	57,800 - 57,900γ
751	57,900 - 58,000γ
738	58,000 - 58,200γ
743	58,200 - 58,400γ
744	58,400 - 58,600γ
745	58,600 - 58,800γ
E747	58,800 - 59,000γ
742	> 59,000γ

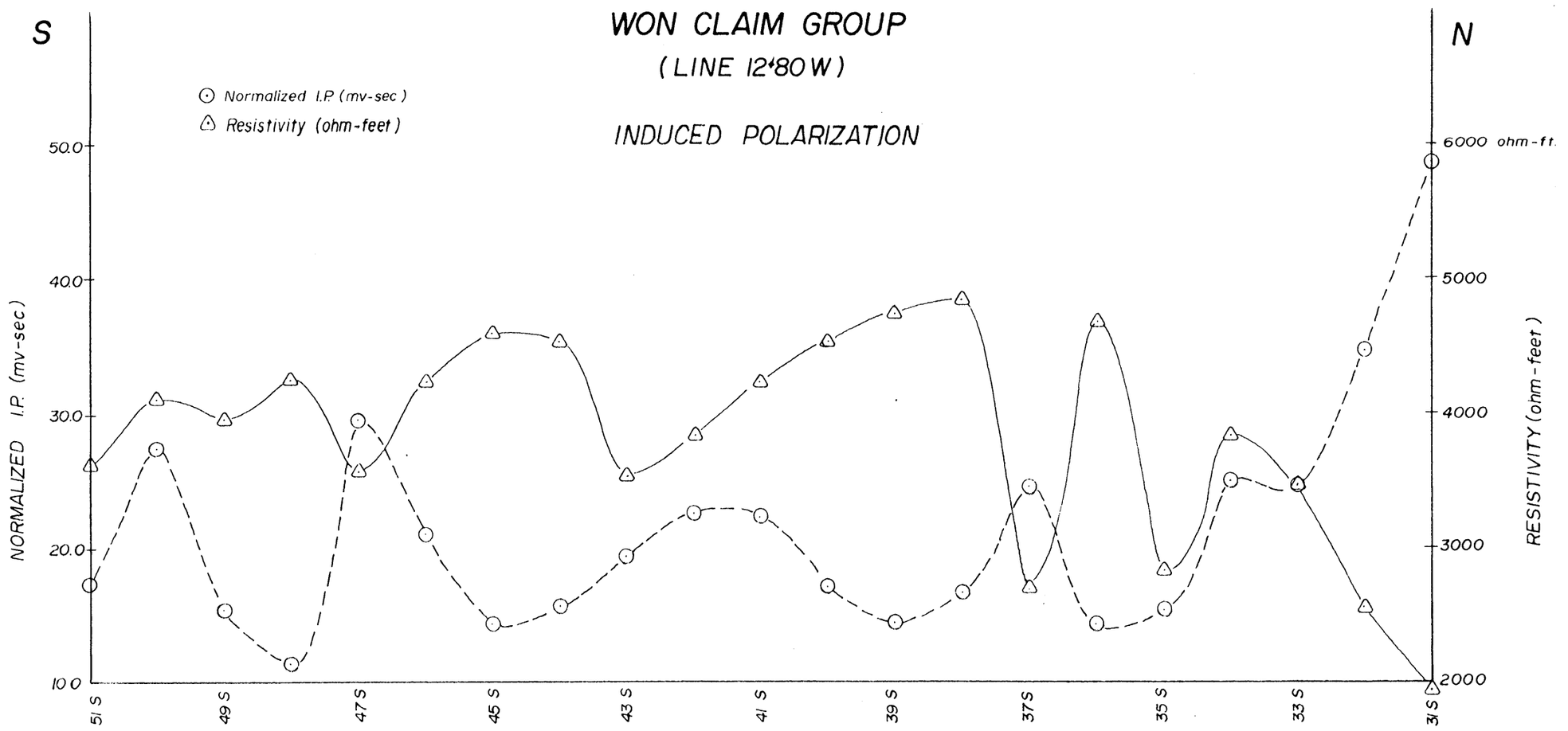
inches 0 1 — 0 1 2 centimetres

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.

YUKON GEOLOGICAL SURVEY

WON CLAIM GROUP
(LINE 12+80 W)

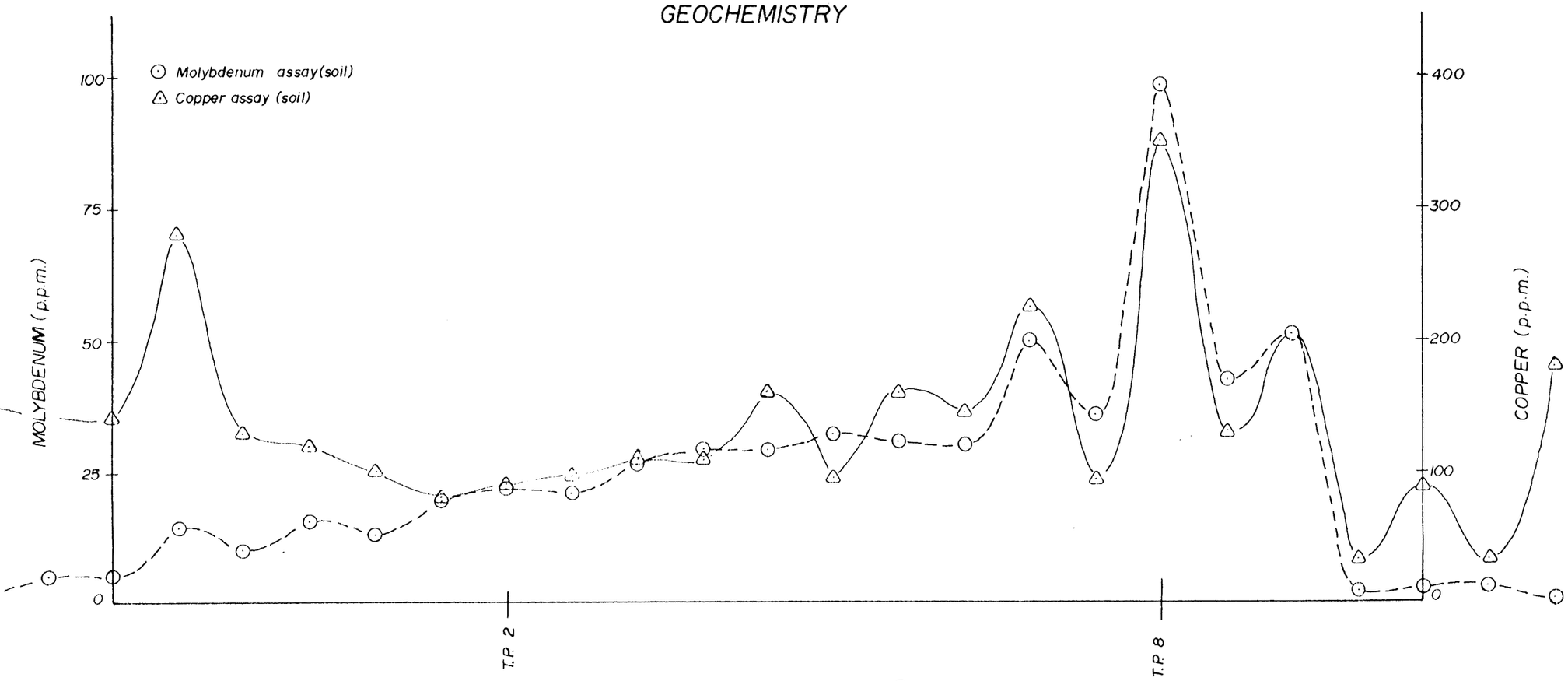
INDUCED POLARIZATION



INSTRUMENT:
Portable Time Domain Unit

ARRAY: WENNER
"A" spacing = 200'

GEOCHEMISTRY



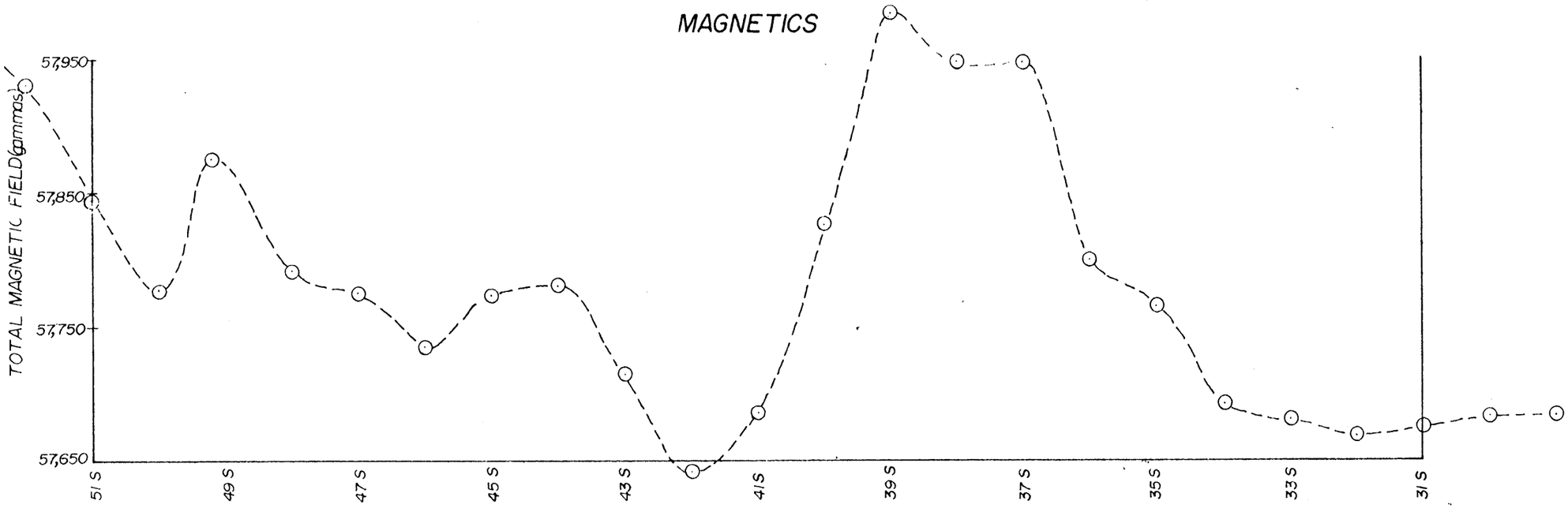
TEST PIT NO. 2

	Cu, Mo (p.p.m)
2-1	305, 74

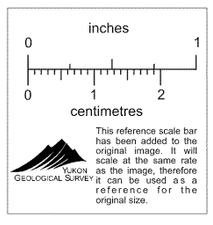
TEST PIT NO. 8

	Cu, Mo (p.p.m.)
8-1	47, 6
8-2	200, 79
8-3	440, 93
8-4	430, 91
8(R)	155, 22

MAGNETICS



INSTRUMENT:
GEOMETRICS MODEL G 816
(PROTON MAGNETOMETER)



SCALE 1" = 200'

SEPT 10, 1974. WJG.