

ASSESSMENT REPORT

GEOLOGICAL AND GEOCHEMICAL SURVEY

GRINGO CLAIM

Atlin Mining Division

Inklin River Area, B. C.

N.T.S. 104K/Tulsequah Sheet

58° 58'N

132° 23'W

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

10,752

OWNER: CHEVRON CANADA LIMITED

OPERATOR: CHEVRON STANDARD LIMITED

Authors: Mike Thicke
Ken Shannon

October, 1982

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INTRODUCTION

LOCATION AND ACCESS

The GRINGO claim is situated at 132° 23'W and 50° 58'N, about 9 km south of Victoria Lake (Figure 1). A helicopter provided access to the property from a base camp at Trapper Lake, B. C., 49 km southwest. The GRINGO claim is approximately 100 km southeast of Atlin, B. C.

CLAIM

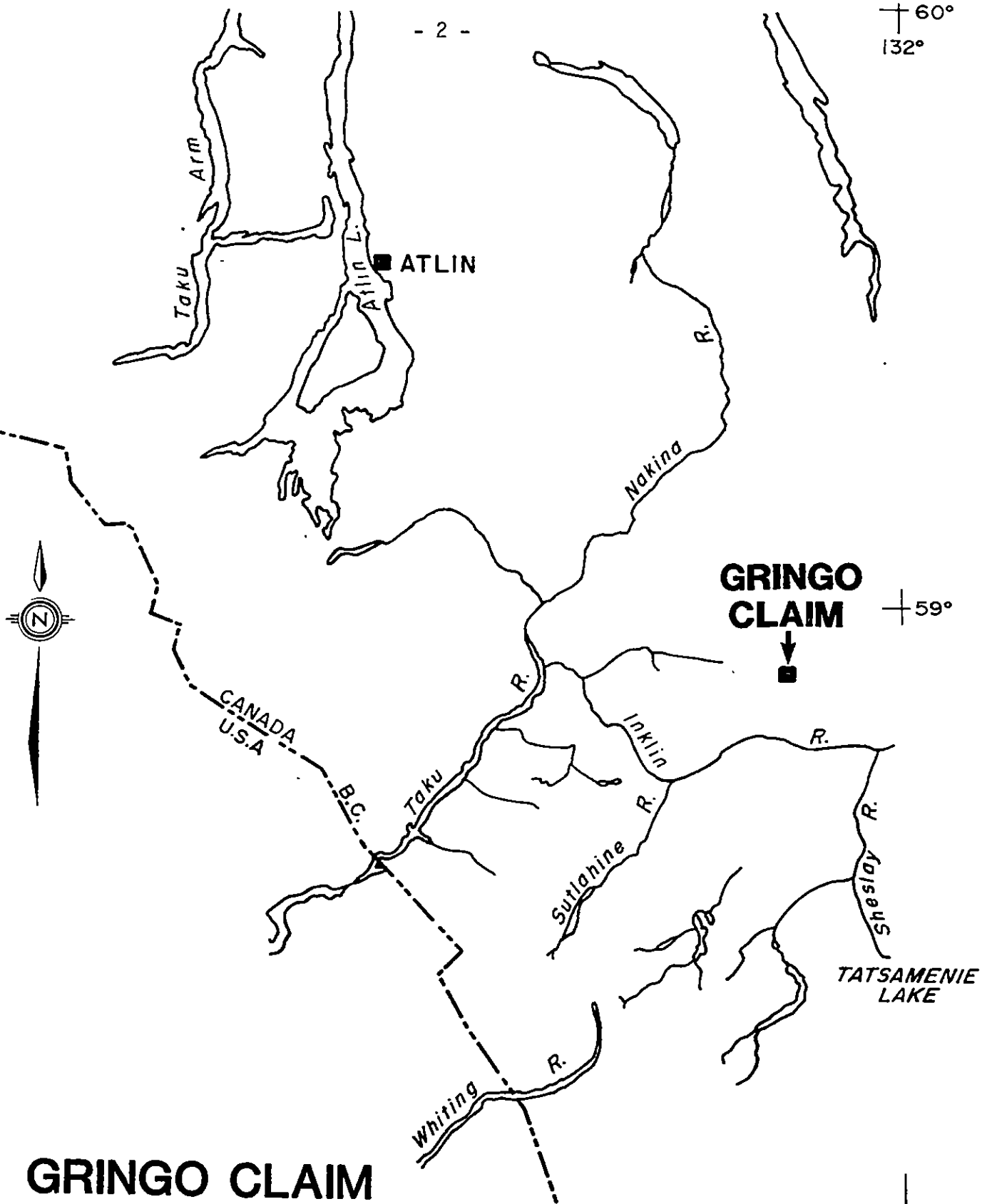
The GRINGO claim was staked during August, 1981.

<u>Claim</u>	<u>Record No.</u>	<u>Record Date</u>	<u>No. of Units</u>
GRINGO	1482	August 21, 1981	20

This claim covers previously unstaked ground.

REGIONAL GEOLOGY

The GRINGO claim is situated on and to the south of the Nahlin fault which dips steeply to the northeast. Near the vicinity of the claim Permian(?) ultramafic rocks are juxtaposed with Jurassic Inklin Formation sediments with a wedge of Triassic Stuhini Group volcanics between the ultramafic and sedimentary rocks (Souther, 1971). North of the fault is the Nahlin ultramafic body consisting mostly of peridotite and serpentinite, while still further north are Cache Creek Group limestone and sediments (Monger, 1975). South of the Nahlin fault a thick sequence of Inklin Formation sedimentary rocks, consisting of mostly sandstone and siltstone, is the predominant unit.



GRINGO CLAIM LOCATION MAP

M504



FIGURE 1

GEOLOGICAL SURVEY OF CLAIM

Mapping was confined to north and eastern parts of the claim as these areas are above tree-line and outcrop is well exposed. Serpentinite and minor hornblende-quartz diorite occupy areas in the north, Stuhini Group volcanics are centrally located, while Inklin Formation sediments occur in the southern part of the claim. Figure 2 illustrates the geology of the GRINGO claim.

(1) Serpentinite (Unit 1a)

Permian(?) serpentinite occurs mostly as talus rubble on the claim.

It is light to medium green in colour, weathering a brownish-red. The texture is usually dense and fine grained, often "jade-like". Slickensides can be observed on fractures within serpentinite in contact zones with volcanic rocks.

(2) Stuhini Group (Unit 2a)

Triassic Stuhini Group volcanic rocks consist mainly of andesite with minor lapilli tuff. The andesite is medium to dark grey, fresh and contains up to 0.5% disseminated pyrite. Minor vesicles are found within the andesite. The fracture density is moderate to high with psuedo-pillow structures in some outcrops possibly caused by fracturing. The lapilli tuff is not abundant. The tuff fragments are mostly rounded, some angular up to boulder size. The composition of the fragments is likely andesitic.

(3) Inklin Formation (Units 3a, 3b, 3c)

Jurassic Inklin Formation sediments include limy sandstone, sandy siltstone, black shale and limestone with interbedded greywacke and

siltstone. The limy sandstone is the most abundant unit within the Inklin Formation. It is fresh, coarse grained and moderately to well fractured. The sandy siltstone is dark grey, fine grained with bedding thicknesses from 3 to 5 cm. It reacts slightly to hydrochloric acid. The black shale is well fractured, fresh and found in central parts of the claim. The only mappable unit of limestone is found in the south central region of the claim. It is white to buff, fresh and medium to coarse grained.

(4) Intrusive Units Hornblende-quartz diorite (Unit 4)

The Post Middle Jurassic hornblende-quartz diorite occurs as small plugs within serpentinite rubble. It is coarse grained, fresh and blocky, often well fractured. It consists of about 20 - 30% hornblende, 10% quartz, with additional feldspar, biotite and other mafic minerals. There is possibly a weak foliation to the hornblende-quartz diorite.

MINERALIZATION AND ALTERATION

Mineralization and alteration is mostly confined to areas around the Nahlin fault. This can be traced by a distinctive reddish coloured quartz-Fe-carbonate altered ultramafic (Unit 1b) and a Fe-carbonate altered andesite (Unit 2b). Both the altered andesite and ultramafic contain local quartz and carbonate veins though not abundantly. Finely disseminated pyrite occurs irregularly up to 1%. Fuchsite blebs and stringers(?) occur in the altered ultramafic. Minor silicification of the Fe-carbonate altered andesite was observed locally. Inklin sediments are unaltered and unmineralized.

GEOCHEMICAL SURVEY OF CLAIM

A soil sample grid consisting of 121 soils made up the bulk of geochemical sampling on the GRINGO claim. A northwest trending baseline, 1 km long, was established in the northeast corner of the claim. Lines ran southwest from the base-line at 100 m intervals. Soil samples were collected at 50m intervals on the lines. Soil from the B-horizon was collected when possible. Four rock samples were collected from altered zones.

Soil samples were placed in kraft wet strength soil bags, air dried and shipped to Chemex Labs. North Vancouver, B. C. The samples were further dried and then sieved, with the -80 mesh portion being retained for analysis. Rock samples were crushed and then pulverized in a ring grinder to -100 mesh. For Au determination, a fire assay - atomic absorption technique is used with the fire assay bead being dissolved in HCl and HNO₃ then analyzed by conventional atomic absorption techniques. For Ag, a mixture of HClO₄ and HNO₃ is used to digest the sample, which is followed by atomic absorption spectrophotometry. The As analyses are done by standard colorometric techniques following an HClO₄ plus HNO₃ digestion. Antimony analyses are done by digesting the sample in HCl, then adding potassium iodide, extracting with TOPO - MIBK and then analyzing by atomic absorption spectrophotometry.

Rocks contain no anomalous values of Ag, As, Sb or Au. Soil samples have no anomalous values of Sb or As. A weak silver and gold anomaly was found in the southeast part of the grid. A soil containing 700 ppb Au was collected. This soil was described as poorly developed and contained abundant organic material, unlike most soil on the property. Geochemical results and sample locations are illustrated on Figures 3-8.

CONCLUSIONS

Eight man days were spent geochemically sampling and geologically mapping the GRINGO claim. Lithologies include serpentized ultra-mafic rocks, Stuhini Group volcanic rocks and Inklin Formation sediments. Quartz-Fe-carbonate alteration of Stuhini Group andesite and Permian(?) serpentinite is confined to the Nahlin fault zone on the claim. No significant mineralization was found within these altered zones.

RECOMMENDATIONS

Due to the lack of any significant geochemical response in either rock or soil it is recommended that no further work be done at this time.

REFERENCES

Monger, J.W.H. (1975). Upper Paleozoic rocks of the Atlin Terrane, Northwestern British Columbia and South-Central Yukon, Geological Survey of Canada, Paper 74-47.

Souther, J.C. (1971). Geology and mineral deposits of Tulsequah map-area, British Columbia. Geological Survey of Canada, Memoir 362, 84 p.

STATEMENT OF QUALIFICATIONS

I, Mike Thicke, graduated from the University of British Columbia in May, 1980 with a B.Sc. degree. Five seasons have been spent working in exploration geology in B.C., including three since graduation. I am presently employed as a geologist by Chevron Standard Limited of Vancouver, B. C.

A handwritten signature in cursive script that reads "Mike Thicke". The signature is written in black ink and is positioned above the printed name.

MIKE THICKE

STATEMENT OF QUALIFICATIONS

I, Ken Shannon, have worked as a geologist in B. C. on a seasonal basis since graduation from the University of British Columbia with a B.Sc. (Hons. Geology) in 1975. A M.Sc. degree was awarded from the Department of Geology at U.B.C. in May, 1982. I am employed as a geologist by Chevron Standard Limited of Vancouver, B. C. Work on the GRINGO Claim Group was done under my supervision.

A handwritten signature in black ink that reads "Ken Shannon". The signature is written in a cursive style with a large, sweeping flourish at the end.

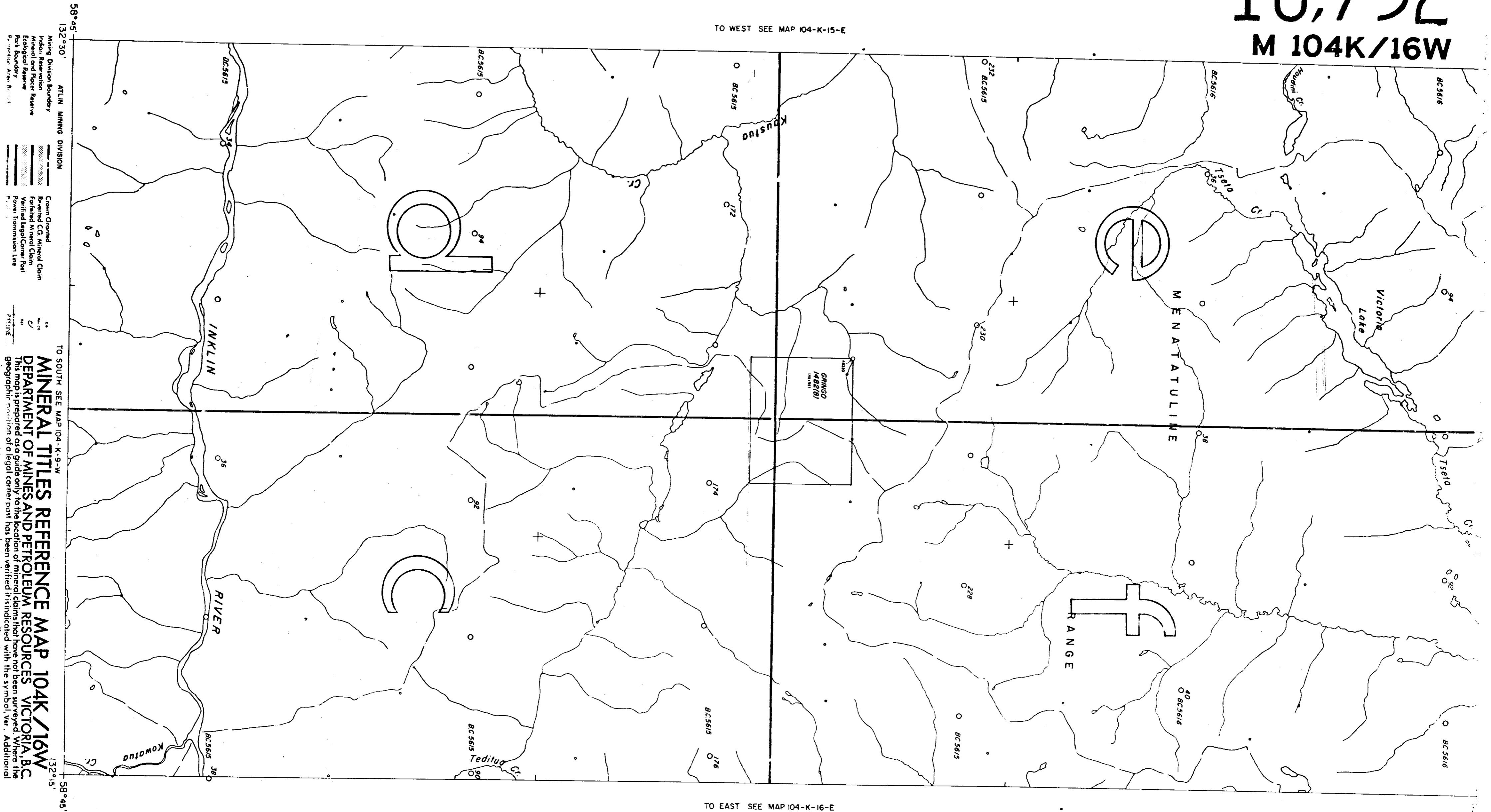
KEN SHANNON

10,752

M 104K/16W

TO WEST SEE MAP 104-K-15-E

TO EAST SEE MAP 104-K-16-E



58°45'
132°30'
ATLIN MINING DIVISION

Mineral Reservation
Ecological Reserve
Part Boundary
Provincial Acre Right

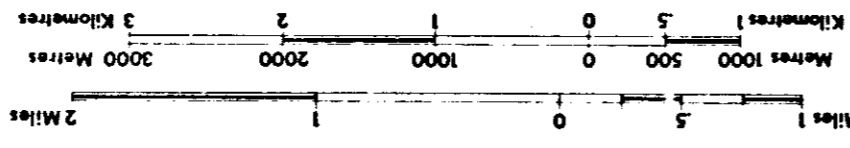
58°45'
132°30'

TO SOUTH SEE MAP 104-K-9-W
MINERAL TITLES REFERENCE MAP 104K/16W
DEPARTMENT OF MINES AND PETROLEUM RESOURCES VICTORIA, B.C.
This map is prepared as a guide only to the location of mineral claims that have not been surveyed. Where the geographic position of a legal corner post has been verified it is indicated with the symbol 'Ver'. Additional

LEGEND
CROWN-GRANTED MINERAL CLAIM
REVERSED C.G. MINERAL CLAIM
VERIFIED LEGAL MINERAL CLAIM
FOREVER LEGAL MINERAL CLAIM
LEGAL SURVEY
LEGAL CORNER POST & TAG NUMBER OTHER

UNLESS VERIFIED OR SURVEYED, THE MAP POSITION OF A LEGAL CORNER POST IS BASED ON THE LOCATOR'S SKETCH OR PLAN. LEGAL INFORMATION, APPLY TO THE OFFICE OF THE MINING DIVISION CONCERNED.

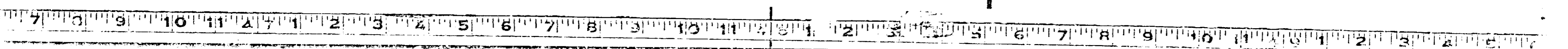
DATE OF MICROFILM: 81-09-24

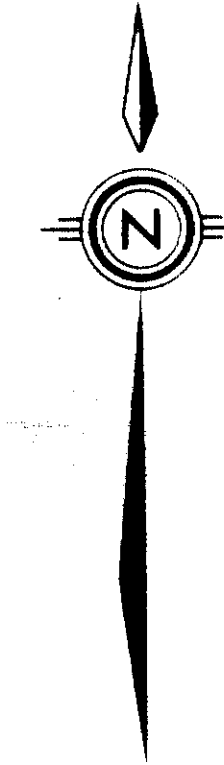
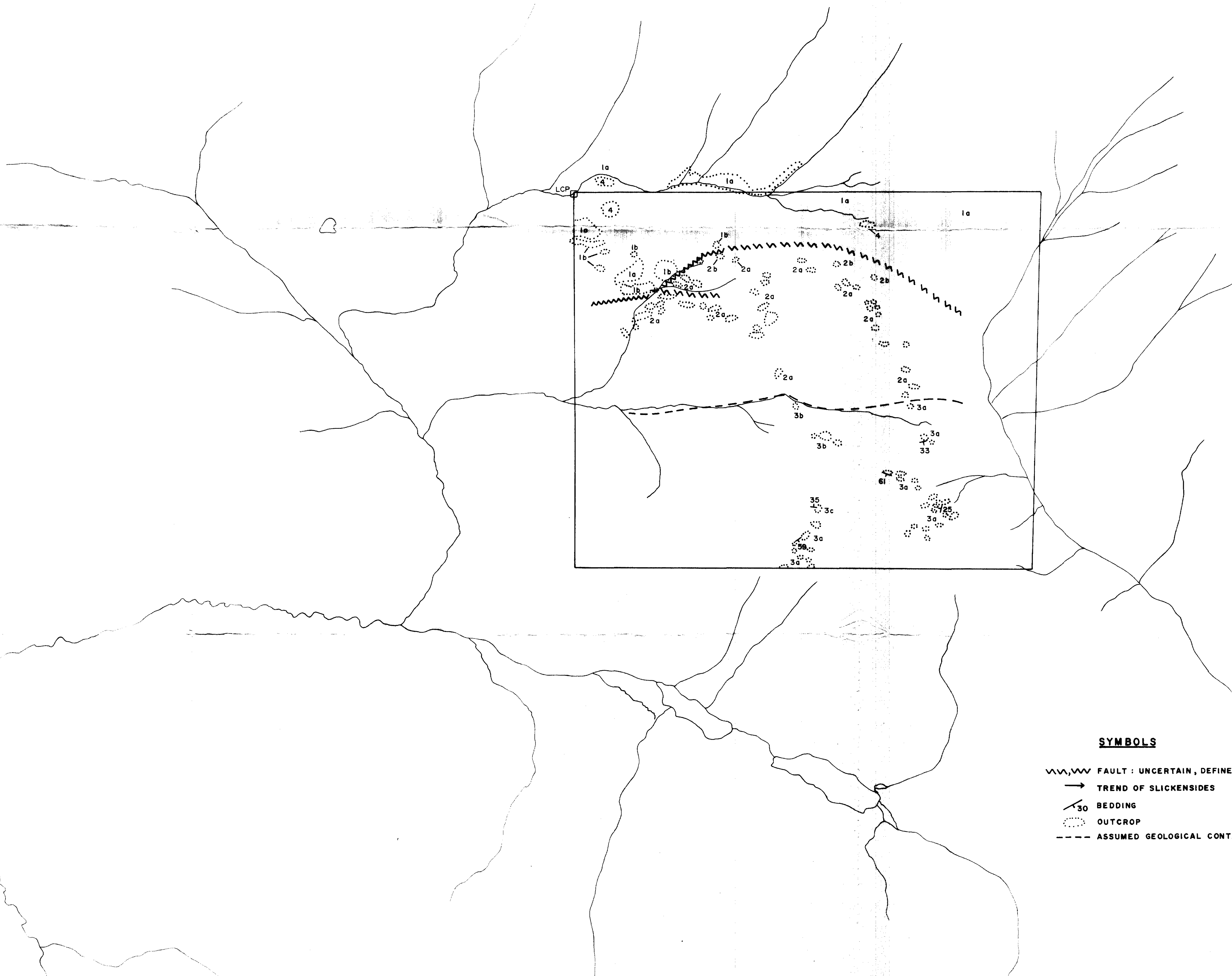


Province of British Columbia
Ministry of Energy, Mines and Petroleum Resources



M 104K/16W





LEGEND

- POST MIDDLE JURASSIC**
- 4 HORNBLENDE-QUARTZ DIORITE, WEAKLY FOLIATED
- JURASSIC INKLIN FORMATION**
- 3c LIMESTONE
 - 3b BLACK SHALE
 - 3a LIMEY SANDSTONE, SANDY SILTSTONE, INTERBEDDED GRAYWACKE, LIMESTONE, SILTSTONE, SHALE
- TRIASSIC STUHINI GROUP**
- 2a ANDESITE
 - 2b FE-CARBONATE ALTERED ANDESITE
- PERMIAN (?)**
- 1a SERPENTINITE, SERPENTINITE RUBBLE AND TALUS
 - 1b QUARTZ FE-CARBONATE ALTERED ULTRAMAFIC



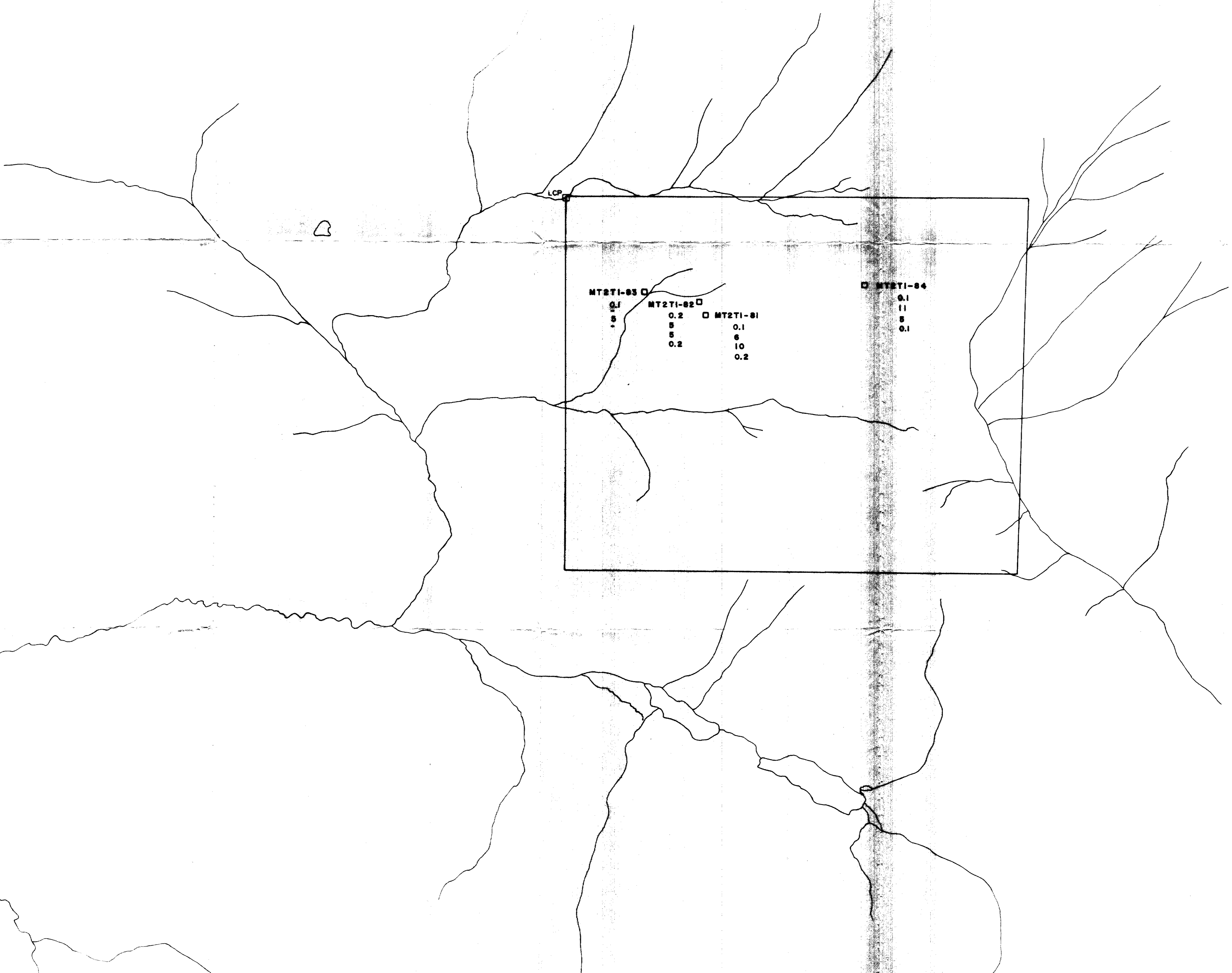
SYMBOLS

- FAULT: UNCERTAIN, DEFINED
- TREND OF SLICKENSIDES
- BEDDING
- OUTCROP
- ASSUMED GEOLOGICAL CONTACT

**GEOLOGICAL BRANCH
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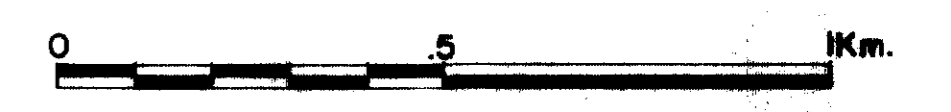
10,752

Chevron Standard Limited Minerals Staff			
GRINGO CLAIM			
GEOLOGY			
FIGURE No 2	PROJECT No M504		
DATE OCT-92	REVISIONS	SCALE: 1:10000	
NTS No 104 K			FILE No
COMPILED BY KRS			G-8



LEGEND

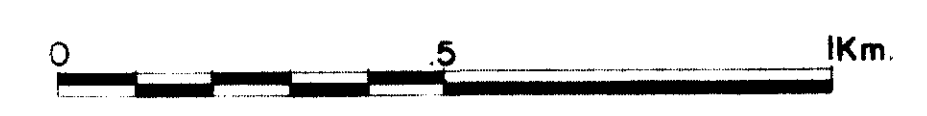
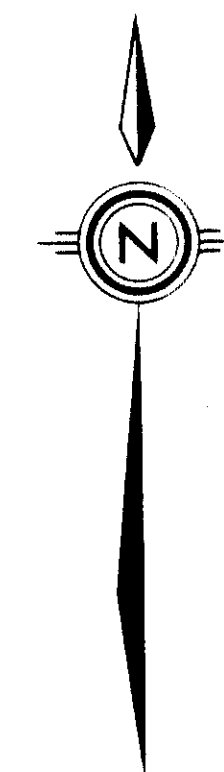
- ROCK SAMPLE
- 0.6 ppm - Ag
- 6.6 ppm - As
- 40 ppb - Au
- 6.2 ppm - Sb



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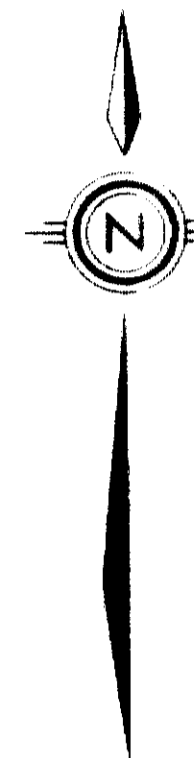
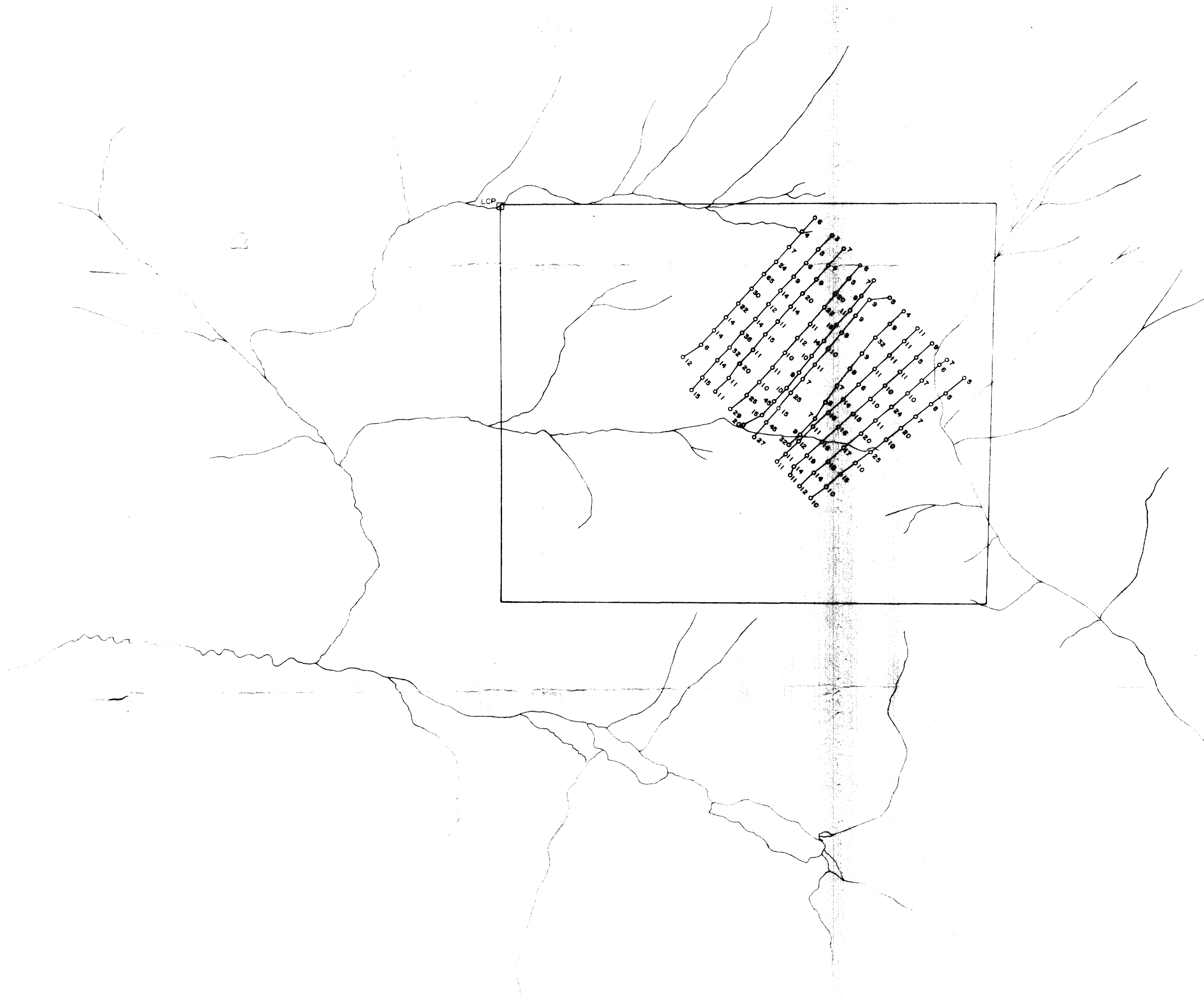
GRINGO CLAIM ROCK GEOCHEMISTRY AND SAMPLE LOCATION			
FIGURE No. 3	PROJECT No. M504		
DATE 07/81	REVISIONS	SCALE 1:10000	
NTS No. 100 K			C-81
COMPILED BY ERS			



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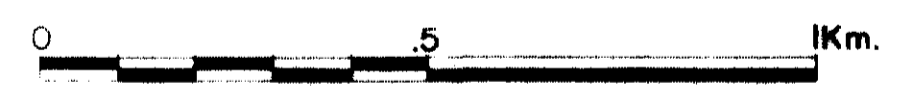
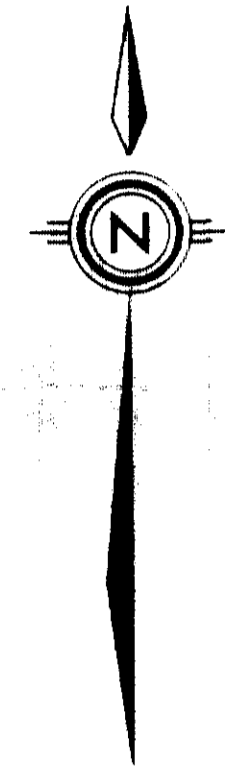
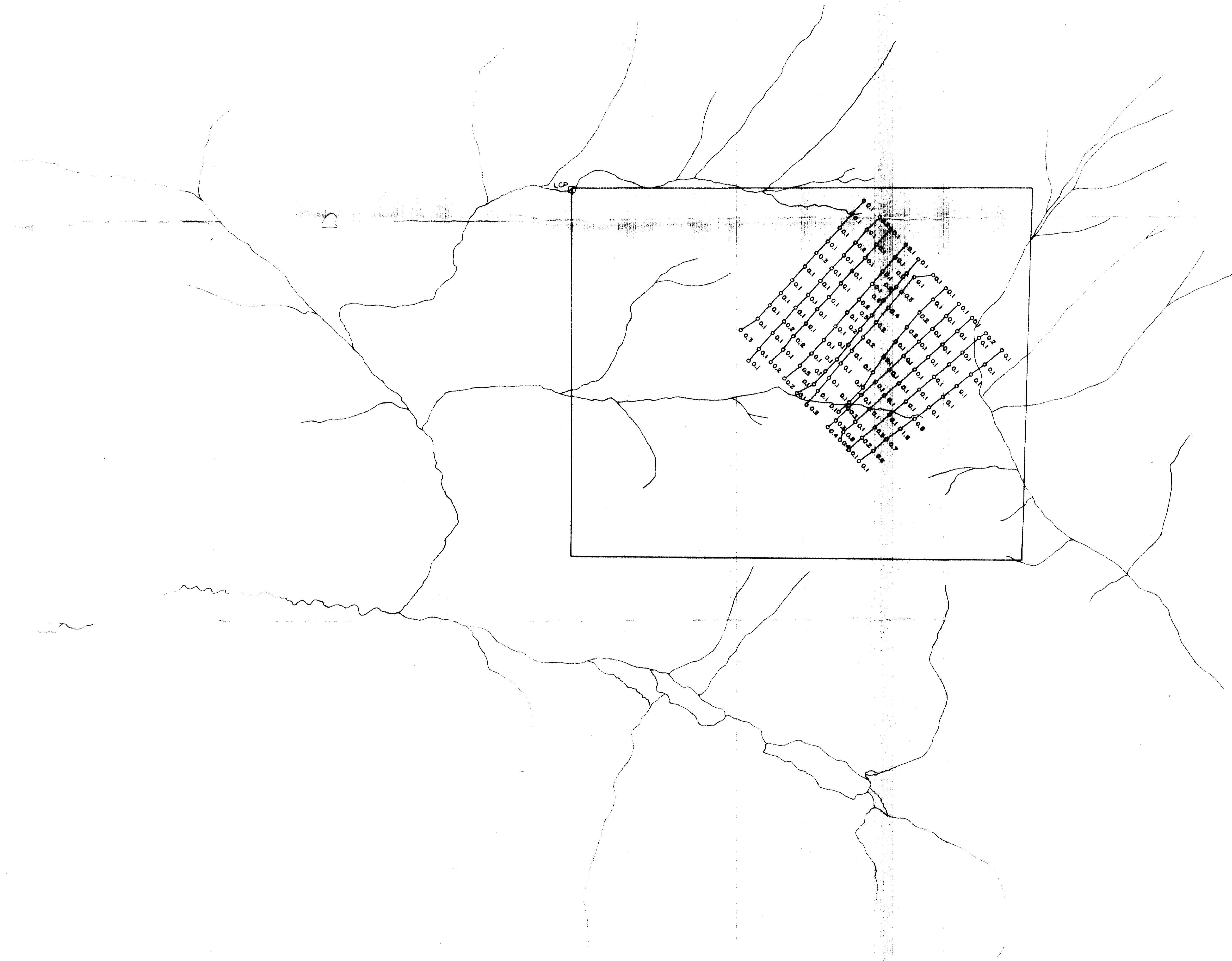
Chevron Standard Limited Minerals Staff	
GRINGO CLAIM	
SOIL SAMPLE LOCATION	
FIGURE No 4	PROJECT No M504
DATE OCT 82	REVISIONS
SCALE 104 K	
COMPILED BY KRS	S-23



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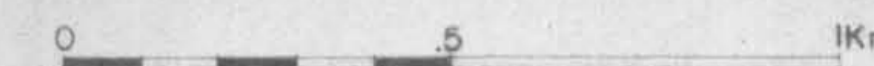
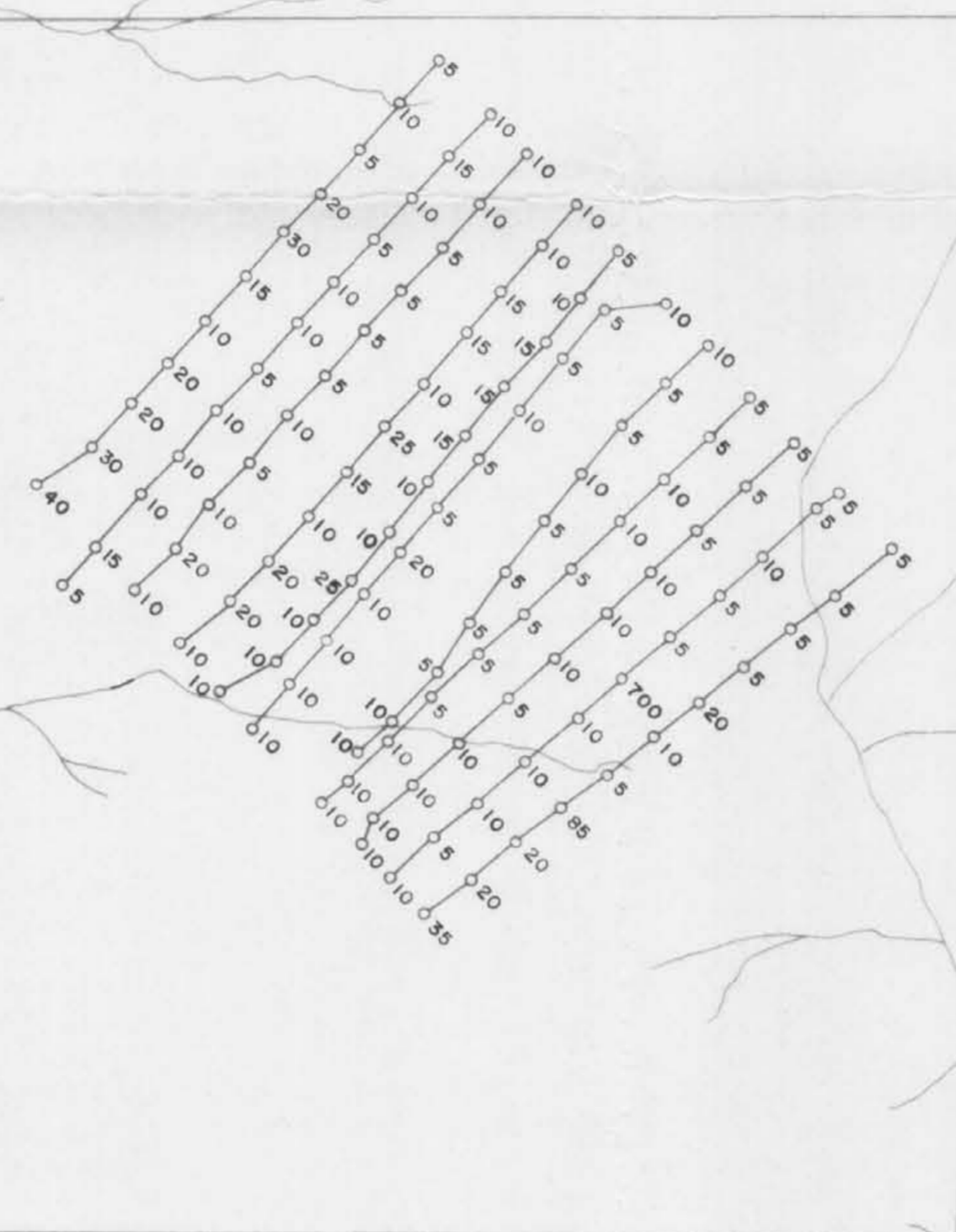
 Chevron Standard Limited Minerals Staff	
GRINGO CLAIM SOIL GEOCHEMISTRY As - ppm	
FIGURE No. 5	PROJECT No. M504
OCT 82	10000
104 K	
104 K	C-82



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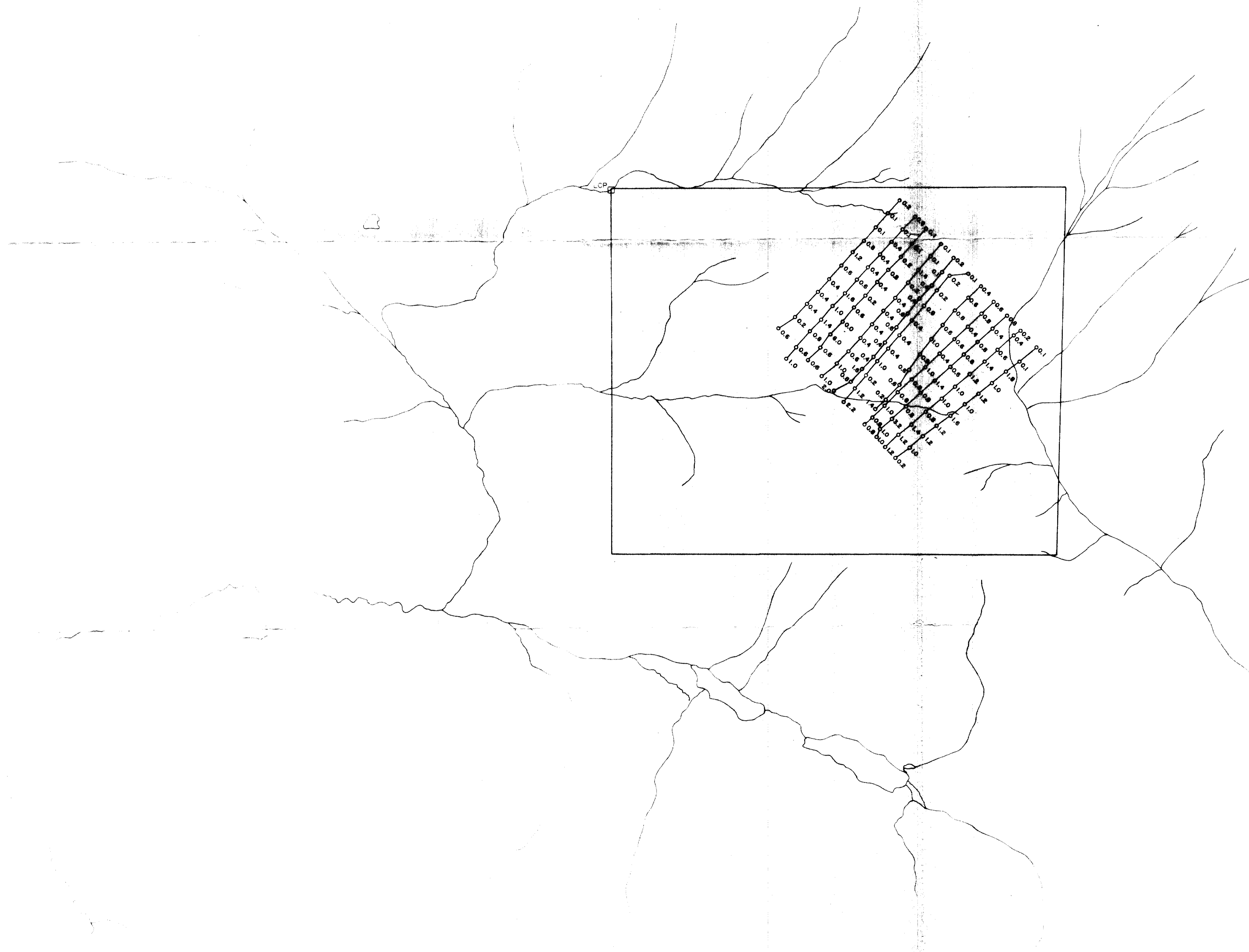
 Chevron Standard Limited Minerals Staff	
GRINGO CLAIM	
SOL. GEOCHEMISTRY Ag - ppm	
FIGURE No. 6	PROJECT No. M504
DATE OCT 82	REVISIONS
DRAWN BY 104 K	
SAMPLED BY 104 K	
C-83	



**GEOLOGICAL BRANCH
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 Chevron Standard Limited Minerals Staff	
GRINGO CLAIM	
SOIL GEOCHEMISTRY Au - ppb	
FIGURE No 7	PROJECT No M504
DATE OCT 82	REVISIONS
SCALE 1:10000	
MAP No. 104 K	
COMPILED BY KRS	C-84



**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

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 Chevron Standard Limited Minerals Staff		
GRINGO CLAIM		
SOL GEOCHEMISTRY		
Sb - ppm		
FIGURE No 8	PROJECT No M504	
DATE OCT 82	REVISIONS	10000
SCALE 1:4000		
COMPILED BY KRS		C-85