

81 - #1049 - #9814

MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
9814
NO. _____

ASSESSMENT REPORT

Grid Location
and
Soil Geochemical Survey
near
Ferguson, L.C.
50°41'N, 117°29'W

Part 1
of 2

Claims: Fissure 1, Mohawk 4, 5, 6

Owner/operator: Westmin Resources Ltd.

Mining Division: Revelstoke
NTS: 82K/11

P. Wojdak

December, 1981

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- 4) " " " Cu
- 5) " " " Pb
- 6) " " " Zn
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INTRODUCTION

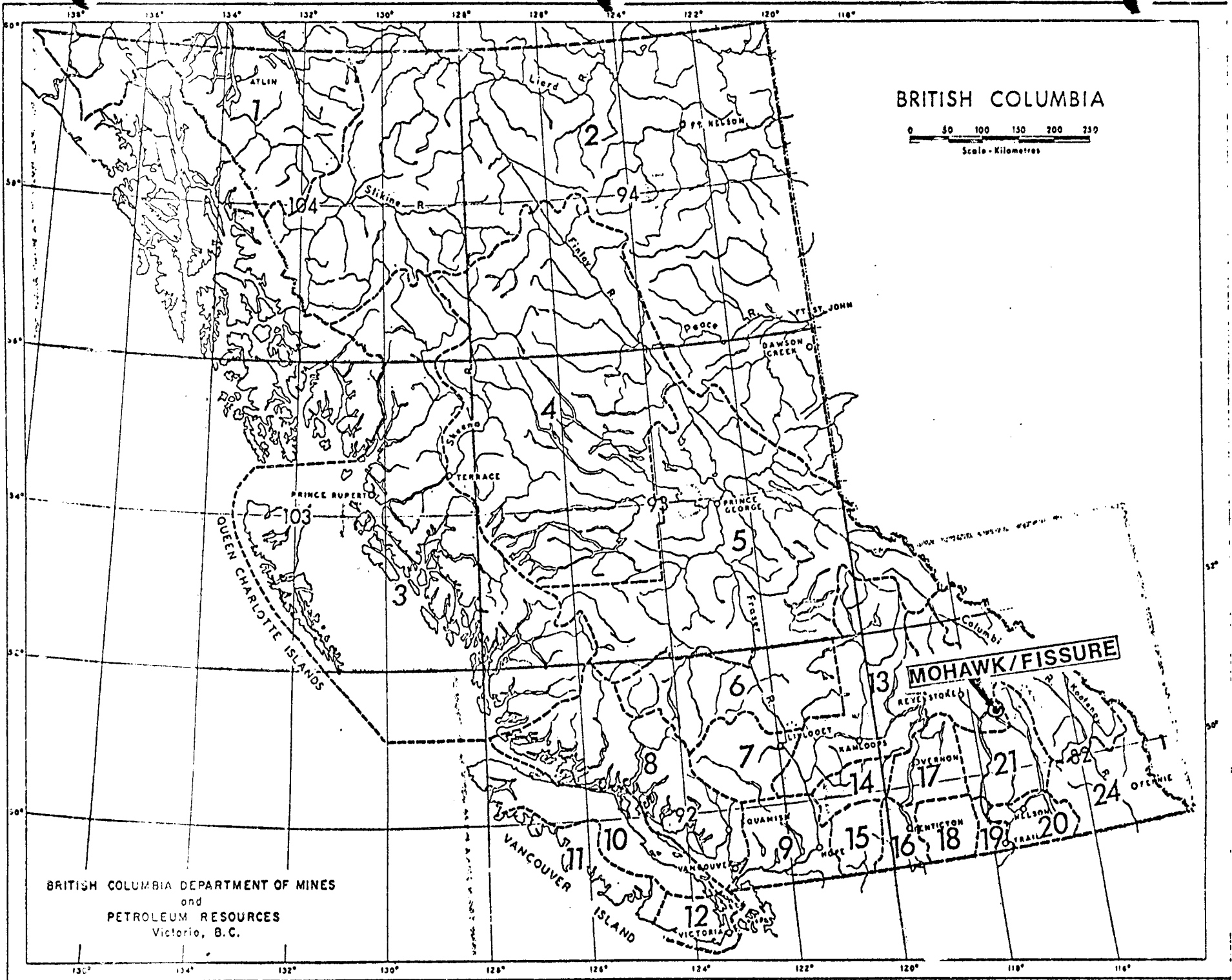
The Fissure and Mohawk claims are located 60 km southeast of Revelstoke, B.C. and 5 km northeast of Trout Lake (Figure 1). The claims extend north-east from the former community of Ferguson, B.C. Access is by paved highway and gravel road south from Revelstoke. The area is within the rugged Selkirk Mountains and elevations range from 3,000 feet at Ferguson to peaks in excess of 8,000 feet. The 1981 soil sampling was on moderate, forested (cedar, fir and hemlock) slopes between 3,500 and 5,500 feet.

Prospectors located a series of high grade vein occurrences at the head of Fissure and Broadview Creeks by 1900. These include the Bluebell, True, Fissure, Great Northern and Broadview showings which are held by a core of crown-granted claims and bordered by the Westmin-owned Mohawk and Fissure claims (Fissure Group). The True Fissure produced 5,076 tons between 1908 and 1918 with a recovery grade of 0.039 oz Au/ton, 8.30 oz Ag/ton, 5.2 percent Pb, 2.8 percent Zn.

Between July 26 and August 6, 1981, Westmin personnel carried out a soil geochemical survey of the Fissure 1 claim, a silt survey of Alpha Creek and follow-up of an anomaly on the 1980 grid. Two kilometres of baseline were axe cut and 451 soil and silt samples were collected.

REGIONAL SETTING

The area is underlain by the lower Paleozoic Lardeau Group (Read and Wheeler, 1976). The mafic volcanic Jowett Formation is overlain by the clastic sedimentary Broadview Formation. These are tightly folded about gently southeast or northwest dipping fold axes and the Fissure area lies near the crest of the Silver Cup Anticline. Silver Cup Fault is a regionally extensive feature apparently produced by shear on the northeast limb of the anticline. Great Northern Fault is a local feature and hosts a quartz, ankerite, pyrite, sphalerite, galena, tetrahedrite and chalcopyrite-bearing vein zone (the showings listed above). There are several other vein occurrences in the area; Silver Cup, Nettie L, Ajax.



BRITISH COLUMBIA DEPARTMENT OF MINES
and
PETROLEUM RESOURCES
Victoria, B.C.

GRID PREPARATION

A 2.0 km baseline at 160° was established on the Fissure 1 claim using the well defined hilltop at the Broadview showing as a defined starting point. This was tied into the 1980 soil grid. Soil samples were collected at 50 m intervals on lines spaced 100 m apart. Location of the 1980 and 1981 grids is shown on Figure 2. A mattock was used to collect B-horizon soil samples. These were shipped to Chemex Labs in North Vancouver for standard atomic absorption analyses.

SOIL GEOCHEMISTRY (Figures 3 - 6)

The silver map shows a series of non-connected high values on lines 7 + 00 S, 9 + 00 S, 14 + 00 S and 18 + 00 S that trends about 155°. Most are single sample highs except the anomaly at 14 + 00 S, 600 E which is more complex in outline and extends to 16 + 00 S. The copper and lead maps show weak correlation with this 155° trend except for a localized anomaly at 14 + 00 S, 600 E. There is a coincident high zinc value at 14 + 00 S, 600 E and a strong (to 1850 ppm) zinc anomaly on the 155° trend on lines 10 + 00 - 12 00 S, between two of the high silver values.

A modest lead anomaly occurs on lines 13 + 00 and 14 + 00 S, 100 - 200 E and a broad area of high zinc values occur near the baseline at 16 + 00 to 20 + 00 S. Neither of these correlate with silver or copper. Similarly the copper map shows scattered highs which, aside from 14 + 00 S, 600 E, do not correlate well with high Pb, Zn or Ag.

SOIL ANOMALY FOLLOW-UP (Figure 7)

A zone with anomalous soil geochemistry on lines 47 + 00 to 54 + 00 NW of the 1980 grid was investigated by prospecting, geological mapping and soil profile sampling. Most attention was paid to the silver map in planning the follow-up. The 500 m long Ag anomaly trends downslope in an area of high runoff (a gully with braided stream channels) and hummocky terrain. Graphitic

phyllites and greywacke strike parallel to the trend of the anomaly but percentage outcrop is low, perhaps 2 percent. Sparse quartz stringers and lenses were found but no significant quartz vein float. Some areas of ferricrete (surficial deposits cemented by iron precipitates) were noted. Elsewhere on the property ferricrete deposits are spatially related to faults, representing iron leached and redeposited by circulating ground water. Soil profile samples were collected on line 48 + 00 NW (two sites) and 49 + 00 NW (one site), with results tabulated on Figure 7. These show silver values decrease substantially (35 percent) with sample depth from about 2 ppm at 10 cm depth to about 1.5 ppm at 45 cm. Lead values increase dramatically from 8 ppm to 13 - 24 ppm, although the latter are still sub-anomalous. Copper and zinc are highly variable, showing both increases and decreases. Nonetheless, the higher surface silver values suggest the anomaly is a surficial feature.

SILT GEOCHEMISTRY

A detailed silt sampling traverse was conducted on Alpha Creek located on the west margin of the Fissure 1 claim and Fissure 1981 soil grid. The results of 29 samples collected are shown on Figure 2. Silver values are 0.1 ppm except for a modest high value of 0.3 ppm about midway along the stream. Higher base metal values occur in this area as well, copper up to 120 ppm and zinc to 390 ppm. The highest lead value, 72 ppm, is located on an upper tributary.

CONCLUSIONS

Projection of the fault which hosts the True Fissure and Broadview showings along its south-southeasterly trend matches the linear 155° trending high silver soil values. Although these values constitute modest anomalies they warrant follow-up mapping and prospecting, especially where there are coincident high base metal values.

The 1980 silver (-lead-zinc) soil anomaly was not satisfactorily explained. The source could be high background metal content in underlying argillaceous metasediments. Alternately, the explanation might be related to faults; the trace of the Silver Cup Fault is believed to be a short distance upslope of the anomaly. However if this is so, source of the metal in circulating ground water could still be either sulphide mineralization or metasediments.

No substantial silt anomalies were found.



P.J. Wojdak
Project Geologist

BIBLIOGRAPHY

READ, P. B. and WHEELER, J. O. (1976) Geology of Lardeau West-Half; GSC Open File 432.

APPENDIX 1
Statement of Expenditures
on
Fissure 1, Mohawk 4, 5, 6
Work Period
July 26 - August 6, 1981

Salaries

Trent Bollinger (soil anomaly follow-up) 2 days @ \$63	\$ 126.00
Don Dudek (supervise soil sampling) 1 day @ \$68	68.00
Jim Eenkooren (soil sampling) 11 days @ \$43	473.00
Alex Marr (soil anomaly follow-up) 1 day @ \$71	71.00
Pat Meade (soil and silt sampling) 11 days @ \$45	495.00
Paul Wojdak (Project supervisor) 1 day @ \$120	120.00

Field Equipment

Flagging, hip chain string, sample bags, etc.	100.00
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Analyses

451 soil and silt samples @ \$4.14 for Ag, Cu, Pb, Zn analyses	1,867.14
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Sample Shipping

	100.00
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Transportation

Four wheel drive truck, gas, repairs	294.86
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Camp Costs

Groceries: 27 man days @ \$16	432.00
Equipment: pro-rated cost of tents, lumber, cots, propane, etc.	350.00

Drafting of Maps

3 days @ \$70	210.00
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Report Writing

	130.00
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\$4,837.00
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P. Wojdak

APPENDIX 2

STATEMENT OF QUALIFICATIONS

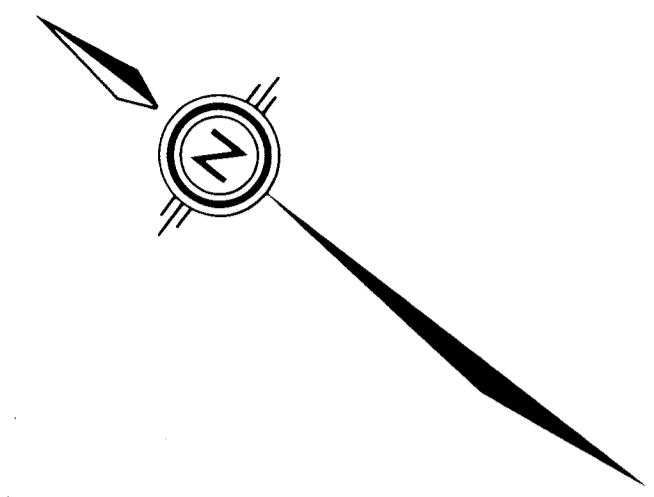
I, PAUL J. WOJDAK of the Municipality of Delta,
Province of British Columbia, hereby certify:

1. That I am a geologist residing at 11405 85th Avenue,
Delta, British Columbia with a business address at
Suite 904, 1055 Dunsmuir Street, P.O. Box 49066,
Four Bentall Centre, Vancouver, British Columbia
V7X 1C4.
2. That I graduated with a B.Sc. (Honours) in Geology
and Chemistry from McMaster University, Hamilton,
Ontario in 1971 and with a M.Sc. in Geology from
the University of British Columbia in 1974.
3. That I am a member of the Geological Association
of Canada.
4. That I have practised geology with Cominco Limited
and Westmin Resources Limited from 1974 to 1981.

Dated this 15 day of December 1981 at Vancouver,
British Columbia.

Signed

P. J. Wojdak
P. J. Wojdak, M.Sc.



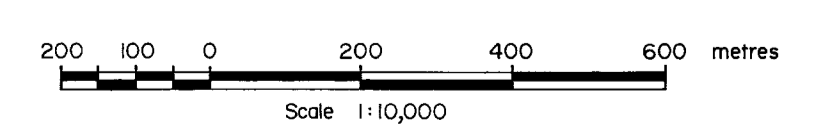
LEGEND

Sample Number & Result (Ag, Cu, Pb, Zn ppm)

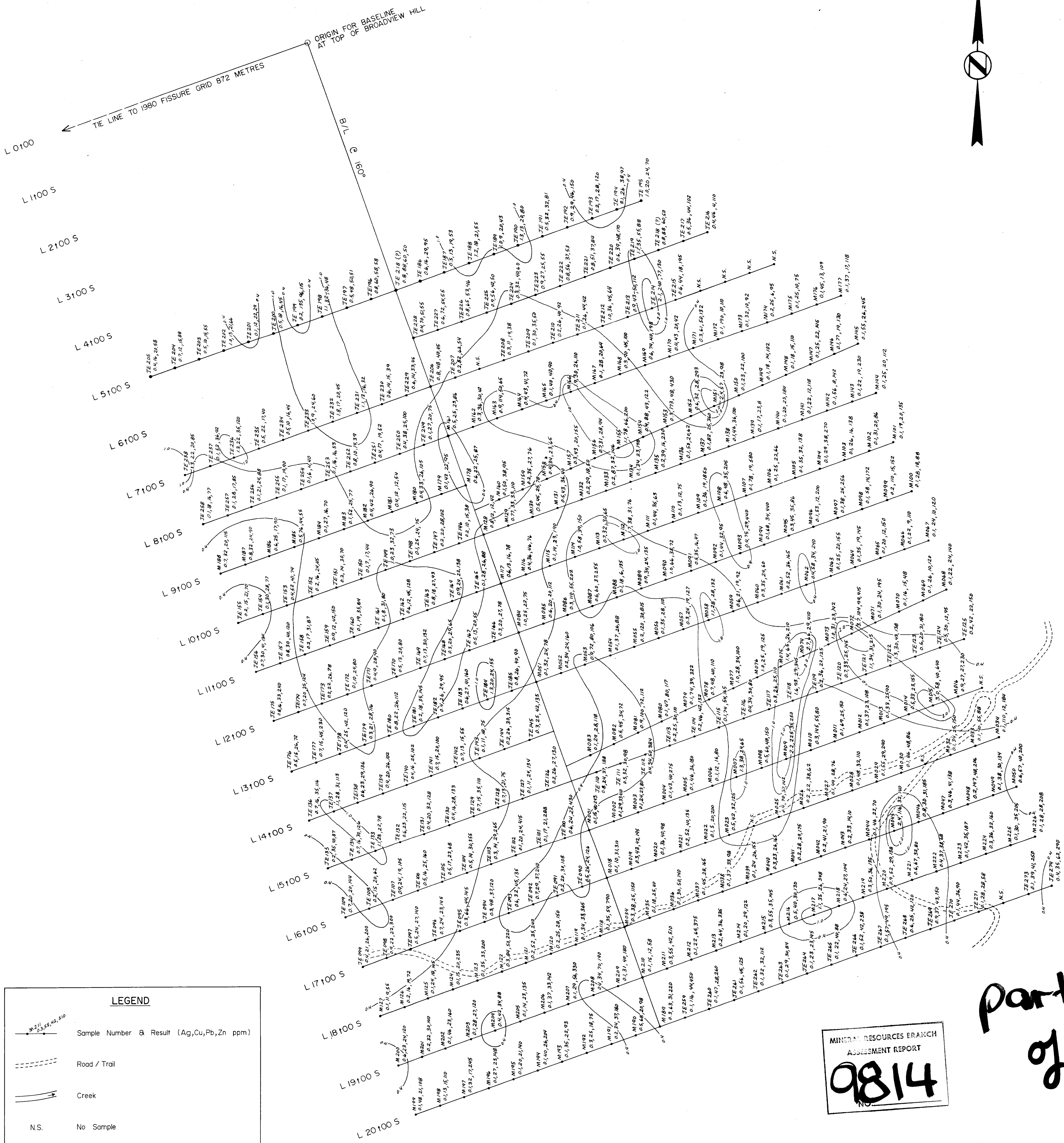
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MINERAL RESOURCES BRANCH
ASSESSMENT REPORT
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WESTMIN RESOURCES LTD.
MOHAWK PROJECT
CLAIMS, GRID LOCATION & SILT GEOCHEMISTRY



Date: Nov. 1981 Drawn By: R. Ivany FIGURE: 2



LEGEND

- Sample Number & Result (Ag,Cu,Pb,Zn ppm)
- Road / Trail
- Creek
- N.S. No Sample

Contour Interval

- Ag
- 0.4-0.99ppm
- 1.0-1.99ppm
- ≥ 2.0ppm

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WESTMIN RESOURCES LTD.

MOHAWK PROJECT

SILVER SOIL GEOCHEMISTRY

FISSURE GRID

Scale 1:4,000

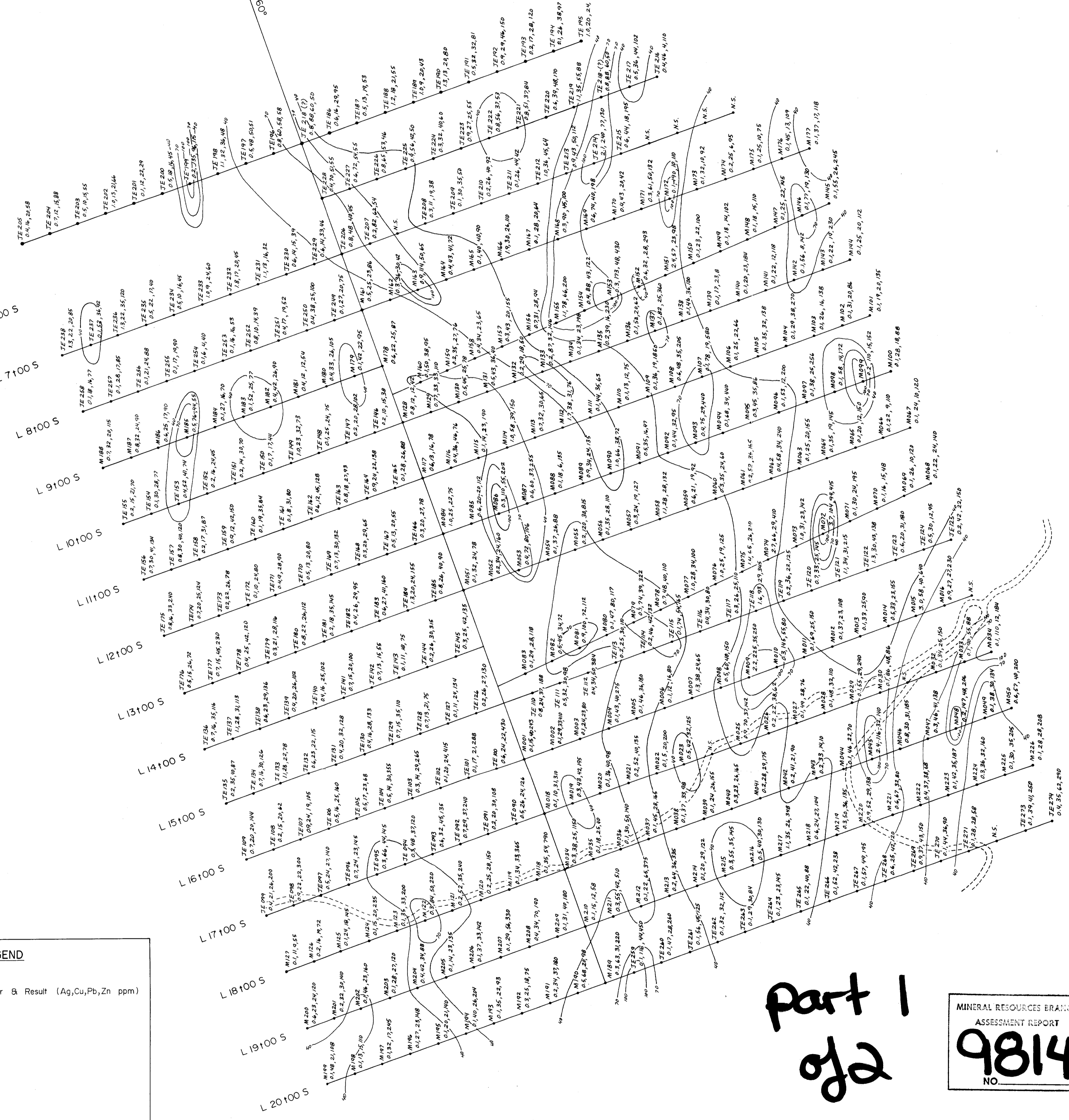
Date: Nov. 1981 Drawn By: R. Ivany FIGURE: 3



← TIE LINE TO 1980 FISSURE GRID 872 METRES
 L 0100
 L 1100 S
 L 2100 S
 L 3100 S
 L 4100 S
 L 5100 S
 L 6100 S
 L 7100 S
 L 8100 S
 L 9100 S
 L 10100 S
 L 11100 S
 L 12100 S
 L 13100 S
 L 14100 S
 L 15100 S
 L 16100 S
 L 17100 S
 L 18100 S
 L 19100 S
 L 20100 S

ORIGIN FOR BASELINE
 AT TOP OF BROADVIEW HILL

6160
 6160
 6160



LEGEND

- Sample Number & Result (Ag,Cu,Pb,Zn ppm)
- Road / Trail
- Creek
- No Sample

Contour Interval

- Cu
- 40-69 ppm
- 70-99 ppm
- ≥ 100 ppm

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 MOHAWK PROJECT
 COPPER SOIL GEOCHEMISTRY
 FISSURE GRID

80 40 0 80 160 240 metres
 Scale 1:4,000

Date: Nov. 1981 Drawn By: R. Ivany FIGURE: 4



LEGEND

- Sample Number & Result (Ag,Cu,Pb,Zn ppm)
- Road / Trail
- Creek
- N.S. No Sample

Contour Interval

Pb

- 40-59 ppm
- 60-79 ppm
- ≥ 80 ppm

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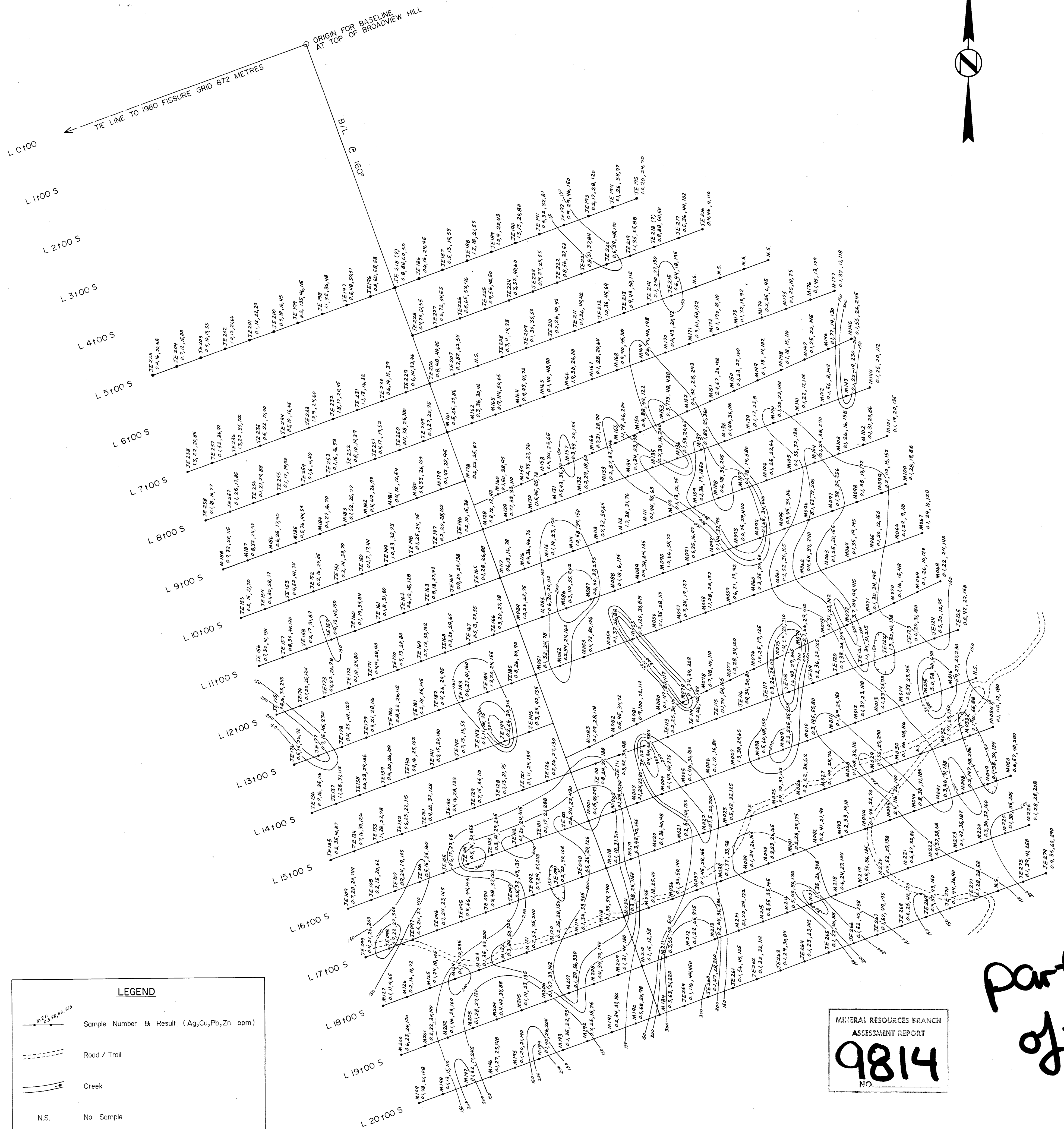
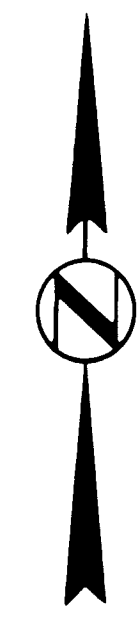
MOHAWK PROJECT

LEAD SOIL GEOCHEMISTRY

FISSURE GRID

Scale 1:4,000

Date: Nov. 1981	Drawn By: R. Ivany	FIGURE: 5
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LEGEND

- Sample Number & Result (Ag,Cu,Pb,Zn ppm)
- Road / Trail
- Creek
- N.S. No Sample

Contour Interval

Zn

- 150 - 199 ppm
- 200 - 299 ppm
- ≥ 300 ppm

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MOHAWK PROJECT

ZINC SOIL GEOCHEMISTRY

FISSURE GRID

80 40 0 80 160 240 metres
Scale 1:4,000

Date: Nov. 1981 Drawn By: R. Ivany FIGURE: 6



RESAMPLING RESULTS

	Ag (ppm)	Cu (ppm)	Pb (ppm)	Zn (ppm)	depth (cm)	
T310	A	1.8	290	8	210	10
	B	1.2	460	15	226	25
	C	1.3	940	17	690	45
T311	A	2.1	65	8	290	7.5
	B	2.0	148	3	480	2.5
	C	1.0	105	24	340	4.5
T312	A	2.5	180	8	82	7.5
	B	2.5	410	12	263	2.5
	C	1.9	204	13	38	40

LEGEND

- SILVER SOIL CONTOUR
0.4-1.0 ppm
1.0-2.0 ppm
- SOIL SAMPLE SITE (PLOTTED)
- SOIL SAMPLE SITE (LOCATED)
- OUTCROP OR FERRICRETE DEPOSIT
- BRAIDED STREAM
- STREAM CHANNEL
- SOIL SAMPLE NUMBER AND SILVER SOIL RESPONSE

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of 2

MINERAL RESOURCES BRANCH
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FISSURE SOIL ANOMALY FOLLOW-UP

1:2000

DATE: DECEMBER 1981 DRAWN BY: A. MARR FIGURE NO.: 7