



52N04NE 003G 63.3994 BATEMAN

010

SABINA INDUSTRIES LIMITED  
McFINLEY MINES LIMITED  
TRENCHING & INITIAL BULK SAMPLING  
McFINLEY PROPERTY  
RED LAKE, ONTARIO

May 20, 1981.

D. Wetmore, P.Eng.

PROJECT NO.

WE80-045

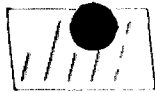


## INTRODUCTION

James Wade Engineering Ltd. was assigned by Mr. W.W. Cummins of Sabina Industries Limited and McFinley Mines Limited, to obtain a sample of approximately 10 tons for preliminary metallurgical testwork from the McFinley Property, located in Bateman Township, Red Lake Mining Division of northwestern Ontario. A trenching site was selected on the Zone "D" between Lines 3+00 and 4+00 South; some 200 feet to the east of Baseline 1 on the property grid. Due to spring conditions and bed-rock topography, the tractor trench was started at outcrop on Line 4+00 South; 165 feet East. The exposure of Zone "D" occurred at Line 3+30 South; 200 to 185 feet East under a maximum depth of 13.5 feet of overburden. The showing was drilled by percussion equipment and blasted. Twenty-four drums of sample were obtained from the four zones of the showing exposed. The trenching commenced on April 10 and sampling was completed on May 4, 1981.

## PROCEDURE

An International TD-8 tractor, equivalent to a Caterpillar D-3, with an eight foot blade was employed to uncover the Zone "D". Overburden consists of a well-compacted, varved clay. The upper 18 to 26 inches of this material was frozen during the trenching operation. Commencing near the eastern end of the trench (grid reference), a narrow seam of sand and gravel, some 3 to 8 inches in depth, occurs between the clay and bedrock. Immediately over the Zone "D" exposure in the deepest part of the trench, the continuous sand and gravel horizon occurs above some 6 inches of clay that lies imperviously on the bedrock. The bedrock surface slopes gently to the west; siliceous zones of the showing proper stand out in local relief in the bedrock topography.



- 2 -

The showing was drilled on approximately 14 inch centres using a portable compressor and jack-hammers with 1-3/8 inch integral steel. Blasting was completed sequentially to provide segregation of the showing zones, using CIL Forcite 40% with electrical caps.

Sample material was loaded by hand into drums (45 gallon) chained to the tractor blade. The tractor was used to pull filled drums on a heavy bush trailer some 4¼ miles from McFinley to the Abino road. The drums were then trucked to Red Lake and the tops spot welded. Commercial trucking transported the drums from Red Lake to Lakefield, Ontario.

Chip samples were taken of each of the four zones of the showing for immediate initial assay purposes. Samples of each of the zones, weighing some 5 kilograms each, were obtained for further relevant study.

#### GEOLOGY

The trench exposed a gently west-dipping bedrock surface that appears megascopically to be a dense, black tuff. Occasional fractures have quartz, ankerite and/or pyrite filling. Approaching within some five to ten feet of the showing, the sulphide content of the tuff and fracturing and pyrite appear to increase. The footwall of the showing comprises a three foot wide quartz-sulphide vein structure with local iron formation inclusions. The quartz is generally light grey to milky, locally contains appreciable sulphides (pyrite, pyrrhotite, arsenopyrite, chalcopyrite, sphalerite and lesser galena) and has massive and fractured to brecciated phases. Fine fractures filled by the sulphides are common. Locally the quartz contains inclusions of iron formation (I.F.) with appreciable pyrite and pyrrhotite and locally chalcopyrite banding. Frequently, near the quartz, former basic rock constituents have been altered to chlorite. The quartz vein phase of the showing is referred to as Zone 4.



The Zone 3 comprises predominantly banded I.F., but locally has quartz vein/lenses and virtually massive base metal sulphide phases. The zone is four feet in width; the I.F. is interpreted megascopically to be a banded, commonly sulphide-rich unit of volcanosedimentary origin, similar to the hosting tuff. Bands of grey chert up to one inch in width are also present. The contacts of Zone 3 contain widths of some 5 inches of massive base metal sulphides with quartz and lesser chlorite gangue.

Zones 2 and 1 illustrate progressively weaker I.F., with local inclusions of sulphide-mineralized quartz and also banded sulphide sections. Additional I.F. bands are inferred to occur repetitively within the tuff further into the hanging wall.

A fine-grained, dense, black rock (gabbro-?), inferred to be a dyke, occurs in the southwest corner and bottom of the trench. The unit contains bluish quartz "eyes". Locally, dark mineral constituents illustrate linearity, possibly reflecting primary flow banding.

The initial chip sampling analysis may be summarized as follows:

<u>Sample No.</u>	<u>Zone No.</u>	<u>Width</u> <u>(feet)</u>	<u>Gold</u> <u>(T.oz/ton)</u>	<u>Silver</u>	<u>Copper</u> <u>%</u>	<u>Lead</u> <u>%</u>	<u>Zinc</u> <u>%</u>
6511	1	3	0.015	0.100	0.078	0.016	0.012
6512	2	3	0.070	0.290	0.200	0.008	0.019
6513	3	4	0.050	1.620	0.780	0.280	0.910
6514	4	3	0.065	2.790	0.034	0.860	0.840
6515	dyke	N/A	0.005	0.070	N/A	N/A	N/A

The formations exposed in the trench strike  $043^{\circ}$  magnetic and dip at some  $-57^{\circ}$  to the northwest. Vertical sections illustrating previous diamond drilling and underground workings indicate a dip of the zone to be  $-65^{\circ}$  NW.

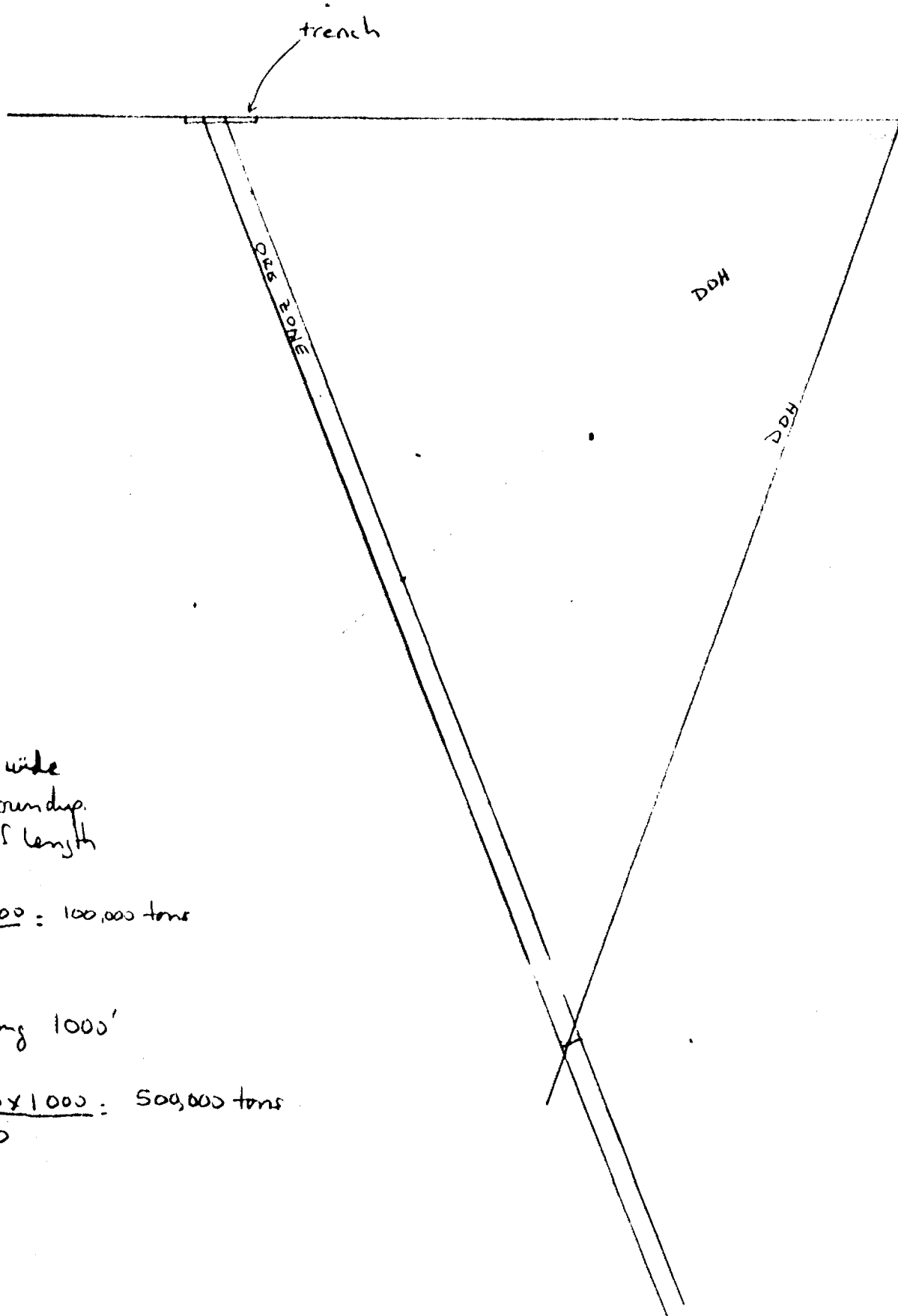


BULK SAMPLE

Twenty-four drums of bulk sample were obtained from the four zones of the exposed showing in the trench. Metallurgical testwork on the bulk sample is scheduled to be undertaken at Lakefield Research of Canada Limited. The scope and results of this program are to be reported independently at a later date.

The bulk sample may be identified as follows:

<u>Drum Identification/Zone</u>	<u>No. of Drums</u>	<u>Width of Zone</u>
1 - Hanging Wall	4	3
2	4	3
3	8	4
4 - Footwall	8	3



T.F. 10.  
 1 yd<sup>3</sup> = 2.7 tons  
 10 ft<sup>3</sup> = 1 ton

assume: avg. 10' wide  
 - 500' down dip  
 - 200' ell length

$$m = \frac{10 \times 500 \times 200}{10} = 100,000 \text{ tons}$$

continuous along 1000'

$$t_m = \frac{10 \times 500 \times 1000}{10} = 500,000 \text{ tons}$$

ONE P31-A-JV-29



View of Trench  
looking eastward  
relative to grid

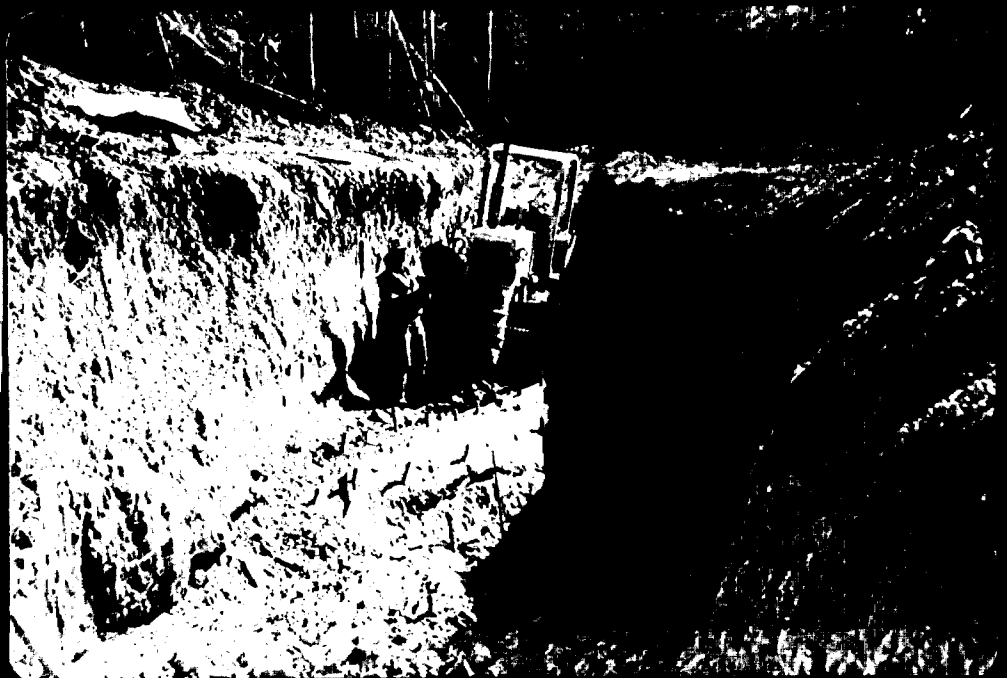
View of Trench  
looking westward  
Int'l. TD-8



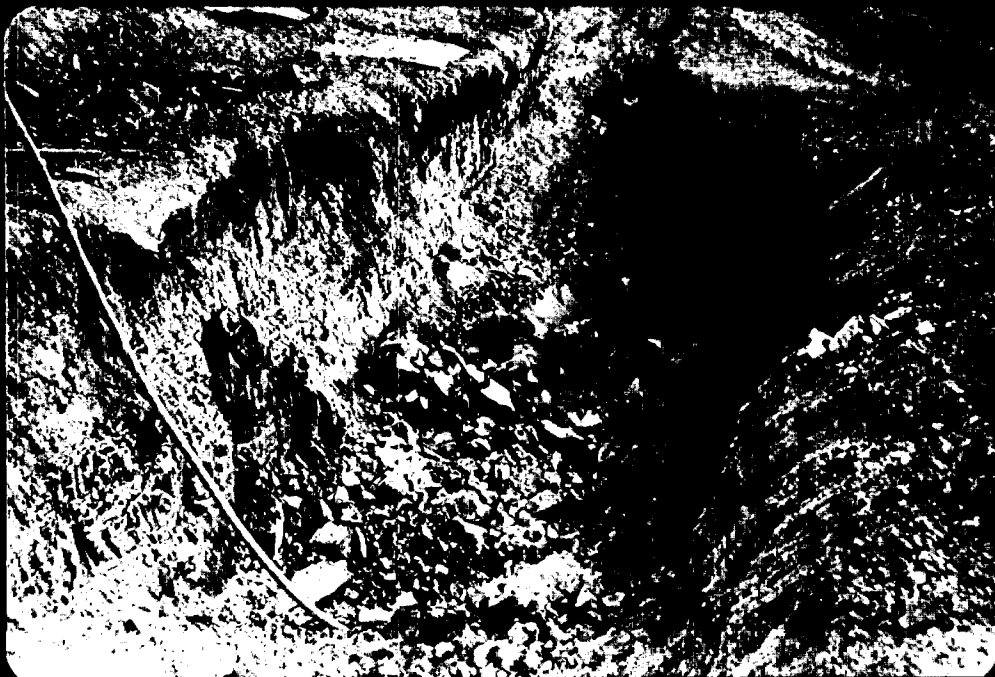
Zone "D"  
Hole Pattern Drilled  
to 4' depth



Sequential Blasting  
& Loading of Sample







View on Completion



Loading of Sample  
at Abino Road



- Zone 4 - Footwall - 3'  
Quartz
- Zone 3 - 4 ft.  
1.F. + S<sub>2</sub>
- Zone 2 - 3 ft.
- Zone 1 - 3 ft.  
Hangingwall

Varved Clay

Dyke

### Geological Description



52N04NE0036 63.3994 BATEMAN

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An Investigation of  
THE RECOVERY OF GOLD AND SILVER

from samples

submitted by

WADE ENGINEERING LIMITED

Progress Report No. 1

Project No. L.R. 2455

NOTE:

This report refers to the samples as received.

The practice of this Company in issuing reports of this nature is to require the recipient not to publish the report or any part thereof without the written consent of Lakefield Research of Canada Limited.

LAKEFIELD RESEARCH OF CANADA LIMITED  
Lakefield, Ontario  
July 29, 1981

I N T R O D U C T I O N

At a meeting in Lakefield on May 19, 1981, a sample preparation procedure was discussed for four samples from the Red Lake area in Ontario. The project number was Wade Engineering WE 80-045.

The sampling and analytical procedure was discussed with Mr. Bill Cummins, David Whetmore and Paul Shibley.

The samples apparently were from the same property as reported in Project No. 1913, Progress Report No. 1, February 3, 1976, submitted by Sabina Industries.

LAKEFIELD RESEARCH OF CANADA LIMITED

*D. M. Wyslouzil*

D.M. Wyslouzil, P. Eng.,

Manager

*R.G. Williamson*

R.G. Williamson, P. Eng.,

Senior Project Engineer

S U M M A R Y

The sample analyses were as follows:

Sample No.	1 + 2	3	4
Cu (%)	0.093	0.081	0.079
Pb (%)	0.009	0.13	0.48
Zn (%)	0.023	0.62	1.48
Fe (%)	20.7	17.5	20.9
Ni (%)	0.005	0.005	0.005
As (%)	0.02	1.97	1.74
S (%)	6.43	6.66	9.23
Au (g/t)	0.94 (0.92)*	2.34 (2.57)*	3.74 (3.90)*
Ag (g/t)	5.17 (8.16)*	23.4 (28.2)*	64.2 (76.0)*

\*resample and reassay

Summary - Continued

Semiquantitative Spectrographic Analysis

Element	Sample 1 + 2	Sample 3	Sample 4
Aluminum (Al <sub>2</sub> O <sub>3</sub> )	1 %	2 %	2 %
Antimony	-	-	-
Arsenic	-	L-M	L-M
Barium	-	0.002 %	0.003 %
Beryllium (BeO)	-	-	-
Bismuth	-	0.0005 %	0.001 %
Boron	-	-	-
Calcium (CaO)	5 %	5 %	3 %
Cadmium	-	0.005 %	0.005 %
Cerium (CeO <sub>2</sub> )	-	-	-
Chromium	0.01 %	0.01 %	0.01 %
Cobalt	0.01 %	0.01 %	0.01 %
Columbium (Cb <sub>2</sub> O <sub>5</sub> )	-	-	-
Copper	0.1 %	0.1 %	0.1 %
Gallium	-	-	-
Germanium	-	-	-
Iron (Fe)	H	H	H
Lanthanum (La <sub>2</sub> O <sub>3</sub> )	-	-	-
Lead	0.005 %	0.1-0.2 %	0.3 %
Lithium (Li <sub>2</sub> O)	-	-	-
Manganese	0.5 %	0.3 %	0.3 %
Magnesium (MgO)	3 %	2 %	2 %
Molybdenum	-	-	-
Neodymium (Nd <sub>2</sub> O <sub>3</sub> )	-	-	-
Nickel	0.005 %	0.005 %	0.005 %
Phosphorus	-	-	-
Silver	1-2 oz/t	0.5-1 %	1 %
Silicon (SiO <sub>2</sub> )	H	H	H
Sodium (Na <sub>2</sub> O)	0.05 %	-	0.05 %
Strontium	-	-	-
Tantalum (Ta <sub>2</sub> O <sub>5</sub> )	-	-	-
Thorium (ThO <sub>2</sub> )	-	-	-
Tin	-	-	-
Titanium	0.01 %	0.01 %	0.01 %
Tungsten	-	-	-
Uranium (U <sub>3</sub> O <sub>8</sub> )	-	-	-
Vanadium	-	-	-
Yttrium (Y <sub>2</sub> O <sub>3</sub> )	-	-	-
Zinc	-	1 %	1-2 %
Zirconium (ZrO <sub>2</sub> )	-	-	-

Figures are approximate:

CODE: H - High - 10 - 100 % approx.  
M - Medium - 1 - 10 % approx.  
L - Low - .1 - 1 % approx.

-Not Detected - Elements looked for but not found  
X Not Looked For  
< Less Than

SAMPLE PREPARATION

On May 25, 1981, a total of 24 x 45 gallon drums of rock pieces were received at Lakefield Research. The drums were identified as follows:

<u>Sample No.</u>	<u>No. of Drums</u>
1	4
2	4
3	8
4	8

A mineralogical sample was removed from each drum prior to crushing. Samples 1 and 2 were combined for crushing. The samples were jaw crushed (10 inch x 16 inch Buchanan jaw crusher) and impact crushed (Hazemag APK-20) in open circuit to nominal minus ½ inch (12 mm). The minus ½ inch material from the discharge conveyor was collected in 45 gallon drums. Periodic samples were removed from the conveyor with a shovel. These samples weighed about 150 kg each.

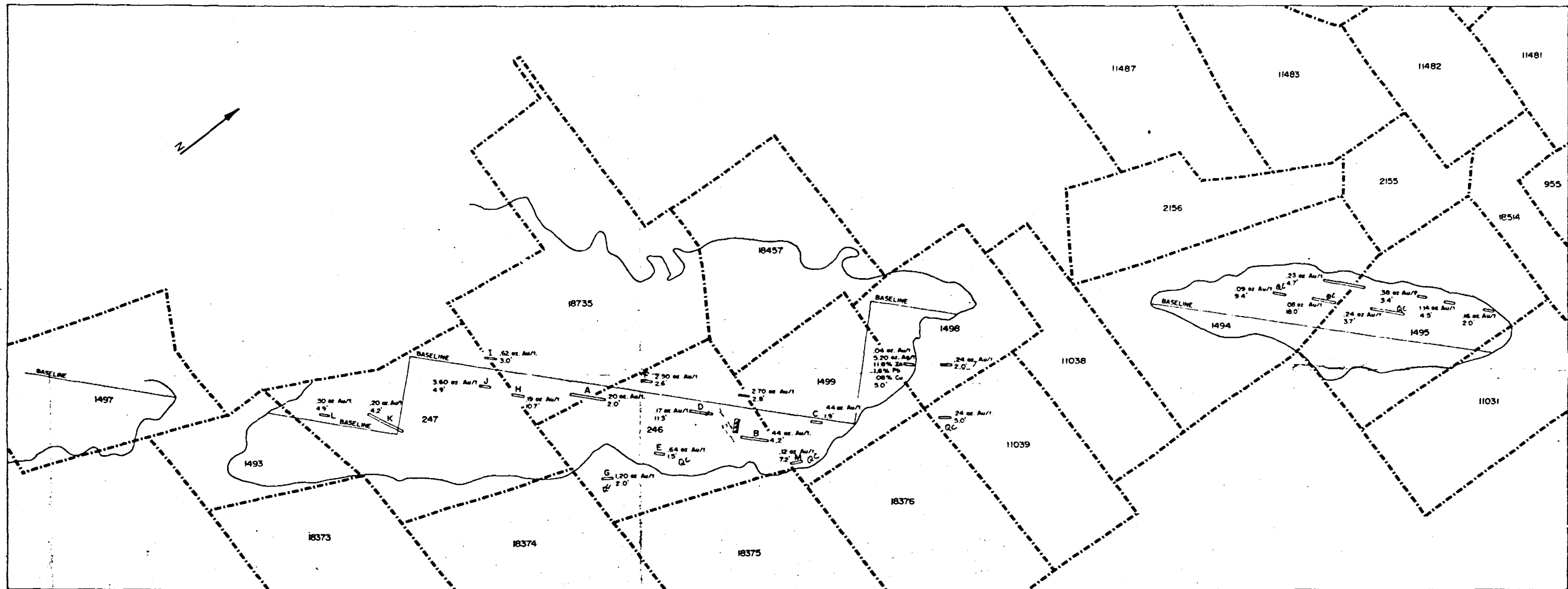
The 150 kg samples were cone crushed and riffled to reject 3/4. The remaining quarter was roll crushed in a single pass to nominal minus 10 mesh. A head sample was removed and pulverized for analysis.

Each sample was analysed for Cu, Pb, Zn, Ni, Fe, As, S, Au, Ag and semi-quantitative spectorgraphic analysis.

Subsequently, the cone crushed reject was resampled. One quarter of the reject was roll crushed to nominal minus 10 mesh and riffled to produce a head sample for check Au and Ag analyses.

At no time in the sample preparation procedure was any free or visible gold detected.

All the samples were stored in a freezer.



MAP 4

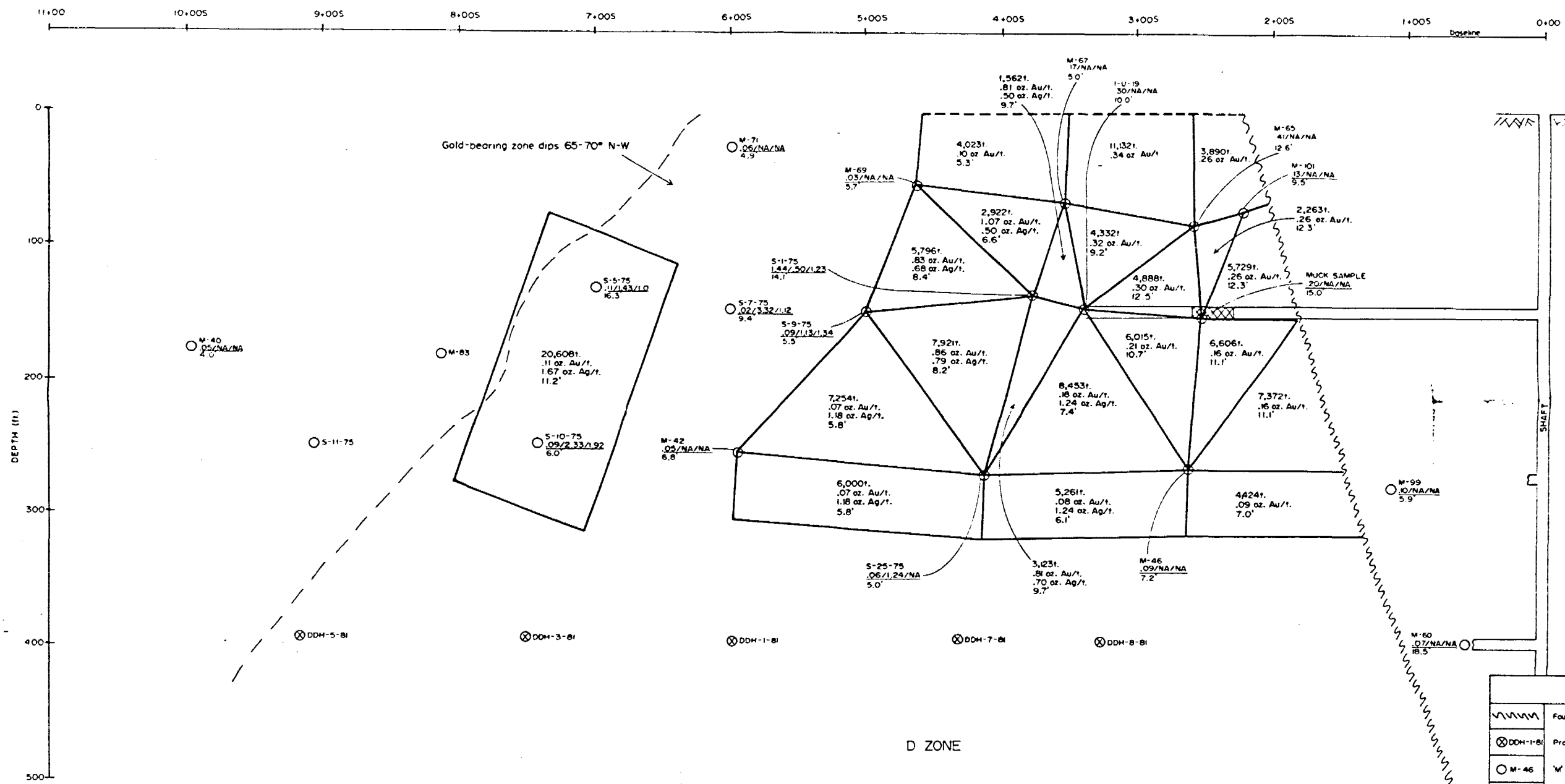
LEGEND	
	Gold-bearing Zone
	Mine Shaft
	Property Boundary
	Claim Number
<b>SABINA INDUSTRIES LTD. &amp; McFINLEY MINES LTD.</b>	
GOLD-BEARING ZONES BATEMAN TOWNSHIP GOLD PROPERTY RED LAKE, ONTARIO	
SCALE: 1" = 400'	DRN BY: W. L.
DATE: JAN 20/81	DRWG. NO.: 80-045-004
Drawing by JAMES WADE ENGINEERING LTD. Rev No 1	

0MEP-BI-1-JV-29



S-W

N-E



MAP 5

LEGEND	
	Fault
	Proposed drill hole
	M Series drill hole, 1945-6 Program
	S Series drill hole, 1975 Program
	Au (oz./t)/Ag (oz./t)/Zn (%) Width (ft)

**SABINA INDUSTRIES LTD.  
& McFINLEY MINES LTD.**

SECTION A-A  
D ZONE AND ESTIMATED RESERVES  
BATEMAN TOWNSHIP GOLD PROPERTY  
RED LAKE, ONTARIO

NOTES  
Drill indicated tonnage to depth of 320'.  
128,167t.  
.32 oz. Au/t. (uncut); .15 oz. Au/t(cut)  
1.19 oz. Ag/t.

SCALE: 1" = 40' DRN. BY: W.L. DATE: JAN. 12/81 DRNG NO: 80-045-005

Drafting by: JAMES WADE ENGINEERING LTD. Rev. No. 1

011EP-81-1-JV-29

11-2001-1-11-90



52N04NE0036 63.3994 BATEMAN

030

*John Betz*

7 BOXBURY .....  
ETOBICOKE, ONT.  
CANADA, M9C 2W1

July, 1962.

(416) 621-6682

REPORT ON THE ELECTROMAGNETIC AND MAGNETIC SURVEYS  
SABINA INDUSTRIES LIMITED  
McFINLEY MINES LIMITED  
McFINLEY RED LAKE PROPERTY  
TOWNSHIP OF BATEMAN  
DISTRICT OF KENORA, ONTARIO

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## INTRODUCTION

The main objective of these two surveys was to detect and outline electrically conductive and magnetic bedrock zones on the property, with a view to eventually finding economic mineralization (in particular gold) associated with these zones.

The MaxMin II EM (electromagnetic) system was used on this project. This system is manufactured by Apex Parametrics of Stouffville, Ontario. The methods of operating this system are amply described in the operations manual and they will not be repeated here. However, a copy of the specification sheet and a picture of the system in operation are included at the end of this report.

For this project the MaxMin II was used in a maximum coupled co-planar mode with the turns of the transmitting and receiving coils held essentially parallel to the surface of the ground. When working in flat terrain, this mode of operation is the well-known horizontal-loop mode. The survey specifications were,

- a) a 100 ft coil spacing and a 20 ft station spacing at frequencies of 222, 888, & 3555 Hz on the parts of the Peninsula Grid where the line spacing is 50 ft, and
- b) a 200 ft coil spacing and a 50 ft station spacing at frequencies of 222, 3555, and sometimes 888 Hz, on the part of the Peninsula Grid where the line spacing is 200 ft, and on the entire Lake Grid.

The G-816 portable proton magnetometer was used as the field unit. The GSM-8 proton magnetometer was used in conjunction with the C.M.G. MR-10 recorder, as a base station unit. The G-816, GSM-8 and the C.M.G. MR-10 are manufactured by EG&G Canada, Exploration/Geometrics Division, Downsview, Ontario; GEM Systems, Inc., Don Mills, Ontario; and Canadian Mining Geophysics Ltd., Ottawa, Ontario, respectively. The specifications for, and methods of operating, these systems are amply described in the operations manual. They will not be repeated here.

The EM and magnetometer field work was carried out by geophysical contractor, Mr. W. Barclay of Toronto, Ontario, during the autumn of 1981 and winter of 1982. The contouring of the magnetometer results was also carried out by Barclay, with the exception of the contours at the south end of the Peninsula Grid, which were added from the results of a 1974 survey, in which a Scintrex MF-1 fluxgate magneto-

meter was used. The interpretation of the results was carried out by geophysical consultant, John E. Betz, the author of this report.

The claims covered by these two surveys are shown in the upper left-hand corner of the two plans included with this report.

#### PRESENTATION OF THE RESULTS AND INTERPRETATION

The conductor interpretation, based on the MaxMin II results, is shown on Plan 1, and the magnetic contour picture is shown on Plan 2. Both plans are at a scale of 1 : 2400. They are in the pocket inside of the back cover of this report.

Both the MaxMin II and the diurnally corrected G-816 results were plotted in profile form by contractor, W. Barclay. Although these profiles were used in the interpretation, they are not included in this report.

#### DISCUSSION OF THE INTERPRETATION

This discussion centers around the two plans in the pocket at the end of the report.

All of the conductive features can be seen on Plan 1. The conductor picture is broken into two main categories:

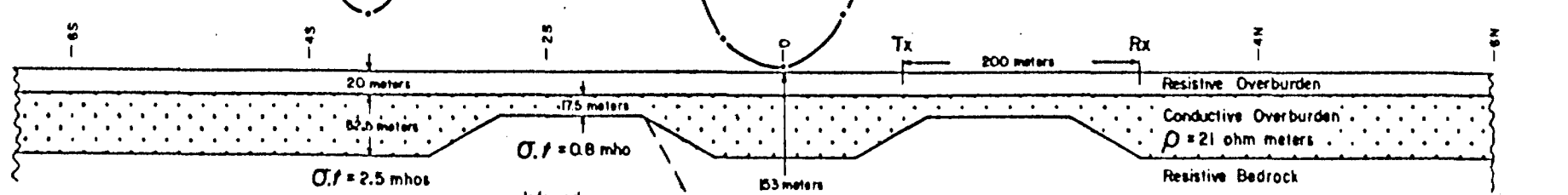
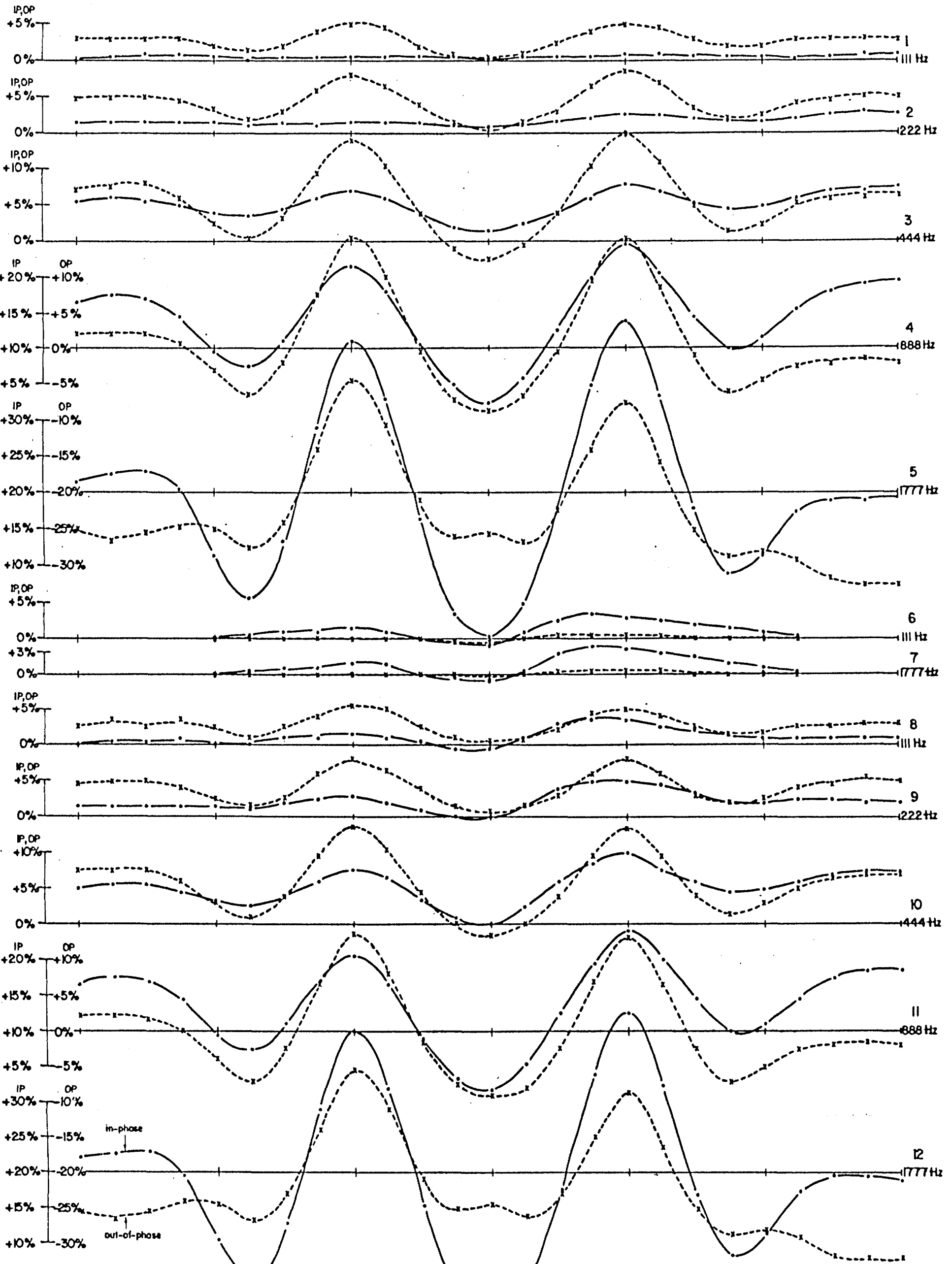
- a) Steeply-dipping bedrock conductors such as sulphide, graphite and intense fracture zones, and
- b) Flat-lying electrolytic conductors, such as caused by narrow and broad, silt-filled basins on top of the bedrock.

Most of the type a) conductors have been given a letter designation. Where these conductors appear to lie along a common contact--with breaks in conductivity between them--they are given the same letter designation, but different numerical subscripts.

The signature of the narrow type b) conductors and of the edge-effect of the wide type b) conductors bears a certain resemblance to that of the 'weakly'-conductive type a) conductors, and it is difficult to unravel the two. However, there is no difficulty in unraveling the 'moderately-to-strongly'-conductive type a) conductors from the narrow type b) conductors and the edge-effect of the wide type b) conductors. As a matter of interest, the method of doing this can be seen in the example on pages 2a and 2b.

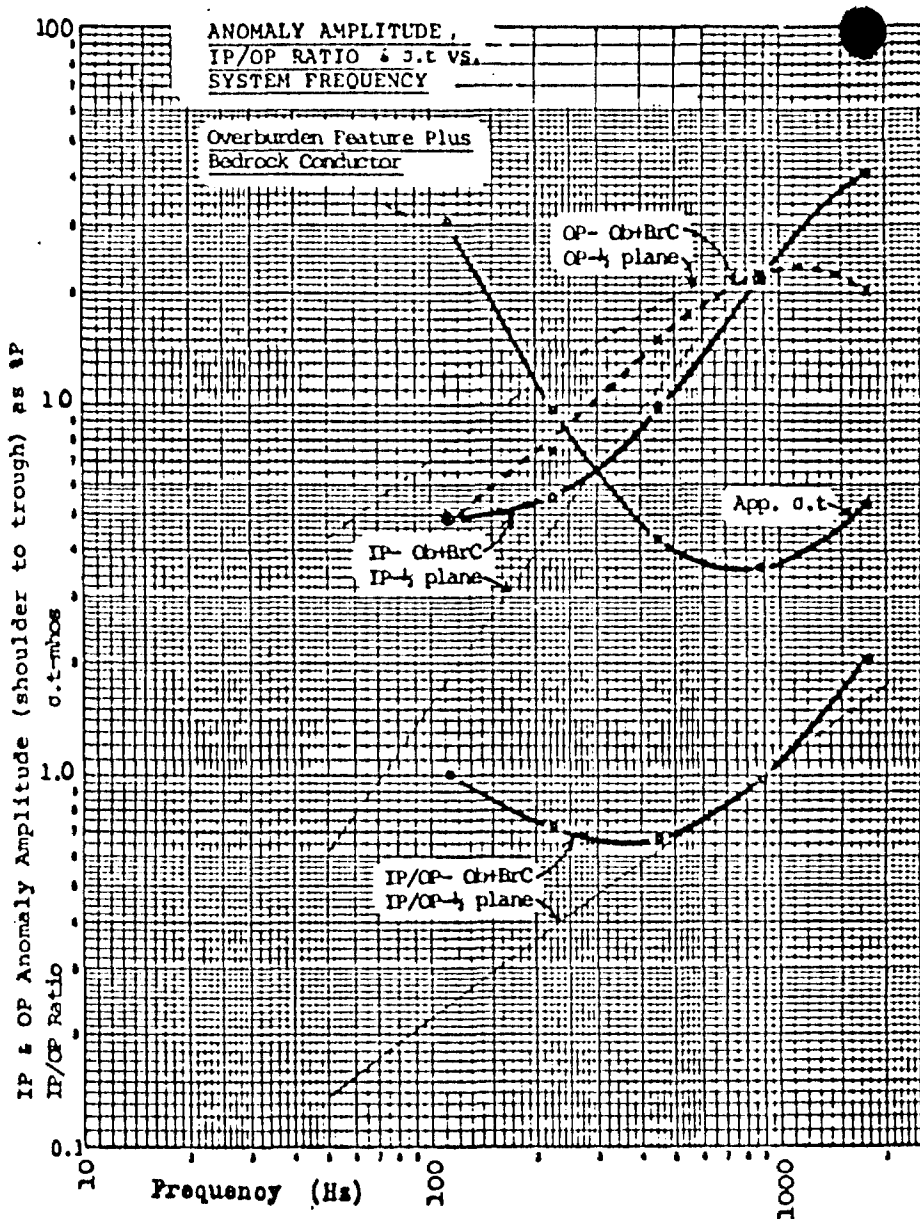
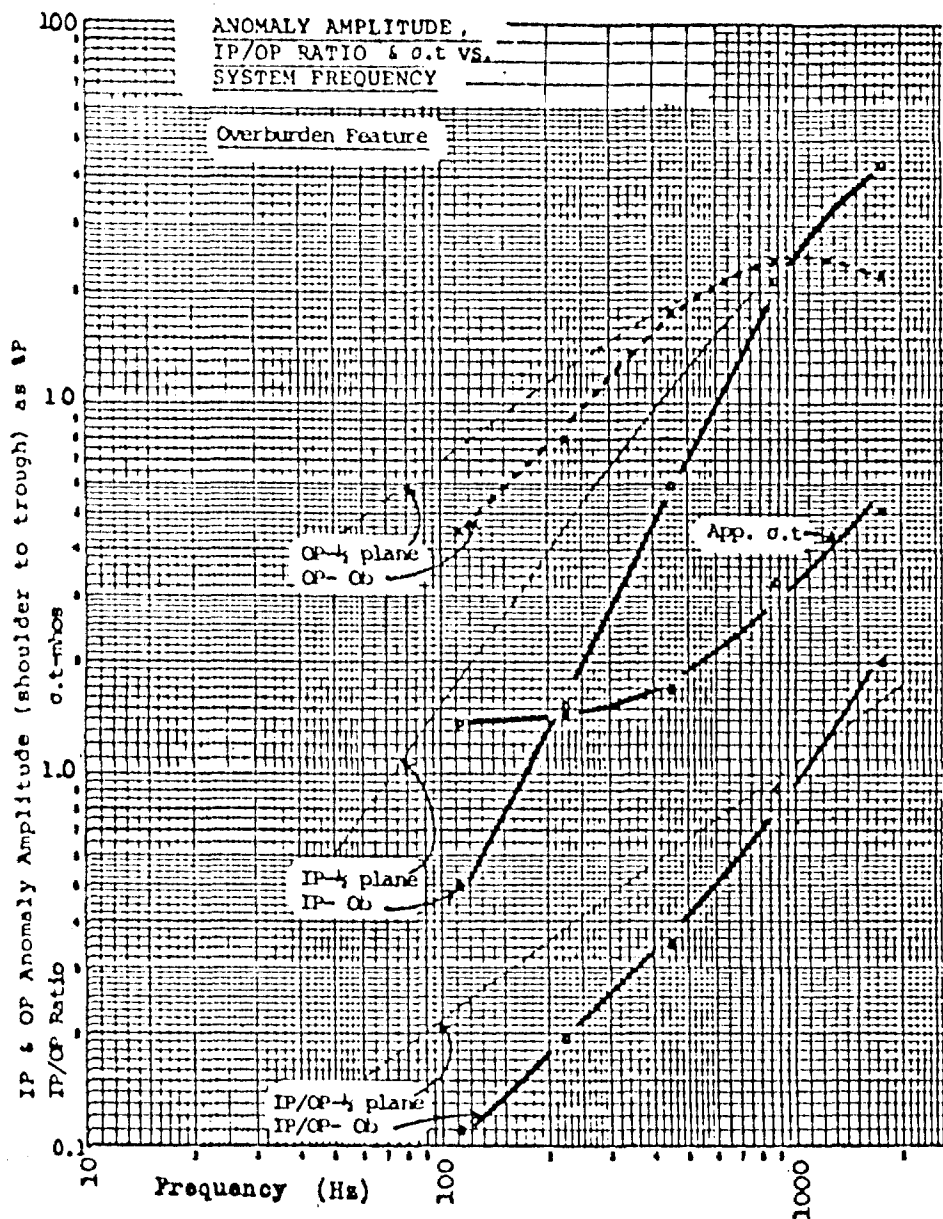
Now, a return to the first-mentioned problem of distinguishing between 'weakly'-conductive type a) conductors and narrow type b), and/or the edge-effect of wide type b), conductors. Generally, where a 'weakly'-conductive zone is a continuation of an obvious 'strongly'

# DETECTING DEEP MASSIVE SULPHIDE BODIES THROUGH 'NOISY' CONDUCTIVE OVERBURDEN



**Modelling Materials**  
 Carbon (conductive overburden)  
 Lead (sulphide body)  
 Scaling Factor 1:2000  
 Modelling done at U. of Toronto  
 Geophysics Laboratory

Note: Profiles 1 through 5 are for the overburden only. Profiles 6 and 7 are for the bedrock conductor only. Profiles 8 through 12 are for the overburden plus bedrock conductor. See Poster '4 B continued' for a discussion of the above results.



DETECTING A DEEP BEDROCK CONDUCTOR THROUGH OVERBURDEN NOISE

To put the irregular conductive Ob (overburden) feature of Poster 4B into perspective, the equivalent field resistivity of 21 ohm meters is lower than that of most clays of the Abitibi clay belt of northern Ontario & Quebec, and the equivalent change in thickness of the Ob from 17.5 to 52.5 meters represents a greater than average bedrock relief over a short distance for the Abitibi region.

To put the BrC (bedrock conductor) of Poster 4B into perspective, the equivalent field conductance of 500 mhos for this BrC is not unduly large for coarse-grained massive sulphides, as can be seen on Poster 1 of my 1976 message posters.

As can be seen in the upper left graph, the amplitude of the IP (in-phase) and OP (out-of-phase) anomalous expressions from the overburden feature alone have constant power relationships with frequency, for the middle-low part of the frequency range. In this particular case, the rates of change of the IP and OP anomaly amplitudes, and the IP/OP ratio are a little greater than those of the half-plane model at small induction numbers. For the latter model, 'IP'  $\sim f^{1/2}$  and 'OP' & 'IP/OP'  $\sim f^{1/2}$ , where f is the frequency. As a general observation for this and other noisy overburden features, both in the lab and in the field, the rates of change of the 'IP', 'OP' and 'IP/OP' at middle-low frequencies are the same as, or greater than, those for the half-plane model in the region of small induction numbers. Reasons for this will not be suggested here. The observation is simply stated, and it is an important one! If the rate of change of the IP/OP ratio is the same as for a conductive half-plane, the apparent conductance computed from an interpretive curve based on the half-plane model will be constant at all frequencies. If the rate of change of the IP/OP ratio is greater than that of a half-plane, then the apparent conductance computed from a half-plane interpretive curve will decrease with decreasing frequency. The behaviour of the apparent conductance at several frequencies, for several field examples of noisy overburden features, is shown on Poster 3 of my 1976 message posters. I have other examples on file which tell the same story. It is of interest to note that the apparent conductance is about 1.4 mhos at 111 Hz for the noisy overburden feature. This lies between the values of 1.7 mhos (2.5 mhos-0.83 mho) for the trough feature, and 0.83 mho for the upper layer of the overburden, which feeds currents into the trough. It is surmised that this apparent conductance would stabilize around 0.83 mho--if low enough frequencies, and the means of measuring minute anomalous values, were available. There is little likelihood of confusing the anomalous profile from this Ob feature with that from a 'poor' BrC, because its amplitude is that for shallow BrC, while its shape is that for a deep BrC.

As can be seen in the upper right graph, the picture described in the preceding paragraph changes appreciably when a BrC of large conductance is introduced--even a deep BrC. The OP picture does not change appreciably; but, the slope of the IP curve becomes continuously smaller with decreasing frequency. The slope of the IP/OP curve even reverses sign at low frequencies. The apparent conductance derived from the half-plane model increases significantly at the low end of the frequency spectrum. Examples of this latter point are shown on Poster 4 of my 1976 posters.

In the above-described graphical method, it is not necessary to plot both the IP/OP ratio and the apparent conductances, because they are closely interdependent. Perhaps using the IP/OP ratios is more purely scientific, than using the apparent conductances derived from the half-plane model, because the data is not being force-fitted to a model which is not necessarily valid. But, based on this experience, and that of a couple of other modelled overburden features, the apparent conductance values are not far out of line with the known values for the overburden features. Furthermore, it is the trend of these values, more than their absolute accuracy, which gives the answers one is looking for.

Although equivalent field frequencies of 111, 222, 444, 888 & 1777 Hz were used in this example, it is obvious that frequencies of 111, 444 & 1777 Hz would have sufficed to arrive at the same interpretation.

The case modelled here is for the deep BrC under the center of the valley feature, in which case the anomalous expression of each blends together making for an interpretational challenge. When the deep BrC is offset to the side of the valley, or under the ridge, no graphical methods are required to establish its presence. It simply 'pops out' at the viewer at the lower frequencies, as per Poster 4A of my message posters.

In closing, a warning is issued about drilling a hole based on a small increase in the IP/OP ratio, or in the apparent conductance estimate at the lowest frequency. A cautious look should always be made at the amplitude of the IP anomaly being dealt with. The smaller the amplitude of the IP anomaly, the greater the chance of its measured amplitude being in error due to the effect of the normal operating noise envelope, which is typically  $\pm 2\%P$  (primary field strength). Given that the IP anomaly amplitude is measured from a best-fit curve through the plot points, the errors in the measured amplitude would generally not be serious for amplitudes greater than  $2\%P$ . For IP anomaly amplitudes of less than  $2\%P$ , more than one best-fit curve should be considered and a limits bar, rather than a single point, used on the amplitude vs. frequency graphs.

conductive type a) zone, it is easy to say that it too is a type a) zone. But, where the 'weakly'-conductive zone stands alone in a region of extensive conductive overburden, it becomes more difficult to decide between a type a) and a narrow type b) conductor. Of course, it is always possible that the two phenomena are combined, because there can easily be an overburden-filled depression, overlying a zone of fracturing and/or shearing in the bedrock.

Continuing the subject of the preceding paragraph, an example of a difficult interpretive decision is conductor A<sub>1</sub> (lines 28N to 38N). This zone is depicted as a weakly-conductive bedrock zone, but it could just as well be a long localized thickening of the lake-bottom silts--in other words, a silt-filled lake-bottom trough. The decision is a little less difficult in the case of conductor C<sub>5</sub> (lines 16N to 27N), because it appears to be an along-strike continuation of conductor C<sub>2</sub> (lines 14S to 4S). With a conductance as large as 50 mhos on line 14S, conductor C<sub>2</sub> cannot be other than a solid metallic conductor in the bedrock; so, C<sub>5</sub> is probably also a bedrock conductor. This point will be elaborated upon in the following paragraph.

There are several depth and conductance estimates along the zones shown on Plan 1. The depth estimate is easy to understand--being the depth from the ground surface to the top of the conductive zone. However, the significance of the conductance estimate may bear a little explaining: In a general sense, a zone of a width of a few feet of massive coarse-grained sulphides will have a conductance in excess of 100 mhos. Given the same width, the conductance of the zone will decrease below 100 mhos and eventually below 5 mhos, as the grain size decreases. This is often the case where the primary sulphide is pyrite. Even with coarse-grained sulphides, the conductance of the zone will decrease perceptibly as the concentration of sulphides decreases, e.g. to below 30% by volume. So by this token, conductive zones with conductances below 5 mhos could contain a high concentration of very fine-grained sulphides (pyrite), or a low concentration of coarse-grained sulphides. Eventually, however, as the total amount, or the grain size, of the sulphides becomes small enough, electrical continuity will cease to exist along the zone, and its conductance will fall to zero.

It is difficult to say how small the conductance of a zone of

sulphides can be, before it suddenly falls to zero. But, in my experience, very few zones, the conductivity of which is due to solid metallic materials, have conductances of less than 1 mho. On the other hand, fluid conductors, e.g. shear and fracture zones containing electrolytic ground water, most often have conductances of less than 1 mho. The most common overlapping of metallic and electrolytic conductors is in the conductance range of 0.75 to 2 mhos. Above 2 mhos--in most Canadian environments at least--one could bet heavily on solid conductivity.

Sofar, the solid conductors discussed consist of massive sulphides. However, there are other solid conductors of note in Nature, such as graphite and massive magnetite. A simplified version of the overall picture is given in the table on page 5.

At this point, the reader is reminded that sphalerite is the only non-conductive sulphide, although it is often associated with other conductive sulphides in both large and small quantities. For this reason, there is no initial clue to the sphalerite content of any property from a set of EM survey results.

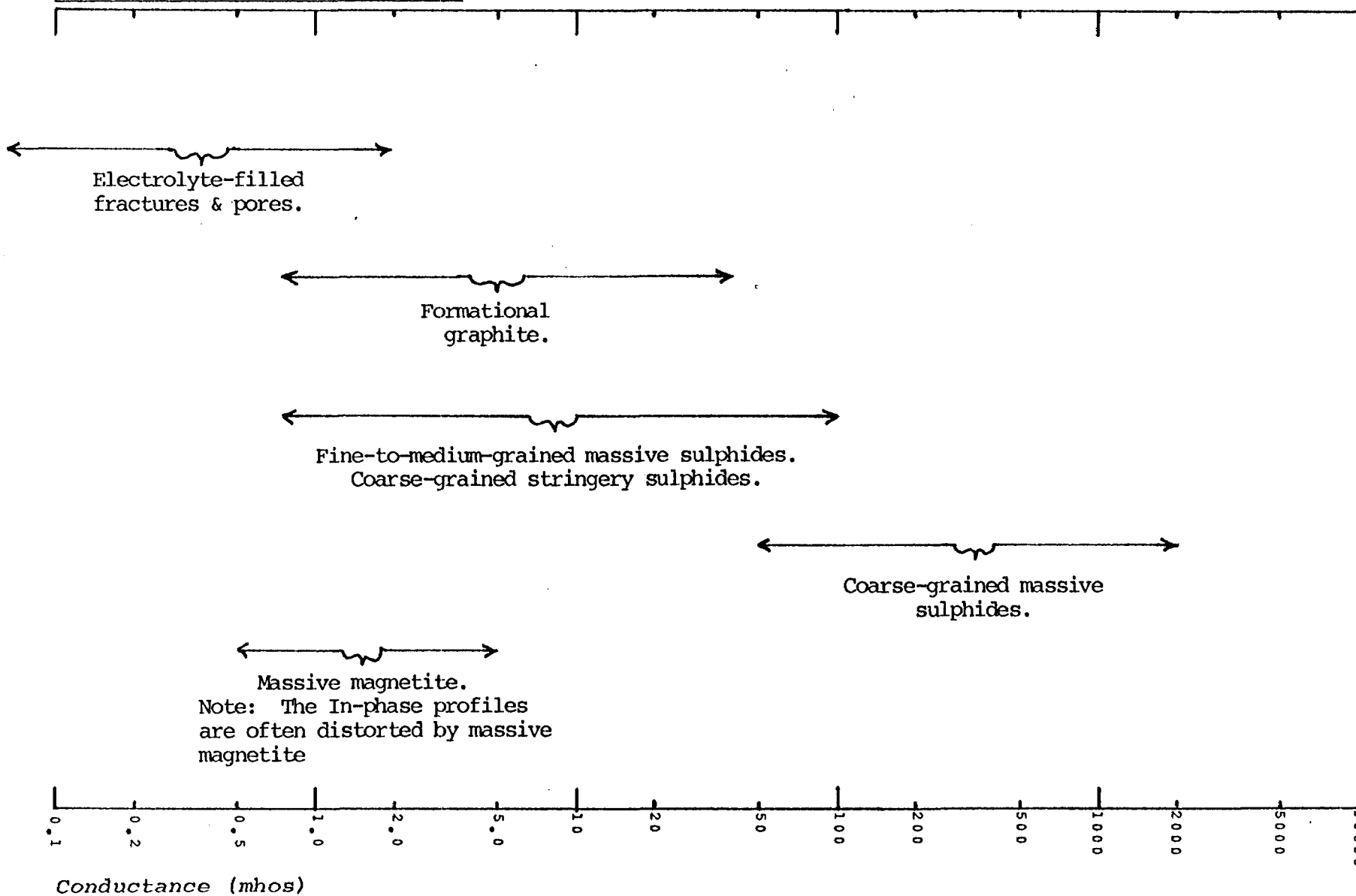
I do not know enough about the geology of the McFinley property to relate the interpreted conductances to economic mineralization, or even to say whether or not such a relationship exists. Nonetheless, the conductance information is given because it falls out of the EM survey data. There is always a chance, in the future, of establishing some sort of relationship between conductance and economic value. For the moment, it is safe to make a simple statement like, massive coarse-grained sulphides almost certainly exist where the conductance values exceed 100 mhos.

Another factor of potential interest is the overall width of the type a) conductors. Where the overall width of the conductor is at least as great as, or greater than, its depth, it is possible to estimate the overall width. In the simplest sense, the wider a type a) conductor the greater is its potential for quantity. In this regard, conductors D<sub>2</sub> and N<sub>1</sub> 'pop out' at the viewer.

Conductor D<sub>2</sub> is not only quite wide in places, but it appears to bifurcate both on line 12N and on line 4N. Given the possibility of weakly conductive material between the prongs of D<sub>2</sub>, there could be appreciable overall widths of anomalous material on lines 8N and 2N. This point should be remembered when considering reconnaissance drill holes.



COMMON CONDUCTANCE RANGES FOR VEIN-LIKE CONDUCTORS  
OF ONE FOOT WIDTH AND GREATER



Conductor N<sub>1</sub> has appreciable overall width between lines 9+50N and 14+00N. It cannot be said for certain, whether or not conductive material exists between the very obvious eastern and western edges of this conductor, but the possibility always exists.

As can be seen on Plan 1, there are many instances of closely-spaced conductors on these grids. These conductors could possibly straddle weakly-conductive material. This factor should be remembered when considering reconnaissance drill holes. One example of this point is on line 56N, where conductors E<sub>3</sub>, D<sub>3</sub>, G<sub>3</sub>, H<sub>2</sub> and any intervening material, could be intersected by a single hole.

The magnetic results will not be interpreted in great detail in this report. But certainly, a superposition of the magnetic contour picture over the interpreted conductive picture will show the relationship of magnetic and conductive zones. I have done this and have found all manner of situations such as: non-conductive magnetic zones and non-magnetic conductive zones standing alone, conductive zones flanking magnetic zones, and coincident magnetic and conductive zones.

This sort of 'mixed-bag' of conductive and magnetic zones is not surprising in the light of some ohmmeter and magnet tests I've performed on both drill core and trench specimens, in the same geological environment as exists on the McFinley property. In the former case, zones of essentially non-conductive, very magnetic magnetite were found standing both alone and in the presence of non-magnetic, moderately-to-highly-conductive pyrite. Presumably, at times, moderately-to highly-conductive pyrite can stand well removed from any magnetic materials. Hence, the full gamut of possibilities.

A few observations on the mag-EM correlation are listed in the table on Page 7. Although, the significance of these observations with respect to economic mineralization is not fully understood by me, the observations are nonetheless noted for whatever value may emerge from them, when plugged into the present and future geological knowledge of the property.

For the purposes of this report, the magnetic contour plan has not been scrutinized carefully in terms of recognizing faults, because there is no evidence of faults with a perceptible horizontal displacement in the conductor interpretation. At most, the conductors appear to be gently folded in the horizontal plane. A quick glance by me at the magnetic contours, when overlain on the conductor interpretation, revealed no additional evidence of horizontal displacement faulting.

Conductors With Coincident  
Magnetic Expression

Conductors With Flanking  
Magnetic Expression

B<sub>1</sub>  
 C<sub>2</sub> north & south ends  
 C<sub>6</sub>  
 C<sub>7</sub> south end  
 D<sub>1</sub>  
 D<sub>2</sub> on L-22N  
 D<sub>2</sub> bifurcated sections  
 D<sub>3</sub> south part  
 E<sub>3</sub> central and north parts  
 H<sub>2</sub> on L-68N  
 J<sub>2</sub> central part  
 J<sub>4</sub> north part  
 J<sub>5</sub> north part  
 K<sub>2</sub>, K<sub>3</sub>, K<sub>4</sub> & K<sub>5</sub>  
 L<sub>3</sub> south central part  
 M<sub>1</sub> north part  
 M<sub>4</sub>  
 N<sub>1</sub> possibly in central region  
 P<sub>1</sub>  
 Q<sub>4</sub>  
 R<sub>2</sub>  
 S<sub>2</sub>  
 V<sub>1</sub> & V<sub>2</sub>  
 Unnumbered L-18S, 10+60W  
 Unnumbered L-8N, 15+00W

A<sub>3</sub> south part  
 D<sub>2</sub> central part\*  
 D<sub>2</sub> north part  
 E<sub>1</sub>  
 E<sub>3</sub> south part  
 G<sub>2</sub>-H<sub>2</sub> (magnetic region between conductors)  
 G<sub>3</sub>-H<sub>2</sub> ( " " " " )  
 G<sub>5</sub>-H<sub>2</sub> ( " " " " )  
 J<sub>2</sub> north & south parts  
 J<sub>4</sub>  
 L<sub>2</sub> south part  
 L<sub>3</sub> north part  
 M<sub>1</sub> south part\*  
 N<sub>1</sub>\*  
 O<sub>2</sub>  
 P<sub>4</sub>\*  
 R<sub>1</sub>\*  
 S<sub>2</sub>\*

Note: The asterisk signifies that the flanking magnetic expression is between the main conductor and a very weak unnumbered parallel conductor. So, the very weak conductor may be one edge of a massive magnetite zone, while the other edge is flanked by a zone of sulphides (pyrite?).

The dips of the conductive zones are generally hard to define due to overlapping anomalous effects. The overall impression is that of steep westerly dips, but the north end of conductor  $N_1$  (line 22N) appears to have an easterly dip, because it veers eastward as it gets deeper. Obviously, any reconnaissance drill holes on zones of undetermined dip should be kept as flat as permitted by the interpreted depth of overburden.

The 200 ft coil spacing used for most of the coverage of these two grids appears to have had sufficient search-depth capability over the major part of the area. Certainly, the more highly-conductive zones can be detected to depths in excess of 150 ft with this coil spacing. But, some of the 'weakly'-conductive zones will drop out of the picture at much lesser depths than this. In most cases, increasing the coil spacing to increase the depth of detection would only increase the problems of resolving each zone from its neighbour. However, one and possibly two zones would benefit from the use of a larger coil spacing on the lake portion of the grid. These zones are  $L_3$  and  $N_1$ .

It is thought that  $L_2$  may join up with  $L_3$  under the lake, but its presence is obscured by the edge-effect of the lake bottom silts. Unfortunately,  $L_2$  is a patchy sort of conductor, which at no point has a large conductance. So quite possibly, it would be inherently unresolvable from the edge-effect of the lake bottom silts--no matter the coil spacing.

The story is a little different for conductor  $N_1$ . This conductor is generally highly conductive. However, it is getting deeper as it goes under the thick lake bottom silts. The estimated depth is 140 ft on line 21N and it is still deeper under line 22N. So, quite possibly, its depth surpasses the capability of a 200 ft coil spacing to the north of line 22N.

Interestingly, the anomalous EM background levels over the lake bottom material to the north of line 22N, can be explained by a 60 ft thick layer of 12 ohm meter clay, sitting under about 50 ft of water. Given a similar situation to the Timmins area of Ontario, where the clay layer often sits over a roughly equal thickness of sandy overburden, it does not take much of a stretch of the imagination to picture the bedrock at depths in excess of 150 ft, to the north of conductor  $N_1$ . Such a depth to bedrock is in keeping with the 'disappearance' of conductor  $N_1$ .

Of course, it is always possible that conductor N<sub>1</sub> is terminated at its north end, by the ultramafic intrusive, seen in the magnetic contours. This intrusive has certainly terminated conductors P<sub>4</sub>, Q<sub>4</sub> and S<sub>3</sub> at their north end. But, the situation is moot for conductor N<sub>1</sub>, because the intrusive appears to veer sufficiently toward the east to permit the conductor to flank it, northwards from line 22N.

The question concerning the north end of conductor N<sub>1</sub> can be answered by using a MaxMin coil spacing larger than 200 ft. A 400 ft coil spacing would be adequate to trace conductor N<sub>1</sub> to the north of line 22N, if indeed it exists in that area. Any problem of unravelling conductor N<sub>1</sub> from the edge-effects of the lake bottom clays can be handled, as per the example on pages 2a, b.

#### CONCLUDING REMARKS AND RECOMMENDATIONS

The obvious starting point in utilizing the interpretation of this report is to plug into it all of the geological information known to date. This exercise is left to the geological consultants of McFinley Mines Ltd. Certainly, a framework has now been established for the direction of pursuit of any earlier encouraging trenching and/or drilling results.

WRITER'S DECLARATION

Neither I, nor John Betz Limited, have any financial interest in any of the properties of Sabina Industries Ltd. or McFinley Mines Ltd., or of their Joint venture partners.

I hold B.A. (1952) and M.A. (1953) degrees in geophysics from the University of Toronto.

I have worked full time in mining exploration geophysics since 1953, and two summer seasons prior to 1953.

All statements made in this report are correct to the best of my knowledge.

Etobicoke, Ontario  
July, 1982.



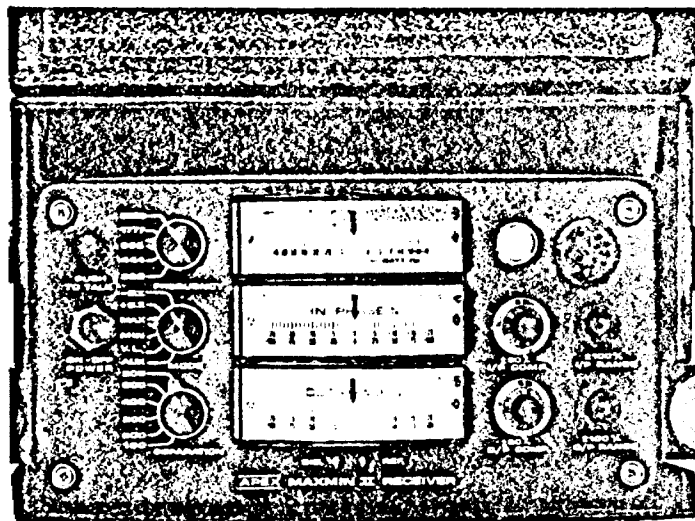
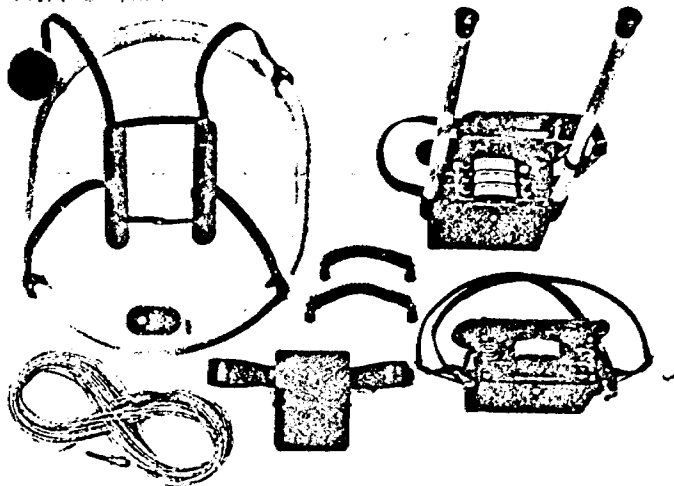
John E. Betz  
President

# ● APEX

# MAXMIN II PORTABLE EM

- Five frequencies: 222, 444, 888, 1777 and 3555 Hz.
- Maximum coupled (horizontal-loop) operation with reference cable.
- Minimum coupled operation with reference cable.
- Vertical-loop operation without reference cable.
- Coil separations: 25, 50, 100, 150, 200 and 250 m (with cable) or 100, 200, 300, 400, 600 and 800 ft.
- Reliable data from depths of up to 180m (600 ft).
- Built-in voice communication circuitry with cable.
- Tilt meters to control coil orientation.





## SPECIFICATIONS :

**Frequencies:** 222, 444, 888, 1777 and 3555 Hz.

**Modes of Operation:** MAX: Transmitter coil plane and receiver coil plane horizontal (Max-coupled; Horizontal-loop mode). Used with refer. cable.

MIN: Transmitter coil plane horizontal and receiver coil plane vertical (Min-coupled mode). Used with reference cable.

V.L. : Transmitter coil plane vertical and receiver coil plane horizontal (Vertical-loop mode). Used without reference cable, in parallel lines.

**Coil Separations:** 25, 50, 100, 150, 200 & 250m (MMII) or 100, 200, 300, 400, 600 and 800 ft. (MMIF). Coil separations in V.L. mode not restricted to fixed values.

**Parameters Read:** - In-Phase and Quadrature components of the secondary field in MAX and MIN modes.  
- Tilt-angle of the total field in V.L. mode.

**Readouts:** - Automatic, direct readout on 90mm (3.5") edgewise meters in MAX and MIN modes. No nulling or compensation necessary.  
- Tilt angle and null in 90mm edgewise meters in V.L. mode.

**Scale Ranges:** In-Phase:  $\pm 20\%$ ,  $\pm 100\%$  by push-button switch.  
Quadrature:  $\pm 20\%$ ,  $\pm 100\%$  by push-button switch.  
Tilt:  $\pm 75\%$  slope.  
Null (V.L.): Sensitivity adjustable by separation switch.

**Readability:** In-Phase and Quadrature: 0.25 % to 0.5 % ; Tilt: 1% .

**Repeatability:**  $\pm 0.25\%$  to  $\pm 1\%$  normally, depending on conditions, frequencies and coil separation used.

**Transmitter Output:** - 222Hz : 220 Atm<sup>2</sup>  
- 444Hz : 200 Atm<sup>2</sup>  
- 888Hz : 120 Atm<sup>2</sup>  
- 1777Hz : 60 Atm<sup>2</sup>  
- 3555Hz : 30 Atm<sup>2</sup>

**Receiver Batteries:** 9V trans. radio type batteries (4). Life: approx. 35 hrs. continuous duty (alkaline, 0.5 Ah), less in cold weather.

**Transmitter Batteries:** 12V 6Ah Gel-type rechargeable battery. (Charger supplied).

**Reference Cable:** Light weight 2-conductor teflon cable for minimum friction. Unshielded. All reference cables optional at extra cost. Please specify.

**Voice Link:** Built-in intercom system for voice communication between receiver and transmitter operators in MAX and MIN modes, via reference cable.

**Indicator Lights:** Built-in signal and reference warning lights to indicate erroneous readings.

**Temperature Range:** -40°C to +60°C (-40°F to +140°F).

**Receiver Weight:** 6kg (13 lbs.)

**Transmitter Weight:** 13kg (29 lbs.)

**Shipping Weight:** Typically 60kg (135 lbs.), depending on quantities of reference cable and batteries included. Shipped in two field/shipping cases.

Specifications subject to change without notification.

**APEX PARAMETRICS LIMITED**  
P.O. BOX 989, STOUFFVILLE, ONT., CANADA. L0H 1L0

Phone: (416) 852-5875 Cables: APEXPARA TORONTO Telex: .





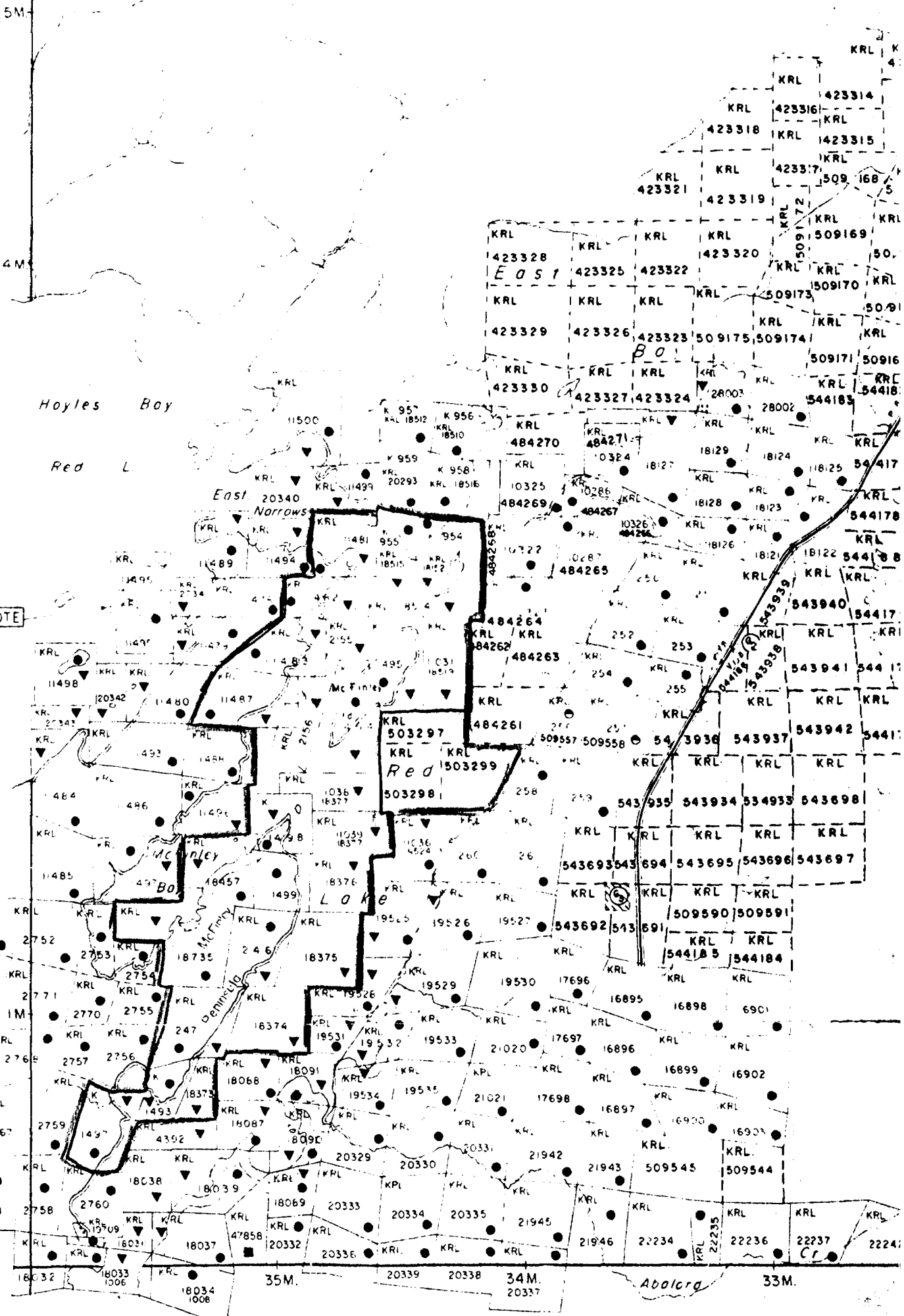
52N04NE0036 63.3994 BATEMAN

900

# BATEMAN TWP. M. 2139

McDonough Twp. M. 2182

SEE NOTE



Balmer Twp. M. 21

OMEPI-1-JV-29

63.3994



# JAMES WADE ENGINEERING LTD.

Tel. (416) 488-4500

805 - 43 Eglinton Ave. E., Toronto, Ont. Canada M4P 1A2

*Separate folder for  
some maps.*

Mr. W. Cummins,  
President,  
Sabina Industries Limited,  
816-500 University Avenue,  
Toronto, Ontario  
M5G 1V7

Dear Bill:

Re: WE81-045  
Trenching & Bulk Sampling  
Program  
McFinley Property  
Red Lake, Ontario

We wish to summarize the results of the abovenoted program.

The work was performed on the property between April 10 - May 4, 1981. A trench was excavated by bulldozer and bulk samples were collected from 5 different zones across the trench. The chip sample analysis of these samples is as follows:

<u>Sample No</u>	<u>Zone No.</u>	<u>Width</u> (feet)	<u>Gold</u> (T.oz/ton)	<u>Silver</u>	<u>Copper</u> %	<u>Lead</u> %	<u>Zinc</u> %
6511	1	3	0.015	0.100	0.078	0.016	0.012
6512	2	3	0.070	0.290	0.200	0.008	0.019
6513	3	4	0.050	1.620	0.780	0.280	0.910
6514	4	3	0.065	2.790	0.034	0.860	0.840
6515	dyke	N/A	0.005	0.070	N/A	N/A	N/A

The attached report by D. Wetmore, P.Eng. describes the work in detail.

The bulk samples were sent to Lakefield Research Laboratories for analysis and metallurgical testing. The first phase of the testwork was to determine head assays on the zones. The results of the test work were disappointing and the planned metallurgical test program was terminated. The results of the Lakefield analysis are presented in the attached Lakefield Report no. L.R. 2455.

If we can be of any further service on this project, please call at your convenience. We would be pleased to serve you.

Yours Sincerely,

*James Wade*  
James Wade, P. Eng.,  
President

JW/gw

8S 6S 4S 2S 0 2N 4N 6N 8N 10N 12N 14N 16N 18N 20N 22N 24N



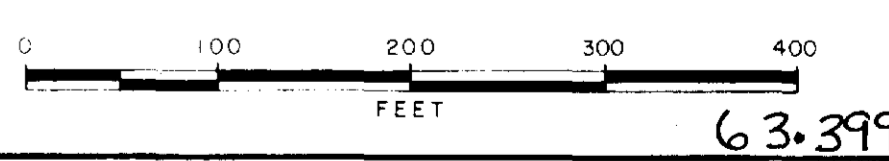
LEGEND

1a Green, massive andesite	5a Diorite	○ Outcrop - observed
1b Schistose andesite, chlorite schist	5b Diabase, basalt	→ Lava flow, top in direction of arrow
1c Chlorite - amphibole schist, dioritic andesite	5c Lamprophyre	⊞ Muskeg - swamp
1d Brown biotite - chlorite schist	5e Chlorite - amphibole schist	□ Old building
1e Dark grey cherty andesite, silicified and carbonized		○ Drill hole - values projected vertically
2a Layered iron formation, garnetiferous		— Old road
2b Cherty layered iron formation		▭ Trench
2c Argillite, slate, sericite-chlorite - phyllite and schist		▭ Trench filled with overburden
2d Carbonaceous argillite, graphitic schist, locally garnetiferous		Py pyrite
3a Peridotite, meta-hornblende		Aspy arsenopyrite
3b Carbonate-chlorite - amphibole - talc schist		cpy(Cu) chalcopyrite (Copper %)
4a Quartz and/or feldspar porphyry		po pyrrothite
4b Green to grey sericitic schist, sericitic quartz porphyry		sp(Zn) sphalerite (Zinc %)
4c Aplite		gal(Pb) galena (Lead %)
		Au Gold - oz/ton
		Ag Silver
		Al(OH)3 Al
		Au, Ag, Zn, Pb / core length (ft.)
		⊞ Shaft
		○ Drift - 150ft. level
		○ Drift - 400ft. level

**SYMBOLS**

s.c.	Carbonatization - slightly
m.c.	— moderately
h.c.	— strongly
qcv	— quartz carbonate vein
s.s.	Silicification - slightly
m.s.	— moderately
h.s.	— strongly
M	Amygdales (feldspar, quartz, carbonate)
35	Schistosity - strike and dip
30	Shearing - slightly
30	Fracturing, jointing - vertical, inclined
30	Bedding - strike and dip
30	Fault
30	Geological contact - observed
30	— interpreted

Note: Outcrops along shoreline have Carbonatization, Silicification and qcv noted on 7-40 maps.



63-3994

**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**

McFINLEY RED LAKE PROPERTY

BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**GEOLOGICAL MAP  
AND DIAMOND DRILL HOLES**

Survey Date: 1974      Drawn By:      Map Ref:

Revisions:              Checked By:      Map No:

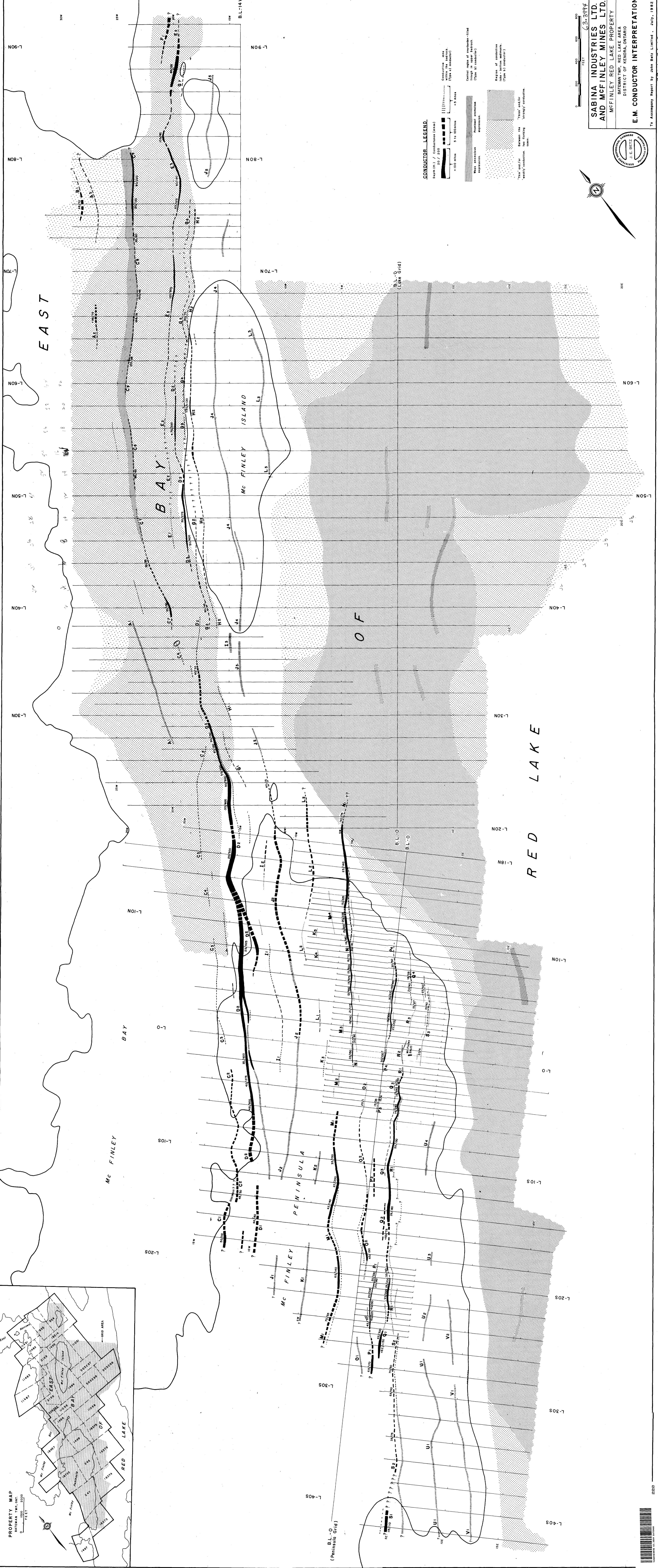
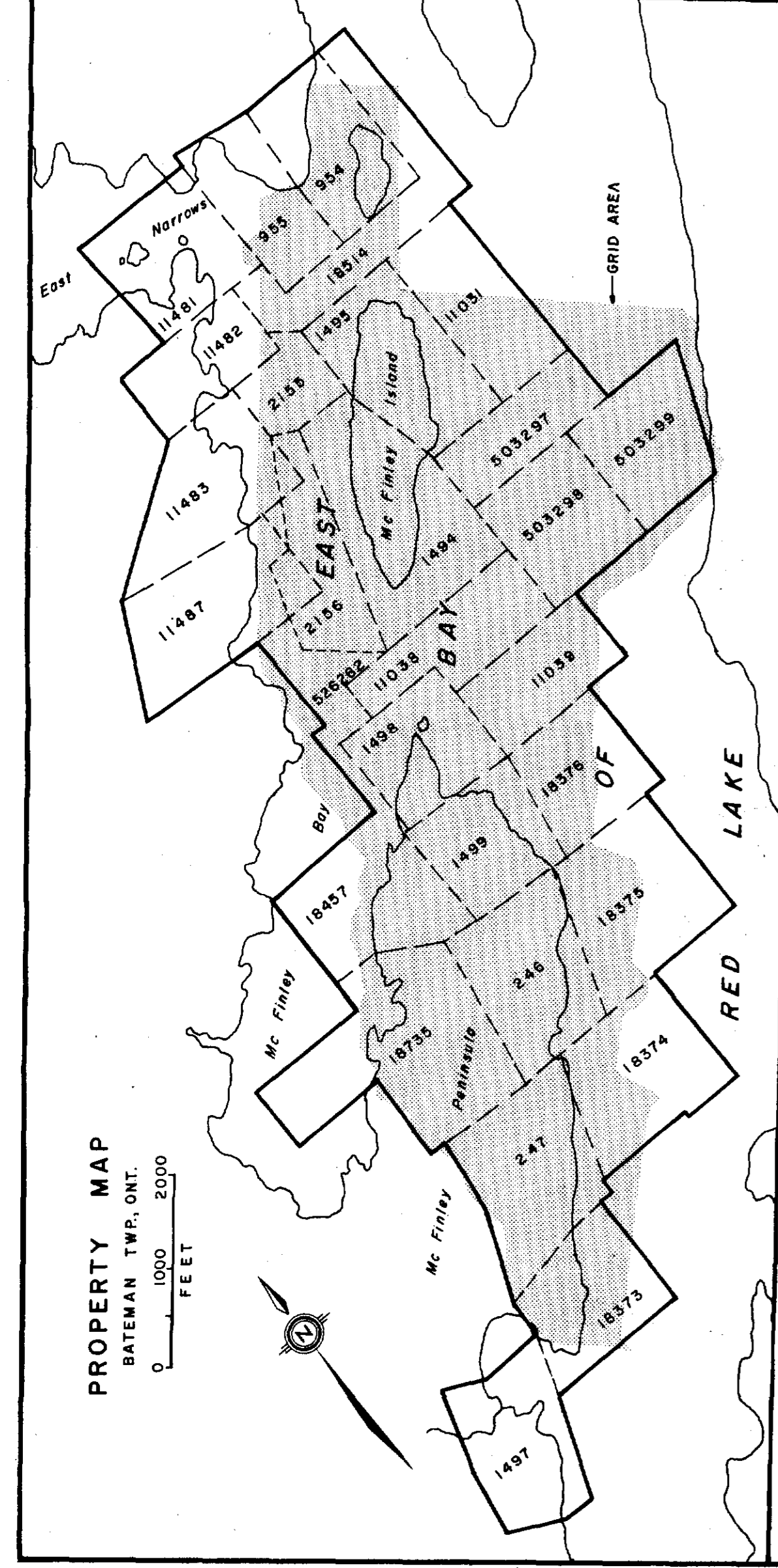
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PROPERTY MAP  
 0 1000 2000  
 FEET



**CONDUCTOR LEGEND**  
 Depth (ft) / Conditions (Notes)  
 20 / 200  
 400 max  
 2 to 3000 max  
 40 max  
 Conductivity zone  
 within the surface  
 (Type 1 conductor)  
 Central region of maximum filling  
 trough in upper strata  
 (Type 2 conductor)  
 Approximate conductor  
 interpretation  
 Regions of conductive  
 rock - surface features  
 (Type 3 conductor)  
 Thick and/or  
 highly conductive  
 zone

63-3194

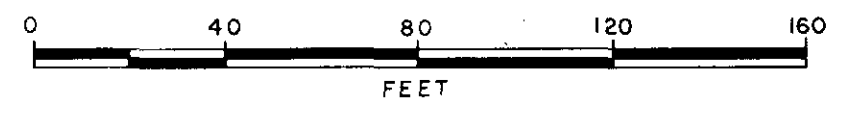
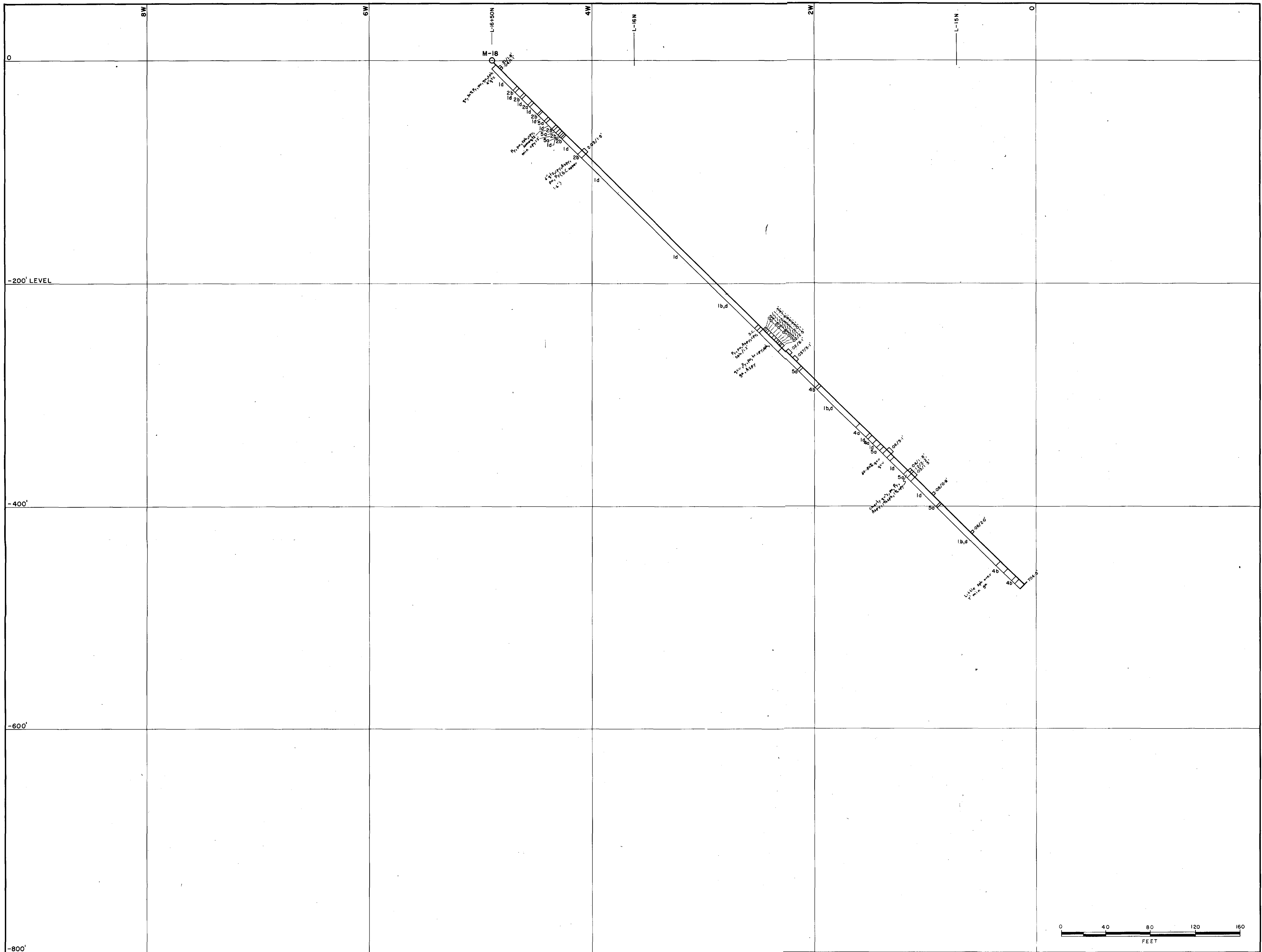
**SABINA INDUSTRIES LTD.  
 AND MCFINLEY MINES LTD.**

MCFINLEY RED LAKE PROPERTY  
 BATEMAN TWP. RED LAKE AREA  
 DISTRICT OF KENORA, ONTARIO

**E.M. CONDUCTOR INTERPRETATION**

To Accompany Report by John Betz Limited, July, 1982





L E G E N D

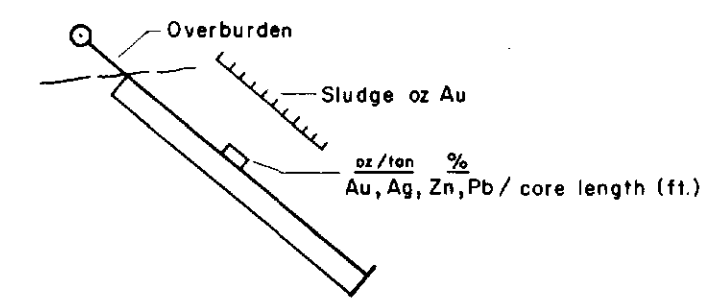
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- acv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrothite

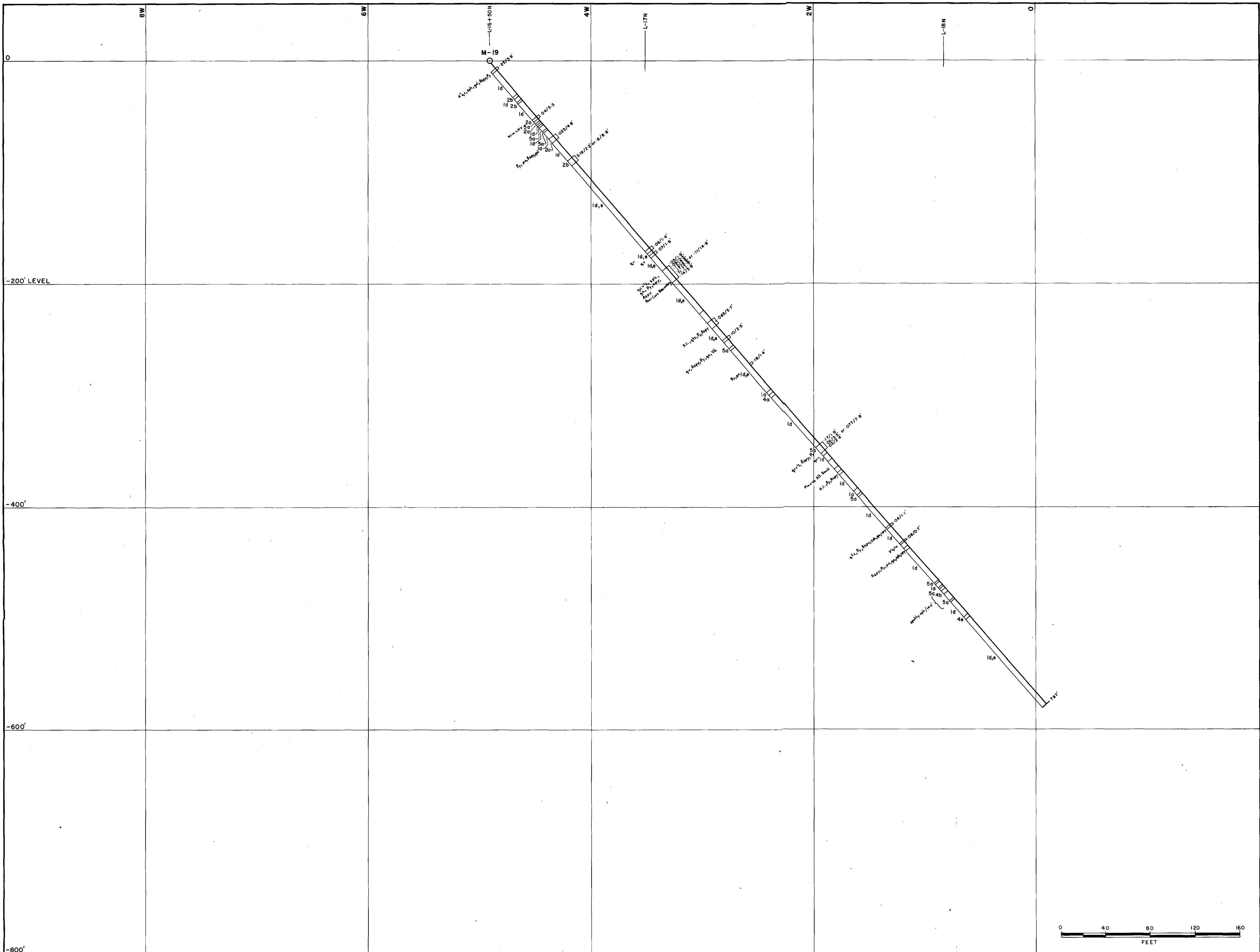
- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY  
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
M-18

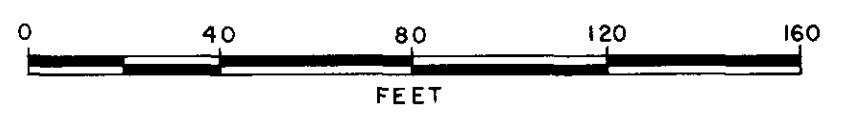
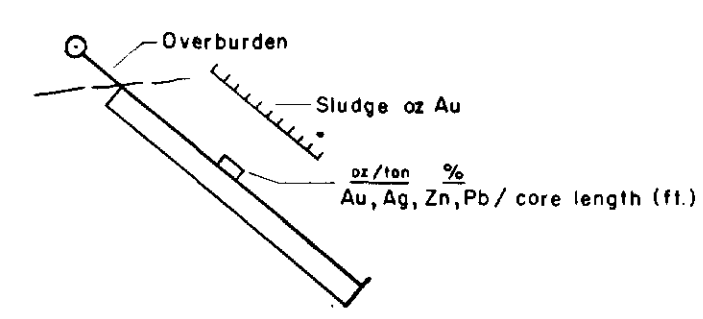
Date: Sept., /82 By: / gmes Map No:





L E G E N D

<ul style="list-style-type: none"> <li>1a Green, massive andesite</li> <li>1b Schistose andesite, chlorite schist</li> <li>1c Chlorite - amphibole schist, dioritic andesite</li> <li>1d Brown biotite - chlorite schist</li> <li>1e Dark grey cherty andesite, silicified and carbonatized</li> <li>2a Layered iron formation, garnetiferous</li> </ul>	<ul style="list-style-type: none"> <li>2d Carbonaceous argillite, graphitic schist, locally garnetiferous</li> <li>3a Peridotite, meta-hornblende</li> <li>3b Carbonate - chlorite - amphibole - talc schist</li> <li>4a Quartz and/or feldspar porphyry</li> <li>4b Green to gray sericitic schist, sericitic quartz porphyry</li> <li>4c Aplite</li> <li>4d Granite</li> <li>4e Grandiorite</li> </ul>	<ul style="list-style-type: none"> <li>5a Diorite</li> <li>5b Diabase, basalt</li> <li>5c Lamprophyre</li> <li>5d Chlorite - amphibole schist</li> <li>Au Gold</li> <li>Ag Silver</li> <li>sph(Zn) sphalerite (Zinc %)</li> <li>gal(Pb) galena (Lead %)</li> <li>cpy(Cu) chalcopyrite (Copper %)</li> <li>Aspy arsenopyrite</li> </ul>	<ul style="list-style-type: none"> <li>s.c. Carbonatization - slightly</li> <li>m.c. moderately</li> <li>h.c. strongly</li> <li>qcw quartz carbonate vein</li> <li>s.s. Silicification - slightly</li> <li>m.s. moderately</li> <li>h.s. strongly</li> <li>M Amygdaloidal (feldspar, quartz, carbonate)</li> <li>VG Visible Gold</li> <li>bx breccia</li> <li>Py pyrite</li> <li>po pyrrhotite</li> </ul>	<ul style="list-style-type: none"> <li>Sul Sulphides</li> <li>mass massive</li> <li>h heavy</li> <li>min minor</li> <li>Shearing</li> </ul>
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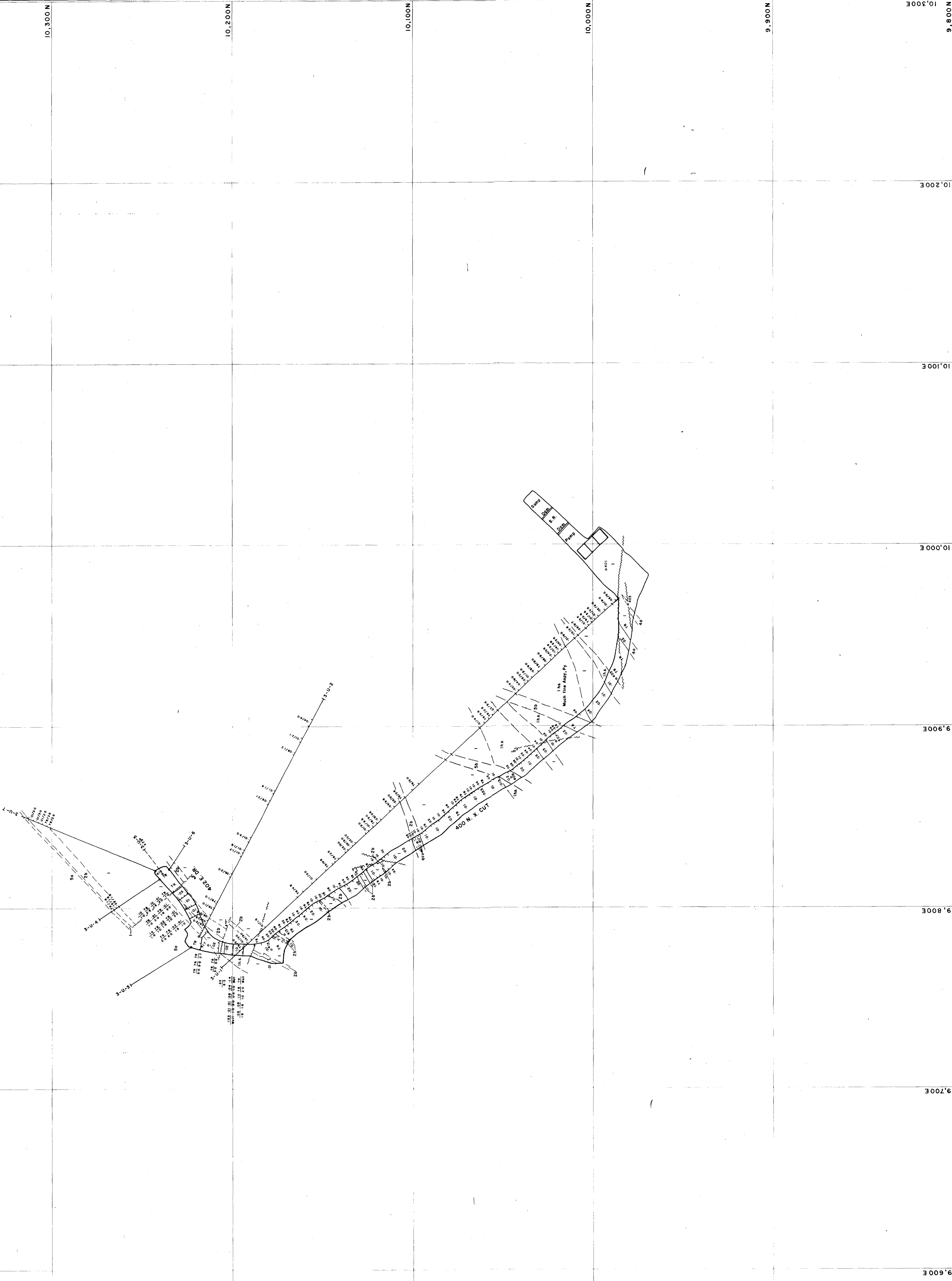
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

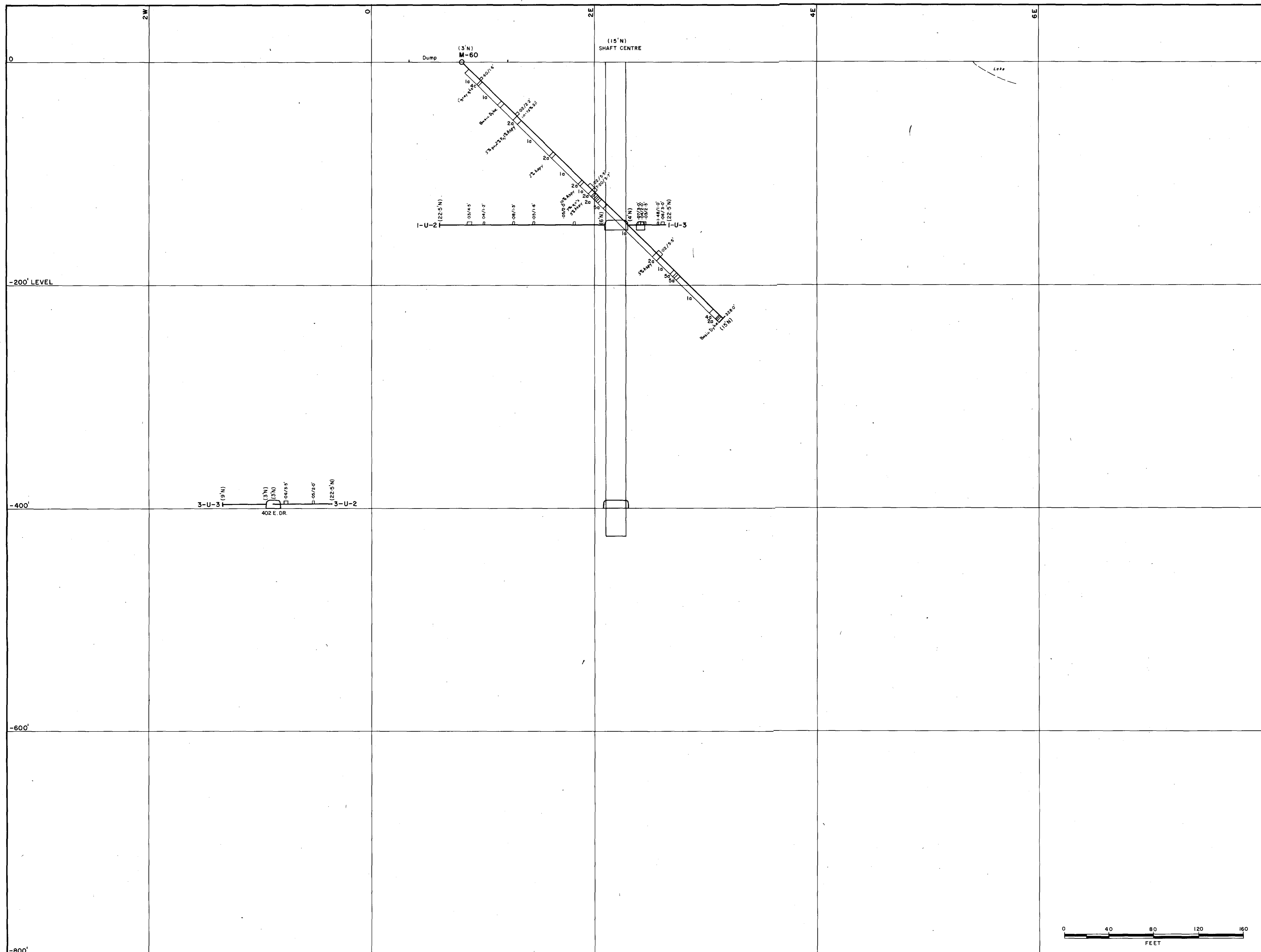
M-19

Date: Sept, /82 By: / gmes Map No:









L E G E N D

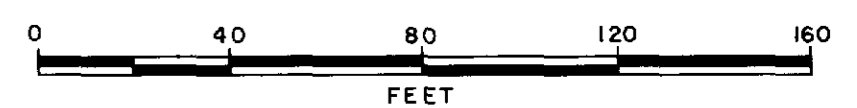
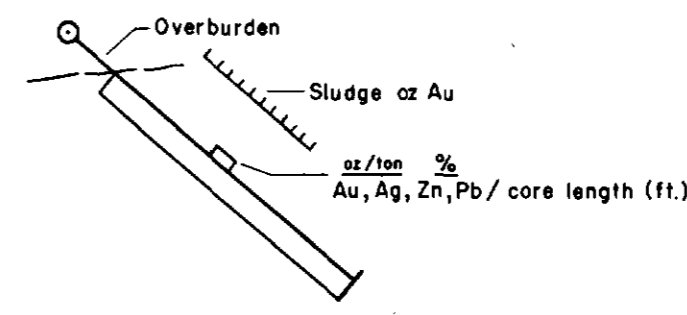
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblende
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

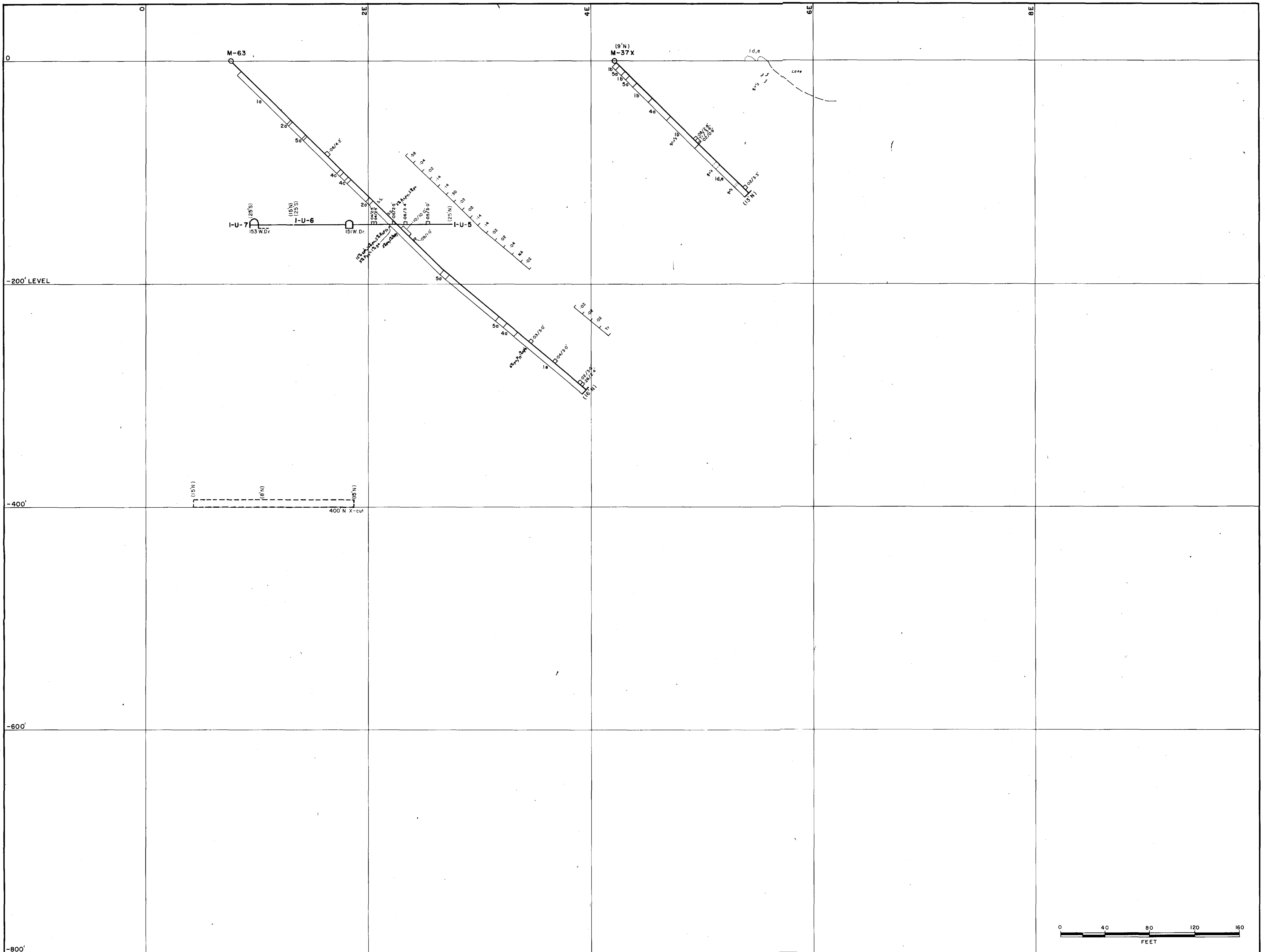
- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
MCFINLEY RED LAKE PROPERTY  
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
**SECTION 0+20S**  
M-60

Date: Sept./82 By: / gmes Map No:





L E G E N D

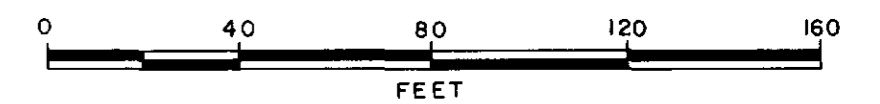
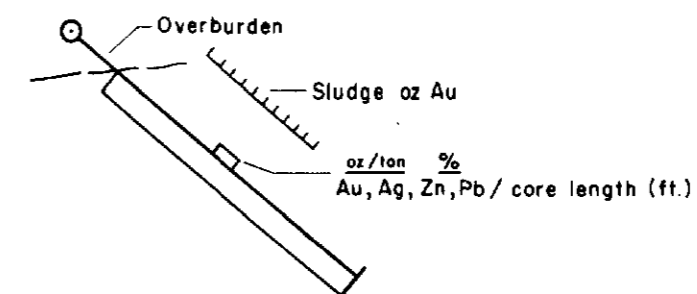
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, areniferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopryrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

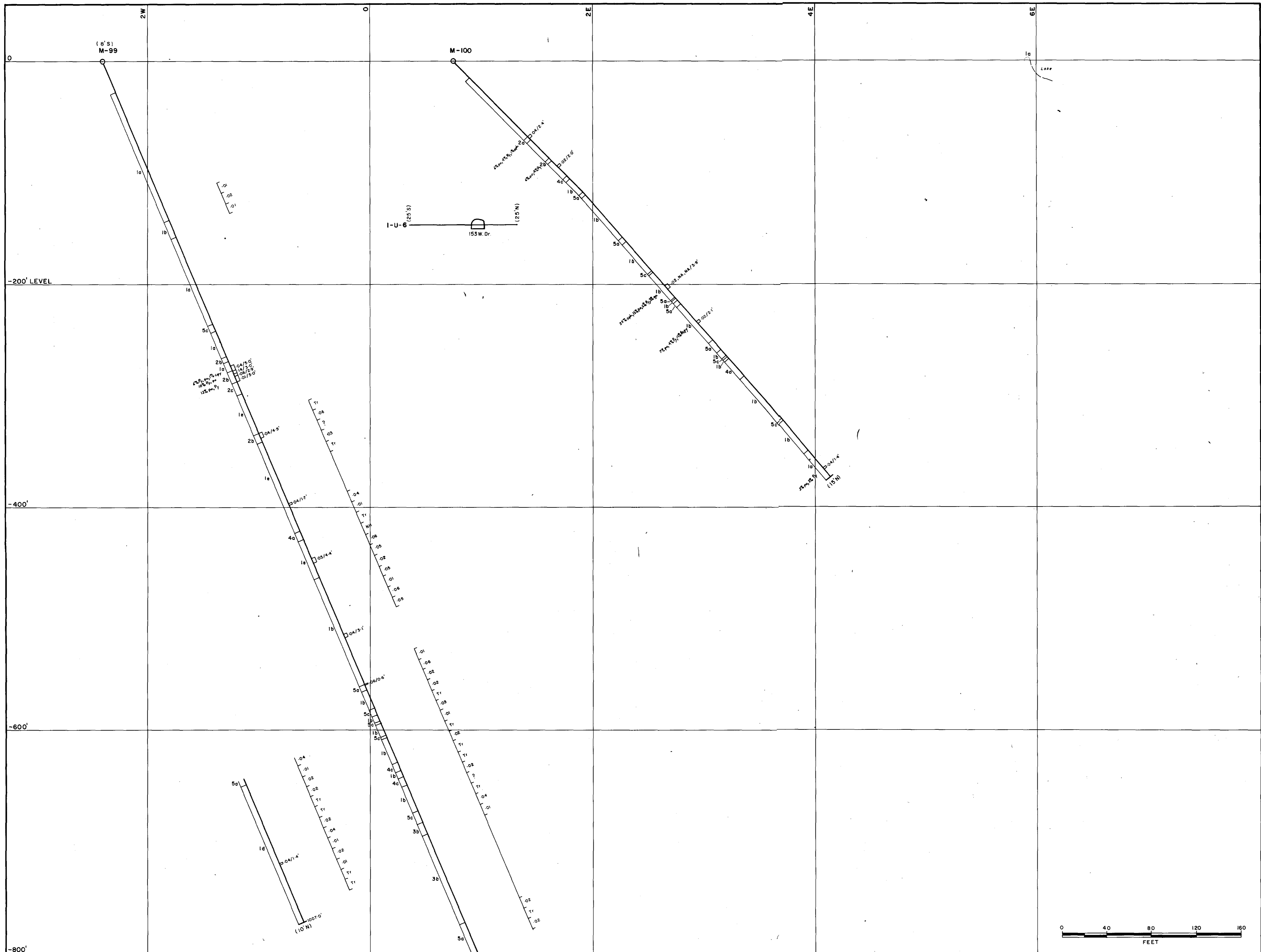
- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY  
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
**SECTION 0+80S**  
M-63, M-37X

Date: Sept. / 82 By: / gmes Map No:





L E G / E N D

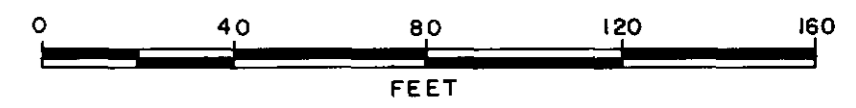
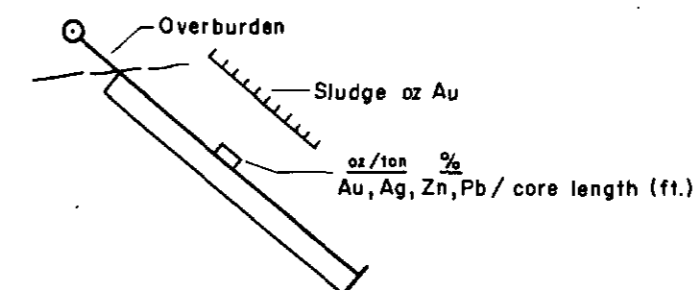
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
McFINLEY RED LAKE PROPERTY

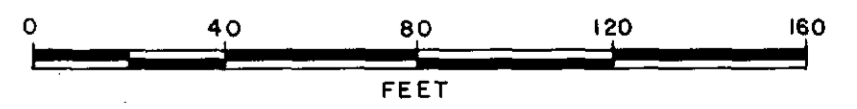
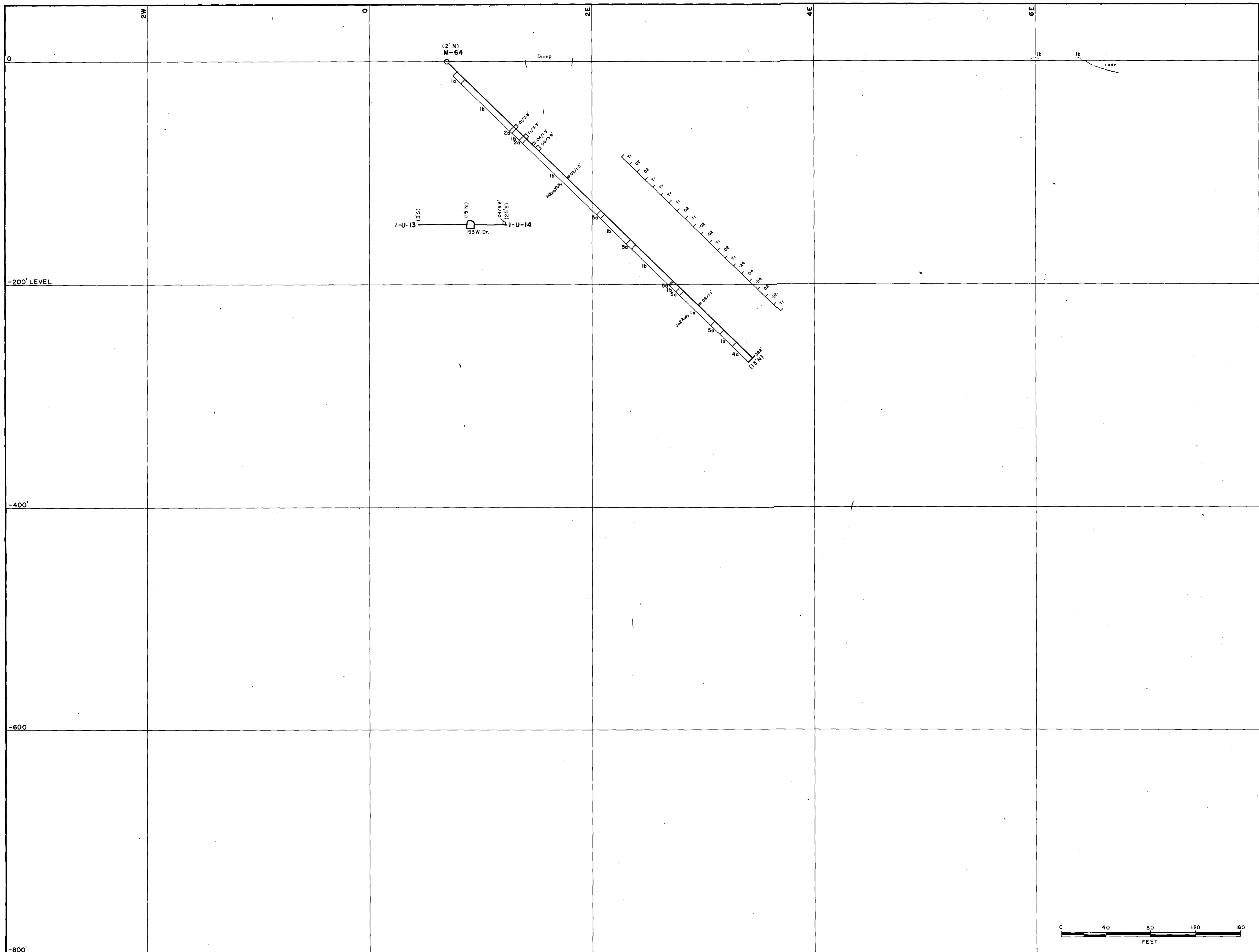
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 1 + 30S**  
M-99, M-100

Date: Sept, /82 By: / gmes Map No:



52N44E0336 63.3994 BATEMAN



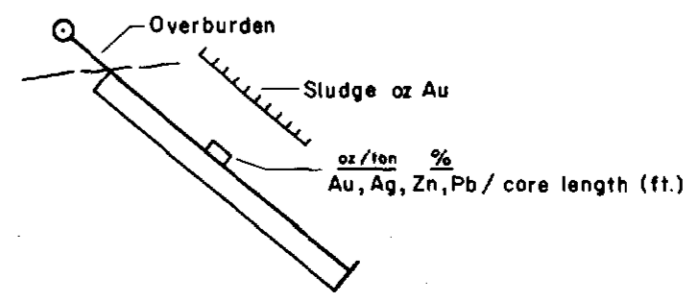
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2a Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
- Au Gold  
Ag Silver  
sph(Zn) sphalerite (Zinc %)  
gal(Pb) galena (Lead %)  
cpy(Cu) chalcopyrite (Copper %)  
Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrolite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**

**McFINLEY RED LAKE PROPERTY**

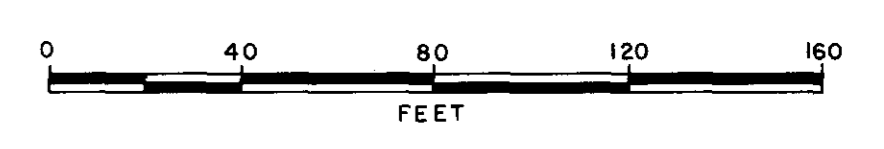
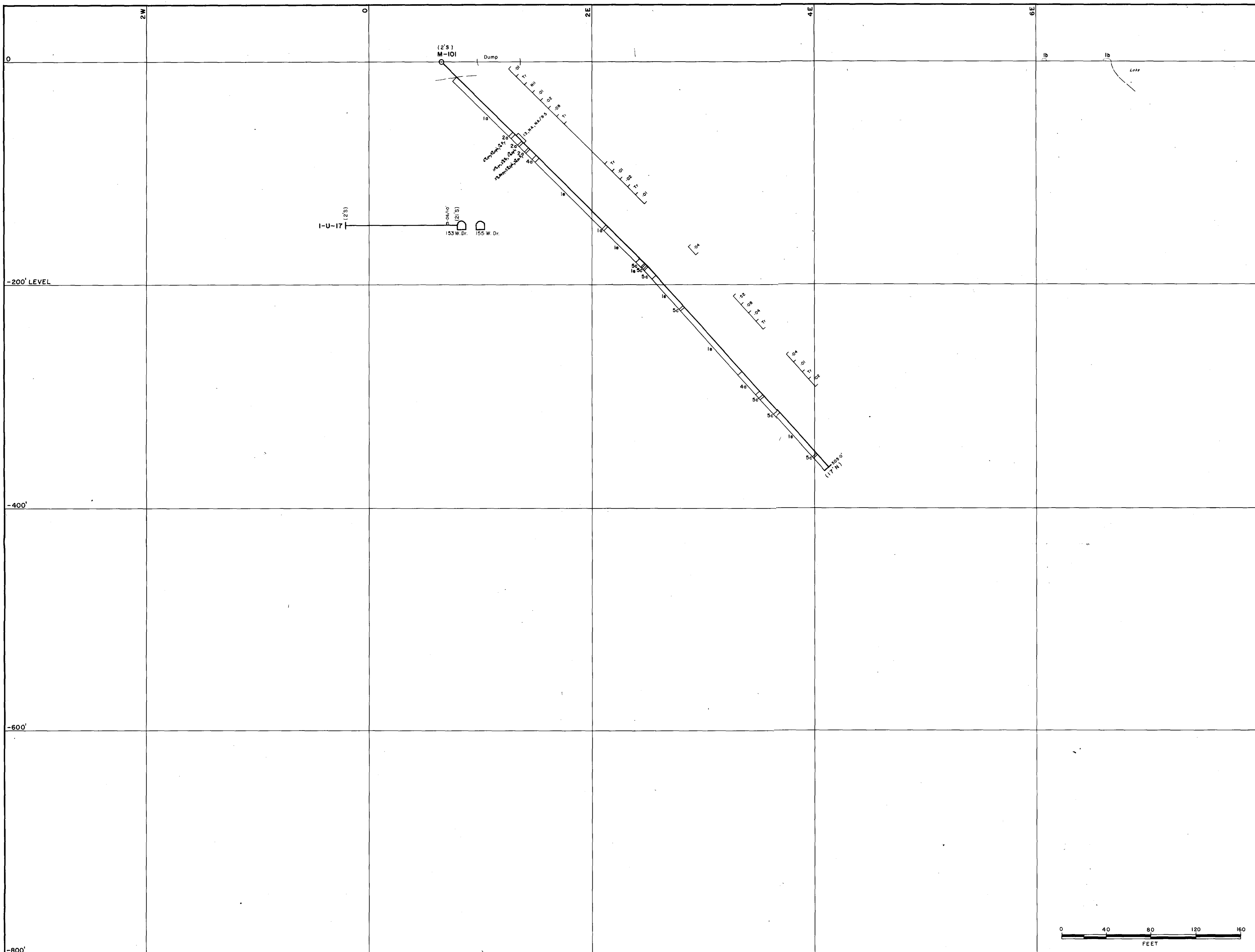
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 1+80S**

**M-64**

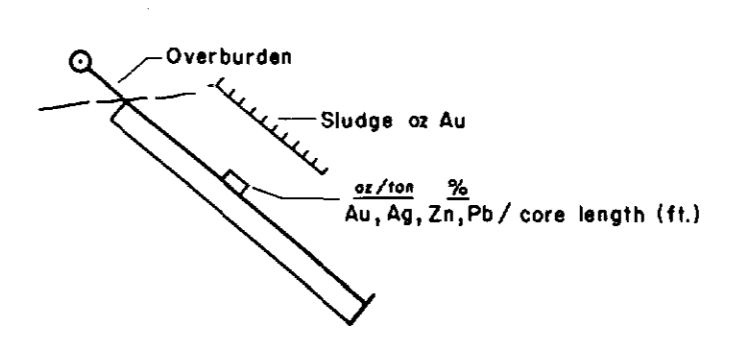
Date: Sept., /82 By: / gmes Map No:





L E G E N D			
1a	Green, massive andesite	5a	Diorite
1b	Schistose andesite, chlorite schist	5b	Diabase, basalt
1c	Chlorite - amphibole schist, dioritic andesite	5c	Lamprophyre
1d	Brown biotite - chlorite schist	5e	Chlorite - amphibole schist
1e	Dark grey cherty andesite, silicified and carbonatized	Au	Gold
2a	Layered iron formation, garnetiferous	Ag	Silver
2d	Carbonaceous argillite, graphitic schist, locally garnetiferous	sph(Zn)	sphalerite (Zinc %)
3a	Peridotite, meta-hornblendite	gal(Pb)	galena (Lead %)
3b	Carbonate - chlorite - amphibole - talc schist	cpy(Cu)	chalcopyrite (Copper %)
4a	Quartz and/or feldspar porphyry	Aspy	arsenopyrite
4b	Green to gray sericitic schist, sericitic quartz porphyry		
4c	Aplite		
4d	Granite		
4e	Granodiorite		

s.c.	Carbonatization - slightly	Sul	Sulphides
m.c.	- moderately	mass	massive
h.c.	- strongly	h	heavy
qcv	- quartz carbonate vein	min	minor
s.s.	Silicification - slightly	shear	Shearing
m.s.	- moderately		
h.s.	- strongly		
M	Amygdaloidal (feldspar, quartz, carbonate)		
VG	Visible Gold		
bx	breccia		
Py	pyrite		
po	pyrrhotite		



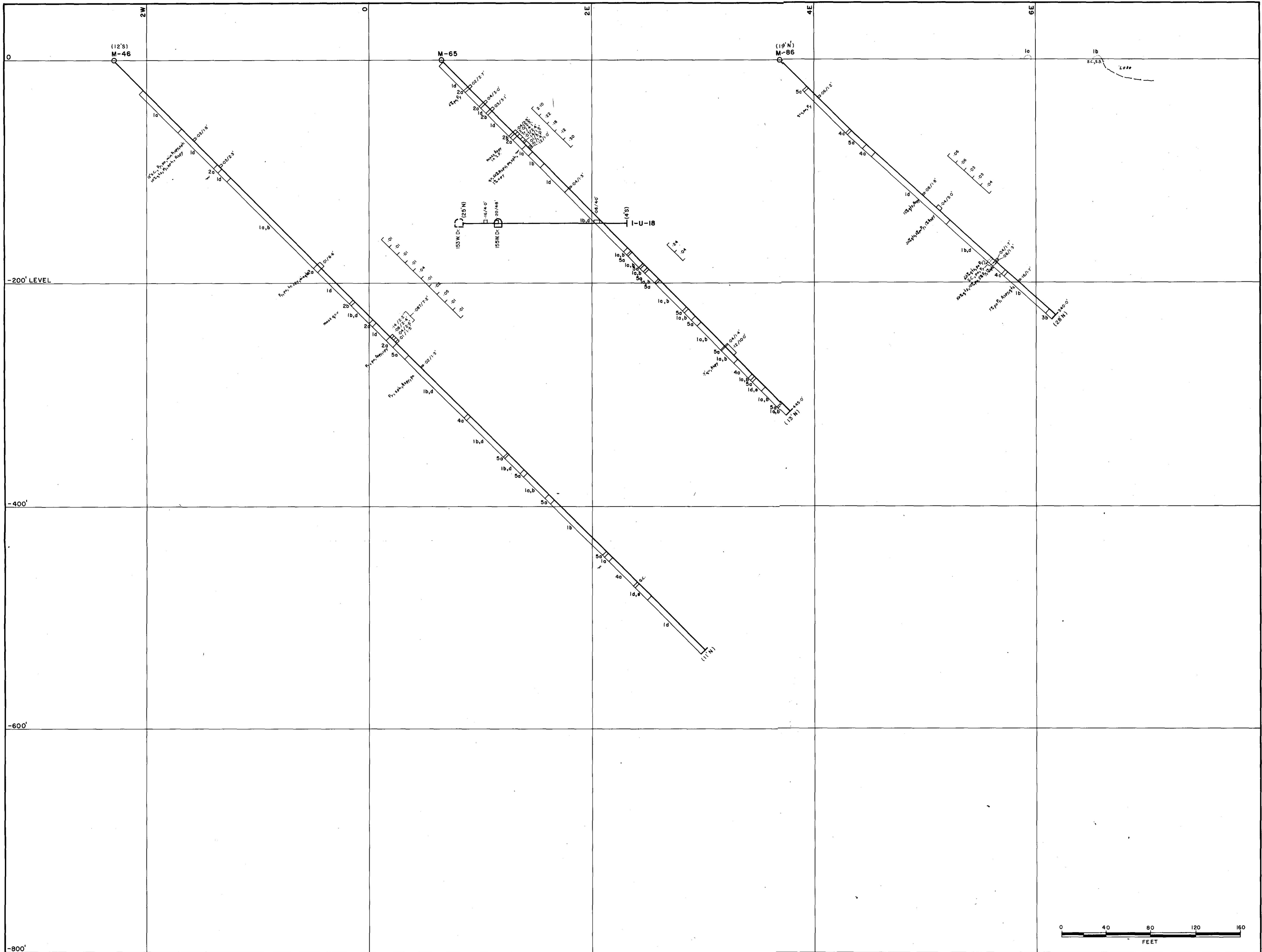
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA.  
DISTRICT OF KENORA, ONTARIO

**SECTION 2+30S**  
M-101

Date: Sept., /82 By: / gmes Map No:





L E G E N D

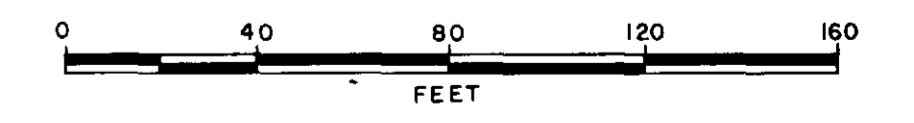
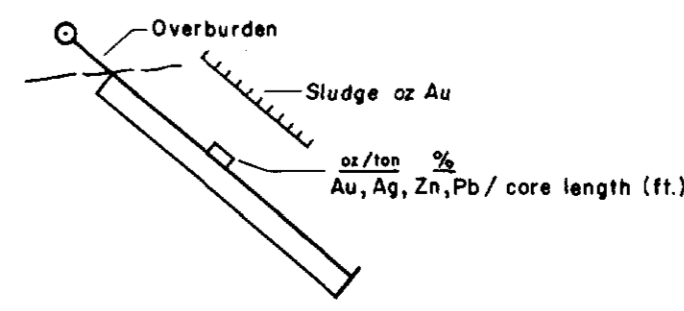
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Apatite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
- Au Gold  
 Ag Silver  
 sph(Zn) sphalerite (Zinc %)  
 gal(Pb) galena (Lead %)  
 cpy(Cu) chalcopyrite (Copper %)  
 Aspy arsenopyrite

- s.c. Carbonatization - slightly  
 m.c. - moderately  
 h.c. - strongly  
 qcv quartz carbonate vein  
 s.s. Silicification - slightly  
 m.s. - moderately  
 h.s. - strongly  
 M Amygdaloidal (feldspar, quartz, carbonate)  
 VG Visible Gold  
 bx breccia  
 Py pyrite  
 po pyrrhotite

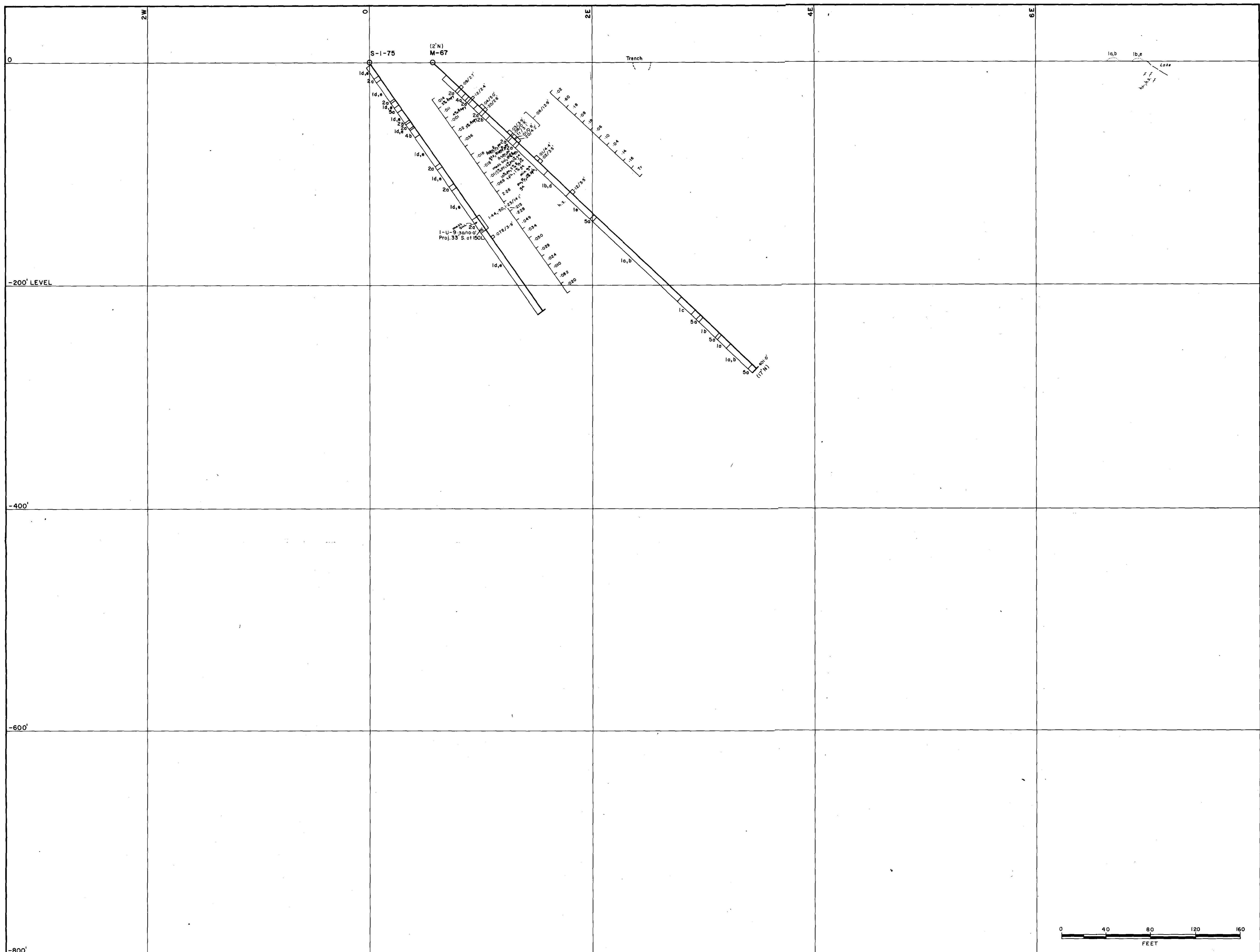
- Sul Sulphides  
 mass massive  
 h heavy  
 min minor  
 Shearing



**SABINA INDUSTRIES LTD.  
 AND M<sup>C</sup> FINLEY MINES LTD.**  
 M<sup>C</sup>FINLEY RED LAKE PROPERTY  
 BATEMAN TWP, RED LAKE AREA  
 DISTRICT OF KENORA, ONTARIO  
**SECTION 2+80S**  
 M-46, M-65 & M-86

Date: Sept./82 By: /gmes Map No:





-200' LEVEL

-400'

-600'

-800'

L E G E N D

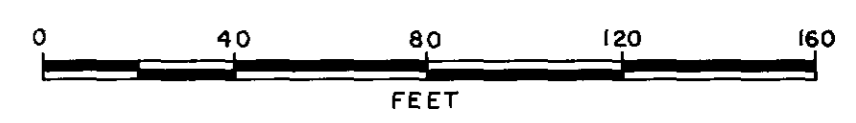
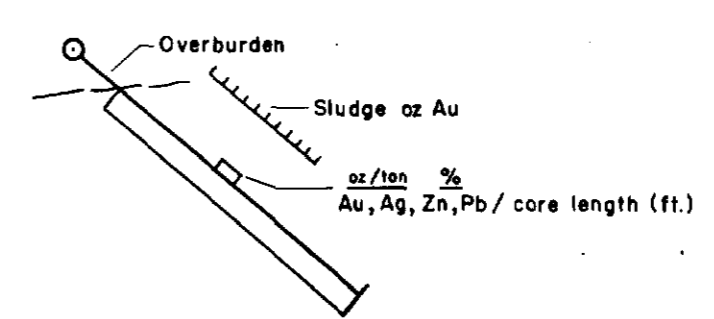
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
McFINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 3+80S**  
S-1-75 & M-67.

Date: Sept., /82 By: / gmes Map No:





- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

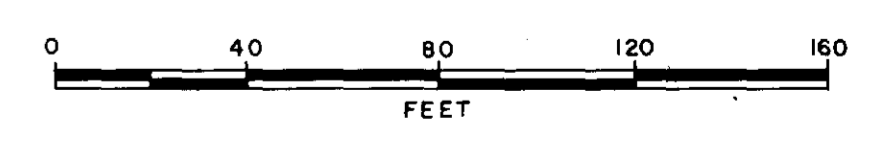
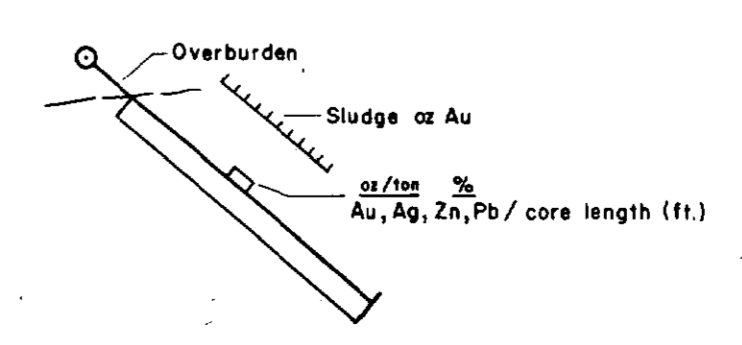
- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblende
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

**L E G E N D**

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcocopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY

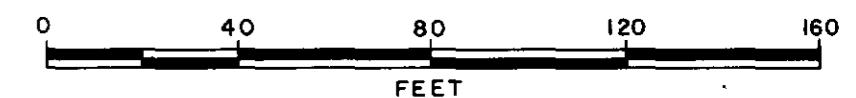
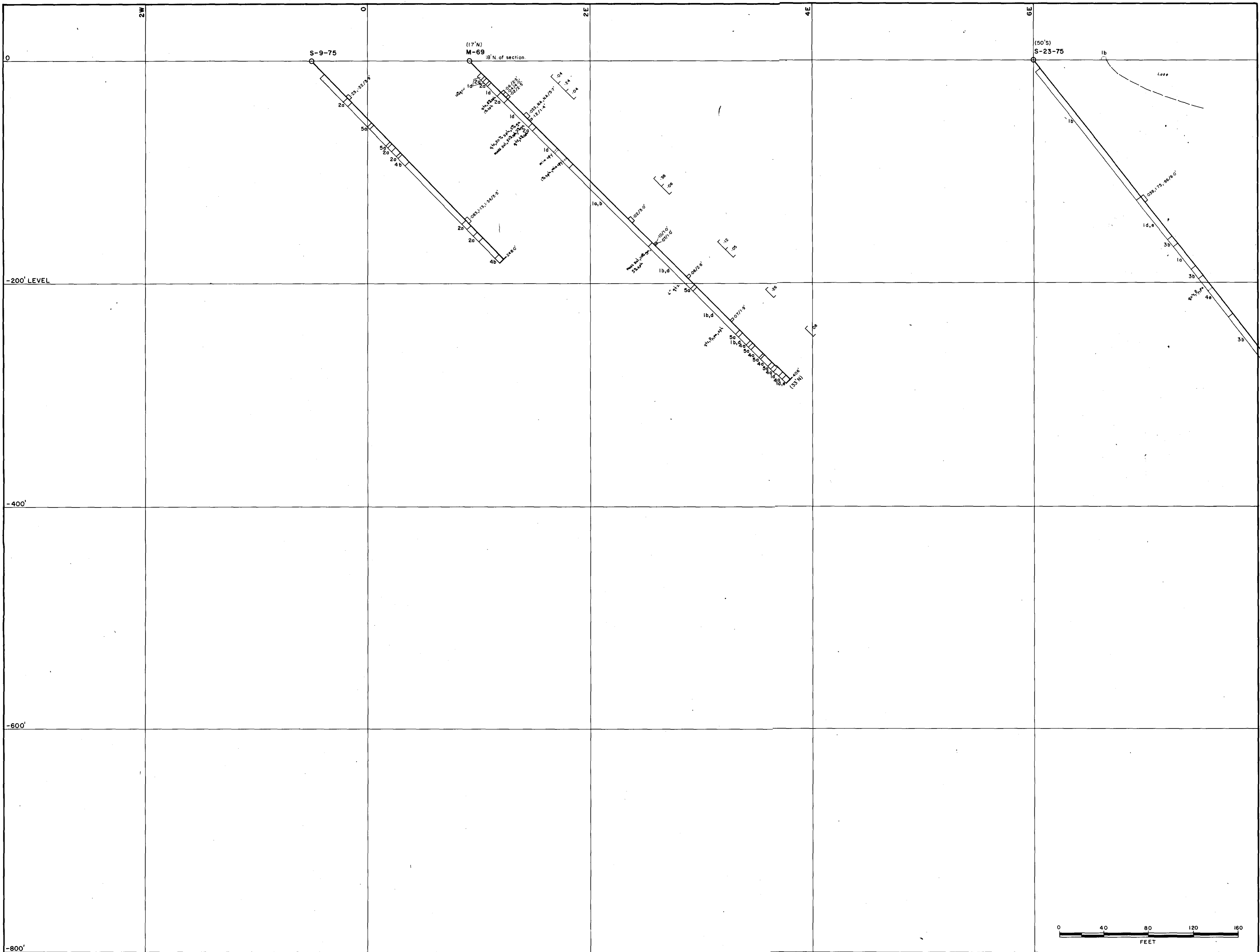
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 4+30S**  
S-25-75 & M-85

Date: Sept., /82 By: / gmes Map No:







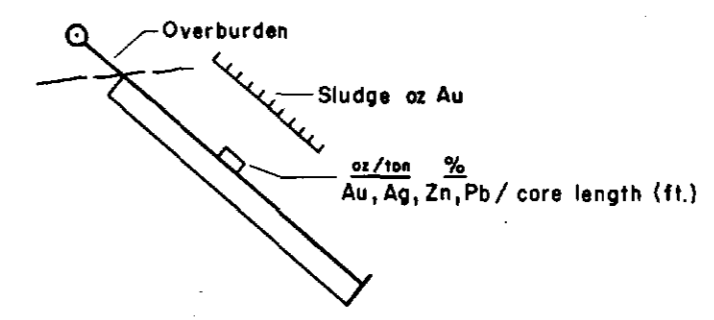
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- L E G E N D**
- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
  - Au Gold
  - Ag Silver
  - sph(Zn) sphalerite (Zinc %)
  - gal(Pb) galena (Lead %)
  - cpy(Cu) chalcopyrite (Copper %)
  - Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



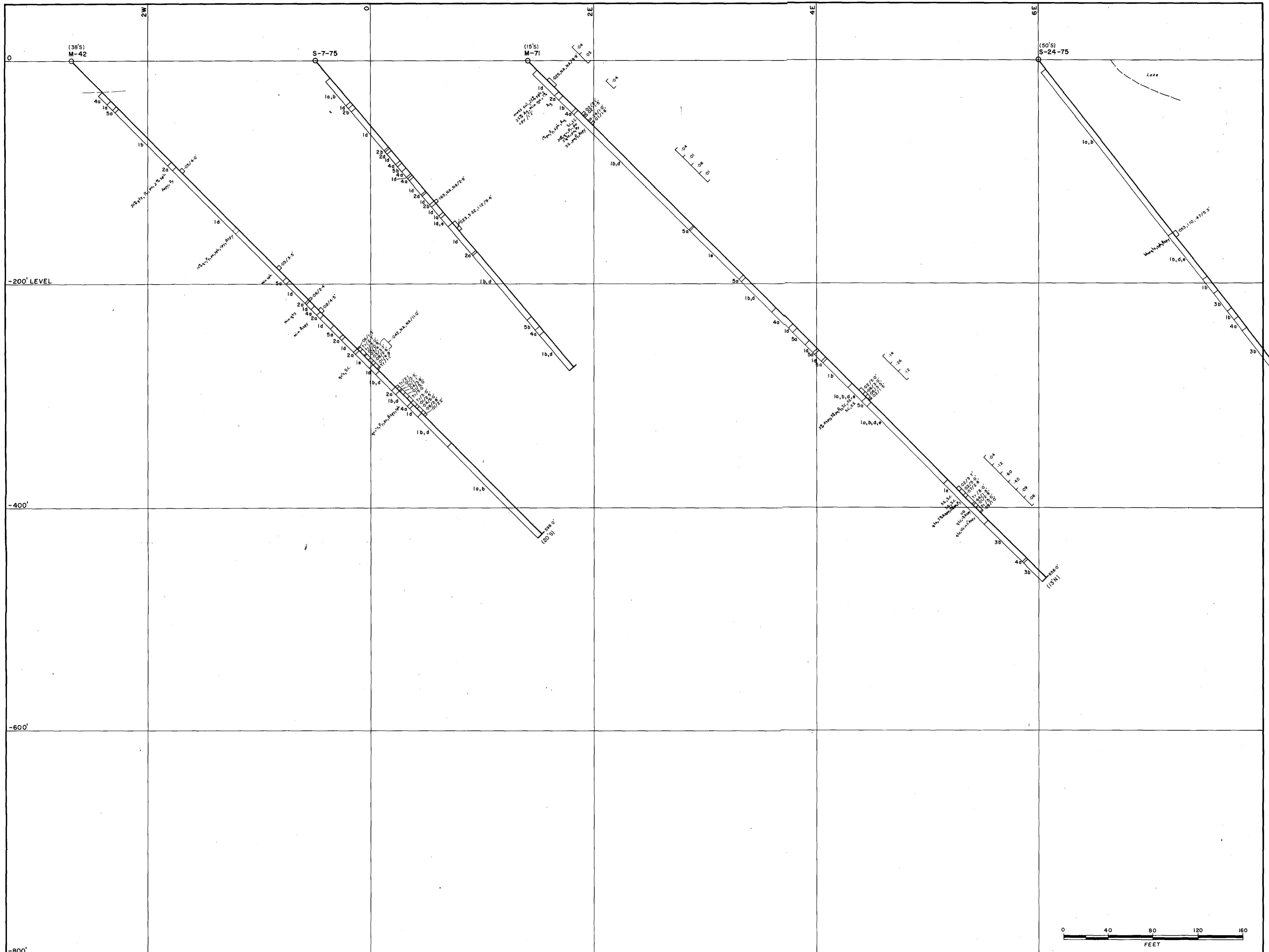
**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
McFINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 5+00S**  
S-9-75, M-69 & S-23-75

Date: Sept, /82 By: / gmes Map No:





L E G E N D

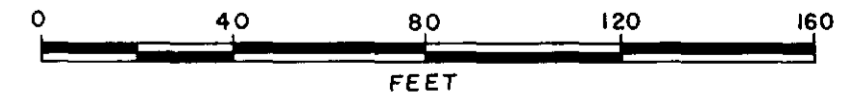
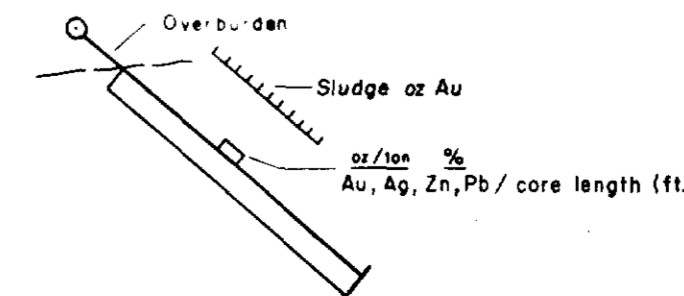
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblende
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



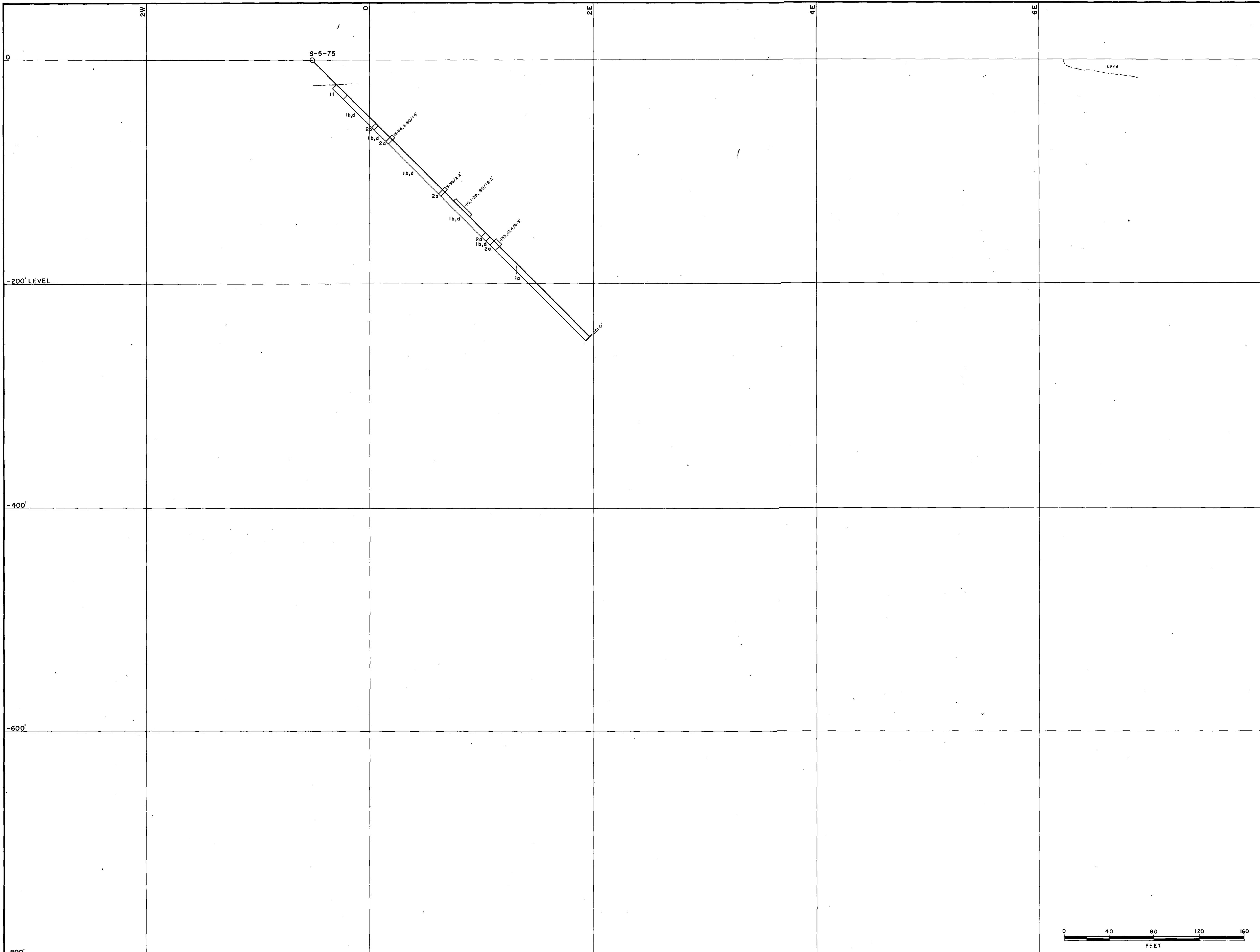
SABINA INDUSTRIES LTD.  
AND MCFINLEY MINES LTD.  
MCFINLEY RED LAKE PROPERTY

BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

SECTION 6+00S  
M-42, S-7-75, M-71 & S-24-75

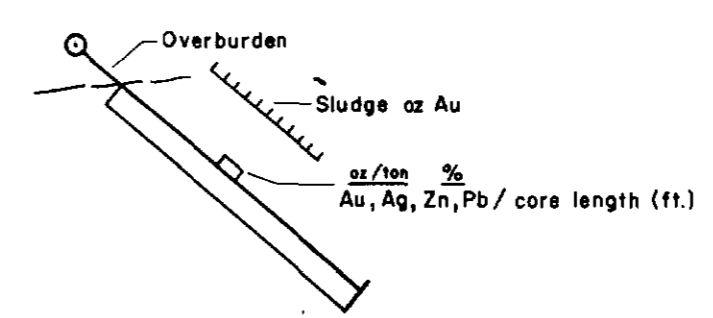
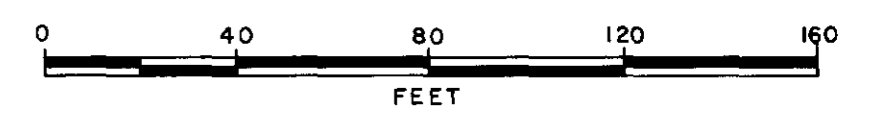
Date: Sept. / 82 By: / gmes Map No:





**L E G E N D**

<ul style="list-style-type: none"> <li>1a Green, massive andesite</li> <li>1b Schistose andesite, chlorite schist</li> <li>1c Chlorite - amphibole schist, dioritic andesite</li> <li>1d Brown biotite - chlorite schist</li> <li>1e Dark grey cherty andesite, silicified and carbonatized</li> <li>1f Layered iron formation arenatiferous</li> </ul>	<ul style="list-style-type: none"> <li>2a Carbonaceous argillite, graphitic schist, locally garnetiferous</li> <li>3a Peridotite, meta-hornblendite</li> <li>3b Carbonate - chlorite - amphibole - talc schist</li> <li>4a Quartz and/or feldspar porphyry</li> <li>4b Green to grey sericitic schist, sericitic quartz porphyry</li> <li>4c Aplite</li> <li>4d Granite</li> <li>4e Granodiorite</li> </ul>	<ul style="list-style-type: none"> <li>5a Diorite</li> <li>5b Diabase, basalt</li> <li>5c Lamprophyre</li> <li>5e Chlorite - amphibole schist</li> </ul>	<ul style="list-style-type: none"> <li>Au Gold</li> <li>Ag Silver</li> <li>sph(Zn) sphalerite (Zinc %)</li> <li>gal(Pb) galena (Lead %)</li> <li>cpy(Cu) chalcopyrite (Copper %)</li> <li>Aspy arsenopyrite</li> </ul>	<ul style="list-style-type: none"> <li>s.c. Carbonatization - slightly</li> <li>m.c. - moderately</li> <li>h.c. - strongly</li> <li>qcv - quartz carbonate vein</li> <li>s.s. Silicification - slightly</li> <li>m.s. - moderately</li> <li>h.s. - strongly</li> <li>M Amygdaloidal (feldspar, quartz, carbonate)</li> <li>VG Visible Gold</li> <li>bx breccia</li> <li>Py pyrite</li> <li>po pyrrolite</li> </ul>	<ul style="list-style-type: none"> <li>Sul Sulphides</li> <li>mass massive</li> <li>h heavy</li> <li>min minor</li> <li>Shearing</li> </ul>
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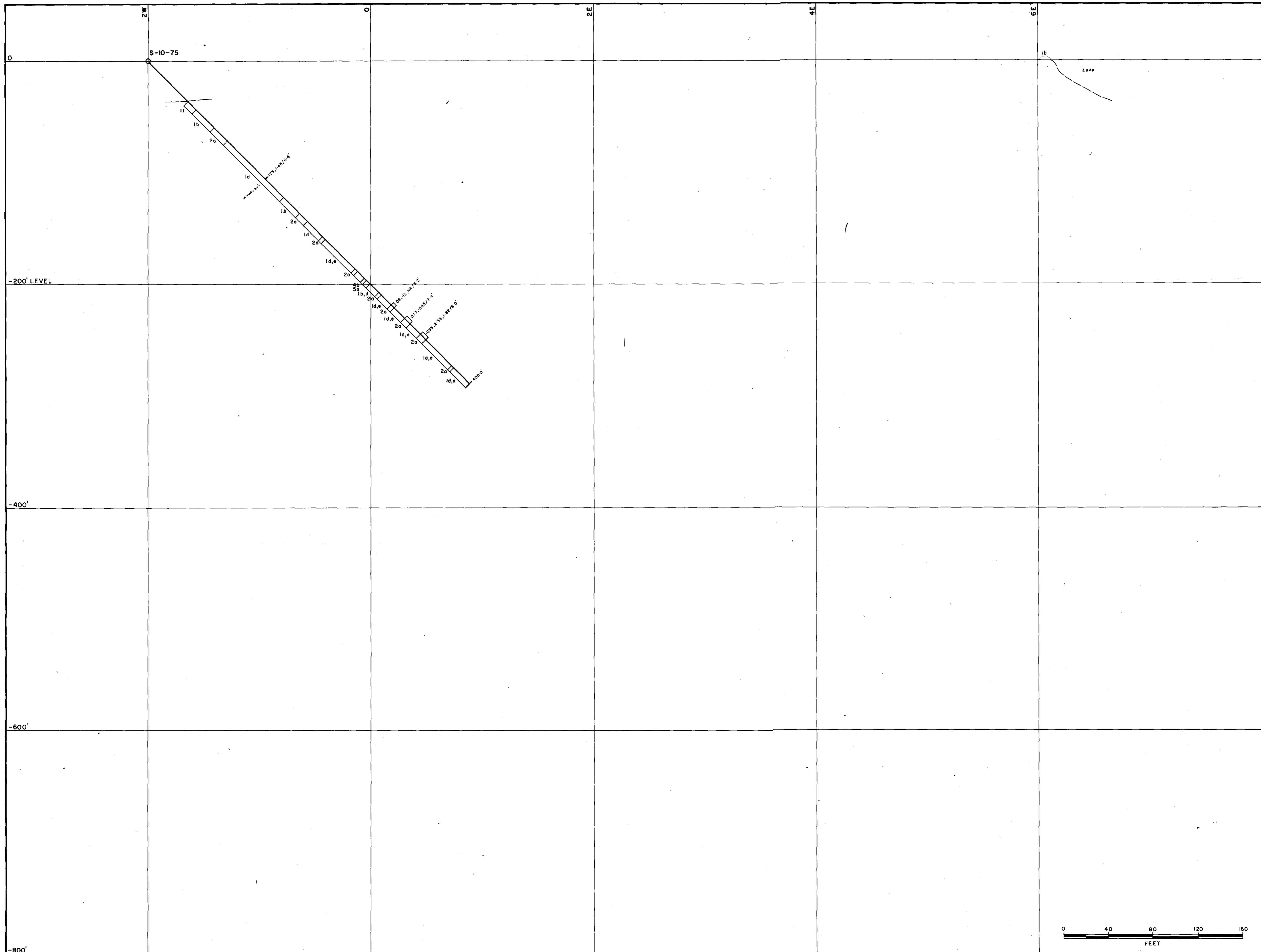
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**

**M<sup>C</sup> FINLEY RED LAKE PROPERTY**

BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 7+00S**  
S-5-75

Date: Sept., /82 By: / gmes Map No:



L E G E N D

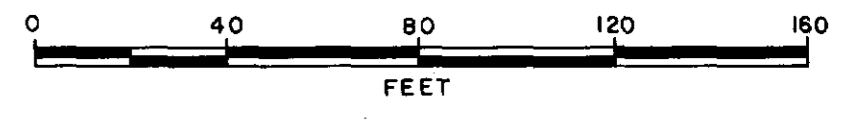
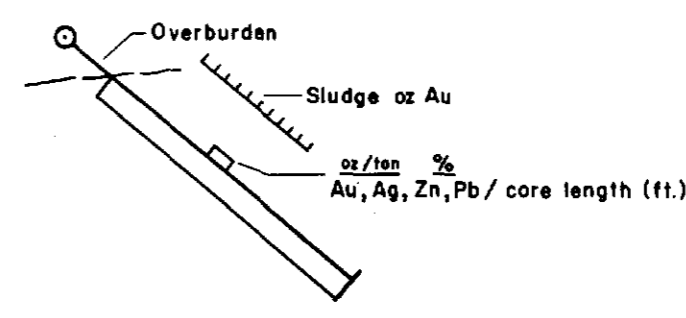
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Grandiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- acv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrolite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

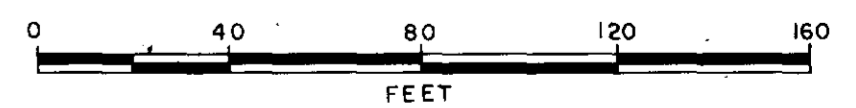
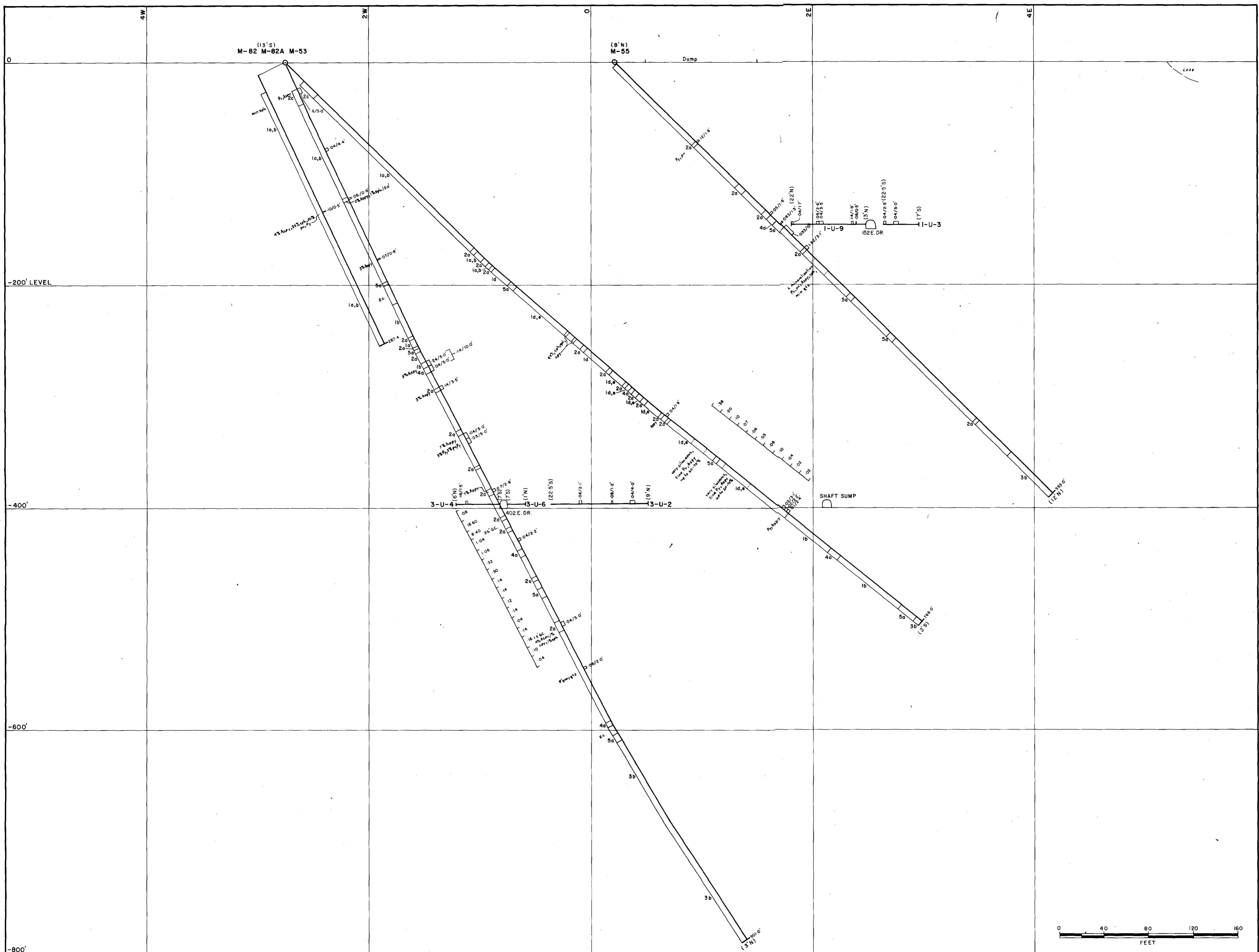
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 7+50S**

S-10-75

Date: Sept, /82 By: / gmes Map No:





**L E G E N D**

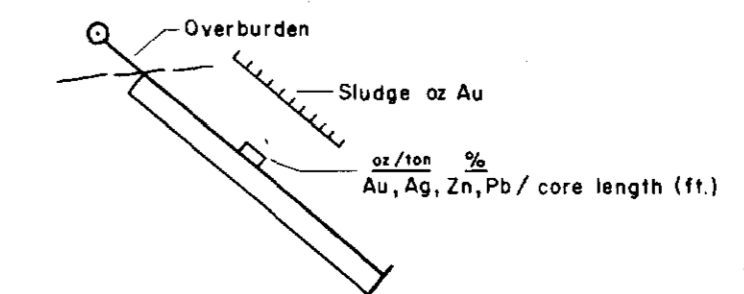
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 1f Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblende
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



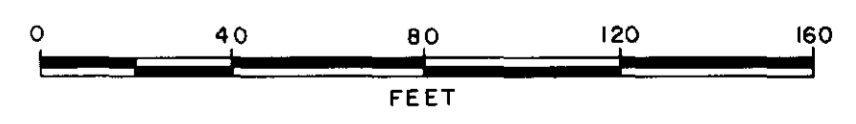
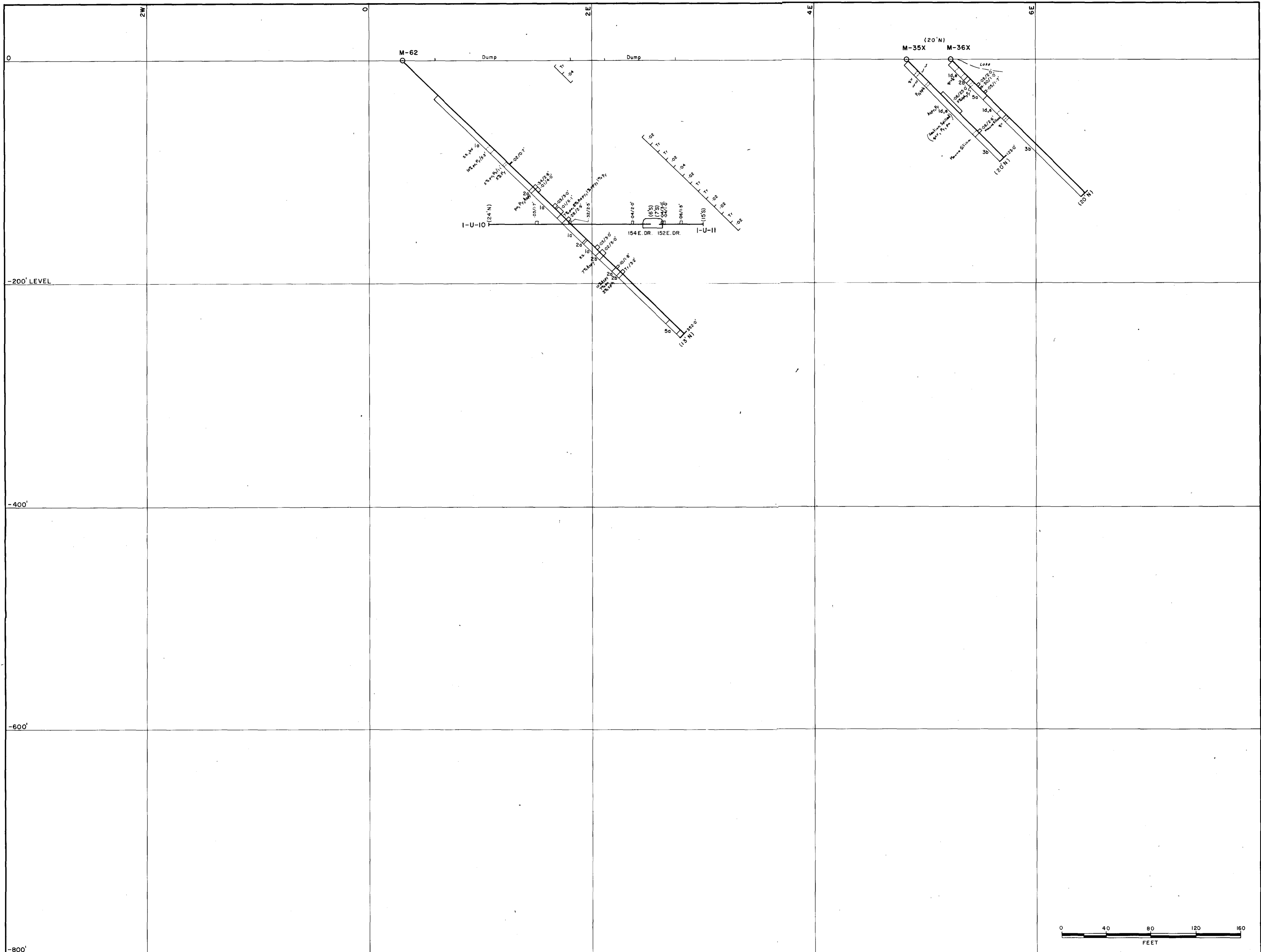
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
MCFINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 0+25N**  
M-82, M-82A, M-53 & M-55

Date: Sept, /82 By: / gmes Map No:





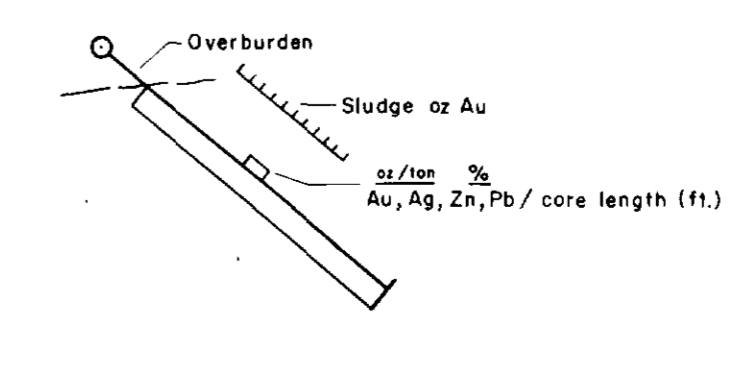
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, arenaceous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qc.v. quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**

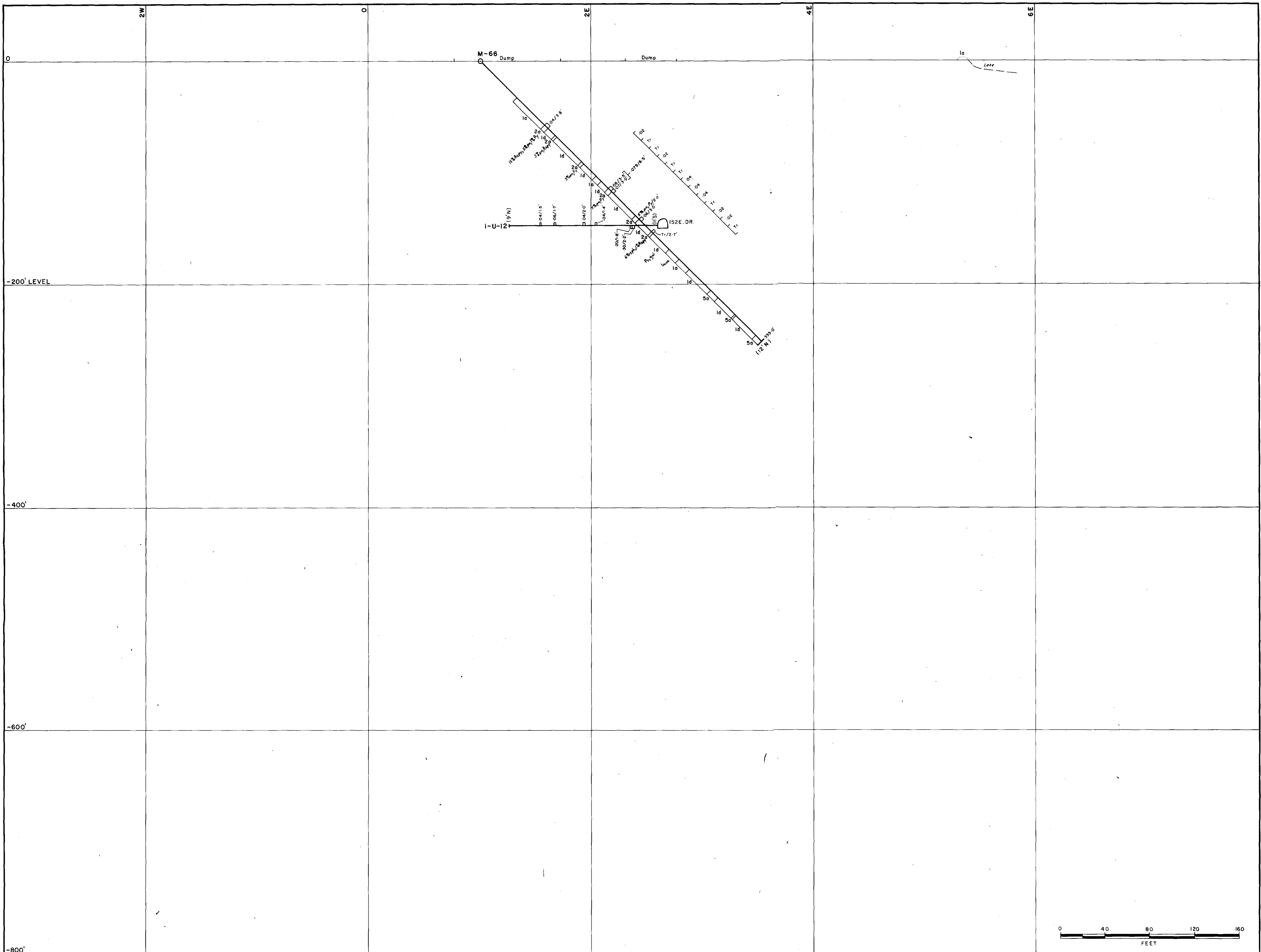
M<sup>C</sup> FINLEY RED LAKE PROPERTY

BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 0+95N**  
M-62, M-35X, M-36X

Date: Sept./82 By: / gmes Map No:





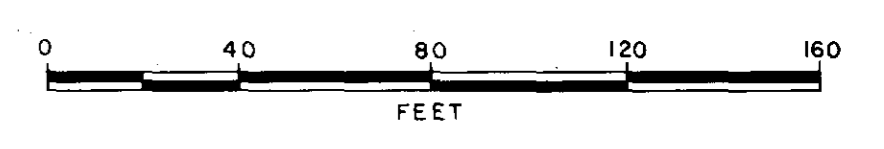
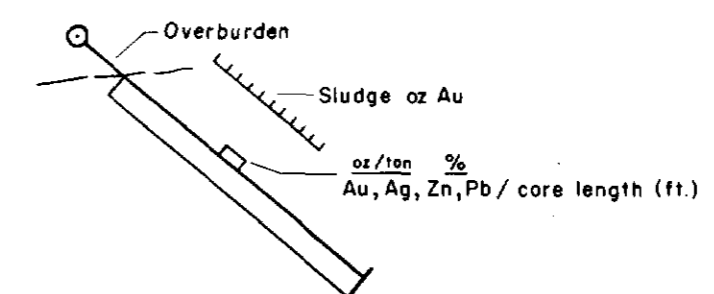
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation arenariferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



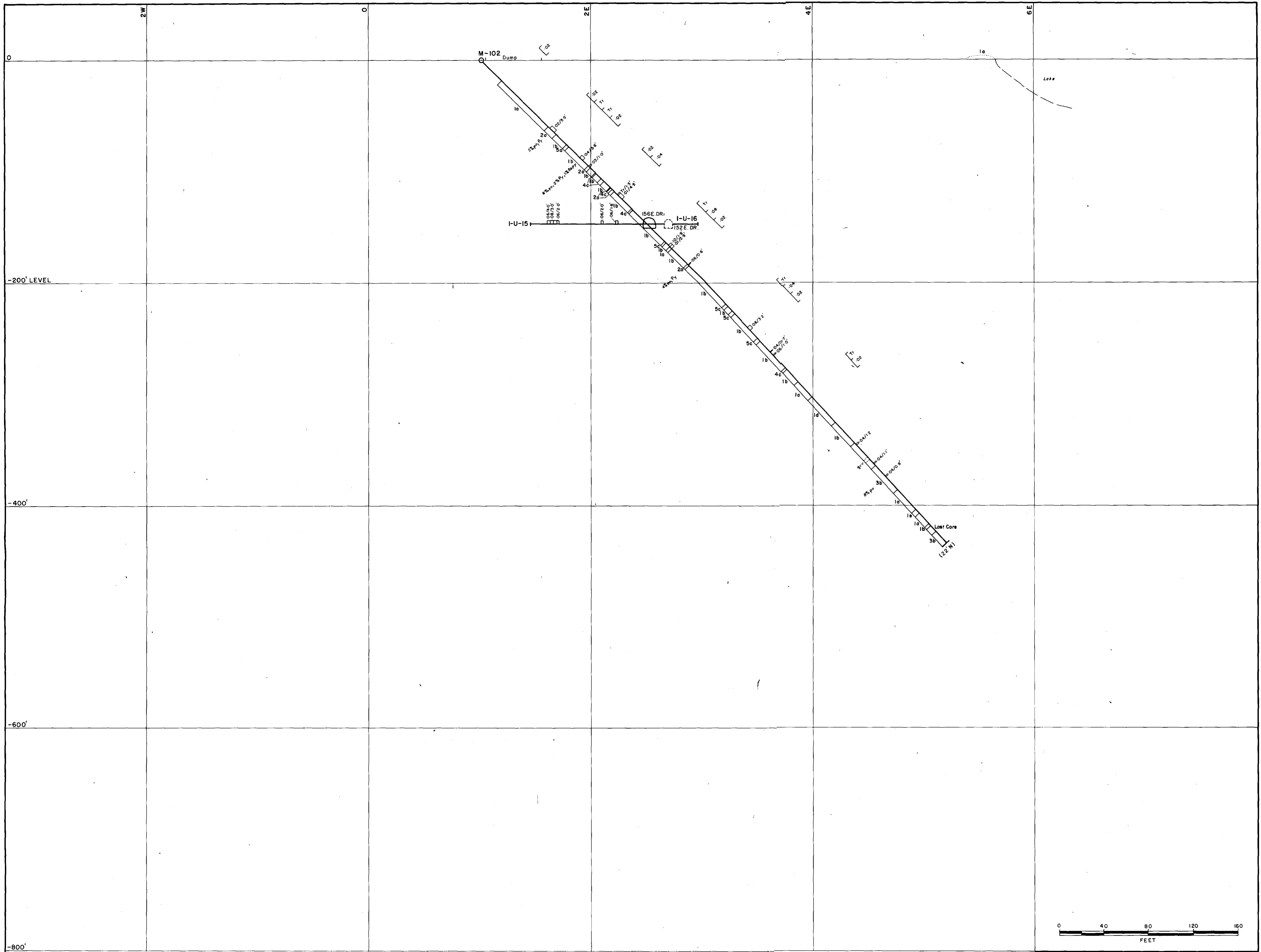
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION I + 55N**  
M-66

Date: Sept., /82 By: / gmes Map No:





L E G E N D

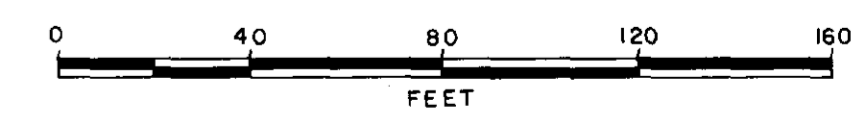
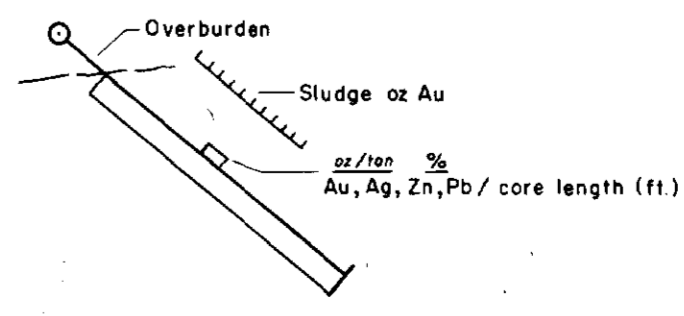
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- acv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- V.G. Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

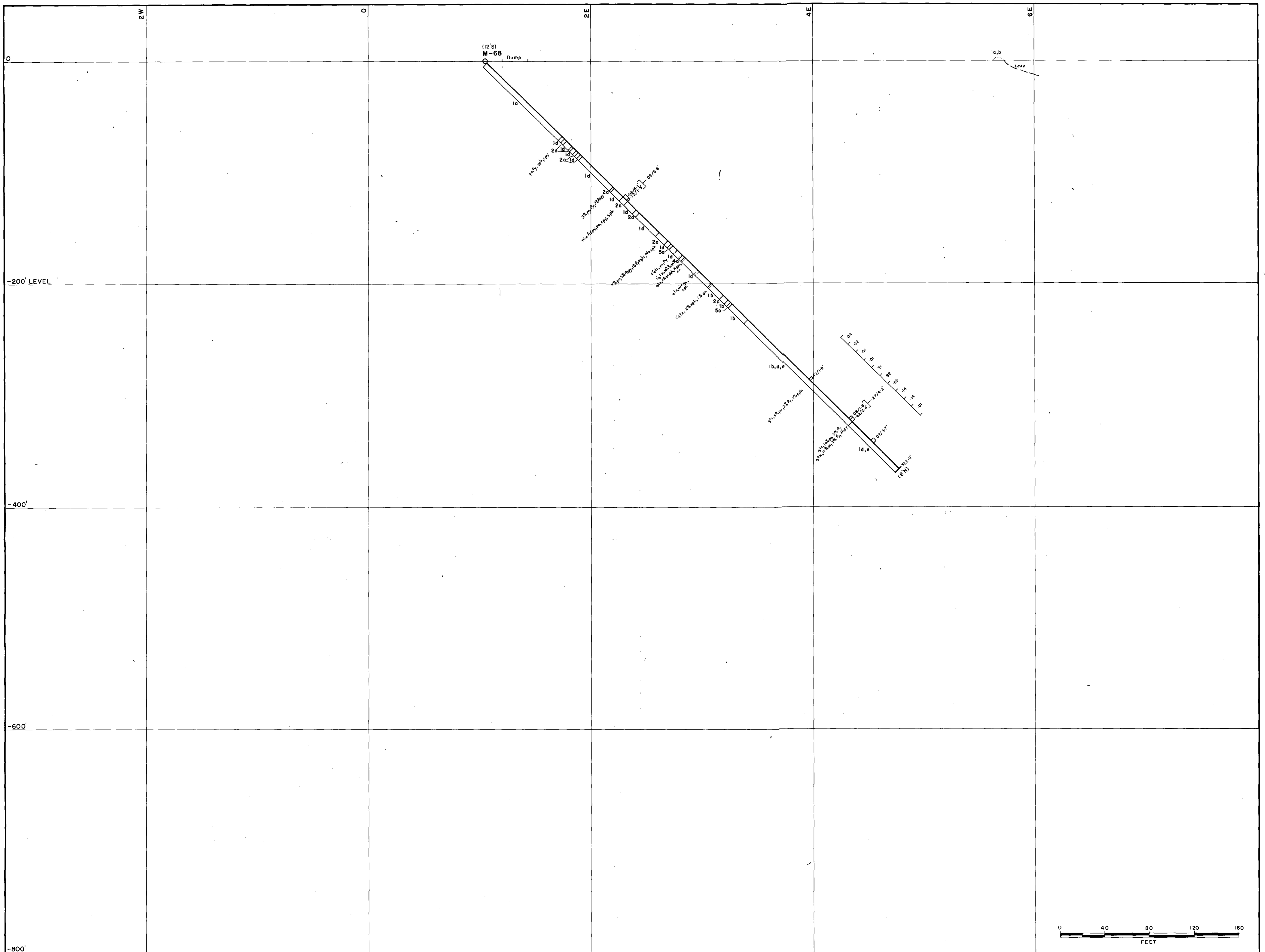
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

SECTION 2+05N  
M-102

Date: Sept, /82 By: / gmes Map No:







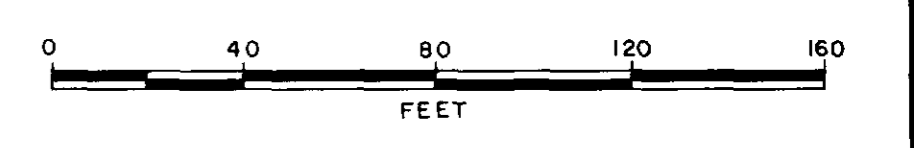
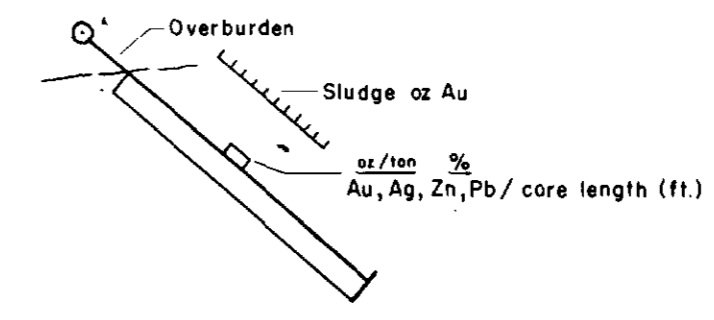
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- L E G E N D**
- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
  - Au Gold
  - Ag Silver
  - sph(Zn) sphalerite (Zinc %)
  - gal(Pb) galena (Lead %)
  - cpy(Cu) chalcopyrite (Copper %)
  - Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- acv quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



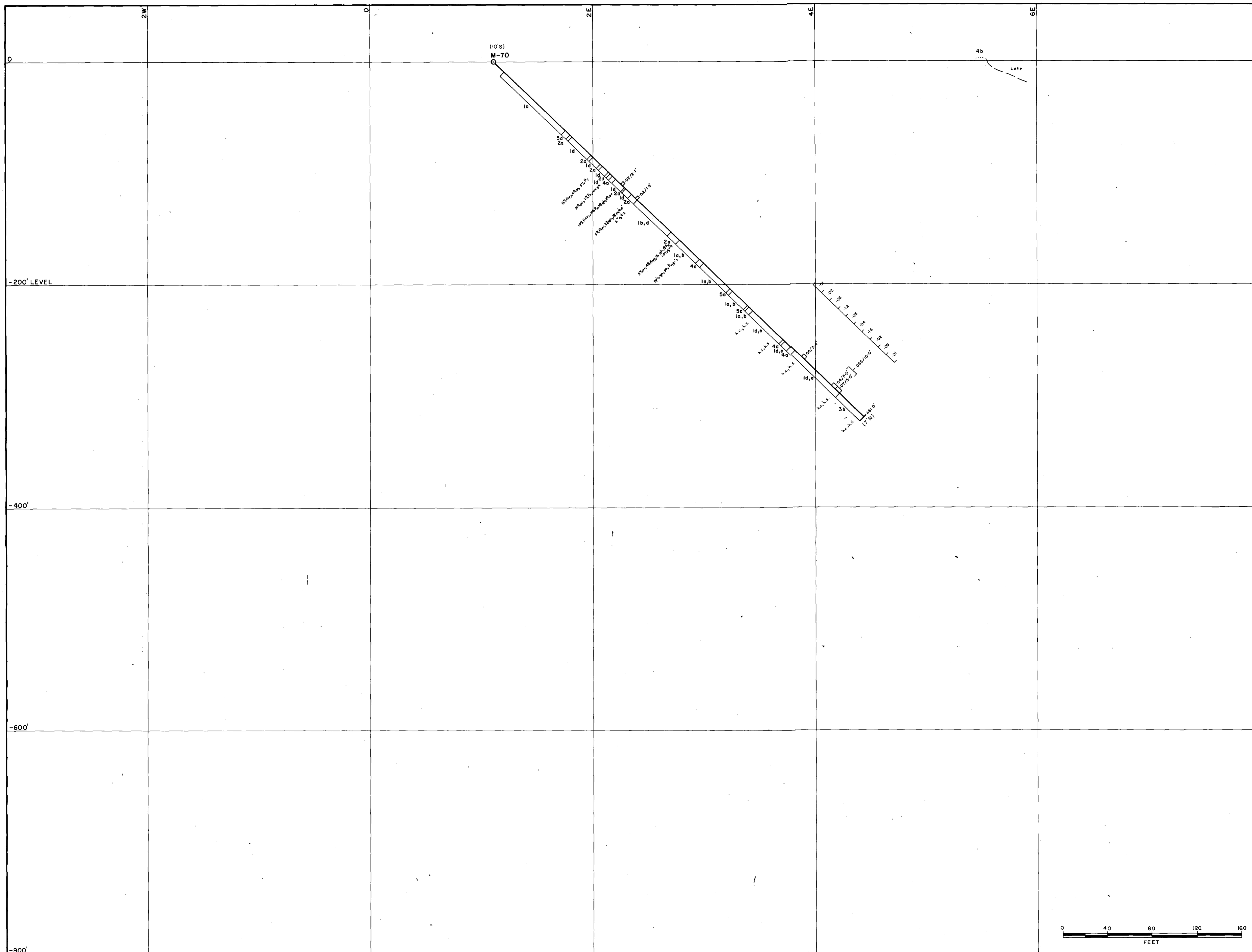
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**

**M<sup>C</sup> FINLEY RED LAKE PROPERTY**

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 2+70N  
M-68**

Date: Sept., /82 By: / gmes Map No:



- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Inverted iron formation, arenaceous

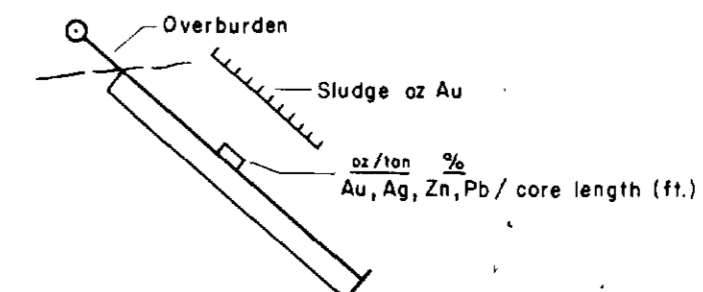
- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblende
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

L E G E N D

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- ss Silicification - slightly
- ms. - moderately
- hs. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

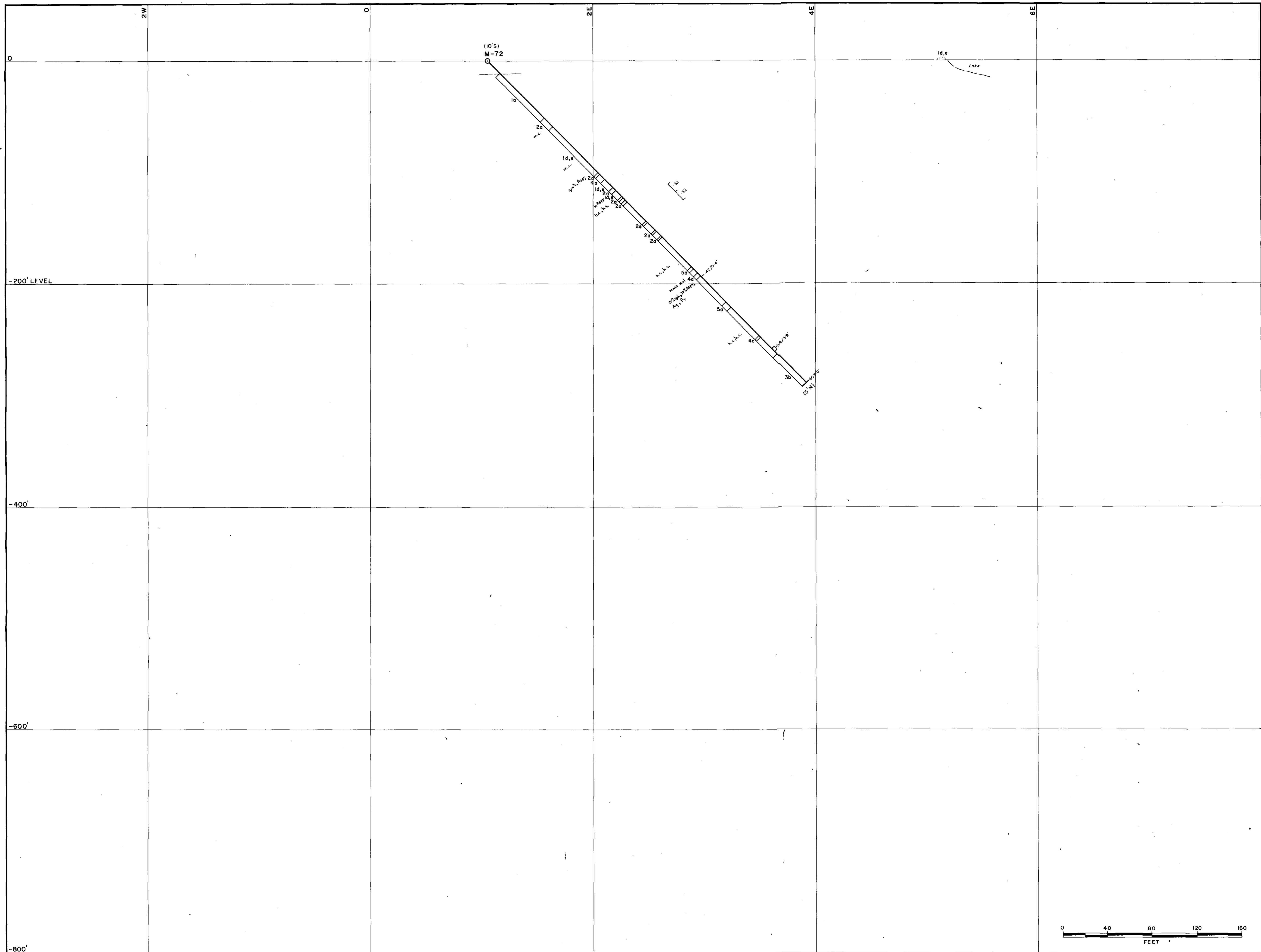
- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
McFINLEY RED LAKE PROPERTY  
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
**SECTION 3+70N**  
M-70

Date: Sept., /82 By: / gmes Map No:





L E G E N D

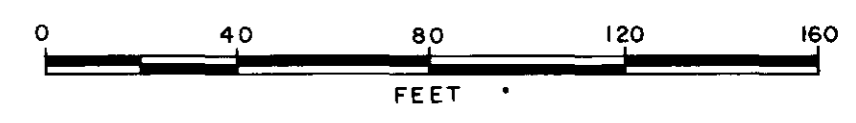
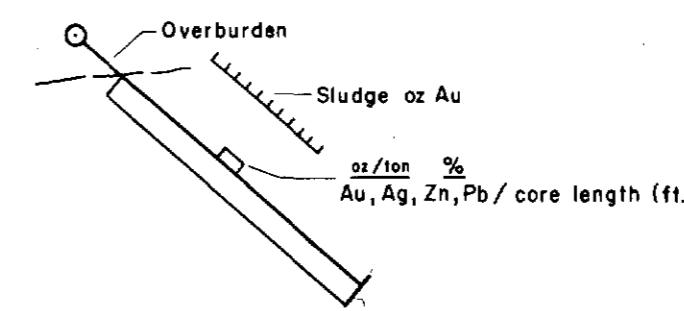
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- ~~~~~ Shearing



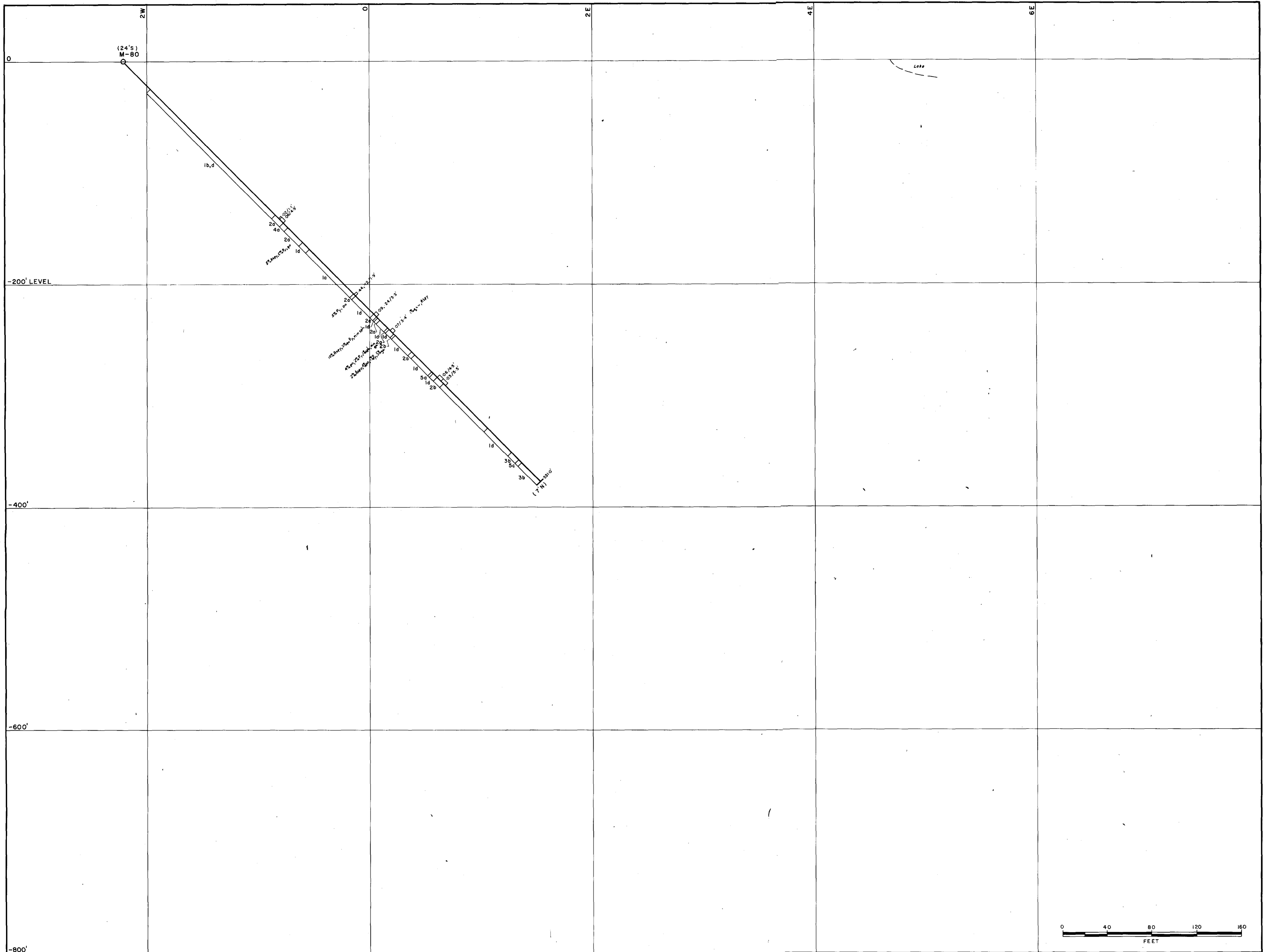
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 4+70N**  
M-72

Date: Sept., /82 By: /gmes Map No:





L E G E N D

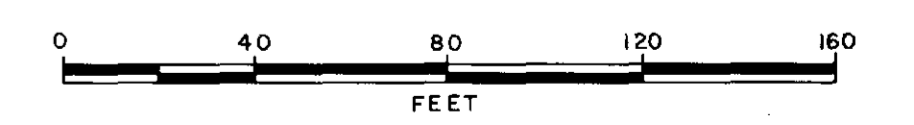
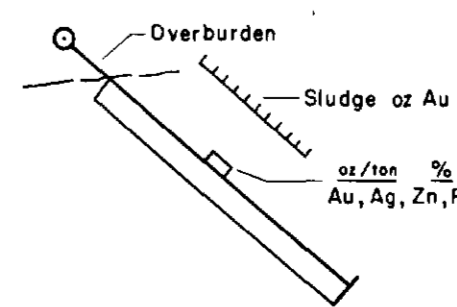
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



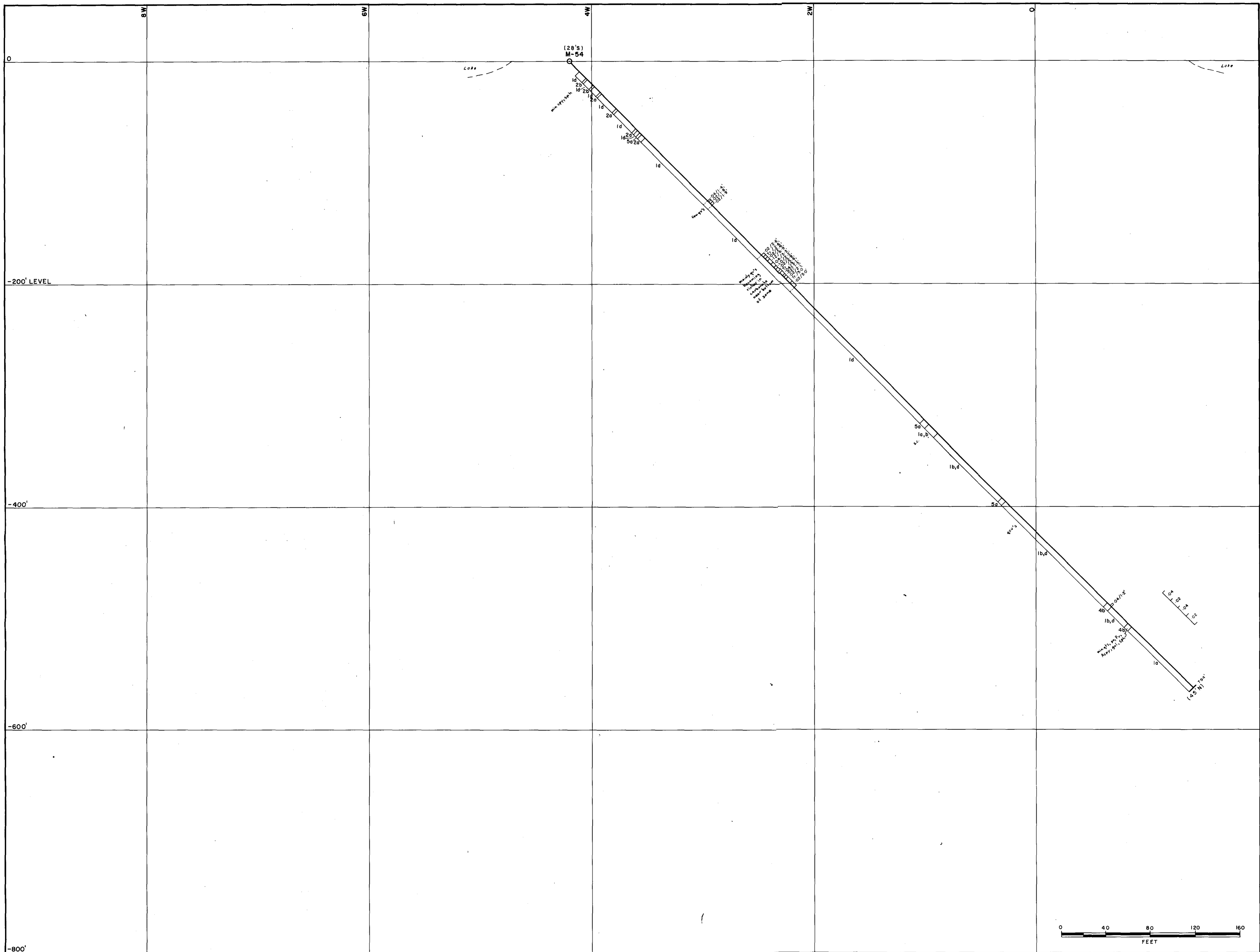
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 6+70N**  
M-80

Date: Sept./82 By: / gmes Map No:





L E G E N D

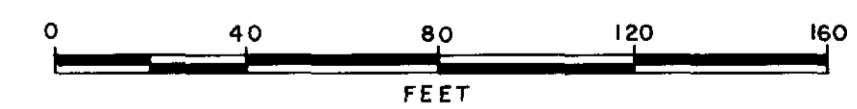
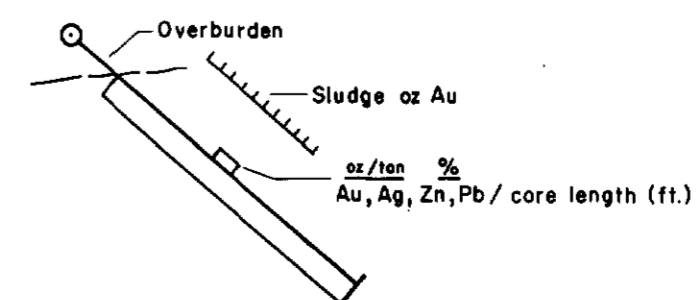
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Grandiorite

- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
- Au Gold  
 Ag Silver  
 sph(Zn) sphalerite (Zinc %)  
 gal(Pb) galena (Lead %)  
 cpy(Cu) chalcopyrite (Copper %)  
 Aspy arsenopyrite

- s.c. Carbonatization - slightly  
 m.c. - moderately  
 h.c. - strongly  
 qcv - quartz carbonate vein  
 s.s. Silicification - slightly  
 m.s. - moderately  
 h.s. - strongly  
 M Amygdaloidal (feldspar, quartz, carbonate)  
 VG Visible Gold  
 bx breccia  
 Py pyrite  
 po pyrrhotite

- Sul Sulphides  
 mass massive  
 h heavy  
 min minor  
 ~~~~~ Shearing



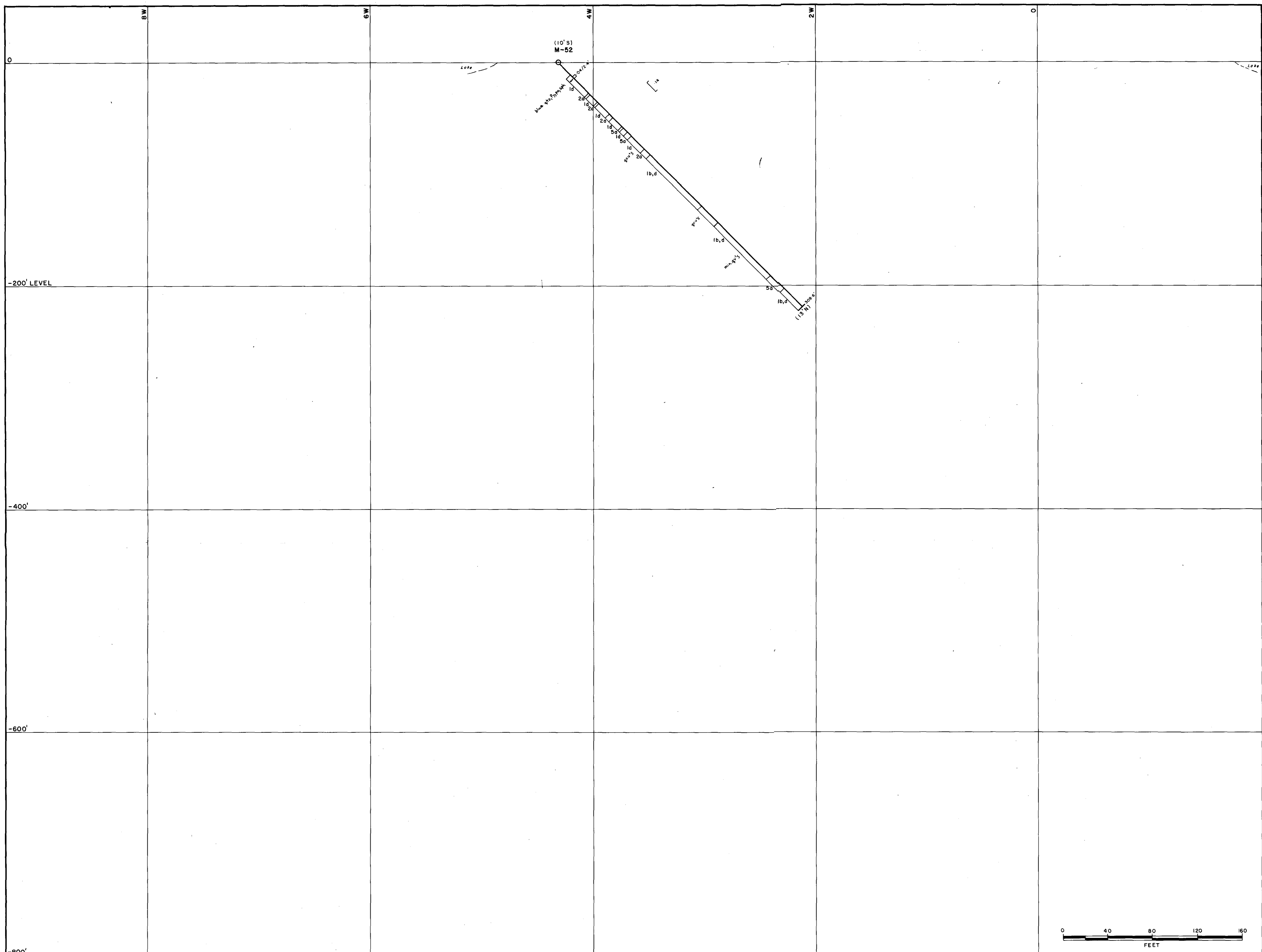
**SABINA INDUSTRIES LTD.  
 AND M<sup>C</sup> FINLEY MINES LTD.**  
 M<sup>C</sup> FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
 DISTRICT OF KENORA, ONTARIO

**SECTION 10+45N**  
**M-54**

Date: Sept., /82 By: / gmes Map No:



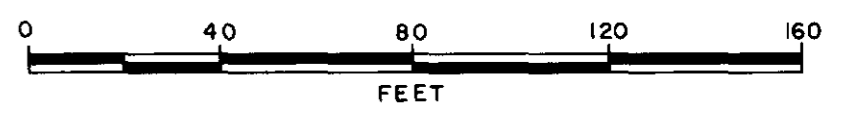
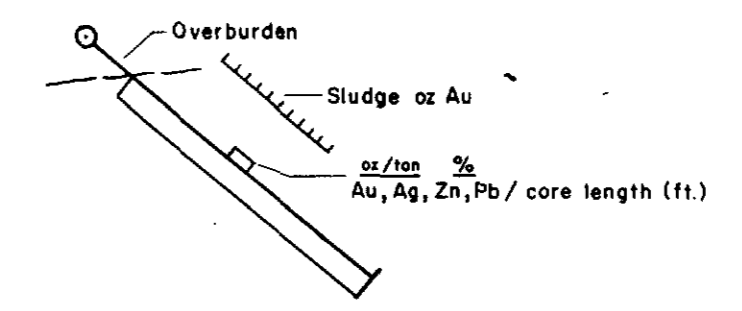


L E G E N D

|                                                                |                                                                           |
|----------------------------------------------------------------|---------------------------------------------------------------------------|
| <b>1a</b> Green, massive andesite                              | <b>2d</b> Carbonaceous argillite, graphitic schist, locally garnetiferous |
| <b>1b</b> Schistose andesite, chlorite schist                  | <b>3a</b> Peridotite, meta-hornblendite                                   |
| <b>1c</b> Chlorite - amphibole schist, dioritic andesite       | <b>3b</b> Carbonate - chlorite - amphibole - talc schist                  |
| <b>1d</b> Brown biotite - chlorite schist                      | <b>4a</b> Quartz and/or feldspar porphyry                                 |
| <b>1e</b> Dark grey cherty andesite, silicified and carbonized | <b>4b</b> Green to grey sericitic schist, sericitic quartz porphyry       |
| <b>2a</b> Layered iron formation, garnetiferous                | <b>4c</b> Aplite                                                          |
|                                                                | <b>4d</b> Granite                                                         |
|                                                                | <b>4e</b> Granodiorite                                                    |

|                                       |                                       |
|---------------------------------------|---------------------------------------|
| <b>5a</b> Diorite                     | <b>5c</b> Lamprophyre                 |
| <b>5b</b> Diabase, basalt             | <b>5e</b> Chlorite - amphibole schist |
| <b>5c</b> Lamprophyre                 | Au Gold                               |
| <b>5e</b> Chlorite - amphibole schist | Ag Silver                             |
| Au Gold                               | sph(Zn) sphalerite (Zinc %)           |
| Ag Silver                             | gal(Pb) galena (Lead %)               |
| sph(Zn) sphalerite (Zinc %)           | cpy(Cu) chalcopyrite (Copper %)       |
| gal(Pb) galena (Lead %)               | Aspy arsenopyrite                     |
| cpy(Cu) chalcopyrite (Copper %)       |                                       |
| Aspy arsenopyrite                     |                                       |

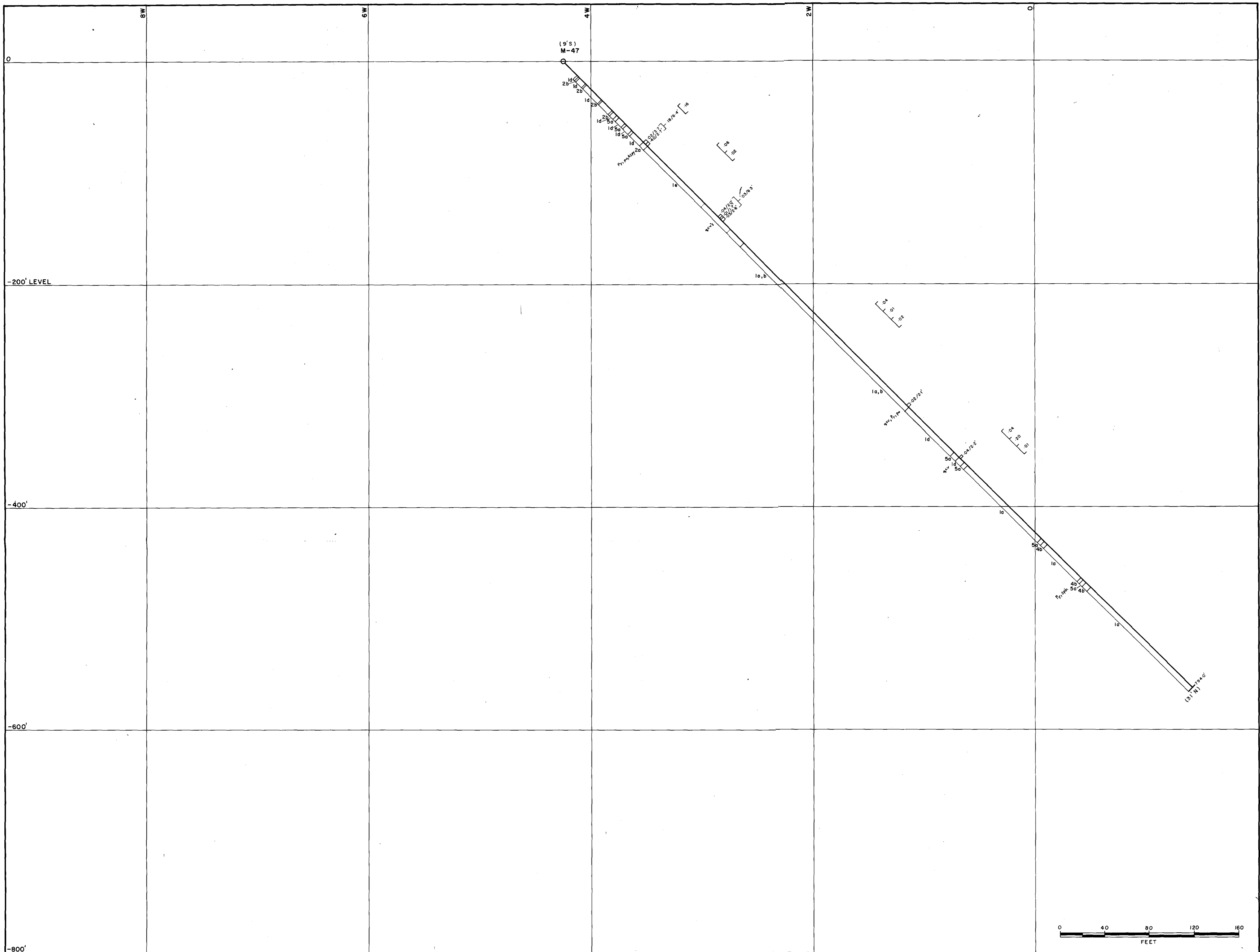
|                                              |               |
|----------------------------------------------|---------------|
| s.c. Carbonatization - slightly              | Sul Sulphides |
| m.c. - moderately                            | mass massive  |
| h.c. - strongly                              | h heavy       |
| qcw - quartz carbonate vein                  | min minor     |
| s.s. Silicification - slightly               | Shearing      |
| m.s. - moderately                            |               |
| h.s. - strongly                              |               |
| M Amygdaloidal (feldspar, quartz, carbonate) |               |
| VG Visible Gold                              |               |
| bx breccia                                   |               |
| Py pyrite                                    |               |
| po pyrrhotite                                |               |



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY  
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
**SECTION 11+75 N**  
M-52

Date: Sept., /82 By: / gmes Map No:





L E G E N D

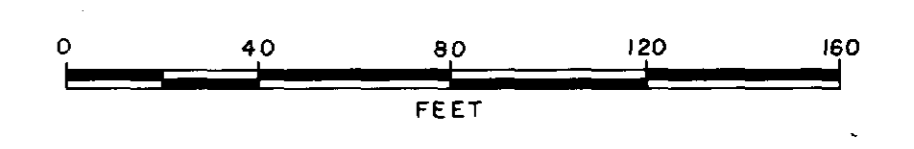
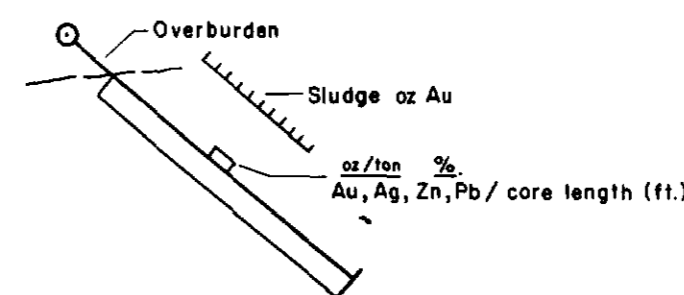
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



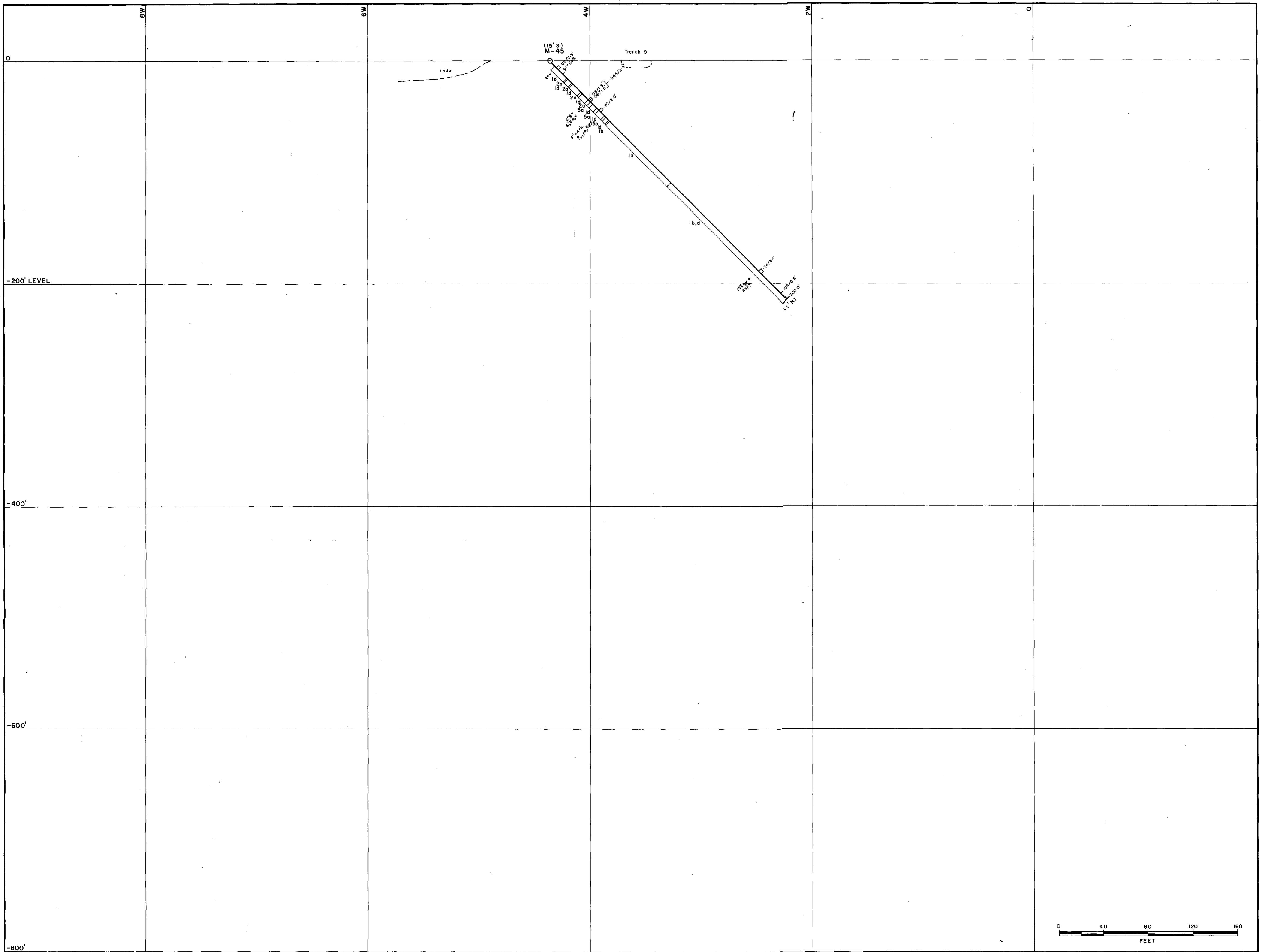
**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup>FINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 12+70N**  
M-47

Date: Sept., /82 By: / gmes Map No:





L E G E N D

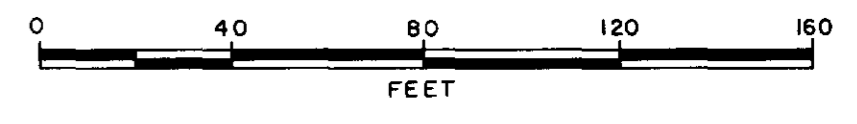
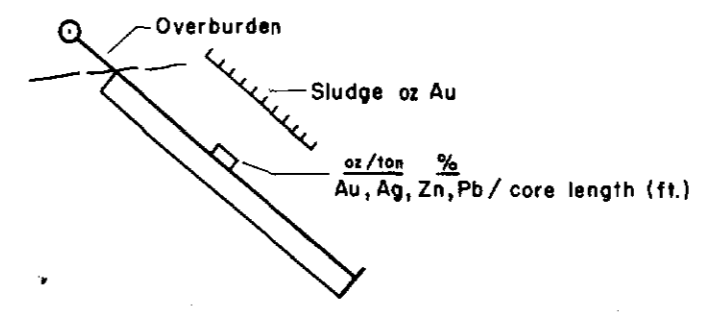
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
- 5b Diabase, basalt
- 5c Lamprophyre
- 5e Chlorite - amphibole schist
- Au Gold
- Ag Silver
- sph(Zn) sphalerite (Zinc %)
- gal(Pb) galena (Lead %)
- cpy(Cu) chalcopyrite (Copper %)
- Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrolite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**

McFINLEY RED LAKE PROPERTY

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

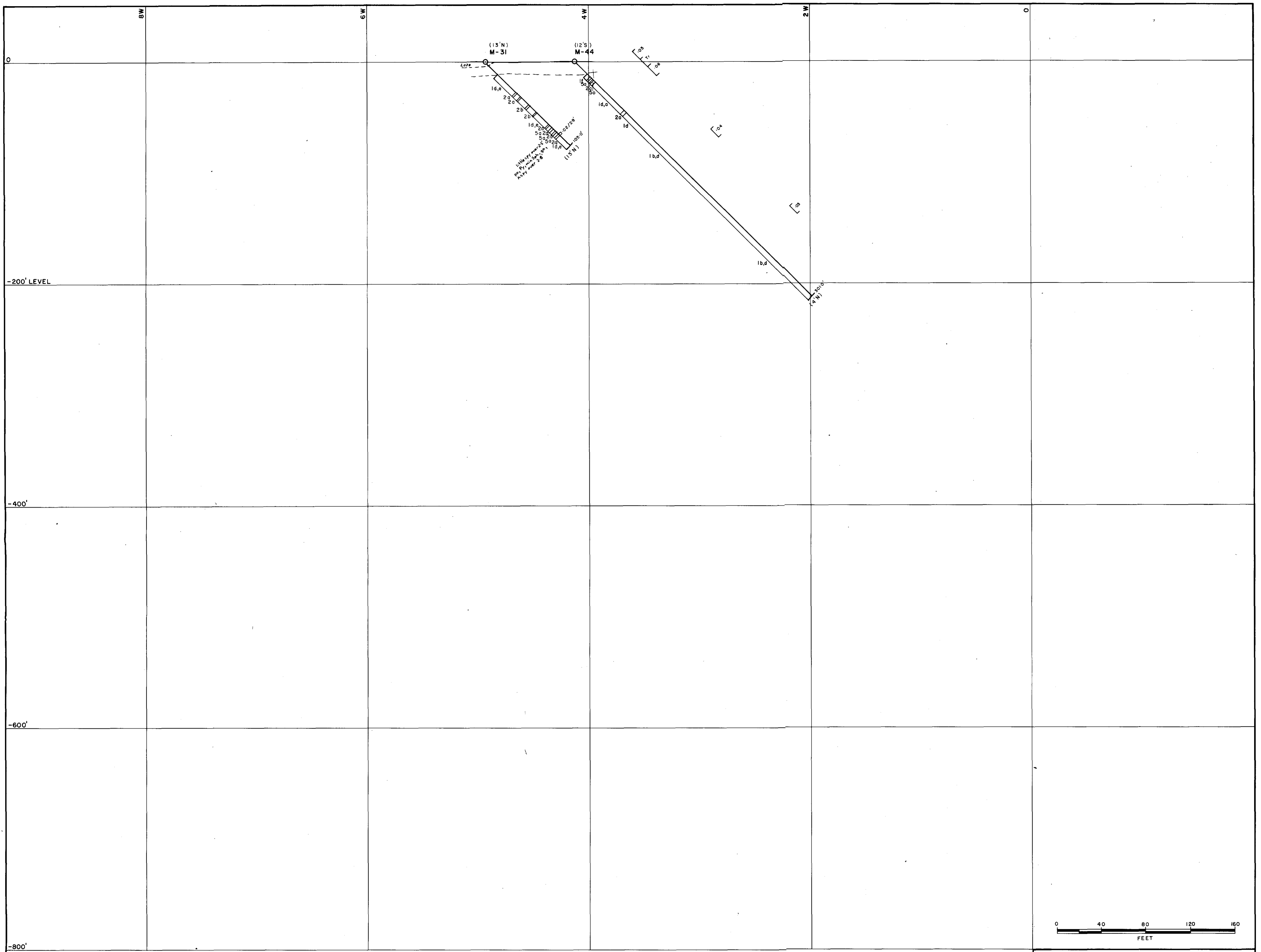
**SECTION 14+35 N**

M-45, M-18

Date: Sept, /82 By: / gmes Map No:







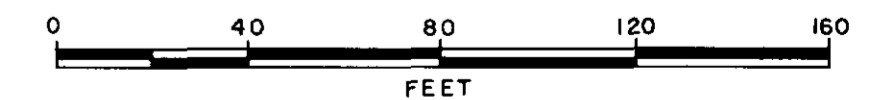
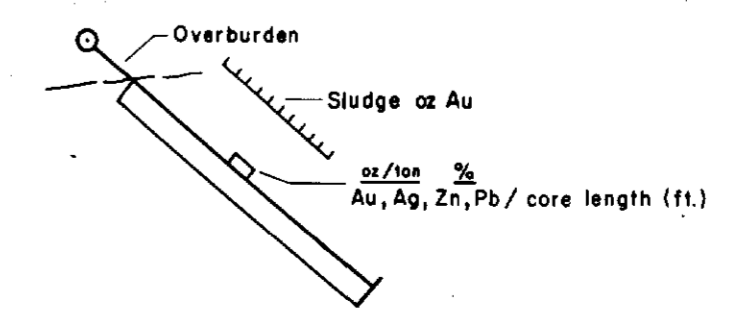
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, magnetite

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplite
- 4d Granite
- 4e Granodiorite

- L E G E N D**
- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
  - Au Gold
  - Ag Silver
  - sph(Zn) sphalerite (Zinc %)
  - gal(Pb) galena (Lead %)
  - cpy(Cu) chalcopyrite (Copper %)
  - Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcv - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



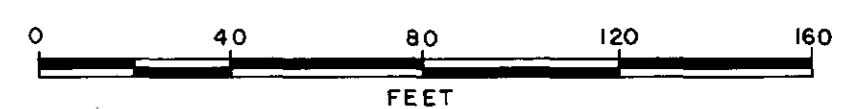
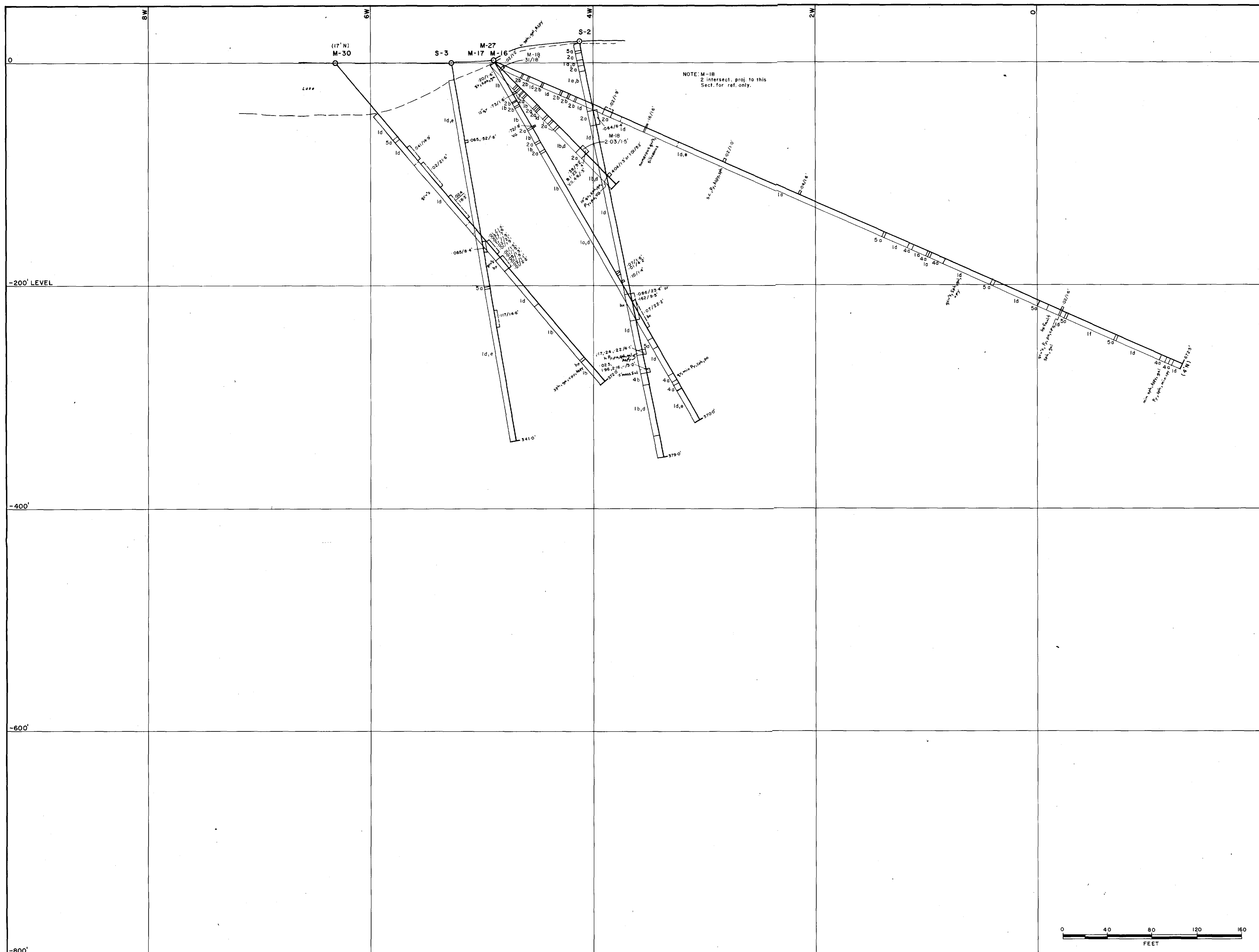
**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**  
McFINLEY RED LAKE PROPERTY

BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 15+80 N**

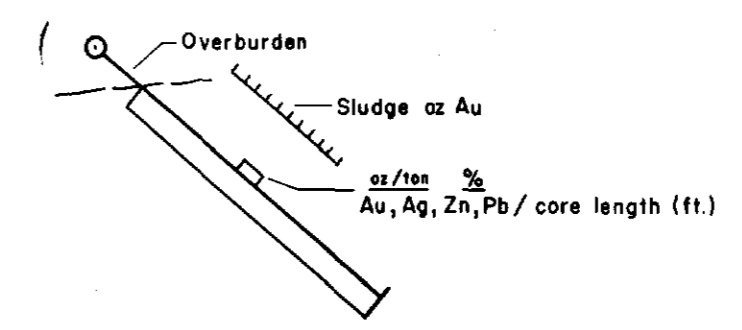
M-31, M-44, M-18





**L E G E N D**

|                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                   |                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|
| <p><b>1a</b> Green, massive andesite</p> <p><b>1b</b> Schistose andesite, chlorite schist</p> <p><b>1c</b> Chlorite - amphibole schist, dioritic andesite</p> <p><b>1d</b> Brown biotite - chlorite schist</p> <p><b>1e</b> Dark grey cherty andesite, silicified and carbonatized</p> <p><b>2a</b> Layered iron formation, garnetiferous</p> | <p><b>2d</b> Carbonaceous argillite, graphitic schist, locally garnetiferous</p> <p><b>3a</b> Peridotite, meta-hornblende</p> <p><b>3b</b> Carbonate - chlorite - amphibole - falc schist</p> <p><b>4a</b> Quartz and/or feldspar porphyry</p> <p><b>4b</b> Green to grey sericitic schist, sericitic quartz porphyry</p> <p><b>4c</b> Aplite</p> <p><b>4d</b> Granite</p> <p><b>4e</b> Granodiorite</p> | <p><b>5a</b> Diorite</p> <p><b>5b</b> Diabase, basalt</p> <p><b>5c</b> Lamprophyre</p> <p><b>5e</b> Chlorite - amphibole schist</p> <p>Au Gold</p> <p>Ag Silver</p> <p>sph(Zn) sphalerite (Zinc %)</p> <p>gal(Pb) galena (Lead %)</p> <p>cpy(Cu) chalcopyrite (Copper %)</p> <p>Aspy arsenopyrite</p> | <p>s.c. Carbonatization - slightly</p> <p>m.c. - moderately</p> <p>h.c. - strongly</p> <p>qcv - quartz carbonate vein</p> <p>s.s. Silicification - slightly</p> <p>m.s. - moderately</p> <p>h.s. - strongly</p> <p>M Amygdaloidal (feldspar, quartz, carbonate)</p> <p>VG Visible Gold</p> <p>bx breccia</p> <p>Py pyrite</p> <p>po pyrrolite</p> | <p>Sul Sulphides</p> <p>mass massive</p> <p>h heavy</p> <p>min minor</p> <p>Shearing</p> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|



**SABINA INDUSTRIES LTD.  
AND McFINLEY MINES LTD.**

**McFINLEY RED LAKE PROPERTY**

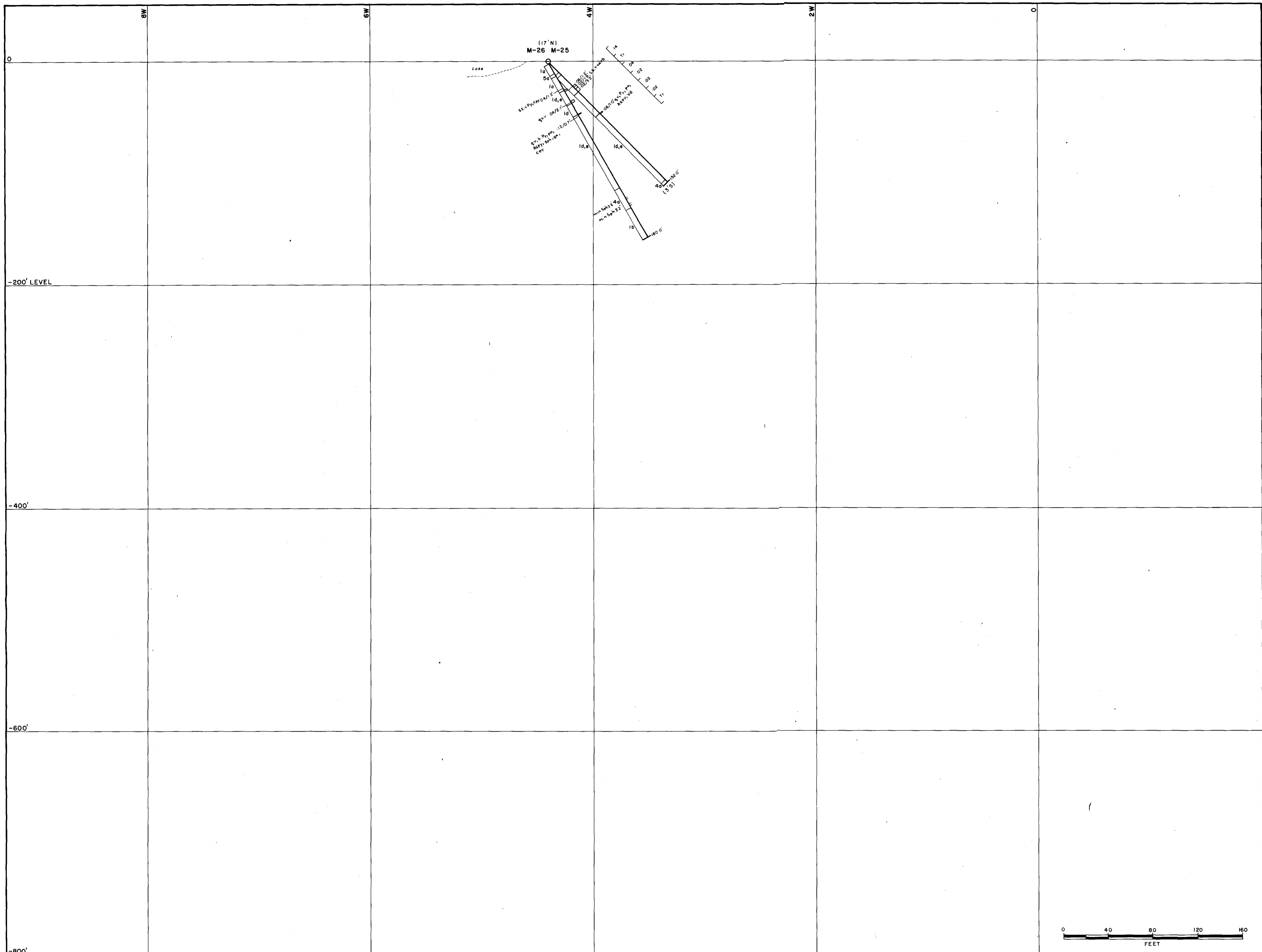
BATEMAN TWP., RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 16 + 50N**

M-30, S-3, M-17, M-27, M-16, S-2

Date: Sept, /82 By: / gmes Map No:





L E G E N D

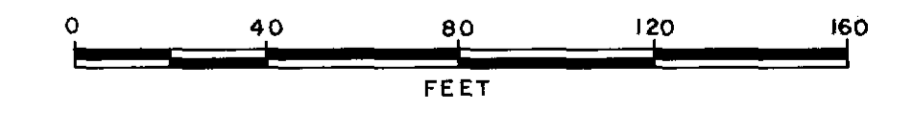
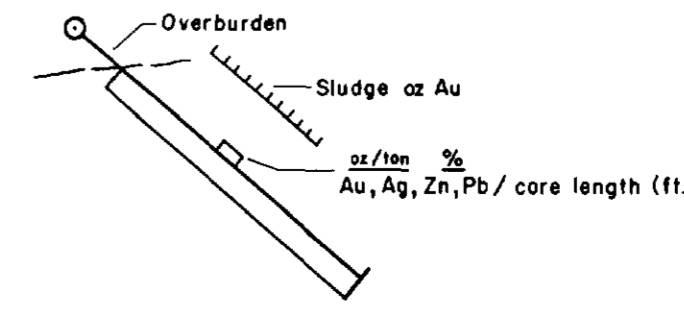
- 1a Green, massive andesite
- 1b Schistose andesite, chlorite schist
- 1c Chlorite - amphibole schist, dioritic andesite
- 1d Brown biotite - chlorite schist
- 1e Dark grey cherty andesite, silicified and carbonatized
- 2a Layered iron formation, garnetiferous

- 2d Carbonaceous argillite, graphitic schist, locally garnetiferous
- 3a Peridotite, meta-hornblendite
- 3b Carbonate - chlorite - amphibole - talc schist
- 4a Quartz and/or feldspar porphyry
- 4b Green to grey sericitic schist, sericitic quartz porphyry
- 4c Aplitite
- 4d Granite
- 4e Granodiorite

- 5a Diorite
  - 5b Diabase, basalt
  - 5c Lamprophyre
  - 5e Chlorite - amphibole schist
- Au Gold  
Ag Silver  
sph(Zn) sphalerite (Zinc %)  
gal(Pb) galena (Lead %)  
cpy(Cu) chalcopyrite (Copper %)  
Aspy arsenopyrite

- s.c. Carbonatization - slightly
- m.c. - moderately
- h.c. - strongly
- qcw - quartz carbonate vein
- s.s. Silicification - slightly
- m.s. - moderately
- h.s. - strongly
- M Amygdaloidal (feldspar, quartz, carbonate)
- VG Visible Gold
- bx breccia
- Py pyrite
- po pyrrhotite

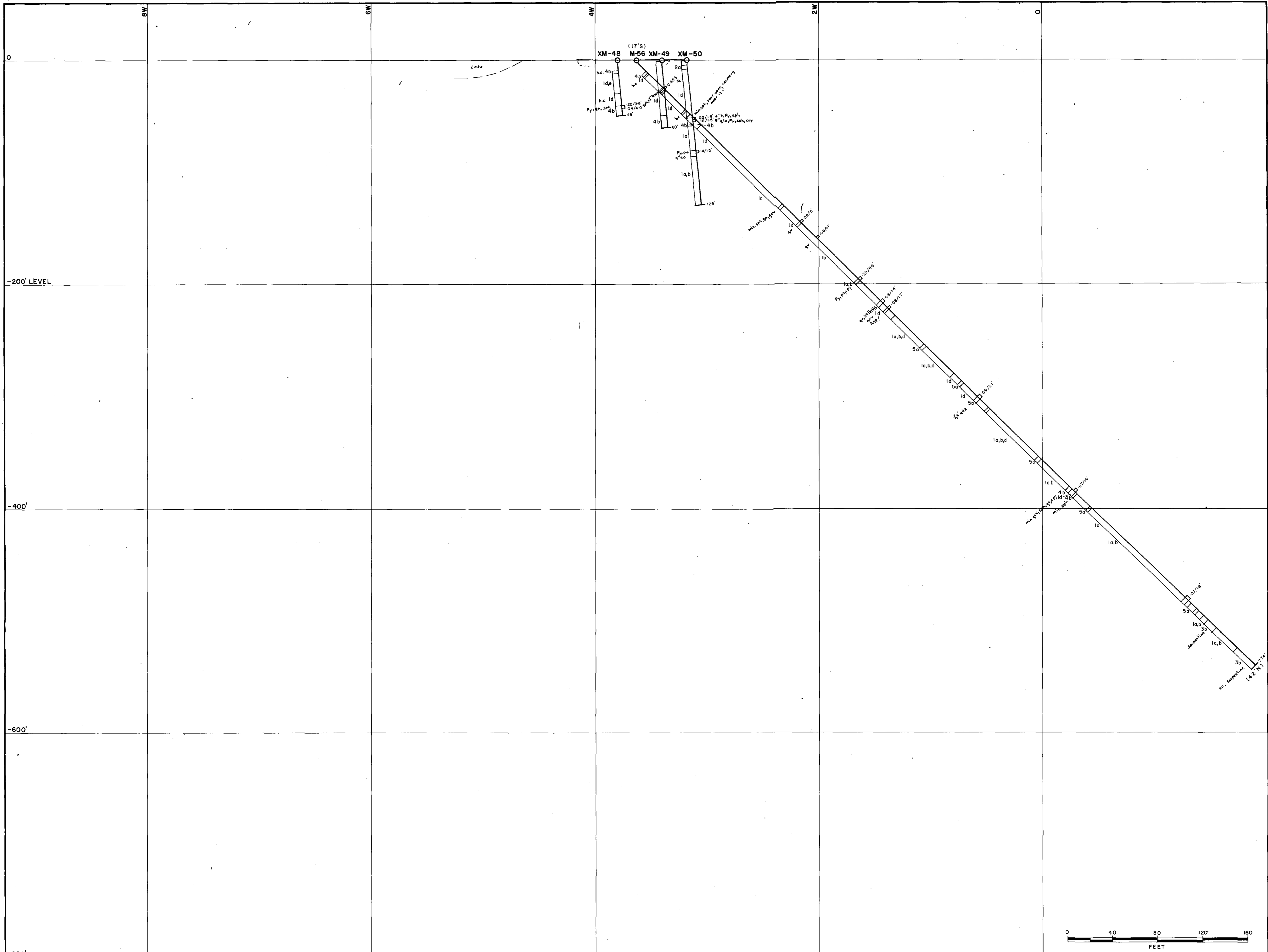
- Sul Sulphides
- mass massive
- h heavy
- min minor
- Shearing



**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**  
M<sup>C</sup> FINLEY RED LAKE PROPERTY  
BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO  
**SECTION 18+75 N**  
M-25, M-26

Date: Sept, / 82 By: / gmes Map No:





| L E G E N D |                                                        |    |                                                                 |         |                                            |
|-------------|--------------------------------------------------------|----|-----------------------------------------------------------------|---------|--------------------------------------------|
| 1a          | Green, massive andesite                                | 2d | Carbonaceous argillite, graphitic schist, locally garnetiferous | 5a      | Diorite                                    |
| 1b          | Schistose andesite, chlorite schist                    | 3a | Peridotite, meta-hornblendite                                   | 5b      | Diabase, basalt                            |
| 1c          | Chlorite - amphibole schist, dioritic andesite         | 3b | Carbonate - chlorite - amphibole - talc schist                  | 5c      | Lamprophyre                                |
| 1d          | Brown biotite - chlorite schist                        | 4a | Quartz and/or feldspar porphyry                                 | 5e      | Chlorite - amphibole schist                |
| 1e          | Dark grey cherty andesite, silicified and carbonatized | 4b | Green to grey sericitic schist, sericitic quartz porphyry       | Au      | Gold                                       |
| 2a          | Layered iron formation, garnetiferous                  | 4c | Aplite                                                          | Ag      | Silver                                     |
|             |                                                        | 4d | Granite                                                         | sph(Zn) | sphalerite (Zinc %)                        |
|             |                                                        | 4e | Granodiorite                                                    | gal(Pb) | galena (Lead %)                            |
|             |                                                        |    |                                                                 | cpy(Cu) | chalcopyrite (Copper %)                    |
|             |                                                        |    |                                                                 | Aspy    | arsenopyrite                               |
|             |                                                        |    |                                                                 | s.c.    | Carbonatization - slightly                 |
|             |                                                        |    |                                                                 | m.c.    | moderately                                 |
|             |                                                        |    |                                                                 | h.c.    | strongly                                   |
|             |                                                        |    |                                                                 | qcv     | quartz carbonate vein                      |
|             |                                                        |    |                                                                 | s.s.    | Silicification - slightly                  |
|             |                                                        |    |                                                                 | m.s.    | moderately                                 |
|             |                                                        |    |                                                                 | h.s.    | strongly                                   |
|             |                                                        |    |                                                                 | M       | Amygdaloidal (feldspar, quartz, carbonate) |
|             |                                                        |    |                                                                 | VG      | Visible Gold                               |
|             |                                                        |    |                                                                 | bx      | breccia                                    |
|             |                                                        |    |                                                                 | Py      | pyrite                                     |
|             |                                                        |    |                                                                 | pp      | pyrrhotite                                 |
|             |                                                        |    |                                                                 | Sul     | Sulphides                                  |
|             |                                                        |    |                                                                 | mass    | massive                                    |
|             |                                                        |    |                                                                 | h       | heavy                                      |
|             |                                                        |    |                                                                 | min     | minor                                      |
|             |                                                        |    |                                                                 | Shear   | Shearing                                   |
|             |                                                        |    |                                                                 |         | Overburden                                 |
|             |                                                        |    |                                                                 |         | Sludge or Au                               |
|             |                                                        |    |                                                                 |         | oz/ton %                                   |
|             |                                                        |    |                                                                 |         | Au, Ag, Zn, Pb / core length (ft.)         |

**SABINA INDUSTRIES LTD.  
AND M<sup>C</sup> FINLEY MINES LTD.**

**M<sup>C</sup> FINLEY RED LAKE PROPERTY**

BATEMAN TWP, RED LAKE AREA  
DISTRICT OF KENORA, ONTARIO

**SECTION 19+60 N**  
XM-48, M-56, XM-49, XM-50

Date: Sept., /82 By: / gmes Map No:

