



42A06SW0080 63.1105 WHITESIDES

010

PAYMASTER CONSOLIDATED MINES, LIMITED

Denton Twp., Ontario

ELECTROMAGNETIC SURVEY

Apr. 14, 1961

W. Rainboth

SUMMARY AND RECOMMENDATIONS

A horizontal coil type of E.M. survey was done on fourteen (14) claims in southwest Benton Township, Ontario. Three (3) conducting zones of interest were found that warrant further investigation. It is recommended that the three zones be investigated, geologically, as there is abundant outcrop either at the zones or along strike. Low gold values are reported in the area, and the conductors may be significant, representing zones of low conductivity carrying gold values.

INTRODUCTION

This report deals with an E.M. survey on fourteen (14) claims (PLS741 to 94 incl.) located in the southwest part of Benton Township, Ontario. Highway 101, 25 miles west of Timmins runs within 2 miles of the property, and from here an old road can be travelled by foot to the south part of the group. Five hundred and forty-five (545) readings were taken at 100 foot intervals on picket lines spaced 400 feet apart. Twelve (12) miles of lines were cut. The instrument used was the Sheridan-Kelk Dual Frequency Magnetometer employed in the horizontal coil configuration and measuring amplitude and phase of the secondary field at 2400 cps. In presentation of the results, only the high frequency phase is plotted on a vertical scale of 1 inch equals 30 units or 7.5 degrees. The purpose of the survey was to detail and locate more accurately conductors found by a reconnaissance E.M. survey done in the fall of 1960 prior to striking. The detail survey was conducted by J. Reinboth, assisted by V. Penttila, from March 16th to March 21st, 1961.

GENERAL GEOLOGY

The claims are located on the east end of a greenstone belt 1½ miles wide that extends for 6 miles west. There are a number of small gold showings in the greenstone, but nothing economic has been found to date. Granite occurs north and south of the greenstone.

On the claim group andesite, agglomerate, chlorite schist, periclite-carbonate schist, and tuff are present. At the west end of the group the rocks strike EW and swing to NE at the east end. A pit at the northeast end of the property is reported to have yielded low assays in gold.

RESULTS OF E.M. SURVEY

There are numerous weak conducting zones most likely due to swamp, but three (3) zones were found that warrant further investigation. (See accompanying map.)

1. Conductor 'A' - This zone occurs in the central part of the group on lines 52S, 48S and 44S. It extends in an EW direction for about 1500 feet. The west end, on lines 52S and 48S, is in swamp, but the east end, on line 44S is in gently rolling topography of an outcrop area, and for this reason the anomaly is not considered due to swamp. The intensity of the conductor indicates the presence of about 15 percent conducting material. This might be a slightly mineralized zone carrying gold values. The east end and the strike of the zone should be investigated geologically.

2. Conductor 'B' - This is a short (400') conductor occurring in the east end of the property on line 24S. It is in an area of abundant outcrop and should be investigated geologically. The conductor is very weak and small but could be caused by a zone containing about 10 percent sulphides with gold present.

3. Conductor 'C' - This conductor is about 800' long and occurs in the north part of the group on lines 28S and 24S. It strikes slightly east of north. There is rock in both directions along strike which should be investigated geologically for a weak conducting zone carrying gold values.

Respectfully submitted,
W. Rainboth
W. Rainboth, Geologist.



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020

PAYMASTER CONSOLIDATED MINES, LIMITED

Thorneloe Township, Ontario

ELECTROMAGNETIC SURVEY

April 20, 1961

W. Reinboth.

SUMMARY AND RECOMMENDATIONS

A horizontal coil type E.M. survey was conducted on nine (9) claims in Thorneloe Township, Ontario. A conductor 2800 feet long was found that will have to be diamond drilled to determine if there is any economic mineralization present. Two preliminary holes are recommended as follows:

D.D.U. No.	N	E	Brs.	Dip	Length
1	125S	1200E	North	-45°	225'
2	380S	200W	North	-45°	225'

As the drilling will have to be done on the ice, it would be advisable to do a predrilling prospecting check of the land on strike during the summer in search of clues that might help correlation of drill results.

INTRODUCTION

This report deals with an E.M. survey on nine (9) claims (PL9786 to 9), (PL9816 to 18) located in the northern part of Thorneloe Township, Ontario. Three hundred (300) feet north of the NE corner of the group is the Hydro dam at Kawatin Falls. A gravel road leads from here about 12 miles to Timmins, Ontario. Four hundred and forty-two (442) readings were taken. Readings were taken at 100 foot intervals except for detail work where they were taken at 50 foot intervals. Picket lines were established at 400 foot intervals, and 200' intervals for detail work. Nine and a half (9½) miles of picket lines were established. The instrument used was the Sheridan-Kelk Dual Frequency Magnetometer employed in the horizontal coil configuration and measuring amplitude and phase of the secondary field at 600 cps. Some detail work was also done using a frequency of 2400 cps. The reason for using 600 cps for the general survey was the presence of sedimentary rocks in the northern part of the group that likely contain slight graphitic horizons and would probably show numerous uneconomic conductors if 2400

cps. were used. In presentation of the results, only the high or low frequency phase is plotted, on a vertical scale of 1 inch equals 40 units or 10 degrees. The purpose of the survey was to detail and locate more accurately a conductor found by a reconnaissance E.M. survey prior to staking. The detail survey was conducted by W. Rainboth assisted by E. Lentille from March 22nd to 24th, 1961.

GENERAL GEOLOGY

A projected E-W sedimentary-volcanic contact goes through the centre of the group. Sediments are on the north side, and comprised of conglomerate, greywacke, quartzite, slate and argillite. The volcanics contain andesite, rhyolite, agglomerate, tuff and iron formation. Possibility of some economic significance is the presence of an acid porphyry intrusive (about 1/4 mile diameter) extending into the north west part of the group. This porphyry was previously drilled by Maryland Mines. They obtained low gold values.

RESULTS OF E.M. SURVEY

A conductor was found striking E-W in the centre of the group for 2800 feet. There are five (5) possibilities put forth here as causing the conductor:

- (1) Disseminated sulphides (about 20%) at shallow depth.
- (2) Massive sulphides under fairly deep overburden.
- (3) Iron Formation.
- (4) Graphite.
- (5) Any degree of permutation or combination of the other 4 possibilities.

Since the conductor is entirely under water, it is probable that diamond drilling will be necessary to determine if there is any economic mineralization present.

Respectfully submitted,
W. Rainboth,
W. Rainboth,
Geologist.



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030

PAYMASTER CONSOLIDATED MINES, LIMITED

Whitesides Township, Ontario

ELECTROMAGNETIC SURVEY

April 22, 1961

W. Rainboth.

Summary and Recommendations

A horizontal coil type E.M. survey was conducted on sixteen (16) claims in Whitesides Township, Ontario. Two conductors were located in the north part of the group in an area of abundant outcrop. A geological check is recommended here as the next step. A third, small, weak conductor was found in the west part of the group. A geological check is also recommended here.

Introduction

This report deals with an E.M. survey on sixteen (16) claims (14977 to 15116) located in the east part of Whitesides Township, Ontario. Highway 101, 20 miles west from Timmins, runs to within six miles of the property and from here a good gravel road crosses the property. The gravel road is closed during winter. Six hundred and eighty-three (683) readings were taken at 100 foot intervals on picket lines spaced 100 feet apart. Fourteen (14) miles of lines were cut. The instrument used was the Sheridan-Kelk Dual Frequency Magnephase employed in the horizontal coil configuration and measuring amplitude and phase of the secondary field at 2400 cps. In presentation of the results, only the high frequency phase is plotted on a vertical scale of 1 inch equals 40 units or 10 degrees. The purpose of the survey was to detail and locate more accurately conductors found by a reconnaissance E.M. survey prior to staking. The detail survey was conducted by C. Reinboth, assisted by K. Fentzle, from March 26th to 30th, 1961.

General Geology

The group occurs at the west end of the greenstone belt that includes the mines from Chibougamau to the Porcupine camp. Volcanic rock types have been mapped in the vicinity as andesite, rhyolite, tuff, conglomerate and iron formation. An I.W. trending contact of the volcanics with a basic intrusive mass occurs in the vicinity of the north

boundary of the claim group. It is highly probable that all rock types on the property are volcanic.

Results of E.M. Survey

Prior to staking, a reconnaissance E.M. survey indicated 2 conductors; one in the north part of the group and one in the south part. The conductor in the south part was not found by the present detail survey and it is assumed that it was due to the combination of topographical effects plus misorientation of the transmitting coil. This assumption is very likely correct as the topography there is very rough.

The present survey located 3 separate conductors.

1. Conductor "A" - This conductor occurs in the north part of the group, striking NNE across 4 lines from 8W to 4E for about 1500 feet. There is abundant rock here, and the cause of the conductor should be able to be determined by a geological check.

2. Conductor "B" - This conductor occurs about 300 feet south of Conductor "A" on lines 0 and 4E. It appears to be a folded conducting horizon, but the same conducting effect could also be caused by two conductors perpendicular to each other. There is abundant rock here also, and the cause of conductance should be able to be determined by a geological check.

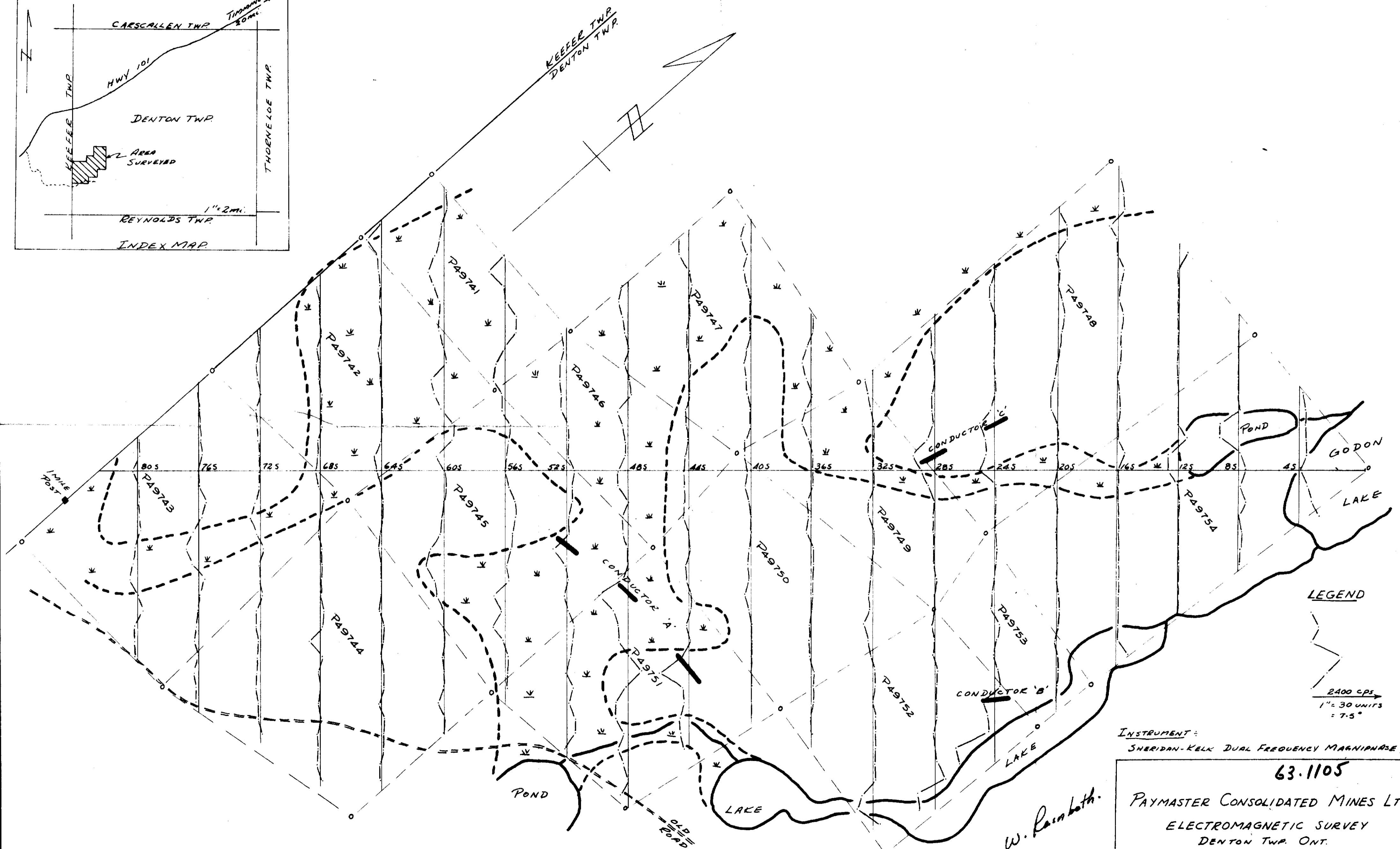
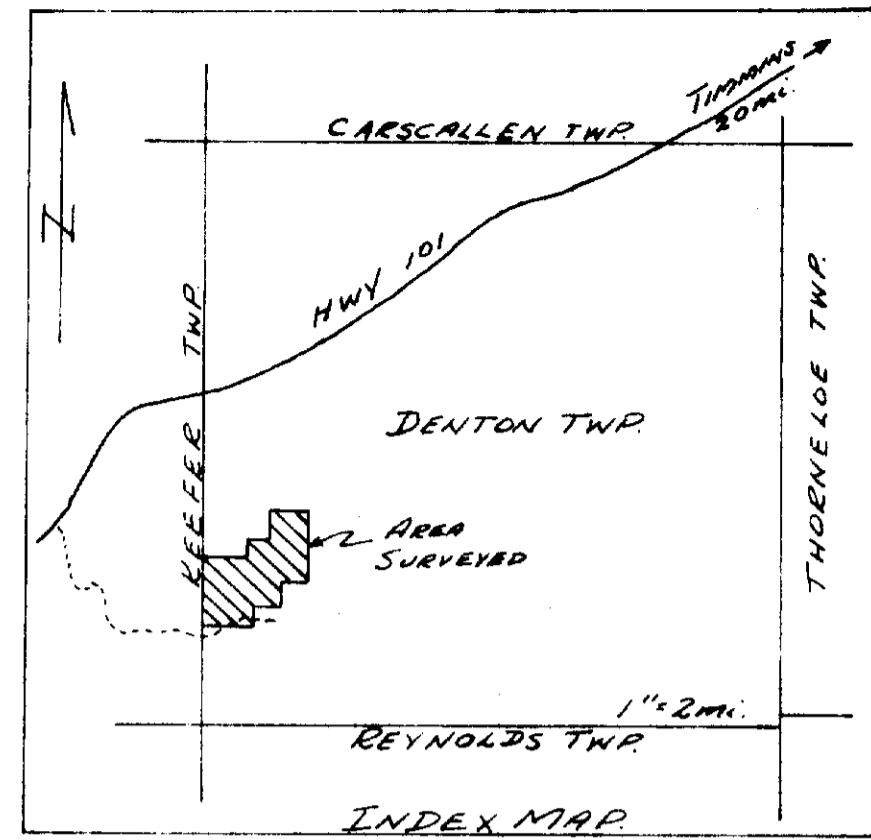
3. Conductor "C" - This conductor is about 600 feet long, striking about 20° N. of E. in the west section of the group crossing lines 20W and 16E at the base line. The conductance here is small and very weak and could possibly be due to overburden conditions, but a geological check should be made before writing it off.

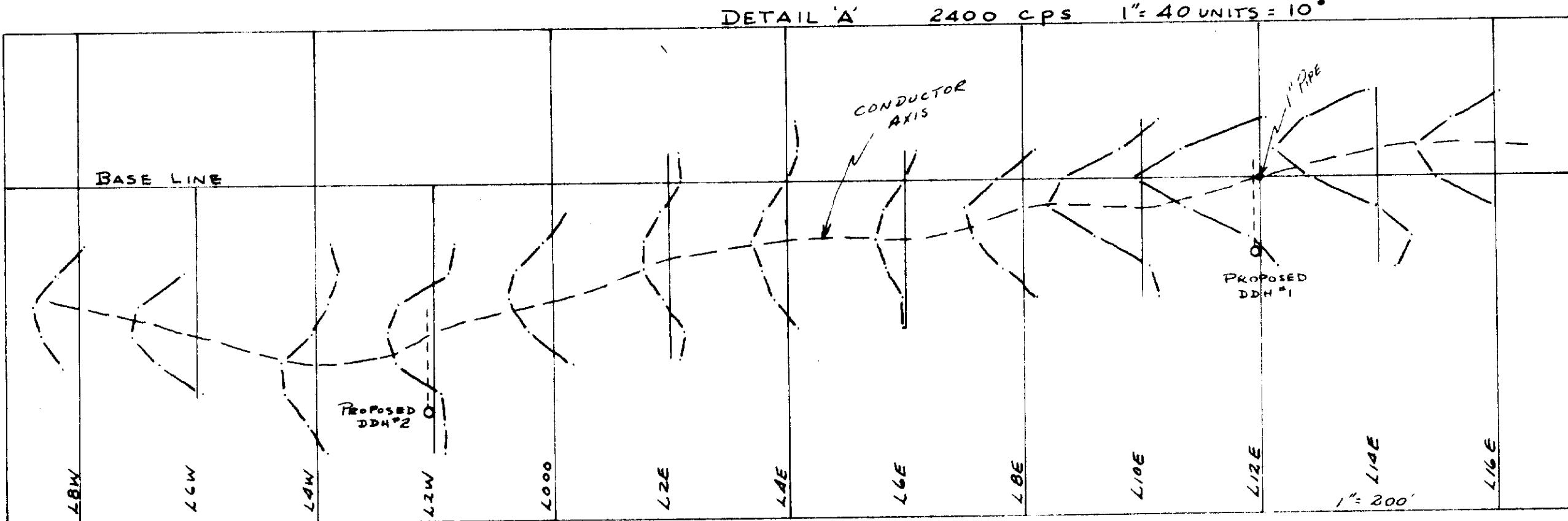
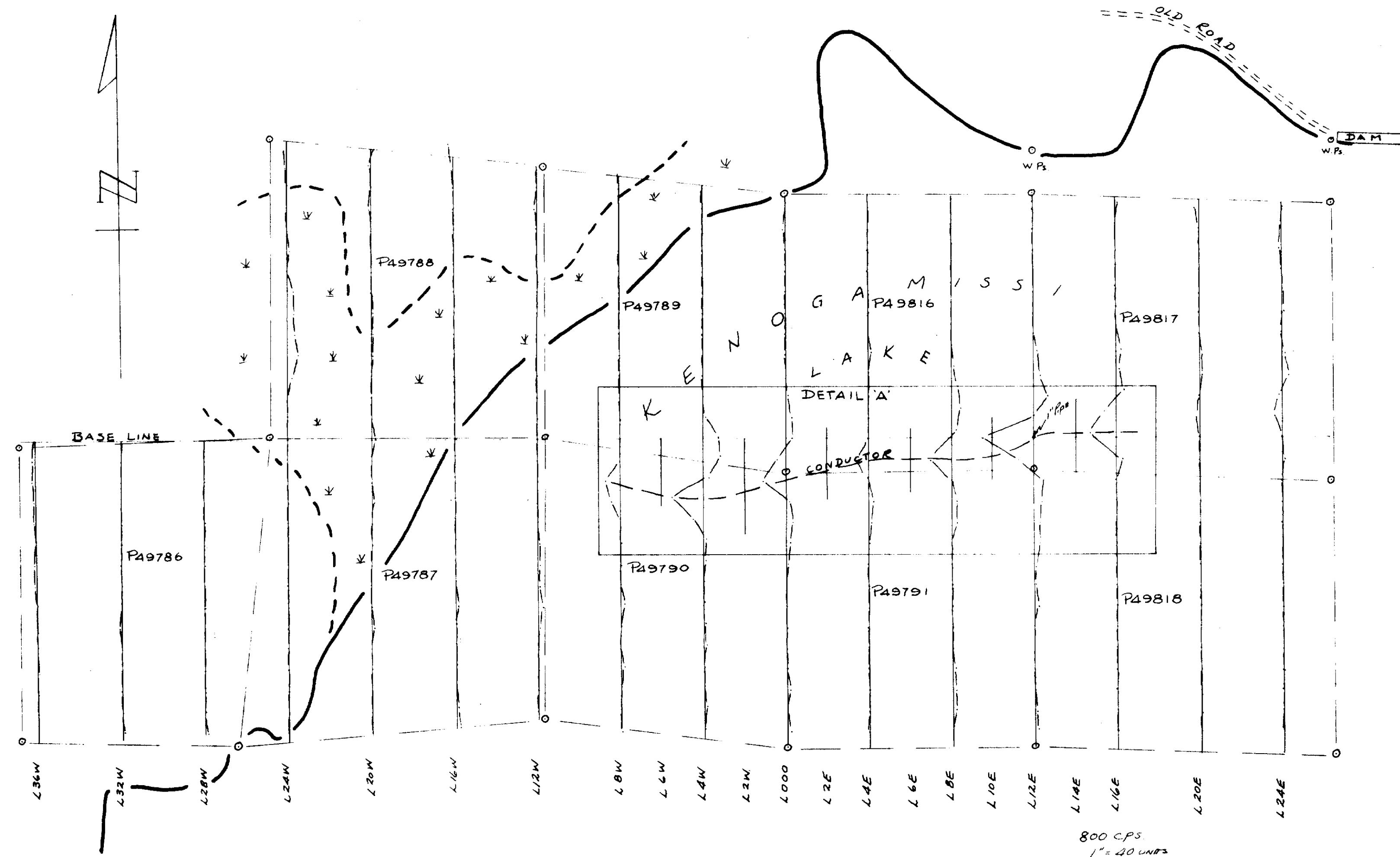
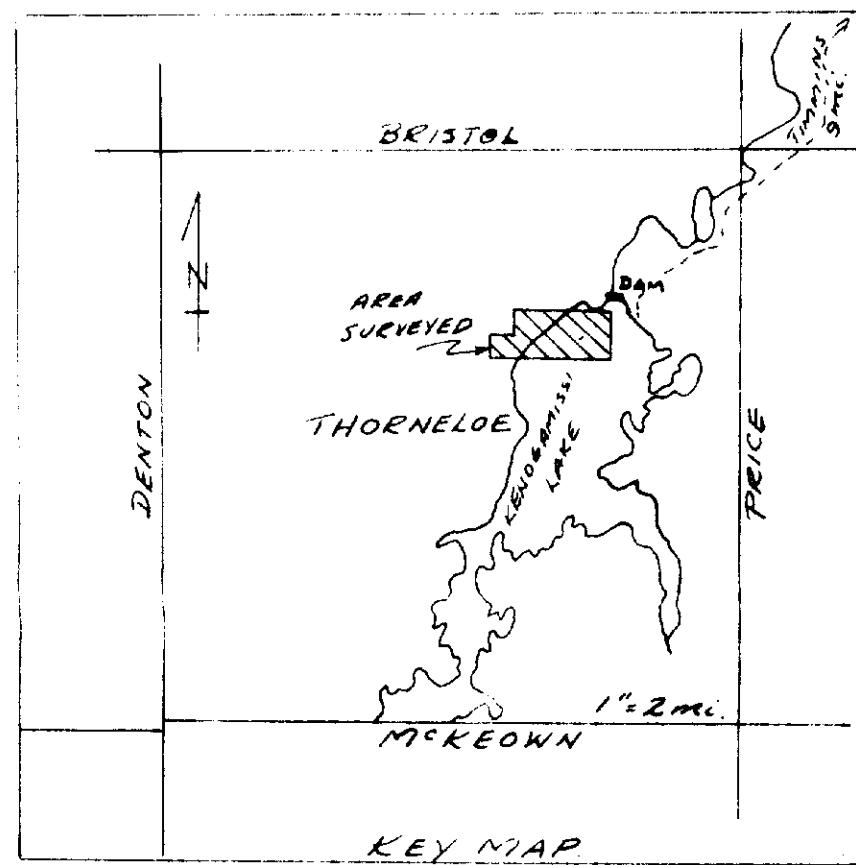
Respectfully submitted,

W. Reinboth.

W. Reinboth,
Geologist.

WIV/g



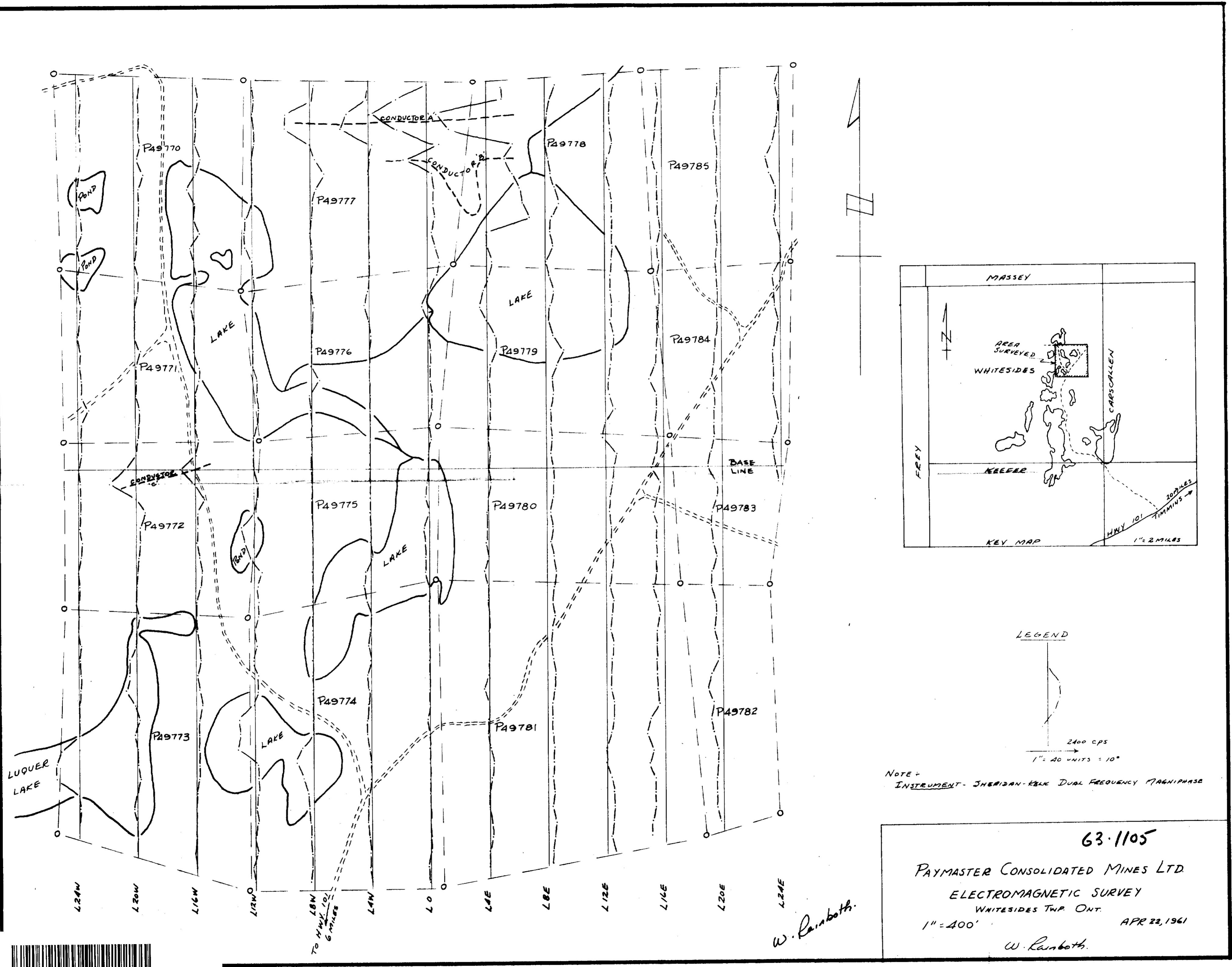


INSTRUMENT - SHERIDAN-KELK DUAL FREQUENCY MAGNIPHASE

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PAYMASTER CONSOLIDATED MINES LTD.
ELECTROMAGNETIC SURVEY
THORNELOE TWP. ONT.
APR 20, 1961
1" = 400'

W. Rambath.





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