



on

GEOPHYSICAL AND GEOLOGICAL SURVEYS

CLAIMS P. 53242, etc., LOVELAND AND EYERS TWP., ONT.

Following is a report on the work performed on this claim group.

CLAIMS

The claims included in this group are numbered:-

P. 53242, 53243, 53244, 53245, 53272, 53571,
 P. 53681, 53682, 53683, 53684, 53685, 53686,
 P. 53687, 53688, 53689, 53729, 53730, 53732,
 P. 53733, 53734, 53939, 53940, 53943, 54569,
 P. 54579, 54580, 54581, 54631, 54632, 54633,
 P. 54634, 54635, 54659.

These claims adjoin the common Loveland-Eyers Twp. boundary line between 1½ miles and 3½ miles north of the south township boundary.

OWNERSHIP

MESPI MINES LIMITED

SUITE 1705 - 80 RICHMOND ST. W.
 TORONTO 1, ONTARIO

ACCESS

Easiest access is by aircraft to Loveland Lake, located on the central west boundary of the group.

SURVEY WORK

The survey work was carried out by employees of Mespri Mines Ltd. during the period June 23 to August 29, 1963. The types of instruments used, sensitivity, miles of line cut, number of stations established and personnel employed are shown on the assessment work breakdown forms attached herewith.

Three plans on a scale of 200 ft. to an inch are attached herewith.

PREVIOUS WORK

Some years ago good grade nickel ore float was found on the ground now covered by claim P. 53734. This led to considerable exploration work in the immediate area but the source of the float was not located.

An aerial electromagnetic survey, carried out in 1963 for Mr. B. W. Lane, covered this area. This survey showed several weak conductors in the area covered by this claim group.

ELECTROMAGNETIC & MAGNETOMETER SURVEYS

The EM. survey was run with the Crone instrument used in-line at 200 ft. coil spacing with readings taken at 100 ft. intervals on lines at 200 ft. and 400 ft. intervals. A small amount of detail was done with 100 ft. line spacing.

The magnetometer survey was carried out with readings at 100 ft. intervals on lines at 400 ft. spacing. A very limited amount of work was done at 200 ft. line spacing.

The magnetometer survey outlined two north-south trending diabase dikes. Other than the diabase, two magnetic anomalies were outlined. The first of these extends for some 1600 ft. with a north-south strike and has a width of about 600 ft. This anomaly occurs on claims P.53571, 53687 and 54631 between the two diabase dikes, though very close to the east contact of the west diabase dike. It is in an area covered by overburden. A very weak EM. conductor is indicated on line 24.8. at the southern end of the outer border of the magnetic anomaly. A closely detailed EM. survey might indicate one or a series of short EM. conductors associated with this magnetic anomaly.

The second magnetic anomaly occurs on claim P.536383. It has a north-south strike length of 1200 ft. and a width of 300 ft. and occurs in a low muskeg area, just west of a narrow band of iron formation. No EM. conductor was located in conjunction with this anomaly. A short weak EM. conductor occurs a short distance west of the magnetic anomaly. It is associated with some mineralized willow lava.

A short, very weak EM. conductor occurs on claim P.53243 just east of the base line and a short distance east of the west diabase dike. No magnetic anomaly is associated with this conductor. It occurs in low ground.

Other than the above, no anomalies or conductors of interest were located on this claim group.

GEOLOGICAL SURVEY

This survey covers the area over which the geophysical survey was carried out.

Outcrops are scarce on the claim group and are limited principally to scattered outcrops of the two diabase dikes and some granitic outcrops adjacent to the diabase in the northern portion of the claim group.

The diabase is a typical fine to medium grained quartz diabase. The dikes trend in a northerly direction. The western dike contains varying amounts of finely disseminated pyrite. The eastern dike contains very little fine pyrite. The eastern diabase

Dike and northern portion of the western dike intersect typical red granite. Andesite lies to the west of the southern and central portion of the western diabase dike. Much of the andesite shows remnants of pillows. In the northern portion, granitic filling occurs on a number of joints and fractures in the andesite, with considerable metamorphism and a gneissic appearance in some locations.

Two narrow outcrops of iron formation occur in the southwestern portion of claim P.53683. A strong magnetic anomaly occurs in the low ground between these two areas of outcrop. This could be due to a basic plug of quartz diorite since some outcrops in the approximate area of the anomaly. The pillow lava adjoining the iron formation on the south boundary of claim P.53683 is well mineralized with pyrrhotite and pyrite. This is the only strong mineralization seen on the claim group.

CONCLUSION

The magnetic anomaly, with possible short EM. conductor zones, occurring on claims P.53571, 53687 and 54631 lies in the depression between the diabase dikes and to the north of the float. There is a possibility that this anomaly could be the source of the nickel-copper float.

The anomaly on Claim P.53683, with some good sulphide mineralization nearby is worth further investigation.

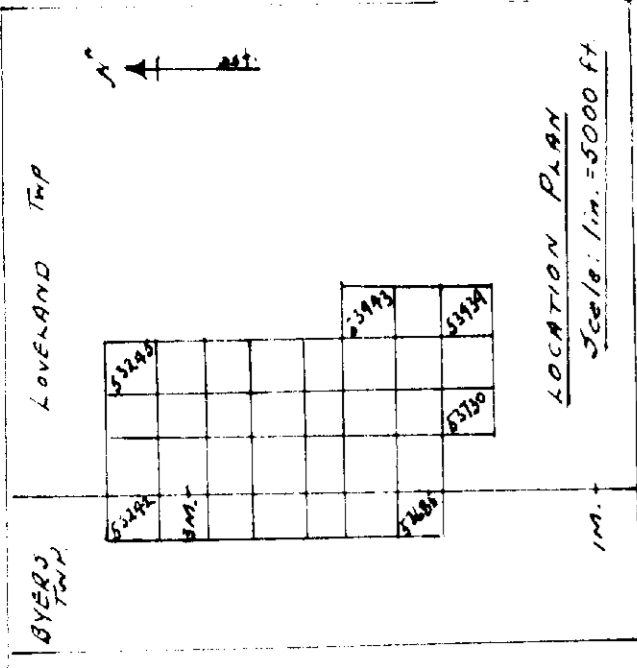
Additional detailed survey work in the area of the conductor on claim P.53243 should be considered.

Respectfully submitted,



L. K. Lytle, P.Eng.

6 Encl.
/lrl.



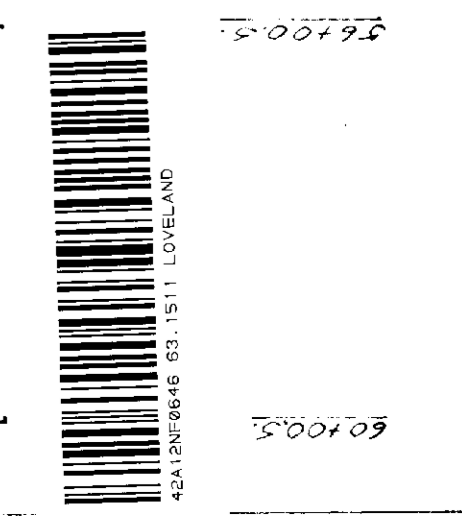
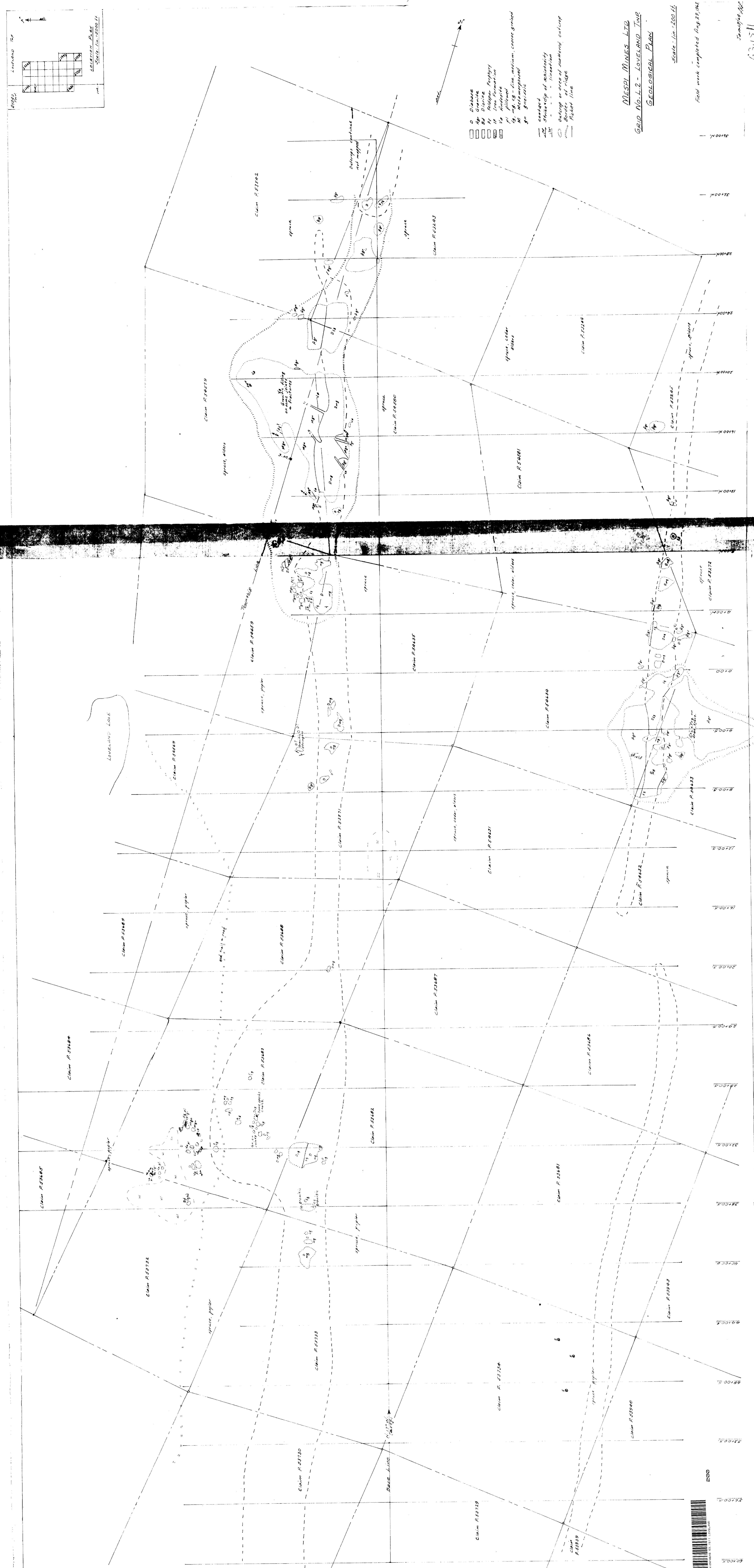
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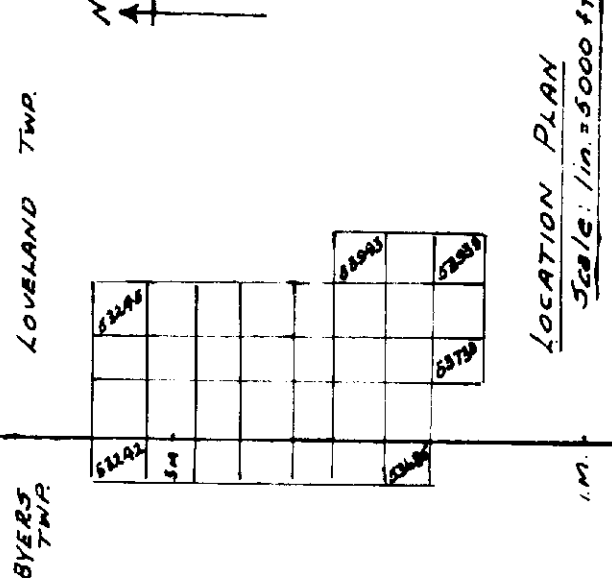
- Diabase
- Granite
- △ Diorite
- ▽ Basalt, Porphyry
- Iron Formation
- Shale
- Sandstone
- Mica Schist
- Gneiss

Other symbols:

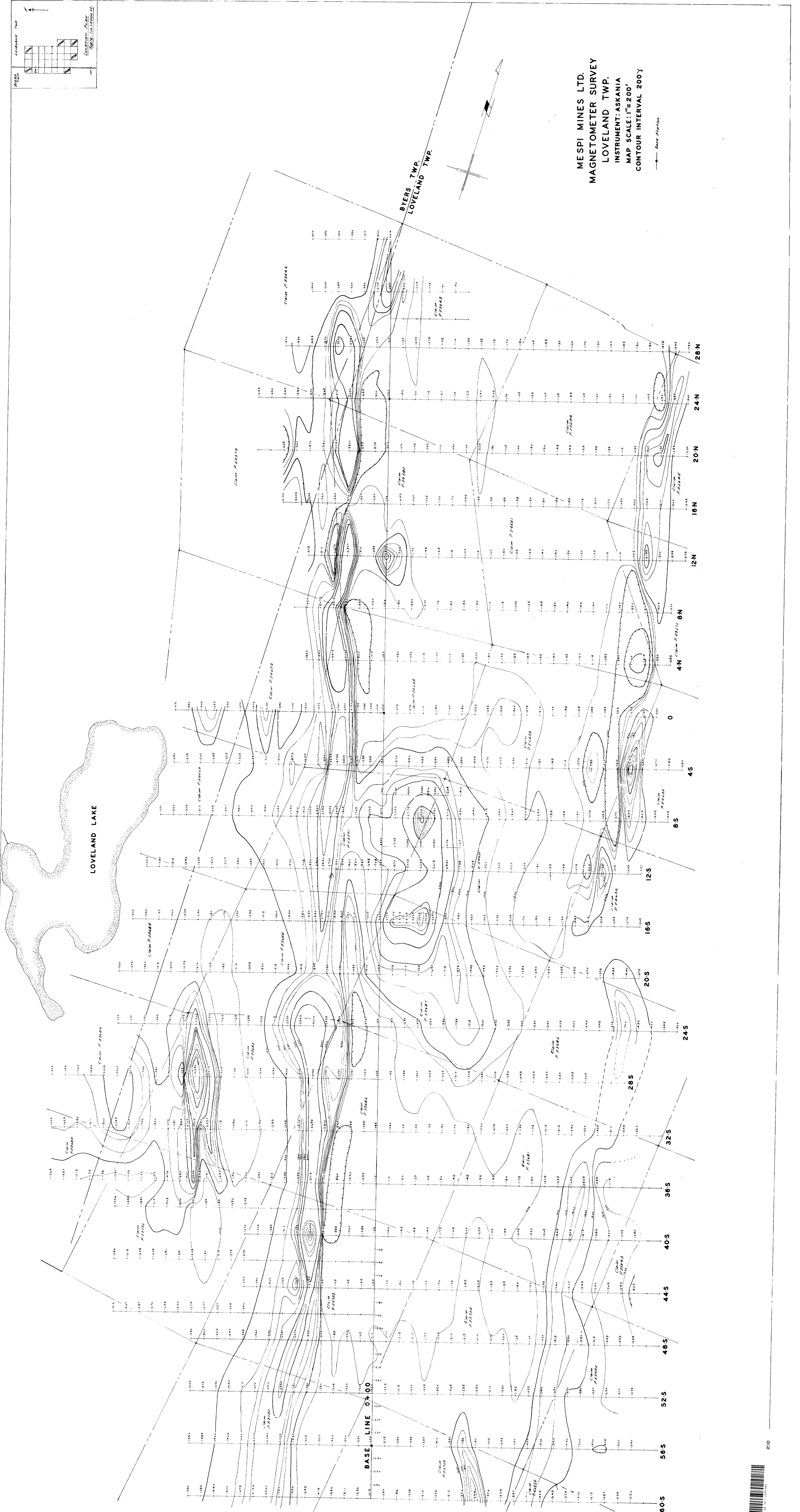
- Boundary of activity
- Strike-slip fault
- Fault line
- Ridge line

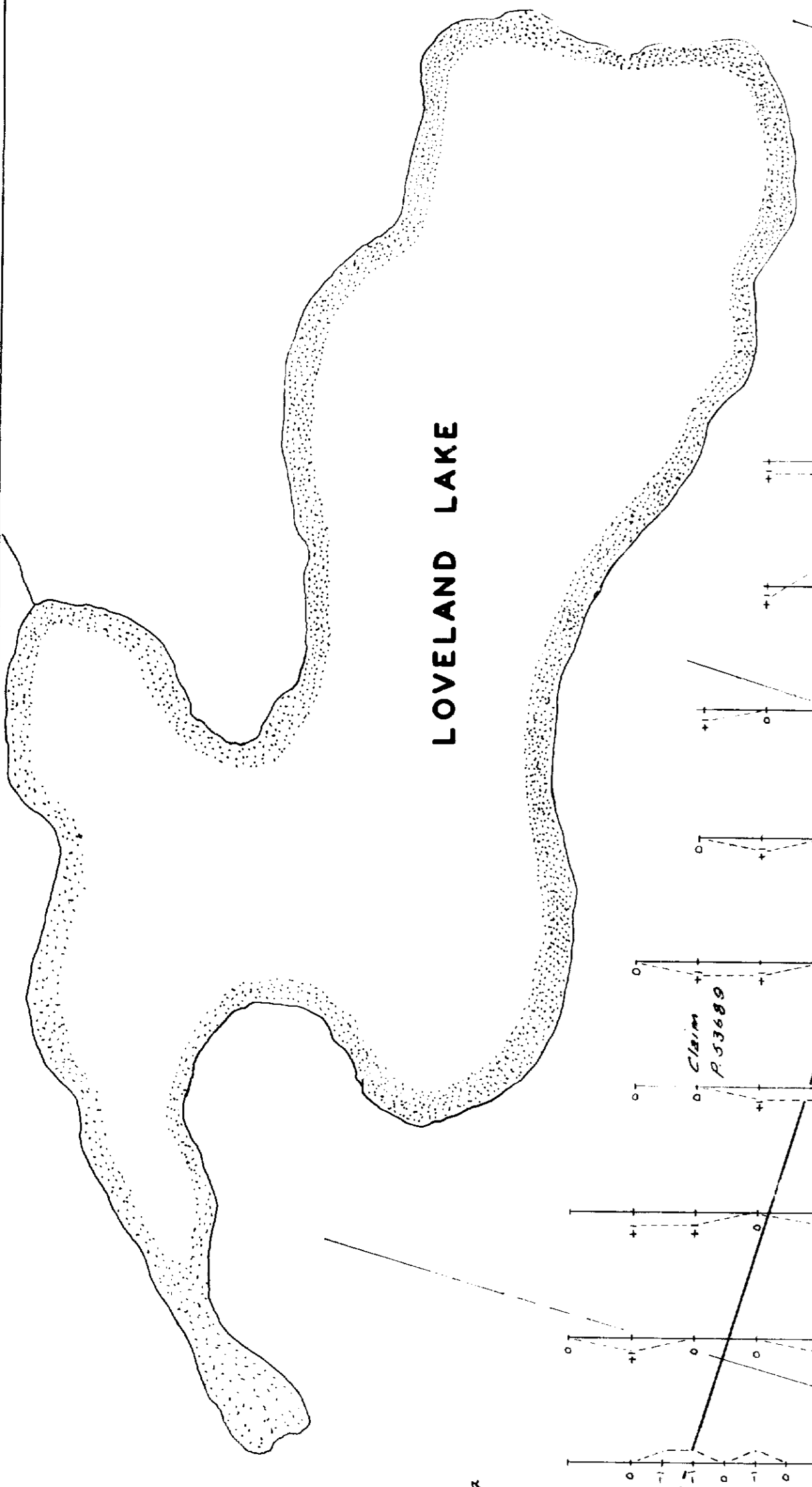
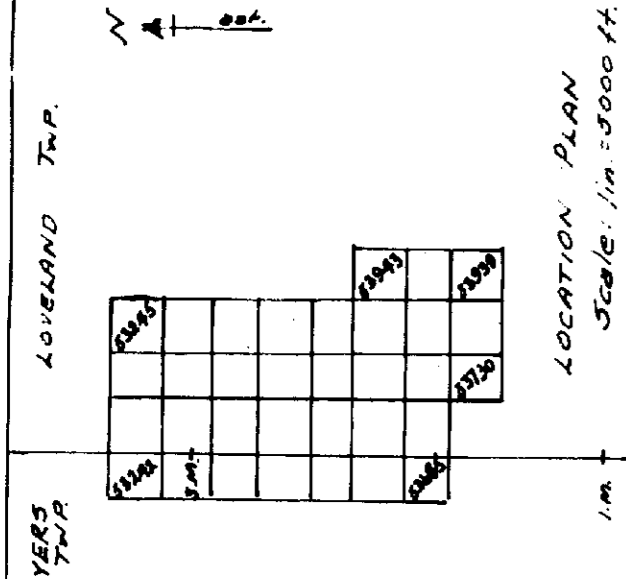
MESDI MINES LTD
GRID No. L-2 - LOVELAND TWP
GEOLOGICAL PLAN
Scale: 1 in. = 200 ft.
Field work completed Aug 29, 1942



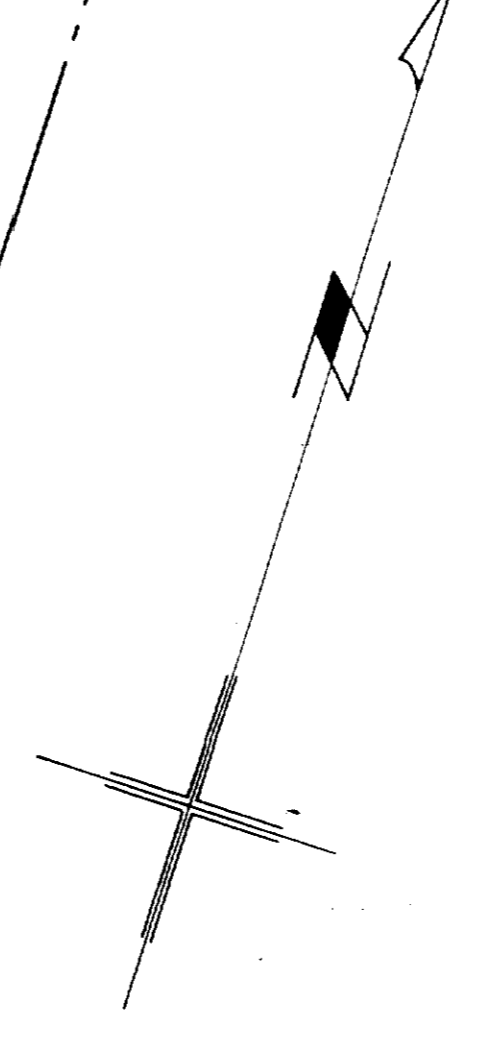


MESPI MINES LTD.
MAGNETOMETER SURVEY
LOVELAND TWP.
INSTRUMENT: ASKANIA
MAP SCALE: 1"=200'
CONTOUR INTERVAL 200'



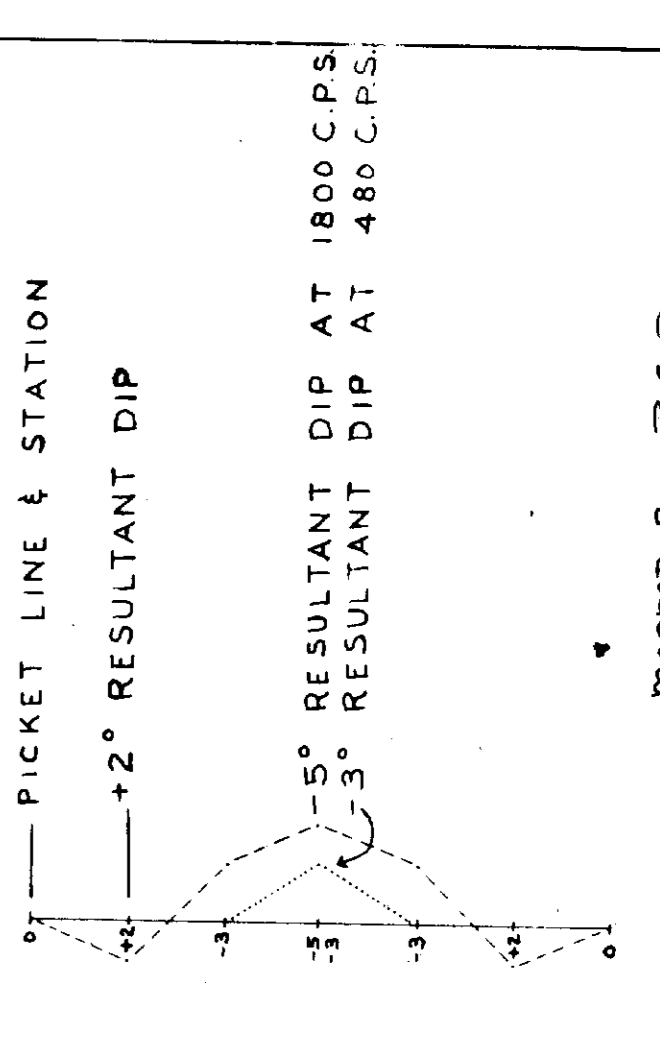


BYERS TWP
LOVELAND TWP



MESPI MINES LTD.
ELECTRO-MAGNETIC SURVEY
LOVELAND TWP.
CRONE INSTRUMENT
IN-LINE METHOD
COILS 200' APART - STATION AT MID-POINT
PROFILE SCALE 1" = 10' - MAP SCALE 1" = 200'

LEGEND



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