PLEASE NOTE:

The following reports have been filmed previously in Sault Saint Marie and can be found in Coden-0018. This report is being filmed again as it refers to various areas within townships in Sudbury.

To accompany the Map of the No.I. Showing

Plum Uranium and Metals Mining Ltd.
'16' Claims in Baldwin Twp.

Mapping and Control

A north -south base line (compass, with no tripod) was out and measured for a distance of over 3800 ft., with an offset of 1400 ft. to take in the northern extension.

Offsets were cut and measured to take in the general geology, with angle offset picket lines to show the location of the radioactive conglomerate bed.

The location of the sulphide pits are approx.

The lava-sediment contact is covered with overburden and also approximate.

Geology

There may be some disagreement over the rock type mapped Pg (garnet and staurolite paragneiss). There is a transition between the quartzites and lavas, with no well defined contact.

The radioactive conglomerate bed showed a sprinkling of pyrite in various places but was not visible in many others. The red alteration, I believe is due to altered hematite.

Structure

The series of small faults I have marked on the map were ascertained by the offsetting of the conglomerate bed. However, with heavy overburden in places, the possibility of two parallel beds should not be overlooked.

Radioactivity

The geiger readings were taken with an EA-135 instrument (ratemeter type)

The widths of the conglomerate bed were not determined by the distance across the pebble bands but by tracing the radioactivity across the bed with the geiger and where there was a marked decrease in the reading, this we considered the outside of the bed. The average geiger reading marked on the map was arrived at by taking the outside readings and then I to 3 readings in the middle and making a rough average (plus or minus 50).

The radioactivity appeared higher where there were more pebbles, however, I feel quite certain the radioactive mineral is not just confined to the pebble bands.

DIAMOND DRILLING

Water Supply

Beaver pond (water supply) -marked on the map.

The water has gone up to three and four feet in places and spread over a fairly wide area. Should they not get too much freezing this winter, I feel there's plenty of water for drilling.

This would still mean that approx. 3000 ft. plus of hose would be needed to drill the south end.

Transportation

The main road from McKerrow to Espanola Bay is approx. 2000 ft. from the Beaver meadow. There is a short road for part of the distance and a good wide path from the end of the road to the Beaver pond, over which they would have no trouble in transporting a drill. From here it would only mean another 1500 across the Beaver meadow, a great deal of which is dry and then about 1000 ft. through the bush to the main part of the showing.

INTER-OFFICE MEMORANDUM

From: Franc Joubin

To: Dit Holt

Date: February 8th, 1954.

Copies to: R. C. Hart
H. Buckles

File

Re: Plum - Baldwin

Confirming my instructions given you on the telephone, I am sending a sketch of the line-cutting plan for Plum - Baldwin. It does not need to be rigidly followed except for east-west strike of picket lines and their interval of 300 feet. Carry all lines far enough east to reach the Mississagi quartzite only.

The base line used may be a north extension (through pond) of the south west leg of the present line, as you suggested.

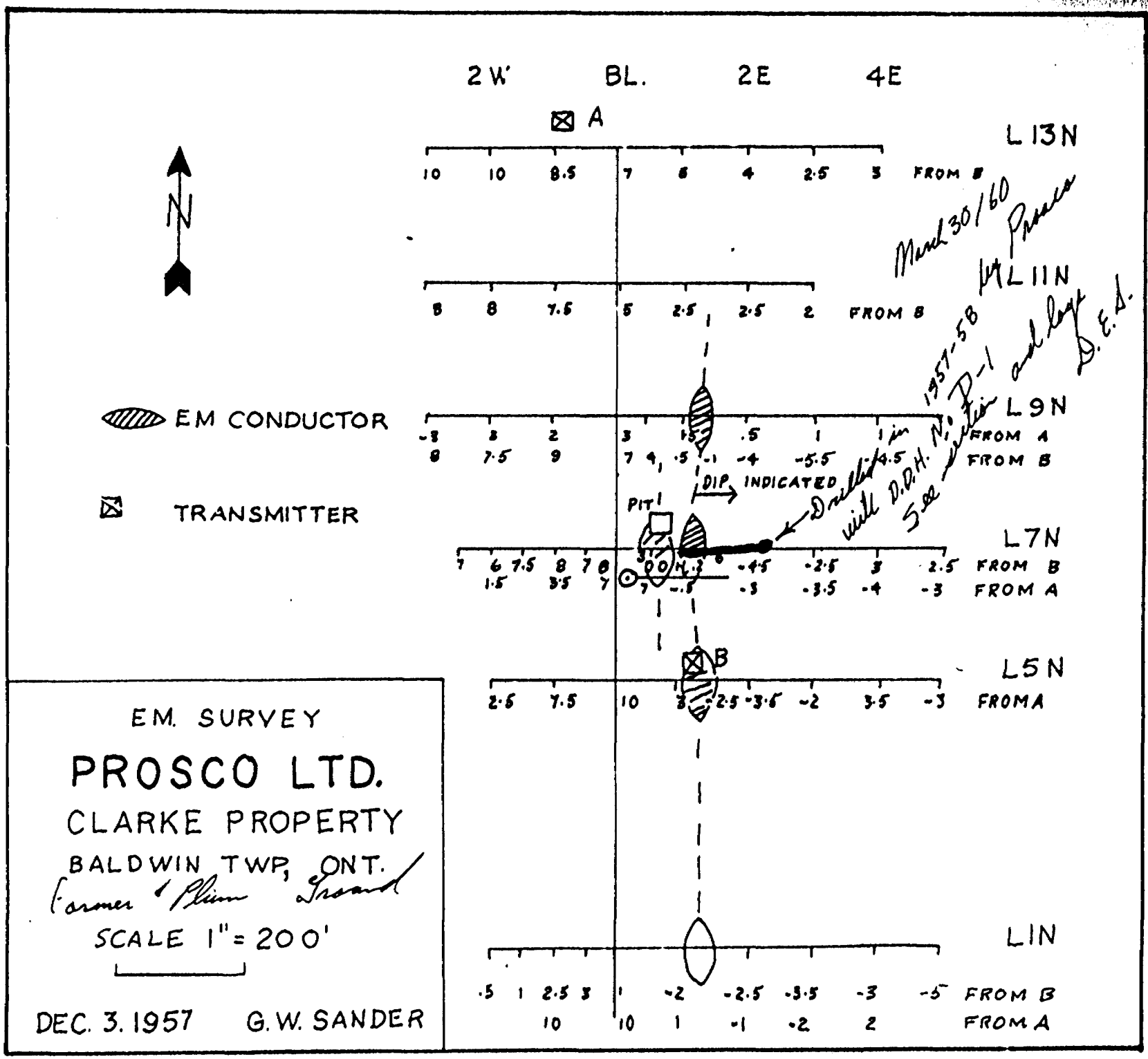
We'll rush this line-cutting since Fred Dunn will soon be available to start the geophysical.

Regards.

FJ/mk
encl.

(sgnd.) Franc. Joubin

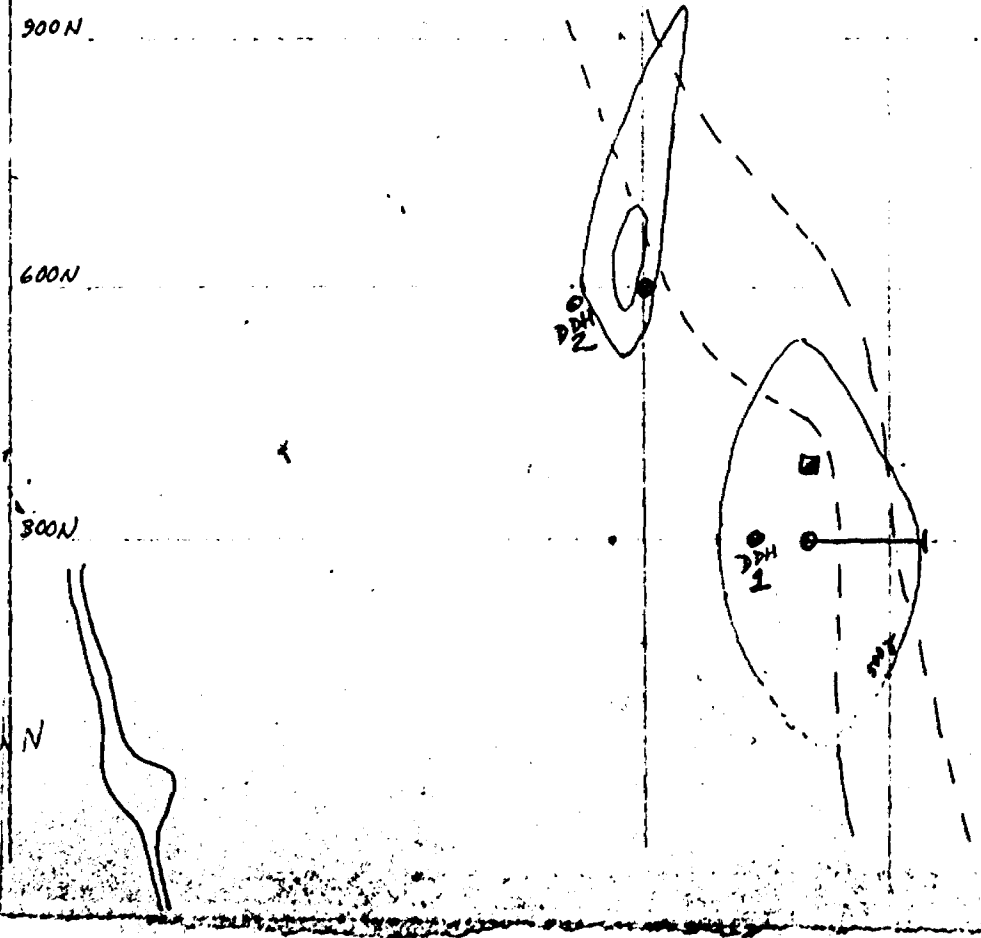
I N D E X

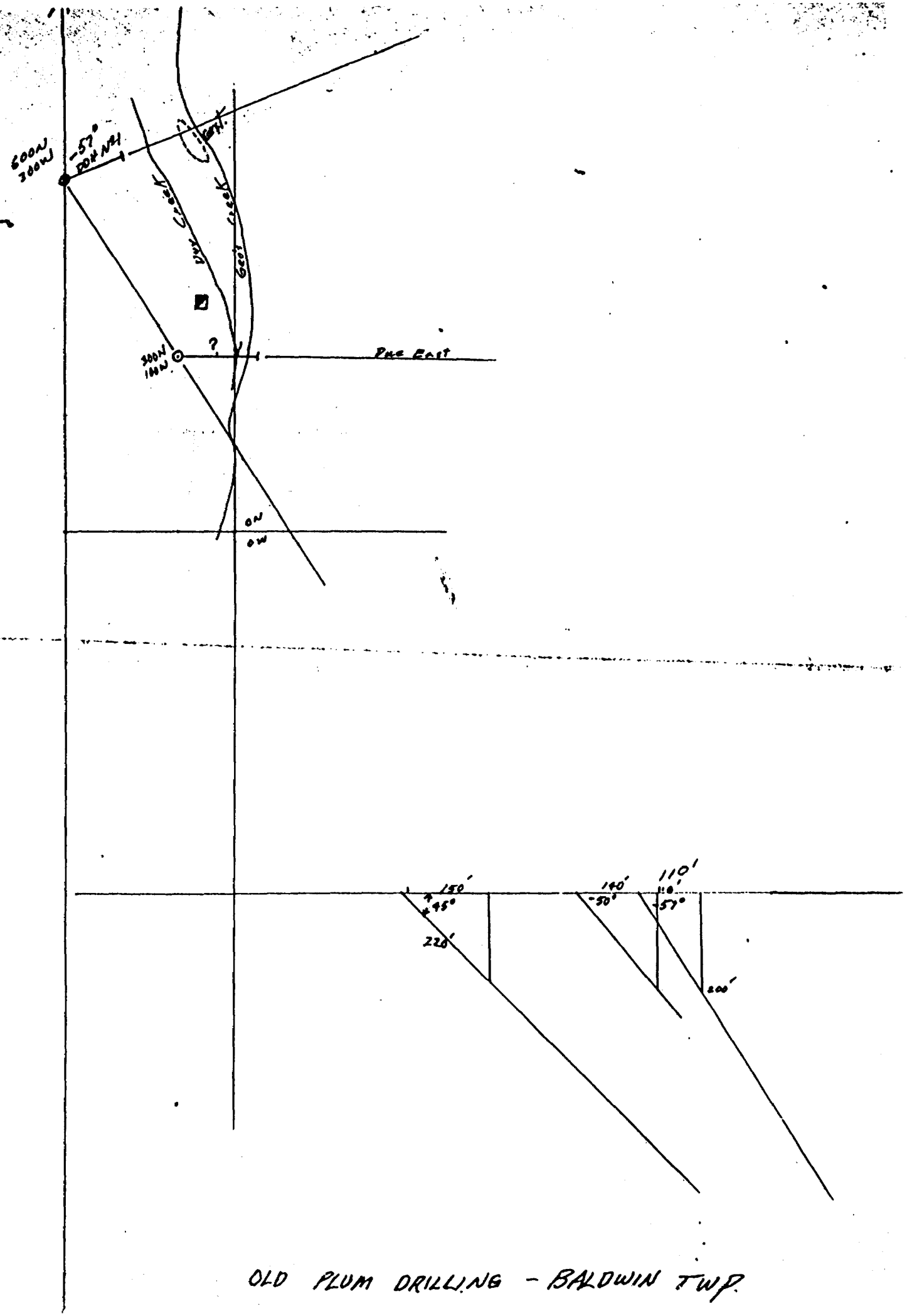

2W
BL.
2E
4E
A
L13N
10 10 8.5 7 6 4 2.5 3 FROM B
March 30/60 Prosco
L11N
8 8 7.5 5 2.5 2.5 2 FROM B
1957-58 P-1 and log D.E.S.
EM CONDUCTOR
L9N
-8 8 2 3 1.5 .5 1 1 in FROM A
8 7.5 9 7 4 .5 -1 -4 -5.5 4.5 FROM B
TRANSMITTER
DIP INDICATED
Drilled with D.D.H. No. 1 See letter
PIT
L7N
7 6 7.5 8 7 8 3 -4.5 -2.5 3 2.5 FROM B
1.5 3.5 7 7 -.5 -3 -3.5 -4 -3 FROM A
B
L5N
2.5 7.5 10 3 -2.5 -3.5 -2 3.5 -3 FROMA
L1N
.5 1 2.5 3 1 -2 -2.5 -3.5 -3 -5 FROM B
10 10 1 -1 -2 2 FROM A
N
EM. SURVEY
PROSCO LTD.
CLARKE PROPERTY
BALDWIN TWP, ONT.
Farmer Plain Strand
SCALE 1" = 200'
DEC. 3. 1957 G.W. SANDER

Plot by Plum of Old Plum Drilling.

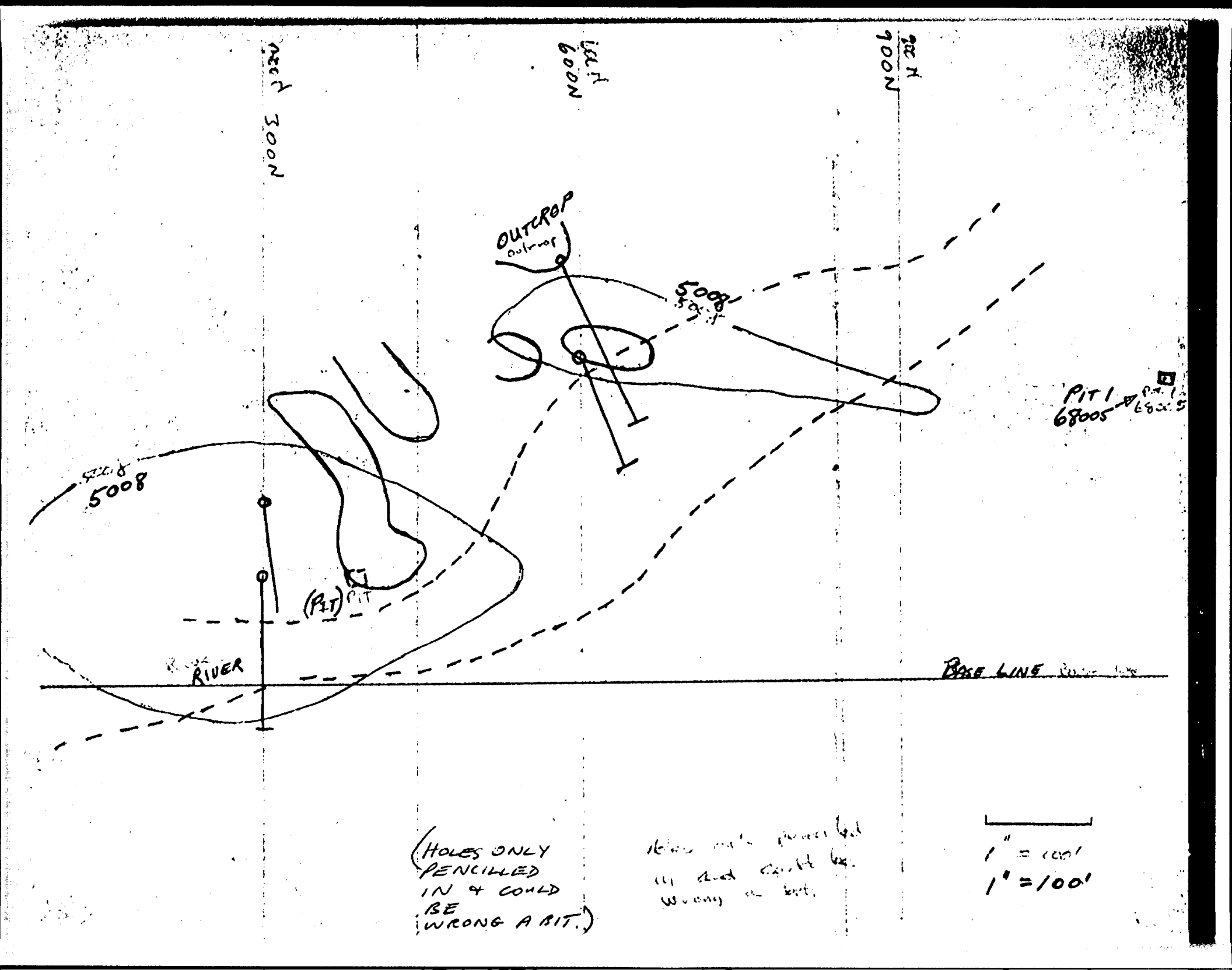
PLOT BY PLUM OF OLD PLUM DRILLING.

1" = 200'





OLD PLUM DRILLING - BALDWIN TWP.


300N
600N
900N
OUTCROP
5008
PIT 1
68005
5008
(PIT)
PIT
RIVER
BASE LINE
(HOLES ONLY PENCILLED IN & COULD BE WRONG A BIT.)
1" = 100'
1" = 100'

DRILLING

PB1 197' 600N - 300W N68E 57°
Pyrrh, Pyr, Cpy, 28-115 Assays Nil & trace
rock quartz gabbro?

PB2 218' 300N - 100W E @ 50°
diss. pyrrh. 20-185 Nil & trace

PB3 244' 873S - 231E N65W 50°
Amyg lava, Qtzt, Chlorite schist
P & Py @ 120' (qtzt.) & @ 205-225 (qtzt & schist)

PB4 152' 800N - 400E N80W 32°
Arg. gw

PB5 81' 810S - 175E BL2 W @ 50°
Qtzt. & gw.

PB6 98' 1138S - 500E W @ 45°
Qtzt. & sericite schist

PB7 89' 1485S - 490E W @ 45°
Sericitic qtzt. & schist

PB8 89' 1730S - 495E W @ 45°
Sericite - chlorite schist, qtzt.

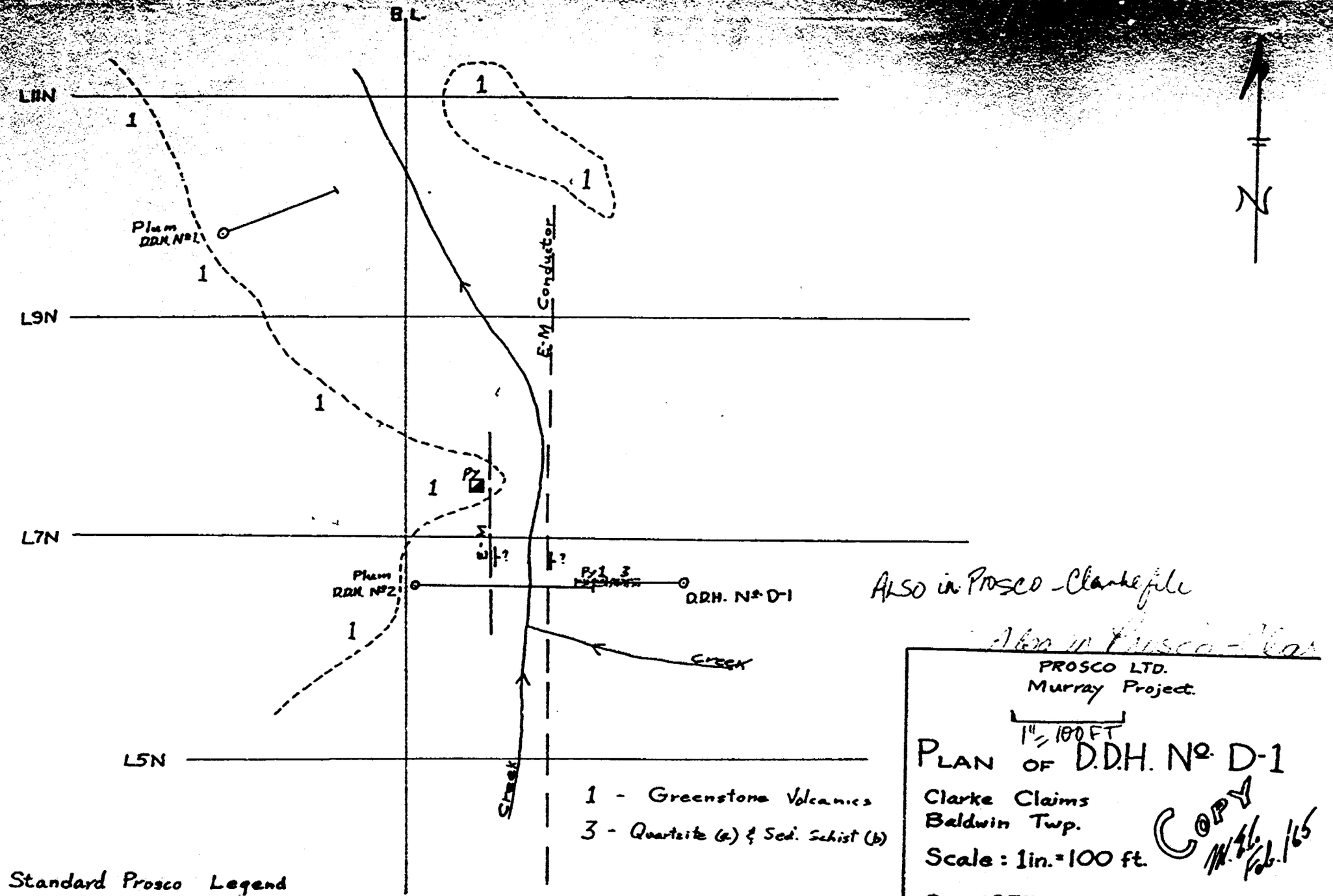
PB9 130' 2345S - 160E N62W @ 45°
Qtzt, arg, & mixtures.

PB10 142' 4560S - 45E, N62W @ 45°
Qtzt, diabase

PB11 233' 1456S - 643E W @ 45°
Qtzt, arg, sericite schist

PB12 235' 935S - 655E W @ 45°
Qtzt. & Chlorite schist

Some radac. in all those. This one has
best with 0.22 across 0.8 ft.



1 - Greenstone Volcanics

3 - Quartzite (a) & Sed. Schist (b)

Standard Prosco Legend

ALSO in PROSCO - Clarke file

Also in Prosco - Misc

PROSCO LTD.
Murray Project.

1" = 100 FT

PLAN OF D.D.H. No. D-1

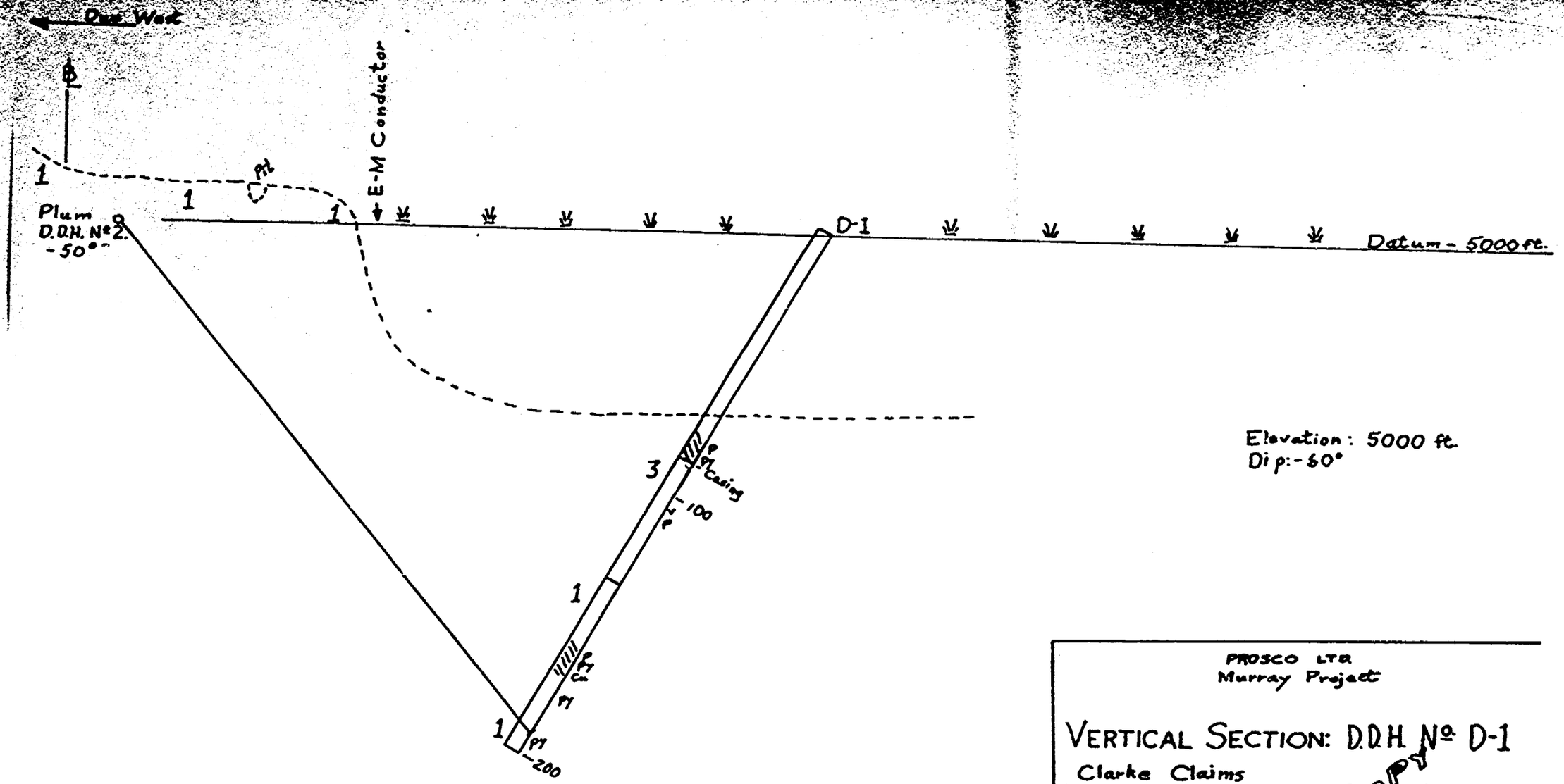
Clarke Claims
Baldwin Twp.

Scale : 1in. = 100 ft.

Dec. 1957

COPY
M.46 Feb. 16/5

D.W.E.



1 - Volcanics, Greenstone (a)

3 - Quartzite (a) Sedimentary Schist (b)

Standard Prosco Legend

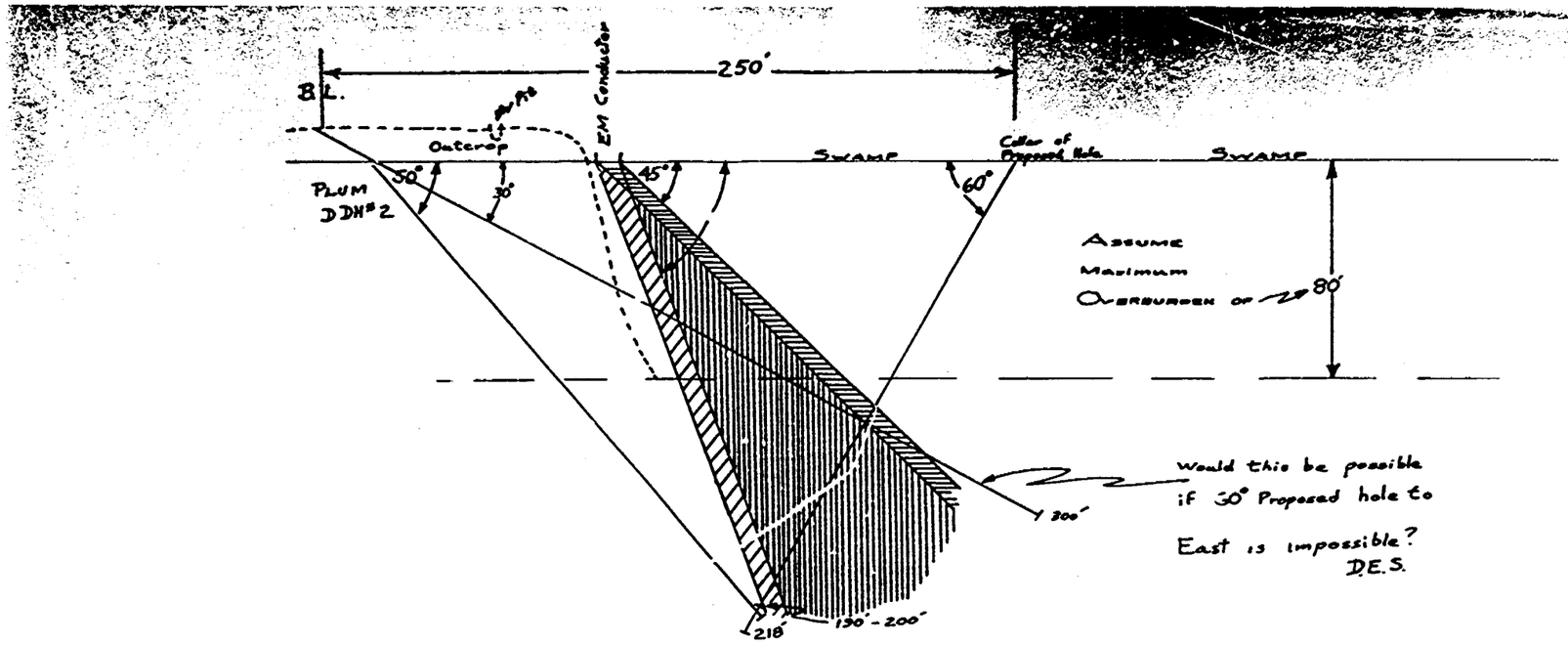
PROSCO LTD
Murray Project

VERTICAL SECTION: D.D.H. No D-1

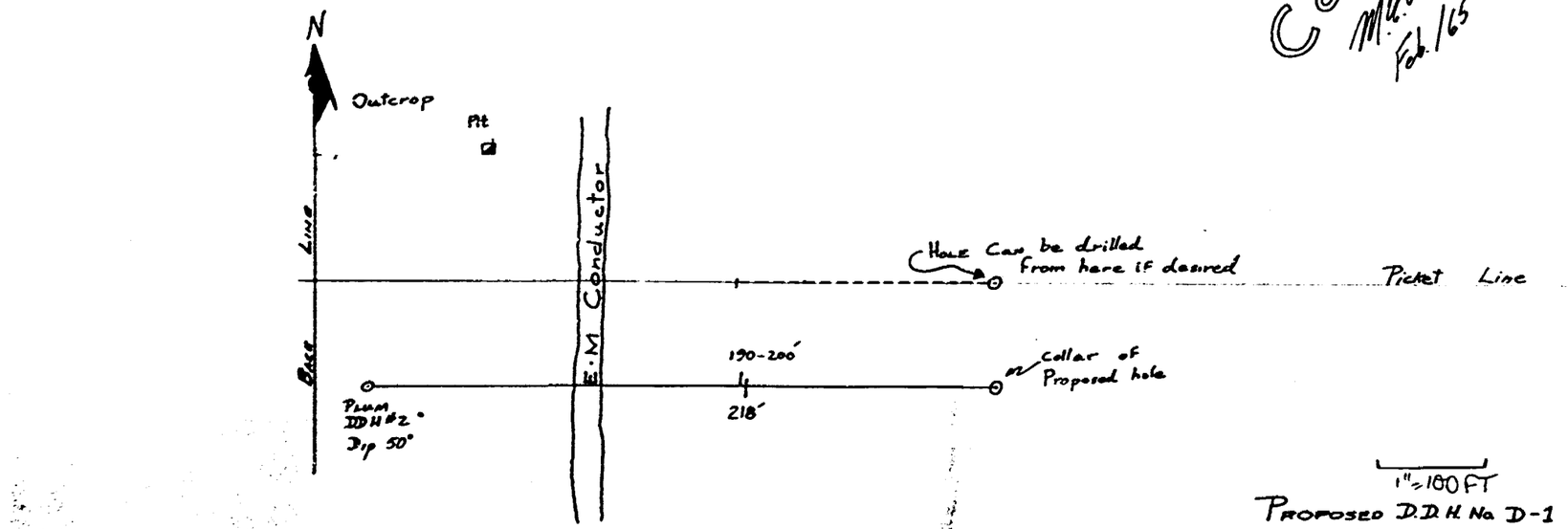
Clarke Claims
Baldwin Twp.
1" = 100 FT
Scale: 1 in = 40 ft.
Dec., 1957

D.W.E.

COPY



SECTION



PLAN

COPY M.L. Feb. 165

1"=100 FT

PROPOSED D.D.H. No D-1
Dip 60° Depth 190-200'
CLARKE CLAIMS
BALDWIN TOWNSHIP

SCALE 1"=40'

PROSCO LTD.

The following notes pertain to an area along and more or less in the immediate vicinity of the Murray-Worthington Fault between Victoria and Denison Townships inclusive.

Information for the notes has been gathered from a study of claim maps, aerial photographs, reports on the area and a certain amount of field work.

The purpose of the notes is to estimate how much geophysical work in the form of an electromagnetic survey and possibly some magnetic survey work could be completed without the necessity of line cutting. Along the miles of open fields or farmlands it may be necessary to do some line cutting at a later date in order that the fault is completely traversed in the proper manner.

VICTORIA TOWNSHIP - 6 claims to stake at most. Fault runs for 6 miles across Twp. through patented land. Approximately 3½ lineal miles could be covered by geophysical work without the necessity of line cutting.

SALTER TOWNSHIP - 6 claims to be staked in Salter Township. Murray Fault area across township for a distance of about 6 miles. Only about 1 mile of the fault could be covered by geophysical work without the necessity of line cutting.

MAY TOWNSHIP - 14 claims could be staked in May township. The Murray Fault passes through the Township for a distance of 6½ miles all in patented lands. About 3 lineal miles of patented land lying immediately south of the fault is open fields and could be covered by geophysical work without the necessity of line cutting.

SHAKESPEARE TWP. - 4 more claims should be staked. Fault extends across township for 4-3/4 miles. 2½ lineal miles of open land could receive a geophysical survey. ½ mile of this would pass over ground already staked for Prosco. Most of land is patented.

BALDWIN TOWNSHIP - 35 claims minimum should be staked. Murray Fault extends across township in a NE direction for approximately 6 miles and would cross several claims that are to be staked for Prosco. The rest of the fault passes through a few patented lots and ground staked by other interests. About all geophysical survey work would require line cutting.

NAIRN TOWNSHIP - Numerous claims along the Murray Fault can be staked. The Murray Fault extends across the township in a NE direction for 6 miles with four miles passing through land that can be staked. The remaining two miles pass through patented properties.

NAIRN TOWNSHIP (continued) - From the aerial photographs it would appear that no geophysical work could be carried out without line cutting being required. However, the bush in much of the area may be sparse and low and a survey on the ground might prove that some work could be carried out if it could be done before the leaves become fully developed.

LORNE TOWNSHIP - 8 claims open for staking. Murray Fault passes through NW part of township for a distance of 5 miles and passes through patented lands and claims held by other interests. Much of the patented land is believed to be held by I.N.CO. Room for geophysical work very limited except along roads. Otherwise, line cutting would be required.
Claims in Beaver Lake open and might be worth staking. They are on direct line more or less of norite offshoot through Worthington.

DRURY TOWNSHIP - No land open for staking in vicinity of Murray Fault. Fault crosses township for two miles in the SE corner through patented land believed to be held by I.N.CO. Lake staked for Prosco and located in Lots 3 & 4, Con. I and land along N-S road just west of lake worthy of some geophysical work provided lake claims can be recorded. This geophysical work would not require line cutting and would involve one day or less of time.

DENISON TOWNSHIP - All open land consisting of 9 claims along fault and one isolated lake claim has been staked. Murray Fault passes across entire south part of township for 6 miles, 5 miles of which is patented land believed to be held by I.N.CO. The fault passes through ½ mile of land held by Prosco. Geophysical work could possibly be carried out on N-S road immediately E of lake and on lake itself. Rest of 5 claim block would require line cutting. Geophysical work might also be carried out with little or no line cutting for a part or about 1/3 mile on another 4 block claim group adjoining the fault, if it could be done before the leaves hampered visibility.

SUMMARY

Township	Lineal Miles of Murray Fault along which Geophysical Work could be carried out without necessity of line cutting	Number of Claim Remaining to be staked
Victoria	3½	6
Salter	1	6
May	3	14
Shakespeare	2½	4
Baldwin	Nil	35
Nairn	?	Numerous
Lorne	½ (see details)	8 or 14
Drury	½ (see details)	Nil (2 lake claims staked for Prosco)
Denison	1 (see details)	Nil
Total	12	79 + numerous in Nairn Twp.

Total length of Murray-Worthington Fault to receive close attention is approximately 40 miles. Parts of an additional 8 miles will receive investigation.

Toronto, Ontario,
April 4, 1957.

Donald E. Smith.

COPY

PROSCO LTD.

MURRAY PROJECT

PROGRESS REPORT

TO: D.E. SMITH JUNE 18/57.

FROM: D. W. ESSON

SUBJECT: GEOLOGICAL MAPPING - MURRAY PROJECT

Summary

Mapping of the Murray Fault zone began on June 3, 1957. The mapping party is, at present, composed of P. Holley-Hime, D. Munro and D. W. Esson; Esson and Hime mapping, Munro assisting.

The objective of the mapping is:

1. to delineate the Murray Fault and, where possible, subsidiary faults and fields;

2. to examine and evaluate all showings along the fault;

3. to locate areas favourable for geophysical work.

By June 3, geophysical work had progressed into May Township and rather than fall behind the geophysics, mapping was begun in May Township. The Townships of Victoria, Salter and western May will be mapped at a later date.

Photos were not available for north eastern May Twp. and north western Hallam Twp. so a gap has been left in these areas of the map. Mapping of the portions of May Twp. which were available, was completed on May 9. Approximately ½ of the area to be mapped in May Twp. is now completed. During the period June 3 to June 9, a total of 6 days was spent on actual mapping by 2 mappers.

Mapping of Shakespeare Twp. was started on June 9 by Hime and June 10 by Esson. Hime completed mapping of Shakespeare by June 17; all Shakespeare Twp. will be completed by June 19. During this period a total of 7½ days of mapping by 2 mappers was expended. Two and a half full days were lost due to rain.

The mapping of Baldwin Twp. was started by Hime on June 17. Mapping of this twp. will proceed quickly as the map of the O.D.M., No. 1952-1, is quite detailed and requires only checking by our party.

The mapping outlined above is being done using aerial photos for control, on a scale of approximately one inch = one quarter mile. This method has been found to be satisfactory with the two exceptions that distortion is quite marked and that locations of small outcrops in dense bush are quite inaccurate.

Geological Mapping - Murray Project

The legend being used for this operation has been based on that proposed by Thompson for the O.D.M. map, No. 1952-1. No use is being made of the stratigraphic terminology of Collins in his North Shore of Lake Huron report. Thompson's legend which is based solely on litholigy, has been slightly modified to suit our purposes.

Descriptions and Appraisals of Showings

Showings have been located on the geological map and have been numbered for those located by Hime and numbered with the prefix "E-" for those located by the writer. The Hime showing evaluations are appended to this report.

Showing No. E-1 & E-2. May Twp. Con. IV Lot 10 & 11

Pyrite was found in two pits on the side of a greenstone hill. These pits are located in a quartzite band varying from a few feet to 50 ft. in thickness. Dip of schistocity is steeply north; some shearing, silicification and quartz veining are found in the greenstones.

These showings are not of interest for metallic minerals and selected specimens gave no "kick" on a scintillometer.

Showing E-3 May Twp. Conv. V Lot 8 N½

This showing consists of a pit in the south side of a small, overburden-covered valley, lying within a mass of diorite. Some shearing and brecciation are found on the south side of the valley. F. R. Joubin reports flatly dipping shears to the south of the valley, containing some mineralization. These shears were not noted by the writer. Prospecting along the draw in both directions failed to show any other gossans of note. The draw is exposed for only 200 ft. east-west before being lost in overburden.

Mineralization consists chalcopyrite, pyrrhotite and pyrite in quartities up to 75% of the rock by volume. Pyrrhotite is the most common mineral and nickel tests were strongly positive.

Silicification is common around the showing and serecitization appears to increase north of the showing for several hundred feet.

This showing containing high grade nickel and lying close to the diorite-greenstone contact is of particular interest and may be related to the first electromagnetic anomally.

Showing E-4 May Twp. Con. VI Lot 9 S ½

This is a small showing of chalcopyrite and pyrite on the north shore of Wilson L. Maximum chalcopyrite is 10% in selected specimens. The host rock is a dark quartzite with greywacke inter beds and quartz veining.

This show is not of particular interest.

Geological Mapping - Murray Project

Showing E-5 Con. VI Lot 7 May Twp.

A small showing of chalcopyrite lying in a quartzite bed within a greenstone mass. The quartzite is sheared in the vicinity of the showing, this shear being 1 ft. wide by 40 ft. long.

This is not of interest except for its association with the diorite-greenstone contact.

Showing E-6

A small pit in massive greenstone approximately 1/8 mile west of E-5. The gossan is very strong but pyrite is far the most abundant metallic mineral with slight chalcopyrite.

Showing E-7 May Twp. Con. VI Lot 1 N ½

This showing consists of a shaft of undetermined depth, numerous pits and a number of recent (1956-7) drill holes. The company which worked on this property is not known but may have been Advance Red Lake. Their core was not found. Picket lines have been cut in the area and, apparently, a resistivity survey done.

The mineralization of pyrite and chalcopyrite lies in shears within a quartzite lens surrounded by greenstones. The greenstone is also sheared but is more sparsely mineralized. The shears dip steeply north. The quartzite lens has an apparent extent of 150 ft. by 300-400 ft., being open at the west end only.

This showing has been extensively drilled and as no one is still on the property results probably were not encouraging.

Showing E-8 Shakespeare Twp. Con. II Lot 3 Claim 5101695

This showing consists of massive to disseminated pyrrhotite in diorite near the contact with a diabase dyke. The pit which is very old is situated near the top of a hill which borders on a beaver swamp. Shearing is not prominent in this outcrop although an adjacent greenstone outcrop is well sheared but not mineralized to any extent.

This showing could be of interest although the nickel test was weak.

Showing No. E-9 Shakespeare Twp. Con. II Lot 2

Very old pit on side of hill approximately at greenstone-diorite contact. Pyrite associated with a quartz vein is the only noticeable mineralization.

- Not of interest.

Showing E-10 Shakespeare Twp. Con. II Lot 2

This showing is in an old trench which has recently been re-blasted. Copper occurs as chalcopyrite in 2 small quartzite beds, separated by approximately 5 ft. of barren quartzite, sheared greywacke and quartz veins. Pyrite mineralization is more common.

- Not of interest.

Geological Mapping - Murray Project

Showing E-11 Shakespeare Twp. Con. III Lot 1

There is an old pit on top of a hill, approximately at a diabase (diorite) - rhyolite contact. The only mineralization recognized was pyrite, occurring in small seams.

This showing, as structure is poor, is not of much importance but this general region of rusty, sheared greenstone and diorite is favourable looking ground. Prospecting in this region has been extensive.

Showing E-12 Hallam Twp. Con. VI Lot 3

This showing consists of one old pit on a quartz vein which contains chalcopyrite in considerable amounts. The associated shears are poorly mineralized and the quartz vein is discontinuous. However, this showing is associated with the Baldwin Creek fault and other cross and branching faults. Shearing and pyrite zones are common in the area which is underlain by diabase and diorite.

I feel that this area would warrant detailed prospecting for several days, but at present the known mineralization is not of importance.

Abbreviated Legs of Madsen R.L. Drilling. May Twp. D.D.H. No. 1

0 - 92'	Quartzite and minor schist
92'	Caving. End of hole

D.D.H. No. 2

0 - 342	Quartzite & Schist. Sparsely mineralized by pyrite
342 - 596	Basic Intensive (Diorite or gabbro) Strongly magnetic
596 - 610	Granite
610 - 661	Basic Intrusive (Diabase)
661 - 729	Quartzite & Schist
729 - 753	Basic Intrusive
753 - 843	Quartzite & Schist
843	End of Hole

D.D.H. No. 3A

0 - 22	Basic rock. Sheared
22 - 30	Quartzite
30 - 50	Basic rock
50 - 160	Quartzite
160	Caving. End of hole

D.D.H. No. 3B

Much similar to D.D.H. No. 3A
Cave at 127 ft.

Geological Mapping - Murray Project

D.D.H. No. 3C

5 - 43	Fine grained basic rock
43 - 120	Quartzite & Schist
120 - 147	Basic
147 - 162	Quartzite
162 - 187	Fine-grained basic
187 - 255	Quartzite & Schist
255 - 262	Basic
262 - 290	Quartzite
290 - 302	Basic
302 - 605	Mostly Quartzite & Schist
605	End of Hole

D.D.H. No. 4

0 - 40	Casing
40 - 160	Schist
160 - 195	Basic Intrusive (Olivene Diabase?) Magnetic
195 - 350	Quartzite & Schist
350	End of Hole

Respectfully submitted,

(Sgnd.) Donald W. Esson.

June 17, 1957 Holley Hime

Report on Showings, etc.

Reference to Numbers (10) onwards to (12) in Baldwin Township

General

Nos. (10) - (12) are confined to greenstones. This is used in the broadest sense, since associated 'burns' are found both in greenstones and at times in much altered diabases, but the major showings are found sheared greenstones. Locally near the showings the rock seems fairly competent but schisty in appearance and carries no minerals, this may grade into a diabase that is hardly altered at all.

(10) Is a pit about 50 feet inside Shakespeare Twp. on Boundary Baldwin, very near Hime's No. 4 post of the N.W. ¼ of the S. ½, Lot 12, Con. II. The mineralisation is primarily pyrite, but a little chalcopyrite was seen, and it occurred in a sheared greenstone with some recognisable diabase nearby like shear plane stands vertical, strikes N 70' E and at most can be traced over about 75', though the mineralisation does not occur all through this length. Total width may be 25' with mineralisation in 2-3'. Associated with this is No. (11), a small 'pit' on a small scarp on an easterly continuation of the outcrop. Conditions are similar, though the size is small and a little chalcopyrite is present.

(12) This is a large sulphide pit, with a good sized heap of 'ore' and situated S ½, Lot 11, Con. II Baldwin. The centre part is highly sheared and shattered and highly pyritised - (see specimens) but the mineralisation occurs across about 30' at the best point. On the East this narrows rapidly and on the West it dips under overburden but on the other side of a small valley the shear can be picked up now only about two feet across. Total shear length may be 150/200'.

Shakespeare Township. Road leading to old power dam on Birch Lake.

No. (7) Pit and showings of pyrite and chalcopyrite in greenstones sheared N 55° E. In central part of shear zone some quartz veining occurs. S.W. end of zone vanishes within 10' under overburden, but N.E. end continues for about 50', but narrows considerably. Small burns occur all along the zone. Excavations from rock outcrop top are down about 8' over a 10' width. Specimens very similar to those occurring at shaft ¼ mile away S. along road.

½ a claim due West is another shear running N 55° E also on the N.W. side of a small quartzite scarp. At most this extends up to 200' and since it occurs at the bottom of the scarp its width is hard to measure. Mineralisation of pyrite with some chalcopyrite is confined to about a 2' width in a greenstone band.

Pits, Trench & small shaft 1 drain length S.E. of (7) and 250' E.S.E. of road.

Here the mineralisation is in sheared quartzites within the greenstones. Chalcopyrite and pyrite and some pyrrhotite were seen. Selected specimens looked very nice. Mineralisation across strike seems to be in 3 zones striking N 55° E. They are separated by up to 50'. The upper has a small shaft, the centre is a trench some 3'/4' wide and 50'/75' long, and the lower (on the hillside) is a pit.

May Twp. 856-109.

(2) Next to garbage dump at back of Wilson farm. Small pit and sulphide burns. General trend in sheared diorite N 60° E. Pyrite and chalcopyrite and some calcite present. Small quarts veins, but these appear barren. Rock is very similar to those seen by me in drill core from hole 400 N.E. Massey mine.

Fairburn Farm. May Twp. 856-109

(3) Large S.E. facing scarp of highly shattered greenstone. This is situated at the entrance to his driveway. The rock contains frequent pyrite and a little chalcopyrite and there is quite a large shear zone, this strikes N 50° E, and dips at 60°. This looks an interesting part, though the actual samples collected are not spectacular. Slickensides, fault gouge and calcite infill are all present.

Fairburn Farm

(6) Hill to S.E. of farm, May Twp. 856-109. West end of hill leads into large gravel pit. Small pit right on top of hill is on a shear in the diorite which extends for some 200' and is < about 2' wide. Several other burns nearby.

Baldwin Twp. Photo 46-163/164 200-12

(15) Sheared zone < 120' long and < 35' wide max. Minerals in narrow centre portion. Pyrite and small specs of chalcopyrite in sheared greenstones and altered diabase. Nearby schisty facies bear garnets that stand out well on weathered surface. Nice looking rock in general.

Shakespeare

Cleveland Copper Drilling Area

Current drilling, two holes to date, is at 45° almost due south into the foot of a quartzite hill. Hole No. 1 went to 375' and No. 2 is still drilling. M. E. Holt has contacted the engineer and has the matter in hand, though at time of writing noradioactive values were picked up in the core by a scintillometer. Previous drilling has been done on the hillside and on top of the quartzite hill, but the cores are not available in untampered form. (The remains are in a shack by the first house on RHS side of road after drill holes as one goes from Webbwood to Agnew lake.) There were at least three of these holes. One dips N at 45° and the other S at 45°. There may be holes we have not located. Besides this there are numerous pits, large and small in the quartzites. Most are sheared and show rusty stains. More recently these old ones have been resampled for radioactive values and several new small pits opened - brief scintillometer tests by us definitely do not indicate 0.475% uranium over any wide extent though in confined areas readings may be high - however, we are getting more detailed information on the matter.

Shakespeare Mine

This is an old working of gold and copper. There is an adit at the N side of a quartzite ridge, a shaft down from the top of the ridge and another adit between these two levels on the S side of the hill. The mine has not been worked for many years though drilling has been done since the mine closed up - core, again incomplete, is in the shack nearby the N adit.

Another working occurs to the west, half way toward Cleveland Copper's new drilling and several pits occur on the top of the hill. The shear zone in the broadest sense can be traced for over 1,000'. Details are in the North Shore resources report.

PROSCO LTD.

PROGRESS REPORT - MURRAY PROJECT

GEOLOGICAL MAPPING

FROM: D.W. ESSON

TO: D.E. SMITH

Summary: June 17 - June 23.

The mapping of Shakespeare Twp. was completed on June 17 by Hime and on June 20 by the writer. Mapping is now proceeding in Baldwin Twp., approximately one half of Baldwin Twp. is now completed. One half day was lost due to rain this week.

Hime departed for Toronto on Friday evening, his services are therefore lost for 2 days of this week (June 22 and 3) and will be lost for 2 days of next week (June 24 and 25). A road traverse in Shedden Twp. was run on June 23 so no mapping was completed that date. During this period a total of 9½ man-days were spent in actual geological mapping, exclusive of assistants.

I estimate that the mapping of Baldwin Twp. will be completed by June 29. Progress for the past period has been slow as the ground has been favourable.

Description of Showings:

Showing E-11; E-13 and 16. Con III Lot 8, Baldwin Twp.

This showing and its related structure have been covered in my last report. This area of greenstones and diorites has now been traced into Baldwin Twp. The general area continues to be very favourable with numerous gossans, pyrite, pyrrhotite and chalcopyrite. Unfortunately, the pyrrhotite does not appear to be nickel-bearing. Showing 16 is covered by Hime's report which is appended.

Showing E-13 consists of several pits on a rusty silicified shear in greenstones. The shear has been traced for 2,000 feet, more or less continuously. The shear is well mineralized with pyrrhotite and minor chalcopyrite. All nickel tests were negative. This mineralization apparently is the cause of a marked magnetic anomally on the O.D.M., Aeromagnetic maps. Detta Minerals has apparently done a magnetometer survey on this property, lines have been cut and 2 drill holes put down. The core from these holes is available on the property and has been examined but not logged.

D.D.H. No. 1 - 75° Brg. S 20° W Depth 740'

Pyrrhotite is disseminated throughout the core averaging probably 5%. Quartz and calcite veins, mineralized are quite common. Chalcopyrite is scarce. Host rock is sheared, chloritic greenstone with chloritization increasing with depth. Nickel tests on one mineralized specimen were negative. Sampling of this core is about 50% of the volume.

D.D.H. No.2 -75° Brg. N 20° E Depth 1456'

Located approximately 100' SW of D.D.H. No. 1

0-1200 All sampled. Pyrrhotite approaches 5-10%.
Minor chalcopyrite. Many quartz veins, mineralized.

1200-1456. More chloritic. Less mineralization, sampled for about 50% of length.
Nickel tests all negative.

This showing has had a great deal of promise but the non-existent nickel values and extremely low copper values render the actual showings and drilling valueless.

Showing E-12 Hallam Twp. Con VI Lot 3

This showing and related structures were covered by my previous report. Mapping of this area has now been completed with no encouraging mineralization found. However, the structure and rock types remain favourable, this area could warrant more detailed prospecting and possibly some geophysical work if any economic mineralization was found.

Respectfully submitted

(Sgnd.) Donald W. Esson.

Period: June 17 - June 23.

PROGRESS REPORT Baldwin Twp.

(16) This is not a specific outcrop but rather covers a series of outcrops in the N ½ of Con III, lots 10 & 11. Here the rock is a diorite basically but varies considerably, being at times schisty and at others almost completely recrystallised. When schisty it often contains garnets that may be up to 1/3" across. Rock burns are small but frequent, but rock that has no outward burn often contains Cu or pyrrhotite or both on the fresh surface, almost every bit of outcrop contains these minerals albeit in small quantities. The rock lies just to the north of the suggested location of the Cameron Creek fault and looks to be an interesting host for these minerals.

PROSCO LTD.

MURRAY PROJECT

Progress Report
Period June 24 - June 30

June 30, 1957.

To - D. E. Smith

From - D. W. Esson

Summary

Rather little mapping was done during this period due to bad weather. Hime was absent for 2½ days; we were rained out for 3 days and one day of Hime's absence was spent on a road traverse. A total of 5½ man-days were spent mapping this period, not counting assistant's time. Consequently, Baldwin Twp. was not completed but I estimate it will be completed by July 1.

Only one interesting showing was found this week, eastern Baldwin Twp. appears to hold little promise for economic mineralization. I also examined a copper showing on the Agnew Lake Lodge road, in Shakespeare Twp. The showing is old and in poor condition but it seems to be of no further interest. Specimens (Sample No. 7) were taken from the Murray Fault zone in Lot 7, Con. IV, Baldwin Twp. and are awaiting assay. The mineralization is finely disseminated but constant and possibly contains copper mineralization as well as pyrite. This zone was not classed as a showing and is not further described herein and not described in the available literature. The showings found by Hime on, or near, the Springer property are old, well-known and thoroughly prospected. They do not seem to be of further interest on the surface but might be considered for geophysical work. Pencil note: "Assay Cu. 0.03%".

Description and Evaluation of Showings

Showing E-14, Baldwin Twp. Con IV, Lot 6

The showing here consists of two quite old pits across a quartz vein containing chalcopyrite. The vein is 20' wide by 300' long, overburden-covered at both ends. Many bands of greenstone, which comprises the country rock, have been included in the vein, which would probably run 75% quartz.

Mineralization is very strong in the more fractured parts of the vein, running as high as 50-60% chalcopyrite. I would estimate that possibly a width of 10' of the vein would comprise ore including several barren zones. Mineralization appears to be quite continuous between the pits which are 150 - 175' apart.

This vein contains the best and most continuous mineralization I have seen in this area for this type of occurrence. It has apparently not been worked for some time and the work appears to have consisted of trenching only. In view of its association with the chalcopyrite-pyrrhotite showings of E-15, this whole area would warrant further work if the ground could be obtained.

Showing E-15 - Baldwin Twp. Con. IV, Lot 5-6

This showing comprises two pits and numerous "burns" on the eastern half of the greenstone ridge which contains showing E-14. The gossans in this area are very dark in colour. The mineralization consists of pyrrhotite and chacopyrite in a basic (greenstone?) host rock.

The two pits are quite deep, 15' +, and apparently quite old, Both are situated on prominent gossans. The host rock consists primarily of greenstone with some dioritic, poorly defined rocks and some "fresh"-looking basalts. No change in the rock is evident between the mineralized and non-mineralized zones, nor is there any continuity of the gossan zones. However, the gossans occur more or less along a sharp, deep valley which could well be a cross-fault between the Murray and the Fairbank Lake faults.

Nickel tests on specimens from this showing were negative but have been sent for copper-nickel assay as Sample No. 6. Pencil note: "Cu. 0.05%, Ni. - N.D.".

This showing is covered by an aeromagnetic anomaly indicated on the O.D.M. maps. The showing is also bordered by the Plum Uranium ground and probably lies in part on the Plum ground. Dit Holt reports that another similar showing was found about ½ mile north of this showing on the Plum holdings. The centre of the aeromagnetic anomaly is also on Plum ground.

Some picket lines have been cut around this area but would appear to be several (5?) years old and probably Plum work. The trenches, however, would appear to be pre-1953 in age.

Should the Plum ground become open I would strongly recommend this area for an E-M survey.

DWE:JTM (Sgnd.) D. W. Esson.

PROGRESS REPORT

June 29th, 1957

P. H. Hime

Showing on Springer Property

Primarily around the large "quartz" vein on Lot 11, Con. IV, Baldwin Twp. This is an impure quartz vein and resembles a quartzite more at the western end, being almost 75' wide. At this end the mineralization is slight. Test pitting is extensive at the eastern end and we found three drill holes here all N at 45°. Some sections of the core are lying around all mixed up and these are primarily of conglomerate. The rock contains quartz pebbles and flattened shaly and schisty stones in a rather dark matrix. In the remains of this core we saw there was very little mineralization, however, some of the pits carry good samples of chacopyrite. Further details are available in Thompson's Report on pages 29 and 30.

Hime estimates this drilling is more than 1 or 2 years old. E.

Up to 4 years old.

Find out when they come open.

Don:

Claims S-98321 - S-98328 in Baldwin Twp. Con. IV, Lots 2 & 3 appear to be open. I saw one untagged claim post marked

"Post 4
Staked by - - - - -
Lic. C-25164
July 20, 1956
Con. IV, Lot 2, NW¼"

I doubt that the northern 4 of this group are worth having but the southern 4 we could use.

D.W.E.

PROGRESS REPORT July 7/57

PROSCO LTD. - MURRAY PROJECT

Period: July 1 - July 7

Subject: Geological Mapping

From: D. W. Esson

To: D. E. Smith

Summary:

Baldwin Township mapping was completed on July 2 and the same day mapping of Nairn Township was begun. The mapping crew is also tagging all the claims in Nairn Township as mapping proceeds.

The writer left for Toronto on the night of July 2 and did not work any more of this period. Munro spent July 3, 4 and 5 with Hough in Denison Township prospecting on a 5 claim group. Munro left for Toronto on the night of July 5.

During this period only ½ day was lost due to rain. A total of 8½ man-days were spent in the field during this period.

Nothing of interest was found in easternmost Baldwin Township or extreme western Nairn Township by the writer.

Respectfully submitted,

(Sgnd.) D. W. Esson

PROGRESS REPORT PROSCO LTD. by Holley Hime

July 1 - 7

To: D. E. Smith

21. Gough Township

No claim map could be found to give exact location, however May air-photo No. 46-165, 15-3 (overlay) indicates the showing as No. 21 and is in the extreme NE corner of the map.

The showing occurs in hematitic quartzites and is of chalcopyrite and pyrite. There is a shear zone maximum 150' long by 15' wide with a central mineralized portion of 3 or 4 feet width and 25 feet length. Another small and slightly mineralized zone occurs 25 feet N of the main shear.

To the south interbedded greenstones and quartzites grade northwards into quartzites and this is the first zone where the greenstones (of dioritic origin) are absent. To the north the quartzites grade into granites.

I'm not over-fond of the future of this showing.

20. May Township Con. VI Lot 1 N 1/2 SW 1/4

Showing of chalcopyrite, pyrite and some hematite. The minerals occur in a shear zone in impure and sheared quartzites. This is about 12' wide by 100' long, but the zone as a whole can be traced westwards to 1/2 way along the North E/W line of D. E. Smith's claim No. 102223, (ie. another 200/300'). Along this length there are several gossans, a small pit and another pit of the sulphides at the extreme W end of the outcrop where it strikes under the road. The strike is N 55/60 degrees E and dip 65 degrees northwards. This is another of those showings that whet the palate at first but leave a taste of a rather useless nature afterwards. A mediocre show.

19. May Township Con. VI Lot 4 & 5 S 1/2 SW 1/4 Farmer Property

Pits, shafts and trenches in a showing of chalcopyrite, pyrite, hematite and some magnetite. The first shaft is easily seen as it is on the hydro line. Following strike eastwards brings you to a second larger shaft some 400/500 feet away. The rock is a chloritic schist of dioritic origin and in places is very silicified - halfway between the two shafts there is a phase resembling a quartzite, but this area between the two shafts is, superficially, barren. Both areas have been drilled, holes were found, and scattered remnants of small bore drill core were seen consisting of the schist and some diorite.

Mineralization is primarily of good chalcopyrite occurring in the shear across some 10 feet, but best across perhaps 3'/4'. Strike is N 80 degrees E and about a dozen trenches have been cut NS, across strike. (See specimens). All the rock is nicely sheared over quite a large area (though mineralized over a smaller part) and the area looks nice.

16 and 17. Nairn Township Con. IV Lot 11 S 1/2 SE 1/4

Two linked showings. These are not spectacular, but occur in diorites and are mineralized with chalcopyrite and pyrrhotite (tests reveal only trace nickel). General strike varies from 40/55 degrees E. of north. The shear is not well marked and is not continuous between the two separate outcrops. The diorite is often silicified and though the showing is small it does occur as a ridge immediately north of the small lake, north of Rock Lake, in the fault zone, and this might be of interest.

P. H. Hime

PROSCO LTD.

PROGRESS REPORT July 12/57

M. E. Holt to D. Smith

1. Subject - Geophysical Survey
Murray Project
Period - June 19 - July 12

During the period a total of approximately 19.2 running miles were covered by the geophysical crew (an average of 1.5 miles per day including rain and instrument failure). This completes the proposed survey in open fields from Victoria Township east to Baldwin Township. Geophysical work was called to a temporary halt on the 3rd of July. The two man crew remained with us to help in the line cutting (May Township). Because of the interesting geology and frequent occurrence of sulphides at the boundary of Shakespeare and into Baldwin Township (Lots 9, 10, 11, 12, Cons. II and III) the Cameron Creek fault (a branch of the Murray) was covered in open fields for a distance of approximately 3½ miles. A weak E.M. and Magnetometer anomaly was picked up at the east boundary of Shakespeare Township (covered later in "results"). Continual rain during the period delayed progress considerably.

Geophysical Results

Over the period the only anomaly of any note was found near the east boundary of Shakespeare Township. The anomaly can be described as weak with cross-over points occurring on three north-south lines spaced at 400 ft. intervals. The E.M. anomaly was checked with the magnetometer and a comparatively weak magnetic anomaly lies coincident with the E.M. anomaly.

G. Sander places little importance to these results but the fact that scattered sulphide zones lie all through this area with more interesting geology, should not be overlooked.

2. Line Cutting - Alexander Option

Line cutting on the bush section of the *Alexander option in May Township started June 28th with three men on a per mile contract. Again, rain delayed the cutting, however, a total of approximately 9.5 line miles have been cut to date with an estimated 3/4 mile left to complete the job.

The purpose of these lines is to extend the E.M. survey north of the farm fields to explore the Greenstone-diorite contact and possibly extend the length of the early "Caldwell farm" anomaly westerly.

Chaining is half way completed and the Geophysical crew are expected to start in again the first of next week.

*Alexander Option: Option papers were signed and the deal completed on the 9th of July, May Township.

*Alexander Option (continued)

Alexander farm	320 acres		Lot 7 Con. V
Caldwell farms	160 acres	E 1/2	Lot 8 Con. V
	160 acres	S 1/2	Lot 10 Con. V
Witty farm	160 acres	W 1/2	Lot 8 Con. V
Tracy farm	160 acres	E 1/2	Lot 9 Con. V
Wilson farm	160 acres	W 1/2	Lot 9 Con. V
Shea farm	320 acres		Lot 11 Con. V
Total	1,440 acres		

3. Alexander Option - Trenching

Nickel Showing

Trenching through overburden across approximately 25' on the *E-3 showing is near completion. The showing is located on the bush section of the Witty farm. The sulphide mineralization is localized and found on a small E-W fracture on the quartz diorite. The attitude of the zone is questionable right now but when the work is completed and the trench swept out it should give us a much better picture.

"Contact" Showing

Work has just started on the "Contact" showing (Diorite-greenstone) located on the north section of the Tracy lot, just off the survey base line.

Small scattered occurrences of sulphides are found in the greenstone derived schists.

* Described by D. Esson - Showing No. 3

3A. "Alexander Option" - Additional staking

18 claims were staked immediately north of the aforementioned farms. Old copper showings reportedly exist on some of these claims but little prospecting on this group has been done to date.

4. "Joubin Claims" - Denison Township

J. Hough and D. Monro prospected and tagged the 9 claim "Joubin" groups on Denison Township from July 3rd to July 9th.

No. 1 Group - 5 claims - N 1/2, Lot 7, Con. I
No. 2 Group - 4 claims - S 1/2, Lot 10, Con. I

Little of interest was reported on either group with no sulphide mineralization found. With two days reconnaissance work they confined most of the prospecting to a possible fault zone running through the lake in Group No. 1. It was thought earlier that this was part of the Murray fault but its strike and position more or less disprove this on the ground. The groups lie entirely in the Huronian sediments with the exception of a small basic dyke running through the SW corner of Group No. 1.

No. 1 Group - Lake E. M. Survey

July 9th - The geophysical crew covered 6,300 ft. of line work (north-south) over the lake by boat and picked up nothing.

Respectfully submitted,

M. E. Holt.

PROSCO LTD. - MURRAY PROJECT

PROGRESS REPORT

July 14/57

Subject: Geological Mapping
From: D. W. Esson
To: D. E. Smith
Period: July 8 - July 14

Summary:

Mapping of the "gap" in Shakespeare and May Townships was completed during this period. This gap had been left as the photos were not available when that area was covered in June.

Mapping and claim-tagging in Nairn Township was resumed on July 11.

The geological staff has now decided to work a six day week, taking Sundays off.

During this period a total of 10 man days were spent mapping in the field by geologists, exclusive of assistant's time. The remainder of the days were spent on showing examinations (2 days), day off and plotting on the master sheets. The latter is almost all up to date as of July 11. No time was lost due to inclement weather during this period.

I estimate that the mapping of Nairn Township will be completed by July 17, by which time some of Lorne Township will also have been mapped.

As mentioned by Hime in his report which is appended, the low-lying ground in Nairn Township appears to be the expression of lithological variations rather than faulting. This also applies to the Murray Fault zone. Low-lying ground in this area appears to be underlain by greywacke, for the most part. Should this assumption be correct the overburden-covered areas in Nairn Township are poor prospects for economic mineral occurrences. The large masses of basic intrusive rocks in this township appear to be suitable for mineralization, although no mineralization has been located by the mapping crews.

Description and Evaluation of Showings - July 8 - 14

Showings E16 and 17. May Township Con. VI Lot 1 S 1/2

These old pits are located on gabbro ridges which have been locally sheared and silicified. Mineralization of chalcopyrite and pyrrhotite is sparse in both pits. Structure appears to be very local in both cases.

Summary: Not of Interest. Nickel tests negative.

Showing E-18 May Township Con. V Lot 10 N 1/2 of N 1/2

This showing which was visited in the company of D. E. Smith consists of an old shaft, reportedly 60 ft. deep and several trenches in a complex of quartzites and greenstone. Mineralization consists of chalcopyrite and pyrite. Maximum mineral width on surface is 18 inches, confined mainly in the quartzites and small greenstone shears.

This property is reported to have once been a producer of a small tonnage of copper and might well warrant a more detailed survey in preparation for a one-hole drilling program. The property or showing is mentioned on page 130 of Collins Report No. 143. The property has been optioned and will be referred to as the Vance portion of the Prosco Alexander Option.

Conglomerate beds. May Township Con. VI Lot 8 N 1/2

These 2 conglomerate horizons are located on Prosco's claims. Both horizons are somewhat pyritized and should be prospected with a geiger counter.

PROGRESS REPORT covering July 7th - 14th, 1957

To D. E. Smith from P. H. Hime

Mapping in Nairn Township:

No showings worthy of mention. The writer mapped the south side of the Murray Fault and will give a brief description of that part. D. W. Esson mapped the north side.

The south side is bordered by large bodies of diorite, primarily of a coarse grain and containing small occasional pyrite burns, these increase in numbers eastwards. Greywacke is seen in scattered outcrops around the base of the substantial diorite hills and occurs as boulders all over the top. This rock, where outcrop is visible, seems to floor the actual fault zone and as seen is quite uninteresting. Likewise the diorite seems a poor prospect. Better luck next week!

Anything in May or Shakespeare? No.

PROSCO LTD. - MURRAY PROJECT

July 22/57

Subject: Geological Mapping
Period: July 15 - July 21 incl.
To: D. E. Smith
From: D. W. Esson

Summary:

During this period the mapping of Nairn Township was completed as was a large part of the portions of Lorne and Drury Townships which are to be mapped. Mapping in Lorne and Drury Townships will be completed only as far east as the Worthington offset as almost all the ground east of this has been patented by the I. N. Co.

No time was lost for any reason during this period, therefore, a total of 12 man-days were spent in the field by the two geologists. Sunday, as usual, was taken off.

I estimate that the mapping of Lorne and Drury Townships will be completed by July 24 after which one day will be required to plot the field work onto the master maps and for evaluation of the work to date. At least one, and possibly two, days will be required to complete the mapping of the Hime claims in Baldwin Township. This will, therefore, end the next weekly period.

Mapping of western May Township and Victoria and Salter Townships should begin on July 29. I estimate that geological mapping of the eastern half of the Murray Fault will be completed by August 24 barring exceptionally poor weather and/or additional areas to be mapped. Should further mapping be required on the Worthington offset in Lorne Township, or on the claims in May and Gough Townships, the mapping on this project is unlikely to be completed until after September 1. The mapping of the claim group held by this company in Cobden Township has not been taken into the above estimates.

The services of one assistant will be lost on September 1 and of one geologist by September 15. The writer and one assistant will be available indefinitely.

During this period only one showing of any interest was found by the writer. A description of this showing is appended hereto. The ground around the showing has recently been taken up by a new organization called Ben More Exploration owned by J. G. Wallace; so the value of the showing to this company is more or less academic. J. S. M. Morgan is in charge of Ben More's exploration program.

It was noted, however, that the fill used in building the grade of the old Algoma Eastern Railway contains considerable high-grade nickel-copper ore from the Worthington Mine. Should it be possible to acquire the rights to this fill cheaply

and easily it might be worthwhile to sample and estimate tonnages of the fill material available. At a very rough estimate there are more than two miles of this material available. Using factors of average depth 5 ft., width 10 ft., side slopes 1:1 and tonnage factor of 15 cu. ft. equals 1 ton the following figures of tonnage available are estimated:

Tonnage per lineal foot of fill = 5 tons
Tonnage per mile of fill = 25,000 tons

Some of the material used in this fill is of very high grade and should the overall grade be high I should think that the material might easily be sold to a small, low-grade mine such as the Arcadia Nickel Corp. The total length of this type of fill available might be extended to 10 or 20 times the two miles estimated above.

Description and Evaluation of Showings

Showing E-19 Drury Township Con. I Lot 7 S 1/2

This showing consists of one large pit and some pack-sack drilling located on a prominent gabbro ridge. One other small pit was found several hundred feet distant from the showing and apparently another pit is located close to the showing although the second pit was not visited by the writer. Mineralization consists of pyrrhotite and chalcopyrite. Nickel tests on selected specimens gave weakly positive reactions.

Structure with the mineralization is poor on surface although a fracture zone is evident in the pit. The drilling is invalid as it seems to have parallelled the fracture zone and did not encounter any mineralization of note.

No proper work has been done on this property and for that reason it would warrant a geophysical survey as the gabbro host rock looks quite promising. Very small pyrite gossans are common throughout the whole of the ridge.

However, a group of private investors have recently hired Mr. Jack Morgan to direct a drilling program on this ground. This company's interest in this showing must be passive at least for the time being.

Respectfully submitted,

D. W. Esson

PROGRESS REPORT

To D. E. Smith from P. H. Hime
Period covered - July 14-21st

22. Showing of pyrrhotite and chalcopyrite. N 1/2 Lot 11 Con. V Lorne Township
This is some 250' south of the railroad track south of the Finlander's cabins (where the ferry is). It occurs on the contact of greywacke and gabbro and the gabbro is in places markedly silicified. There is one pit 6 feet deep in a mineralised shear 150 feet long at maximum with the main mineralization through 50' (x 6 feet wide). Some of the mineralization of pyrrhotite looked good, but nickel values did not come up to expectation and structure was poor.

23. (S 1/2 Lot 9 Con. VI Lorne Township)
This is a showing of pyrrhotite and chalcopyrite on the N side of the ridge practically due south of the point where the old highway from Nairn to Worthington crosses to the south of the railroad. This is quite a nice showing and some 2,300 ft. of drilling has been done in 1956.

There are two main pits; one at the east end and one at the west. Both contain some excellent specimens of Cu and Ni, and rarely some strongly magnetic magnetite is present. The rock is a highly altered diorite, showing shearing, silicification and some brecciation. The diorite seems to contain felspars that are often pink (see core sample). The core is neatly stacked nearby and could easily be logged if we are interested further. The total length of the showing is up to 400 ft. but the veins are seldom more than 50 ft. long x 6 ft. wide. Some of the brecciation is associated with amphibolite. The showing is readily described on a sketch - see below. The geology of this showing is very complex and a more detailed mapping would be required to determine the structure and economic possibilities.

24. (Middle of Lot 12 Con. IV Lorne Township)
This occurs on the rock-cut on highway 17. Both sides of the road show sheared gabbros with some dioritic phases and as one travels eastward the intrusives dip beneath quartzites at about 25 degrees. The quartzites are shattered and baked for a thickness of about 6 feet above the intrusives and though they are quite iron-stained they carry but very small values of pyrite. The gabbros contain small veins primarily pyrrhotite and lesser chalcopyrite. In spots this is massive and the nickel test shows good values (see specimens). The veins are scattered and of little extent. Gossans are slight due to recent blasting and perhaps there is more mineralization than at first meets the eye. The gabbro is at times very coarse and occasionally amphibolitic/actinolitic. This does not occur quite as in the Worthington norite, however, the rock looks interesting and there is a move afoot to try and tie this in with a southwesterly extension of the norite offshoot since the strike line shows possibilities.

P. H. Hime

PROSCO LTD.

Report on Aerial Survey of the Algoma Anticline Lineation - D.W. Easo

Pencil note: (July 27, 1957)

Summary:

The airborne reconnaissance along the chain of lakes in the Algoma Anticline, Blind River district, by D. E. Smith and the writer, was not economically encouraging. There is considerable doubt that the lineation of these lakes represents a fault and no evidence of mineralization or interesting intrusive activity was found.

Introduction:

A series of lakes lying within the area of the Algoma Anticline, Blind River district, had been noted by F.R. Joubin to bear a marked lineation which might represent a fault zone. This chain of lakes lies in the Townships of: Montgomery, 167, 161, 155, McGivern, Esten, Proctor, 136 and 129. The trend of the lakes is WNW. The major lakes of the chain, going west, are McCarthy, Depot, Edge, Otter, Tendinenda and Williamson.

On July 27, in the company of D.E. Smith, I flew along this zone from east to west, in an aircraft chartered from Lau-Goma Airways. Flew at elevations ranging from 100 to 300 ft. From this altitude was possible to distinguish granites and pegmatites with considerable accuracy. The distinction of basic rocks was less accurate, and, for main part, sediments were only distinguishable by that broad classification, although quartzites and greywacke were occasionally noted. Visual coverage of 1/4 - 1/2 mile on each side was possible at this elevation.

Blind River sheet, map No. 1970 of the Dept. of Mines, Canada, was used as a base sheet for the reconnaissance. The geology shown on this map was found to be quite accurate.

The area is underlain, for the most part, by granites, granite and lesser pegmatites, the latter cutting the granites in places. An area of sediments and basic intrusives lies in the central portion of the structure with granites again found further west. At the extreme western end of the area are more sediments. Notes on the geology and structure of the area covered are appended to a Blind River area map.

It proved to be difficult to evaluate the nature of the lineation from the air. A marked lineation of the lakes does exist but the reasons for this were not evident. Steep hills or scarps were rarely present along the lake-chain.

Between Otter Lake and Lake Tendinenda the land rises to considerable elevations above the water level and shows fairly good rock exposures.

PROSCO LTD.

Report on Aerial Survey of the Algoma Anticline Lineation - D.W. Esson

Pencil note: (July 27, 1957)

Summary:

The airborne reconnaissance along the chain of lakes in the Algoma Anticline, Blind River district, by D. E. Smith and the writer, was not economically encouraging. There is considerable doubt that the lineation of these lakes represents a fault and no evidence of mineralization or interesting intrusive activity was found.

Introduction:

A series of lakes lying within the area of the Algoma Anticline, Blind River district, had been noted by F.R. Joubin to bear a marked lineation which might represent a fault zone. This chain of lakes lies in the Townships of: Montgomery, 167, 161, 155, McGivern, Esten, Proctor, 136 and 129. The trend of the lakes is WNW. The major lakes of the chain, going west, are McCarthy, Depot, Edge, Otter, Tendinenda and Williamson.

On July 27, in the company of D.E. Smith, I flew along this zone from east to west, in an aircraft chartered from Lau-Goma Airways. We flew at elevations ranging from 100 to 300 ft. From this altitude it was possible to distinguish granites and pegmatites with considerable accuracy. The distinction of basic rocks was less accurate, and, for the main part, sediments were only distinguishable by that broad classification, although quartzites and greywacke were occasionally denoted. Visual coverage of 1/4 - 1/2 mile on each side was possible from this elevation.

The Blind River sheet, map No. 1970 of the Dept. of Mines, Canada, was used as a base sheet for the reconnaissance. The geology shown by Collins on this map was found to be quite accurate.

Geology

The area is underlain, for the most part, by granites, granite gneiss and lesser pegmatites, the latter cutting the granites in all directions. An area of sediments and basic intrusives lies in the west-central portion of the structure with granites again found further to the west. At the extreme western end of the area are more sedimentary beds. Notes on the geology and structure of the area covered are being added to a Blind River area map.

The Structure

It proved to be difficult to evaluate the nature of the lineation from the air. A marked lineation of the lakes does exist but the reasons for this were not evident. Steep hills or scarps were rarely present along the lake-chain.

Between Otter Lake and Lake Tendinenda the land rises to considerable elevations above the water level and shows fairly good rock exposures.

There was no evidence visible, from the air, to indicate shearing, brecciation or intrusive activity along the structure, except for the area of basic intrusives in Townships 161 and 167 as shown on the Blind River sheet. There is possibly some NE-SW shearing through Moon and Tendinenda Lakes giving rise to quartzite cliffs along the north shore of Tendinenda Lake.

No cross-faulting was noted except as mentioned above.

The main more or less E-W structure through the lakes could possibly be a fault but if this is so, it is extremely "tight" in some areas and/or sinuous.

Economic Geology

No evidence of mineralization or intrusive activity was noted along the structure, with the exceptions of pink pegmatite dykes cutting the granites; and the basic rocks in the west-central region.

From the air this structure would appear to be quite "dry".

The Mississagi sedimentary series in the west-central area might possibly be of interest for uranium mineralization, however, I believe that this ground has previously been staked and prospected.

Conclusions and Recommendations

The results of this survey are essentially negative, in that there is some serious doubt that the lineation of the lakes represents a fault. Furthermore, no evidence was noted to suggest that the fault, if it does exist, either contains, or has provided access for economic mineralization.

Should further work be contemplated along this structure, I would recommend that a ground party be placed in the area with a boat and supplies. This party could map and prospect the zone from camps established at intervals along the well-connected chain of lakes. Supplies could be taken in at regular intervals by [illegible] Massey Tote Road and the Elliot Lake Road No. 612 for the eastern and central parts and by air for the western portion. Only one move would require the use of an aircraft.

Appendix

During the course of this same flight we flew over the Townships of 114, 108, Hart, Moncrieff, Craig and 115, looking for signs of reported staking and prospecting. No signs of activity were found.

An area underlain by quartzite, just south of Spanish Lake on both the east and west side of the Spanish River, appeared to offer some chance for uranium mineralization of the Blind River type.

Nothing of further economic possibility was noted.

The area as a whole appeared to be underlain by mainly sedimentary rocks although large areas are obscured by heavy overburden.

Respectfully submitted,

Donald W. Esson

PROSCO LTD.

Progress Report July 28/57

M. E. Holt to D. E. Smith

1. Subject - Geophysical Survey
Murray Project
Period - July 13 - July 28

During the period the E.M. and Magnetometer surveys were completed on the bush section of the Alexander Option.

Accompanying this report is a sketch showing:

1. Position of base and survey lines.
2. Approximate locations of the more promising anomalies.
3. Contact and E-3 Nickel showings (trenching has been completed on both of these and individual sketches showing their tie-in to the survey lines).
4. Geology
5. Cross-sections of the anomalous areas on the Caldwell farm to aid in selecting possible drilling locations.

The geophysical crew with the help of G. Sander finished the surveys on the 20th of July and moved on to another job.

Geophysical Results

Ref: G. Sander Report

The results are covered in some detail by G. Sander in his latest report.

In summary, George is not enthused over the results of what was thought to be our best area to date (Caldwell farm), from previous work "steep interfaces between somewhat conducting overburden and nonconducting rock can give rise to E.M. anomalies".

In the vicinity of line 80W the island of diorite shown on the map quite likely separates north and south branches of the Murray fault. Although the north and south sides of this island are sharply scarped and likely represent deep thicknesses of overburden, the junction of these two branches coincide with the "conducting zone" and scattered occurrences of sulphides have been found along this outcrop. The greenstone and diorite contact may also coincide with the north branch. The other anomalies located in this survey, as recommended, require more checking and additional prospecting. It is the writer's considered opinion that this area is still a relatively good drilling target.

2. Drill Contract - Dave Hermiston

On the 27th of July I spent some time with Dave Hermiston and his brother-in-law looking over possible drill locations on the Alexander Option.

1. There is a good supply of water readily at hand to drill the Caldwell farm area. A stream from 3 to 5 ft. deep runs from Wilson Lake and winds its way down along the base line.

Drilling in the vicinity of the Nickel showing E-3, the water will likely have to be pumped from Wilson Lake, a distance of approximately 2000 ft.

2. Transporting the drill and equipment will present no problems and can likely be done by truck, very close to the spotted holes.

3. Accommodation -
   (a) To start the drilling programme two or more men can likely be fed and bedded at Mrs. Haggerty's home in Webbwood.

   (b) As an alternative and should 4 to 6 men require accommodation, the Proctor farm house is available and is situated just north of Wilson Lake.

Advance Red Lake encountered difficulties in drilling the fault zone further to the south. In order to drill the "Caldwell anomaly" area it might be advisable to sacrifice a few hundred feet by moving to outcrop to insure a good start. Numerous heavy boulders lay at the base of the scarp, south side of "Diorite Island" and it might mean either getting in the centre of the outcrop or taking a chance on overburden in the fields.

PROSCO LTD. - MURRAY PROJECT

Progress Report: Period July 22-28, 1957

Subject: Geological Mapping
To: D. E. Smith
From: D. W. Esson

Summary:

During this period the geological mapping of Lorne, Drury and May Townships was completed with the exception of a small strip in May Township which was previously missed. This latter strip will require one day's work by one geologist.

The company's claims in May Township have not been mapped and shall be left for the time being.

The Worthington offset in Drury and Lorne Townships has been mapped almost to the Lorne Township line which is several hundred feet south of the lake staked by this company. No other norite exposures were found further to the south. It is planned to extend mapping in this area further south at some later date.

A total of 8 man-days were spent in the field by geologists during this period. The remainder of the time was taken up by plotting and interpretation of previous work and by one day of aerial reconnaissance.

Only one showing of note was found by the writer. This showing, No. E-20, is on the boundary of Salter and May Townships and has not been completely mapped as yet. A more complete description of this showing will be included in next week's report. Mineralization consists of chalcopyrite, pyrite and non-nickelferous pyrrhotite in quartz veins located in shear zones in a large mass of gabbro. Several pack-sack diamond drill holes, numerous trenches and picket lines on a 100 ft. grid have been completed in this area. Drill core is on the property and is well mineralized in part.

The geology of this showing is very promising and if further work continues to show promise I would recommend this area for some geophysical work.

The only other notable feature this week was the drilling in Drury Township by Worthington Mines Ltd. (Gaffney et al). This company is drilling a 700-800 ft. hole approximately 1000 ft. west of the Worthington offset on the theory that the offset dips northwest. According to our information the offset dips east and coupled with the poor calculations by Worthington Mines, they appear to have very little chance of success.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT

To: D. E. Smith
From: P. H. Hime
Period: July 22-28, 1957

The only showing and rock type seen during this period that appears to be of any interest is the gabbro in the Worthington area. Exact details of old mines, etc. on the Worthington offshoot can be found in reports in the Nickel Commission's volume, however, it was the possible southwesterly extension of this offshoot that interested us and which I fancy is not described previously.

Firstly, the so-called "norite" seems to need explanation. It is not, at least in this area, a homogenious rock as matter in a large granitic batholith might be, but rather contains bulky "inclusions". These may appear as actinolitic boulders up to two feet across or be dark, fine-grained and almost diabasic in texture or even dioritic, also a spheroidal appearance is imparted to the rock in places presumably due to rings of alteration advancing toward a common centre - this appearance is often associated with ore. The study of this rock was made over well-known ground to aid recognition in less known parts.

The offshoot previously has been marked as ending in a lake; however, 2 outcrops have been found (see map) to the SW of the lake (staked by D. E. Smith), of these the more southerly and easterly in the writer's opinion is the more favourable since it contains copper and nickel values. No further outcrop was found due to fields and overburden.

It should be noted that a large swamp lying along the projected strike of the offshoot to the SW may be a physiographic expression of a true extension and be worthy of study by geophysics.

P. H. Hime

PROSCO LTD. - MURRAY PROJECT

August 4, 1957

Subject: Geological Mapping
Period: July 29 - Aug. 4 incl.
To: D. E. Smith
From: D. W. Esson

Summary:

During this period the small portion not previously completed in May Township and a large part of Salter Township were mapped. Mapping of Salter Township has been proceeding very rapidly due to the extensive areas of sand and gravel along the Murray Fault zone.

George Checklin and his party of 2 began the mapping of the 18 (?) claim group in Cobden Township on August 1. They completed this work on August 4. His report is appended. Nothing of interest was found on this group.

During this period a total of 10 man-days were spent in the field by the two geologists on the Murray Project. No time was lost due to weather, the remaining time being taken by days off.

The mapping of Salter Township will be completed by August 7 after which one day will be required to plot the work onto the master sheets. Following this the Alexander claims and adjoining areas north of West Lake, in May Township, will be mapped. The latter will take approximately 3 days.

No new showings were found this week. However, the mapping of the area of showing No. E-20 was completed and the Massey and Hermina Mines were visited. A more complete description of these areas follows but in general they all occur in, or near, quartz veins which lack the length to make reasonable-sized ore bodies.

Description and Evaluation of Showings:
Showing E-20 Salter Township SW 1/4 Section 12 and NW 1/4 Section 13

The claims and patents on which these showings are located are held by a group headed by Mr. Len Houle of Massey. (Probably Gutcher). Previous work has consisted of trenching, bulldozing and pack-sack diamond drilling. The core from the latter is still on the property and contains some well-mineralized intersections. Picket lines have also been cut on what appears to be a 100 ft. grid. Houle claims that no geophysical work has been done on the property. The drilling appears to have been poorly handled, sometimes drilling parallel to the veins.

Mineralization consists of chalcopyrite, pyrite, pyrrhotite (?) and hematite in, and near, quartz veins intruded into greenstones and gabbro. The latter rock is often exceptionally coarse-grained and altered, often consisting of feldspars and chlorite with varying amounts of ferro-magnesians, probably hornblende. Shearing is prominent in the greenstones. Nickel tests on selected specimens were negative.

Two veins were located which were 10 ft. or more in width; numerous lesser, mineralized veins also occur. Mineralization may be irregular but many spectacular specimens were found. Overburden obscures the geology to a great extent, making it impossible to determine the strike-length of the veins and often obscuring even the widths.

From the rapid examination which I was able to give this property I would recommend that further work should be done here. These veins are mineralized over a greater width than usual for this country and their length is open due to overburden. The geology of the area as a whole is very promising and should be covered by E.M. work where open fields or old picket lines are available. The only detracting factor to this showing is the fact that mineralization is closely associated with quarts veins which, from past experience, are irregularly mineralized and lacking in length in the North Shore area.

Massey and Hermina Mines, Salter Township
- ref: O.D.M. 38th Annual Report; Vol. XXXVIII, Part VII, 1929; pages 28-31

These roperties are well described in the report cited above so I shall deal only with recent work on the properties.

The work in 1956 on the Massey property consists of picket lines, probably for a geophysical survey, and approximately 30 diamond drill holes. This work was done by Donalda Mines Limited and appears to have been thorough and well-handled. Their results apparently were only moderately encouraging, and in view of the extent of their work, I feel that although the No. 3 working looks very promising on surface there is nothing here for this company.

The Hermina property shows signs of some fairly recent drilling, probably less than 5 years old. The geology of the Hermina properties is not encouraging and I feel that they are of no interest to us.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT

To: D. E. Smith
From: P. Holley Hime
Period covered: 29 July - 3rd August, 1957

No actual showings were encountered. The writer looked over some of the shafts and pits associated with the Massey mine with D. W. Esson and these items will be covered in his report.

Apart from that I will make mention of the rock-types. Mapping was done mostly south of the EW road in Salter Township and north of Highway 17. Practically all the rock encountered was a greywacke series - including impure quartzites, schists (both micaceous and at times staurolitic). Warping of the beds was considerable with strike and dip hard to take - however, as a generalisation toward the north the dip was near vertical or sometimes steeply north, while at the south dip tended to be to the south, especially by the Highway 17.

Occasional basic dyke material cut this sediment series but contacts etc. seemed to carry no values and the clastics in themselves were uninteresting.

Further, a long EW strip in May Township was filled in on the south margin of the area already mapped since this area seemed to be nearer a possible position of the Murray Fault than hitherto expected; but the rock was mostly quartzite with some greywacke and schists and was totally barren. I don't think the plotted position of the Murray Fault should be changed in the light of this work but it did bring up some smaller subsidiaries - these in turn, as already stated, appeared barren.

August 3, 1957 P. Holly Hime

PROSCO LIMITED

Subject: Mapping of McWilliams claims, Cobden Township
Period: August 1 - 4, 1957
To: D. E. Smith
From: G. A. Checklin

Location of claims

The claims were known as Edward Sayers Mining Location and include Lots 9 and 10 of Concession II and part of the same lots in Concession I.

Work done

The claims were staked by C. McWilliams earlier this year, and these were located and tags were checked. The claims are numbered SSM. 54103-54120 inclusive.

All outcrops shown on the air photographs were visited and mapped. Some mapping was conducted further to the West than is immediately necessary.

The main rocks in the area are acidic, being quartzites and granites, which have been intruded by basic material occurring as two belts striking roughly E - W. The intruded rocks are somewhat variable and it is suggested that some mixing of the basic and the acidic material has taken place, resulting in an intermediate product locally. The basic gabbro is locally found as patches in the granite. Dykes of diabase cut both the granite and the gabbro. In the North-East the intruded rock grades into diorite.

An area of patented land of which the mining rights were believed open was not found to have been staked, so beyond a search for posts no work was done on this property. The air photographs held did not cover the South of this second area.

Except for trace sulphides in the basic rocks, no mineralization was found. Although this was a mining location, no showings were found.

Geo. A. Checklin

PROSCO LTD. - MURRAY PROJECT

Progress Report August 11, 1957

Subject: Geological Mapping
To: D. E. Smith
From: D. W. Esson
Period: Aug. 5 - 11, inclusive, 1957

Summary:

During this period the mapping of Salter Township was completed; mapping of Victoria Township was well begun and a start was made on the area of the Alexander claims in May Township. Geo. Checklin and his party completed the mapping of the two claim groups held by this company in Denison Township.

Eleven man-days were spent in the field by the three geologists this period. One day, August 8 was lost due to rain but was used to bring the plotting on the master sheets up to date. One day was spent in examination of showing E-20 on the Sable River, in the company of D. E. Smith and Mr. Len Houle, the owner of the property. Sample No. 14 taken from a pit across 5 1/2' returned 1.12% copper.

Two areas of economic importance were located during this period. One of these areas, in May Township, has been partially mapped by Hime and is covered in his report (appended). Mapping of this area will completed by next week and the overall area will be described in the next report. The showings occur in greenstone shears and quartz veins interbedded with quartzites. Mineralization consists of chalcopyrite and pyrite in irregular patches. While the showings themselves are not interesting their numbers and structural associations may prove to be of importance.

Description and Evaluation of Showings

Showing E-21 and Surrounding Area - Eastern Salter Township

This showing consists of an old pit located on a quartz vein in sheared greenstones. Mineralization of chalcopyrite and pyrite is irregular and of overall low grade. The vein is a maximum of 2 ft. wide. The eastern end of the vein ends about 10' from the pit while the western end is lost in overburden.

This vein serves to indicate the type of occurrence of copper mineralization in the greenstone-gabbro (or diorite) belt which extends from eastern Victoria Township, through Salter and May Townships and into Shakespeare Township. All these occurrences are in, or associated with, quartz veins, usually in greenstones but occasionally in gabbro (diorite) and quartzite. The deposits show a marked irregularity both in mineralization and in length and width.

In Salter Township the mineralized veins appear to be concentrated towards the southern contact of the greenstones. Mineralization rarely extends more than a few inches into the greenstones and shows no evidence of replacement of the host rock. I believe that the veins are probably of the low-temperature type and do not offer much hope of ore formation.

It is, however, conceivable that some one vein might be found in overburden-covered ground which has sufficiently great continuity and even distribution of mineralization to form an ore body. With this in mind I have recommended that all the fields over the greenstones and gabbros be covered by an E.M. survey but I do not feel that this area would warrant the expense of line-cutting for geophysical surveys at the present time.

Respectfully submitted,

Donald W. Esson

Pencil note: Geophysical survey recommended was carried out August 23/57.

D.E.S.

PROGRESS REPORT

To: D. E. Smith
From: P. H. Hime
Period covered: August 3rd - 10th, 1957.

Monday through Friday (9th) saw mapping by the writer with R. Van Wyk on the south side of the EW road that runs through Salter and Victoria Townships. The south limit of the mapping did not go as far south as Highway 17.

The rock was primarily impure quartzites and greywackes with some diabasic dykes, larger dioritic bodies occurred but were rarer and appeared quite barren. One small pit, hardly worthy of the name, was seen on the property of Mr. Lucien Dejardain of Massey, it occurred in diorite and contained a little pyrite with traces only of chalcopyrite - it was of no interest. The sedimentaries also lacked showings and on surface seemed of no interest.

Saturday, August 10 was spent mapping north of the line joining Wilson and West Lakes in May Township on the Alexander claims. Here the rocks were greenstones, schists, quartzites, basic intrusives and granite. Showings seemed to occur at greenstone/quartzite contacts with mineralisation more often in the latter. One large outcrop of highly altered gabbro contained small amounts of pyrite distributed through it remarkably evenly.

There were several showings. These are seen and numbered on field sheet 1/49.4612.856-42 May Township and are described below.

No. 25

A small showing with a central pit in a shear about 25 feet long. The mineralization is of chalcopyrite and a little pyrite in sheared quartzite (strike EW) and occurs over a width of 18 inches and a length of about 15 feet. The concentration is poor and the showing of very limited interest.

No. 26

A copper showing near the quartzite/greenstone contact on the north side of a quartzite hill. A pit some 12' long x 6' wide cuts across strike which is N 80 degrees E (dip N at 80 degrees). Chalcopyrite and pyrite are easily found disseminated through the sheared quartzite but do not reach really interesting quantities. To the west the shear vanished within a few feet under drift and about 18' to the east a north-south trench has been cut for 15' to expose the shear and further slight mineralization, but little more is to be noticed east of this.

No. 27

Another pit at the contact of quartzite and a greenstone dyke. This dyke is up to 4' wide and is traceable 200' NW along strike which is N 70 degrees W. Nearby the quartzites tend to become granitised, but this appears to have only academic significance. The minerals in the quartzite are chalcopyrite, pyrite and some hematite and are scattered through the sheared rock for a width of 25' and a length of 100', however, the mineralisation is scant.

Nos. 28, 29, 30, 31

These are best described together since all occur on the same large outcrop, contain the same minerals and occur in the same rock. The pits are all small ones with pyrite and chalcopyrite - the minerals do not become massive, even in small veins, are rather thinly distributed in the quartzite. This is usually sheared over a small length and breadth, i.e. perhaps 50' at most by about 5' wide. I do not think these showings are important to us at all.

P. H. Hime

PROSCO LIMITED

Subject: Mapping of claims, Denison Township.

Period: August 5 - 7, 1957.

To: D. E. Smith.

From: O. A. Checklin.

Location of Claims.

S ½ of Lot 10, Concession I, (Claims Nos. S 101458-59-60-61).
N ½ of " 7, " I (" " S 101452-53-54-55).
Part of Lake extending into Lot 7, Concession II (Claim No. S101451).

Mapping Information.

O. Checklin and R. Saukko mapped the geology, indicating this on air photograph overlays. P. Ferguson spent one day on part of the area doing a scintillometer survey.

The main rocks in the area are a group of quartzites and interbedded impure bands of a darker colour and rather schisty mature. Both types are barren of economic minerals, although the quartzite often shows a rusty colour locally. At some points there seems to have been brecciation on a large scale, with flowage of the schistose material between large blocks of quartzite, both rounded and angular. On the other hand these may represent slump structures in the original sediment, or, at one location, be fault breccia. The strike of these rocks varies little about N 70 E.

In the eastern group of claims the quartzites grade into or alternate with greywacke, and there is a change of strike to about N 80 W. Locally the greywacke is extremely slaty and fissile, and in one place shows a fine example of relations between competent and incompetent beds.

Running across the lake in Lot 7 is a topographical feature formed by a belt of hard grey rock containing quartz fragments. It appears to be a conglomerate but could be mistaken for an intrusive if judged by its field relations.

There has been some intrusive activity in the area, diabase and gabbro being of rather local occurrence. Although indicated by different colours, they may not be different in time or source. An intrusive which occurs along the North shore of the lake most of the way appears to be of different type however, being lighter in colour and tougher. There are apparently two separate bodies of this rock.

Except for the usual traces of pyrite, there do not seem to be any sulphides associated with the basic rocks examined.

A lineament passing roughly E - W through the western group of claims may be a fault structure (i.e. the Murray Fault) though there was no visual evidence of displacement along the length of the feature which was examined.

(Sgnd.) Geo. A. Checklin.

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PROSCO LTD. - MURRAY PROJECT

Progress Report

August 19, 1957

Subject: Geological Mapping
To: D. E. Smith
From: D. W. Esson
Period: Aug. 12 - 18 incl.

Summary:

During this period the mapping of the Alexander claims and surrounding area in May Twp. was completed. This area, mentioned in last week's report, did not live up to expectations for economic mineralization. Evaluation of the structural possibilities for this area has not, as yet, been completed but could indicate areas for geophysical work and line-cutting.

Mapping of the Hime claims and east of these claims in Baldwin Twp. were completed this period. Numerous gossans and mineralization were found, a more detailed evaluation of this area is appended in both this report and Hime's report.

Geo. Checklin and R. Saukko began a road traverse of the K.V.P. road north of Webbwood. No report has been received from this party.

One day was lost due to rain this period, and as of that date (Aug. 15) the plotting of the master sheets was almost up to date.

The quartz vein west of the Plum ground in Baldwin Twp. was sampled by Hime and the writer. No results have been received by this date.

During the next period mapping of the extension in Lorne Twp. will be completed and the former Plum holdings in Baldwin will be mapped.

Description and Evaluation of Showings

Showing E-22 and surrounding areas Baldwin Twp. Con. II Lot 8
SE ¼ of S½

This showing occurs on a diorite ridge, close to a contact with quartzites. The pit is quite old but has recently (2 or 3 years) been reblasted. Mineralization consists of disseminated to massive pyrrhotite, chalcopyrite and pyrite. The latter two minerals occur in minor amounts only, associated with the numerous small quartz veins which cut the rock. Massive pyrrhotite specimens from this showing do not contain nickel when tested by dimethyl glyoxomine.

The pyrrhotite occurs in shears and replacements of the host rock. The outcrop on which the showing occurs is small and strongly gossaned making determination of strike and length of the structure very difficult. The strike appears to be north and the length is open to the north due to overburden.

For two claim lengths north of the showing are numerous gossans on the diorite ridge. Most of the gossans contain only pyrite but chalcopyrite is occasionally found in minor amounts. This zone parallels that of Hime as described in his report as No. 33. Although the surface mineralization is weak and irregular the number and area covered by these rusty, silicified zones is of considerable interest. Prospecting of the area by the mapping crew has been quite thorough so any further work is a geophysical problem.

It would appear that zones E-22 and 33 run more or less parallel at their southern extremities but join together to the north in the vicinity of showing 34. Mineralization is finely disseminated and most often erratically distributed throughout these zones.

If any anomallous conditions whatsoever are found in the geophysical survey of the power line I would recommend line-cutting to extend the survey in this area.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT for period 12th - 18th August, 1957

To: D. E. Smith
From: P. H. Hime

Monday 12th - Hime and Van Wyk mapping between West and Wilson lakes in May Township - on claims itemised below and on Alexander claims.

No. 32 - A shaft and trenches in smoky quartzites containing chalcopyrite, pyrite and bornite. The quartzites are sheared over a width of up to 40' and the main shear that contains the minerals is perhaps six feet wide and its length, as revealed by a trench along strike to the east is 200 feet long: however, minerals only occur in sparce amounts in this shear with the best values seen across two or three feet by 125 feet at the most. The shear strikes N 80 degrees W and has a slight north dip, two Ext. size drill holes have been bored about 10 feet west of the small waterfilled shaft and dip at 45 degrees and 50 degrees on a bearing of S 10 degrees W.
Location: Con. V, Lot 10, N½ of N½ i.e. 2 non-patented claims - S-98590 and S-98589. Pencil note: (Vance Claims).

Tuesday 13th - Hime and Van Wyk mapping in NW May and SW Gough Twps. No showings.

Wednesday 14th - Hime and Munro mapping on Hime's claims in south central Baldwin Township. No showings.

Thursday 15th - Hime and Munro mapping in Baldwin Twp.

Friday 16th - Hime and Munro in Baldwin Twp.

No. 33 - Zone centred on freshly cut hydro line. Here the rock is very varied and its field relations rather hard to determine, however, greenstones, diorites and some questionable agglomerate occur and all contain minerals. These are predominantly pyrite with some pyrrhotite (barely nickeliferous) and a little chalcopyrite with bornite. The diorite is fine-grained and shows crystal orientation and shearing. Some of the greenstone was obviously a lava due to the present occurrence of elongated amygdules. The "agglomerate" contains various basic igneous rocks along with some quartzite boulders in a basic matrix, but though there is considerable minor gassaning over a fairly large area it is extremely hard to get out a fresh specimen; with reservations, therefore, pyrite is the most common mineral with lesser chalcopyrite. Biotite seems to be abundant in all the rocks and some areas are siliceous - minerals favour these areas.

There are no pits along this outcrop which runs almost normal to the new H.E.P.C. line - perhaps since this was poor country until the Hydro cleared a way. The mineralization is rather sparse, but as an area as a whole is tempting and further prospecting with geophysical work (before the H.E.P.C. wires go up) is suggested.

No. 34 - Baldwin Twp. - Con. II, Lots 7 and 8 N ½'s

This describes a zone, once more, rather than a showing. Pyrite, pyrrhotite and some chalcopyrite occur in this zone in smallish quantities. It occurs on the

west flank of the hill of diorite whose line almost follows the NS line dividing Lots 7 and 8. The lowest slopes have patches of quartzite and the zone exhibits shearing for almost 2 claim-lengths off and on. A small NS stream occurs just to the west and this perhaps clinches the idea of a structure down here.

The shear zone, where gossans are best, is marked by a small scarp and thus its width is hard to determine since overburden surrounds the base of the scarp, however, where seen it may be 50 ft. wide, minerals occur in patches near the scarp and diminish eastwards. Some small shears striking NE (approx.) have been detected in the diorite and are probably connected with the main one.

This area is of interest as a whole since it tends to tie-in with showing 33 to the south and some showing of Esson's further south again i.e. a zone from Con. II/III to Con. I/II at Baldwin creek.

P. H. Hime

PROSCO LIMITED

Subject: Geological mapping of the KVP. road

Period: August 14 - 22, 1957

To: D. E. Smith

From: G. Checklin

Location

The KVP. road is a private road put through by the KVP. company of Espanola into its logging concession covering 5000 square miles to the North of Espanola. The road begins at a point about 3 miles from Webbwood on the Agnew Lake road to the North.

The road runs through the following townships: Shakespeare, Gough, 118, Dunlop, 119, 120, A, B, C, G, H. L and Durban, and terminates at the present date in Ivy Township, which branches from it extend into Gilbert and Township 115.

The main part of the road has been chained (72 miles) and a mile post erected at each mile, but all posts are not visible. Where the roads cross township boundaries, signposts indicating this have been erected. Using these points in conjunction with the truck milometer, outcrops could be located along the road fairly well, but some discrepancy will be found on the map as map distances do not correspond exactly with road distances.

Purpose

The purpose of the traverses was to secure general information on the geology of this area which until the construction of the road cannot have been thoroughly prospected. Most of the area was not covered during the compilation of Collins' map of the North Shore of Lake Huron. In addition certain areas were marked out for particular notice, as reports from other sources indicated that these might be interesting. Such are: 1. Claims staked by a Mr. Caswell and thought to be in the vicinity of Cutler Creek (Townships 118 and 119) have recently been visited by representatives of T.M.C. apparently. 2. General area of Camp 1. 3. SW. corner of Gilbert Township, supposed to have been indicated by a government geologist as a good area for prospecting.

Topography

The road runs for the most part in the valley of the Spanish River (W. Branch) which was evidently important in drainage at the end of glacial times as now, because large areas are underlain by sand and pebbles which extend over the area and limit considerably the outcrops available for examination along the road. Above the valley and associated flat areas stand high ridges of granite with usually steep cliffs.

Further to the North the rivers are smaller and drainage is of the familiar pattern of the Shield country.

Geology

Except for two areas to be mentioned later, the road passes over ground underlain by several different types of granite. To the South the granite is mainly coarse and massive, and is generally homogeneous. Further North some of the outcrops are coarser and usually show stringers of pegmatite. The felspar is often stained red-brown and ferromagnesian material is accessory. Yet further North and West the granite is often migmatic and has lenses of biotite and hornblende-gneis in it. Faint alignment of crystals, tracebanding and areas of numerous small felspar augen between which the femag material forms a network, suggest that the granite has developed from former basic rocks of a gneissic or sedimentary nature.

The granites and other rocks have all been intruded by diabase or gabbro bodies, some of which can be seen for miles in the sides of cliffs.

Between Mile 1 and Mile 4 there are small exposures of basic material of an amphibolitic nature, though occasionally with excess of felspar.

Between Mile 6 and Mile 11 is much gabbroic rock which forms some topographical features. This is undoubtedly the same as Collins' quartz-diabase or quartz-norite. There were traces of sulphides only, but no sign of structures or areas of greater mineralization.

No claim posts were seen to locate the position of the Caswell claims, but the area of Cutler Creek seems to be well covered by overburden of boulders and sand, and any showings were not found.

From Camp No. 1 (Mile 47 approx.) out to the East along the road to Sinamunda Dam and Camp 11, the rocks are more varied. There is some granite, but in the main amphibolite or hornblende gneiss on a strike of N 80 E to N 80 W runs more or less parallel to the road, and would seem to link up with an area of what Collins calls "a schisted complex mainly of lavas but including local sedimentary deposits" found to the East. The gneiss is locally distorted and occurs as bands alternating with bands of pegmatite or granite. There is associated diabase and other basic material locally. Some of this has previously been prospected, as plugger holes can be seen, and though the sulphide content is slightly more than usual, these rocks do not seem to be economically important.

A small area of banded quartzite which seems to have escaped granitisation further is found in the SW. corner of Gilbert Twp.

Not far from Camp 11 a fine-grained, purple-weathering intrusive containing chunks of brown quartzite in it and carrying some sulphides, was noticed. Near this a boulder of heavily iron-bearing brown rock was seen at the side of the road, but there was nothing to indicate its origin.

Magnetite and hematite in thin veins (less than 1") were occasionally found in the granites where diabase was associated nearby. One vein of pyrite-bearing quartz was seen which was too thin (1" - 2") to be of any value except

possibly as a marker to trace across country.

Recommendations

Claim maps of townships 118 and 119 should be bought and the exact location of the Caswell claims noted. A day could then be spent going over the property to check on the possible showings.

While there is little evidence for mineralization in the belt of hornblende-gneiss and pegmatite, much information may have been obscured by the bulldozer, and at some slacker period mapping over air photographs covering the area from Camp 1 to Camp 11 should effectively disclose any potentialities of the area. The KVP. company has proved to be very co-operative and it may later be possible to have the use of a cabin as a base if this program is thought desirable and the weather is cold.

August 24, 1957.

.....
Geo. A. Checklin

The geological data is being plotted on a map of the area donated by the K.V.P.

PROSCO LTD. - MURRAY PROJECT Aug. 25/57

Progress Report

Subject: Geological Mapping
To: D. E. Smith
From: D. W. Esson
Period: Aug. 19-25 incl.

Summary:

During this period rather little was accomplished due to rain and sickness. Only 6 man-days were spent in the field by the two geologists. Mapping of the southern and western extension of the Worthington Offset in Lorne Twp. was not complete and will require 2 or 3 more man-days of mapping.

Mapping of the former Plum claims in Baldwin Twp. was completed. One showing and several drill holes were found on these claims.

A copper-nickel showing in Baldwin Twp., owned by V. Piispanen, was briefly visited and several character specimens taken. Nickel tests on these specimens gave strong, positive results. Very little time was spent on this property and even less could be seen in the pit due to water. The attitude of the mineralized zone could not be determined. Assay valves from this property of 0.34% Ni and 0.51% Cu are reported by J. E. Thompson (O.D.M. Vol. LXI, Pt. 4, 1952, p.31) and 1.16% Ni, trace Cu by V. G. Douglas (O.D.M. Vol. XXXIV, 1925, pt. 4 (b), p.49), the latter across 15 ft.

Copper showings E24, E25 and 26 on the Piispanen and Turpeinen farms in Lorne Twp. were examined and mapped. These showings are discussed below.

Description and Evaluation of Showings

Showing E23 Former Plum holdings, Baldwin Twp.

The rock in the vicinity of the showing is almost wholly greenstone and shows considerable alteration and shearing. Rusty, silicified zones are common, containing pyrite and minor chalcopyrite.

One drill hole, which apparently drilled under one of these zones, cut disseminated chalcopyrite, pyrite and pyrrhotite. Quartz veins and shears were common in the core. However, best material did not look like ore.

The main showing, an old pit on a heavily gossaned ridge adjoining a swamp, showed disseminated to massive pyrrhotite and some chalcopyrite. Shearing in the host rock was common and garnets had been developed. Nickel tests on selected specimens were negative.

A second drill hole, 200 ft. more or less to the south-west of the pit, was drilled out under the swamp. Rocks cut were greenstones, diorites and amphibolites. Some quite good zones of copper mineralization were cut uncluding one zone 35 ft. in length. Only part of the latter zone had been sampled and it is

the writer's intention to return at a later date to sample this core. Unfortunately, the markings on the boxes are illegible so the core cannot be logged.

Two other drill holes were found on this property by prospectors on another day but as yet these holes have not been visited by the writer.

The whole property has been cut by picket lines.

Although this property has had considerable work performed on it I feel that the copper values in the second drill hole warrant more work than has yet been done. An E.M. survey is recommended immediately over the dried swamp with more work to follow after the results have been received.

Several other showings on this ground, covered in my report of June 30/57, warrant re-examination and possibly some further geophysical work on this property.

Showings E24, E25 and E26 Lorne Twp. (E26 - Lot 5 Con. V Turpeinen farm)

These 3 showings appear to be associated with quartz veins in quartzites, although the exact distinction between the two is difficult. Chalcopyrite is disseminated throughout the quartz and also into the walls although the widths of mineralization are fairly constant for short distances.

Showings E24 and 25 are of no economic significance as their lengths are limited and widths are poor. Strike of all these showings is N 35 degrees E, parallel to the general strike of the quartzites.

Showing E26 is a mineralized, dark quartz vein (?) which is intermittently exposed in pits on surface for 115' more or less 10 ft. Pencil note: (more +, less -) Maximum width is two feet with the average width about 1.5 ft. Mineralization consists of chalcopyrite, minor pyrite and non-visible gold. Assays on representative specimens gave 4.47% Cu and 0.04 oz./T Au. The wall rocks are quite pure quartzite and would undoubtedly be suitable for flux.

The vein appears to pinch out on surface to the east but is covered by overburden on the south-west. I believe that the maximum length of the vein would be about 250 ft. as outcrop exposed 150' further to the SW does not appear to carry the vein. Some light trenching in shallow overburden would suffice to determine the strike length of this vein.

This vein warrants some surface trenching and sampling and, in view of the assay results, some short diamond drilling to determine the mineralized widths at depth.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT

Period Covered - 18-25th August, 1957
To - D. E. Smith
From - P. H. Hime

Sad to report, the writer was out sick on Wednesday, Thursday and Friday, and the weather was inclement on Saturday.

Monday and part of Tuesday Hime and Van Wyk spent mapping in Lorne Township south of Bell Lake and north of the new Highway 17. Here the rock is either quartzite or a quartz pebble-in-quartzite-matrix conglomerate. This latter rock lies to the north of the quartzite. General strike is NE. Some gabbro was encountered at the NE end of Bell Lake but seemed barren in itself and its contact. Pencil Note: (Any geiger work? Dip? Vertical).

About 400' south of a point about a 1000' away on the south bank of the lake from the Zingari's cabin (west end of lake) an EW resistivity wire was found on the conglomerates. There were no gossans and no pits found, but close inspection revealed very small quantities of pyrrhotite disseminated in the matrix and this barely gave a nickel test pink. An unpromising looking rock type to me.

In the second small series of rocks in the cut east of the major rock cut containing showing No. 24 slight sulphide mineralization was found in quartzite/gabbro contacts. Pyrrhotite proved non-nickeliferous and besides pyrite, chalcopyrite occurred in trace quantities; what shows is poor, but the rest of the contact is overburden covered where I mapped, however, it strikes about NE into Esson's mapping area and it will be interesting to see what he reports.

Other work consisted of plotting and double-checking all field sheets done so far this season onto the master sheets.

P. H. Hime

PROSCO LTD. - MURRAY PROJECT

Progress Report

September 2, 1957.

Subject: Geological Mapping
Period: Aug. 26 - Sept. 1, incl.
To: D. E. Smith
From: D. W. Esson

Summary:

Mapping of Lorne Twp. was completed this period, which finished all the mapping on the eastern end of this project.

Mapping of Victoria Twp. was almost completed with only one day's work remaining to finish this Twp. This will complete the mapping of the eastern end of the Murray Fault. There is also a few day's remaining in various areas where checks and fill-ins are necessary.

After this I propose to employ the summer geological staff in inspection of showings and logging of various diamond drill core which is scattered around the country, until they depart on Sept. 15th.

One nickel-copper showing was found by the writer in Lorne Twp. and the area held by Victoria Algoma Mines in Victoria Twp. was mapped.

With regard to the latter area, a great deal of rock trenching and diamond drilling was done by Algoma Victoria Mines. Hime reports that Mr. Humpage of the Waterfalls Resort, Victoria Twp., says that Victoria Algoma Mines has received new financing and is planning more work on their property. The majority of their work to date appears to have been concentrated on two zones; one of which is argillaceous (or greywacke) and the other has very bright green boulders in a pure quartzite matrix. The boulders themselves contain quartz pebbles and the whole horizon is well pyritized. This well-marked horizon extends, intermittently, for a strike-length of 3 miles. Victoria Algoma Mines has done considerable work in this area and as they still hold the ground I feel that the area is not of interest to us at the present time.

Geo. Checklin and party completed their examination of the Espanola Mines, (Old Wallace Mining Location), near Whitefish Falls during this period. Nothing of interest was found. His report is attached. A geological mapping survey of the Massey Tote Road and its branches was started by G. Checklin and R. Saukko on August 31.

Description and Evaluation of Showings

Showing E 27, S ½, NE ¼ of Lot 10, Con. V, Lorne Twp.

This showing is a small, old pit at the edge of a gabbro/diorite hill. Mineralisation of nickeliferous-pyrrhotite and chalcopyrite is contained in a gabbroic zone. Mineralization is strongest where the development of chlorite and/or actinolite is strongest. Nickel tests on selected specimens gave moderately strong results.

The structure of the showing is quite tight but could be interesting should this prove to be only a small shoot from the adjoining swamp. Picket lines were found to have been cut in the general area although the showing itself does not show any signs of recent work.

This area of basic rocks in the vicinity of Bell Lake shows considerable evidence of chloritization. I have been informed by Mr. Turpeinen, who owns a patented lot in this area, that the International Nickel Co. has been buying mineral rights around Bell Lake for several years.

This showing is associated in the same mass of basic rocks as Hime's showings Nos. 22, 23 and 24, mentioned in his report of July 14-21. While these rocks are of definite interest, any further work in the area would appear to require either geophysical or geochemical exploration. The extent of the Inco holdings in the area would also require investigation before further work was undertaken. Inco is reported to have been offering $10,000. per 160 acres in this area so acquisition of ground would be expensive.

In summary, due to the extensive work in this area by other parties and the apparent expense of property acquisition, I feel that this company would not be interested in this area. However, I hope to check all the showings found here before the summer is over. A geophysical survey of Bell Lake and the swamp to the NE could easily be run in the winter without lines.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT

To: D. E. Smith
From: P. H. Hime
Period: August 24th - 31st, 1957

Hime and Munro mapped in Victoria Twp. South of the main EW gravel road and spent two days on lake work on the "Waterfalls Resort" lakes. This was on Mr. Humpage's property.

Only one showing was found. This occurred in EW striking quartzites on the actual shore and comprised a NS trench some 25' long X 4' wide that had been blasted for uranium. However, in the writer's opinion the rock looked unsuitable for this mineral but did contain small quantities of pyrrhotite and pyrite. Little evidence of shearing was found and the pit was of little interest.

The other rocks, for the record, reading N to S at the extreme W end of Victoria photo No. 61 were:- granite, quartzite, ... lake ... quartzite and banded shales and argillites, quartzite, diorite, quartzite, conglomerate (Ramsay lake type) quartzites and then more granite. Small bands of quartz-pebble conglomerate occur in the qtz-argillites.

Mr. Humpage reports radio activity, as regards uranium, in argillites and certain small quartz-pebble conglomerate bands. This occurs on the East and West shores of the southerly bulge of Denvic Lake about 2 and 3 claim lengths from Waterfalls resort respectively. This might warrant some further prospecting with a geiger counter on account of certain similarities of small bands of material within the rock to Blind River type deposits.

P. H. Hime

PROSCO LIMITED

Subject: Wallace Mine Locations, Mongowin Township
To: D. E. Smith
From: G. A. Checklin
Date: September 1, 1957

Report on Wallace Mine Locations, Mongowin Twp.

Property Concerned

The property consists of a group of locations known as the Wallace Mine Locations 1 - 5, together with an area known as Block A, which lies along the North shore of Lake Huron West from the mouth of the Whitefish River and adjoin the Whitefish River Indian Reserve in the East. It consists of 1600 patented acres, both surface and mining rights, and is at present owned by Hespanola Mines Limited, of 88 Richmond Street West, Toronto, Ontario.

Topography

The main features are two high ridges striking slightly North of East, with a deep narrow valley between them, which is occupied by lakes and swamps. To the South of these the ground slopes gently down with intermittent outcrops to the shore of Lake Huron, which is characterised by a series of points and bays, but just North of the shor is a flat area of spring swamp of width varying from several hundred feet to half a mile. To the North of the ridges a further line of lakes is found, followed by ground which is lower, but still composed of parallel ridges.

Services

The property is near both rail and road and the cheap transport facilities of Lake Huron. Several old trails and roads pass through the property, and in addition numerous paths have been cut out, though none of these have been traced to the highway. Access roads would not be difficult to construct.

Purpose and method of work

According to earlier reports, (Listed later), copper, nickel and iron have been found on the property. G.A. Checklin and R.N. Saukko spent five days on the property (August 25-29, 1957) with the purpose of giving it as thorough an examination as possible, with particular emphasis on the showings spoken of in earlier reports.

The first day was utilised in making enquiries in Whitefish Falls, and in contacting Mr. George Eaton, (who has taken several people out to the property), and also the two students who at that time were working on the property under the instructions of Mr. Herbert W. Morris of Hespanola Mines Limited. (These men left for Toronto on August 26). Also the party and equipment were transported to the area of the copper-nickel showings and camp set up near there. In the afternoon a reconnaissance of the area rocks was conducted.

On succeeding days traverses were conducted (a) West along the Lake Huron shoreline to near the boundary of the locations, then North to the lake-swamp line, East along the ridge and South again to camp; (b) East along the shore, North along the East boundary to the limit of the swamp, West approximately along the lineament and SW to the camp; (c) along the peridotite intrusive close to and parallel to the North shore of the lake in Block A, and back by the ridge and the opposite shore to the starting point; (d) along the South slope of the main quartzite ridge N of the lake-swamp line and back along the N slope, with frequent side traverses down the slope to the valley and up to the crest of the ridge.

References

Report of the Geological Survey for 1849.
" " " " " " 1890-91.
" " " Mineral Resources of Ontario, 1890.

Extracts from these previous reports have been collected by Hespanola Mines Limited and their summary is used as the source of earlier information. A report written by J.C. Honsberger, P.Eng., in November, 1956 is based on these excerpts and other Ontario Department of Mines publications.

Geology

The property concerned is underlain by a belt of quartzites striking with few exceptions N 80-85 degrees W, varying in type somewhat but grading generally from rather dark and impure zones with numerous schisty bands, in the South along the shore of Lake Huron, through granular, gneissose, greenish and off-white material to the pure white massive quartzite of the highest ridges. To the North this sequence seems to be reversed, but no evidence of a fold axis was seen.

Several diabase intrusives pass through the quartzites parallel with the strike. There are also a few discordant intrusives of diabase. Although the contacts were prospected wherever possible, none of these bodies were found to contain more than traces of sulphide.

A large gabbro or diabase body several hundred feet wide is centred in the SE of Location 3, and seems to be of similar type and age to these diabase intrusives.

Visible along the shore, especially in the region of the SW of Location 2 and the SE of Location 3, are several bands and patches of greenstone which are not continuous at the surface. They exhibit a definite streaky appearance which has been accentuated by weathering and wave action and which is due to shearing and low-grade schistosity. This rock type is thought to be older than the diabase and gabbro, which stands up well to wave action and which shows no stress effects. These greenstones carry, locally, the amounts of sulphides which drew attention to the property in the first place.

A wide body of basic material identified by the Department of Mines as a peridotite can be traced right across Block A. This does not contain any visible olivine, which has probably all been altered to serpentine. Locally it seems to

have taken up some silica during metamorphosis. A few thin veinlets of specularite were seen at one place in this peridotite, but elsewhere the material seems to be quite barren.

Some quartz veins are found in the metamorphosed sediments, and where these show rust stains, this is almost invariably due to the breakdown of chlorite rather than of sulphides.

There is no direct evidence of faulting. The lakes and swamps lie in troughs parallel with the strike, and appear to be related to erosion along this direction rather than faulting. However, a very strong fracture in the ridge to the E of Mt. Arabella and apparently continued along arms of Horseshoe and House Lakes (just off the property to the North) may be a fault. No signs of mineralisation were seen along it. The edges of this fracture are composed of high vertical cliffs and there is much debris from them lying below.

Showings

The main showings on this property are situated near the shore in the SW corner of Location 2 and formed what was known as the Wallace Mine, which dates back at least to 1849. It is not thought that any operation other than exploration was undertaken. There are three pits over a length of 126 feet, which were put down along or near the contacts of a greenstone schist with the quartzite. Tongues of greenstone schist pass into the quartzite, and both Pit 1 (25') and Pit 2 (35') tested the contacts of two of these tongues with the quartzite. A third tongue can be traced near to Pit 3 (15'), although this pit apparently tested thin mineralised veinlets in fractures in the quartzite rather than the actual contact, judging by some of the debris from the pit.

The full extent of the greenstone over this length is not seen, as debris from the pit obscures most of the bedrock, but judging from its presence on a small point in continuity with the tongues, it seems to underlie the shore zone and may have some width under the water. It cannot be followed along the shore to the E (where the pit debris is replaced by overburden), and is not picked up definitively on the other side of the bay to the W, so that the probable length of the zone does not appear to be much more than 200 feet.

In the SE corner of Location 3 a fourth pit was found, in depth about 15'. This was put down along the contact between gabbro and quartzite, and some of the wall rock in place has a granitic appearance and seems to be a hybrid of the two originals. Some of the debris from this pit showed sulphides in the granitic rock, including chalcopyrite, but there was nothing extensive enough for sampling. The gabbro-type debris was practically barren except locally. Along the shore and slightly to the West another contact is visible, and the basic material along it contains a variable amount of sulphides, mostly pyrite and pyrrhotite, but with some chalcopyrite. It is not certain whether this basic material is an altered part of the gabbro with which it seems to be continuous, or greenstone like that mentioned above. The contact is marked by one or more quartz veins, but the sulphides are not as a rule found in this quartz, although they are usually found along it or near it. The width of pyritisation varies between a few inches and about three

feet, but is mostly the former. This vein can be traced for about 70 feet, though it is sporadic, but the contact is then lost under water. Close to the western end of it is a 4' lens of rich sulphide material but this is very narrow (5" at the most). The gabbro body is extensive, but no other contacts showed any mineralisation.

A fifth pit, which is however located just East of the property boundary and on Indian Reserve ground, was noticed. This has apparently been filled in, no doubt because of the danger to children from Whitefish Falls, which is nearby, but enough debris from the workings is scattered about to show that it was excavated into a gabbro intrusive. Nearly all fragments looked at showed some sulphides, mostly pyrrhotite but some chalcopyrite. Much quartz is also found in blocks of debris. This gabbro seems to strike roughly N 20 W, but it was not picked up again on the property under discussion.

Iron is mentioned in earlier reports as having been found on the property, either as one or more showings. A shaft of about 20' depth was supposed to have been excavated into it, and the occurrence was variously described as a "vein" and an "enormous mass of ore" which "crops out all over some 10 or 15 acres". It is hard to think that there is no foundation whatever in these reports, but no trace of any iron showing was found by the writer and his assistant, and the dip needle observations taken during all the traverses failed to indicate any body of magnetic metal. Both Mr. George Eaton and Mr. Stan White of Whitefish Falls have hunted and fished the area, and White has also prospected the locations, but neither have seen anything to fit in with the early reports. A rusty-coloured stain found locally in certain zones of the quartzite, particularly along fractures and cracks and along faces of contacts with diabase, seems to be superficial and to be derived from breakdown of the diabase.

It is probable that during the last 100 years or so the vein or other showings have been completely obscured by vegetation, but it is not likely that any deposit of a size large enough to be of value at the present day has been missed.

The sediments themselves are practically barren, though some traces of chalcopyrite were found in a conchoidal-fracturing dark quartzite, while a dark, finely-banded (?) siltstone had pyrite locally

Other Mineral Occurrences

In several of the bays along the Lake Huron shore there are deposits of green and red clays. The bays generally lead-in to swamps or low woodland, and it is possible that such clays may be found under the swamps and might be of economic value if extensive enough.

Water reaching the shore from one swamp was seen to have left a rusty scum on plant material in its way, while a swamp one mile North from the shore in the East of the property is filled with a similar scum, though the water flowing through it is clear. This is probably organic in origin, but may indicate iron.

It should be noted that the International Nickel Company is working pure white quartzite in Lawson Quarry, and that this property adjoins the Wallace Mines Location. They have enough silica on their

own property to cover smelting operations for many years to come, but at some future date they will be looking around for reserves and the quartzite on the Locations, close to road, rail and their own crushing plant, would be the obvious property to choose.

Water

A small lake found in Block A and quite near the road seems to be at a higher level than the plant mentioned above belonging to Inco. They presumably pump water up from the lake near Lawson Quarry, but possibly they would do a deal to use the water from this small lake, which would save them pumping costs. It would serve as an additional reservoir for them, though the water flow through the lake at this season is not great. If water is used up during the summer and fall it would probably be replenished during the spring.

Samples already assayed

The earlier reports indicate high percentages of nickel on the main showings, but the figure for nickel of 13.93% in the sample taken by Dr. T.S. Hunt in 1849 was reached at a time when assaying was not probably as accurate as it is now. (Another figure given, for either this sample or another, was 8% with a little cobalt). Grab samples taken by J.C. Honsberger assayed 1. 0.94% Cu, 0.23% Ni; 2. 0.52% Cu, 0.18% Ni; 3. 0.70% Cu, 1.04% Ni. There was a trace of cobalt in the first sample.

Recommendations

The mineral showings at the surface seem rather poor in extent and values and do not offer much promise, as they are probably too small-scale to be worth any more work. A further check could, however, be made by drilling to intersect the contacts at depth. Drilling from both land and lakeshore ice in winter would be comparatively easy.

The two students who worked on the property for three weeks were apparently mapping. It should be possible to find out from Hespanola Mines Limited the extent of any other mineralisation found by them, and in particular whether they were able to find the earlier-mentioned iron occurrences.

The swamp and woodland may cover mineralised zones, but to gain some idea of the possibility of this it would be better to examine rock outcrops along the strike to the East before any geophysical survey is made, as the rock types seem to be continuous for long distances, as shown by the white quartzite.

From the standpoint of real estate, this property might well be worth acquiring. Some notes regarding this follow on a separate sheet.

Note: Some of the railroad fill used on the line passing through the property contains many boulders of nickel and copper-bearing sulphides. It would be interesting to find out the source of this fill, but no information could be gleaned in Whitefish Fall

September 1, 1957

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Geo. A. Checklin, Geologist

Some Notes on the Potentialities of the Wallace Mine Location as Real Estate

1. The property is a fair sized block of land, consisting of 1600 acres and with a variety of scenery, set at the mouth of the Whitefish River near what is gradually being developed as a tourist centre, and borders the North shore of Lake Huron.

2. The points and bays of the Lake Huron shoreline, where deep water near rocks alternates with shallow water along sandy beaches, would be attractive sites for summer cottages. Some of the inshore waters would be deep enough for large motor launches and yachts.

3. There is a considerable area of woodland and spring swamp which when cleared should provide good arable and pasture farmland. This lies just behind the Lake Huron shore. A second such area lies between the two main quartzite ridges and is damper, but could easily be drained The timber available is not of the best quality, but there is some good pulpwood, and the timber should be of considerable value overall.

4. The lakes are patented with the property and the customary strip around the shore is not reserved to the Department of Lands and Forests In the three enclosed lakes, therefore, fishing would be protected, and one of them would be suitable for the establishment of a fish farm.

5. From the top of the quartzite ridges a fine view of the islands in Lake Huron to the South, and of a wide stretch of country to the North are obtained. As these areas are developed, the view will become even more attractive.

PROSCO LTD. - MURRAY PROJECT

Progress Report Sept. 9/57

Subject: Geological Mapping
Period: Sept. 2 - Sept. 8 incl.
To: D. E. Smith
From: D. W. Esson

Summary:

During this period the geological crew was engaged in a clean-up of small mapping jobs; final plotting of field work and checking of work. Rain hampered operations on two days.

Two men spent a day trenching and sampling the copper showing on Turpeinen's farm in Lorne Twp. This zone does not have any greater length than that reported last week (115'), therefore, it is of little interest to us.

D.D.H. No. A-1 on the Alexander Option was logged to its depth of 360 ft. (Sept. 4). The predominant rock types are diorite, quartzite and schist, all sheared and intruded by quartz and calcite veins. Mineralization of pyrite, pyrrhotite and chalcopyrite is disseminated but persistent.

Dip needling has been completed on the Piisanen property and started on the area east of the Hime claims, both in Baldwin Twp. No interesting results were obtained on Piisanen's property. Anomalous dips were recorded on the other ground. (See also Hime's report).

The core from the Plum drilling in Baldwin Twp. was sampled and has been sent for assay.

Respectfully submitted,

Donald W. Esson

PROGRESS REPORT September 9, 1957.

To: D. E. Smith
From: P. H. Hime
Period Covered: 1st - 8th Sept., 1957

Tuesday 3rd Sept.

Hime and Munro on lake-work on Sugar Lake. Esson has covered the uranium area to the south and all we found to add to his information was a diamond drill hole on the north shore of the lake.

It dipped 45 degrees South and was collared in a thin band of quartzites on the "gabbro" and granite contact, thus, obviously, the object was to probe the sediments beneath the lake. Two islands near the south shore of this western limb which are almost due south of the D.D.H. are of greywacke and qtzite striking E-W.

Thursday 5th Sept.

35. Hime and Munro picking off small outcrop gaps in maps.

The copper showing with a little pyrite as well occurred in sheared quartzites at the north base of the hill on which the Victoria Twp. Lands & Forests tower stands. We were advised of the existence of this pit by Mr. Humpage and hope we found the right one since all we could find was a very poor showing. Chalcopyrite was sparse over a width of about 3 feet and nowhere within that really concentrated. The shear zone in the quartzites was traceable 150' at most and was mineralized only along 50' and poorly at that. In fact a poor showing.

Friday 6th and Saturday 7th Extension of work on showing 34

Hime, Munro and Hough: Hime and Hough

Prospecting, mapping and dip needle work in Baldwin Twp. The location is in Lot 8, N ½ Con. II and Lot 7, S ½ Con. III. This structure, apart from its most likely continuation to the south along the stream that starts from the beaver pond in N ½, Lot 8, Con. II and flows south into the Baldwin Creek, can quite likely be traced northwards: i.e. through junction of Lot 7 and 6 at the dividing line of the N and S halves of Con. III and up into the zone marked with a series of "R"'s (on Thompson's map of Baldwin) in 6 and 5 in S ½, Con. IV, and this in turn seems to lead quite obviously through the beaver ponds and slightly east of the ponds up into Espanola Bay on Agnew Lake. Therefore, if this structure exists it starts at the south ½ of the Baldwin creek at Lot 8, S ½. Con. II and strikes generally NNE up to Agnew Lake and in so doing crosses the north and south branches of the Worthington fault in the N ½, Con. III at lots 5 and 6.

The writer prospected the area within Con. II and found considerable burning and shearing, especially around the beaver pond. The burning on surface was mostly pyrite though traces of pyrrhotite were seen. The quartzite and diorite had well marked scarps and valleys striking almost N and S with low land or streams occurring in between.

J. Hough ran EW dip needle lines across this area and recorded some interesting values. The readings were taken along EW lines, separated N and S 500' apart, at 200' intervals. However, as interesting values were noted the readings were taken at 100' or 50' intervals. This data is plotted on a map by J. Hough which should be inspected for exact details. Distances and directions in the bush were determined on the pace-and-compass basis and may not be 100% accurate due to the difficult nature of the bush.

P. H. Hime

PROGRESS REPORT

To: D. E. Smith
From: Holley Hime
Period: September 8th - 15th, 1957

May Township - Hime and Hough mapping between showing (Pencil note: No.21) and the turn off to the Currier ranch. A copper showing was seen in a sheared quartzite. The strike was N85E dipping 80/85 degrees N. The quartzites are sheared for a width of 200' but the zone with the mineralization is up to 2' wide, possibly widening towards the base of the pit, while scant mineralization is seen over a 10' width. Fair overburden is encountered at the E end of the pit but 400' further E a small outcrop of the same sheared quartzite is seen to have traces of chalcopyrite. To the W the outcrop is better in the maple bush and the land rises. The total length of the quartzite bearing any possibility is <600' but metalization on the main outcrop is limited to 150/200' and would be poor over more than 50'. Some pyrite occurs as well as does some chloritization and all are in reasonably pure quartzite. This is only a mediocre showing.

The remainder the week was spent in mapping odd small outcrops that had either been missed or needed to be checked.

Core logging on Mining Endeavour property was done on Saturday on a showing already written up in a previous report - Log sheets are separate from this report.

Hime and Saukko checked some copper showings in May Twp. on or near the Alexander claims and a resumé of these is presented separately from this report - all the showings involved have previously been written up.

Respectfully submitted,

Holley Hime

RICHER PROPERTY

Harrow Twp.
Sept. 13/57

During the week beginning August 25th Hough spent 3 days prospecting the Richer Property. Traverses were run at about 250 ft. intervals and two new sulphide zones and 3 pits were located. Their locations are shown on the accompanying map.

Sulphide Zone A

This is a large leached zone covering an area of about 200 ft. by 100' in a badly fractured quartzite. (?) Some pyrrhotite is present but not in sufficient quantity to warrant further work.

B

Zone B is a slightly smaller area than A in a similar quartzite where cobalt bloom is present. The cobalt itself is not visible to the naked eye.

C

This is a small pit in an intrusive rock with small amounts of pyrite and chalcopyrite shot through the pit. The mineralization appears to fade out at the edges of the pit.

D

Trench in a brecciated quartz vein. The trench is approximately 4' by 10', and was in a north-west direction. The quartz is from 2 to 3 feet wide and contains sparse pyrite and chalcopyrite. No extension of mineralization on quartz could be found beyond the edges of the trench. This is a very poor showing.

E

Pit number E is in the same general area and similar to pit D in many ways. It contains a quartz vein of approximately 4' in width, which strikes NW. The sulphides in this pit are very poor and no continuation of either the vein or mineralization can be found any appreciable distance from the pit.

With regard to the pits and trenches already seen by D. E. Smith, I was unable to discover any extension of mineralization in any of the pits or tranches. Number 1 pit and No. 2 trench remain the most promising and they are not good in my estimation.

(Sgnd.) John Hough

If any further work is to be done I would recommend doing it only north and west of Long Lake.

Vein

No. 1 – 2' zone of disseminated cobalt & cobalt bloom.

Trenches

No. 1 - Water filled in soil

No. 2 - Sulphides - pyrite, pyrrhotite Chalcopyrite.
30" Sample from NW end of trench Assayed 2Cu - 2Ni

No. 3 - Sulphides but not as impressive as No. 2

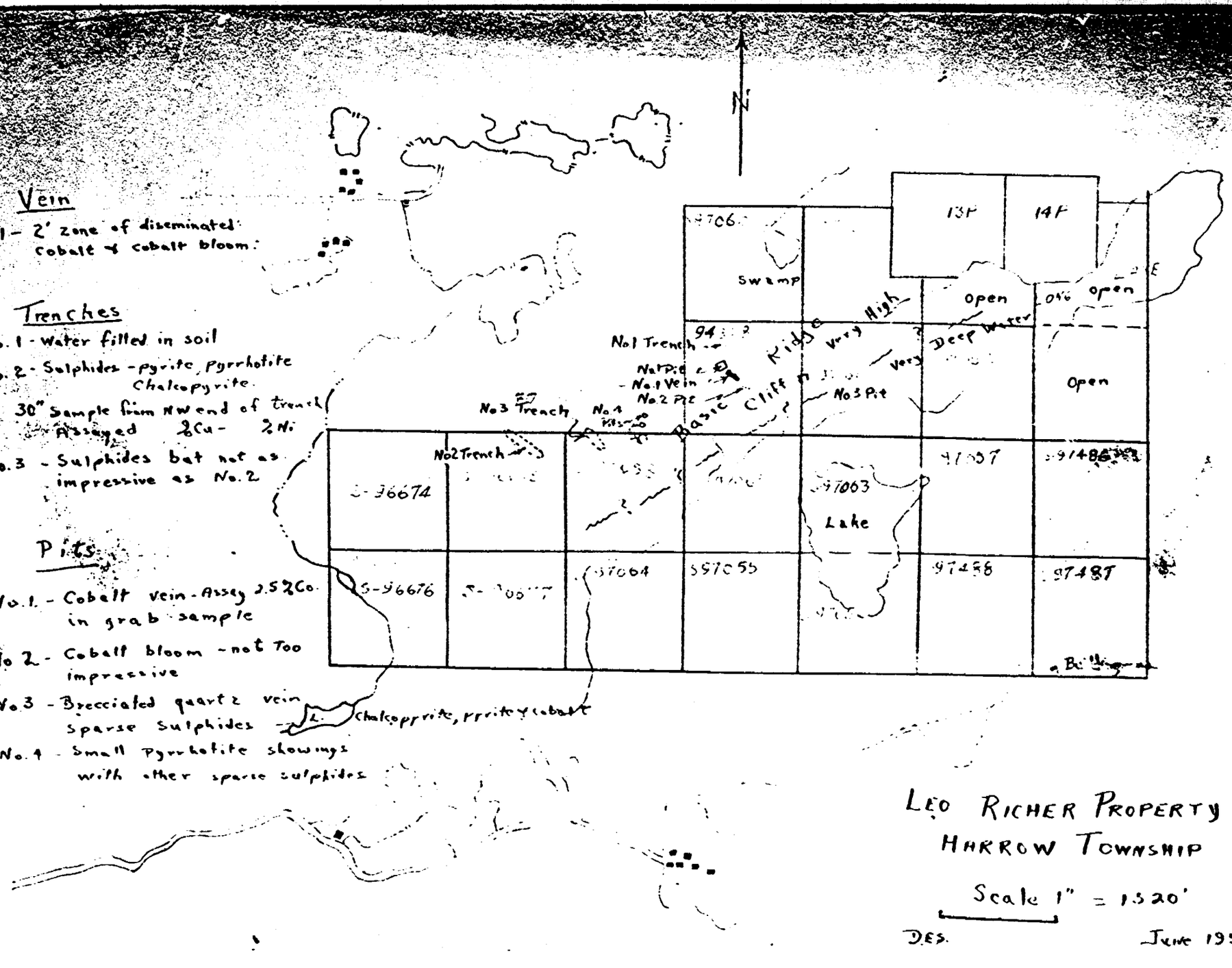
Pits

No. 1. - Cobalt vein - Assay 2.5%Co in grab sample

No. 2 - Cobalt bloom - not Too impressive

No. 3 - Brecciated quartz vein Sparse Sulphides

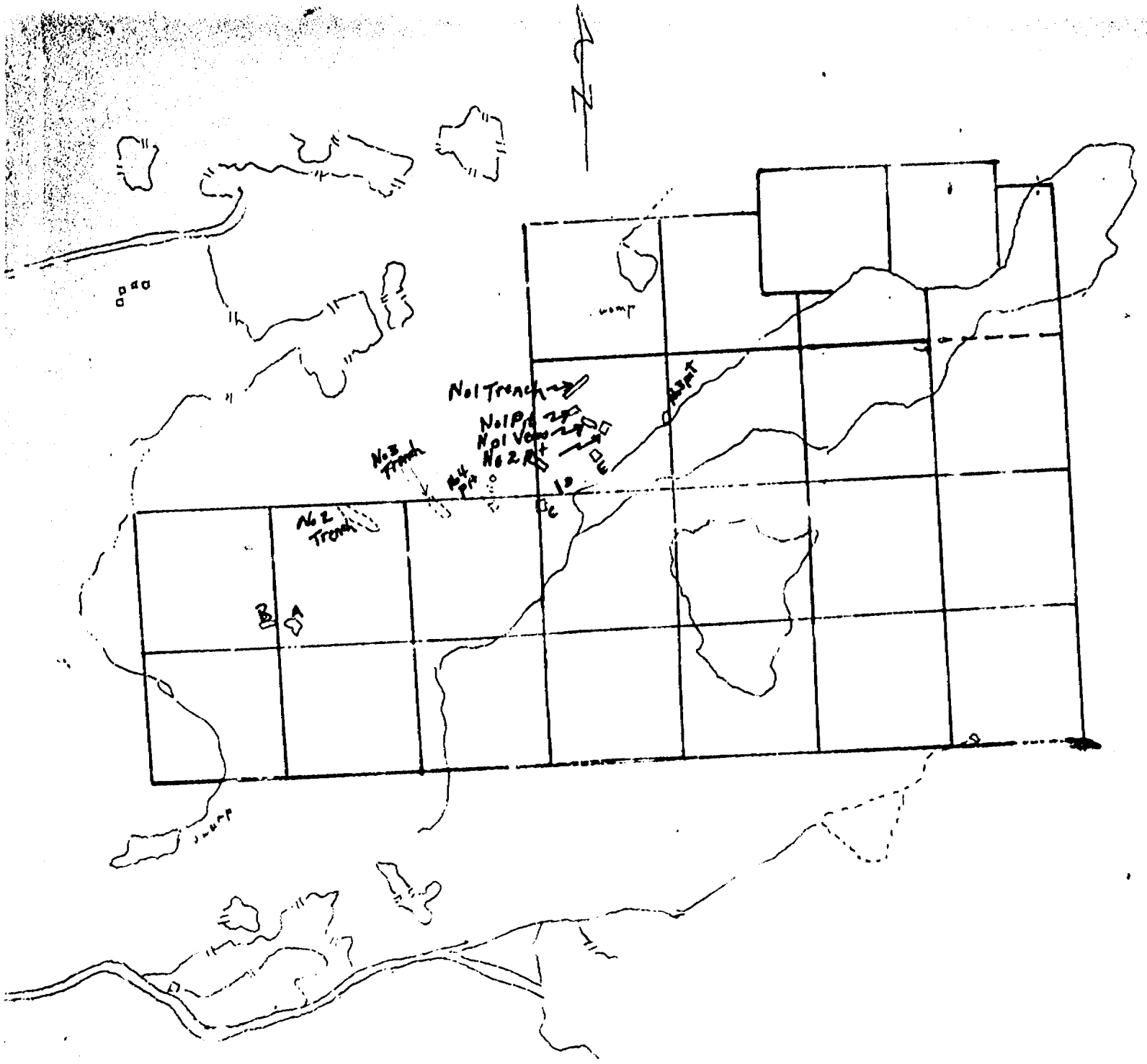
No. 4 - Small Pyrrhotite showings with other sparse sulphides



LEO RICHER PROPERTY
HARROW TOWNSHIP

Scale 1" = 1320'

DES. June 1957


N
No1 Trench
No1 Pit
No1 Vein
No2 Pit
No3 Trench
No4 Pit
No2 Trench
A
B
C
D
E
Swamp
Swamp

PROSCO LIMITED

Subject: Massey Tote Road Mapping Project.
To: D.E. Smith.
From: G.A. Checklin.
Date: September 10, 1957

Mapping of Massey Tote Road.

General Information.

The Massey Tote Road, an old logging road which is little used except by tourists and at the present by a few lumber trucks, runs roughly North from Massey in Salter Twp. to Ritchie Falls in Twp. J, and for most of the way more or less follows the River aux Sables. There are several side roads or tracks. The main ones lead off to Whiskey Lake, Klondyke Lake, Russian Lake and Lac aux Sables.

Traverses were conducted along the main road and all these branches except that to Russian Lake, (which is reputed to run over pine flats and to show no outcrops), and the geology of outcrops along them was mapped.

The road from Massey to Whiskey Lake was mapped in 1924 by O. Vibert Douglas. (Reference: O.D.M. Report Vol. XXXIV Part IV, 1925).

G.A. Checklin and R.N. Saukko spent 8½ days on this project between August 31 and September 9, 1957, to gain an idea of the rocks for correlation with other areas. Besides covering new ground, that part dealt with earlier was remapped in order to check contacts and possible mineralisation missed in 1924.

Geology.

(a) Massey Tote Road North of the Whiskey Lake Road Intersection, and Branches from it.

Outcrops in this section are not numerous but are generally great ridges between which is much glacial drift of huge boulders, boulders and sand, and sandy flats. Diabase dykes were seen in one or two places. Except for the rocks around Ritchie Falls, which show many remnants of the original granite gneiss with a strike of N 85 W, this granite has little structure.

A ridge of gabbro was encountered in this section which is similar to others crossing the road to the South.

(b) Whiskey Lake Road.

Except for a ridge of tough gabbro which parallels the road in the East and is seen in contact with the granite at one point, the rocks along this section are again granites varying between pink and grey, with some pegmatite present locally. Diabase intrudes

this at many places.

(c) Massey Tote Road South of the Whiskey Lake Road Intersection.

For most of the way down to Massey there are outcrops all along the road and the rock types alternate rather often. There is for this reason much material and structure to examine.

South from the intersection there is basic rock for about two miles. It is a gabbro, medium-grained, locally coarse, with some hypersthene locally, as far as can be determined. There are only traces of sulphides throughout the whole body, which forms several ridges. Locally the gabbro is banded, with plagioclase-rich bands of a lighter colour than the rest of the material. Some blasting during road work in this area has exposed fresh rock.

In contact with the gabbro is another zone of granite, some of which is highly felspathic. Diabase is intruded into this, and epidote stringers and lenses are also seen. Paralleling this ridge of granite to the South is another extensive gabbro body with a stringy weathered surface, while fractured surfaces mostly show up platy movement planes. Some rusty patches were visible on the surface, but no sulphide was seen.

Further to the South is a zone of rock which is nearly all orthoclase felspar. Pencil note: (*about 1½ miles across). There is locally just a trace of quartz, but biotite is a little more common and towards the South limit of the type the rock is locally rich in aggregated biotite. Intruded into this are numerous diabase dykes. Blasting along the road has left many fresh sections and the appearance of the euhedral felspar crystals in a matrix of distorted dark material suggests felspathisation of a basic rock. Douglas mapped this as a pegmatite.

Within this mass is a body of intermediate character mapped as diorite on account of its appearance.

Contact phases of felspar rock with basic rock, with felspar growth in the basic and lensing of one into the other, bring this zone to an end, but the next rock type is a felspar-rich granite with phases of dark fine-grained diorite containing blebs of felspar and quartz up to 2". Locally the diorite is the matrix of a breccia of granite fragments. Traces of schist and reticulo-banded biotites indicate the original rock.

Next, a light-coloured, fine-grained biotite-granite with some medium-grained phases is predominant, showing stringers of coarser-grained material which weather as "ribs" on the surface of the outcrop and pass in all directions. This type is again intruded by diabase bodies. A gabbro body containing little felspar succeeds this and is followed by more granite, this time mainly of coarser grain and with lenses of felspar and quartz pegmatite some of which is very pink. The granites are extremely variable

in this section. Many outcrops are of a pink granite with rare biotite and muscovite, the surface of these masses being of a ropy appearance. Diabase bodies are very common. Darker and medium-grained granite invaded by pegmatite is also found. There is one outcrop of massive white quartz which is completely barren, although the contacts were not seen. Further to the South the granite is graphic, and pegmatitic, and wide diabase intrusives cut this. One diabase parallels the road roughly for over a mile.

About three miles from Massey is an exposure of a grey felspathic rock which is probably an anorthosite. Just to the South of this is a greenstone schist (or sheared diabase, a rock type it strongly resembles). There were some rusty spots here, but little pyritic material was found.

From here to the town the outcrops are of mica-schist, with a few basic intrusions. Some of this rock is more gneissose than schistose, very little mica (and occasionally none) being present locally. Some bands are even rather massive. Folding and distortion has taken place.

Within the granites locally are found lenses of greenstone schist. Some of the basic material encountered as bands between granite bodies is also of this nature. In spite of careful examination of all visible contacts there was no sign of mineralisation beyond the small proportion of sulphides normally found in basic rocks, and many of the basic occurrences seen were even apparently deficient of this material.

Local Information.

Ritchie Falls Lodge, a tourist camp, is owned by a Mr. Ferguson who acts as guide to fishermen and to hunters. He has offered to show us some of the country if we are in here again, and this would be helpful as he knows the trails and portages, etc. and it would perhaps save a party much time. He recently took some people in to restake certain claims at the North end of Russian Lake, and says that after looking over the ground they decided not to stake it. There are reported to be radioactive showings there, but as far as he knows this ground is still open. A boat would be needed to see these showings.

A burnt-over area to the South of Lac aux Sables was the scene of salvage logging operations last year, and a watchman is at the camp there now, while four trucks are engaged in taking loads of sawn lumber out to the Sault Ste. Marie district from a large stock which is piled there. The name of the watchman is D. Spooner, and he owns property in Section 11 and possibly Section 14 of Salter Twp. (3½ miles from Massey on the Tote Road, and E about ½ mile). He says there are sulphide showings there, but Prosco has already done geophysical work on this ground.

A man named S. Anderson of Massey spent Labour Day weekend in the Whiskey Lake area "seeing about some claims", but there is no information available about any showings or the location of these claims.

A core box for A type core was seen on the shore of the lake, and presumably floated away from some drilling operation nearby, but it was not marked.

There is a tourist camp on the shore of Whiskey Lake at the end of the road.

No information about El-Pen-Rey operations in Twp. 130 was obtained.

A Mr. R. Boucher, of Derby Street, Massey, (Phone 101), who apparently takes stores in to the camp near Lac aux Sables, said he had property near Massey consisting of two claims which are supposed to have good copper showings on them.

Conclusions.

A gabbro mass seen on the KVP. road in the South of Twp. 118 may continue across country to tie up with that seen on the Massey Tote Road.

The more southerly rocks on the Tote Road are very variable, and compared to rocks on the KVP. road, several new rock types are exposed. This and the presence of a greater proportion of felspar rock and pegmatite may indicate a greater distance from a centre of granitisation. Such may be in the Cutler Creek area to the East of the Massey Tote Road, an area from which some activity has been reported earlier, and this may be a good area to prospect for quartz veins and along contacts with the basic rocks.

Economic Possibilities.

The large-scale felspar body, which locally is very clean, should be borne in mind in case there is some future demand in the area for it as an industrial mineral. The graphic granite may have some decorative value if cut and polished, for instance into plates.

September 10, 1957.

(Sgnd)...Geo..A..Checklin....
Geologist.

PROGRESS REPORT

To: D. E. Smith
From: Holley Hime
Period: 15th - 22nd September, 1957

Piisanen Property - Baldwin Twp. Lot 2, Concession I

This consists of up to ten pits and trenches in SE Baldwin Twp. just north of Highway 17.

The main showing is a series of five pits in diabases and these contain massive pyrrhotite plus lesser chalcopyrite and pyrite. The pyrrhotite is nickeliferous and the chalcopyrite is too scant to be of interest. The largest pit strikes between N 40 degrees E and N 60 degrees E and has a resemblance to a shear running through it - due to overburden little tracing of structure is possible but the writer observes that the general aspect of the host diabase is remarkably unaltered. When mineralization occurs the diabase has high quartz content and a certain actinolite/chlorite development but the ore seems to choose only the siliceous rock. The other pits at the main showing are small and contain only small quantities of minerals. Since structure is poor and the occurrence isolated, late-stage injection of ore-solutions from the parent magma is advanced as an idea for genesis.

To the NE on the E edge of the same outcrop another medium-sized pit is found. This appears to fit in with the overall picture of the above five pits though this one has been drilled and "E" core is lying loose on the ground. What is left there holds no value and no split core was seen. Three "A" core boxes were on the site, empty, and unless some were removed I surmise that only a small amount of drilling was done i.e.: up to 75'.

To the W almost to the limit of the main outcrop 3 more pits are seen. These are all small though in one a good massive occurrence of pyrrhotite was noted over a very small area. Again the story tallies with the above. Just below these to the S and right next to the Highway 17 another very small pit is seen which contains the same minerals in trace quantities and is of little interest.

Summary: The occurrence of the pits is interesting and the massive nature of the pyrrhotite in the main showing is enticing, however, there seems to be no structure or continuity and geologically speaking I don't think the showing warrants further work; results of geophysical work recently completed may disprove this opinion.

Between this Piisanen property and McKerrow in SE Baldwin Twp. just north of Highway 17, lies a large diorite hill. This had one pit ¼ way along its length and up near the top. In certain respects similar to the Piisanen showing it had, in spots massive pyrrhotite associated with much lesser quantities of chalcopyrite, pyrite, but with a little hematite and magnetite. Again this appears more as a plug than of vein-filling of fault/shear filling origin. It is small in size and I think due to its singular (literally) occurrence merits no further work. The pyrrhotite is nickeliferous as tested with dimethylglyoxime.

Harrow Twp. Leo Richer Cobalt Property

The main occurrences occur on D. W. Esson's field sheets and report, but the writer saw two very small pits found by Hough while prospecting the area. These are in the SW part of the claims and are marked on the field sheets. Both lie on a very poor quartz vein striking NW in gabbro. One pit, hardly worthy of the name contains only pyrite, while the other, on close examination, had some chalcopyrite as well. Neither pit I feel is of any value to us.

Foster Twp. Frank Karl Property

Again the main showings are described by D. W. Esson, however, the writer would add that he saw a very large quartz vein of great purity with a width of 40' and a length of at least 400' and at each end it vanishes under overburden, to the north towards the Vermillion River while to the south, presumably after passing across a valley under overburden, it lines up very nicely with the cobalt showing where the adit is on the claim adjoining the E boundary of Karl's claims. Except for its immediate proximity to the cobalt/pyrrhotite showing at the adit this vein appears quite barren. If the two parts do in fact join under the valley its total estimated length cannot be less than 1320'.

Respectfully submitted,

Holley Hime

PROSCO LTD.

Report on showings North of Benny, Ontario, in Monerieff Township.

General.

On September 18, while mapping in the area, G.A. Checklin and D. Munro met Mr. John Erickson of Benny, and during conversation the latter mentioned a showing he knew of on patented ground. The ground does not belong to him. The ownership is not established yet. Following his instructions the party tried to find this showing later the same day, but were not successful. The following day Mr. Erickson acted as guide and took the party via several showings on ground staked last fall to the main showing already mentioned. While there, the party met Mr. C.J. Cryderman, who was tagging claims.

Recent Staking of Claims.

A Mr. C.J. Cryderman of 505 Dixon Street, Peterborough, Ont., an engineer, staked 32 claims to the North of Benny in the fall of 1956, on the basis of reported nickel occurrences mentioned in an old report (? 1897). It was understood that no work has yet been done on the claims, but Mr. Cryderman talked of doing some geophysical work on flat ground within the claim group. The southern boundary of this claim group runs about 1/3 mile North of Benny.

Showings on the Cryderman Claims.

Just N. of the southern boundary of the claim group is a series of showings in banded quartzite which seem to be more or less on strike with each other (at about N 70 E), and occur over a distance of some 800 feet. These all show gossan at the surfaces and have been blasted. The main ones only are detailed.

The main showing is about 20 feet long and 10 feet wide, with arsenopyrite found in much rotten rock. An igneous "breccia" is found near the quartzite and is itself very rotten and weathered. It shows no radioactivity.

About 400 feet to the East of this is the second showing of any size. It consists again of arsenopyrite lenses in quartzite country rock, and these are locally rich (up to 60% arsenopyrite with a little pyrite). Small scale folding is seen.

A further 150 feet to the East is another cleaned area with a blasted showing in banded quartzite, again with the same strike of N70 E. The quartzite surrounds lenses of granite or brownish

quartzite, and of fine grey gneiss. Rusty stain is seen covering the whole cleaned area, but lenses of arsenopyrite are sporadic as before. There has been some distortion folding.

To the North of this showing about 300 feet, a 6"-8" vein of quartz with some carbonate and a little green copper stain was seen. Euhedral crystals of quartz were present. The strike of the vein was N 40E.

A large beaver lake is a feature in this area. NE of the pond there is a rusty zone but only a little pyrite mineralisation. The North boundary of the Cryderman claims runs along the North shore of the beaver lake.

Showing on Patented Ground North of the Cryderman Claims.

The showing pointed out by Mr. Erickson is on patented ground (thought to be known as Mining Location C.R. 52 and C.R. 53), ownership at present unknown. It lies some 200' North of the Cryderman claims, so it is not in a good position relative to property boundaries.

The showing is in banded quartzite, and rust can be traced to the West for about 200 feet and to the East about 100 feet. The width at the showing is about 15 feet. Not all bands are mineralised, but some are rotten as if weathering had removed much original sulphide material.. Arsenopyrite was the only sulphide recognised, but there may be some pyrite. The writer had understood that this was a copper showing. The arsenopyrite occurs in concentrated pockets as well as more sparsely in the bands themselves.

A pit of unknown depth but seemingly over 20 feet deep was excavated. Cryderman thinks the work was done about 1875. Erickson mentioned that in 1932 the property belonged to a man named Gordon, whom he believes also worked on the pit and who may have drilled the showing (although there is now no evidence of this). The debris of the pit is quartzite with arsenopyrite both sparse and concentrated in it, as found around the pit itself. The pit is filled with water.

Conclusions.

The type of mineralisation in this showing does not seem to be important enough to give this property any more attention, but if anything interesting turns up on the Cryderman claims we should find out the owner and prospect his property if possible.

September 23, 1957.

(Sgnd.) Geo. A. Checklin
Geo. A. Checklin.

Notes on a conversation with Mr. John Erickson, Benny, Ont.

Mr. Erickson was rather informative about the area around Benny, which he has hunted and prospected for about 25 years. The following are notes on some of the points he brought up.

1. Iron found in Munster Township (magnetite and hematite) has been diamond drilled.

2. Erickson was employed for a while as a prospector and staker on ground near Selwood in Hutton Township, where there is supposed to be uranium in a conglomerate. Possibly this was part of the Capreol staking operation.

3. He says that most of Lake Onaping is in granite except for a band of what he thinks is Cobalt conglomerate, but there is a different group of rocks at the North end. The Department of Lands and Forests maintain a road from Ruel on the CNR line to the North end of this lake, for fire prevention purposes.

4. Low Water Lake (Baynes Twp.) also has a group of rocks different from granite at the North end. Erickson could not indicate what these were.

5. Erickson had claims in 1932 in Rhodes Township. The southern half of this township has now been staked by Hanna Iron Company, and they are reputed to have drilled extensively and to have shown up a large iron orebody there.

6. A Mr. Dumont of Cartier has 14 claims in Ermatinger Twp. (Weequed Lake-Ministic Lake area), with a good copper showing on one of them. INCO has claims in the Armstrong Lake area to the SE., which it has been drilling recently with reported good results. The ground between Dumont's and INCO's has recently been staked, but the staker is not known.

(An examination of the Dumont showings was made, and they are discussed elsewhere).

September 23, 1957.

(Sgnd.)..G.A.C.....
G. A. Checklin.

PROSCO LIMITED.

Dumont Showing

Ermatinger Twp.

Date: September 20, 1957

Hole No: Chip Sample

Pit No. 5

Result: 0.20% Cu.

Sample: 301

Sample Length: 25 ft.

Remarks: Basic intrusive with chalcopyrite and pyrrhotite in pockets and blebs.

Assay for: Cu.

(Sgnd. Geo. A. Checklin.

PROSCO LIMITED

Report on the Dumont Showings, Ermatinger Township.

Pencil note: (September 23, 1957)

General.

Mr. A. Dumont owns the Red & White grocery store in Cartier, Ontario. He has 14 claims in Ermatinger Township (90799-800-01-02-03-04; 94905-06; 89436-37-38-39-40-41) and the showings concerned are some 200 feet from the No. 2 post of claim no. 89437 and near the S. boundary of the claim.

The showings can be reached from the Ministic Lake road. About 3½ miles to the South from the intersection with the Fox Lake road is a logging track which leads off to the West. This narrows to a footpath, and about 1/3 mile from the turn-off is a small pit blasted into diabase. The claim posts are about 200 feet W. of this, and the showing another 200 feet further to the West.

Showings.

Pit No. 1: This is about 7' x 7', with an additional E - W shallow trench cleared to expose the rock surface in the West. The showing was blasted into granite which shows intense leaching on blocks apparently from the surface. A body of sulphides, (chalcopyrite and pyrite), about 4 feet in width on the South wall cannot be traced along the bottom of the pit (at present containing about 1 foot of water) towards the North, nor is it found on the North wall, so the sulphide concentration appears to form a pocket. Dumont had one sample assayed by a friend who works in the INCO assay office, with a reported 17% copper over 4 feet. Pencil note: (According to Mr. Dumont the 17% sample comes from Pit No. 5). The sample probably came from this zone, which is locally very rich in chalcopyrite. The granite is coarse and slightly pink, with a little basic material in cracks and fractures. Some of the cracks are mineralised with chalcopyrite and pyrrhotite, which also occur as isolated blebs and as specks in the granite.

Debris from the pit shows rich pyritic material with green copper stain. There are pyrrhotite, chalcopyrite and octahedra and pyritohedra of pyrite present.

Pit No. 2, is a small pit 4 feet wide to the S of No. 1. There is gossan and sulphide in local pockets, but no definite vein visible.

Pit No. 3, about 15 feet West of No. 2, and slightly South, is 6 feet long. A basic dyke of 12" - 18" width crosses it. This is rotten and rusty, but shows little but traces of sulphides.

Pit No. 4 is 70 feet South of No. 1. It is a small test pit, and a little gossan is present, but nothing else.

Pit No. 5; This is 130 feet South of No. 1, and is about 40 feet E - W, and 3 - 5 feet wide. Pencil note: (Sample No. 4). The rock is an intermediate or basic intrusive, apparently running SE. It is in contact in the East with granite, but in the West passes under a 75 feet wide swamp, with a granite ridge on the other side of this flat land.

Chalcopyrite and pyrrhotite mineralisation occurs in pockets and is disseminated through the basic. Felspar phenocrysts are also found locally. The basic is not a typical diabase, but more like an andesite. It seems to be locally hybridised with some of the granite.

A quartz vein 1' - 2' in width and parallel with the strike is barren, though it contains basic material with sulphide traces, and near the contact are more such traces. Pencil note: (Sample #3).

Geology.

In the area are several diabase dykes cutting the granites, but they have no visible connection with the above-mentioned basic type, which is more of an andesite than anything else. Several small bodies of basic material can be seen to finger out against the granite. These seem to be extensions of this basic dyke along fractures in the granite. They contain a little sulphide.

Mineralisation is evidently associated with the basic dyke. Fractures formed during intrusion or earlier acted as pathways for solutions, and the granite seems to have been a favourable material for deposition of some of the sulphide matter.

The INCO property around Armstrong Lake would appear to be roughly on strike with the basic intrusive mentioned above. They have apparently located an orebody there, and this fact makes this property worth a better look, especially in view of two unknown factors, i.e. the extent of the basic under the swamp to the West and the almost unexplored contact of the basic with the granite. As far as is known, the only work done has been on the showings, and the rest of the claims may not have been well prospected. Pencil note: (Patches of granite in the swamp).

Possible Deal.

According to Mr. Dumont, several groups have approached him to try to secure options on the property with the idea of working on it, but none of them wish to make a down payment. He feels that as he has done a considerable amount of work on the showings, he wants a visible return on it as soon as possible.

The writer thinks he would probably come to an agreement with us if a payment were made in the beginning. The usual Prosco

option agreement may well be quite satisfactory, and enough work could be done in one month to show the potentialities of the property at the cost of about 100 dollars in payment to Mr. Dumont for that month.

Recommendations.

Trenches testing along the contact, further sampling, and, if the swamp nearby proves extensive, a short geophysical exploration program over it, are recommended if the property is optioned. Prospecting of the other claims in the group is also indicated. Pencil note: (No picket lines or line cutting required).

Note.

A test for nickel on several pieces of rock of the sample taken for assay showed negative. The sample is from Pit No. 5, taken from the basic material only, Pencil note: (and is numbered No. 30.

September 23, 1957 (Sgnd.) Geo. A. Checklin.

Pencil Note:

March 29/60

Harry:

We did not do much on this property due to the fact that our sampling gave low assays.

(Sgnd.) Don Smith

PROSCO LTD. - MURRAY PROJECT Sept. 24/57

Progress Report

Subject: Geological mapping
Period: Sept. 16-22, incl.
To: D. E. Smith
From: D. W. Esson

Summary:

All mapping and checking on the Murray project has now been completed. In addition, the Piisanen property in Baldwin Twp.; the Karl property in Foster Twp. and most of the Richer property in Harrow Twp. have been mapped. One half day will be required to finish the map of the Richer property.

Hime departed on Sept. 22, which leaves only one geologist on the eastern half of the Murray project. Checklin and Munro completed the road traverse, north of Sudbury on Sept. 22.

The F. Karl Property: Foster Twp. 11 claims, Con. V, Lots 11 and 12

The main trench on this property contains an apparent quartz vein which has been brecciated and intruded by sulphide mineralization, primarily slightly nickeliferous-pyrrhotite and minor chalcopyrite. Assays of the vein material have returned low values, in the order of 0.05% Ni and 0.10% Cu. The vein striking N-S lies in brecciated quartzites. No strike length could be determined due to overburden. The vein is approximately 2 ft. wide and dips steeply east.

This vein lies just to the north of a rather tight lineation which strikes north-easterly. Another uninteresting showing lies along this lineation to the east of Brazil Lake. This showing is either on the southern boundary of Karl's claims or lies wholly on the patented lot south of the claims; in either event the southern property would have to be acquired before further work was undertaken.

The narrow width, low assays and tightness of the structure do not make this property attractive on its own.

To the east of Karl's property, and adjoining it, is a patented claim, No. S 4875. On this claim is an adit which has recently been worked. Mineralization of pyrrhotite, chalcopyrite and cobaltite is contained in a large quartz vein in a gabbro mass. The vein is 30-40 ft. wide and may be traced along the N-S strike for over 1 claim length. In the vicinity of the adit the vein has been offset 30-40 ft. and is very brecciated. The massive, non-nickeliferous pyrrhotite is apparently contained solely within the vein. However, the cobaltite is confined to zones of massive feldspar and/or actinolit

Several diamond drill holes have been put down around the showing. The area is spotted with core of gabbro and barren quartz although only 1 drill hole collar was located.

The vein disappears in overburden immediately to the south of the showing. Along strike to the north, the vein is mainly barren although one pyrrhotite showing within the vein was found about 1000 ft. north of the adit.

It would seem doubtful that an orebody could be developed within the vein as previous work has probably tested the vein both north and south. However, some work on relationship of the ore to the vein should be warranted. If the ore is post vein, as appears to be the case, a magnetometer survey of the surrounding area, especially the swamp to the south, would pick up any concentrations of pyrrhotite with which the cobaltite appears to be associated.

In summary, this is one of the most attractive surface showings I have seen all summer. At the least, a more detailed examination should be completed, and a preliminary discussion with the owners of the claim re an option. Some ground surrounding the patent is open for staking.

Picket lines running N-S were located on Karl's property although none were found in the vicinity of the adit.

Richer Property; Harrow Twp.

To date, only the cobalt showing on this property has been mapped. A detailed report of this property will be included in next week's report after the mapping is completed.

In brief, the cobalt showing is not of interest as the strike length of mineralization is too limited.

Respectfully submitted,

Donald W. Esson

PROSCO LIMITED.

Subject: Mapping of Roads to the North and North-West of Sudbury
To: D.E. Smith.
From: G.A. Checklin.
Date: September 14-21, 1957.

Mapping of Roads North and North-West of Sudbury.

General Information.

This project was a continuation of the mapping of roads in the area, and followed mapping of the KVP road through the main part of their concession, and of the Massey Tote road.

The roads mapped this time are those of the system West and North of Levack, that is, (a) Highway 544 from Levack Station to Cartier, and branches from it to Fox Lake in Twp. 107, and to Ministic Lake in Ermatinger Twp.; (b) the road from Cartier to Benny and the branch to Geneva on the CPR. line; (c) the road from Benny E to the region of Venetian Lake in Tyrone Twp. (part of which is a private KVP. road) and the branch to the Bannerman Dam at the South end of Lake Onaping; (d) The Foy Mine Road from the Nickel Offset Mine for about eight miles to the South.

G.A. Checklin and D. Munro spent 7 working days on this project, from September 14-21, 1957. Mapping was taken to just South of the contact zone of the Sudbury Basin rocks, which have been extensively mapped earlier by both mine and Mines Department geologists.

Showings in the area of Benny and another showing on claims in Ermatinger Township belonging to Mr. A. Dumont of Cartier were visited. Reports on these are given separately but are attached to the present one.

Previous Work and Reports.

F.F. Osborne mapped the Cartier-Stralak area in 1928, extending work done by T.T. Quirke in Moncrieff and Hess Twps. around 1921. A map and report are contained in the 1929 ODM. report (Vol. XXXVIII, Part 7, 1929).

Geology.

Between the Sudbury Basin contact and 3 miles North of Cartier the rocks are granites and diabase and other basic intrusives, some of the latter probably being allied to the Sudbury norite. To the

North of Benny, granites again come in along the Bannerman Dam road. Between these main granitic areas are a group of gneisses, metamorphosed sediments and volcanics. There are many basic intrusives (diabase, gabbro and diorite).

Some difficulty was encountered in naming many of the rock types in the highly metamorphosed group. Although described in the notes taken during mapping, outcrops were marked in on the map in the standard legend colours of their nearest equivalent. Thus arkose was mapped as quartzite, and the distinctive fine-grained hornblende-gneiss and similar rocks were grouped with diorite, but marked as gneissic. A group of fine-grained blue rocks has been shown as volcanics.

Many of the metamorphosed basic rocks contain a fair amount of pyrite and a little chalcopyrite, and a few showings as well as the Geneva Mine property are found in these. The basic intrusives contain a little sulphide material, but nowhere were they found to be important in quantity.

Among the sediments is a limestone schist about 30 feet wide and striking N 60 E, and a little massive limestone with banding shown only on the weathered surface. Pyrite crystals were noted on one weathered face, otherwise the limestone seemed quite pure. A diabase dyke was intruded along the northern contact. Conglomerate was found on the southern contact. This limestone is found on both sides of the road and is about 11½ miles East of Benny.

In the area South of Geneva are some hard white quartzites and a gritty conglomerate.

In none of the rocks was any notable radioactivity found. Some of the granites had a slight radac increase over background. The sediments were all barren, except for one showing to be mentioned later.

There are numerous bodies of intrusive breccia, mostly narrow dykes, and they are very common near the Sudbury Basin contact. They are very fine-grained, generally dark blue on the fresh surface and they usually contain finely disseminated sulphide throughout. A similar type with sulphides round the included granitic fragments has been found as boulders in the Espanola area, and may come from similar intrusives around the Sudbury Basin area.

Near Fox Lake in Twp. 107 two lamprophyre dykes were found, made up mainly of biotite and carbonate. The nearby granites were locally syenitic, (fenitised in a similar fashion to the carbonate-contact granites of the Seabrook Lake area).

Showings.

8 miles NE. of Benny along the road (less than ½ mile inside the KVP. gate) there are two sections of hornblende-gneiss with a strike of N 60 E and dip of 70 S with a band of siliceous gneiss

between them. Along the contact there is much rust due to weathering of pyrrhotite and pyrite. This showing has been trenched and pitted and it can be easily seen from the road. The rusty zone seems to peter out along strike to the North. Munro reported a slight increase in radioactivity here.

1/10 of a mile to the West is another and similar showing, with however, less work done on it.

The Geneva Mine.

About 7 miles along the road East from Benny is the Geneva Mine, which has been closed for several years. Across the road to the North of it is an old pit and a deep trench exposing pyrite in dark gneiss, and which appears to be development work connected with the mine. A pile of branches in one place may mark a mine vent. The country rock around the mine is a similar dark gneiss. Fragments of rock found on the dump also included (a) White quartzite with muscovite crystals here and there, (b) Chlorite schist, (c) Biotite-mica-schist, (d) Muscovite schist, (e) Quartz-intruded gneiss. There is a considerable quantity of sulphide-bearing rock on the dump. Sulphides identified were: Galena, Chalcopyrite, and Pyrite, with possibly some Arsenopyrite. No Pyrrhotite was distinguished.

Conclusions.

The band of metamorphosed gneisses, sediments and volcanics East of Benny appear to link up with similar rocks encountered during the KVP. road traverse done some weeks ago, which lay to the East of Camp No. 1 in the centre of the KVP. concession. As sulphides have been found in them in minable quantities, this belt is an obvious one to choose for further prospecting, preferably preceded by mapping. (During the winter, air photographs of the region should be studied in case they throw light on structure).

The intrusive breccias near the Sudbury Basin contact should be studied where they are extensive, as locally the inclusions may have acted as centres for deposition of sulphides.

The lamprophyre dykes found near Fox Lake are interesting and the area should be looked over for others and for a centre from which they may have been intruded over a wider area.

The limestone and limestone schist mentioned above should be investigated both for purity and extent along the strike. Although only about thirty feet wide, a good length and fair purity might make this a useful deposit in connection with uranium concentration.

Note on Mr. John Erickson of Benny, Ontario.

During the mapping the party met Mr. Erickson, who proved to be both helpful and knowledgeable. If we need anyone in that area to do some work for us, he would be an ideal person to contact. He has prospected the area over about 25 years and intends to continue. Though not on the telephone he could, no doubt, be contacted through the railroad foreman in Benny and by mail.

Claim maps for Ulster, Munster, Moncrieff and Hess Townships have been sent to him and he says he will contact the writer if he finds anything interesting.

September 24, 1957

(Sgd.) Geo. A. Checklin
Geo. A. Checklin.

PROSCO LTD. - MURRAY PROJECT Sept. 16/57

Progress Report

Subject: Geological mapping
To: D. E. Smith
From: D. W. Esson
Period: Sept. 9 - 15 incl.

Summary:

All geological mapping has now been completed with the exception of a small area in NE May Twp. which will require ½ day's work. Hime discovered a copper showing in this area which may be of interest as there is an EM anomaly nearby. (See Hime's report, appended)

The core from D.D.H. No. A-1 has been logged to 600 ft. and is now stored at the Alexander farm, in May Twp. Scattered mineralisation of pyrite, pyrrhotite and chalcopyrite is consistent throughout the core but no economic intersections have been cut to date. The hole has been drilled too steeply and should now be brought to a flatter angle.

Dip needling in Baldwin Twp. has now been completed. On the Piisanen claims, there is a weakly anomalous trend running NE, centred on the nickel-showing pits. This zone could have some extension to the SW. This looks interesting but will be checked when the EM and mag. results are received. Pencil note: (Sample - 0.20% Cu and 0.93% Ni).

Dip needling east of the Hime claims in Baldwin Twp. has revealed two anomalous areas, both apparently on a tongue of Diorite. One of these anomalies is quite strong, and while quartzite outcrops in the area, the diorite contact is a matter of feet away. This whole area has been noted before as showing considerable rusting and interesting structural possibilities. A small amount of EM work is to be done in the area after which the whole area should be reconsidered. The only pitted showing in the area showed massive, non-nickeliferous pyrrhotite and very minor chalcopyrite.

Assay results which were returned this week from the Plum (Baldwin) drill core showed only 0.07% Cu and trace Ni with no other interesting values.

The core from Mining Endeavor drilling in Lorne Twp. (showing 23) was logged and the best mineralization sampled. The showings themselves do not show much continuity although the mineralization of nickeliferous-pyrrhotite and chalcopyrite is quite strong. Results from the drilling look poor; no assay results have yet been received.

The geological staff on this project now consists of only 2 men, and 2 others on outside work.

Respectfully submitted,

Donald W. Esson

Prosco Limited

Subject: Mapping in Cobden and Thompson Townships from September 26 - 30 inclusive.
To: D. E. Smith.
From: G. A. Checklin.
Date: September 30, 1957.

General

The party, consisting of G. Checklin and D. Munro, left Espanola for the Iron Bridge area on Thursday, September 26, and proceeded directly to the area South of the Mississagi River to map in Cobden Twp. in continuation of the mapping done there during August 1-3. On succeeding days, work was extended westward into Thompson Twp. and at the date of writing is in progress around Dean Lake.

Personnel Arrangements.

The party is staying at Milligan's Motel in Iron Bridge and as from October 1 will have all meals with Mrs. Ray Walker close by, at a cost of $2.75 a day per person, with the proviso that this rate is to be raised to $3.00 if she cannot provide proper meals at the lower amount.

Geology.

Much gabbro along the South shore of the Mississagi River apparently cuts a dark impure gritty quartzite with a few pebbles and boulders in it, which is picked up again further to the West. One small blasted pit was found where many thin and distorted quartz veins cut this gabbro, but the poor gossan zone was apparently due to a little pyrite as far as it was possible to see, and this showing is not thought to be important. A check is required on the quartzite noted above, which may in fact be the Gowganda conglomerate.

Gabbro occurs in numerous dykes cutting granites which occur to the SE. and S. of Dean Lake hamlet and extend to the NW of it also. These two rock types appear to form the South wall of the projected fault, while quartzitic sediments are found in the North wall. Mapping in this area has not been carried far enough in the five days of the period to indicate any further tendencies in structure.

A large and well-marked anomaly about ½ mile due S. of Dean Lake hamlet is apparently due to a low overburden-covered ridge in the middle of a very large swamp. Two small granite outcrops were found along the N. side of the ridge, but it is not known what underlies the major part of it.

Mapping has so far been confined to within a zone about ½ mile on each side of the fault. This will be extended each way if necessary. To the S. there is much gravel and swamp and outcrops are few and difficult to locate.

September 30, 1957 (Sgnd.) Geo. A. Checklin

PROSCO LTD. - MURRAY PROJECT Sept. 30/57

Progress Report

Subject: Geological mapping
Period: Sept. 23-30, incl.
To: D. E. Smith
From: D. W. Esson

Summary:

During this period all mapping contemplated, on the eastern Murray project was completed.

Richer Property, Harrow Twp. 19 claims, Con V, Lots 5,6,7 & 8
Main Cobalt Vein and Related Veins

Lying within the gabbro ridge on the northern half of this property, are a number of acid veins, usually of quartz but sometimes resembling granite. These veins strike northwesterly and have steep dips. Many pinch out within a few 10's of feet although some are more continuous. Occasionally these veins have local concentrations of sulphides, chalcopyrite, pyrite, pyrrhotite, arsenopyrite and a cobalt mineral, possibly cobaltite.

The main cobalt showing occurs in one of these veins which is wider and more strongly mineralized than usual. At the pit the main vein is 2½' wide, with cobalt mineralization extending an additional 2½' into the footwall. Samples across the vein at the pit gave 1.7% Co across 4.6 ft. The mineralization dies out within 20 ft. to the SE although the vein can be traced for 50 ft. To the NW the vein is covered by overburden. The contact of gabbro and quartzite lies a maximum distance of 125' NW of the pit. These veins were not noted to cut the quartzites on this property and I feel it is safe to assume that the maximum, possible mineralized length of the vein would be 125'. In view of the sudden drop in values along strike of both this vein and other veins in the area I very seriously doubt that mineralization would extend for even 25 ft.

Due to the local, erratic occurrence of mineralization I would not recommend any further work on these cobalt veins.

Nickel Showings

The nickel showings occur mainly within the mass of gabbro although the occasional occurrence of pyrrhotite, with and without nickel, occurs in the wall rock of the acid veins as above.

The smaller nickel showings may easily be seen to be lens-shaped, one which was pitted had an extent of 4' x 1' wide x 2' deep. It is my opinion that even the main nickel pit is len-like although one end is obscured by overburden. Mapping also revealed that there is no favourable structure near the main showing.

In summary, the combination of lens-like occurrences, poor structure and low (< 1%, Cu + Ni) assays do not make these nickel showings worthy of further consideration.

Respectfully submitted,

Donald W. Esson

MEMORANDUM TO - D. E. SMITH OCTOBER 24, 1957.

FROM - M. E. HOLT

RE - DUMONT PROPERTY, ERHATINGER TWP.
REF: CHECKLIN REPORT - SEPT. 23/57

General

The writer visited the Dumont property Thursday, October 10th, guided by Mr. A. Dumont of Cartier, Ont. Access and descriptions are covered in the Checklin report. The purpose of the second visit was to sample and re-inspect the reported showings. Apparently Checklin was a little pushed for time since this property examination was not on his schedule.

Title & Present Status of Claims

90799 to 90804 (inclusive)		
	Staked Nov. 1/55	transferred
	Recorded Nov. 18/55	to Dumont
	Work - 40 days recorded Sept. 12/56	
94905 & 06	Staked Mar. 23/56	
	Recorded Apr. 16/56	
	Work - 40 days recorded Sept. 12/56	
		Dumont
89436 - 41 (inclusive)		
	Staked Sept. 24/55	
	Recorded Oct. 4/55	
	Work - 40 days recorded Sept. 12/56	

* Extension granted Oct. 8/57 to Oct. 3/58.

Sampling

Sample #1 This sample came from a showing not reported by Checklin and located approx. 1000 ft. to N.E. of the main showings. A small pit had been blasted into the granites where no basic intrusives could be found in that immediate vicinity. The iron and copper sulphides were accompanied by small quartz stringers. Selected specimens showed a fair percentage of copper. There was no surface extension of the mineralization. Pencil note: (.05% Cu.)

Sample #2 Location - Pit #1 (Checklin Report)
A grab sample was taken from what Checklin referred to as "sulphide mineralization in the pocket form". It was difficult to affix any width to this and it was also accompanied by a good percentage of quartz. At the time the pit was dry and as Checklin concluded in his descriptions the rest of the pit showed only a trace of mineralization.

Sample #3 This sample is reasonably representative of the quartz vein - taken across the 1 to 2 ft. From what could be seen it was thought to contain only a trace of sulphides.

Sample #4 Selective grab samples were taken near the contact of the granite and basic intrusive. There appeared to be very little continuity to the mineralization within the pit and no apparent tie in with the pits further to the north other than somewhat similar geology. Pencil note: (1.5 to 2% Cu; Nil Ni.)

Comments

Excepting the property's proximity to Inco's ground and reported drilling results, the showings in themselves are anything but encouraging. It's the writer's thought that if Inco met with any success it was done on the strength of deep drilling in closer to the basin contact. There is a large area of granite east and towards the basin with a number of dykes paralleling this particular host dyke.

A company called East View mines are thought to be neighbours immediately to the south. They have reportedly carried out geophysical and preliminary exploration work - presently getting ready for a drilling program. Their field man was in to see the Dumont property (and also do a little partridge hunting on the side). He did not approach Mr. Dumont with any deal to date.

* It should be noted that the outside 6 claims appear to be coming open November 19/57.

Assays

Sample #1 has been sent to X-Ray Lab for a copper assay.
Pencil note: (0.05% Cu.)

Sample #4 has also been sent for a Cu. & Ni. assay.
Pencil note: (1.5 to 2% Cu., no Ni.)

The other two samples will be held till the results of the first two are known.

Possible Deal

G. Checklin neglected to mention that Mr. Dumont is quite deaf and a little short in English. He had no ideas himself as to a possible deal but showed me some figures his partner had scribbled on a piece of paper -"$1,000 down, $5,000 in 6 months and $5,000 at the end of 1 year". It was explained to him that this would likely be out of the question and after a lot of shouting and repetition he suggested that my principals make an offer if they're interested and mail it to him.

It is the writer's opinion that this area be kept in mind but no immediate action taken.

MEH:JTM

M.E.H.

PROSCO LTD. - MURRAY PROJECT Nov. 1/57.

PROGRESS REPORT

To - D. E. Smith

From - D. W. Esson

Period - Oct. 1-31 incl.

Summary

During this period the major portion of my time was spent in company with D. E. Smith on supervision of the company's diamond drill on D.D.H. No. A-1. This work consisted of logging and sampling the core; drawing sections and plans; and taking dip tests. Much time was lost at the drill due to breakdowns and trouble mainly caused by breaking rods. As of the 31st of Oct. all core was logged and sampled for a length of 1210 ft. Hole A-1 is still drilling towards its anticipated final depth of 1300 ft.

By my calculations the drill is now well into the area covered by the E.M. anomaly. Mineralization remains extremely sparse. A strongly magnetic dyke was cut from 930 ft. to 1065.5 ft. which apparently had given rise to the magnetic anomaly located by Sander's crew. The main rocks cut to date are mica schist of probably impure quartzite origin and quartzite. Numerous quartz veins, mainly barren, have been intersected and sampled for gold and silver. No assays have yet been returned which ran higher than trace in gold and very minor silver. Results are still awaited on the last seven samples.

Proposed D.D.H. No. B-1, on the Vance option, May Twp., was spotted and profiled. This hole is to be approximately 450 ft. long, to cut an E-M anomaly, 2 magnetic anomalies and pass underneath an old shaft.

Part of two days were spent on the Clarke claims in Baldwin Twp. in an attempt to locate the old Plum drilling in relation to Sander's geophysical maps. This has not been possible to date, due apparently to poor orientation of the geophysical map. Consequently we have not been able to determine whether or not the old drilling cut our E-M anomaly.

The most southerly magnetic anomaly south of the school in Baldwin Twp. was located and staked out on the ground in preparation for a possible drill hole. A preliminary talk with Vaino Oman re an option was not productive.

Reports and maps of the Karl property in Foster Twp. and the Richer property in Harrow Twp. were completed, copies of which will be forwarded to the property holders. Neither property is considered by the writer to be of further interest to this company. Assay results from the Turpeinen property in Lorne Twp. were sent to Wm. Turpeinen.

The E-M anomalies on the Houle property near the Sables River in Salter Twp. were investigated. No further work is warranted on this ground until the geophysical survey is extended.

The anomalies on Currier's ranch in May Twp. were investigated and a preliminary talk was held with Mr. Currier re an option. No outcrops were located in proximity to the anomaly. Mr. Currier appears to be agreeable to an option.

The anomaly in the field near or on the Cable Copper holdings in NE May Twp. were investigated. This anomaly apparently was discovered by Cable's resistivity survey and probably has been drilled. The core from Cable's drilling was located and checked. Some interesting intersections had been cut apparently in the vicinity of the showing. The assumed hole into the anomaly located in the E-W trending field did not cut any values.

Showings Investigated

Showing E4 - Wilson Lake, May Twp.

A brief examination of this showing was made on Oct. 18 by D. E. Smith and the writer. A pit had recently been blasted here by A. J. Alexander, on a narrow, mineralized fissure in impure quartzites. Mineralization of massive chalcopyrite is apparently associated with quartz veining. The tight structure of this showing precludes any value in itself, however, it is interesting in that it adjoins the West Lake Fault and is close to an E-M anomaly discovered under Wilson Lake. Further E-M prospecting is planned for this area.

Teasdale Showing

A very brief examination was made of a so-called nickel showing on Devil's Lake in Salter Twp. This showing turned out to consist of one pit on a lens-shaped mass of pyrrhotite. Nickel tests were negative and only traces of chalcopyrite were found.

Showing 20 - May Twp. Con. VI, Lot 1, N½

This showing of chalcopyrite and pyrite in sheared and shattered quartzite was mapped and described by Hime during July. E-M lines were also run over the showings with no anomalous results.

Maki Property, Drury Twp. Pencil Note: (E.J. Maki, R.R.#1, Worthington, Ontario)

This property, containing 19 claims, is situated in Drury Twp., comprising the N½ of lots 8 and 9, Con. III and parts of Lots 9, 10 and 11, Con. IV.

Several pits, comprising a nickel showing located in Gabbro mass, were visited. Nickel tests on selected specimens of massive pyrrhotite yielded weak to negative reactions; chalcopyrite was sparse to non-existent. The structure was exceedingly tight. One specimen has been sent for a nickel assay, the results of which are not yet available. Pencil note: (0.63 % Ni.)

The uranium showings consisted of a few small lenses of pyritized conglomerate and some narrow, weakly pyritized shears in massive, sericitic quartzites. Widths of radioactivity were very small and radioactivity, as measured on a scintillometer, was weak.

A copper showing in the north eastern part of the property was also visited. One small outcrop of quartzite had been exposed which contained disseminated chalcopyrite in several bands. Exposure of the quartzite was very poor, however, one of the bands was exposed 15 ft. along strike, where it was only sparsely mineralized. I doubt that the best mineralization would run better than 3-4% Cu. over narrow widths and most would be well below this figure. Maki plans to do some trenching on this showing, the results of which might be worth examining if a man were in the area.

In summary, none of the showings on this property are worthy of any further work in this writer's opinion.

The property adjoining to the NW, that owned by Maki is held by a group of Americans who have done a fair amount of work, mostly trenching, on some radioactive showings. The main trench showed two narrow bands of pyritized conglomerate separated by several feet of slightly pyritized, weakly radioactive quartzite. Five samples were cut from their trench, the results of which have not yet been received. A copper showing of chalcopyrite in quartzite, on the same property, was also visited. Mineralization was quite strong, probably running over 5% copper across 2 or 3 ft. This zone could not be traced along strike. The showing lies along the face of a cliff overlooking a swamp which is reputed to be underlain by an airborne magnetometer anomaly. It is my opinion that the best hope for this property would be in investigation of the base metal possibilities beneath the swamp. The Americans are reported to place the value of their property in millions of dollars, which is certainly not the case. Rio Tinto is reputed to have been interested in the property but not at the price asked.

Respectfully submitted,

Donald W. Esson.

Pencil Note:

March 29/60

Harry:

(This property was optioned by Steve Romans Cody-Reco Company in 1958, (Jan. or Feb.) and drilling and other work done under supervision of Ralph Benner. Property turned out not too good.)

(Sgnd.) Don Smith

PROSCO LTD. MURRAY PROJECT

Summary Report for November, 1957

To: D. E. Smith

From: D. W. Esson

SUMMARY

The principal work accomplished by the writer during this period consisted of supervision of diamond drilling. Holes No. A-1 and B-1 were completed this month. Nothing of economic importance was intersected in A-1. A narrow width of copper mineralization was encountered in B-1 but was too low in grade to warrant further work.

Two properties were examined by D. E. Smith and the writer, brief notes on these properties are appended. Nothing of interest was found on either property.

Several days were spent cutting lines on the Currier property in May Twp. and the Clarke claims in Baldwin Twp. E.M. and magnetometer surveys were conducted by Geo. Sander and various helpers, including D.H. James during the period November 23 - 29th. This work was performed near the Sable R. on the Currier ranch and in the north eastern portion of May Twp. and on the Clarke Claims in Baldwin Twp. The anomalies previously located near the Sable R. and on Currier's do not warrant further work as a result of these check surveys. No anomalous conditions were found in N.E. May Twp. The previous anomaly in Baldwin Twp. was accurately located and will be drilled during Dec.

A plan of the West L. fault area was drawn and submitted to the head office with recommendations for additional geophysical work. Part of this work has been completed as outlined above, the remainder awaits the freezing of swamps and lakes.

In view of the poor results from D.D.H. No. A-1, several of the options in the Alexander option group were terminated. Those of Vance, Gordon, Witty and Caldwell were retained pending the results of D.D.H.'s B-1 (now known, see above) and C-1, the latter on the Witty nickel showing (E-3).

The field staff on the Murray Project has now been reduced to one man.

DIAMOND DRILLING

During this period, D.D.H. No. A-1 on the Alexander Option was completed to a depth of 1429 ft. Rocks cut by this hole were predominantly schist quartzite and basic intrusives. Although all quartz veins were sampled for gold and silver, nothing of economic importance was found.

D.D.H. No. B-1 on the Vance option was collared and completed at a depth of 400 ft. during this latter part of the month. The quartzite-chlorite-quartz vein horizon, as indicated on surface, was cut at a vertical depth of 140 ft. or at an inclined depth of 345 - 363 ft. in the hole. One 18 inch width contained considerable chalcopyrite with lesser amounts of the same mineral scattered through the zone. A 3 ft. sample of the best mineralization returned values of 1.1% Cu; 0.20 oz./ T Ag; 0.005 oz/ T Au. This amount of mineralization is not considered to justify further work on the property.

PROPERTY EXAMINATION

Showing E-30

This showing, mentioned in a previous report, on the Karl property in Foster Twp., consists of a cobalt-nickel showing located in a large quartz vein. The owners of the property had done considerable diamond drilling and one adit approximately 120 ft. long had been driven to explore the vein. My original examination of the property had been rather hurried and I felt that a further examination was warranted.

The recent examination showed the previous work to be more extensive than originally thought; as a result the property is no longer of interest to this company.

Tom Rock Mines Ltd.

The so-called nickel-copper property of this company, near Espanola in Merritt Twp. was examined by D.E. Smith and the writer. Much of the drill core and the showings were located and checked. Nothing of interest was found, nickel tests were all negative and copper mineralization extremely sparse.

PERSONNEL

Work on the western portion of the Murray Project was terminated on November 20th when Checklin and Holt were recalled to Espanola, then sent on another job. These men are no longer on Prosco's payroll. Results on the western end of the project have been rather discouraging; for more detailed information see report of G. Checklin.

D. E. Smith returned to Toronto on November 15th. D.W. Esson remains the only field employee of Prosco Ltd. on the Murray Project.

Respectfully submitted,

sgd. "Donald W. Esson"

Espanola,
December 7, 1957

HOYLE MINING - NICKEL - COPPER PROSPECT - PANACHE LAKE

Property

60 claims located in Dieppe and Truman Townships, Sudbury Mining Div.

Title

Optioned from a Mr. Herrington by Hoyle Mining and under the direction of Pioneer Consultants.

Access

By car via the Panache Lake Highway, south from Highway 17 as far as the Lake (9 miles) - approximately 12 miles west by water into Brady Lake. The showings lie between Brady Lake on the south and Northwest Lake on the north - west boundary of Dieppe Township.

Introduction

Accompanied by D.E. Smith and directed by C. Gidding, the engineer in charge, we visited the property on July 30th. Hoyle Mining took option last winter and since that time have carried out a magnetometer survey over the snow, geological mapping, coil testing, short hole drilling programme with a pack-sack diamond drill, at present almost completed.

Geology

The nickeliferous pyrrhotite and chalcopyrite are found in a quartz-quartzite complex (50-70% quartz), striking E-W over a fairly constant width of approximately 25' and bordered on the north by a well defined quartz dyke 12-15' in width. To date the zone has been traced for a distance of about 800 ft. - going into overburden on the east end and butting into a "plug" like basic intrusive (approximately 100 ft. in diameter) which is thought to resemble the fine grained Sudbury gabbro?? From what could be seen the vein dips steeply to the north in places, to vertical in others. The host rock is a white Serpent Quartzite of the Bruce series, grading into thin beds of the Espanola formation on the north. Two trenches approximately 200 ft. apart were put down two years ago by the owner - approximate dimensions:- 25' across the strike, 10' wide and 10' deep. Both pits disclosed good sulphide mineralization but other good surface exposures along strike showed nothing. In the most westerly trench, located about 100 ft. east of the gabbro, a steeply dipping fault occupies the hanging wall plane of the barren quartz dyke and appeared to the cut-off line for the sulphide zone to the south. Inclusive breccia patches can be seen along the south contact.

Drilling

The 13th hole was in progress and will almost complete the programme. The "pack-sack" drilling has proved costly and difficult in the hard quartz and quartzite. We were told the holes were drilled to an average depth of 50 to 60'. Some of the holes carried no values and the core we saw, from three holes showed sections of from 6-8' split, mineralised, and sent for assay. They looked to contain 30-40% sulphide mineralization but the results, Mr. Giddings kept to himself.

Comments

Certainly, the possibilities of getting nickel-copper ore dimensions are unlikely but the nickel-quartz alliance in this area is an uncommon one and Pioneer Consultants seem to feel the property deserves a thorough going over and perhaps a deep hole.

They base their hopes in a deep hole with the theory that perhaps the Sudbury series underlies the "up-ended" "Serpent Quartzites" at a reasonable drilling depth and the fault would provide a channel for the nickel bearing basic intrusives.

They must have good reason for believing the "gabbro" is a phase of the "nickel irruptive" but this is not an original thought and it appears to be a long shot.

M. E. Holt

Pencil note:

March 30/60

(This property not too hopeful).

(Sgnd.) D. E. Smith

DESBARATS EXAMINATION

Copper Showing - Shakespeare Township
Sudbury Mining Division

Location: (see accompanying claim map)
The showing as located, accessible by road, three miles north of Webbwood in Shakespeare Township. A series of farm roads lead to within ¼ mile of the showing.

Examination
D. James & M. Holt visited the showing Monday, November 19, 1956. It was first brought to T.M.C.'s attention in January of 1954, at which time M. Holt made a brief examination of the showing. A heavy snowfall at the time made it almost impossible to determine the strike extension and general geology of the showing.

Geology & Structure
With little to no snow covering the rocks a different picture was uncovered. The chalcopyrite mineralisation was chiefly confined to the previously examined pit which ran 30 to 40 ft. across the strike and approximately 6 to 7 ft. wide. The open pit disclosed interbanding of what first appeared to look like blue quartz veins, dark green schist and altered quartzite. Most all of the mineralization was in the blue quartz. Further examination along strike (approximately S45°W and dipping steeply to the NW) showed very little mineralisation and it was generally thought that what looked like a quartz vein intrusive is likely an altered quartzite with inclusions of chalcopyrite and the schist an altered basic intrusive in a shear zone. A hill approximately 400 ft. to the SW showed a quartzite bed on strike with the showing. To the north west basic rocks were found (pyroxene gabbro).

The showing is located in a draw (possible cross fracture of the well defined Worthington fault to the south).

Sampling
One grab sample of choice material was taken and gave an assay of 1.58% copper (appearance deceiving, it looked as if it would run 2-3% copper).

Conclusion
Spotty and likely inextensive.

P.O. Box 621,
Espanola, Ontario,
October 29, 1957.

Mr. Leo Richer,
Massey, Ontario.

Dear Mr. Richer:-

Enclosed herewith is a colored print of a geological map with accompanying sheet of assays on samples taken from your property and a geological report.

The map might be acceptable for assessment work credit if the scale were changed from the present scale of 1320 feet to 1 inch to a scale of 400 feet to 1 inch.

In examining your property we spent considerable time in prospecting, mapping and sampling to try to give it a possible chance. However, as outlined in detail in the accompanying report, we were unable to find anything that we could possibly do additional work on. I had hoped that after the close examination we gave your property that I could recommend it to my organization for an exploration program, but I find that the results of our work make it impossible for me to bring it to their attention.

In view of the present extreme lack of interest by numerous companies in exploration, caused chiefly by an over-production in many metals and an accompanying declining metal prices, it is very difficult to interest a company in such a property. However, it may be that when market conditions improve companies will be hungry for new properties again, and if at any time we can be of any help to you in arranging a deal we would be only too happy to assist you.

I wish to thank you for all the assistance you have given us in connection with your property, and I hope that you will be successful in a sale. The work that we have done on your property and the results obtained are all present in the report being sent to you at this time.

Yours very truly,

DES:JTM

(Sgnd.) Donald E. Smith.

A REPORT ON THE RICHER PROPERTY, HARROW TWP.
TO ACCOMPANY GEOLOGICAL MAP OF THE PROPERTY

Summary

Prospecting and sampling of the Richer property by members of the staff of Prosco Ltd. during the summer of 1957 revealed numerous showings and interesting values in cobalt and nickel. Silver and copper assay results were all very low. Geological mapping of this property failed to reveal any continuity or favourable structures associated with the showings.

No further work is contemplated on this property by Prosco Ltd.

Location

The Richer property consists of 19 claims, being numbers S-96674 - 96677; S-97055 - 97065; S-94308; S-97486 - 97488. These claims are located in Harrow Twp. District of Sudbury; comprising parts of lots 5, 6, 7 & 8, Concession V.

Geology

This property is mainly underlain by a large gabbroic intrusive which strikes north-easterly, cutting massive quartzites. The intrusive is irregular in width varying from over ½ mile at the west to less than ¼ mile in the centre of the property.

All the showings are contained within the gabbro, none having been seen in the quartzite. The cobalt showings are contained in acid veins, usually quartz but sometimes containing sufficient feldspar to be considered granitic. The nickel showings are contained both in massive gabbro and also in the wall-rock of the acid veins.

One small diabase dyke was noted to cut both gabbro and quartzite in the west-central portion of the property.

Structure

A major lineament was noted trending north easterly across the property cutting both gabbro and quartzite and including Long Lake. This lineament is assumed to represent the only major fault on the property. A lesser fault is assumed to be the cause of the lineation to the west of the property. One small fault was noted to cut the quartzite in the vicinity of Round Lake.

None of these structures appear to be associated with economic mineralization, although one copper-bearing vein does outcrop along the shore of Long Lake.

Economic Geology

Lying within the gabbro on the northern half of the property are a number of acid veins of quartz to granitic composition. These veins striking north-westerly, have steep to vertical dips. These veins are erratic in distribution and discontinuous along strike, usually pinching out within a few 10's of feet. These veins have local concentrations of sulphides; being chalcopyrite, pyrite, pyrrhotite, arsenopyrite and a cobalt mineral, possibly cobaltite. It is my opinion that these veins are more likely to be differentiates of the gabbro rather than true intrusives.

The main cobalt showing occurs in one of these veins which is wider and more strongly mineralized than usual. At the main pit the vein is 2½' wide, with cobalt mineralization extending an additional 2½' into the footwall. Samples across the vein at the pit gave 1.7% Co. and trace silver across 4.6 ft. Other samples across this vein 20 ft. along strike to the south-east gave only a trace of cobalt. Along strike to the north-west the vein is covered by overburden; however, the gabbro-quartzite contact lies a maximum distance of 125' in this direction. These veins have not been noted to cut the quartzite and I feel it is safe to assume that the maximum possible mineralized length of this vein would be 125 ft. In view of the sudden drop in values along strike of both this vein and other veins in the area, I very seriously doubt that mineralization would extend for even 25 ft.

The nickel showings occur mainly within the massive gabbro although the occasional occurrence of pyrrhotite, with and without nickel, was noted in the walls of the acid veins mentioned above.

The smaller nickel showings may easily be seen to be lens-like and it is my opinion that even the main nickel showing is of this nature. Mapping failed to reveal any favourable structures near the nickel showings. Assays of material from the main nickel showing returned only 0.70% nickel and 0.05% copper across 3.5 ft.

All other showings found on this property are either too small, erratic or low grade to warrant further work.

A list of all assay results is attached to the map accompanying this report.

Respectfully submitted,

(Sgnd.) Donald W. Eason.

Espanola, Ontario,
October 24, 1957.

SAMPLE RESULTS

LEO RICHER PROPERTY

Sample No.	Width	Assay	
1 Main Nickel Pit	30"	0.08% Cu 0.64% Ni	
4 Main Cobalt Pit	Grab	2.5% Co. Tr Ag	
9 Main Pit	32"	2.12% Co. Tr. Ag.	1.7% Co. & Tr. Ag. 4'9"
10 Main Pit	25"	0.79% Co. Tr. Ag.	
11 Main Pit	26"	Tr. Co. Tr. Ag.	
20' along strike of vein from Nos. 9 & 10			
12 Nickel Showing	42"	0.75% Ni. 0.05% Cu.	

SUPPLEMENTARY REPORT

M. E. Holt to D. E. Smith

(a) Capreol Rush

For the past 3 or 4 weeks the Sudbury newspapers, T.V. and radio have been covering a staking rush located near Milnet, on the C.N. line, north of Sudbury and about 10 miles from Capreol.

The reports were inconsistent and evasive as to who was doing what and for what reason. We had looked into this just after the first staking was reported but had decided not to participate because the staking pattern and rumours sounded a great deal like a rebirth of the uranium rush that occurred four years ago. At the time I visited a number of the showings in the area and supervised the drilling of a uranium prospect, for T.M.C., optioned from H. Craig and located in Parkin Township. To my knowledge three such properties were drilled, all of which were similar in their surface exposures and in each case the results were too low to warrant any further development.

The fact that Rio Tinto had optioned a property from R. Leslie of Anstice and a further rumour that zirconium was being found in economic quantities prompted the trip to Sudbury. While in Milnet I learned that Bob Rice of Rio Tinto had mapped the Leslie group some time before the last rush had started. In later talking with Bob I learned that in his opinion the uranium picture had not improved and although he had seen some zirconium he could not understand all the fuss and publicity. According to Bob the option is a cheap one and the property is considered no more than good prospecting ground.

From what we know of the area's history and the reason for Rio's option, I believe it can be assumed that the extensive staking has been done on rumour alone and will prove to be of little importance unless something new turns up.

(b) While in Sudbury I learned of a rumour that radioactive conglomerates in the Mississagi formation were found somewhere in the neighbourhood of Townships 114, 115, 108 and Craig. This area lies approximately 40 miles due north of Espanola and approximately 8 miles east of Cartier (C.P.R.).

Mongrieff, Hart, Cartier and Hess Townships, immediately to the east of this area have been mapped in some detail by the Ont. Dept. of Mines in conjunction with the old Geneva Lake Mines.

Reference:
Map No. 38h, Cartier Stralak Area
Report - F. F. Osborne, Vol. XXXVIII, Part 7, Ont. Dept. Mines.

Relatively thin remnant beds of Mississagi formation are shown on the map and basal conglomerates are mentioned in the accompanying report but no mention of sulphides associated with them.

On Wednesday, July 24, I flew the area from Sudbury in hopes of finding some evidence to support the rumour that Rio Tinto, McIntyre and Noranda were staking in the area although nothing had

been recorded to date. I flew first to Spanish Lake, on the Spanish River, then in circular fashion through Craig, 115, 114 and back east again through 108. I saw no signs of staking and no tents around the lakes that looked large enough to be accessible by plane.

With the exception of a large band of sediments striking to the SW immediately west and paralleling the Spanish River, most of the area is relatively flat lying and covered with heavy overburden, similar to the thick sand deposits north of Lake Agnew. The sediments appeared to dip to the NW (30-40 degrees) and looked more like the white cherty Lorraine formation. The area is accessible by a fairly decent road to Cartier and old winding lumber roads into Spanish Lake.

There is a possibility that a good thickness of the Mississagi does occur in this area and winds its way in "S" fashion down to meet the "Agnew Lake Uranium Area" that was active after the Blind River Area four years ago.

Ground prospecting to any extent would be difficult with the heavy overburden but a trip up the Spanish River through Townships 108 and Craig might prove worthwhile. From what we have been told Townships 114 and 115 are accessible via branches of the K.V.P. road running north of Webbwood and almost through to Chapleau.

M. E. Holt

MURRAY PROJECT DATA

TO: H. R. Buckles
T.M.C.
Toronto, Ontario.

FROM: D. Holt

RE: BLIND RIVER - FIELD EXPLORATION

The following is a list of the Reports, maps, notes etc. that I had collected during the Plum Exploration work. The majority of this material, particularly reports, is duplicated in the T.M.C. office file. However, I thought this might prove its usefulness in that some of the data may have gone astray or field notes may have additional information.

(A) Plum Group - Baldwin Township

1. Baldwin Geology Map - Thompson
2. Sketch of claims - showing early approx. location of showing
3. Early report to Joubin - showing & staking proposals
4. 2 claim maps of Baldwin Township
5. Letter and sketch from Mr. Joubin covering later line cutting for Magnetometer work.
6. Aeromagnetic Survey Map (just Baldwin)
7. Sketch showing approx. location of the first two grab samples (No. 1 showing)
8. Report to accompany map of the No. 1 Showing.

(B) Espanola District

1. Staking plan - properties
2. Espanola Sheet - Geology
3. Aerial - Magnetometer & Radioactive Anomolies
4. Baldwin & surrounding district claim maps (composite)
5. Report by Hawley covering the owners of patented lots surrounding the Plum Group in Baldwin Township.
6. Sam Owen Property - report.
7. Blow up - section of Lake Huron Sheet - geology.

(C) Espanola District - Claim Maps

2 Porter	Eden	Vernan
Dunlop	Lorne	Bevin
2 Merritt	2 Foster	Louise
2 Nairn	Stalin	Caen
Hyman	Roosevelt	Caen
Sale	Mengowin	

(D) Rhodes Exploration - Parkin Township - Craig Option

1. 2 Claim Maps
2. 2 Topographic Sheets - tracing from Gov. sheet
3. Drill X Sections (prints) Holes 7, 8 & 9
4. Field base map - drilling plan
5. Cartier - Gov. Topographic sheet - Sudbury District.
6. Longyear Daily Reports
7. Gatenby Correspondence
8. Assays - Samples Nos. 2, 6 & 13
9. Progress Report - D. Holt, Jan. 18/54 - drilling completed.
10. Diamond Drill Logs
11. Property Report by Gatenby

(E) Whiskey Lake Staking

1. Rough field sketches of early staking.

(F) Panache Lake District

1. Topographic Sheets - Gov. - 1"= 1/4 mile.
2. Claim Maps - Goschen
   - Truman
   - Dieppe
3. Lake Panache Geology Sheet - 1925

(G) Mississagi Rd. - Prineau Property

1. Claim Map - 7D.
2. Report - Geology along the Mississagi Rd. by W. Harding Accompanying map.
3. Assay - (Dept. of Mines) - Prineau property.
4. Report - D. Holt - Prineau Claims - T.M.C. file

(H) Peach Staking

1. Early sketches of staking in Lang, Lewis, Striker & Spragge Twps.
   (out of date and in bad condition from field usage)
   (Holt, Ukos & Martin)

(I) McNeely Property - Roberts Twp. & Vicinity

1. Claim Maps - 4 Roberts) staking - rough field sketches
   - Hutton
   - Creelman
   - Sweeney
   - Beresford
   - Fraleck
   - 3 Beaument
   - 2 Creelman

(J) Plum Exploration - General
Geological Maps & Reports

Maps - (a) Mississagi Reserve & Goulais River Iron Ranges
(to accompany report by E. S. Moore, Vol. XXXIV Part 4, Ont. Mines, 1925, report separate)

(b) Three Duck Lakes Area (Map No. 41d) District of Sudbury
(to accompany report by H. D. Laird, Vol. XLI, Part 3, Ont. Mines, 1932)

(c) Abitibi-Timiskaming Area
Districts of Cochrane & Timiskaming, Map No. 1934a
(this takes in Cobalt, Kirkland & Larder districts as far as the Quebec Border).

(d) Haliburton Area, Map 52a
(to accompany report by J. Satterly in Vol. LII, Ont. Mines Annual Report, 1943)

(e) Lake Huron Sheet 155a

Reports

(a) Whiskey Lake Area - Bureau of Mines by A. P. Coleman.

(b) Mississagi Reserve & Goulais River Iron Ranges
District of Algoma by E. S. Moore
The Whiskey Lake Area (District of Algoma) by G. V. Douglas
La Closche Area (District of Sudbury) by G.V. Douglas

(c) The Age of the Killarney Granite (copy) by W.H. Collins
Bulletin No. 22
Geological Series No. 31.

(d) 2 - Geology of Baldwin Twp. by J. E. Thompson
Vol. LXI, Part 4, 1952, & map

(e) Geology of Twps. Janes, McNish, Parde & Dana by E. L. Bruce
+ Moose Mountain - Wanapitei Area by L. F. Kindle
(this takes in Roberts & Parkin Twps.)
Vol. XLI, Part IV, 1932

(f) Geology of Grimsthorpe - Barrie Area by V. B. Meen
Geology of Kaladar & Kennebec Twps. by W. D. Harding
Vol. LI, Part IV, 1942

(g) Extract from "Sedimentary Rocks" by F. J. Pettijohn
Oligomictic Conglomerates.

(h) Geological Report of the Southeastern Portion of Long Twp. by R. J. Cook

(K) Plum Exploration (including Reports - D. Holt, notes, letters & sketches).

1. McGregor Bay Trip
2. Whiskey Lake Area
3. J. Gutcher property (south of Massey)
4. Flight with Aeromagnetic Survey over Peach Priority zone.
5. McNeely Property - Roberts Twp.
6. Reed Property - Shakespeare Twp. N. of Webbwood.
7. Higginson Property - Sault District
(Report - T.M.C. files)
8. Nemegos Property - notes by H. R. Buckles
9. Mr. Ted McKie, R.R. #1, Massey (letter)
10. Tom Crab - Massey - Whiskey Lake Road (letter)

11. C. Lacell - Massey, Ont. (letter)

10 & 11 - claims were not seem but the two men were visited - description poor.

12. Letter from L. Lestie, Anstice, Ont.
Radioactive Nickel Showing.

13. Outline for Prospectors - Uranium in the Sedimentary deposits in and about the Blind River Area - Holt & Hawley

14. Plum Group - Baldwin
New Areas - Opeepeesway Lake - near old Gerame Mines
Spencer Claims - 9 miles west of New Liskeard

15. Farmer Claims - located approx. 90 miles north of Sault - old Camray district.

16. 28 claims - South of Hastie Lake - north shore of Lauzon Lake (report in T.M.C. files).

(L) Miscellaneous

1. Correspondence - Joubin - Labow - Holt
2. Instructions in use of Scintillometer for logging core - D. Smith
3. Instructions to Drillers - D. Smith.
4. Geology & radioactive showings - by R. Dearnley - Plum, Peach & Abe groups, Lewis & Shedden Twps.
5. Luncheon address - F. Joubin - Uranium Day.
6. Letter to H. R. Buckles from H. Garvie Nemegos.
7. Uranium Day Programme
8. Products for Mining Industry - Geo. Taylor Hardware
9. Small sketch of Al Graham's of the staking - Plum Group near Quirke Lake

(M) Plum Accounting
(Rough Notes covering expenses during the period).

ADDITIONAL NOTES

1. Dr. Merritt) & Dr. Everhart) — Washington, D.C. names of the two geologists from U.S. Atomic Energy Control Board - visited the Blind River area in the Fall of '53

2. Cochrane Dunlop Hardware, Soo, Ont.
Shipper - Johnny Shellhorne
Salesman - Roy White
Phone - 340, Thessalon
(for supplies in a hurry - these men will act quickly).

3. Hugh Craig, Box 78, Capreol
(lives in Milnet - 10 miles from Capreol).

4. H. A. Crawford - Blue Water Hotel
Mr. Donelly - Detroit.

5. Noranda Property -

Hyman Twp. - North of Espanola
Geologist in charge - Ralph Woolverton
(started drilling end of March)

6. Mr. Kourinoja - prospecting family
River View Cabins - 2 miles east of King George Hotel, Nairn
(honest, sincere prospectors - they spend considerable time roaming about the bush and have turned up with some interesting samples from time to time).

7. Mrs. L. Badgerow, Nairn
She has 4 claims close to Nairn, platinum, gold & copper - unable to see showing - didn't sound too good.

8. John C. Humpage, 608 Kansas Ave., Topeka, Kansas. Tel. 20525.
Home 1112 Tylar St. Ph. 39489.
Mr. Humpage is a well to do business man who has made a practise of spending his summers at a summer resort just north of Spanish. During the Blind River rush he staked a large group of claims adjoining last of the Peach group. We saw no radioactive conglomerate but did see a small showing of mineralized impure greywacke that gave geiger readings up to 6 to 8 times background on spots.

On the advice of ourselves and others he turned down something like $50,000.00 to drill the most promising showing. Since he and friends have money, I thought this would be worth while keeping an eye on. He told me that his plans were to set loose a couple of prospectors next summer to thoroughly prospect the claims. The contact incidentally runs right through the middle of his claims. At least, we found the characteristic granite to the north and quartzite to the south.

9. Mr. F. St. Pierre, 20 Lee Valley Rd., Espanola.
Group of claims located in Twp. 119, K.V.F. Westbranch Rd.
I talked to the man - from his description it was just a group of claims - but might be worth a look. The snow was a little too thick to go in at the time.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

June 5, 1957.

Mr. Don Smith,
Manager,
Prosco Mines Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find the mapped results of the first week of EM prospecting:

May 13 - May 18, 1957.

The EM crew covered 13.3 miles during five days. One day was lost due to bad weather.

No anomalies of interest were found. One marginal anomaly occurs on Lines 18, 19 and 20. It does not appear to be significant, however, that lines should be rerun with the transmitter on Lines 16 or 17 in order to be entirely sure.

Some difficulties were encountered with power lines which limited the permissable distance between transmitter and receiver somewhat.

Yours very truly,

GWS/bm
Encl.

(Sgnd.) George W. Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

June 12, 1957.

Mr. D. Smith, Manager,
Prosco Mines Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find prints of five EM maps for the work done between May 20th and May 31st. The maps cover the eastern portion of Victoria Township and Salter Township.

Some anomalies were caused by the great number of power lines in the surveyed area. The strongest anomalies of this type occur on Lines 113 and 114. They appear to be due to a power line close to Transmitter location M_3. Tests from another location failed to indicate any anomaly, however, I will instruct Bill to run another test line in order to be entirely sure.

A weak indication was found on Line 129 south of the Massey Mine shaft. It appears advisable to run another line over this area.

A small disturbance was found on Line 60 south of Sugar Lake. It is recommended to run two lines to the north from the road in order to investigate this area thoroughly,

I hope to have the strong transmitter in working condition by the end of the week.

Best regards,

/bm
Encl.

(Sgnd.) George

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

June 26, 1957.

Mr. D. Smith, Manager,
Prosco Mines Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find three EM maps of the work done in Salter and May Townships, and one Magnetometer map. The maps cover Profiles 154 to 173, 174 to 197 and 198 to 5 respectively.

The strongest electromagnetic anomalies are found between Lines 174 and 182 to the north of the power line. The electrical anomalies appear to indicate a zone up to 500 feet wide and there must be much suspicion that it is caused by conducting overburden. However, there is some chance that the conductivity of the overburden is related to sulphide mineralization in the area which would tend to increase the electrolyte content of the overburden. It would be quite difficult to detect the electromagnetic response of an ore body under such cover of electrically conducting overburden.

The magnetometer survey in the area of the electromagnetic anomaly indicated a high trend just to the south of the electrical indication. The magnetic anomaly appears to be a portion of a long east-west striking trend which is quite prominent on the regional magnetic survey of the townships to the east. Very likely, it represents a dyke. The magnetometer survey does not indicate magnetic material at the exact location of the electrical anomalies. It might indicate a favourable structure, but it does not support the EM anomaly directly. There is a local magnetic anomaly in the vicinity of the sulphide showing, indicating that the sulphides are associated with magnetic minerals.

I recommend to establish chained lines in the area and to repeat the two geophysical surveys over the immediate zone of the anomaly in order to get more information.

There are several more weak electrical anomalies in the area of the three maps submitted with this report. They are very likely caused by the overburden. I would not recommend any further investigation of these anomalies before the main anomaly is fully evaluated.

Best regards,

GWS/bm
Encl.

(Sgnd.) George Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

June 28, 1957.

Mr. D. Smith,
Manager,
Prosco Mines Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find prints of two maps showing Lines 4-17 and 18-35, in May Township. this field work was done between June 14th and 19th, 1957.

Anomaleous conditions were found between Lines 7 and 11 and Lines 32 and 35. Both areas are probably surveyed by magnetometer in the meantime, but I do not have the results yet. The electrical anomalies by themselves are not too encouraging and unless they are well supported by the magnetic data, I would not recommend drilling.

Best regards,

GWS:bm (Sgnd.) George Sander

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

July 26, 1957.

Mr. Joubin,
Franc R. Joubin & Assoc.,
619-68 Yonge St.,
Toronto, Ontario.

Dear Mr. Joubin:

Enclosed you will find one copy of my report covering the work on the Alexander Option. Two further copies are being sent to Don Smith in Espanola.

I expect to be in Espanola in about two weeks in order to see Don.

Best regards,

/bm
Encl.

(Sgnd.) George Sander

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

July 29, 1957.

Mr. D. Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find maps of the geophysical field work done between June 20th and July 3rd, and on July 9th.

In the following, the maps will be discussed separately:

Magnetometer Map of July 3:

Three separate areas which showed electromagnetic anomalies were checked with a magnetometer survey. The magnetic data in the vicinity of Lines 7 and 8 do not support the electrical trends in this area particularly well and no further action can be recommended on the basis of the geophysical surveys.

Magnetic and electrical anomalies between Lines 32 and 35 appear to be slightly more promising. However, the electrical anomaly is such that it is likely to be caused by the recent overburden covering the valley in which the anomaly occurs.

A considerable amount of drilling was done in this area, probably based on the results of an electrical resistivity survey. It would be helpful to know the location of the previous drilling, and its results, in order to evaluate entirely the anomaly in the area.

The electrical and magnetic data in the area between Lines 50 and 53 appear to be very similar to the ones discussed previously. The magnetic trend is slightly more prominent. If the area appears to be of great interest from the geological standpoint, it is recommended to extend the lines in a north-south direction in order to get more information concerning the electrical anomalies. At the present time, drilling does not appear to be warranted on the basis of the geophysical data.

ELECTROMAGNETIC MAPS:

The electromagnetic maps submitted with this report cover Lines 36 to 115 in Shakespeare, Baldwin and May Townships. They will be discussed in the order of their line numbers. Only minor anomalies occur on the map covering Lines 36 to 53. They do not appear to be of significance with the exception of those occurring between Lines 50 and 53, which have been discussed in the previous paragraph.

No anomalies occur between Lines 63 to 75.

A weak indication of an anomaly might exist to the south of Line 83. Since this indication would fall within the area of an interesting aero-magnetic anomaly, it is recommended to extend Line 83 somewhat to the south in order to check the anomaly.

A slight anomaly was found between Lines 90 and 92. It is recommended to investigate the area, possibly do some more electromagnetic work to the west of Line 90 and to check the anomalous area with a magnetometer.

Lines 106 to 115 were surveyed north of Whitson Lake in May Township. Only one weak anomaly was found on

Line 115. It could be checked during the work planned on Whitson Lake.

The map of July 18th shows work on a lake in Denison Township. No anomalies were found on the lake. Some indications are apparent to the south of the lake on Line 8. If this area appears geologically promising, it is recommended to extend the lines somewhat to the south.

Three minor anomalies in Victoria and Salter Townships were checked during the period of this report. Two were found to be of no significance. Readings in the area south of Sugar Lake were somewhat anomalous, however, they do not correspond to the anomalies found earlier. The area is covered by bush and EM work cannot be done on sight. The anomalous readings might well be due to misalignment between the transmitter and the receiver. If this area appears to be of interest, it is recommended to cut lines and do a regular survey. At the present time, the slightly anomalous readings shown on the map should not be taken as indications for mineralization in the area.

Best regards,

/bm (Sgnd.) George Sander.
Encl.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

Aug. 16, 1957.

Mr. F. R. Joubin,
619 - 68 Yonge St.,
Toronto

Dear Franc.

Enclosed a letter to Don Smith. The anomalies mentioned in the letter occur in the area of the circular magnetic anomaly in Baldwin Twp. which we discussed while you were in Espanola. I think they are quite interesting for this reason. The ground covered until now consists of one small field only, the rest of the ground is covered by bush.

Best regards,

(Sgnd.) George Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

Aug. 16.57

Mr. Don Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

I received today the magnetometer map covering Lines 90 to 93, Baldwin Twp. The magnetic anomalies look quite promising to me. In order to give you some information before the formal map is finished, I sketched the magnetic anomalies into the old EM map of the area.

I would recommend that somebody investigates the ground. The southern magnetic anomaly is probably on ground with little overburden. I would expect some magnetite and pyrrhotite in the vicinity of this anomaly.

The northern anomaly is a part of the large trend on the aero-magnetic survey. Please notice that this trend gets quite strong to the west of the surveyed area. I would think that this whole trend which forms the northern portion of a circular pattern is of interest.

I would suggest to survey a somewhat larger area in the vicinity of the anomalies if ground is available.

Best regards,

(Sgnd.) George Sander.

c.c. to Mr. Joubin

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

Aug. 20, 1957

Mr. Don. Smith, Manager,
Prosco Ltd.,
Box 631,
Espanola, Ontario.

Dear Don:

Enclosed the magnetometer maps referred to in my letter of Aug. 16.

The electrical and magnetic anomalies in this area correspond very closely. While the electrical anomalies are weak, the two magnetic anomalies appear to be promising.

I recommend further investigation of the area.

Best regards,

(Sgnd.) George Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

September 25th, 1957.

Mr. Don Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find 5 prints of geophysical maps.

Alexander Option:

Check work on two previously found doubtful anomalies on the Alexander Option did not confirm the anomalies. There is some doubt concerning the anomalies south of Whitson Lake, however, they appear to be caused by overburden.

Salter and May Twp.:

This map shows work done on Whitson, Salmay Lake and to the west of this lake. A weak anomaly was found in the northeastern portion of Whitson Lake. The anomaly strikes into a swampy portion of the lake which is not accessible in summer. It is recommended to extend the electrical survey over the swamp during the winter and to conduct a magnetometer survey of Whitson Lake and the adjacent swamps at the same time. At the present time, the electrical

anomalies found on Whitson Lake and to the north and south of this lake appear to be caused by overburden. However, because of the geological conditions and the showings in the area, I recommend further work during the winter.

The EM survey of Salmay Lake did not show any anomalies of interest.

Several weak EM anomalies were found in the vicinity of the showing on the Sable River west of Salmay Lake. None of the anomalies coincides with the showing. The anomalies were found by work without lines and without sight between the instruments. However, they appear to be reliable. It is recommended to conduct a survey with chained lines in order to gain more definite data.

Some magnetometer work in the area indicated that the most southern one of the anomalies occurs on the contact between intrusives and quartzite. Strong magnetic anomalies were found in the vicinity of the pit.

Shaft in May Twp., Vance Option:

An interesting EM anomaly was found immediately to the south of the old shaft on the Vance Option. The anomaly is well supported by the magnetic data. A drillhole is indicated to show the section of interest, the hole could be drilled from the south as well.

It is recommended to investigate a zone east and west of the shaft by a regular survey using lines.

Baldwin Twp.:

Work on a beaver pond on the former Plum Claims in Baldwin Twp. showed a good coincidence between EM anomalies and magnetic anomalies. The anomalies occur close to the showing, however, the hole drilled south of the pit might not have intersected the electrical anomaly 50 feet east of the pit. It is recommended to investigate the area by a combined EM and magnetometer survey using chained lines in order to give a better comparison between geophysical data and geology in the area.

Further reports will follow shortly.

Best regards,

(Sgnd.) George Sander.

c.c. Toronto office
encl. 8 maps
/hf

GEORGE W. SANDER
Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

September 27th, 1957

Mr. Don Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find prints of four geophysical maps.

Baldwin Twp., Area of Photo 17-15:

The magnetic survey in this area was enlarged in order to investigate previously found anomalies. The two hight trends were found to extend to the east and west.

The southern anomaly is not as strong in the newly covered ground as it is in the vicinity of the road. An EM check did not find an anomaly at the location of the magnetic high. A good number of sulphide showings in the area showed similar magnetic anomalies without giving rise to electrical anomalies.

Therefore, I recommend to investigate the magnetic anomaly as indicated by the DDH shown on the map. Overburden in the vicinity of the proposed hole is probably very shallow.

Two new lines of EM work confirmed the conducting zone which coincides with the northern magnetic anomaly. This conducting zone is getting wider to the west. It is recommended to extend the survey in this direction.

Drury and Lorne Twp., Photo 19 - 32:

The survey area lies southwest of the Worthington Mine.

The EM survey on Prosco Lake did not result in any anomalies. Anomaleous readings to the southwest of the lake are very likely due to the numerous powerlines in the area which act as electrical conductors. No magnetic anomalies are found in the area.

The southwestern portion of the area consists of a swamp with young trees which limit the open sight for the EM survey.

Strong magnetic anomalies were found to the south of this swamp in the vicinity of some gabbro outcrops. Very likely gabbro is underlying the whole area of the magnetic anomaly.

A small EM anomaly was located on the contact zone between the gabbro and quartzite. The EM anomaly appears to indicate a small zone of good conductivity, probably sulphides, very close to the surface.

I believe the anomaly and the area should be investigated further.

Best regards,

(Sgnd.) George Sander.

c.c. Toronto office.

/hf

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

October 3rd, 1957

Mr. Don Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find prints of seven geophysical maps giving the results of work done recently. There are only a few smaller maps outstanding after this report. The maps will be discussed according to their location from west to east.

May Twp., Photo 15 - 2, September 27, 57.

An EM anomaly is shown on Lines 41 to 45, however, the anomaly is quite poor. A weak magnetic trend follows this anomaly closely. I recommend to investigate the wooded area to the east of Line 45, since the anomaly appears to get somewhat better in this direction.

May Twp., Photo 165, 15 - 4, September 1, 1957.

Lines 47 to 58 have been added to this map. EM anomalies between Lines 53 and 57 appear to be poor and are not supported by the magnetometer survey on the same lines.

I believe that the anomalies found earlier on Lines 32 to 35 are the best indications on this map. If previous drilling in this area did not include the ground of these anomalies, I recommend further investigation to the west of Line 32. The anomaly is open in this direction and further work might give some indication of its cause.

Baldwin Twp., October 1, 1957.

No indications of interest were found on the field located close to the road to Espanola Bay.

The EM survey on the clearing for the new Hydro Power Line indicated the possibility of a conducting zone to the north of the Line. This indication occurs in the area of an interesting magnetic anomaly and to the south of a large pyrrhotite showing. An attempt was made to find the anomaly by EM prospecting in the bush without lines. The results were not conclusive. I recommend to investigate the area further.

Shakespeare Twp., Photo 15 - 7, September 30, 1957.

Two areas designated as A and B are shown on the map.

EM anomalies in the A area are not encouraging and are not well supported by the magnetic map. Further investigation cannot be recommended on the basis of the EM anomalies.

No anomalies of interest are shown in the B area. EM anomalies were found to be caused by two powerlines.

Shakespeare Twp., October 2, 1957.

A previously found EM anomaly was investigated by a magnetic survey and by some additional EM work. The anomaly was not confirmed and no further work is recommended.

Forster Twp., Photo 46 - 166, 13 - 20, October 1, 1957.

An EM survey on Brazil Lake did not show any significant indications.

A magnetic survey in the vicinity of a showing to the west of Brazil Lake indicated a very strong anomaly of limited size. Magnetite mineralization appears to extend over an area of approximately 100 by 100 feet.

THIS IS A MAG. JOB ONLY

Denison Twp., Photo 19 - 38.

Additional work in the area of this map was not conclusive. A questionable conductor is indicated to the south of the lake. This conductor might very likely be caused by overburden.

A more thorough investigation of the ground was prevented through difficulties with the landowner.

Best regards,

(Sgnd.) George Sander.

c.c. to Toronto office

/hf

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345.

October 5th, 1957.

Mr. Don Smith, Manager,
Prosco Ltd.,
Box 621,
Espanola, Ontario.

Dear Don:

Enclosed you will find prints of 4 geophysical maps.

Salter Twp., June 4 and Oct. 2.

Some additional EM work was done north of the area mapped previously. No anomalies were found.

Salter Twp., June 10 and October 3.

Magnetic and EM prospecting was done along the old railroad to Massey. No indications of mineralization were found.

May Twp., July 12.

Two new lines were added to this map in order to investigate a previously found anomaly. The anomaly was confirmed, but it appears to be too weak to warrant drilling without additional evidence of mineralization.

Baldwin Twp., Piston Showing.

A strong magnetic anomaly was found in the immediate vicinity of the Piston Showing, however, it is of limited size only. No EM anomaly was found close to the showing.

Some check work was done on Line 83 in Baldwin Twp. and on Lines 187 and 188 in May Twp. The work tends to discount previously found weak indications.

Reports for all geophysical work done for Prosco Ltd. have now been submitted. Please let me know if there are any additional questions in connection with my work. Please advise me also to where I should send the originals of my maps.

Best regards,

(Sgnd.) George Sander.

c.c. to Toronto office

/hf

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

November 15th, 1957.

Mr. D. H. James,
F. R. Joubin & Assoc.,
68 Yonge Street,
Toronto.

Dear Don:

Re: Alexander Option, electrical test on drill core.

The piece of sericite schist core which you gave me recently was found to have a electrical resistivity of 20,000 Ω cm.

This value is quite normal for metamorphosed sedimentary rock. I do not think that the rock as such is the cause of the EM anomaly.

There might be an indirect connection between the rock and the anomaly, in so far, as, the schist might form valleys filled with relatively conducting overburden. Also, the schist might be quite conducting in the vicinity of faults where the schistosity is such that water can penetrate into the rock.

I think it is possible that the two conditions described above are the cause of the EM anomaly found on the ground.

Best regards,

/hf

(Sgnd.) George Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

December 5th, 1957.

Mr. Don Smith, Manager,
Prosco Ltd.,
Suite 619,
68 Yonge Street,
Toronto.

Re: Geophysical work Nov. 23 to 28, 57

Dear Don:

Enclosed you will find three maps covering 4 separate areas which were investigated recently by geophysical work.

Clarke Property, Baldwin Twp.

The electrical anomaly on this property was confirmed by the recent work. The anomaly occurs between 50 and 1000 feet east of DDH 2. Sulphides intersected by this hole might account for the anomaly. However, the electrical data indicate the mineralized zone to dip to the east and it is quite possible that the zone was not entirely cross sectioned by the hole.

The anomaly is quite weak on Line 1 N and is not indicated north of Line 9 N, giving the zone a length of approximately 800 feet.

Currier Ranch, Photo 15-2

The investigation of this area was intended to check the extension of a previously found anomaly.

The anomaly was located on the surveyed lines, but it appears now less favourable than on the original work. Shape and strength of the electrical indication rather suggests a zone of strong schistosity than mineralization.

E M survey without lines.
Currier Ranch Area.

A bush covered area to the east of the last mentioned trend was investigated with EM instrumentation adapted to work without lines.

No anomalies were found.

Sauble River Area, Salter Twp.

An area on the Sauble River north of the town of Massey was investigated by an E M and a magnetometer survey without picket lines.

A high magnetic trend is shown in the vicinity of the basic intrusive which is indicated by a few outcrops in the area. An electrical anomaly was found previously on the south contact of this intrusive. This anomaly was not confirmed by the recent survey. It appears to be due to a shear zone on the contact between the sediments and the intrusive.

Best regards,

/hf

(Sgnd.) George Sander.

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

Jan. 2nd., 1958.

Mr. Don Smith, Manager,
Prosco Ltd.,
619 - 68 Yonge Street,
Toronto, Ontario.

Dear Don:

Enclosed a map of the work on Whitson Lake. The electromagnetic survey indicates a conducting zone in good agreement with the conductor previously located in the north east corner of the lake. The electrical anomaly is rather wide and weak and it is not supported by any indication on the magnetometer survey.

The magnetometer survey shows a very definite anomaly striking north west - south east between Lines 3 and 7. The anomaly suggests strongly a dike. This dike is not shown on the magnetometer survey of the Alexander Option to the south of Whitson Lake. It seems very likely that the dike is terminated by a fault following the south shore of Whitson Lake. If the dike continues to the south of the fault, the displacement along the fault must be appreciable since the dike is not indicated on the portion of the Alexander Option surveyed by magnetometer.

Yours very truly,

(Sgnd.) George W. Sander.

/hf

GEORGE W. SANDER

Geophysicist

174 Douglas Ave. N.,
Oakville, Ontario,
Phone Victor 4-6345

REPORT

Prosco Ltd.

Re: Geophysical Survey on the Alexander Option, May Twp., Ont.

Dear Sirs:

A combined electromagnetic and magnetometer survey was conducted between July 15 and July 19 over an area in May Township known as the Alexander Option.

PURPOSE OF THE SURVEY:

Several sulphide showings are known to occur in the area, some of them carrying base metal values. The geological conditions appear to be favourable for the occurrence of Sudbury type mineralization. Electromagnetic anomalies were found to the south of the area of investigation during an earlier survey. It was the purpose of the survey to investigate these anomalies and to prospect for sulphide bodies.

TECHNICAL DATA:

The electromagnetic survey was conducted with an especially heavy transmitter which allowed taking readings at distances up to 3000 feet from the transmitter. It appears likely that ore bodies at greater depths could be detected with this equipment than with the conventional smaller transmitters.

The magnetic survey was conducted with a Sharpe A2 Magnetometer.

RESULTS

The results of the two geophysical surveys are shown on four maps submitted with this report. Several electrical anomalies were found during the electromagnetic survey. With one exception, all the anomalies occur in the area covered by overburden. While some of the anomalies are quite strong, they appear to be caused by overburden rather than by mineralization. The anomalies are similar to the ones found by the previous survey, but do not occur at the same location. The electrical trends are not directly supported by magnetic anomalies.

It appears that the steep cliffs occurring in the area extend to greater depths, the lower portion being covered by overburden. Such steep interfaces between somewhat conducting overburden and non-conducting rock can give rise to EM anomalies which are similar to the anomalies shown by ore bodies. There are, however, some differences which can be used to distinguish between the two types of anomalies, such as: size, depth and conductivity of the anomalous body. There appears to be little doubt that the anomalies shown on the west sheet of the map are due to such escarpments below the overburden.

A weaker trend between Line 16 West and Line 8 West on the eastern sheet appears to be of the same nature. One anomaly on the southern part of Line 20 West should be checked since it occurs in an area not covered by overburden. It is recommended to investigate the area for showings and to repeat a few EM lines. Anomalies on the south shore of Whitson Lake can be checked during the planned survey of this Lake. It is recommended to investigate the northern part of Lines 92 West to 100 West at the same time. Some irregular conditions have been found in this area which cannot be explained by the presence of anomalies to the south.

MAGNETOMETER SURVEY:

A better interpretation of the magnetic data will be possible after the showings and the geological features of the area are plotted on the same map. At the present time, it appears that some of the small magnetic anomalies occur in the vicinity of showings. A larger anomaly on the southern portion of Lines 80 to 88 West might be associated with the showing in this vicinity. The more prominent trend between Lines 88 and 112 West appears to be the same which has been drilled during previous activities in the area. It is recommended to investigate the stronger ones of the small, local anomalies, and their relation to sulphide showings.

SUMMARY:

A combined electromagnetic and magnetometer survey was conducted on the Alexander Option of Prosco Ltd., in May Township. A number of electromagnetic anomalies which were found during the survey appear to be caused by unusual conditions in the overburden. Three minor electrical anomalies should be checked by further EM work. Several magnetic anomalies are recommended for investigation and the total magnetic map should be related to the local geological exploration.

Respectfully submitted,

GWS:bm (Sgnd.) George W. Sander, Ph.D.

LIST OF MAPS ACCOMPANYING REPORTS

1. Sketch showing Caldwell anomaly area, General Geology, Fault Zones and Showings, Alexander Option, May Township.

2. E.M. and Mag. Profile, Alexander Option.

900

THE TOWNSHIP OF BALDWIN

DISTRICT OF SUDBURY

SUDBURY MINING DIVISION

SCALE: 1 INCH = 40 CHAINS

Porter Twp. (M-1061)

Shakespeare Twp. (M-1104)

Nairn Twp. (M-883)

Agnew Spanish River

Lake of the Mountains

O.F.S. Reserve

RAILWAY

CANADIAN PACIFIC

LOC.

SRO.

VI

V

IV

III

II

I

12 11 10 9 8 7 6 5 4 3 2 1

Dunlop Twp. (M.771)

THE TOWNSHIP
OF

SHAKESPEARE

DISTRICT OF
SUDBURY

SUDBURY
MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

Agnew

Spanish River

Lake

Baldwin Twp (M.685)

VI

V

IV

III

II

I

12 11 10 9 8 7 6 5 4 3 2 1

TWP. 129 M.1208

VICTORIA
M-1172

SHEDDEN TWP. M.1109

SALTER TWP

Hanna L.

Long L.

Laroche L.

Kecil Lake

1" = 40 chains

Toria L.

Tune

Sugar L.

WALFORD STATION

Spanish R.

Canadian Pacific

Algoma Eastern Railway

6 5 4 3 2 1
7 8 9 10 11 12
19 20 21 22 23 24
30 29 28 27 26 25
31 32 33 34 35 36
42 41 40 39

SALTER
M-1087

1" = 40 Chains

Gravel Pit

Massey L.

Wahsesee L.

CHUTES PROV. PARK

TOWN OF MASSEY

LAND ADDED TO SALTER TP

MAY TP. M.860

HARROW TP. M.918

For Additional Information See Maps:

BALDWIN-0047-A1 #1-36


LEGEND
1 Volcanics - greenstone (a)
2 Conglomerate
3 Quartzite (a), Sedimentary Schist (b)
4 Argillite & Greywacke (a) Staurolite, Garnet Sericite Schist (b), Interbedded Greywacke & Lamprophyre (c)
5 Basic Intrusives, Diorite or Gabbro
6 Granite
7 Diabase
Bmuns
Strike & dip of bedding
Strike & dip of schistosity
Drag Folding
Pit or Trench
Drill Hole
Shaft
Contact or Edge of Outcrop
Contact or Edge of Outcrop Approximate
Fault & direction of movement
Swamp
Porphyry
Pyrite
Copper
Magnetite
Hematite
Nickel
Pyrrhotite
Uranium
Sheared
Quartz veins
SHEET 7
N
SHEDDEN
VICTORIA
SALTER
MAY
BEMIC LAKE
TUBB LAKE
Echo Bay Fault
Murray Fault
North Branch
South Branch
NOT TO BE REMOVED FROM THE OFFICE OF THE RESIDENT GEOLOGIST, ONT. DEPT. OF MINES SAULT STE. MARIE, ONT.
RECEIVED
RESIDENT GEOLOGIST SAULT STE. MARIE
Map #1 of 2
PROSOC LTD MURRAY PROJECT
Geological Map of parts of the Twps - Shedden - Victoria - Salter, May
Scale 1in = 1320'
Drawn by DJM
Geology by DWE, PMH
Baldwin 0047-A1#1
(COBDEN 0018-9)

LEGEND

1	Volcanics - greenstone (a)
2	Conglomerate
3	Quartzite (a), Sedimentary Schist (b)
4	Argillite & Greywacke (a) Staurolite, Garnet Sericite, Schists (b), Interbedded Greywacke & Limestone (c)
5	Basic Intrusives, Diorite or Gabbro
6	Granite
7	Diabase

	Breccia
	Strike & dip of bedding
	Strike & dip of schistosity
	Drag Folding
	Pit or Trench
	Drill Hole
	Shaft
	Contact or Edge of Outcrop
	Contact or Edge of Outcrop Approximate
	Fault & direction of movement
	Swamp

Por.	Porphyry
P	Pyrite
Cu	Copper
M	Magnetite
H	Hematite
Ni	Nickel
Py	Pyrrhotite
U	Uranium
S or ///	Sheared
V or	Quartz veins

SHEET 8 EXTENSION

GOUGH

SALTER

MAY

NOT TO BE REMOVED FROM THE OFFICE OF THE RESIDENT GEOLOGIST, ONT. DEPT. OF MINES SAULT STE. MARIE, ONT.

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RESIDENT GEOLOGIST SAULT STE. MARIE

Map # 2 of 9.

COPY

Baldwin 0047-A1 #2

COBDEN 0018-10

PROSCO LTD. MURRAY PROJECT

Geological Map of parts of the Twps. - May, Salter

Scale 1in = 1320'

Drawn by JHH

Geology by D.W.E., PHH

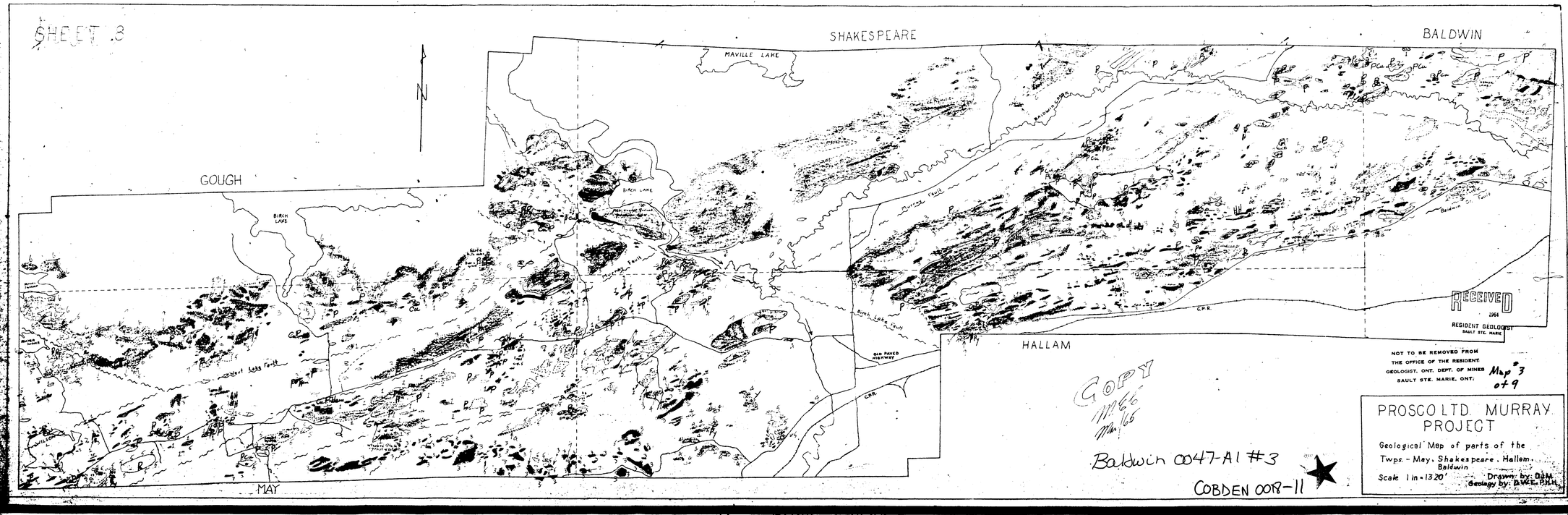
SHEET 3

LEGEND

1. Volcanics - greenstone (a)
2. Conglomerate
3. Quartzite (a), Sedimentary Schist (b)
4. Argillite & Greywacke (a) Staurolite, Garnet Sericite, Schists (b), Interbedded Greywacke & Limestone (c)
5. Basic Intrusives, Diorite or Gabbro
6. Granite
7. Diabase

- Breccia
- Strike & dip of bedding
- Strike & dip of schistosity
- Drag Folding
- Pit or Trench
- Drill Hole
- Shaft
- Contact or Edge of Outcrop
- Contact or Edge of Outcrop Approximate
- Fault & direction of movement
- Swamp

Por	Porphyry
P	Pyrite
Cu	Copper
M	Magnetite
H	Hematite
Ni	Nickel
Py	Pyrrhotite
U	Uranium
S or ///	Sheared
Vor	Quartz veins



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1964
RESIDENT GEOLOGIST
SAULT STE. MARIE

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Map 3 of 9

COPY
11MAY66
Mar 166

Baldwin 0047-A1 #3

COBDEN 0018-11

PROSCO LTD. MURRAY PROJECT

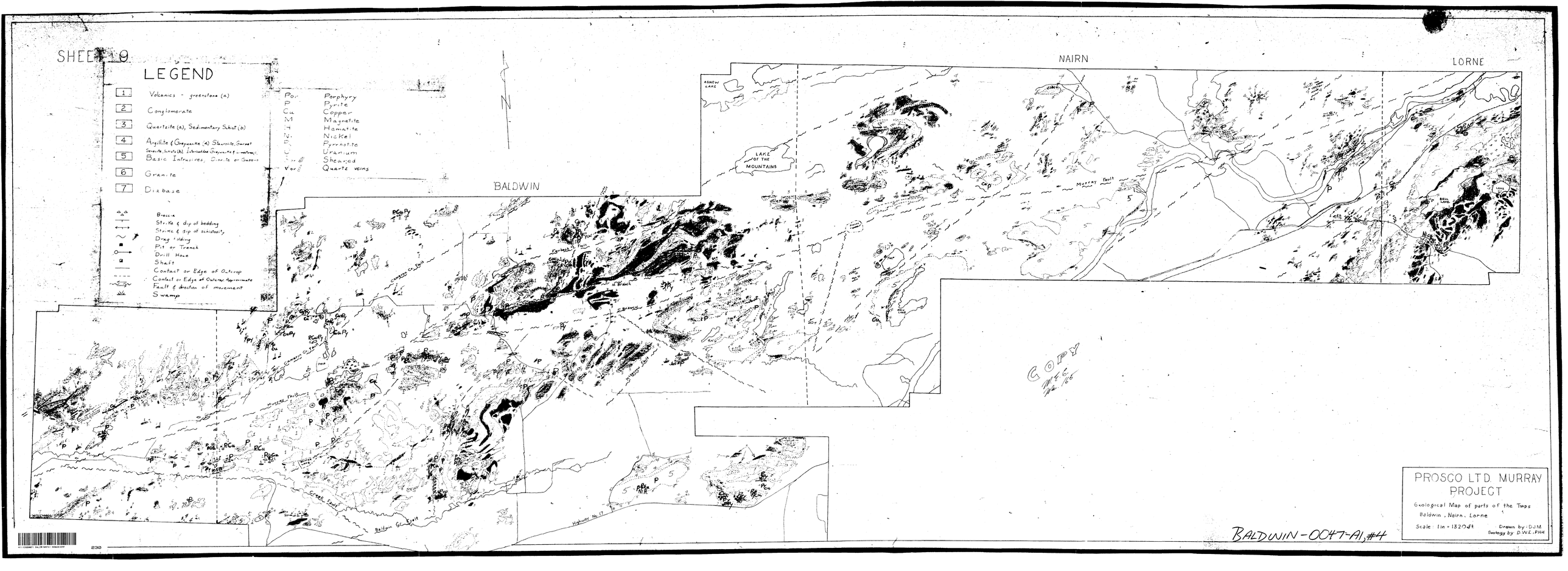
Geological Map of parts of the Twps. - May, Shakespeare, Hallam, Baldwin

Scale 1 in = 1320'

Drawn by: D.A.M.
Geology by: D.W.E., P.H.H.

220

SHEET 9



PROSCO LTD. MURRAY PROJECT

Geological Map of parts of the Twps Baldwin, Nairn, Lorne

Scale: 1 in = 1320 ft

Drawn by: D.J.M.
Geology by D.W.E. PHH

BALDWIN-0047-A1,#4

230

LEGEND

1 Volcanics - greenstone (a)

2 Conglomerate

3 Quartzite (a), Sedimentary Schist (b)

4 Argillite (Greywacke (a) Staurolite, Garnet Sericite Schist (b), Interbedded Greywacke & Limestone (c)

5 Basic Intrusives, Diorite or Gabbro

6 Granite

7 Diabase

Breccia

Strike & dip of bedding

Strike & dip of schistosity

Drag Folding

Pit or Trench

Drill Hole

Shaft.

Contact or Edge of Outcrop

Contact or Edge of Outcrop Approximate

Fault & direction of movement

Swamp

Por Porphyry

P Pyrite

Cu Copper

M Magnetite

H Hematite

Ni Nickel

Po Pyrrhotite

U Uranium

Str Sheared

Vqz Quartz veins

SHEET #10

DRURY

DENISON

GRAHAM

LORNE

LOUISE

SPANISH RIVER

Totten Mine

NOT TO BE REMOVED FROM THE OFFICE OF THE RESIDENT GEOLOGIST, ONT. DEPT. OF MINES SAULT STE. MARIE, ONT.

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RESIDENT GEOLOGIST SAULT STE. MARIE

Map #6 of 9.

COPY

Baldwin 0047-A1 #5

(COBDEN 0018-14)

BRISCO LTD: MURRAY PROJECT

Geological Map of parts of the Twps - Drury, Denison, Graham

Scale 1in = 1320 ft

Drawn by: D.W.M

Geology by: D.W.E., P.M.H.

240

LEGEND

1 Volcanics - greenstone (a)

2 Conglomerate

3 Quartzite (a), Sedimentary Schist (b)

4 Argillite & Greywacke (a) Staurolite, Garnet Sericite, Schists (b), Interbedded Greywacke & Limestone (c)

5 Basic Intrusives, Diorite or Gabbro

6 Granite

7 Diabase

Breccia

Strike & dip of bedding

Strike & dip of schistosity

Drag Folding

Pit or Trench

Drill Hole

Shaft

Contact or Edge of Outcrop

Contact or Edge of Outcrop Approximate

Fault & direction of movement

Swamp

Por. Porphyry
P Pyrite
Cu Copper
M Magnetite
H Hematite
Ni Nickel
Py Pyrrhotite
U Uranium
S or /// Sheared
Vor Quartz veins

SHEET TO EXTENSION

LORNE

Map #4 of 9

COPY LEGEND

COPY
M.E.G.
May/65

Baldwin 0047-A1 #6
(COBDEN 0018-12)

PROSCO LTD. MURRAY PROJECT

Geological Map of part of the twp of LORNE

Scale: 1in = 1320'

Drawn by: D.J.M.

Geology by: D.W.E., P.H.H.

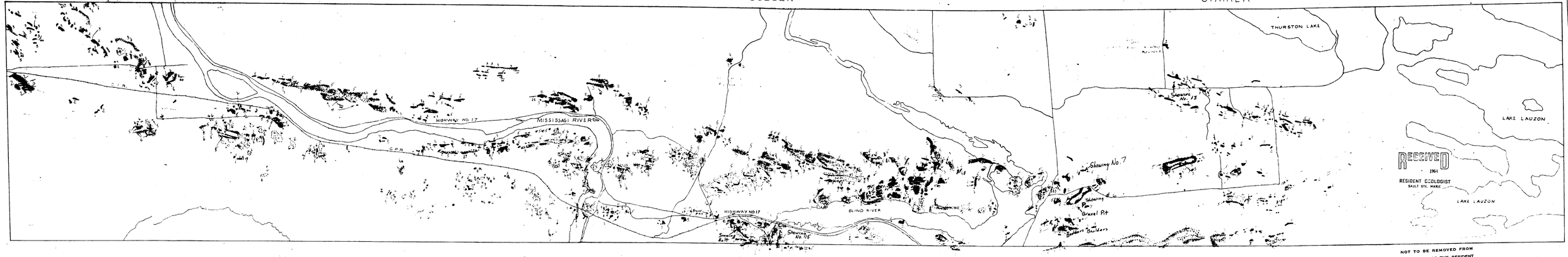
SHEET 4

1 Volcanics - greenstone (a)
2 Conglomerate
3 Quartzite (a), Sedimentary Schist (b)
4 Argillite (Greywacke (a) Staurolite, Garnet, Sericite, Schists (b), Interbedded Greywacke & Limestone (c)
5 Basic Intrusives, Diorite or Gabbro
6 Granite
7 Diabase

Breccia
Strike & dip of bedding
Strike & dip of schistosity
Drag Folding
Pit or Trench
Drill Hole
Shaft
Contact or Edge of Outcrop
Contact or Edge of Outcrop Approximate
Fault & direction of movement
Swamp

P Pyrite
Cu Copper
M Magnetite
H Hematite
Ni Nickel
U Uranium
Sor Sheared
Vqz Quartz veins

THOMPSON COBDEN STRIKER



Map #7 of 9

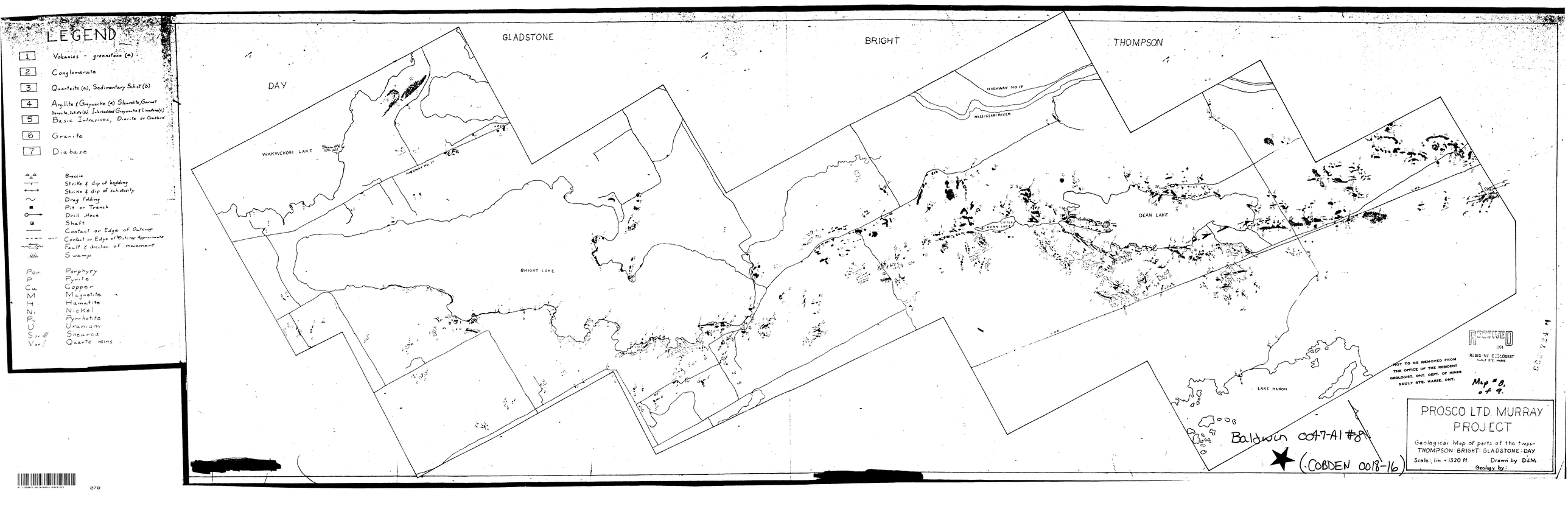
PROSCO LTD. MURRAY PROJECT

Geological Map of parts of the Twps
STRIKER, COBDEN, THOMPSON

Scale 1 inch = 1,000 ft. Drawn by E.J.M.

Baldwin 0047-A1 #7

COBDEN 008-15


LEGEND
1 Volcanics - greenstone (a)
2 Conglomerate
3 Quartzite (a), Sedimentary Schist (b)
4 Argillite & Greywacke (a) Staurolite, Garnet Sericite Schists (b), Interbedded Greywacke & Limestone (c)
5 Basic Intrusives, Diorite or Gabbro
6 Granite
7 Diabase
Breccia
Strike & dip of bedding
Strike & dip of schistosity
Drag Folding
Pit or Trench
Drill Hole
Shaft
Contact or Edge of Outcrop
Contact or Edge of Outcrop Approximate
Fault & direction of movement
Swamp
Por Porphyry
P Pyrite
Cu Copper
M Magnetite
H Hematite
Ni Nickel
Po Pyrrhotite
U Uranium
Sor Sheared
Vor Quartz veins
DAY
GLADSTONE
BRIGHT
THOMPSON
WAKWEKOBI LAKE
HIGHWAY NO. 17
MISSISSAGI RIVER
BRIGHT LAKE
DEAN LAKE
LAKE HURON
RECEIVED
RESIDENT GEOLOGIST
SAULT STE. MARIE
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Map # 8. of 9.
PROSCO LTD. MURRAY PROJECT
Geological Map of parts of the twps. THOMPSON BRIGHT GLADSTONE DAY
Scale: 1in = 1320 ft
Drawn by D.J.M.
Geology by:
Baldwin 0047-A1 #8
(COBDEN 0018-16)

LEGEND

1 Volcanics - greenstone (a)

2 Conglomerate

3 Quartzite (a), Sedimentary Schist (b)

4 Argillite & Greywacke (a) Staurolite, Garnet Sericite Schists (b), Interbedded Greywacke & Limestone (c)

5 Basic Intrusives, Diorite or Gabbro

6 Granite

7 Diabase

Breccia

Strike & dip of bedding

Strike & dip of schistosity

Drag Folding

Pit or Trench

Drill Hole

Shaft

Contact or Edge of Outcrop

Contact or Edge of Outcrop Approximate

Fault & direction of movement

Swamp

Por Porphyry
P Pyrite
Cu Copper
M Magnetite
H Hematite
Ni Nickel
Py Pyrrhotite
U Uranium
Sch Sheared
Vqtz Quartz veins

LEFROY

THESSALON

DAY

WAWEKEDIT LAKE

SWAIN LAKE

KIRKWOOD LAKE

GULLIS LAKE

BURK LAKE

WAKWEKOBI LAKE

BRIGHT LAKE

THESSALON RIVER

(DIORITE?)

Area not mapped

LAKE HURON
MAGBETH BAY

N

Baldwin 0047-A1 #9.

(COBDEN 0018-17)

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SAULT STE. MARIE

Map #9 of 9.

PROSCO LTD. MURRAY
PROJECT SSM-724
Geological Map of parts of the twps.
LEFROY: THESSALON: DAY
Scale: 1in = 1320 ft.
Oct. 15. 1957
Drawn by: D.J.M.
Geology by:

280

E. M. SURVEY

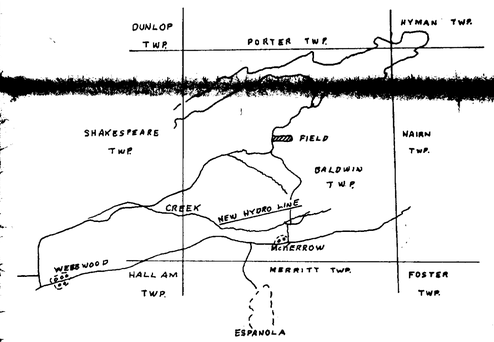
PROSCO LTD.

BALDWIN TWP.

SCALE 1"= 200'

OCTOBER 1, 1957

GEORGE W SANDER
CONSULTING GEOPHYSICIST



L80A L81A L82A L83A L84A L85A L86A L87A

TO ESPANOLA

SMALL POWER LINE

TO SCHOOL HOUSE AND McKERROW

HOUSE

BARN

A_3

SHEET NO 2
PHOTO 17-14

FIELD

DRY LAKE

SHACK

CONDUCTOR?

C_3

B_3

NEW HYDRO LINE (PHOTO NO 200-14)

R_3

Q_3

JEEP ROAD

TO McKERROW MAIN GRAVEL ROAD

POWER LINE

JEEP ROAD

NEW HYDRO LINE (PHOTO NO 200-14)

CREEK

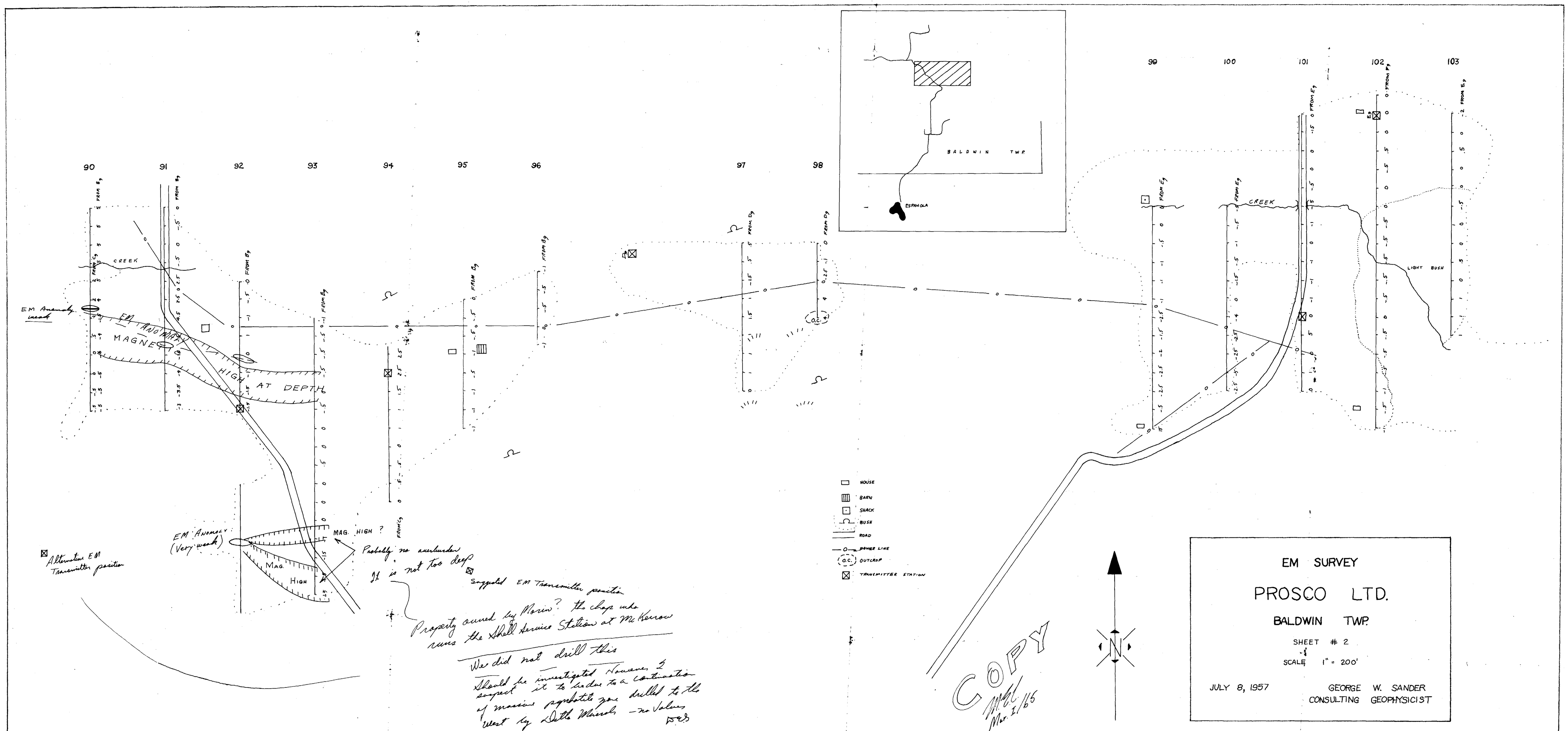
N_4

JEEP ROAD

R_3

JEEP RD

COPY
M.E.C.
March 9/65



EM SURVEY

PROSCO LTD.

BALDWIN TWP.

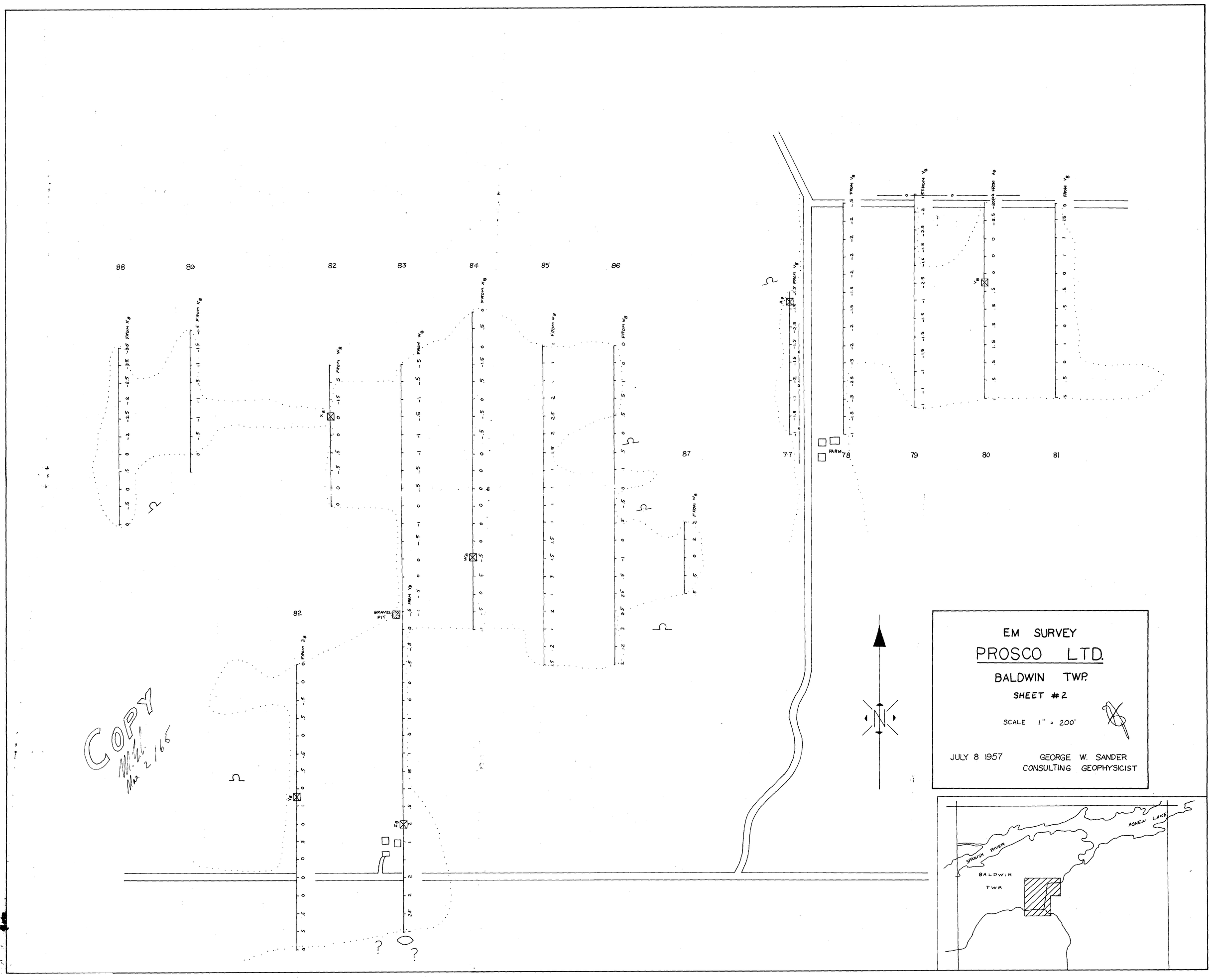
SHEET # 2

SCALE 1" = 200'

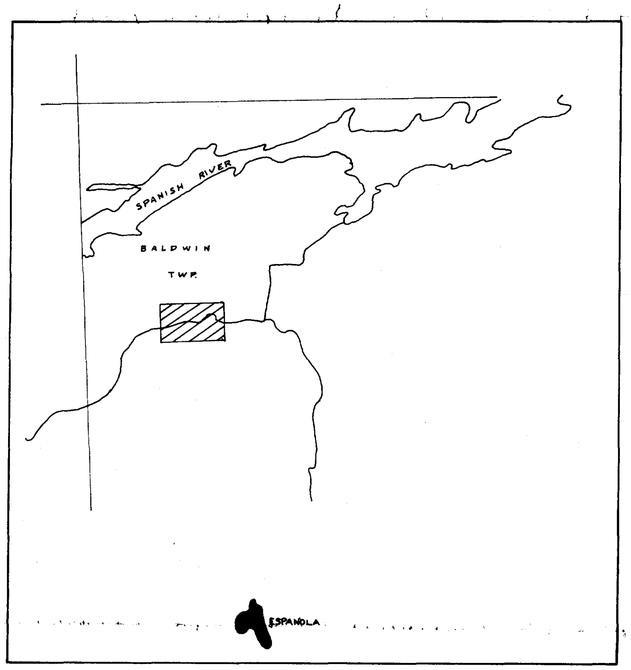
JULY 8, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

BALDWIN -0047-A1,#11



BALDWIN - 0047 - A1 #12



67 68 69 70 71 72 73 74 75 76

FROM T_B FROM T_B .5 FROM T_B -.15 FROM U_B FROM T_B FROM U_B

FROM R_B FROM S_B -.5 FROM R_B -.5 FROM R_B

S_B R_B U_B

O.C.

EM

EM SURVEY

PROSCO LTD.

BALDWIN TWP.

SHEET # 1A

SCALE 1" = 200'

JULY 5, 1957

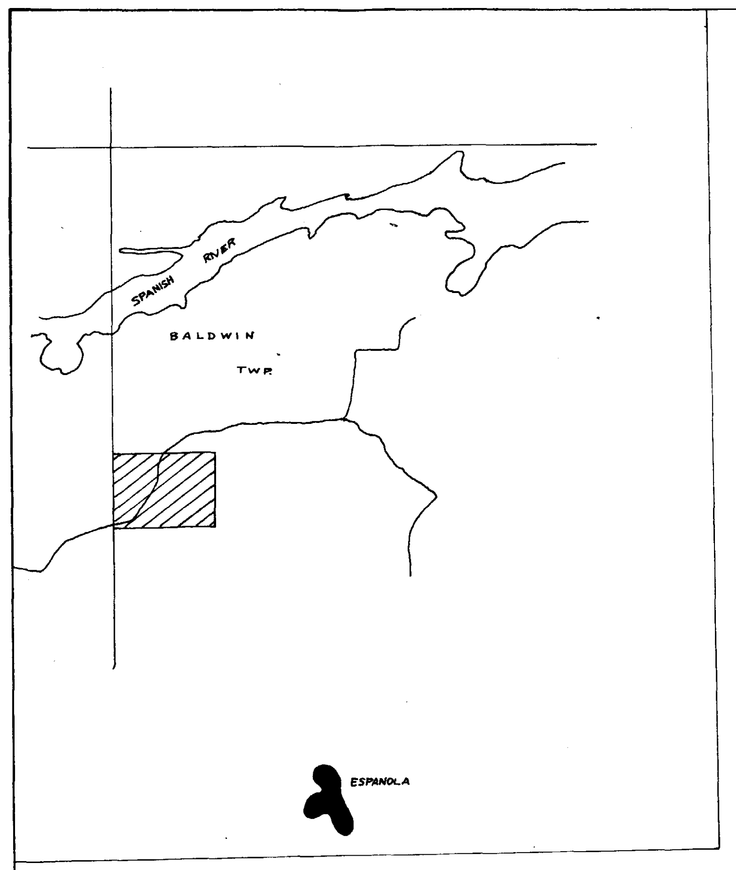
GEORGE W. SANDER

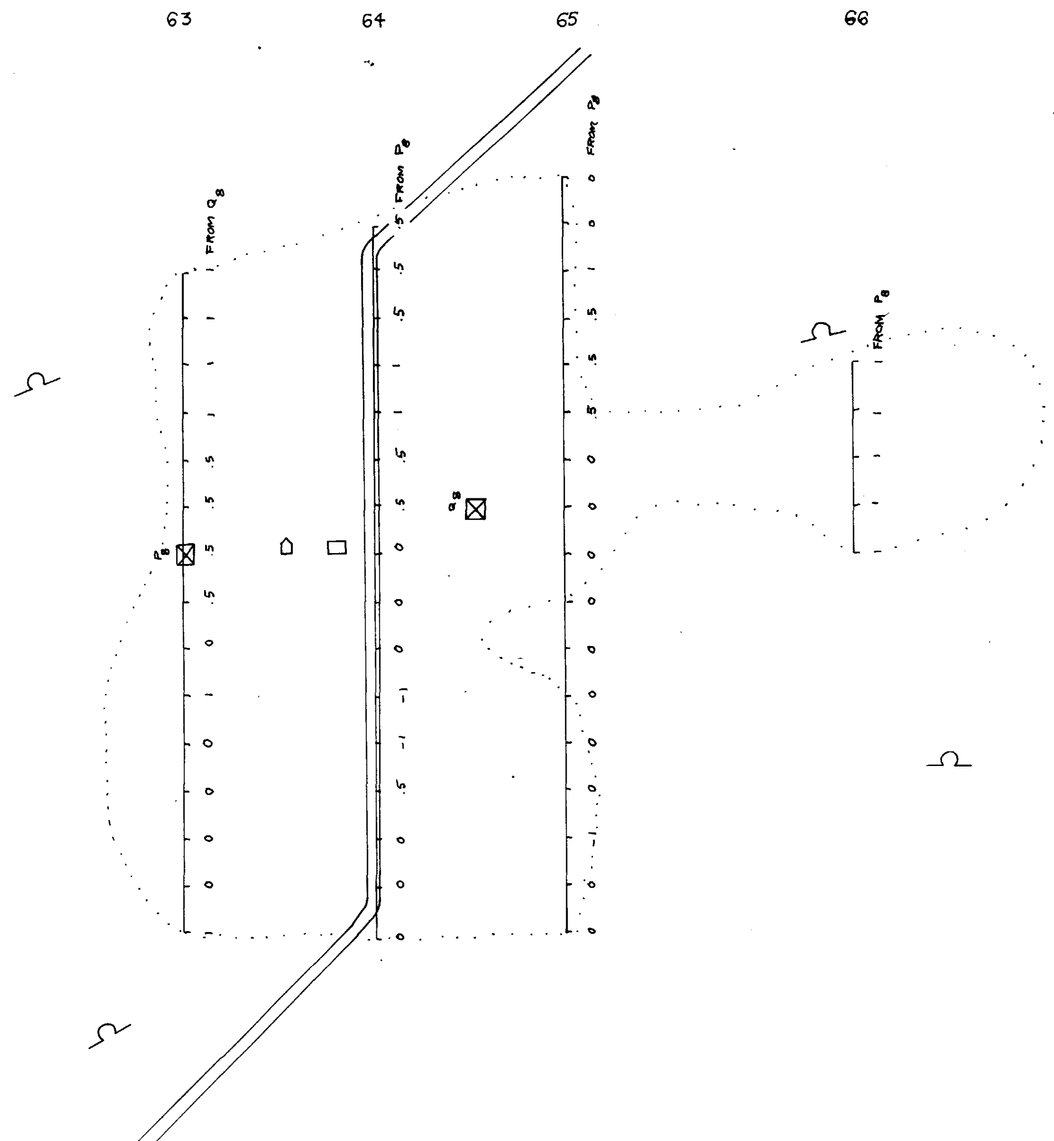
CONSULTING GEOPHYSICIST

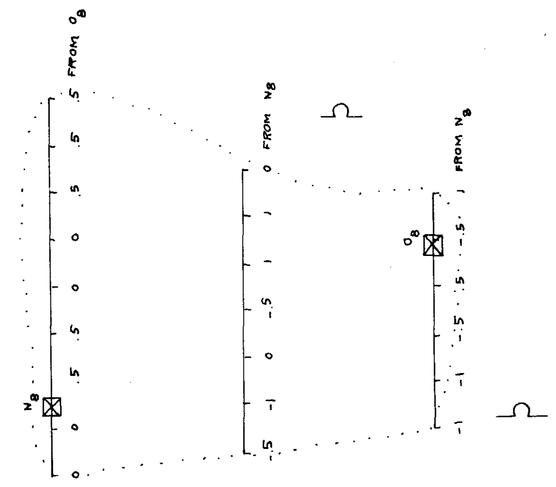
COPY

Mar 5/65

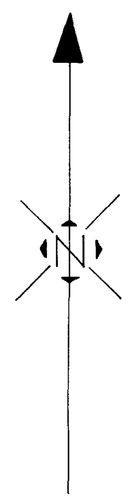
13







60 61 62



EM SURVEY

PROSCO LTD.

BALDWIN TOWNSHIP

SHEET # 1

SCALE 1" = 200'

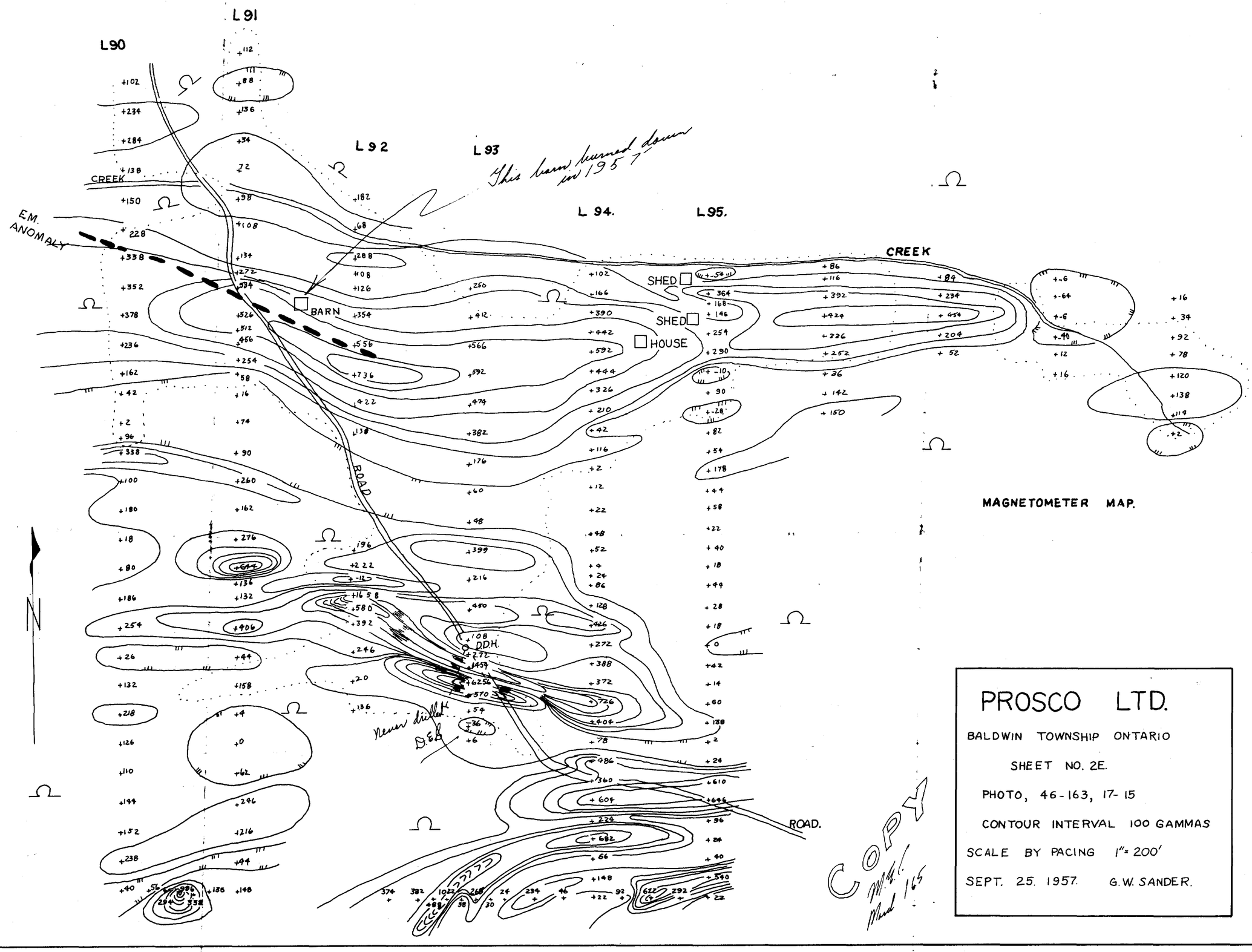
JULY 5, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

COPY
Mar. 6/65

330

BALDWIN-0047-A1, #14



MAGNETOMETER MAP.

PROSCO LTD.

BALDWIN TOWNSHIP ONTARIO

SHEET NO. 2E.

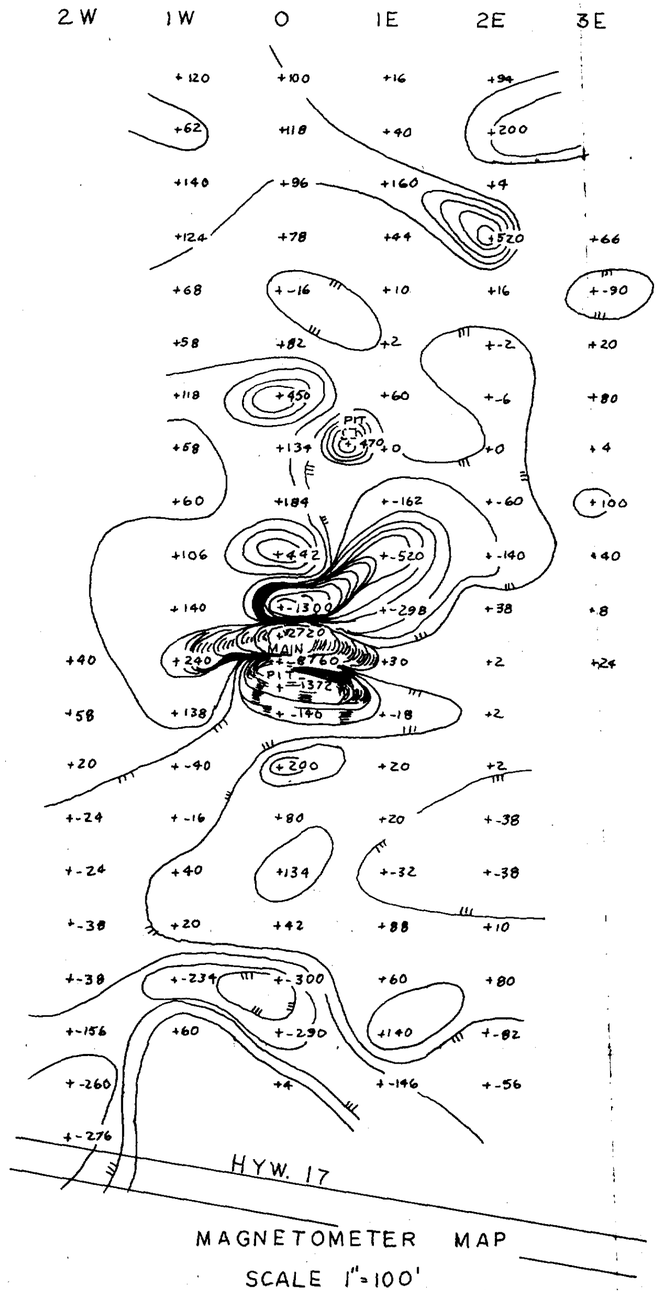
PHOTO, 46-163, 17-15

CONTOUR INTERVAL 100 GAMMAS

SCALE BY PACING 1"= 200'

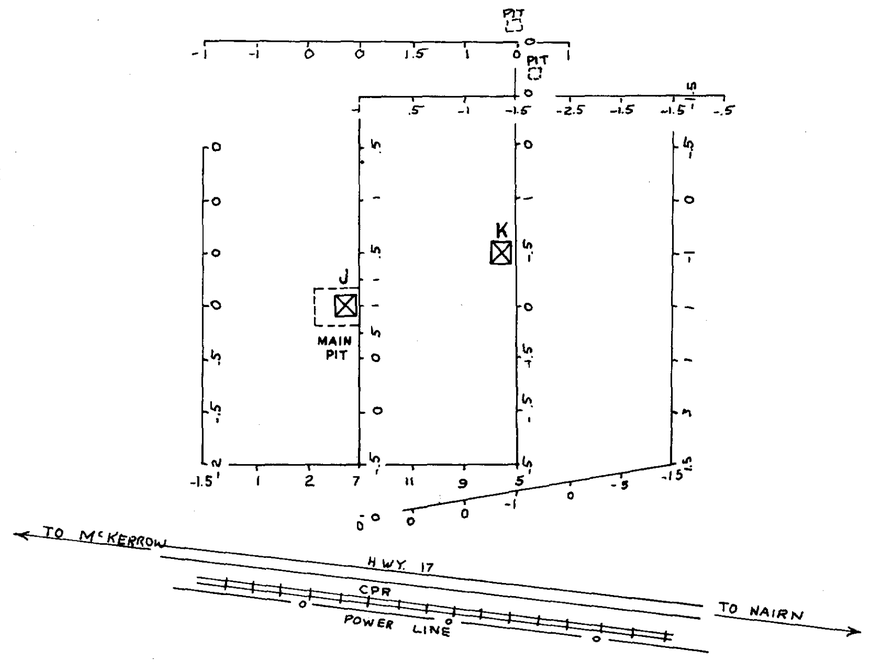
SEPT. 25. 1957. G.W. SANDER.

COPY



MAGNETOMETER MAP

SCALE 1"=100'



E. M. MAP

SCALE 1"=200'

GEOPHYSICAL SURVEY

PROSCO LTD.

BALDWIN TWP.

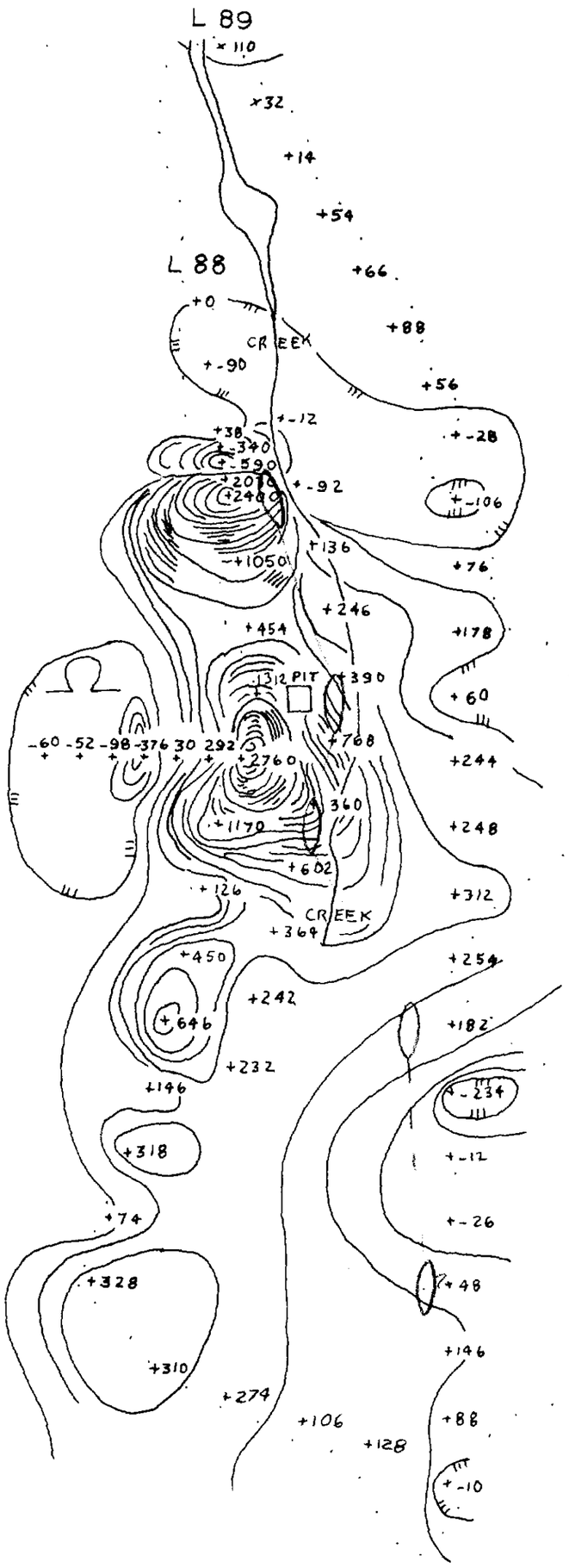
PISSINEAN SHOWING

OCTOBER 2, 1957 GEORGE W. SANDER
CONSULTING GEOPHYSICIST

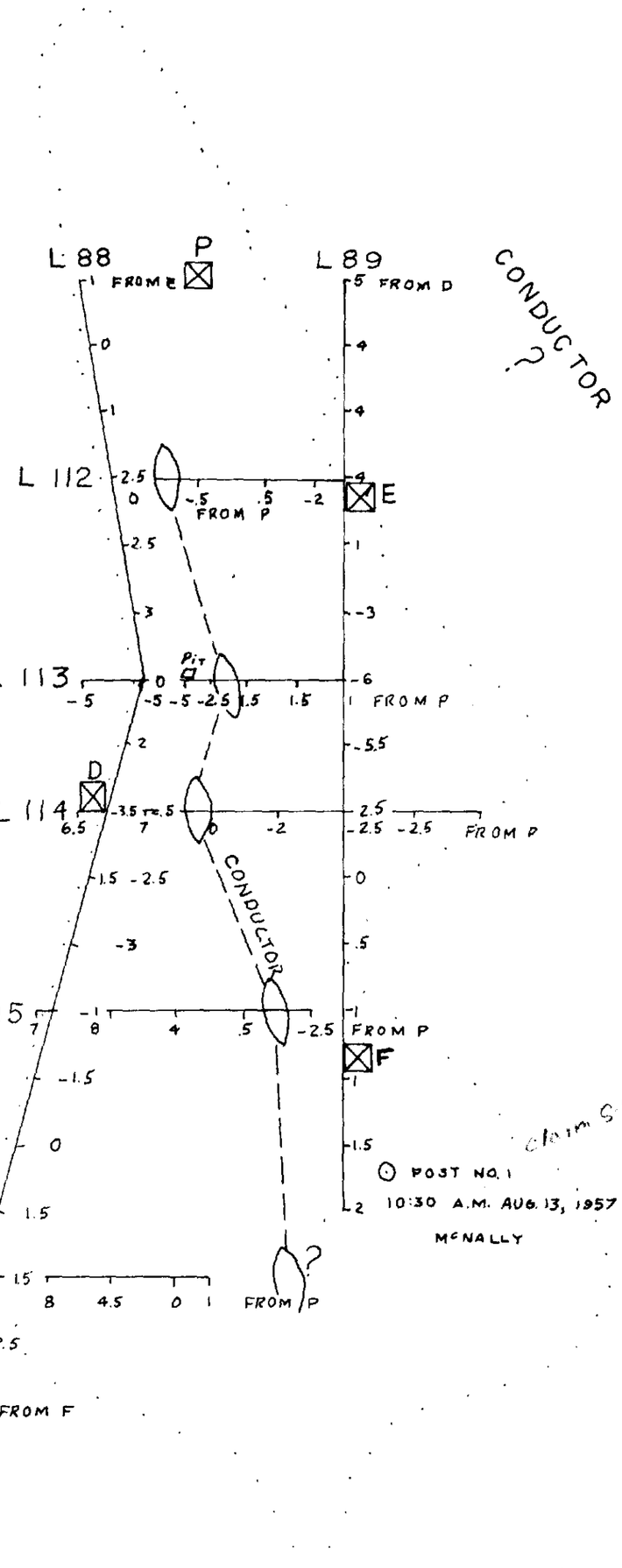
COPY
Mar. 2/66

March 30/60
Worthy of more check work
Lot 2 Con II
Baldwin Twp.
About 400' or so north
of highway 17 D.E.S.

0047-A1 #16



MAGNETOMETER MAP



E.M. MAP

PROSCO LTD.

BALDWIN TWP

FORMER PLUM PROP.

1" = 200'

SEPT. 25, 1957 G. W. SANDER

COPY

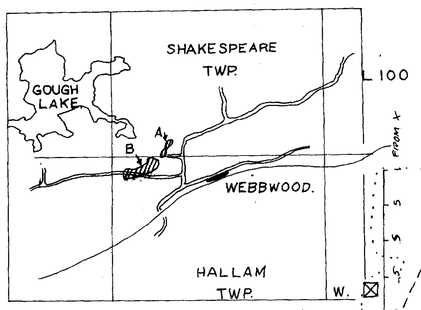
PROSCO LTD.

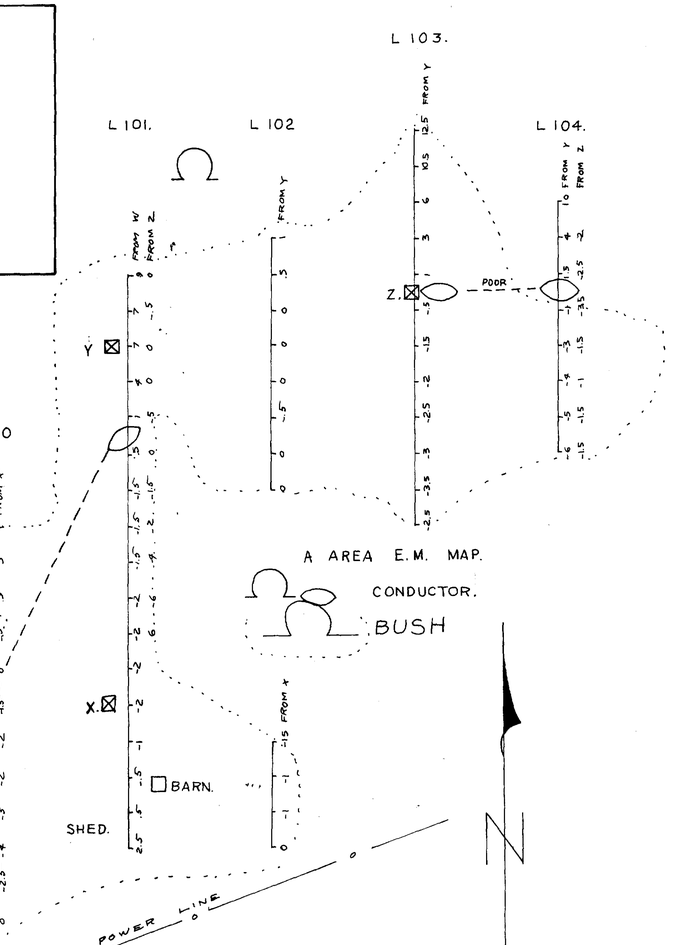
SHAKESPEARE TWP.

PHOTO 15-7.

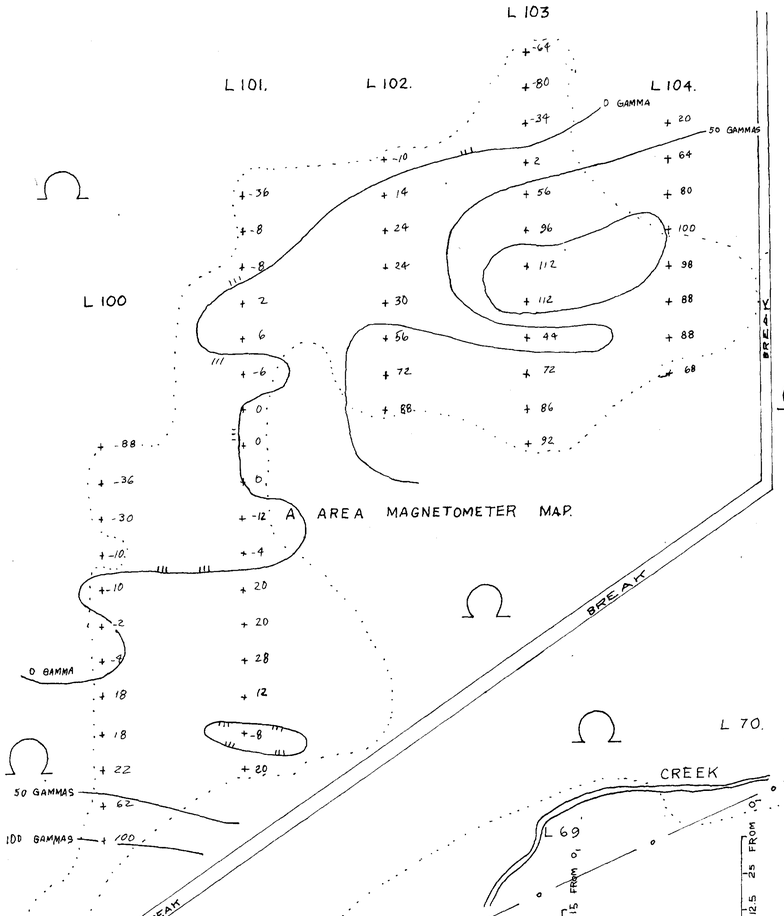
SCALE 1"= 200'

SEPT. 30, 1957. G. W. SANDER.

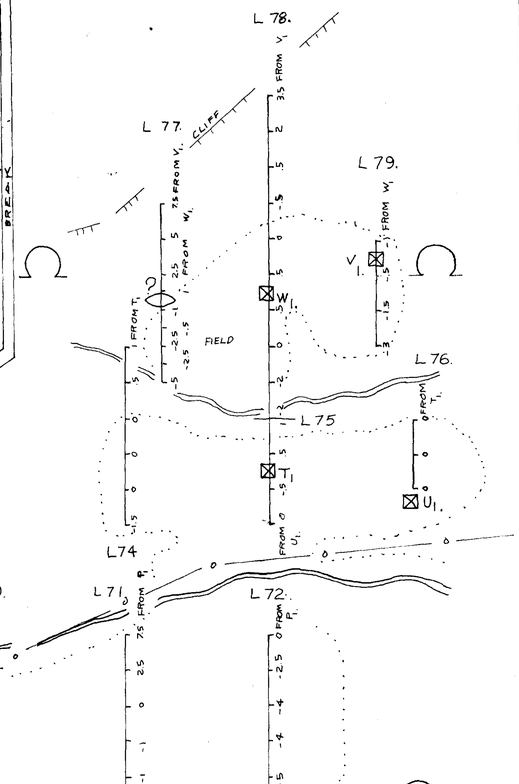


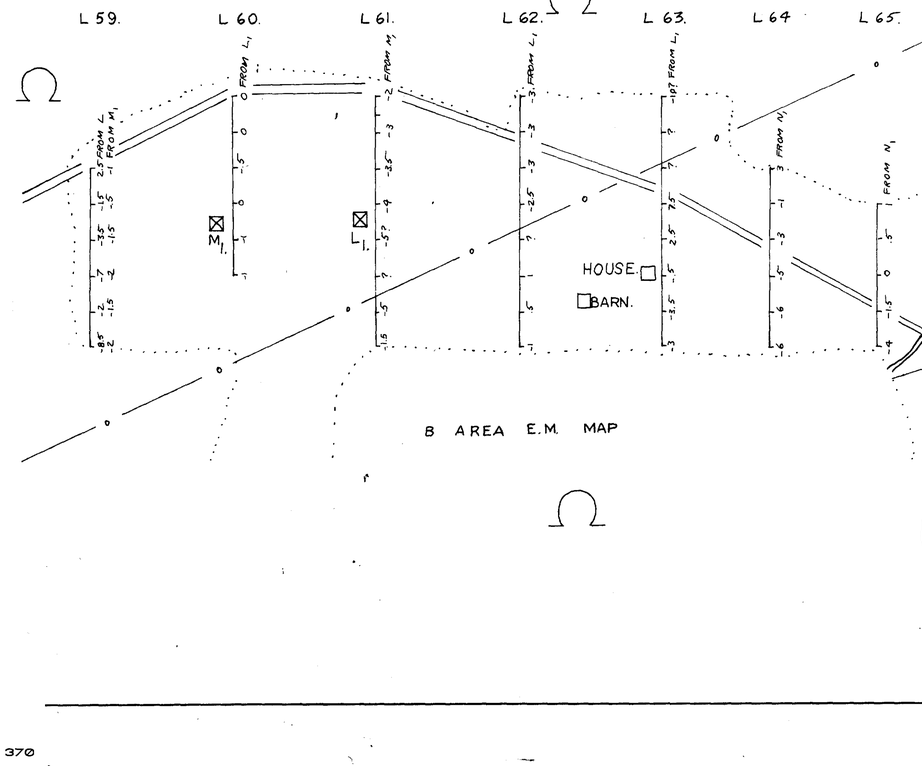


A AREA E.M. MAP.

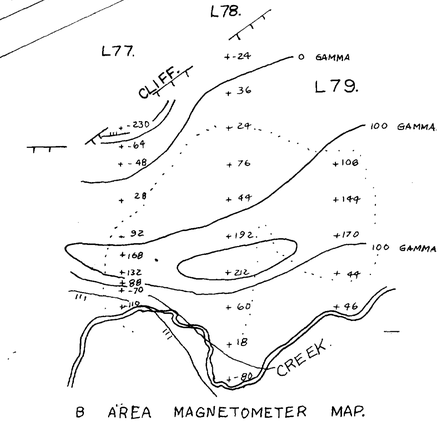


A AREA MAGNETOMETER MAP.



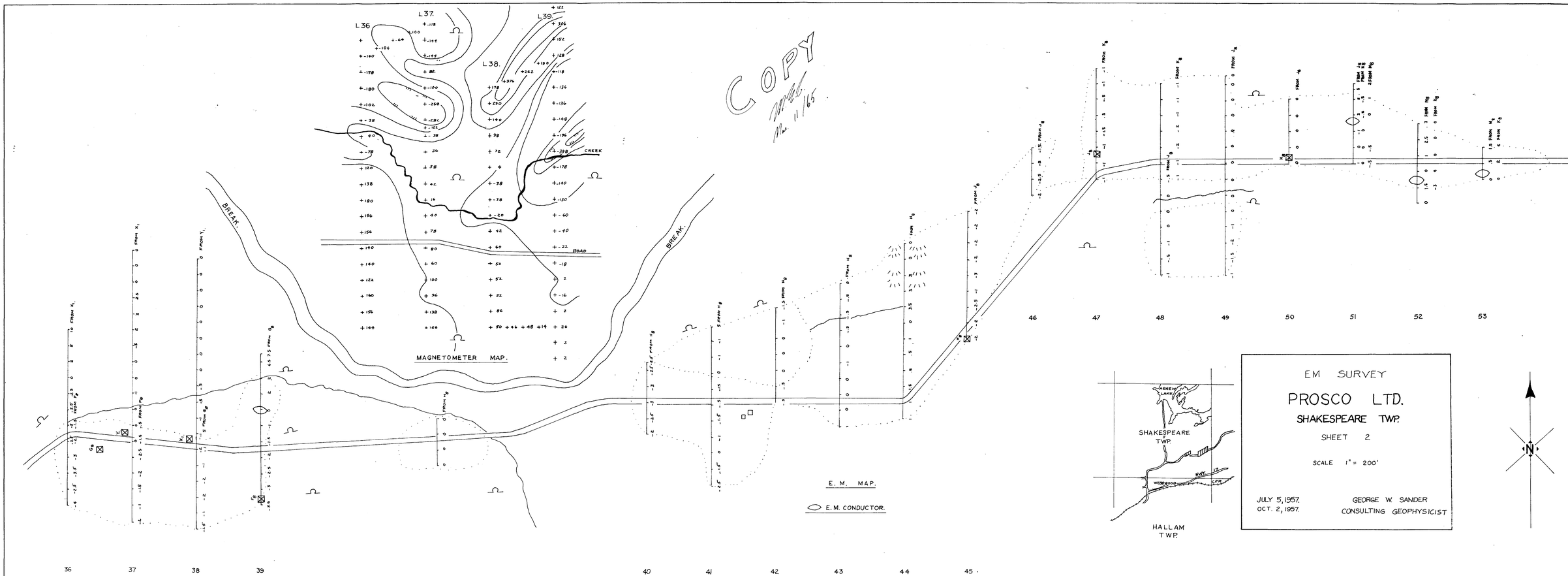


B AREA E.M. MAP



B AREA MAGNETOMETER MAP.

COPY
Mar. 26/65



COPY
Mar. 11/65

E.M SURVEY

PROSCO LTD.

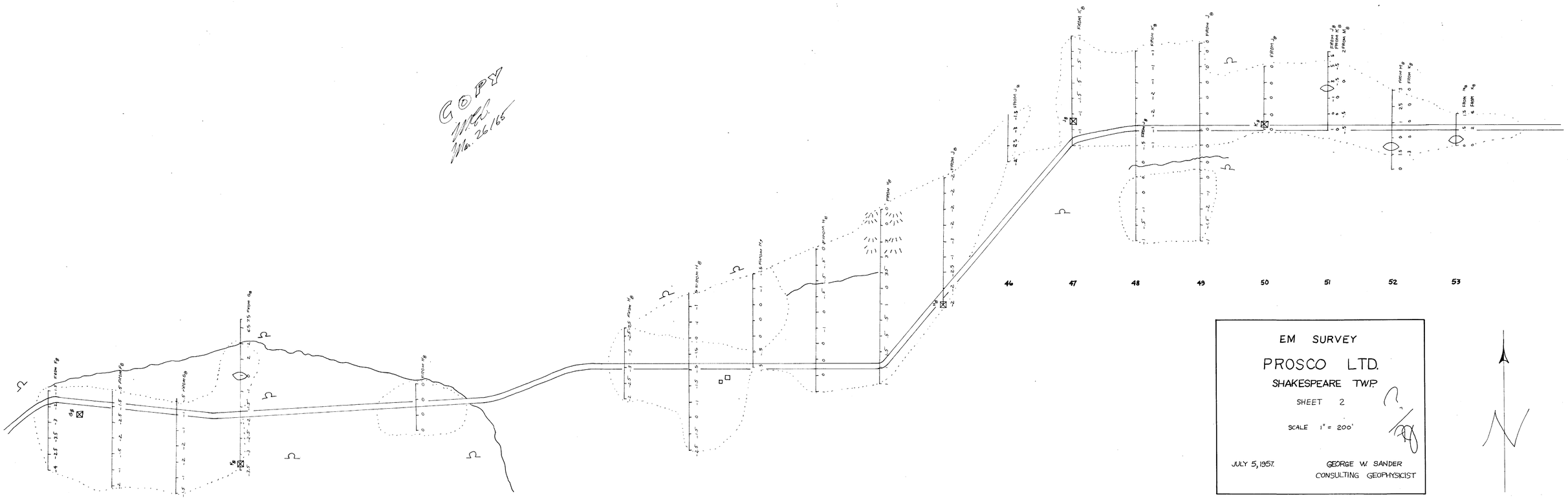
SHAKESPEARE TWP.

SHEET 2

SCALE 1" = 200'

JULY 5, 1957.
OCT. 2, 1957.

GEORGE W. SANDER
CONSULTING GEOPHYSICIST



COPY
Map No. 26165

EM SURVEY

PROSCO LTD.

SHAKESPEARE TWP.

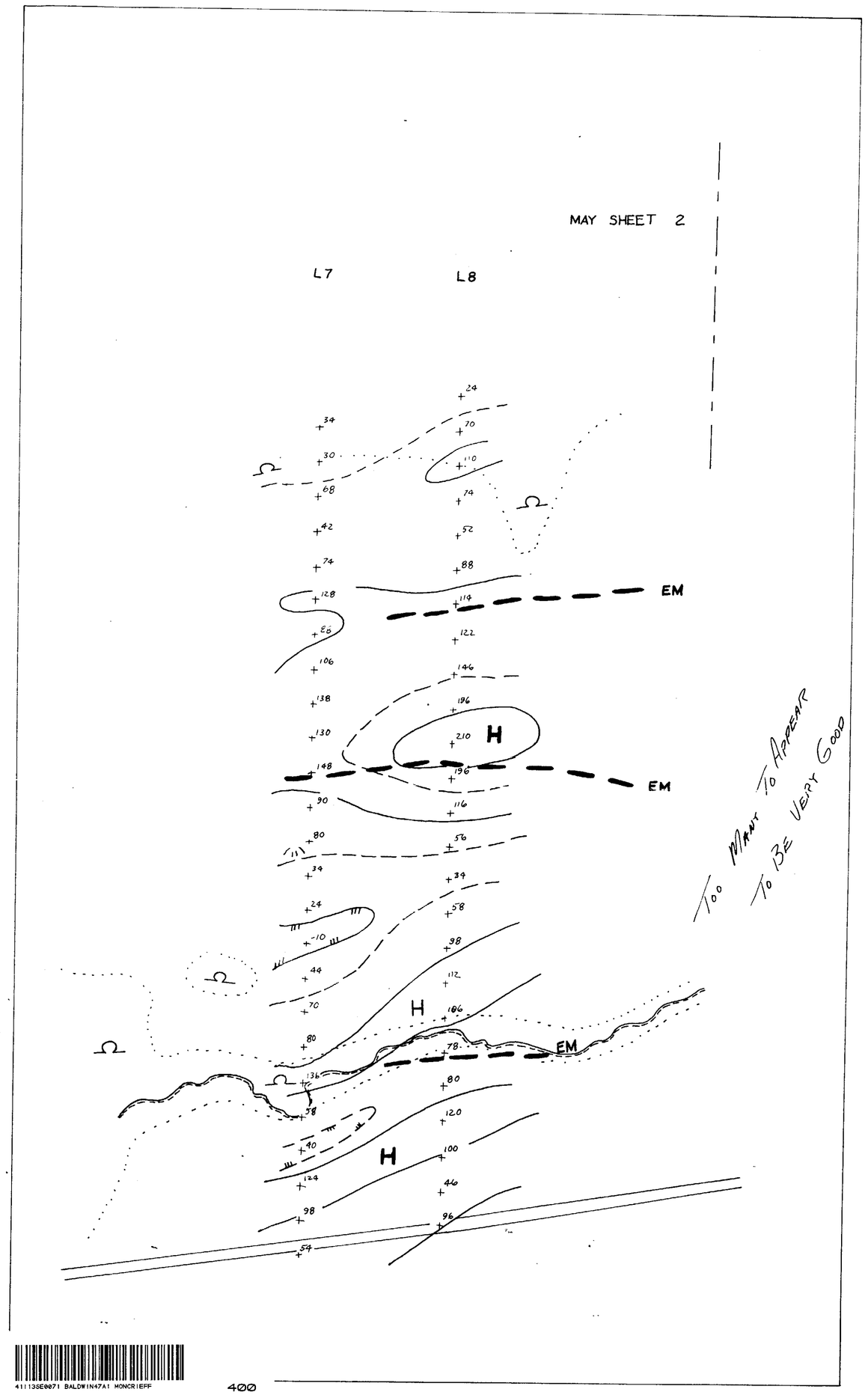
SHEET 2

SCALE 1" = 200'

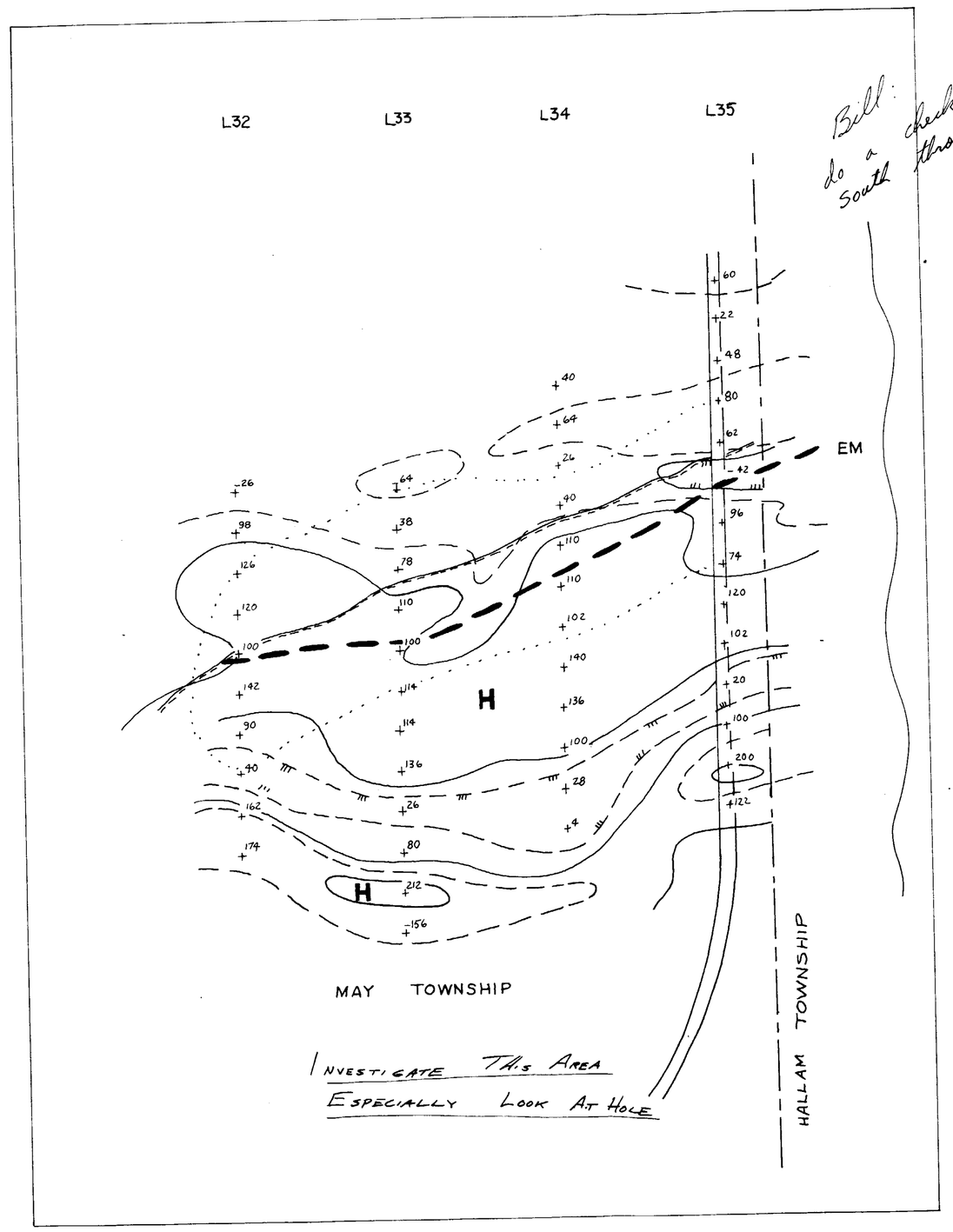
JULY 5, 1957.

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

BALDWIN-0047-A1, #21

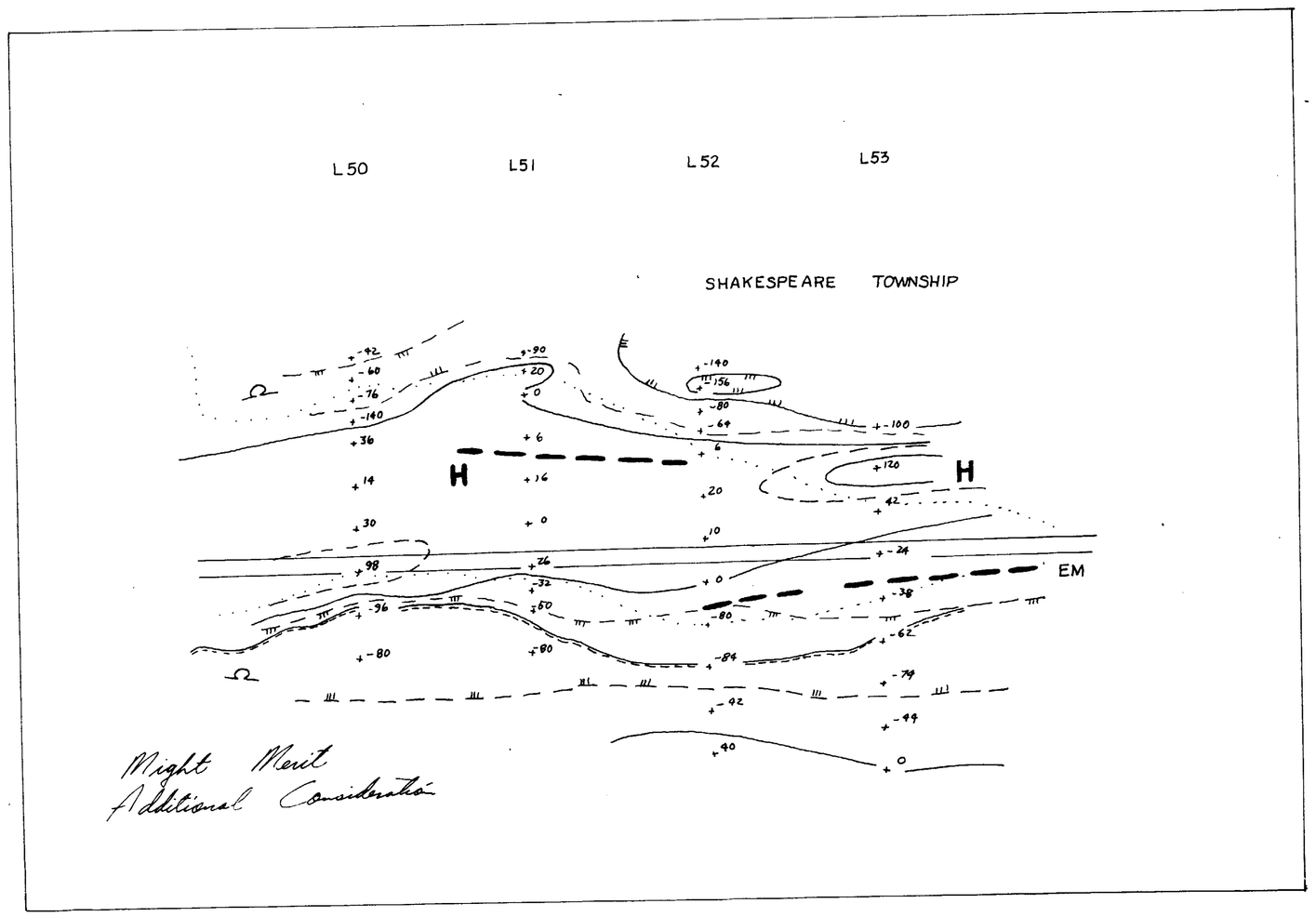


Might Want To Appear
Too Many To Be Very Good



Bell:
do a check
South through open field
both E.M. & MAG.

Investigate This Area
Especially Look At Hole



Might Want
Additional Considerations

PROSCO LTD.

MAGNETOMETER INVESTIGATION OF
EM ANOMALIES

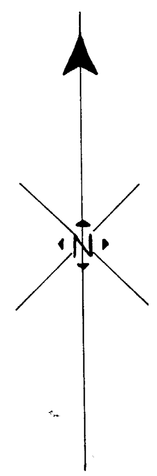
MAY & SHAKESPEARE TWPS.

CONTOUR INTERVAL 50 GAMMAS
SCALE 1" = 200'

LINES SAME AS EM MAP

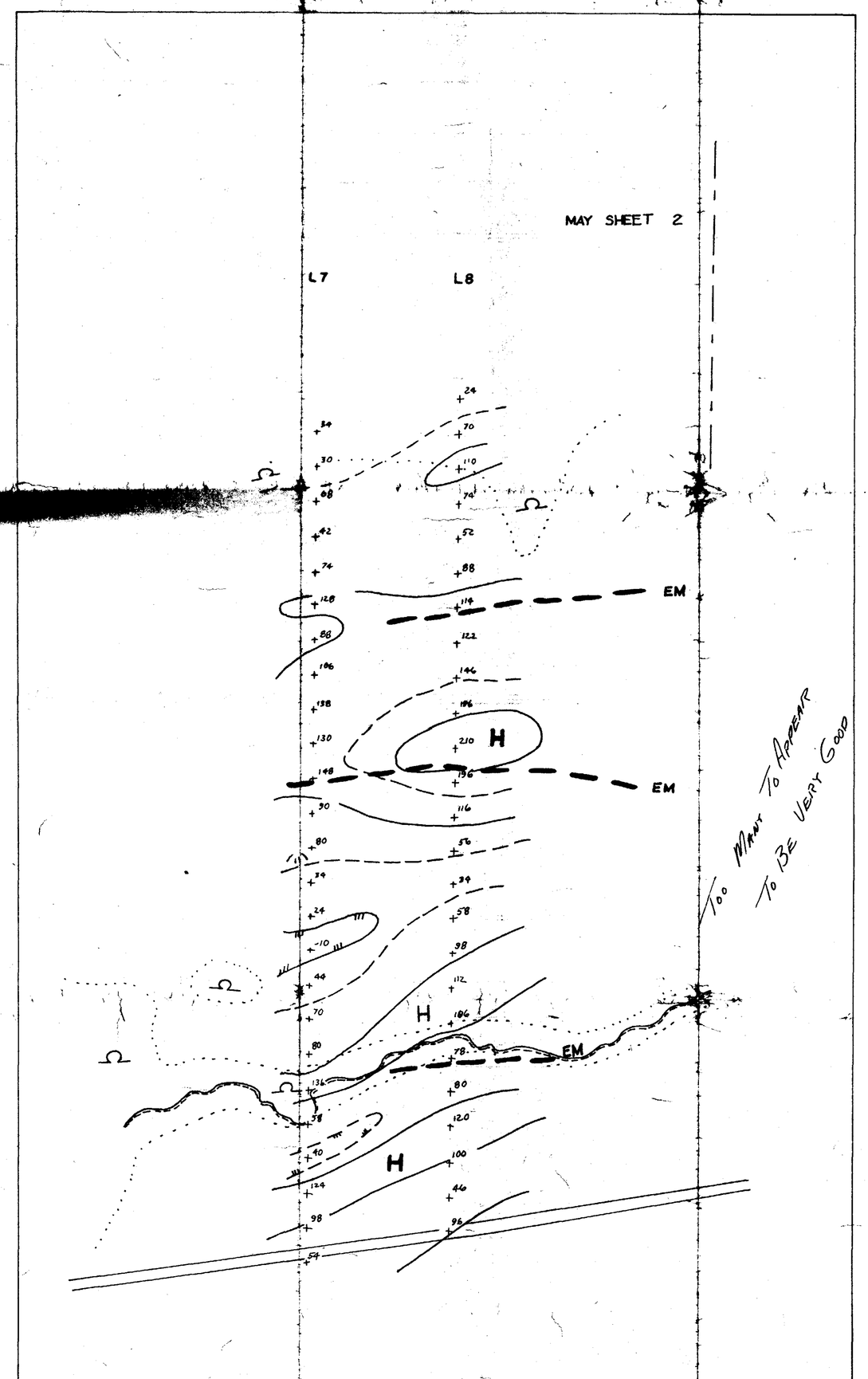
JULY 3, 1957

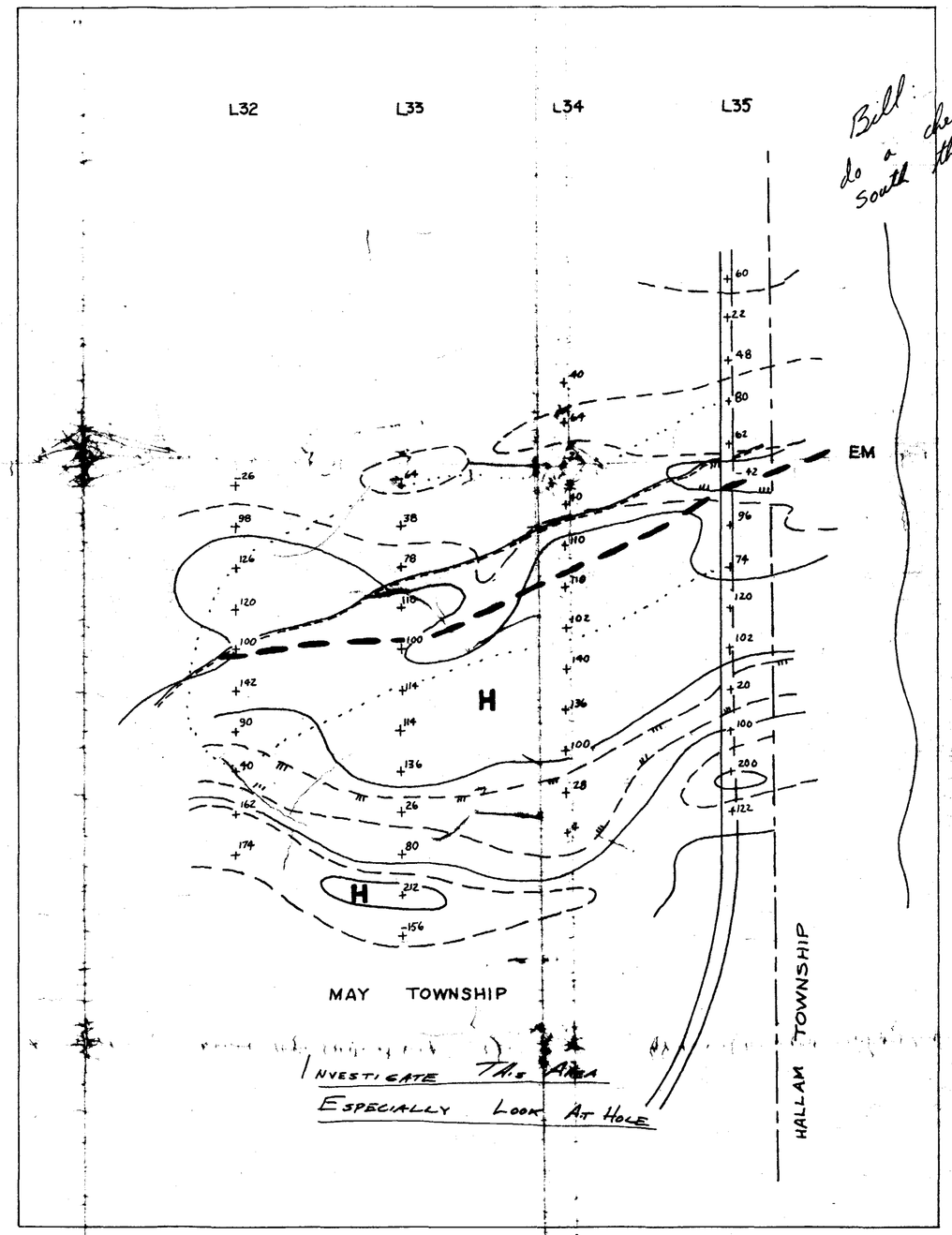
GEORGE W. SANDER
CONSULTING GEOPHYSICIST

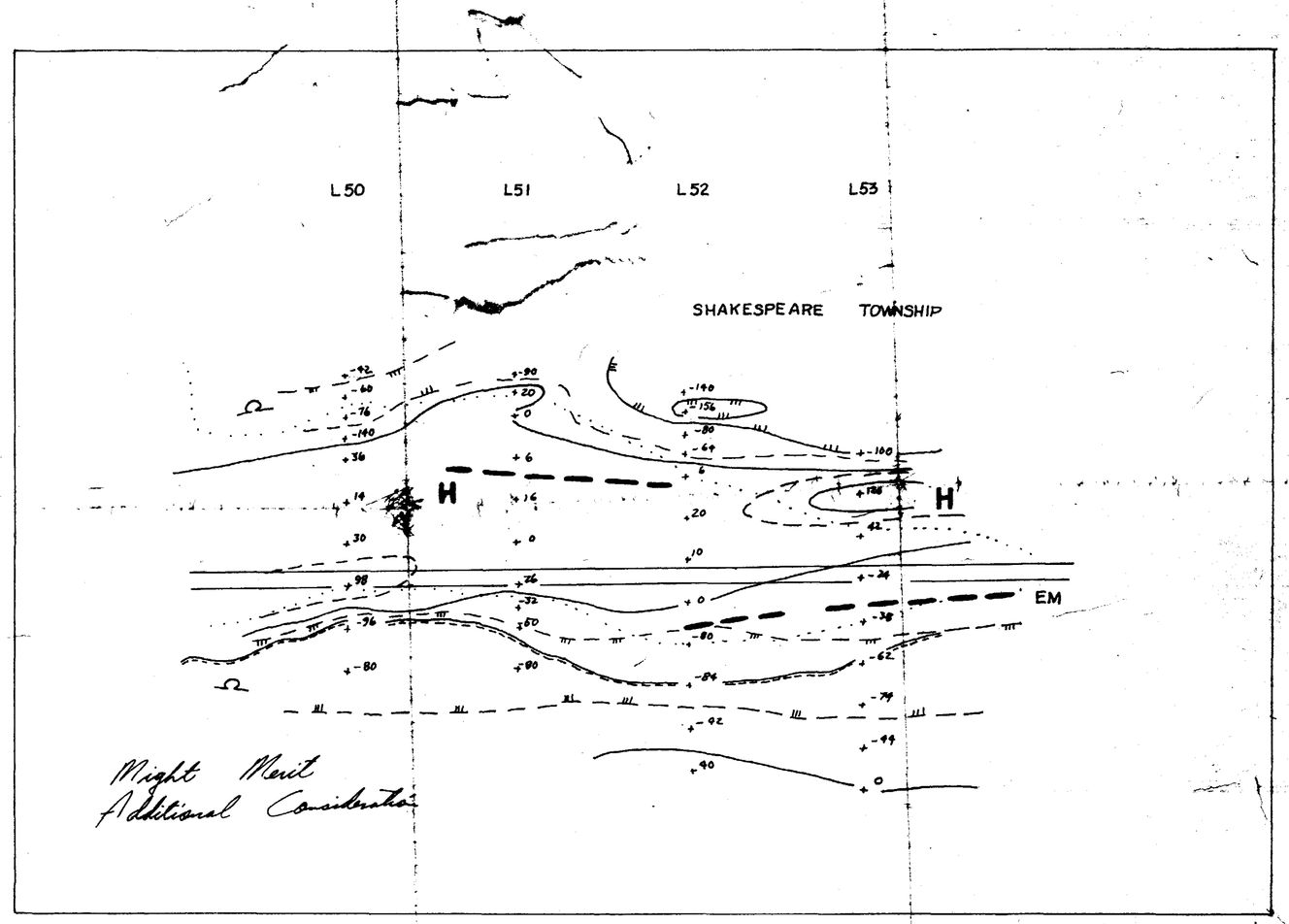


COPY
M.E.C.
Mar. 12/65

BALDWIN - 0047 - A1, #22







PROSCO LTD.

MAGNETOMETER INVESTIGATION OF EM ANOMALIES

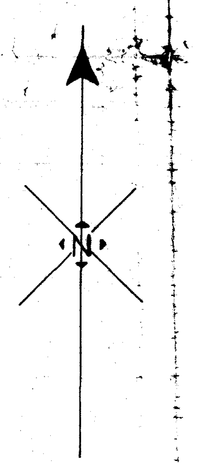
MAY & SHAKESPEARE TWPS.

CONTOUR INTERVAL 50 GAMMAS
SCALE 1" = 200'

LINES SAME AS EM MAP

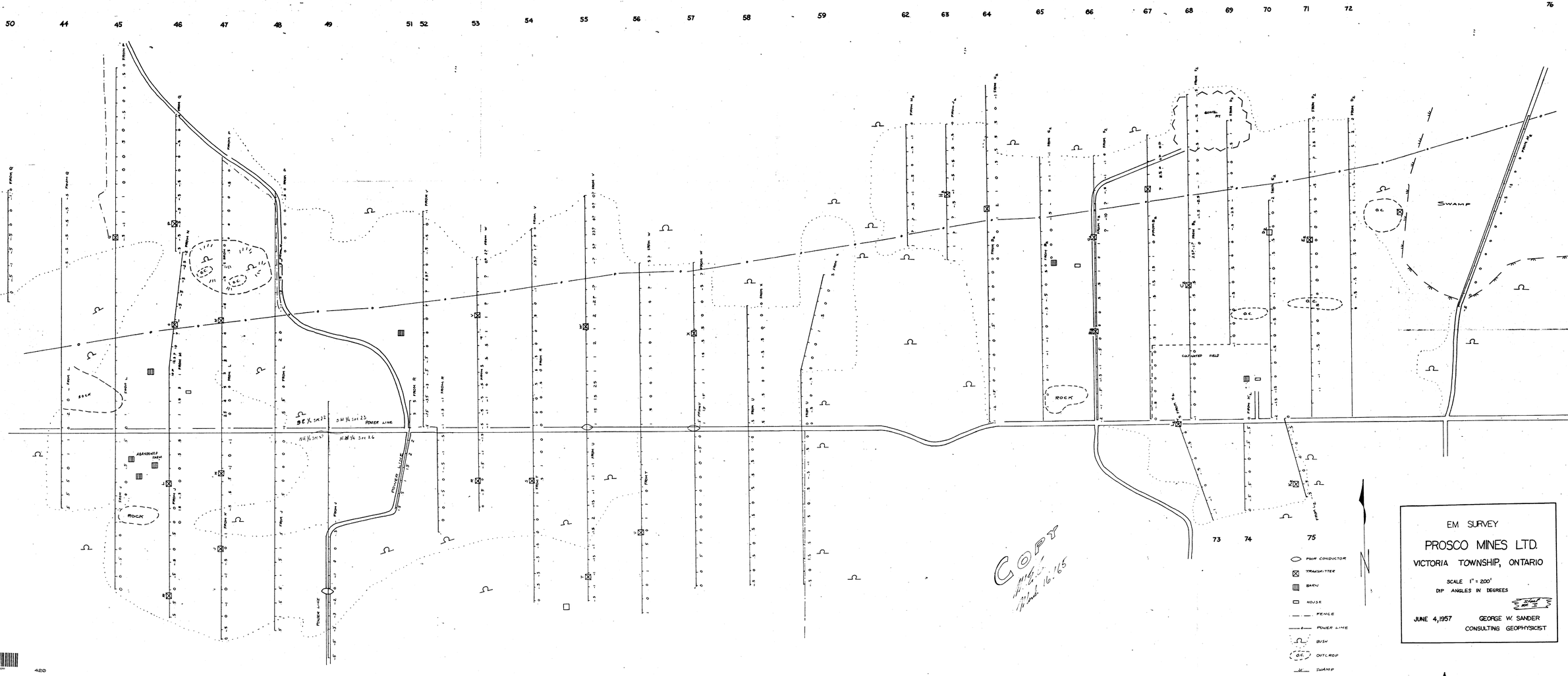
JULY 3, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST



COPY
mgt.
12/65
Mar.

BALDWIN-0047-A1, #22



BALDWIN-0047-A1,#23

BALDWIN-0047-A1,#23

EM SURVEY

PROSCO MINES LTD.

VICTORIA TWSP., ONT.

SCALE 1" = 200' Sheet #1

DIP ANGLES IN DEGREES

MAY 31, 1957

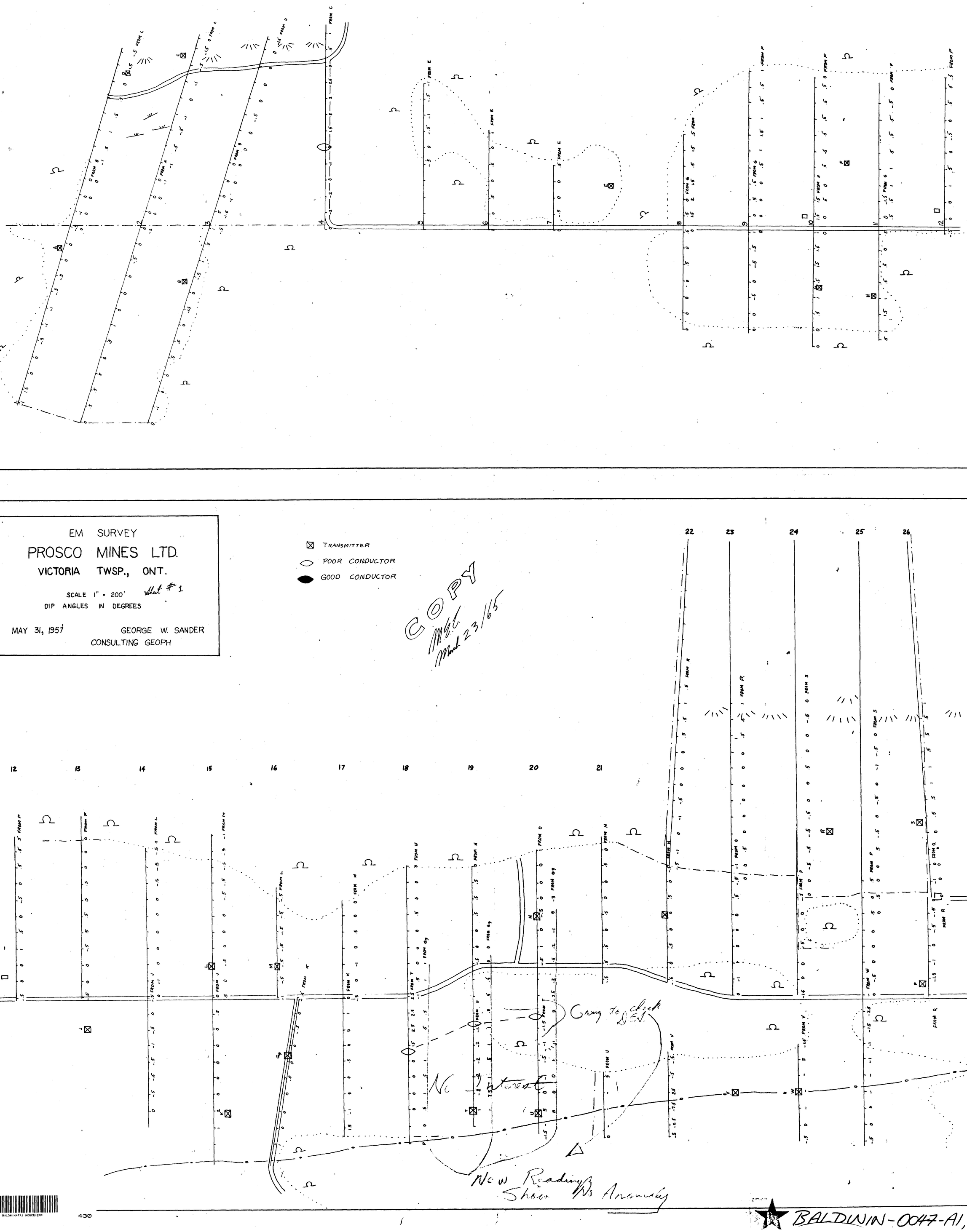
GEORGE W. SANDER
CONSULTING GEOPH

⊠ TRANSMITTER

POOR CONDUCTOR

GOOD CONDUCTOR

COPY
MEC
March 23/65



26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43

EM SURVEY

PROSCO MINES LTD.

VICTORIA TWSP., ONTARIO

SCALE 1" = 200'

Sheet #2

DIP ANGLES IN DEGREES

MAY 31, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

- TRANSMITTER
- BARN
- HOUSE
- POWER LINE
- ROAD
- BUSH
- FENCE
- HILL

ROCK RIDGE

ROCK LEDGE

POWER LINE

COPY
M.E.G.
15/165

L 61

SUGAR LAKE

No possibility if alignment of Trans & Rec

400 FEET

OUTCROP

L 60

600 FEET TO LINE 45

COPY
M.E.G.
Mar. 15/65

EM SURVEY

Master Sheet

PROSCO MINES LTD.

VICTORIA TOWNSHIP, ONTARIO

SCALE 1" = 200' {Sheet #II}

DIP ANGLES IN DEGREES

JUNE 10, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

L100. L16. L17. L18. L15.

TRANSMITTER
BUSH
OUTCROP
HILL
FENCE
POWER LINE
ROAD

N

EM SURVEY

PROSCO MINES LTD.

SALTER TOWNSHIP, ONTARIO

SCALE 1" = 200'
DIP ANGLES IN DEGREES

JUNE 4, 1957 GEORGE W. SANDER
Tmac OCT, 2, 1957 CONSULTING GEOPHYSICIST

77 78 79 80 81 82 83 84 85 86 87 88 89 90 100 101

FIELD

COPY

PROSCO MINES LTD.

SALTER TOWNSHIP, ONTARIO

SCALE " = 200'
DIP ANGLES IN DEGREES

JUNE 10, 1957 GEORGE W. SANDER
OCT. 3, 1957 CONSULTING GEOPHYSICIST

TRANSMITTER
BARN
HOUSE
BUSH
FENCE
ROAD
POWER LINE
CREEK

OLD PLY RD. BED TO MASSEY MINE
MAG TRAVERSE IN Y

BREAK

130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146

SAUBLE RIVER

EM SURVEY

PROSCO MINES LTD.

SALTER TOWNSHIP, ONTARIO

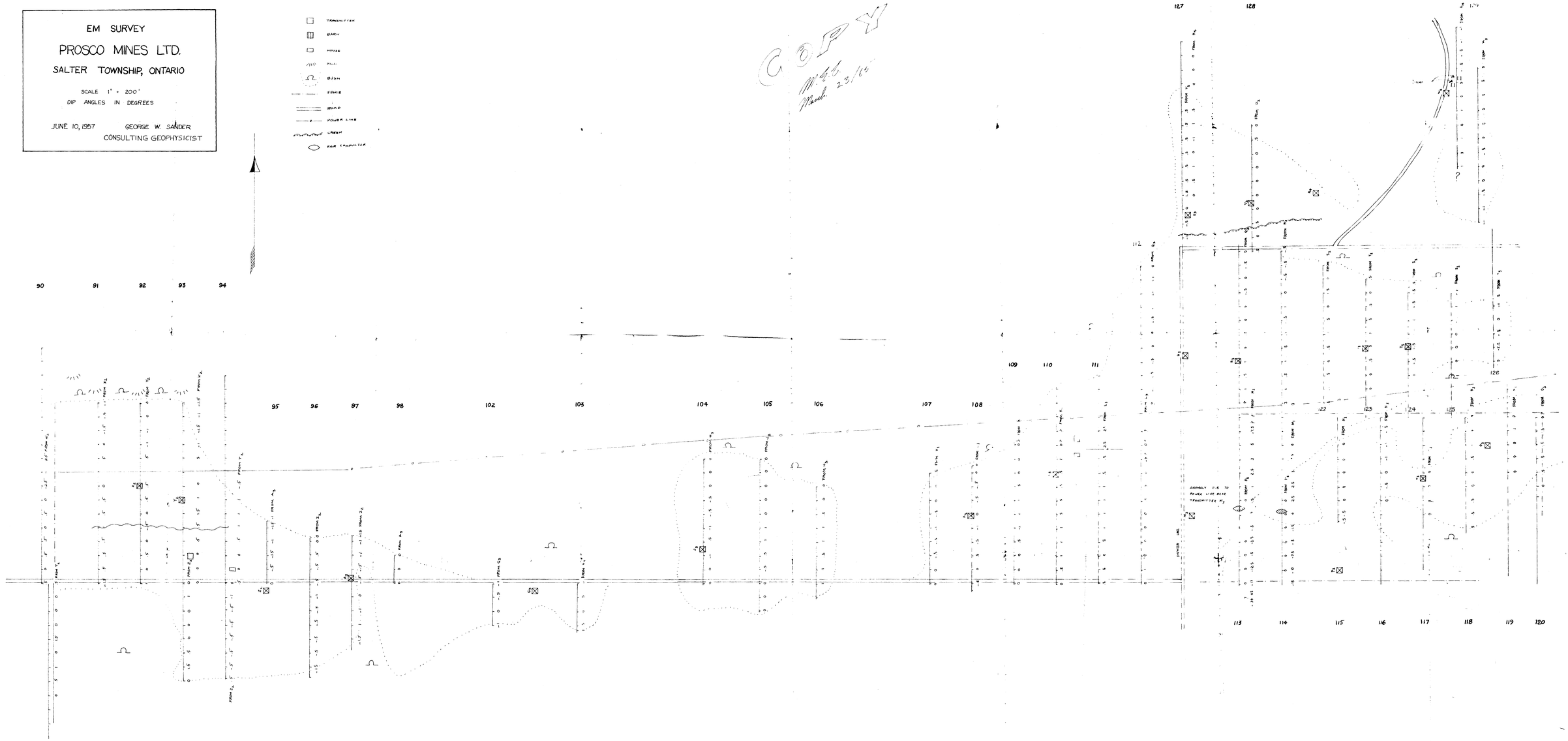
SCALE 1" = 200'

DIP ANGLES IN DEGREES

JUNE 10, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

TRANSMITTER
BARN
HOUSE
MILL
BUSH
FENCE
ROAD
POWER LINE
CREEK
FAIR EXPOSITION



EM SURVEY

PROSCO MINES LTD.

SALTER AND MAY TOWNSHIPS

SCALE 1" = 200'

DIP ANGLES IN DEGREES

JUNE 20, 1957

GEORGE W. SANDER
CONSULTING GEOPHYSICIST

SALMAY LAKE

SALTER TOWNSHIP

MAY TOWNSHIP

154 157 158 159 160 147 148 149 150 151 152 153 166 162 163 164 165 190 189 167 168 169 170 171 172 175

COPY
W.S.C.
March 25/65

SALTER TWP

MAY TWP

SALMAY OR
WEST LAKE

L 12 FROM E

L 13

L 14 FROM E

L 11 FROM D

L 10 FROM D

L 9 FROM E

L 8 FROM D

L 7 FROM D

L 6 FROM D

L 5 FROM G

L 1 FROM C

L 2 FROM C

L 3 FROM C

L 4 FROM C

WATSON LAKE
MAY TWP

WEST LAKE

L 34 FROM T

L 35 FROM T

L 33 FROM S

L 32 FROM R

L 31 FROM O

L 27 FROM N

L 26 FROM N

L 23

L 1E FROM I

L 4E FROM B1

L 8E FROM A1

L 12E FROM A1

L 28 FROM P

L 29 FROM P

L 30 FROM Q

L 20 FROM J

L 21 FROM H

L 22 FROM H

L 19 FROM J

L 23 FROM K

SABLE RIVER

LOG SQUARE

E.M. CONDUCTOR AT QUARTZITE

BARN

HOUSES

Requires more geophysical work
Area all overburden
Covered

SALTER TWP.

COPY
M.E.C.
March 15/66

E.M. ANOMALY

FAIR

POOR

EM SURVEY

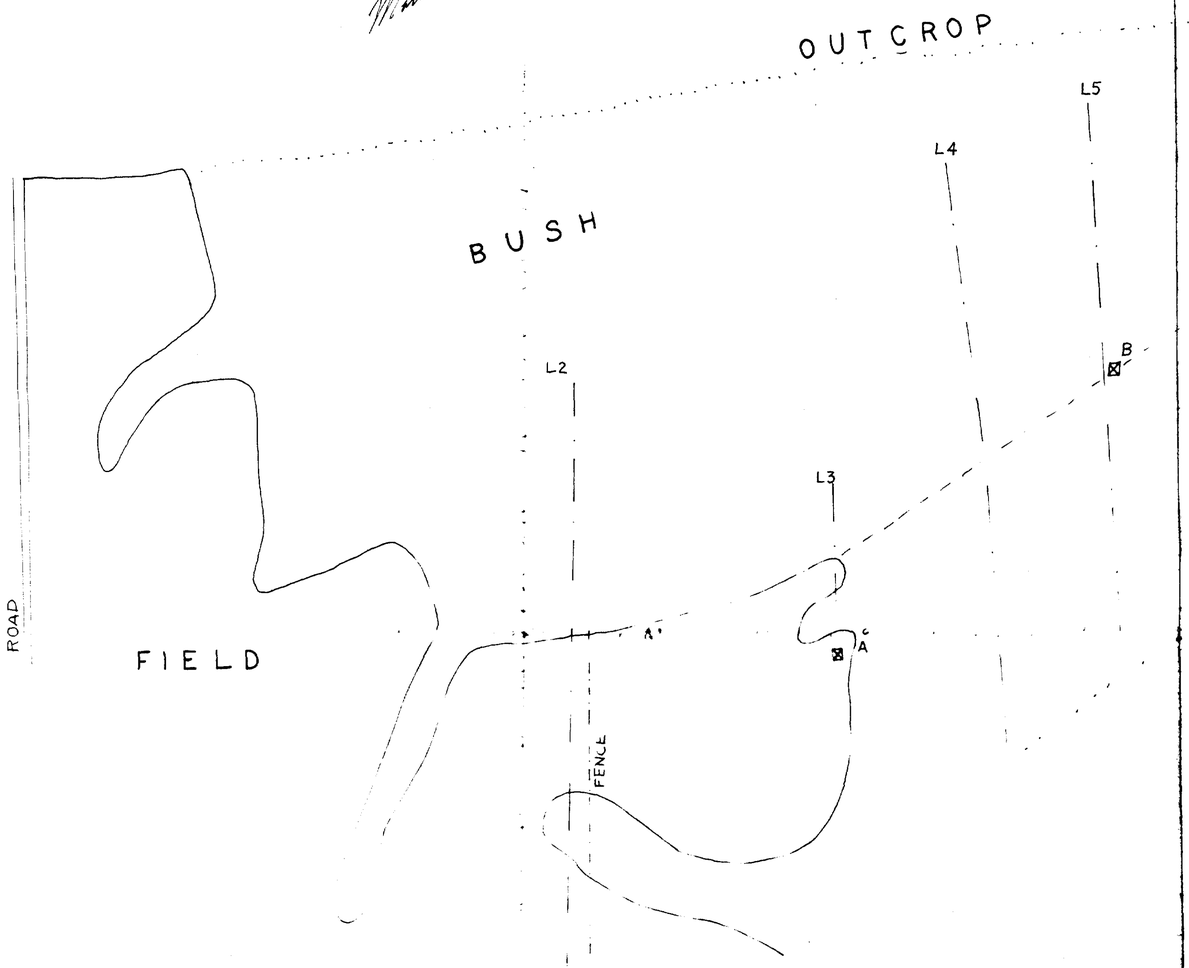
PROSCO LTD.

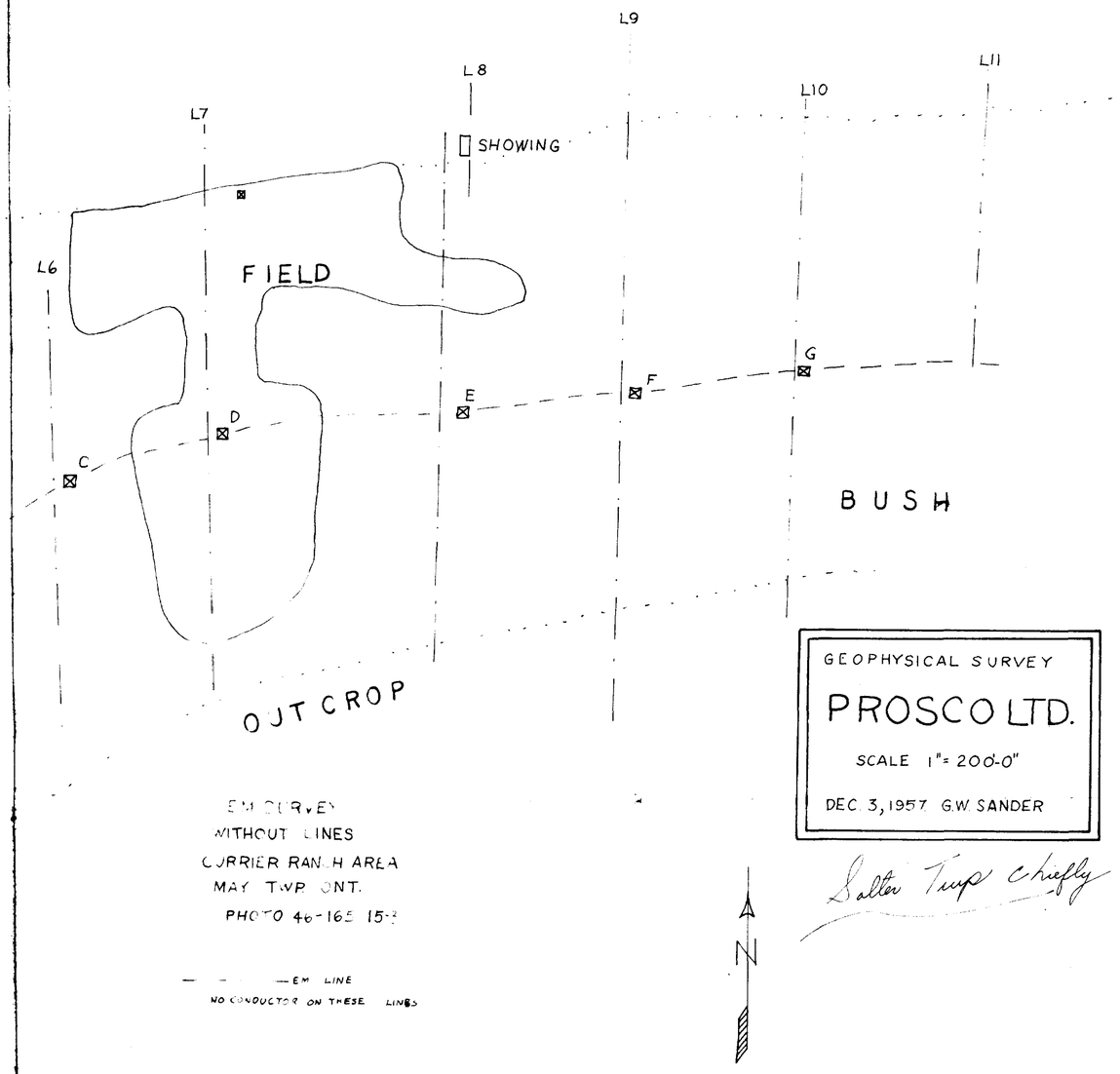
SALTER & MAY TOWNSHIPS, ONTARIO.

SEPT. 23 1957 GEORGE W. SANDER
CONSULTING GEOPHYSICIST

BALDWIN - SC47-A1, #3

COPY
M.S.C.
March 26/65



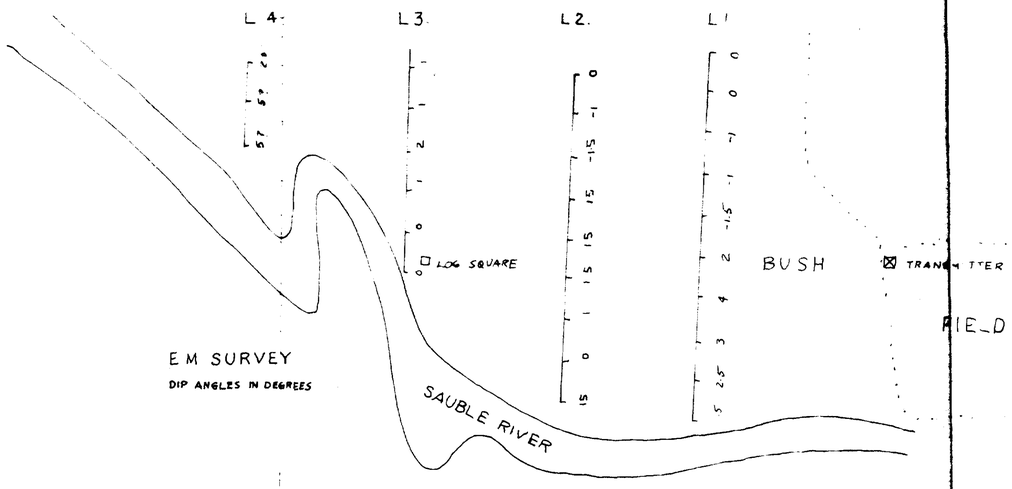


EM SURVEY
WITHOUT LINES
CURRIER RANCH AREA
MAY TWP. ONT.
PHOTO 46-165 15-3

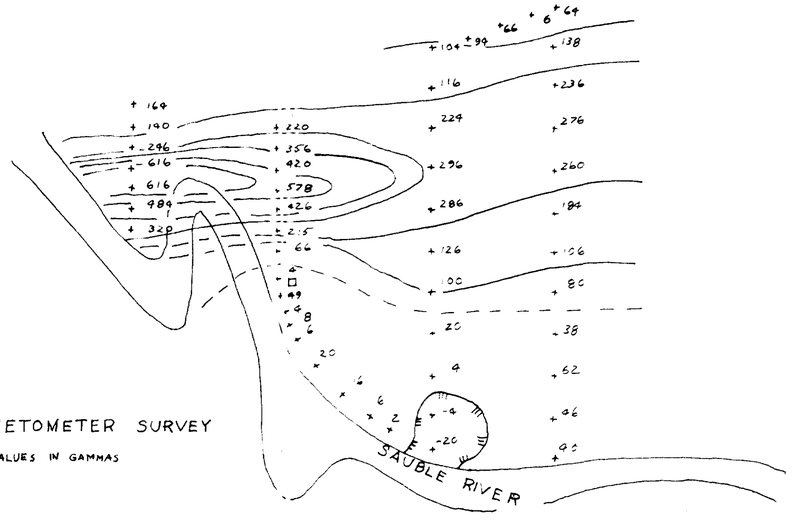
— — — EM LINE
NO CONDUCTOR ON THESE LINES

GEOPHYSICAL SURVEY
PROSCO LTD.
SCALE 1"= 200-0"
DEC. 3, 1957 G.W. SANDER

Salter Twp chiefly

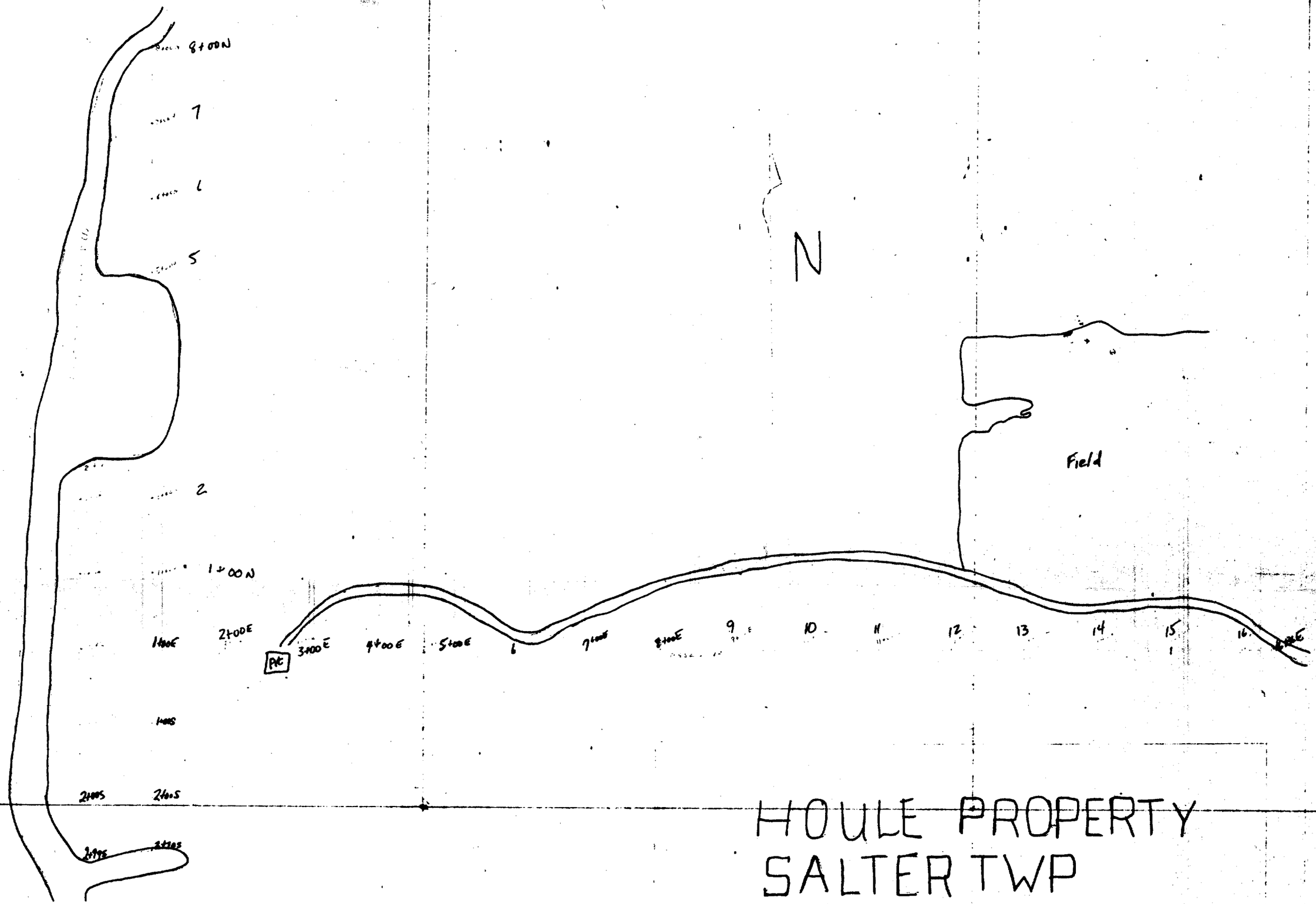


SALTER TWP. ONT.



510

BALDWIN-0047-A1, #71



HOULE PROPERTY
SALTER TWP

Scale 1in = 100ft

Drawn by JH/t

BALDWIN-0047-A1 #33

520

S-98590

S-98529

VANCE CLAIMS

180 A

CONTACT

ST. DENNIS

180 A

CRAIN FIELD

S-103062

S-103063

S-103061

WILSON LAKE

Greenstone

Diorite

BASE LINE No. 1

CONTACT SHOWING

See Sketch

EDGE of BUSH

MURRAY FAULT

South Branch

OPEN FIELD

WEST LAKE

SHEA

320 ft

Greenstone

PROPOSED DRILL HOLE

DIP

Line No. 2 SE

Diorite

CONDUCTIVE ZONE

FAIR Conductors

POOR Conductors

APPROX LOCATION OF MAGNETIC ANOMALY

WILSON

1160 ft

CONTACT

ADVANCE DRILL BACK DRILLING

CALDWELL (W)

11.0 ft

TRACY

11.1 ft

WITTY

160 ft

CALDWELL (E)

160 ft

ALEXANDER

320 ft

ALEXANDER OPTION

SKETCH SHOWING

TRACY, CALDWELL (W) AND PARTIALLY WITTY

GENERAL GEOLOGY, FAULT ZONES

& WORKINGS

of the

ALEXANDER OPTION
MAY TWP

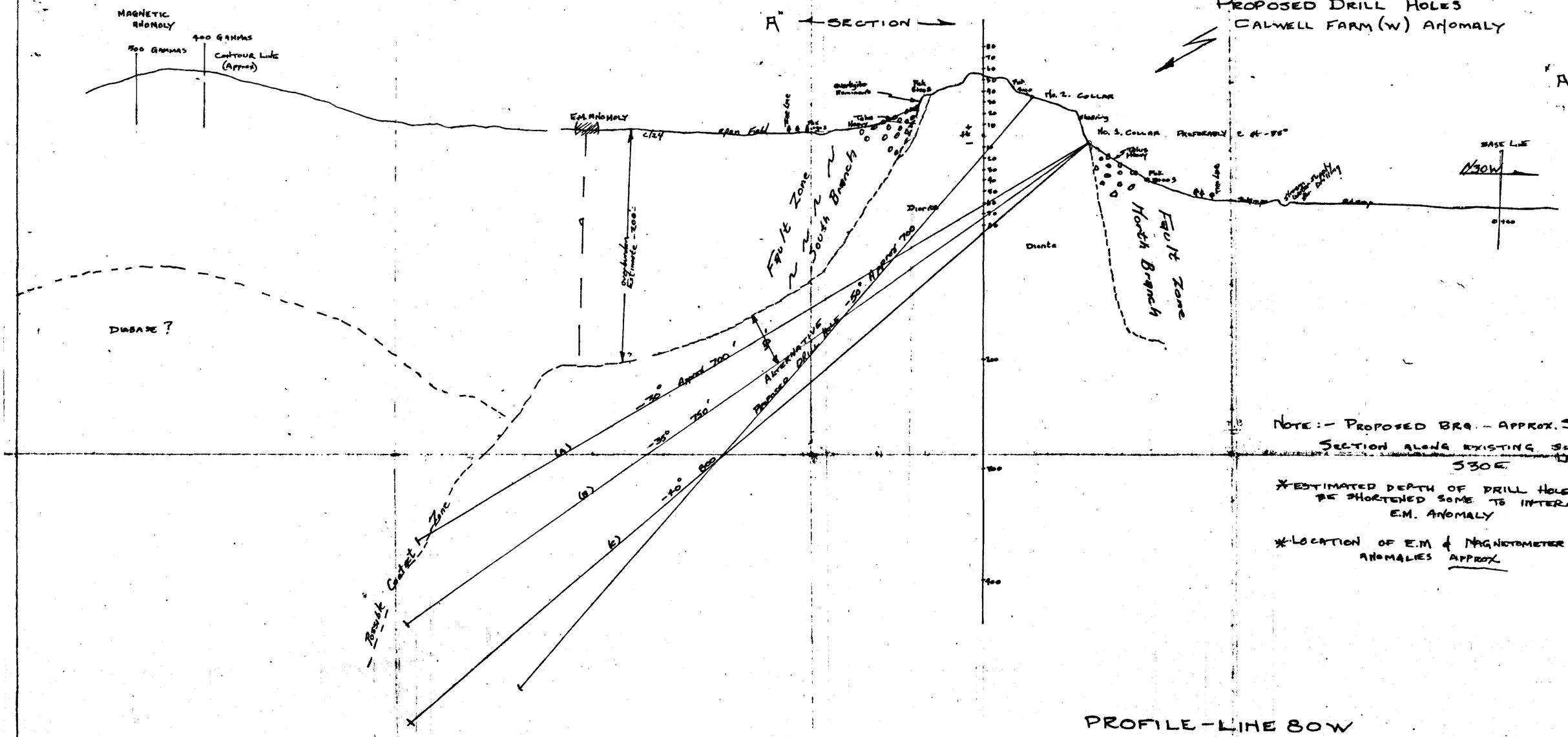
Scale 1 IN = 660 Ft

BALDWIN-0047-A1 #34

TECHCO - MONCRIEFF

JULY 27/67

DRAWN BY M.S.H.



PROPOSED DRILL HOLES
CALWELL FARM (W) ANOMALY

NOTE :- PROPOSED BRG. - APPROX. SOUTH, SECTION ALONG EXISTING SURVEY LINE 80 W
330 E.

*ESTIMATED DEPTH OF DRILL HOLES WOULD BE SHORTENED SOME TO INTERCEPT E.M. ANOMALY

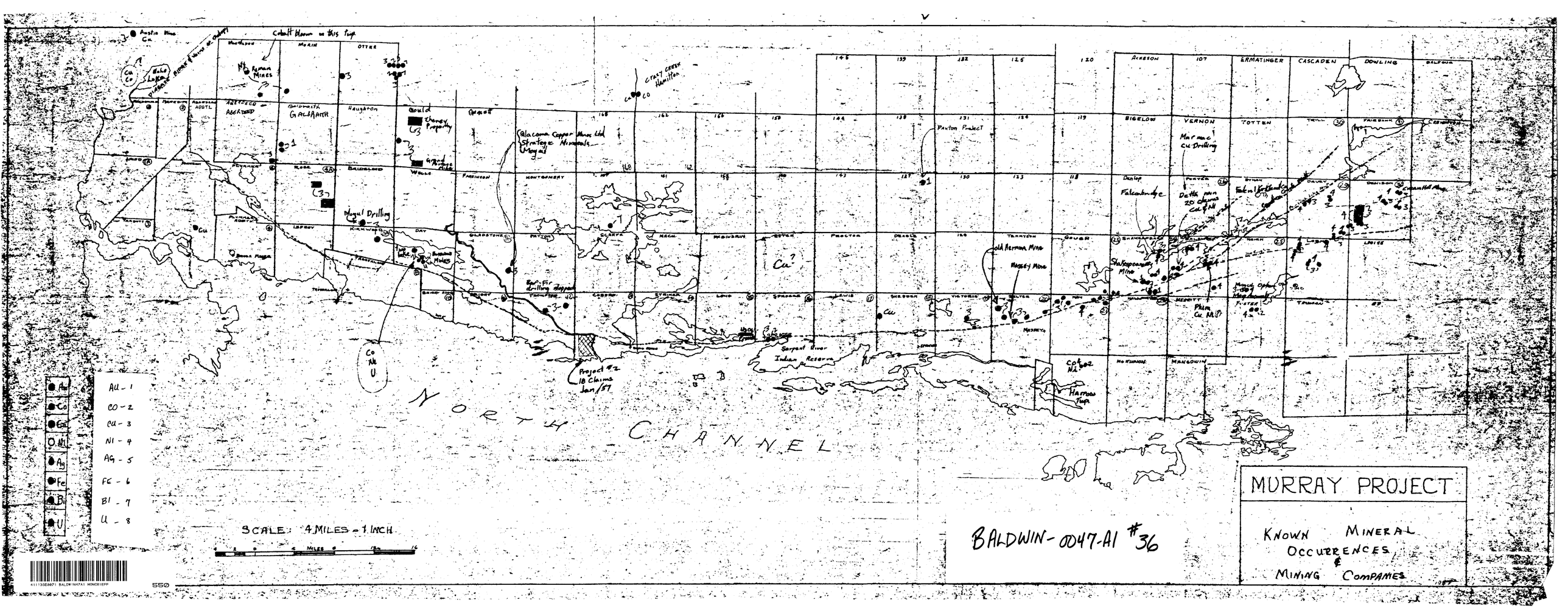
*LOCATION OF E.M & MAGNETOMETER ANOMALIES APPROX

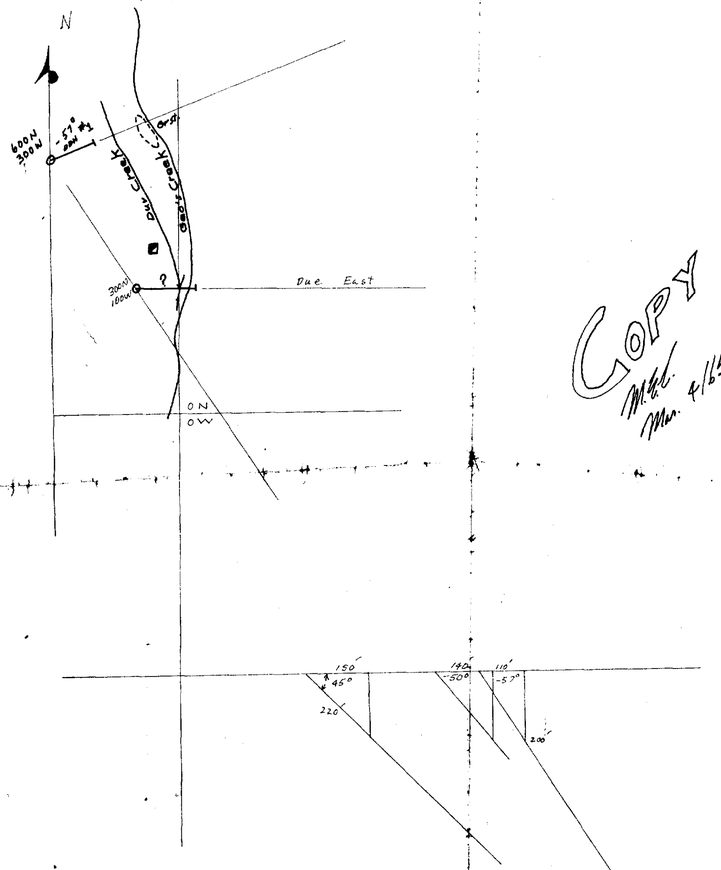
PROFILE - LINE 80 W
WEST MAP
ALEXANDER OPTION
MAY TWP
REF. PLAN ~ SANDER E.M & MAG. SURVEY
JULY 28/57

HORIZONTAL & VERTICAL SCALE: 1"=50 ft.

M.B. Hyatt
PROSCO - MURRAY PROJECT
JULY 30/57

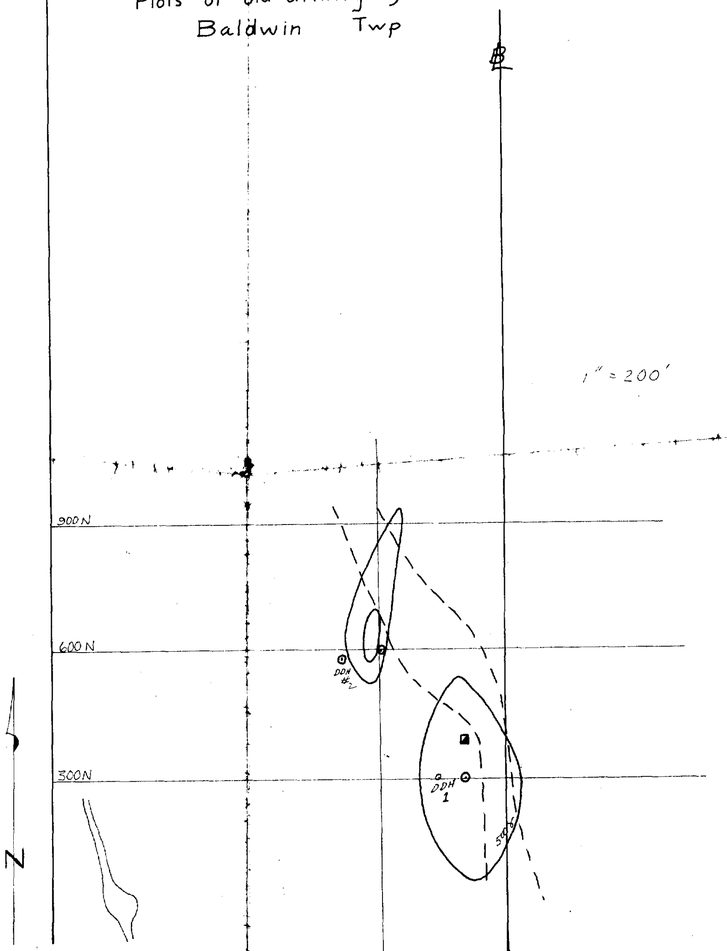
BALDWIN-0047-A1 #35

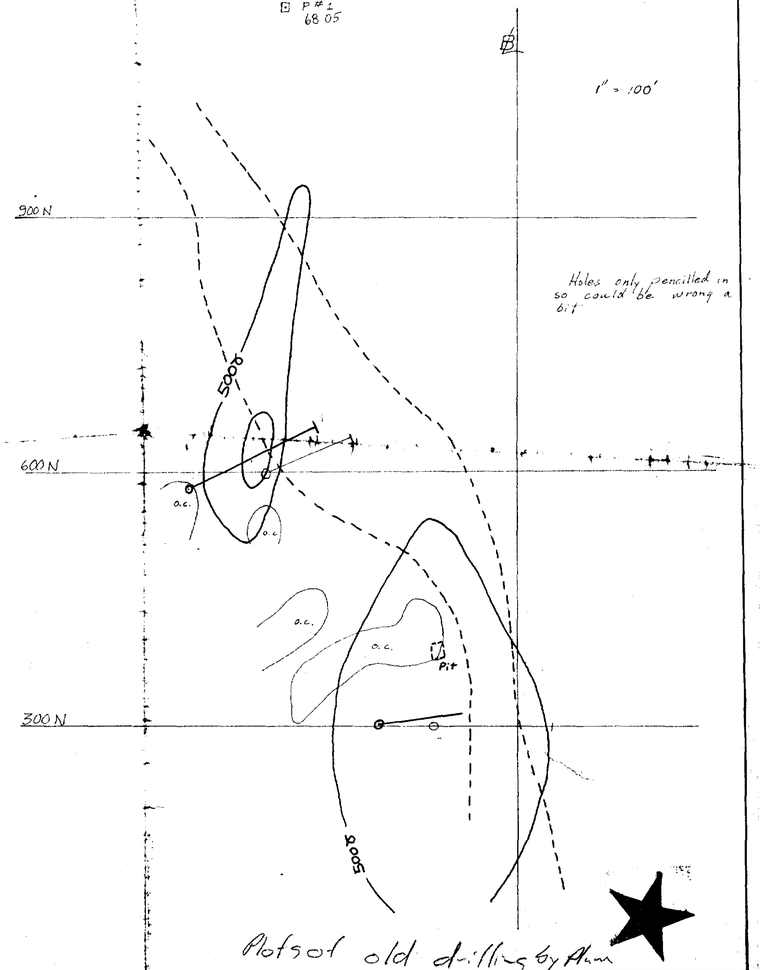

Austin Mine Co.
Cobalt Bloom on this Trap
Baie Lake
Cu Co
Mud Lake
Mt. Norman Mines
McRAE
OTTER
Gould
Chaney Property
Grant Mines
Wells
Mogul Drilling
Kirkcudbright
Day
Gladstone
Peyton
Clarke
Meagher
Preston
Deagle
Territory
Gouger
Old Norman Mine
Massey Mine
Cu?
Sheppard Mine
Cu
Victoria
Spragge
Louis
Shebbeare
Strathy
Long
Cobden
Trowbridge
Bigelow
Vernon
Totten
Ermatinger
Cascaden
Dowling
Balfour
Falconbridge
Marmoo Cu Drilling
Deaks min 20 chains Cu Ni
Fairbank
Cranmer
Dalton
Davis
Dunnon
Lorne
Mann
Mowat
Trumper
Foster
Mowatt
Plain Cu Mine
Cobalt Nickel
Harrow Trap
Mangowin
Carpent River Indian Reserve
Project #2 18 Claims Jan/67
Co Ni U
NORTH CHANNEL
Au
Co
Cu
Ni
Ag
Fe
Bi
U
AU - 1
CO - 2
CU - 3
NI - 4
AG - 5
FE - 6
BI - 7
U - 8
SCALE: 4 MILES = 1 INCH
MILES
BALDWIN-0047-AI #36
MURRAY PROJECT
KNOWN MINERAL OCCURRENCES & MINING COMPANIES
550



COPY
Mich. Min. 4/65

Plots of old drilling by Plum
Baldwin Twp





Plots of old drilling by Plum

BALDWIN-0047-A1, #18