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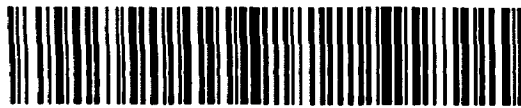
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R E P O R T
on
Property of
OSSINGTON EXPLORATIONS LIMITED
JANES TOWNSHIP
SUDBURY MINING DIVISION
ONTARIO

D. W. Esson, P. Eng.

Toronto, Ontario.

September 28th, 1968



41109NW0204 JANES16 JANES

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SUMMARY

During the early part of 1968 Ossington Explorations Limited acquired a group of 20 unpatented mining claims located in Janes Township, Sudbury Mining Division.

This property is located in an area of mafic rocks (norite) which are intrusive into metamorphosed Huronian and Keewatin sediments. The norite was identified with thin section study of a sample from the pit located on the east side of the Sturgeon River near the common boundary of claims S 147430 and S 147431. The sample BA-D-3 indicates that the rock is a norite and contains 3% interstitial sulphides, some of which is nickel-bearing pentlandite along with chalcopyrite, pyrrhotite and ilmenite. The existence of these sulphides in a norite rock similar to the intrusive containing deposits of nickel and copper in the Sudbury area is of significance. The rock description and photomicrographs were prepared by the Geological Survey of Canada.

In a report dated March 1, 1968 by D. W. Sullivan P. Eng. , F. G. A. C. a program of line cutting, mapping, geophysical surveying, prospecting and sampling was recommended. This program was initiated during the latter part of May 1968 and has progressed continually since that date.

To date the line cutting, geophysical surveying and prospecting have been completed. Geological mapping is underway

PROPERTY

The property consists of twenty (20) unpatented mining claims located in the central portion of Janes Township, Sudbury Mining Division, Province of Ontario.

The claim numbers are as follows:

S 147417 to S 147434 inclusive	18 claims
S 147443 to S 147444 inclusive	<u>2</u> claims
Total	20 claims

LOCATION AND ACCESS

The claim group is located in the west central part of Janes Township in the Sudbury Mining Division of Ontario at the junction of the Sturgeon and Chiniguchi Rivers.

It lies 1 - 1/4 miles north of Chudleigh on the main line of the Canadian National Railway which passes through the southern part of Janes Township. It is readily accessible by a good gravel road which passes through the property from Sturgeon Falls or Warren on Highway 17.

TOPOGRAPHY

Generally rugged, particularly at the junction of the two rivers with local relief of about 150 feet. Relief is due mainly to ridges and hills of Precambrian sediments and sills and masses of basic rocks typical of the area between Lake Temiskaming

and Lake Wanapitei.

RESOURCES

The district is timbered with secondary spruce, pine, balsam, birch and maple. Local lumbering operators are active.

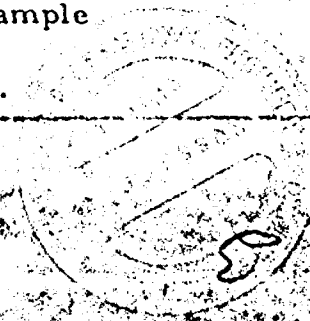
Power is available from the North Bay-Sudbury grid of Ontario Hydro.

HISTORY

Prospecting and some exploration has been carried on for several years in the area, more especially in Davis Township to the west.

Minor showings of copper and gold have been found in quartz veins in crush zones in gabbro and old sediments in Janes Township. A 30 foot shaft was sunk north of Sargesson Lake one mile to the east but no values were reported.

A small pit was excavated on the property in the fall of 1967 near the common boundary of claims S 147430-431 on a sulphide showing in the large basic intrusive which microscopic examination shows to be norite, very similar to the Sudbury norite which is known to contain copper and nickel sulphides. A sample from this pit No. BA-D-3 contains 3% interstitial sulphides.



This discovery of base metals in norite warrants further investigation and the large areas of mafic rocks seen on the property require careful investigation.

GENERAL GEOLOGY

All the rocks in the area are Precambrian in age. The Grenville Front crosses the southern part of Janes Township and the Ess Creek Fault coincides with the Front. A relatively strong north-south fault extends from Ess Creek up the Sturgeon river and is evident in the field on the east side of the river.

The rocks south of the Ess Creek fault are Killarnean (Grenville) and consist of granite gneiss, migmatites, amphibolites and metasediments. North of the fault in the area of the property the rocks consist of metamorphosed cobalt and Keewatin sediments intruded by diabase, gabbro, amphibolite (Sudbury gabbro) shown as mafic intrusives on O. D. M. Map P-367(1966).

These mafic intrusives cover a large area in Janes Township as well as on the claim group itself, as were observed by the writer during field examinations on June 24th - 25th and August 14th, 1968.

Siliceous argillite was seen adjacent to two large outcrops of mafic rocks on claim S.147431; no contact of these rocks was seen at the time.

It is of particular interest to note that the large area of mafic intrusives between Lake Temiskaming, Gowganda and Sudbury show variations in composition from quartz diabase to quartz norite (Sudbury norite) with the latter type increasing from northeast to southwest approaching the Sudbury base metal area (see G. S. C. Memoir 95, pp. 88-91). As mentioned earlier, a sample from a test pit on the common boundary of mining claims S 147430-431 has been identified as norite of the Sudbury type. This sample showed from a thin section and polished section study to have 3% interstitial sulphides (chalcopyrite, pentlandite, pyrrhotite), 50% plagioclase, 40% hypersthene and minor biotite, hornblende, chlorite, ilmenite and quartz (see photomicrographs).

It would appear that the large areas of basic intrusives mapped as diabase and gabbro east-northeast of the Sudbury nickel area warrant careful examination since they appear to be in part related to the favourable Sudbury norite. Careful examination of the larger intrusive masses or sills should be made for possible magmatic segregations within them which may contain concentrations of base metal sulphides.

GROUND GEOPHYSICAL SURVEYS

In preparation for ground magnetometer and electromagnetic surveys a picket line grid was established on the property.

East-west base lines and tie lines were used to control north-south

picket lines at 300 foot intervals with stations established each 100 feet along these picket lines.

MAGNETOMETER SURVEY

A ground magnetic survey, using a Sharpe MF1 Fluxgate instrument, has been completed over the property utilizing a pre-established grid. The normal corrections for instrument drift and diurnal variations were applied and readings recorded to the nearest 5 gammas. Technical details of the instrument used are outlined in Appendix "A" of this report.

RESULTS OF MAGNETIC SURVEY

With reference to the accompanying magnetometer map it can be noted that there are four main areas of above background magnetic relief. The first extending from the Sturgeon River east through claims S 147429 and S 147434 with a maximum relief of 2750 gammas. A lesser magnetic trend to the south with a maximum relief of 2000 gammas extends east through claims S 147430 and S 147433. The second large magnetic trend extends through the property on a slight south-easterly trend crossing claims S 147420, S 147421, S 147427, S 147431, S 147432 and S 147444. The maximum relief is in the order of 3000 gammas. A third east-west magnetic trend of lesser magnitude and a maximum relief of 1400 gammas lies within claim S 147443. The fourth area of magnetic relief is of irregular shape and covers parts of claims ~~S-147419, S 147422, S 147423, S 147424 and S 147417.~~ The maximum relief is approximately 1200 gammas.

Living Diabase
*Probably
Diabase*

Several disseminated sulphide exposures have been located in the proximity of two of the areas of magnetic relief, however, a program of stripping and trenching is underway to confirm their relationship.

There are other smaller areas with lesser magnetic relief that require further investigation prior to discussion.

ELECTROMAGNETIC SURVEY

The property was completely covered by an electromagnetic survey utilizing the same grid pattern as was used for the magnetic survey. The Ronka E M 16 instrument was utilized in this survey and technical details relative to this equipment are to be found in Appendix "B" to this report.

RESULTS OF ELECTROMAGNETIC SURVEY

The accompanying electromagnetic map indicates nine (9) significant electromagnetic conductors all of which appear to be related to areas of above normal magnetic relief.

Conductor "A" plotted on claim S 147429 extending from Line 6E to 15E appears to be reasonably strong. Sulphides are known to exist slightly to the west indicating that sulphides may be the cause of the conductor.

Conductor "B" located on claims S 147421 and S 147428 extends from Line 0 to Line 18 west. This conductor could be a

faulted extension of Conductor "A".

Conductors "C", "D" and "E" are located in the southeast portion of the property. All are associated with magnetic relief and trend generally east-west from Line 12E to Line 30E.

Conductor "F" located on claim S 147423 is also associated with a magnetic feature and extends from Line 21W to Line 24W.

Conductor "G" located on claims S 147419 and S 147422 associated with a magnetic feature and extends from Line 27W to Line 42W.

Four other conductors exist on the property however they could be related to those already discussed.

The overall picture indicates the possible existence of sulphide zones and requires that additional exploration be undertaken.

CONCLUSIONS

In light of the results of work completed to date on this property as well as results of work currently underway on adjoining properties the present program of stripping, trenching and sampling should be continued. Based on the results obtained diamond drilling as outlined in the report of D. W. Sullivan,

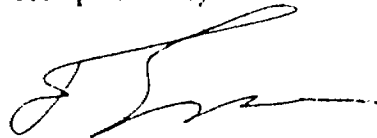
P. Eng., F. G. A. C. should be initiated.

RECOMMENDATIONS

It is therefore recommended that all known sulphide occurrences be stripped, trenched and sampled and that the areas around all geophysical anomalies be examined and where topographic features and overburden conditions allow these areas should also be stripped, trenched and sampled.

On correlation of current results as well as those from the above program the required diamond drill holes should be located.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. W. Esson', written in a cursive style.


D. W. Esson, P. Eng.

CERTIFICATE

I, Donald W. Esson, of the City of Toronto, in the County of York, in the Province of Ontario, hereby certify:

1. That I am a consulting geological engineer and reside at 122 Blythwood Road, Toronto 12, Ontario.
2. That I graduated from the University of Toronto in 1957 with the degree of B. A. Sc. in Mining Geology and have practised my profession as field geologist, mining securities analyst and consulting geologist continuously since graduation with the exception of the years 1962-64.
3. That I am a member of The Association of Professional Engineers of Ontario.
4. That my report on the Janes Township property of Ossington Explorations Limited is based on review of the maps and reports as listed in the attached Acknowledgements, on personal visits to the property and surrounding area during June and August 1968 and on my specific knowledge of exploration programs being conducted by others in the same general area.
5. That I have no direct or indirect interest, nor do I expect to receive any direct or indirect interest, in the properties described herein. I do not own beneficially, directly or indirectly, any shares in Ossington Explorations Limited, nor shares in any affiliate of that Company.

DATED at Toronto this 30th day of September, 1968.


Donald W. Esson, B.A.Sc., P. Eng.

ACKNOWLEDGEMENTS

Ontario Department of Mines

Vol. XLI Part IV 1932

Ontario Department of Mines

Geological Report 15 1963

Report of D. A. Duff, B. Sc. , P. Eng. ,

Dated November 13, 1967,
Janes Township

Department of Mines, Geological Survey, Memoir 95.

Ontario Department of Mines

Preliminary Report P-367(1966)

Photomicrographs (4), Sample #BA-D-3. Thin section and polished sections carried out by Geological Survey of Canada.

Report of D. W. Sullivan, B. Sc. , P. Eng. F. G. A. C., dated March 1, 1968,
Janes Township.

APPENDIX "A"

VERTICAL INTENSITY FLUXGATE MAGNETOMETER MF-1 SPECIFICATIONS

Model MF-1 Standard surveying and prospecting magnetometer with self-levelling sensor.

Ranges: Plus or minus -
1,000 gammas f. sc. Sensitivity: 20 gammas per div.
3,000 " 50 "
10,000 " 200 "
30,000 " 500 "
100,000 " 2000 "

Meter: Taut-band suspension, 1,000 gamma scale: 1 7/8" long 50 div.
3,000 " 1 11/16" long 60 div.

Accuracy: 1,000 to 10,000 gamma ranges \pm 0.5% of full scale
30,000 to 100,000 gamma ranges \pm 1% of full scale

Operating Temperature: - 40°C to 40°C
- 40°F to 100°F

Temperature Stability: Less than 2 gammas per °C (1 gamma/°F)

Bucking Adjustments: 10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10-turn potentiometer. Convertible for Southern hemisphere or \pm 30,000 gammas equatorial.

Batteries: 12 x 1.5V - flashlight batteries ("C" cell type)
(AC Power supply available)

Consumption: 50 milliamperes

Dimensions: Instrument: 6 1/2" x 3 1/2" x 12 1/2" -
165 x 90 x 320 mm
Battery Pack: 4" x 2" x 7" - 100 x 50 x
180 mm
Shipping Container: 10" dia. x 16" -
255 mm dia. x 410 mm

Weights: Instrument: 5 lbs. 12 oz. - 1.6 kg.
Battery Pack: 2 lbs. 4 oz. - 1 kg.
Shipping: 13 lbs.

APPENDIX "B"

PRINCIPLE OF OPERATION (RONKA EM 16)

The VLF-radio stations operating for communications with submarines have a vertical antenna. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. This equipment measures the vertical components of these secondary fields.

The EM16 is simply a sensitive receiver covering the frequency band of the new VLF-transmitting stations, with means of measuring the vertical field components.

The receiver has two inputs with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the coil. The tilt-angle is calibrated in percentages. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil, after being shifted by 90° . The axis of this coil is at right angles to the axis of the first coil. This coil is kept normally parallel to the primary field.

Thus, if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $\Pi/2$ -signal from the horizontal coil is a measure of the quadrature vertical signal:

APPENDIX "B" (Cont'd)

SPECIFICATIONS

Primary field:	Horizontal from any selected VLF-transmitting station.
Frequency range:	Approximately 15 - 25 kc.
Station selection:	By plug-in units. Two stations selected by a switch on front panel.
Measured field:	Vertical field, in-phase and quadrature components.
Accuracy of readings:	$\pm 1\%$ resolution.
Range of measurements:	In-phase $\pm 150\%$ or $\pm 90^\circ$, quadrature $\pm 40\%$.
Output readout:	Null-detection by an earphone, real and quadrature components from mechanical dials.
Batteries:	6, size AA penlight cells. Life about 200 hours.
Size:	16 x 5.5 x 3.5 in. (42 x 14 x 12 cm).
Weight:	2.4 lbs (1.1 kg).
Accessories:	1 earphone and cord. 1 carrying bag. 1 set of batteries. 1 Manual of Operation. 2 plug-in units for station selection -- additional optional units available.



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R E P O R T
for
OSSINGTON EXPLORATIONS LIMITED
JANES TOWNSHIP
ONTARIO

Toronto, Ontario

D. W. Esson, P. Eng.

January 29, 1969

I N D E X



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020C

APPENDICES: Report of Donald W. Esson,
P. Eng., dated September
28, 1968 (with Maps)

EXPLORE

EXPLORE

EXPLORE

I SUMMARY:

Ossington Explorations Limited owns a group of 20 unpatented mining claims located in Janes Township, Sudbury Mining Division, Ontario.

This report describes the results of work on this property which has been completed subsequent to a report of the writer dated September 28, 1968 and recommends further work.

Earlier work had indicated that the property was, in part, underlain by mafic rocks which had been identified in thin section studies as Norite. Exploration to date has consisted of prospecting, line cutting, geophysical surveys, geological mapping and trenching. The mapping has indicated that some 80% of the property is underlain by the Norite rock type. Geophysical surveys located several coincident magnetic and electromagnetic anomalies.

Disseminated sulphide mineralization has been noted at a number of locations on the property.

Stripping and trenching over the EM conducting zones in many cases failed to penetrate through overburden to bedrock. In the few cases where bedrock was reached there were insufficient sulphides found present to account for the conductors. In one case, trenching did expose interesting concentrations of sulphide mineralization not associated with an EM conducting zone.

Diamond drilling of several of the TM conductors is recommended as the best method of testing these conductors at depth.

II INTRODUCTION

Description of the Property, Location, Access, Topography, History, etc. is contained in a report by the writer dated September 28, 1968, a copy of which is appended hereto. Maps and results of magnetometer and EM surveys which have been completed on the property are also included in that report.

The purpose of this report is to describe the results of exploration which were completed subsequent to the earlier report, and to recommend a program for the future.

III GEOLOGICAL MAPPING

A geological map on those portions of the property lying south and east of the Sturgeon River has been completed by Mr. Robert Scobie under the direction of GHD CONSULTANTS LIMITED. While the writer has had an opportunity to examine this map it is currently being drafted and is, therefore, not included in the report.

Mapping has revealed that the property is underlain by Greywacke and Norite (with some diabasic and gabbroic phases) with some lesser exposures of Quartzite. It would appear that Norite outcrops over some 80% of the property with Greywacke exposed over most of the remainder, primarily on the eastern claims.

E

Notes from mapping indicate that disseminated sulphide mineralization, consisting mainly of pyrrhotite with some chalcopyrite, was found in some of the norite outcrops and in a few places in the greywacke.

IV INVESTIGATION OF GEOPHYSICAL ANOMALIES

A program of stripping, trenching and sampling was conducted under the direction of GHD CONSULTANTS LIMITED in an attempt to expose rock at the locations of the electromagnetic conductors.

CONDUCTOR A (L6E, 50N) - Trenching to 8 feet and probing to 12 feet failed to locate bedrock on line 6E at 50N. A small trench was blasted into the outcrop located at 48N, but off the conductor axis, and revealed no significant economic mineralization.

On line 18E at 47N, a small trench was blasted in outcrop. Again no significant economic mineralization was noted.

CONDUCTOR B (L9W, 39N) - No attempt was made to trench this conductor.

CONDUCTOR C (L33E, 47N) - The trench at this location exposed bedrock at 46 + 50 North on line 33E. Rock trenches at this location failed to reveal significant amounts of sulphide mineralization.

On line 21E from 47N to 49N, a series of trenches and pits were excavated. While some sulphide mineralization was noted in the pits there apparently were insufficient sulphides to account for the EM conductor. No material from these pits was sent for assay.

IV INVESTIGATION OF GEOPHYSICAL ANOMALIES (Cont'd)

CONDUCTOR D (L27E, 22N) - A trench 5 feet deep failed to expose bedrock.

A trench on line 33E, at 23N, 7 feet deep and probed to 10 feet failed to expose bedrock.

On line 12E from 18 to 21N, a series of trenches and pits exposed bedrock. Again no sulphides were noted which would account for the EM conductor in this area.

On line 21E at 20N, an 8-foot deep trench failed to expose bedrock.

CONDUCTOR E (L18E, 12N) - A trench 7 feet deep at this location failed to expose bedrock.

CONDUCTOR F (L21E, 19N) - A trench 5 feet deep, probed to 7 feet, failed to locate bedrock in this area of low, swampy ground.

CONDUCTOR G (L36W, 27N) - Two trenches 5-6 feet deep failed to reach bedrock over this conductor.

V OTHER TRENCHING

A pit was blasted into a mineralized rock outcrop located 340 feet west of 38N on line 6E along the bank of the Sturgeon River. Samples from the pit gave values as follows:

<u>SAMPLE #</u>	<u>SAMPLE TYPE</u>	<u>WIDTH</u>	<u>ROCK TYPE</u>	<u>% Cu.</u>	<u>% Ni</u>
400	Chip	15 ft.	Norite	2.42	0.13
402	Grab	n/a	Quartz	Gold -	0.02
				(only)	oz/T
404	Grab	n/a	Norite	0.01	0.01
405	Grab	n/a	Norite	0.21	0.11
406	Grab	n/a	Norite	0.79	0.19

V OTHER TRENCHING (Cont'd)

It is not possible to determine the ultimate extent of this zone due to topographic conditions which preclude any attempt to strip the area by bulldozer.

VI RESULTS OF TRENCHING

In no case did the trenching program reveal sulphides in sufficient amount to account for the EM conductors. To that extent the trenching program failed to accomplish its purpose.

Trenching of the showing 340 feet west of 38N on line 6E, which is not associated with an EM conductor, did establish that significant economic mineralization does occur on the property.

VII OTHER ACTIVITY IN THE AREA

Kennco Explorations (Canada) Limited is known to have acquired exploration rights on approximately 600 claims in the area surrounding and to the west of the property of Ossington Explorations Limited. While Kennco are known to have been working on their ground for several months, no results have been made public to this date.

VIII CONCLUSIONS

The work to date has revealed that economic mineralization, in the form of copper & nickel sulphides, exists on the property. No explanation has yet been found to account for the EM conductors. The magnetic anomalies,

VIII CONCLUSIONS (Cont'd)

which in most cases are associated with the EM conductors are similarly unexplained, although it is possible that the magnetic trends will be found to be associated with concentrations of magnetite within the underlying basic rocks.

IX RECOMMENDATIONS

As surface exploration techniques have been unable to reveal the cause of the EM conductors, diamond drilling will be required to test them. A preliminary program consisting of 3,000 feet of diamond drilling in 6 or 7 holes is, therefore, recommended to test the more important conductors and to test the showing on the river bank at depth.

Specifically holes should be located more or less as follows, exact locations to be determined after the geological map is available (see also attached EM Map):

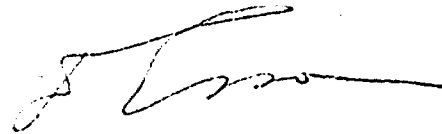
<u>D. D. H. No.</u>	<u>Location</u>	<u>Purpose</u>
1	38N on line 12W	Test Conductor B
2	24N on line 33W	Test Conductor G
3	18N on line 22W	Test Conductor F
4	36N on line 3E	Test showing at depth
5	44N on line 15E	Test Conductor A
6	16N on line 21E	Test Conductor D and magnetic anomaly to the south
7 (possible)	9N on line 18E	Test Conductor E.

E

X ESTIMATED COSTS

Diamond Drilling, 3,000 Ft. @	\$ 18,000
Engineering & Supervision	4,000
Assaying	500
Contingency @ 10%	<u>2,500</u>
TOTAL	<u>\$ 25,000</u>

All of which is respectfully submitted.



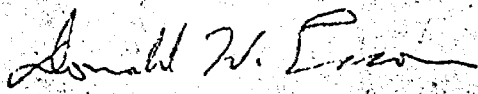
Donald W. Esson, P. Eng.

CERTIFICATE

I, Donald W. Esson, of the City of Toronto, in the County of York, in the Province of Ontario, hereby certify:

1. That I am a consulting geological engineer and reside at 122 Blythwood Road, Toronto 12, Ontario.
2. That I graduated from the University of Toronto in 1957 with the degree of B. A. Sc. in Mining Geology and have practised my profession as field geologist, mining securities analyst and consulting geologist continuously since graduation with the exception of the years 1962-64.
3. That I am a member of the Association of Professional Engineers of Ontario.
4. That my report on the Janes Township property of Ossington Explorations Limited is based on review of maps and reports as listed in the attached Acknowledgements, on personal visits to the property and surrounding area during June and August, 1968 and on my specific knowledge of exploration programs being conducted by others in the same general area.
5. That I have no direct or indirect interest, nor do I expect to receive any direct or indirect interest, in the properties described herein. I do not own beneficially, directly or indirectly, any shares in Ossington Explorations Limited, nor shares in any affiliate of that Company.

DATED at Toronto this 28th day of January, 1969.


Donald W. Esson, B. A. sc., P. Eng.

ACKNOWLEDGEMENTS

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Vol XLI Part IV 1932

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Geological Report 15, 1963

Report of D. A. Duff, B. Sc., P. Eng.,

Dated November 13, 1967,
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Department of Mines, Geological Survey, Memoir 95.

Ontario Department of Mines

Preliminary Report P-367
(1966)

Photomicrographs (4), Sample #BA-D-3. Thin section and polished sections carried out by Geological Survey of Canada.

Report of D. W. Sullivan, B. Sc., P. Eng.,
F. G. A. C.

Dated March 1, 1968
Janes Township

Report of D. W. Esson, B. A. Sc., P. Eng.
(with Maps)

Dated September 28, 1968
Janes Township

Reports, Maps, Sketches, etc. of work performed for
Ossington Explorations Limited by GHD Consultants Limited,
June-November, 1968.

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G.P. gd, mag, EM

S: Cu, ni

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ENCLOSURE

SUMMARY

During the early part of 1968 Ossington Explorations Limited acquired a group of 20 unpatented mining claims located in Janes Township, Sudbury Mining Division.

This property is located in an area of mafic rocks (norite) which are intrusive into metamorphosed Huronian and Keewatin sediments. The norite was identified with thin section study of a sample from the pit located on the east side of the Sturgeon River near the common boundary of claims S 147430 and S 147431. The sample BA-D-3 indicates that the rock is a norite and contains 3% interstitial sulphides, some of which is nickel-bearing pentlandite along with chalcopyrite, pyrrhotite and ilmenite. The existence of these sulphides in a norite rock similar to the intrusive containing deposits of nickel and copper in the Sudbury area is of significance. The rock description and photomicrographs were prepared by the Geological Survey of Canada.

In a report dated March 1, 1968 by D. W. Sullivan P. Eng., F. G. A. C. a program of line cutting, mapping, geophysical surveying, prospecting and sampling was recommended. This program was initiated during the latter part of May 1968 and has progressed continually since that date.

To date the line cutting, geophysical surveying and prospecting have been completed. Geological mapping is underway

and the stripping, trenching and sampling is to start immediately.

The geophysical results are most impressive with several coincident magnetic and electromagnetic anomalies outlined two of which coincide with areas of sulphide mineralization.

Preliminary assays are as follows:

<u>Sample No.</u>	<u>Copper(Cu)%</u>	<u>Nickel(Ni)%</u>
3	0.63	0.07
D0096	0.42	0.17

In light of these results the completion of the geological mapping along with the stripping, trenching and sampling should provide sufficient encouragement and information to continue with diamond drilling as set out in the contingent portion of the program by D. W. Sullivan's P. Eng. , F. G. A. C. report of March 1, 1968,

This property is located within a broad area of favourable mafic intrusive (norite) rock that is undergoing extensive study by other parties. Encouraging results on Ossington Explorations property are of the same tenure as those on adjacent properties which is ample encouragement to continue with and consider expanding this exploration program.

E

PROPERTY

The property consists of twenty (20) unpatented mining claims located in the central portion of Janes Township, Sudbury Mining Division, Province of Ontario.

The claim numbers are as follows:

S 147417 to S 147434 inclusive	18 claims
S 147443 to S 147444 inclusive	<u>2</u> claims
Total	20 claims

LOCATION AND ACCESS

The claim group is located in the west central part of Janes Township in the Sudbury Mining Division of Ontario at the junction of the Sturgeon and Chiniguchi Rivers.

It lies 1 - 1/4 miles north of Chudleigh on the main line of the Canadian National Railway which passes through the southern part of Janes Township. It is readily accessible by a good gravel road which passes through the property from Sturgeon Falls or Warren on Highway 17.

TOPOGRAPHY

Generally rugged, particularly at the junction of the two rivers with local relief about 150 feet. Relief is due mainly to ridges and hills of Precambrian sediments and sills and masses of basic rocks typical of the area between Lake Temiskaming

5

and Lake Wanapitei.

RESOURCES

The district is timbered with secondary spruce, pine, balsam, birch and maple. Local lumbering operators are active.

Power is available from the North Bay-Sudbury grid of Ontario Hydro.

HISTORY

Prospecting and some exploration has been carried on for several years in the area, more especially in Davis Township to the west.

Minor showings of copper and gold have been found in quartz veins in crush zones in gabbro and old sediments in Janes Township. A 30 foot shaft was sunk north of Sargesson Lake one mile to the east but no values were reported.

A small pit was excavated on the property in the fall of 1967 near the common boundary of claims S 147430-431 on a sulphide showing in the large basic intrusive which microscopic examination shows to be norite, very similar to the Sudbury norite which is known to contain copper and nickel sulphides. A sample from this pit No. BA-D-3 contains 3% interstitial sulphides.

This discovery of base metals in norite warrants further investigation and the large areas of mafic rocks seen on the property require careful investigation.

GENERAL GEOLOGY

All the rocks in the area are Precambrian in age. The Grenville Front crosses the southern part of Janes Township and the Ess Creek Fault coincides with the Front. A relatively strong north-south fault extends from Ess Creek up the Sturgeon river and is evident in the field on the east side of the river.

The rocks south of the Ess Creek fault are Killarnea. (Grenville) and consist of granite gneiss, migmatites, amphibolites and metasediments. North of the fault in the area of the property the rocks consist of metamorphosed cobalt and Keewatin sediments intruded by diabase, gabbro, amphibolite (Sudbury gabbro) shown as mafic intrusives on O. D. M. Map P-367(1966).

These mafic intrusives cover a large area in Janes Township as well as on the claim group itself, as were observed by the writer during field examinations on June 24th - 25th and August 14th, 1968.

Siliceous argillite was seen adjacent to two large outcrops of mafic rocks on claim S 147431; no contact of these rocks was seen at the time.

5

It is of particular interest to note that the large area of mafic intrusives between Lake Temiskaming, Gowganda and Sudbury show variations in composition from quartz diabase to quartz norite (Sudbury norite) with the latter type increasing from northeast to southwest approaching the Sudbury base metal area (see G. S. C. Memoir 95, pp. 88-91). As mentioned earlier, a sample from a test pit on the common boundary of mining claims S 147430-431 has been identified as norite of the Sudbury type. This sample showed from a thin section and polished section study to have 3% interstitial sulphides (chalcopyrite, pentlandite, pyrrhotite), 50% plagioclase, 40% hypersthene and minor biotite, hornblende, chlorite, ilmenite and quartz (see photomicrographs).

It would appear that the large areas of basic intrusives mapped as diabase and gabbro east-northeast of the Sudbury nickel area warrant careful examination since they appear to be in part related to the favourable Sudbury norite. Careful examination of the larger intrusive masses or sills should be made for possible magmatic segregations within them which may contain concentrations of base metal sulphides.

GROUND GEOPHYSICAL SURVEYS

In preparation for ground magnetometer and electromagnetic surveys a picket line grid was established on the property. East-west base lines and tie lines were used to control north-south picket lines at 300 foot intervals with stations established each 100 feet along these picket lines.

5

MAGNETOMETER SURVEY

A ground magnetic survey, using a Sharpe MF1 Fluxgate instrument, has been completed over the property utilizing a pre-established grid. The normal corrections for instrument drift and diurnal variations were applied and readings recorded to the nearest 5 gammas. Technical details of the instrument used are outlined in Appendix "A" of this report.

RESULTS OF MAGNETIC SURVEY

With reference to the accompanying magnetometer map it can be noted that there are four main areas of above background magnetic relief. The first extending from the Sturgeon River east through claims S 147429 and S 147434 with a maximum relief of 2750 gammas. A lesser magnetic trend to the south with a maximum relief of 2000 gammas extends east through claims S 147430 and S 147433. The second large magnetic trend extends through the property on a slight south-easterly trend crossing claims S 147420, S 147421, S 147427, S 147431, S 147432 and S 147444. The maximum relief is in the order of 3000 gammas. A third east-west magnetic trend of lesser magnitude and a maximum relief of 1400 gammas lies within claim S 147443. The fourth area of magnetic relief is of irregular shape and covers parts of claims S 147419, S 147422, S 147423, S 147424 and S 147417. The maximum relief is approximately 1200 gammas.

Several disseminated sulphide exposures have been located in the proximity of two of the areas of magnetic relief, however, a program of stripping and trenching is underway to confirm their relationship.

There are other smaller areas with lesser magnetic relief that require further investigation prior to discussion.

ELECTROMAGNETIC SURVEY

The property was completely covered by an electromagnetic survey utilizing the same grid pattern as was used for the magnetic survey. The Ronka EM 16 instrument was utilized in this survey and technical details relative to this equipment are to be found in Appendix "B" to this report.

RESULTS OF ELECTROMAGNETIC SURVEY

The accompanying electromagnetic map indicates nine (9) significant electromagnetic conductors all of which appear to be related to areas of above normal magnetic relief.

Conductor "A" plotted on claim S 147429 extending from Line 6E to 15E appears to be reasonably strong. Sulphides are known to exist slightly to the west indicating that sulphides may be the cause of the conductor.

Conductor "B" located on claims S 147421 and S 147428 extends from Line 0 to Line 18 west. This conductor could be a

faulted extension of Conductor "A".

Conductors "C", "D" and "E" are located in the southeast portion of the property. All are associated with magnetic relief and trend generally east-west from Line 12E to Line 30E.

Conductor "F" located on claim S 147423 is also associated with a magnetic feature and extends from Line 21W to Line 24W.

Conductor "G" located on claims S 147419 and S 147422 associated with a magnetic feature and extends from Line 27W to Line 42W.

Four other conductors exist on the property however they could be related to those already discussed.

The overall picture indicates the possible existence of sulphide zones and requires that additional exploration be undertaken.

CONCLUSIONS

In light of the results of work completed to date on this property as well as results of work currently underway on adjoining properties the present program of stripping, trenching and sampling should be continued. Based on the results obtained diamond drilling as outlined in the report of D. W. Sullivan, P. Eng., F. G. A. C. should be initiated.

RECOMMENDATIONS

It is therefore recommended that all known sulphide occurrences be stripped, trenched and sampled and that the areas around all geophysical anomalies be examined and where topographic features and overburden conditions allow these areas should also be stripped, trenched and sampled.

On correlation of current results as well as those from the above program the required diamond drill holes should be located.

Respectfully submitted,



D. W. Esson, P. Eng.

APPENDIX "A"

VERTICAL INTENSITY FLUXGATE MAGNETOMETER MF-1 SPECIFICATIONS

<u>Model MF-1</u>	Standard surveying and prospecting magnetometer with self-levelling sensor.	
<u>Ranges:</u>	Plus or minus -	
	1,000 gammas f. sc.	Sensitivity: 20 gammas per div.
	3,000 "	50 "
	10,000 "	200 "
	30,000 "	500 "
	100,000 "	2000 "
<u>Meter:</u>	Taut-band suspension, 1,000 gamma scale: 1 7/8" long 50 div.	
	3,000 "	1 11/16" long 60 div.
<u>Accuracy:</u>	1,000 to 10,000 gamma ranges \pm 0.5% of full scale	
	30,000 to 100,000 gamma ranges \pm 1% of full scale	
<u>Operating Temperature:</u>	- 40°C to 40°	
	- 40°F to 100°F	
<u>Temperature Stability:</u>	Less than 2 gammas per °C (1 gamma/°F)	
<u>Bucking Adjustments:</u>	10,000 to 75,000 gammas by 9 steps of approximately 8,000 gammas and fine control by 10-turn potentiometer. Convertible for Southern hemisphere or \pm 30,000 gammas equatorial.	
<u>Batteries:</u>	12 x 1.5V - flashlight batteries ("C" cell type) (AC Power supply available)	
<u>Consumption:</u>	50 milliamperes	
<u>Dimensions:</u>	Instrument: 6 1/2" x 3 1/2" x 12 1/2" - 165 x 90 x 320 mm	
	Battery Pack: 4" x 2" x 7" - 100 x 50 x 180 mm	
	Shipping Container: 10" dia. x 16" - 255 mm dia. x 410 mm	
<u>Weights:</u>	Instrument: 5 lbs. 12 oz. - 1.6 kg.	
	Battery Pack: 2 lbs. 4 oz. - 1 kg.	
	Shipping: 13 lbs.	

APPENDIX "B"

PRINCIPLE OF OPERATION (RONKA EM 16)

The VLF-radio stations operating for communications with submarines have a vertical antenna. The antenna current is thus vertical, creating a concentric horizontal magnetic field around them. When these magnetic fields meet conductive bodies in the ground, there will be secondary fields radiating from these bodies. This equipment measures the vertical components of these secondary fields.

The EM16 is simply a sensitive receiver covering the frequency band of the new VLF-transmitting stations, with means of measuring the vertical field components.

The receiver has two inputs with two receiving coils built into the instrument. One coil has normally vertical axis and the other is horizontal.

The signal from one of the coils (vertical axis) is first minimized by tilting the coil. The tilt-angle is calibrated in percentages. The remaining signal in this coil is finally balanced out by a measured percentage of a signal from the other coil, after being shifted by 90° . The axis of this coil is at right angles to the axis of the first coil. This coil is kept normally parallel to the primary field.

Thus, if the secondary signals are small compared to the primary horizontal field, the mechanical tilt-angle is an accurate measure of the vertical real-component, and the compensation $\Pi/2$ -signal from the horizontal coil is a measure of the quadrature vertical signal.

APPENDIX "B" (Cont'd)

SPECIFICATIONS

Primary field:	Horizontal from any selected VLF-transmitting station.
Frequency range:	Approximately 15 - 25 kc.
Station selection:	By plug-in units. Two stations selected by a switch on front panel.
Measured field:	Vertical field, in-phase and quadrature components.
Accuracy of readings:	$\pm 1\%$ resolution.
Range of measurements:	In-phase $\pm 150\%$ or $\pm 90^\circ$, quadrature $\pm 40\%$.
Output readout:	Null-detection by an earphone, real and quadrature components from mechanical dials.
Batteries:	6, size AA penlight cells. Life about 200 hours.
Size:	16 x 5.5 x 3.5 in. (42 x 14 x 12 cm).
Weight:	2.4 lbs (1.1 kg).
Accessories:	1 earphone and cord. 1 carrying bag. 1 set of batteries. 1 Manual of Operation. 2 plug-in units for station selection -- additional optional units available.



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- ULTRA CARBON CORPORATION
- METALS RESEARCH LIMITED

CERTIFICATE OF ANALYSIS

Semiquantitative Spectrographic

SAMPLE(S) FROM *1000 3000 2000*
 1000 3000 2000,
 1000 3000 2000,
 1000 3000 2000,
 Toronto, Ontario.

REPORT NO.
 T-13608

SAMPLE(S) OF
 ROCK

	Sample 413	Sample 416	Sample	Sample 413	Sample 416	Sample
Antimony						
Arsenic						
Barium	.01%	.07%				
Beryllium (BeO)				X	X	
Bismuth						
Boron				X	X	
Cadmium						
Caesium						
Caesium (CsO ₂)						
Caesium						
Chromium						
Cobalt	.003%	.003%				
Columbium (Cb ₂ O ₅)						
Copper	.05%	.01%				
Gallium	.002%	.002%				
Germanium						
Gold	.010%	.010%				
Hafnium						
Indium						
Iridium						
Lanthanum (La ₂ O ₃)						
Lead	.06%	.02%				
Lithium (Li ₂ O)						
Manganese	.2%	.2%				
Mercury						
Molybdenum						
Neodymium (Nd ₂ O ₃)						
Nickel	.02%	.01%				
Palladium						
Phosphorus						
Platinum						
Rhenium						
Rhodium						
Rubidium						
Ruthenium						
Silver						
Strontium						
Tantalum (Ta ₂ O ₅)						
Tellurium						
Thallium						
Thorium (ThO ₂)						
Tin						
Titanium	.005%	.001%				
Tungsten	1.2%	1.0%				
Uranium (U ₂ O ₅)						
Vanadium						
Yttrium (Y ₂ O ₃)	.03%	.05%				
Zinc						
Zirconium (ZrO ₂)						
ROCK FORMING METALS						
Aluminum (Al ₂ O ₃)				11%	11%	
Calcium (CaO)				10%	6%	
Iron (Fe)				11%	11%	
Magnesium (MgO)				8%	8%	
Silica (SiO ₂)				11%	11%	
Sodium (Na ₂ O)				1%	2%	
Potassium (K ₂ O)				1%	2%	

Figures are approximate

CODE

- H - High - 10 - 100% approx.
- MH - Medium High - 5 - 50% approx.
- M - Medium - 1 - 10% approx.

- LM - Low Medium - .5 - 5% approx.
- L - Low - .1 - 1% approx.
- TL - Trace Low - .05 - .5% approx.
- T - Trace - .01 - .1% approx.

- FT - Faint Trace - approx. less than .01%.
- PT - Possible Trace - Presence not certain.
- : not Detected - Elements looked for but not found.
- X - Not looked for

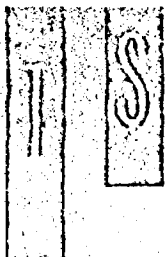
Samples, Pulps and Rejects discarded after ~~3~~ 6 months

DATE Nov. 28/68

SIGNED C.S. Joyce

C.S. JOYCE, D.Sc., Manager of Laboratories





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MILGER & WATTS LIMITED
BADTLER RESEARCH
ULTRA CARBON CORPORATION
METALS RESEARCH LIMITED

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM

THE CORPORATION

REPORT NO.

T-13608

SAMPLE(S) OF

ROCK

Sample No.

Gold (Au) oz: ton

1.02

0.02

Samples, Pulps and Rejects discarded after ³⁰ months

DATE Nov. 20/68

SIGNED *C.S. Joyce*
C.S. JOYCE, B.Sc., Manager of Laboratories



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HILGER & WATTS LIMITED
SADTLER RESEARCH
ULTRA CARBON CORPORATION
METALS RESEARCH LIMITED

CERTIFICATE OF ANALYSIS

SAMPLE(S) FROM GNP Cons. Slabs,

REPORT NO.

T-12666

SAMPLE(S) OF

ROCK

<u>Sample No.</u>	<u>Copper (Cu)%</u>	<u>Nickel (Ni)%</u>
400	2.42	0.13
404	0.01	0.01
405	0.21	0.11
406	0.79	0.19

Samples, Pulps and Rejects discarded after six months

DATE Nov. 28/65

SIGNED

C.S. Joyce

C.S. JOYCE, B.Sc., Manager of Laboratories

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CT

Doxbury

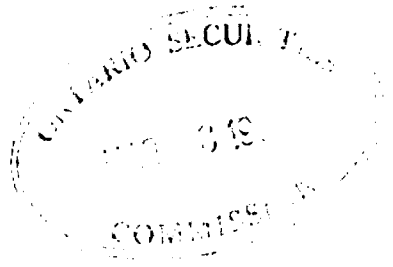
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41109NW0204 JANES16 JANES

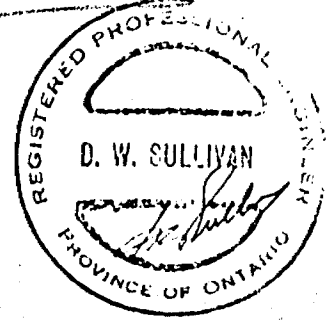
040

REPORT
on
Property of
OSSINGTON EXPLORATIONS LIMITED
JANES TOWNSHIP
Sudbury Mining Division
Ontario



Toronto, Ontario.

~~March 1st, 1968~~





41109NW0204 JANES16 JANES

040C

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INTRODUCTION

Ossington Explorations Limited have acquired a mining property by outright purchase in Janes Township, Sudbury Mining Division of Ontario.

A group of twenty (20) claims is located in an area of mafic rocks (norite) which are intrusive into metamorphosed Huronian and Keewatin sediments. The mafic rocks in places are definitely considered to be norite as determined from samples blasted from an outcrop east of the Sturgeon River near the common boundary of claims S147430 and S147431. The pit was not seen by the writer who made a brief examination of the property on February 22, 1968 due to snow cover but mafic rock was seen on higher exposed outcrops.

Descriptions of the norite rock blasted from the pit along with photomicrographs were given to the writer by the Company and are included with this report. The sample, No. BA-D-3 indicates that the rock is a norite and contains 3% interstitial sulphides, some of which is nickel-bearing pentlandite along with chalcopyrite, pyrrhotite and ilmenite. The presence of these important sulphides in a norite rock similar to the intrusive which contains deposits of nickel and copper in the Sudbury Area is considered important. The description of the rock type and the photomicrographs were done by the Geological Survey of Canada.

Since there ^{are} ~~is~~ present on this property favourable mafic rocks which contain base metal sulphides, the entire property must be thoroughly

explored for economic concentrations of these sulphides.

It is recommended that the entire property be mapped geologically. Any promising looking occurrences of sulphides should be trenched and sampled.

It is also recommended that the whole claim group be covered by a magnetometer geophysical survey on lines cut at 300 foot spacing and readings taken every 100 feet. A test programme of electromagnetic geophysical surveying should be done over any showings.

The cost of the above exploration is estimated to be \$10,600.00.

PROPERTY

Consists of twenty (20) unpatented contiguous mining claims of approximately 40 acres each.

They are known more precisely as follows:

S147417 to S147434	18 claims
S147443 to S147444	<u>2</u> claims
Total	20 claims ==

This report was authorized by the officials of Ossington Explorations Limited.

LOCATION AND ACCESS

The claim group is located in the west central part of Janes Township in the Sudbury Mining Division of Ontario at the junction of the Sturgeon and Chiniguchi Rivers.

It lies 1-1/4 miles north of Chudleigh on the main line of the Canadian National Railways which passes through the southern part

of Janes Township. It is readily accessible by a good gravel road which passes through the property from Sturgeon Falls or Warren on Highway 17. The distance from Sturgeon Falls by road is approximately 37 miles.

TOPOGRAPHY

Generally rugged, particularly at the junction of the two rivers with local relief of about 150 feet. Relief is due mainly to ridges and hills of Precambrian sediments and sills and masses of basic rocks typical of the area between Lake Temiskaming and Lake Wanapitie.

RESOURCES

The district is timbered with secondary spruce, pine, balsam, birch and maple. Local lumbering operators are active.

Power is available from the North Bay-Sudbury grid of Ontario Hydro.

HISTORY

Prospecting and some exploration has been carried on for several years in the area, more especially in Davis Township to the west.

Minor showings of copper and gold have been found in quartz veins in crush zones in gabbro and old sediments in Janes Township. A 30 foot shaft was sunk north of Sargesson Lake one mile to the east but no values were reported.

A small pit was excavated on the Ossington property in the fall of 1967 near the common boundary of claims S147430-431 in a sulphide

showing in the large basic intrusive which microscopic examination shows to be norite, very similar to the Sudbury norite which is known to contain copper and nickel sulphides. A sample from this pit No. BA-D-3 contains 3% interstitial sulphides (see photomicrographs). The writer did not see the pit on his examination of the property on February 22nd last because of snow conditions.

This discovery of base metals in norite warrants further investigation and the large areas of mafic rocks seen on the property require careful investigation. This discovery of sulphides in rock of the Sudbury type is the first known indication in this area.

GENERAL GEOLOGY

All the rocks in the area are Precambrian in age. The Grenville Front crosses the southern part of Janes Township and the Ess Creek Fault coincides with the Front. A relatively strong north-south fault extends from Ess Creek up the Sturgeon river and is evident in the field on the east side of the river.

The rocks south of the Ess Creek fault are Killarnean (Grenville) and consist of granite gneiss, migmatites, amphibolites and metasediments. North of the fault in the area of the property the rocks consist of metamorphosed Cobalt and Keewatin sediments intruded by diabase, gabbro, amphibolite (Sudbury gabbro) shown as mafic intrusives on O. D. M. Map P-367(1966).

These mafic intrusives cover a large area in Janes Township.

as well as the claim group itself and were seen by the writer during his field examination on February 22nd, 1968.

Siliceous argillite was seen adjacent to two large outcrops of mafic rocks on claim S147431; no contact of these rocks was seen at the time.

It is of particular interest to note that in the large area of mafic intrusives between Lake Temiskaming, Gowganda and Sudbury, show variations in composition from quartz diabase to quartz norite (Sudbury norite) with the latter type increasing from northeast to southwest approaching the Sudbury base metal area (see G. S. C. Memoir 95, pp. 88-91). As mentioned earlier, a sample from a test pit on the common boundary of mining claims S147430-431 has been identified as norite of the Sudbury type. This sample showed from a thin section and polished section study to have 3% interstitial sulphides (chalcopyrite, pentlandite, pyrrhotite, ilmenite), 50% plagioclase, 40% hypersthene and minor biotite, hornblende, chlorite, and quartz (see photomicrographs). The above determinations were done for the Company by the Geological Survey of Canada and given to the writer for his study.

It would appear that the large areas of basic intrusives mapped as diabase and gabbro east-northeast of the Sudbury nickel area warrant careful examination since they appear to be in part related to the favourable Sudbury norite. Careful examination of the larger intrusive masses or sills should be made for possible magmatic segregations within them which may contain concentrations of base metal sulphides.

CONCLUSIONS

On the basis of the presence in the area of the property of favourable mafic rocks some of which have been identified as norite, which in places contain sulphides, the property should be carefully explored. The possibility could exist for the presence of replacement deposits within or near the mafic intrusives as well as magmatic segregations within these mafic rocks.

RECOMMENDATIONS

It is therefore recommended that the entire property be carefully prospected and mapped geologically and structurally. Any sulphide occurrences should be trenched and sampled.

It is also recommended that a magnetic geophysical survey be carried out over the entire property on lines cut at 300 foot spacing and readings taken every 100 feet. Any sulphide occurrences found should have limited electromagnetic test work done on them.

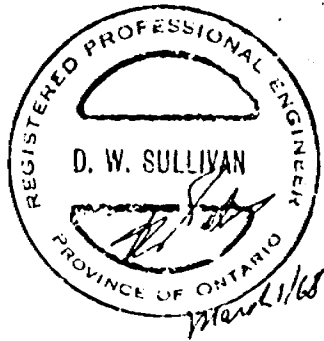
The estimated cost of the above exploration is as follows:

Line cutting	\$1,900.00
Magnetometer survey	2,400.00
Prospecting	1,300.00
Geological mapping	2,600.00
Trenching and sampling	1,800.00
Electromagnetic test survey	<u>600.00</u>
Total estimated cost	\$10,600.00 =====

CONTINGENT PROGRAM

If the above exploration should indicate that diamond drilling is warranted, the following cost estimate is recommended:

2,500 feet of diamond drilling at \$6.00/ft.	\$15,000.00
Engineering and contingencies	<u>2,500.00</u>
	\$17,500.00
	=====



Respectfully submitted,

A handwritten signature in cursive script, appearing to read "D. W. Sullivan".

D. W. Sullivan, P. Eng., F. G. A. C.

CERTIFICATE

I, D. W. SULLIVAN, of the Township of Esquesing, in the County of Halton, Province of Ontario, hereby certify:

1. That I am a Mining Engineer and reside at R. R. #3, 5th Line, Georgetown, Ontario.
2. That I am a graduate of Queen's University with a B. Sc. degree and that I have been practising my profession as a Mining Engineer for the past twenty years.
3. That I have no interest, either directly or indirectly, nor do I expect to receive any interest, either directly or indirectly in the property of Ossington Explorations Limited or any affiliated company.
4. That I do not beneficially own, either directly or indirectly, any securities of Ossington Explorations Limited or any affiliated company.
5. That the following report is based on a personal visit to the property on February 22nd, 1968 and upon available geological reports and maps of the general area. Photomicrographs of the rock types and sulphides were given to the writer by the Company for his study.
6. That I am a member of the Association of Professional Engineers of the Province of Ontario and the Geological Association of Canada.

Dated this 1st day of March, 1968.



D. W. Sullivan, B. Sc., P. Eng.,
F. G. A. C.

ACKNOWLEDGEMENTS

Ontario Department of Mines

Vol. XLI Part IV 1932

Ontario Department of Mines

Geological Report 15 1963

Report of D. A. Duff, B. Sc., P. Eng., dated November 13, 1967,
Janes Township.

Department of Mines, Geological Survey, Memoir 95.

Ontario Department of Mines

Preliminary Report P-367(1966)

Photomicrographs (4), Sample #BA-D-3. Thin section and polished sections
carried out by Geological Survey of Canada.

APPENDIX "B" (Cont'd)

SPECIFICATIONS

Primary field:	Horizontal from any selected VLF-transmitting station.
Frequency range:	Approximately 15 - 25 kc.
Station selection:	By plug-in units. Two stations selected by a switch on front panel.
Measured field:	Vertical field, in-phase and quadrature components.
Accuracy of readings:	$\pm 1\%$ resolution.
Range of measurements:	In-phase $\pm 150\%$ or $\pm 90^\circ$, quadrature $\pm 40\%$.
Output readout.	Null-detection by an earphone, real and quadrature components from mechanical dials.
Batteries:	6, size AA penlight cells. Life about 200 hours.
Size:	16 x 5.5 x 3.5 in. (42 x 14 x 12 cm).
Weight:	2.4 lbs (1.1 kg).
Accessories:	1 earphone and cord. 1 carrying bag. 1 set of batteries. 1 Manual of Operation. 2 plug-in units for station selection -- additional optional units available.

Map No. 11f

THE TOWNSHIPS OF
JAMES, MUNICH, PARDO AND DANA
DISTRICTS OF SUDBURY AND NIPISSING, ONTARIO

To accompany report by E. L. BRUCE in Vol. XLI, Part 4, Ontario Department of Mines Annual Report, 1932.

Scale $\frac{1}{31680}$ or $\frac{1}{2}$ Mile = 1 Inch

LEGEND

QUATERNARY

Recent and Glacial

1. Alluvial deposits

PRE-CAMBRIAN

Archeozoan

1. Gneiss and schists

2. Quartzite granite

3. Dark gneiss

4. Dark schist

5. Light gneiss

6. Amphibolite

7. Dark schist

8. Light schist

9. Dark schist

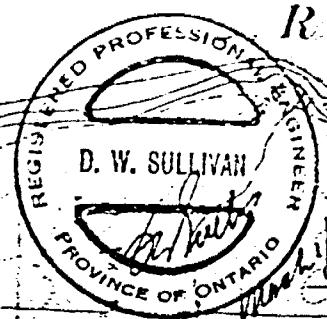
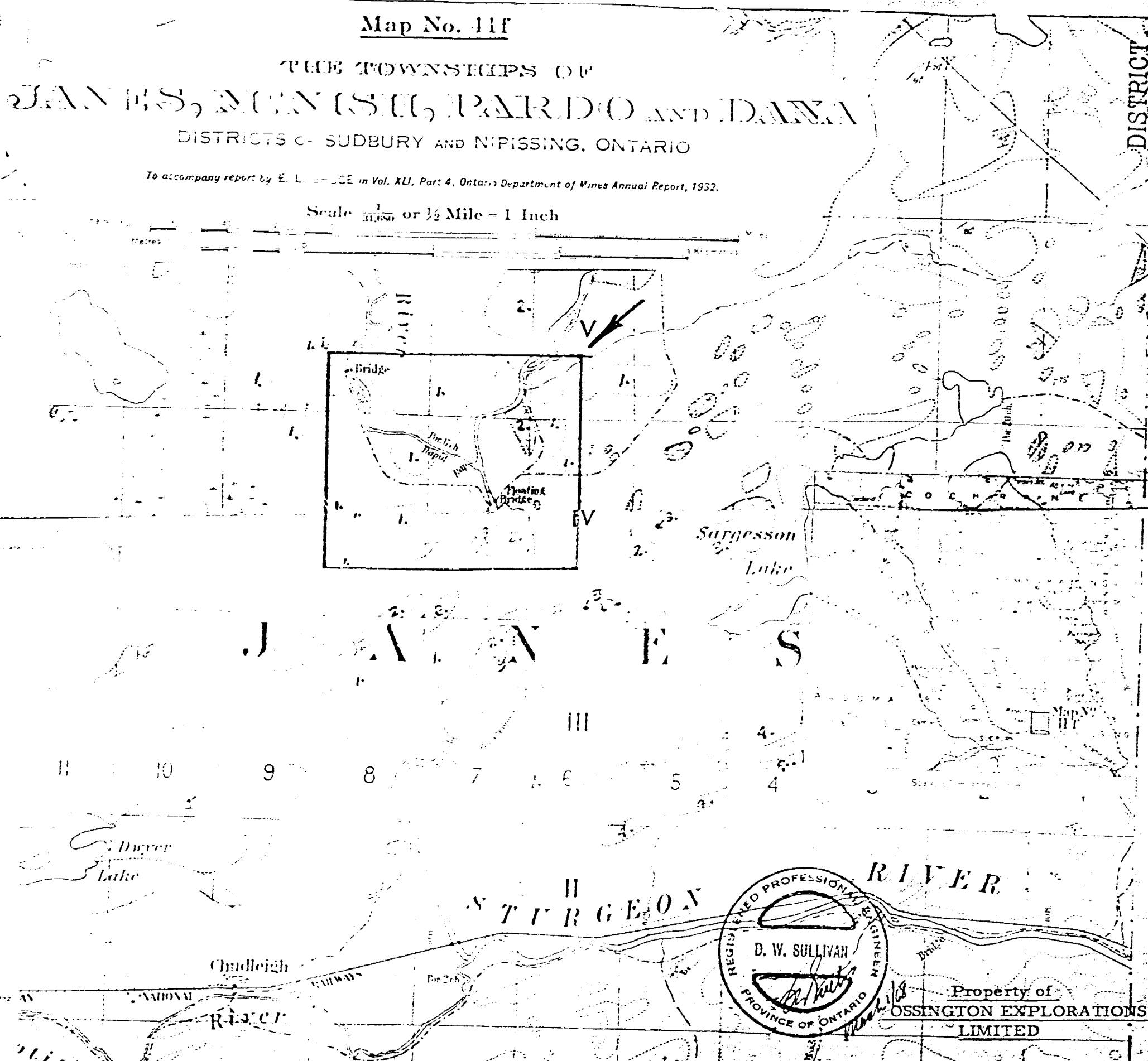
10. Light schist

11. Dark schist

12. Light schist

Symbols

- 13. Railway
- 14. Road
- 15. Stream and dip of rock strata and general structure
- 16. General boundary, surface
- 17. General boundary, assumed



Property of
**ROSSINGTON EXPLORATIONS
 LIMITED**

THE TOWNSHIP
OF

JANES

DISTRICT OF
SUDBURY

SUDBURY
MINING DIVISION

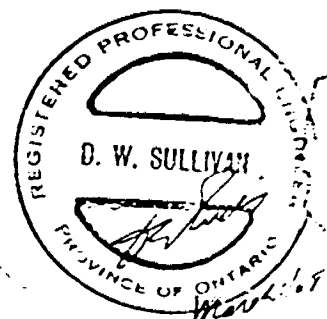
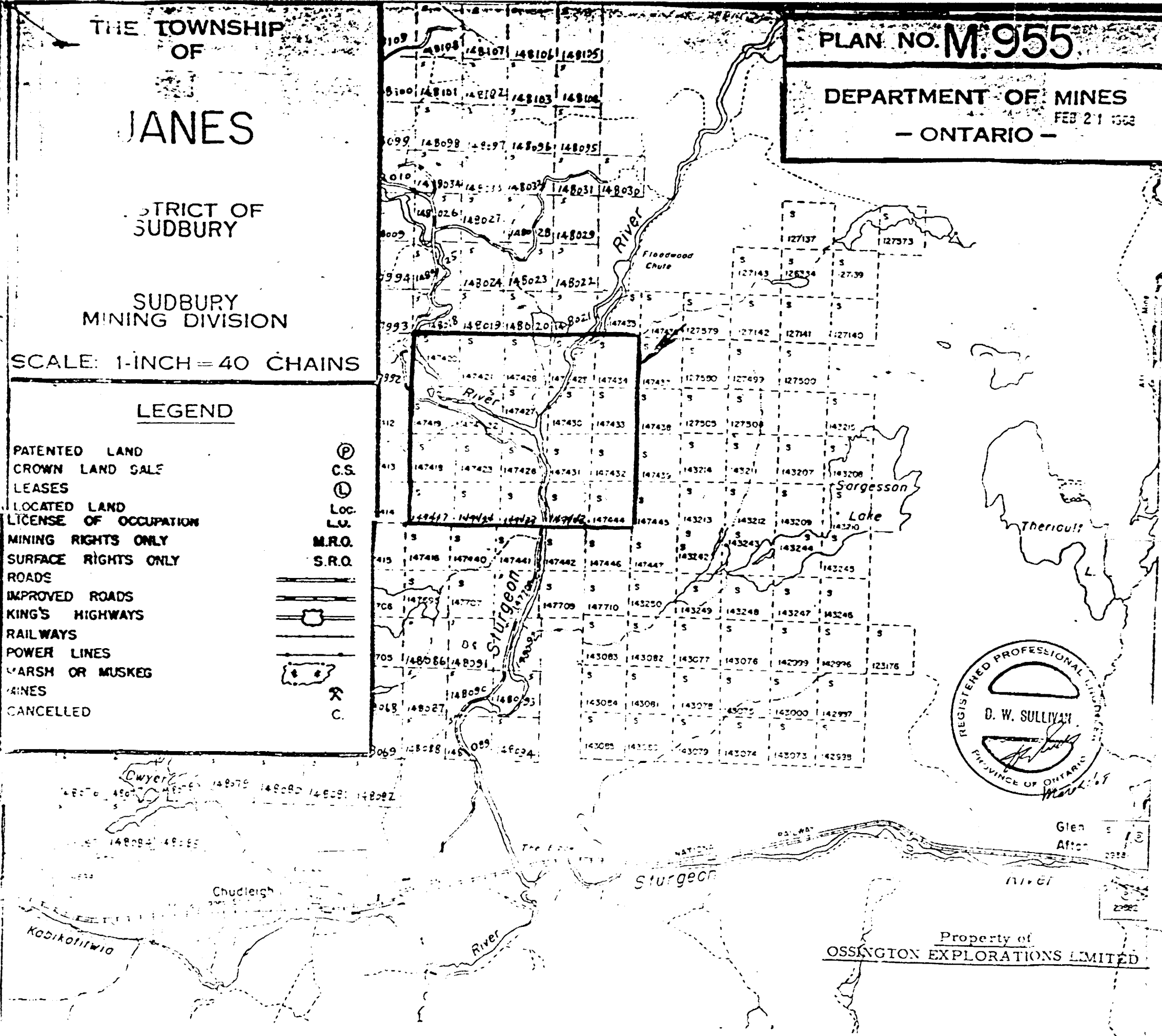
SCALE: 1-INCH = 40 CHAINS

LEGEND

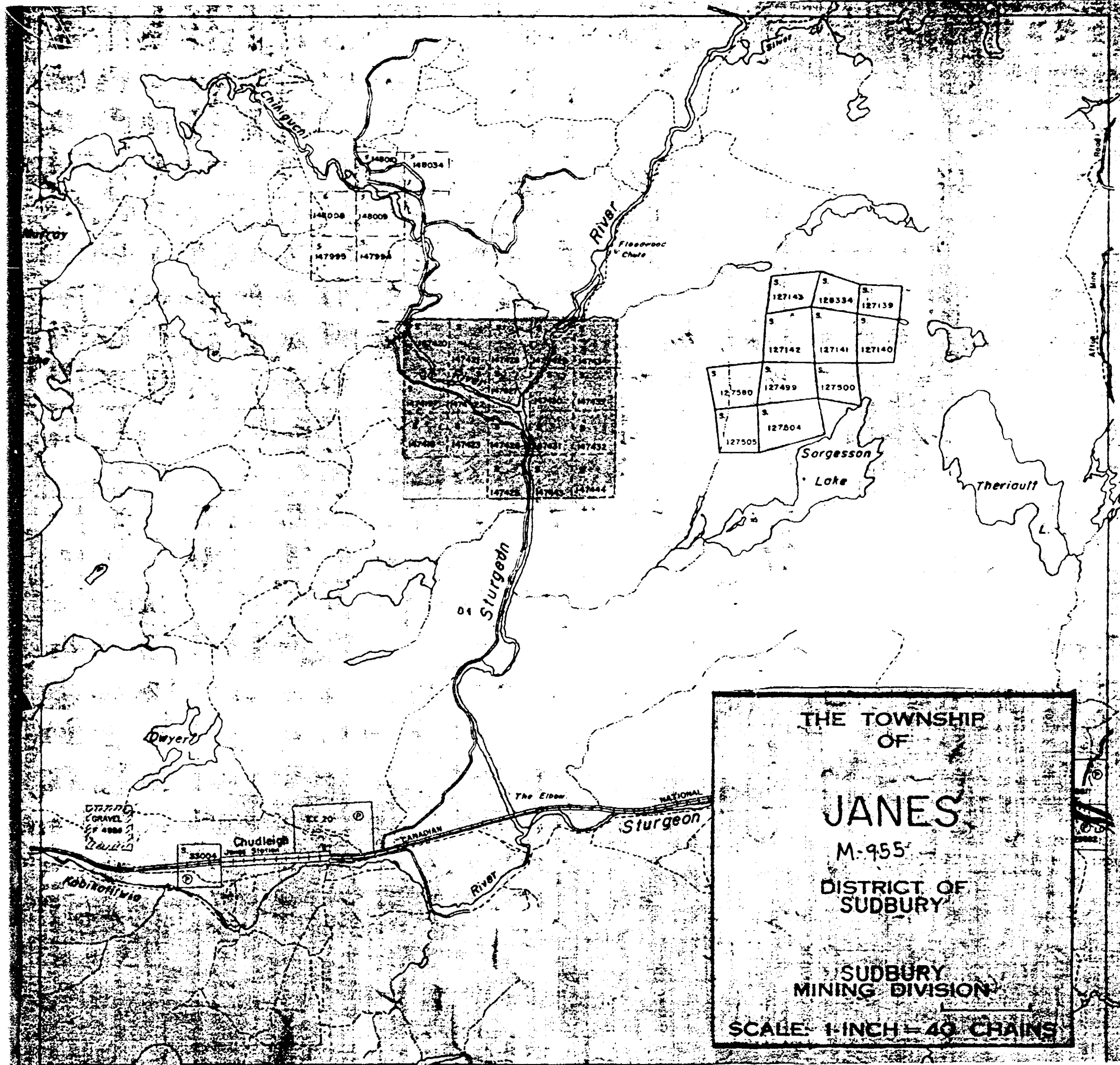
- PATENTED LAND Ⓟ
- CROWN LAND SALE C.S.
- LEASES Ⓛ
- LOCATED LAND Loc.
- LICENSE OF OCCUPATION L.O.
- MINING RIGHTS ONLY M.R.O.
- SURFACE RIGHTS ONLY S.R.O.
- ROADS — — — — —
- IMPROVED ROADS — — — — —
- KING'S HIGHWAYS — — — — —
- RAILWAYS — — — — —
- POWER LINES — — — — —
- WASH OR MUSKEG ⊛ ⊛
- MINES ⊛
- CANCELLED C.

PLAN NO. M.955

DEPARTMENT OF MINES
FEB 21 1958
— ONTARIO —

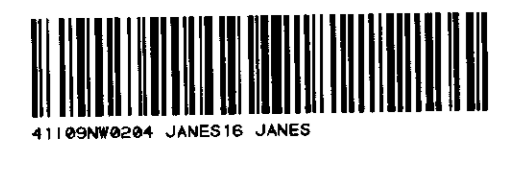
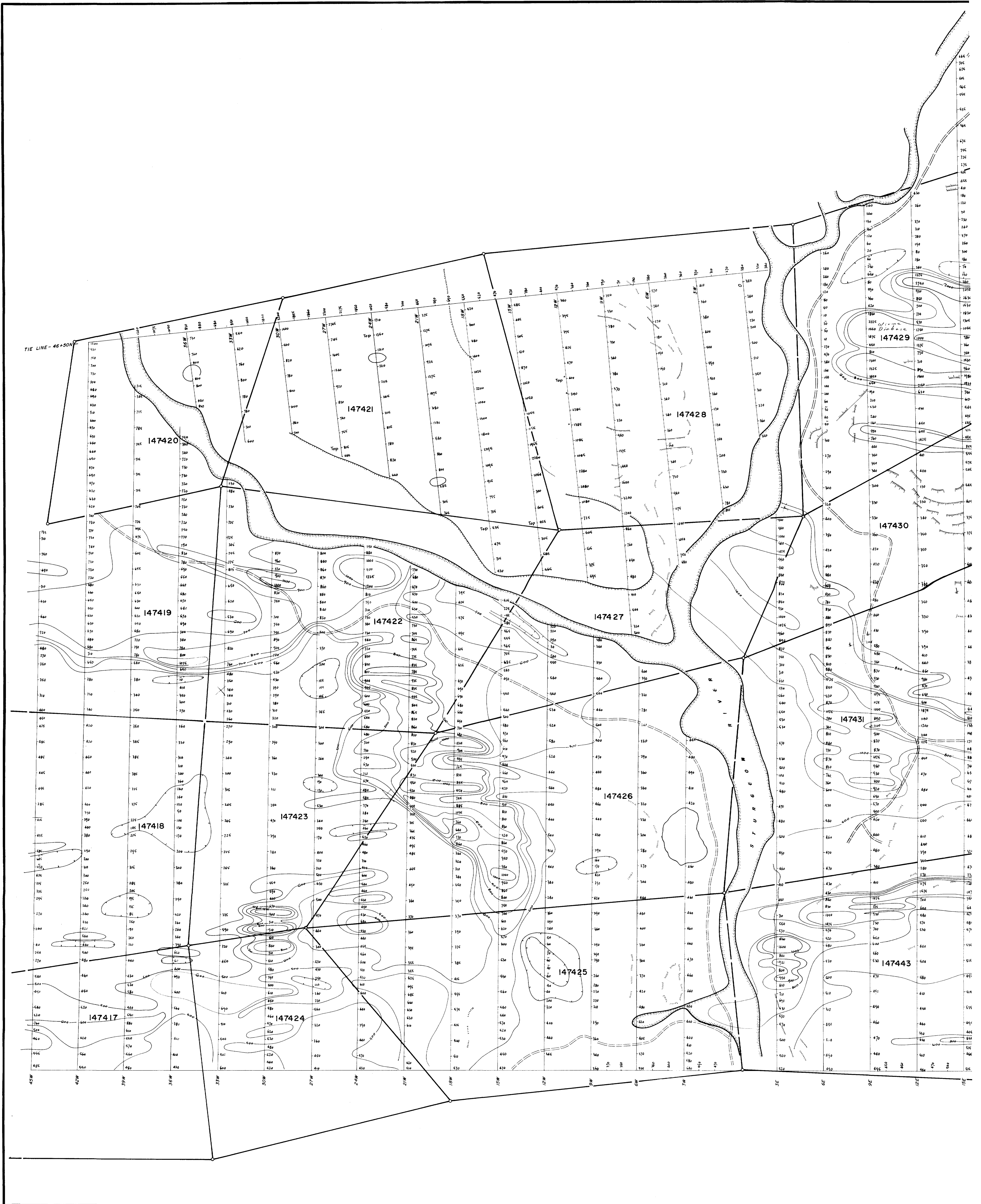


Property of
OSSINGTON EXPLORATIONS LIMITED



THE TOWNSHIP
 OF
JANES
 M-955
 DISTRICT OF
 SUDBURY

 SUDBURY
 MINING DIVISION
 SCALE: 1 INCH = 40 CHAINS





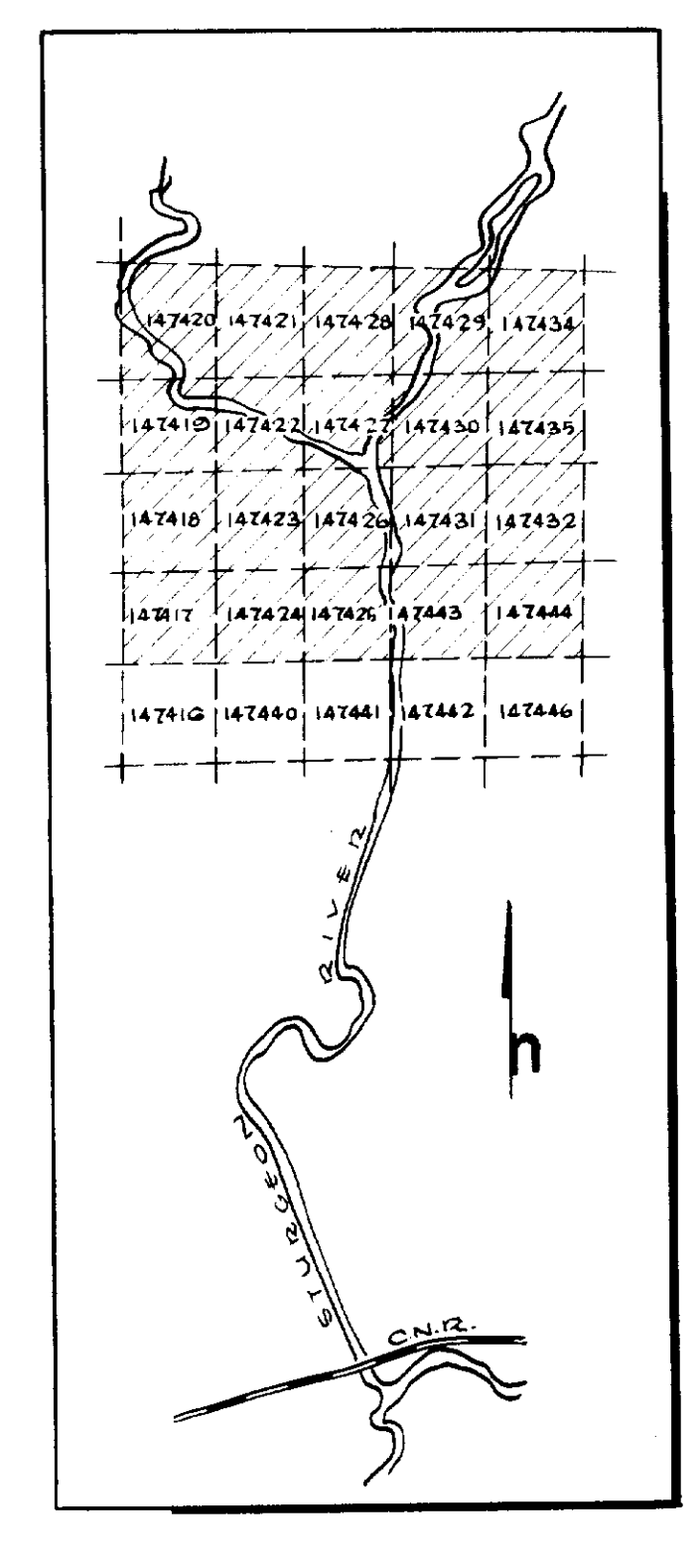
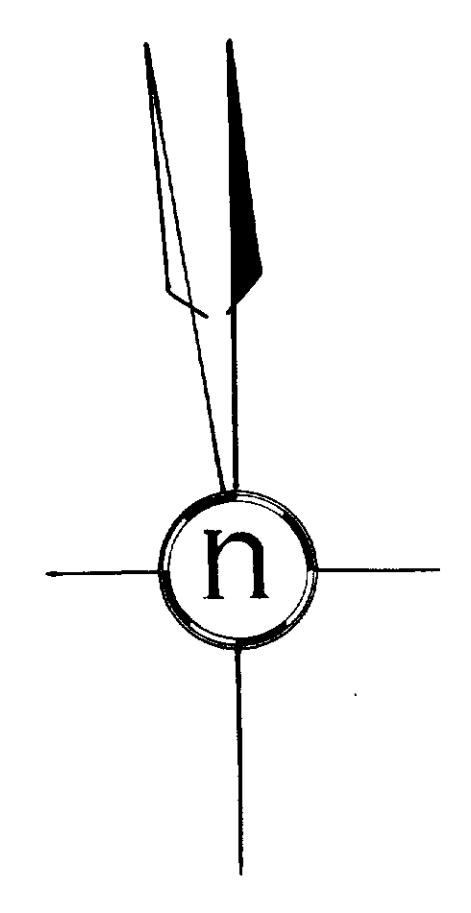
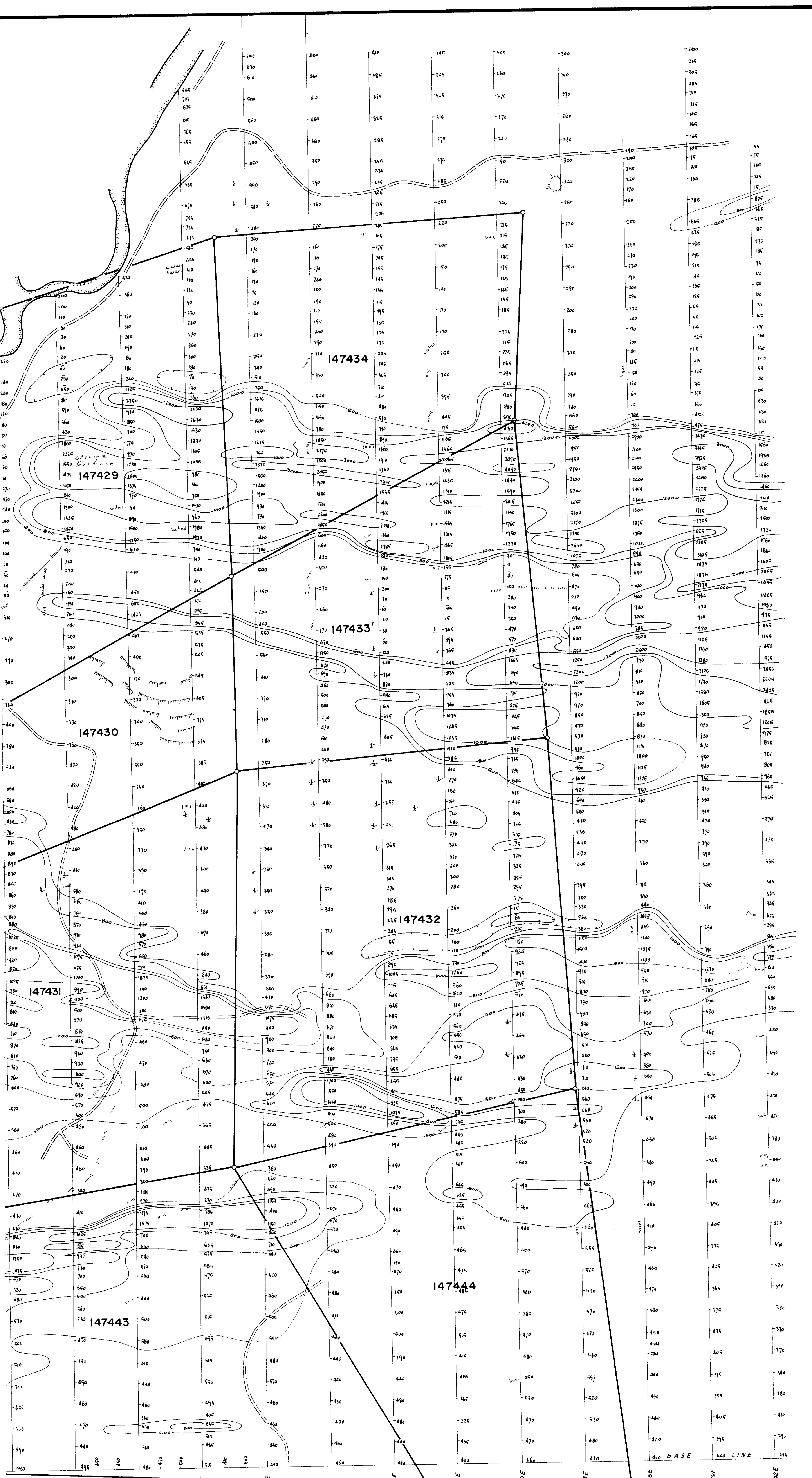
BASE LINE 45W 30W 25W 20W 15W 10W 5W 0 5E 10E 15E 20E 25E 30E 35E 40E

SYMBOLS

- Measurement station along picket line
- In phase reading plotted west of line
- Out of phase reading plotted east of line
- Scale of profile 1" = 20' of tilt
- Indicated conductor

INSTRUMENT : Geonics, Ranka EM-10
 Transmitter station - NAA



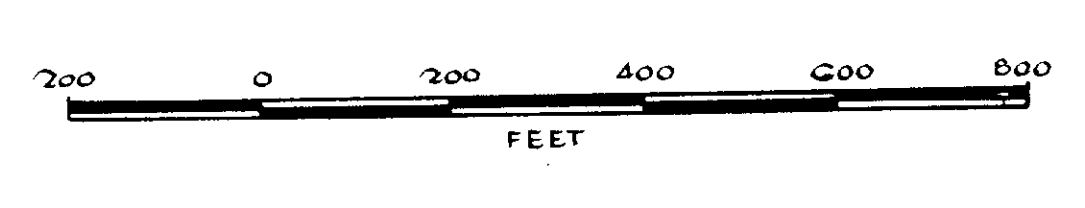


- SYMBOLS**
- 400 Measurement station along picket line
 - Relative value of the vertical component of the earth's magnetic field in gammas
 - Magnetic contours 100 gamma contour interval
 - Magnetic depression
 - Claim posts.
- Instrument: Sharpe MF 1 fluxgate magnetometer

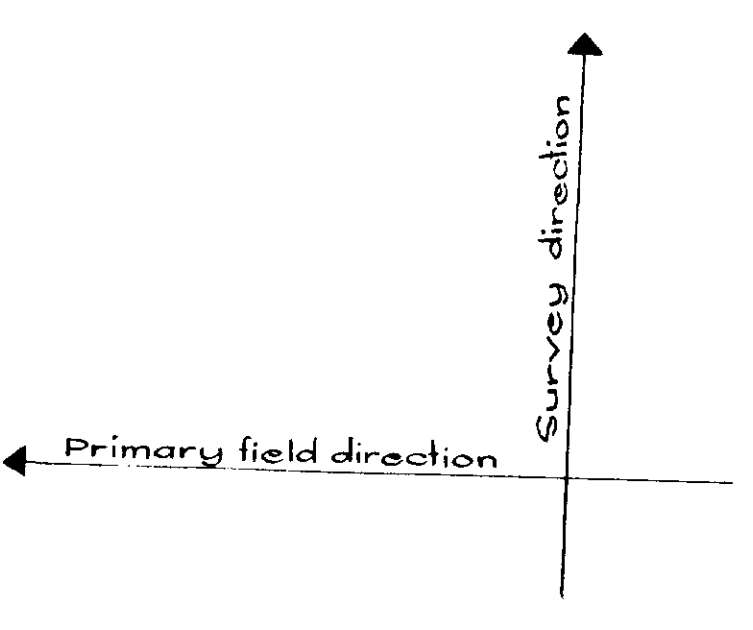
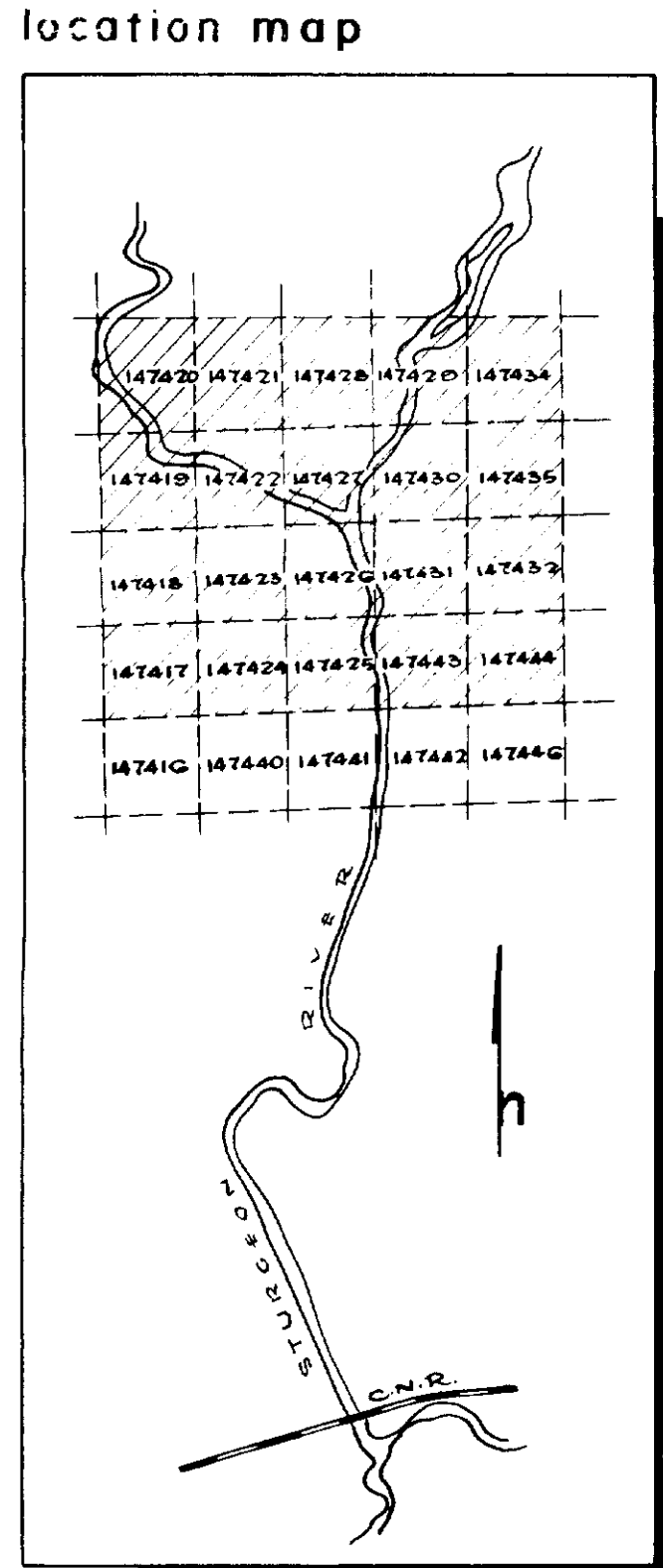
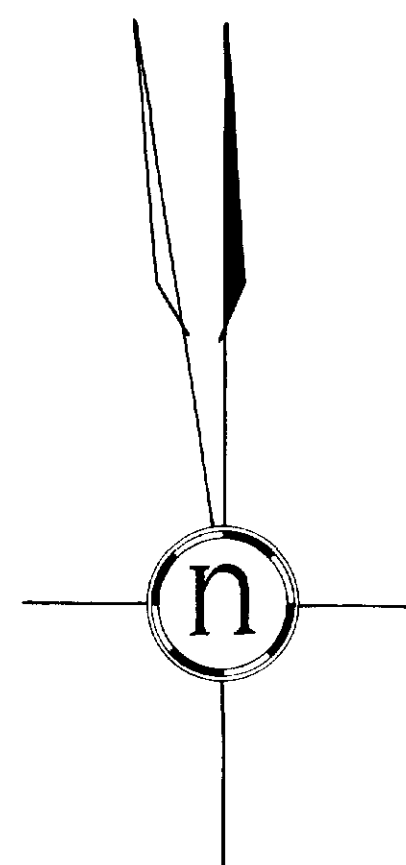
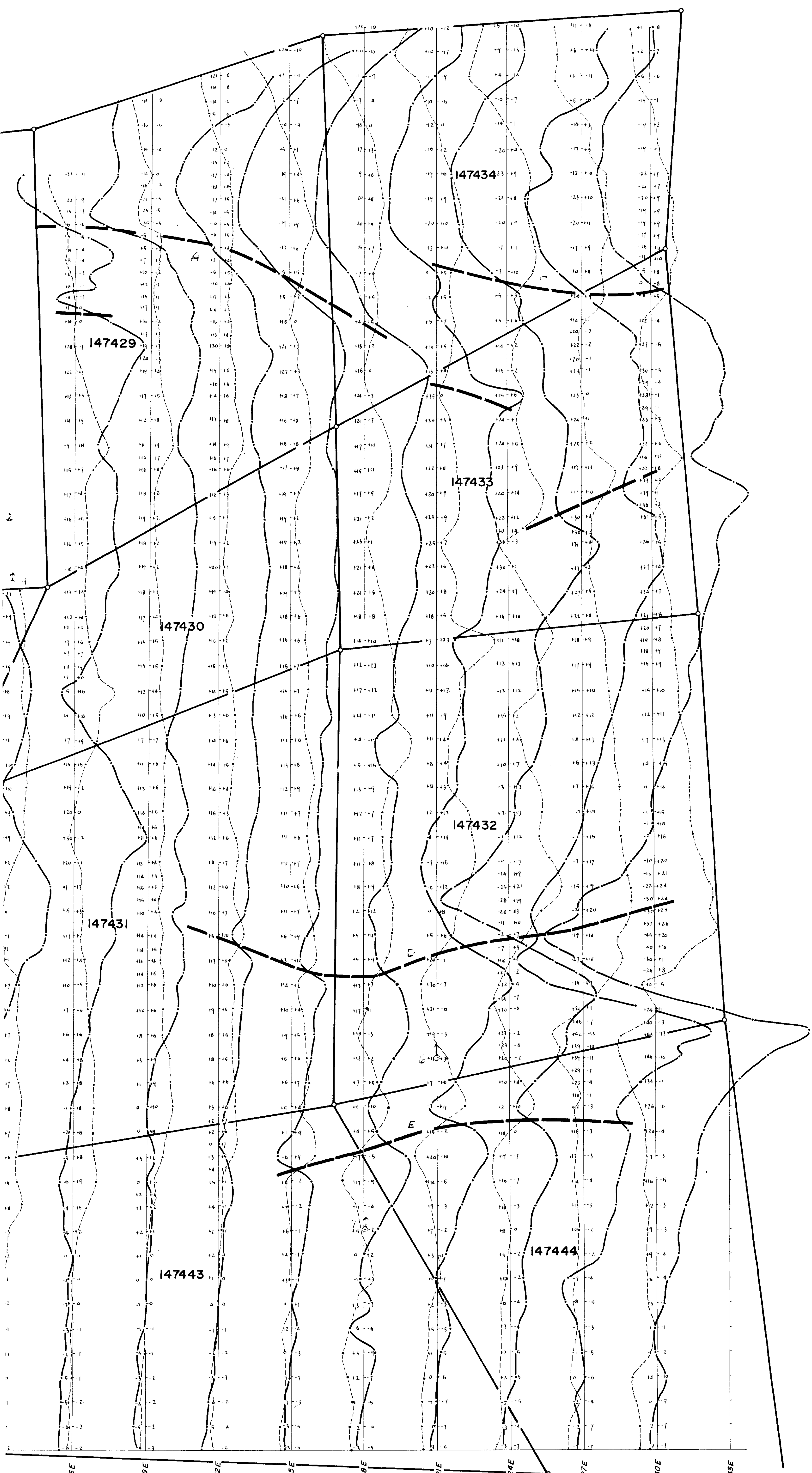
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 JANES TWP SUDBURY DISTRICT-ONTARIO

MAGNETOMETER SURVEY

by
G.H.D. CONSULTANTS LTD.



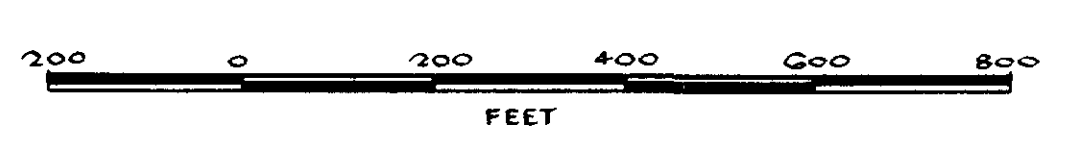
JANES-0016, #1



BOLS
 on along picket line
 plotted west of line
 ding plotted east of line
 1-20' of tilt
 or
 M:1G
 n - NAA

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ELECTROMAGNETIC SURVEY
 by
 G.H.D. CONSULTANTS LTD.



aug-sept. 1968

JANES - 0016, #2