CANADIAN JOHNS-MANVILLE COMPANY LIMITED

Report on the geomagnetic survey of the South Reaume group of claims, Reaume Township, Ontario.

Summary

The geomagnetic survey indicated the presence of a basic to ultrabasic intrusive body on these claims.

Two lakes and corresponding creeks are the only topographical features which can give hints as to the structure of the underlying rocks. No outcrops were found on this property.

Relatively high readings were obtained on several localities along the North-West trending anomaly. Such localities are assumed to indicate the occurrences of serpentine.

Introduction

A magnetometer survey was carried out from August 1st to 27th, 1950 over the South Reaume group of 21 claims for the purpose of outlining the basic to ultrabasic rock bodies which could exist on this property, and occurrences of which were found on adjacent claims.

It was considered essential to determine the location of any serpentine by geophysical means and to provide thereby a basis for systematic drilling of such localities considered to be favourable for the occurrence of asbestos.

Property Location and Accessibility

The South Reaume property consists of a group of 21 unpatented claims with the following numbers: T30374 - 5 - 6 - 7 - 8 - 9 - 80 - 1 - 2; T30387 - 8 - 9 - 90 - 1 - 2 - 3; T30395 - 6 - 7 - 8 - 9, located on Lots 7, 8, 9 and 10, Concessions 2 and 3, Reaume Township. Additional readings on adjoining claims were done at a later time and are not included in this report.

Short lines were run later on claims T30386, 30385, 30383 and 30394, but these are not part of this survey.

The property is best reached, first by plane to Reaume Lake and from there on foot a distance of about 4 miles West.

Survey Procedure

An East-West trending base line was established by transit and provided control for the magnetic survey. The zero point of this line is located at the North-East corner of claim T30395, 1580 feet North of a land survey post situated on the intersection of the boundaries between Lots 6, and 7 and Concessions 2 and 3.

North-South trending lines were turned off the base line at 400 foot intervals and extended to the boundary of the property. Magnetic observations were made with a Watts vertical magnetometer with a sensitivity of 29 gammas per scale division, at 100 foot intervals along the North-South picket lines.

The approximate absolute value for vertical magnetic intensity of any of the readings may be obtained by adding 56,740 gammas.

General Geology

The consolidated rocks of this region are Precambrian and consist of various Keewatin volcanics and lavas, intruded by sill-like masses of basic to ultrabasic rocks of Haileyburian age.

Diabase dikes are commonly found cutting the above-mentioned rocks. The basic and ultrabasic masses of this region are usually concordant structures, being parallel in dip and strike to the surrounding formations. They are never more than a few miles in horizontal extent and their mode of termination, whether by faulting or by simple "lensing out" has not yet been definitely determined. Rock bodies of other shapes may occur.

As no outcrops were found on the porperty, the conclusion upon the geology is entirely confined to the interpretation of the magnetic survey.

Interpretation of Magnetic Survey

Older Diabase and Gabbro The magnetic field over these rocks is uniformly low and often not distinguishable from that over the volcanics. On the other hand, it may attain values corresponding with the lower range of that found over serpentine. It is possible, therefore, that the area between the 2000 and 4000 contours is underlain by gabbro and-or serpentine. Therefore, this area is indicated on the map as undivided basic to ultrabasic rock.

Volcanics The magnetic field over the volcanic series is generally low. Local "highs" caused by concentrations of magnetite are possible. Areas below the 2000 contour are tentatively assigned to the volcanics. The pronounced rise in magnetic value near this 2000 contour, especially along the southern border of the anomaly suggests a geological contact between the volcanics and undivided basic rocks.

Serpentine and Serpentinized Peridotites It is assumed that the serpentinized ultrabasic rocks always carry a higher amount of magnetite than the adjacent formations such as volcanics and sediments. This is related in part to the alteration of the ferromagnesian rich ultrabasic rocks.

In general serpentine and serpentinized peridotite, lying near the surface, yield anomalies of 5000 to 7000 gammas above the regional level. Stronger anomalies give readings as high as 10,000 to 14,000 gammas. Anomalies of this order are considered to be produced by serpentinized peridotite rather than serpentinized dunites.

Serpentine may be deficient in magnetite. Errors of interpretation may occur, where no outcrops are available for checking.

Other difficulties are encountered because of the tendency of the ultrabasic rock to be interbanded and interlensed with less basic rocks.

The accompanying map shows several areas enclosed by 4000 contours and scattered within the major magnetic belt outlined by 2000 contour. The shape of such areas varies from oval to irregular and suggests local concentration of magnetic material. It is assumed that such areas are composed of serpentine, with possible occurrence of asbestos. They are separated therefore from the undivided rocks by special colouring.

Structural Interpretation

Only major faults are indicated on the map belonging to this report. Their strike is from North to North-East. Two faults correspond with the longer N/S trending axis of the lakes at the East end of the map, and are also well indicated by the abrupt bend of the contours.

The NE fault through the centre of claims T30398 and T30380 may correspond to a diabase dike.

Conclusion

The magnetic method is ideally suited for outlining serpentinized ultrabasic rocks in this region. The marked difference in magnetic properties of serpentinized ultrabasic rocks and the enclosing volcanics allows a reasonable accurate delineation of these former bodies. The zones marked by serpentinized peridoties should be considered as probable serpentinized peridotite.

The highest magnetic readings obtained on this property are of the lowest range found on the outcrops of serpentine. In spite of these not too promising results it is advisable to test this area by a few reconnaissance drill holes.

Submitted,

C. de Leuchtenberg

April 7, 1951 C. de Leuchtenberg

Certified True copy

Detail of Survey

The survey was commenced on August 1st, 1950 and completed August 27th, 1950, or occupied a total of 27 days. A total of 15.94 miles of line was cut, chained and picketed, which includes 1.5 miles of base or control line surveyed. A total number of 1042 stations were established in this distance.

The following is the breakdown of the actual man-days required to complete the magnetometer survey.

(a)	Line cutters - 5 men - T.S. Tough, Contractor 120 man days x 4	480 days ✓
(b)	Instrument Operator & Assistant Magnetometer Operator J. Hart & Assistant 44 man days x 4	176 days ✓
	Transit Operator & Assistant H. L. Garvie & Assistant 8 man days x 4	32 days ✓
(c)	Field Work - Consulting N. W. Hendry - 15 man days x 4	60 days ✓
(d)	Office - Mapping - Interpreting	
	J. S. Koski - 15 man days x 4	60 days ✓
	J. Hart 5 man days x 4	20 " ✓
	D. Doal 5 man days x 4	20 " ✓
	F. Kaltwasser 20 man days x 4	80 days ✓
	Total man days	928 days ✓

Assessment Work Distribution

On each of claims T30374 - 82 incl; T30387 - 93 incl; and T30395 - 99 incl. ----- 40 days work.

Respectfully submitted,

H. L. Garvie
P. Eng.

CANADIAN JOHNS-MANVILLE COMPANY LIMITED

Report on the geomagnetic survey of the claim group in Hanna Township, Ontario

Summary

The geomagnetic survey of a group of 24 claims located in the South West part of Hanna Township indicated the presence of basic to ultrabasic intrusive rocks.

The property has no topographic features or outcrops which could give hints as to the structure of the underlying rock.

High readings were obtained over areas located in the central and eastern part of the property, within a WNW trending belt of relatively high value. Magnetic anomalies of such values are assumed to indicate the occurrence of serpentine.

Introduction

A magnetometer survey was carried out from November 28, 1950 to February 15, 1951 over the Hanna group of claims to detect and outline the basic to ultrabasic rock bodies, which could exist within the limits of this property, outcrops of which were found in the adjacent region.

It was considered essential to determine the location of any possible serpentine body by geophysical means and provide therefore a basis for systematic drilling of those localities thought to be favourable for occurrences of asbestos.

Property Location and Accessibility

The Hanna property consists of a group of 24 unpatented claims with the following numbers: T30251-2-3-4-5-6-7-8-9-60-1-2-3-4-5-6-7-8-9-70-1-2-3-4, located on Lots 5, 6, 7 and 8, Concessions 1 and 2 in Hanna Township.

The property is reached by Highway 11 to Warwick Lake and then southwest along a 1½ mile trail.

Survey Procedure

An East-West trending base line was established by transit and provided control for the magnetic survey. The Zero point of this line is located at the North East corner of Claim T30370. North-South trending lines were turned off this base line by transit and extended to the boundaries of the property. Magnetic observations were made with a Watts vertical magnetometer with a sensitivity of 29 gammas per scale division at 100 foot intervals along the North-South trending picket lines.

The approximate absolute value for vertical magnetic intensity of any of the readings shown may be obtained by adding 56,740 gammas.

General Geology

The consolidated rocks in this region are Precambrian and consist of various Keewatin volcanics and lavas, intruded by basic to ultrabasic rocks of Haileyburian age. Diabase dikes of later age are commonly found cutting all the above mentioned rocks.

The basic to ultrabasic rock masses of this region are usually concordant structures being parallel in dip and strike to the surrounding formations. They are never more than a few miles in horizontal extent and their mode of termination, whether by faulting or by simple "lensing out" has not yet been definitely determined.

Rock bodies of other shapes may occur. As no outcrops were found on the property, the conclusion upon the geology is entirely confined to the interpretation of the magnetic survey.

Interpretation of Magnetic Results

Older Diabase and Gabbro The magnetic field over these rocks is uniformly low and often not distinguishable from that over the volcanics. On the other hand, it may attain values corresponding to the lower range of such found at the outcrops of serpentine. It is possible therefore, that areas between the 3000 and 4000 contours are underlain by gabbros and related rocks or serpentine. This area is indicated as undivided basic to ultrabasic rocks.

Volcanics The magnetic field over the volcanics is generally low. Local "highs" caused by concentrations of magnetite are possible. The areas of limited extension along the south boundary are most probably lenses with higher concentrations of magnetite. The pronounced increase in magnetic values near the 3000 level is considered to represent the geological contact between the volcanics and the basic intrusives.

Serpentine and Serpentinized Peridotite

It is assumed that the serpentinized ultrabasic rocks always carry a higher amount of magnetite than the adjacent formations, such as volcanics and sediments.

In general, serpentine and serpentinized peridotite, lying near the surface yield anomalies of 5000 to 7000 gammas above the regional level. Stronger anomalies give readings up to 14,000 and over. Anomalies of this order are considered to be produced by serpentinized peridotite rather than by serpentinized dunite.

Serpentine may be deficient in magnetite and other basic rock rich in it. Errors of interpretation may occur where no outcrops are available for checking.

Other difficulties are encountered because of the tendency of the ultrabasic rock to be interlensed and interbanded with other less basic formations.

On the accompanying map, areas encircled by the 4000 contour are tentatively assigned to possible occurrences of serpentine. Their shape conforms to the anomaly outlined by the 3000 contour. Evidently, all of them belong to one common intrusive rock body.

Therefore the area between 4000 and 3000 indicated as undivided basic rock may be occupied by serpentine.

Structural Interpretation

Only major faults were indicated on the accompanying map. Most of them strike NE, a few smaller ones are believed to strike NW.

Conclusion

The magnetic method is ideally suited for outlining serpentinized ultrabasic rocks in this area. The marked difference in magnetic properties between the serpentinized ultrabasic rocks and the enclosing volcanics permits a reasonably accurate delineation of the former.

The highest magnetic readings obtained on this property are near the lower range found on outcrops of serpentine. In spite of these not too promising results, it is advisable to test this area by a few reconnaissance drill holes.

Respectfully submitted,

C. de Leuchtenberg

C. de Leuchtenberg

Certified True Copy

Detail of Survey

The survey was commenced on November 28, 1950 and completed February 15, 1951. A total of 15.75 miles of line was cut, chained and picketed, which includes 2 miles of base or control line surveyed. A total number of 923 stations were established in this distance.

The following is the breakdown of the actual man-days required to complete the magnetometer survey.

(a)	Line cutters - 5 men - T.S. Tough - Contractor 140 man days x 4	560 days
(b)	Instrument Operator & Assistant Magnetometer - D. Doal & Assistant 84 man days x 4	336 days
(c)	Consultants - Transit - Field Work	
	N. W. Hendry 12 man days x 4	48 days
	J. S. Koski 12 " " x 4	48 "
(d)	Office - Mapping - Interpreting	
	J. S. Koski 14 man days x 4	56 "
	G. O'Connor 14 " " x 4	56 "
	D. Doal 8 " " x 4	32 "
	R. Kaltwasser 7 " " x 4	28 "
	Total man days	1164 days

Assessment Work Distribution

On each of claims T30251 to 30274 incl. 40 days work

Respectfully submitted,

H. L. Garvie
P. Eng.

CANADIAN [illegible]

Report on the Geomagnetic Survey of the Northern Group of Claims, Reaume Township and adjoining 4 Claims in Hanna Township, Ontario.

Summary

The geomagnetic survey of the three groups, a total of 88 claims in the northern part of Reaume Township and the adjoining four claims in the north western part of Hanna Township indicated the presence of basic to ultrabasic rock bodies, striking roughly E-W-East-West across these properties.

The topography of the whole region is practically flat and does not give any hint as to the structure of the bedrock, covered probably in most parts by deep overburden.

Outcrops of serpentine are known to the west of the northwestern group of claims, but within the property under discussion none were found to date.

Higher than normal readings were obtained:

1 Over the irregularly shaped broad area in the northwestern claim group. (Map No. 1)

2 Over a clearly outlined strip in the central part of the north-central claim group. (Map No. 2)

3 Over two parallel strips and isolated small area in the north-eastern claim group. (Map No. 3)

These anomalies are assumed to indicate the presence of serpentine and related rocks. The existence of serpentine outcrops mentioned above, in an area held by other interests to the west, supports this assumption.

Introduction

A magnetometer survey was carried out from August to December, 1950 over the three groups of claims in Reaume and adjoining 4 claims in Hanna Township, District of Cochrane, for the purpose of outlining the basic to ultrabasic rock bodies whose existence was already indicated by the preliminary airborne magnetic survey.

It was considered essential to determine in detail the location of any serpentine body by ground geomagnetic survey and to provide a basis for systematic drilling of these areas considered to be favorable for the presence of asbestos.

Property Location and Accessibility

The property under discussion in this report consists of three groups of claims separated by strips of ground not included in survey but owned by the Company. All claims are unpatented. The three groups are as follows:

(1) The North-Western group consists of 22 claims as follows:

T20187-88-89-74-82-84-85-86-87-88-89-90-91
T20210-11-12-13-14-15-16-19-20-21-22-23-26-31-28-32-34-35-36

located on Lots 6, 7, 8, & 9 Concessions 5 & 6, Reaume Township. (Map No. 1)

(2) The North-Central group consists of 25 claims as follows:

T20142-43-44-45-46-56-57-58-59-68-69-70-71-72-73
T20203-04-05-06-07-08-09-25-27-38-39-40-41-42-43-44
T20245-47-49-50

located on Lots 1, 2, 3, 4, 5, 6, & 7, Concession 4 Reaume Township. (Map No. 2)

(3) The North-Eastern group consists of 25 claims as follows:

T20184-25-26-27-28-29-30-47-48-49-50-51-52-53-92-93-95
T20196-97-98; T20246-75-76-77-78

located on Lots 1, 2 & 3 Concessions 5 & 6 Reaume Township and Lot 12, Concessions 5 & 6 Hanna Township. (Map No. 3)

The property is best reached by a farm road which runs in North South direction between Lots 6 & 7, Concession 1, Fournier Township and then from the south end of this road on foot for a distance of 2 to 4 miles in direction south-west, south or south-east, respectively.

Survey Procedure

East-West trending base lines were established for each group of claims by transit and provided control for the magnetic survey.

The zero points of the individual lines are located as follows:

1 For the North-West group at the North-Eastern corner of claim No. T20184, exactly half a mile South of a land survey point which is located on the crossing of boundaries between Lots 6 & 7 and Concessions 5 & 6.

2 For the North-Central group at the North-Eastern corner of claim No. T20144. The east end of this base line is located on the boundary of the Townships of Reaume and Hanna.

2 For the North-East group on the boundary between the Townships of Resume and Hanna at the North-Eastern corner of claim T20150.

North South trending lines were turned off these base lines by transit at 400 foot intervals and extended to the boundaries of the respective claim groups.

Magnetic observations were made with a Watts vertical magnetometer, with sensitivity of 29 gammas per scale division at 100 foot intervals along the North-South picket lines and base lines. Due to the isolated location of these properties it was impossible to make an accurate tie to any of the Ontario Department of Mines base stations. However, the approximate absolute value for vertical magnetic intensity of any of the readings shown may be obtained by adding 56,740 gammas.

General Geology

No detailed geological information or maps are available to date for the region covered by the three claim groups, and no outcrops were found on them or in the neighbourhood in amount sufficient for an approximately accurate geological explanation. Therefore the geology of this region can be mentioned in general terms only, based on information gathered to date from adjoining areas.

The consolidated rocks of this region, where found, are all Precambrian and consist of Keewatin volcanics and lavas, intruded by basic to ultrabasic rocks in the form of sills, occasionally pipes and bodies of irregular shape.

Diabase dykes are commonly found cutting the above mentioned rock types.

The basic and ultrabasic masses of this region are usually concordant structures being parallel in dip and strike to the surrounding formation. They are never more than a few miles in horizontal extent and their mode of termination, whether by faulting or by a simple "lensing out" has not yet been definitely determined. In addition, a pipelike body is known to occur on another property and can occur elsewhere.

As no outcrops were found, the conclusion reached on the property under discussion is entirely dependent upon the interpretation of magnetic survey.

Interpretation of the Magnetic Results

Older Diabase and Gabbro: The magnetic field over these rocks is uniformly low and in most cases not distinguishable from that over the volcanic rocks. The lack of outcrops and other pertinent information does not permit to separate on the maps, areas possibly underlain by such rock from those occupied by the volcanics.

Volcanics

The magnetic field over the volcanics is usually low, with local higher than normal anomalies. These "highs" are apparently caused by local concentration of magnetite within these formations. No such unusual "highs" were indicated in the areas of comparatively low readings, within the limits of the three claim groups.

Areas with magnetic readings below the 2000 gamma level are characterized by uniform distribution of the magnetic values and by very slow change of them in the range 2000 & 1800 gammas.

It is assumed that such areas are underlain by volcanic and related rocks of basic to intermediate character.

An exception is the area in the northern part of the North-West claim group, where unusual low readings were recorded, as seen on claims T30191, 30188, 30214 and 30213 and near the northern boundary of this part of the property. The occurrence of acid volcanics or metamorphic rocks bordered by faults is possible.

Along the northern limits of claims T30191 and 30198 some of the readings show even negative magnetic values corresponding probably to a fault which strikes roughly West-East.

Serpentine and Serpentinized Peridotite

It is assumed with reasonable justification that ultrabasic rocks which have been highly or moderately serpentinized usually carry a high amount of magnetite, compared with the magnetite content of adjacent formations, such as volcanics and sediments. This is related in part with the alteration of ferromagnesian rich ultrabasic intrusives.

In general, the serpentine and serpentinized peridotite lying near the surface yield anomalies of from 5000 to 7700 gammas above the regional level. Stronger anomalies may give readings as high as 10,000 to 14,000 gammas and it is often the case that anomalies of this order are produced by serpentinized peridotites rather than serpentinized dunites.

Exceptions to this rule are possible. On one hand, the serpentine may be deficient in magnetite, on the other, gabbros and related rocks may be rich in magnetic material. Errors of interpretation may occur where no outcrops are available for checking.

Other difficulties are encountered because of the tendency of the ultrabasic rock to be interbanded and interlensed with basic, less magnetic formation.

Therefore areas interpreted as serpentine may include or consist of gabbro, peridotite and related rocks.

It may be mentioned that areas with high readings and extensive faulting are considered from previous work to be favourable for the occurrence of asbestos. (Refer Report - M.C. Gardiner.)

Each group of claims is discussed separately.

The North-West Group (Map No. 1)

The preliminary airborne magnetic survey indicated here the existence of a large uniform magnetic anomaly. The irregular shape and distribution of the magnetic anomalies, as recorded from the detailed magnetic ground survey are caused first, by the irregular distribution of magnetic material and secondly by faults which are easily inflicted upon the flat lying, sill-like rock body.

The quantity of the assumed faults is not exhaustive; only the most possible and probable are indicated on the map. Several places show very high magnetic values in the order often found right on the outcrops of serpentine. This area therefore is very favourable for further investigation.

The North-Central Group (Map 2)

This group contains only one clearly outlined, bandlike anomaly, stretching roughly West-East. The assumed serpentine body is cut by several N-S to NW/SE striking cross faults which have displaced the central part of the body to the south. The range of the horizontal displacement is in the order of 900 to 1000 feet in the central part of the anomaly.

The West-East trend of the local areas, with relatively high readings, is primarily due to the distribution of the magnetic material and may be accentuated by minor faults of the same trend which can be developed as the results of the tearing stress directed roughly N-S.

High magnetic readings found in places are again in the order of such found on the serpentine outcrops. Further investigation of such places by drilling is justified.

The North-East Group (Map No. 2)

Here three anomalies were outlined. A small, well-defined lense-shaped anomaly of comparatively low readings, elongated in E-W direction covers the southern part of the claim No. T30196. Significantly this anomaly is more pronounced on the map of the airborne survey. The conclusion which can be drawn from the study of the ground survey indicate that the rock body producing this anomaly was originally the part of the larger anomalies lying further North-East. Later it was displaced along a N-S fault to the south for a horizontal distance of 1300 feet and a vertical distance of an unknown depth. The latter displacement accounts for the comparatively low readings found over this anomaly.

The anomalies in the North-Eastern part of this group indicated as a unit by airborne survey show a more complicated structure as disclosed by the ground survey. Two anomalies larger than the one discussed above are seen stretching roughly West-East. The southern anomaly is regular in shape and in distribution of magnetic readings. The change of magnetic gradient in all directions is comparatively slow, suggesting a gradual enlargement of this assumed serpentine body at depth. The regularities in the shape of the isogamms do not indicate the existence of many cross faults.

More complicated conditions prevail in the area occupied by the northernmost anomaly. The general trend of this anomaly conforms to the first named or even slightly North of East. At its west end, 4 areas of higher readings surround an area of pronounced "low", located within the claims T30147 and 30148.

Complex faulting is under question, the answer for which may be gained by more detailed magnetic work and proved only by diamond drilling. The west end of this anomaly, as indicated from study of both magnetic surveys, the ground and the airborne, is a major fault, striking roughly N-S. As in other cases, the irregular shaped areas with comparatively high readings may be caused by the combined results of faulting and distribution of magnetic material.

The existence of faults, running roughly W-E and separating the different strips of the anomalies with higher readings by lower readings is possible.

All anomalies covered by this group of claims do not show readings as high as found within the areas of the two other groups.

Either the magnetism of rocks was weaker or the rock bodies are located at a greater depth.

Structural Discussion on a Larger Scale of the Map Areas

It remains to point out that the general trend of the magnetic anomalies in the region under discussion is roughly West-East contrary to the major North-Westerly trend as found in the areas between Munn Township in NW and Garrison Township in SE.

This may indicate the general change of strike of the whole geological formation indicated on the general geological map of Ontario under the headings "Keewatin". Resume Township is close to the northern boundary between Keewatin province and the Archean, which trends roughly East-West as shown on the map. Folding of the rocks of the Keewatin formation in this large area may have the same trend, and therefore more anomalies and corresponding basic to ultrabasic bodies may exist along this major structural lines.

Conclusion

The magnetometer method is ideally suited for outlining serpentinized ultrabasic rocks in this area. The marked difference in magnetic properties between the serpentinized ultrabasic rocks and the enclosing volcanics makes for a reasonably accurate delineation of these former bodies.

The zones marked as serpentinized peridotite on the accompanying map should be considered as "predominantly serpentinized peridotite.

The high readings obtained on the North-Western and North-Central groups favour a closer investigation by diamond drilling.

Submitted:

March 20, 1951

C. de Leuchtenberg

C. de Leuchtenberg

Certified True copy

J. R. O'Hendry P.E.

Detail of Survey

The survey was commenced on August 6th, 1950 and completed December 21st, 1950. A total of 82.2 miles of line was cut, chained and picketed and 3748 observations were taken. This covers the three map areas.

The following is the breakdown of the actual man-days required for the survey.

(a)	Line cutters - 5 men - Cherman Tough - Contractor Aug. 6 to Nov. 17 - 520 man days x 4	2080 days
(b)	Instrument Operators & Assistants Magnetometer - J. Hart & assistant Aug. 28 to Sept. 28 - 56 man days x 4	224 "
	D. Doal & assistant Sept. 28 to Dec. 21 - 140 man days x 4	560 "
(c)	Transit - H. L. Garvie & assistants Aug. 28 to Dec. 21 - 94 man days x 4	376 "
(d)	Consultants Field Work - H. L. Garvie & N. W. Hendry 30 man days x 4	120 "
	Office Work - H. L. Garvie, N. W. Hendry, J. Koski, R. Kaltwasser, F. Kaltwasser 120 man days x 4	480 "
	Total man days	3840

Assessment Work Distribution

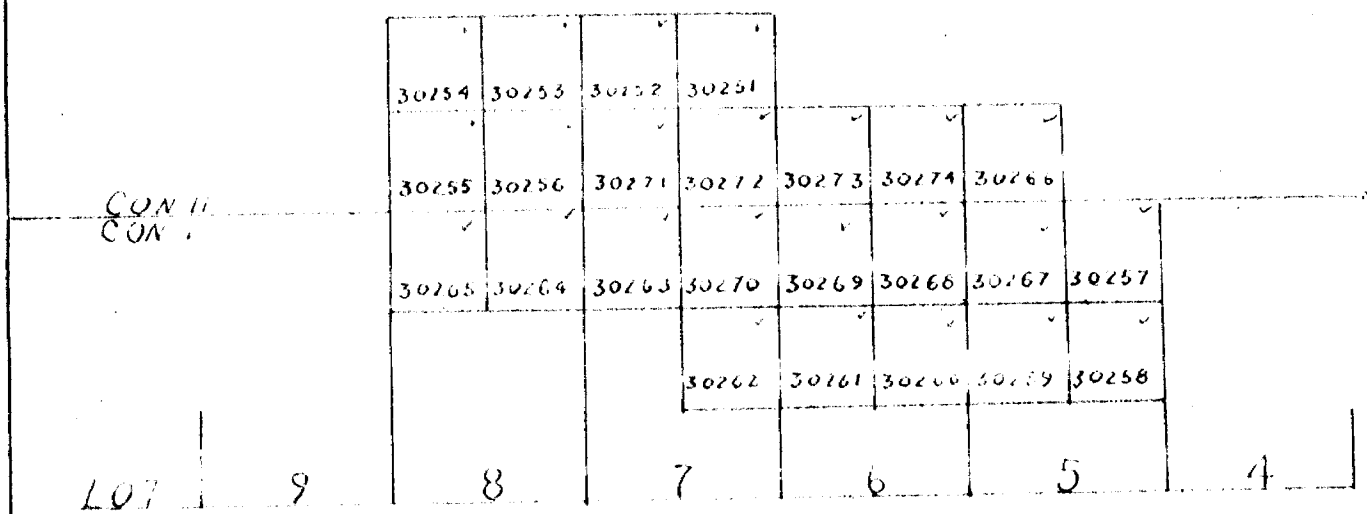
On each of the 92 claims listed on page 2 . . . 40 days

40 + 92 | 3840 | 368 | 16

Respectfully submitted.

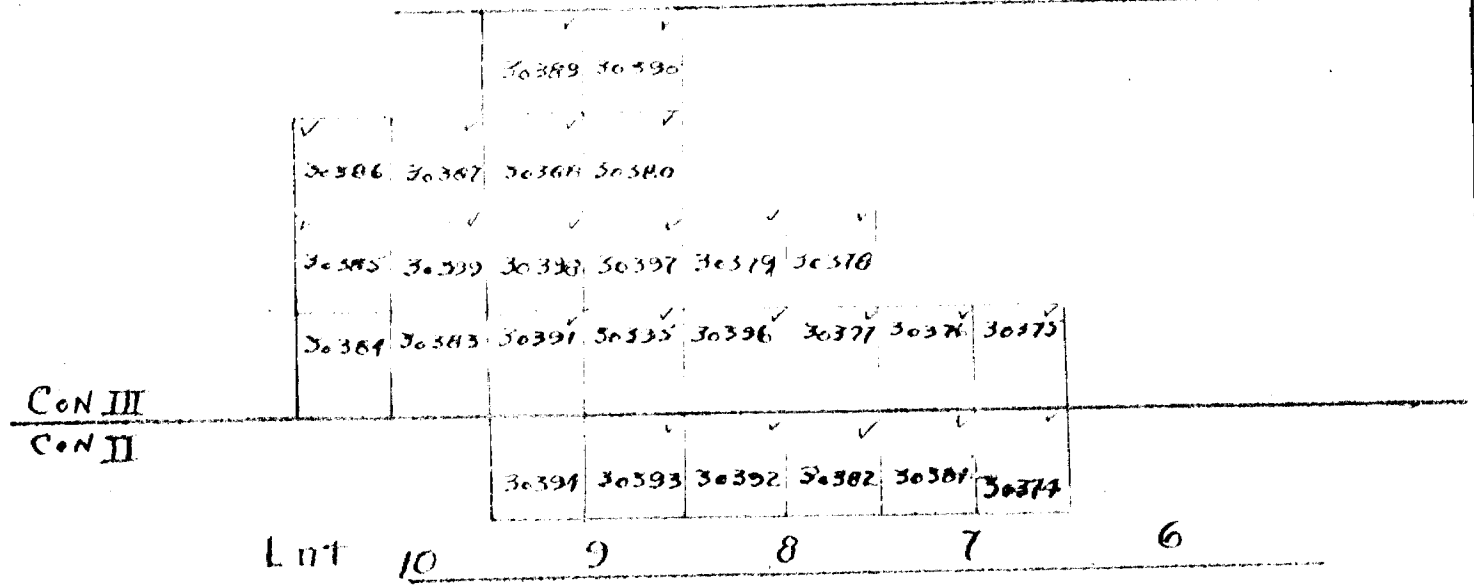
H. L. Garvie, P. Eng.

HANNA

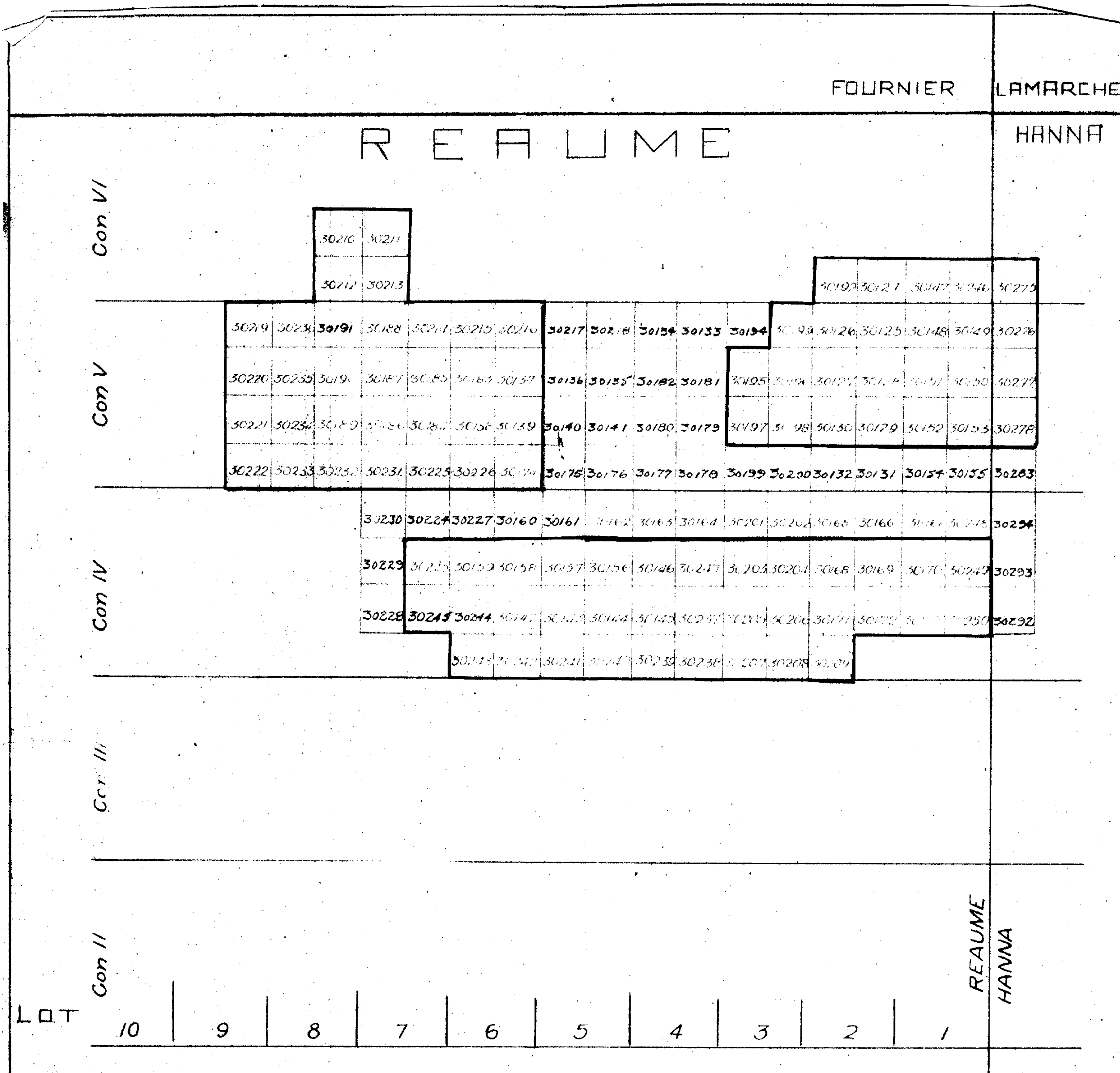


PLAN
Showing
CAN. JOHNS MANVILLE
CO. LTD.
MAGNETOMETER SURVEY
HANNA TWP.
1950-51

REAUME TOWNSHIP



PLAN
Showing
CAN. JOHN'S MANVILLE
CO. LTD.
MAGNETOMETER SURVEY
REAUME TWP. 1950
SURVEYED AREA IN YELLOW



PLAN
SHOWING
CAN. JOHNS-MANVILLE
CO. LTD.
MAGNETOMETER SURVEY
REAUME TWP · 1950

RVE/ED AREA IN YELLOW

42A14NE0060 63.239 REAUME

200

SOUTH GROUP

CANADIAN JOHNS-MANVILLE

MAGNETOMETER SURVEY

SOUTH REAUME GROUP

LEGEND

- 3 — Serpentinized - Peridotite
- 2 — Basic intrusive (undivided)
- 1. — Keewatin Volcanics
- Creek
- Contours
- Δ Base station

Magnetometer survey of the South Reaume Group of claims held by Canadian Johns-Manville Company in Reaume Township, District of Cochrane Province of Ontario.

Vertical intensity equals plotted readings plus 56,740. Readings taken by John Hart and Donald Doal July and August 1950.

Interpretation by - C. de Leuchtenberg

Scale: 1 inch = 200 feet

63.239

63.239

PLAN of MAGNETOMETER SURVEY

On claims:

30137 — 30139 inclusive.
30174
30183 — 30191 "
30210 — 30216 "
30219 — 30223 "
30226
30231 — 30236 "

Reaume Township, District of Cochrane
Ontario.

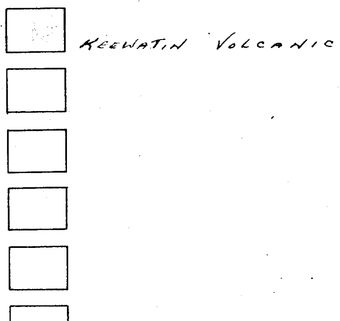
Vertical intensity equals plotted readings plus 56,740 gammas.

Survey conducted by D. Doal and F. Hill.

INTERPRETATION BY C de LEUCHTENBERG

LEGEND

- 2 — SERPENTINIZED PERIDOTITE
- 1. — KEEWATIN VOLCANICS
- Creek
- Trail
- Camp site
- Outcrop
- Magnetic contour.
- Traverse Line. Magnetometer station Gammas.
- Fault
- Magnetic contact.



KEY MAP. Scale: 1 in = 8 miles

63.239

GEOLOGICAL AND GEOMAGNETIC CONTOUR MAP
GROUP IN REAUME TWP.
ONTARIO
SCALE 1 in = 200 ft. Feb. 23, 1951
DRAWN DSDoal PROJECT Map No
TRACED GHOC APPROVED 1

N.W. Group.
Map No. 1

PLAN of MAGNETOMETER SURVEY
On claims:
30251 — 30274 inclusive
Hanna Township District of Coch
Ontario
Vertical intensity equals plotted readings plus 56,740 gammas.
Survey conducted by
Interpretation by C. de Leuchenberg
N
LEGEND
Serpentinized Peridotite
Keewatin Volcanics
Basic Intrusive Undivided
Creek
Trail
Camp site
Outcrop
Magnetic contour
Traverse Line Magnetometer station Gammas
Fault
Magnetic contact
Key Map
Scale: 1 in = 8 miles
LUCAS
DUFF
MANN
NEWMARKET
63-239
GEOLOGICAL AND GEOMAGNETIC
CONTOUR MAP
HANNA TWP.
1 inch = 200 feet
March 29, 1951
MAP No
30251
30252
30253
30254
30255
30256
30257
30258
30259
30260
30261
30262
30263
30264
30265
30266
30267
30268
30269
30270
30271
30272
30273
30274
Base Line
CON 2
CON 1
LOT 5
LOT 6
LOT 7
LOT 8

Con VI

N

T 30210

T 30211

T 30212

T 30213

Con V

T 30219

T 30236

T 30191

T 30188

T 30214

T 30220

T 30235

T 30190

T 30187

T 30185

64W 60W 56W 52W 48W 44W 40W 36W 32W 28W 24W 20W 16W 12W 8W 4

Con V

T 30221

T 30234

T 30189

T 30186

T 30184

T 30222

T 30233

T 30232

T 30231

T 30223

lot 8

lot 7

240

FOURNIER | LAMARCHE

REAUME

HANNA

Con VI

Con V

Con IV

Con III

Con II

EAST

10 9 8 7 6 5 4 3 2 1

REAUME

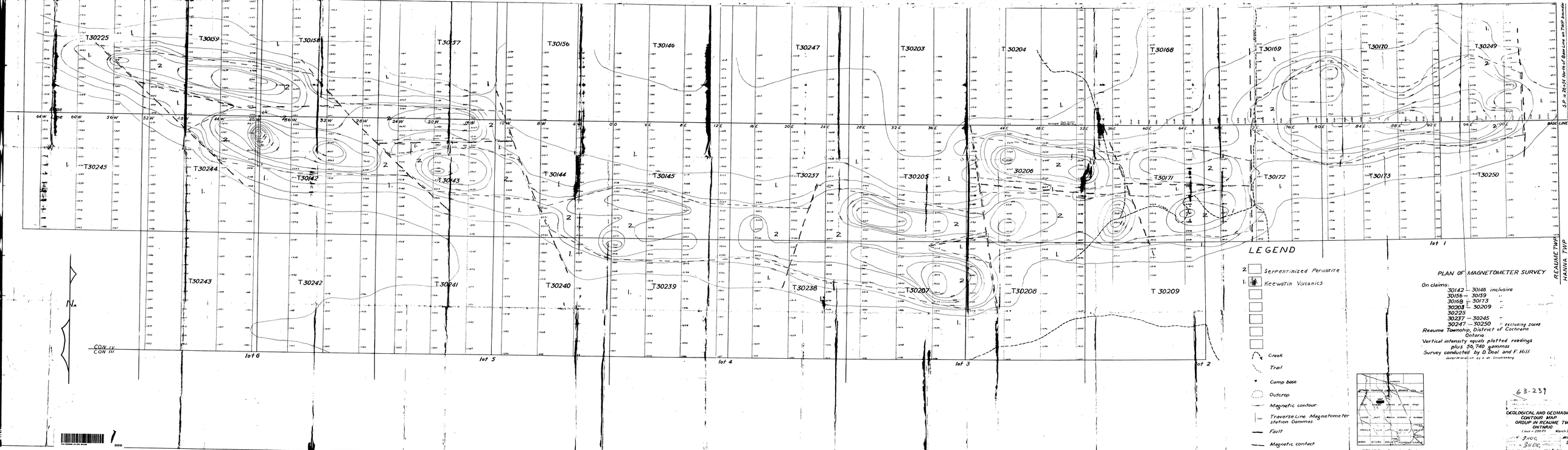
HANNA

PLAN
SHOWING

CAN. JOHNS-MANVILLE CO. LTD.
MAGNETOMETER SURVEY
REAUME TWP. 1950

SURVEYED AREA IN YELLOW


SOUTH GROUP
CANADIAN JOHNS-MANVILLE
MAGNETOMETER SURVEY
SOUTH REAUME GROUP
LEGEND
3 Serpentinized - Peridotite
2 Basic Intrusive (Undivided)
1 Keewatin Volcanics
Creek
Contours
Base Station
Magnetometer survey of the South Reaume Group of claims held by Canadian Johns-Manville Company in Reaume Township, District of Cochrane Province of Ontario
Vertical intensity equals plotted readings plus 56,740. Readings taken by John Hart and Donald Doal July and August 1950.
Scale: 1 inch = 200 feet
63.239
30386
30387
30388
30389
30390
30380
30385
30399
30398
30397
30379
30378
30384
30383
30395
30396
30377
30376
30375
30394
30393
30392
30382
30381
30374
Con III
Con II
lot 10
lot 9
lot 8
lot 7
63.239


T30225
T30159
T30158
T30157
T30156
T30146
T30247
T30203
T30204
T30168
T30169
T30170
T30249
T30245
T30244
T30142
T30143
T30144
T30145
T30237
T30205
T30206
T30171
T30172
T30173
T30250
T30243
T30242
T30241
T30240
T30239
T30238
T30207
T30208
T 30209
lot 6
lot 5
lot 4
lot 3
lot 2
lot 1
CON IV
CON III
N.
BASE LINE
REAUME TWP
HANNA TWP
LEGEND
Serpentinized Peridotite
Keewatin Volcanics
Creek
Trail
Camp base
Outcrop
Magnetic contour
Traverse Line Magnetometer station Gammas
Fault
Magnetic contact
PLAN OF MAGNETOMETER SURVEY
On claims:
30142 — 30146 inclusive
30156 — 30159 "
30168 — 30173 "
30203 — 30209 "
30225 — 30245 "
30237 — 30250 " excluding 30248
Reaume Township, District of Cochrane
Ontario
Vertical intensity equals plotted readings
plus 56,740 gammas
Survey conducted by D. Deal and F. Hill
KEY MAP
63.237
GEOLOGICAL AND GEOMAGN
CONTOUR MAP
GROUP IN REAUME TW
ONTARIO


PLAN of MAGNETOMETER SURVEY
On claims
30275-30278 INCLUSIVE
30246
30147-30153
30124-30130
30192-30199
Reaume Township, District of Coch
Ontario
Vertical intensity equals plotted readings plus 56,740 gammas
Survey conducted by
Interpretation by C de Leuchtenberg
LEGEND
2 Serpentinized Peridotite
1. Keewatin Volcanics
Creek
Trail
Camp BASE
Outcrop
Magnetic contour
Traverse Line Magnetometer station. Gammas.
Fault
Magnetic contact
KEY MAP Scale 1 in = 8 miles
CANADIAN JOHNS-MANVILLE COMPANY LTD
MATHESON MUNRO MINE ONTARIO
GEOLOGICAL AND GEOMAGNETIC CONTOUR MAP
GROUP IN REAUME AND HANNA TWP.
ONTARIO
SCALE 1 inch = 200' DATE Jan. 30, 1951
DRAWN
CORRECT Map No 3
TRACED
APPROVED
63.239
N.E. Group
Map No. 3
REAUME TWP.
HANNA TWP.
N
CON VI
CON V
BASE LINE
LOT 2
LOT 1
LOT 12
T30192
T30193
T30126
T30125
T30124
T30147
T30148
T30149
T30246
T30275
T30276
T30195
T30196
T30127
T30128
T30151
T30150
T30277
T30197
T30198
T30130
T30129
T30152
T30153
T30278