63.346

DOMINION GULF COMPANY
GEOLOGY OF CYNTHIA CHAMBERS CLAIMS GROUP I
TIMISKAMING MINING DIVISION
PROVINCE OF ONTARIO

GENERAL

The property was staked primarily to investigate its iron ore potential. It consists of 31 claims straddling the Cynthia and Chambers Townships boundary, with numbers as follows: T-32290-32307, 32418-32430 inclusive. A group of patented claims staked for iron at the turn of the century originally covered the area. In later years some prospecting and staking was done on the strength of scattered sulphide mineralization. As far as could be determined, no surface work was ever done on the iron formation.

In 1941 the Temagami area was mapped by W. W. Moorehouse on a scale of 1" = 1 mile. B. A. Bradshaw investigated the area in 1951 for the Dominion Gulf Company.

Most convenient access to the property is via air from the town of Temagami, 10 miles to the east. By water, the distance is 21 miles via Temagami Lake, Ko-Ko-Ko Bay, a quarter mile portage, and Ko-Ko-Ko Lake. The eastern end of the property is about 3 miles west of a spur of the Ontario Northland Railway.

North-south picket lines were cut at 400 foot intervals. On the iron formation additional lines were cut to provide a spacing of 200 feet. Lines were used as a control in geological and geophysical mapping. A geologist, assistant and five men were employed on the property from May 11 to October 30, 1952. On completion of the line-cutting, an extensive program of stripping, trenching, sampling and detailed mapping was carried out.

Work was hampered by a covering of moss up to 8 inches thick on most outcrops. Considerable stripping was required. The property is well wooded with white and red pine, up to 3 feet in diameter, on the ridges. Hardwoods cover the slopes.

SUMMARY

Keewatin acid and intermediate flows and iron formation have been tightly folded so that the strata strike approximately NW-SE with steep dips south. These formations have been intruded by granite, porphyries and diabase. Two synclinal basins are suggested - in the iron formation, and in acid volcanics. Faults striking NE-SW cut all formation but the diabase dikes.

Two bodies of potential iron ore are exposed on surface.

These may be extended by ground magnetics and diamond drilling. Sulphide zones gave discouraging results for gold, silver, and nickel.

RECOMMENDATIONS

A program of diamond drilling is recommended to extend known orebodies into areas of deep overburden and to check chip sampling results.

TOPOGRAPHY

A prominent ridge controlled by the weather resistant iron formation trends NW/SE through the property. Its elevation is from 100 feet to 200 feet above the level of Ferrim Lake. Most of the other hills and ridges are controlled by rock outcrops, usually steep on the north with exposed rock and gentle drift covered slopes to the south. Most of the small lakes and rivers are controlled by geologic structures, particularly faulting in a NE-SW direction. Lizzard Lake and some of the swamps lie in depressions parallel to the formational trends - ie. - NW-SE.

One topographic feature is anomalous. Ferrim Lake, with depths up to 60 feet lies in an E-W depression due to eroded iron formation. Perhaps the iron formation was highly shattered due to major movements and readily eroded.

Ko-Ko-Ko Lake at the western end of the property, may be controlled by a N-S fault.

DESCRIPTION OF FORMATIONS

Table of Formations

Pliestocene:	Sand, gravel, boulders, esker ridges.
Keweenawan:	Diabase sills.
Algoman:	Feldspar porphyry, granite, porphyritic granite, diorite.
Keewatin:	Intermediate volcanics - andesite, basalt, pillow lava, fragmental, tuffs, dioritic andesite (may be intrusive).
	Acid volcanics - rhyolite, tuffs, fragmental.
	Iron formation

Pliestocene

Glacial sands and boulders cover up to 90% of the bedrock. They usually form the gentle south slopes of ridges. An extensive sand and boulder deposit with no outcrops slopes northward from the north shore of Ferrim Lake. An arc-shaped esker ridge occurs on the south central boundary of the property. Much of the property is covered by gently rolling hills of sand and boulders.

Keweenawan

The Keweenawan is represented by four coarsegrained diabase dikes. Of these, three could be traced only for short distances. One dike up to 200 feet wide was traced across the northeastern corner of the property for a distance on one mile. The diabase is a typical brown weathering rock with a coarse diabasic texture. The fresh surface is dark greenish to black. Visible magnetite can be seen in specimens of the northerndike.

Algoman ?

Porphyries

Feldspar porphyries occur but are not common. Only isolated outcrops were found with none traced for any great distance. The most continuous occur in claims T-32290-93-94, 32430. The most interesting one outcrops in claim T-32421 where andesite in contact with a porphyry has been granitized and well mineralized with pyrite.

Granite

Granite occupies much of the southeast corner of the property. Four textural and compositional types were recognized in the field.

Porphyritic granite is most common. It is a very coarse grained rock, the grains of quartz and feldspar varying up to 1/2" in diameter. Euhedral phenocrysts of feldspar are often 1½" in length. It is part of the granite stock covering parts of Joan, Briggs and Chambers Twp. According to a thin section analysis by W. W. Moorehouse, phenocrysts consist of oligoclase feldspar. The matrix is composed of microcline, perthite, quarts, and biotite. No evidence of assimilation of andesitic volcanics was observed. The volcanics are recrystallized but do not appear granitized. Several feet from the contact, the granite exhibits its normal grain size.

Two probable offshoots of the main granite were observed several hundred feet from the main mass. One is a fine grained, flesh colored granite, the other, a pink aplitic granite.

Intruding the porphyritic granite, is a distinctive grey

hornblende granite called a dioritic greenstone by Moorehouse. This rock shows cutting relations with the porphyritic granite at post #4 of claim T-32427. A thin section analysis shows the main minerals to be quartz, feldspar (oligoclase) hornblende and some biotite. In some outcrops the rock is quite dark and possibly dioritic in composition.

An altered diorite occurs in claim T-32420. The rock is medium grained and typically greenish grey in color. In thin section, the rock is composed of augite, uralite, andesine feldspar, chlorite and some carbonate. Sphene, leucoxene and magnetite are accessory minerals. Augite has altered in part to tremolite-actinolite and chlorite. Feldspars are corroded and recrystallized. A dioritic rock mapped in the north part of claim T-32426 may be intrusive. Some of the volcanics are dioritic in appearance and may be intrusive in part.

Keewatin

Intermediate Volcanics:

Intermediate volcanics comprise about 3/4 of the formations. Most common is a massive, fine grained, featureless andesite. Pillow lava occurs on four isolated outcrops. Fragmentals are found in the south-western part of the property near Ko-Ko-Ko Lake. On L48E at 300' N, an amygdaloid horizon was noted, but it could not be traced any distance. Much of the coarser grained andesite carries 5-10% leucoxene. Magascopically the leucoxene shows up as yellowish buff flecks in the rock. In thin section, the rock consists of feldspar (andesine?), chlorite quartz, and leucoxene. Chlorite comprises about 40% of the section. The feldspars are corroded, and recrystallized. Quartz is secondary.

Dioritic types occur mainly in the east central and western portions of the property. The rock in the east central area lies south of Lizzard Lake and was traced for 3/4 mile in a southeast direction. A number of smaller bodies were also mapped in this section. In thin section this rock is highly altered, the main minerals now being hornblende, tremolite, chlorite, altered and recrystallized feldspar, and secondary quartz. In the western part of the property, an altered dioritic formation was outlined. A thin section study showed the rock to be highly carbonated. Chlorite is abundant , feldspars are altered and recrystallized. The rock may be either an older diorite or diorite flow.

Acid Volcanics

Acid volcanics are mainly of a fragmental nature, although rhyolite and banded tuff also are present. The fragmentals consist of grey to black cherty fragments in a grey to olive green matrix. Alignment of fragments is generally parallel to banding and shearing.

Fragments are up to 8 inches in length. Bomb-like cherty masses up to 10" long were observed in claim T-32428.

The rhyolite varies in color from almost white, through grey and olive green to black. Tuffs are usually well bedded and olive green to dark grey in color. Acid volcanics occur mainly in the northeast where they form a northeast trending belt about 1000 feet wide. In the south, a broad, nose-shaped mass of acid volcanics, appears to form a synclinal basin. Other narrow rhyolite horizons occur throughout the property, intercalated with the intermediate volcanics.

In some cases, acid volcanics have been altered to sericite-carbonate schists. The most interesting occurrence lies along the south shore of Ferrim Lake where the schist has been well mineralized with pyrite. Considerable trenching and pitting has been carried out in former years. Another band of sericite-carbonate schist lies in the northeast corner of claim T-32421.

Iron Formation

The iron formation forms a ridge trending in a general NW-SE direction through the property. It varies in width from 300 feet to 1000 feet. It is composed of well banded magnetite, some hematite and silica, the magnetite comprising 10 to 50% by volume, of the total. The banding varies from infinitessimal to 2 inches in width, with an average width of 1/4 to 1/2 inch.

For mapping purposes it was divided into three groups depending on estimated % magnetite content as follows: 0 - 15%, 15 - 25%, over 25%. The first grouping, occurring mainly along the outer margins, is composed of alternating bands of white quartzite and limonitic bands. Magnetite occurs in small quantities in the limonitic bands and probably is sparsely disseminated through the quartzite. This rock has been termed a ferruginous quartzite. The second and third groupings are composed of banded magnetite, white silica, black chert, and bright red jasper. Banded jasper and black chert with magnetite are characteristic of the higher grade zones and often grade from one to the other. The banded jasper is a very striking rock making very attractive ornaments on polishing. Magnetite bands often form 30 to 40% of the higher grade sections. Appreciable amounts of magnetite occur finely disseminated throughout the interbanded silica.

Brecciation is often noted with fragments of iron formation cemented by silica and magnetite. The silica is of the same type that occurs in the iron formation. This suggests that brecciation has taken place, probably during initial deformation of and prior to final recrystallization of the iron formation.

Outcrops of iron formation occur as shoals in Ko-Ko-Ko Lake in claim T-32291. Ground magnetics indicate that Ferrim Lake is underlain by iron formation.

The iron formation was probably deposited in a salt water basin. Moore and Maynard suggest that iron and silica can be leached from intermediate to basic volcanics and carried into shallow sea basins. Reaction with sea water causes iron to be deposited first followed by silica. Iron is probably deposited as a hydroxide and later recrystallized forming magnetite and hematite on deformation and heating. Intricate flowage and crenulations observed suggest that the formation was still unconsolidated during initial deformation.

STRUCTURAL GEOLOGY

Folding

The strata in general trend NW-SE, and dip steeply south, indicating that the area has been tightly folded. Two synclines are suggested.

One is suggested in the iron formation by the manner in which the bedding at the western end swings from N 70° W to N-S to N 45° E. Also, the two parallel magnetite rich bands, separated by a band of ferruginous quartzite, may be traced through most of the formation. This suggests the north and south limbs of a fold. Tops in pillow lavas just north of the iron formation face south. If the structure is a syncline, it is certainly steeply folded, with a steep plunge to the east indicated on surface.

A second fold is suggested by the nosing out of a broad belt of acid volcanics in the southern part of the property. Bedding and flowage structures, change strike from N 45° W to N 10° W, to N 70° E to S 60° E around the nose. This undoubtedly is a fold. If the iron formation is a syncline plunging steeply east, by analogy this must be one also.

The iron formation was later warped by a major drag fold, the movement being north side east. This is also expressed in the volcanics. Minor drag folds in the iron formation are conformable to the major drag fold. Some are, however, opposed to it and may be related to the earlier synclinal fold.

Faulting

The prominent fault direction is N 35° - 50° E with movements both east side north and east side south. The largest

movement occurs on the fault through the Beaver Pond at the western end of the property. The movement is east side north by about 400 feet. A movement of about 300 feet with the same relative movement occurs at the main drag fold near the eastern end of the property. The other movements are usually of the order of 100 feet or less. This system of faulting is probably post drag folding since the fault shows a reverse movement to the drag fold. This suggests faulting on relief of the stresses causing the drag folding. The faults apparently do not displace the diabase dikes.

Shearing

Shearing occurs in varying degrees throughout most of the volcanic formations. The most intensive shearing is developed along the south shore of Ferrim Lake. The rock probably was originally an acidic volcanic, but it is now a sericite-carbonate schist. It may represent a strong E-W break. Considerable pyrite is present. A similar schist occurs in the northeast corner of claim T-32421.

Between L.0 and L.4E about 200' N of Base Line 'A' - outcrops of sheared carbonated andesite were found with finely disseminated magnetite. An area of highly sheared, carbonated greenstones occurs in claim T-32419 near Ko-Ko-Ko Lake. Shearing is not persistent to the east. Another such area lies south of the western end of the iron formation.

Fracturing

Fracturing is evident in the iron formation. The most prominent sets consist of short gash type fractures about 6" long occurring in parallel ladderlike swarms. Two main sets at N 30° E and N 60° E occur. The former set is almost perpendicular to the formation while the latter makes an angle of 60°. They appear to be tension cracks developed in post recrystallization times, and are now filled with white, secondary quartz.

ECONOMIC GEOLOGY

Iron

Interest in the iron deposits began in 1899 and claims were staked and patented about this time. No evidence of any work on the iron formation was found.

Three possible orebodies including material over 25% estimated magnetite are indicated. At the western end of the iron formation two parallel zones are outlined. The northern one averages about 130 feet in width over an exposed length of 1100 feet. The southern zone averages about 360 feet in width over an exposed length of 1500 feet. Another orebody is located near the central

section of the iron formation. It averages 416 feet wide and may be traced from L 20 E to L 42 E for a length of approximately 3000 feet. A third possible orebody, averaging 170 feet in width is exposed for a length of 1400 feet from L 42 E to L 54 E.

Other Minerals

Sulphides are found throughout most of the formations. Pyrite is the usual sulphide with some pyrrhotite and rarely chalcopyrite. The most interesting sulphide zone occurs on L 48 E at 1100' S of Base Line 'C'. A zone 6 feet wide in basalt at a rhyolite contact is well mineralized with finely disseminated pyrrhotite and magnetite. A picked sample returned the following: AU - nil, AG - tr., NI- 0.02%.

A pyrite zone in rhyolite on L 52 E at 1450' South of Base Line 'C' consists of massive pyrite. On L 40 E at 650' North of Base Line 'C' the rhyolite is well mineralized with pyrite.

Much surface work has been expended years ago along the south shore of Ferrim Lake. The sericite schist is well mineralized with pyrite. Small amounts of pyrite occur in the volcanics in the northern parts of claims T-32420-21. Most of the sulphides were sampled but assays gave only low gold and silver values.

DEVELOPMENT

An extensive program of surface work was carried out on the iron formation in the summer of 1952. All the moss covered outcrops were stripped. A total of 2,927 linear feet of earth trenching was carried out to obtain five continuous sections across the body. A program of rock trenching, for a total of 1,339 linear feet or 670 cu. ft. was carried out. Five complete sections across the iron formation were chip sampled totalling 2711 feet in length.

"H. Reimer"
January 12, 1953.

jm

Attach: 1) Map showing geology of Cynthia-Chambers Township Claims Scale 1"=400' - January 7, 1953

Interpretation Report on Ground Magnetometer Survey

Cynthia-Chambers Claims Group I

INTRODUCTION

Thirty-one claims located near the southern boundaries of Cynthia and Chambers Townships in the Timiskaming Mining Division of the Province of Ontario, were staked for the Dominion Gulf Company during the period from December 18, 1951 to January 31, 1952. Interest in the area was derived from several strong magnetic anomalies shown on the aeromagnetic map of the area. Correlation of three of the magnetic anomalies with the geology as mapped by W. W. Moorhouse for the Ontario Department of Mines in 1942, showed that the anomalies were directly indicative of bands of iron formation. Due to the size and intensity of the westernmost magnetic anomaly, it was believed that a complete program of geological and geophysical work was justified, in an effort to determine its economic potential.

A geological program, involving mapping, stripping, trenching and sampling was undertaken during the summer months of 1952. Since the prime interest in the area concerned the magnetite in the iron formation, a ground magnetometer survey was proposed. The purposes of this survey were to delineate the iron formation, to indicate any structural controls, and, if possible, to assist in determining the percentage of magnetite in the individual iron formation horizons. The survey was carried out in two parts, a winter and a summer program. During the winter program, profiles were run across the larger lakes in the area, while the remainder of the survey, over the land masses, was completed during the summer.

An Askania Schmidt-type magnetic balance having a sensitivity of about 24 gammas per scale division, was used in the survey. Basic coverage for the property consisted of readings taken at a station interval of 100 feet, on picket lines 400 feet apart. Over the major iron formation horizon the picket line interval was reduced to 200 feet, while the station spacing decreased to 50 feet, or in selected locations 25 feet. In all, a total of 2,999 stations was observed on 47.6 miles of picket line.

The magnetic data were observed and reduced by a Dominion Gulf Company magnetometer crew, and then transmitted to the Toronto office of the Dominion Gulf Company for further processing and interpretation. The basic data together with isomagnetic contours and interpretation are presented on a map, at a scale of 1 inch equals 200 feet, accompanying this report.

SUMMARY

The iron formation has been outlined and shown to consist of two horizons, both of potential economic interest. A diamond drilling program has been suggested as the next step to test two zones covered by heavy overburden and to assist in determining the significance of certain magnetic high-low combinations.

INTERPRETATION

Two extremely intense magnetic anomalies completely dominate the claim group area. The first anomaly trends generally north-westerly from the southeastern corner of the claim group to the eastern shore of Ko-ko-ko Lake, a short distance south of Ferrim Lake. The second anomaly trends east-west and occupies the basin of Ferrim Lake. This anomaly continues 900 feet east of the eastern shoreline of Ferrim Lake, and extends westward beyond the claim group boundary. Relatively uniform magnetic conditions exist over the remainder of the claim group. Several narrow linear anomalies are shown. In general, these anomalies appear to follow the regional strike direction. In at least one case, however, in the northeastern corner of the claim group a series of anomalies cuts across the regional strike and possesses remarkable continuity. These anomalies have been correlated with a diabase dyke.

The magnetic anomalies measured over the exposed iron formation present some interesting scientific data. The base level for the area is about 2000 gammas. Magnetic anomalies in excess of 276,000 gammas above this base level were actually measured. In several cases, it was impossible to obtain a measurement of the magnetic anomaly due to the limitations of the instrument. Special compensating magnets and latitude screws proved inadequate. Strong negative anomalies were also measured. The maximum negative anomaly recorded was more than 115,000 gammas below regional base level. Again, several "off-scale" lows, below the range of the instrument, were encountered. Combining the lows and the highs, changes in the magnetic field of 357,000 gammas in 90 feet, and 334,000 gammas in 50 feet, were recorded. These extreme ranges are not easily explained by conventional magnetic theory. Investigations concerning the significance and cause of such intense natural magnetic fields, are in progress.

The significance of the magnetic anomalies in the Ferrim Lake basin, is of more immediate importance. It may be shown that if the causative body were exposed, as is the case on the first iron formation anomaly, magnetic anomalies in excess of 60,000 gammas might be expected. Since a fair proportion of the better-grade iron formation on the southern iron formation is represented by magnetic anomalies in excess of 40,000 gammas, it is fair to assume that some commercial-grade iron ore will be found beneath Ferrim Lake. It would appear, however, that some physical or chemical difference must exist between the Ferrim Lake iron formation, and the southern iron formation horizon, in order to explain the differential erosion characteristics. The Ferrim Lake iron formation forms a topographic depression, while the southern horizon is responsible for a marked ridge standing up above the surrounding country. The southern band of iron formation is high in silica content, and therefore very hard. Possibly the Ferrim Lake formation is low in silica and therefore more amenable to erosion. Three little islands in Ko-ko-ko Lake near the western end of the Ferrim Lake anomaly have been formed by iron formation. This is the only true evidence that the Ferrim Lake anomaly is caused by iron formation. The rock exposed on these islands, however, is very similar to that outcropping on the southern anomaly zone. No evidence of chemical difference in the two formations exists, therefore.

The rocks enclosing the iron formation over most of the property are acid and intermediate lavas. The magnetic characteristics exhibited by these rocks are such as to make differentiation between them impossible. Near the southeastern corner of the property the iron formation is cut off by an intruding granite mass. This body exhibits magnetic characteristics which are very similar to those of the volcanic series, and cannot be distinguished from them.

Several peculiar magnetic anomalies entirely divorced from the iron formation horizons were indicated by the ground magnetometer survey. One of these has been briefly discussed, and correlated with a diabase dyke. A second anomaly north of Ferrim Lake appears to be associated with a highly sheared, carbonatized, andesitic lava. Possibly a strike fault, with subsequent introduction of secondary magnetite is responsible for the magnetic anomaly. Two small anomalies in this general region, on lines 24W and 28W, appear to be local erratics.

Three anomalies west of Lizzard Lake lie wholly within a belt of andesitic lavas. In general, they follow the regional strike and therefore may be assumed to be representative of local concentrations of magnetite. A similar feature is indicated to the south of Lizzard Lake.

Several faults have been indicated on the accompanying map sheet. In general, these faults trend in a northeasterly direction, cutting across the geological horizons. They have been interpreted from interruptions and offsets in the magnetic data. It is interesting to note that they are confirmed in part at least by geological evidence. The faults appear to be late in age, and consequently are of little economic consideration, except insofar as they disrupt and cut off the iron formation horizons.

A major fold in the formations is indicated in the southeastern portion of the claim group. This fold has been well defined by geological evidence so there is little need for comments concerning the geophysical aspects of the structure. It is sufficient to state that the fold is also represented by the magnetic data.

It is believed that the ground magnetometer survey of this property has provided valuable information concerning the continuity of the iron formation horizons, particularly in those areas covered by overburden. Points of interest concerning both the economic and the scientific have been raised. Two problems remain to be solved, the question as to tonnage and grade of iron ore in those areas covered by overburden or lakes, and the purely academic question concerning the cause of the outstanding magnetic high-low combinations. The first may be solved by prudent diamond drilling, but the second will require theoretical studies into magnetic theory, coupled perhaps with a small amount of drilling to prove or disprove the resulting concept.

It is therefore recommended that a diamond drilling program be embarked upon, the program to have two targets in view - the development of ore possibilities, and the solution of the theoretical problem. Holes should be drilled to check the Ferrim Lake anomaly, the southern anomaly band in the area covered by overburden between lines 8W and 12E, and the magnetic high-low combinations at 2000 feet south on lines 24E and 26E and at 700 feet south on line 16W.

J. H. Ratcliffe

JHR:C

Attach: Map "Ground Magnetometer Survey
Cynthia-Chambers Claims Grp. I"
scale 1"=200' Prepared Aug.6/52
Revised Dec.29/52

T32427
T32426
T32304
T32305
T32303
T32306
T32302
T32428
T32425
T32424
T32307
T32297
T32423
T32299
T32295
IRON FORMATION
T32296
T32420
T32290
T32418
IRON FORMATION

KO-KO-KO LAKE

FERRIN LAKE

LIZZARD LAKE

JASPER LAKE

LAKE

CYNTHIA TWP.

CHAMBERS TWP.

BL.'B'-010

BL.'B'-0100

BL.'B'-15100N

BL.'C'-33100S

BL.'D'-26400S

BL.'E'-14130S

TL.-56100S

TL.-56100S

LEGEND

KEWEENAWAN

8 Diabase - coarse grained

HURONIAN

7 Cobalt conglomerate

ALGOMAN ?

6 Feldspar porphyry

5a Flesh coloured, f.g. granite

5c Pink, f.g. granite - sugary texture

5b Porphyritic pink granite - very c.g.

5a Grey hornblende granite - coarse grained

KEEWATIN

4 Intermediate Volcanics: A - andesite; P - pillow lavas, F - fragmental; T - tuffs; D - dacite (may be older dacite)

3 Acid Volcanics: R - rhyolite; T - tuffs; F - fragmental

Iron formation:

2 Ferruginous quartzite

1b Banded magnetite and silica - 15-25% magnetite (visual estimate)

1a Banded magnetite and silica - 25+% magnetite.

SYMBOLS

- Strike and dip of bedding
- Strike and dip of shearing
- Strike and directions of tops of pillows
- Strike and dip of jointing
- Strike of glacial striae
- Synclinal axis
- Known geological contact
- Assumed geological contact
- Fault with differential movement
- Swamp
- Edge of hill
- Outcrop outline
- Specimen location
- Sample for assay
- Picket lines
- Claim corners
- Slightly sheared
- Medium sheared
- Highly sheared
- Carb. Carbonated
- Ser. Sericite
- Sil. Silicious
- f.g. Fine grained
- m.g. Medium grained
- c.g. Coarse grained
- 25% Percent magnetite by volume (visual estimate)

DOMINION GULF COMPANY

DETAIL GEOLOGY

CYNTHIA - CHAMBERS TWPS CLAIMS GRI

PROVINCE OF ONTARIO

SCALE - 1 INCH = 400 FEET DATE - JANUARY 7, 1953

H. REIMER

63.346

DOMINION GULF COMPANY

GROUND MAGNETOMETER SURVEY

CYNTHIA-CHAMBERS TWPS. CLS. - GRP. I

PROVINCE OF ONTARIO

SCALE 1" = 200'

DATE: NOVEMBER 1965

CONTOUR INTERVAL: 100 GAMMAS

Legend

Contact

Fault

65N OFFSET AREA

65L OFFSET LINE

CYNTHIA TWP.

CHAMBERS TWP.

FORMATION

IRON

FORMATION

IRON

NO-NO-NO LAKE