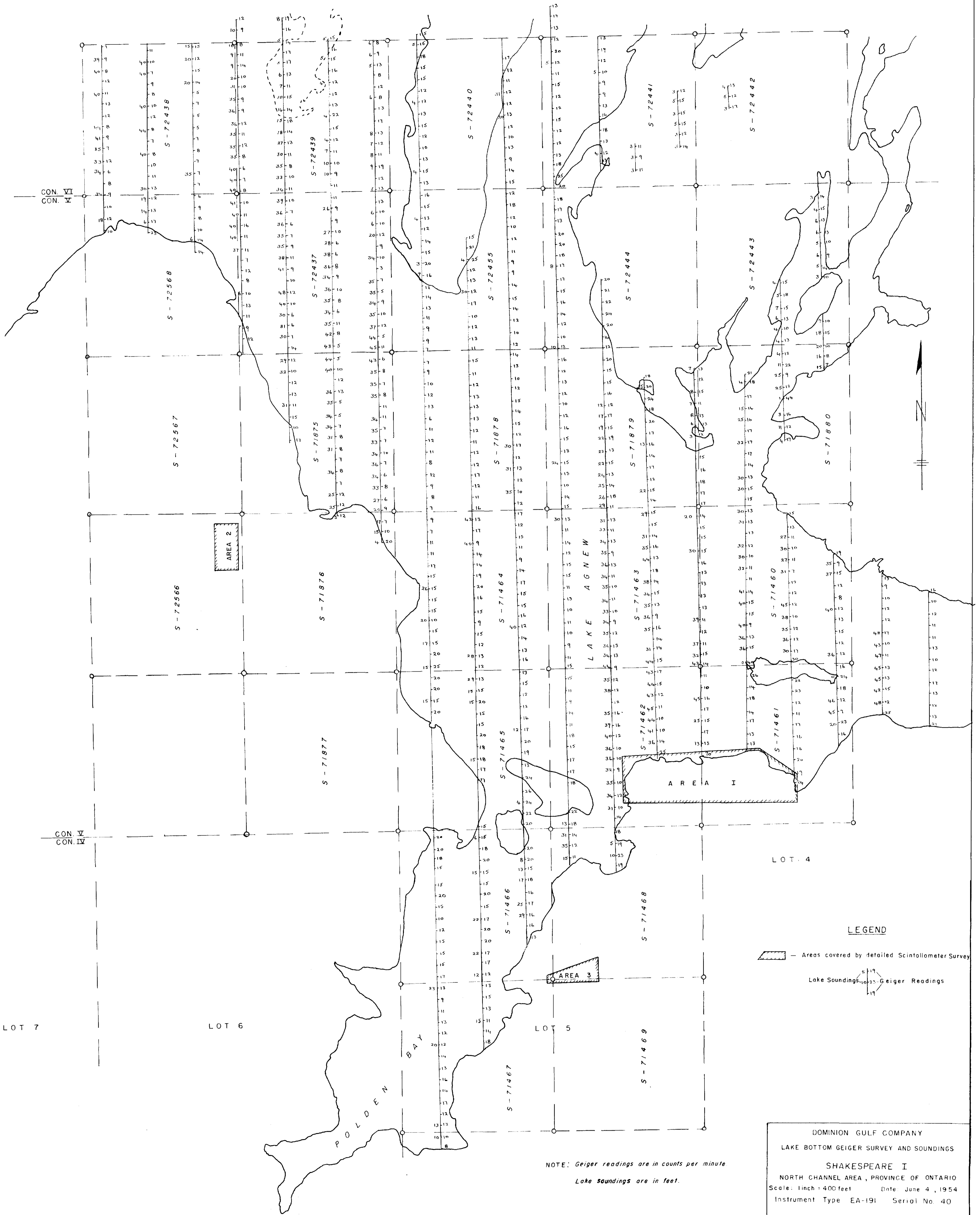


LEGEND

- 7 Granite after quartzite
- 6 Diabase
- 5 Diabase breccia
- 4 Quartzite
- 3 Small 2' quartz pebble bands in quartzite
- 2 Quartz pebble conglomerate
- 1 Greywacke and impure quartzite beds in quartzite
- Outcrop boundary
- Strike and dip of bedding
- - - - - Gneissosity trend
- Trench
- X-Ray Diamond Drill Hole Location
- + Claim corner
- - - - - Metres Lines

SHAKESPEARE



CON. VI
CON. V

CON. V
CON. IV



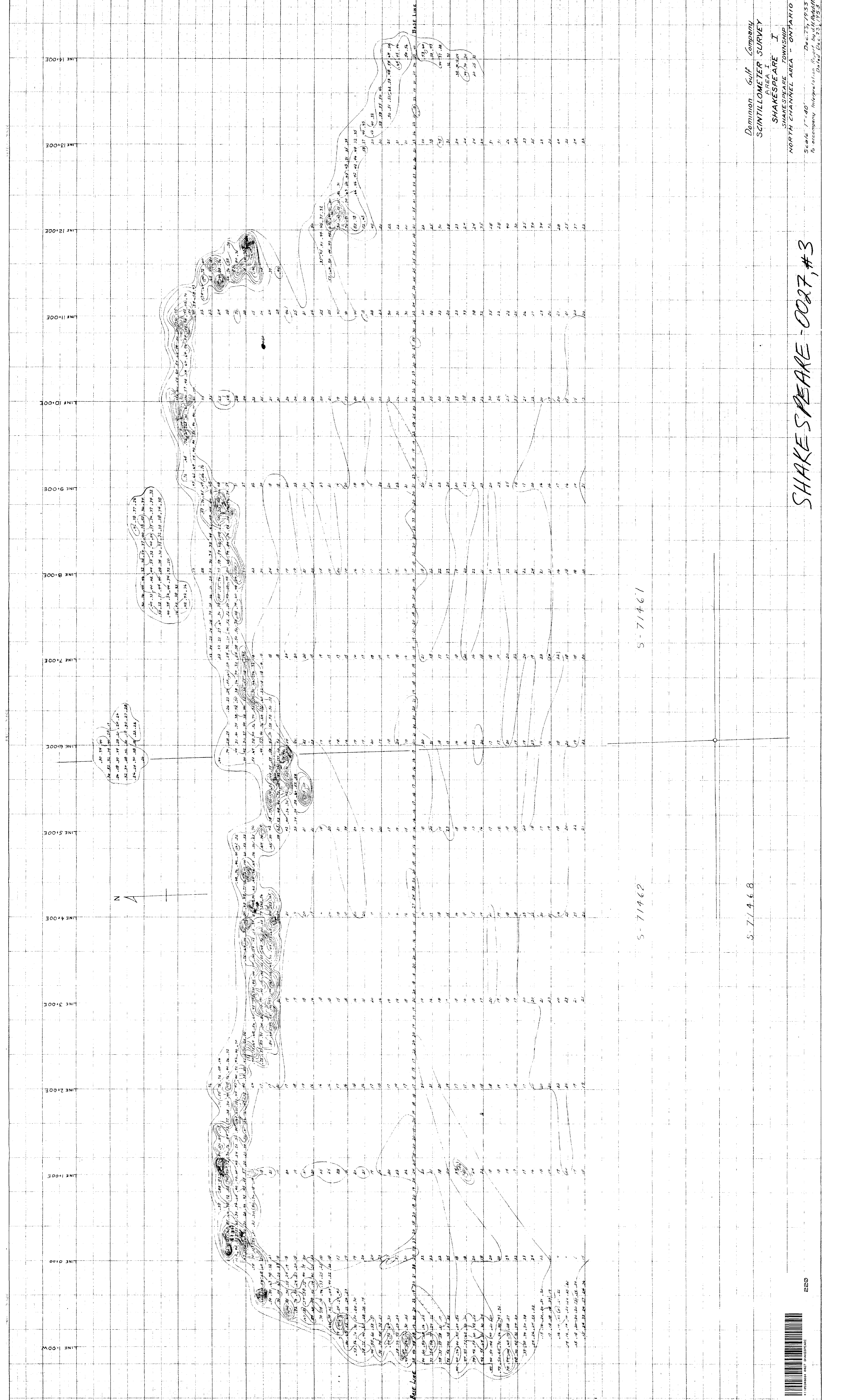
LEGEND

- Areas covered by detailed Scintillometer Survey
- Lake Soundings
- Geiger Readings

NOTE: Geiger readings are in counts per minute
Lake soundings are in feet.

DOMINION GULF COMPANY
LAKE BOTTOM GEIGER SURVEY AND SOUNDINGS
SHAKESPEARE I
NORTH CHANNEL AREA, PROVINCE OF ONTARIO
Scale: 1 inch = 400 feet Date: June 4, 1954
Instrument Type: EA-191 Serial No. 40





41189894 827 SHAKESPEARE



820

S-71468

S-71462

S-71461

SHAKESPEARE-0027, #3

Dominion Gulf Company
 SCINTILLOMETER SURVEY
 AREA I
 SHAKESPEARE I
 SHAKESPEARE TOWNSHIP
 NORTH CHANNEL AREA - ONTARIO
 Scale 1"=40'
 Dec. 23, 1953
 to accompany Interpretation Report by H. R. Griffith
 Dated Dec. 23, 1953

LINE 11+00 E

LINE 12+00 E

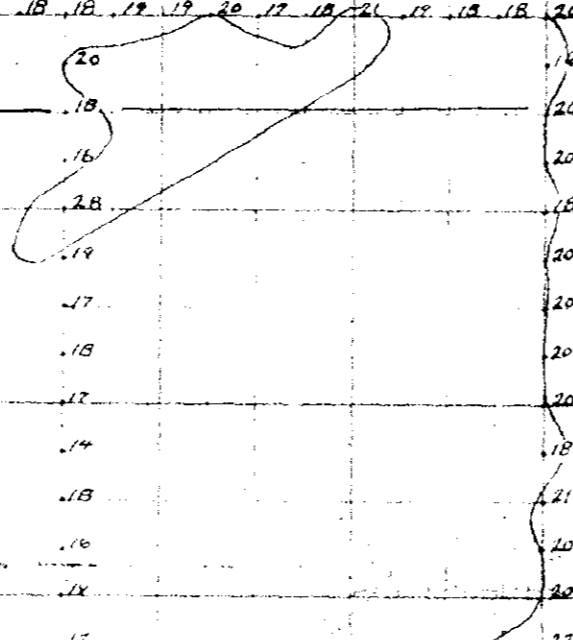
S-72567

S-71875

NORTH BASE LINE

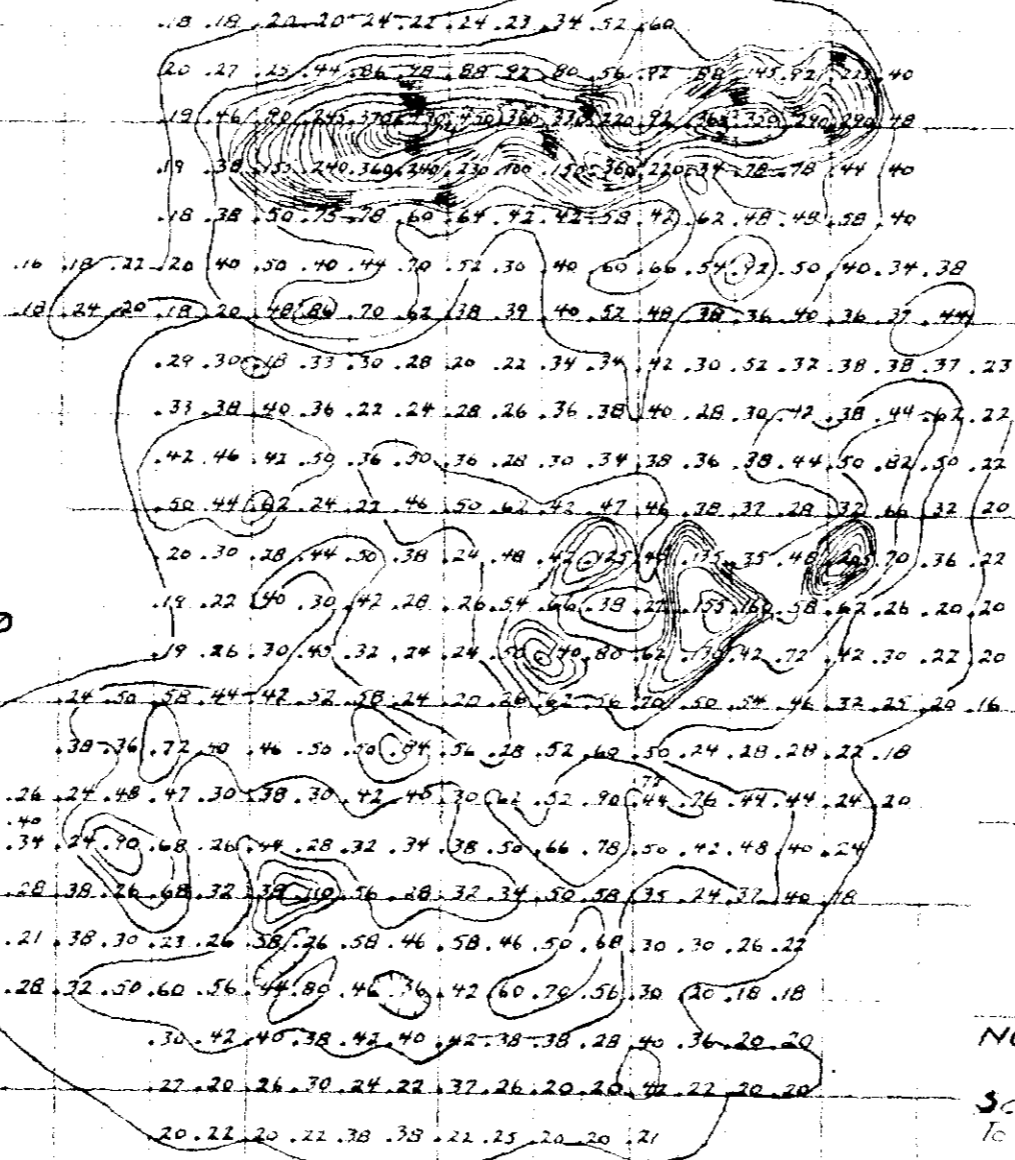
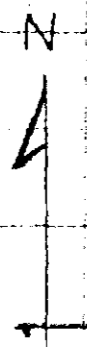
20 18 16 16 13 14 16 18 16 18 18 19 19 20 17 18 21 19 18 18 20

NORTH BASE LINE



S-72566

S-71876



411055W0084 0027 SHAKESPEARE

230

Dominion Gulf Company
SCINTILLOMETER SURVEY
AREA 2
SHAKESPEARE I
SHAKESPEARE TOWNSHIP
NORTH CHANNEL AREA - ONTARIO

Scale: 1" = 40'
Dec. 23, 1953
To accompany Interpretation Report by J.H. Ratchiff
Dated Dec. 23, 1953.

SHAKESPEARE -0027, #4



7.00W

6.00W

5.00W

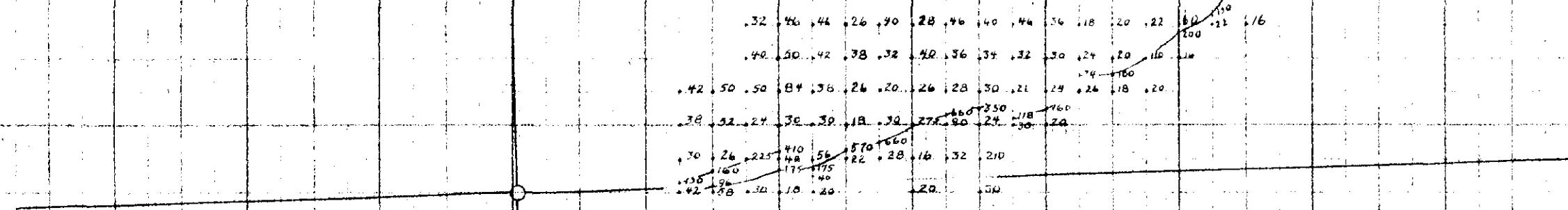
4.00W

3.00W

S-71466

S-71468

BASE LINE 16.00 S



S-71467

S-71469

Dominion Gulf Company
 SCINTILLOMETER SURVEY
 AREA 3
 SHAKESPEARE I
 SHAKESPEARE TOWNSHIP
 NORTH CHANNEL AREA - ONTARIO

Scale: 1" = 40'

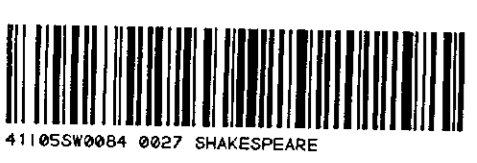
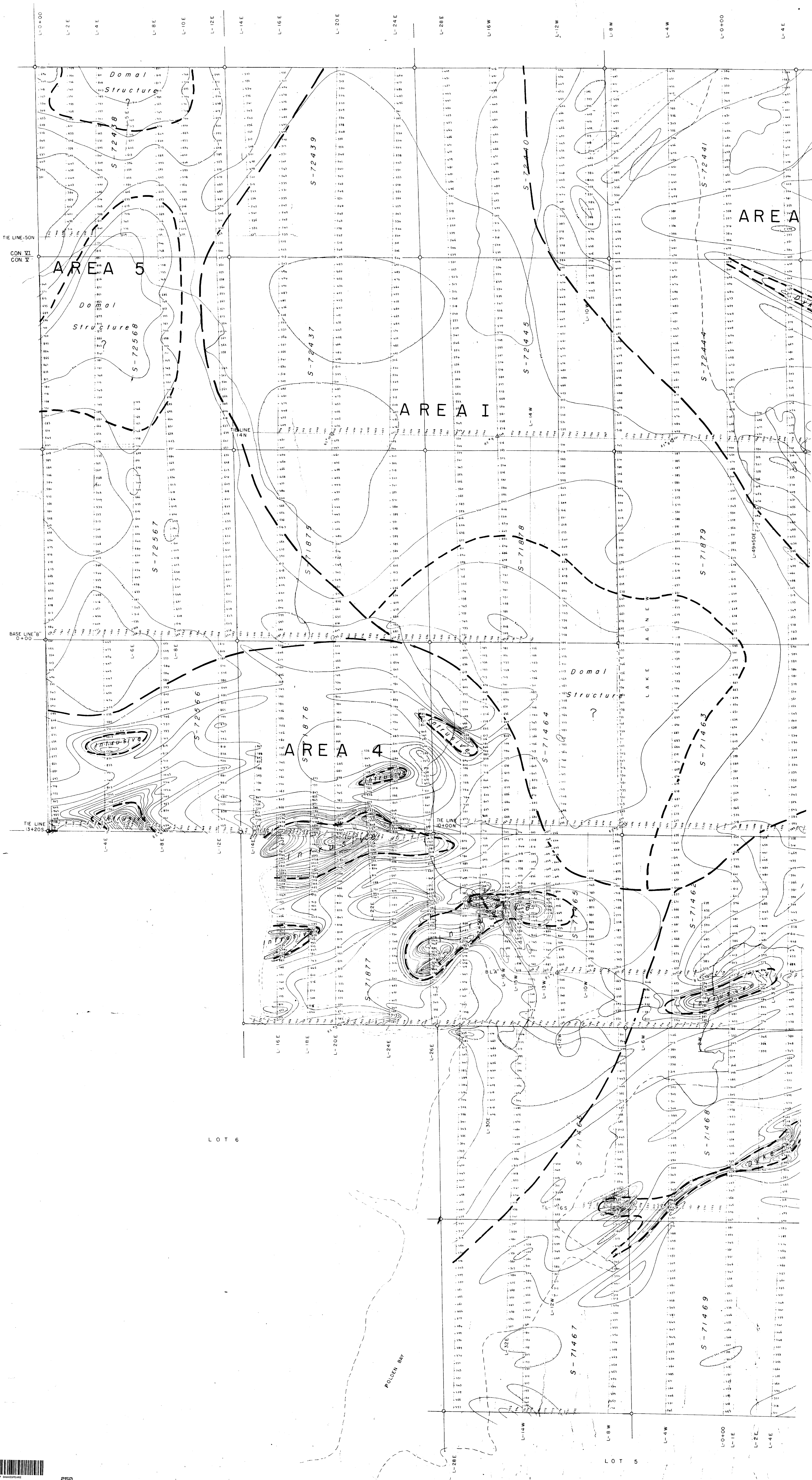
Dec. 23, 1953

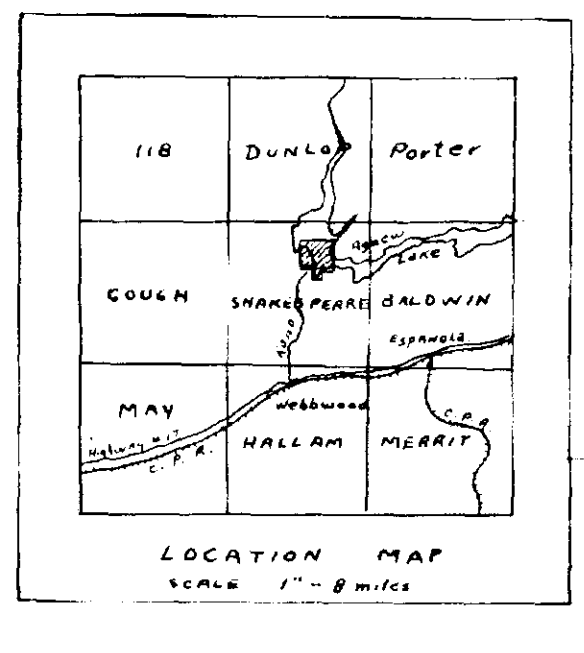
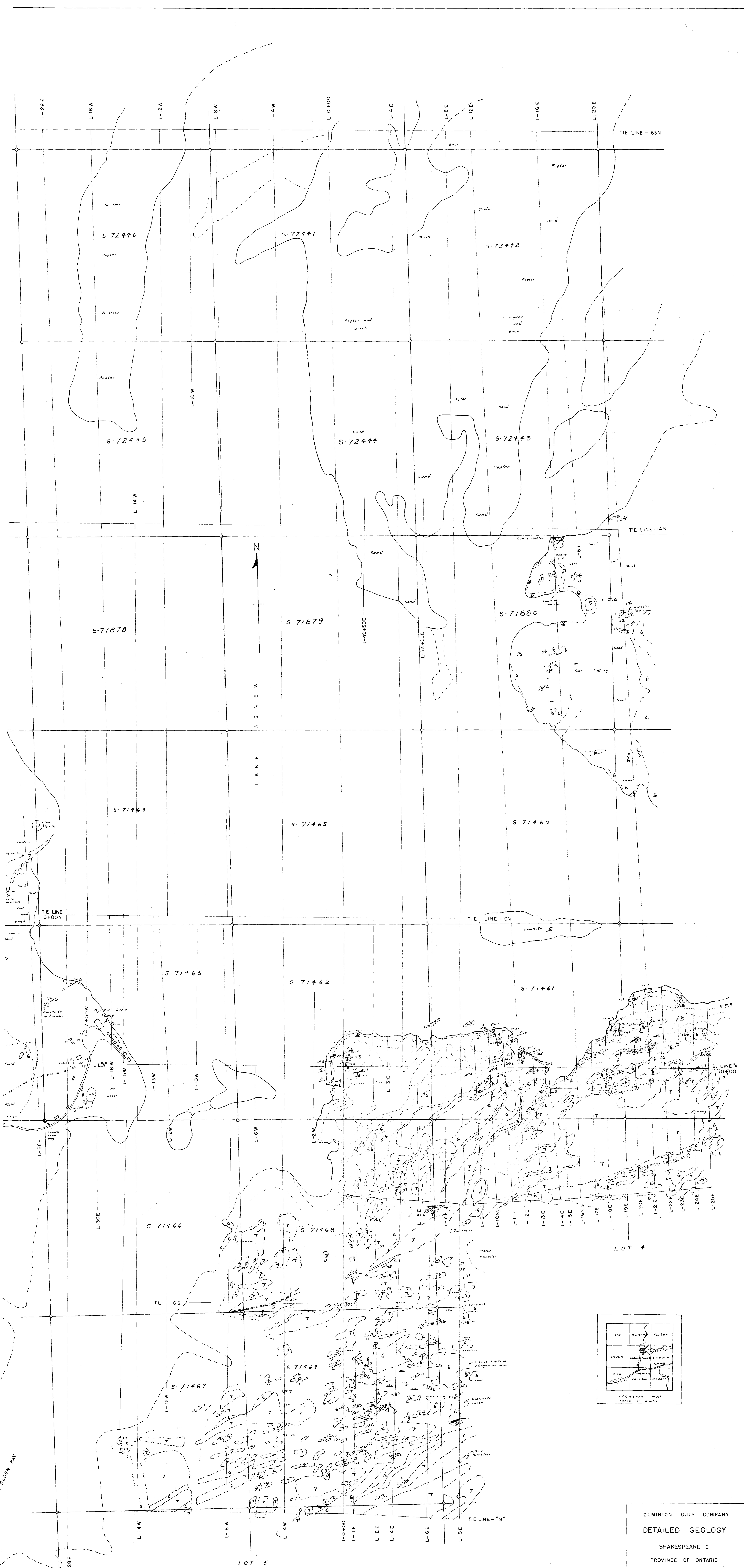
To accompany Interpretation Report by J.H. Rotel
 Dated Dec. 23, 1953



240

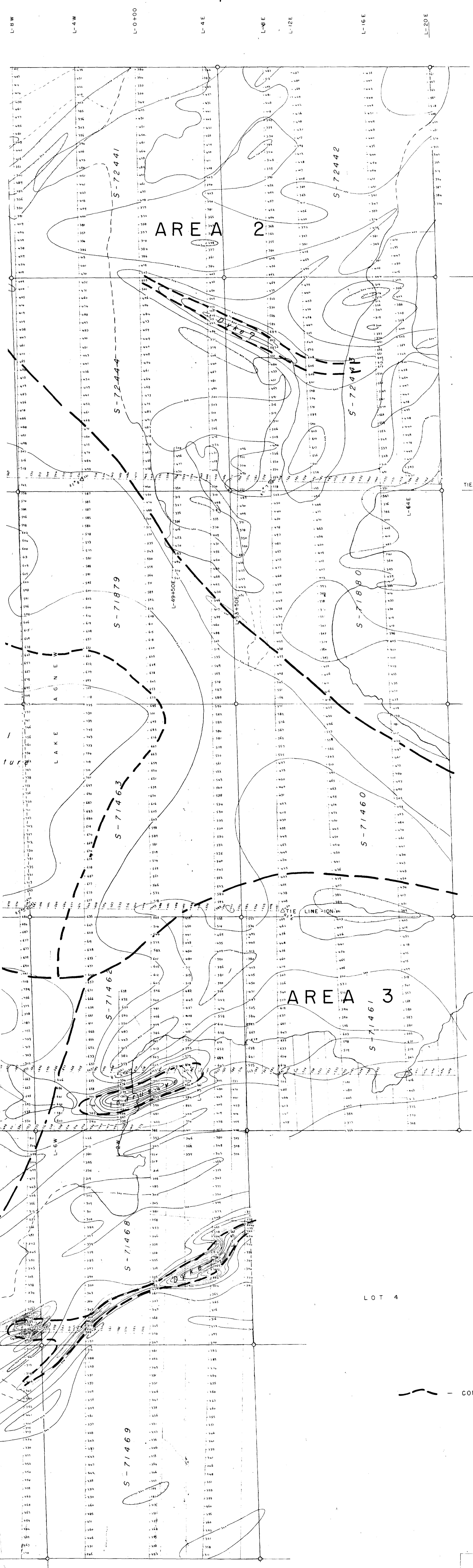
SHAKESPEARE - 0027, #5





DOMINION GULF COMPANY
 DETAILED GEOLOGY
 SHAKESPEARE I
 PROVINCE OF ONTARIO
 SCALE: 1" = 200'
 TO ACCOMPANY REPORT BY G. LAROCQUE
 DATED: SEPT. 30 1954

SHAKESPEARE-0027, #1



TIE LINE-14N

TIE LINE-10N

LOT 4

LOT 5

--- CONTACT

DOMINION GULF COMPANY
 GROUND MAGNETOMETER SURVEY
 SHAKESPEARE I
 PROVINCE OF ONTARIO
 SCALE: 1" = 200' MAY 4, 1954
 CONTOUR INTERVAL: 100 GAMMAS
 To accompany report by J. H. R., dated Oct. 8, 1954

SHAKESPEARE-0027, #6



411055W0084 0027 SHAKESPEARE

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Oct 15 1984
to
2

ASSESSMENT WORK REQUIREMENTS

DOMINION GULF COMPANY

DOMINION GULF COMPANY

Geology Report - Shakespeare I

Sudbury Mining Division - Ontario

J. A. LaRocque - September 30, 1954

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411055W0084 0027 SHAKESPEARE

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INTRODUCTION

Shakespeare I consists of 28 unsurveyed and unpatented claims centered in Lot 5, Conc.V of Shakespeare Township, in the Sudbury Mining Division, Ontario. These claims number S-71460-69 incl., S-71875-80 incl., S-72437-45 incl., and S-72566-67 incl.

The property is about 8 road miles north of Webbwood, Ontario which is located on the Highway # 17, and on the Canadian Pacific Railway branch line from Sudbury to Sault Ste. Marie. Agnew Lake lodge, a tourist camp, is located on the property on the south shore of Agnew Lake in Lot 5 Concession V.

The claim block was acquired between October 3-22, by Dominion Gulf Company following the discoveries of radioactive mineralization along the south shore of Agnew Lake. Geological investigations performed over the group includes, line cutting, with lines spaced 100 and 400 feet apart; detailed geological mapping; earth and rock trenching with Warsop Plugger drill; X-Ray diamond drilling of 3 holes; grab and channel sampling. In addition the following geophysical surveys were completed : ground magnetometer survey over entire group; detailed ground scintillometer surveys in the land sections of portions of claims 71461-62, 72566, and 74168; Lake bottom geiger counter survey, and associated lake bottom soundings survey on claims wholly and partially covered by Agnew Lake and Polden Bay.

These investigations were performed during the latter part of 1953, and first six months of 1954 by G. E. Parson, C. McAulay and J. A. LaRocque, geologists, J. R. Ratcliff, geophysicists assisted by other Dominion Gulf Company personnel.

TOPOGRAPHY

Drainage in the property is eastward through Agnew Lake, an artificial lake enlargement of the Spanish, formed by a hydro electric dam at High Falls in Hyman township. This lake has a water level which varies up to ten feet depending mainly on the climatic conditions.

The accompanying geological map shows the relative amount and distribution of outcrops and drift on the property. Diabasic and granitic rocks appear to be more resistant types and occur as rugged hills up to 200 feet above the lake level.

Vegetation consists mainly of birch growth and minor small patches of spruce and pine.

GEOLOGY

General

The claim block appears to have been originally underlain by an extensive belt of sedimentary rock types of greywacke and quartzites, resembling the Mississagi type of the Lower Huronian. These were later folded along an east-west trend, and intruded and almost entirely metamorphosed to a granitic type rock by sill and plug-like masses of basic intrusive and diabase rock types of possibly Nipissing age. The latter rock types with the granitic type now occupy a greater part of the claim block.

TABLE OF FORMATIONS

Nipissing

Diabase and diabase breccia
Granite after quartzite
Lower Huronian (Mississagi type)
Quartzite
Greywacke

DESCRIPTION OF FORMATIONS

Lower Huronian (Mississagi type)

Quartzite : Within the group it is represented by four gradational types. (a) normal pale greenish white to whitish tan coloured weathering, fine to coarse grained, relatively high quartz type. (b) similar coloured weathering type containing narrow bands of $\frac{1}{2}$ " quartz pebble conglomerate (pea pebble conglomerate) (c) quartzite containing narrow bands of quartz pebble conglomerate, with pebbles up to one inch in size, set in an impure quartzite base. (d) quartzite with thin beds and seams of argillite and greywacke.

Exposures were observed in the southern, west central and northeastern land portions of the claim group, and quartzite exposures in each section were observed to have a similar easterly bedding trend and northerly dip. Also two or all of the above types of quartzite were found present, indicating a possible duplication of the same bedding horizon by folding.

Greywacke and Impure Quartzite

These rock types are interbedded with and lie adjacent to the quartzite exposures having widths from a few feet upto to 150 feet. They are variously altered and metamorphosed, and now have a dark grey to brownish grey colour, are usually of schistose nature, and where greywacke lies adjacent to diabasic material it is difficult to distinguish between the two.

Nipissing

Granite after quartzite

This rock is believed to be a metamorphed arkosic quartzite due to such features as :

1. its presence adjacent to major masses of diabase.
2. lack of ferromagnesian.
3. conforming in trend to definite sediments and contains bands that could readily be altered greywacke and altered pure quartzite.
4. lack of evidence of being a true intrusive in the sense that it cuts other formations.

Diabase

This term is used to cover basic rocks of general composition and texture of diabase, diorite and gabbro. Exposures are fairly abundant in the claim group, especially in the southeastern and northeastern parts. In the former part two sill-like masses up 800 feet wide conform with trend of sediments in this portion of group. In the northeastern part sill-like conditions are evident from the quartzitic mass resting with low angle dip on diabase and this appearing underlain by quartzite.

Narrow dike or sill-like masses are found in the sediments. When these become sheared and altered they are difficult to distinguish from altered and sheared greywacks. When impossible to distinguish they have been tentatively classified as greywacks.

It varies from medium to coarse texture, dark green, and massive. No attempts have been made to study it in the field or laboratory. Locally large laths of amphibole are present.

Diabase breccia

This rock was observed on the claim block along the contact zone between diabasic and granitic quartzite in the southeast part of the claim group. It consists of rounded to angular fragments of metamorphosed quartzite up to two feet in cross section in a fine grained basic groundmass. In the western part of the group in this claim S72566 there occurs a breccia consisting of angular, irregularly oriented quartz to quartzite fragments with a fine grained basic groundmass. This breccia appears to grade westward into a massive medium grained diabasic material.

STRUCTURE

Folding

The formations within the group form a part of a northeasterly trending and plunging synclorium, the major axis of which may be interpreted as occurring about 1000 feet north of the south shore of Agnew Lake. A similar trending anticlinal structure of perhaps less magnitude is assumed to lie immediately south of Agnew Lake and the synclorium axis. To the north of the above axis small synclinal and anticlinal northeasterly trending and plunging structures occur along the northside of the major syncline. This minor folding would appear to give rise to a repetition of beds and be the loci for faulting.

Sill-like masses of diabase interbedded with the sediments appear to probably pinch and swell both down dip and strike.

Local trends vary, with strike of N65°E to E-W. and dips of steep north to 32° north being obtained. Gneissic banding within the granitic area conforms with the general northeasterly trend of sediments.

Faulting

Three major sets of topographical lineaments that may be interpreted from aerial photographs as faults cut across the property and adjacent ground, having trends of northwesterly, slightly east or north, and northeasterly.

ECONOMIC GEOLOGY AND MINERALIZATION

Five zones of radioactivity have been located all occurring in the Mississagi type quartzite. They are :

- (a) Zone "A" and "B" in claims S-71461 and 62, along the south shore of Agnew Lake.
- (b) Zone "C" in claim S-72566, near L12+00'E, south of Baseline "B"
- (c) Zone "D" in claim S-71466, 550 feet west of 10+00E, approximately 1550'S of Baseline "A"
- (d) Zone "E" in claim S-71469, at 24'00S of baseline "A", between 16+00'E and 18+00'E

Zones A, B, C and E, are all related to quartz pebble horizons in the Mississagi type quartzite. Zone D appears to be associated with a light dark fine grained quartzite of the Mississagi type with only a very slight indication of the presence of scattered quartz pebbles.

Radioactive minerals were not observed visually although it is suspected that the following minerals may be present - pitchblende, brannerite, and thucolite. Sulphide mineralization is rather weak with pyrite, pyrrhotite, and chalcopyrite occurring as minute disseminated specks.

J.A. LaR: BJ

c.c. Mr. R. D. Wycoff.

J. A. LaRocque

Attachments

Geology Map, Shakespeare I, Scale 1"-200' by J.A.LaRocque, dated September 24, 1954.

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DOMINION GULF COMPANY

Geology Report - Shakespeare I

Sudbury Mining Division - Ontario

J.A. LaRoque - September 30, 1954.

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Economic Geology - Mineralisation	5.
Attachments	6.

INTRODUCTION

Shakespeare I consists of 28 unsurveyed and unpatented claims centred in Lot 5 Cons. V of Shakespeare township, in the Sudbury Mining Division, Ontario. These claims number S-71460-69 incl., S-71875-80 incl., S-72437-45 incl., and S-72566-67 incl.

The property is about 8 road miles north of Webbwood, Ontario which is located on the Highway #17, and on the Canadian Pacific Railway branch line from Sudbury to Sault Ste. Marie. Agnew Lake Lodge, a tourist camp, is located on the property on the south shore of Agnew Lake in Lot 5 Concession V.

The claim block was acquired between October 3 - 22, by Dominion Gulf Company following the discoveries of radioactive mineralisation along the south shore of Agnew Lake. Geological investigations performed over the group included, line cutting, with lines spaced 100 and 400 feet apart; detailed geological mapping; earth and rock trenching with Warsaw Plugger drill; X-Ray diamond drilling of 3 holes; grab and channel sampling. In addition the following geophysical surveys were completed; - ground magnetometer survey over entire group; detailed ground seismometer surveys in the land sections of portions of claims 71461-62, 72566, and 74168; Lake bottom geiger counter survey, and associated lake bottom soundings survey on claims wholly and partially covered by Agnew Lake and Polden Bay.

These investigations were performed during the latter part of 1953, and first six months of 1954, by G.E. Parsons, C. McAulay, and J.A. LaRoeque, geologists, J. R. Ratcliffe, geophysicists assisted by other Dominion Gulf Company personnel.

TOPOGRAPHY

Drainage in the property is eastward through Agaw Lake, an artificial lake enlargement of the Spanish, formed by a hydro electric dam at High Falls in Hymen township. This lake has a water level which varies up to ten feet depending mainly on the climatic conditions.

The accompanying geological map shows the relative amount and distribution of outcrops and drift on the property. Diabasic and granitic rocks appear to be the more resistant types and occur as rugged hills up to 200 feet above the lake level.

Vegetation consists mainly of birch growth and minor small patches of spruce and pine.

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 Greywacke

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- (b) similar coloured weathering type containing narrow bands of 1/4" quartz pebble conglomerate (pea pebble conglomerate)
- (c) quartzite containing narrow bands of quartz pebble conglomerate, with pebbles up to one inch in size, set in an impure quartzite base.
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Discussion.

Granite after Quartzite

This rock is believed to be a metamorphed arkosic quartzite due to such features as:-

1. its presence adjacent to major masses of diabase.
2. lack of ferromagnesian.
3. conforming in trend to definite sediments and contains bands that could readily be altered greywacke and altered pure quartzite.
4. lack of evidence of being a true intrusive in the sense that it cuts other formations.

Diabase

This term is used to cover basic rocks of general composition and texture of diabase, diorite, and gabbro. Exposures are fairly abundant in the claim group, especially in the southeastern and northeastern parts. In the former part two sill-like masses up 800 feet wide conform with trend of sediments in this portion of group. In the northeastern part sill-like conditions are evident from the quartzite mass resting with low angle dip on diabase and this appearing underlain by quartzite.

Narrow dike or sill-like masses are found in the sediments. When these become sheared and altered they are difficult to distinguish from altered and sheared greywackes. When impossible to distinguish they have been tentatively classified as greywackes.

It varies from medium to coarse texture, dark green, and massive. No attempts have been made to study it in the field of laboratory. Locally large laths of amphibole are present.

Diabase Breccia

This rock was observed on the claim block along the contact zone between diabasic and granitic quartzite in the southeast part of the claim group. It consists of rounded to angular fragments of metamorphosed quartzite up to two feet in cross section in a fine grained basic groundmass. In the western part of the group in claim 572566 there occurs a breccia consisting of angular, irregularly orientated quartz to quartzite fragments with a fine grained basic groundmass. This breccia appears to grade westward into a massive medium grained diabasic material.

STRUCTURE

Folding

The formations within the group form a part of a northeasterly trending and plunging synclorium, the major axis of which may be interpreted as occurring about 1000 feet north of the south shore of Agnew Lake. A similar trending anticlinal structure of perhaps less magnitude is assumed to lie immediately south of Agnew Lake and the synclorium axis. To the north of the above axis small synclinal and anticlinal northeasterly trending and plunging structures occur along the northside of the major syncline. This minor folding would appear to give rise to a repetition of beds and be the loci for faulting.

Sill-like masses of diabase interbedded with the sediments appear to probably pinch and swell both down dip and strike.

Local trends vary, with strikes of N65°E to E-W, and dips of steep north to 32° north being obtained. Oneissic banding within the granitic area conforms with the general northeasterly trend of sediments.

Faulting

Three major sets of topographical lineaments that may be interpreted from aerial photographs as faults cut across the property and adjacent ground, having trends of northwesterly, slightly east of north, and northeasterly.

ECONOMIC GEOLOGY AND MINERALIZATION

Five zones of radioactivity have been located all occurring in the Mississagi type quartzite. They are:

- ✓ (a) Zones "A" and "B" in claims S-71461 and 62, along the south shore of Agnew Lake.
- ✓ (b) Zone "C" in claim S-77566, near 112°00'E, south of Base Line "B".
- (c) Zone "D" in claim S-71466, 550 feet west of 10°00'E, approximately 1550's of Base Line "A".
- ✓ (d) Zone "E" in claim S-71469, at 24°00'S of base line "A", between 16°00'E and 18°00'E.

Zones A, B, C, and E, are all related to quartz pebble horizons in the Mississagi type quartzite. Zone D, appears to be associated with a light dark fine grained quartzite of the Mississagi type with only a very slight indication of the presence of scattered quartz pebbles.

Radioactive minerals were not observed visually although it is suspected that the following minerals may be present: - pitchblende, brannerite, and thueolite. Sulphide mineralization is rather weak with pyrite, pyrrhotite and chalcopyrite occurring as minute disseminated specks.

J.A. LaRocque

J.A. LaRocque.

c.c. Mr. R.D. Wyckoff

Attachments

Geology Map, Shakespeare I, Scale 1" = 200' by J. A. LaRocque, dated September 24, 1954.



411055W0004 0027 SHAKESPEARE

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DOMINON GULF COMPANY

Radioactivity Survey Interpretation Report

Shakespeare I

SUDBURY MINING DIVISION - ONTARIO

J. A. LaRocque

Sept. 28, 1954

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41105SW0084 0027 SHAKESPEARE

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INTRODUCTION

The property consists of 28 claims located around the western end of Agnew Lake in Lots 4, 5, and 6 Concessions V and VI, of Shakespeare Township, Sudbury Mining Division, Ontario.

It lies about 8 road miles north of Webbwood, which is located at Highway # 17 and on the C.P. Railway branch line between Sudbury and Sault Ste. Marie.

Three phases of radioactivity surveying were made on the portions of the groups, namely :

1) Detail Scintillometer Survey, over known radioactive occurrences in claims 71461 and 62, 72566 and 71468. This work was done using a Halross Scintillometer, Model 939, Serial No. 310, by J. H. Ratcliffe, Geophysicist, and two assistants during November, 1953.

2) Combines Lake Bottom Geiger - Counter and Sounding Surveys of portion of group covered by Agnew Lake, claims 72437-41, 72445, 71875 71878-80, 71460, 74163-66. This survey was done using Geiger Counter Model EA-191, Serial No. 40, with attached 150 foot cable and probe, by C. McAulay, geologist, and two assistants, during summer of 1954.

3) Drill Hole Geiger Counter Survey : using Geiger Counter Model EA-191, Serial No. 40, with attached 150 foot cable and probe. Three X-Ray drill holes located in claims 72566, 71877, 71461 were surveyed by C. McAulay, geologist, during the summer of 1954.

METHOD OF SURVEYS

The methods used in performing each survey are as follows :

1) Detail Scintillometer Survey

Scintillometer readings in each of Area 1, 2, and 3 were taken on 10 foot spaced grid pattern and tied into previously cut picket lines spaced in Area 1 at 100 foot intervals, and in Areas 2 and 3 at 400 foot intervals.

Station readings were taken with the instrument panel as close as possible to the source material, (i.e. surface of rock or overburden) without actually touching it, thus avoiding instrument contamination.

The number of station readings taken at corners of 10 foot grid-pattern in each area were : Area 1-1553 readings; Area 2-460 readings, Area 3-183 readings. These were plotted on grid paper and maps prepared at scale of 1" = 40 feet, and readings contoured, the contour intervals being 20 scintillometer counts per second. A copy of these maps accompany this report.

2) Combines Lake Bottom Geiger - Counter and Sounding Surveys

These surveys were done by carrying Geiger counter with cable and probe attachment in a row-boat and rowing boat along traverse lines spaced about 400 feet apart over entire lake portion of group and taking readings at stations approximately 100 feet apart on the traverse lines. The traverse lines were determined, prior to the actual surveying, from topographic features on a 1"-400' aerial photograph. Pickets were set up at the ends and at intermediate points, where possible, to mark out proposed traverses.

In order to take station readings a three man party was necessary, one man sighting and rowing boat along the traverse line, one to handle probe and cable, and one to record instrument readings and check station points by taking compass bearings. The cable and probe at all times along a traverse were kept at or close to the lake bottom to give a continuous reading, as a check against interesting radioactivity occurring intermediate between stations.

Sounding readings of depth of water to lake bottom were made from length of cable extended below surface of water. Cable was sealed and marked prior to the actual surveying. About 785 radioactivity readings and about 230 soundings were taken. These were plotted on a property map at scale 1"-400 feet. Readings were contoured, with contour interval being two geiger counts per minute, as shown on accompanying map.

3) Drill hole Geiger - Counter Survey

Three X-Ray diamond drill holes were surveyed using the geiger counter and attachments mentioned above. Readings in the drill holes were taken every five feet down each hole measuring from the top of the casing. The probe at each five foot distance was left in these locations for at least two minutes to allow for adjustments, steadying of instrument, and for possible duplication or reading, if necessary. Readings obtained were recorded on diamond drill hole log sheets, as shown on accompanying sheets.

INTERPRETATION

From the combined detail scintillometer and geiger counter surveys, of those sections of the group covered, at least five radioactive zones or anomalies may be outlined. Of these the anomaly along the south shore of Agnew Lake in claim 71461 and 62 appears to be the most extensive and to have the greatest radioactive intensities. Here surface geiger counter readings

up to 7- counts per minutes (C.P.M.) drill hole geiger counter readings upto 1050 C.P.M. and scintillometer readings up to 900 C.P.S were registered at spot locations.

Although an attempt was made to correlate data of each instrument and surveys, all that was possible at this time was to note that each indicated radioactive anomalous conditons were overlaps of surveys exist.

The anomaly in claim 72566 would appear to have the greatest width of an individual radioactive zone. Its length is unknown since extensions in either direction, east or west, along strike pass below overburden of undetermined depth with a subsequent blanketing of radioactivity radiations. This zone would appear to be the most interesting from a possible economic viewpoint. Each of the five anomalies are known to be underlain by quartzite, but detail scintillometer results show that the quartzite is not equally radioactive throughout. Instead the better radioactivity is confined to narrow bands and seams of quartz pebble conglomerate within the quartzite.

Similar conditions are believed to exist within those anomalous zones outlined by geiger counter survey of the lake bottom. The weaker radioactive anomalous zones may indicate underlying quartzite rock types, or a thinner mantle of lacustrine deposits. It is the lack of evidence concerning the depth of the lacustrine deposits within the group that prevents at this time a satisfactory interpretation of the geiger counter survey data of the lake bottom of Lake Agnew.

J. A. LaRocque

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1. D.G.C. Diamond Drill Record - Shakespeare I Geiger Survey -
Hole No. 167-54-1
2. D.G.C. Lake Bottom Geiger Survey and Soundings - Shakespeare I
Scale 1"-400' - Contour Interval 2 counts per minutes -
dated June 2, 1954.
3. D.G.C. Scintillometer Survey - Area I - Shakespeare I - scale
1"-30' dated December 23, 1953
4. D.G.C. Scintillometer Survey - Area 2 - Shakespeare I - scale
1"-40' dated December 23, 1953
5. D.G.C. Scintillometer Survey - Area 3 - Shakespeare I - Scale
1"-40' dated December 23, 1953

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DOMINION GULF COMPANY

Radioactivity Survey Interpretation Report

Shakespeare I

SUNBURY MINING DIVISION - ONTARIO

J. A. LAROCQUE

SEPT. 28, 1954.

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INTRODUCTION

The property consists of 28 claims located around the western end of Agnew Lake in lots 4, 5 and 6, concessions V and VI, of Shakespeare township, Sudbury Mining Division, Ontario

It lies about 8 road miles north of Webbwood, which is located at Highway #17, and on the C.P. Railway branch line between Sudbury and Sault Ste. Marie.

Three phases of radioactivity surveying were made on portions of the group, namely:-

1) Detail Scintillometer Survey, over known radioactive occurrences in claims 71461 and 62, 72566, and 71468. This work was done using a Halross Scintillometer, Model 939, Serial No. 310, by J. H. Ratcliffe, geophysicist, and two assistants during November, 1953.

2) Combinee Lake Bottom Geiger - Counter and Counting Surveys of portion of group covered by Agnew Lake, claims 72437-41, 72445, 71875, 71876-80, 71460, 74163-66. This survey was done using Geiger Counter Model EA-191, Serial No. 40, with attached 150 foot cable and probe, by C. McAulay, geologist, and two assistants, during summer of 1954.

3) Drill Hole Geiger Counter Survey; using Geiger Counter Model EA - 191, Serial No. 40, with attached 150 foot cable and probe. Three x-ray drill holes located in claims 72566, 71877, and 71461 were surveyed by C. McAulay, geologist, during the summer of 1954.

METHODS OF SURVEYS

The methods used in performing each survey are as follows:-

1) Detail Scintillometer Survey

Scintillometer readings in each of Area 1, 2 and 3, were taken on a 10 foot spaced grid pattern and tied into previously cut picket lines spaced in Area 1 at 100 foot intervals, and in Areas 2 and 3 at 400 foot intervals.

Station readings were taken with the instrument placed as close as possible to the source material, (i.e. surface of rock or overburden) without actually touching it, thus avoiding instrument contamination.

The number of station readings taken at corners of 10 foot grid-pattern in each Area were : - Area 1-1553 readings; Area 2-460 readings, Area 3-183 readings. These were plotted on grid paper and maps prepared at scale of 1" = 40 feet, and readings contoured, the contour interval being 20 scintillometer counts per second. A copy of these maps accompany this report.

2) Combines Lake Bottom Geiger - Counter and Sounding Surveys

These surveys were done by carrying Geiger Counter with cable and probe attachment in a row-boat and rowing boat along traverse lines spaced about 400 feet apart over entire lake portion of group and taking readings at stations approximately 100 feet apart on the traverse lines. The traverse lines were determined, prior to the actual surveying, from topographic features on a 1" = 400' aerial photograph. Pickets were set up at the ends and at intermediate points, where possible, to mark out proposed traverses.

In order to take station readings a three man party was necessary, one man sighting and rowing boat along the traverse line, one to handle probe

and cable, and one to record instrument readings and check station points by taking compass bearings. The cable and probe at all times along a traverse were kept at or close to the lake bottom to give a continuous reading, as a check against interesting radioactivity occurring intermediate between stations.

Sounding readings of depth of water to lake bottom were made from length of cable extended below surface of water. Cable was scaled and marked prior to the actual surveying. About 785 radioactivity readings and about 230 soundings were taken. These were plotted on a property map at scale 1" = 400 feet. Readings were contoured, with contour interval being two geiger counts per minute, as shown on accompanying map.

3) Drill Hole Geiger - Counter Survey

Three x-ray diamond drill holes were surveyed using the geiger counter and attachments mentioned above. Readings in the drill holes were taken every five feet down each hole measuring from the top of the casing. The probe at each five foot distance was left in these locations for at least two minutes to allow for adjustments, steadying of instrument, and for possible duplication or reading, if necessary. Readings obtained were recorded on diamond drill hole log sheets, as shown on accompanying sheets.

INTERPRETATION

From the combined detail scintillometer and geiger counter surveys, of those sections of the group covered, at least five radioactive zones or anomalies may be outlined. Of these the anomaly along the south shore of Agnew Lake in claim 71461 and 62 appears to be the most extensive and to have

the greatest radioactive intensities. Here surface geiger counter readings up to 70 counts per minute (C.P.M), drill hole geiger counter readings up to 1050 C.P.M. and scintillometer readings up to 900 C.P.S. were registered at spot locations.

Although an attempt was made to correlate data of each instrument and surveys, all that was possible at this time was to note that each indicated radioactive anomalous conditions where overlaps of surveys exist.

The anomaly in claim 72566 would appear to have the greatest width of an individual radioactive zone. Its length is unknown since extensions in either direction, east or west, along strike pass below overburden of undetermined depth with a subsequent blanketing of radioactivity radiations. This zone would appear to be the most interesting from a possible economic viewpoint. Each of the five anomalies are known to be underlain by quartzite, but detail scintillometer results show that the quartzite is not equally radioactive throughout. Instead the better radioactivity is confined to narrow bands and seams of quartz pebble conglomerate within the quartzite.

Similar conditions are believed to exist within those anomalous zones outlined by geiger counter survey of the lake bottom. The weaker radioactive anomalous zones may indicate underlying quartzite rock types, or a thinner mantle of lacustrine deposits. It is the lack of evidence concerning the depth of the lacustrine deposits within the group that prevents at this time a satisfactory interpretation of the geiger counter survey data of the lake bottom of Agnew Lake.

JALAR:BJ

J.A. LaRoque

cc Mr. R.D. Wyckoff.

ATTACHMENTS

1. D.G.C. Diamond Drill Record - Shakespear I Geiger Survey - Hole No. 167-54-1.
2. D.G.C. Lake Bottom Geiger Survey and Soundings - Shakespear I - Scale 1" = 400' - Contour Interval 2 counts per minute - dated June 2, 1954.
3. D.G.C. Scintillometer Survey - Area 1 - Shakespear I - Scale 1" = 40' - dated December 23, 1953.
4. D.G.C. Scintillometer Survey - Area 2 - Shakespear I - Scale 1" = 40' - dated December 23, 1953.
5. D.G.C. Scintillometer Survey - Area 3 - Shakespear I - Scale 1" = 40' - dated December 23, 1953.

PROPERTY Shakespeare I - Geiger Survey

HOLE NUMBER 167-1-11

SHEET NUMBER 13

DIAMOND DRILL RECORD

SECTION FROM TO

LOCATION: LAT.....
 DEP.....
 ELEVATION OF COLLAR.....
 DATUM.....
 DIRECTION AT START: BEARING.....
 DIP.....

STARTED.....
 COMPLETED.....
 ULTIMATE DEPTH.....
 PROPOSED DEPTH.....

DEPTH FEET	FORMATION	SAMPLE NO	WIDTH OF SAMPLE	GOLD \$	SLUDGE GOLD \$
5	80 counts per minute				
10	150 "				
15	120 "				
20	120 "				
25	90 "				
27	100 "				
28	185 "				
30	125 "				
31	125 "				
32	115 "				
33	60 "				
34	45 "				
35	50 "				
40	60 "				
45	45 "				
50	65 "				
55	90 "				
60	65 "				
65	75 "				
70	55 "				
75	75 "				

NOTE: Drill Hole Geiger No. 40, type EA 191 was used.
 Readings were taken after probe was in position
 for at least two minutes.
 The footages given are measured from the top of
 the casing.

PROPERTY Shakespeare I. Geiger Survey

HOLE NUMBER 167

SHEET NUMBER 4

SECTION FROM TO

DIAMOND DRILL RECORD

LOCATION: LAT.....

DEP.....

ELEVATION OF COLLAR.....

DATUM.....

DIRECTION AT START: BEARING.....

DIP.....

STARTED.....

COMPLETED.....

ULTIMATE DEPTH.....

PROPOSED DEPTH.....

DEPTH FEET	FORMATION	SAMPLE NO.	WIDTH OF SAMPLE	GOLD \$	SLUDGE GOLD \$
80	95 counts per minute				
85	110 "				
90	120 "				
91	125 "				
92	150 "				
93	550 "				
94	150 "				
95	145 "				
100	90 "				
105	90 "				
107.5	135 "				
110	100 "				
115	100 "				
120	80 "				
125	100 "				
130	95 "				
135	115 "				
140	105 "				
145	105 "				
147 1/2	120 "				



411055W0084 0027 SHAKESPEARE

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DOMINION GULF COMPANY

Interpretation of Ground Magnetometer Survey Data

SHAKESPEARE I

Shakespeare Township

North Channel Area

Ontario

J. H. Ratcliffe

Oct. 8, 1954

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41105SW0084 0027 SHAKESPEARE

030C

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INTRODUCTION

Twenty-eight claims, located in Lots 4,5 and 6, Conc.IV, V and VI, Shakespeare Township, Province of Ontario, were staked for the Dominion Gulf Company during the month of October, 1953. Interest in the area was generated by the discovery of radioactive minerals occurring in quartzite horizons, in the Blind River area. Similar horizons were traced eastward toward Espanola, and some interesting radioactive occurrences were subsequently located in the Agnew Lake sector. Reconnaissance geological mapping, aided by a scintillometer or a geiger counter indicated the presence of narrow radioactive horizons occurring in the quartzites along the south shore of Agnew Lake, near Polden Bay. The available ground was immediately staked, and surface investigations begun.

Geological mapping, stripping, trenching, and detail scintillometer surveys succeeding in locating several radioactive showings, in those areas where overburden was very thin. The radiometric method of surveying cannot be successfully used, however, when overburden depths exceeds 5 feet or water depths in excess of 2 feet are encountered. Since more than half of the claim group lay under Agnew Lake, and over half of the remaining land portion was covered with deep overburden, it was found necessary to employ some other method to trace either the radioactive bands or the geologic horizons. The magnetic method was proposed as a method of differentiating between the various rock types, thus permitting an interpretation of structure. It was recognized before the survey began, that due to the similarity in chemical composition, of the known rock types, magnetic susceptibility differences would be very slight. The survey was undertaken on an experimental basis as an attempt to check the applicability of the method to the particular problem involved in the area. Additional impetus for the choice of the magnetic method was provided by a government aeromagnetic survey which indicated the presence of a magnetic anomaly in the southwestern portion of the claim group.

An Askania Schmidt-type magnetic balance, having a sensitivity of about 24 gammas per scale division, was used in the survey. Basic coverage consisted of stations 50 feet apart, on picket lines 400 feet apart. In certain anomalous areas, additional picket lines and stations were added. In all, a total of 3,549 stations were observed on 36.4 miles of picket lines.

The basic data were observed and reduced by a Dominion Gulf Company magnetometer crew, under the direction of R. MacDonald. The survey was carried out during the months of March and April, 1954 in order to permit complete coverage of the lake area, while the ice was available. On completion of the survey the field data were 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 AND RECOMMENDATIONS

The ground magnetometer survey of this claim group outlined several magnetic anomalies which have been attributed to steeply dipping intrusive bodies of quartz diorite or diabase. Thin, flat-lying bodies of the same material, however, did not produce magnetic anomalies. Since the intrusives are relatively young genetically they cannot be used to map the older geology and thus determine the structural controls operative in the area.

It is therefore believed that future exploration on this property must consist of test pitting or diamond drilling. No geophysical methods are available to further assist the surface exploration of property.

INTERPRETATION

A cursory examination of the magnetic data indicates that the claim group may be divided into 5 magnetically distinct units. The first of these, characterized by rather uniform magnetization, occupies that portion of the claim group which is flooded by Lake Agnew. The other areas are located about this central flat, in the four geographical corners of the claim group. Of these, the two anomalous areas located in the southwestern and southeastern corners of the group are by far the most prominent from a magnetic viewpoint. For the sake of convenience, the central zone of uniform magnetics, occupying the lake bed will be termed Area 1. Then the anomalous area in the northeastern corner of the group will be called Area 2, that in the southeastern corner Area 3, the southwestern corner Area 4, and the northwestern corner, Area 5.

As previously discussed, Area 1 is characterized by generally uniform magnetic having gentle gradients and broad closures. Base level for the area is about 450 gmmas, while the peak intensity

measured is slightly in excess of 800 gammas. It may be shown that this increase in intensity, although spread over a large area, must be caused by polarization changes, rather than topographical relief of the bedrock. Thus the very extensive zone of high centered in claim S-71464 must be the eastern extension of the anomalous belt occurring in Area 4. The broadness of this anomaly in Area 1, however, suggests a gradational or sloping contact between the source rock and its surroundings.

Area 2 is characterized by 2 cross-cutting trends, one of which is a narrow zone of relatively high magnetic intensity while the other is a zone of low. The high, trending N60°W may be traced for 1600 feet along strike and is probably representative of a basic dyke. The low trends about N45°E, and could perhaps be related to a topographic depression in the bedrock. Although some rock outcrops in Area 2, it is impossible to correlate the visible rock types with the magnetic values. Neither the diabase nor the quartzite found in this area, can be identified by a characteristic magnetic pattern.

Area 3 is unique in the claim group, for the amount of rock outcrop available for study in conjunction with the magnetic data. All the various rock types exposed in the claim group may be found in this area. Only two magnetic anomalies were located, however. These anomalies are found to be associated with either the diabase or the greywacke. The northern anomaly, located in the southern part of claim S-71462, encompasses greywacke and quartzite outcrops. From depth determinations, however, the source of the anomaly appears to be buried by about 30 feet of overburden. Thus the surface exposures are not necessarily responsible for the anomaly. The anomaly trends about N65°E and is limited to about 800 feet in strike extent, its sources having an apparent width of about 100 feet.

The southern anomaly zone consists of a narrow bands of high magnetic intensity trending N55°E for a distance of over 1,600 feet. Along its course, this anomaly traverses such varying rock types as diabase, quartzite, greywacke and granite. In general, however, the anomaly appears to be more closely associated with diabase than any other rock type.

Throughout Area 3, other masses of diabase and greywacke are devoid of magnetic effect. It is therefore suggested that those masses which are associated with magnetic anomalies, have great vertical extent, as compared with the flat-lying or discontinuous character of the non-anomalous masses. Since the greywackes have been

shown to pinch out along strike, it may be assumed that a similar phenomenon occurs at depth. The diabase, however, is a late intrusive rock and as such must have come from great depth along fissures or plugs. For these reasons, it is believed that the magnetic anomalies in Area 3 are considered associated with feeder plugs or fissures for the diabase, and are therefore, representative of vertical diabase dykes or plugs. Those areas of diabase which do not cause magnetic anomalies are probably thin, flat-lying sills.

The strongest and most extensive magnetic anomalies are found in Area 4. The magnetic intensities range from -220 gammas to 4,700 gammas, a range $2\frac{1}{2}$ times greater than found elsewhere in the claim group. Due to the symmetrical shape and strength of the anomalies it is believed that the source rocks have generally vertical contacts, and extend to appreciable depth. Since the anomalies are limited in strike extent, and have an elliptical shape, the source rocks are considered to be small plugs. In the field, they have been mapped as diabase, but under the microscope no sign of an ophitic texture was observed. Perhaps the rocks should be more properly classified as quartz diorite. Since they are similar to the Nipissing diabases in the area, it is believed that these plugs may represent feeders for the Nipissing diabase sills in the area. While the strong anomalies in this area stop at the shoreline of Lake Agnew, it would appear that the cause of the anomalies extends into Lake Agnew and is responsible for the broad anomaly occurring in Area 1.

The broad anomalies separated by a rather distinctive low, characterize area 5. The intensity and form of the anomalies are similar to those of the anomaly in Area 1. It is therefore suggested that these anomalies are caused by similar features. The anomalies appear to be rather deep seated, but this appearance could easily be due to sloping or gradational contact. Thus the anomalies may be caused by domelike sheets of quartz diorite, having a large, but finite, depth extent. The low separating the two anomalies is too sharp and intense to be attributed to topography. Thus a change in polarization is required.

It may be seen therefore that the magnetic anomalies throughout the claim group have been attributed to an intrusive rock of intermediate composition which has been variously described as quartz diorite or diabase. Since the rocks are probably closely related chemically and genetically it is unnecessary to differentiate between them any further. It is, however, necessary to explain why

the rock type should produce a magnetic anomaly in one instance, and not in another. When the distance from the magnetometer to the bottom surface of the causative body is large compared with the distance from the instrument to the top surface of the body, and the body has a magnetic susceptibility different from its surroundings, a magnetic anomaly will be produced. If the distances are of the same order of magnitude, or the magnetic susceptibilities are the same, no anomaly will be observed. If, however, it dips steeply and extends to great depth a strong anomaly will result. It is believed that this is the reason for the change in magnetic character exhibited by the quartz diorite or diabase. None of the other rock types outcropping in the claim group exhibit a measurable magnetic effect.

Since the quartz diorite is one of the later intrusives in the area, it is not a reliable horizon marker for determination of structural deformations. Thus it has not been possible to trace the geological horizons, and thus determine the structural conditions present in the area. In this respect, the survey was proved a failure.

J. H. Ratcliffe.

REFERENCES

(1) Dominion Gulf Company Report, "Complete Essential Data, Shakespeare I, North Channel Area, Ontario," compiled by J.A. LaRocque, Aug. 23, 1954

ATTACHMENTS

(1) Dominion Gulf Company Map, "Ground Magnetometer Survey, Shakespeare I, Province of Ontario," Scale 1"-200', contour interval = 100 gammas, dated May 4, 1954.

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DOMINION GULF COMPANY

Interpretation of Ground Magnetometer Survey Data

SHAKESPEARE I

Shakespeare Township

North Channel Area

Ontario

J. H. RATCLIFFE

OCT. 8, 1954

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It is therefore believed that future exploration on this property must consist of test pitting or diamond drilling. No geophysical methods are available to further assist the surface exploration of the property.

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A cursory examination of the magnetic data indicates that the claim group may be divided into 5 magnetically distinct units. The first of these, characterized by rather uniform magnetization, occupies that portion of the claim group which is flooded by Lake Agnew. The other areas are located about this central flat, in the four geographical corners of the claim group. Of these, the two anomalous areas located in the southwestern and southeastern corners of the group are by far the most prominent from a magnetic viewpoint. For the sake of convenience, the central zone of uniform magnetism, occupying the lake bed will be termed Area 1. Then the anomalous area in the northeastern corner of the group will be called Area 2, that in the southeastern corner Area 3, the southwestern corner Area 4, and the northwestern corner, Area 5.

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between them any further. It is, however, necessary to explain why the rock type should produce a magnetic anomaly in one instance, and not, in another. When the distance from the magnetometer to the bottom surface of the causative body is large compared with the distance from the instrument to the top surface of the body, and the body has a magnetic susceptibility different from its surroundings, a magnetic anomaly will be produced. If the distances are of the same order of magnitude, or the magnetic susceptibilities are the same, no anomaly will be observed. Thus if the intermediate intrusive mass is flat lying and relatively thin as compared with its depth, no anomaly will be observed. If, however, it dips steeply and extends to great depth a strong anomaly will result. It is believed that this is the reason for the change in magnetic character exhibited by the quartz diorite or diabase. None of the other rock types outcropping in the claim group exhibit a measurable magnetic effect.

Since the quartz diorite is one of the later intrusives in the area, it is not a reliable horizon marker for determination of structural deformations. Thus it has not been possible to trace the geological horizons, and thus determine the structural conditions present in the area. In this respect, the survey has proved a failure.

JHR/BJ

J. H. Ratcliffe.

REFERENCES

(1) Dominion Gulf Company Report, "Complete Essential Data, Shakespeare I, North Channel Area, Ontario," compiled by J. A. LaRoque, Aug. 23, 1954.

ATTACHMENTS

(1) Dominion Gulf Company Map, "Ground Magnetometer Survey, Shakespeare I, Province of Ontario," Scale 1" = 200', contour interval = 100 gammas, dated May 4, 1954.

1954 OCT 14

Mr. H. C. Rickaby,
Deputy Minister of Mines,
Ontario Department of Mines,
Parliament Buildings,
Toronto, Ontario.

Dear Mr. Rickaby:

Enclosed with this letter I am forwarding to you reports and maps in duplicate covering a geophysical survey, a geological survey, and a radioactivity survey performed on 28 claims numbered S-71460 to S-71469 inclusive, S-71875 to S-71880 inclusive, S-72437 to S-72445 inclusive, and S-72566 to S-72568 inclusive located in Shakespeare Township.

The geological and radioactivity work on these claims covered in the attached reports and maps prepared by J. A. LaRocque, a member of our geological staff. The geophysical work consisted of a ground magnetometer survey which is covered in a report by J. H. Ratcliffe, a member of our geophysical staff. A contoured and interpreted map of the ground magnetic field data is also attached in support of the report.

The linecutting, chaining and picketting required for the above surveys required 87.5 man-days to complete. We are applying 72 man-days of this time to the geological and radioactivity surveys and the balance of 15.5 man-days to the geophysical survey.

A breakdown of the man-days required for the work reported herein with their assessment credit values is shown in the following schedule:

<u>Geological and Radioactivity Surveys</u>	<u>Actual Man-days</u>	<u>Assessment Factor</u>	<u>Assessment Credit in Man-days</u>
Linecutting, chaining & Picketting (F. Broathen, Chief)	72	4	288
Field Work (G. McAulay, Geologist)	180	4	720
Drafting and Reports (J. A. LaRocque, Geologist)	28	4	112
Subtotal	280		1,120

<u>Ground Magnetometer Survey</u>	<u>Actual Man-days</u>	<u>Assessment Factor</u>	<u>Assessment Credit in Man-days</u>
Linecutting, chaining & Picketting (T. Broathen, Chief)	15.5	4	62.
Instrument Operators & Assistants (R. McDonald, Chief)	53.	4	212.
Drafting (H. Ricketts)	8.	4	32.
Interpretation and Report (J. H. Ratcliffe, Geophysicist) 3.5	3.5	4	14
Subtotal	80.		320.
Total	<u>360.</u>		<u>1,440.</u>

The following schedule shows the distribution of the above work credit on a per claim basis:

<u>Claim Number</u>	<u>Geological</u>	<u>Geophysical</u>	<u>Assessment Credit in Man-days</u>
S-71460	40	12	52
61	40	12	52
62	40	12	52
63	40	12	52
64	40	12	52
65	40	12	52
66	40	12	52
67	40	12	52
68	40	12	52
69	40	12	52
S-71875	40	12	52
76	40	12	52
77	40	11	51
78	40	11	51
79	40	11	51
80	40	11	51
S-72437	40	11	51
38	40	11	51
39	40	11	51
40	40	11	51
41	40	11	51
42	40	11	51
43	40	11	51
44	40	11	51
45	40	11	51
S-72566	40	11	51
67	40	11	51
68	40	11	51
Total	<u>1,120</u>	<u>320</u>	<u>1,440</u>

I am also enclosing a copy of our Schedule "A" which accompanies each work report filed with the Mining Recorder. This schedule shows the complete listing of the men employed on the separate surveys and the dates during which the work was performed.

Very truly yours,
ORIGINAL SIGNED BY
E. W. Westrick
E. W. Westrick.

JHS:jm

Attachments follow in this order:

1. Schedule "A" showing employees engaged in work reported.
2. Geological report written by J. A. LaRocque.
3. Geological map, scale 1" = 400'.
4. Radioactivity survey report written by J. A. LaRocque.
5. Map of lake bottom geiger survey and soundings, scale 1" = 400'.
6. Scintillometer survey map, scale 1" = 40'.
7. Ground Magnetometer report written by J. H. Ratcliffe.
8. Contoured and interpreted map of ground magnetic data, scale 1" = 400'.

Dunlop Twp. (M.771)

THE TOWNSHIP
OF 1980

SHAKESPEARE

DISTRICT OF
SUDBURY

SUDBURY
MINING DIVISION


SCALE: 1-INCH = 40 CHAINS

LEGEND

PATENTED LAND	● or ⊕
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	—
MARSH OR MUSKEG	—
MINES	X
CANCELLED	C.
PATENTED S.R.O.	⊙

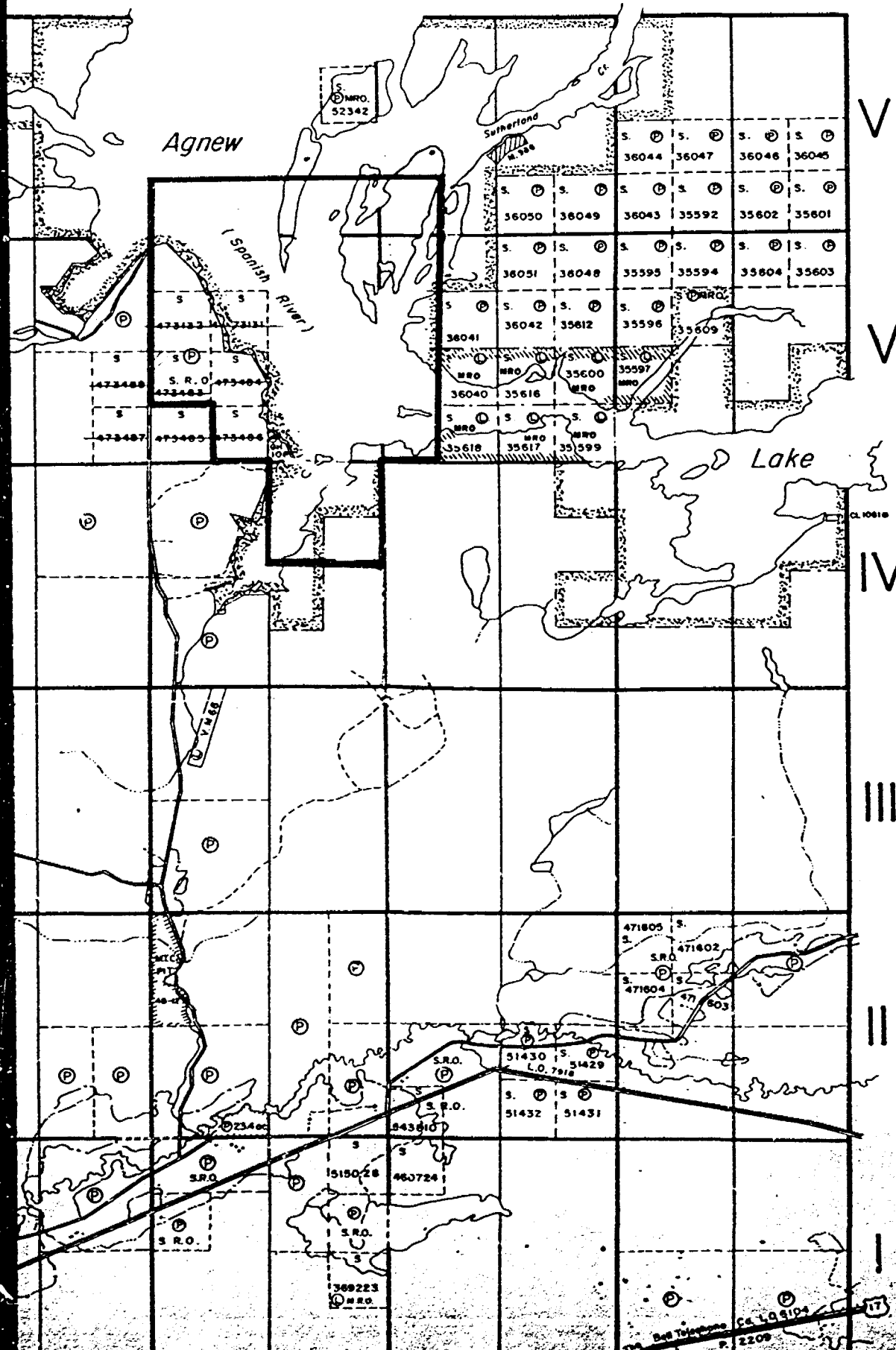
NOTES

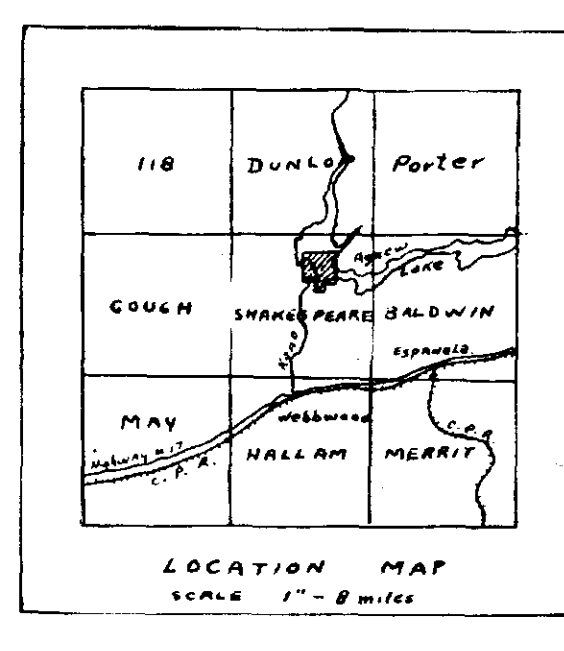
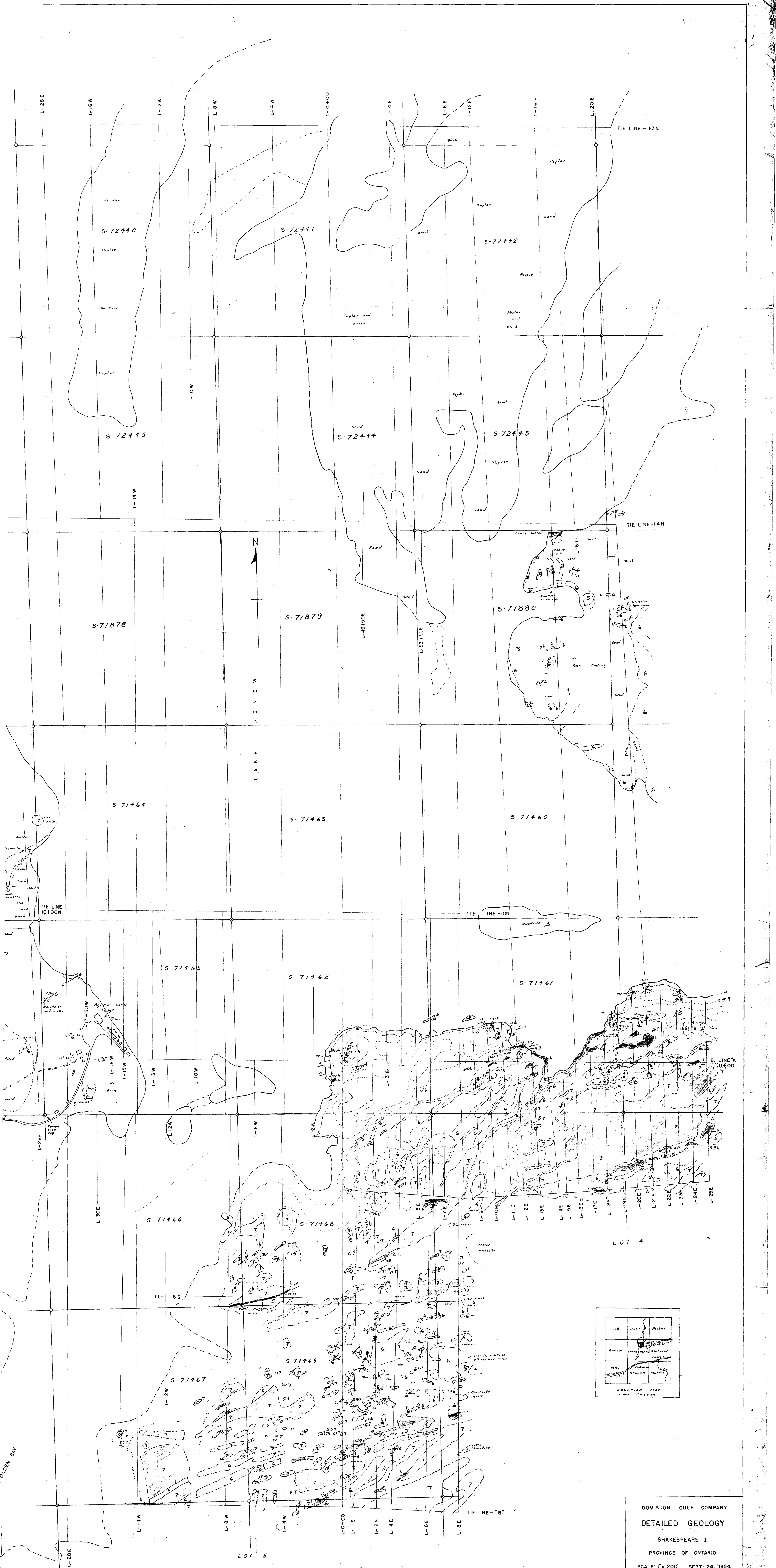
400' SURFACE RIGHTS RESERVATION ALONG THE SHORES OF ALL LAKES AND RIVERS.

AREA SHOWN THUS:  W.P.L.A. No. 69.
MINING CLAIMS WITHIN THIS AREA ARE FOR MINING RIGHTS ONLY.

AREA SHOWN THUS:  M.R.O.

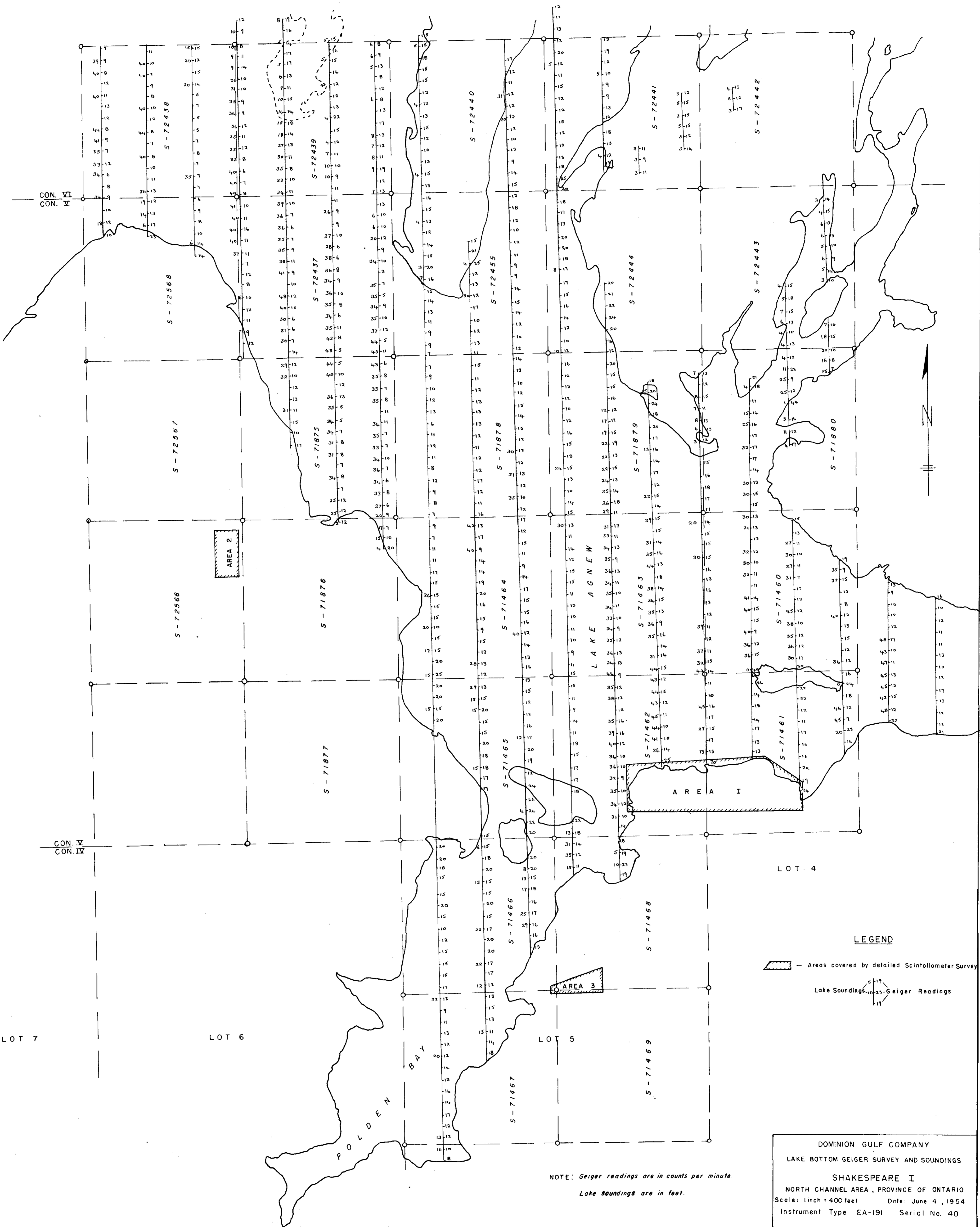
DATE OF ISSUE
29/80
FEB 19 1980





DOMINION GULF COMPANY
 DETAILED GEOLOGY
 SHAKESPEARE I
 PROVINCE OF ONTARIO
 SCALE: 1" = 200' SEPT. 24, 1954
 TO ACCOMPANY REPORT BY J. LAROCQUE
 DATED SEPT. 30, 1954

SHAKESPEARE-0027, #1



LEGEND

- Areas covered by detailed Scintillometer Survey
- Lake Soundings $\begin{matrix} 5-19 \\ 10-25 \\ 1-11 \end{matrix}$ - Geiger Readings

NOTE: Geiger readings are in counts per minute.
Lake soundings are in feet.

DOMINION GULF COMPANY
LAKE BOTTOM GEIGER SURVEY AND SOUNDINGS
SHAKESPEARE I
NORTH CHANNEL AREA, PROVINCE OF ONTARIO
Scale: 1 inch = 400 feet Date: June 4, 1954
Instrument Type EA-191 Serial No. 40





BRITISH COLUMBIA

BRITISH COLUMBIA

BRITISH COLUMBIA

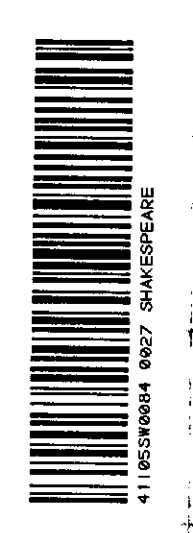
Dominion Gulf Company
SCANTILLONETER SURVEY
SHEARSPEARE I
SHAKESPEARE TOWNSHIP
NORTH CHANNEL AREA - ONTARIO
Scale 1"=40
Dec. 23, 1953
Report by G.H. Bennett
to accompany Interpretation
dated Dec. 23, 1953

SHAKESPEARE - 0027, #3

S-71461

S-71462

S-71468



LINE 11000 E

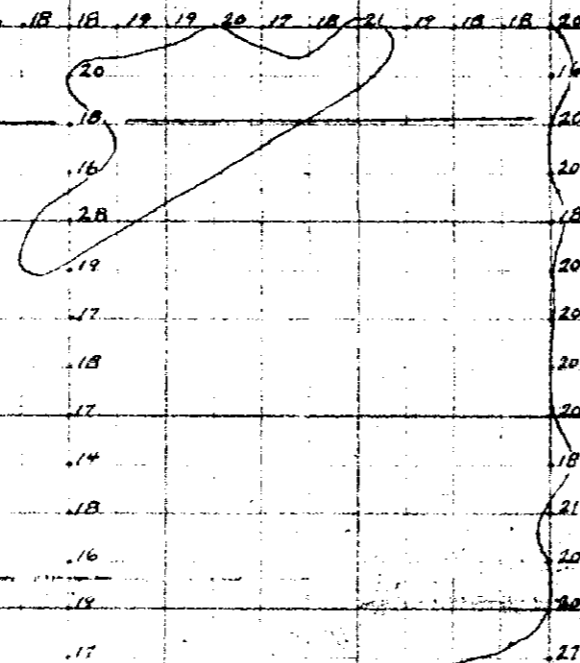
LINE 12000 E

S-72567

S-71875

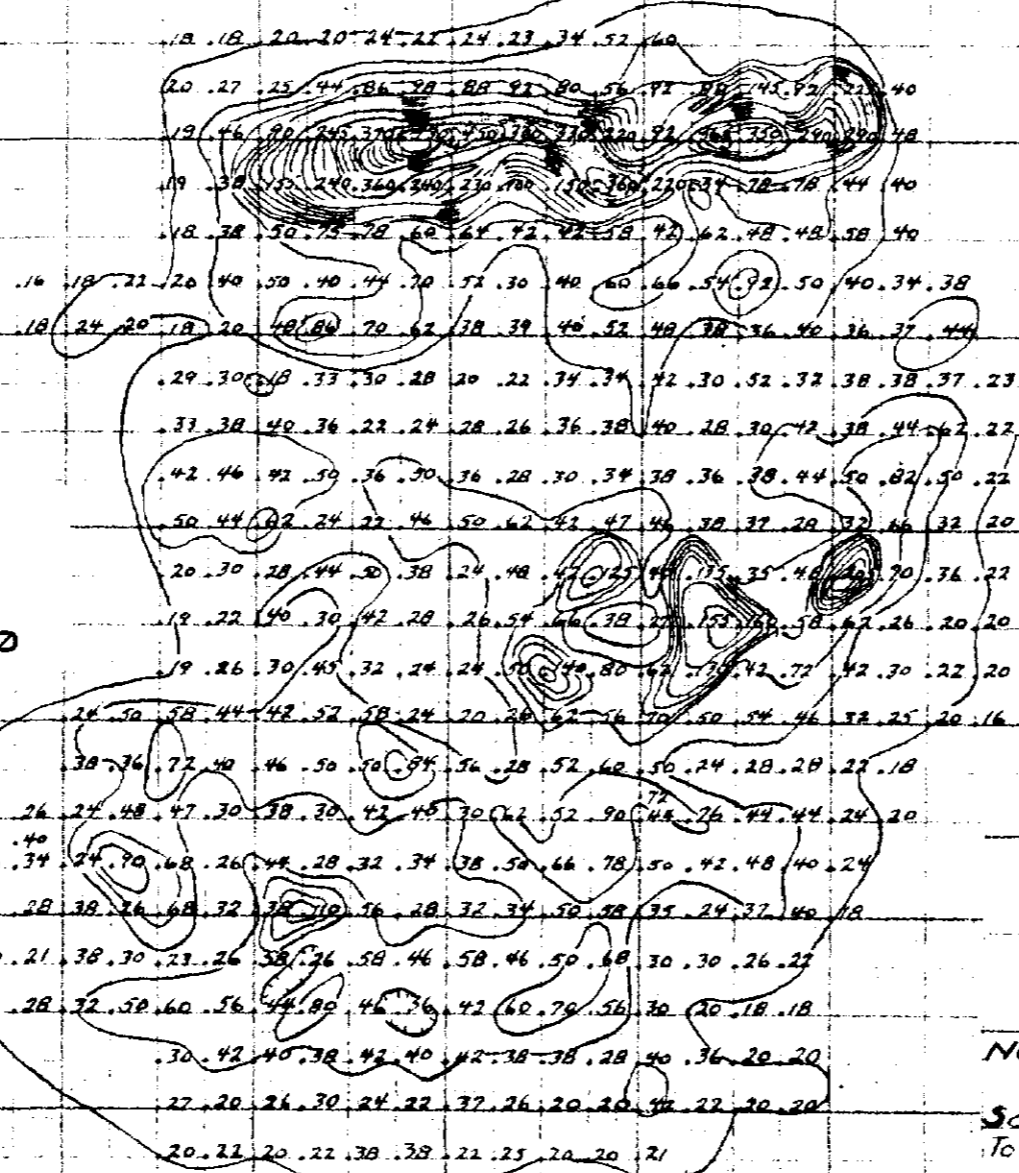
NORTH BASE LINE 20 18 16 16 13 14 16 18 18 18 19 19 20 17 18 21 17 18 18 20

NORTH BASE LINE



S-72566

S-71876



411055W0084 0027 SHAKESPEARE

Dominion Gulf Company
SCINTILLOMETER SURVEY
AREA 2
SHAKESPEARE I
SHAKESPEARE TOWNSHIP
NORTH CHANNEL AREA - ONTARIO

Scale: 1" = 40'

Dec. 23, 1953
To accompany Interpretation Report by J.H. Ratchiff
Dated Dec. 23, 1953.

SHAKESPEARE - 0027, #4

N

7.00W

6.00W

5.00W

4.00W

3.00W

S-71466

S-71468

BASE LINE 16.00S

BASE LINE 16.00S

S-71467

S-71469



411055W0084 0027 SHAKESPEARE

240

SHAKESPEARE - 0027, #5

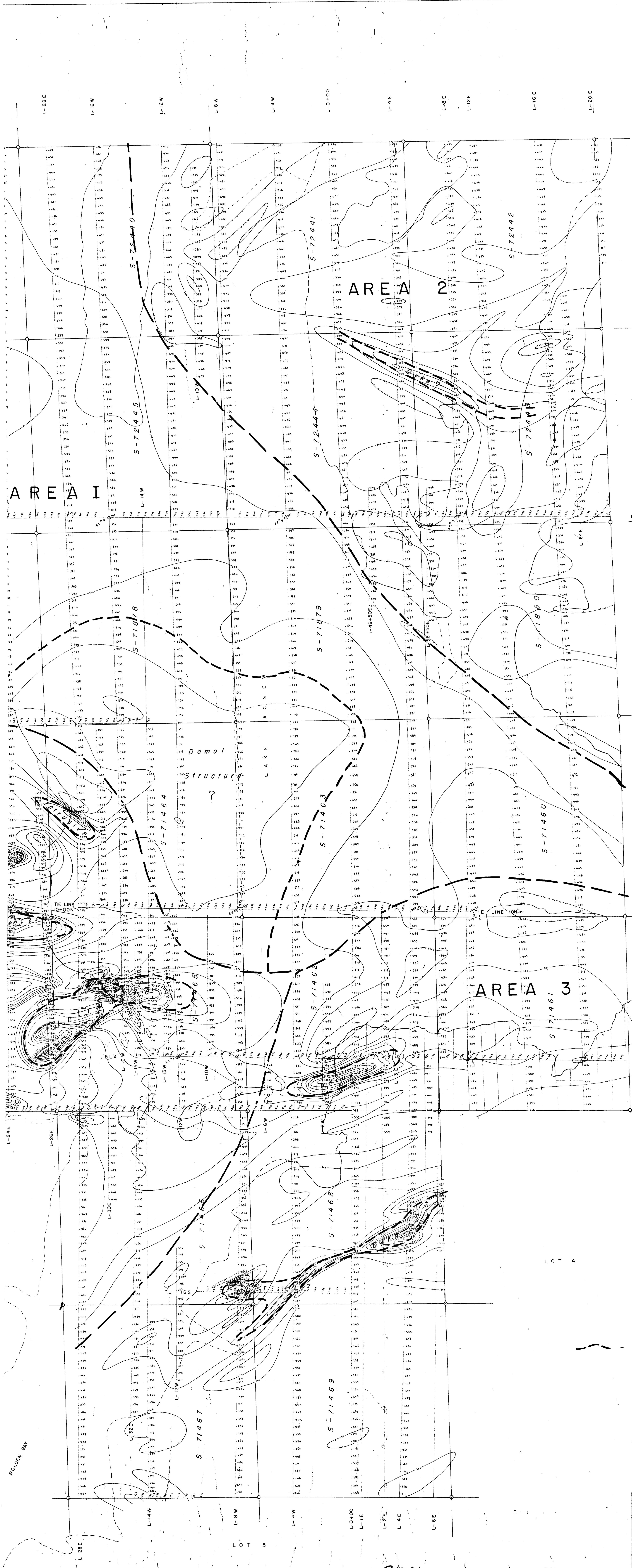
Dominion Gulf Company
SCINTILLOMETER SURVEY
AREA 3
SHAKESPEARE I
SHAKESPEARE TOWNSHIP
NORTH CHANNEL AREA - ONTARIO

Scale: 1" = 40'

Dec. 23, 1953

To accompany Interpretation Report by J.H. Rotci

Dated Dec. 23, 1953



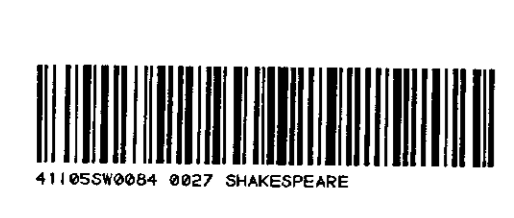
DOMINION GULF COMPANY
 GROUND MAGNETOMETER SURVEY
 SHAKESPEARE I
 PROVINCE OF ONTARIO
 SCALE 1" = 200' MAY 4, 1954
 CONTOUR INTERVAL: 100 GAMMAS
 To accompany report by J.H.R., dated Oct. 8, 1954

SHAKESPEARE - 0027 #6



LEGEND

7	Granite after quartzite
6	Diabase
6	Diabase breccia
5	Quartzite
4	Small qtz pebble bands in quartzite
3	Quartz pebble conglomerate
2	Greywacke and impure quartzite beds in quartzite
1	Greywacke and impure quartzite
(Dashed line)	Outcrop boundary
(Line with dots)	Strike and dip of bedding
(Line with dashes)	Gneissosity trend
(Trench symbol)	Trench
(X symbol)	X-Ray Diamond Drill Hole Location
(Star symbol)	Claim corner
(T-dash symbol)	Metre Lines



SHAKESPEARE

