



32D12SW0093 2.4160 HARKER

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MINING LANDS SECTION

REPORT ON A GEOLOGICAL SURVEY

OF

CARLSON CLAIMS

IN

HARKER TOWNSHIP

LARDER LAKE MINING DIVISION

DISTRICT OF COCHRANE

ONTARIO

by

H. D. CARLSON

Ph. D., P. ENG.

CONSULTING GEOLOGIST

INTRODUCTION

This report describes a geological survey conducted over the Carlson group of 21 claims in the northwestern part of Harker Township, Larder Lake Mining Division, District of Cochrane, Ontario, and is based on the following sources of information:

- (1) "Geology of Harker Township" - By J. Satterly - Sixtieth Annual Report of the Ontario Department of Mines, being Vol. LX, Part VII, 1951. Accompanying this report is coloured Map No. 1951-4, Township of Harker, at a scale of one inch equals one thousand feet.
- (2) Assessment work records on file in the office of the Resident Geologist, Ontario Ministry of Natural Resources, 4 Government Road, E., Kirkland Lake.
- (3) Prospecting of the property by the writer during the months of June, July and August, 1980.
- (4) Systematic traversing of the property by pace and compass methods during the periods August 29th. - September 8th., 1980, and September 17th. - 22nd. 1980, and on September 3rd., 1981.
- (5) Aeromagnetic Survey Maps 45G (Lightning River Sheet) and 46G (Magusi River Sheet), Geological Survey of Canada, 1951. Scale: 1 inch equals 1 mile.

PROPERTY, LOCATION AND ACCESS

The property consists of twenty-one (21) contiguous, unpatented mining claims in the northwestern part of Harker Township, and are described as follows:

Claim numbers L. 529321 to L. 529341 inclusive. No. 4 post for claim L. 529341, the northwest corner of the claim group, lies some 1200 feet almost due east of the bridge over the Ghost River on Highway 101. No. 1 post for claim L. 529340, the northeast corner of the group, lies at the junction of two Ministry of Natural Resources access roads some 1150 feet south of Highway 101, to which these access roads are connected (see the map accompanying this report). The remaining claims are staggered to the east in descending rows, with No. 2 post for claim L. 529322, the southeast corner of the group, lying some 4400 feet east of the north-south Ministry road, and about 9500 feet due south of Highway 101. A wide, clear, straight, north-south, winter timber haulage track extends from below No. 3 post of claim L. 529321 to well beyond No. 4 post of claim L. 529333, almost, but not quite, as far north as Highway 101; this track is easily traversed by swamp buggy, but is not suitable for wheeled vehicles. The Ministry access roads can be travelled by automobile in suitable weather conditions.

TOPOGRAPHY AND PLEISTOCENE GEOLOGY

The surface of the claim group is generally rather flat and featureless, with local relief probably nowhere exceeding 30 or 40 feet, except where creeks and streams tributary to the Ghost River incise gulleys into the glacial overburden. Along the bottoms and lower slopes of these gulleys the overburden appears to consist largely of lacustrine varved clays, the layered nature of which is much obscured by slumping. Claims L. 529326, L. 529329, L. 529330 L. 529333 and the north part of L. 529327 appear to be covered by outwash sand and gravel deposits. Elsewhere on the claim group the overburden appears to consist of ground morainal boulder clays, with some sizeable boulders in evidence, particularly in the vicinity of the outcrop areas on claims L. 529321 and L. 529323.

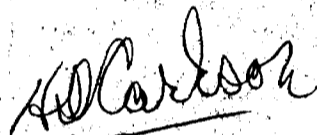
Vegetation on the sand and gravel outwash deposits consists of clean, open, well-spaced jackpine and minor spruce, with little underbrush. West of the north-south Ministry access road the terrain has been heavily timbered of evergreen trees at some time in the past 25 years, and the vegetation now consists of a dense, second-growth of poplar, willows, tag-alders, and various bushes, most in excess of 8 feet high. Traversing in these areas is tedious and time-consuming. Between the Ministry north-south access road and the north-south winter haulage track, the terrain has been heavily timbered and extensively scarified, probably within the last 15 years, and there is now much open ground on which there are variable growths of grasses, weeds and low bushes. In the southeast corner of the property the terrain is mainly somewhat swampy with a heavy growth of spruce and cedars with much tag-alder underbrush; some birch is present on higher ground around outcrop areas.

HISTORY OF THE EXPLORATION

Assessment work records do not indicate any record of significant exploration work performed on the subject property since the publication of Satterly's Report in 1951. This report (P. 28) indicates that Dale Gold Mines Ltd. carried out a geophysical survey in 1946 over parts or all of the most northwesterly of the subject claims, and that stripping, trenching and test-pitting were done in the extreme southeast corner of Claim L. 529338. The writer did not locate these workings in the course of his survey, probably because of the extremely dense underbrush coverings presently prevailing there. According to Satterly's 1951 Report (P. 40) St. Anthony Mines, Limited carried out a geophysical survey in 1946 over ground that may now be a part of the southeastern section of the subject property. No traces now remain of these survey grids and no significant results appear to have been obtained as a consequence of the work.

GEOLOGY

Two new outcrop areas were found on the subject property during the course of the present survey. One is located in the southwest corner of Claim L. 529323, the other on the winter haulage track on the boundary between claim nos. L. 529323 and L. 529325. In these exposures the rocks are light sandy-white to light pink, coarse-grained, almost pegmatitic syenites. Another new outcrop area, not on the subject property, was seen several hundred feet west-south-west of No. 3 post on Claim L. 529321. The rock exposures in the north central part of the same claim are believed to have been examined and mapped by Satterly and his assistants. The interpretation of the geology of this part of Harker Township as made by Satterly seems reasonable to this writer, and accordingly the assumed geological contacts shown on Map No. 1954-1 have been incorporated into the map accompanying this report. It is the writer's opinion that the valley following the course of the Ghost River, and the gully marking the course of the tributary creek which trends southeast-northwest across the claim group, probably represent the locations of high-angle, tensional, normal fault zones in the underlying bedrock formations.



H. D. Carlson,

Ph. D., P. Eng.

Consulting Geologist.



Ministr

GEOPHYSICAL - TECHNICAL



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TO BE ATTACHED AS AN APPENDIX TO TECHNICAL REPORT
FACTS SHOWN HERE NEED NOT BE REPEATED IN REPORT
TECHNICAL REPORT MUST CONTAIN INTERPRETATION, CONCLUSIONS ETC.

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MINING LANDS SECTION

Type of Survey(s) Geological
Township or Area Harker
Claim Holder(s) H.D. Carlson

Survey Company self
Author of Report H.D. Carlson
Address of Author 110 Martin St., Porcupine, Ont.
Covering Dates of Survey Aug. 29/80 - Sept. 19/81
Total Miles of Line Cut Nil

MINING CLAIMS TRAVERSED
List numerically

- List of mining claims with prefixes 'h' and numbers 529321 through 529341

SPECIAL PROVISIONS
CREDITS REQUESTED

DAYS per claim

ENTER 40 days (includes line cutting) for first survey.

ENTER 20 days for each additional survey using same grid.

- Geophysical: Electromagnetic, Magnetometer, Radiometric, Other
Geological: 20
Geochemical

AIRBORNE CREDITS (Special provision credits do not apply to airborne surveys)

Magnetometer Electromagnetic Radiometric
(enter days per claim)

DATE: Sept. 20/81 SIGNATURE: H.D. Carlson
Author of Report or Agent

Res. Geol. Qualifications 63.2574

Previous Surveys

Table with columns: File No., Type, Date, Claim Holder. Claim Holder contains 'H.D.'

TOTAL CLAIMS 21

If space insufficient, attach list

OFFICE USE ONLY

GEOPHYSICAL TECHNICAL DATA

GROUND SURVEYS – If more than one survey, specify data for each type of survey

Number of Stations _____ Number of Readings _____

Station interval _____ Line spacing _____

Profile scale _____

Contour interval _____

MAGNETIC

Instrument _____

Accuracy – Scale constant _____

Diurnal correction method _____

Base Station check-in interval (hours) _____

Base Station location and value _____

ELECTROMAGNETIC

Instrument _____

Coil configuration _____

Coil separation _____

Accuracy _____

Method: Fixed transmitter Shoot back In line Parallel line

Frequency _____

(specify V.L.F. station)

Parameters measured _____

GRAVITY

Instrument _____

Scale constant _____

Corrections made _____

Base station value and location _____

Elevation accuracy _____

INDUCED POLARIZATION

RESISTIVITY

Instrument _____

Method Time Domain Frequency Domain

Parameters – On time _____ Frequency _____

– Off time _____ Range _____

– Delay time _____

– Integration time _____

Power _____

Electrode array _____

Electrode spacing _____

Type of electrode _____

LAMPLUGH TWP. M-358

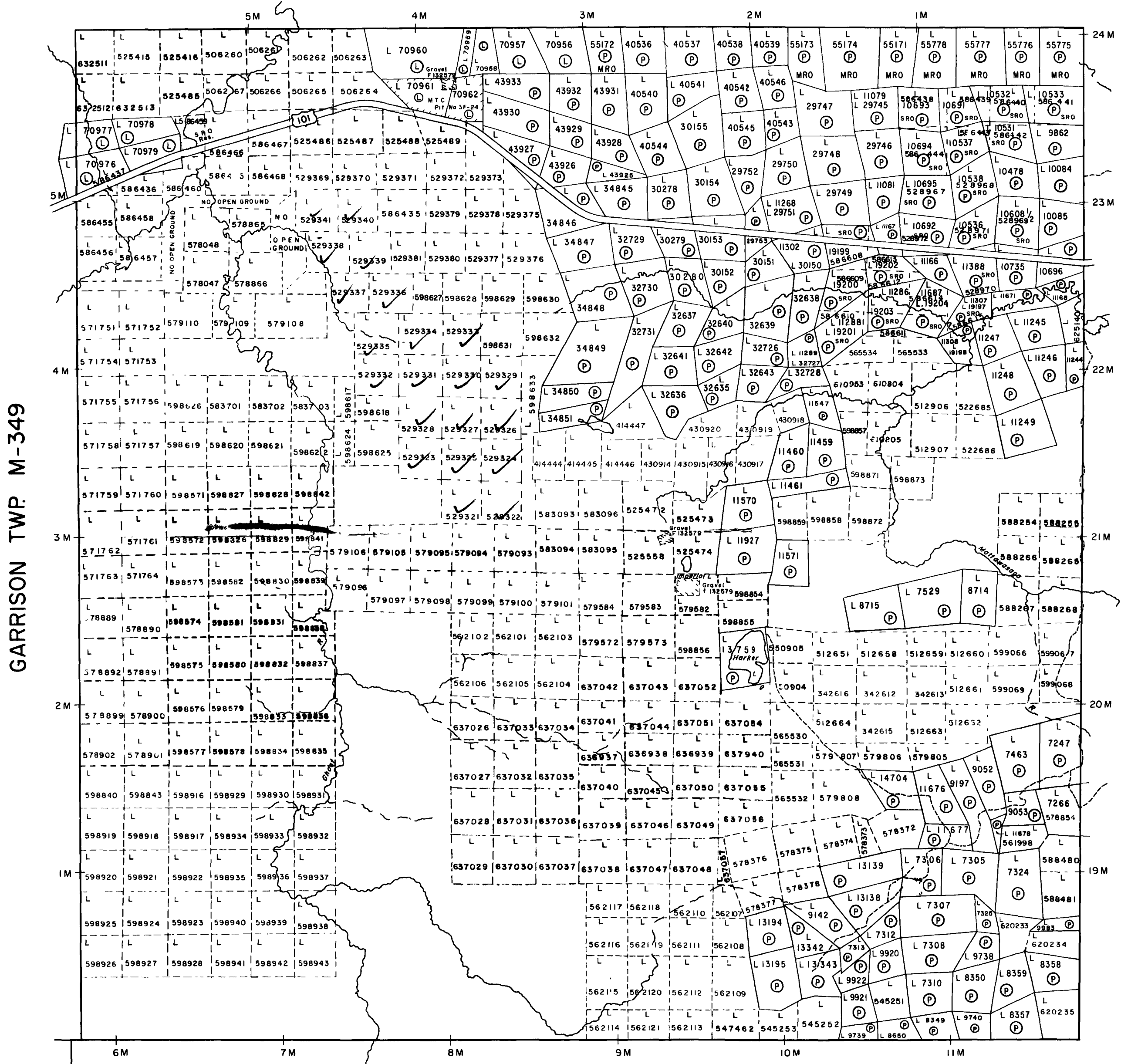
THE TOWNSHIP OF
OF

HARKER

DISTRICT OF
COCHRANE

LARDER LAKE
MINING DIVISION

SCALE: 1-INCH 40 CHAINS



LEGEND

- PATENTED LAND ● or (P)
- CROWN LAND SALE C.S.
- LEASES (L)
- 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
- CANCELLED
- PATENTED S.R.O.

NOTES

400' Surface Rights reservation along the shores of all lakes and rivers.

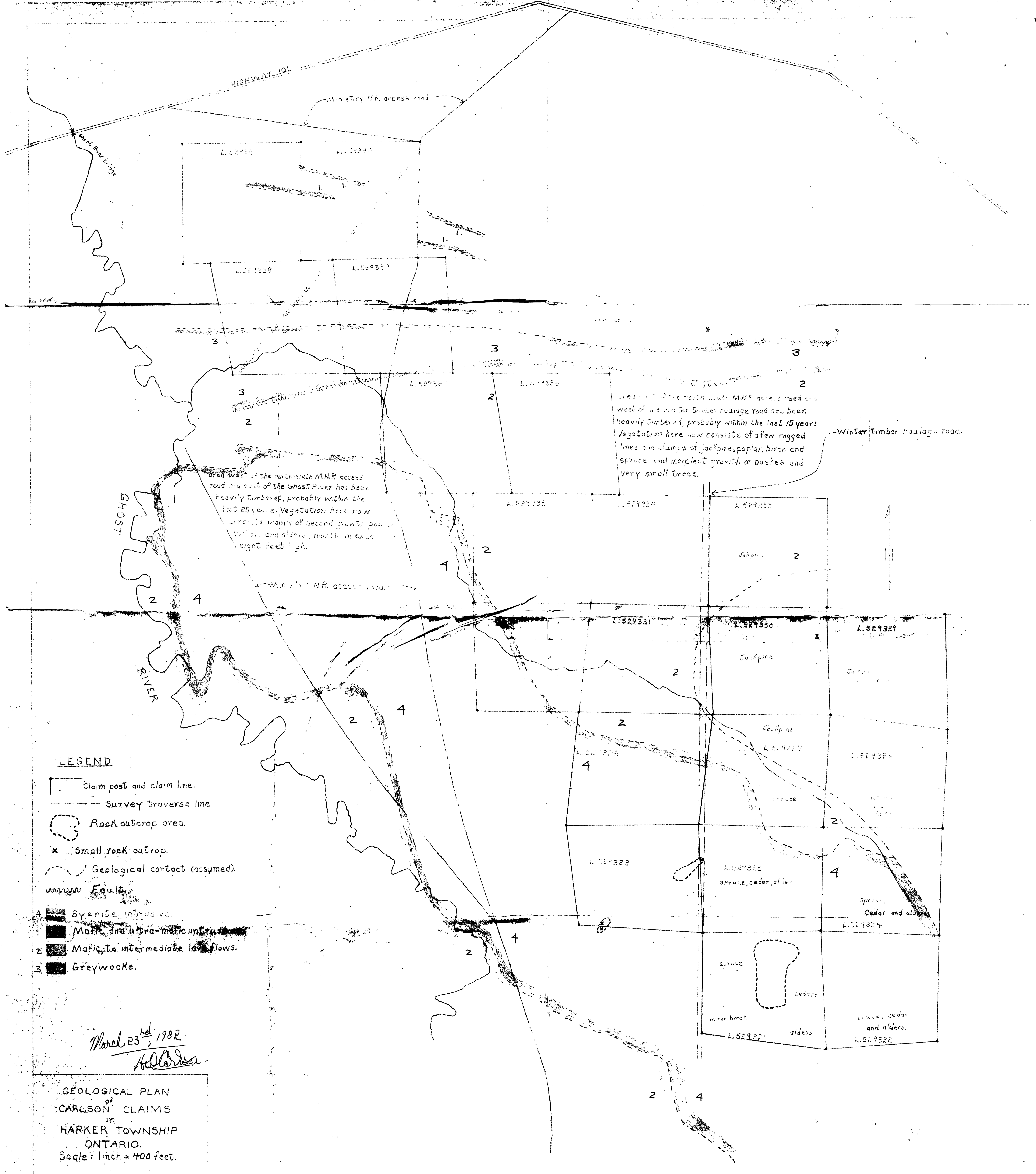
DATE OF ISSUE
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Ministry of Natural Resources
TORONTO

2.4160

PLAN NO. M-353

ONTARIO
MINISTRY OF NATURAL RESOURCES
SURVEYS AND MAPPING BRANCH





HIGHWAY 101

Ministry M.R. access road

Ghost River bridge

GH
OST
R
I
V
E
R

Area west of the north-south M.R. access road on west of the winter timber haulage road has been heavily timbered, probably within the last 15 years. Vegetation here now consists of a few ragged lines and clumps of jackpine, poplar, birch and spruce and incipient growth of bushes and very small trees.

-Winter timber haulage road.

Area west of the north-south M.R. access road and east of the Ghost River has been heavily timbered, probably within the last 25 years. Vegetation here now consists mainly of second growth poplar, willow and alders, mostly in excess of eight feet high.

LEGEND

- Claim post and claim line.
- Survey traverse line.
- Rock outcrop area.
- * Small rock outcrop.
- Geological contact (assumed).
- ~~~~~ Fault.
- 4 Syenite intrusive.
- 1 Mafic and ultra-mafic intrusions.
- 2 Mafic to intermediate lavas flows.
- 3 Greywacke.

March 23rd, 1982
H. L. ...

GEOLOGICAL PLAN
of
CARLSON CLAIMS.
in
HARKER TOWNSHIP
ONTARIO.
Scale: 1 inch = 400 feet.

