



GEOLOGICAL REPORT
HOLLISTON PROPERTY
KEITH TOWNSHIP

SUDBURY MINING DIVISION, ONT.

GENERAL. That part of the Holliston property here considered consists of seven claims numbered S44580 to S44583 inclusive, and S44566 to S44568 inclusive. These claims, owned by C. Corbett and T. Holliston of Groundhog Dam, Ontario, are now under option to Nib Yellowknife Mines Limited of 19 Melinda Street, Toronto, Ontario.

Nib Yellowknife Mines has been exploring the property for some time. Details of the crew and time involved in geological mapping of the property are given at the end of this report.

PREVIOUS DEVELOPMENT. There is no record or evidence of any mining development on this property prior to the commencement of exploration by Nib Yellowknife Mines.

LOCATION AND ACCESS. The location of the property relative to geographic features and township boundaries is shown on the accompanying key map of the area.

The Holliston group is situated just west of Groundhog Lake.

The property may be reached by a three-mile water route from Groundhog which is a flag-stop on the Canadian National Railway. An alternative route is by three-mile trail paralleling the telephone line between the Groundhog River Dam and the

2-continued

railroad.

GEOLOGY. The geology of the property is shown on the accompanying geological plan, on a scale of 1 inch to 200 feet. The property, as indicated on this plan, was systematically traversed as shown, with many other subsidiary, closed traverses where detailed work in outcrop areas warranted.

The rock types exposed include andesite, metadiorite (amphibolite), diorite and syenite with a hybrid syenite-granite phase also present.

The andesite, type No. 2 on the map legend, underlies only a very small area of the property. Its distribution is shown on the plan. This is a massive, relatively fresh-looking rock. Its form or attitude is not determinable.

The metadiorite (amphibolite), type No. 3 in the map legend, is quite widely distributed on the property. This rock is a medium to coarse grained type, rich in hornblende. It is not definitely known if it is an altered diorite or, in whole or in part, an amphibolitized greenstone. This rock type, in general, is schistose. In places this schistosity is marked and the shear zones resulting show evidence of hydrothermal activity. The trend of these zones, shown on the geological plan, is about north 55 degrees east with a vertical dip.

The shear zones in the metadiorite often contain quartz, as stringers or lenses of irregular form, with the wallrock commonly altered to iron-bearing carbonate. The quartz and the altered wall-rock contain variable amounts of pyrite. Numerous samples taken of all types of this shear zone material assays

3-continued

only negligible values in gold or silver. It is noteworthy that no mineralization or quartz, has been found on this property in rocks other than the metadiorite.

The diorite occurs as several large outcrops in the western part of the claims considered. This rock type, shown as No. 4 on the geological plan, is in general, medium grained, crystalline textured and massive. It is relatively fresh-looking. No mineral showings have yet been found in this type of rock.

The syenite is not widespread, occurring as apparently small bodies in the central part of the claims. It is shown as type No. 6 on the geological plan. No mineral showings are known to occur in this rock but narrow dykes of syenite are closely associated, in places, with the mineralized, quartz-bearing shears in the metadiorite.

The syenite-granite rock type is present in the eastern portion of the claims. It is shown as type No. 5 on the geological plan. This rock type resembles the syenite in general appearance, except that a varying amount of quartz is present. Like the syenite, the hybrid syenite-granite is pink coloured, of medium granitic to porphyritic texture and quite fresh-looking. No mineral showings are known to occur in this rock type on the property.

MINERAL SHOWINGS. A brief description of these has been given above under the paragraph on "metadiorite". The showings, which are mineralized, quartz-filled shears, vary from one to twenty-five feet in width. They conform in attitude to the schistosity indicated on the plan. Although relatively well mineralized with pyrite and of attractive appearance, all the

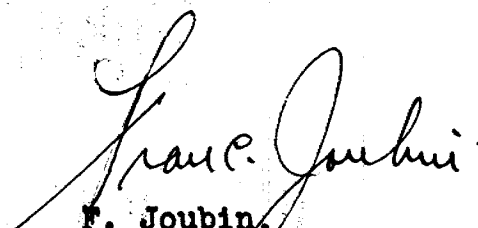
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known mineral showings examined carried disappointingly low values in gold.

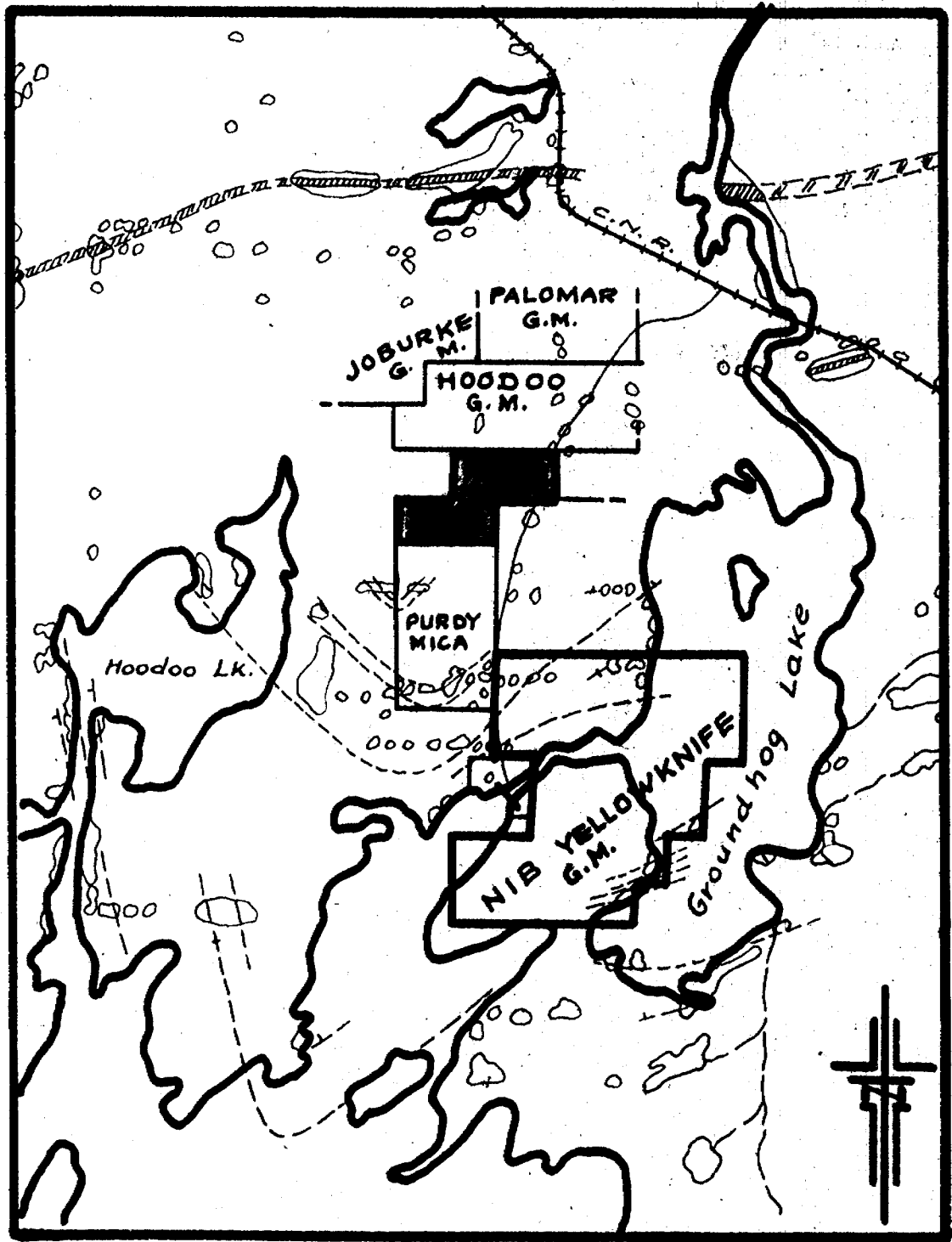
- CONCLUSIONS.
- (1) The favoured host rock on these claims appears to be the metadiorite.
 - (2) This rock type contains mineralized shears of good size and appearance but surface samples assay low in gold or silver.

RECOMMENDATIONS. Consideration be given to a limited amount of X-Ray diamond drilling as a means of securing some sub-surface samples from the better-looking surface showings.

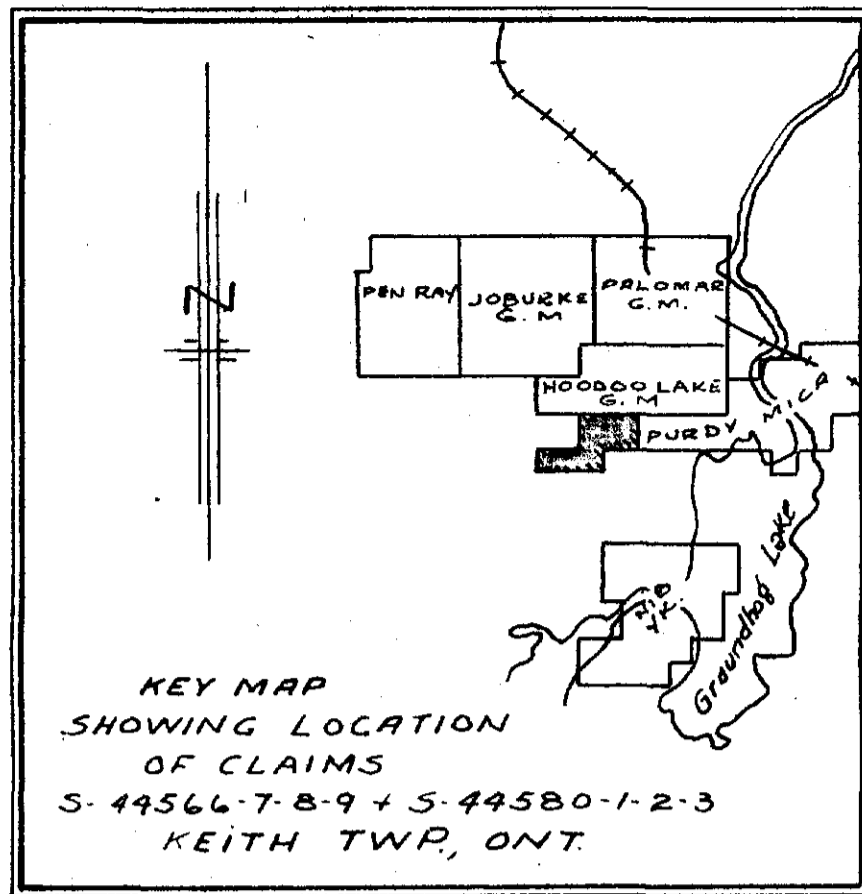
Respectfully submitted,



F. Joubin,
Geologist,
Toronto, Ontario,
October, 1947.



NIB YELLOWKNIFE GRP.
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HOLLISTON GRP



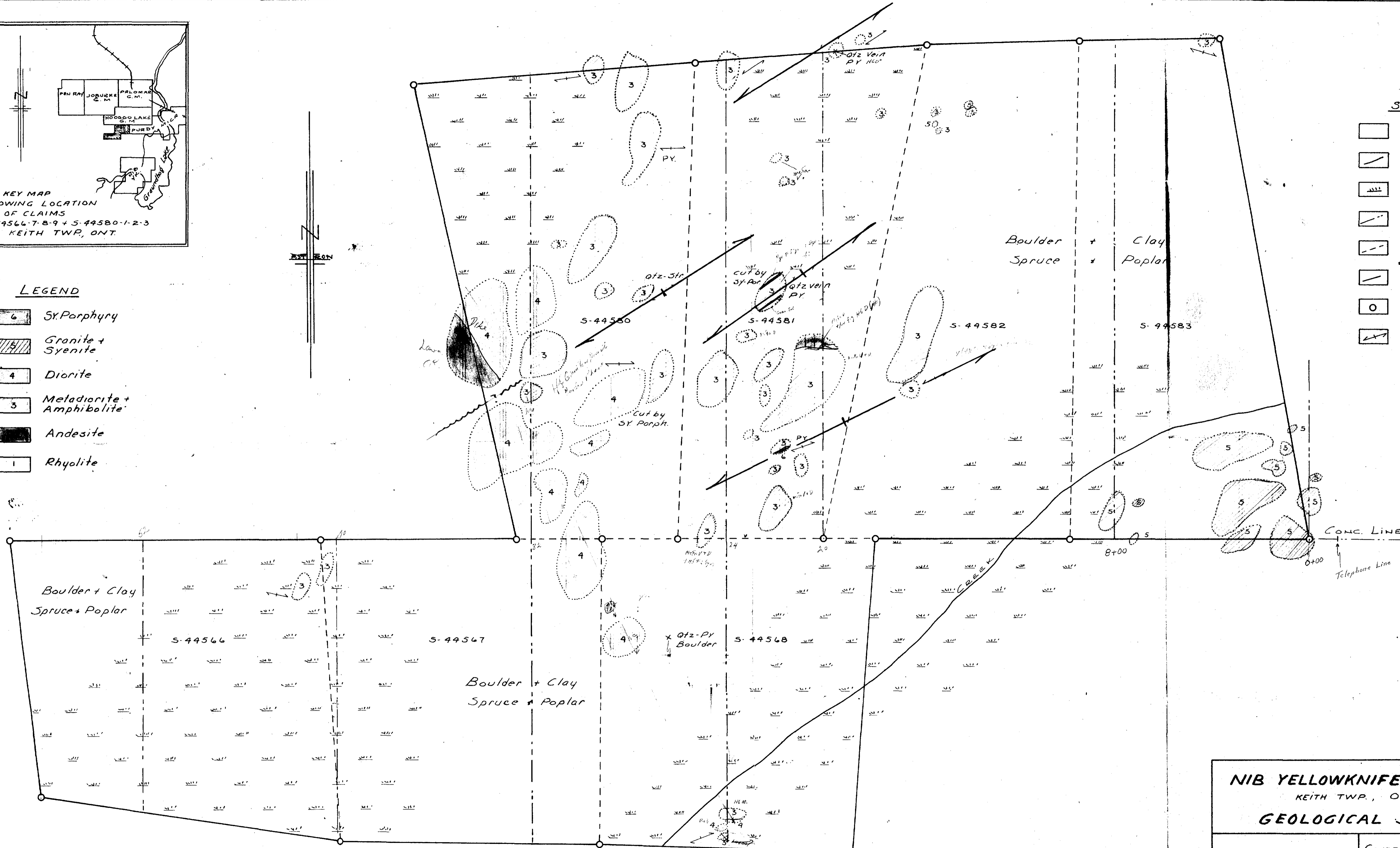
KEY MAP
SHOWING LOCATION
OF CLAIMS
S-44566-7-8-9 + S-44580-1-2-3
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LEGEND

- 6 SX Porphyry
- 5 Granite + Syenite
- 4 Diorite
- 3 Metadiorite + Amphibolite
- Andesite
- 1 Rhyolite

SYMBOLS

- Outcrop
- Contact Defined
- Swamp
- Picket Line
- Claim Line
- Boundary Line
- Claim Post
- Schistosity



NIB YELLOWKNIFE MINES LTD.
KEITH TWP., ONT.
GEOLOGICAL SURVEY

SCALE: 1" = 200'	COVERING DATES OF SURVEY	AUG. 13th
F. JOUBIN GEOLOGIST L. TESSIER MINING ENGR.		AUG. 27th, 1947

