U.S. GEOLOGICAL SURVEY
GEORGE OTIS SMITH, DIRECTOR

AREAL GEOLOGY

NEW YORK
WATKINS GLEN QUADRANGLE

(Penn Yan 62500) (Ovid 62500) (Genoa 62500) (Moravia 62500)
(Hammondsport 62500) (Tioga 62500)

LEGEND

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines; subaerial deposits by patterns of dots and circles

- Qal — Alluvium *(shown in larger stream bottoms only)* — QUATERNARY
- Dcc / Dch — Chemung formation *(dark-gray shale and thin sandstones, with some calcareous beds, and lentils of coarse sandstone and fine conglomerate, Dcc)*
- De — Enfield shale member *(dark-gray argillaceous shale with thin-bedded sandstones)*
- Dih — Ithaca shale member *(dark-gray argillaceous shale generally very fossiliferous, with few thin sandstones)*
- Ds — Sherburne flagstone member *(flaggy sandstones with gray shale partings and some finely laminated black shale)*
- Dg — Genesee shale *(black, finely laminated, evenly bedded, arenaceous shale)*

Portage formation — DEVONIAN

IGNEOUS ROCKS

- Il — Dikes of mica peridotite — POST-DEVONIAN

STRUCTURAL DATA

- ANTICLINE
- SYNCLINE

Anticlinal and synclinal axes *(dashed lines indicate approximate location.)*

- Quarries *building stone, road material, and shale for brick.*
- Salt wells and works
- 3185 Other deep borings

Geology by Henry S. Williams and Edward M. Kindle.
Surveyed in 1903-05.

H.M. Wilson, Geographer in charge.
Topography by Robt. D. Cummin, Jas. Mc Cormick, M.B. Lambert, and Nat. C. Van Doren.
Triangulation by N.Y. State Survey.
Surveyed in 1893 and 1898-99.

SURVEYED IN COOPERATION WITH THE STATE OF NEW YORK.

APPROXIMATE MEAN DECLINATION 1902.

Scale 1/125000
1 ½ 0 1 2 3 4 5 Miles
1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 40 feet.
Datum is mean sea level.

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