

Structural Implications of Walloomsac and Hartland Rocks Displayed by Borings in Southern Manhattan

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EARLY MEDIAL ORDOVICIAN

(Early Chazyan)

PALEOGEOGRAPHY

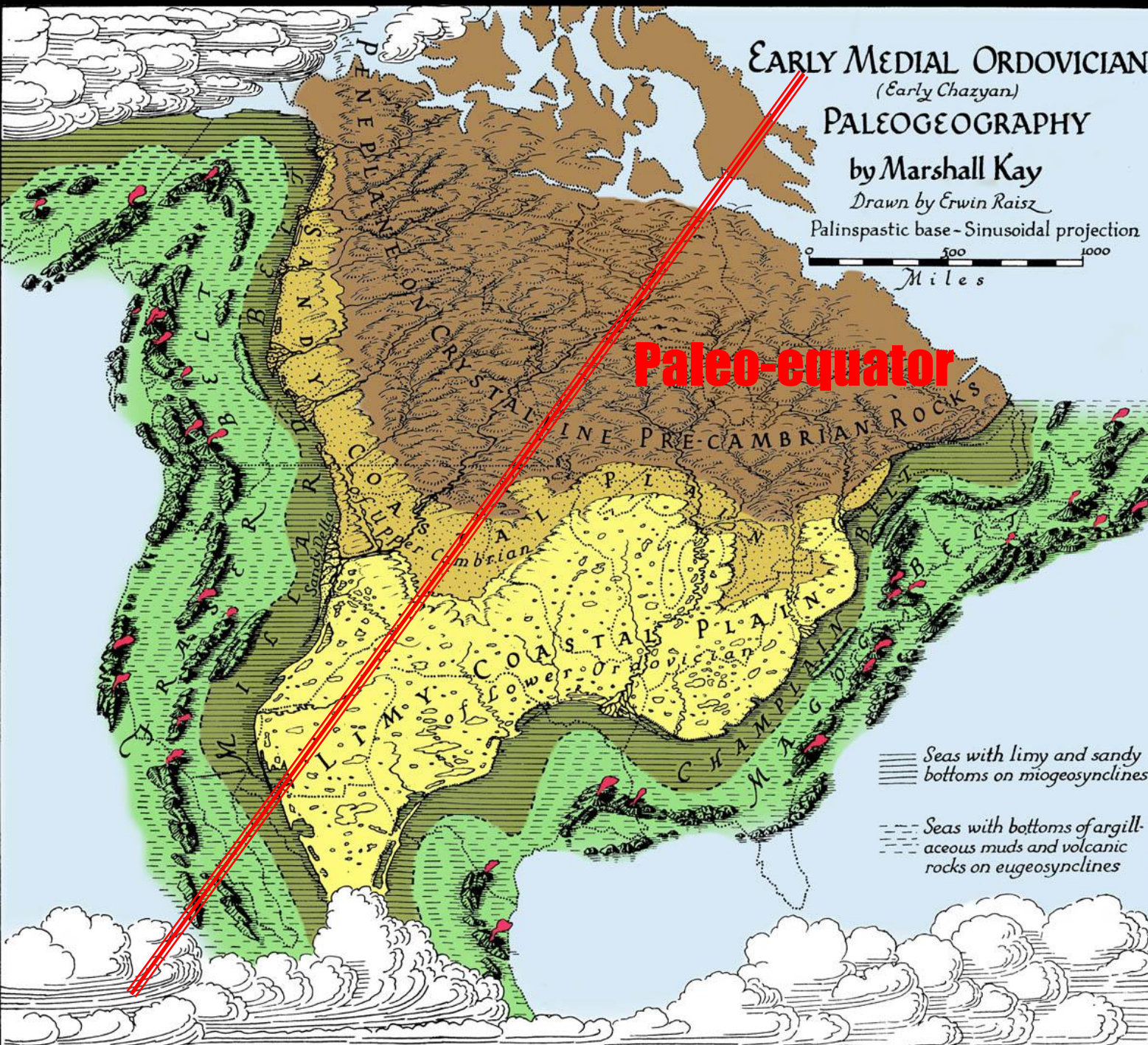
by Marshall Kay

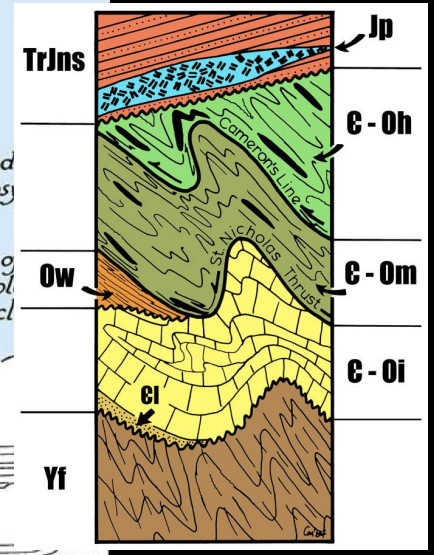
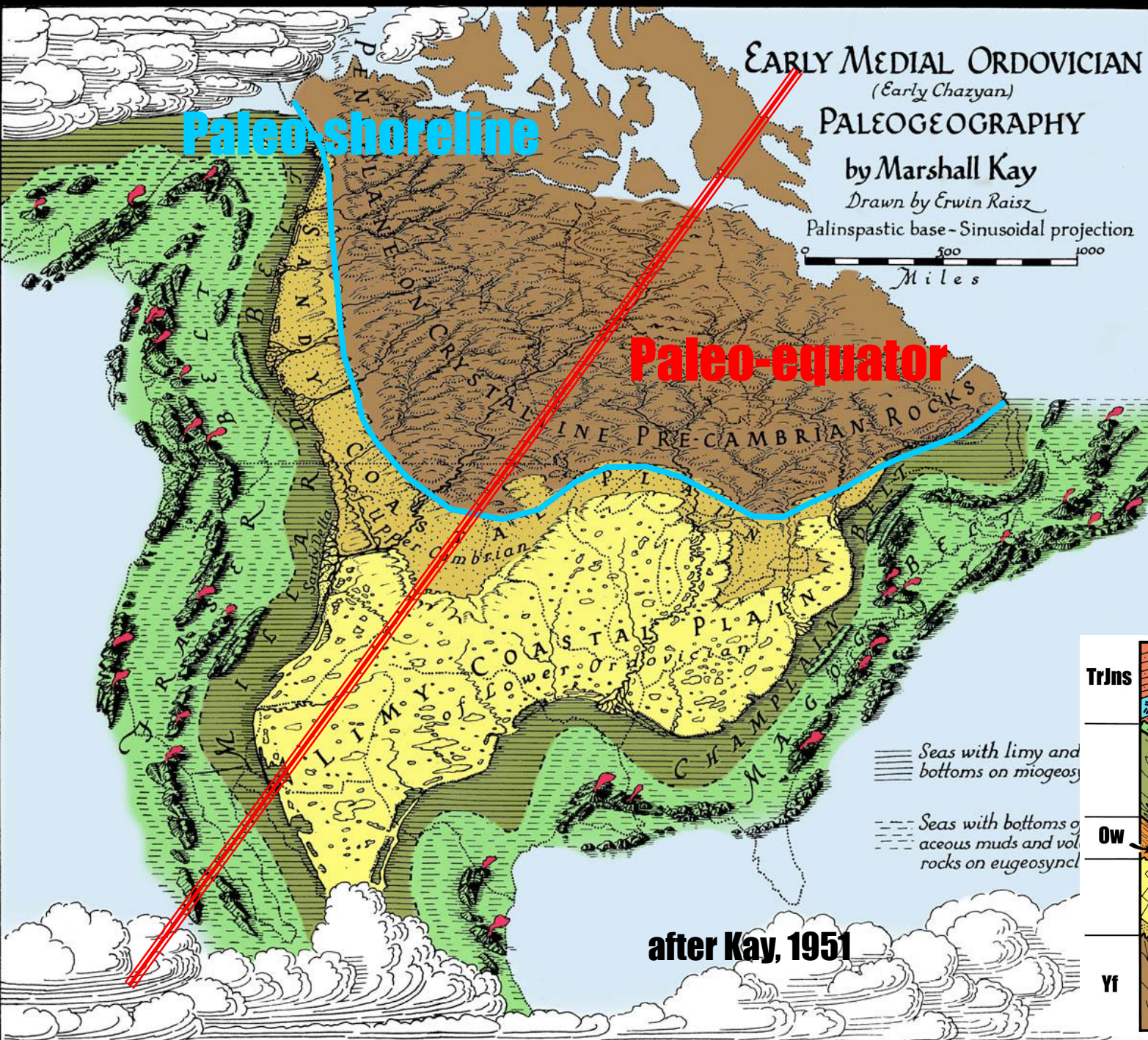
Drawn by Erwin Raisz

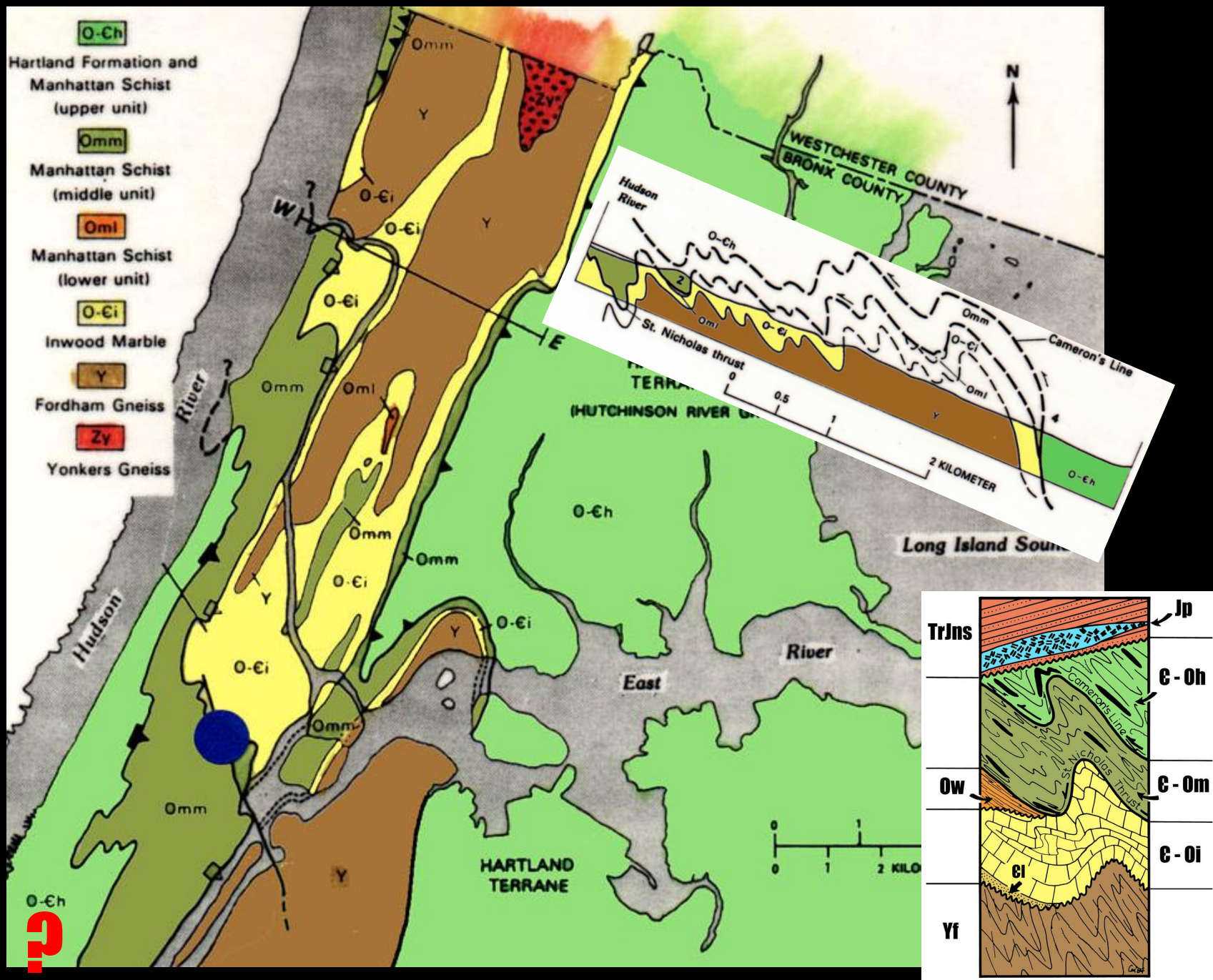
Palinspastic base - Sinusoidal projection

0 500 1000
Miles

Paleo-equator

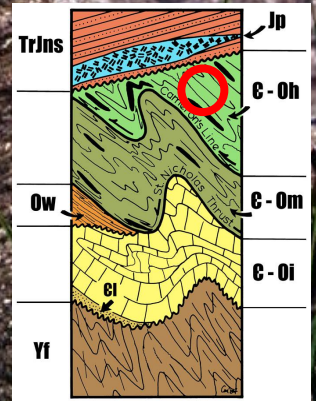


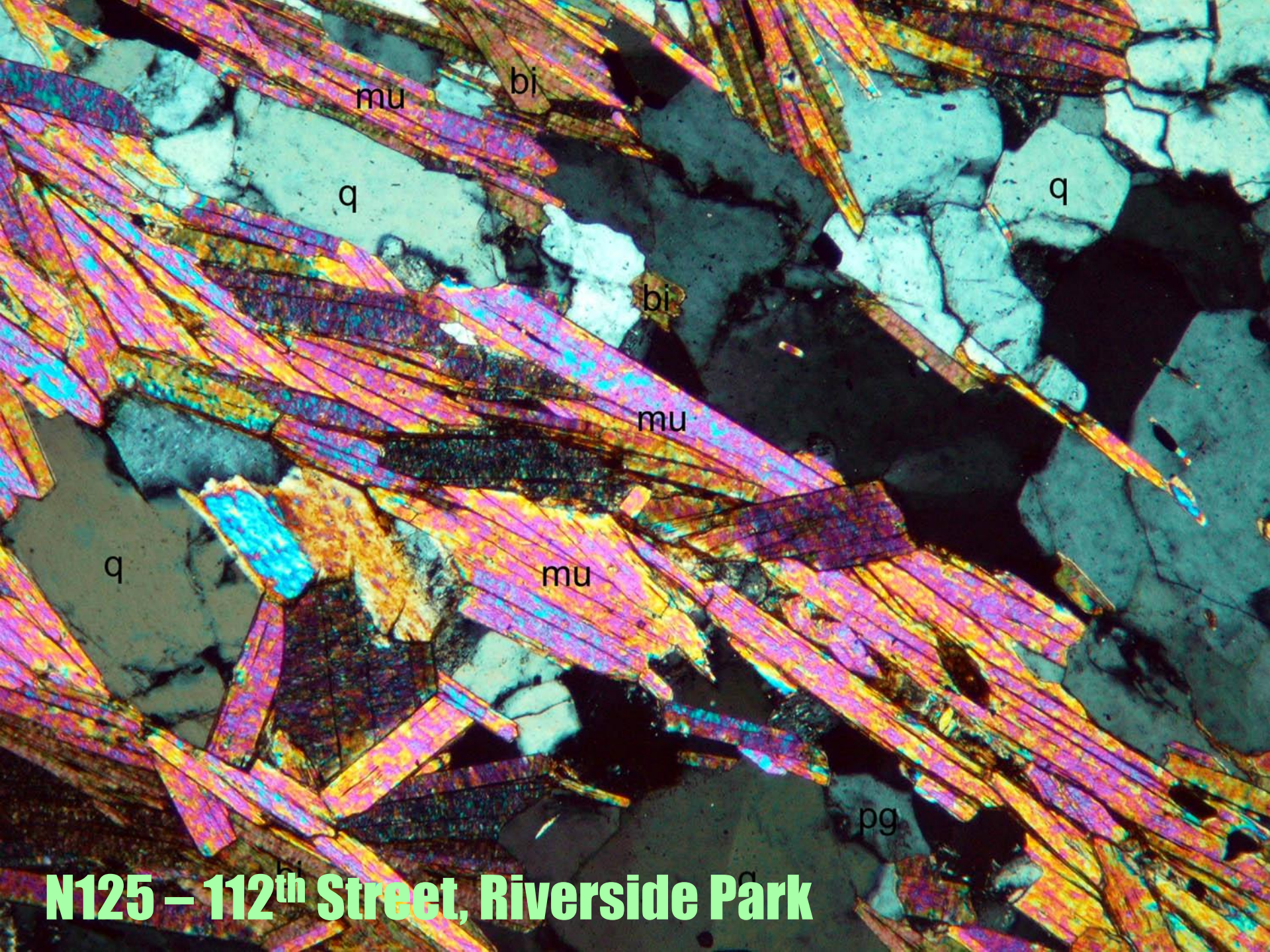




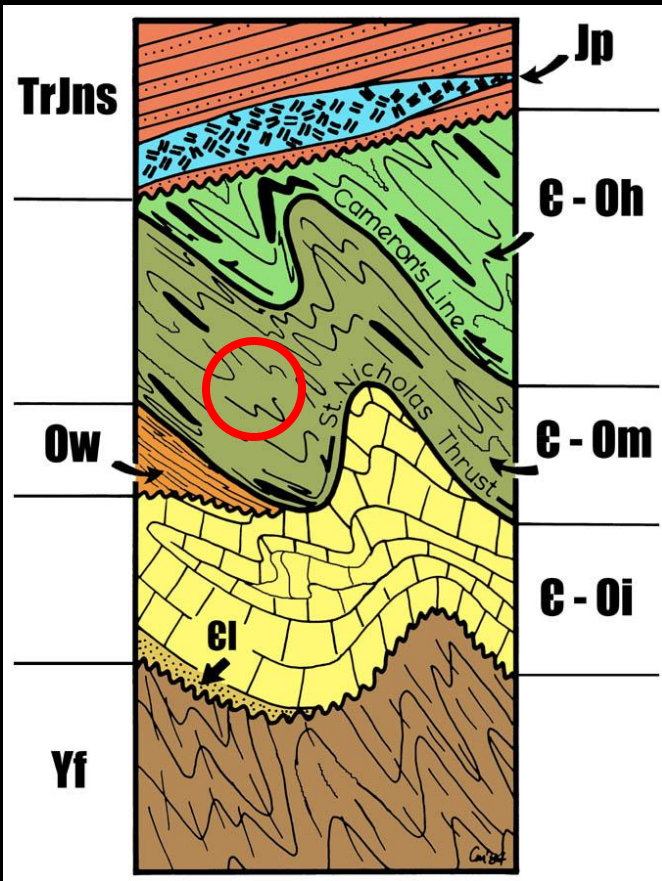


Hartland Schist, Riverside Park

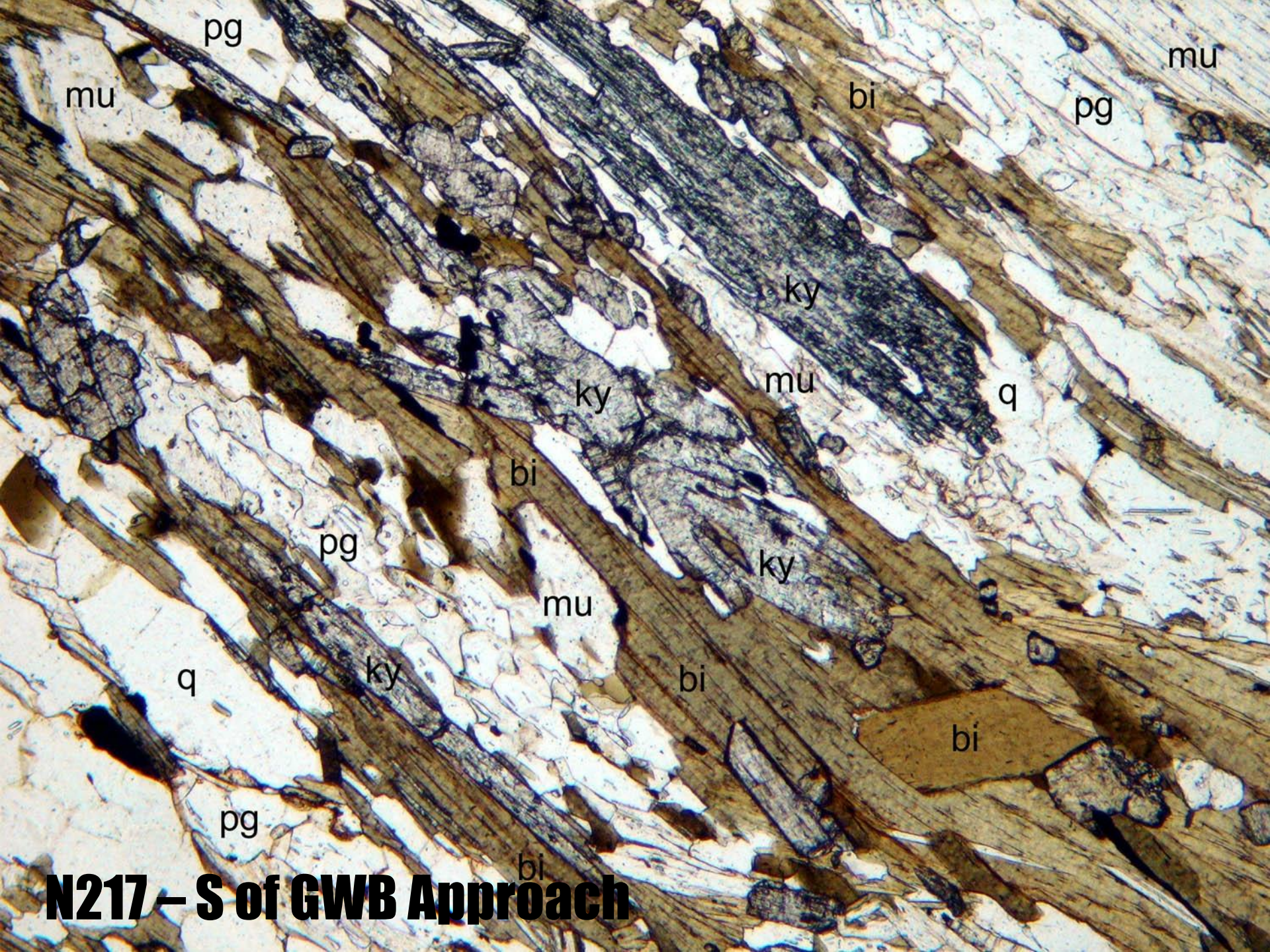




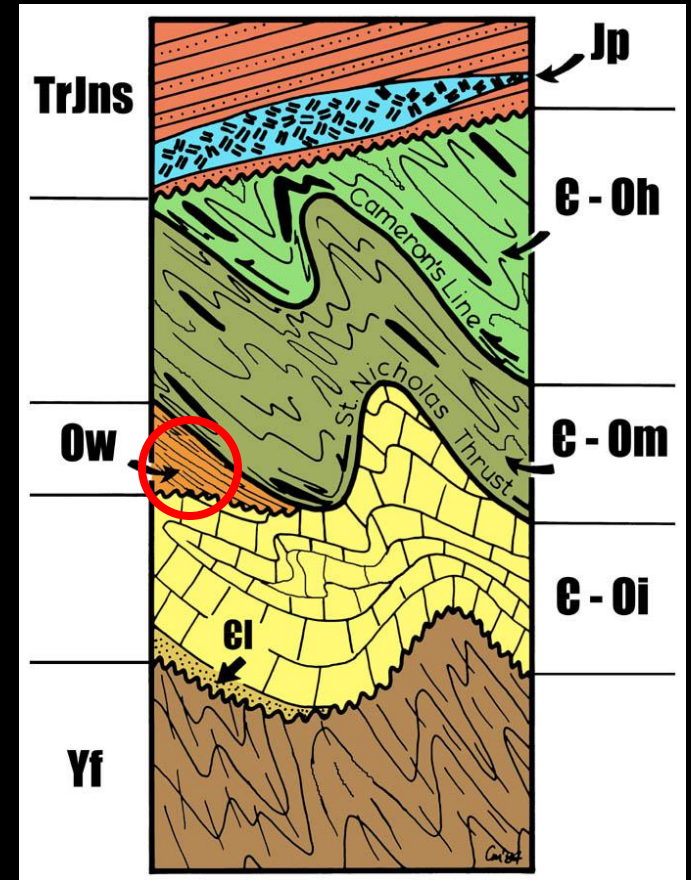
N125 – 112th Street, Riverside Park



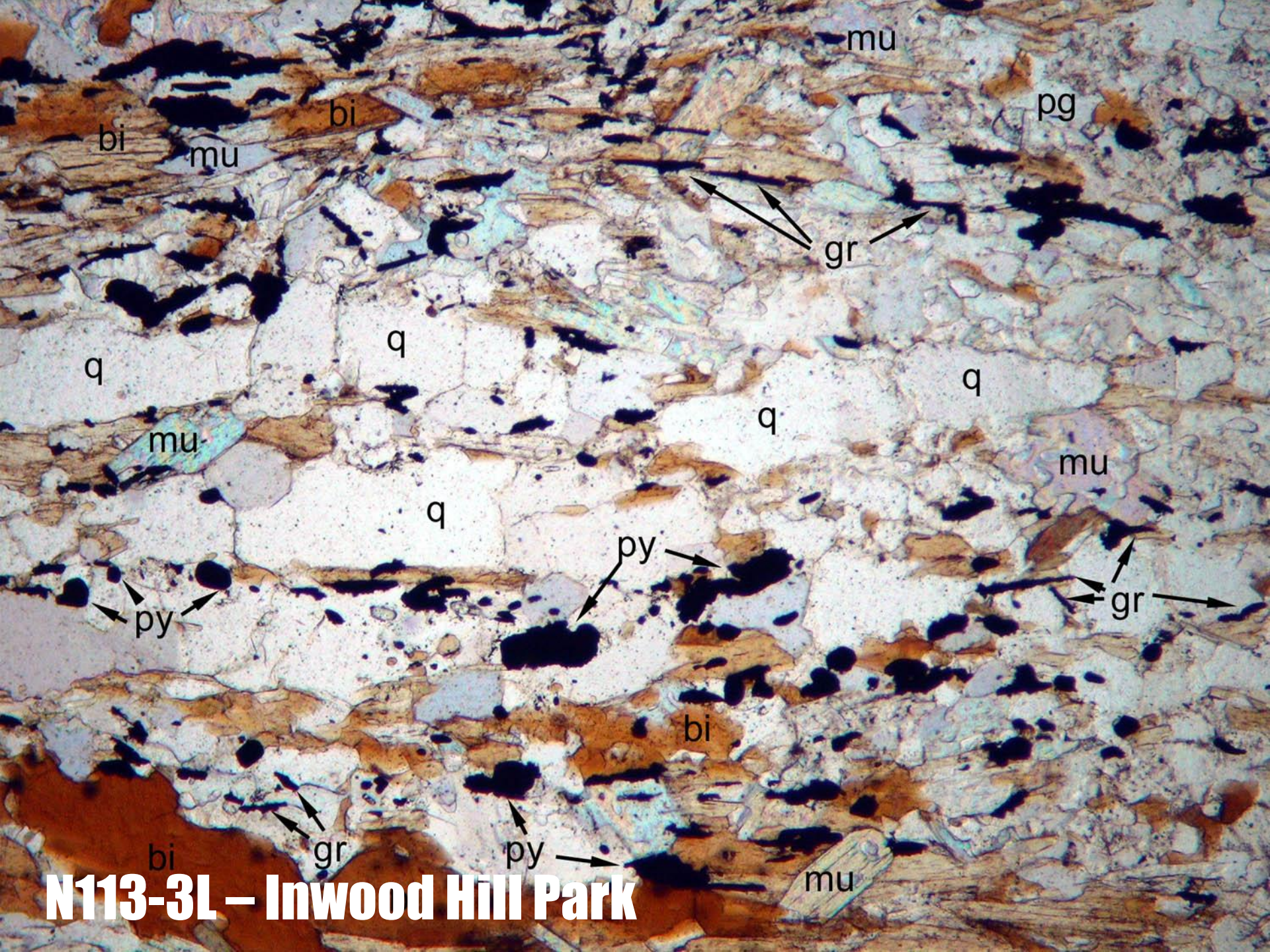
Manhattan Schist
F₃ Folds of S₂
Central Park, NYC



N217 – S of GWB Approach



Walloomsac "Balmville" Contact, Grand Concourse, Bronx, NY



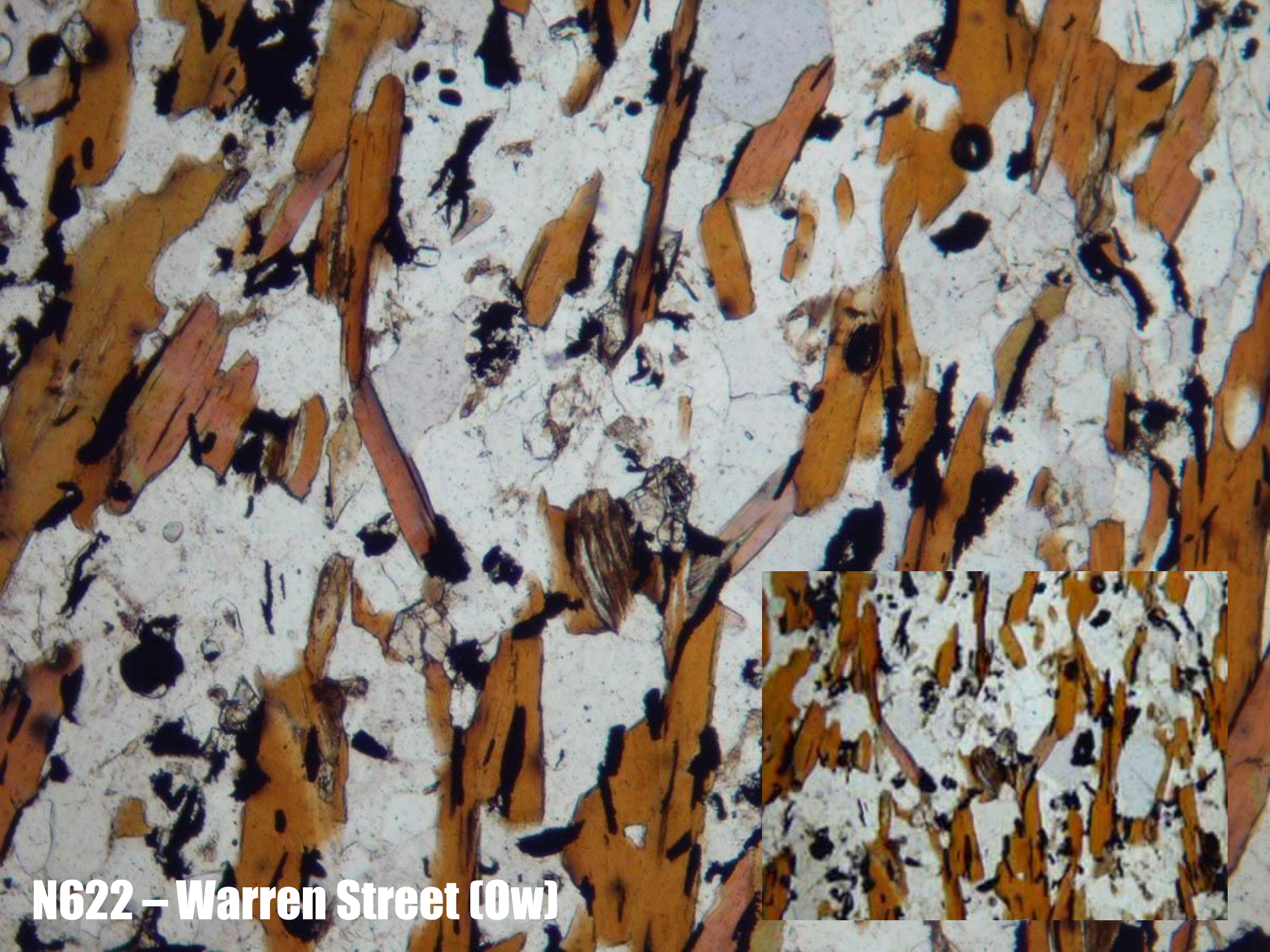
N113-3L – Inwood Hill Park

The map shows Lower Manhattan with various sites and infrastructure. Key locations labeled include:

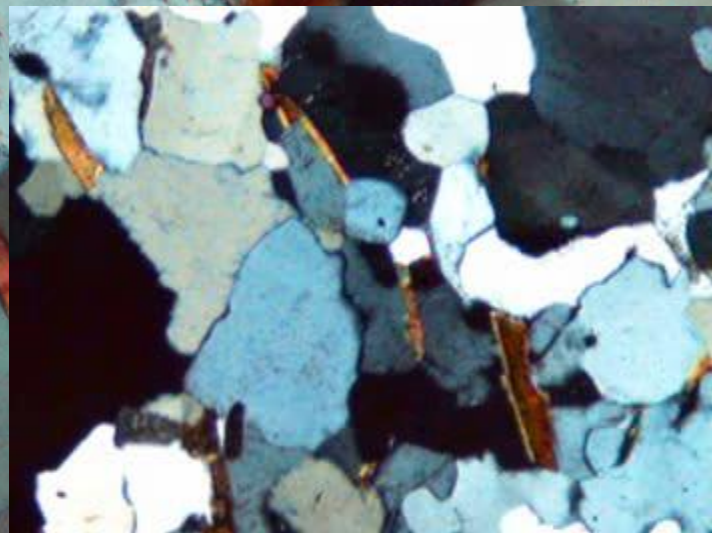
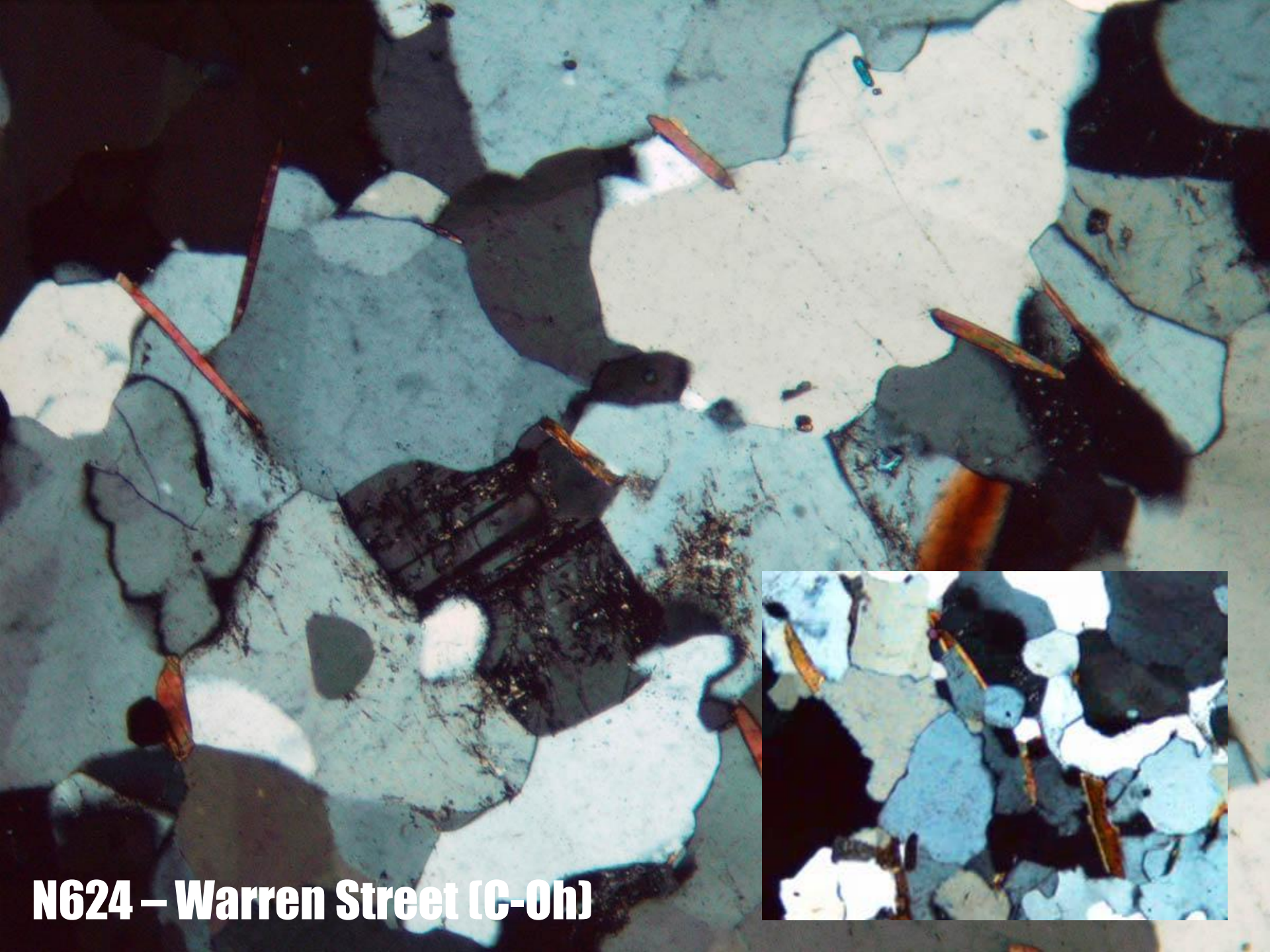
- Warren St. Site**: Located near the top left, marked with a green dot.
- World Trade Center Site**: Located in the center, marked with a green dot.
- Nassau-Beekman Site**: Located to the right of the World Trade Center Site, marked with a green dot.
- West St. Site**: Located to the left of the World Trade Center Site, marked with a green dot.
- Cavity in Bedrock**: Indicated by a white arrow pointing to a specific location near the World Trade Center Site.
- 8TH AVE SUBWAY**: A dashed line running diagonally across the lower right.
- WEST SIDE 7TH AVE SUBWAY**: A dashed line running diagonally across the bottom.
- 4TH AVE AND**: A dashed line running horizontally across the bottom.
- STREET NAMES**: Various streets are labeled, including Broadway, Canal Street, West Street, and Nassau Street.
- LANDMARKS**: The New York City Hall and the New York Stock Exchange are visible in the upper right.
- Other Labels**: "g/smt/s" appears in two locations, and "Chinatown" is labeled in the upper right.

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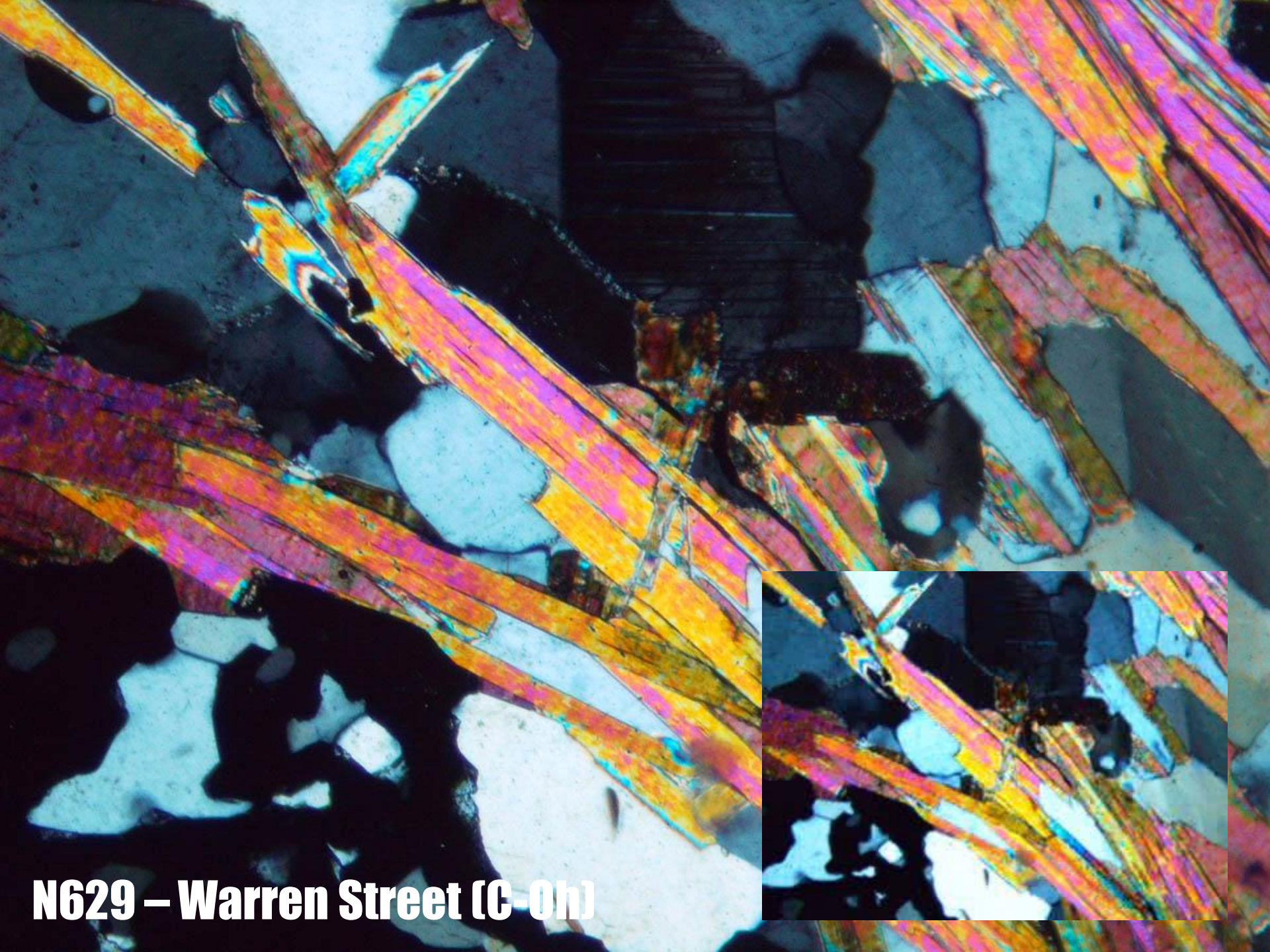
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N622 – Warren Street (Ow)



N624 – Warren Street (C-Oh)



N629 – Warren Street (C-0h)



q

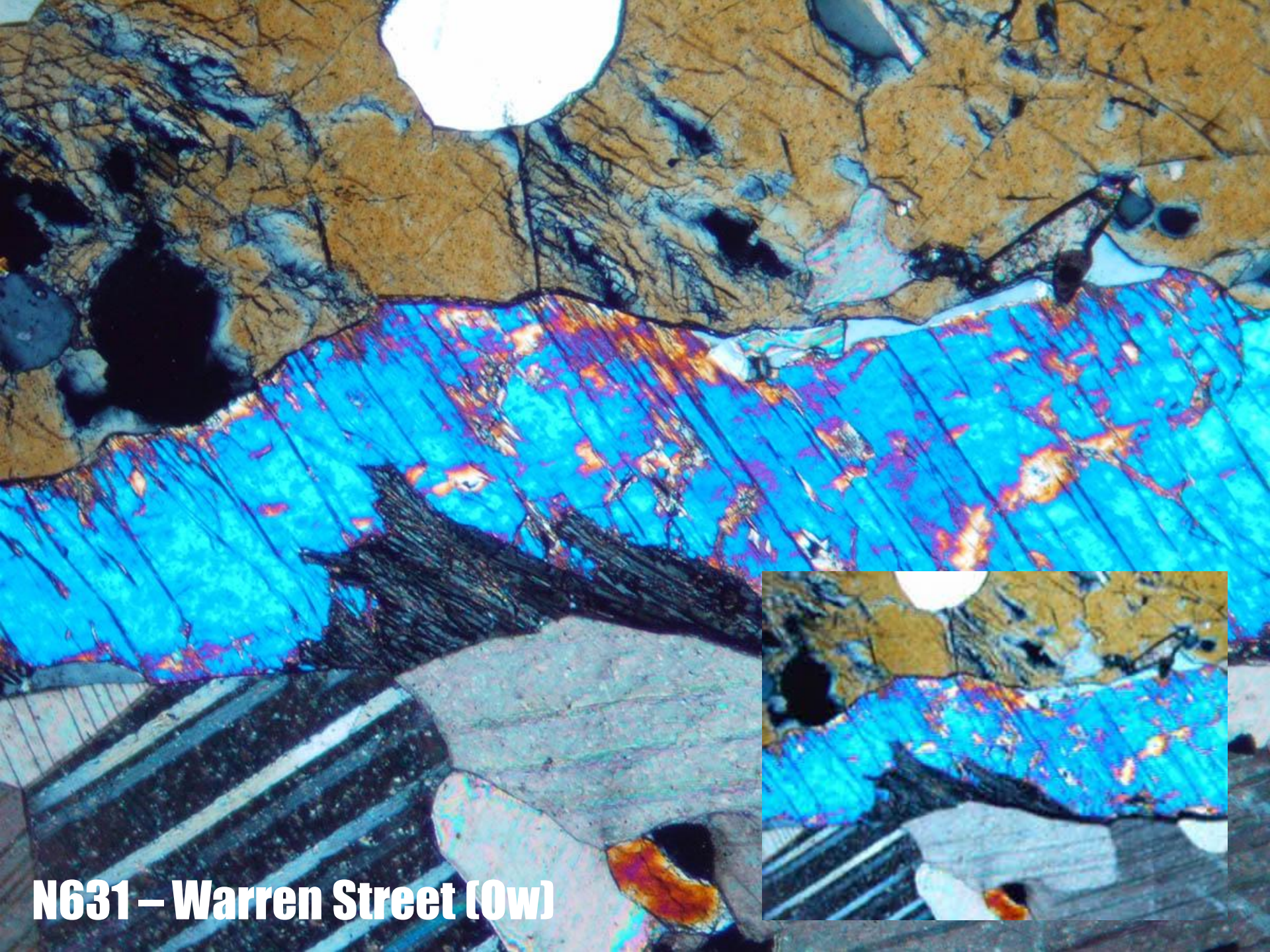
di

cal

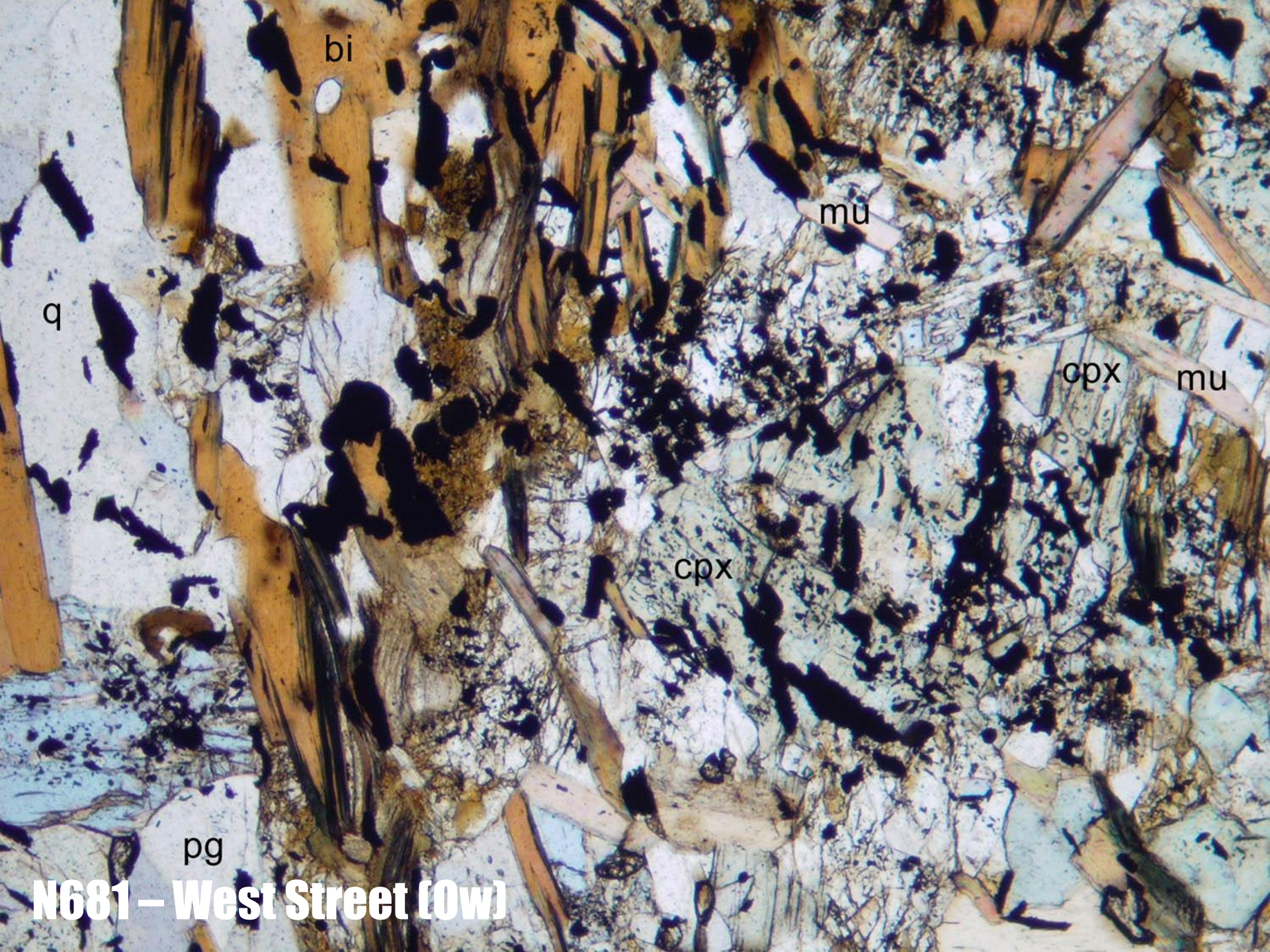
di

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N631 – Warren Street (0w)



N631 – Warren Street (0w)



bi

mu

q

cpx

mu

cpx

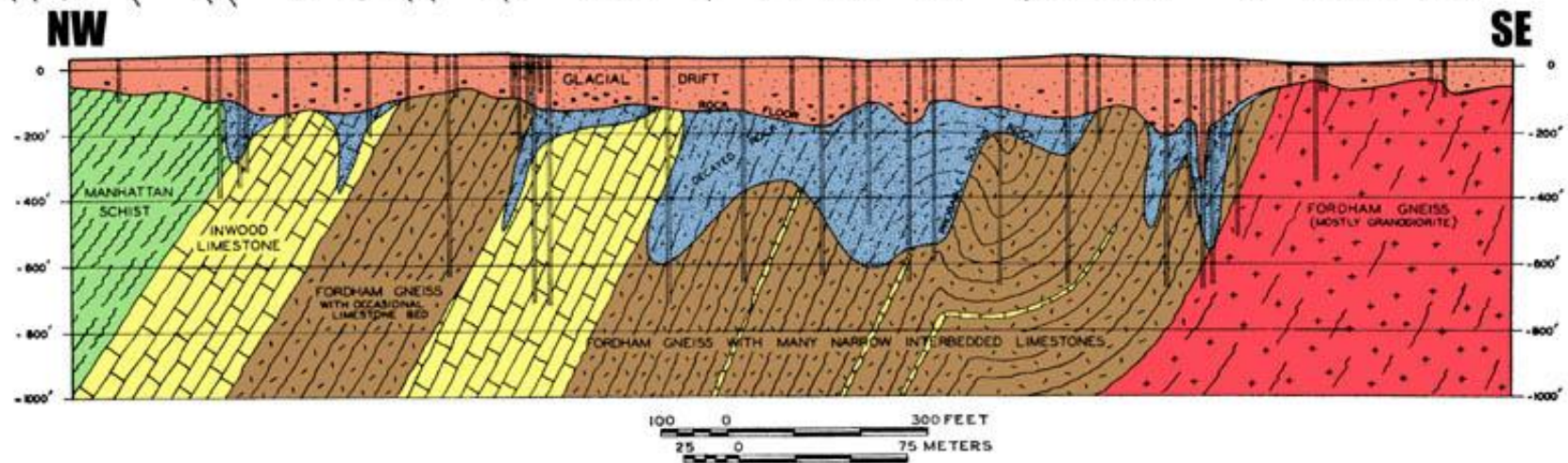
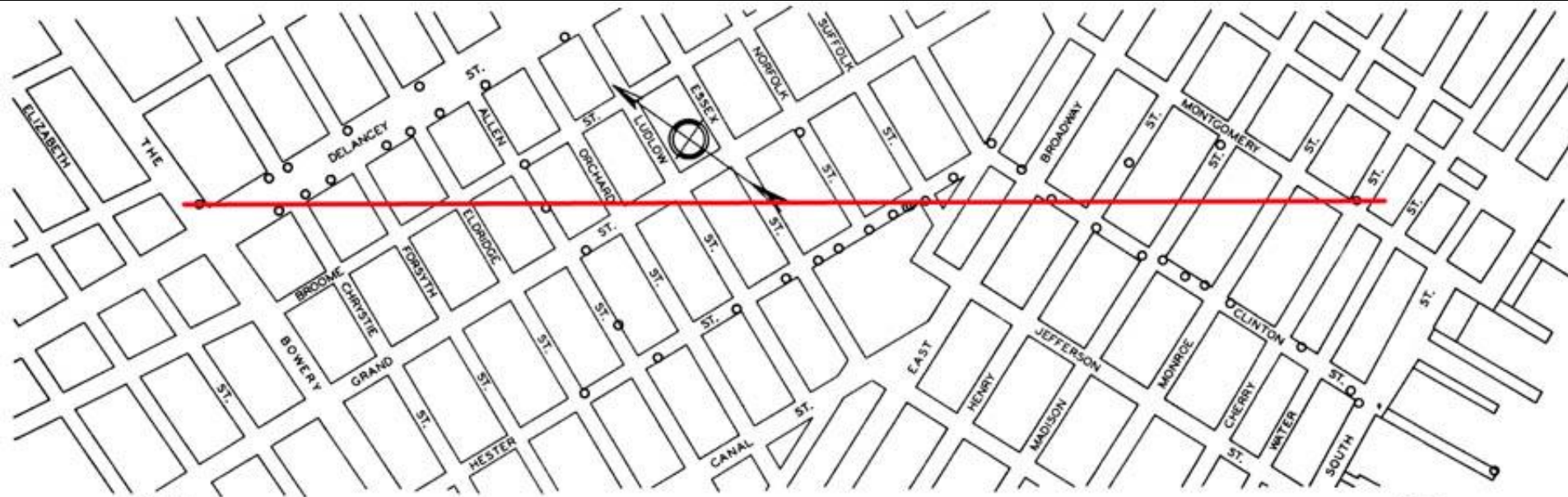
pg

N681 – West Street (0w)



Berkey, 1911

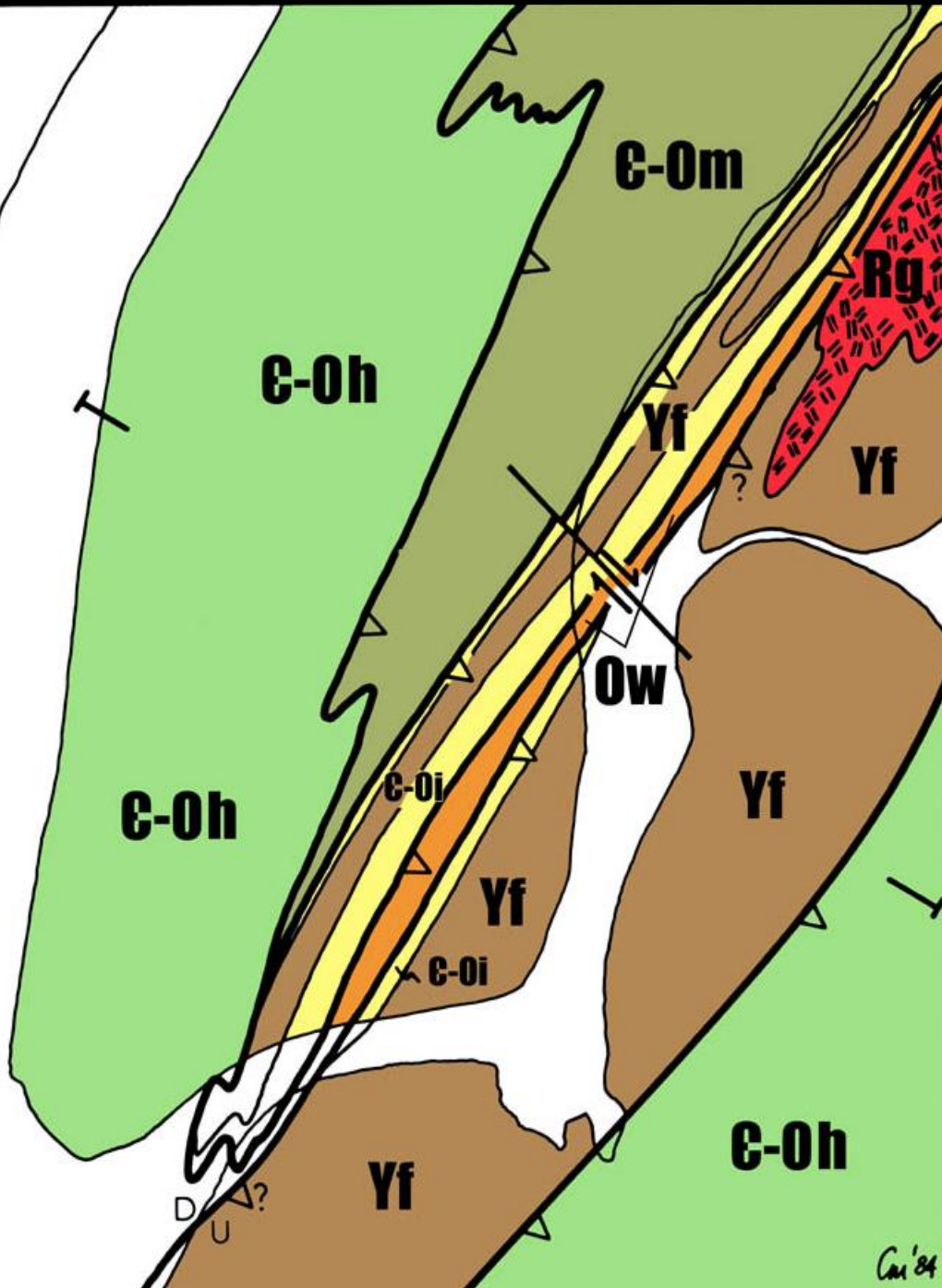
SE Manhattan



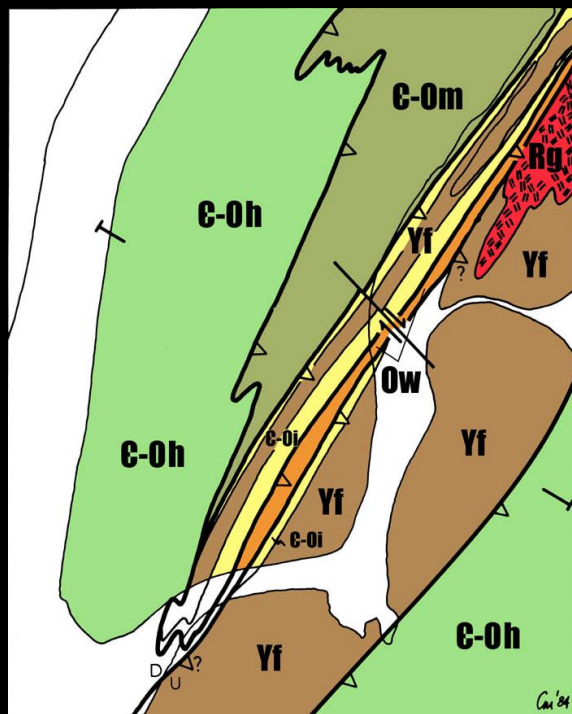
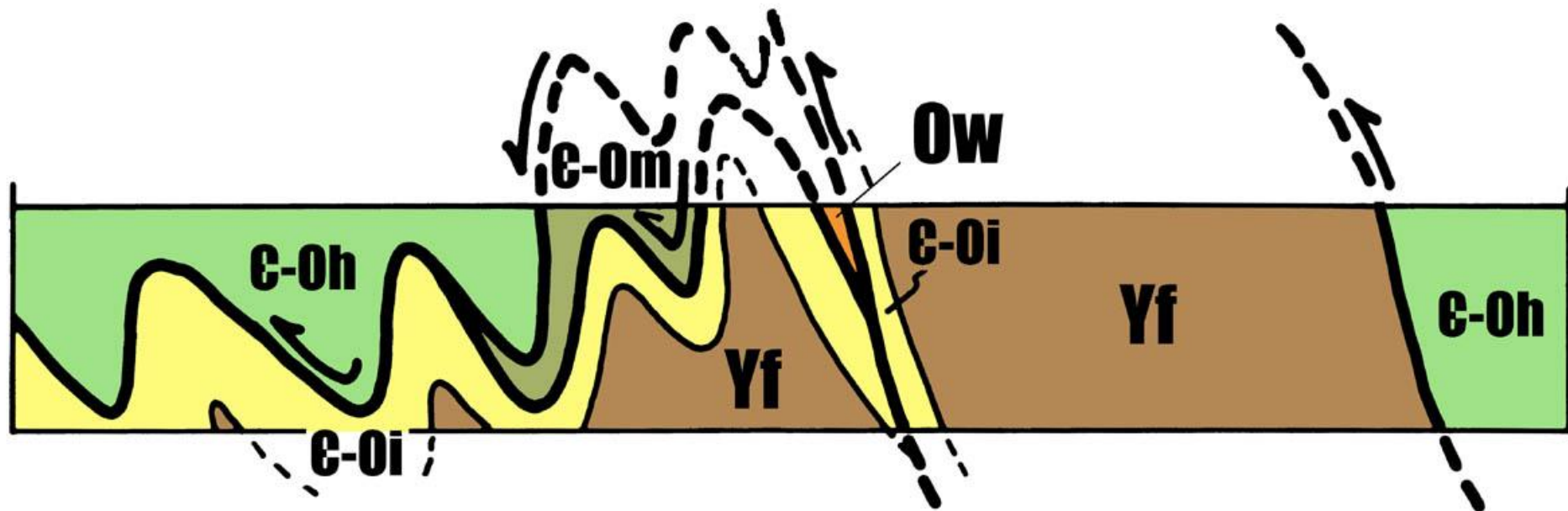
CT1

after Berkey, 1911 and 1933

Interpretive Geologic Map of SE Manhattan, Brooklyn, and Queens Based on Borings

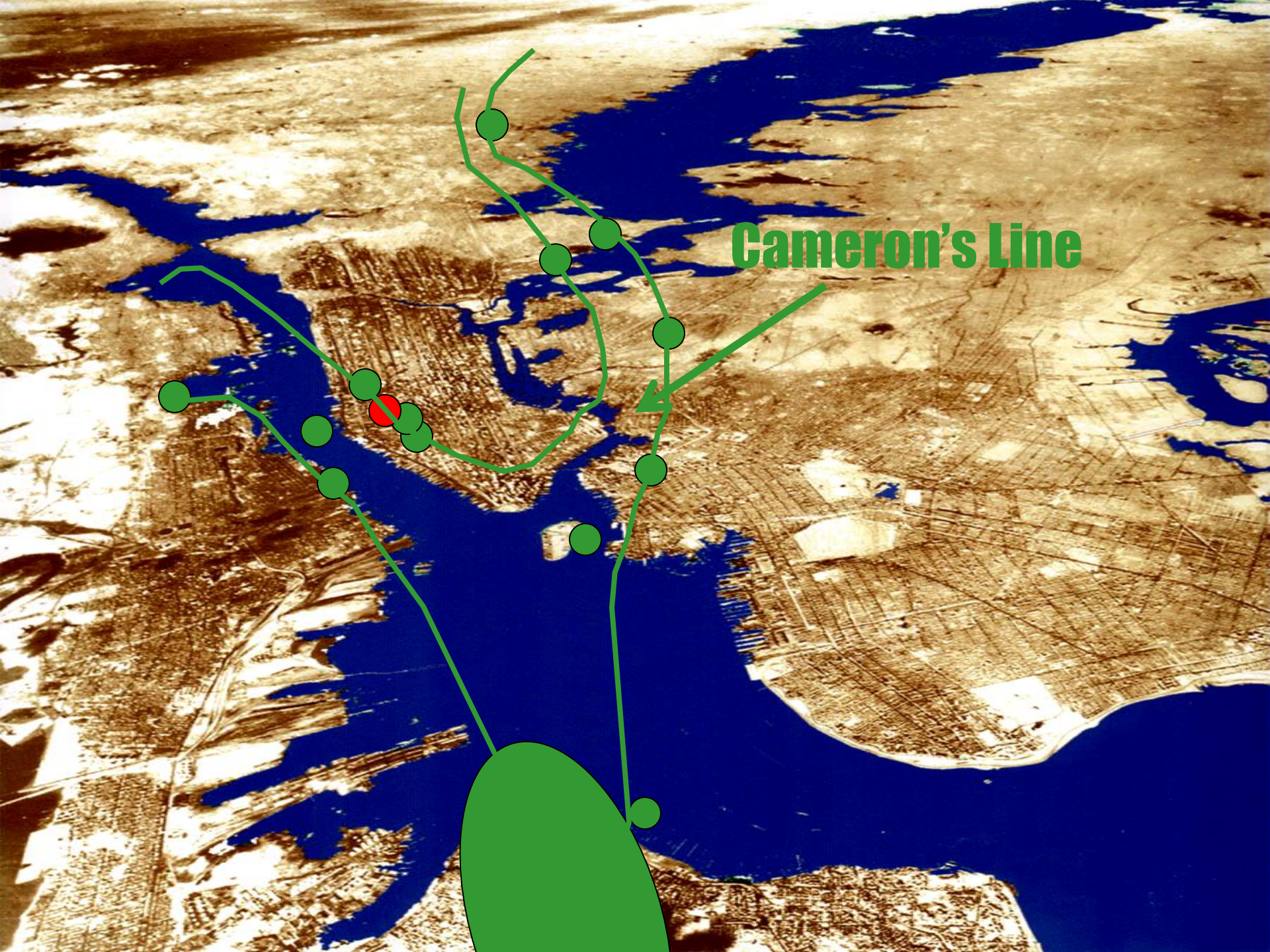


Merguerian, 1984

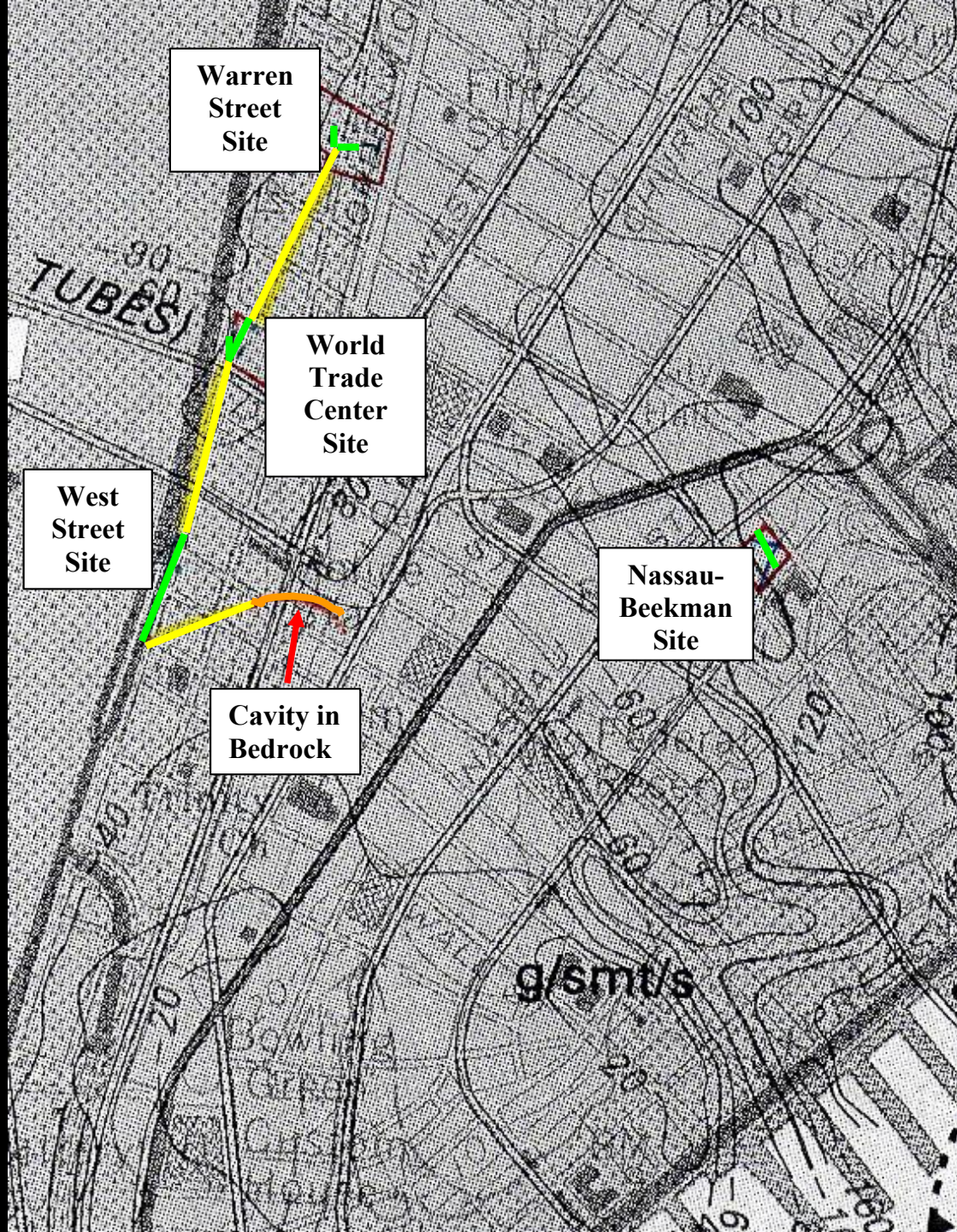


Interpretive NW-SE Geologic Section Based on Berkey 1910 Boring Data

Merguerian, 1984



Cameron's Line



**Four Main
Localities
South of
Canal Street**

**All Display
Walloomsac
Rocks**