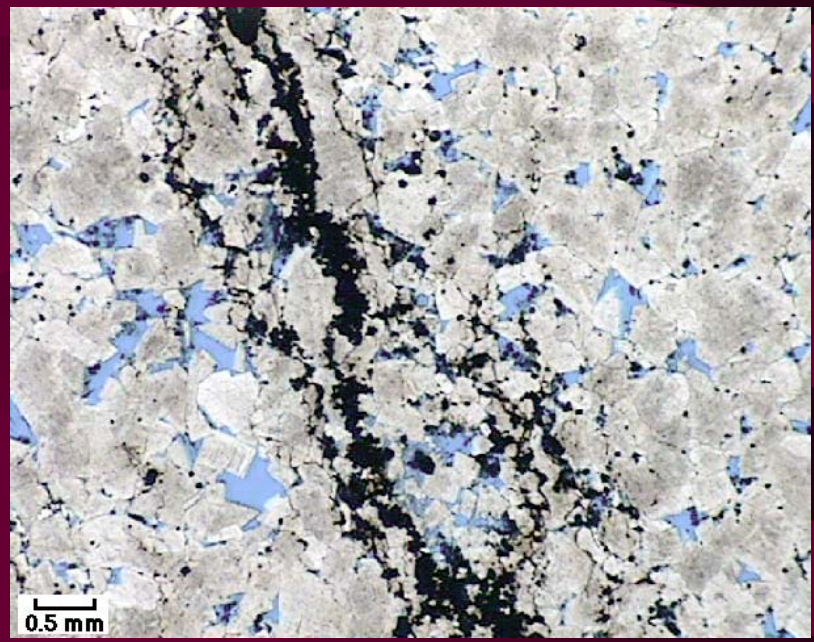
PETROGRAPHY OF TRENTON/BLACK RIVER CARBONATE RESERVOIRS, APPALACHIAN BASIN

PETROGRAPHY - PURPOSE

- Enhance field studies and core descriptions:
  - Identification of constituent grains
  - Detailed classification of reservoir rocks
  - Interpretation of depositional environments
- Diagenesis
  - Timing of significant diagenetic events (i.e., cementation or secondary porosity development relative to the emplacement of hydrocarbons)

PETROGRAPHY - PURPOSE

- Frame of reference for geochemical studies
  - Dolomitization processes:
    - Stable isotopes
    - Fluid inclusions
    - $^{87}Sr/ ^{86}Sr$
    - Trace elements
  - Source rock studies



CORE AND OUTCROP SAMPLING PROGRESS AS OF JUNE, 2004


OH3372/1843.4 ft.
FRACTURED
DOLOSTONE

OH3372/1823 ft.

FRACTURED DOLOSTONE

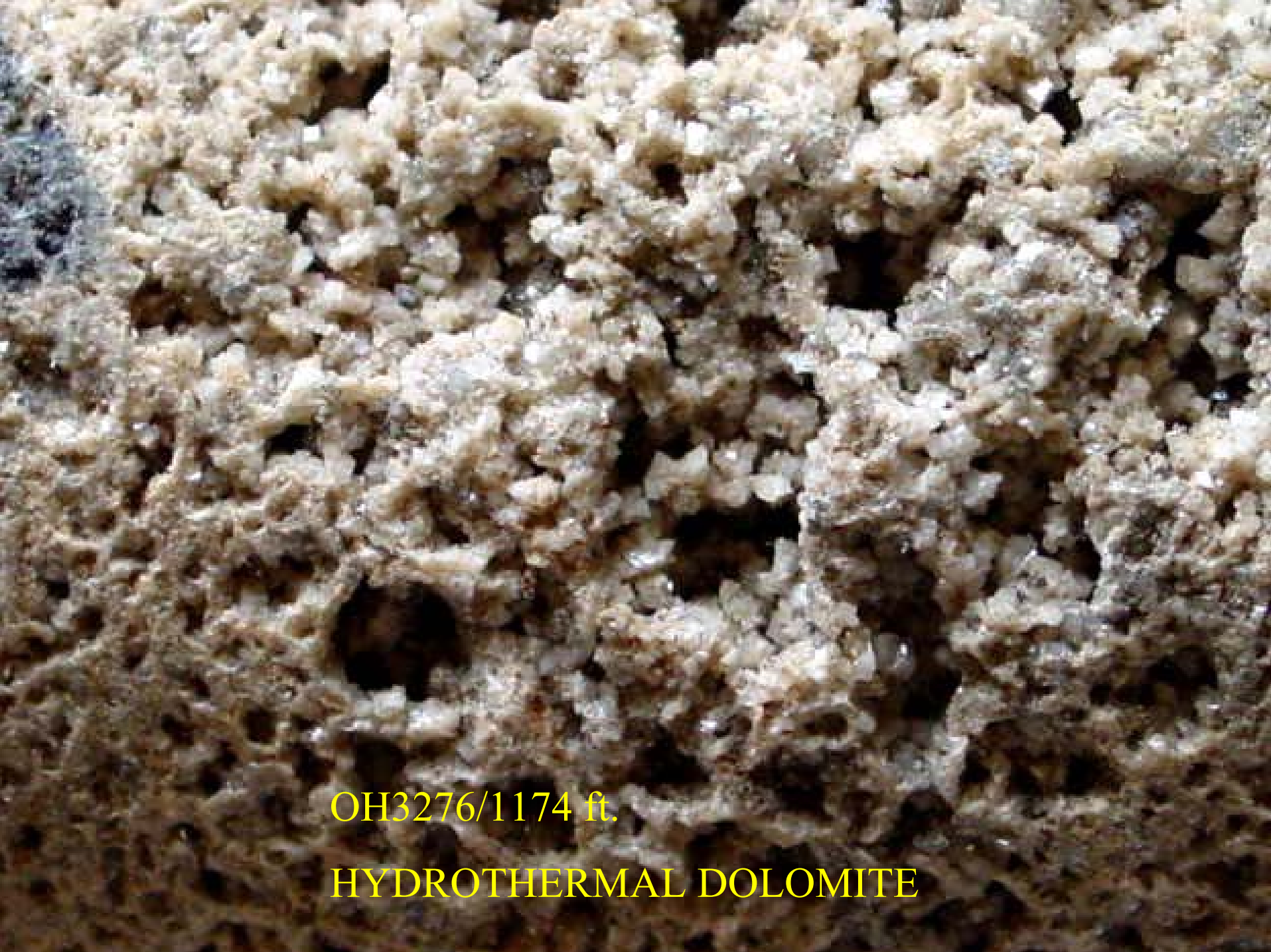
DOLOMITIZED, BIOTURBATED MUDSTONE AND WACKESTONE

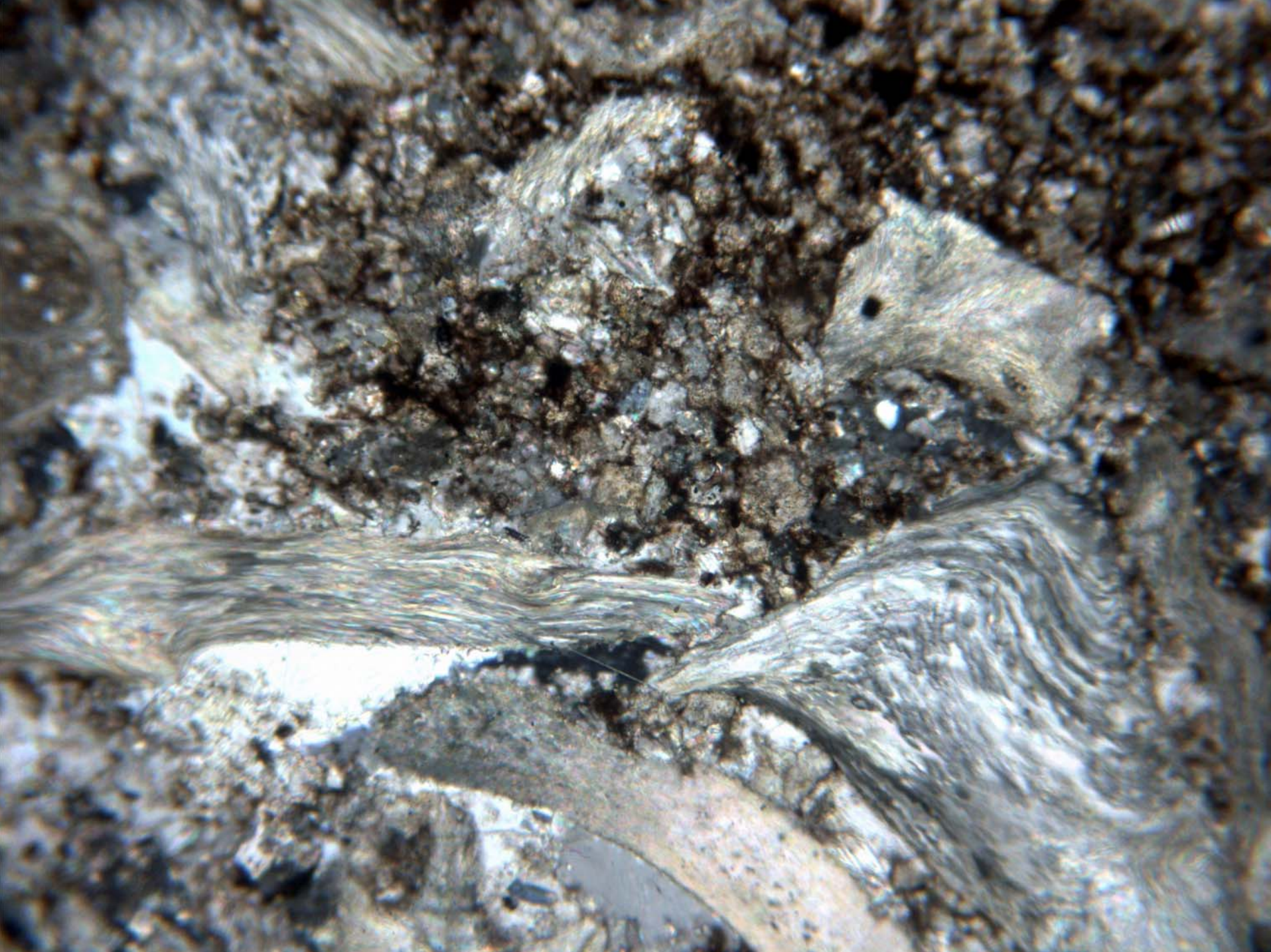
DOLOMITIZED, BIOTURBATED MUDSTONE AND WACKESTONE

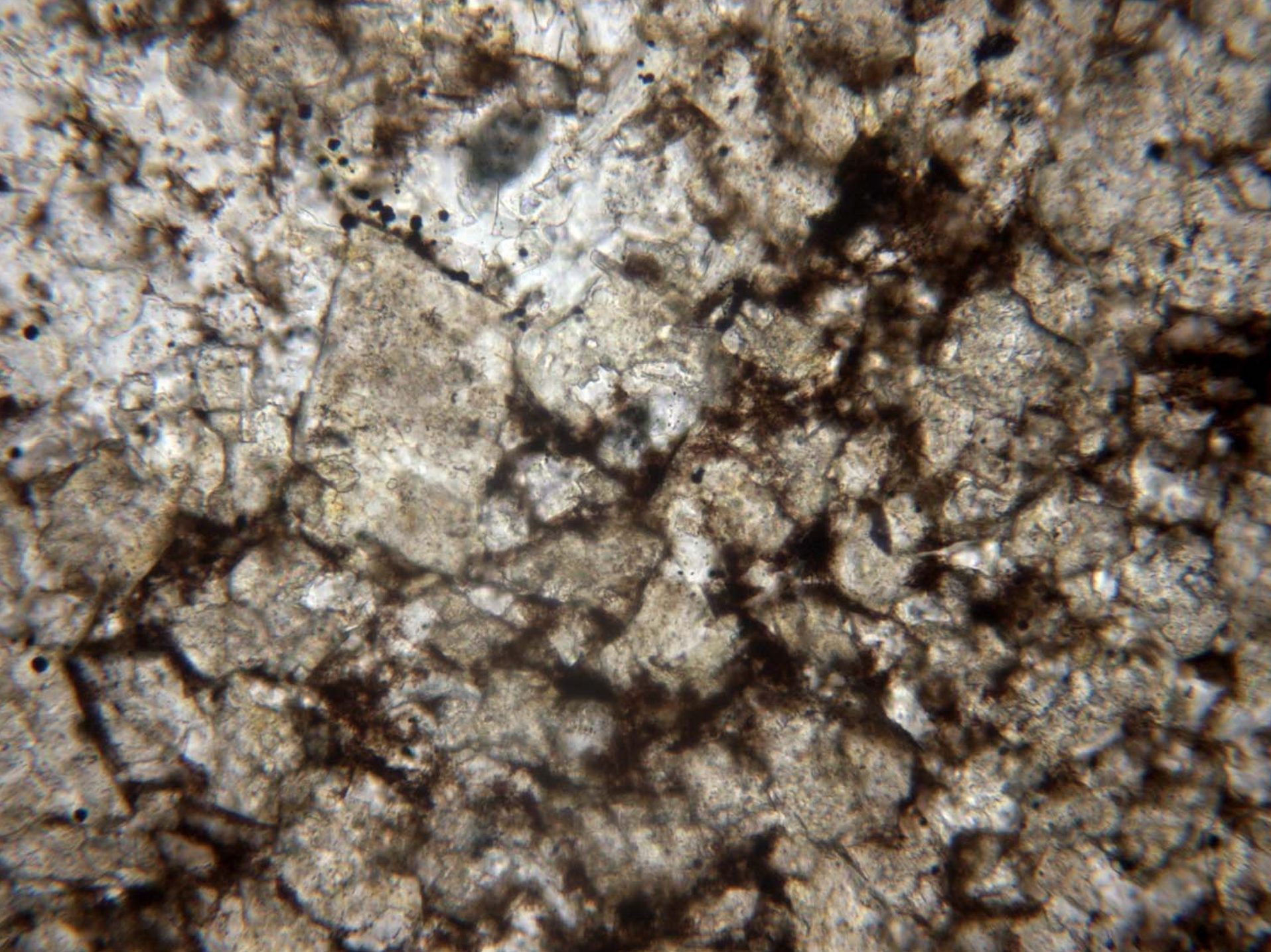
OH3372/1840 ft.

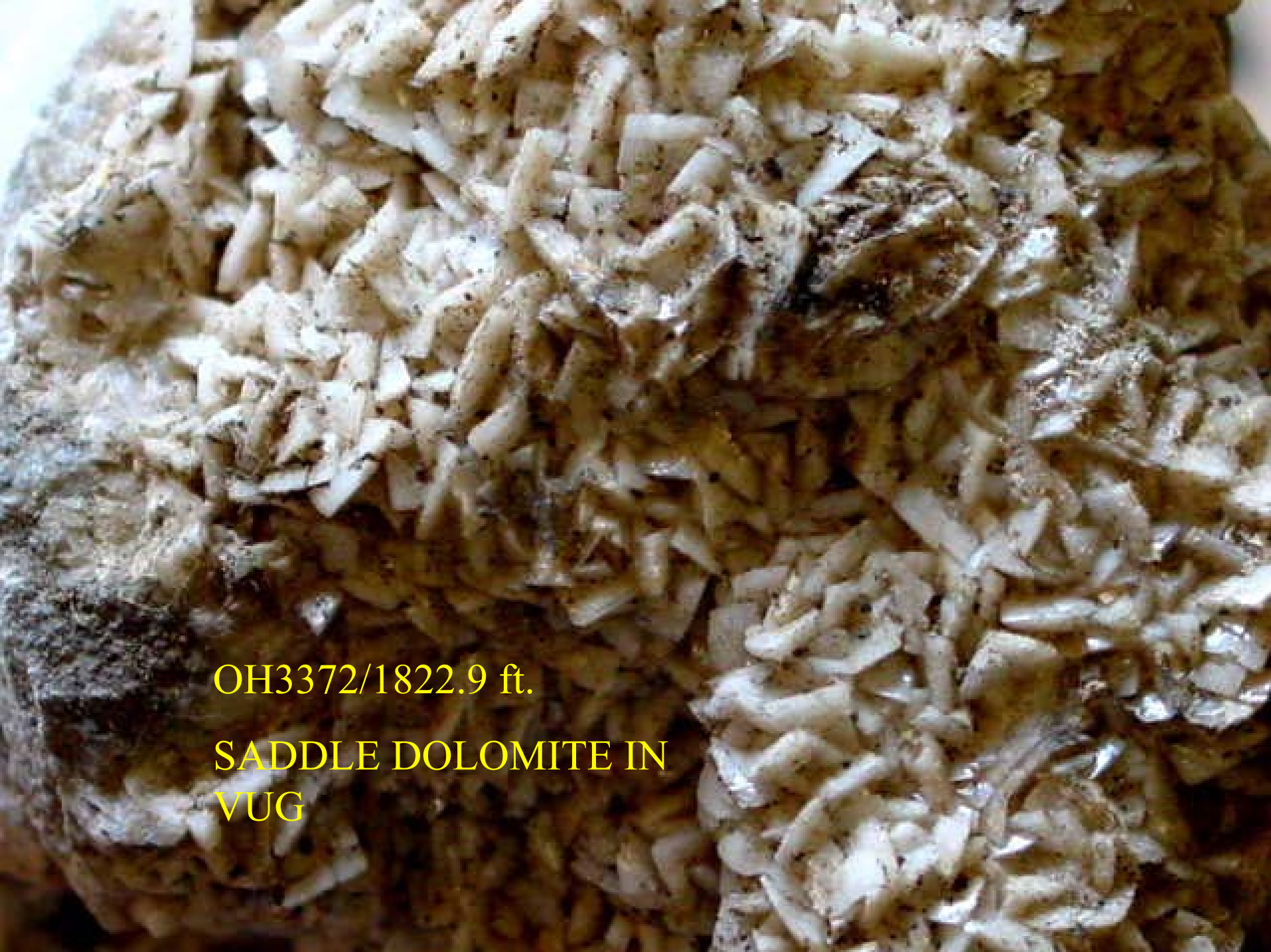

OH3479/1337.8 ft
HYDROTHERMAL
DOLOSTONE


OH3276/1174 ft.
HYDROTHERMAL
DOLOMITE
1500
0.5 mm


OH3276/1174 ft.
HYDROTHERMAL DOLOMITE






OH3372/1822.9 ft.
SADDLE DOLOMITE IN VUG


SADDLE
DOLOMITE