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Plate I—Transgressive siltstone and sandstone unit and transgressive-regressive carbonate unit.

A—Towanda-Gage cycle, and overlying, transgressive, gray siltstone of the Winfield-Odell cycle.
B—Gray, transgressive siltstone abruptly overlain by transgressive, very fine grained, burrowed sandstone, Barneston-Holmesville depositional cycle. Contact may represent a marine, transgressive surface of erosion.
C—Transgressive, light-gray, burrowed, very fine grained sandstone of the Barneston-Holmesville depositional cycle.
D—Transgressive, osagid-coated-grain packstone of the Florence Limestone, Barneston-Holmesville cycle.
E—Transgressive, argillaceous and sandy, dolomitic, bioclast wackestone and packstone of the Towanda Member, Towanda-Gage cycle. Dolomitic limestone gradationally overlies transgressive, very fine grained sandstone composing the lower 3 cm of the slabbed core. Large bioclasts in the wackestone are bryozoans.
F—Transgressive, argillaceous and sandy, dolomitic, crinoid wackestone/packstone of the Florence Limestone, Barneston-Holmesville cycle. Small white nodules are anhydrite.

PLATE I

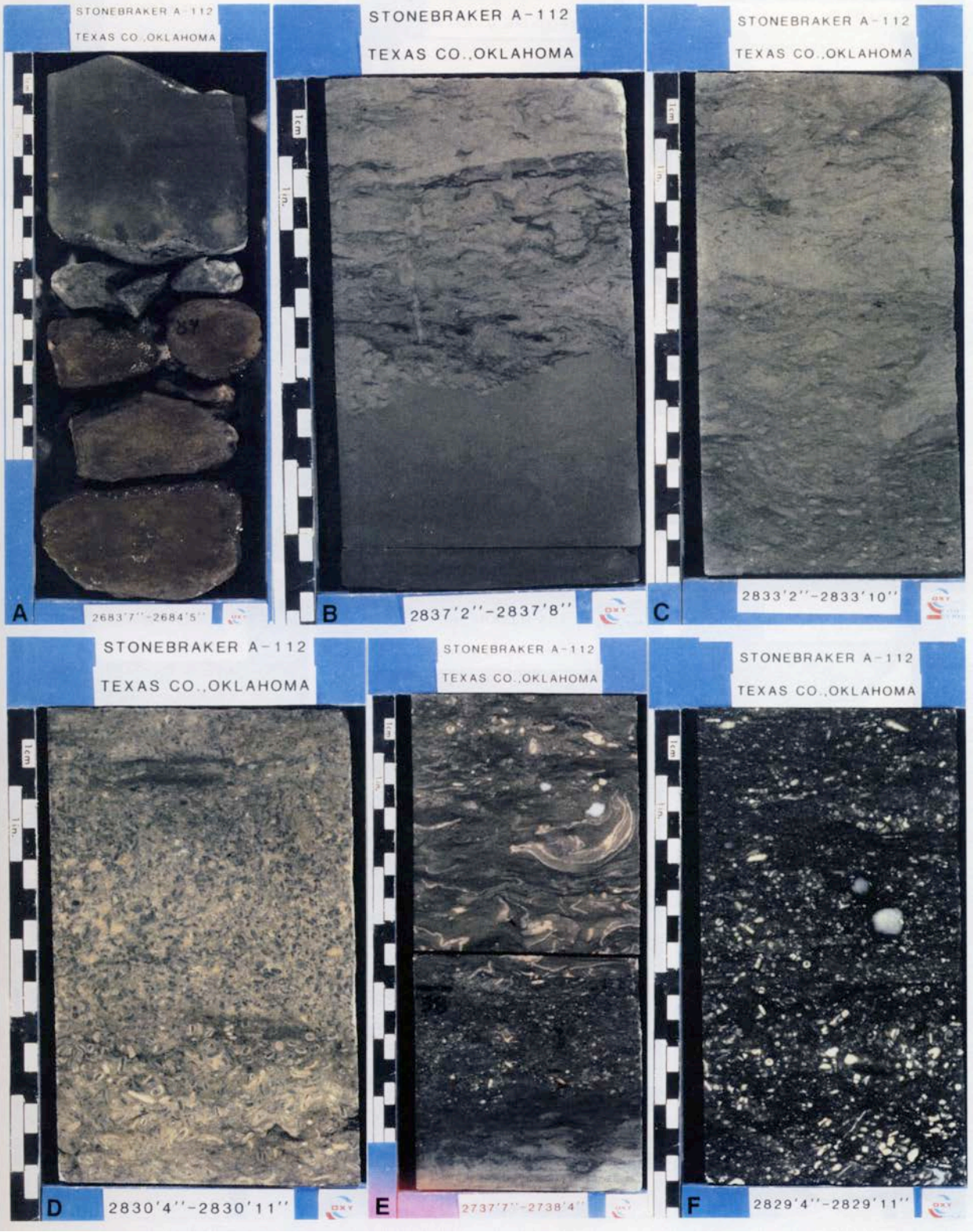
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
A
2683'7''-2684'5''
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
B
2837'2''-2837'8''
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
C
2833'2''-2833'10''
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
D
2830'4''-2830'11''
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
E
2737'7''-2738'4''
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
F
2829'4''-2829'11''

Plate II—Regressive sandstone and dolomitic mudstone unit and transgressive-regressive carbonate unit.

A—Burrowed, argillaceous and dolomitic, very fine grained sandstone of the Oketo Shale, Barneston-Holmesville cycle. Burrows are predominantly Teichichnus.
B—Regressive, medium-scale cross stratified, ooid-bioclast grainstone (dolomite) of the Krider Member, Krider-Paddock cycle.
C—Burrowed, very fine-grained sandstone and reddish-brown, silty to sandy mudstone of the regressive siliciclastic phase, Odell Formation, Winfield-Odell cycle.
D and E—Regressive, reddish-brown, silty to sandy mudstones of the Odell Formation, Winfield-Odell cycle (photo D) and Gage Member, Towanda-Gage cycle (photo E). Light-colored areas are dolomite caliche. Calichification of the sample shown in photo D may have been related to plant-root action.
F—Regressive, sandy dolomite with gray anhydrite nodules, Paddock Member, Krider-Paddock cycle. Dolomite displays mud-filled desiccation cracks.

PLATE II

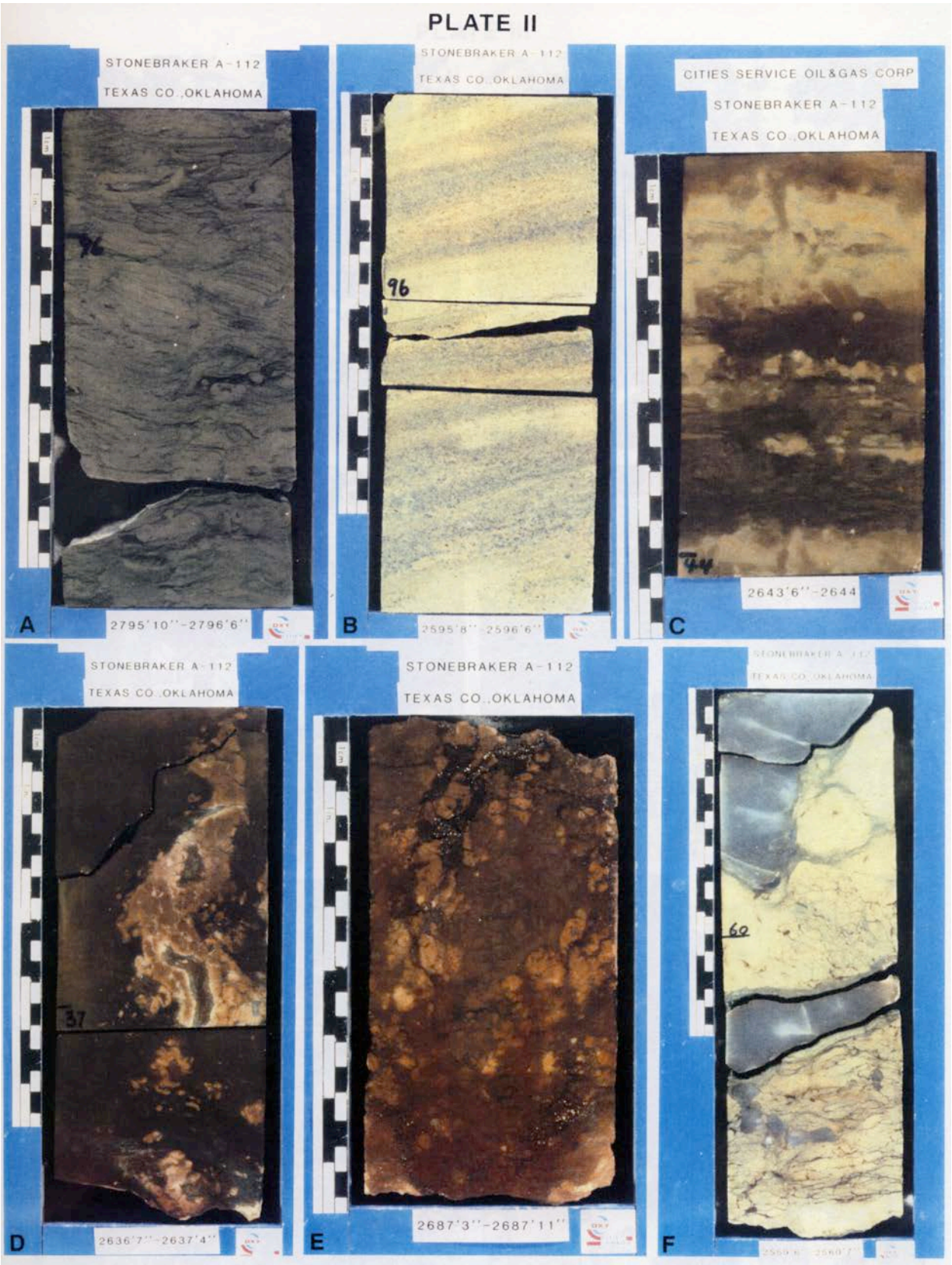
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
A
2795'10"-2796'6"
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
B
2595'8"-2596'6"
CITIES SERVICE OIL&GAS CORP
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
C
2643'6"-2644
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
D
2636'7"-2637'4"
STONEBRAKER A-112
TEXAS CO.,OKLAHOMA
E
2687'3"-2687'11"
F

Plate III—Transgressive-regressive carbonate unit.

A-D—Regressive, bioclast and bioclast-intraclast grainstones of the Winfield Formation. Carbonate grains are green algae (A), crinoids (C), bryozoans (B), and intraclasts (I). Intergranular and secondary moldic porosity are occluded by calcite cement. Grains typically display equant to bladed, very finely to finely crystalline, isopachous, rim cement (RC). A later, medium- to coarsely crystalline, equant calcite cement (CC) fills or partially fills the remaining porosity. Intergranular porosity (IP) and secondary biomoldic porosity (MP) are minor (photos A and B: 30x, photos C and D: 125x).
E—Regressive, ooid grainstone of the Krider Member displaying intergranular porosity filled by blue epoxy. Intergranular porosity is occluded in places by coarsely crystalline, poikilitic, anhydrite cement (AN). Ooids are finely to medium-crystalline dolomite (30x).
F—Anhydrite-cemented (AN), regressive, bioclast-ooid grainstone of the Krider Member. Moldic porosity (NV) is filled by blue epoxy. Carbonate grains are finely crystalline dolomite (30x).

PLATE III

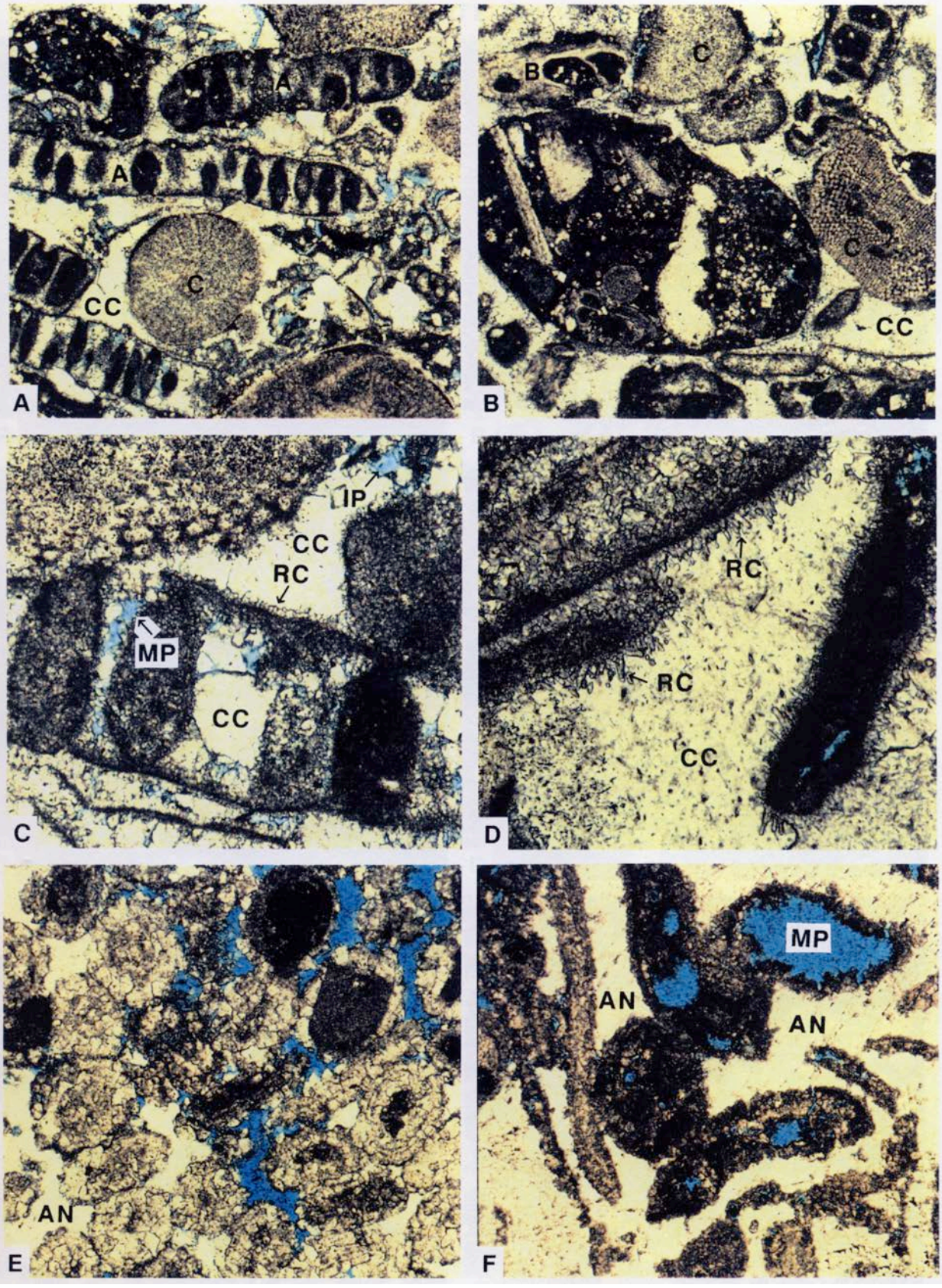

Plate IV—Transgressive-regressive carbonate and regressive sandstone units.

A—Regressive, sandy, dolomite wackestone of the upper part of the Krider Member. The sample displays fine-grained, detrital quartz (Q), moldic porosity filled by blue epoxy, and in the center of the photo a large grain replaced and/or cemented by anhydrite (AN) and dolomite (30x).
B—Transgressive, sandy, bioclast wackestone of the lower part of the Towanda Member. Bioclasts are mainly crinoids (C). Siliciclastic sand is fine- to very fine grained (30x).
C and D—Limy dolomite, bioclast wackestone of the lower part of the Winfield Formation. The matrix is dolomite. Bioclasts, stained red by alizarin red S, are calcite. Bioclasts are bryozoans (B) and brachiopods (BR). Porosity filled by blue epoxy appears to be largely intercrystalline (IP) and lesser biomoldic (photo C: 30x, photo D: 80x).
E—Sandy, osagid-coated-grain packstone of the transgressive Florence Limestone, Barneston-Holmesville cycle. Bioclasts are concentrically coated by encrusting forms (EF) and blue-green algae (30x).
F—Fine-grained, regressive sandstone of the uppermost Winfield Formation, Winfield-Odell cycle, displaying intergranular porosity (filled by blue epoxy) and minor amounts of finely crystalline, dolomite cement (arrows) (80x).

PLATE IV