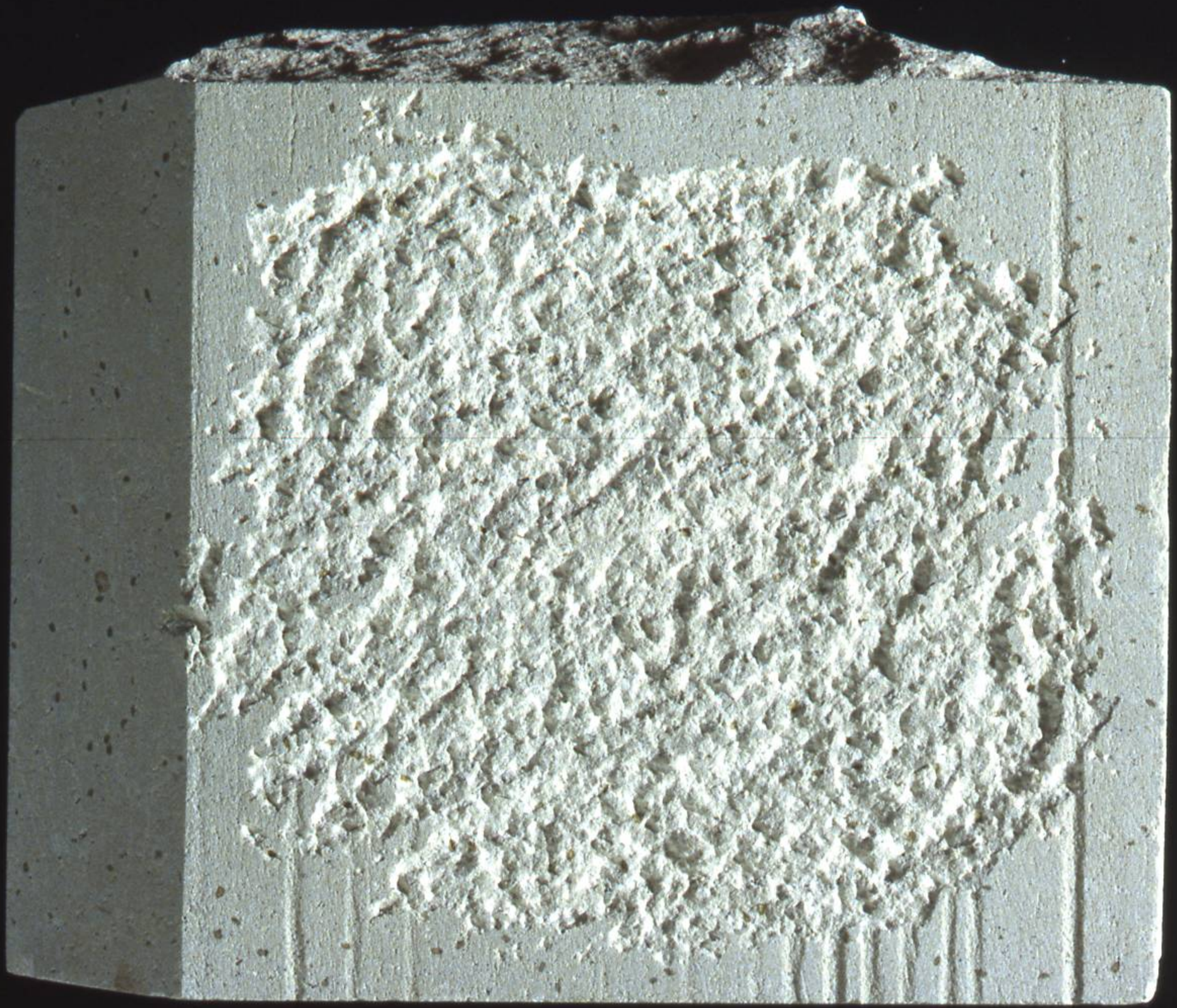

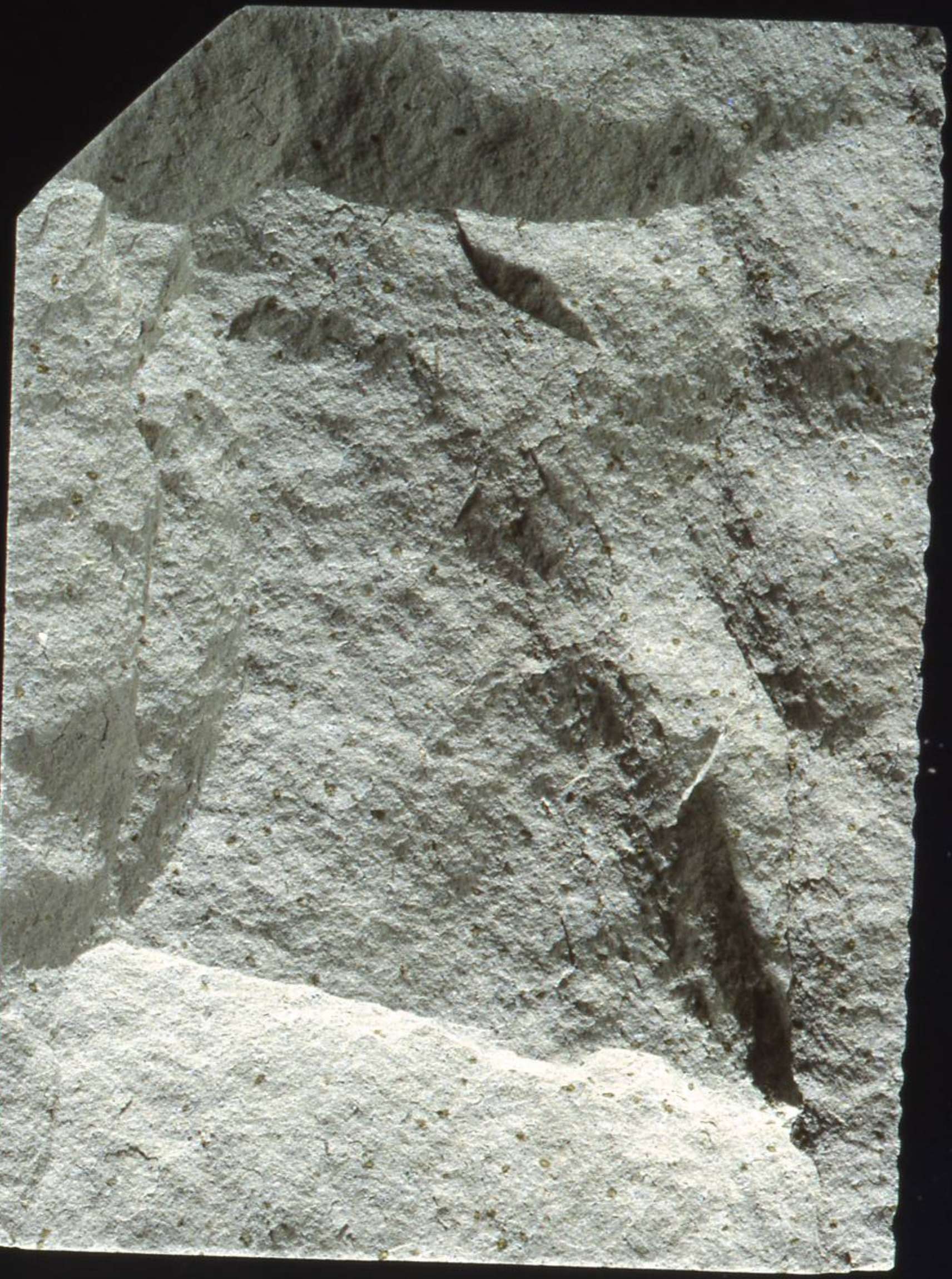

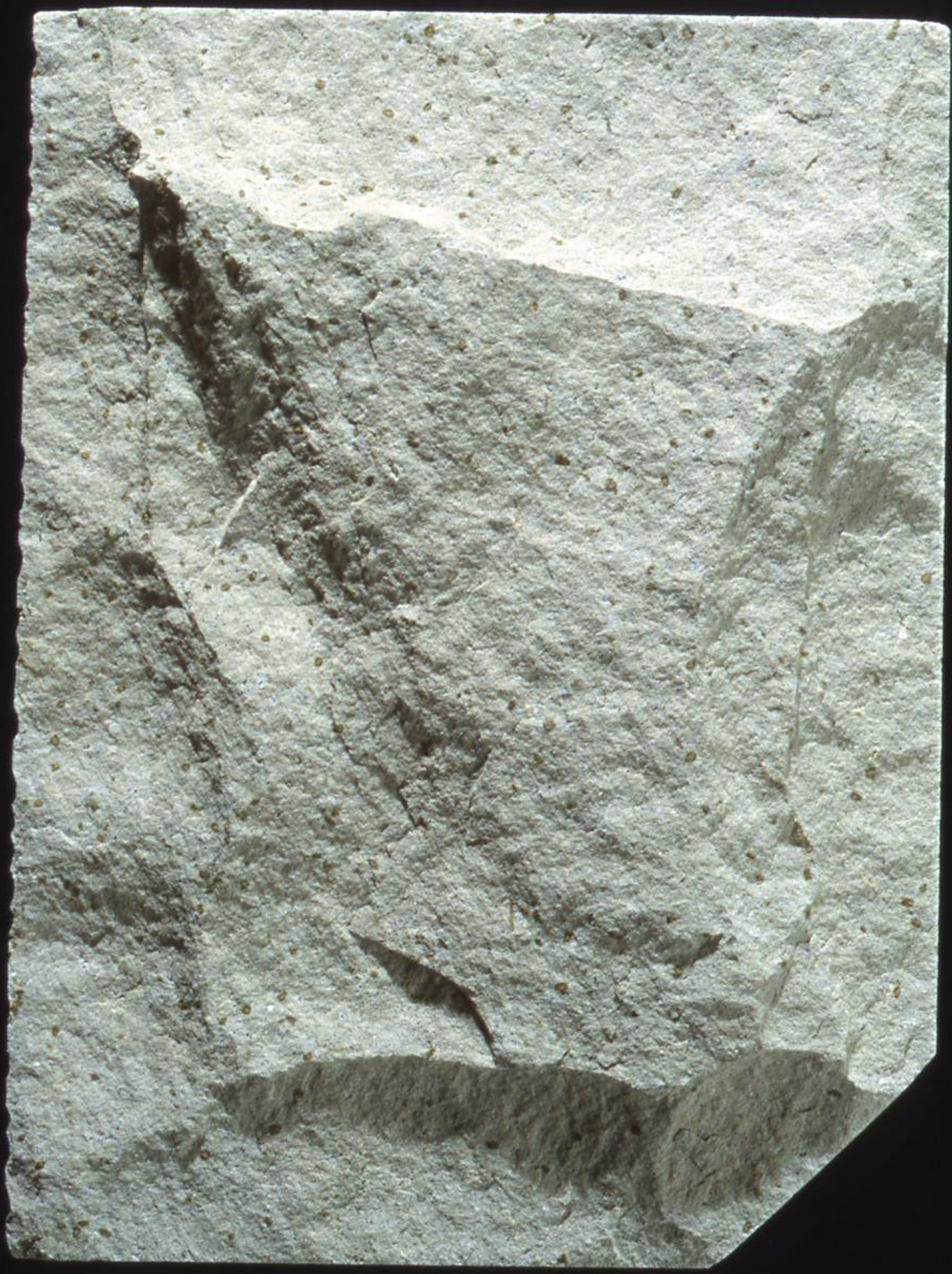

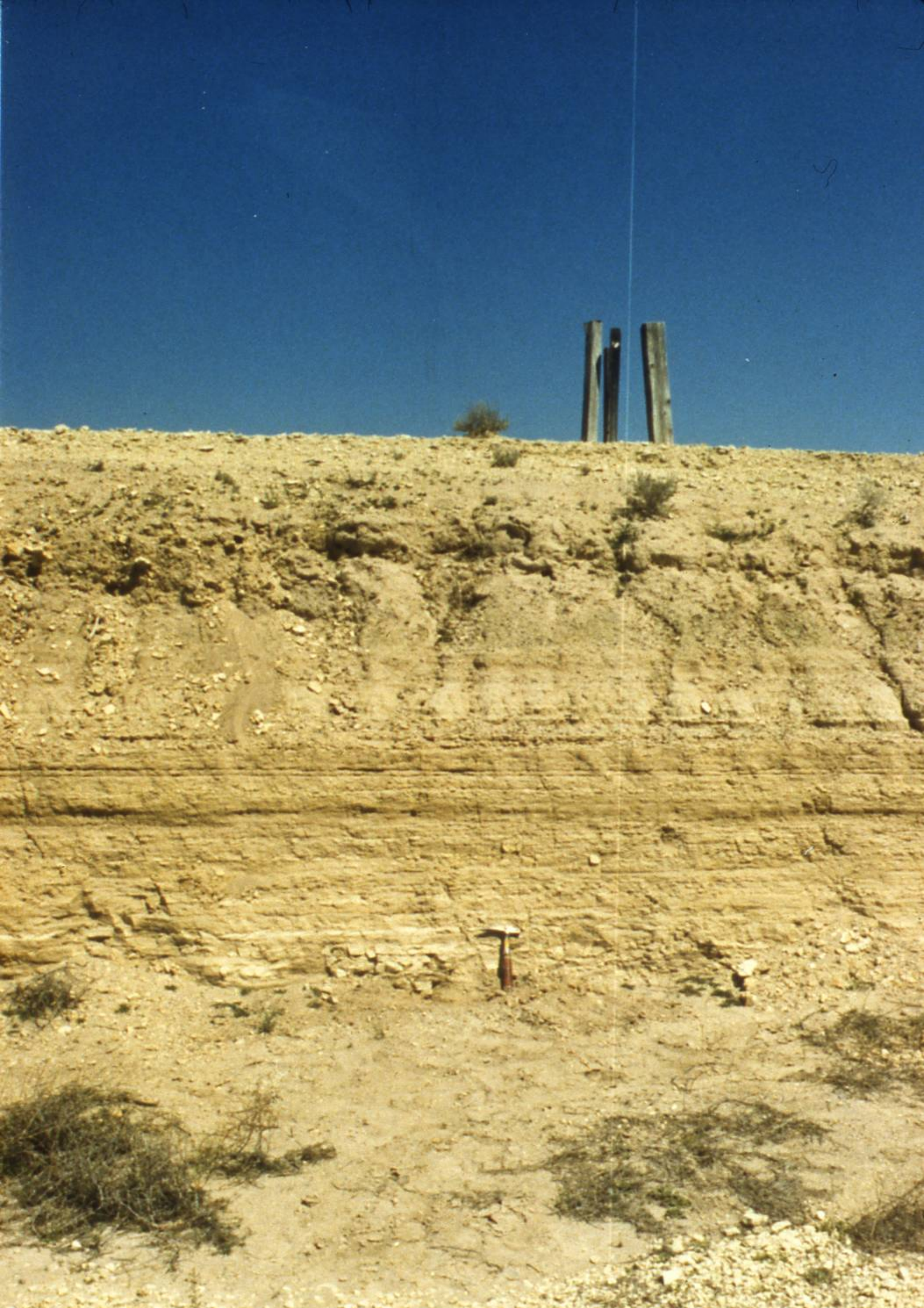


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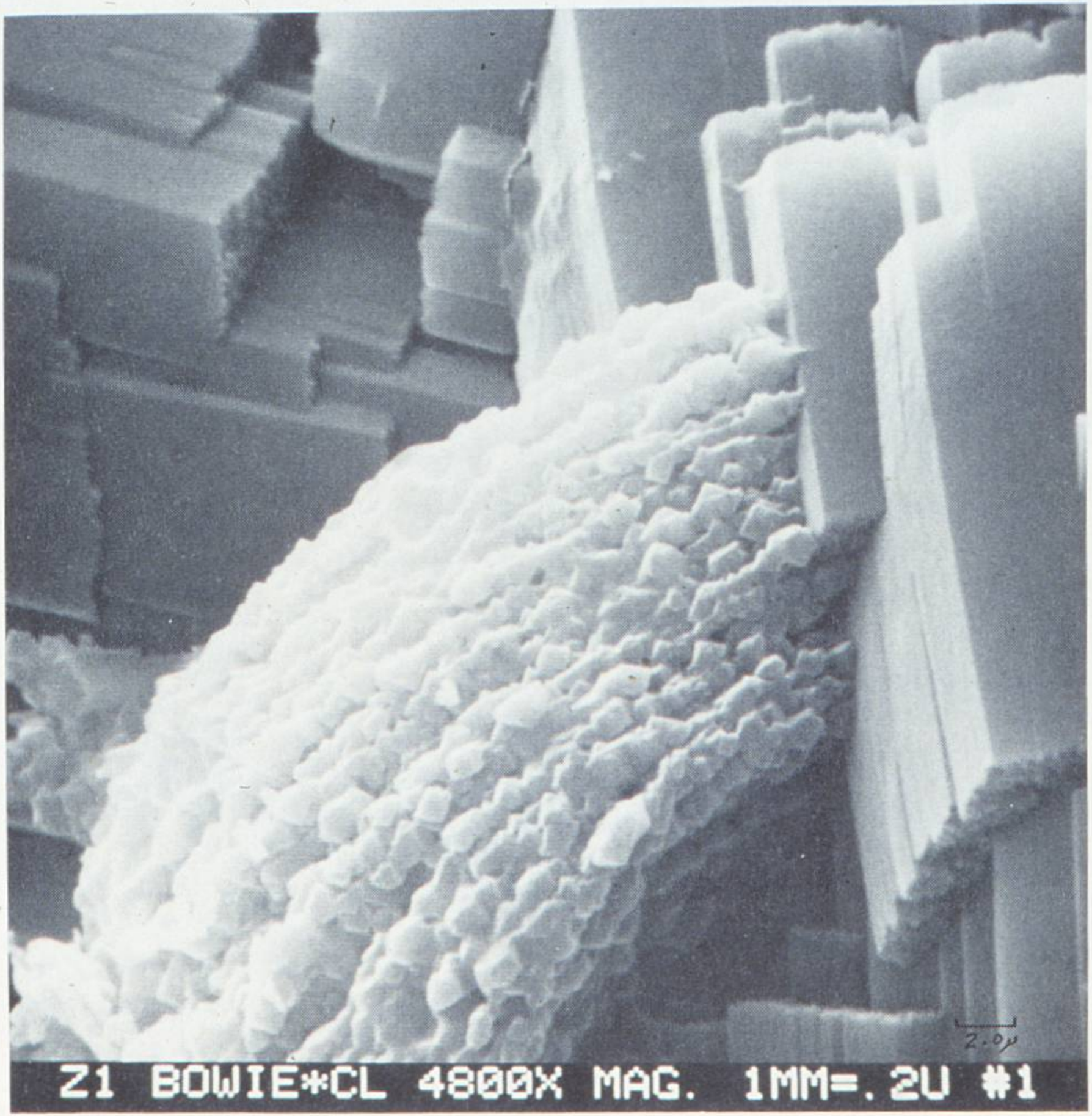

FIGURE 3—CHABAZITE (CHAIN-LIKE CLUSTERS OF SMALL CRYSTALS)

FIGURE 5—DISTRIBUTIO
BOWIE CHABAZITE DEPO

FIGURE 4—CHABAZITE (CHAIN-LIKE CLUSTERS OF SMALL CRYSTALS)

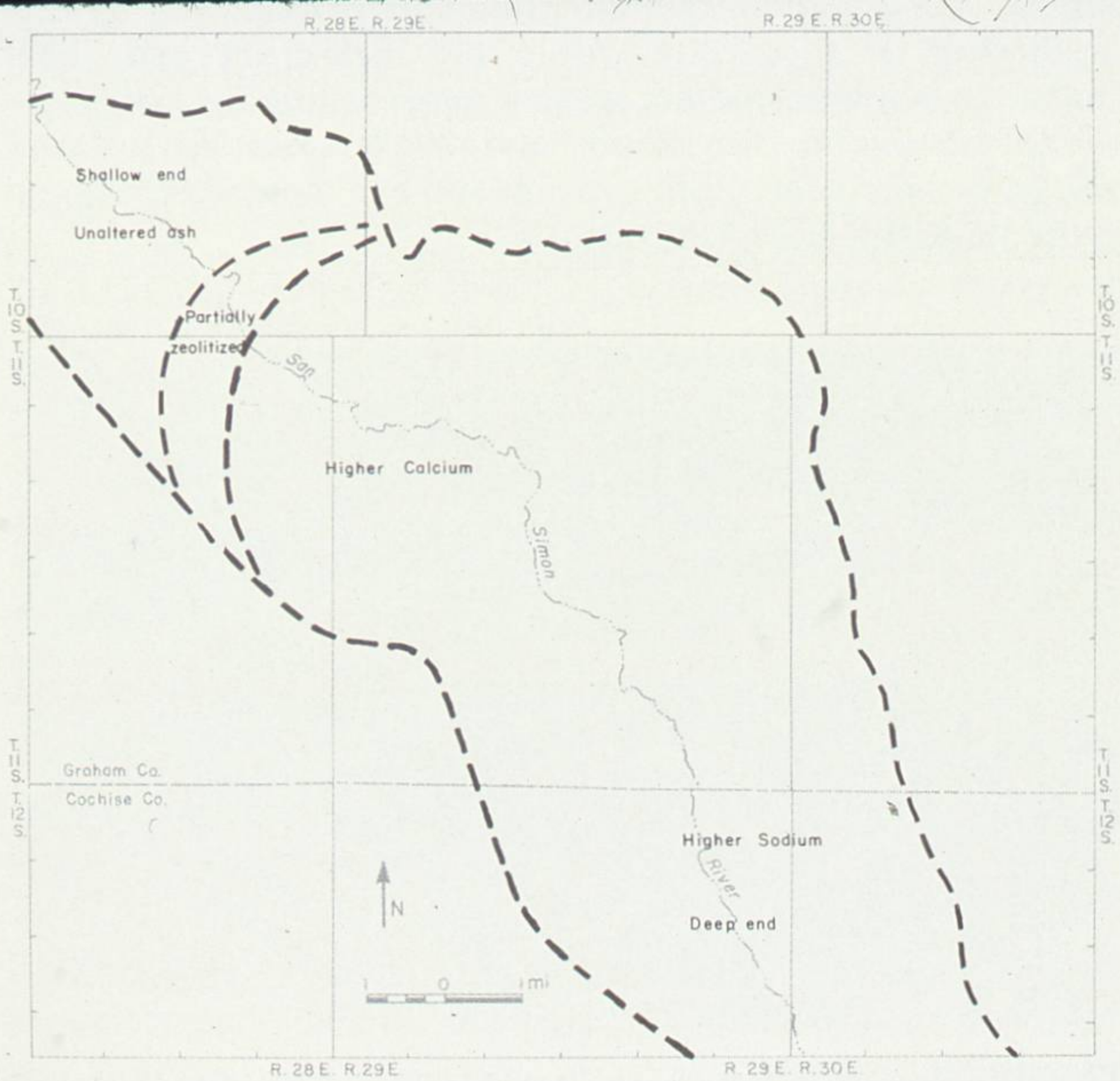

FIGURE 8—OUTLINE OF THE ORIGINAL BASIN OF DEPOSITION AT THE BOWIE CHABAZITE DEPOSIT.


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4th Edition

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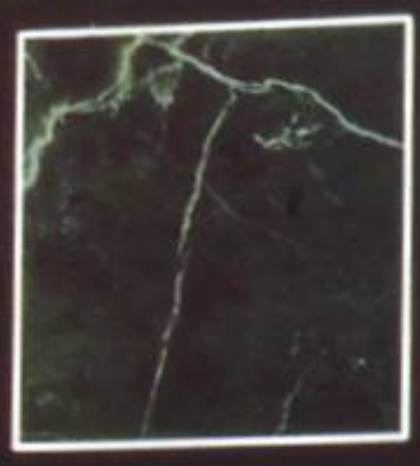

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by Peter W. Harben and Robert L. Bates

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DISTRIBUTION OF CARBONATITES AND RELATED ROCKS IN B•C•

1. VERGIL
2. LONNIE
3. BEARPAW RIDGE ☆
4. VERITY & PARADISE LAKE
5. HOWARD CREEK
6. BONE CREEK & SERPENTINE CREEK
7. MUD LAKE
8. TRIDENT MOUNTAIN ☆
9. KINBASKET LAKE ☆
10. MOUNT GRACE
11. RATCHFORD RIVER
12. PERRY RIVER
13. JORDAN RIVER (MOUNT COPELAND)
14. THREE VALLEY GAP
15. ICE RIVER

☆ denotes sodalite or nephelinite syenites only – no associated carbonatites present

ROCKY MOUNTAIN TRENCH

B.C. ALTA

SCALE

100 50 0 50 100

KILOMETRES

PRINCE GEORGE

VANCOUVER

CALGARY

CRETACEOUS & TERTIARY

plateau basalt, intermediate to acidic volcanics, tuff, sandstone, shale

LATE JURASSIC THROUGH EARLY CRETACEOUS

granite, quartz monzonite, quartz diorite, granodiorite

PERMIAN THROUGH JURASSIC

acid to intermediate volcanics, tuff, basalt, sandstone, limestone

DEVONIAN TO TRIASSIC

Slide Mountian, Cache Creek, Sylvester Fms.

basalt, chert, sandstone, limestone

DEVONIAN TO CRETACEOUS

carbonate, sandstone, shale, coal

CAMBRIAN THROUGH DEVONIAN

sandstone, shale, carbonate

HADRYNIAN

Windermere Supergroup

grit, sandstone, shale, limestone

HELIKIAN

Belt-Purcell & Equivalents

quartzite, shale, dolomite, limestone

CAMBRIAN THROUGH MISSISSIPPIAN

Lardeau, Broadview, Eagle Bay Fms.

argillite, limestone, phyllite

?PRECAMBRIAN THROUGH MISSISSIPPIAN

Snowshoe Fm.

argillite, limestone, sandstone

AGE UNCERTIAN – HADRYNIAN THROUGH ?

schist, gneiss, marble, pegmatite

AGE UNCERTIAN – ARCHEAN THROUGH ?

Core Gneisses

ortho and paragneiss

N

MORAINE

PEGMATITE

7500

7000

HOWARD CREEK

URTITE

CARBONATITE

SPHENE-BEARING AMPHIBOLITE

HORSETHIEF CREEK GROUP

SEMIPELITE-AMPHIBOLITE DIVISION

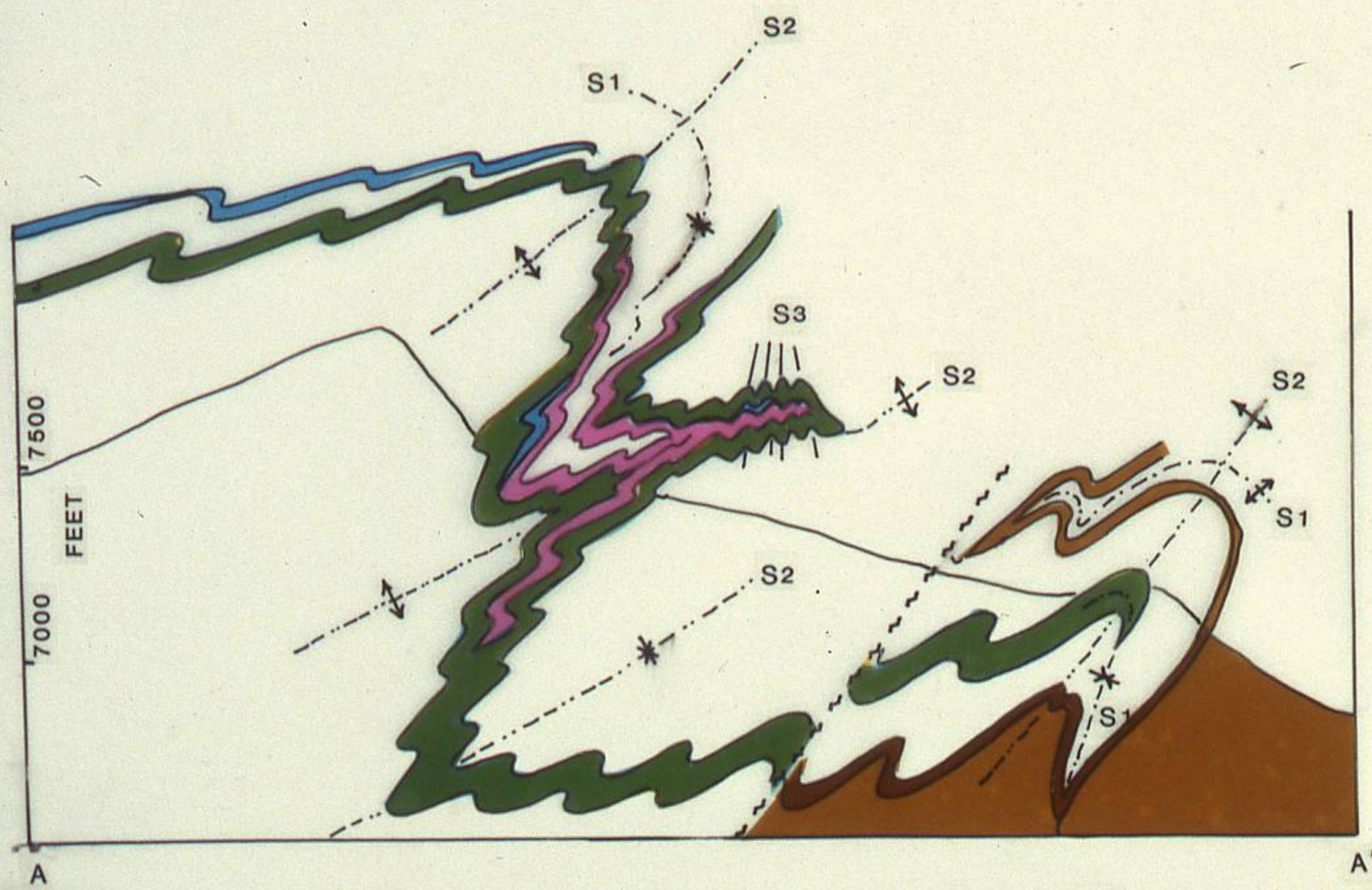
32 BEDDING

FAULT

SCALE

0 METRES 500

CROSS-SECTION PARADISE LAKE



LEGEND

INTRUSIVE ROCKS

NEPHELINE & SODALITE SYENITE

CARBONATITE

HOST ROCKS

HADRYNIAN HORSETHIEF CREEK GP

SEMIPELITE-AMPHIBOLITE DIVISION

banded amphibolite

LOWER MARBLE DIVISION

LOWER DIVISION biotite schist

21 BEDDING

S2 AXIAL TRACE

FAULT

N

MALTON GNEISS

McNAUGHTON LAKE

VERITY

PARADISE LAKE

HOWARD CREEK

SERPENTINE CREEK

BONE CREEK

RIVER

NORTH THOMPSON

MUD LAKE

SCALE

1 0 2 4

KM

BLUE RIVER AREA

CARBONATITE

NEPHELINE SYENITE

KAZA GROUP: GRIT, PSAMMITE, PELITIC SCHIST, MINOR CARBONATE

HORSETHIEF CREEK GROUP: MAIN MARBLE

HORSETHIEF CREEK GROUP: SEMIPELITE/AMPHIBOLITE

HORSETHIEF CREEK GROUP: LOWER UNITS, PELITE, MINOR CARBONATE, QUARTZITE, MINOR GRIT

CORE GNEISSES: ORTHO AND PARAGNEISS

NORMAL FAULT, TEETH ON DOWNTHROWN SIDE

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22

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26

PARADISE LAKE

SCALE

100 0 100 200 300

METRES

LONNIE COMPLEX

LEGEND

- SYENITE, MONZONITE, MONZODIORITE
- AEGERINE–AMPHIBOLE FENITE
- MYLONITIZED BIOTITE SOVITE
- BIOTITE SOVITE
- AEGERINE SOVITE
- INTERLAYERED SOVITE AND SEMIPELITIC SCHIST

LONNIE COMPLEX

- WOLVERINE COMPLEX BIOTITE PSAMMITE, SEMIPELITIC SCHIST, MINOR QUARTZITE AND MARBLE
- 85 BEDDING
- FAULT

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0 25 50

METRES

GRANITE CREEK

3400 3500 3600 3700