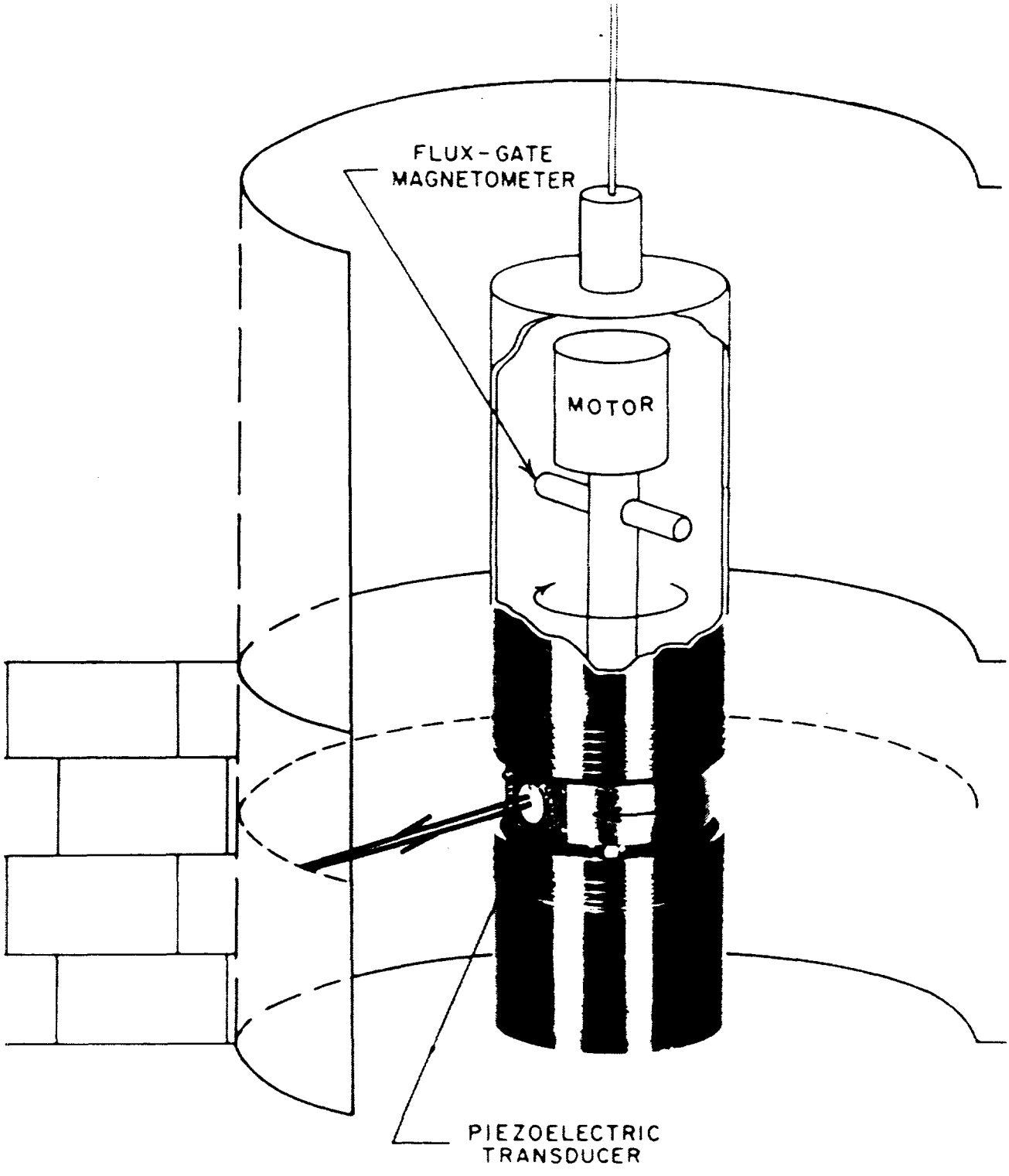


Fig. 1 Schematic of Basic Televiewer Elements (From: Zemanek, J., et. al., 1970, Formation Evaluation by Inspection with the Borehole Televiewer; Geophysics, v. 35, no. 2, p. 255, fig. 1.)

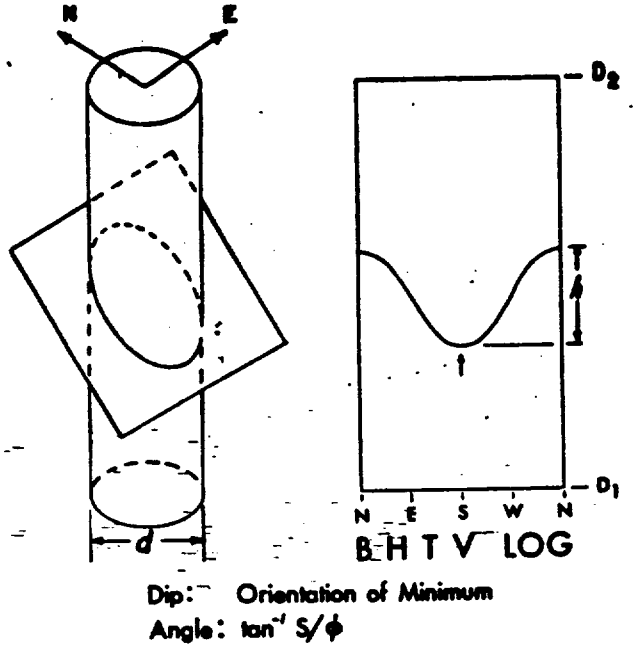


Fig. 2 Isometric of natural fracture or bedding plane intersecting borehole at moderate dip angle, and corresponding BHTV log.

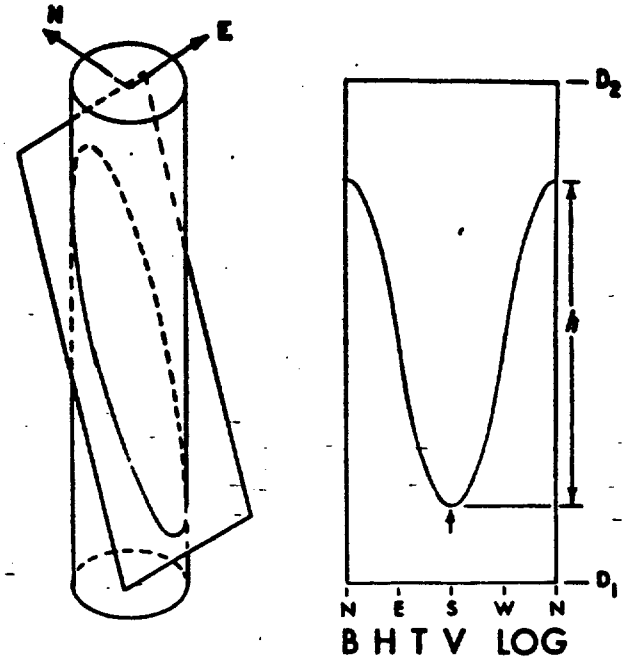


Fig. 3 Isometric of natural fracture or bedding plane intersecting borehole at steep dip angle, and corresponding BHTV log.

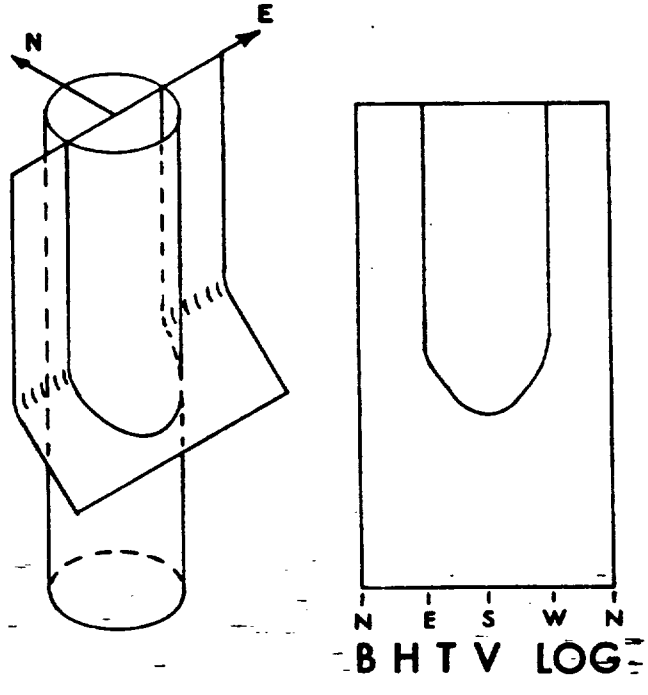


Fig. 4 Isometric of induced fracture entering the borehole at a moderate dip and bisecting it vertically. With corresponding BHTV log.

All figures, from: Zemanek, J., 1969, The Borehole Televiewer - A New Logging Concept for Fracture Location and Other Types of Borehole Inspection: Jour. of Petr. Tech., v. 21, pp. 762-774

Mobil

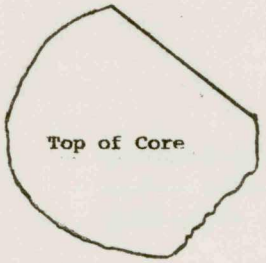
Mr. Le May

- CORE DATA EXHIBITS -

BEFORE THE
OIL CONSERVATION COMMISSION
Santa Fe, New Mexico
Case No. 8946 8950 / 9113 9114 Exhibit No. 2
Submitted by Mobil
Hearing Date 3-30-87

Photo 1

- Mobil - Lindrith B Unit
  No. 38 Core
- B Zone - 6691.5



End View

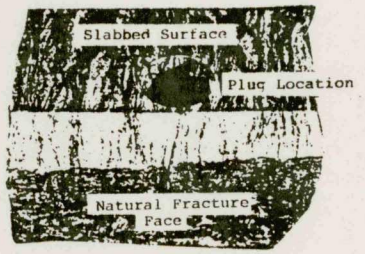
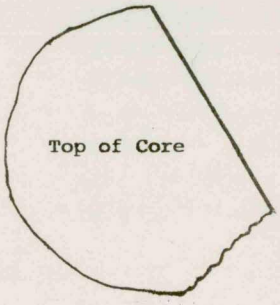


Photo 2

- Mobil - Lindrith B Unit
  No. 38 Core
- B Zone - 6698.5



End View

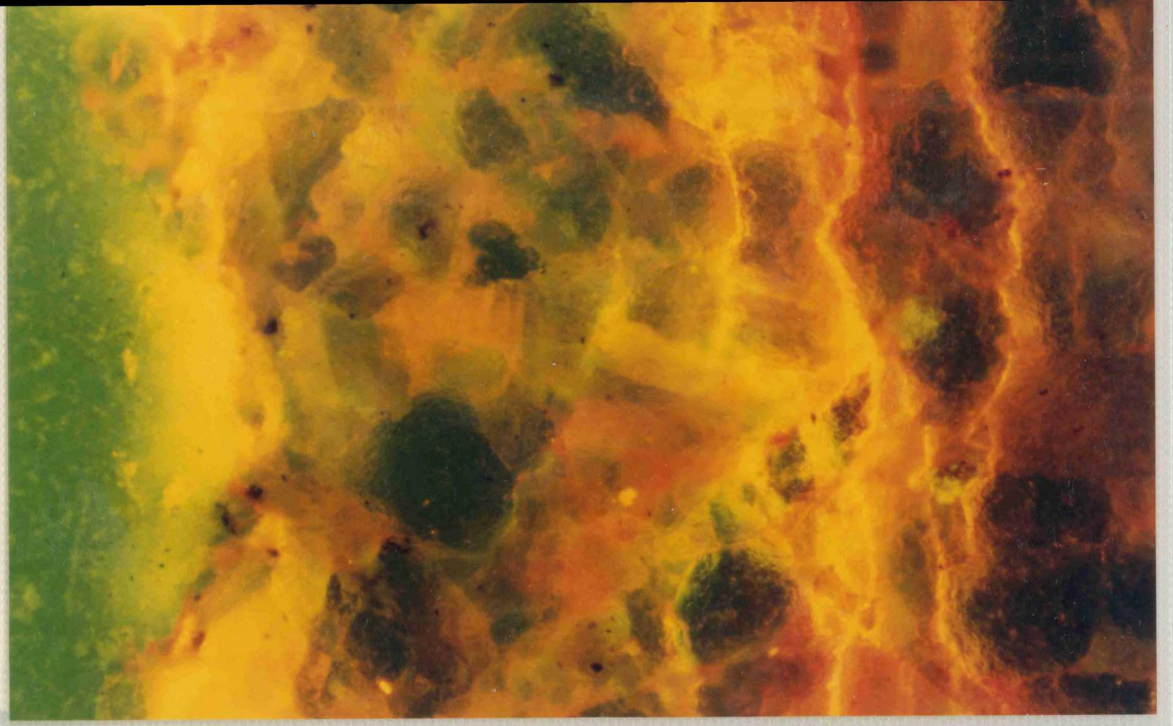


Photo 3A

- Mobil - Lindrith B Unit
  No. 38 Core
- B Zone - 6709.4
- Flourescence photomicro-
  graph approx. 300X
- Major vertical fracture face (left)
  and associated micro-fracturing
  and intergranular porosity.

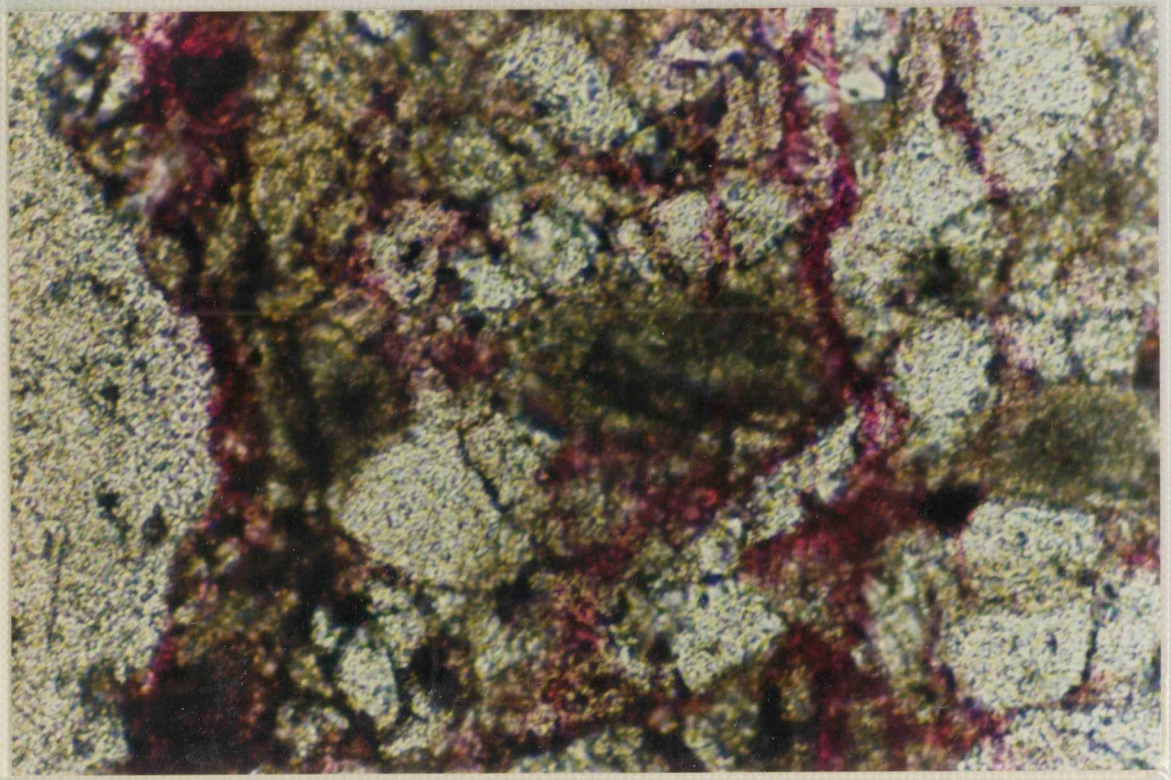
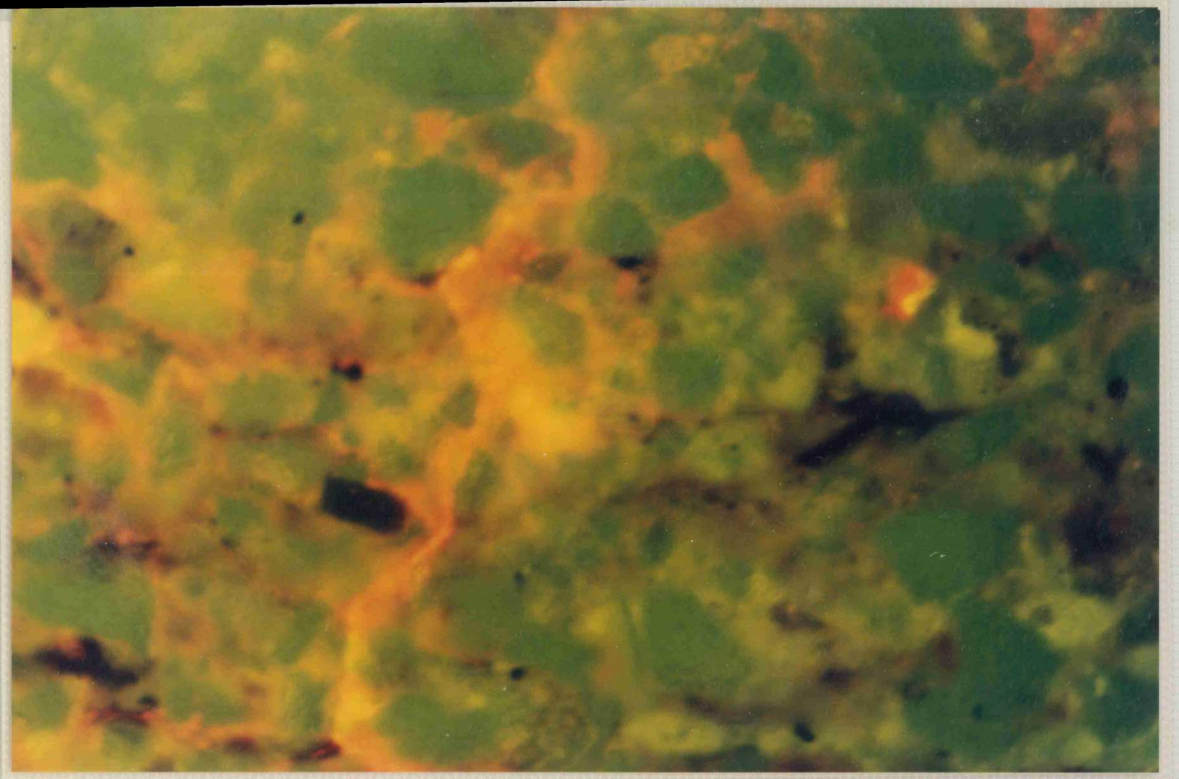


Photo 3B

- Same view as above.
- Plain light
- Flourescent epoxy is red.



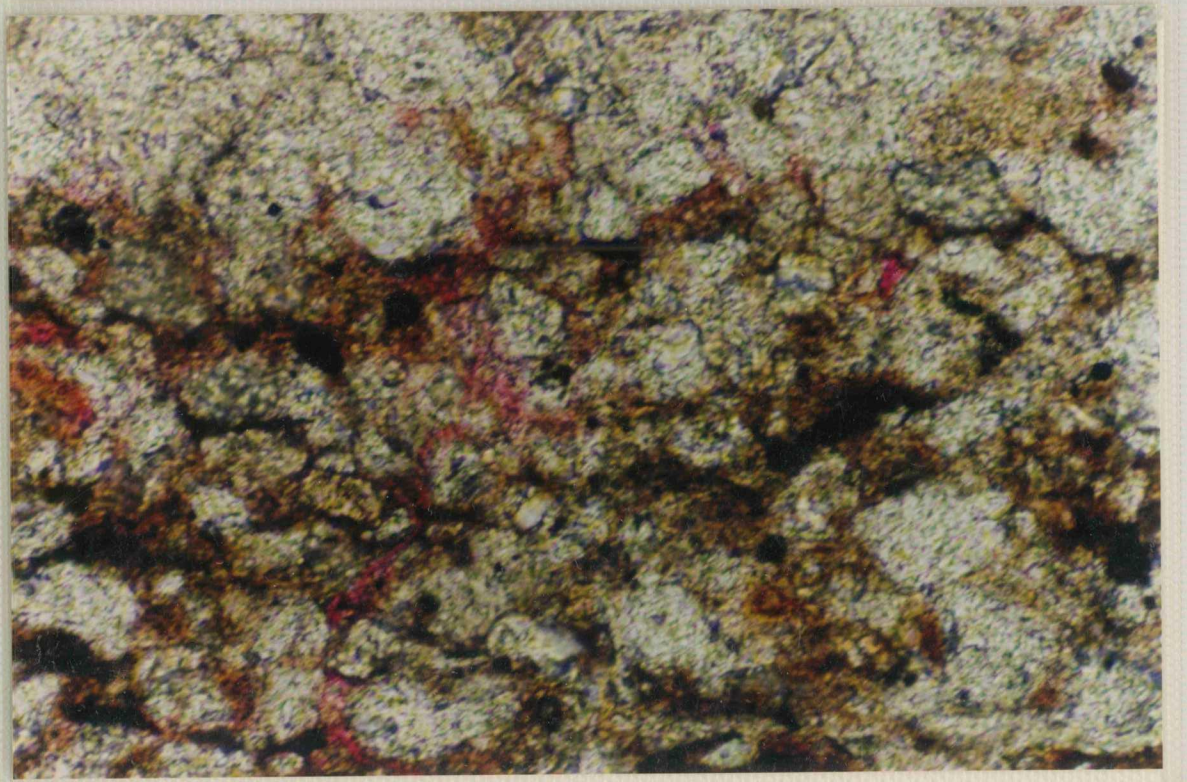


Photo 4A

- Mobil - Lindrith B Unit
  No. 38 Core
- A Zone - 6668.0
- Flourescence photo micrograph
- approx. 300X
- vertical microfracture with
  interconnected sheet pores and
  intergranular porosity

Photo 4B

- Same view as above
- Plain light
- Flourescent epoxy is red.

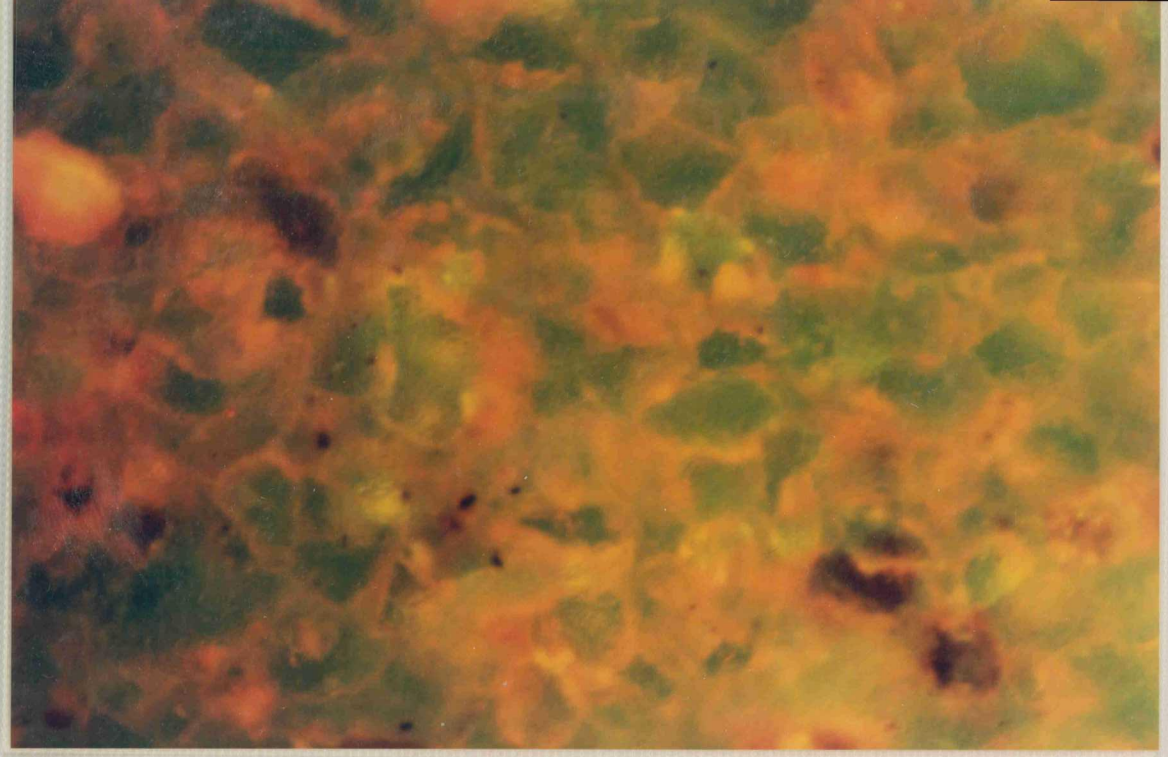


Photo 5A

- Mobil - Lindrith B Unit
  No. 38 Core
- B Zone - 6717.8
- Flourescent photo micrograph
- approx. 300X
- Sheet pores and intergranular
  porosity

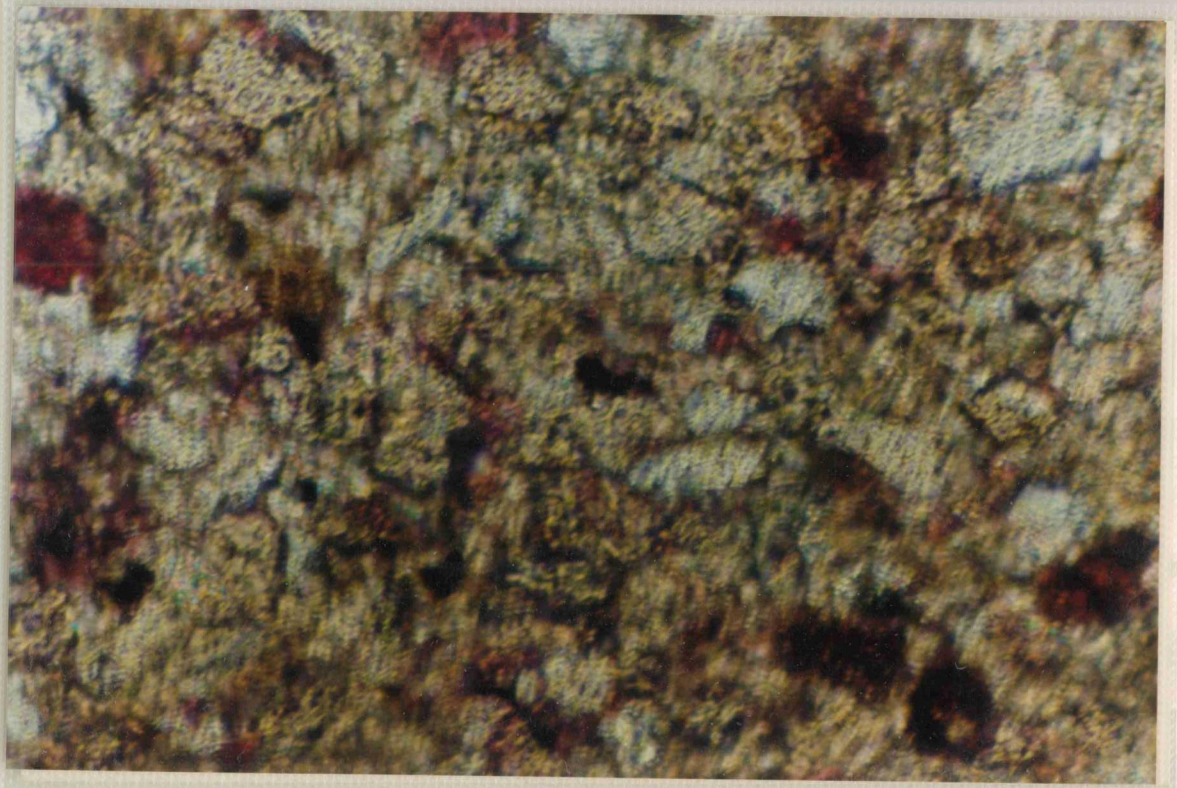


Photo 5B

- Same view as above
  (slightly out of focus)
- Plain light
- Flourescent epoxy is red

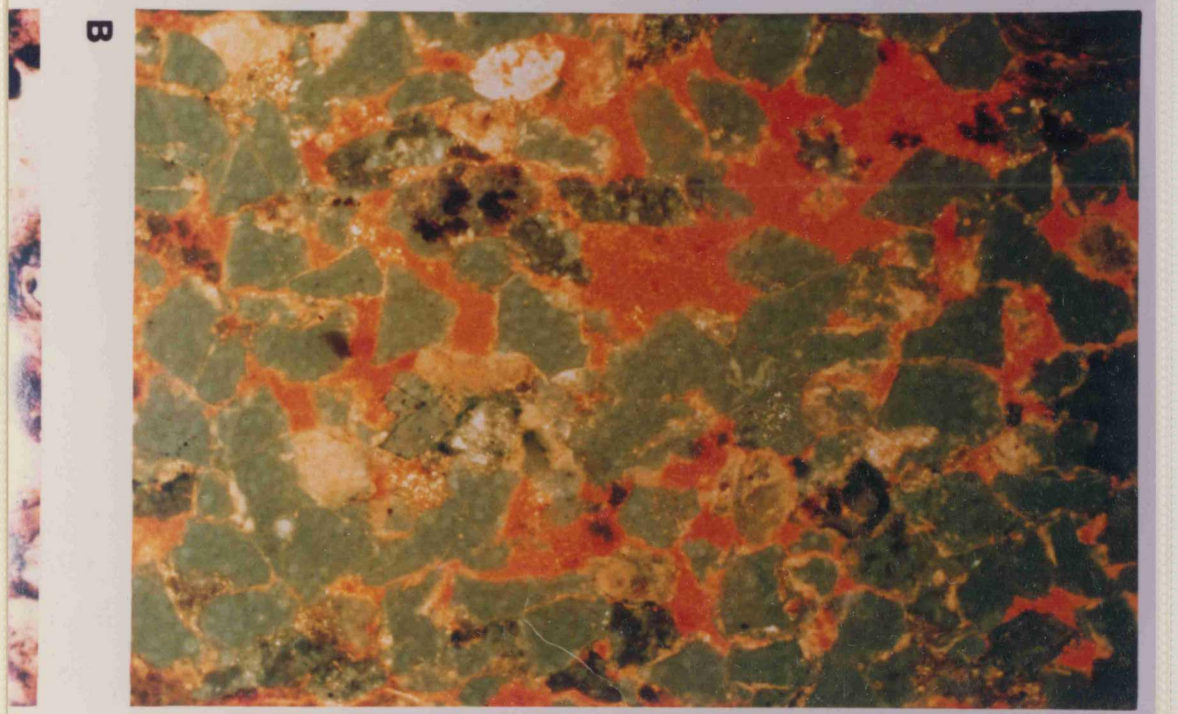


Photo 6

- Mallon Oil - Davis Fed. 3-15 core.
- B Zone - 7167'(7161 log depth)
- Terratek Sample 7167, photo C
- approx. 100X
- "Blue-violet flourescence photomicrograph of vertical fracture porosity transecting both muddy and grain supported portions of laminated rock. Note minor amounts of porosity separating transported grains from calcareous cement (arrows)."

Photo 7

- Mallon Oil - Davis Fed. 3-15 core.
- C Zone - 7273'(7267' log depth)
- Terratek sample 7273, photo B
- approx. 100X
- "Flourescence photomicrograph revealing microporosity associated with kaolinitic pore fill."

C

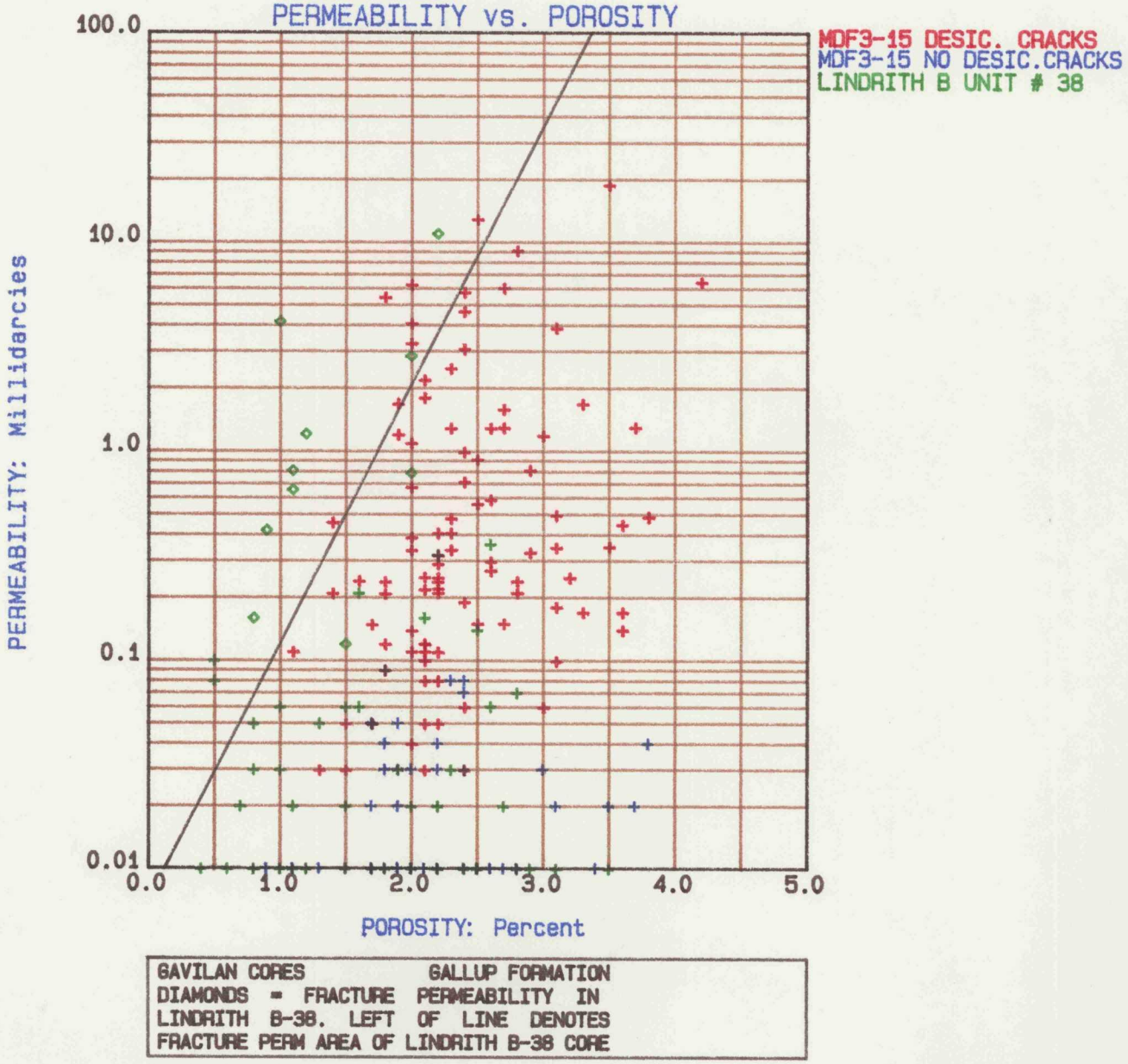
D

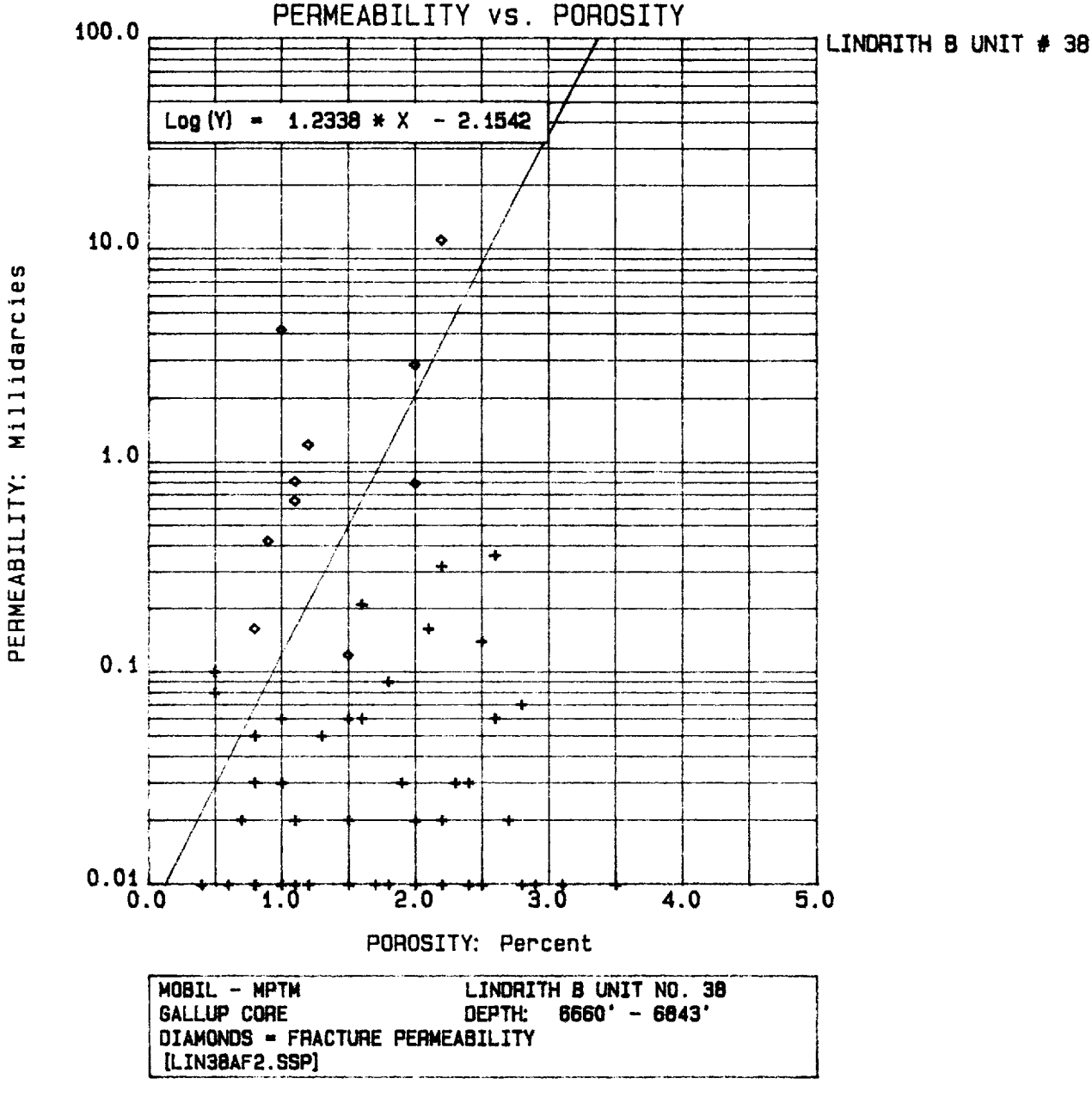
Photo 8

- Mallon Oil - Davis Fed. 3-15 core.
- Lower C Zone - 7343'(7337' log depth)
- Terratek sample 7343, photo C
- approx. 100X
- "Flourescence micrograph of large open fracture typically responsible for most porosity in these rocks. Blue ultraviolet photo also reveals presence of microfractures (yellow-orange) and leak-off matrix porosity (orange)."

Photo 9

- Mallon Oil - Davis Fed. 3-15 core.
- Lower C Zone - 7343'(7337' log depth)
- Terratek sample 7343, photo D
- approx. 100X
- "Green flourescence photomicrograph of pull-apart porosity where grain-to-grain contacts have pulled away from one another. Alternatively, grains can pull away from cements (or overgrowths) due to rock strain."


PERMEABILITY vs. POROSITY
MDF3-15 DESIC. CRACKS
MDF3-15 NO DESIC.CRACKS
LINDRITH B UNIT # 38
PERMEABILITY: Millidarcies
100.0
10.0
1.0
0.1
0.01
0.0
1.0
2.0
3.0
4.0
5.0
POROSITY: Percent
GAVILAN CORES GALLUP FORMATION
DIAMONDS = FRACTURE PERMEABILITY IN
LINDRITH B-38. LEFT OF LINE DENOTES
FRACTURE PERM AREA OF LINDRITH B-38 CORE


PERMEABILITY vs. POROSITY
LINDRITH B UNIT # 38
Log (Y) = 1.2338 * X - 2.1542
100.0
10.0
1.0
0.1
0.01
PERMEABILITY: Millidarcies
0.0
1.0
2.0
3.0
4.0
5.0
POROSITY: Percent
MOBIL - MPTM
LINDRITH B UNIT NO. 38
GALLUP CORE
DEPTH: 6660' - 6843'
DIAMONDS = FRACTURE PERMEABILITY
[LIN38AF2.SSP]