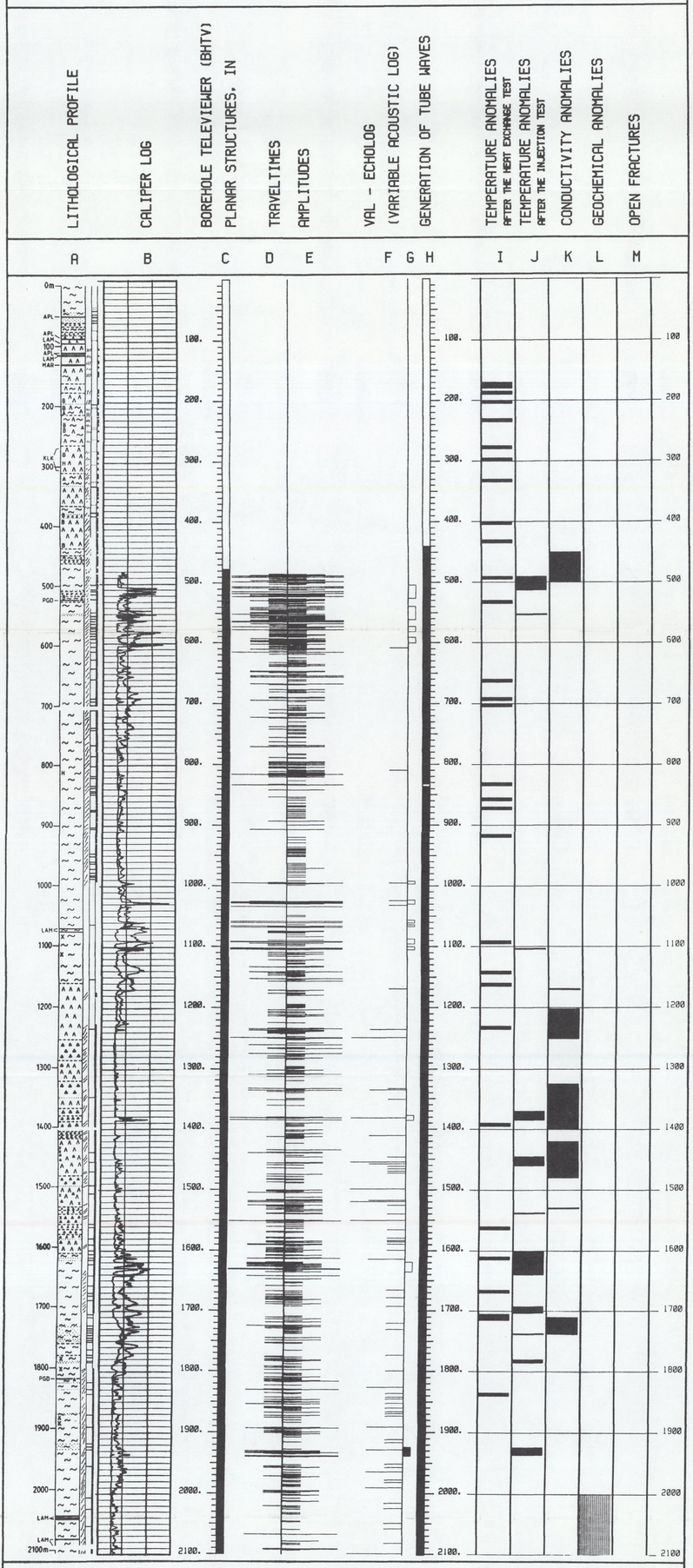
KTB OBERPFALZ VB

COMPARISON BETWEEN RELEVANT BOREHOLE MEASUREMENTS FOR FRACTURE DETECTION

APPENDIX TO "DETECTION OF PERMEABLE FRACTURE ZONES BY TUBE WAVES IN THE KTB PILOT BOREHOLE"

CH. HANITZSCH, TH. RUEHL, B. B. HEINEMANN

SCALE: 1:4000 0 - 2100 M



1ST COLUMN: LITHOLOGY (SEE LEGEND)
2ND COLUMN: FOLIATION
3RD COLUMN: FAULTS (DOTTED: ASSUMED FAULTS) AND CORE RECOVERY

KTB Feldlabor/Geologie
Zchn.: Nuber Dez 89

NO DATA
SCHLUMBERGER - DATA
WBK - DATA
BAD QUALITY OF DATA

NO DATA
PETRODATA - DATA

ZONES OF LOWER AMPLITUDES

ZONES OF DELAYED WAVE ARRIVALS AND LOWER AMPLITUDES

TEMPERATURE ANOMALY IN THE FIRST PROFILE
TEMPERATURE ANOMALY IN ALL PROFILES
HIGH HELIUM AND METHAN CONTENTS IN MUD
INFLOW OF SALINE FLUIDS AND HIGH HELIUM AND METHAN CONTENTS
OPEN FRACTURE
PERMEABLE FRACTURE OR ZONE

LEGEND:

- (garnet-, muscovite-bearing) kyanite / sillimanite-biotite gneiss
- (garnet-) biotite-hornblende gneiss (hornblende-) biotite gneiss
- granular, leucocratic biotite gneiss
- amphibolite
- meta-gabbro
- ultramafic rock
- lamprophyre
- dioritic dyke

..... cataclasite, cata-clastically overprinted
***** aplite-granite, aplite, meta-aplite

SIGNATURES:

x = leucocratic dyke
A = amphibolite
B = biotite gneiss
H = hornblende gneiss
S = sillimanite-biotite gneiss

ABBREVIATIONS:

APL = aplite, aplite-granite, meta-aplite
AUX = augen-texture
BIO = biotite
CAL = calcite
EPD = epidote
GNS = gneiss
GWT = garnet
KLK = calcsilicate, intercalations
KLU = joint
KRG = granular
LAM = lamprophyre
LET = fault-gouge
PDG = pegmatoid

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FOR FRACTURE DETECTION

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BY TUBE WAVES IN THE KTB PILOT BOREHOLE"
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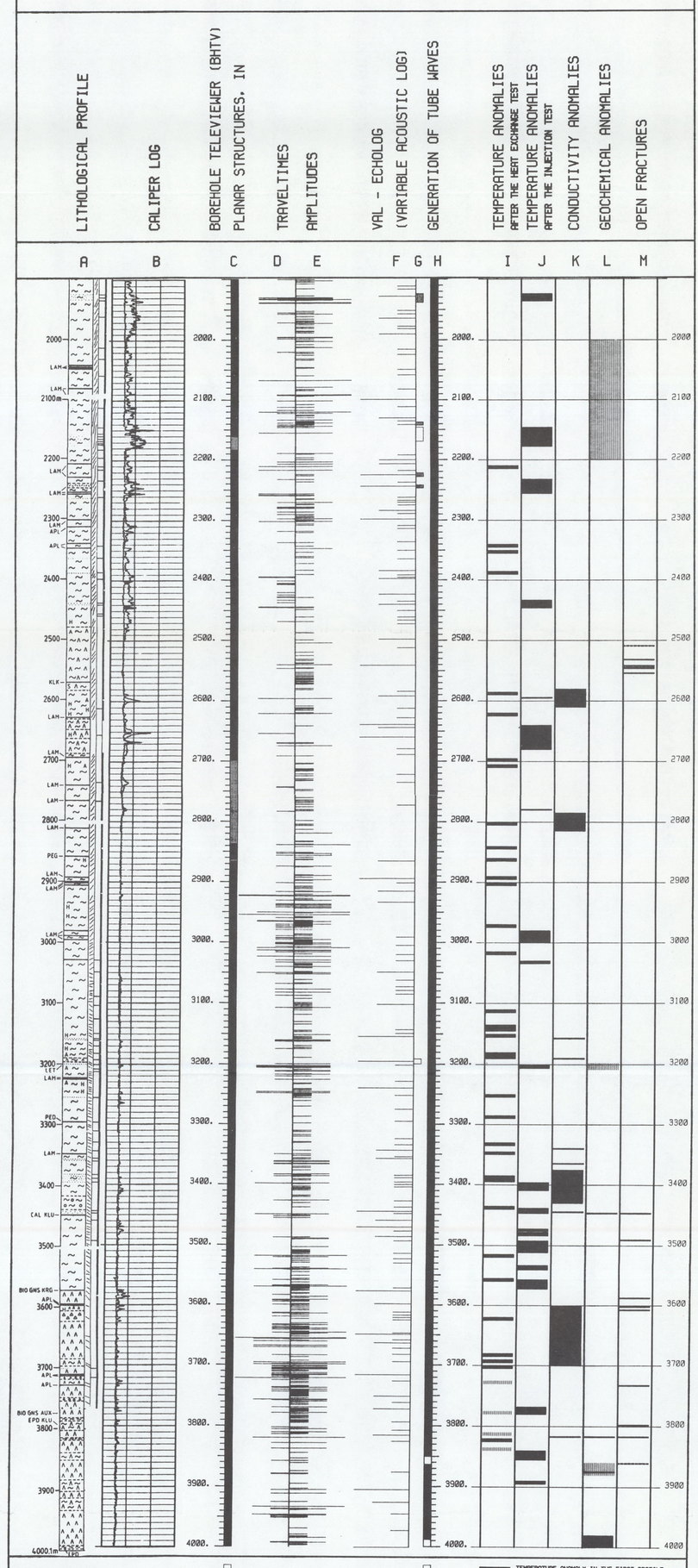
SCALE: 1:4000 1900 - 4000 M



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