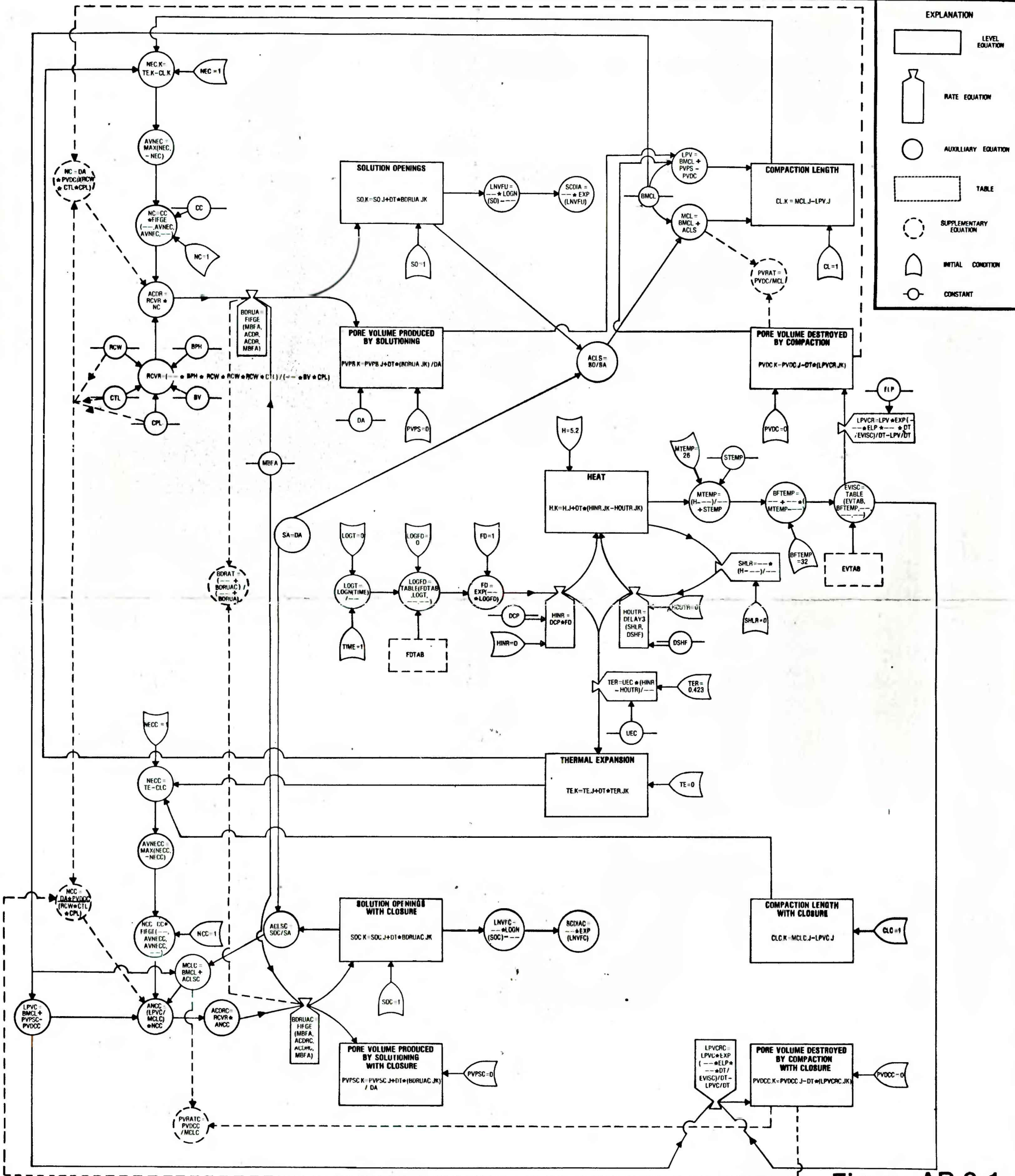
EXPLANATION
LEVEL EQUATION
RATE EQUATION
AUXILLIARY EQUATION
TABLE
SUPPLEMENTARY EQUATION
INITIAL CONDITION
CONSTANT
NEC.K=TE.K-CL.K
NEC=1
AVNEC=MAX(NEC,-NEC)
NC=DA*PVDC/(RCW*CTL*CPL)
NC=CC*FIFGE(---,AVNEC,AVNEC,---)
CC
NC=1
ACDR=RCVR*NC
BDRUA=FIFGE(MBFA,ACDR,ACDR,MBFA)
RCW
BPH
RCVR=(---*BPH*RCW*RCW*RCW*CTL)/(---*BV*CPL)
CTL
BV
CPL
SOLUTION OPENINGS
SO.K=SO.J+DT*BDRUA.JK
SO=1
LNVFU=---*LOGN(SO)---
SCDIA=---*EXP(LNVFU)
PORE VOLUME PRODUCED BY SOLUTIONING
PVPS.K=PVPS.J+DT*(BDRUA.JK)/DA
DA
PVPS=0
ACLS=BD/BA
LPV=BMCL+PVPS-PVDC
BMCL
MCL=BMCL+ACLS
COMPACTION LENGTH
CL.K=MCL.J-LPV.J
CL=1
PVRAT=PVDC/MCL
PORE VOLUME DESTROYED BY COMPACTION
PVDC.K=PVDC.J-DT*(LPVCR.JK)
PVDC=0
FLP
LPVCR=LPV*EXP(---*ELP*---*DT/EVISC)/DT-LPV/DT
MBFA
H=5.2
HEAT
H.K=H.J+DT*(HINR.JK-HOUTR.JK)
MTEMP=26
STEMP
MTEMP=(H-----)/---+STEMP
BFTEMP=---+---*(MTEMP-----)
EVISC=TABLE(EVTAB,BFTEMP,---,---)
BFTEMP=32
EVTAB
SHLR=---*(H-----)/---
SHLR=0
SA=DA
LOGT=0
LOGFD=0
FD=1
BDRAT=(---+BDRUAC)/(---+BDRUA)
LOGT=LOGN(TIME)/---
LOGFD=TABLE(FDTAB,LOGT,---)
FD=EXP(---*LOGFD)
DCP
HINR=DCP*FD
HINR=0
TIME=1
FDTAB
HOUTR=DELAY3(SHLR,DSHF)
HOUTR=0
DSHF
TER=UEC*(HINR-HOUTR)/---
TER=0.423
UEC
NECC=1
THERMAL EXPANSION
TE.K=TE.J+DT*TER.JK
TE=0
NECC=TE-CLC
AVNECC=MAX(NECC,-NECC)
NCC=DA*PVDC/(RCW*CTL*CPL)
NCC=CC*FIFGE(---,AVNECC,AVNECC,---)
NCC=1
ACLSC=SOC/SA
SOLUTION OPENINGS WITH CLOSURE
SOC.K=SOC.J+DT*BDRUAC.JK
LNVFC=---*LOGN(SOC)---
SCDIAC=---*EXP(LNVFC)
COMPACTION LENGTH WITH CLOSURE
CLC.K=MCLC.J-LPVC.J
CLC=1
MCLC=BMCL+ACLSC
LPVC=BMCL+PVPSC-PVDCC
ANCC=(LPVC/MCLC)*NCC
ACDRC=RCVR*ANCC
BDRUAC=FIFGE(MBFA,ACDRC,ACDRC,MBFA)
SOC=1
PORE VOLUME PRODUCED BY SOLUTIONING WITH CLOSURE
PVPSC.K=PVPSC.J+DT*(BDRUAC.JK)/DA
PVPSC=0
LPVCRC=LPVC*EXP(---*ELP*---*DT/EVISC)/DT-LPVC/DT
PORE VOLUME DESTROYED BY COMPACTION WITH CLOSURE
PVDCC.K=PVDCC.J-DT*(LPVCRC.JK)
PVDCC=0
PVRATC=PVDCC/MCLC

Figure AR.3.1