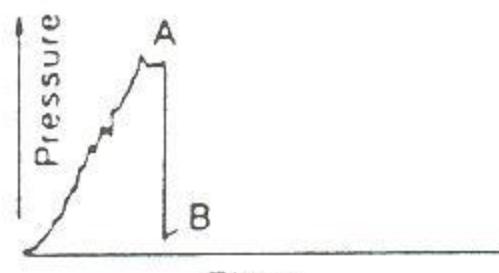
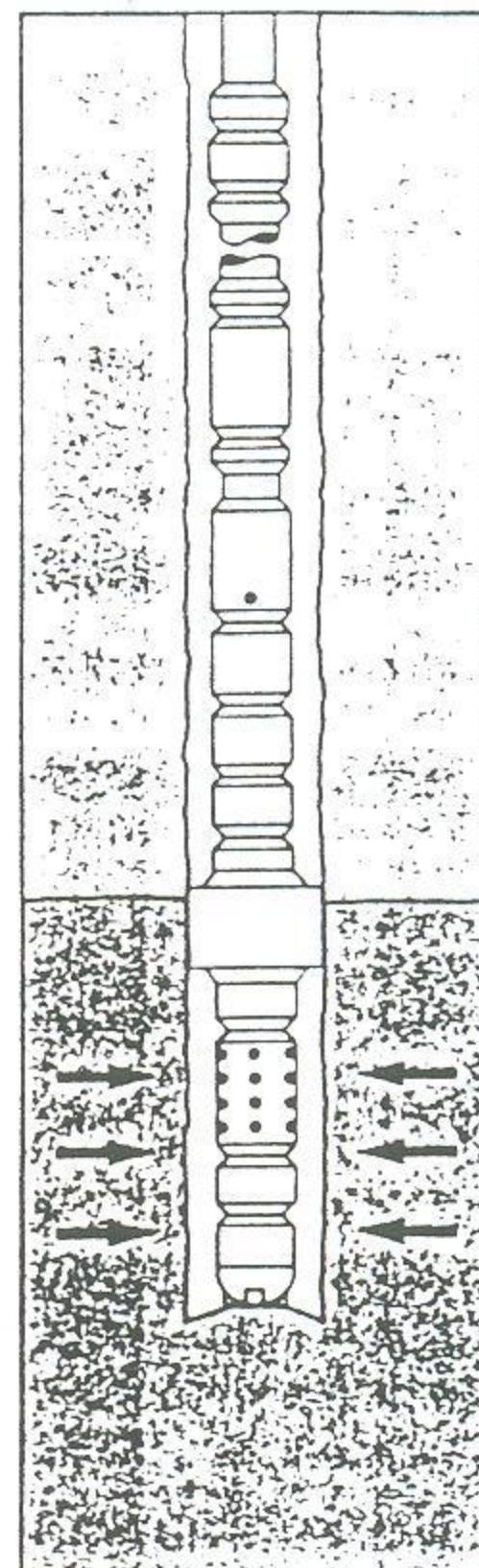


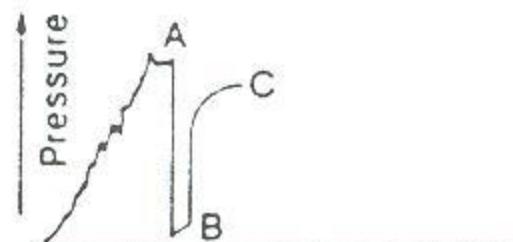
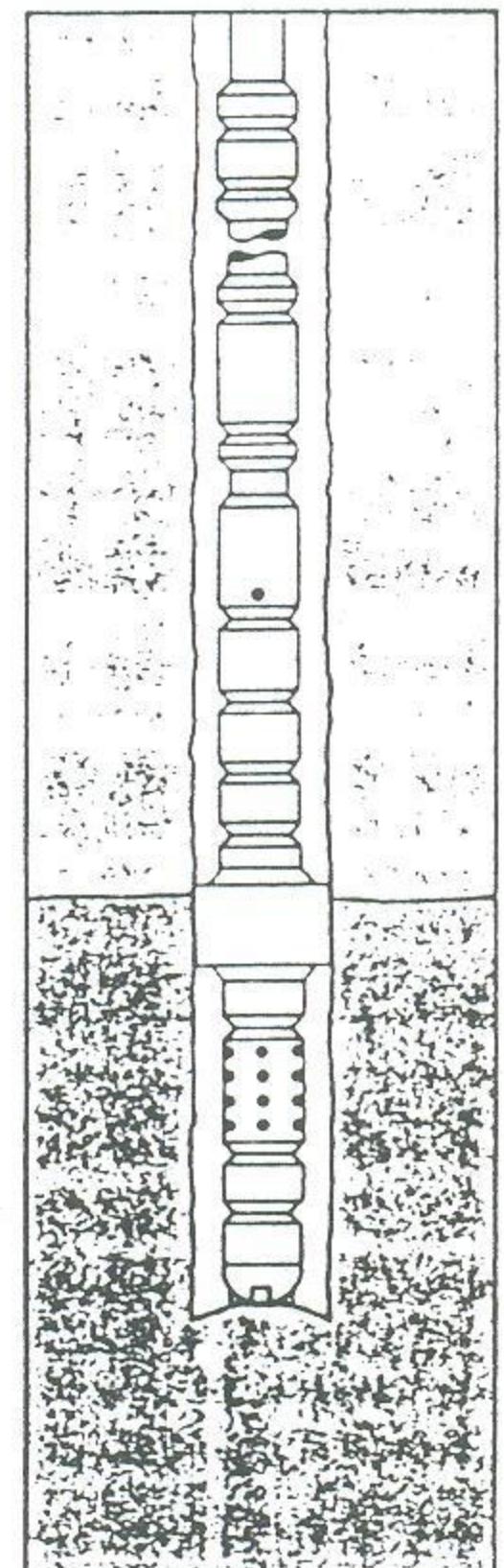
A Initial Hydrostatic Pressure

*Fig. 1(a) DST tool assembly running in the hole.*



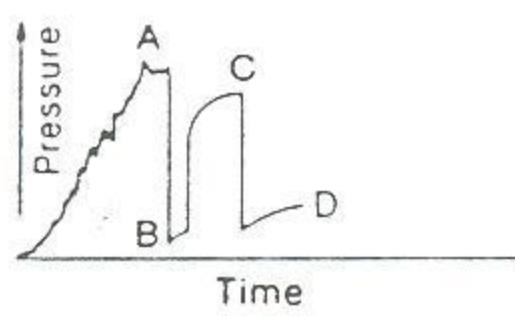
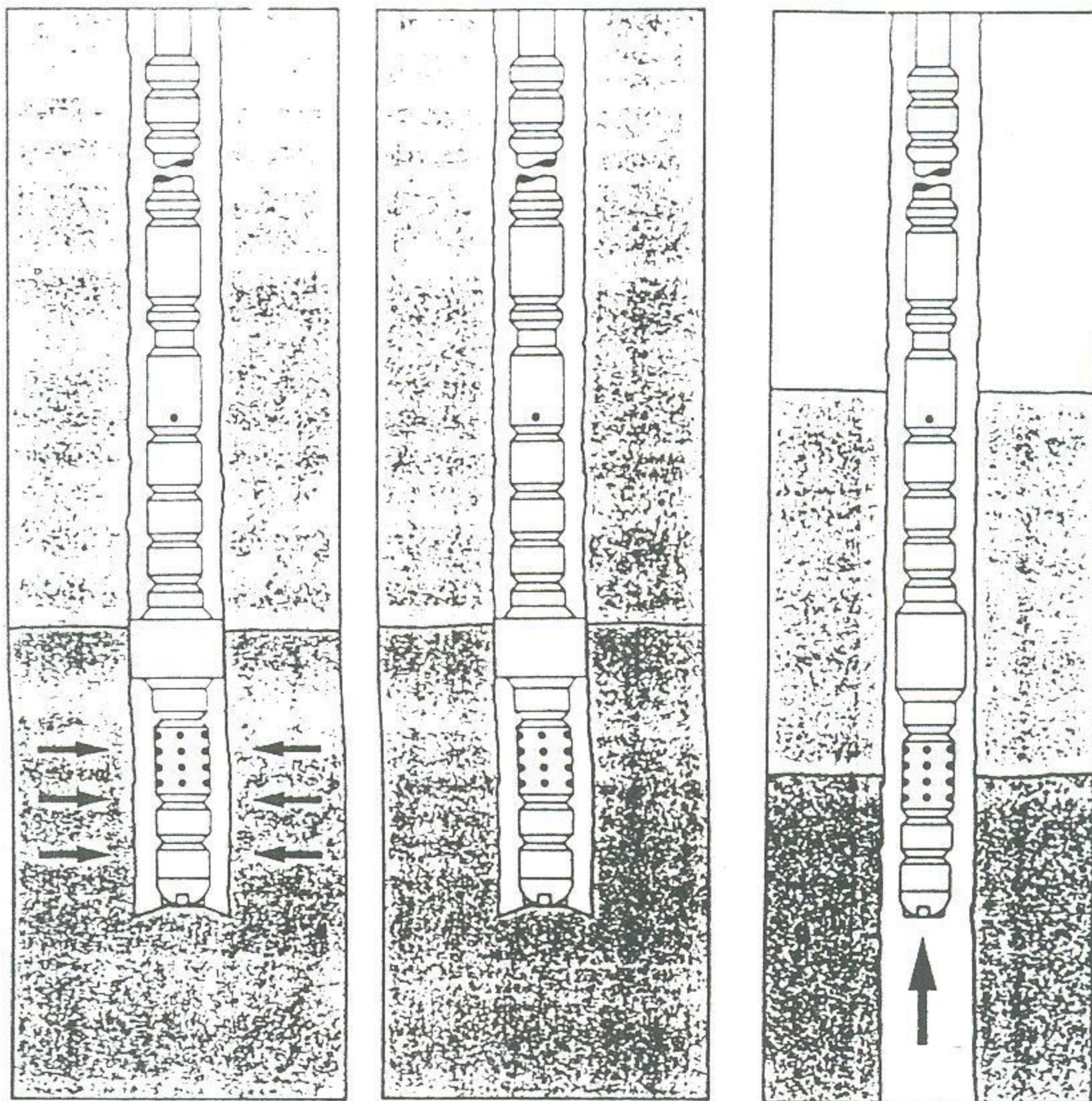
A Initial Hydrostatic Pressure  
B Initial Flow Pressure

*Fig. 1(b) DST tool assembly during initial or preflow period.*



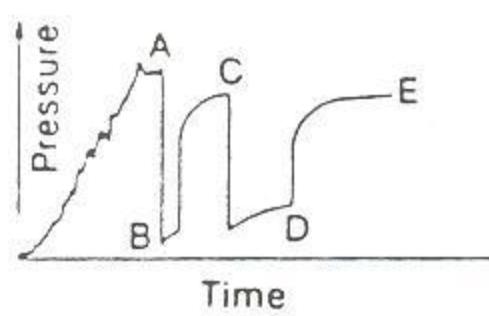
A Initial Hydrostatic Pressure  
B Initial Flow Pressure  
C Initial Shut-in Pressure

*Fig. 1(c) DST tool assembly during initial shut-in.*



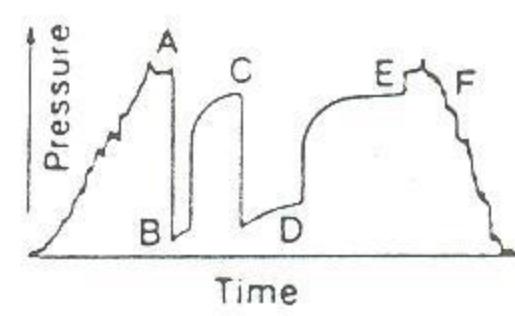
- A Initial Hydrostatic Pressure
- B Initial Flow Pressure
- C Initial Shut-in Pressure
- D Final Flow Pressure

**Fig. 1(d)** DST tool assembly during final flow period.



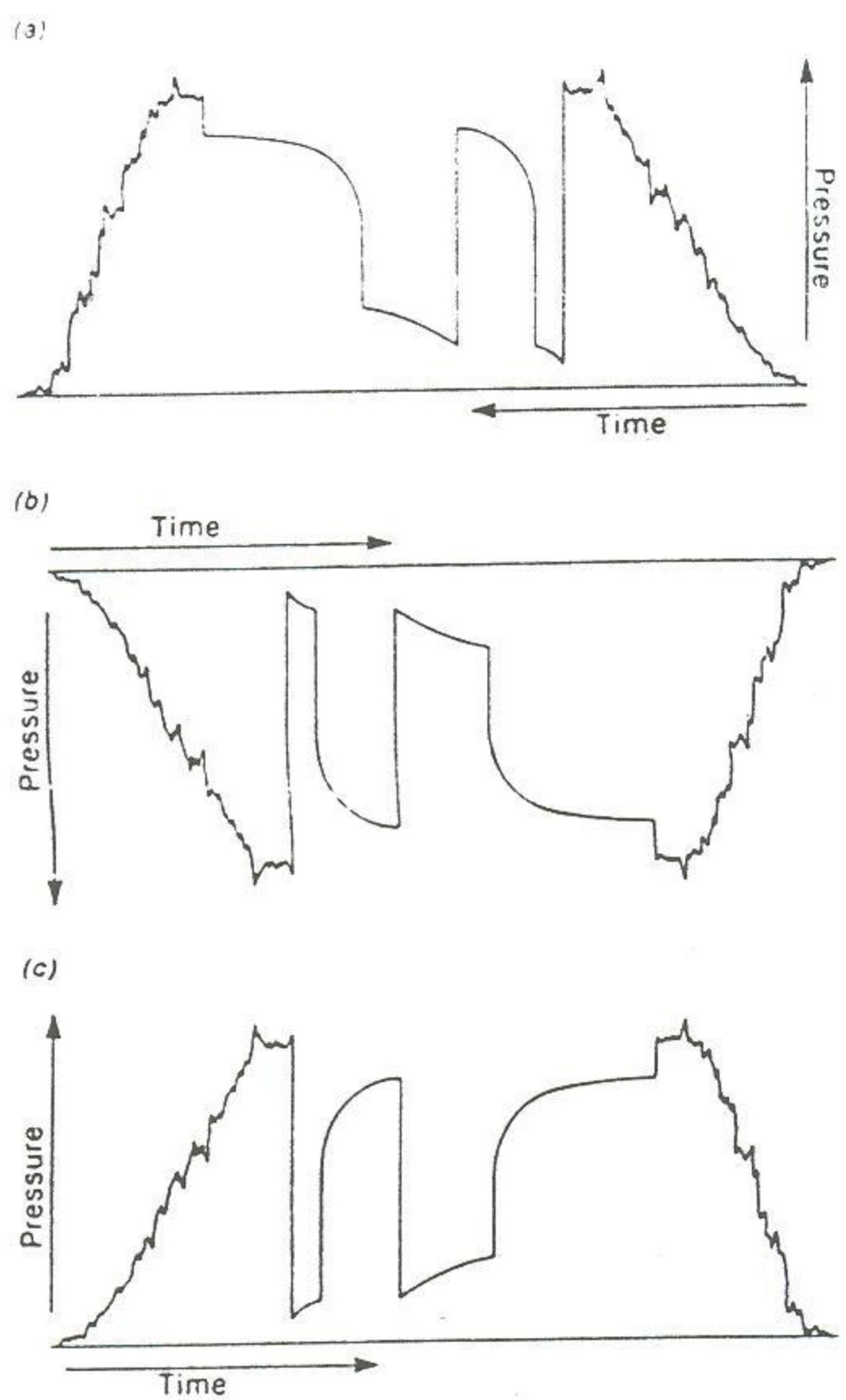
- A Initial Hydrostatic Pressure
- B Initial Flow Pressure
- C Initial Shut-in Pressure
- D Final Flow Pressure
- E Final Shut-in Pressure

**Fig. 1(e)** DST tool assembly during final shut-in.



- A Initial Hydrostatic Pressure
- B Initial Flow Pressure
- C Initial Shut-in Pressure
- D Final Flow Pressure
- E Final Shut-in Pressure
- F Final Hydrostatic Pressure

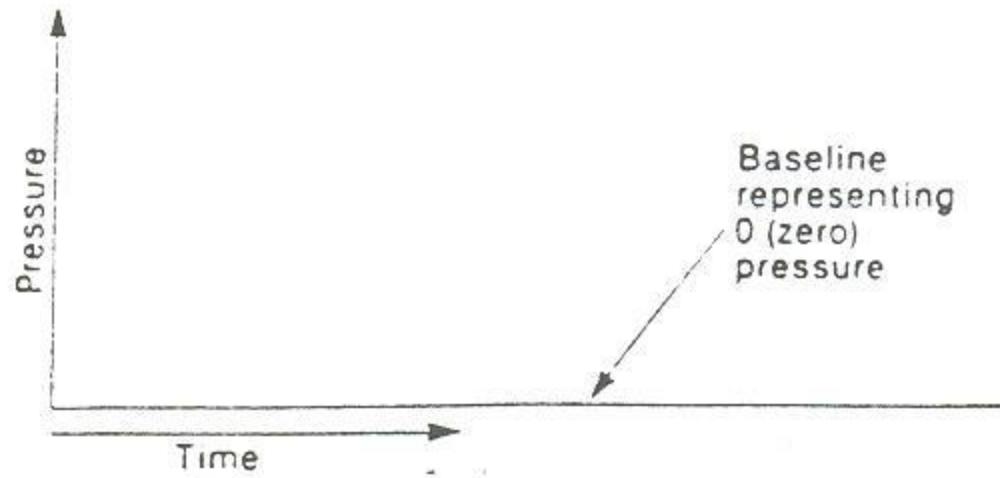
**Fig. 1(f)** DST tool assembly during retrieval from hole.



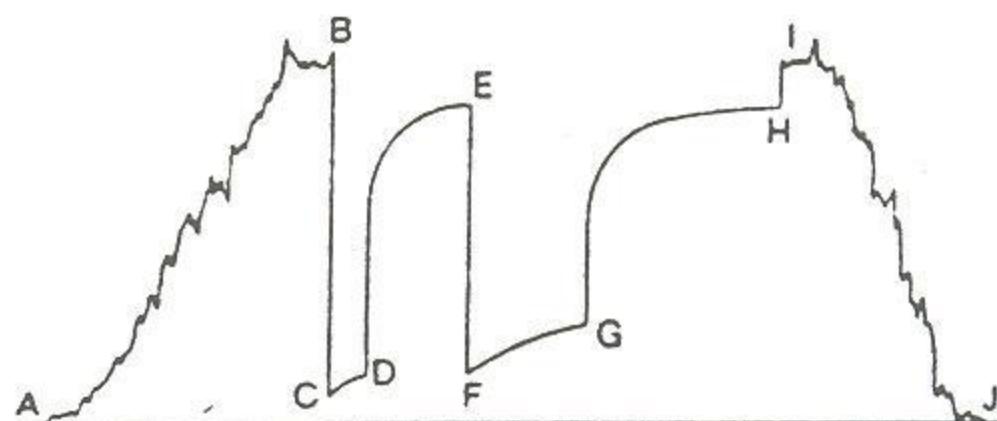
*Fig. 28 Various ways in which DST charts are recorded.  
(a) Conventional scales. (b) Pressure scale reversed. (c) Time scale reversed.*

- *initial flow period* - 5 to 10 minutes;
- *initial shut-in period* - 30 to 60 minutes;
- *final flow period* - onshore, openhole, which is 60 to 80 minutes, depending on permeability;
- **offshore, cased hole** - daylight hours, typically 8 hours;
- *final shut-in period* - 1.5 to 2 times the duration of the second flow period.

*Table 1 Test period duration "rules of thumb."*



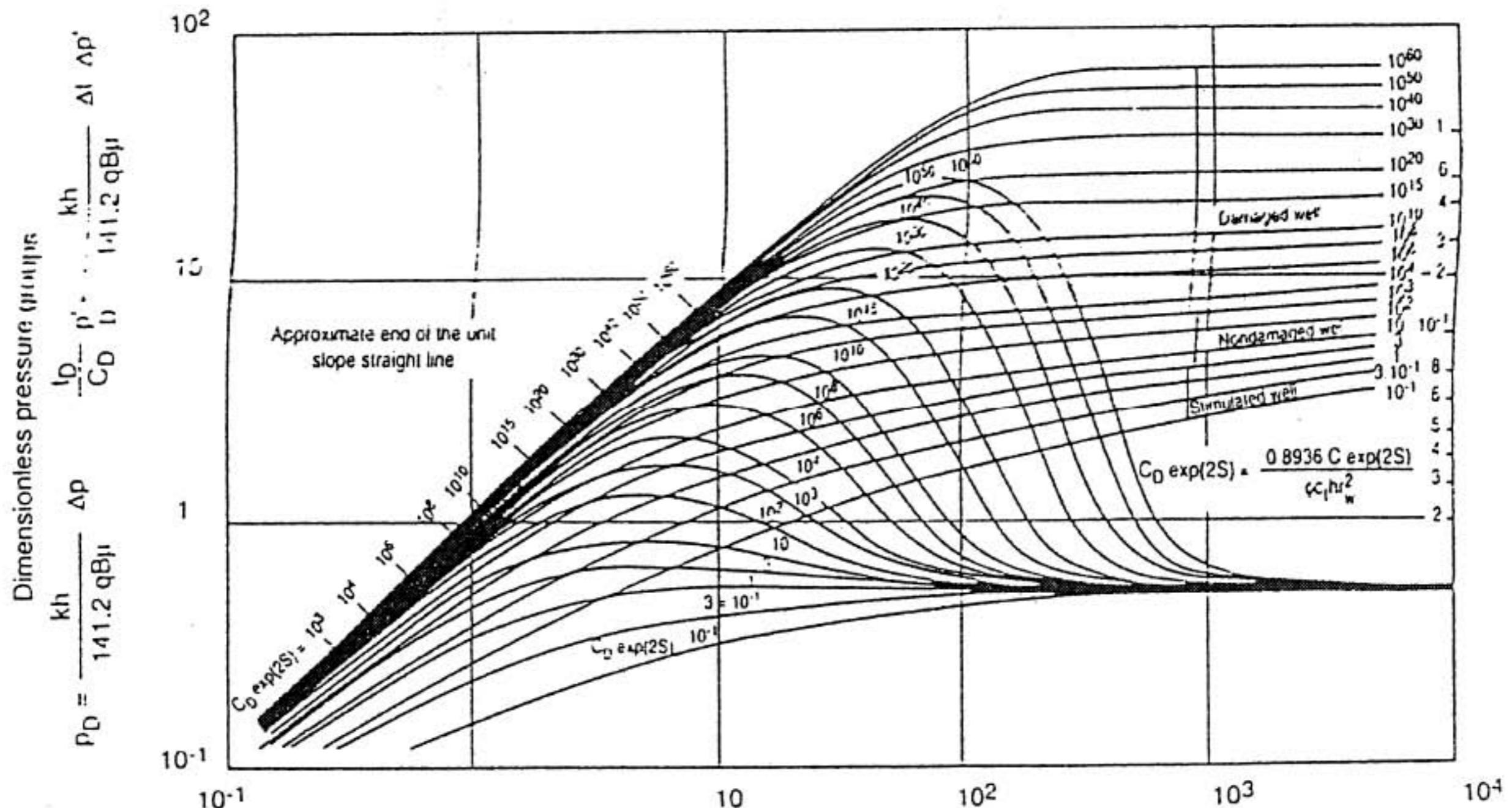
*Fig. 29 Drawing baseline on DST chart.*



Pressure Readings

- A Start in Hole
- B Initial Hydrostatic
- C Start of Initial Flow
- D End of Initial Flow
- E End of Initial Shut-in
- F Start of Final Flow
- G End of Final Flow
- H End of Final Shut-in
- I Final Hydrostatic
- J Out of Hole

*Fig. 30 Typical DST chart.*



Dimensionless time group  $\frac{t_D}{C_D} = 0.000295 \frac{kh}{\mu} \frac{\Delta t}{C}$

Fig. 6.2 Type curves for a well with wellbore storage and skin  
(infinite acting homogeneous reservoir)