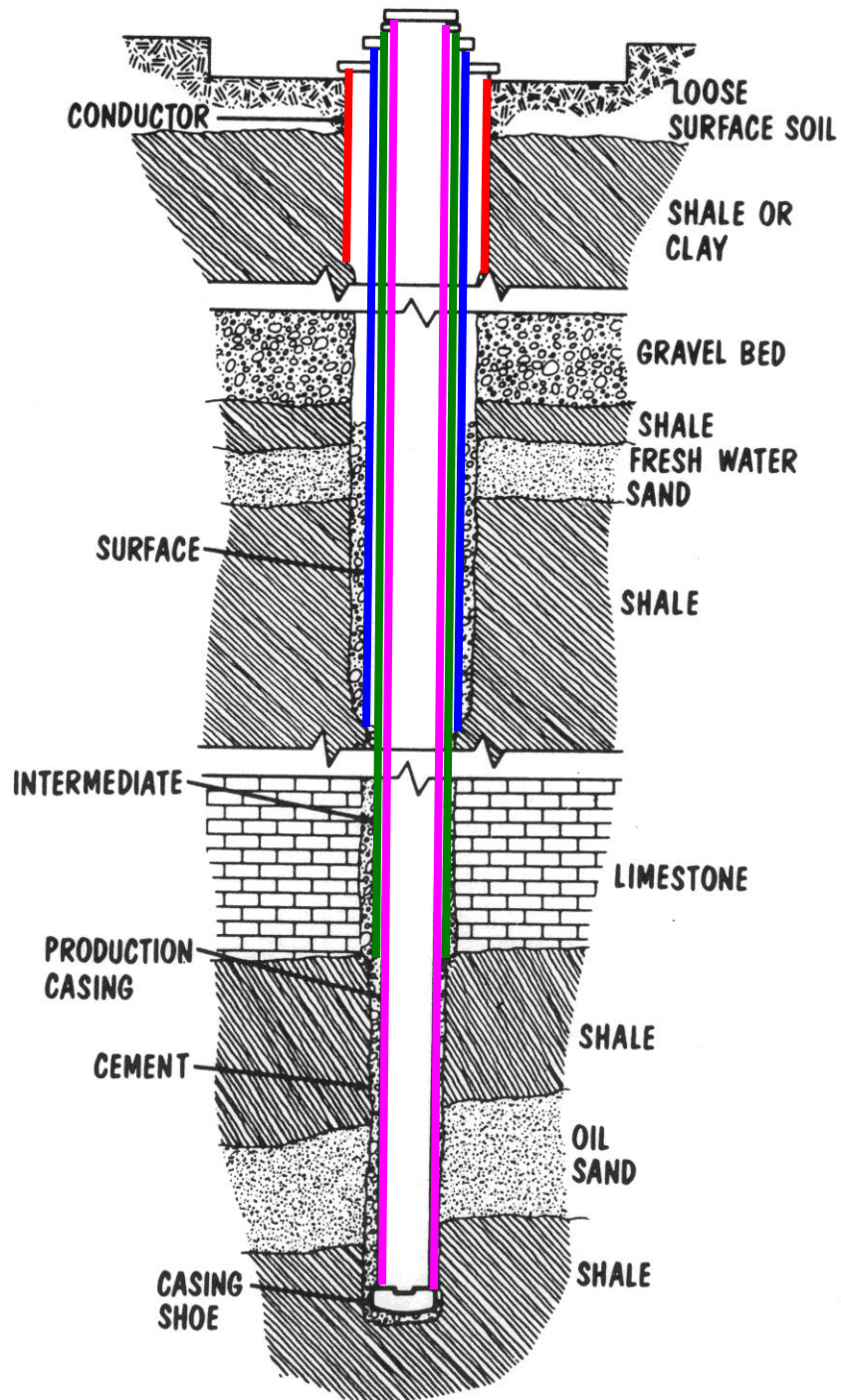
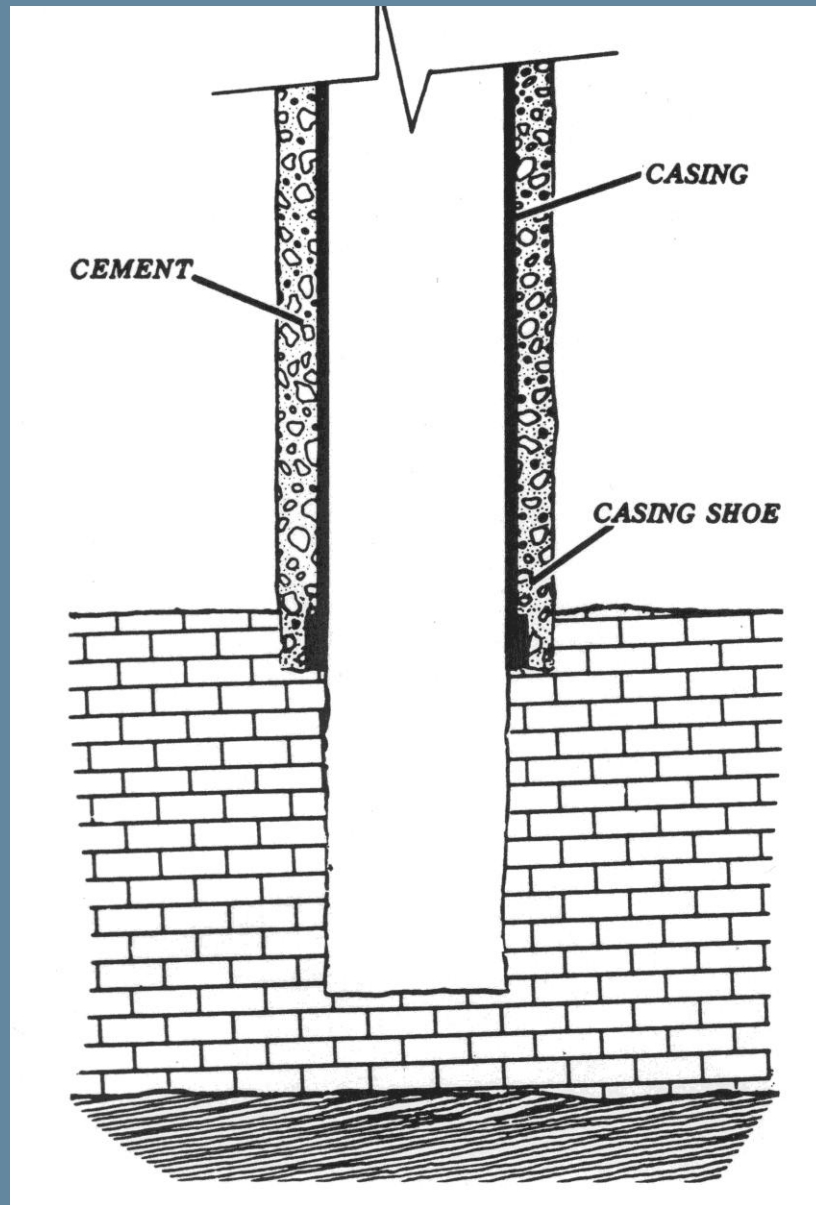


- Well Completions
(casing protocols)
- Acidizing
- Fracture treatments

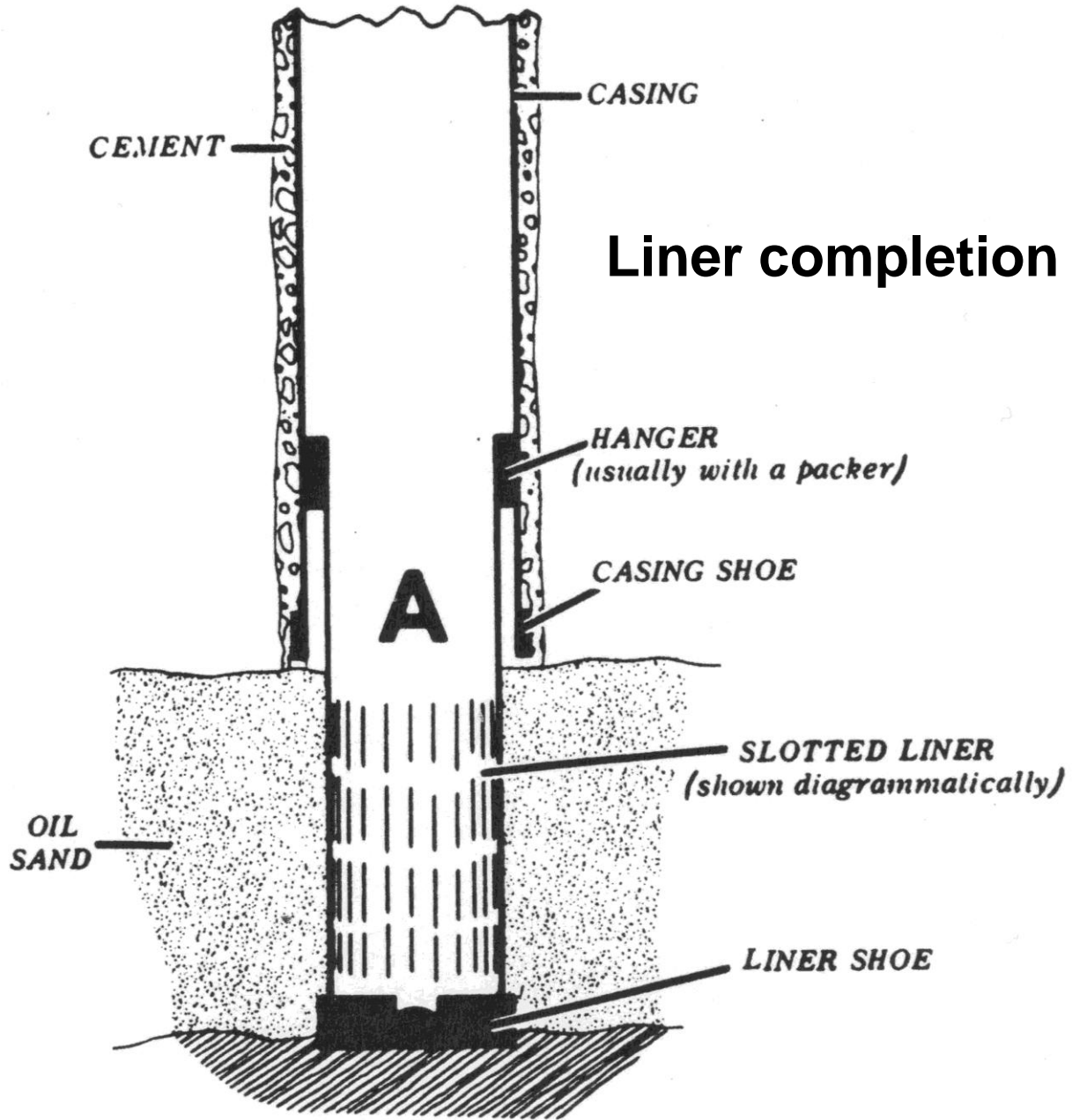


Types of casing

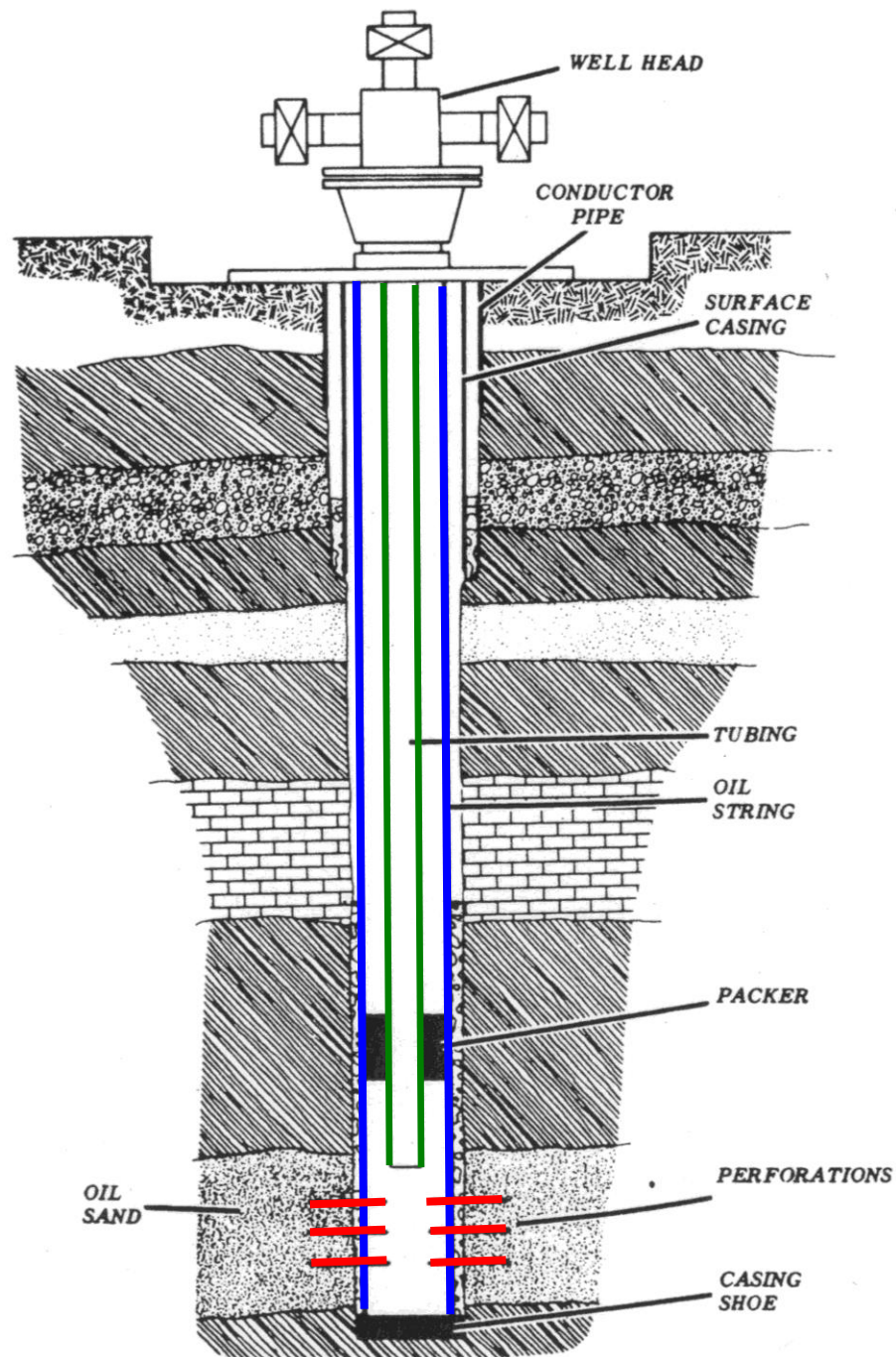


Open-hole completion

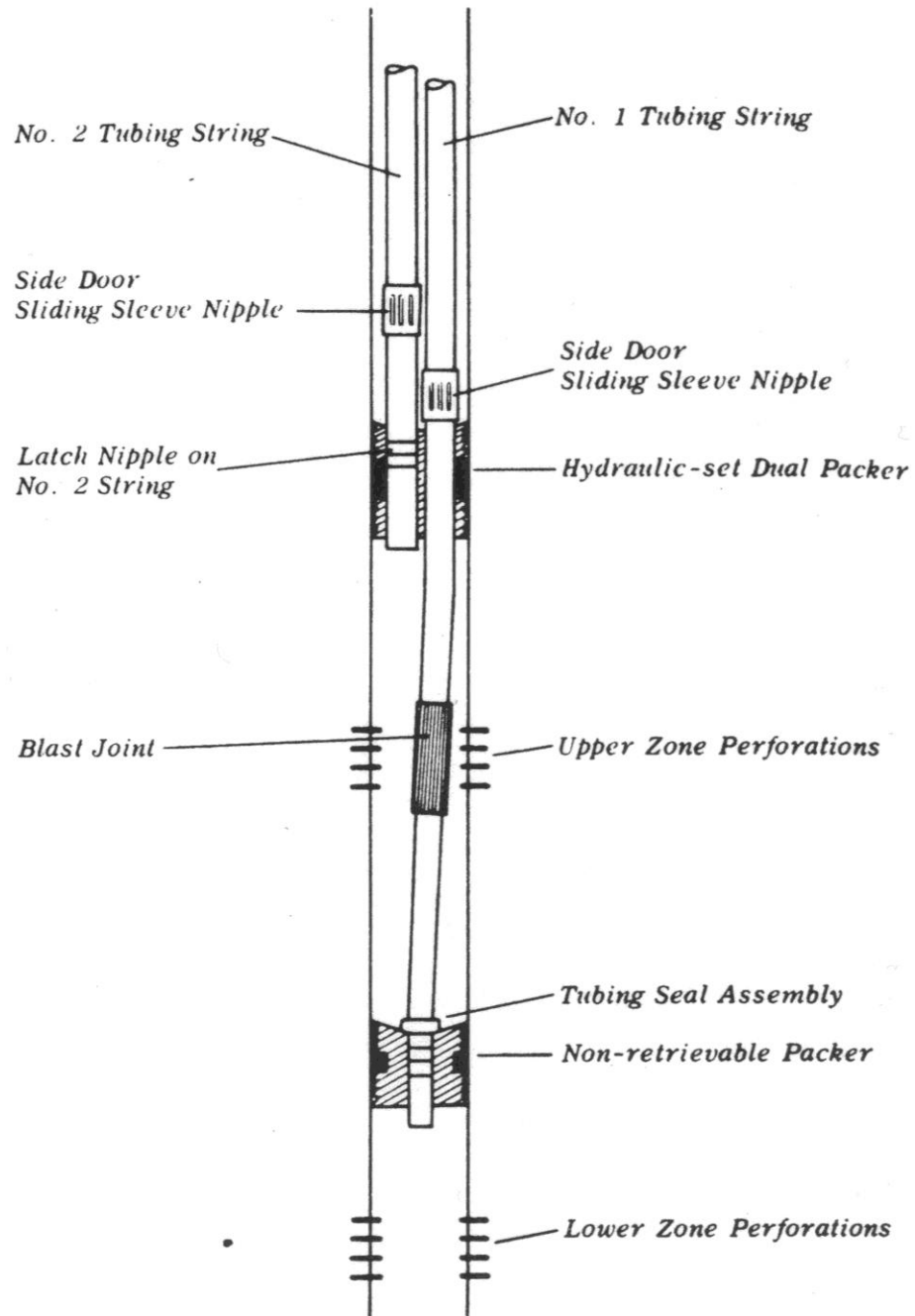
Liner completion



Perforated casing completion



Multi-zone completion



Well Acidizing

Used to increase production rates

- Well-bore clean-up
 - Mineral and matrix dissolution
- Acid fracturing – deep fm stimulation

Fracture Treating

(Used in most wells)

- Generally uses a proppant to keep fractures open. Fine-grained sand commonly used.
- Delivery fluids:
 - Water-based
 - Polymer (reduce friction) = slick water fracs
 - Cross-linked polymer = changes viscosity
 - Air
 - Foam
 - Gas (nitrogen)
 - Acid gel