● 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