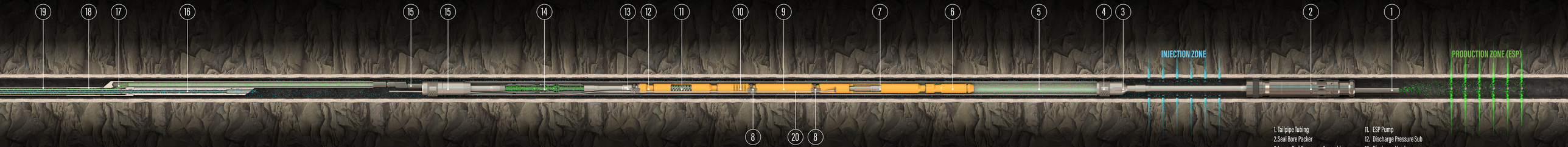
System 018 - Dual Zone - Single ESP - Concentric Tubing Strings

Upper Zone Injection / Lower Zone ESP (Seal Bore Packer)



Simultaneous production and injection can be achieved in a single well bore. Injection into the upper zone provides pressure support for the lower production zone to increase production.

Produced water from the lower zone can be recycled and injected back into the well. When the distance between zones is restricted, a pod system with seal bore packer can be used.

This also allows zones to be isolated with an isolation valve to prevent communication between zones during a workover.

UMS Flowell
Performance Under Pressure

ADVANTAGES

- Injection to upper zone to boost lower zone reservoir pressure to increase production in a single well bore
- Ability to recycle produced water from the produced zone and recycle into the upper injection zone
- Pod system eliminates ESP cable going past perforations
- Seal bore packer used when distance between zones is small
- Allows zone isolation with an isolation valve during workover to prevent zone communication

1. Tailpipe Tubing
2. Seal Bore Packer
3. Lower Pod Crossover Assembly
4. Pod Casing Clamp
5. Pod Casing
6. ESP Gauge
7. ESP Motor
8. MLE Protector
9. ESP Seal Protector
10. ESP Pump Intake
11. ESP Pump
12. Discharge Pressure Sub
13. Discharge Head
14. FMDV
15. Pod Hanger Assembly
16. Stinger
17. Flow Crossover
18. Outer Tubing (ESP Production From Lower Zone)
19. Inner Tubing (Natural Flow Production From Upper Zone)
20. MLE Cable