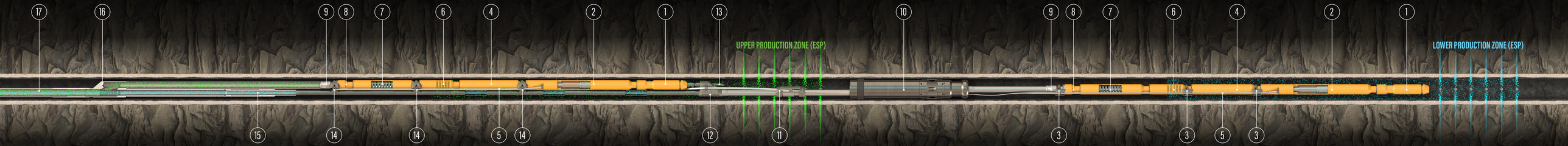
System 24: Dual Zone - Dual ESP - Comingled Single Tubing

Upper Zone ESP / Lower Zone ESP (ESP Packer)



UMS Flowell
Performance Under Pressure

Multiple reservoirs can be produced independently in the same well bore. In cases where the upper zone and the lower zone require an ESP, a dual zone completion can be used with a single production tubing string by comingling the discharge of each ESP.

Compared to the seal bore packer, this configuration has no means of zonal isolation during workover, and requires sufficient distance between zones for the ESP packer and ESP.

ADVANTAGES

- Increased production by producing two zones independently with dissimilar productivity
- Only need to drill one well to maximise production from both zones

DISADVANTAGES

- No zone isolation during workovers
- ESP cable potentially needs protection past upper perforations
- Requires enough distance between zones for ESP packer and ESP

1. ESP Gauge
2. ESP Motor
3. MLE Protector
4. ESP Seal Protector
5. MLE Cable
6. ESP Pump Intake
7. ESP Pump
8. Discharge Pressure Sub
9. Discharge Head
10. ESP Packer
11. Cross Coupling Clamp
12. Pump Support
13. Gauge Swivel
14. Bypass Tubing Clamp
15. Telescopic Swivel
16. Flow Crossover / Y-Tool
17. Production Tubing (Comingled Production)