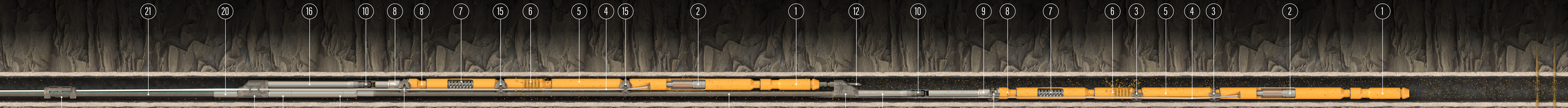
System 06: Y-Tool Only Completions

Dual ESP With Single Y-Tool & Pump Support -High Flow (Parallel Pumping)



The parallel pumping system allows both ESPs to run simultaneously, to combine the flow for high flow systems where a matching flow rate single ESP will not fit inside the well casing size.

The upper and lower ESP discharge pressures are matched using variable speed drives (VSDs) to prevent reverse flow. Each ESP is fitted with a check valve to prevent reverse flow and to allow production should one of the ESPs fail.

This system is typically used in high flow geothermal wells.

ADVANTAGES

- Provides high flow production in casing where an industrial pump won't fit

DISADVANTAGES

- No access to the reservoir below with the ESPs installed

APPLICATIONS

- Geothermal wells

1. ESP Gauge
2. ESP Motor
3. MLE Protector
4. MLE Cable
5. ESP Seal Protector
6. ESP Pump Intake
7. ESP Pump
8. Discharge Pressure Sub
9. Discharge Head
10. Check Valve
11. Handling Sub
12. Spear
13. Pump Support Block
14. Flush Joint Bypass Tubing
15. Bypass Tubing Clamp
16. Pump Sub
17. Telescopic Swivel
18. Bypass Nipple
19. Y-Tool
20. Top Nipple
21. Handling Sub
22. Production Tubing Connection

UMS Flowell
Performance Under Pressure