

UGS Dolní Dunajovice 2012

1. Scope of work

UGS Dolní Dunajovice is located in South Morava (approx. 50 km to south from Brno, 80 km to north from Vienna and 10 km from Mikulov). Owner of UGS Dolní Dunajovice is RWE Gas Storage s.r.o.

RWE GS has interest to install 6 TRSSSV to 6 wells of UGS Dolní Dunajovice (4 workovers are required and rest as optional – according budget).

HWO unit (Contractor) will pull out current completion and will be installed new completion with TRSSSV. Current tubing string will be isolated from bottom by two plugs (XN and X) and will be filled by water. Packer will be set on wire-line and plugged (XN). Well will be filled by packer fluid. Tubing string with TRSSSV will be installed and pressure tested. TRSSSV will be closed after space out and HWO unit with BOP will be replaced by X-mass tree.

Main workover steps::Preliminary jobs

1. Well will be prepared for workover,
 - XN-profile will be set in landing nipple and pressure tested (**RWE GS**)
 - **Tubing string will be filled by water (RWE GS)**
 - X-profile will be set to landing nipple and pressure tested (**RWE GS**),
 - Tubing hanger will be plugged by check valve and X-mass tree will be pressure tested (**RWE GS**),
2. Well-site will be prepared for HWO unit mobilization. Fence, surface pipeline and any other equipment will be disassembled (**RWE GS**),
3. Contractor personal will be trained for local conditions (**RWE GS and Contractor**)
4. RWE GS and Contractor will check well-site and will sign transfer protocol (**RWE and Contractor - annex no.X**),

Workover

5. Mobilization (crane service **RWE GS**)
 - a. X-mass tree disassembly (**RWE GS**)
 - b. BOP installation (**Contractor**)
 - c. HWO unit installation (**Contractor**)
6. Spud meeting (**RWE GS & Contractor**),
7. Check valve disassembly (**RWE GS & Contractor**),
8. Packer retrieving and pulling out of hole (**Contractor**),
9. Logging (**RWE GS**),
10. Packer installation (RWE GS – serviceman),
11. Well fill by packer fluid (**RWE GS**),
12. Tubing string and TRSSSV installation & space out (**Contractor**),
13. Packer and tubing string pressure testing (**Contractor & RWE GS**),
14. Closing TRSSSV (**Contractor**),
15. HWO unit and BOP disassembly (**Contractor**),
16. X-mass tree installation (**RWE GS**),
17. HWO unit demobilization

2. Scope of services requested (provided by contractor)

- Engineering support in the area of preparation planning,
- Execution and end of well reporting,
- Provision of HWO equipment
- Provision of suitable experienced and trained personnel,
- Provision of associated equipment or services if required.
- Transport to location (UGS) from contractors base and back from location to base

Service organized by RWE GS

- Crane service,
- Fluids,
- Diesel,
- Concrete panels as a death weights,
- Wire-line service,
- Logging service,
- Packer installation service,
- Fluid Tanks
- Pump service
- Transport for well to well (transport from base to UGS and back will be organized by Contractor)