

# Case Reference IP-1078 – Treating Dahra H<sub>2</sub>S Water for Drinking

## EPC Water Desalination RO Plant with ReidSteel Building for Oil Field

Client: Waha Oil Company

Location: Dahra Field

Equipment: Sour Water RO Desalination Plant

Design: 600m<sup>3</sup>/day Permeate from Deep Well water with High Salinity (20000ppm TDS & 50ppm H<sub>2</sub>S)

Application: Drinking

Year: 2025 (Ongoing)

### Scope:

- **Engineering & Design** – Technical drawings, compliance with RO system standards, risk assessments.
- **Procurement & Fabrication** – H<sub>2</sub>S Removal Degasser, Ultrafiltration units, RO membranes, pumps, dosing systems, QA/QC inspections.
- **Civil Works** – Site prep, foundation construction, drainage, and structural supports.
- **RO System Installation** – Assembly of Degasser & H<sub>2</sub>S Removal System, pre-treatment (Ultrafiltration UF membranes, softeners, carbon filters), RO membranes, and post-treatment units.
- **Instrumentation & Control** – Automatic Control, integration of SCADA systems, monitoring sensors, and calibration of flow/pressure transmitters.
- **Prefabricated Building Erection** – Installation of ReidSteel UK structure, including ventilation, electrical, and safety systems.
- **Commissioning & Handover** – Performance testing, water quality validation, and final documentation.

