Balsam Compression Relocation & Installation

Owner	Wastani Petroleum Company (WASCO)
Client	PETROMAINT
Location	Nile Delta, Egypt
Year	2021
Project Type	Engineering, Construction, and Commissioning (ECC)
Keywords	Onshore, Brownfield, Gas Compression, Relocation

Scope of Work

WASCO, operator of the El Wastani Gas Plant in Egypt's Nile Delta, launched a project to enhance Balsam field production by relocating an existing compression station from Faraskur to the El-Basant-2 site. PETROMAINT, as the main EPC contractor, assigned UNEPP to execute the Engineering, Construction, and Commissioning (ECC) scope. The work covers dismantling and transporting the Faraskur Phase 1 compression train over 15 km, reinstalling it at El-Basant-2, and integrating discharge lines, ESD systems, and process tie-ins while ensuring equipment compatibility, safety, and minimal operational disruption.

Technical Challenges

- Safely dismantling and transporting legacy compression equipment from Faraskur to El-Basant-2 without interrupting operations.
- Verifying mechanical and functional compatibility with existing site layout, utilities, and control systems.
- Matching inlet/outlet pressure, temperature, and gas composition with El-Basant-2 parameters to prevent process mismatches.
- Coordinating shared ESD and fire & gas interfaces while preserving system independence.
- Ensuring safe operation and maneuverability between feed lines without full physical integration.

Execution Strategy

UNEPP's execution strategy focused on detailed planning and coordination with WASCO and PETROMAINT to ensure safe, efficient relocation and integration. The approach covered logistics management, dismantling sequencing, piping reconnections, and alignment of mechanical, electrical, and control systems. Special attention was given to safety system integration, interface management, and minimizing downtime during the transition to full operation at El-Basant-2.

Strategic Outcome

The Balsam Compression Station project strengthens WASCO's production sustainability by mitigating low-pressure decline through the relocation and reuse of existing assets. UNEPP's engineering and mechanical execution highlight its capability in brownfield gas infrastructure, delivering cost-effective, timely solutions while maintaining operational continuity and supporting Egypt's domestic gas production reliability.

Photos / Diagrams