

# Balsam Compression Relocation & Installation

<b>Owner</b>	Wastani Petroleum Company (WASCO)	 <b>PETROMAINT</b> 
<b>Client</b>	PETROMAINT	
<b>Location</b>	Nile Delta, Egypt	
<b>Year</b>	2021	
<b>Project Type</b>	Engineering, Construction, and Commissioning (ECC)	
<b>Keywords</b>	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.

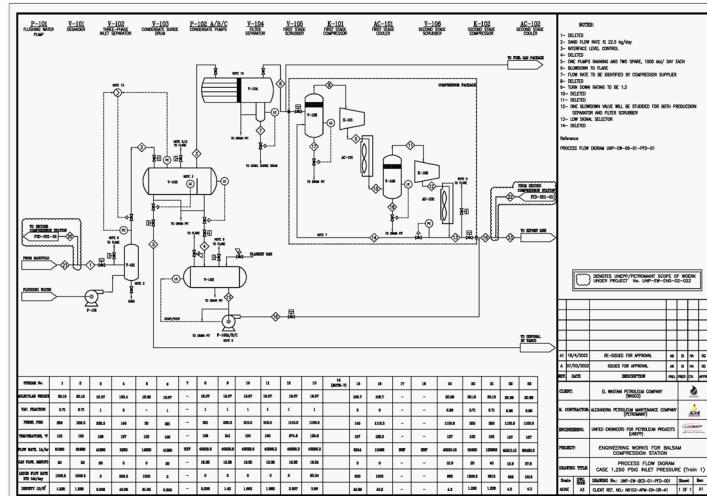
## Execution Strategy

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



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Project Interfaces Matrix			
Entity	Interface Topic	UNEPP Role <sup>(1)</sup>	Notes
WASCO (Owner)	Project coordination, site access, shutdown and recommissioning planning	A / R	UNEPP managed the engineering and relocation execution in coordination with WASCO's operations and site management teams.
PETROMAINT (Client)	Interface for dismantling, transport, installation, and commissioning activities	C / I	UNEPP coordinated closely with the Client to align field execution, logistics, QA/QC processes, and commissioning activities.
UNEPP (Mechanical Construction Scope)	Dismantling, alignment, and reinstallation of compressors, piping, and auxiliaries	R / C	UNEPP executed the dismantling and reinstallation of mechanical equipment, piping, and auxiliaries ensuring proper alignment and mechanical integrity.
UNEPP (Piping Scope)	Tie-ins, routing, and connection integrity	R / C	UNEPP executed piping modifications, tie-ins, and reinstatement works ensuring leak-free and safe operation.
Electrical & Instrumentation (E&I) Contractor	Power, control, and instrumentation interfaces	C / I	UNEPP coordinated with the E&I contractor on reconnection of power cables, control loops, and testing activities.
Civil Contractor	Foundations, supports, and site preparation	C / I	UNEPP coordinated with the civil contractor for new foundation works, skid supports, and alignment of relocated packages.
HSE Team	Work permits, safety supervision, and relocation safety management	C / I	UNEPP enforced HSE standards during dismantling, transport, and installation operations, ensuring compliance with site requirements.
QA/QC Team	Inspection, testing, and certification	S / C	UNEPP performed inspection and testing of relocated systems and verified compliance with design and quality standards.
WASCO (Site Operations)	Shutdown execution, tie-in supervision, and start-up support	S / C	UNEPP coordinated with operations for shutdown activities, safe tie-ins, and post-relocation commissioning.

**(1) Legend**

- R – Responsible: Executed the activity or deliverable.
- A – Accountable: Approved and owned the result.
- S – Support: Provided input or assistance.
- C – Consulted: Provided expert review or advice.
- I – Informed: Was kept up to date on progress.