

ONSHORE GAS-GATHERING FACILITIES

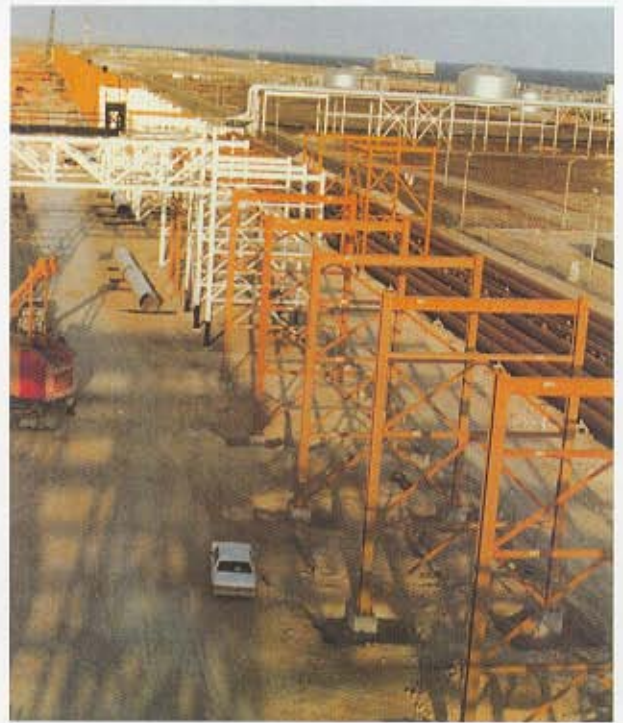


PROJECT NAME	ONSHORE GAS-GATHERING FACILITIES (civil works)
LOCATION	SAFANIYA, SAUDI ARABIA
CLIENT	ARAMCO
CONSTRUCTION PERIOD	19 MONTHS

This was a complex multi-disciplinary project, involving over 6 million manhours (for all mechanical, civil and electrical work) during a very short construction period of 19 months. Peak manpower for all disciplines both direct and indirect reached 2,300 men, all of whom were accommodated and catered for, adjacent to the site, in MAC Construction's relocatable camp, with its own sewage treatment plant, medical facilities, entertainment centre, canteen, etc.

The project was designed to collect gas which was wastefully burning off into the atmosphere. On construction, the plant enabled the gas to be purified and then compressed in 16 large compressors, ranging from 17,000 to 21,000 hp. It was then piped to Jubail industrial city, some 150 kilometres to the south, where it was put to commercial use, thus achieving substantial economic and ecological gains.





The civil work included:

- Earthmoving, grading, excavation and backfilling of the site in general, as well as special excavation work for cable trenches and concrete foundations.
- Construction of burnpits.
- Construction of reinforced concrete underground pipework trenches.
- Excavation and backfilling for an extensive underground piping network.
- Site fabrication, installation and testing of ductile iron and FRP underground piping.
- Construction of reinforced concrete foundations, slabs, culverts, manholes and valve boxes.
- Construction of buildings, including main power sub-stations P1 and P2, sub-station P3, control building, laboratory and standby generator building, maintenance shelter, chemical store and personnel shelters.
- Fireproofing of structural steel columns and beams.
- Laying of more than 150,000 square metres of concrete paving, asphalt paving and roads.