

THE MAIN INSTALLATIONS

The main oil and related installations of the company consist of the following:

1. Degassing Stations

Initial separation of associated gas from crude oil is carried out through degassing units in (24) degassing stations distributed over presently producing fields as follows:

Kirkuk Field: with (8) single stage degassing stations at (60 psi) working pressure to control the rate of production from wells through flow lines and appropriate valves for the main (Tertiary) reservoir. For higher pressure (Cretaceous) reservoir, choke valves are used.

Bai Hassan & Jambour Fields: (3) high pressure, three stage, degassing units, in two trains of horizontal separators each at Bai Hassan Field, and (2) high pressure, three stage, degassing stations in two trains of horizontal separators each at Jambour Field.

Other Fields: (2) degassing stations at East Baghdad Field & (1) degassing station each at Khabbaz, Ajeel, Ain Zala, Butmah, Sufayah, Qayyarah, Naft Khanah and Balad Fields with one production station at Anfal Gas Field.

2. Gas Compressor stations

There are (12) compressor stations that collect associated gas from producing fields and compress it to the Gas Processing plant at (Northern Gas Company) to produce LPG. These compressor stations are distributed as follows:

(3) at Kirkuk Field

(3) at Bai Hassan Field

(1) each at Jambour, Khabbaz, Ajeel and East Baghdad Fields

(1) at each of the two Process Plants

3. Oil Process Plants

Crude oil produced from Kirkuk fields is treated in (2) process plants in order to remove the sulfur content to comply with export and refinery requirements. The first plant (Central Processing) has cold stripping units and the second (Hot Processing) has hot units.

4. Export Pipeline Systems

Oil produced from (N.O.C.) fields is transported to export terminals by (3) pipeline systems as follows:

(1) Iraqi – Turkish P/L System

With two pipelines of 40/46 inch diameter connecting Kirkuk fields to Ceyhan terminal in Turkey. On Iraqi side, the system consists of (4) pump stations and (3) storage tank farms with a metering station at the border.

(2) Western Pipeline System

With (2) pipelines of 30/32 inch diameter connecting Kirkuk fields to Banias (Syria) and Tripoli (Lebanon) terminals. The oil is pumped by (5) pump stations distributed along the pipelines, with (3) storage tank farms on the Iraqi side.

(3) Strategic P/L system

This pipeline of (42) inch diameter connects Northern P/L system to the South Oil Company's (S.O.C.) P/L system at K-3 Pump Station enabling the transfer of oil from (N.O.C.) to (S.O.C.) at Basrah for export at the southern terminals and vice versa (S.O.C. Basrah crude to northern terminal in Turkey).

In addition to the above pipeline systems, there exists an integrated pipeline network that connects oil production systems and refineries within (N.O.C.) area of operation in North and Mid Iraq.

5. Pumping Statins & storage Farms

Crude oil of different types are collected in storage tanks within pumping stations along the main pipeline systems as bellow:

Iraqi – Turkish P/L system

Pump Stations: IT/1, IT/1A, IT/2 & IT/2A

Tank Farms: At IT/1 & IT/1A

Western P/L System

Pump Stations: K/1, K/2 West, K/3 & T/1

Tank Farms: At K/1, K/2 & T/1

6. Electric Power Generation

The company has a Central Electric Generation Station at Baba industrial area consisting of (2) Steam Units in addition to (2) emergency Gas Generator Units at Baba and Zab areas. Because of wide geographical distribution of N.O.C. installation, those installations far from the central operation area are fed from the National Grid. However, two new Turbine Units have been added recently at Baba to support electric power generation.

Communications & Computers

The company runs a well developed communication network that spans all areas. Recent Computer & Communication (C & C) systems have been introduced into service in addition to other services such as Mobile Telex and an integrated private telephone network connecting all company industrial, administrative and residential areas. Also, Transmission Network connects all company areas and particularly pipeline routs.

As for computers, the company administers (2) main centers operating on PC Networks to effect all company systems of Administration, Finance, Storage and Scientific Studies and Auto-Cad Applications.

7. Medical Services

The company offers a complete medical service to it's own employees and their families, and other Oil Sector workers in the north, through the following:

- a) **K/1 Hospital: With Patient Wards of (200) beds, Major and Minor Operation Rooms which serve Kirkuk fields, administration and residential areas in addition to nearby villages. The hospital includes the necessary Intensive Care & Emergency Units, Gynecology, Labs and Pharmacies.**
- b) **Medical Centers: (11) such centers are run by the company in the following Governorates: Kirkuk, Salahuddin, Neneva, and Anbar. These centers extend preventive medical care to all employees in Kirkuk, Baiji, Ain Zala, K/2 areas and T/1 together with distant drilling locations.**

Water Supply

The company operates (2) major Water Pumping Stations on River Zab, one for drinking in the Kirkuk field and residential areas and the other for injection into the Main Oil Reservoir of Kirkuk to maintain oil pressure. There are several secondary water supply units accompanying drilling sites and other remote project locations.

8. Work Force

The approved Work Force Number is about (10000) employees. The actual Working Force is somewhat less.

9. Residential Camps

The company has residential complexes and rest houses in the main work areas at Kirkuk, Baghdad, Ain Zala, K/3 and T/1. The number of housing units exceeds (3000) in addition to mobile camps in major project locations.