

**Sweidieh Massive Development Project
Al Hassake Oil Fields
Syrian Arab Republic**



CLIENT

Syrian Petroleum Company (SPC)

SUMMARY

SPC Syrian Petroleum Company at its field at Sweidieh that is located at the Northern East of Syria intends to construct three (3) identical Oil Gathering and Transportation Stations (GTS) with suitable number of remote Test Stations (RTS) and all the necessary pipelines networks and facilities.

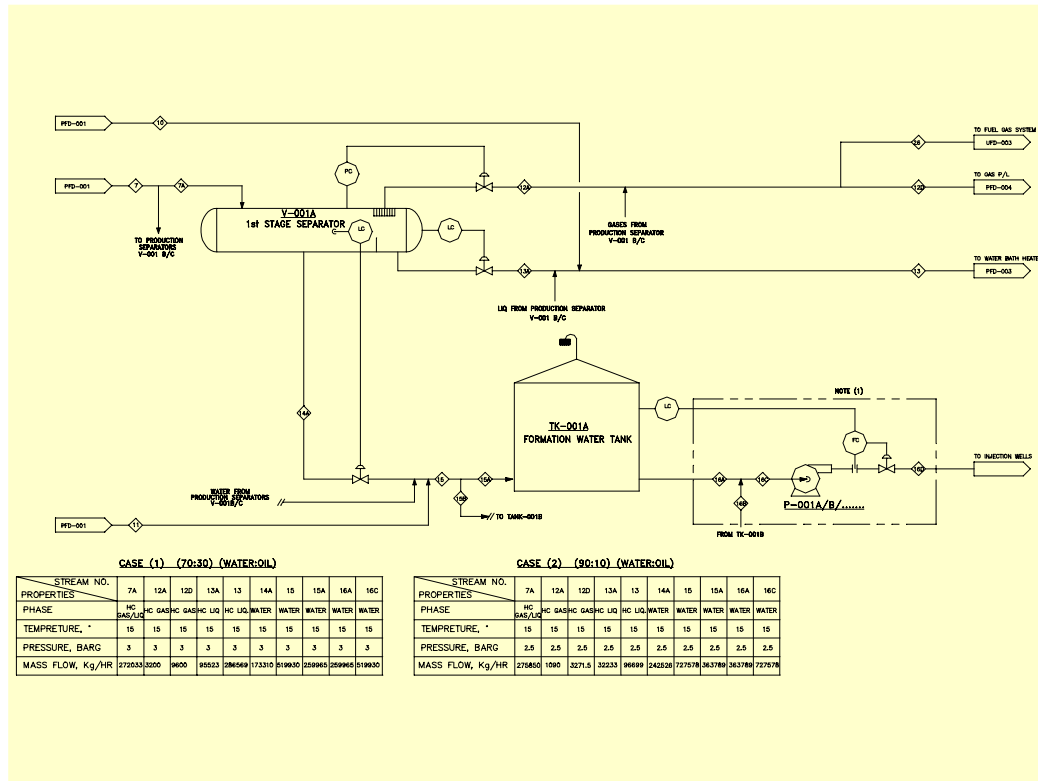
The project facilities shall significantly increase the oil production rate by 37000 – 111000 bpd from the massive formation in Sweidieh oil field. Also, an amount of approximately 3-9 MSCFD of associated gas shall be produced. Oil and associated gases shall be separated from the associated formation water.

SCOPE

The scope of this project is to study and design the GTS's and their associated RTS's with all the interconnected flow lines from TRS's to GTS's, oil transfer pipelines to Tel Addas, gas pipelines to gas plant and water injection lines to the injection wells. It shall be

carefully designed to significantly increase the liquid/oil production rate from the massive formation in Sweidieh Oil Field. The purpose of this project is to separate oil; water and associated gases then transport each product in order to optimize their utilization.

By performing the engineering works of this project, OnSpec had a main objective, which is setting up a balance between all given data and existing factors, to arrive at the most appropriate facilities with respect to cost, efficiency/flexibility of design capacity, site considerations and operating conditions.



DESCRIPTION

OnSpec used the latest version of the process simulation (Pro/II and HYSYS) to simulate the new process.

OnSpec covered all the process design aspects and provided all the process deliverables related to the following equipment:

- The RTS Includes the Following Equipment:
 - Test and production manifolds
 - Two phase test separator
- The GTS Includes the Following Equipment:
 - Test and production manifolds.
 - Three phase test separator.
 - Three identical three phase production separators

- Two identical water bath heaters
- Three identical two phase separators
- Two identical separated water tanks
- Three oil-shipping pumps
- Two identical gas compressors
- Five identical booster pumps
- Seven identical HP injection pumps
- Oil pipeline with its launcher and receiving traps
- Gas pipeline with its launcher and receiving traps
- Electrical power and lighting system
- Control system
- GTS Utility Area Includes the Following Equipment:
 - Two identical instrument and utility air compressor packages
 - LP elevated flare system
 - One Flare knockout drum
 - Two identical knock-outs drum pumps
 - Corrosion inhibitor and anti-scale injection package
 - Demulsifier injection package
 - Fuel gas package
 - Open drain skimmer
 - Two identical Open drain oil pumps
 - Two (2) identical open drain water pumps
 - Firewater tank
 - Firewater jockey pump
 - Firewater electrical pump
 - Firewater diesel driven pump
 - Electrical power and lighting system
 - Control system