maintain reservoir pressure which would otherwise be depleted during production.

Water flooding, the most extensively used and least costly form of pressure maintenance, involves injecting water into a reservoir through intake wells to drive the oil towards production wells.

Gas injection is frequently used because natural gas is soluble in oil, increasing its volume, decreasing its viscosity, reducing its surface tension and lessening its specific gravity – all desirable effects in boosting recovery.

Enhanced oil recovery (EOR): advanced methods for recovering oil from a reservoir, which increase the recovery factor and which allow a broader range of reservoirs to be exploited. These techniques may include the injection of miscible solvents such as LPG and carbon dioxide into the reservoir, the addition of heat through steam injection or in situ combustion, and the addition of chemicals to act as wetting agents. EOR techniques are expensive and sensitive to the price of oil.

Components of a typical natural gas

Hydrocarbon and % by Weight

Methane (CH_4)	70-98%
Ethane (C_2H_6)	1-10%
Propane (C_3H_8)	trace-5%
Butane (C_4H_{10})	trace-2%
Pentane (C_5H_{12})	trace-1%
Hexane (C_6H_{14})	trace-1/2%
Heptane + (C_7H_{16}+)	none-trace

Nonhydrocarbon and % by Weight

Nitrogen	trace-15%
Carbon dioxide*	trace-1%
Hydrogen sulphide*	occ. trace
Helium	none-5%

* Natural gases are occasionally found which are predominantly carbon dioxide or hydrogen sulphide.

Source: McCain, 1973, p. 4.

Composition of a typical 35° API crude

Molecular Size and % by Volume

Gasoline (C_5 to C_{10})	27%
Kerosine (C_{11} to C_{13})	13%
Diesel fuel (C_{14} to C_{18})	12%
Heavy gas oil (C_{19} to C_{25})	10%
Lubricating oil (C_{26} to C_{40})	20%
Residuum (more than C_{40})	18%
Total	**100%**

Source: Hunt, 1979, p. 43.