

1. “GAS ACCUMULATIONS, RESERVES AND FUTURE POTENTIAL IN Libya”

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Gas whether non-associated or associated has been found in all the onshore and the offshore basins of Libya where hydrocarbons were discovered and being produced. Gas was accumulated in almost all available reservoirs in all the basins from Cambro-Ordovician to Upper Eocene .

However, gas potential of Libya is Under explored and Unexploited as there are numerous undeveloped non-associated and associated gas discoveries.

The number of non-associated gas is small compared to the number of oil discoveries.

Natural gas in the Sirt Basin holds 55% of the discovered reserves, Ghadames Basin (Al Wafa gas and condensate Field, now on stream), and the Pelagian (Sabratah) Basin (cluster of 12 gas discoveries. Bahr Es Salam Field in Block NC41) hold 45% of the discovered gas reserves.

Out of a total of 108 producing oil and gas fields in the Sirt Basin there are: two non-associated gas fields (Essmoud and Hatiba), three gas and condensate fields (Attahadi, Sahl And Sorra), 65 oil and fields, 3 oil, gas and condensate fields and 35 oil fields.

Initial recoverable reserves of the producing fields in the Sirt Basin were estimated to be more than 40 TCFG, the remaining recoverable reserves are 20 +/- TCFG (50% of initial).

Out of more than 165 undeveloped oil and gas discoveries in the Sirt Basin there are: 13 non-associated gas, 3 gas and condensate, 31 oil and gas, 7 oil, gas and condensate and 111 oil discoveries with initial recoverable gas reserves of more than 20 TCFG. The total remaining reserves of the Sirt Basin are more than 40 TCFG.

There is a major associated oil and gas field in Ghadames Basin ,Al Wafa Field (Conc. A-NC 169) with 2.76 TCFG in-place and 2.2 TCFG (80%) recoverable reserves. In Murzuk Basin there is an associated oil and gas field, Atchan Field with 1.07 TCFG in-place and 0.90 TCFG recoverable reserves.

Out of the 33 producing oil and gas fields in offshore Libya , Sabratah Basin there are : 12 gas (Es Salam Field), 7 gas and condensate fields, 5 oil and gas fields, 1 oil and condensate field and 8 oil fields with total in-place reserves of 37 TCFG (0.219 TCFG for the offshore Sirt Basin, (B1 & D1-88 wells) and more than 29 TCFG for initial recoverable reserves.

Grand total of remaining recoverable gas reserves in Libya basins are in the order of more than **72.1 TCGF.**

Future prospective areas are: near offshore areas where gas was found in several wells on Nufallya High, along the seaward margin of Al Jahamah, Shammara and Nufaallya platform as an Eocene and Oligocene shore line trend passes through this area may join Farwah terend in north western offshore., East of Agedabya Trough a similar trend is present, in deep troughs (most likely will be associated gas) and in stratigraphic and combined stratigraphic/ structural traps.