Rare discoveries of oil fields world wide entail seriousness of enhancing oil recovery from the existing oil fields. We present reservoir simulation using fractal based permeability distribution in a CO$_2$ (gas) flooded reservoir. Also, effect of water alternating gas (WAG) is studied to enhance the oil recovery. Though, enhanced oil recovery using CO$_2$ injection is not a permanent sequestration, however, it does provide a temporary use of large amount of CO$_2$ to be used in this process. A successful kick off of such technique will trigger the awareness among major CO$_2$ emitting industries and its economic values. This will further facilitate transport of huge of CO$_2$ to oil reservoirs where it will be used for several years as a recycling product, and finally it could be permanently stored in the emptied oil reservoir upon abundance of the oil field. Effectiveness of CO2 WAG is demonstrated using synthetic as well real field data set.