

ARE HYDROCARBONS OF INORGANIC OR ORGANIC ORIGIN?

The recent BP oil spill in the Gulf of Mexico and the unabated leakage of oil and methane (about 60,000 barrels a day) from the broken well for a period of now more than 70 days has got me thinking about the origin of this oil located at least 13,000 ft below the bottom of the Gulf. The standard view held by most oil geologists is that it has a biogenic origin and was produced by decaying vegetation under high temperature and pressure. If this is so then the world is indeed running out of oil and we may already have reached a peak in oil recovery. However, there is a small minority (Russian School especially Mendeleev of periodic table fame and Kurdryavtsev, plus some individuals in the United States including Gold and Kenney) who cite evidence for an **abiogenic origin** involving the chemical conversion of methane arising from deep within the earth mantle being converted to larger chain hydrocarbons by the high pressures and temperatures existing at greater depth. If the latter group is correct, then it would appear there is an unlimited supply of hydrocarbon oils and gases available, provided one drills deep enough into pockets capable of holding such products, especially methane. After some thinking on the subject, I find myself siding with the minority in believing that most hydrocarbons are indeed of abiotic origin.

1.-Oil is being found at depths as high as 30,000 ft below the earth's surface. It is extremely difficult to see how organic plant matter would be transported to such depths over the last several hundred million years, especially in places like the Gulf of Mexico far removed from the edge of any tectonic plate.

2.-Plant and animal life on earth is carbon based (about 18% of the human body is carbon). Where did this carbon come from? Clearly from inside the earth and not from space. So there must be a great deal of carbon existing throughout the core and mantle in various chemical combinations and especially as methane(CH₄). The high temperatures and pressures existing several tens of kilometers below the surface make for an ideal chemical reactor allowing the formation of larger chain hydrocarbons including oil which are sometimes trapped in pockets large enough and near enough to the surface to make recovery economic.

3.-The broken BP well in the Gulf shows no sign of becoming depleted even after some 70plus days of leaking 60,000 or so barrels per day. A

bionic origin oil pocket would have shown at least some slowing down of the leak at this time. It seems they have tapped into a huge reservoir of oil and methane being re-supplied on a continuous basis by gas moving up through fissures from deep within the earth's mantle and being converted to oil at an unknown rate. Oil replenishment in some of the deep Mexican and Saudi Arabia oil wells appear to support this view. The oil level in a given reservoir just equals the withdrawal rate minus the replenishment rate and will become exhausted only if the withdrawal rate exceeds replenishment.

In view of these points and those made earlier by others **it is my contention that most if not all oil found at depth greater than 10,000ft is of abiogenic origin and therefore there exists essentially an unlimited supply of natural gas and oil provided that one just drills deep enough into some, so far undetected, oil reservoirs.** The technology for drilling wells as deep as 20,000ft and more exists today. It might be a good time to start drilling deeper near some of the existing and partially depleted oil fields in Texas, Baku, Ploiesti, etc..