Oil is a Renewable Resource

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Oil wells in the Gulf of Mexico are being refilled with oil coming up from below the current oil fields. Russia has drilled over 300 eight mile deep wells into the Earth's granite crust. This has worked so well that they worked in Vietnam and found oil off its coast where everyone said there was no oil. Oil used to be found in sedimentary rock at 2-3 miles deep, but the Russians found a new source. What is happening? The Russians found that new oil was being made from hot molten rock called magma heating the basement rocks of the Earth's crust. As the rocks are heated methane gas is distilled. This combines with carbonates and carbon 14 that occur naturally in rock, when these are mixed together, they form oil. It's called Abiotic (non biological) because it does not come from vegetable matter. The original theory of how oil was formed is that swamps filled with vegetation, (biomass) were covered with mud (called sedimentary rock once it hardened) and decayed over millions of years into coal or crude oil. This is called the Biotic Theory. Oil is a renewable resource because it is being made today deep in the earth's crust.

1. Are We Running Out of Oil?

Peak oil means that after a certain time, no more oil will be found in the ground and the present wells will empty out in a few years.

How soon will we start running out of oil? That question is asked by many people every day. One source says we are going to reach peak oil by 2016. After that point in time, all the wells of the world will eventually be pumped dry by 2050 and there will be no more oil.[1] Here are some facts about oil:

- We get 5% of our oil from Iraq.
- Oil companies make an 8% profit compared to 33% for a company like Wal-Mart.
- Wind and solar power provide only about 2% of the energy to our power grid.

Only about 30% of crude oil is actually used for gasoline and diesel fuel while the rest goes into everyday items. When people insist that we quit using oil and shift to something else, they don't really understand what's at stake because it would shut down most of our civilization.[2]

Think about all the things around us that are made from oil. You can imagine just in your own home the vinyl siding, the play equipment for children such as play cars, toys, balls, blow up toys, shoes, and hundreds of other objects. Just about everything we use in the house has a petroleum base to it. Oil is the basis of our civilization.

What has happened to the typical oil retrieval system in 100 years? Santa Maria, CA, covers an area of about 5 by 5 miles or about 25 square miles, it's an oil town and pictures show that, in its hay day, there was an oil well on every city block. It looked like a forest of wooden oil derricks.

Today, with the modern drilling technique called slant drilling, one oil rig is able to pump out all the oil from underneath Santa Maria or about 100 square miles of area. One drill rig can run out 5 to 8 miles in all directions. The idea that we have to have *oil rigs all over the landscape isn't true.[3]

2. Two Theories of Oil Production

There are two basic theories on the way oil is made. The number one theory for the last 150 years is the Biotic Theory or the plant/animal theory. The second theory is called the Abiotic Theory and it means no plants. It means that the oil is formed by another process deep down in the earth's crust. The theory was put forth in the 1950's. We will show you in this paper that the Russians took that idea and were able to strike oil successfully with over 300 extraordinarily deep wells.

2.1. Biotic Oil Theory

An article called "The Origin of Oil." from the National Geographic Explorer of January 2008 sums up the traditional explanation for the formation of oil:

> "The story of oil began millions of years ago. Most scientists believe oil started with dead plants, and animals. These pictures show how they turned into oil. Tiny ocean plants and animals died and fell to the sea floor. Then mud dirt and sand covered and pressed down on the dead plants and animals. The pressure turned the animals and plants into oil. And now we dig oil wells to reach the oil."[4]

To put it in scientific terms, the bio mass was laid down in swamps and shallow seas. First sediments were laid down, then a shallow sea or swamp grew up. This repeated many times over millions of years. More strata laid down on top of that and then another shallow sea, then more mud and strata and then coal and oil were made via heat, pressure and bacterial processes, The typical oil field is based on this hypothesis today and cross sections in books will show you layers of limestone, shale, and sandstone in a typical oil field.

Oil and gas are in-prisoned between sedimentary layers in a pocket with a domed shaped roof. The depth of these sediments that contain the oil is anywhere from one half to three miles. Usually at three miles the drill hits the granite crustal rock. For years, no one thought to drill through this granite for oil because the Biotic Theory does not support such an idea. Oil production

by the Biotic Pressure Heat Theory takes millions of years and allegedly started in the Carboniferous Period, 300 million years ago. Books which illustrate cross-sections of the strata show first marine fossil layers and then Carboniferous rocks that often contain dinosaurs.

Anyone who has seen road kills knows that this theory does not work. The first thing that happens to an animal that is killed is that it begins to rot and is scavenged by crows and other creatures. It is never fossilized.

Scientists have found that when bio-mass falls to the bottom of the ocean, it is scavenged by large and then smaller ocean creatures to be finally decomposed by bacteria.

For example: Craig Smith of the University of Hawaii has been studying whale corpses on the bottom of the ocean for more than a decade, When a whale dies sharks scavenge the body as it floats on the surface for several weeks. Once the flesh was eaten off, the animal sinks to the ocean bottom. Smith's studies show:

"For months the carcass is alive with scavengers. Hundreds of long, tendon-like hagfish curl in and out of every opening. Huge sharks feast on the softening flesh. Crabs are busy eating all they can. In as little as four months, the soft tissue can be stripped away, leaving a pile of bones. Furry worms and shrimp-like animals then multiply and consume the small fragments of tissue dispersed over the sea floor. After another year, the furry worms have gone and the bones are covered in mussels, clams, tubeworms and bacteria. Over ten or so years, the bones are slowly consumed until they disappear and the site is clean."[5][6][7][8]

Another important fact is that the ocean only deposits a little less than a quarter inch of mud a year. That does not cover and preserve for fossilization any dead creatures. Dead creatures have to be buried fast and deep. Fast so they are not scavenged and don't rot on the surface and deep so that the bacterial action that will cause it to rot will be destroyed because there is not enough oxygen for them to live on.

That's how the fossils are formed that we see in South Dakota at our dinosaur dig. They had to be buried fast and deep so that the decay processes listed above could not take place. They were covered with mud that then exchanged mineral atoms with the calcium molecules to turn the bones into rocks. The fossilization process that is reported in this National Geographic article doesn't happen in the real world. This traditional approach, that creatures fall to the bottom of the ocean, are buried and create oil doesn't work, This is not good science.

2.2. Abiotic Oil Theory

Before we start talking about the second theory of how oil is formed we need to review the Earth's geology. There are three major rock groups named igneous which is fire formed, sedimentary which is water formed, and metamorphic which is rock formed under heat and pressure.

Most people are familiar that within the center of the earth, we have the core. Above the core we have molten rock called the magma. After that strata comes the mantel that is the transitional rock which goes from molten to hard. Finally, on top of that is the granite crust which underlies the surface gravel and loam soils. Knowing the order of these layers will help us understand where the abiotic oil comes from.

The Abiotic Theory starts with the hot magma. The mantel rocks are heated by the magma so that as the heat rises methane is distilled or cooked out of the rocks. The methane gas moves towards the surface and combines with carbon dioxide and other carbonates that are held in the rocks forming a black liquid.

Deep living bacteria attack the oil once it comes to the upper earth granite strata for its final refinement to become what we extract today from the wells. The traditional Biotic Theory says that the oil trapped in the earth's sedimentary strata was formed there by dead bio-mass over millions of years. This Abiotic Theory says that the oil flowed up from the mantel through cracks and fissures and was caught in domes in the sedimentary rock.

In places like the La Brea Tar Pits, near LA, the oil continued to flow onto the earth's surface, via natural pressure following Boyle's Law, and by the earth's centrifugal force which pushes the oil toward the surface of the earth. The Chumash Indians have been using this oil that has been washing up on the beaches of California to waterproof boats and baskets for thousands of years.

The depth at which this oil is found is anywhere from 6 to 8 miles because you have to drill into the granite basement rocks. This drilling goes way below the traditional three miles of sedimentary rock. That's why it is so important to understand that this process is going on daily and has been going on for thousands years. This is a continuous process that will never quit as long as the center of the earth is hot and is distilling the methane gas and carbonates that are in the rocks.

3. First Implication of Abiotic Oil Theory

This theory explains why old oil wells are actually refilling. If we look at the Gulf of Mexico oil fields, south of New Orleans, there are 30 or 40 oil reserve sections there. Many years ago satellite images showed oil slicks in the gulf waters. It was thought that this was drill rigs leaking. Deep sea robot subs were sent to investigate. One of the areas investigated was Compeche Knolls which covers about 100 square miles. The mini sub went down and took pictures that showed newly made oil was seeping out of the ocean sea bed. Later chemical analysis showed that it had nothing to do with the present oil platforms that are there. As it seeps out it cools and forms a material that looks like road asphalt. The sub brought up samples that look very much like hot asphalt you see in trucks being hauled to road construction sites.[9]

Naturally, occurring oil also has been found on the beaches of California. When these little pieces of oil harden they smell very much like asphalt. When these were first noticed by some people the knee jerk reaction was that these oil blobs were leaking out of the off shore drilling platforms. When the oil was analyzed, scientists found it was not from any of the drill rigs. It was simply seeping out of the ocean floor.

In the Gulf of Mexico some wells oil wells are actually being refilled. Eugene Island reserve number 330 is an example. "In 1972, production was thought to have peaked out at fifteen thousand barrels a day. Then in 1989, production dropped to 4,000 barrels a day and then jumped to 13,400 barrels a day. As a result, reserves had been pegged at 60 million barrels a day, then

later estimated at 400 million barrels a day, and now estimated to produce over a billion barrels of oil per day. Woods Hole Oceanographic Institution did conclude that Eugene Island 330 did "support the possibility that reservoirs are being replenished by current migration of oil and gas from deeper depths." Emphasis mine.[10]

"The phenomenon of replenished wells was not limited to Eugene Island, but also occurred in the North Sea, the Niger Delta, the Mahalcan Delta, in Indonesia, the Trinidad Basin, the Taiwan Basin, and the Alaskan North Slope." Soviets and Vietnamese have found oil in granite from deep-fracture underground structures." Emphasis mine.[10]

4. Second Implication of Abiotic Oil Theory

This theory explains why the Russians have proved that peak oil is a myth, "Moscow has invested heavily in unlimited oil production for the future."[11]

"In 1970 the Russians started drilling Kola SG 3 an exploration well which finally reached a staggering, world record depth of 40,230 feet. [That's over 8 miles] Since then, Russian oil majors including Yukos have quietly drilled more than 310 successful super deep oil wells and put them into production. Last year Russia overtook Saudi Arabia as the world's biggest, single oil producer, and is now set to completely dominate global oil production and sales for the next century."[11]

What this has shown is that the oil reserves are coming from deep in the granite crust, coming up and being trapped in the domes, so that when the Russians drilled through the sedimentary rock into the granite dome, they found oil. They are not getting it from sedimentary rock at all. They maintain the oil is migrating from 70 to 150 miles deep into the upper layers.

During the 40's and 50's Russian engineers realized their reserves were somehow being topped up from below despite a total lack of additional decaying matter. In other words, they began to suspect that the oil was not from decayed matter but something else. All that lay below was solid granite and basalt, meaning that the oil was actually being manufactured in the mantel of the earth before slowly migrating upward to the existing reservoir. It all seemed too fantastic to believe, but the Russians persevered. Since that time, they have drilled more than 300 producing oil wells through solid granite and basalt, with another 20 drilled the same way in the White Tiger field in Viet Nam.

Abiotic oil comes from drilling into the earth's crust. What convinced me that the Russians were on to something was that they were able to take their basic technology, and transfer it to Viet Nam.

While there from l965 to l975, American geologist had sought oil reserves hoping that they could develop them so that the Vietnamese people would be energy self-sufficient. After doing studies and testing there they maintained there were no sedimentary strata that contained oil in Viet Nam or off the coast.

After the United States left Viet Nam in l975, the Russians moved in and began to explore for oil. The Russians proved their Abiotic Theory by drilling 20 wells off the coast of Viet Nam into granite basement rocks where they found huge oil reserves. "The Vietnamese White Tiger oil field was and is a raging success, currently producing high quality crude oil from the basalt rock more than 17,000 feet below the surface of the earth, at 6000 barrels a day per well."[11]

The following report is from a website that lists oil fields that investors might want to invest in.

> "Oilfields in the Cuu Long Basin offshore southeastern Vietnam typify the country's fractured basement reservoirs. Bach Ho (White Tiger), Vietnam's largest oilfield, produces almost 280,000 barrels of oil per day from granitoid basement [rock]. Recently, a basement-reservoir extension in the nearby Su Tu or "Lion" fields generated wide industry interest."[12]

Evidently, it is beginning to produce oil and it is also in the basement granite rock. Basement rock is way below the traditionally explored sedimentary rocks, where geologists always expected to find oil.

5. History of Abiotic Oil Theory

"Hydrocarbons are not biology reworked by geology [as the traditional view would hold] but rather geology reworked by biology". (Thomas Gold)

- 1950's The Russians put forth the original Abiotic Theory.
- 1979 Thomas Gold published his paper on the theory. He later acknowledged that the Russians had it first and corroborated his findings.
- 1992 Gold achieved fame for his 1992 paper "The Deep Hot Biosphere" in the Proceedings of the National Academy of Sciences, which presented a controversial view of the origin of coal, oil, and gas deposits, a theory of an abiogenic petroleum origin.
- 1999 Gold published his book - "The Deep Hot Biosphere"[13]

6. Oil Spills & New Oil Fields

Of course, we don't want oil spills. There haven't been any major oil spills along the California coast since 30 years ago because of the new technology that has made the off shore platforms safer. Because of improved technology, the movement of the oil from the platforms to the beach is safer. New technology has provided cut-off valves at the sea floors so that if a platform is ripped away, the valves shut off at the sea floor. For example; when Katrina blew away over a hundred oil platforms in the Gulf of Mexico, only about 150 barrels of oil were lost because the shut off valves did their job.[14][15]

In South Dakota, where we hold our dinosaur digs, we work in what's called the Williston Basin (or Bakken), sedimentary rock that goes down three miles and covers over 200,000 square miles from North and South Dakota, and into Montana, and Saskatchewan, Canada. They have drilled over 30,000 oil wells there and are still pumping the oil out.

> "The Bakken is the largest domestic oil discovery since Alaska's Prudhoe Bay, and has the potential to eliminate all American dependence on foreign oil. The Energy Information Administration (EIA) estimates it at 503 billion barrels. Even if just 10% of the oil is recoverable... at $107 a barrel, we're looking at a resource base worth more than $5 trillion."[16]

Conclusion

Abiotic Evidence - "Modern heat experiments show that methane compressed to 30 or 40 kbar yields hydrocarbons having properties similar to petroleum." These scientific experiments support the Abiotic Theory.

Biotic Evidence - "No investigatorq has ever produced anything resembling petroleum in the laboratory by the application of heat and pressure to plant debris." Thomas Gold. These experiments do not support the Biotic (plant) theory.[17]

This paper shows that Abiotic oil is a renewable resource being formed in the earth's crust today. It is an inexhaustible source of energy. Technology is far more advanced now to help us get oil cleanly and safely. We do not have an energy problem but only a national energy policy problem. We could be totally independent of foreign oil and their stranglehold on our economy.

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Non-renewable resources such as fossil fuels....Â Easy to Transport: Being a liquid it can be transported through pipelines meaning a large amount of oil can be transported long distances relatively quickly. Efficient: According to the U.S. Energy Commission, no other kind of fuel contains as much energy per unit of volume as diesel and gasoline does. Cons. Dangerous to Environment: Like coal, burning oil releases carbon dioxide into the atmosphere in addition to nitrous oxide and methane. Spills at drill sites or pipelines also cause negative effects to the surrounding environment and wildlife. Limited Supply: Like all fossil fuels, it takes But there is another option: motor oil as a renewable resource. Itâ€™s possible to re-refine used motor oil, restoring it to â€œgood as newâ€ quality. Then it can be resold over and over again at about the same price per quart as conventional motor oil. In Europe, about 50 percent of motor oil is re-refined, thanks to regulations dating to 1975 that were revised in 2008, say analysts at Kline & Company, a market research firm based in Parsippany, New Jersey. In North America, only about 10 to 15 percent of motor oil is re-refined. But that story is slowly changing as U.S. companies have begun t