



Abiotic Snake Oil

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A few days ago, Energy Bulletin reported that [CNBC hosts 'Deep Oil vs. Peak Oil' debate](#). This turned out to be brief dialogue between Matt Simmons and Craig R. Smith, author of [Black Gold Stranglehold: The Myth of Scarcity and the Politics of Oil](#). This book promotes the theory of [abiogenic petroleum formation](#) as we see from this [worldnetdaily.com](#) blurb.

Smith and co-author Jerome Corsi contend in "Black Gold Stranglehold" that oil is not a product of decaying dinosaurs and prehistoric forests, but that oil is constantly being produced by the earth, far below the planet's surface, and that it is brought to attainable depths by the centrifugal forces of the earth's rotation.

The book seems to be a follow-up to [Thomas Gold's](#) 1998 book [The Deep Hot Biosphere](#) in which the maverick astronomer contends that

Gold's theory of oil formation, which he expounded in a book entitled The Deep Hot Biosphere, is that hydrogen and carbon, under high temperatures and pressures found in the mantle during the formation of the Earth, form hydrocarbon molecules which have gradually leaked up to the surface through cracks in rocks.

Here, we will examine some specific claims made by Smith during his [CNBC debate](#) (mov clip) with Simmons to see if they are true. We will defer a more theoretical discussion of abiotic oil claims to a later date but as a bonus, we'll learn something about petroleum geology as it relates to Vietnam's oil production where the alleged "super deep" oil comes from.

During the CNBC interview, Smith claimed that Vietnam's [White Tiger and Black Lion](#) fields proved that abiotic oil was a reality and used this argument to support his general claim that worldwide oil depletion is a fiction. More information is available at EIA's [Vietnam Analysis Country Brief](#). These kinds of claims have been around for the last few years. Back in 2003, Julie Creswell wrote [Oil Without End](#) (originally from Fortune Magazine 02/15/03) and reported

In the quiet waters off the coast of Vietnam lies an area known as Bach Ho, or White Tiger Field. There, and in the nearby Black Bear and Black Lion fields, exploration companies are drilling more than a mile into solid granite--so-called basement rock--for oil. That's a puzzle: Oil isn't supposed to be found in basement rock, which never rose near the surface of the earth where ancient plants grew and dinosaurs walked. Yet oil is there. Last year the White Tiger Field and nearby areas produced 338,000 barrels per day, and they are estimated to hold about 600 million barrels more.

So, the "mystery" here is that oil is being extracted from porous granite [basement](#) rock which has presumably always been deeply buried, not [sedimentary \(source\) rock](#) that was formed by the burial, heating, chemical transformation and compaction of organic matter.

Looking further, I consulted an article from the American Association of Petroleum Geologist's (AAPG) Explorer series entitled [Vietnam Finds Oil in the Basement](#) to find out what was really going on here. First, these offshore fields are producing.

Bach Ho (White Tiger), Vietnam's largest oilfield, produces almost 280,000 barrels of oil per day from granitoid basement.

Recently, a basement-reservoir play extension in the nearby Su Tu or "lion" fields generated wide industry interest.

The Su Tu Den (Black Lion) field currently produces about 80,000 barrels per day, but PetroVietnam expects to increase output to 200,000 barrels per day within three years.

But most importantly, what is the geological context?

Wallace G. Dow, an AAPG member and consultant in The Woodlands, Texas, calls the Cuu Long oil "paraffinic, classic [lacustrine](#) crude" expelled into fractured basement from lower source rock.

"The oils in the basement are virtually identical to the oils in the sandstone sitting around the basement," Dow said.

"This is the key -- they migrate [updip](#) through faults into the basement, in [horst blocks](#)," he said.

Dow emphasized that the oil's components indicate a lacustrine organic facies with lipid-rich, land-plant debris and fresh-water algal material, refuting theories of abiogenic origin in this area.

The bottom line is that the fractured basement granite containing the oil has been lifted up due to rifting and is now underlain by sandstone source rock. This is the source of the oil, which has migrated up into the basement granite. These fields are *not examples of abiogenic oil* at all. For a rebuttal of abiogenic oil, read Richard Heinberg's [The "Abiotic Oil" Controversy](#).

What is disturbing is that these abiogenic oil arguments are presented in the mainstream media (MSM, here CNBC) without any critical analysis. In the short interview format TV allows, Simmons was unable (or unwilling) to rebut Smith's claim. Many fantastic and unbelievable claims are being put forward now as people scramble around to dispute oil depletion--abiogenic oil is one of these. It is perhaps the most insidious of these false claims with its implicit promise that, to paraphrase Duffeyes, everything is OK because "God [the deep hot biosphere] will put more oil in the ground".



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