

1968: The Very Beginning of Vietnam's Off-Shore Oil & Gas Development

Khương Hữu Điều



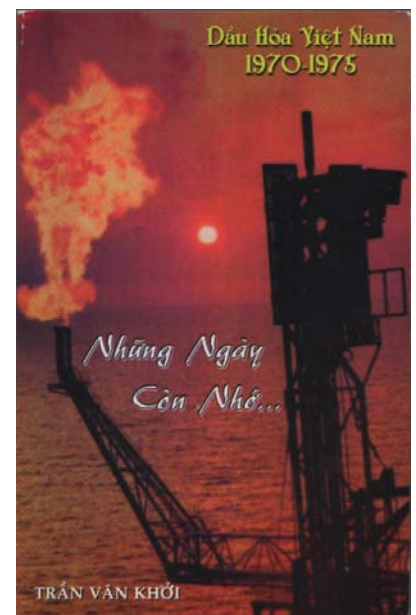
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Mr. Tran Van Khoi, the engineer that served as Head of the Vietnam Agency for Petroleum and Minerals, published the book entitled "DAU HOA VIET NAM 1970-1975," which describes the Vietnam's oil and gas exploration during that period.

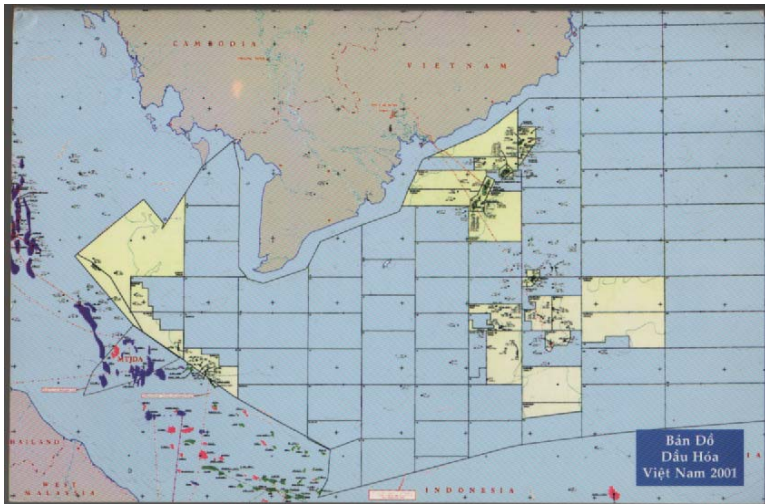
In 1966, the CCOP ("Coordinating Committee for Offshore Prospecting in Asia") was initiated by China, Japan, Republic of Korea and The Philippines under the auspices of ESCAP (Economic and Social Commission for Asia and the Pacific) and the United Nations. CCOP became an independent intergovernmental organization in 1987 based on the common understanding of its member countries and the aspirations of the United Nations. The name was changed in 1994, but the acronym CCOP was retained. CCOP has devoted itself to co-ordination of, and co-operation in, scientific activities related to coastal and offshore areas with respect to geological/geophysical surveys, regional map compilations, database development, development of human resources and transfer of state of the art technology.

The very beginning of Vietnam Offshore Oil began in 1968. While working at the Ministry of Economy, I coordinated with CCOP in Bangkok to obtain a very important technical assistance mission. CCOP sent a high-tech team of three specialists from London Imperial College to Saigon to help the Vietnam Off-Shore Exploration Project. The CCOP members included Vietnam, with the UK, Germany, and Holland making financial and technical contributions to this organization. Its earliest report on Vietnam oil potential was not optimistic.

In 1968, we set up the headquarters of this international team at Saigon's famous Majestic Hotel, on Tu Do Street. They needed 10,000 kg of explosives and two ocean going ships for the two month seismic survey of the continental shelf off Vietnam. I explained the importance of this project, and the technical requirements of this international team to Admiral Tran van Chon, the head of the Vietnamese Navy. Obviously, during this critical phase of the war, the discovery of oil and gas in the country was important, and indeed critical for the survival of Vietnam's war time economy. Because of this I got full cooperation from the Armed Forces.



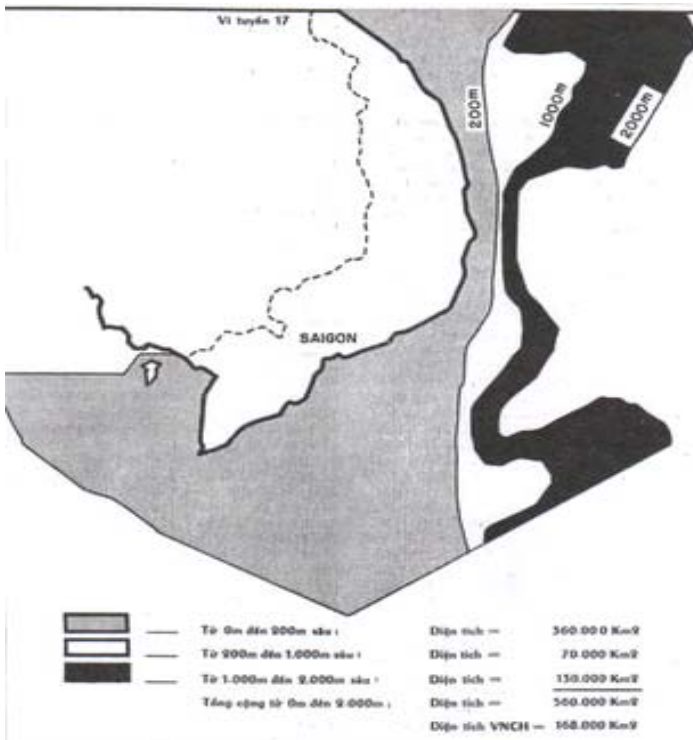
I had the responsibility of coordinating the transportation of explosives to the Navy ships with the military staff of Thanh Thuy Ha Ammunition Depot located in the suburb of Saigon. A convoy of trucks from this depot to downtown Saigon, to the ships was extremely dangerous and complicated because of obvious sabotage efforts by the Communists. The MP (Military Police) escort for the explosives to the Embarcadero was implemented without incident. To celebrate this important milestone day for the Vietnam economy, Admiral Chon invited me to join him in the ceremonial send off party with Navy honor guards and band at the Saigon River pier. We were all very proud and fortunate to be the first Vietnamese team participating in the exploration of Vietnam's offshore oil and gas. As a goodwill gesture, I did not forget to put two cases of Johnny Walker Black Label on the ships for the team's two month expedition at sea.



Map of Vietnam Offshore oil fields 2001

I was told by the petroleum specialists that the experts could detonate 200 kg of explosives at a time on the Navy warships, as opposed to 100 kg that could be detonated on regular civilian ships, because of the difference in thickness of steel in the hull. As a result, the reflection and refraction waves through the sediment and rocks were better recorded for the study of the continental shelf. The good news was that, according to the findings, the Saigon Sabu basin sediments were similar on both sides of the continent. The rocks and the sea floor vegetation were the same. This was good news because production of oil and gas

on the Sabu (Malaysia) side had already begun many years before.



During one of the dinner banquets at the Majestic Hotel, I sat next to the Director of the Massachusetts Wood Hole Oceanographic Institute. He was a member of of ECAFE (The United Nations Economic Commission for Asia and the Far East) team with a lot of experience in the exploration phase. I asked him about the crude oil potential of the Saigon Sabu Basin, Vietnam side. At first he refused to give me a guesstimate. I kept insisting and promised not to leak any news concerning his estimate. Finally he uttered 10 billions barrels based on what he saw in the similar structure from the Borneo Sabu side. He kept warning me not to leak any numbers to the hungry press. I felt so happy to hear this news. I thought "My God, it's quite a revelation; and so critical to the survival of Vietnamese war economy! Maybe with the newly found wealth, the US will not let the communists take over all that oil! And maybe the US Congress may reconsider its drastic aid cutting and let Vietnam survive a few more years." It was wishful thinking!

Depth of the Continental Shelf of Vietnam in meters

The critical issue was that several years were needed for the construction of the production platform before the exploration phase could transition to the exploitation phase. Sadly, we knew that the US Congress had cut the Vietnam war budget against the wishes of the Executive branch in the White House for continued aid.

Offshore oil was discovered in 1974. At that time I felt very proud to have a bottle of Vietnam sweet base crude oil in my office, a symbol of hope for our economy. During the war, I was the chairman of the joint Vietnam-Shell-Esso refinery. We rejected the Quang Ngai site for many obvious economic reasons. Furthermore, we could not build a refinery during the war because a \$1000.00 rocket could burn down the oil refinery - a multi-billion dollar investment.

Sadly, my dream and hope to see a prosperous South Vietnam ultimately did not come true. By April 1975, it became a nightmare with the Vietnam "Bolshevik Revolution."



Visit to Vietnam Shell Oil Drilling Platform 1974 Left to Right: Mr. Ho Tan Phat, President of Viet Nam Power Company - Mr. Tran van Khoi, CEO Petroleum and Minerals Agency - Republic of China's Ambassador to Viet Nam - HE Nguyen van Kieu, Viet Nam Ambassador to Republic of China - Mr. Khuong Huu Dieu, President of Industrial Development Bank - Shell Drilling Specialist (Sikorsky Helicopter in the background)



Vietnam's First Oil Drilling Operation
Time: 14:10, 8.17.1974 Ocean-Prospector Platform

In 2010 Kissinger, for the first time in a State Department conference, told the audience that the loss of the war was not because the South Vietnam Army did not fight, but because the US decided to change its policy toward the communists. To open the door to Communist China was more important to the US foreign policy than to fight North Vietnamese communists. It was observed that the more the US isolated Red China, the stronger Mao Tse Tung became. Vietnam, a small country, was one more time the hopeless and convenient pawn of the Great Powers chess game.

After 1975, Communist Vietnam did not have that pre-1975 security problem. Feasibility studies showed situating the refinery at Dung Quat was contrary to all economic criteria. There was no commercial port. The port of Dung Quat had many other major problems. It is not large enough nor was it well equipped enough to allow the unloading of the heavy equipment for the refinery. The road from the port to the refinery site was also in poor condition.

The Communists took 34 long years to build the first oil refinery in Vietnam. Worst of all, it was built at the

wrong place with the wrong capacity. Why? Again, Communist politics.

It was a well known fact around the world that the Vietnamese government would grant approval for an oil refinery based only on specific political reasons. It had to be built in the central Quang Ngai region of Vietnam because their communist leader Pham van Dong was born there. In 1930 he was a charter member of the Indochinese Communist party, and he served as Prime Minister of Socialist Republic of Vietnam for three decades.

VIỄN TƯỢNG CÓ DẦU HỎA VÀ NỀN KINH TẾ VIỆT NAM



K.S. KHUÔNG HỮU ĐIỀU
Tổng Giám Đốc Ngân Hàng Phát Triển Kỹ Nghệ Việt Nam

PETROLEUM PROSPECT AND THE ECONOMIC DEVELOPMENT IN VIETNAM

The drill bit from the Rose IX well has revealed the existence of oil on the continental shelf of Vietnam. This news has brought about a hopeful prospect for the Vietnamese people. One must thinking of a bright future for the economy of Vietnam.

However, in finding the importance of oil production to the national economy, we may temporarily assume that there will be enough oil to be exploited commercially in order to figure out how the economy of Vietnam will change and in what direction the Vietnamese industries will be developed?

In this article, Mr. KHUÔNG HỮU ĐIỀU, President of The Industrial Development Bank of Vietnam, presents the impacts of petroleum resource and economy of Viet Nam.

Management Magazine 10-1974
Petroleum Prospects and Economic Development in Vietnam
By KHUONG HUU DIEU

Nguyệt san
Quản trị xí nghiệp
Diễn đàn của Quản trị gia Việt Nam

Chức năng: Kỹ sư KHUÔNG HỮU ĐIỀU - Giám đốc Ngân hàng Phát triển Kỹ nghệ Việt Nam

Là Thư Tòa Soạn :

DẦU HỎA TẠI VIỆT-NAM

Trong không thời-gian gần đây, tin-tức về việc tìm-khảo và khai-thác dầu-hỏa đã trở thành quan-thuộc đối với hầu hết mọi người tại Việt-Nam. Tên giám-khảo OCEAN PROSPECTOR, và Công Ty PECEN đang sử-dụng để khoan những giếng dầu-tên trong là đặc-nghưng tại thăm-lục địa Việt-Nam đã được các báo-lưu-tưc nhắc đến. Và người ta cũng được biết trong tương-lai gần, những Công-ty khác như MOBIL, ESSO, SUNNING, DALE... sẽ khởi công việc khoan giếng dầu.

Những điều đã được xác-nhận về dầu-hỏa tại Việt-Nam cho đến nay có thể được tóm-lược như sau: các vết dầu đã được tìm thấy khi khoan, dầu này là loại có phẩm-chất tốt, và lớp đá giữ-dầu được các chuyên-viên cho biết là loại thuận-tiện cho việc khai-thác.

Tại những nơi đã nêu, chúng ta có thể không-chỉ rằng việc tìm-một giếng dầu hỏa tại thăm-lục Việt-Nam chỉ cần là vấn-đề thời-gian. Trong số này Nguyệt-San Quản-Trị Xí-Nghiệp xin chấp-nhận đề-giải một số những tin tức cũng như những chi-cốt kỹ-thuật liên-quan đến việc tìm-khảo dầu hỏa, không người mục-đích để thông-ta cũng có một nhận-định rõ-ràng hơn và một lời khuyên kỹ-thuật cho tương-lai.

NS/QTN

Ban Biên-Tập

NGUYỄN ĐĂNG KHÔI
NGUYỄN HỮU HÂN
CHU VĂN CƯỜNG
NGUYỄN QUANG PHONG

THÀNH LẬP:
NGUYỄN QUY TƯỜNG
NGUYỄN NGỌC BIÊN

Bộ V số 4 Ngày 16 tháng 11-1974

TRONG SỐ NÀY : trang

- Vấn-tượng có-dầu hỏa và nền-kinh-tế Việt-Nam (K.S. Khuông Hữu Điều, Tổng Giám-Đốc Ngân Hàng Phát Triển Kỹ Nghệ VN) 3
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Thư xin gửi về: Ô. Quản-Trị, NS/QTN, - 33-37, Bến Chương-Dương - Saigon 2, Đ.T. - 94.242

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Oil & Gas in Vietnam

As it turned out, the refinery project was finally slated to begin in the 1980's. At first, it was supposed to be constructed near the port of Vung Tau, just 100 km (60 mi) away from the offshore oil fields. However, the refinery project was shelved. Why? In the early 1990s, Total SA (France) expressed interest to the project. At the same time the Vietnamese government decided to move the site to Dung Quat. Following this, in 1995 Total SA pulled out, claiming that the new site made no economic sense. Total SA was replaced with a consortium of foreign investors, including the LG Group and Petronas, but this consortium also withdrew two years later for the same economic reasons.

In 1998, Viet Ross, a joint venture of Vietnam and Russia, was established. The intergovernmental agreement on the construction and operation of the refinery was signed on 25 August 1998. The Front End Engineering Design (FEED) contract was signed between Petro Vietnam, Zarubezhneft and Foster Wheeler Energy. Construction of the Dung Quat refinery was originally scheduled to begin in 2000, but the process was delayed several times. On December 25th, 2002, Russia pulled out for the same economic reasons, and the project continued under the management of Petrovietnam, a state enterprise. Finally, the refinery was inaugurated on February 25th, 2009, 34 years after the war. The long delay and the political decision to build at the wrong site caused great long term financial loss for the country, and consequently the construction costs increased from \$1.3 billion to \$3 billion dollars.

For a period of more than 30 years, Communist Vietnam kept exporting crude oil and importing costly refined products such as diesel oil and gasoline for their own use. They recognized the need to have an oil refinery for their own development but were incapable of building one.

The Dung Quat refinery was 1000 km from the country's Bach Ho (White Tiger) oil field off the Southern coast. This would increase the cost of transportation of crude oil and refined products. They would probably need to construct an additional pipeline to solve this long term logistics problem. The site was also situated far from the country's economic centers, Saigon and Hanoi. Of the refined crude oil, 60% would be shipped back to Saigon, 30% to Hanoi, and only 10% would be used locally.

Not until 2011, did Communist Vietnam via PetroVietnam admitted that it has learned a lesson from its first oil refinery. The chairman of PetroVietnam was quoted as saying that future facilities should be built according to sound economic feasibility studies.

Investing in future refineries with such a wrong capacity would be inefficient; the state Vietnam News quoted Dinh La Thang, chairman of PetroVietnam, as saying. "This is the lesson drawn from Dung Quat," Thang said, adding that two planned refineries would have annual capacities of 10 million tonnes of oil located in North and South Vietnam. PetroVietnam confirmed the comments to AFP.



Oil depots in Dung Quat refinery
(Photo: Tuoi Tre Newspaper)



Dung Quat refinery



Location of new refineries in North and South Vietnam