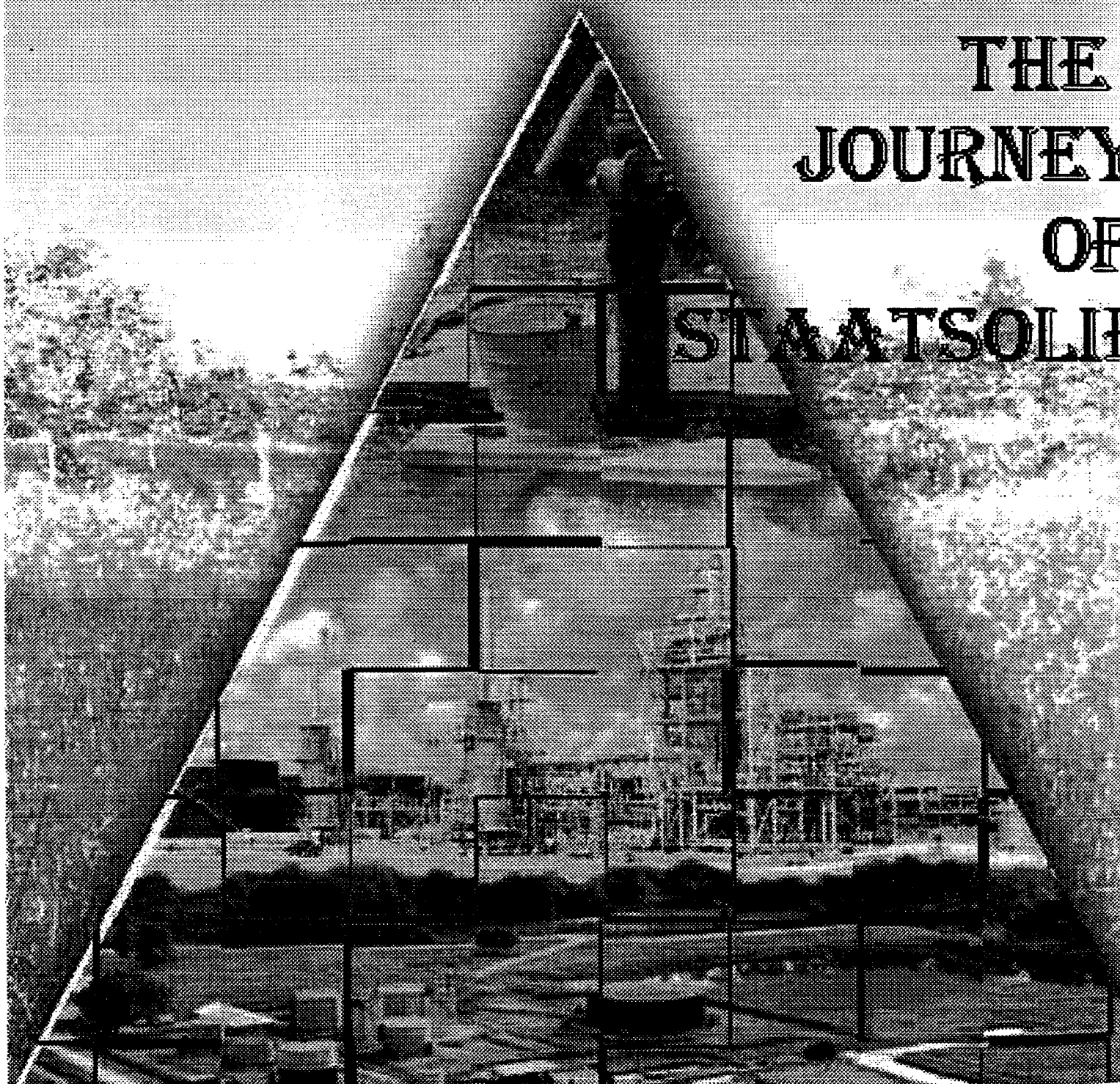


De weg van Staatsolie

Het verwerven van expertise in techniek en management

THE
JOURNEY
OF
STAATSOLIE



"The Journey of Staatsolie" (The Acquisition of Technical and Management Expertise)

Speech delivered by Mr. S.E. Jharap on
the occasion of the 29th Anniversary of
the University of Suriname, 31 Oct. 1997

Drs.S.E. Jharap



1. Introduction

Esteemed Governing Body of the Uni-
versity,
Other distinguished guests,
Ladies and gentlemen,

It is an honor for me to deliver the Uni-
versity's Foundation Day Speech today.
In the middle of this year, when I met
Prof. B. Oostburg at a reception, he sur-
prised me with the request that I should
make the annual anniversary speech for
the university this year. While I was still
thinking of a theme for the speech, the
State Oil Company of Suriname came
into wide publicity. I do not want to go
into the issues which caused this

publicity, but it did us good to know that
broad layers of society think of Staatsolie
as the pride of the nation.

These feelings which are so evident have
motivated me to tell you today about the
"The Journey of Staatsolie", and thus
provide a clearer picture of our com-
pany's motto "Confidence in Own Abili-
ties". In my presentation, I will relate
how Staatsolie developed in a relatively
short period from practically nothing into
a fully integrated company in a techno-
logically advanced industry with local
management and national ownership. I
will relate, from personal experiences,

about the background to the founding of the State Oil Company of Suriname, its objectives and the first activities; but most important how we acquired technical and management expertise and capital.

My presentation does not have the intention to be a scientific dissertation, but it is rather a story of how people who want to realize a similar objective could proceed. I hope this story will inspire many of you to absorb more passionately the knowledge to which you are exposed, and to begin a journey of your own.

2. Petroleum Crisis

It was under pressure of spiralling oil prices in the late seventies that the exploration of petroleum was stepped up worldwide. The international oil companies, who had lost most of their lucrative producing areas in the seventies through nationalization, were now more willing than before to conclude reasonable agreements with host countries.

Oil-importing countries, which had to spend large amounts of their export earnings to pay their oil bill, were now more than willing to promote and to undertake exploration activities of their own in their sedimentary basins. Various foreign oil companies came to Suriname again and asked for licenses to explore for petroleum in our sedimentary basins.

Various persons and companies had already explored for petroleum in Suriname before the eighties, but no commercial deposits had been found, although much useful information be-

came available. I will however, not deal with that period today.



Visitors for oil show in Saramacca

3. The Oil Commission of 1980

One of the companies with which talks were held in 1980 was Gulf Oil, one of the so-called Seven Sisters. These talks were interrupted by the military coup d'etat of 25 February 1980. But after a new government was installed, Gulf Oil came back in search for an exploration license. In the new Government, the late Dr. Ir. H.S. Adhin was appointed Minister of Development and charged with the management of minerals. One of Minister Adhin's first actions was to install a new Oil Commission, which was assigned the following tasks:

- to advise the Minister with regard to the policy on petroleum;
- to draft concession licenses and/or contracts for foreign oil companies;
- to negotiate petroleum contracts with interested oil companies.

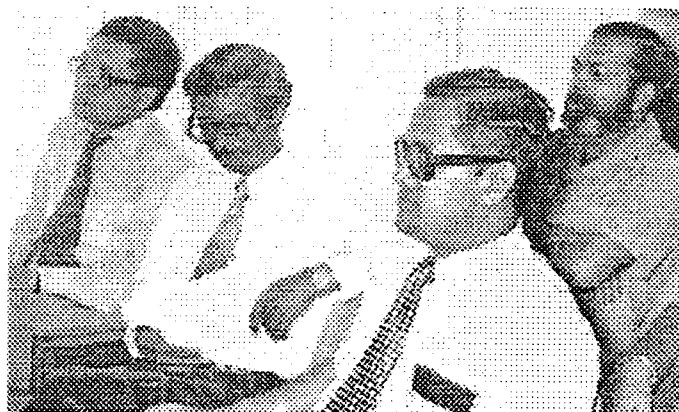
The Commission consisted of Messrs:

1. Ir. Alfred Ng A Tham, Under-Di-

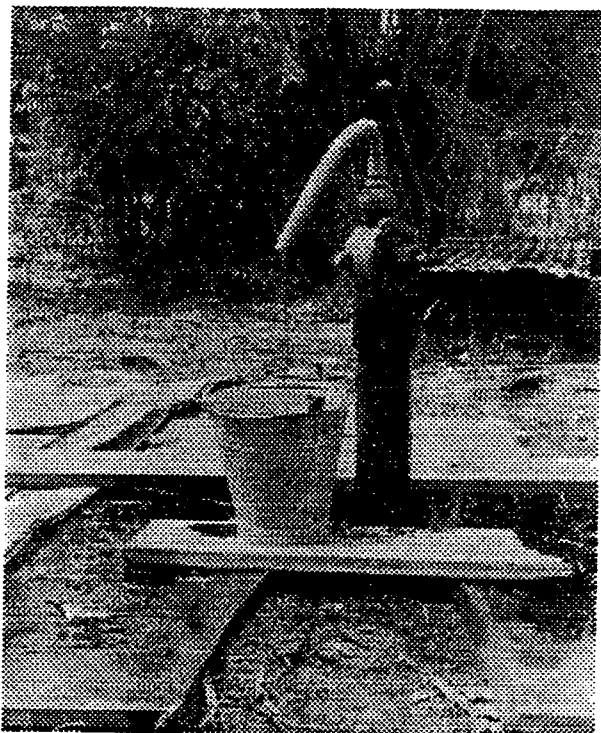
- rector of the Ministry of Development;
2. Drs. Ray Bergval, Geologist at the Geological Mining Department;
 3. Drs. Kenny Texel, Economist in the Ministry of Finance;
 4. Mr. Stanley Ramsaran, Head of the Information Service in the Ministry of Economic Affairs;
 5. Drs. Iwan Kortram, Head of the Project Evaluation Department in the Ministry of Planning and Development Policy;
 6. Mr. Ben Halfhide, Lawyer and Professor in Mining Law at the University of Suriname;
 7. Drs. S.E. Jharap, Geologist at the Geological Mining Department, who was appointed Chairman;
 8. Drs. Rene Cambridge, Head of the Geological Mining Department, who was appointed as adviser to the Commission.

Before the military coup of 1980, I was campaigning as a member of the **Volksparty** for a seat in the National Parliament and I was pissed off that no elections were to be held anymore. I returned to work at the Geological and Mining Service of Suriname (GMD). Shortly after the new Government was installed, Minister Adhin came to the GMD to meet the staff. I told him at that time that I had become frustrated in the civil service and was planning to leave. The Minister asked me to be patient. "The revolution needs everyone," he said.

Mr. Dr. H. Adhin (center) with Mr. H.Lim A Po and Mr. S. E.Jharap (left) and Mr.A. Telting (right)



With political activities forbidden, I was glad to be appointed in the Oil Commission so I had something worthwhile to do. After a short working period, an active core group within the committee had formed itself, and went to the Jan Starke Training Center near Zanderij for a few days to speed up the work. There the basis for a new petroleum policy was formulated and drafts for concession licenses and contracts for foreign participation were prepared. Minister Adhin took great interest in the work of the Commission and he even came to visit us one afternoon with his wife. He was very result-oriented. Minister Adhin has played an important role in the foundation of Staatsolie.



Producing petroleum is within our reach

4. New Petroleum Policy

In the new petroleum policy proposed by the Commission, petroleum was classified as a strategic mineral. The exploration and exploitation of petroleum should therefore be carried out under national control and ownership. To do so, the State would establish a state company, which would be granted the oil exploration and production rights. This company would then, with due account for the wishes of the state, as stipulated in the (petroleum) law, undertake exploration and exploitation alone, or with the help of third parties.

a. Concession Agreement

Initially, foreign companies made use of the legal instrument called a "Concession agreement" for their oil exploration activities in developing countries. These

countries were often still colonies of the respective home countries of the oil companies. When these oil-producing countries became independent and discovered that they had not been given a fair share in the oil revenues, the flagrant inequalities of the concession system could no longer be tolerated. The aversion against the concession system can be understood best if some of its main aspects are mentioned:

1. The concession areas were very large. Usually they contained the entire potential sedimentary basin of the country.
2. The duration of the concession rights were extremely long, usually between 60 and 75 years, in Kuwait even 92 years.
3. The financial benefits for the host country were small and meager.
4. The concessionaire was entirely free in his actions with regard to exploration programs, production levels and prices.

Resistance

Changes were inevitable. The struggle to acquire a better share in the petroleum production took more than half a century. In this struggle, the Latin American countries were the vanguard. The OPEC was founded in the sixties, and in the seventies the oil production was nationalized in most countries.

b. Participation of the state in the petroleum industry

State participation started in some developing countries, which were unable or did not intend to nationalize the petro-

leum industry entirely. Such participation developed after 1950 in two forms, namely in joint ventures and in service contracts.

State participation should not be seen as a matter of prestige or national pride. It is much more than that. Its tangible and non-tangible advantages are multiple, yet the most important are the following:

1. Additional income

By being a partner, the State now receives not only royalties and income taxes, but as co-owner the State also receives a share in the profits, either in money or in oil.

2. Control from within

Although the increase of income would be a great impetus to seek State participation, there are other vital considerations which recommend State participation. State participation, moreover, makes it possible to have control from within in a spontaneous and uninterrupted manner. Such participation also provides the State with the possibility to bring the petroleum industry more in line with national objectives.

3. Acquisition of technical and management skills

It is clear that if a developing country wants to bring the petroleum industry more in line with its national objectives, it will have to plan to develop its own cadre of people who will then acquire and develop, through training and experience, the high technology that is required for the different phases of this industry.

4. Access to the world market

The State or the state company can, with its share in the oil, explore the market and slowly seek lucrative markets for its oil, as well as acquire an insight in the oil market and the manner in which prices for petroleum are established.

Former President Dr. H. Chin A Sen attends a production demonstration in Tambaredjo (1980)



c. The service contract system

After an evaluation of the different forms of foreign participation, the service contract formula was recommended by the Oil Commission in 1980 as the best system for Suriname then. Under the service contract system the State retains through its national oil company ownership of the petroleum in the ground and jurisdiction over subsequent production. The State, however, entrusts the actual exploration,

development and in some cases even the sale of the petroleum, to a foreign company which is able to provide the necessary risk capital and technical expertise. The service contract normally covers many phases of the petroleum industry; from geophysical surveys to the sale of petroleum products. But it can also be used for a single phase.

d. The production sharing service contract

If the remuneration of the foreign oil company (Contractor) consists of a free share in the annual production (after deduction of investment and operating costs), the contract is called a production-sharing service contract. It is this type of contract that was introduced by the Oil Commission in 1980 for the participation of private oil companies in Suriname's petroleum activities.

This service contract provides for, among other things: a minimum exploration program and guarantee for the execution thereof; the manner of approval of work programs, activities and budgets; the role of the state company during the implementation of activities; control and inspection; acquisition of knowledge, establishment of a commercial fund, participation of the State; manner of repayment of invested capital; share of the State, the state company and contractor in the production; provisions for safety and environment protection, provision for information and accounting procedures.

5. Establishment of Staatsolie on 13 December 1980

In December 1980 a Production-Sharing Service Contract was agreed with Gulf Oil after intensive negotiations. To implement this contract a new legal framework and the foundation of a state-owned company were necessary. Both of these things were also prepared by the Oil Commission. Based on a profile description, I was nominated as the



The foundation of Staatsolie in 1980

Managing Director of the new company. I had meanwhile become Head of the Mining Department and, to save on costs, it was proposed that these two functions be combined. The Government adopted the proposals of the Oil Commission and thus the *Staatsolie Maatschappij Suriname N.V.* (State Oil Company of Suriname), for short, **STAATSOLIE**, was founded on 13 December 1980 and the service contract could be signed with Gulf Oil.

6. The acquisition of technical and management expertise

Gulf Oil

The service contract with Gulf Oil pro-

vided for intensive participation of the state company in the activities. It soon became apparent that if we wanted to give serious consideration to the good intentions of the contract, Suriname and State Oil had to have at their disposal at the shortest possible term a properly trained and experienced cadre of its own. Only then would we be able to serve the interests of the State adequately.

Our strategy in the early years was therefore aimed at the following:

"THE DEVELOPMENT AND TRAINING OF A LOYAL GROUP OF NATIONALS IN THE PETROLEUM INDUSTRY TO SERVE THE BEST INTERESTS OF THE STATE."

The question was how to do so. Initially we had oriented ourselves among other state companies of the region. But, for the greater part these companies had been nationalized recently, and in essence the new managers were struggling with the same questions as we were.



The signing of a service contract for technical assistance with GEOMAN

UN Seminar in the Hague in 1981

In early 1981 a UN Seminar took place in The Hague on petroleum exploration strategies for developing countries. Large groups of developing countries, consultants and international oil companies participated in that conference. Among the mass of information and multifarious opinions, an interesting exploration strategy was presented by a speaker from the Norwegian state oil company, to which I was attracted and which we have used as a model for Staatsolie. This model has been applied consistently throughout the years. Since this strategy and its application are the core of my presentation, I will go more deeply into the formula.

Formula for Exploration Strategy

".....The traditional outside view of the petroleum industry is that the major oil companies possess and control the full scope of technologies required to explore for, develop and produce oil and gas, that this technology is very sophisticated, and that the selective application of this know-how has restrained the development of hydrocarbon resources in the Third World. This is only part of the reality. Petroleum Exploration Technology is rather a combination of professional knowledge in petroleum-related disciplines, tools and techniques needed to achieve specific ends and operational know-how on how to manipulate these techniques....

In addition, and maybe most important, is the management expertise to coordinate and guide the know-how and equipment in order to produce actual re-

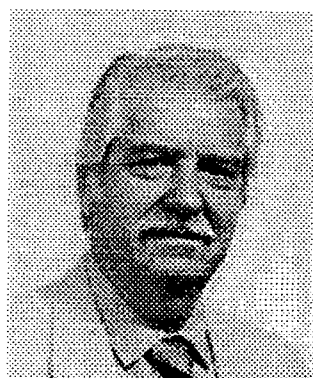
sults, that is finding and producing oil and gas. The strength and importance of the international oil company lies rather in its ability to provide the last service. The complexity of managing all the individual tasks and services providing by a host of consultants, subcontractors, and in-house experts, arranging the financial and legal issues, all within an overall economic efficiency requirement - all this requires an expertise which these companies have built up over many years of practical experience. Exploration technology is not a single expertise concentrated in a single business entity, the multinational oil company. It covers many disciplines and is spread over many sources. The management and coordination of these diverse sources has been the main strength of the oil company. It is this Expertise the developing countries need to get, acquire or borrow from the foreign companies. In addition, the developing countries need to build up a petroleum sector infrastructure that allows them to deal successfully with foreign companies and accumulate the know-how they are exposed to....."

G. W. Hall

While I was listening to this strategy in the conference room, my thoughts went back to a conversation I had some months ago at Tambaredjo with the principal negotiator of Gulf Oil, Mr. George Hall. This is what had happened.....

The two of us had taken one of the visiting bosses of Gulf Oil to a provisional oil well of the Geological Service at

Tambaredjo. From time to time crude oil flowed from this well to the surface. When I saw how the visitor was leering at the oil, I asked Mr. Hall, "Chuck, can we perhaps also interest you in Saramacca crude?", to which Hall replied, "Eddy, my company is looking for large oil fields. This field is too small for Gulf Oil, but I would love to have this well in my backyard."



George Hall

When he saw that I did not fully understand what he meant, he said, "In Texas there are many farmers who produce one or two such oil wells on their farms next to cattle-breeding. You Surinamese are intelligent people and you can produce these fields by yourselves, too. If Gulf Oil comes to work in Suriname there will be sufficient people to help you if you like."

I was able to combine Hall's remarks on the production of Saramacca crude nicely with the exploration strategy mentioned above. Then I made my decision: I would resign from the Mining Service and work full-time for the development of Staatsolie along the formula I had just heard. We would obtain concession rights for the Saramacca area; and try, as Hall had said, to produce that field and by doing so, build up the necessary knowledge and expertise in order to be able to better deal with foreign oil companies. Moreo-

ver, with a little luck, we would be able to generate some income with the crude production and pay the salaries of our personnel by ourselves.

Minister Adhin looked at me with astonishment and even expressed anxiety for my health when I presented my plan for our own oil production to him. Nevertheless, his reaction was: "I do have my doubts, but I know you are a serious young man, if you resign I will not stop you. I will apply for some funds (Sf 500,000) as working capital from the Minister of Finance, so you can start". I went also lobbying at the Minister of Finance, Mr. A. Telting. His eyes began to twinkle, and he said: "Your story sounds incredible, but I have belief in you. I'm going to stick out my neck for you, so don't let me down". I knew I could count on his further support.

Meanwhile, Minister Adhin installed a board of commissioners for Staatsolie, which consisted of:

- Ir. Rudy Goossen, Chairman
- Mr. Mike Kensenhuys, member
- Drs. Rudy Roseval, member
- Ir. Jainul Abdul, member
- Drs. Josef Pahladsingh, member

7. Experiences from the early years

I will try to describe, with some events and anecdotes, the working conditions during the early days of Staatsolie, the acquisition of the necessary technical and management expertise, as well as the risk and investment capital, and about the persons who played an important role in the journey of Staatsolie. But let me first make clear that we had good cooperation and support from the Government and government agencies in the development of the national oil company. However, there were some moments of serious misunderstandings with the Government, but the Military Authority led by Mr. Desi Bouterse, was always available as last resort to mediate a favorable solution for Staatsolie.

The acquisition of risk capital

Gulf Oil had set up a sizable organization for its offshore operations in Suriname. However, in the mean time we received signals that Gulf would like to have a change in the original contract area. Staatsolie already had the concession rights in that area and in exchange



The first Office building in Paramaribo

On 13 March 1981 we began our operations from a house on the Gravenberchstraat no 18, which was turned into an office. Our staff at that time consisted of 5 persons.

Update for D.D.Bouterse and I. Graanoogst in 1982



for the area of interest, we were able to negotiate technical assistance and an amount of US\$ 500,000 in cash as a first risk capital for our own evaluation program at Tambaredjo. Gulf Oil was shocked, but nevertheless agreed, because it had high expectations of that particular offshore area. With the money obtained from Gulf Oil and the working capital of Sf 500,000 advanced by the Government, we started our own evaluation program in Saramacca in April 1981. I should note that the initial share capital of five million guilders at the establishment of Staatsolie was paid in kind, with the offshore concession, by the Government.

Jack Bradford

Gulf Oil's technical assistance was provided under the name of GEOMAN to keep Staatsolie's operations separate from its own offshore activities. The relationship with this company lasted until 1984. Gulf Oil has always made available its best experts, and in this period Messrs. Jack Bradford, a petroleum en-

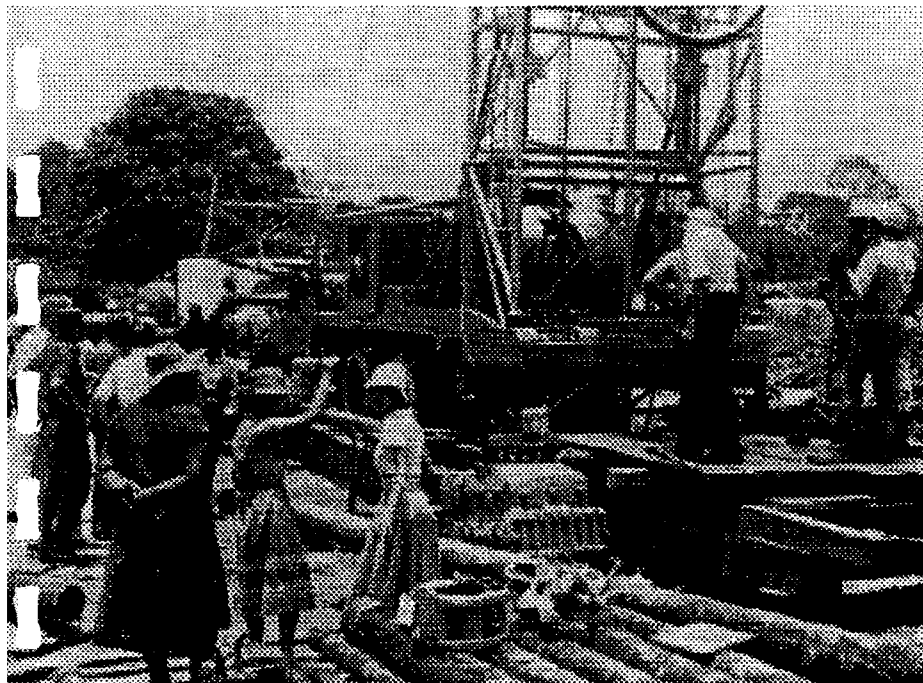
gineer, Ed White, the purchasing manager, and Jo Martinelli, President of Geoman, were great supporters of Staatsolie.

The man who stood head and shoulders above anyone else was Jack Bradford, an experienced and old style petroleum drilling and production engineer. He was 60 years old and had worked for more than 40 years for Gulf Oil in various functions in different countries. After a heart surgery he took early retirement, but before saying farewell to the oil industry definitely, he wanted to transfer his rich knowledge and expertise to people in developing countries who wanted to absorb it.

Jack Bradford



Jack Bradford was the right person for Staatsolie. He was made available as a project consultant to the company, but in fact performed as the project manager. For our onshore area a work program with three wells was planned to examine the value of the oil findings at Tambaredjo (Saramacca). Bradford in fact directed the execution of the work program, but he had all decisions, small or large, made by me. He would first explain patiently what had to happen, when and how, what the alternatives and consequences were. Many a time, due to a lack of specific knowledge



The drilling of the first well in 1981 at Poeran

and experience, I had to ask Bradford what decision he would take if he were in my shoes. In this manner technical and operational knowledge was transferred and learned step by step. Jack took great pleasure in what he was doing and we became good friends for many years.

I would like to tell you of an occurrence with Jack Bradford, which made a great impression on me. Before Jack came to Suriname, he had undergone a heart operation. Despite advice to go a little slowly and relax, he made long days in the field. I was worried about his health. One hot day in October I met him alone in the hot sun out in the field. The rest of the crew had sought the shade of the trees long ago. I asked: "Jack, why do you keep on working in the hot sun?" To which Jack replied: "Eddy, these

measurements cannot be delayed. The data are important to the success of the project. This project is of eminent importance to your country, and I have seen what risks you have taken personally. Moreover, I now have a fatherly interest in this project and I would like to conclude my career with a tangible contribution to a developing country".

It became clear to me that if we wanted to succeed, we had to follow Bradford's example, but work twice as hard.

The first drilling operations in 1981

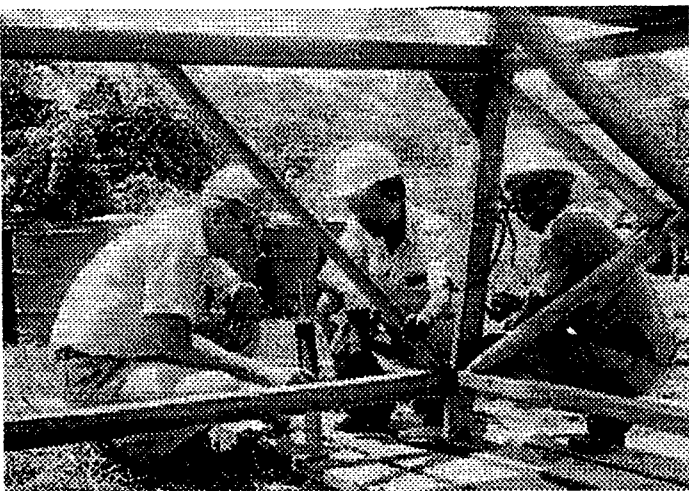
Our first field activities took place in the dry period of 1981 on the Larecoweg, km 12, near plantation *Dankbaarheid* in the District of Saramacca. We were to drill three wells. Mr. R. Bergval, a geologist, had meanwhile joined Staatsolie and was in charge of the field operations. Due to our limited funds, we had leased a water-drilling rig from the Government. The rig capable for the job was, however, old and worn out. As compensation for the lease Staatsolie agreed to have the machine reconditioned for an amount of almost US\$100,000. After completion of the job at Staatsolie, the machine would be in working condition again for a number of years.

However, the drilling machine could not be made available at the time agreed upon. It had gotten stuck in a water well at Meerzorg. We had made all prepara-

tions to carry out the first drilling operation and already had mobilized foreign experts and rental equipment for the job. A decision to abandon the well was postponed every time and without the timely availability of the rig our whole project would fail before the drilling of a single well. As time was running out we removed the rig by ourselves without authorization and thus risked the anger of the inhabitants of Meerzorg and the management of the Water Supply Department. Mr. E. Tsai Meu Sjong, was first very angry but forgave us and even provided assistance with logging of the wells.

In spite of the costly repairs to the drilling machine, almost everything broke down during the operations. We just about managed to do it thanks to the support of the former smithy of Beekhuizen and Holly's repair shop. Bradford could make it all happen and managed to reach the desired depth in two weeks. To our delight, petroleum was found at a depth of 300 meters in the yard of farmer Poeran on the Larecoweg.

Field test of Saramacca crude at Poeran-well



The drilling crew we had hired did not show their best side either. Almost every day work was stopped or there were threats of strikes to demand more money. They thought that we - using the excuse that it was own work - were in fact trying to have work for Gulf Oil carried out cheaply. Other service providers also shared this opinion.

An experience with curfew

The well at Poeran's appeared to contain good oil sands and was to be tested for a number of days on productivity. With all sorts of improvisation the hole was completed into a production well. While we were running casings it appeared that a special instrument was needed to get one of the parts in the right place. We phoned the supplier in Houston and he promised to send a member of his staff - who happened to have his passport with him - to Suriname at once with the instrument. He had never heard of Suriname, let alone that there was a curfew.

I picked up the man at the Zanderij airport and managed to get him to the Torarica hotel just before curfew. I then proceeded to the military post at the Fort Zeelandia to get a curfew pass to take the instrument to the Larecoweg. There the military was of the opinion that I was too late and that I had to sit on a bench and wait until the following morning. At a certain moment I could not take it anymore and said, "Commander, if this instrument does not reach the drill-site tonight, serious accidents may happen and endanger the life of people. You are now informed and will have to take responsi-

bility for all consequences." Everybody in the room went silent and after a while, the commander said angrily: "Let that man go. If they shoot at him on the way, it's his own risk." I was not issued a pass.

But as I was about to leave, one of the soldiers whispered the advice to me that I should put on my hazard lights and not drive too fast. The car I drove was a gray Mazda stationcar 323, similar to the one Mr. Bouterse used to drive at the time, so the soldiers would think I was driving his car and don't bother. I reached the drill site without problems. The job was successfully completed and a production of 75 barrels a day was tested. This was beyond all expectations. The two other wells proved to be less successful.

Nick Cengiz



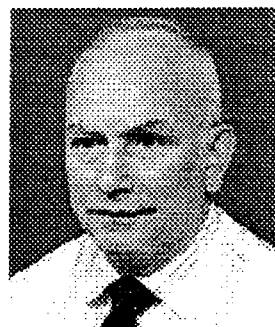
Nevertheless, a preliminary estimation gave an oil reserve of about 5 million barrels and the construction of a small production facility for testing

purposes was recommended. The installation would be financed commercially.

Importance of someone to show you the ropes: Nick Cengiz and Jozef Brahim

I come from a simple farmer's family of Santo Boma, and in the early days knew hardly anyone in the business world. This was a handicap. Often access to persons and institutions was difficult.

Jozef Brahim



Once when I went to a meeting with Bradford, I was sent to a bench in the waiting room, while Bradford was allowed to walk into the manager's office. They thought I was the driver.

I saw that in no time Nick Cengiz, Gulf Oil's local manager, knew almost everyone in Paramaribo who held an important position. He also gave a lot of parties. Once I asked him if he was not fed up with all those parties, and he said, "Eddy, those parties have a function. This is how you learn to know people and make contacts. It is very important for our work. You should do the same. The business world does not know you yet". After Nick Cengiz left Suriname, I had a lot of support in this respect from Josef Brahim.

Freddie Vos



Going to receptions - Freddie Vos

From then on, I started to go to receptions. It was not always pleasant. Once I was introduced to someone as the managing director of the national oil company, and the man replied, "Oh, that's nice. How many coconuts have you pressed today?" But there were also satisfying experi-

ences. I had never before personally spoken to a bank president. At a reception I met Freddie Vos, president of the local ABN bank. He showed a lot of interest in our oil activities and asked all sorts of questions. At the end of our conversation he surprised me by saying, "If you find oil, think of us. Perhaps we will be able to loan you some money for the development." At first I thought he was joking, but he managed to convince me that the bank also financed projects in the mining sector.

Combustion tests with Saramacca crude at Brynzeel



After that meeting, there were many more talks, and as a result of that we managed to unite the six commercial banks of Suriname into a consortium to provide Staatsolie with a loan of US\$ 2 million to finance the first production facilities in 1982.

Oil tests, C. Small, Dr. Ir. Anne van Dijk

Not all technical expertise came from abroad. Geoman confined itself mainly to drilling and production aspects. Organization, financing, marketing, and so

on were undertaken with local efforts and expertise. One of our most important merits in this period was to prove that the Saramacca crude could be used without refining as a fuel in existing installations. Only then could we sell the crude oil and think about commercial production. Laboratory tests in the USA had confirmed that the crude could be used as a proper replacement for fuel oil bunker C. But our potential customers were not convinced. "Seeing is believing!" they said. With the cooperation of Mr. C. Small of Bruynzeel we successfully burned Saramacca crude as fuel in their installations. There was also a motor test at Surmac. Saramacca crude in different mixing proportions with diesel was tested in a Caterpillar engine. With these test results and lab analyses we managed to conclude sales contracts with Suralco. In later years we experimented with success together with the late Ir. Anne van Dijk at using the Saramacca crude as fuel oil for drying paddy.

Lesley Goede

Staatsolie's management team in the early days was small and consisted primarily of technical people. To find our way through the financial procedures and administration, we acquired the good services of the late chartered accountant Lesley Goede. In those days Lesley was the best in his field. He had a good reputation in the business world. If you had Lesley on



your side, you had a heavyweight to whom people listened. He advised us in setting up our financial administration, so that we could provide the banks swiftly with the necessary information. He was also our adviser during the negotiations with the banks for our first production loan, and that made a good impression.



R.Berval, S.Jharap and S.Gilds charman of the Staatsolie labor union

Dutch development aid money

The Government was not so pleased to see that we took costly loans from banks while ample financial funds were available to the country through the development aid treaty with the Netherlands. We had, however, little belief in the fact that it would be possible to build a commercial company with development aid money, due to the bureaucracy in the acquisition thereof, and we stuck to our point.

To sidestep the Government's criticism somewhat, we prepared two project proposals:

- one for the CONS (the aid fund management committee) to finance a production test installa-

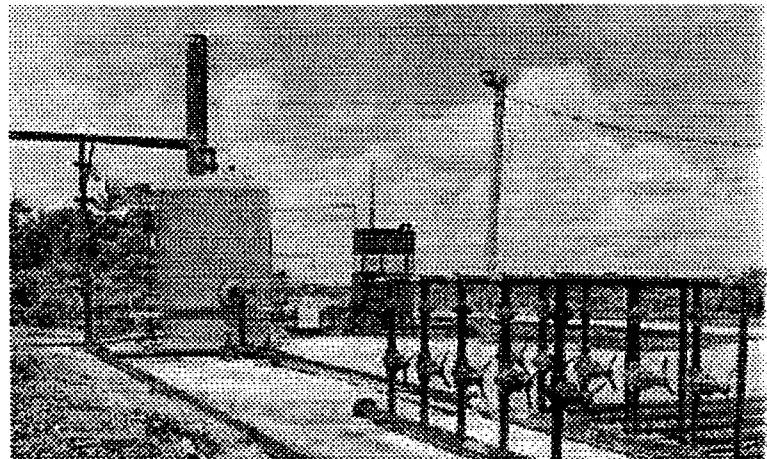
tion with a single well. The costs at this project were estimated at US\$\$ 200,000;

- another proposal to finance a production installation with 5 wells with a total value of US\$ 2 million. This proposal was submitted to the commercial banks.

We reached an agreement with the banks in two months, so that we could already make use of the loan in early 1982. With the CONS the trajectory took about two years. When the approval was finally given, the production with bank financing had already been in full swing for a year.

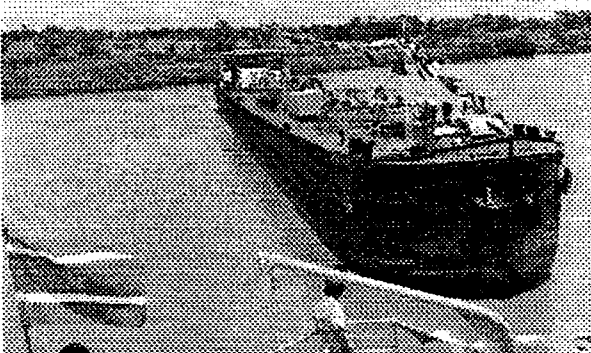
First production installation 1982

According to initial plans, the first production installation was to be built along the Larecoweg and thus make the best possible use of the existing infrastructure. But reservoir studies showed that the plantation Catharina Sophia on the left bank of the Saramacca River was the best development area. That was tough luck, for the area was a swamp. We did



not let ourselves be discouraged and under the motto "even the best is not good enough for Staatsolie" we then recruited the best local experts and construction companies to prepare that area for drilling and construction. In this context I would like to mention the names of Messrs. Ir. R. van Romondt, agricultural engineer at the Ministry of Agriculture, Ir. A. Tjin Wong Joe of the engineering firm IBT, and Mr. Baitali of the construction company Baitali. With their input we could have access to the area with our heavy equipment in August 1982, construct the installations, and drill the first production wells as planned.

This time we had purchased used drilling rig in Canada and recruited and trained our own drilling crews. Jack Bradford was once again the man who performed miracles. He designed, explained, trained, gave instructions, installed, supervised, and controlled, without even one improper word ever passing his lips. In all that time I was constantly at his side, trying to soak up all his know-how and experience like a sponge.



The M.t. Staatsolie-1

On 25 November 1982 the Catharina Sophia production installation was inaugurated by the then Prime Minister Drs.

H. Neijhorst. Immediately thereafter Jack Bradford was to return home. I was anxious about this and said, "Jack, you are leaving tomorrow and we do not have any experience with field operations. What will we do when problems arise and you are not here?" Jack smiled, and said, "Eddy, I have worked with you people long enough to know you are intelligent and capable. You'll see how fast your people themselves will manage to solve the problems. But if you ever need me, don't hesitate to call." Jack left but has always been available for State Oil in word and deed. The development of our national petroleum industry owes a lot to Jack Bradford.

There were problems initially in almost all areas and at all levels. Supported by Jack's encouraging words, we managed to solve those one by one, with ups and downs, and thus give true meaning to our company's motto "Confidence in Own Ability". In the years that followed we carried out and expanded our activities with increasing independence. Now we not only make an important contribution to the economy of our country, but we also have a loyal and properly trained staff in almost all sectors of the oil industry. They are able to serve the interests of the state to the best of their ability.

Final word

Ladies and gentlemen, I have tried to give you an idea of our development, on the basis of some events taken from the early years of Staatsolie's history. How we managed to acquire technical and

management expertise and external capital for the development of our own

Fam. Jharap: Graciela, Eddy, Greta and Anita



petroleum industry. Thus do not remain passive and use stereotypes such as: we have no money, we have no expertise or no people, but follow our example and work hard to achieve your own objectives.

The method we have followed is not new, nor is it unique to the oil industry. It has already been described in many old documents and studies. With Staatsolie we have actualized this formula again in Suriname, so that it can serve as a beacon for the journey you are about to undertake. I wish you success.

Thank you for your attention.

S.E. Jharap

Comment Jack Bradford

Dear Eddie,

I enjoyed your speech at the University Founding Day. For the first time I now know your thoughts and preparation you had done before and during the negotiations with Gulf. I don't know whether you remember, but I sat in one of the negotiations as an observer knowing that if the agreement was signed I would be the "Technical Expert" to be supplied by Gulf for the evaluation of your project. It was very interesting and I quickly recognized that your negotiating skills were considerable and far better than the Suriname lawyer Gulf had engaged, had led us to expect. Then when your decision not to accept the World Bank's offer to finance your operation was made, I knew you were no pushover and were going to control your own operation. This led to the approach used in the study and operation that followed and to the success that followed.

Your speech tells me that you could teach a course at the University when you retire on entrepreneurship. The speech set forth the procedures that should be followed in starting any new business, (a) Idea (b) Planning (c) Technical Help (d) Financing (e) Organization (f) Sales (g) Management for growth. All the above were done in your operation and outlined in your talk and could be outlined for a course.

Congratulations on your awards, they were well deserved. I'm glad the people of Suriname have recognized what you have done for the Country, financially and as a morale builder. Your rewards have not been financial so I'm certain recognition is welcome. You would have received considerable more income had you performed this operation in the USA or Europe. I know your philosophy is to better the people as a whole and not your personal gain but you do deserve a reward. Again congratulations.

Your success should be an example that all graduates could emulate and I am sure will inspire some to follow in your footsteps.

My regards to all,

Jack Bradford
Petroleum Consultant and
GEOMAN's Project Manager
Suriname Onshore Evaluation Project
21 December 1997