

**SOURCES FOR SANA'A WATER SUPPLY
(SAWAS PROJECT)**

MISSION REPORT

Mission period : 5 March - 12 March 1993

Purpose of mission : Finalisation of Prequalification Documents

Report prepared for : National Water and Sanitation Authority
(NWSA), Sana'a

Royal Netherlands Embassy (RNE), Sana'a

Directorate General for International
Cooperation (DGIS), The Hague

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1. Friday 5 March 1993

Transit in Paris.

2. Saturday 6 March 1993

Travelled Paris-Sana'a, arriving in Sana'a at 18:30 local time. This is a non-stop, quite convenient flight. Met by Wim van Dalfsen (WVD).

Discussed about the current political state of Yemen.

The country is facing economical difficulties due to several factors. Yemen's political isolation after its supposed support of Iraq at the occupation of Kuwait and the return of thousands of workers (now unemployed) from other Arab countries, flat oil production/price (oil production will increase by next September when Can-Oxy's Masilah field will come on stream and boost production from less than 200,000 to over 300,000 barrels per day), raging inflation, rapid devaluation of the Rial - added to a fast population growth - have created a squeeze on the lower classes. Their discontent resulted in acts of violence in Sana'a and other large cities in last December. In this climate, Islamic fundamentalists have an easy task to "demonstrate" that Western values (and companies) are not bringing any benefits to the ROY. The situation has become more troubled by tribal unrest and the upcoming general elections on next 27 April, with a completely unpredictable outcome.

In this atmosphere, one major concern is the obvious weakening of the government and its apparent difficulty to control the country's stability and to maintain law and order.

Security

As it has been confirmed during my stay, security is still quite good for foreigners, but certainly not for their cars that are stolen by the dozen for political, tribal and/or other more "practical" reasons.

Ramadan

The whole mission fell within the month of Ramadan. Office hours were from 11:00 to 15:00. Shops and businesses were also opened between 21:00 and 23:00 hrs. International companies were working about as normal. A plan of work was organised to optimise my stay.

3. Sunday 7 March 1993

Meeting with WVD:

Prequalification procedure

Discussed Prequalification procedure and format based on the latest remarks of NWSA. Reviewed first draft of Prequalification Documents and identified possible changes.

Drilling Philosophy

WVD reviewed latest developments of SAWAS-3 Project: Administrative Agreement between the Netherlands Minister for Development Cooperation and the Yemen Ministry for Electricity and Water about to be signed, and discussion with DGIS on drilling campaign options regarding the number and location of boreholes.

General

Discussed the technical issues related to the borehole designs, test and completion programmes, etc.

* Evening: meeting with Sarkis Garabedian (SG), Legal/Technical Advisor of NWSA, and WVD on the Prequalification Documents.

- The format of the prequalification and tender package and procedures were discussed in detail. NWSA is used to work with a specific format and for consistency and efficiency reasons it was decided to use the same format for all documents.
- SG was quite helpful in bringing his local experience on legal and administrative matters and NWSA philosophy. This helped to modify the draft documents to match NWSA format and other requirements and eventually get the package approved rapidly.

4. Monday 8 March 1993

Spent all day to change the Prequalification Documents to reflect SG's comments and NWSA preferred presentation and format.

5. Tuesday 9 March 1993

* It was planned to visit the locality of the second exploratory borehole (DS-2) to identify a suitable site. However, due to the risk to have the SAWAS car hijacked, and upon SG strong recommendation, it was

decided to rent a car to go to the DS-2 locality as no car from NWSA was available. The rent-a-car company required details of the trip with a map of the area visited and an official letter from NWSA. It was too late to obtain the required letter and it was then decided to postpone the trip to the following day. Met with WVD and Adel Kaid, SAWAS Coordinator, about DS-2.

* Discussed with WVD about the prequalification procedure, the tender/contract philosophy as well as technical matters regarding the wells and the operation, and in particular:

- Acceptable timings for SAWAS for the drilling of DS-1 and DS-2 and the possible impact on the prequalification and tender procedures.
- Following the prequalification exercise the Tender Documents will be based on NWSA format. NWSA is used to work with a FIDIC format (prepared for construction works). The International Association of Drilling Contractors' (IADC) format, which is more relevant to drilling contracts, will be used to complement the NWSA format. Close contacts between RDP, WVD and SG will be necessary to avoid duplication of works.
- Based on Shell's and other companies' experience, the responsibility related to accidents (and safety in general) and pollution problems - and their consequences - will be clearly stated in the contract.
- Discussion was also made about the updating of the "Drilling Campaign Outline" (DCO). Thoughts were given to what should be included in this document and its functionality.
- Effective communications between the rig and Sana'a will be paramount to a good supervision. It may be impossible to get a licence for radio communication but it may be possible to use cellular telephones between the rig and Sana'a. WVD will investigate these possibilities.
- The review of potential bidders and companies which expressed an interest highlighted the difficulties for small, unexperienced companies to compete for this project. Not only there is a financial penalty for these companies to mobilise and/or import a rig, but they may also have to set up a new structure in the country and this requires many authorizations. The prequalification criteria will have to integrate these facts. Also, the tender will have to be quite specific about the Contractor's legal responsibilities as the contractor will come

under NWSA "umbrella" and NWSA will be fully liable for them until they find a new "umbrella" or leave the country.

- * WVD and myself visited with Joseph Mongrain, Schlumberger Marketing Manager. He reviewed today's activity level in Yemen in great details and presented to us Schlumberger forecast for 1993/1994.

The 1992 activity level was of 122 rig-months. In 1993, the forecast is at least a dozen operators will be drilling and the activity level will be of 144 rig-months (or 12 rigs working simultaneously). It is difficult to have an accurate forecast for 1994 but Schlumberger think that the activity level will be the same as in 1993.

What has to be noted is, compared to 1992, the number of Drilling Contractors has increased significantly (from 3 to 5). This more competitive environment will be quite favourable to our tender exercise.

Another subject that was discussed with J. Mongrain is the evaluation of the reservoirs to be encountered in DS-1 and DS-2 and more particularly the analysis of water samples. Samples are presently not analyzed in Yemen by Schlumberger. They are sent to a nearby country for analysis. A "mini-lab" is to be imported shortly by Schlumberger in Yemen to provide for such service. It was not sure, however, if the required analyses could be performed on site. The testing of the wells depends on the quality of the water found and it is important that water analyses are done rapidly to avoid waiting time. J. Mongrain will investigate this matter and should provide an answer to WVD within a few weeks.

6. Wednesday 10 March 1993

- * Around 01:30 hrs somebody shot the British Embassy with a bazooka.
- * Visit to DS-2 borehole site with WVD and Mohammed Mayas (MM), NWSA/SAWAS hydrogeologist.

In the morning it became obvious that it was about impossible to rent a car a trip outside of the city limits. Two NWSA guards were "hired" to accompany us and we left Sana'a by 13:30 hrs. It took only about half an hour to reach the proposed area for DS-2 where a convenient site was then selected. A GPS survey will be made at a later date and will provide the exact coordinates of this site.

The following remarks can be made for the selected location of DS-2:

- flat and easily accessible,
- distance from the borehole site to the asphalt road: 1 km,
- then distance to Sana'a Airport road: 14 km,
- not a cultivated area, but water is available,
- close to Al Hatarish village (and a telephone line).

The return trip was very fast. It took less than 25 minutes to return to Sana'a.

* Visit to David Allison, Contract Manager of Nabors Drilling. David confirmed they will apply for prequalification.

- Nabors expect to see the level of activity to increase next year as many operators have commitments they have to fulfil before the end of 1994.
- They have 14 rigs in the country; two are idled at present but they may be exported to Iran. Nabors is apparently reluctant to import more rigs in the country because of "the economics of such an investment". This may also be linked to the already large exposure they have in a country with a very competitive environment, and a political situation he judges "explosive". Nabors feeling is that more troubles are probable after the Ramadan is over.
- David indicated that the dayrate of drilling rigs are likely to increase by 20 or 25 % (i.e. \$12,000 to 12,500 for the kind of rig we are considering) and the mobilisation/move should be about \$200,000. I think it may be too optimistic (from his point of view).

* Evening meeting with SG/WVD to finalize the prequalification package. Discussed again the philosophy of the exercise in detail and decided some additional changes to combine NWSA and DGIS requirements in a more simplified document.

7. Thursday 11 March 1993

- * Made changes on Prequalification Package according to decision made with SG and WVD the day before.
- * Discussion with D. Bienvenue, Total Deputy Operation Manager. Total have two rigs working in the South (one large rig and one small one) and two in the North. They will probably release one rig by mid year but keep the other three until next year because of a small discovery.
- * Met with M. Ben Abdullah, G.M. of Nimir, and discussed about the political situation. Before starting their

operations many Oil Companies are waiting as long as they contractually can for a clearer political situation. This means that many projects that should have started early this year are on hold and may be postponed to next year.

- * Met with P. Regnault (in Nimir office), Forasol Manager. Forasol have a three well contract for Nimir "via" ARCO. They are interested to bid on our project as they are trying to bring a small heli-rig in the country. Regnault's point of view is that the market will be flat, at best, this year and 1994 activity level will depend upon the political atmosphere and the results of the 1993 exploration campaign. He noted that no discovery was made in the last 12 months and that the Oil Companies are less optimistic about the prospects of the country.

Note: Al Mansoori was contracted by Nimir to drill two shallow water wells. They were apparently unable to perform their task due to a lack of equipment and materials and Forasol had to finish the second well.

- * Worked on cost estimates and NWSA tender procedure. At first glance we still are within the timing of the proposed schedule for tendering the contract.
- * Started to work on the Mission Report and reviewed the draft of the Main Contract used by NWSA.
- * Evening meeting with SG and WVD. The Prequalification Package draft was reviewed for typos and final adjustments. A hard copy of the Documents and a diskette with the file were left to WVD for eventual modifications. SG pointed out the criticality of the timing with less than two weeks left before the end of the Ramadan and the Eid holidays coming up. To avoid delay in the prequalification process it was noted that the Prequalification Notice should be sent as soon as possible to the selected magazines and the prequalification package approval has to be obtained before 24 March 1993 (start date of the Eid).
- * Discussion with WVD. Plan of action and priorities:
 - RDP to prepare a Mission Report a.s.a.p.
 - RDP to start tender procedure and contract format for ICB, based on a FIDIC format as already used by NWSA but with specifics related to drilling operation from the IADC format.
 - The scenario to consider for the drilling campaign is becoming critical and may impact the Tender Documents delivery if not decided shortly.

- RDP to update the "Drilling Campaign Outline", with new times and cost estimates as soon as the campaign scenario is finalised.

8. Friday 12 March 1993

* Travelled back to Paris/Algiers.