

From the President

Since joining Geoservices in November 1995, I have visited all the Regional Offices and some of the bases. What struck me immediately was the great resource of different skills, capabilities and cultures available from among Geoservices personnel.

Its dynamism and its capacity to evolve and adapt were also plain to be seen. I can vouch for this by the speed with which the new organisation slotted into place in January and by the way the new working procedures have been accepted and put into practice.

The other side of the coin is that Geoservices does not operate as a homogenous group, but rather like a collection of companies. This type of structure undoubtedly produces a healthy commercial spirit but it does not make best use of the synergy or resources available from within the Group. I believe it will be possible to maintain the entrepreneurial spirit and the competitive character of the Profit Centres, while improving the overall working of the company through better internal communications, and in the knowledge and *recognition* of each other's achievements.

GeoWorld, which will be published 4 times this year, should help us to get to know ourselves better.

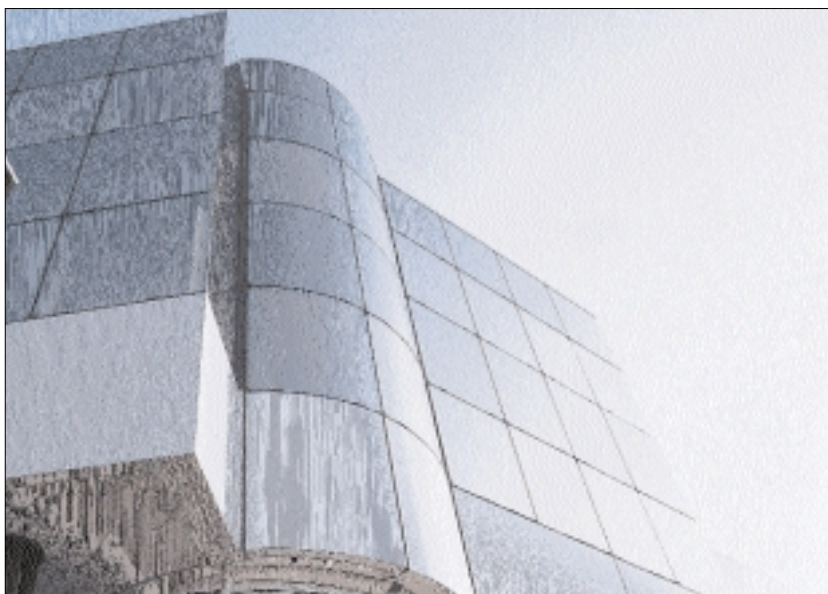
I sincerely hope that this first issue, with its informative comments from all over the world, will enable us to begin useful and open dialogue with each other.



BRUNO FLORIS

ISIS invests in Geoservices

Interview with M. Ferrari - President of ISIS
(Internationale de Services Industriels et Scientifiques)



The new wing at Geoservices' Headquarters, Le Blanc-Mesnil

In October 1995, ISIS subscribed to an increase in Geoservices' capital, to become a 35% shareholder. Could you tell us something about ISIS?

ISIS is a holding company which was created in 1975 to manage the French Petroleum Institute's (IFP) interests in the industrial sector. Originally these interests were intended to secure market openings for IFP's technological innovations.

The success of this move can be seen in the examples of TECHNIP, COFLEXIP and PROCATALYSE, companies which rose to become international leaders in their respective fields.

Nowadays ISIS, which is presently 57% owned by IFP, 39% by the ELF Group and 4% by BNP (Banque Nationale de Paris) is an investor specialising in the oil industry services sector; its aim is to be a stable shareholder which can actively participate in the life and development of the company through its membership of the Board of Directors.

ISIS presently manages a portfolio of 16 subsidiaries and interests taken from all areas of the petroleum industry.

Why did ISIS decide to invest in Geoservices?

For 2 years now ISIS has been keen to balance its holding between its companies in the downstream sector (refining, petrochemicals) and the upstream sector (exploration and production).

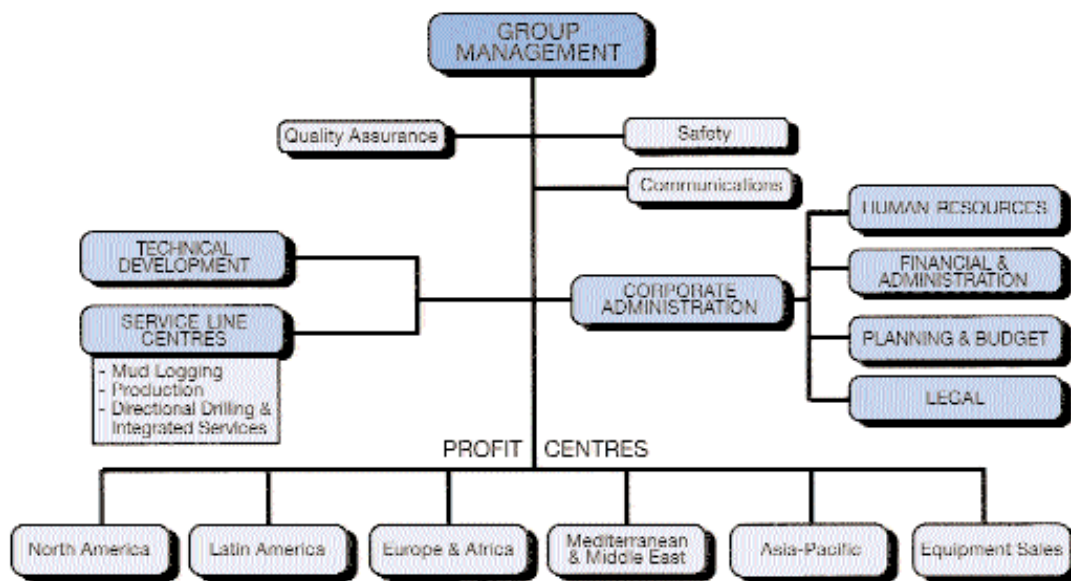
Our analysis of Geoservices, prior to subscribing to its capital, was that it is a company with great potential for development, by virtue of its capabilities, the extent and quality of its international presence and a much greater range of activities than its "mud logging" image would lead one to imagine.

The increase in Geoservices' capital will now enable it to take full advantage of the upturn in activity in the upstream sector.

What has ISIS to offer Geoservices?

I would say mainly the advantage of a stable shareholder, bringing with it its knowledge of the industry as regards markets and contacts and of course the technological cooperation which could be provided through specific agreements between Geoservices and IFP.

NEW MANAGEMENT ORGANISATION



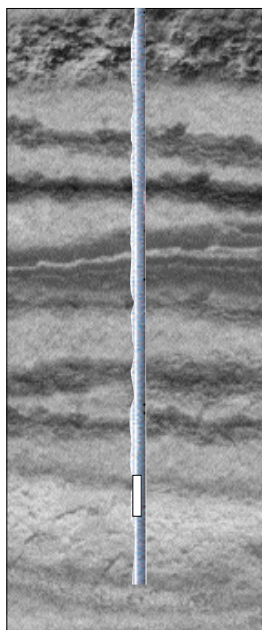
The first signs of change came during 1995 with the appointment of Bruno Burban as Assistant Managing Director, later to take over the position of Executive Vice President when Olivier Isсенmann stepped down. Bruno Floris joined us from ISIS in November and took over as President on the 1st January from Edouard Cochet, who had held the position for 5 years. We also welcomed Jean-François Daviau who joins us as Vice President,

Management Planning & Control. The new team did not waste any-time in reorganising the company's management structure, which ended up as shown in the chart above. This became effective on the 22nd January and it sought to achieve four main objectives: to clarify responsibilities, to simplify chains of command, to optimise the use of resources, and to ensure that Research & Development prac-

tice meets the needs of the regions. Full details of the reorganisation, with the names of those involved, are available from the Communications Department in Head Office. The reorganisation was immediately followed by office moving in Blanc-Mesnil on a grand scale. Apologies to all callers who had difficulty making the desired contact while these moves were going on. The dust has now settled.

TECHNICAL ACHIEVEMENTS

The MQG-X is the latest model in a new generation of Geoservices Demeter® gauges and it is taking the market by storm. It is a memory gauge, convertible to surface read-out capability, which is being widely acclaimed for its ease of use, small diameter, huge data storage memory and for being very economical. It was first introduced to the market at the end of 1994 and seriously commercialised in 1995. In that first year, almost 200 surveys were completed, 40 of which involved high temperature (HT) wells at over 150 °C. The highest temperature was recorded on a job



in Italy at 185 °C. The gauge is most appreciated by our clients for its reliability; in 1995 this ranged from a 75% success rate for the HT jobs (between 175 °and 185 °C) to 94% for the lower temperature jobs (under 150 °C). This track record is excellent for this type of equipment and cannot be matched today by our competitors. The reliability comes from the use of the latest technology in electronic circuitry, specially designed for long life at very high temperatures. This type of circuit has been tested for 4000 hours at 230 °C without failure. In addition to the success in services (operations presently being performed in

10 different countries), sales have also been brisk, with 65 gauges sold in 1995. The MQG-X will soon be complemented with our new FIELD MASTER data validation and test interpretation software package which replaces the existing WISE software. Running in a Microsoft® Windows™ environment, the new software is equally easy to use, although offering many more features, and it is 100% compatible with the most widely used test interpretation software on the market. Demeter® is a trade mark of Geoservices. Microsoft® is a registered trade name. Windows® is a trade mark of Microsoft Corporation.

NEWS from the REGIONS

NORTH AMERICA

In January, the region ran electromagnetic MWD on twelve of its thirteen drilling operations; five of these operations were run by Geoservices directional drillers. The wide variety of drilling tools used on these projects included single shot, G3 MWD, G4 MWD, mud pulse MWD, gamma ray and annular pressure.



About 75 per cent of all our North American drilling operations is performed on wells drilled underbalanced. In addition to the drilling tools, we supply our underbalanced data acquisition system, developed to monitor fluid and gas injection, bottom hole drilling parameters and produced fluids. This type of system allows the operator to see the overall picture of the underbalanced circuit, as well as providing data to perform real-time and post-well analysis.

LATIN AMERICA

Activity in the Latin America region increased dramatically in 1995. The three busiest places are Venezuela, which has seen big gains in directional drilling, Columbia, with increased market share in well testing and mud logging and Argentina, where directional drilling was introduced during the year. Brazil, Ecuador, Mexico and Trinidad are also active but to a lesser extent.

Latin America continued . . .

All Geoservices specialities are represented here. We have 40 mud logging units and enough well test sets (with ALS Production capability), SRO units, DST equipment and directional MWD to cover our clients' needs.

In January, eight foreign oil companies took up exploration blocks in Venezuela in the first round of offers since nationalisation of the oil industry in 1975. This promises a bright future for Geoservices, in a country where we are already well respected.

EUROPE & AFRICA

Significant achievements in mud logging have included; award of the HPIHT services programme into an existing integrated contract in Holland, expansion of the deepwater (1300 metres) programme offshore Angola, development of the subterranean storage campaign for Andra in 3 areas of France and dual long term contracts in the Ukraine (CIS) where they have made considerable investment and commitment.

We were selected to provide MWD directional services for the first underbalanced wells in Europe (5 foam wells in Germany in 1995) and are currently expanding into the UK market with our new G4 tool (directional-gamma ray/annular pressure) which is ideally suited for this lithology.

Production activity has remained stable, with most activity still taking place in West Africa. The Shell Gabon EPF has been producing steadily since 1987 and is currently undergoing a specification upgrade.

MEDITERRANEAN & MIDDLE EAST

The word coming out of the Mediterranean & Middle East region is that they are crying out for personnel. So busy are they in fact that this piece has been delegated to the Editor.

They are currently running some 30 mud logging units in Italy, Libya, Tunisia and the Middle East and on the production side a number of well test sets are presently in operation in the region. They have just won a useful contract to supply complete production services (well test, wire line, gauges, DST . . .) to one of their favourite clients in the area.

ASIA - PACIFIC

At long last Asia-Pacific has entered the MWD business with a very successful job in the highlands of Papua New Guinea. It was to complete the horizontal section of a well drilled underbalanced, using aerated mud, and the G4 tool's performance exceeded the client's expectations (and those of the competition who were on site for the conventional part of the hole).

On the production front we recently broke our existing temperature barrier with a DST performed at 402 °F (205 °C) thus adding to our excellent track record with full package well testing services in the hostile environment of the Gulf of Thailand.

Our ALS-V (vibration data logging) equipment continues to improve drilling performance for clients throughout the region, from Irian Jaya to Vietnam, where we received the performance bonus due under the contract for no drill string failures.

VENEZUELA

One year of INTEGRATED SERVICES

Venezuela is the major player in the Latin America region; the country where most is happening and where new ideas are tried out for the first time. The most recent Geoservices success story here has been the management of an integrated services contract, started in April 1995, and following on from the successful introduction of Directional Drilling services in 1989 and Drill Stem Testing (DST) in 1992.



It was at the beginning of 1994 that the national oil company PDVSA, through its three subsidiaries, Maraven, Corpoven and Lagoven, decided that its operating costs needed to be reduced. Benefiting from the experience of initiatives such as CRINE in the North Sea, the company began to delegate the management of some of its drilling operations to service companies in the form of integrated services contracts.

The first contracts, which were confined to horizontal, reentry, development wells, were snapped up by the four largest service companies. This evolution in the market did not look good for Geoservices directional drilling services, which at the time made up a large part of the region's turnover. Something had to be done, and what better than to become an active player in integrated services ourselves.

We faced one major obstacle in this task; our firmly established reputation as a mud logging company. Because we were such a well-known mud logging company, our client needed convincing that we could also provide integrated services.

Many hours of meetings and presentations of our worldwide references in directional services and project coordination finally convinced them that we were up to the task and, in March 1995, we were awarded our first integrated services contract.

The scope of work on this contract included: site selection, well positioning, the design and drilling of 14 horizontal reentries, each between 6000

and 7000 feet deep (TMD) on Lake Maracaibo; all stages included their own incentive/penalty clauses. Our mission was to provide all of the following services:

Engineering:

- project management
- well selection (reservoir study)
- well profile planning
- drilling programme definition
- completion programme definition
- selection of sub-contractors

Operations:

- work over (removal of old completion)
- window opening
- cementing
- drilling fluids
- drilling tools
- directional drilling (downhole motors, MWD, personnel)
- mud logging
- electric logging
- centrifuge (preservation of the environment)
- running casing/liner/completion
- moving platform location

Initially we needed help with some of these services, so we looked to Beicip Franlab (100% subsidiary of

ISIS, see article on first page) for the reservoir engineering, to Horwell, (51% Forasol/Foramer, 24.5% Geoservices, 24.5% ISIS) for the design and supervision of the horizontal wells, and to Geoservices, Paris for drilling engineers who would take care of sub-contracting any services we couldn't supply directly.

As might be expected, the contract saw its fair share of difficulties in the early stages. These were mostly familiarisation and communication problems; people needed time to find the best collective working method and to understand exactly what the client required. It took about six months to develop the ideal formula which best satisfied the client's needs and also fulfilled our contractual obligations. The way it turned out is that all the engineering activities are being carried out by Geoservices, with Beicip Franlab retained as a reservoir auditor to check our results from time to time.

The results of the last four wells were very encouraging and exceeded expectations. Not only was the drilling time less than that contracted with the client but the rate of oil production has also surpassed their predictions.

The PDVSA subsidiaries have since extended their integrated services contracts to other well types which opens up opportunities for us to provide more services, such as well testing, another speciality in the region. Thanks to the success achieved with our first contract, we were awarded a second integrated services contract at the beginning of February; this is for a variety of deviated water injection wells, to depths of 15,000 feet, in the Oriente (Maturin area) in a region known for high pressure zones. We are now looking forward to many more contracts to come, and also to being of assistance to any of our colleagues who face the same challenge.

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