

## Highlight

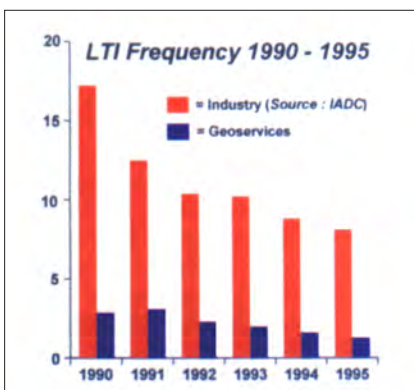
### Development and Partnership

GEOSERVICES and IPEDEX, also a member of ISIS and well-known for the Operation and Maintenance of hydrocarbon facilities, have decided to combine their expertise to create a joint venture called:



The objective of GEODEX is to provide operating companies with **Integrated Field Management Services**. This partnership, which responds to an evolution in the market, aims at reducing the exploitation costs whilst satisfying targets for production, reservoir optimisation, safety and quality.

In the immediate future, GEODEX, in close collaboration with the existing GEOSERVICES and IPEDEX bases, will concentrate exclusively on marginal fields and field management projects in West Africa. At the beginning of the New Year, a new brochure and a set of presentation overheads will be available to Base Managers in the region, to help get the sales drive



Lost Time Injuries per million man-hours

## Geoservices wins prestigious safety prize for 4th year running



From left to right: Steve Davidge (District Manager - North Sea), Lex van den Heuvel (Vice-President Europe & Africa Region) and Rob Taylor (Safety Manager)

The Sword of Honour, the coveted 'Oscar' of the Safety World, has been awarded to Geoservices for the fourth consecutive year. Specifically awarded to our North Sea District, this British Safety Council award is presented to a select number of companies every year for their commitment to improving safety standards. Our photo shows Geoservices managers at the presentation ceremony in London on the 29th November.

### Safety Department

Geoservices' commitment to health, safety and the environment was formalised into its business strategy in 1990, with the creation of a Safety Department. The success of this move is clearly shown by the effect it has had on accidents over the past 5 years (see chart below left). We now have an enviable safety record, with our safety procedures currently enjoying the highest 5-star international rating and the content of our SMS (Safety Management System) meeting existing legislative standard.

### Impressive statistics

Geoservices' Lost Time Injuries (LTI), which are consistently lower than the industry average, have been more than halved over the period. "Every employee has contributed towards Geoservices' safety culture and should be justifiably proud of our achievements" says Rob Taylor, who continuously strives to heighten our safety awareness through audit

training and the guidance of our safety documentation.

### Demanding clients

Providing a safe and efficient service becomes ever-more important as clients become increasingly demanding and safety legislation becomes more stringent. It is now quite common for a client's pre-qualification safety questionnaire to run to 10 pages or more (to see if we qualify to be even invited to bid for a job). Equally, a client's evaluation of a completed job will often place as much importance on our safety arrangements as our technical expertise.

A sword may not be the safest item in the world, but it is a spectacular way to open a bottle of champagne. We hope the correct safe procedure was followed on the 29th November!

- Over 90% of accidents are due to human error
- For every serious injury there are approximately 400 near misses
- The unseen cost of an accident may be 30 times the obvious cost
- 80% of adults will have lower back problems during their lifetime
- Industry fatalities are now 65% lower than 20 years ago.

## A new experience offshore

Geoservices sent a 4-man crew offshore for 3 days last October with an unusual mission; to represent the company in a sailing competition exclusively for companies in the oil business. The regatta, known as the 'Oil Industry Sailing Cup', was battled out in the Porquerolles Islands region in the Mediterranean off the

south coast of France. Our crew gave a good account of themselves on their first attempt by coming home 7th out of 17, all hands still safely on board!

### Not all plain sailing

Problems with the engine before the race were the first signs of trouble.

Later, an unsuccessful strategic gamble left them becalmed for 2 hours and lost them several places in the final result. By contrast, they then met winds of 40 knots (70 km/h to landlubbers) which caused the event to be cancelled early due to high seas. None of this dampened the indomitable team spirit of our erstwhile rig hands however, who performed better than quite a few crews who had been sailing together for years.

### Flying the flag

The regatta has been a regular annual event for almost 15 years, but it is the first time that the Geoservices flag was among the colours. We sponsored the boat as part of our effort to improve the image and general awareness of Geoservices within the industry and beyond. With this in mind, the Communications Department is prepared to study the possibility of sponsoring similar events in other parts of the world, so, although the budget is limited, we would be glad to hear what else is out there!



On board the Gib'sea 362, from left to right: Yves Denizau (Geo), Benoit Debray (Ipedex), Eric Landel (Principia), Louis Sourice (Geo), Benoit Debray (Geo), (there really are 2 of them!) and Jean-Luc Ru (Geo)

## TECHNICAL ACHIEVEMENTS

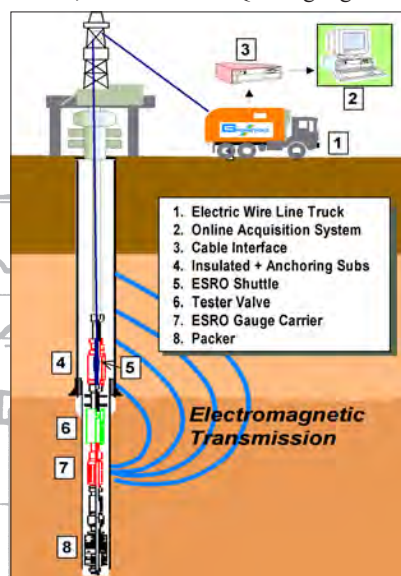
## ESRO (Electromagnetic Surface Read Out) EM transmission simplifies real-time DST

Drill Stem Testing (DST), the operation whereby a well is produced and tested via ordinary drill pipe, is a relatively new service offered by our Production Service Line. We bought the technology and several sets of tools in 1993 and since then have been making improvements to both tools and technology. Our latest innovation exploits our expertise in Electromagnetic (EM) transmission technology, as already used in our MWD and WTD tools.

During production testing, there is every interest in getting the downhole pressure measurement data in real-time (as the test progresses) rather than waiting to recover the information from a pressure gauge's memory after the event. The difficulty in doing this with a DST string is the presence of the Tester Valve downhole; the data have to get past this valve to get to surface. Existing technology relied on a cable connection through a passage bored in the valve body, but this meant using a specially adapted and expensive valve.

### The Geoservices solution

Geoservices overcomes the problem by simply transmitting the data past the valve via electromagnetic waves. Data transmission is undertaken by an element incorporated into the gauge carrier, so standard MQG-X gauges



ESRO system installation

can be used. Our gauges can thus be used with any type of DST string and any type of tester valve. Three gauges are usually run on a job; all three measure data and store them in memory, but only one transmits, the other two acting as back-up. The data are transmitted to a 'shuttle' (data relay) positioned in the string above the tester valve and connected to surface by cable. Communication with the gauges is bi-directional; they send out data but they can also receive instructions from surface. This means that if anything goes wrong with the transmitting gauge, the operator can quickly switch transmission to one of the back-ups.

### Tried & tested

The system, which was introduced this year after extensive field-testing in Africa, France and Venezuela, has already been used successfully on jobs for clients in N. Africa and S. America. ESRO technology is exclusive to Geoservices; it gives us an important advantage in a competitive market and consolidates our position as industry leader in the application of EM technology.

## NORTH AMERICA

*It's nice to see drilling activity picking up worldwide as well as in North America. Many of our clients are expecting drilling to continue on the upside for some time to come. Bids for mud logging services are being tendered for offshore projects on the eastern coast of Canada. Drilling has also picked up in the Gulf of Mexico, which offers a potential new market for MQG-X gauges.*

*All of our customers seem to be more interested in quality than price. We are getting very good feed-back from US Operators about the work Geoservices is doing for them in mud logging around the world. Let's keep up the good work!*

## LATIN AMERICA

*As part of an Integrated Services contract we are handling the first multilateral well (2 legs) drilled in Venezuela, and so far so good. One leg has already been drilled and completed; the second one has been drilled and is being completed at the moment. The operation is taking place on Lake Maracaibo.*

*Geoservices Venezuela has been awarded a two year contract for Wire Line Services which includes well operations with 5 1/2" completions on deep deviated wells, as well as outsourcing services which used to be the client's responsibility. The outsourcing services include such things as completion reception, pre-assembly, testing, maintenance and storage.*

*Colombia, Argentina and Ecuador are continuing operations without any major changes.*

## MOVEMENT IN THE REGIONS AND AT HEAD OFFICE

*Following a recent meeting of the Management Committee in Paris, some important changes in the structure of the regions have been announced. The changes will take effect from the 1st January 1997.*

*Two new regions will be created from the existing Europe & Africa region:*

- Continental Europe/West Africa  
Vice-President: J-M. Gueguen
  - North Europe  
Vice-President: D. O'Driscoll
- The countries Austria, Bulgaria, Rumania and Hungary will now be covered by the Mediterranean/Middle East region*

*Mr Lex van den Heuvel has been appointed Vice-President of the Asia-Pacific region. He replaces Mr Foster who leaves the company to pursue his personal projects and we wish him good luck with this.*

*This new restructuring follows the appointments to Paris in November of Michel Bouvard as Group Technical V-P and André Floris as Deputy Manager of the Production Department. The new appointments are intended to strengthen the Management Team to meet present and future expansion and development.*

## MEDITERRANEAN & MIDDLE EAST

*A substantial increase in activity is forecast for the region in 1997 with production services income largely exceeding mud logging.*

*Highlights of the month include a 9-month package contract to produce a field in Tunisia, the commissioning of our first gas EPF offshore, a successful*

*Mediterranean and Middle East continued . . .*

*ESRO job (see Technical Achievements, page 2) and long term ML contracts in the Middle East.*

*We welcome Y. Massoule as Production Manager in Sfax and A. Nardelli as Technical Manager in Tripoli.*



*At a 3-day budget meeting in Milan in November, from left to right: R. Nowell (Paris), G. Meillan (Paris), A. Camblong (Algeria), W. Youssef (Egypt), I. Frère (Tunisia), M. Licata (Milan), C. Baldissera (Tripoli), A. Calleri (Milan), Morena (Milan), B. Floris (Paris), Y. Massoule (Tunisia), T. Czerwinski (Tripoli), J. Kerhervé (Milan), G. Ferrari (Milan), F. Anglereaux (Milan), C. Platt (Qatar).*

## ASIA - PACIFIC

*Production operations continue to expand and we will begin new Well Testing contracts in Indonesia and China in 1997. Our super-clean six-headed burners have been requested to cope with the strict environmental regulations and extremely high pour point of the produced fluid.*

*We continue to develop our Geothermal mud logging business in Indonesia. In a short time we have become the dominant player. Our units are located on the island of Java in rain forests close to the top of volcanoes (which are still active!). Drilling technology is similar to oil well drilling but our sensors have had to be adapted to the very high surface temperatures (150 - 200 °C).*

*Welcome to the hundreds of you who joined the Geoservices Team this year !  
Apologies to those of you not shown here but we didnt have room for all of your photos.*

Abaid.D Abbot.A Ahmed.Muneer Aksoy.F Ash.S Bain.R  
Baiolla.L Barchi.P Basset.L Baudoin.M Becuwe.O  
Bennett.P Bernardo Perez.F Bertolini.G Beyma.E Bilbao.A  
Black.R Boisnaud.C Bonicolini.F Borra.G Briand.H Brogi.R  
Bruno.F Buchanan.J Buda.A Camaldi.M  
Canales Oviedo.F Cardoso Louzada  
Celentano.E Centrih.D Chapple.J  
Chinelli.A Cibron.A Clark.M  
Close.D Cochenec.S Collini.S  
Comotti.S Corbo.B Corda.C  
Cukovic.Z  
Dai Pra.G Dai-Pra.F  
Dall'armi.E Dalli.A  
Default.D  
Delhommel.B  
Dell'olio.P  
Demilly.E  
Dequay.T Di  
Cocco.S Duce.S  
Ebejjer.P  
Edouard.M  
Egan.N  
Etchegorry.P  
Evans.Lewis  
Ferracuti.S  
Ferrari.G  
Finney.S  
Foucaud.S  
Foucaul.H  
Friz.A  
Frullini.A  
Gaffa.J Gairdo.G  
Garcia Blanco.C  
Gardener.D  
Garrido.C Geraut.M  
Gibier.M Gill.S (Ms)  
Giordano.R Girard.C  
Giulini.G Goles.Z  
Gonzalbo.A Govekor.N  
Graham.A Gray.A  
Halpin.Michael Hardman.C  
Herlido.J Herman.P Hernan  
Martinez.F Hernandez,Matias  
Hickman.A Hugues.Cheryl Ibrahim Ragab  
Istef.N Jackson.B Johnstone.N Kerhornu.D Khaled Ben  
Ftina King.A Laurent.M Le Marquis.X Le Roux.S Le Vot.B

Leclerc.J.C Leustek.S Levacic.P Levoux.F Lhomet.JM  
Lhomet.JM Libeau.G Lockyer.C Maisto Luigi Malfintano.G  
Manns.J Massone.S Mc Neil T Mela.A Merle.FX Mews.C  
Milanese.F Miles.S Millward.L Mocchiutti.A Mochi.I  
Molinari.F Montino.E Moorcroft.D Moore.A  
Mortimer.S Morton.P O'Brien.K (Ms)  
O'Conaill.A O'Connell.A Ona Velasco  
Otfinowski.M Owens.S Palfree.W  
Pancisi.C Paoletti.A  
Paravelli.L Paul.PJ  
Penney.P Petric.T  
Piacquadio.N Picard.E  
Pinson.B Porrotto.C  
Presles.JY  
Quintana.E  
Rabarons.S  
Redaelli.U  
Redhead.R  
Ricci.S  
Robinson.AC  
Romanchock.M  
Rosetti.E  
Rosetti.E  
Ross.M  
Rosson.R  
Rowsell.D  
Ruiz-Castillo.L  
Salloum.S  
Salvetti.S  
Sancho Avila.A  
Seve.F  
Sharples.R  
Sheppard.G  
Sicilia.G  
Simmons.S Smith.W  
Sokec.T Sottile.G  
Spears.G Squires.D  
Starvic.G Steenstrup.S  
Synmott.J Tai Bi.Y Tejado  
Ramos.J Tomlinson.I Toon.S  
Turco.A Unica Pacheco.J  
Upton.W Vasquez.S Vecello del  
Monego Vella.F Vidal.D Vidalies.C  
Vidus.L Ville.N Vyckemans.P  
Wakerley.Howard Wakfer.N White.K Wood.C Wright.V



*Season's greetings and best wishes to all our  
newcomers, our longer serving personnel and their  
families.*

*Bruno Floris*

Bruno Floris