THE GEOSERVICES GROUP NEWSLETTER

GeoWorld

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Tierra del Fuego - Exceptional Slick Line Service in the World's Southernmost Oilfield

Geoservices

Continuously Striving for Improvement

Our message for this edition of GeoWorld is more pictorial than usual so that it is perfectly clear. Whether individually or collectively, we continue to strive for perfection in terms of Health, Safety, the Environment and Quality (HSEQ). We are proud of our HSEQ record to date, we appreciate everyone's participation in achieving it and you can count on total management support for your continuing effort in these essential areas.

Bruno Burban Benoît Debray

Geoservices has placed special emphasis on HSEQ by symbolising these important subjects in a set of new designs (see above and page 8).

A glimpse of the spectacular scenery near Tierra del Fuego, Argentina showing part of the Perito Moreno Glacier, at Calafate, Santa Cruz, near Rio Gallegos.

Land of Fire

Imagine temperatures as low as -20° C, a wind speed of more than 150 km per hour, very hard rain and long periods of snowfall; these are the extreme weather conditions that can be encountered in the spectacular setting of one of the most southerly points in Argentina, a location where Geoservices is running Well Intervention services. These adverse conditions have not deterred our slick line crew from performing what has been a demanding job over the past 13 years, when this adventure began. The professionalism and dedication of the whole team have enabled Geoservices to perform an outstanding service for one of our main clients - TotalFinaElf (TFE).

History

On the 17th May, 1989, Geoservices began its first offshore slick line operation in Argentina for Total Austral (today TFE). It was a two-year contract with options to extend. The crew members at the time were S. Drinkwater, M. Jaime, N. Castaño, A. Halliday and A. Gordillo. During the following years, the team worked hard and dedicated themselves to acquiring more experience and knowledge of the well conditions in the field. The first completions took about 72 hours but later, as everyone gained in experience, they managed to reduce the time considerably, in some cases down to 16 hours. In 1990, M. Rolón and E. Ponce (currently Chief Slick Line Operator) joined the team and helped to build the workforce that is still running the job today.

Three years later, at the end of 1992, a new slick line contract was awarded by the same client and included 90 onshore wells on the Cañandón Alfa field, in the South of Argentina. New equipment and extra, experienced personnel were brought in to perform these services. The first Canadian slick line trucks (F-700 and

Tierra del Fuego... continued

F-350) were imported and gave us very good service for many years. Geoservices was in fact supplying a combination of services to TFE. We were also providing them with mud logging and eventually participated in their world record-breaking horizontal well in 1999, with our ALS and Cuttings Flow Meter.

For the entire 13 years of wire line operations, good training, experience, dedication and teamwork have all paid off in keeping the operation completely free from accidents. "*Up to now we have not had any Lost Time Incidents in our operations*", says Antonio Gordillo, Geoservices Team Leader.

During the management visit in April this year, from the left: Pascal Mirville - SLAM District Manager, Jose Fariña - Argentina Country Manager, Benoit Debray - Chief Operating Officer, Antonio Gordillo - Team Leader, Maurcio Borquez - SL Operator, Graeme Rignault - SL Operations Manager, Marcelo Rolon - SL Operator, Sr. Cabrera - TotalFinaElf Supervisor, Roberto Cancinos - Chief SL Operator and Javier Nieva - SL Operator

Management Visit

In April 2002, a management visit was organized to the Cañandon Alfa field and the Geoservices Base in the TFE field in Tierra del Fuego. "*It was a great opportunity to meet and congratulate our wire line crew there who for so long have been able to run such an excellent operation*", said Pascal Mirville, South Latin America District Manager. Benoit Debray, Chief Operating Officer, returned to Paris obviously impressed by the region and with high regard for the people responsible for such a good work record and company job references.

The Future

Geoservices is expecting new projects in the coming years and is determined to continue providing the same quality services as in the past. This year, TFE awarded us a new two-year onshore slick line contract with options for extension, which will begin before the end of this year. Equipment and personnel are being prepared at present and all will work hard to ensure that this will be another successful job. The client made a point of studying Geoservices' background and performance on the services provided in Tierra del Fuego before awarding this new slick line contract in the Aguada Pichana - San Roque reservoir, located in the Province of Neuquen. "*The excellent Safety performance and our efficiency on the job during these 13 years were evaluated by TotalFinaElf before awarding the new contract* " Said Jose Fariña, Country Manager for Argentina. He added; "*for example, during 2001 we carried out approximately 270 onshore and offshore jobs and we had just one fishing operation, when the string was stuck due to sand. This performance is due to the experience of our personnel and the quality of the equipment operated.*"

On-site slick line operations using a Ford 700 Slick Line Truck and F4000 Crane and Pick-up

Geoservices' proficiency for slick line services in Tierra del Fuego has passed new boundaries, in more ways than one. Now, as a result of TFE's favourable comments about our performance, a company in neighbouring Chile has invited us to join the bidding process they have just started for their operations. A successful result there would be another boost to fulfilling Geoservices general company strategy to expand our Well Intervention services worldwide.

NEWS FROM THE DISTRICTS

North Africa

Expansion in Algeria

Our Algerian Mud Logging operations are growing daily. The integration of 14 Algerian geologists into our operations started a new phase in our development for planned growth in Algeria. Welcome, guys! *Marhaban bicom!* We wish you great success and a long future with Geoservices.

Christian Sanchez has replaced Xavier Merle as Base Technician. We wish Xavier all the best in his new assignment in Well Testing and thank him for the hard work he put into the start-up of our operations. Christian, congratulations on the new assignment, and along with your relief, Jean Philippe Metivier, we know that we can count on you to maintain the high standard of service.

BHP has successfully completed its first underbalanced drilling (UBD) well in Algeria. Along with conventional ALS services, Geoservices supplied WITS transmission for the UBD contractor.

Erwan Jorand (left) and Giuseppe Mileo putting the final touches to yet another ALS unit destined for the great Algerian desert.

Middle East

Performance appraisal in Azerbaijan

Geoservices Middle East, in cooperation with Sales, Marketing & Development, recently performed a formal Performance Appraisal with BP in Baku, Azerbaijan. This appraisal covered the operations that have taken place over the past 18 months on Chirag 1, the Dada Gorgud (Phase 1 development) and the Istiqlal (Shah Deniz) rigs. Our services were closely analysed from a safety and technical point of view. It was very clear that the work performed by Yann Douarin, Mathieu Beauvais and all of the Caspian Team (on shore support staff and offshore personnel) has not gone unnoticed by BP, who commended us on many aspects of our service.

Taking part in the first Performance Review with BP in Baku were, from left to right : Dave Hughes (BP), Gabriel Corcoran, Marketing Manager, Nick Barker (BP), Pat Smith (BP), Andrew Warrington (BP) and Yann Douarin, Country Manager for Azerbaijan.

However, as Mark Badcock - Middle East District Manager pointed out, "*this exercise is not about self congratulations, but about having a very open, if formal, discussion with our clients concerning our past performance and looking at how we can work better together to improve on the contribution our services will make in the future. It is also a very valuable occasion to present new services which we feel can have a positive impact on the overall project. I would definitely encourage all my managers to participate in this type of evaluation*"

Geoservices has been operating in the Caspian area since 1997 and our operations continue to expand there. Over the past four years we have monitored more than 40 wells in the area, many of which are among the most challenging abnormal pressure wells drilled to date anywhere in the world. There are many reasons for our success, and we must congratulate our Azeri operators and personnel for the significant contribution they have made to the success of our operations in Azerbaijan.

As well as operating in Azerbaijan, we are currently active in Kazakhstan, have worked in Turkmenistan and have just been awarded our first contract in Uzbekistan.

With the arrival of John McHardy in Dubai, as the new District Production Manager, we are very optimistic about the further development of Well Intervention and Well Testing services in this District.

South-east Asia

Well Intervention success in Thailand

A long battle between seven bidders has turned out favourably for Geoservices; we have been awarded the new Wire Line contract with PTT Exploration & Production pcl (PTTEP) in Thailand. Thanks to the quality of our services during the 7-years duration of the previous

Yves Denizeau, District Production Services Manager (far right) in Bangkok with PTTEP personnel, from left to right: Khun Pramote - Well Services Manager, Paul Helderle - Well Services Advisor, Khun Thamarat - Well Services Engineer and Khun Worawut - Well Services Engineer

contract, PTTEP renewed its confidence in Geoservices for their wire line and downhole measurement services. We have invested in new wireline units which have slickline, stranded line and monoconductor line capability and also a new offshore mast for operating on wellhead platforms without a crane.

Participating in a HSE workshop in Bergen, Norway were from the left, back row; Jo Nordstrand, Rob Taylor, Arie Romer, Jochen Susselbeck, Joachim Simonsen and front row; Ragni Hattlebakk, Abryl Ramirez, Ole Kristian Nilsen and Bjarte Helle.

Besides the standard pressure gauges and PLT (memory or SRO), there will be extra excitement with multifinger caliper and video camera, and all this in a difficult gas well environment with high deviation and uncomfortable temperatures (some bottom hole temperatures are greater than 190 °C). This sort of hostile environment calls for our high-temperature PLT tool set and our MQG version X21.

North Sea

Moving ahead with our Alliances

The Geoservices / Schlumberger alliance won a prestigious contract in Norway to supply most of Statoil's drilling services (MWD/-LWD/DD and Mud Logging) for two years. Already, two platforms, Gulfaks C & B have been mobilised and up to four more mobile drilling units are expected soon, with an additional two platforms by the end of the 1st quarter of 2003.

Credit for this success must go to our Norway Country Manager, Arie Romer, who sadly fell ill while on holiday and is still not fully fit. We all wish him strength for a speedy recovery and look forward to his return among us before too long.

The second alliance contract known as "Shell Big Lever" has also been extended for a further two years, but we await the outcome of budget reviews for confirmation of what is planned. TFE UK sees the suspension of the Dunbar platform, which has been drilling continuously since 1992. It will return again in 2004 when they intend to employ "Through Tubing Coiled Drilling" (TTCD) techniques.

North Latin America

Wireliners busy again

Following the award of two new contracts, Geoservices' Wire Line team in Maturin were put straight to the test. The first operations, commencing the day after signing the contract, were to carry out eight days of continuous SRO surveys between two gas injector wells, both of which had surface pressures during operations in excess of 9300 psi.

Operations on both wells were carried out successfully, in a safe and efficient manner and to the full satisfaction of the client. Congratulations to all involved.

Antonio Mata (left) and Cesar Charmello at the control panels of 15,000 psi wire line pressure control equipment on site in Maturin, Venezuela.

North America

Arsenal Dias, Data Engineer, testing a DAP in preparation for new mud logging contracts Geoservices recently won in the Gulf of Mexico.

New contracts in GOM

Geoservices' Houston operations Base is very busy at present preparing mud logging units for new contracts that we have just been awarded in the Gulf of Mexico by ConocoPhillips, Nexen and Repsol YPF. Field staff, under the supervision of technician Sarmad Malik, have been called in to help with the preparations.

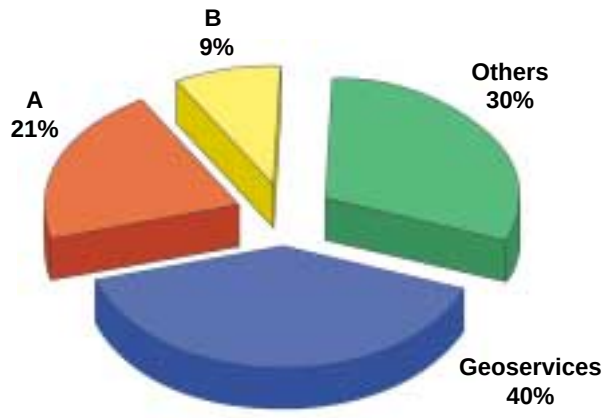
The ConocoPhillips Magnolia deep water development project is expected to run for 1 1/2 years. This is, to date, the deepest Gulf of Mexico deep water development. The Nexen contract is a shelf well while the Repsol YPF one is another deep water contract.

Geoservices - World Leading Supplier of Mud Logging Services, and proud of it!

Although holding the greatest market share certainly helps, this in itself is not enough to be considered the world leader in any given sector. It is also essential to be the pace setter in terms of quality of services, technical innovation and safe work practices.

Happily, Geoservices can lay claim to be the market leader in mud logging services based on all of the above criteria. In no area has this been more obvious than in the gas-analysis-while-drilling domain, where we have succeeded in providing operating companies with tools that are now a key component in formation and reservoir evaluation. From the basic gas detection systems of the '60s, on through the chromatographs of the '70s, the Gaslogger in the '80s to the Reserval services offered in recent years, Geoservices has continually worked on the development of new tools which add value to real-time reservoir evaluation on site. Keen to remain in the forefront of this technology, we are presently funding an important R&D project and preparing for the next technological breakthrough.

Our leadership in the mud logging market has meant that mud logging is today not simply associated with cuttings and drilling fluid analysis, but covers the full range of drilling process monitoring and diagnostics. Our Advanced Logging System (ALS), was the first on the market to store data in relation to both depth and time, and is still an industry reference. The drilling optimization services we offer cover domains such as early kick detection, drill string vibration analysis and cuttings transport monitoring, and continue to prove how mud logging can contribute to the safety and efficiency of exploration and development projects. With over 50 operations bases worldwide and over 60 nationalities working for the Group, Geoservices is a truly international organization. Our worldwide support network is the envy of not only our competitors but also many other much larger companies in the oilfield services sector. When it comes to services and support in the mud logging business on a global scale, Geoservices is in fact the only supplier who can offer the standards that most of the major oil companies expect. In terms of experience, Geoservices has more than 1000 mud logging engineers to draw from, so when it comes to very challenging projects (ultra deepwater, HPHT, extended reach etc.), we have the necessary resources. In the deepwater domain over the past 2 years, we have supplied services on more than 200 wells in water depths greater than 2000ft and now, with close to 20 units currently operating for Petrobras in Brazil, these figures will continue to rise rapidly.



Geoservices' nearest competitor, A, has about half as much market share as us outside N. America, while B has about one quarter. "Others" is made up of a number of small companies, the biggest of which has no more than 7% of the market.

Today, the message from Corporate Management is very clear; *"We are proud of our position as market leaders in mud logging. Through the experience of our engineers, the deployment of new technology and the continued focus on improving the safety of our operations and the quality of our services, we will continue to demonstrate that this is a position we are not about to get complacent about".*

Field Surveillance - what does this new Business Segment cover?

The term Field Surveillance certainly means different things to different people but the following sets out to explain what it means in the context of Geoservices' newest business segment. We now market several different services under this name, all with the common aim of improving the efficiency and optimising the production and performance of an oil or gas field.

The Repsol YPF La Cañadon La Escondida field in Argentina where Geoservices is providing Field Surveillance services (see GeoWorld Sept 2001)

Geoservices' Field Surveillance business segment incorporates the following different activities:

- **Operations & Maintenance** (of the plant and equipment making up the field's production facilities)
- **Surveillance & Optimisation** (of the surface facilities, the well and production parameters).

Geoservices has been offering Operations and Maintenance services for many years and has many references from major operators. Information on this part of the service is available in the form of a brochure from Marketing/Communications (luangraj@geoservices.com) or as a downloadable PDF from our Website. Less is known about the newer aspects of Field Surveillance, those that we have been focusing on lately, notably the new services that come under the Surveillance & Optimisation umbrella.

One example of Surveillance & Optimisation - Full Control Of Well (FCW)*

In the early stages of an oil field's development, the reservoir pressure is usually high enough to enable the wells to flow naturally. The wellhead pressure is often so high that a choke must be used to adjust the pressure to the flowline specifications and the flow rate to the target production figure. Later on in the field's life, and depending on reservoir characteristics, a decline in reservoir pressure and/or water influx may occur. A decrease in wellhead pressure results and, in order to continue flowing, the produced fluid has to receive some "artificial lift". The main artificial lift techniques are gas-lift (injection of gas into the tubing down hole to lighten the column of fluid) or one of a variety of pump types, ESP (Electrical Submersible Pump), PCP (Progressing Cavity Pump), or Beam Pump, sometimes known as a "nodding donkey". FCW is a specific technology adapted to the production optimisation and automation of wells. Geoservices presently offers this service for naturally flowing and gas-lifted wells and in the future we will be able to offer it for pump-assisted wells. Among the benefits FCW can bring are:

- Smooth start-up, avoiding near well bore damage usually due to formation deconsolidation.
- Control of well instabilities allowing, for gas-lifted wells, optimisation of the ratio of injected gas over produced oil, and so more oil for less gas.
- Since unstable situations are avoided, the wear and tear on equipment, mainly downhole gas-lift valves, is reduced.
- The constant optimisation performed by the automat will allow the completion string to last longer as the well and reservoir characteristics evolve (an increase in water content or decrease in reservoir pressure). A subsequent workover to change, for example the depths of the gas-lift valves,can be delayed until a later date.
- Safety is improved since the automat will shut-down the well in the event of an incident occurring on the well or on any field facilities.

Another example of Surveillance & Optimisation - Smart Well Head Logging

This service monitors well head parameters to allow us to analyse well behaviour. The system uses technology based on the new Geonext™ hardware and software. This includes a control centre, a field box and specific surface sensors. When available, downhole sensors can be connected to enhance the array of available information for future diagnosis. The control centre has sufficient battery-powered autonomy to enable our specialist to carry out analyses on the data gathered during the operation.

Among the many possible applications for this new service, some examples are highlighted:

- Well head parameter information for enhanced diagnosis to help our clients with queries they may have on their producing wells
- Water or gas injection metering surveys
- Gas Lift well head monitoring (well head & pipe network parameters + gas injection rate)
- Intelligent alarms.

Jean-Paul Le Cann, Geoservices' Field Surveillance Marketing Manager, who works from Head Office with Jacques Lessi, Christian Galfi and Benoît Grillon says : "*Geoservices is actively marketing these new services with the help of all our District and Business Development Managers. We believe that the demand for these services will increase in the future, as our clients seek to optimise recovery from their mature reservoirs. This is a real opportunity and a real challenge for the future.*"

** FCW is a licensed TotalFinaElf technology*

Achieving Success through People

Our people are Geoservices' most important resource. These are not just words - this is the reality of our business. We rely on our personnel to represent the Company in front of our clients and to deliver the high quality of service that our clients expect, at a standard that beats the competition. To be successful, our people must be highly motivated, well trained, technically competent, good team-players and working in full alignment with the company's values, goals and objectives.

The Competence Assurance System (CAS) ensures that staff are trained and competent in technical skills. But this alone is not enough. In addition, we need to ensure that skills of leadership, teamwork, communication, behaviour towards the client, etc., are identified and developed. Our Base and District Managers need to ensure that the work of each person is aligned with the goals of their organizations.

At the same time, we want to help each individual person to be successful, to achieve their own work-related goals and ambitions. If you are successful, the company also will succeed.

The process that we follow was introduced last year and to date has been used by more than 600 people. This autumn we plan to begin the process for all remaining personnel.

The process is cyclical, continuing from year to year. It focuses primarily on personal development and on establishing (and achieving) measurable work objectives for each person. It includes the old type of "personnel evaluation" as a part of this. It is a two-way process - each person plays an active part in his or her own performance evaluation, and in setting their own work objectives. Together with your manager you will look objectively at the non-technical aspects of your work performance, using criteria of teamwork skills, communication skills, safety, quality, etc. After identifying areas where you can benefit from training or development, you agree on your development plans for the next year, which may include training or a change in your work assignment. You also agree on measurable work objectives that will be designed to support the goals and objectives of the organization (e.g. Base or District) that you are working in.

The results of the reviews will also provide input to allow us to select the best person for each assignment, and will help with making decisions on salaries and promotional opportunities. For this reason we will need to complete all remaining reviews by mid-November.

Most importantly, though, this process represents a major investment of time and money in our people, to help each person to achieve their goals and ambitions and develop their skills, and to mobilise all our personnel to ensure our mutual success.

If you would like more information or have any comments, please don't hesitate to contact Alec Robinson at Head Office. (alec.robinson@geoservices.com)

Personnel and their families enjoying a tug-of-war competition at Geoservices' Base in Balikpapan during Indonesian Independence Day celebrations on August 17th 2002.

GEOPROLOG
First stop for quality oil field services in Jakarta

New visitors to our Jakarta Base in Indonesia now have no excuse for not finding it easily. Last July, the local District Government not only erected a beautiful bus stop outside the office but also named it GEOPROLOG, the company name Geoservices uses in Indonesia. Mimbar Bambang Seputro, Special Projets Coordinator, kindly sent us the photo above and says that it has made the office receptionist, Nining's life much easier for directing newcomers to the Base. If you are travelling there by taxi, just ask the driver to drop you off at the "GEOPROLOG HALTE".

Safety Section becomes HSEQ Section

The regular Safety Section, usually found on this page, has evolved into the HSEQ (Health, Safety, Environment & Quality) Section to enable GeoWorld to communicate on all four of these important subjects. Rob Taylor, Corporate HSE Manager, who wrote the articles for previous Safety Sections, varies the theme in this issue with recommendations for preserving the Environment.

Our Environment
All of us are aware of the huge damage already done to this planet over the last hundred or so years - and we all know that it **must** stop. The oil industry has certainly made its own impact - and is now setting excellent standards that will affect and protect future generations. Geoservices naturally supports this very positive thinking **at work**. *"Protecting the environment from hydrocarbon pollution has been one of our primary functions on the well site for almost 50 years".*

Also **at leisure** - each time we reuse or recycle something we **save** on raw materials, disposal costs, the energy required to manufacture, package and transport it! We can all help the environment - both at work and at home - so consider the following range of **"savings"**:

- Turn off all non-essential lights as you leave
- Switch off unnecessary heating and close doors / windows
- Turn down the thermostat to avoid opening windows
- Reuse packaging whenever you can
- Recycle materials whenever the option is available
- Reduce waste - reduce landfill and rubbish sites
- Turn off taps and get leaks or drips repaired
- Switch off your computer and screen when not in use (overnight!)
- Insulation to your home will dramatically reduce heat loss
- Maintain and service your car correctly for best efficiency
- Drive at a constant (safe) speed without sudden changes
- Check and adjust your tyres - to the correct inflation

Each of these actions will take only a little thought or effort, but will make savings - make a difference to help reduce environmental damage.

Geoservices will issue further information (ISO14001) and real achievements made in protecting our environment as we progress over the next months. Your ideas and input are valuable and much appreciated, so please e-mail them to our new HSEQ e-mail address: hseq@geoservices.com.

Geoservices HSEQ stickers

Congratulations to those of you noticed the offer of a Geoservices key ring in the last GeoWorld and e-mailed in to claim one. In this edition, you will find a sheet of HSEQ stickers and we hope you will use them to help keep these essential values in mind. Just remember the Environment when choosing where to stick them!


Geoservices key ring

Geoservices Crew Commended in Nigeria

Our people in Nigeria were very pleased to receive the following compliment in an e-mail from one of their major clients.

QUOTE
"*Please relay to your people on the rig that was involved in the kick/loss incident.*

We have had a week with very hard work. With influx and losses. We all attend well control schools, but very often we see that the situation is not exactly the way it should be according to the books, with pressures and signals we do not immediately understand.

We want to express our appreciation for the professional way you handled the problems and challenges this last week. I also would like you to know that (we) have received mail from upper management in our HQ that expressed gratitude for the handling of the situation and outcome of the well section".
UNQUOTE

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