Good guidance

Advances in technology have allowed for old geophysical records to be put online, enabling technologically adept operators to conduct geological analysis anywhere the Internet is available. TGS has long been involved in creating the digital realm of the energy industry by creating a database of digital well logs and providing interpretation applications that help operators determine how to approach fields.

How do the well logs and regional mapping programmes by TGS contribute to exploration?
When an exploration company enters an area, its first priority is to understand its geology. Regional maps and well logs help geologists reach conclusions about the subsurface layers they are looking to drill into. In the well data business, our value is being able to go and find all of these logs, especially the historical logs, and converting them into a standardised digital form that everyone can use in their applications. It may be simple to find a single modern well log, but our log database contains some 6.5 million total well logs and contains many legacy logs that are not available elsewhere. Many companies are not able to do regional mapping by themselves due to size, budget or logistical constraints. Let alone engage in independent analyses that reach a larger scope. Providing data as a package, including the interpretation of the region and tops for a single well, is a relatively inexpensive approach, especially compared to buying seismic.

Furthermore, outsourcing data collection can help exploration firms that are considering entering new countries but are hesitant about new prospects. It is often easier to get a permit to shoot seismic than it is to get countries to give up their historical well information.

How have the company’s new acquisitions impacted upon the services it offers?
Geotechnical solutions provider Valant Solutions was small, but they provided a critical technology. Firms need to organise their information and put it into databases, but there are different applications that use different file types. There are a handful of standard industry formats for niche data. For example, in the seismic sector, there is a format called SEG-Y. Everybody in the industry knows what that is, and software developers write their code to read it. With a lot of well data, this is simply not the case. Valant was purchased to be our primary translation software. Its code takes any data that comes in and allows it to be utilised by most major applications. It can convert their data for them, and can also allow us to dispense any data they have requested from us into the format they need for their software.

The structural reason behind the acquisition of Arcis Seismic Solutions was to grow our onshore seismic offerings. Arcis has an existing onshore 3D database in Canada and actively generates new projects. The company also has good processing technology for onshore seismic. This may serve as a springboard to plays such as the Eagle Ford.

“IT IS OFTEN EASIER TO GET A PERMIT TO SHOOT SEISMIC THAN IT IS TO GET COUNTRIES TO GIVE UP THEIR HISTORICAL WELL INFORMATION.”

In Figures

- Wells drilled in the Eagle Ford shale: More than 5,000
- TGS’s log database: 6.5 million well logs
- Purchase of Arcis Seismic Solutions: $72 million

**THE MIX**

TGS revenue breakdown by product, Q4 2012

- Global positioning systems: 6%
- 2D seismic: 20%
- 3D seismic: 74%

Source: TGS Q4 earnings presentation