## Reasons for the Offer and Use of Proceeds

Not applicable.

## **Risk Factors**

We depend on capital expenditures by the oil and gas industry and reductions in such expenditures have had, and may continue to have, a material adverse impact on our business.

Demand for our products and services has historically been dependent upon the level of capital expenditures by oil and gas companies for exploration, production and development activities. These expenditures are significantly influenced by oil and gas prices. Oil and gas prices may fluctuate based on relatively minor changes in the supply and demand for oil and gas and certain other factors beyond our control. Lower or volatile oil and gas prices tend to limit the demand for our services and products.

Factors affecting the prices of oil and gas include:

- · level of demand for oil and gas;
- worldwide political, military and economic conditions, including the ability of the Organization of Petroleum Exporting Countries (OPEC) to set and maintain production levels and prices for oil;
- · level of oil and gas production;
- policies of governments regarding the exploration for and production and development of oil and gas reserves in their territories; and
- global weather conditions.

The markets for oil and gas historically have been volatile and are likely to continue to be so in the future.

Historically, there has been an average lag of six months between recovery in the market for petroleum products and implementation by oil companies of projects requiring seismic services. The significant decline in crude oil prices that began in 1998 caused a substantial decline in demand for our products and services in 1998 and 1999 and materially adversely affected our results of operations for 1998 and 1999. While oil and gas prices have risen since mid-1999, we did not experience a significant increase in demand for our products and services until the fourth quarter of 2000. Since then, demand for seismic services has gradually increased, despite the economic slowdown and lower energy demand of late 2001. Furthermore, the events of September 11, 2001 have created significant uncertainty in the current outlook. In addition to the human toll that was exacted, the events of September 11, 2001 have exacerbated a recent weakening in the global economy that could potentially have an adverse effect on our industry. The dynamics of the global oil and gas market could be further unsettled as the political reaction to September 11, 2001 and, more recently, the military operations in Iraq may possibly affect the Middle Eastern producing region, an area in which we are particularly active. Any sustained decrease in worldwide oil and gas demand and prices could reduce exploration and development activities and negatively affect our operations. We cannot assure you as to future oil and gas prices or the resulting level of industry spending for exploration, production and development activities.

We have had operating losses in the past and we cannot assure you that we will be profitable in the future.

We recorded net losses each year from 1998 to 2000. In 2001 and 2002, we recorded a net income of approximately  $\in$ 16 million and  $\in$ 17 million respectively, marking a return to profitability. We have taken measures designed to respond to the circumstances existing in the industry underlying prior year losses; however, we cannot assure you that the implementation of these actions will be effective in maintaining profitability in future years.

We are subject to intense competition, which could limit our ability to maintain or increase our market share and to maintain our prices at profitable levels.

Most of our contracts are obtained through a competitive bidding process, which is standard for the industry in which we operate. While no single company competes with us in all of our segments, we are subject to intense competition with respect to each of our segments. We compete with large, international companies as well as smaller, local companies. In addition, we compete with major service providers and government-sponsored enterprises and affiliates. Some of our competitors operate more data acquisition crews than we do and have substantially greater financial and other resources. These and other competitors may be better positioned to withstand and adjust more quickly to volatile market conditions, such as fluctuations in oil and gas prices and production levels, and changes in government regulations.

We rely on significant customers, so the loss of a single or a few customers could have a material adverse impact on our business.

A relatively small number of clients account for a significant percentage of our revenues. During 2000, our two largest clients accounted for 8.3% and 8.0%, respectively, of our operating revenues. During 2001, our three largest clients accounted for 7.7%, 7.5% and 5.2% of our operating revenues, respectively. During 2002, our two largest clients accounted for 7.6%, and 7.1% of our operating revenues, respectively. If we were to lose a substantial amount of the business of any of these clients, this could have a material adverse effect on our operating revenues.

Our land and marine seismic acquisition activities are seasonal in nature.

Our land and marine seismic acquisition activities are seasonal in nature. We generally experience decreased revenues in the first quarter of each year due to the effects of weather conditions in the Northern Hemisphere and to the fact that our principal clients are generally not prepared to fully commit their annual exploration budget to specific projects during that period.

We have historically experienced higher levels of activity in our equipment manufacturing operations in the fourth quarter as our clients seek to fully deploy annual budgeted capital.

Our debt agreements may limit our ability to respond to changes in market conditions or to pursue business opportunities.

As of December 31, 2002, we had €290 million of long-term debt outstanding and total shareholders' equity of €438 million. We may need to borrow additional amounts in the future to meet our anticipated working capital and capital expenditure needs. Our syndicated credit facility imposes operating and financial restrictions on our business. These provisions include limitations on our ratios of net debt to equity and net debt to EBITDA and require us to maintain minimum levels of net worth. In addition, certain of these provisions grant liens on our accounts receivable and those of our subsidiary, Sercel S.A. Our 10 5/8% senior notes also contain restrictive covenants, including restrictions on payments and investments, the incurrence of indebtedness, the creation of liens, the entry into sale and leaseback transactions, the issuance and sale of subsidiary stock and the payment of dividends and other payments by certain of our subsidiaries. Many of the restrictions contained in these covenants depend on our ability to meet certain ratios and tests with respect to consolidated interest coverage, total assets and net income. These provisions may negatively affect our ability to react to changes in market conditions, take advantage of business opportunities we believe to be desirable, obtain future financing, funds needed capital expenditures, significantly increase research and development expenditures, or withstand a continuing or future downturn in our business.

If we are unable to comply with the restrictions and covenants in our debt agreements, there could be a default under the terms of these agreements, which could result in an acceleration of payment of funds that we have borrowed.

If we are unable to comply with the restrictions and covenants in our current or future debt agreements, there would be a default under the terms of these agreements. Our ability to meet our financial ratios and tests may be

affected by events beyond our control. As a result, we cannot assure you that we will be able to meet these tests. In the event of a default under these agreements, our lenders could terminate their commitments to lend to us or accelerate the loans and declare all amounts borrowed due and payable. Borrowings under other debt instruments that contain cross-acceleration or cross-default provisions may also be accelerated and become due and payable. If any of these events occur, we cannot assure you that our assets would be sufficient to repay in full all of our indebtedness, including the notes, or that we would be able to find alternative financing. Even if we could obtain alternative financing, we cannot assure you that it would be on terms that are favorable or acceptable to us.

We invest significant amounts of money in acquiring and processing seismic data for multi-client surveys and for our data library without knowing precisely how much of the data we will be able to sell or when and at what price we will be able to sell the data.

We invest significant amounts in acquiring and processing seismic data that we own. By making such investments, we assume the risk that:

- we may not fully recover the costs of the data through future sales. The amounts of these data sales are uncertain and depend on a variety of factors. Many of these factors are beyond our control. In addition, the timing of these sales can vary greatly from period to period. Technological or regulatory changes or other developments could also adversely affect the value of the data;
- the value of our multi-client data could be significantly adversely affected if any material adverse change occurred in the general prospects for oil and gas exploration, development and production activities in the areas where we acquire multi-client data; and
- any reduction in the market value of such data will require us to write down its recorded value, which could have a significant adverse effect on our results of operations.

We have high levels of fixed costs that will be incurred regardless of our level of business activity.

Our business has high fixed costs, and downtime or low productivity due to reduced demand, weather interruptions, equipment failures or other causes can result in significant operating losses.

Technological changes and new products and services are frequently introduced in our market, and our technology could be rendered obsolete by these introductions or we may not be able to develop and produce new and enhanced products on a cost-effective and timely basis.

Technology changes rapidly, and new and enhanced products are frequently introduced in the market for our products and services, particularly in our equipment manufacturing and data processing and geoscience sectors. Our success depends to a significant extent upon our ability to develop and produce new and enhanced products and services on a cost-effective and timely basis in accordance with industry demands. While we commit substantial resources to research and development, we cannot assure you that we will not encounter resource constraints or technical or other difficulties that could delay our introduction of new and enhanced products and services in the future. In addition, our continuing development of new products inherently carries the risk of obsolescence with respect to our older products. We cannot assure you that new and enhanced products and services, if introduced, will gain market acceptance or will not be adversely affected by technological changes or product or service introductions.

We depend on attracting and retaining qualified employees to protect our business know-how.

Our results of operations depend in part upon our business know-how. We believe that protection of our know-how depends in large part on our ability to attract and retain highly skilled and qualified personnel. Any inability of ours in the future to hire, train and retain a sufficient number of qualified employees could impair our ability to manage and maintain our business and to protect our know-how.

## We depend on proprietary technology.

Our results of operations depend in part upon our proprietary technology. We rely on a combination of patents, trademarks and trade secret laws to establish and protect our proprietary technology. In addition, we enter into confidentiality and license agreements with our employees, customers and potential customers and limit access to and distribution of our technology. However, we cannot assure you that actions we take to protect our proprietary rights will be adequate to deter the misappropriation or independent third party development of our technology. Although we have not been involved in any material litigation regarding our intellectual property rights or the possible infringement of intellectual property rights of others, we cannot assure you that such litigation will not be brought in the future. In addition, the laws of certain foreign countries do not protect proprietary rights to the same extent as either the laws of France or the laws of the United States.

We are subject to risks related to our international operations that could harm our business and results of operations.

With operations worldwide, and with a majority of our revenues derived outside of the United States and Western Europe, including emerging markets, our business and results of operations are subject to various risks inherent in international operations. These risks include:

- instability of foreign economies and governments;
- · risks of war, seizure, renegotiation or nullification of existing contracts; and
- foreign exchange restrictions, laws and other policies affecting trade and investment.

While we carry insurance against political risks associated with such operations, in amounts we consider appropriate in accordance with industry practices, we cannot assure you that we will not be subject to material adverse developments with respect to our international operations.

The nature of our business is subject to significant ongoing operating risks for which we may not have adequate insurance or for which we may not be able to procure adequate insurance on economical terms, if at all.

Our seismic data acquisition activities, particularly in deepwater marine areas, are often conducted under harsh weather and other hazardous conditions and are subject to risks of loss from business interruption, delay or equipment destruction. We carry insurance against the destruction of or damage to our seismic equipment and against business interruption for our data processing activities in amounts we consider appropriate in accordance with industry practice. However, we cannot assure you that our insurance coverage will be adequate in all circumstances or against all hazards, or that we will be able to maintain adequate insurance coverage in the future at commercially reasonable rates or on acceptable terms

## Our results of operations can be significantly affected by currency fluctuations.

Our operations can be significantly affected by fluctuations in exchange rates, particularly between the euro and the U.S. dollar. We incur a large portion of our operating expenses in currencies other than the currency in which corresponding net sales are generated. In particular, we incur substantial euro operating costs while a substantial majority of our net sales are U.S. dollar-denominated. Appreciation of the euro versus the U.S. dollar makes us less competitive, because our operating costs increase, while depreciation of the euro versus the U.S. dollar makes us more competitive. In addition, for financial reporting purposes, the appreciation of the euro against the U.S. dollar adversely affects our reported results of operations since U.S. dollar-denominated earnings that are converted to euro are stated at a reduced value. While we attempt to reduce the risks associated with such exchange rate fluctuations through our hedging policy, we cannot assure you that we will be effective or that fluctuations in the value of the currencies in which we operate will not materially affect our results in the future.

Our working capital needs are difficult to forecast and may be subject to significant and rapid increases which could result in additional financing requirements that we may not be able to obtain at all or on satisfactory terms.

It is difficult for us to predict with certainty our working capital needs. This is due primarily to working capital requirements related to our marine seismic acquisition business and related to the development and introduction of new lines of geophysical equipment products. We may therefore be subject to significant and rapid increases in our working capital needs that we may have difficulty financing on satisfactory terms or at all due to limitations in our existing debt agreements.

Our substantial debt could adversely affect our financial health and prevent us from fulfilling our obligations.

We have a significant amount of debt. As of December 31, 2002, our total consolidated long-term debt, consolidated total assets and shareholders' equity were  $\in$ 290 million,  $\in$ 1.025 billion and  $\in$ 438 million, respectively. Although our ratio of earnings to fixed charges was 2.2 for the year ended December 31, 2002 and 2.0 for the year ended December 31, 2001, earnings before fixed charges were inadequate to cover fixed charges by approximately  $\in$ 8 million for the year ended December 31, 2000. We cannot assure you we will be able to generate earnings to cover fixed charges in future years.

Our substantial debt could have important consequences to you. For example, it could

- · increase our vulnerability to general adverse economic and industry conditions;
- require us to dedicate a substantial portion of our cash flow from operations to payments on our indebtedness, thereby
  reducing the availability of our cash flow to fund working capital, capital expenditures and other general corporate
  purposes;
- limit our flexibility in planning for, or reacting to, changes in our businesses and the industries in which we operate;
- place us at a competitive disadvantage compared to our competitors that have less debt; and
- limit, along with the financial and other restrictive covenants of our indebtedness, among other things, our ability to borrow additional funds.

Failing to comply with restrictive covenants in our loan agreements or the indenture relating to our senior notes could result in an event of default that, if not cured or waived, could have a material adverse effect on us.

Despite current debt levels, we and our subsidiaries may still be able to incur substantially more debt.

We and our subsidiaries may be able to incur substantial additional debt (including secured debt) in the future. As of December 31, 2002, we had no outstanding borrowings under our syndicated credit facility and availability of €64,575,000 under all credit facilities. If new debt is added to our and our subsidiaries' current debt levels, the related risks that we, and they, now face could intensify.

Our results could be affected by changes in interest rates.

Our sources of liquidity include credit facilities with financial institutions charging variable interest rates over the course of draw-down periods of from one to twelve months. As a result, our interest expenses could increase if short term interest rates increase. However, our exposure to interest rate fluctuations is reduced to the extent that 70.5% of our financial debt at December 31, 2002 consisted of senior notes maturing in November 2007 and bearing a fixed interest rate. A large part of the our sources of liquidity also consists of long term credit facilities and capital leases of various durations with fixed interest rates.

#### Item 4: INFORMATION ON THE COMPANY

## History and Development of the Company

We were established in 1931 to market geophysical techniques for appraising underground geological resources. Since that time we have gradually come to specialize in seismic techniques adapted to exploration for and production of oil and gas, while continuing to carry on other geophysical activities. Compagnie Générale de Géophysique is the parent company of the CGG group. We are a *société anonyme* incorporated under the laws of the Republic of France and operating under the French *Code de commerce*. Our registered office is 1, rue Léon Migaux, 91341 Massy, France. Our telephone number is (33) 1 64 47 3000.

Over the course of the last three years, we completed numerous acquisitions and dispositions which are described under "Operating and Financial Review and Prospects — Acquisitions and Dispositions" in Item 5, and elsewhere in this annual report.

On February 8, 2002, we issued \$55 million aggregate principal amount of 10 5/8% Senior Notes due 2007 in the international capital markets, a re-opening of a U.S.\$170 million issuance of 10 5/8% Senior Notes due 2007 on November 22, 2000. We used the approximately U.S.\$52.5 million of net proceeds to repay approximately \$22 million of outstanding indebtedness under our existing syndicated credit facility and to repay approximately \$10 million in other long-term revolving debt. We used the balance for general corporate purposes.

For a description of our principal capital expenditures, please see Item 5.

#### **Business Overview**

We are a leading international provider of geophysical services and a leading manufacturer of geophysical equipment. We provide geophysical services principally to oil and gas companies that use seismic imaging to help explore for, develop and manage oil and gas reserves by:

- identifying new areas where subsurface conditions are favorable for the accumulation of oil and gas;
- · determining the size and structure of previously identified oil and gas fields; and
- optimizing development and production of oil and gas reserves (reservoir management).

We sell our geophysical equipment primarily to other geophysical service companies.

Our operations are organized into two main segments: Services and Products. Services accounted for 72% and Products accounted for 28% of our consolidated revenues for the year ended December 31, 2002. We generate revenues on a worldwide basis. For the year ended December 31, 2002, 41% of our consolidated revenues were from the Americas, 26% from the Middle East and the Asia-Pacific region, 17% from Europe and CIS, and 16% from Africa.

## **Industry Conditions**

Overall demand for geophysical services is dependent upon spending by oil and gas companies for exploration, production, development and field management activities. This spending depends in part on present and expected future oil and gas prices. Oil and gas prices increased significantly from mid-1999 through 2000, resulting in a modest increase in spending on geophysical services by our clients. In early 2001, economic conditions in Europe and the United States began to deteriorate, and oil and gas prices declined. The events of September 11, 2001 compounded the worsening economic climate. These conditions, in turn, resulted in a reduction in energy demand and downward pressure on energy prices, particularly gas in North America. Nevertheless, the seismic industry market continued its recovery, albeit at a slower rate. We believe that this resilience resulted in particular from the need by the oil and gas industry to replace reserves (which are currently being depleted at a rate estimated by industry analysts at 5 to 10% per year).

The worsening geopolitical climate which prevailed during the second half of 2002 caused a perception of potential oil and gas shortages in the overall economy, which in turn caused oil and gas prices to rise.