

PROSPECTUS

649,574 SHARES

NATURAL GAS SERVICES GROUP, INC.

Common Stock

This prospectus relates to 649,574 shares of our common stock that may be offered for sale or otherwise transferred from time to time by certain of our shareholders. See “Selling Shareholders” on page 13. The shares were issued by Natural Gas Services Group, Inc. in August 2004 when we completed a private placement of the shares under a securities purchase agreement entered into with one of the selling shareholders.

We are not offering any shares of our common stock for sale under this prospectus. We will not receive any of the proceeds from the sale of shares by selling shareholders under this prospectus.

Our common stock is quoted on the American Stock Exchange under the symbol “NGS”. On October 21, 2004, the closing sale price of our common stock was \$8.74 per share.

Our principal executive office is located at 2911 S. County Road 1260, Midland, Texas 79706 and the telephone number is (432) 563-3974.

The selling shareholders may offer these shares from time to time through public or private transactions at market prices prevailing at the time of sale, at prices related to prevailing market prices or at other negotiated prices. The selling shareholders may sell none, some or all of the shares offered by this prospectus. We cannot predict when or in what amounts the selling shareholders may sell any of the shares offered by this prospectus. The selling shareholders will generally be responsible for their legal fees and for any commissions or discounts due to brokers or dealers. We will pay the other offering expenses. See “Plan of Distribution” on page 14.

PROSPECTIVE PURCHASERS OF THE COMMON STOCK SHOULD CONSIDER CAREFULLY THE MATTERS SET FORTH UNDER “RISK FACTORS” BEGINNING ON PAGE 4.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these shares, or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is November 5, 2004.

WHERE YOU CAN FIND ADDITIONAL INFORMATION

We file annual, quarterly and special reports, proxy statements and other information with the Securities and Exchange Commission (or SEC). You may read and copy materials that we have filed with the Securities and Exchange Commission at the following Securities and Exchange Commission public reference room:

450 Fifth Street, N.W.
Washington, D.C. 20549

Please call the Securities and Exchange Commission at 1-800-SEC-0330 for further information on the public reference room.

The shares of common stock of Natural Gas Services Group are traded on the American Stock Exchange under the symbol "NGS".

Our Securities and Exchange Commission filings are also available to the public on the Securities and Exchange Commission's internet website at <http://www.sec.gov>. In addition, the filings Natural Gas Services Group makes with the Securities and Exchange Commission are also available to the public on Natural Gas Services Group's website, www.ngsgi.com. Information on our website is not incorporated into this prospectus and is not part of this prospectus.

We have filed with the Securities and Exchange Commission a registration statement on Form S-3 covering the shares offered by this prospectus. The registration statement, including the attached exhibits and schedules, contains additional relevant information about us and our common stock, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. The rules and regulations of the Securities and Exchange Commission allow us to omit certain information included in the registration statement from this prospectus.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" some of the documents we file with it. This means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. The documents we incorporate by reference are:

- Our Annual Report on Form 10-KSB for the year ended December 31, 2003;
- Our Quarterly Report on Form 10-QSB for the quarter ended March 31, 2004;
- Our Quarterly Report on Form 10-QSB for the quarter ended June 30, 2004;
- Our Current Reports on Form 8-K filed with the Securities and Exchange Commission on April 6, 2004, July 27, 2004, August 3, 2004, August 10, 2004 and October 21, 2004;
- The description of our common stock contained in Items 1 and 2 of our Registration Statement on Form 8-A filed under Section 12 of the Securities Exchange Act of 1934 (or Exchange Act) on July 17, 2002; and

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- All documents we file pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act after the date of this prospectus and prior to the termination of the offering of the shares offered hereby.

We will provide at no cost to each person, including any beneficial owner, to whom this prospectus is delivered, on the written or oral request of such person, a copy of any or all of the documents we incorporate by reference, other than exhibits to such documents (unless those exhibits are specifically incorporated by reference into the documents that this prospectus incorporates). Requests should be directed to Natural Gas Services Group, Inc., 2911 South County Road 1260, Midland, Texas 79706, (432) 563-3974, Attention: Investor Relations.

We have not authorized anyone to give any information or make any representation about us that is different from, or in addition to, that contained in this prospectus or in any of the materials that we have incorporated by reference into this document. Therefore, if anyone does give you information of this sort, you should not rely on it. If you are in a jurisdiction where offers to sell, or solicitations of offers to purchase, the shares of common stock offered by this document is unlawful, or if you are a person to whom it is unlawful to direct these types of activities, then the offer presented in this document does not extend to you. You should assume that the information appearing in this prospectus, as well as the information we previously filed with the SEC and incorporated by reference, is accurate only as of the date of the documents containing the information.

ABOUT NATURAL GAS SERVICES GROUP, INC.

We provide equipment and services to the natural gas and oil industry. We manufacture, fabricate, sell and lease natural gas compressors that enhance the production of oil and gas wells and we provide maintenance services for those compressors. We define a natural gas compressor as a mechanical device with one basic goal — to deliver gas at a pressure higher than that originally existing. It may be powered by a natural gas burning engine or an electric motor to accommodate different applications. Gas compression is undertaken to transport and distribute natural gas to pipelines. Pipeline pressures vary and with the addition of new wells to the pipeline, the need for compression increases. We also manufacture and sell flare tips and ignition systems for oil and gas plant and production facilities. We define a flare tip as a burner on the upper end of a flare stack that is designed to combust waste gases to assure a clean environment. An ignition system is a pilot light or a spark generator that assures continuous ignition of the waste gases going through the burner in the flare tip.

We primarily lease natural gas compressors. As of October 20, 2004, we had 501 natural gas compressors under lease to third parties.

We also fabricate natural gas compressors for our customers, designing compressors to meet unique specifications dictated by well pressures, production characteristics and particular applications for which compression is sought.

We have established an exchange and rebuild program to attempt to help minimize costs and maximize revenue for our customers. Under the program, we work with maintenance and operating personnel of a customer to identify equipment for exchange. When we receive a compressor for exchange because of a maintenance problem, we deliver to our customer a replacement compressor at full price. We then rebuild the exchange compressor and credit our customer an amount based on the value of the rebuilt compressor. We also offer a retrofitting service by repackaging a customer's compressor with a compressor that meets our customer's changed conditions.

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We design, manufacture, install and service flare stacks and related ignition and control devices for onshore and offshore burning of gas compounds such as hydrogen sulfide, carbon dioxide, natural gas and liquefied petroleum gases.

We have manufacturing and fabrication facilities located in Lewiston, Michigan, and Midland, Texas, where we manufacture and fabricate natural gas compressors. We design and manufacture natural gas flare systems, components and ignition systems in our facility in Midland, Texas, for use in oilfield, refinery and petrochemical plant applications.

We currently provide our products and services to a customer base of oil and gas exploration and production companies operating primarily in Colorado, Kansas, Louisiana, Michigan, New Mexico, Oklahoma, Texas and Wyoming.

We maintain our principal office at 2911 South County Road 1260, Midland, Texas 79706 and our telephone number is (432) 563-3974.

RISK FACTORS

To inform investors of our future plans and objectives, this prospectus (and other reports and statements issued by us and our officers from time to time) contain certain statements concerning our future performance, intentions, objectives, plans and expectations that are or may be deemed to be “forward-looking statements.” See “Forward Looking Statements” on page 12. Our ability to do this has been fostered by the Private Securities Litigation Reform Act of 1995, which provides a “safe harbor” for forward-looking statements to encourage companies to provide prospective information so long as those statements are accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from those discussed in the statement.

You should carefully consider the following risks. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that are not presently known to us or that we currently deem immaterial may also impair our business.

If any of the events described in the following risks actually occur, our business, financial condition and results of operations could be materially adversely affected. In such case, the trading prices of our common stock could decline and you could lose all or part of your investment.

Our current debt is large and may negatively impact our current and future financial stability.

As of September 30, 2004, we had an aggregate of approximately \$12,746,000 of outstanding indebtedness, not including accounts payable, and accrued expenses of approximately \$1,648,000. As a result of our significant indebtedness, we might not have the ability to incur any substantial additional indebtedness. The level of our indebtedness could have several important effects on our future operations, including:

- our ability to obtain additional financing for working capital, acquisitions, capital expenditures and other purposes may be limited;
- a significant portion of our cash flow from operations may be dedicated to the payment of principal and interest on our debt, thereby reducing funds available for other purposes; and

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- our significant leverage could make us more vulnerable to economic downturns.

If we are unable to service our debt, we will likely be forced to take remedial steps that are contrary to our business plan.

As of September 30, 2004, our debt service requirements on a monthly, quarterly and annual basis were \$198,000, \$594,000 and \$2,376,000, respectively. It is possible that our business will not generate sufficient cash flow from operations to meet our debt service requirements and the payment of principal when due. If this were to occur, we may be forced to:

- sell assets at disadvantageous prices;
- obtain additional financing; or
- refinance all or a portion of our indebtedness on terms that may be very unfavorable to us.

Our current bank loan contains covenants that limit our operating and financial flexibility and, if breached, could expose us to severe remedial provisions.

Under the terms of our bank loan, we must:

- comply with a debt to asset ratio;
- maintain minimum levels of tangible net worth;
- not exceed specified levels of debt;
- comply with a cash flow to fixed charges ratio;
- comply with a debt to net worth ratio; and
- not incur additional debt over a specified amount.

Our ability to meet the financial ratios and tests under our bank loan can be affected by events beyond our control, and we may not be able to satisfy those ratios and tests. A breach under either could permit the bank to accelerate the debt so that it is immediately due and payable. No further borrowings would be available under the credit facility. If we were unable to repay the debt, the bank could proceed against our assets.

Approximately 70% of our compressor leases are leased for terms of six months or less and, if terminated, would adversely impact our revenue and our ability to recover our initial equipment costs.

Approximately 70% of our compressor leases are for terms of up to six months. There is a possibility that these leases could be terminated by lessees within short periods of time and that we may not be able to recover the cost of a compressor for which a lease is terminated.

The anticipated revenue from the affiliate of Dominion Michigan cannot be guaranteed.

In connection with our acquisition of the compression-related assets of Dominion Michigan, an affiliate of Dominion Michigan committed until March 2006 to purchase compressors from us or enter into five year leases of compressors with us totaling five-thousand horsepower. If, for any reason, the affiliate does not fulfill this obligation to any material extent, our cash flow will be significantly reduced and we may not be able to pay the principal or interest on our debt as it becomes due.

We rely on one customer for a significant amount of our business and the loss of this customer could adversely affect our operating results and lower the price of our common stock.

Our business is dependent not only on securing new customers but also on maintaining current customers. During the three months ended September 30, 2004, Dominion Exploration & Production, Inc. accounted for approximately 25% of our consolidated revenue. During the years ended December 2003 and 2002, Dominion Exploration accounted for approximately 28% and 30% of our consolidated revenue, respectively. The loss of Dominion Exploration as a customer could cause our operating results to fall below market analysts' expectations and lower the price of our common stock.

We are dependent on a few suppliers for some of our compressor components and the loss of one of these suppliers could cause a delay in the manufacturing of our compressors and reduce our revenue.

We currently obtain approximately 23% of our compressor components from two suppliers. We order from these suppliers as needed and we have no long-term contracts with either supplier. If either of these suppliers should curtail its operations or be unable to meet our needs, we would encounter delays in supplying our customers with compressors until an alternative supplier, if any, could be found. Such delays in our manufacturing process could reduce our revenue and negatively impact our relationships with customers.

Decreased oil and gas industry expenditure levels would adversely affect our revenue.

Our revenue is derived from expenditures in the oil and gas industry which, in turn, are based on budgets to explore for, develop and produce oil and natural gas. If these expenditures decline, our revenue will suffer. The industry's willingness to explore, develop and produce depends largely upon the prevailing view of future oil and gas prices. Many factors affect the supply and demand for oil and gas and, therefore, influence product prices including:

- the level of oil and gas production;
- the levels of oil and gas inventories;
- the expected cost of developing new reserves;
- the cost of producing oil and gas;
- the level of drilling activity;
- inclement weather;
- worldwide economic activity;

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- regulatory and other federal and state requirements in the United States;
- the ability of the Organization of Petroleum Exporting Countries to set and maintain production levels and prices for oil;
- terrorist activities in the United States and elsewhere;
- the cost of developing alternate energy sources;
- environmental regulation; and
- tax policies.

If the demand for oil and gas decreases, then demand for our compressors likely will decrease.

The intense competition in our industry could result in reduced profitability and loss of market share for us.

We sell or lease our products and sell our services in competitive markets. In most of our business segments, we compete with the oil and gas industry's largest equipment and service providers who have greater name recognition than we do. These companies also have substantially greater financial resources, larger operations and greater budgets for marketing, research and development than we do. They may be better able to compete in making equipment available quickly and more efficiently, meeting delivery schedules or reducing prices. As a result, we could lose customers and market share to those competitors. These companies may also be better positioned than us successfully to endure downturns in the oil and gas industry.

Our operations may be adversely affected if our current competitors or new market entrants introduce new products or services with better prices, features, performance or other competitive characteristics than our products and services. Competitive pressures or other factors also may result in significant price competition that could harm our revenue and our business.

We might be unable to employ adequate technical personnel which could hamper our plans for expansion or increase our costs.

Many of the compressors that we sell or lease are technically complex and often must perform in harsh conditions. We believe that our success depends upon our ability to employ and retain a sufficient number of technical personnel who have the ability to design, utilize, enhance and maintain these compressors. Our ability to expand our operations depends in part on our ability to increase our skilled labor force. The demand for skilled workers is high and supply is limited. A significant increase in the wages paid by competing employers could result in a reduction of our skilled labor force, or cause an increase in the wage rates that we must pay, or both. If either of these events were to occur, our cost structure could increase and our operations and growth potential could be impaired.

If we do not develop, produce and commercialize new competitive technologies and products, our revenue may decline.

The markets for natural gas compressor products and services and for flare systems, ignition systems and components for plant and production facilities are characterized by continual

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technological developments. As a result, substantial improvements in the scope and quality of product function and performance can occur over a short period of time. If we are not able to develop commercially competitive products in a timely manner in response to changes in technology, our business and revenue may be adversely affected.

We may encounter financial constraints or technical or other difficulties that could delay introduction of new products and services in the future. Our competitors may introduce new products before we do and achieve a competitive advantage.

Additionally, the time and expense invested in product development may not result in commercial applications that provide revenue. We could be required to write off our entire investment in a new product that does not reach commercial viability. Moreover, we may experience operating losses after new products are introduced and commercialized because of high start-up costs, unexpected manufacturing costs or problems, or lack of demand.

We are subject to extensive environmental laws and regulations that could require us to take costly compliance actions that could harm our financial condition.

Our manufacturing and maintenance operations are significantly affected by stringent and complex federal, state and local laws and regulations governing the discharge of substances into the environment or otherwise relating to environmental protection. In these operations, we generate and manage hazardous wastes such as solvents, thinner, waste paint, waste oil, washdown wastes, and sandblast material. We attempt to use generally accepted operating and disposal practices and, with respect to acquisitions, will attempt to identify and assess whether there is any environmental risk before completing an acquisition. Based on the nature of the industry, however, hydrocarbons or other wastes may have been disposed of or released on or under properties owned, leased, or operated by us or on or under other locations where such wastes have been taken for disposal. The wastes on these properties may be subject to federal or state environmental laws that could require us to remove the wastes or remediate sites where they have been released. We could be exposed to liability for cleanup costs, natural resource and other damages as a result of our conduct or the conduct of, or conditions caused by, prior operators or other third parties. Environmental laws and regulations have changed in the past, and they are likely to change in the future. If existing regulatory requirements or enforcement policies change, we may be required to make significant unanticipated capital and operating expenditures.

Any failure by us to comply with applicable environmental laws and regulations may result in governmental authorities taking actions against our business that could harm our operations and financial condition, including the:

- issuance of administrative, civil and criminal penalties;
- denial or revocation of permits or other authorizations;
- reduction or cessation in operations; and
- performance of site investigatory, remedial or other corrective actions.

We could be subject to substantial liability claims that could harm our financial condition.

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Our products are used in hazardous drilling and production applications where an accident or a failure of a product can cause personal injury, loss of life, damage to property, equipment or the environment, or suspension of operations.

While we maintain insurance coverage, we face the following risks under our insurance coverage:

- we may not be able to continue to obtain insurance on commercially reasonable terms;
- we may be faced with types of liabilities that will not be covered by our insurance, such as damages from significant product liabilities and from environmental contamination;
- the dollar amount of any liabilities may exceed our policy limits; and
- we do not maintain coverage against the risk of interruption of our business.

Any claims made under our policy will likely cause our premiums to increase. Any future damages caused by our products or services that are not covered by insurance, are in excess of policy limits or are subject to substantial deductibles, would reduce our earnings and our cash available for operations.

Liability to customers under warranties may materially and adversely affect our earnings.

We provide warranties as to the proper operation and conformance to specifications of the equipment we manufacture. Our equipment is complex and often deployed in harsh environments. Failure of this equipment to operate properly or to meet specifications may increase our costs by requiring additional engineering resources and services, replacement of parts and equipment or monetary reimbursement to a customer. We have in the past received warranty claims and we expect to continue to receive them in the future. To the extent that we incur substantial warranty claims in any period, our reputation, our ability to obtain future business and our earnings could be materially and adversely affected.

Loss of key members of our management could adversely affect our business while we attempt to find their replacements.

We depend on the continued employment and performance of Wallace C. Sparkman, our interim President, Earl R. Wait, our Treasurer and Chief Financial Officer, and other key members of our management. If any of our key managers resigns or becomes unable to continue in his present role and is not adequately replaced, our business operations could be materially adversely affected. We do not maintain any "key man" life insurance for any of our officers.

We must evaluate our intangible assets annually for impairment.

Our intangible assets are recorded at cost less accumulated amortization and consist of goodwill and patent costs. Through December 31, 2001, goodwill was amortized using the straight-line method over 15 years and patent costs were amortized over 13 to 15 years.

In June 2001, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 142, "Goodwill and Other Intangible Assets." FAS 142 provides that: (1)

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goodwill and intangible assets with indefinite lives will no longer be amortized; (2) goodwill and intangible assets with indefinite lives must be tested for impairment at least annually; and (3) the amortization period for intangible assets with finite lives will no longer be limited to forty years. In the event that we determine our intangible assets with indefinite lives have been impaired, we must record a write-down of those assets on our statement of operations during the period of impairment. Our determination of impairment will be based on various factors, including any of the following factors, if they materialize:

- significant under performance relative to expected historical or projected future operating results;
- significant changes in the manner of our use of the acquired assets or the strategy for our overall business;
- significant negative industry or economic trends;
- significant decline in our stock price for a sustained period; and
- our market capitalization relative to net book value.

We adopted FAS 142 as of January 1, 2002. Based on independent valuations in June 2003 and 2002 of our reporting units with goodwill, adoption of FAS 142 has not had a material adverse effect on us through at least 2003. In the future it could result in impairments of our intangible assets or goodwill. We expect to continue to amortize our intangible assets with finite lives over the same time periods as previously used, and we will test our intangible assets with indefinite lives for impairment at least once each year. In addition, we are required to assess the consumptive life, or longevity, of our intangible assets with finite lives and adjust their amortization periods accordingly. Our net intangible assets were recorded on our balance sheet at approximately \$2,680,000 as of September 30, 2004, and we expect the carrying value of net intangible assets will increase significantly if we acquire additional businesses. Any impairments in future periods of those assets, or a reduction in their consumptive lives, could materially and adversely affect our statement of operations and financial position.

Provisions contained in our governing documents could hinder a change in our control.

Our articles of incorporation and bylaws contain provisions that may discourage acquisition bids and may limit the price investors are willing to pay for our common stock and warrants. Our articles of incorporation and bylaws provide that:

- directors will be elected for three-year terms, with approximately one-third of the board of directors standing for election each year;
- cumulative voting is not allowed, which limits the ability of minority shareholders to elect any directors;
- the unanimous vote of the board of directors or the affirmative vote of the holders of not less than 80% of the votes entitled to be cast by the holders of all shares entitled to vote in the election of directors is required to change the size of the board of directors; and

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- directors may only be removed for cause by holders of not less than 80% of the votes entitled to be cast on the matter.

Our board of directors has the authority to issue up to five million shares of preferred stock. The board of directors can fix the terms of the preferred stock without any action on the part of our shareholders. The issuance of shares of preferred stock may delay or prevent a change in control transaction. In addition, preferred stock could be used in connection with the board of director's adoption of a shareholders' rights plan (also known as a poison pill), which would make it much more difficult to effect a change in control of us through acquiring or controlling blocks of our stock. Our directors and officers as a group beneficially own stock. Although this is not a majority of our stock, it confers substantial voting power in the election of directors and management of us. This would make it difficult for other minority shareholders to effect a change in control or otherwise extend any significant control over our management. This may adversely affect the market price and interfere with the voting and other rights of our common stock.

You may suffer substantial dilution upon the exercise of outstanding warrants and options.

As of September 30, 2004 we had outstanding a significant number of warrants and options to purchase shares of our common stock. If these warrants or options are exercised, your percentage ownership in Natural Gas Services Group will be diluted and the price per share of our common stock may decline. We have

- issued warrants to purchase up to 2,544,336 shares of common stock; and
- granted options to purchase up to 69,000 shares of common stock.

Under our employee and director stock option plans, we may grant options to purchase up to an additional 70,000 shares of common stock. All of our outstanding warrants and options have exercise prices below \$8.74, the closing sale price of our common stock on October 21, 2004. Sales of substantial amounts of common stock, or a perception that such sales could occur, could adversely affect the market price of the common stock and could impair our ability to raise capital through the sale of our equity securities.

If we issue debt or equity securities, you may lose certain rights and be diluted.

If we raise funds in the future through the issuance of debt or equity securities, the securities issued may have rights and preferences and privileges senior to those of holders of our common stock, and the terms of the securities may impose restrictions on our operations or dilute your ownership in Natural Gas Services Group.

We do not intend to pay, and have restrictions upon our ability to pay, dividends on our common stock.

We have not paid cash dividends in the past and do not intend to pay dividends on our common stock in the foreseeable future. Net income from our operations, if any, will be used for the development of our business, including capital expenditures, and to retire debt. In addition, our bank loan facility contains restrictions on our ability to pay cash dividends on our common stock.

We have a comparatively low number of shares of common stock outstanding and, therefore, our common stock may suffer from limited liquidity and its prices will likely be volatile and its value may be adversely affected.

Because of our relatively low number of outstanding shares of common stock, the trading price of our common stock will likely be subject to significant price fluctuations and limited liquidity. This may adversely affect the value of your investment. In addition, our common stock price could be subject to fluctuations in response to variations in quarterly operating results, changes in management, future announcements concerning us, general trends in the industry and other events or factors as well as those described above.

The sale of stock by the selling shareholders may depress our stock price.

Under this prospectus, the selling shareholders may sell up to 649,574 of their shares of our common stock (approximately 10.7% of our outstanding common stock at the date of this prospectus). The sale of substantial amounts of our stock owned by the selling shareholders in the public market, or the belief that these sales may occur, could reduce the market price of our stock, making it more difficult for us to raise funds through future offerings of our common stock and to acquire businesses using our stock as consideration.

FORWARD LOOKING STATEMENTS

Some statements contained in this prospectus, any accompanying prospectus supplement, and the documents incorporated by reference are “forward-looking statements” within the meaning of Section 27A of the Securities Act of 1933 (or Securities Act) and Section 21E of the Exchange Act. These statements include, without limitation, statements relating to oil and gas prices, demand for oil and gas, budgets, business strategies and other plans, intentions and objectives of our management for future operations and activities and other such matters. The words “believe”, “budget”, “plan”, “estimate”, “expect”, “intend”, “strategy”, “project”, “will”, “could”, “may”, “anticipate”, “continue” and similar expressions identify forward-looking statements. We believe the assumptions and expectations reflected in these forward-looking statements are reasonable. However, we cannot give any assurance that our expectations will prove to be correct or that we will be able to take any actions that are presently planned. Actual results could differ materially from those expressed in the forward-looking statements. Factors that could cause such a difference include:

- fluctuations in prices of oil and gas;
- future capital requirements and availability of financing;
- competition;
- general economic conditions;
- governmental regulations;
- receipt of amounts owed to us by our customers;
- events similar to 911; and
- fluctuations in interest rates and availability of capital.

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You are cautioned not to place undue reliance on any of our forward-looking statements, which speak only as of the date of the document or in the case of documents incorporated by reference, the date of those documents.

USE OF PROCEEDS

We will not receive any proceeds from the sale of our common stock by the selling shareholders. All sales of the common stock will be by or for the account of the selling shareholders listed in this prospectus.

SELLING SHAREHOLDERS

This prospectus is part of a registration statement that we filed pursuant to registration rights granted to the selling shareholders under a securities purchase agreement dated as of July 20, 2004 (the "Securities Purchase Agreement"). Under the Securities Purchase Agreement, on August 4, 2004 we sold to the selling shareholders in a private placement the shares of our common stock subject to this prospectus.

Under terms of the Securities Purchase Agreement, we are required to file a registration statement under the Securities Act so that the selling shareholders may sell the shares of our common stock that they purchased thereunder. In addition, we will pay all expenses of registering the shares under the Securities Act, including all registration, listing and filing fees, printing expenses, fees and disbursements of our counsel, expenses of any special audits incident to or required by the registration, and expenses of complying with the securities or blue sky laws of any jurisdictions. The selling shareholders will pay all fees and disbursements of their counsel and all discounts, brokerage fees, commissions and expenses for any shares that are registered and that they sell.

The following table sets forth information provided by the selling shareholders about the ownership of our common stock by the selling shareholders before and after the offering covered by this prospectus.

| Name and Address | Shares Beneficially Owned Before Offering ⁽¹⁾ | Shares Being Offered in the Offering | Shares Beneficially Owned After Offering ⁽²⁾ | Percentage of Shares Beneficially Owned | |
|--|--|--------------------------------------|---|---|----------------------------------|
| | | | | Before Offering ⁽³⁾ | After Offering ^(2, 3) |
| CBarney Investments, Ltd 952 Echo Lane, Suite 364 Houston, Texas 77024 | 597,274 | 549,574 | 47,700 | 9.77 | 0.78 |
| Mark X Energy Company 952 Echo Lane, Suite 364 Houston, Texas 77024 | 273,500 | 100,000 | 173,500 | 4.39 | 2.78 |

(1) CBarney Investments, Ltd. is the beneficial owner of 549,574 shares of our common stock and warrants to purchase 47,700 shares of our common stock. Mark X Energy Company is the beneficial owner of 105,000 shares of our common stock and warrants to purchase 168,500 shares of our common stock.

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(2) The selling shareholders may offer shares under this prospectus from time to time and may elect to sell none, some or all of the shares set forth above. As a result, we cannot estimate the number of shares of our common stock that the selling shareholders will beneficially own after termination of sales under this prospectus. For purposes of this table, however, we have assumed that the selling shareholders sell all of their shares available for sale hereunder. In addition, the selling shareholders may have sold, transferred or otherwise disposed of all or a portion of their shares of our common stock since the date on which they provided information for this table.

(3) Beneficial ownership is determined in accordance with Rule 13d-3(d) promulgated by the SEC under the Exchange Act. The calculations of the percentages of shares beneficially owned are based upon 6,068,269 shares of our common stock outstanding at September 30, 2004, including 649,574 shares issued pursuant to the Securities Purchase Agreement, and assume the exercise of the warrants (which are exercisable for shares of our common stock) held by that selling shareholder.

PLAN OF DISTRIBUTION

The shares of common stock covered by this prospectus may be offered and sold from time to time by the selling shareholders. The term “selling shareholders” includes donees, pledgees, transferees or other successors-in-interest selling shares received after the date of this prospectus from a selling shareholder as a gift, pledge, shareholder distribution or other non-sale related transfer. The selling shareholders will act independently of us in making decisions with respect to the timing, manner and size of each sale.

The shares offered by this prospectus are subject to restrictions under the Securities Purchase Agreement. Subject to those restrictions, sales of shares by the selling shareholders referred to in this prospectus may be made from time to time in one or more transactions on the American Stock Exchange, in the over-the-counter market or any other exchange or quotation system on which shares of our common stock may be listed or quoted, in negotiated transactions or in a combination of any such methods of sale. Sales may be at fixed prices that may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. The shares may be offered directly to purchasers or to or through underwriters or agents designated from time to time or to or through brokers or dealers, or through any combination of these methods of sale.

The methods by which the shares may be sold include:

- block trades (which may involve crosses) in which the broker or dealer will attempt to sell the securities as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by the broker or dealer for its own account under this prospectus;
- exchange distributions or secondary distributions in accordance with the rules of the American Stock Exchange or other relevant markets;
- short sales, ordinary brokerage transactions and transactions in which the broker solicits purchasers;
- transactions in options, swaps or other derivatives, whether exchange-listed or otherwise;
- firm commitment or best efforts underwritings; and
- privately negotiated transactions.

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In addition, sales not covered by this prospectus may also be made by the selling shareholders under Rule 144 or another applicable exemption under the Securities Act.

From time to time the selling shareholders may distribute a portion or all of their shares to their owners. In the event of such a distribution, and to the extent these owners intend to use this prospectus to sell any of such shares, if required these owners will be identified in a supplement to this prospectus filed with the SEC. Furthermore, to the extent required, this prospectus also may be amended or supplemented from time to time to describe a specific plan of distribution or any material arrangement that a selling shareholder has entered into for the sale of shares, including the details of any underwritten distribution.

In connection with distributions of shares or otherwise, the selling shareholders may enter into hedging transactions with broker-dealers or other agents. In connection with these transactions, broker-dealers or other agents may engage in short sales of shares in the course of hedging the positions they assume with the selling shareholders. The selling shareholders may also sell shares short and redeliver the shares to close out their short positions. The selling shareholders may also enter into option or other transactions with broker-dealers or other financial institutions that require the delivery to that broker-dealer or other financial institution of shares offered by this prospectus, which shares that broker-dealer or other financial institution may resell under this prospectus (as supplemented or amended to reflect the transaction). The selling shareholders may also pledge or grant a security interest in shares and, upon a default in the performance of the secured obligation, the pledgee or secured party may effect sales of the pledged shares under this prospectus (as supplemented or amended to reflect the transaction).

In effecting sales, broker-dealers or agents engaged by the selling shareholders may arrange for other broker-dealers to participate. Broker-dealers, underwriters or agents may receive commissions, discounts or concessions from the selling shareholders and/or purchasers of the shares for whom they may act as agents.

In offering the shares covered by this prospectus, the selling shareholders and any broker-dealers, underwriters or agents who execute sales for the selling shareholders may be deemed to be “underwriters” within the meaning of the Securities Act in connection with these sales. Any profits realized by the selling shareholders and the compensation of any broker-dealer, underwriter or agent may be deemed to be underwriting discounts and commissions. No underwriter, broker-dealer or agent has been engaged by us in connection with the distribution of the shares.

To comply with the securities laws of certain states, if applicable, the shares must be sold in those jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states the shares may not be sold unless they have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

The selling shareholders and any other person participating in a distribution of the shares covered by this prospectus will be subject to the applicable provisions of the Exchange Act and the rules and regulations thereunder. Regulation M of the Exchange Act may limit the timing of purchases and sales of shares by the selling shareholders and any other person. In addition, Regulation M may restrict the ability of any person engaged in the distribution of the shares to engage in market-making activities with respect to our common stock for a period of up to five business days before the distribution.

LEGAL MATTERS

The validity under Colorado law of the shares will be passed upon for us by Jones & Keller, P.C., Denver, Colorado.

EXPERTS

HEIN & ASSOCIATES LLP, independent certified public accountants, have audited our consolidated balance sheet at December 31, 2003, and the consolidated statements of income, shareholders' equity and cash flows for each of the two years ended December 31, 2003 and 2002, as set forth in their report, which is incorporated in this prospectus by reference. Our consolidated financial statements are incorporated by reference in reliance on their report, given on their authority as experts in accounting and auditing.

We have not authorized any dealer, salesperson or other person to give any information or to make any representation not contained in this prospectus. This prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, any offer or solicitation by anyone in any jurisdiction not authorized, or in which the person making such an offer or solicitation is not qualified to do so or to any person to whom it is unlawful to make such an offer or solicitation. By delivery of this prospectus we do not imply that there has been no change in our affairs or that the information in this prospectus is correct as of any time subsequent to its date.

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NATURAL GAS SERVICES GROUP, INC.

PROSPECTUS

November 5, 2004