AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON OCTOBER 21, 1997

REGISTRATION NO. 333-

SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

DAWSON GEOPHYSICAL COMPANY
(Exact name of registrant as specified in its charter)

TEXAS	1382	75-0970548
(State or other jurisdiction of corporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification No.)

	L. DECKER DAWSON PRESIDENT DAWSON GEOPHYSICAL COMPANY
208 SOUTH MARIENFELD MIDLAND, TEXAS 79701 (915) 682-7356	208 SOUTH MARIENFELD MIDLAND, TEXAS 79701 (915) 682-7356
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)	(Name, address, including zip code, and telephone number, including area code, of agent for service)

COPIES TO:

JACK D. LADD STUBBEMAN, MCRAE, SEALY, LAUGHLIN & BROWDER, INC. 550 W. TEXAS AVE., SUITE 800 MIDLAND, TEXAS 79701	C. NEEL LEMON III THOMPSON & KNIGHT, P.C. 1700 PACIFIC AVE. SUITE 3300 DALLAS, TEXAS 75201

APPROXIMATE DATE OF COMMENCEMENT OF PROPOSED SALE TO THE PUBLIC: As soon as practicable after the Registration Statement becomes effective.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, check the following box. [ ]

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [ ]

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration number of the earlier effective registration statement for the same offering. [ ]

If delivery of the prospectus is expected to be made pursuant to Rule 434, check the following box. [ ]

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED(1)	PROPOSED MAXIMUM OFFERING PRICE PER SHARE(2)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE(2)	AMOUNT OF REGISTRATION FEE
Common Stock, $.33 1/3 par value per share...........	1,725,000 shares	$22.625	$39,028,125	$11,826.70

(1) Includes up to 225,000 shares of Common Stock which may be purchased by Underwriters to cover over-allotments, if any. See "Underwriting."
(2) Calculated pursuant to Rule 457(c) under the Securities Act of 1933, as amended, based on the average of the high and low prices (reported on the Nasdaq National Market) of the Common Stock on October 20, 1997.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(a) OF THE SECURITIES ACT OF 1933 OR UNTIL THIS REGISTRATION STATEMENT SHALL BECOME

EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SECTION 8(a), MAY DETERMINE.

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INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED OCTOBER 21, 1997

1,500,000 SHARES

(DAWSON LOGO)

COMMON STOCK

Of the 1,500,000 shares of Common Stock offered hereby, 1,000,000 shares are being issued and sold by Dawson Geophysical Company and 500,000 shares are being sold by the Selling Shareholder. The Company will not receive any proceeds from the sale of Common Stock by the Selling Shareholder. The Common Stock is traded on the Nasdaq National Market under the symbol "DWSN." On October 20, 1997, the closing price of the Common Stock on the Nasdaq National Market was $22.44 per share.

SEE "RISK FACTORS" ON PAGES 6 THROUGH 8 FOR A DISCUSSION OF CERTAIN FACTORS THAT SHOULD BE CONSIDERED BY PROSPECTIVE INVESTORS.

THESE SECURITIES HAVE NOT BEEN APPROVED OR DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION NOR HAS THE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

	PRICE TO PUBLIC	UNDERWRITING DISCOUNTS AND COMMISSIONS(1)	PROCEEDS TO COMPANY(2)	PROCEEDS TO SELLING SHAREHOLDER
Per Share..................	$	$	$	$
Total(3)..................	$	$	$	$

(1) The Company and the Selling Shareholder have agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act of 1933, as amended. See "Underwriting."

(2) Before deducting estimated expenses of $ payable by the Company.

(3) The Company has granted to the Underwriters a 30-day option to purchase up to 225,000 additional shares of Common Stock on the same terms and conditions as the securities offered hereby solely to cover over-allotments, if any. If such option is exercised in full, the total Price to Public, Underwriting Discounts and Commissions and Proceeds to Company will be $, $ and $, respectively. See "Underwriting."

The shares of Common Stock are offered by the several Underwriters named herein subject to prior sale, when, as and if delivered to and accepted by the Underwriters, and subject to certain other conditions including the right of the Underwriters to withdraw, cancel, modify or reject any order in whole or in part. It is expected that delivery of the Common Stock will be made on or about , 1997 at the offices of Raymond James & Associates, Inc., St. Petersburg, Florida.

RAYMOND JAMES & ASSOCIATES, INC.

PRINCIPAL FINANCIAL SECURITIES, INC.

The date of this Prospectus is , 1997.

I/O System Two RSR The Company's I/O System Two RSR central control unit and transmitting tower.	Vibrator energy source units Vibrator energy source units operating in north Texas.
Technician collecting data Technician collecting data from a remote seismic recorder.	Geophysicist performing quality control Company geophysicist performing quality control of data volume from a 3-D seismic survey.

CERTAIN PERSONS PARTICIPATING IN THIS OFFERING MAY ENGAGE IN TRANSACTIONS THAT STABILIZE, MAINTAIN OR OTHERWISE AFFECT THE PRICE OF THE COMMON STOCK, INCLUDING ENTERING STABILIZING BIDS, EFFECTING SYNDICATE COVERING TRANSACTIONS OR IMPOSING PENALTY BIDS. FOR A DESCRIPTION OF THESE ACTIVITIES, SEE "UNDERWRITING."

PROSPECTUS SUMMARY

The following summary is qualified in its entirety by reference to the more detailed information and the financial statements and related notes appearing elsewhere in this Prospectus. As used herein, the "Company" means Dawson Geophysical Company, the "Selling Shareholder" means L. Decker Dawson, President of the Company, and "Common Stock" means the Company's Common Stock, $.33 1/3 par value per share, unless the context otherwise requires. Unless otherwise indicated, all financial information and share data in this Prospectus assume no exercise of the Underwriters' over-allotment option. Investors should carefully consider the information set forth under "Risk Factors."

THE COMPANY

Founded in 1952, Dawson Geophysical Company acquires and processes three-dimensional ("3-D") seismic data used in the exploration, development and field management of oil and natural gas reserves. The Company's operations consist of six 3-D seismic data acquisition crews and a seismic data processing center located in Midland, Texas. As a result of an increase in industry-wide demand for 3-D seismic surveys and the Company's competitive position, the Company has experienced increasing demand for its 3-D seismic services. The Company acquires and processes seismic data for its clients, ranging from major oil and gas companies to independent oil and gas operators, who retain exclusive rights to the information obtained.

The Company's land-based data acquisition crews operate primarily in the southwestern United States, but have responded to demand from south Texas to North Dakota. As a result of the addition of a sixth crew equipped with the versatile I/O System Two(R)* Remote Seismic Recorder ("RSR"), the Company has expanded its capabilities to accommodate more difficult and remote terrains such as east Texas and the Rocky Mountains.

The Company operates five I/O System Two recording systems, one with RSR capability, and one MDS-18X(R)* recording system. The Company's six seismic crews are equipped with an aggregate capacity of 14,200 recording channels and 45 vibrator energy source units, which are configured to meet the demands of specific survey designs. Each crew consists of approximately 40 technicians, 25 associated vehicles with off-road capabilities, 31,000 geophones, a recording system, energy sources, electronic cables and a variety of other equipment.

3-D seismic surveys provide an immense volume of concentrated subsurface information to the oil and gas industry. Detailed subsurface resolution from 3-D seismic data enhances the exploration for new reserves and enables oil and gas companies to better delineate existing fields and to augment reservoir management techniques. Benefits of incorporating 3-D seismic technology into exploration and development programs include reducing drilling risk, decreasing oil and gas finding costs, lowering field development expenditures and recovering a greater portion of reserves in place.

The Company believes that it maintains a competitive advantage in the industry by (i) acquiring equipment to expand capacity in response to client demand, (ii) updating its equipment to take advantage of advances in geophysical technology, (iii) maintaining skilled and experienced personnel for its data acquisition and processing operations, (iv) focusing its operations on the domestic onshore seismic industry, and (v) providing integrated in-house operations necessary to complete all phases of 3-D seismic data acquisition and processing, including project design, permitting and surveying.

Since fiscal 1990, the Company has spent approximately $57 million to acquire new 3-D telemetry recording systems and associated equipment, including approximately $26 million since fiscal 1995. Consistent with the Company's strategy of maintaining technologically advanced equipment and the financial flexibility to expand its 3-D capacity, the Company intends to use, of the net proceeds it receives from this offering, (i) approximately $10 million to reduce bank debt of the Company, (ii) approximately $8 million to

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* I/O System Two(R) is a registered trademark of Input/Output, Inc. and MDS-18X(R) is a registered trademark of I/O Exploration Products.

acquire new equipment and to upgrade existing equipment for the six 3-D seismic crews now operated by the Company, and (iii) the balance to increase working capital of the Company and for general corporate purposes. The Company intends to continue its program of acquiring new seismic equipment and upgrading its existing equipment.

The headquarters of the Company, a Texas corporation, are located at 208 South Marienfeld, Midland, Texas 79701, and its telephone number is (915) 682-7356.

THE OFFERING

Common Stock offered by the Company.............................	1,000,000 shares(1)
Common Stock offered by the Selling Shareholder.........................	500,000 shares
Common Stock to be outstanding after this offering......................	5,200,000 shares(1)
Use of proceeds.....................	Approximately $10 million to reduce bank debt, approximately $8 million to acquire new equipment and to upgrade existing equipment for the Company's six 3-D seismic crews, and the balance to be added to working capital and for general corporate purposes. See "Use of Proceeds."
Nasdaq National Market symbol.......	"DWSN"

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(1) Excludes 89,000 shares of Common Stock issuable upon exercise of outstanding employee stock options. See "Management -- Compensation Plans."

SUMMARY FINANCIAL INFORMATION
(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following summary financial information for the five fiscal years ended September 30, 1996 was derived from the audited financial statements of the Company. The historical information presented as of June 30, 1997 and for the nine months ended June 30, 1996 and 1997 was derived from the unaudited financial statements of the Company which, in the opinion of the Company's management, contain all adjustments, consisting only of normal recurring accruals, necessary for a fair presentation thereof. The following information should be read in conjunction with "Selected Financial Data," "Management's Discussion and Analysis of Financial Condition and Results of Operations," the Company's financial statements and notes thereto and the other financial data included elsewhere in this Prospectus.

	YEARS ENDED SEPTEMBER 30,					NINE MONTHS ENDED JUNE 30,	
	1992	1993	1994	1995	1996	1996	1997
STATEMENT OF OPERATIONS DATA:							
Operating revenues	$11,827	$17,016	$23,027	$28,188	$33,518	$24,485	$34,304
Operating costs:							
Operating expenses	9,393	12,497	15,478	20,067	23,763	17,613	22,840
General and administrative	694	842	887	975	1,299	1,031	1,052
Depreciation	1,441	1,830	3,016	4,150	5,818	4,104	5,456
	11,528	15,169	19,381	25,192	30,880	22,748	29,348
Income from operations	299	1,847	3,646	2,996	2,638	1,737	4,956
Other income (expense)	807	950	(129)	444	122	171	37
Income before extraordinary item	$ 918	$ 1,862	$ 2,266	$ 2,174	$ 1,888	$ 1,221	$ 3,248
Net income(1)	$ 1,097	$ 2,739	$ 2,266	$ 2,174	$ 1,888	$ 1,221	$ 3,248
PER SHARE DATA:							
Income per share before extraordinary item	$ .31	$ .62	$ .74	$ .54	$ .45	$ .29	$ .78
Net income per share	$ .37	$ .91	$ .74	$ .54	$ .45	$ .29	$ .78
Weighted average equivalent common shares outstanding	2,973	3,008	3,045	3,990	4,183	4,181	4,191

	JUNE 30, 1997	
	HISTORICAL	AS ADJUSTED(2)
BALANCE SHEET DATA (AT PERIOD END):		
Working capital	$11,890	$
Net property, plant and equipment	29,675	
Total assets	44,747	
Long-term debt, less current maturities(3)	4,214	
Stockholders' equity	36,220	

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(1) See the Company's financial statements and notes thereto included elsewhere herein for information concerning the Company's use of net operating loss carryforwards in certain periods.

(2) As adjusted to reflect the sale by the Company in this offering of 1,000,000 shares of Common Stock and the application of the estimated net proceeds it receives therefrom as described under "Use of Proceeds."

(3) As of October 20, 1997, the Company's long-term debt, less current maturities of $1,690,000, was $7,752,000.

RISK FACTORS

Prospective investors should carefully consider the following factors, as well as the other information contained in this Prospectus, in evaluating the Company and its business before purchasing the Common Stock offered hereby.

INDUSTRY CONDITIONS

Demand for the Company's services depends upon the level of spending by oil and gas companies for exploration, production, development and field management activities, which activities depend in part on oil and gas prices. Beginning in 1982, a sharp decline in oil and gas prices led to a worldwide reduction in oil and gas activities. This decline resulted in a significant reduction in the overall demand for seismic services. Since reaching a high in 1981, the number of land-based seismic crews operating worldwide and the number of companies providing seismic services declined dramatically. Although demand for 3-D seismic data acquisition services has continually increased over the past seven years, no assurance can be given that current levels of oil and gas activities will be maintained or that demand for the Company's services will reflect the level of such activities. Decreases in oil and gas activities could adversely affect the demand for the Company's services and the Company's results of operations. In addition, a decrease in oil and gas expenditures in the United States could result from such factors as unfavorable tax and other legislation or uncertainty concerning national energy policy. Any significant decline in oil and gas prices such as that which occurred in the 1980's could cause the Company to alter its capital spending plans.

WEATHER

The Company's seismic data acquisition operations could be adversely affected by inclement weather conditions. Delays associated with weather conditions could negatively affect the Company's results of operations.

PERMITS

The Company's seismic data acquisition operations could be adversely affected by the inability of the Company to obtain right of way usage from land or mineral owners. Delays associated with permitting could negatively affect the Company's results of operations.

OPERATING RISKS

The Company's activities are subject to general risks inherent in land-based seismic data acquisition activities. To date, the Company has not suffered any material losses of equipment, but there can be no assurance that it will not experience such losses in the future. Because of the high fixed costs associated with the Company's 3-D equipment, any significant downtime or low productivity caused by reduced demand, weather interruptions, equipment failures, permit delays or other causes could adversely affect its results of operations. See "Business -- Operating Hazards and Insurance" for a description of such risks and the insurance therefor carried by the Company.

LIQUIDITY AND WORKING CAPITAL REQUIREMENTS

The Company's sources of working capital are limited. The Company has funded its working capital requirements with cash generated from operations, cash reserves and borrowings from commercial banks. The Company's working capital requirements increased significantly during the last seven years, primarily due to the development of its 3-D land seismic data acquisition infrastructure. If the Company were to expand its operations at a rate exceeding operating cash flow, or if the current demand for and pricing of geophysical services were to decrease substantially, additional financing could be required. There is no assurance that additional financing could or would occur. See "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources."

RELIANCE ON KEY SUPPLIER

The Company's primary supplier for seismic data acquisition systems is Input/Output, Inc. Although the Company believes it will be able to obtain data acquisition systems and/or replacement parts from Input/Output, Inc. or another source for such systems or parts in the future, should it be unable to do so, the Company's anticipated revenues could be reduced and the amount of cash needed for capital expenditures could be increased. See "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources -- Capital Expenditures" and "Business -- Equipment Acquisition."

LITIGATION

The Company is a defendant in two lawsuits relating to a July 1995 accident involving a van owned by the Company in which four Company employees died. The Company believes that it has meritorious defenses to the claims asserted against it in such suits. Further, while the plaintiffs seek damages in excess of the Company's liability insurance policies, the Company believes that its liability insurance should provide adequate coverage of the damages, if any, which may be assessed against the Company in such litigation. Due to the uncertainties inherent in litigation, no assurance can be given as to the ultimate outcome of such suits or the adequacy or availability of the Company's liability insurance to cover any such damages. A judgment awarding plaintiffs an amount significantly exceeding the Company's available insurance coverage could have a material adverse effect on the Company's financial condition, results of operations and liquidity. See "Business -- Legal Proceedings."

DEPENDENCE ON KEY PERSONNEL

The Company's success may be dependent upon, among other things, the services of certain key personnel. The loss of services of any one or more of the executive officers of the Company could have a material adverse effect on or result in a disruption of normal business operations. See "Management."

COMPETITION

The acquisition and processing of 3-D geophysical data for the oil and gas industry is a highly competitive business in the United States. The Company's competitors include companies with financial resources that are significantly greater than those of the Company as well as companies of comparable and smaller size.

TECHNICAL OBSOLESCENCE

Seismic data acquisition and data processing technology have progressed rapidly over the past several years, and the Company expects this progression to continue. The Company's strategy is to regularly upgrade its data acquisition and processing equipment to maintain its competitive position. However, due to the rapid advances in technology and the related costs associated with such technological advances, no assurance can be given that the Company will be able to fulfill its strategy, thus possibly affecting the Company's ability to compete.

GOVERNMENTAL REGULATIONS

The Company's operations are subject to a variety of federal, state and local laws and regulations, including laws and regulations relating to the protection of the environment and archeological sites. The Company is required to expend financial and managerial resources to comply with such laws and related permit requirements in its operations, and anticipates that it will continue to be required to do so in the future. Although such expenditures historically have not been material to the Company, the fact that such laws or regulations change frequently make it impossible for the Company to predict the cost or impact of such laws and regulations on its future operations. The adoption of laws and regulations that have the effect of reducing or curtailing exploration and production activities by energy companies could also adversely affect the Company's operations by reducing the demand for its services.

SHARES ELIGIBLE FOR FUTURE SALE

Sales of a substantial number of shares of Common Stock in the open market after this offering could adversely affect the trading price of the Common Stock. Immediately after this offering, the Selling Shareholder will hold 507,272 shares, representing approximately 9.76% of the outstanding shares of Common Stock. A decision by the Selling Shareholder to sell shares of Common Stock could adversely affect the trading price of the Common Stock. Upon the consummation of this offering, the Company will have 5,200,000 shares of Common Stock outstanding (excluding 89,000 shares of Common Stock issuable upon exercise of outstanding employee stock options). Of such outstanding shares, the Company estimates that approximately 4,410,000 shares will be freely tradeable unless purchased by an "affiliate" of the Company, as that term is defined in Rule 144 under the Securities Act of 1933, as amended (the "Securities Act"). See "Description of Capital Stock -- Shares Eligible for Future Sale."

NO DIVIDENDS

The Company has never paid cash dividends on its Common Stock and has no plans to do so in the foreseeable future. The Company intends to retain earnings for use in its operations and to finance its business. See "Dividend Policy."

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

All statements other than statements of historical fact included in this Prospectus, including without limitation statements under "Prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business" regarding technological advancements, use of proceeds and the Company's financial position, business strategy and plans and objectives of management of the Company for future operations, are forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). When used in this Prospectus, words such as "anticipate," "believe," "estimate," "expect," "intend" and similar expressions, as they relate to the Company or its management, identify forward-looking statements. Such forward-looking statements are based on the beliefs of the Company's management as well as assumptions made by and information currently available to the Company's management. Actual results could differ materially from those contemplated by the forward-looking statements as a result of certain factors, including but not limited to dependence upon energy industry spending, weather problems, inability to obtain land use permits, the volatility of oil and gas prices, the availability of capital resources and the other factors set forth in "Risk Factors." Such statements reflect the current views of the Company with respect to future events and are subject to these and other risks, uncertainties and assumptions relating to the operations, results of operations, growth strategy and liquidity of the Company. All subsequent written and oral forward-looking statements attributable to the Company or persons acting on its behalf are expressly qualified in their entirety by this paragraph. The Company assumes no obligation to update any such forward-looking statements.

USE OF PROCEEDS

The net proceeds to the Company from the sale of the Common Stock offered by it are estimated to be approximately $ after deducting underwriting discounts and commissions and offering expenses payable by the Company. Of the net proceeds it receives from this offering, the Company intends to use (i) approximately $10 million to reduce bank debt, (ii) approximately $8 million to acquire new equipment and to upgrade existing equipment for the Company's six 3-D seismic crews in early 1998, and (iii) the balance for working capital and general corporate purposes. Pending its use of the net proceeds it receives from this offering, the Company may invest such proceeds in short-term investments.

The Company's bank debt has been used to finance operating cash requirements and capital expenditures for equipment purchases. See "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources -- Loan Agreement" for additional information concerning the Company's bank debt.

The Company will not receive any proceeds from the sale of the shares of Common Stock offered by the Selling Shareholder. See "Principal and Selling Shareholders."

PRICE RANGE OF COMMON STOCK

The Common Stock is quoted on the Nasdaq National Market under the symbol "DWSN." The following table sets forth the high and low sales prices, as reported on the Nasdaq National Market, for the periods indicated.

	HIGH	LOW
FISCAL YEAR ENDED SEPTEMBER 30, 1996		
First Quarter	$12.25	$ 8.50
Second Quarter	9.75	7.75
Third Quarter	12.00	9.13
Fourth Quarter	11.25	8.31
FISCAL YEAR ENDED SEPTEMBER 30, 1997		
First Quarter	$11.25	$ 8.13
Second Quarter	13.75	10.38
Third Quarter	14.50	9.13
Fourth Quarter	25.75	13.50
FISCAL YEAR ENDED SEPTEMBER 30, 1998		
First Quarter (through October 20, 1997)	$27.38	$22.13

The last reported sale price for the Common Stock on October 20, 1997 on the Nasdaq National Market was $22.44 per share. As of September 30, 1997, there were approximately 296 record holders of the Common Stock.

DIVIDEND POLICY

Since its initial public offering in 1981, the Company has not declared or paid any dividends on its Common Stock. The Company presently intends to retain earnings for use in its operations and to finance its business. Any change in the Company's dividend policy is within the discretion of its Board of Directors and will depend, among other things, on the Company's earnings, debt service and capital requirements, restrictions in financing agreements, business conditions and other factors that the Board of Directors deems relevant.

CAPITALIZATION

The following table sets forth the capitalization of the Company as of June 30, 1997, and as adjusted to give effect to the sale of 1,000,000 shares of Common Stock offered hereby by the Company and the application of the estimated net proceeds to the Company therefrom. See "Use of Proceeds" and the Company's financial statements and notes thereto included elsewhere herein.

	JUNE 30, 1997	
	HISTORICAL	AS ADJUSTED
	(IN THOUSANDS, EXCEPT SHARE DATA)	
Long-term debt, less current maturities(1)	$ 4,214	$
Stockholders' equity:		
Preferred Stock, par value $1.00 per share: 5,000,000 shares authorized, none issued or outstanding	--	
Common Stock, par value $.33 1/3 per share: 10,000,000 shares authorized, 4,199,250 shares issued and outstanding; 5,199,250 shares issued and outstanding as adjusted(2)	1,400	
Additional paid-in capital	17,171	
Retained earnings	17,649	
Total stockholders' equity	36,220	
Total capitalization	$40,434	$

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(1) See the Company's financial statements and notes thereto included elsewhere herein for additional information relating to the Company's long-term debt. As of October 20, 1997, the Company's long-term debt, less current maturities of $1,690,000, was $7,752,000.

(2) Excludes 59,750 shares reserved for issuance upon exercise of employee stock options at June 30, 1997. See "Management -- Compensation Plans."

SELECTED FINANCIAL DATA

The following selected financial data as of and for the five fiscal years ended September 30, 1996 were derived from the historical financial statements of the Company, which have been audited by KPMG Peat Marwick LLP, independent certified public accountants. The following selected financial data as of and for the nine months ended June 30, 1996 and 1997 were derived from the unaudited historical financial statements of the Company which, in the opinion of the Company's management, contain all adjustments, consisting only of normal recurring accruals, necessary for a fair presentation thereof. The selected financial data presented herein is qualified in its entirety by, and should be read in conjunction with, "Management's Discussion and Analysis of Financial Condition and Results of Operations," the Company's financial statements and notes thereto and the other financial information included elsewhere herein.

SELECTED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	YEARS ENDED SEPTEMBER 30,					NINE MONTHS ENDED JUNE 30,	
	1992	1993	1994	1995	1996	1996	1997
STATEMENT OF OPERATIONS DATA:							
Operating revenues	$11,827	$17,016	$23,027	$28,188	$33,518	$24,485	$34,304
Operating costs:							
Operating expenses	9,393	12,497	15,478	20,067	23,763	17,613	22,840
General and administrative	694	842	887	975	1,299	1,031	1,052
Depreciation	1,441	1,830	3,016	4,150	5,818	4,104	5,456
	11,528	15,169	19,381	25,192	30,880	22,748	29,348
Income from operations	299	1,847	3,646	2,996	2,638	1,737	4,956
Other income (expense):							
Interest and dividend income	413	367	209	399	253	187	167
Interest expense	(140)	(160)	(376)	(170)	(144)	(26)	(341)
Gain on disposal of assets	20	67	68	76	11	9	196
Other	60	1	(30)	8	2	1	15
Proceeds from litigation settlement	--	669	--	131	--	--	--
Realized gain (loss) on marketable securities	--	6	--	--	--	--	--
Unrealized gain on marketable securities	454	--	--	--	--	--	--
Income before income tax expense and extraordinary item	1,106	2,797	3,517	3,440	2,760	1,908	4,993
Income tax expense:							
Current	9	58	1,212	970	599	373	1,222
Deferred	179	877	39	296	273	314	523
	188	935	1,251	1,266	872	687	1,745
Income before extraordinary item	918	1,862	2,266	2,174	1,888	1,221	3,248
Tax benefit from utilization of loss carryforward	179	877	--	--	--	--	--
Net income(1)	$ 1,097	$ 2,739	$ 2,266	$ 2,174	$ 1,888	$ 1,221	$ 3,248
Income per common share:							
Income before extraordinary item	$ .31	$ .62	$ .74	$ .54	$ .45	$ .29	$ .78
Extraordinary item	.06	.29	--	--	--	--	--
Net income	$ .37	$ .91	$ .74	$ .54	$ .45	$ .29	$ .78
Weighted average equivalent common shares outstanding	2,973	3,008	3,045	3,990	4,183	4,181	4,191
BALANCE SHEET DATA (AT PERIOD END):							
Working capital	$ 4,803	$ 3,646	$ 2,789	$ 9,641	$ 5,343	$ 7,795	$11,890
Net property, plant and equipment	7,825	11,836	14,936	21,550	32,926	27,914	29,675
Total assets	16,540	21,908	24,942	32,342	41,909	39,902	44,747
Long-term debt, less current maturities(2)	1,833	3,500	2,250	--	4,857	2,926	4,214
Stockholders' equity	12,628	15,482	17,686	30,856	32,804	32,134	36,220

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(1) See the Company's financial statements and notes thereto included elsewhere herein for information concerning the Company's use of net operating loss carryforwards in certain periods.

(2) As of October 20, 1997, the Company's long-term debt, less current maturities of $1,690,000, was $7,752,000.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following discussion should be read in conjunction with the Company's financial statements and notes thereto included elsewhere in this Prospectus. In addition, in reviewing the Company's financial statements it should be noted that quarterly fluctuations in the Company's results of operations can occur due to weather, land use permitting and other factors. See "Risk Factors."

NINE MONTHS ENDED JUNE 30, 1997 VERSUS NINE MONTHS ENDED JUNE 30, 1996

The Company's operating revenues increased 40.1% from $24,485,000 for the first nine months of fiscal 1996 to $34,304,000 for the same period of fiscal 1997. The increase in revenues is primarily due to increased capacity and improved efficiency resulting from fiscal 1996 capital expenditures. The fiscal 1996 capital expenditures consisted of the addition of a fifth crew in the third quarter combined with additional channel capacity of the existing crews and additional vibrator energy source units.

Operating expenses for the nine months ended June 30, 1997 totaled $22,840,000, an increase of $5,227,000, or 29.7%, over the same period of fiscal 1996. Operating expenses increased primarily as a result of increased personnel and other expenses associated with the equipment acquisitions and technological upgrades made primarily during the third quarter of fiscal 1996.

General and administrative expenses for the nine months ended June 30, 1997 totaled $1,052,000, an increase of $21,000 from the same period of fiscal 1996. The increase for fiscal year 1997 is primarily due to timing adjustments of certain expenses. General and administrative expenses totaled 3.1% of operating revenues for the nine months ended June 30, 1997 versus 4.2% of operating revenues for the same period of fiscal 1996.

Depreciation for the nine months ended June 30, 1997 totaled $5,456,000, an increase of $1,352,000, or 32.9% from the same period of fiscal 1996. Depreciation continues to increase as a result of the capital expansion discussed below in "Liquidity and Capital Resources."

Total operating costs for the first nine months of fiscal 1997 totaled $29,348,000, an increase of 29.0% over the first nine months of fiscal 1996 due to the factors described above. Income from operations increased to $4,956,000, 14.4% of revenues, from $1,737,000, 7.1% of revenues, in the comparable nine month period of fiscal 1996. This increase is the direct result of the Company's operating expenses being relatively fixed as compared to revenue trends. Because of the high proportion of relatively fixed total operating costs (including personnel costs for active crews and depreciation costs), income from operations in fiscal 1997 reflects the benefit of efficient production with steady demand.

Interest is paid monthly at prime rates on the principal of the term notes described below in "Loan Agreement."

Federal and state income tax expense is calculated at the rates of 35% and 36% in fiscal years 1997 and 1996, respectively.

FISCAL YEAR ENDED SEPTEMBER 30, 1996 VERSUS FISCAL YEAR ENDED SEPTEMBER 30, 1995

The Company's operating revenues increased 18.9% from $28,188,000 for fiscal 1995 to $33,518,000 for fiscal 1996. In June 1996, the Company placed into service its fifth telemetry recording system after combining two 1,000-channel crews in the quarter ended March 31, 1996. The Company further increased production capacity during 1996 with the purchase of additional equipment. Demand for larger surveys translates to an increased number of channels and improved efficiency which has been gained with additional energy source units to complement recording systems already in service.

Operating expenses increased 18.4% in 1996 as compared to 1995 as a result of adding a new 3-D seismic crew as well as increased personnel and other expenses associated with the equipment additions and technological upgrades.

General and administrative costs have increased with additional support services for the Company's expanding operations. As a percentage of operating revenues, general and administrative costs increased to 3.9% from 3.5% in 1995.

Depreciation continues to increase dramatically due to the Company's capital expansion. In 1996, the cost to field the new telemetry crew represents approximately $10,000,000 of the total $15,597,000 in capital expenditures. The increase from the total capital expenditures in 1995 of $10,961,000 is comprised of the upgrades to data acquisition capacity of the existing crews and further expansion of energy source units.

The decrease in income from operations for 1996 as compared to 1995 and for 1995 as compared to 1994 is attributable to the significant increase in depreciation. In addition, the impact of the permit delays in the first quarter and unfavorable weather during the first and fourth quarters of 1996 affected revenue directly without a significant corresponding reduction in the relatively fixed operating expenses.

The significant changes in the Company's other income and expenses are a result of a final litigation settlement of $131,000 in 1995 resulting from the suit filed against First Republic Bank in 1988 and the increase of interest income in 1995 due to the investment of public offering proceeds until capital expenditures were made.

The Company's effective tax rate for 1996 is 32.0% as compared to 36.8% for 1995. These rates reflect the effects of federal and state income taxes over the periods reported. As of September 30, 1995, the Company had no tax loss carryforwards to offset future tax expense.

FISCAL YEAR ENDED SEPTEMBER 30, 1995 VERSUS FISCAL YEAR ENDED SEPTEMBER 30, 1994

The Company's operating revenues increased 22.4% from $23,027,000 for fiscal 1994 to $28,188,000 for fiscal 1995. This increase was attributable primarily to the increased industry demand for 3-D data acquisition services, additions of new equipment and technological upgrades to existing equipment. Revenues did not increase during 1995 to the extent of the 1994 increase primarily due to unfavorable weather during the third and fourth quarters of 1995.

Operating expenses for the year ended September 30, 1995 totaled $20,067,000, an increase of $4,589,000 over fiscal 1994. Operating expenses include increased personnel and other expenses associated with the equipment additions and technological upgrades described above.

General and administrative expenses for the year ended September 30, 1995 totaled $975,000, an increase of $88,000 over fiscal 1994. General and administrative expenses totaled 3.4% of operating revenue for the year ended September 30, 1995 versus 3.8% for fiscal 1994. This decline as a percentage of operating revenue was a result of economies of scale and improved operating efficiency.

Depreciation for the fiscal year ended September 30, 1995 totaled $4,150,000, an increase of $1,134,000 over fiscal 1994. Depreciation increased as a result of the Company's capital expansion.

Operating costs for the year ended September 30, 1995 totaled $25,192,000, an increase of $5,811,000 or 30% over fiscal 1994, due to the factors described above. The $650,000 decrease in income from operations to $2,996,000 in 1995 from $3,646,000 in 1994 reflects the effects of increased depreciation resulting from the new crew and its associated start-up expenses. In addition, the impact of unfavorable weather during the third and fourth quarters of 1995 affected revenue directly without a significant corresponding reduction in the relatively fixed operating expenses.

The significant changes in the Company's other income and expenses were a result of a litigation settlement of $131,000 in 1995 and decreased interest expense as a result of the retirement of debt.

The Company's effective tax rate for 1995 was 36.8% as compared to 35.6% for 1994. These rates reflect the effects of federal and state income taxes for the periods reported. As of September 30, 1995, the Company had no tax loss carryforwards to offset future current tax expense.

OUTLOOK FOR FISCAL YEAR ENDED SEPTEMBER 30, 1997 VERSUS FISCAL YEAR ENDED SEPTEMBER 30, 1996

The Company expects that fiscal 1997 revenues and income from operations will be significantly increased over fiscal 1996. The Company anticipates that operating costs will not have increased as rapidly as revenues due to the relatively fixed nature of many of the Company's costs relative to the number of active crews.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

Despite net income of $3,248,000 for the nine months ended June 30, 1997 versus $1,221,000 for the same period of fiscal 1996, net cash provided by operating activities of $6,325,000 for the nine months ended June 30, 1997 as compared to $6,848,000 for the same period of fiscal 1996 reflects a slight decrease primarily due to changes in working capital components. The increase in accounts receivable in fiscal 1997 is the result of increased revenues.

Net cash used in investing activities decreased to $4,687,000 for the first nine months of fiscal 1997 from $9,710,000 in the same period of fiscal 1996. During the second quarter of fiscal 1997, the Company invested cash generated from operations in U.S. Treasury instruments. As discussed below in "Capital Expenditures," the Company is positioning for possible future expansion.

Net cash used in financing activities primarily reflects principal payments on debt. During fiscal 1997, the Company made monthly principal payments of $71,400 under a $6,000,000 term note, and in September 1997, the Company made a $69,400 principal payment under a $5,000,000 term note. See "Loan Agreement" below.

Capital Expenditures

Capital expenditures of $15,597,000 during fiscal year 1996 in addition to capital expenditures during fiscal 1995 and 1994 have positioned the Company to supply market demand with technologically advanced 3-D data acquisition recording systems and leading edge data processing capabilities. Depreciation has increased as a new crew has been placed into service each year for the past several years.

Capital expenditures of $2,340,000 for the nine months ended June 30, 1997 include additions and replacements to the myriad of cables and geophones, enhancements to the surveying operation, and additions in support of quality control and operational safety efforts. In addition, the Company has budgeted capital expenditures of approximately $2,000,000 for the fourth quarter of fiscal 1997 to upgrade existing equipment.

The Company placed a sixth crew into service in August of 1997. The cost of the new crew equipped with a 2,000 channel I/O System Two RSR was approximately $6,000,000. See "Loan Agreement" below.

Loan Agreement

The Company is a party to a loan agreement, as amended (the "Loan Agreement"), with Norwest Bank Texas, N.A. ("Norwest"). The Loan Agreement consists of (1) a revolving line of credit of $6,000,000 which matures on April 15, 1999, (2) a term note in the aggregate principal amount of $6,000,000 bearing interest at Norwest's prime rate and which matures on March 15, 2003 and (3) a term note in the aggregate principal amount of $5,000,000 bearing interest at the prime rate as published in The Wall Street Journal and which matures on April 15, 2003. The $5,000,000 term note, together with working capital, was utilized to finance the purchase of equipment placed into service in August 1997. The term notes are secured by eligible accounts receivable and equipment purchased from loan proceeds. At September 30, 1997, approximately $9.5 million was outstanding under the term notes all of which was bearing interest at 8.5% per annum.

Capital Resources

The Company believes that its capital resources, including the availability of bank borrowings, and cash flow from operations are adequate to meet its current operational needs and will allow the Company to continue its practice of acquiring new technologically advanced equipment and upgrading its existing equipment. However, the Company's expansion plans, including its capital budget for fiscal 1998, may be affected by its ability to raise capital from additional sources, including but not limited to this offering.

Litigation

The Company is a defendant in two lawsuits relating to a July 1995 accident involving a van owned by the Company in which four Company employees died. The Company believes that it has meritorious defenses to the claims asserted against it in such suits. Further, while the plaintiffs seek damages in excess of the Company's liability insurance policies, the Company believes that its liability insurance should provide adequate coverage of the damages, if any, which may be assessed against the Company in such litigation. Due to the uncertainties inherent in litigation, no assurance can be given as to the ultimate outcome of such suits or the adequacy or availability of the Company's liability insurance to cover any such damages. A judgment awarding plaintiffs an amount significantly exceeding the Company's available insurance coverage could have a material adverse effect on the Company's financial condition, results of operations and liquidity. See "Risk Factors -- Litigation" and "Business -- Legal Proceedings."

RECENT ACCOUNTING PRONOUNCEMENTS

In October 1995, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards ("FAS") No. 123, "Accounting for Stock-Based Compensation." FAS 123 is required to be adopted by the Company in fiscal 1997. FAS 123 provides for alternative methods of recording stock-based compensation and requires additional disclosure regardless of which method is utilized to record stock-based compensation. The Company accounts for employee stock-based compensation using the intrinsic value method prescribed by Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees ("APB 25"). The Company plans to adopt only the disclosure provisions of FAS 123 at September 30, 1997.

In February 1997, the Financial Accounting Standards Board issued FAS No. 128, "Earnings per Share." FAS No. 128 establishes standards for computing and presenting earnings per share and is effective for periods ending after December 15, 1997. The impact of the adoption of FAS No. 128 on the Company's earnings per share is expected to be immaterial.

In June 1997, the Financial Accounting Standards Board issued FAS No. 130, "Reporting Comprehensive Income." FAS No. 130 establishes standards for reporting and display of comprehensive income and its components in a full set of general purpose financial statements. FAS No. 130 is effective for interim and annual periods beginning after December 15, 1997. The Company plans to adopt FAS No. 130 for the period ended December 31, 1999.

BUSINESS

GENERAL

Founded in 1952, Dawson Geophysical Company acquires and processes seismic data used in the exploration, development and field management of oil and natural gas reserves. Since fiscal 1990, the Company has spent approximately $57 million to acquire new 3-D telemetry recording systems and associated equipment, including approximately $26 million since fiscal 1995. The Company's operations consist of six 3-D seismic data acquisition crews and a seismic data processing center. As a result of an increase in industry-wide demand for 3-D seismic surveys and the Company's competitive position, the Company has experienced increasing demand for its 3-D seismic services. During fiscal 1997, substantially all of the Company's revenues were derived from 3-D seismic operations.

The Company's land-based data acquisition crews operate primarily in the southwestern United States, but have responded to demand from south Texas to North Dakota. As a result of the addition of a sixth crew equipped with the versatile I/O System Two RSR, the Company has expanded its capabilities to accommodate more difficult and remote terrains such as east Texas and the Rocky Mountains.

Data processing is performed by Company geophysicists at the Company's computer center located in Midland, Texas. The Company acquires and processes data for its clients, ranging from major oil and gas companies to independent oil and gas operators, who retain exclusive rights to the information obtained.

The Company believes that it maintains a competitive advantage in the industry by (i) acquiring equipment to expand capacity in response to client demand, (ii) updating its equipment base to take advantage of advances in geophysical technology, (iii) maintaining skilled and experienced personnel for its data acquisition and processing operations, (iv) focusing its operations on the domestic onshore seismic industry, and (v) providing integrated in-house operations necessary to complete all phases of 3-D seismic data acquisition and processing, including project design, permitting and surveying.

GEOPHYSICAL SERVICES

General. Technological advances in equipment and computers have allowed the seismic industry to economically acquire and process immense volumes of seismic data which produce more precise images of the earth's subsurface. The industry refers to this process of data acquisition, processing and subsequent interpretation of the processed data as the 3-D seismic method. Geophysicists use computer workstations to interpret 3-D data volumes, identify subsurface anomalies and generate a geologic model of subsurface features.

3-D seismic data are used in the exploration for new reserves and enable oil and gas companies to better delineate existing fields and to augment their reservoir management techniques. Benefits of incorporating 3-D seismic technology into exploration and development programs include reducing drilling risk, decreasing oil and gas finding costs and increasing the efficiencies of reservoir location, delineation and management.

The Company is exploring the opportunities presented by the four-dimensional seismic method, which adds the element of time to 3-D surveys. By surveying the same site at successive times, geophysicists compare data volumes and may be able to determine the progress of enhanced recovery programs in existing petroleum reservoirs, and thereby aid in extracting remaining reserves. Such projects could, over time, benefit reservoir management thereby providing future opportunities for the Company.

The industry as a whole is investigating even more sophisticated technologies. Researchers at the Colorado School of Mines, underwritten in part by the Company, are exploring the use of three-component ("3-C") surveys utilizing shear wave information in the effort to identify and exploit recoverable oil and gas reserves. The Company's equipment currently includes vibrators and geophones capable of generating and recording shear waves.

Data Acquisition. The seismic survey begins at the time a client requests the Company to formulate a proposal to acquire seismic data on its behalf. The Company's geophysicists then assist the client in designing the specifications of the proposed 3-D survey. If the client accepts the Company's proposal, a Company permit agent then obtains access from the landowner to the site where the survey is to be conducted.

Utilizing electronic surveying equipment, the Company's survey personnel precisely locate the energy source and receiver positions from which the seismic data are collected. The Company utilizes the satellite global positioning system, known as GPS, to properly locate the seismic survey grid.

The Company operates six land based crews gathering 3-D seismic data. The Company primarily uses vibrator energy sources, each of which weighs 50,000 to 62,000 pounds, but on occasion detonates dynamite charges placed in drill holes below the earth's surface to generate seismic energy. The Company has 45 vibrator energy source units and a capacity of 14,200 recording channels, any of which are configured to meet the demands of specific survey designs. Each crew consists of approximately 40 technicians, 25 associated vehicles with off-road capabilities, 31,000 geophones, a seismic recording system, energy sources, electronic cables and a variety of other equipment. The Company operates five I/O System Two recording systems, one with RSR capability, and one MDS-18X recording system.

Since 1994 the Company has grown from four seismic data acquisition crews with an aggregate recording capacity of 4,532 channels and 22 vibrator energy source units. Demand for more recording channels continues to increase from client companies as the industry strives for improved data quality. The Company's current average of 2,367 channels per crew is well above the industry average. The comparatively large number of recording channels gives the Company a competitive edge with the versatility and productivity to improve data quality at a lower cost per unit of data to the client.

Data Processing. The Company currently operates a computer center located in Midland, Texas to process seismic data. Such processing primarily involves the enhancement of the data by improving reflected signal resolution, removing ambient noise and establishing proper spatial relationships of geological features. The data are then arranged in such a manner that computer graphic technology may be employed for examination and interpretation of the data by the user.

The processing center operates 24 hours daily utilizing two parallel high-speed computers. The Company continues to improve data processing efficiency by further integrating workstation-based computer technology into the mainframe operation at the computer center and remote sites such as the client's office. The Company purchases, develops or leases, under non-exclusive licensing arrangements, seismic data processing software.

The Company's computer center processes seismic data collected by its crews, as well as by other geophysical contractors. In addition, the Company reprocesses previously recorded seismic data using current technology to enhance the data quality. The Company's processing contracts may be awarded jointly with or independently from data acquisition services.

Integrated Services. The Company maintains integrated in-house operations necessary to the development and completion of 3-D seismic surveys. Experienced Company personnel conduct and supervise the 3-D seismic survey design, permitting, surveying and data acquisition and processing functions for each seismic program. In-house support operations include facilities for automotive repair, automotive paint, electronics repair, electrical engineering and software development, thereby enabling better quality control and improved efficiency. The Company's clients generally undertake to provide their own interpretation of the seismic data provided by the Company, although from time to time the Company's geophysicists may assist its clients in this process.

EQUIPMENT ACQUISITION

The Company believes it is essential to monitor and evaluate advances in geophysical technology and to commit capital funds to purchase equipment it deems most promising. Purchasing new assets and continually upgrading capital assets involves a continuing commitment to capital spending. The Company's capital expenditures for the three fiscal years ended September 30, 1996 and the nine months ending June 30, 1997 were $6,161,000, $10,961,000, $15,597,000 and $2,340,000 respectively. Projected capital expenditures for fiscal 1998 are at least $8 million which will be used to purchase new equipment and upgrade existing equipment for its six 3-D seismic crews by early 1998. See "Risk Factors -- Liquidity and Working Capital Requirements" and "Use of Proceeds."

CLIENTS

The Company's services are marketed by supervisory and executive personnel who contact clients to determine geophysical needs and respond to client inquiries regarding the availability of crews or processing schedules. These contacts are based principally upon professional relationships developed over a number of years.

The Company's clients range from major oil companies to small independent oil and gas operators. The services provided by the Company vary according to the size and needs of the client. During the year ended September 30, 1996, the three most significant clients for the Company's services accounted for approximately 11.0%, 9.9% and 9.2% of the Company's revenues. For the nine months ended June 30, 1997, the three most significant clients of the Company accounted for approximately 7.9%, 7.4% and 7.4% of the Company's revenues. None of such clients were included in the three largest clients during fiscal 1996. Because of the limited number of data acquisition crews and the length of contracts under which these crews have performed duties in the past, the Company anticipates that a large portion of future revenues will continue to be attributable to a few clients, who may change from period to period. The Company presently believes that the loss of any one of its clients would not have a material impact on its business.

CONTRACTS

For the past seven years, demand for the Company's services has substantially exceeded its ability to meet such demand. Based on current market conditions, current indications of interest and work in progress, the Company believes that there will be a significant demand for its services well into the Company's 1998 fiscal year.

The Company's seismic services are conducted under master contracts with clients. Contracts are either "turnkey" contracts that provide for a fixed fee to be paid to the Company for each unit of data acquired, or "term" contracts that provide for a fixed hourly, daily, or monthly fee during the term of the project. Turnkey contracts generally provide more profit potential for the Company, but involve more risks because of the potential downtime for weather and other types of delays. Substantially all of the Company's contracts with its clients are turnkey. A supplemental agreement setting forth the terms of a specific project, which may be cancelled by either party, is entered into for every project.

The results of the Company's services belong to the contracting party. To avoid conflicts of interest, the Company does not acquire any data for its own account. All of the client's information is maintained in strictest confidence. Company policy prohibits any officer, director or employee from participating in oil and gas ventures.

COMPETITION AND MARKETS

The acquisition and processing of 3-D seismic data for the oil and gas industry is a highly competitive business in the United States. Contracts for such services generally are awarded on the basis of price quotations, crew experience and availability of crews to perform in a timely manner, although factors other than price, such as technological expertise and reputation, are sometimes determinative. The Company's competitors include companies with financial resources that are significantly greater than those of the Company as well as companies of comparable and smaller size.

Historically, the demand for geophysical services has been directly related to the level of spending by oil and gas companies for exploration, production, development and field management activities, which activities depend in part on the level of oil and gas prices. Because geophysical services are among the first operations involved in the exploration for oil and gas, the level of such services, in the past, has declined prior to a decline in oil and gas exploration activities. In recent years, however, the improved subsurface resolution obtainable from 3-D seismic data have enhanced the exploration for new reserves and enabled oil and gas companies to utilize 3-D surveys to better delineate existing fields and to augment their reservoir management techniques. See "Risk Factors -- Industry Conditions."

EMPLOYEES

The Company employs approximately 350 persons, of which 293 are engaged in providing energy sources and acquiring data, 12 are engaged in data processing, seven are administrative personnel, 30 are engaged in equipment maintenance and eight are executive officers. Of the employees listed above, 16 are geophysicists. The Company's employees are not represented by a labor union. The Company believes it has good relations with its employees.

The current level of demand for geophysical services has increased the difficulty of obtaining qualified personnel. Although the Company thus far has not experienced unusual difficulty in this regard, a continued acceleration in demand for geophysical services may create a shortage of such personnel. The Company maintains an active training program and attempts to promote from within the Company.

PROPERTIES

The Company's principal properties are energy sources and data acquisition and processing equipment. At June 30, 1997 the average age of the Company's data acquisition equipment was approximately three years. In general, the Company believes that this equipment is well maintained and suitable for its intended uses. See "Business -- Equipment Acquisition" for information regarding capital expenditures by the Company.

The location and description of the Company's principal real properties are set forth in the following table:

LOCATION	FEE OR LEASED	PURPOSE	BUILDING AREA SQUARE FEET
Midland, Texas..................	Fee	Executive offices and data processing	10,400
Midland, Texas..................	Fee	Field office Equipment fabrication Maintenance and repairs	53,000

OPERATING HAZARDS AND INSURANCE

The Company's activities are often conducted in remote areas under extreme weather and other dangerous conditions. These operations are subject to risks of injury to personnel and equipment. The Company's crews are mobile and the equipment and personnel are subject to vehicular accidents. The Company uses diesel fuel which is classified by the U.S. Department of Transportation as a hazardous material. See "Risk Factors -- Litigation and -- Governmental Regulations."

The Company carries insurance in amounts which it considers adequate on the principal items of its equipment. The Company does not carry insurance against certain risks, including business interruption resulting from equipment losses or weather delays. The Company obtains insurance against certain property and personal casualty risks, when such insurance is available and when management considers it advisable to do so. Such coverage is not always available, however, and, when available, is subject to unilateral cancellation by the insuring companies on very short notice. The Company insures seismic data for amounts considered acceptable by management. Accordingly, damage to such data should not have a material adverse effect upon the Company.

LEGAL PROCEEDINGS

The Company is a defendant in two lawsuits pending in the 112th and 83rd District Courts of Pecos County, Texas (respectively, Cause No. 8812, Ernestine Bernal, et al. vs. Javier Antonio Orona, et al.; and Cause No. P5565-83-CV, Carla Jaquez, et al. vs. Javier Antonio Orona, et al.) relating to a July 1995 accident involving a van owned by the Company which was used to transport employees to various job sites and a non-Company owned vehicle. The accident resulted in the deaths of four Company employees who were passengers in such van. The Company is one of several named defendants in such suits. Other named defendants include the estate of the deceased driver of such van, who was an employee of the Company, the driver of such non-Company owned vehicle, who was then an employee of the Company, the owner of such vehicle, and Ford Motor Company, the manufacturer of the Company van involved in such accident. In general, the claims against the Company include allegations of negligence, gross negligence and/or intentional tort as a result of, among other things, the Company's alleged failure to provide safe transportation for its employees and to properly select, train and supervise the deceased driver of such van. The plaintiffs in such suits are seeking actual damages from the defendants of $15.5 million, additional unspecified actual damages, pre-judgment and post-judgment interest and costs of suit as well as exemplary and punitive damages in an amount not to exceed four times the amount of actual damages. The Company believes that it has meritorious defenses to the claims asserted against it in such suits and it intends to continue to vigorously defend itself against such claims. In addition, the Company believes that it has approximately $11 million of liability insurance coverage to provide against an unfavorable outcome. Such suits are currently in the discovery stage and the Company currently has pending before the court a motion for summary judgment in Cause No. 8812 requesting that the Company be dismissed from such suit based upon various legal theories. Such motion has not yet been heard by the court. A trial date of July 20, 1998 has been set in Cause No. 8812. No trial date has yet been set for Cause No. P5565-83-CV. Due to the uncertainties inherent in litigation, no assurance can be given as to the ultimate outcome of such suits or the adequacy or availability of the Company's liability insurance to cover the damages, if any, which may be assessed against the Company in such suits. A judgment awarding plaintiffs an amount significantly exceeding the Company's available insurance coverage could have a material adverse effect on the Company's financial condition, results of operations and liquidity. See "Risk Factors -- Litigation" and "Management's Discussion and Analysis of Financial Condition and Results of Operations -- Liquidity and Capital Resources."

In addition to the foregoing, from time to time the Company is a party to various legal proceedings arising in the ordinary course of business. Although the Company cannot predict the outcomes of any such legal proceedings, the Company's management believes that the resolution of pending legal actions will not have a material adverse effect on the Company's financial condition, results of operations or liquidity.

MANAGEMENT

The Board of Directors currently consists of three persons who are employees of the Company and three persons who are not employees of the Company (i.e., outside directors). Set forth below are the names, ages, and positions of the Company's Directors and executive officers.

NAME	AGE	POSITION
L. Decker Dawson	77	President, Director
Floyd B. Graham	69	Executive Vice President, Director
Howell W. Pardue	61	Executive Vice President, Director
Christina W. Hagan	42	Vice President, Chief Financial Officer
Edward L. Huff	60	Vice President
C. Ray Tobias	40	Vice President
Stephen C. Jumper	36	Vice President
Paula W. Henry	40	Secretary
Calvin J. Clements	76	Director
Matthew P. Murphy	67	Director
Tim C. Thompson	63	Director

L. Decker Dawson. Mr. Dawson founded the Company in 1952 and has served in his present positions since that time. Prior thereto, Mr. Dawson was a geophysicist with Republic Exploration Company, a geophysical company. Mr. Dawson served as President of the Society of Exploration Geophysicists (1989-1990) and received its Enterprise Award in 1997. He was Chairman of the Board of Directors of the International Association of Geophysical Contractors (1981). He currently serves as a director and honorary life member of such association. He was inducted into the Permian Basin Petroleum Museum's Hall of Fame in 1997.

Floyd B. Graham. Mr. Graham joined the Company in 1974 and has served in his present positions since that time. Prior thereto, Mr. Graham was an independent geophysical consultant for 14 years, and prior thereto was a geophysicist for the predecessor of Exxon Company, U.S.A. for 10 years.

Howell W. Pardue. Mr. Pardue joined the Company in 1976 and has served in his present positions since that time. Prior thereto, Mr. Pardue was employed in data processing for 17 years by Geosource, Inc. and its predecessor geophysical company.

Christina W. Hagan. Ms. Hagan joined the Company in 1988, and was elected Chief Financial Officer in January 1997 and Vice President in September 1997. Prior thereto, Ms. Hagan served the Company as Controller and Treasurer. Ms. Hagan is a certified public accountant.

Edward L. Huff. Mr. Huff joined the Company in 1956, and was elected Vice President in September 1997. Prior thereto, Mr. Huff served as instrument operator, crew manager and field supervisor. He has managed the Company's field operations since 1987.

C. Ray Tobias. Mr. Tobias joined the Company in 1990, and was elected Vice President in September 1997. Mr. Tobias is responsible for maintaining client relationships and submitting survey cost quotations to client companies. He is presently the chairman of the International Association of Geophysical Contractors West Texas -- Eastern New Mexico Operations Committee and is Past President of the Permian Basin Geophysical Society. Prior to joining the Company, Mr. Tobias was employed by Geo-Search Corporation where he was responsible for pricing and bidding geophysical work to major oil companies.

Stephen C. Jumper. Mr. Jumper, a geophysicist, joined the Company in 1985, and was elected Vice President in September 1997. Mr. Jumper also serves as manager of technical services with an emphasis on 3-D processing. Mr. Jumper has served the Permian Basin Geophysical Society as Second Vice President (1991), First Vice President (1992), and as President (1993).

Paula W. Henry. Ms. Henry joined the Company in 1981 and has served in her present position since 1989. Ms. Henry supervises administrative operations of the Company.

Calvin J. Clements. Mr. Clements has served the Company as a director since 1972. Prior thereto and until his retirement in 1987, Mr. Clements was employed by the Company as vice president of the data acquisition operations.

Matthew P. Murphy. Mr. Murphy has served the Company as a director since 1993. Until his retirement in 1991, Mr. Murphy served as an executive of NCNB Texas, now known as Nations Bank of Texas, N.A. (and predecessor banks), and from 1986 to 1991, Mr. Murphy served the bank as District Director-West Texas.

Tim C. Thompson. Mr. Thompson has served the Company as director since 1995. Mr. Thompson, a management consultant since May 1993, was President and Chief Executive Officer of Production Technologies International, Inc. from November 1989 to May 1993.

All directors and officers of the Company are elected annually and hold office from the date of their election until their successors have been duly elected and qualified, or until their earlier death, resignation or removal from office. The Board of Directors has standing audit and compensation committees, each consisting of Messrs. Clements, Murphy, and Thompson, all of whom are non-employee directors.

EXECUTIVE COMPENSATION

The following table sets forth summary information regarding the compensation paid by the Company to L. Decker Dawson, the President of the Company, and to Floyd B. Graham, Howell W. Pardue, Edward L. Huff and Stephen C. Jumper (collectively, the "named executive officers").

SUMMARY COMPENSATION TABLE

		ANNUAL COMPENSATION			LONG TERM COMPENSATION AWARDS
NAME AND PRINCIPAL POSITION	FISCAL YEAR	SALARY	BONUS(1)	OTHER ANNUAL COMPENSATION	SECURITIES UNDERLYING OPTIONS (NO. OF SHARES)
L. Decker Dawson.....................	1997	$119,892	$ --	$--	
President	1996	90,301	--	--	
	1995	84,293	--	--	
Floyd B. Graham......................	1997	121,538	5,840	--	5,000
Executive Vice President	1996	120,000	7,588	--	
	1995	120,000	9,138	--	
Howell W. Pardue.....................	1997	121,538	5,531	--	5,000
Executive Vice President	1996	120,000	7,168	--	
	1995	120,000	8,607	--	
Edward L. Huff(2)....................	1997	102,498	4,603	--	5,000
Vice President					
Stephen C. Jumper(2).................	1997	102,498	3,337	--	5,000
Vice President					

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(1) Bonus amounts reflect discretionary amounts paid during the indicated fiscal year based on prior fiscal year results.

(2) Messrs. Huff and Jumper were each elected Vice President in September 1997.

The following table sets forth certain information with respect to options to purchase Common Stock granted during the fiscal year ended September 30, 1997 to each of the named executive officers.

OPTION GRANTS IN FISCAL YEAR 1997

	INDIVIDUAL GRANTS				GRANT DATE VALUE(1)
NAME	NUMBER OF SECURITIES UNDERLYING OPTIONS GRANTED (NO. OF SHARES)	% OF TOTAL OPTIONS GRANTED TO EMPLOYEES IN FISCAL YEAR	EXERCISE PRICE ($/SH)	EXPIRATION DATE	GRANT DATE PRESENT VALUE($)
Floyd B. Graham............	5,000	16.67%	24.125	9/30/2002	55,926
Howell W. Pardue...........	5,000	16.67%	24.125	9/30/2002	55,926
Edward L. Huff.............	5,000	16.67%	24.125	9/30/2002	55,926
Stephen C. Jumper..........	5,000	16.67%	24.125	9/30/2002	55,926

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(1) The "grant date present value" shown is a hypothetical value based upon application of the "Black-Scholes" model which often is used to estimate the market value of transferable options by calculating the probability, based on the volatility of the stock subject to the options, that the stock price will exceed the option exercise price at the end of the option term. The Company's stock options are not transferable and, the Black-Scholes estimate notwithstanding, an option will have value to the optionee only if and to the extent the market price of the Company's stock rises above the market price on the date the option was granted.

The following table sets forth certain information with respect to the exercise of options to purchase Common Stock during the fiscal year ended September 30, 1997, and unexercised options held at September 30, 1997, by each of the named executive officers.

AGGREGATED OPTION EXERCISES IN FISCAL YEAR 1997
AND FISCAL YEAR-END OPTION VALUES

NAME	SHARES ACQUIRED ON EXERCISE	VALUE REALIZED	NUMBER OF UNEXERCISED OPTIONS AT 9/30/97 EXERCISABLE/ UNEXERCISABLE (NO. OF SHARES)	VALUE OF UNEXERCISED IN-THE-MONEY OPTIONS AT 9/30/97(1) EXERCISABLE/ UNEXERCISABLE
Floyd B. Graham.........................	--	$ --	--/5,000	$--/$--
Howell W. Pardue........................	--	--	--/5,000	--/ --
Edward L. Huff..........................	2,500	17,188	--/5,000	--/ --
Stephen C. Jumper.......................	3,750	23,906	--/5,000	--/ --

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(1) The high sales price per share on September 30, 1997 was $24.38 as reported by the Nasdaq National Market.

Defined Benefit Plans and Other Arrangements. Long-term incentive compensation for senior executive officers is not a policy of the Company. Accordingly, no awards or payouts have been made. The Company has no retirement or pension plan except for its Employee Stock Purchase Plan and its 1991 Incentive Stock Option Plan, both of which are described below.

COMPENSATION OF DIRECTORS

Directors who are not also employees of the Company receive $1,000 per month and 500 shares of Common Stock per year for serving as Directors.

COMPENSATION PLANS

Stock Option Plan. The Dawson Geophysical Company 1991 Incentive Stock Option Plan (the "1991 Plan") provides that 150,000 shares of the Company's authorized but unissued Common Stock are reserved for issuance pursuant to the 1991 Plan and are subject to options granted to key employees during the ten-year period ending January 8, 2001.

Options under the 1991 Plan will be granted at an exercise price equal to the market price of the Common Stock on the date of grant. Each option that is granted will be exercisable after the period or periods specified in the option agreement, but prior to the expiration of five years after the date of grant. Commencing one year after date of grant, optionees may purchase up to one-fourth of the shares covered by a particular grant, and each option becomes exercisable with respect to an additional one-fourth of the shares covered in each of the next three years.

During fiscal 1997, options to purchase an aggregate of 30,000 shares of Common Stock were granted to certain key employees of the Company under the 1991 Plan. The per share exercise price of all options granted in fiscal 1997 is $24.125, being the fair market value of a share of the Common Stock on the date of grant. During fiscal 1997, 36,500 shares of the Common Stock were issued pursuant to the exercise of options granted under the 1991 Plan. As of October 20, 1997, the total number of shares covered by outstanding options was 89,000.

Stock Purchase Plan. On November 1, 1982, the Board of Directors of the Company adopted an Employee Stock Purchase Plan (the "Purchase Plan") effective January 1, 1983, in which eligible employees may elect to purchase, through payroll deductions, shares of the Company's Common Stock and thereby increase their proprietary interest in the Company. Pursuant to the Purchase Plan, the Company contributes one dollar (before Social Security and withholding taxes) for each dollar contributed by an eligible employee to purchase Common Stock for the employee's account up to 5% of the employee's annual salary. As of September 30, 1997, two named executive officers participated in the Purchase Plan. On a bi-weekly basis, the Company matches the participants' contributions and directs the purchase of shares of the Company's Common Stock. There are no vesting requirements for the participants. The Company contributed $164,530, $198,863 and $217,723 to the Purchase Plan during the fiscal years 1995, 1996 and 1997, respectively.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Company's Compensation Committee makes recommendations regarding compensation subject to approval of the entire Board of Directors.

PRINCIPAL AND SELLING SHAREHOLDERS

The following table sets forth certain information, as adjusted to reflect the sale of the Common Stock offered by this Prospectus, with respect to the beneficial ownership of the Company's outstanding Common Stock by (i) each person known by the Company to own beneficially more than 5% of the outstanding Common Stock, (ii) each of the directors and executive officers of the Company, (iii) all directors and executive officers of the Company as a group and (iv) L. Decker Dawson, the President of the Company and the Selling Shareholder.

NAME AND ADDRESS OF SHAREHOLDER	SHARES BENEFICIALLY OWNED BEFORE THIS OFFERING(1) NUMBER	PERCENT	SHARES TO BE SOLD IN THIS OFFERING	SHARES BENEFICIALLY OWNED AFTER THIS OFFERING(1) NUMBER	PERCENT
L. Decker Dawson 208 South Marienfeld Midland, Texas 79701	1,007,272	23.98%	500,000	507,272	9.76%
Wellington Management Company(2) 75 State Street Boston Massachusetts 02109	410,000	9.76%	--	410,000	7.88%
Dimensional Fund Advisors Inc.(3) 1299 Ocean Avenue 11th Floor Santa Monica, California 90401	232,000	5.52%	--	232,000	4.46%
Howell W. Pardue	77,000	1.83%	--	77,000	1.48%
Calvin J. Clements	71,126	1.69%	--	71,126	1.37%
Floyd B. Graham	60,425	1.44%	--	60,425	1.16%
Stephen C. Jumper	21,928	*	--	21,928	*
Christina W. Hagan	16,420	*	--	16,420	*
Edward L. Huff	15,537	*	--	15,537	*
C. Ray Tobias	15,146	*	--	15,146	*
Tim C. Thompson	1,500	*	--	1,500	*
Paula W. Henry	1,152	*	--	1,152	*
Matthew P. Murphy	200	*	--	200	*
Share ownership of directors and executive officers as a group (11 persons)	1,287,706	30.66%		787,706	15.15%

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* Indicates less than 1% of the outstanding shares of Common Stock.

(1) Except as otherwise indicated, each shareholder shown in the table has sole voting and investment power with respect to all shares listed as beneficially owned by such shareholder.

(2) Wellington Management Company, LLP ("WMC") is an investment adviser registered with the Securities and Exchange Commission under the Investment Advisers Act of 1940, as amended. As of June 30, 1997, WMC, in its capacity as investment adviser, may be deemed to have beneficial ownership of 410,000 shares of Common Stock that are owned by numerous investment advisory clients, none of which is known to have such interest with respect to more than five percent of the class.

(3) Dimensional Fund Advisors Inc. ("Dimensional"), a registered investment advisor, is deemed to have beneficial ownership of 232,000 shares of Common Stock as of June 30, 1997, all of which shares are held in portfolios of DFA Investment Dimensions Group Inc., a registered open-end investment company, or in series of the DFA Investment Trust Company, a Delaware business trust, or the DFA Group Trust and DFA Participation Group Trust, investment vehicles for qualified employee benefit plans, all of which Dimensional Fund Advisors Inc. serves as investment manager. Dimensional disclaims beneficial ownership of all such shares.

DESCRIPTION OF CAPITAL STOCK

The Company is authorized to issue 5,000,000 shares of Preferred Stock, $1.00 par value per share, and 10,000,000 shares of Common Stock, $.33 1/3 par value per share. As of the date of this Prospectus, there were 4,200,000 shares of Common Stock issued and outstanding, and no shares of Preferred Stock have been issued. The outstanding shares of Common Stock are, and the shares of Common Stock to be sold by the Company as described herein will be when issued, fully paid and nonassessable.

PREFERRED STOCK

The Preferred Stock may be issued in series, and shares of each series shall have such rights and preferences as shall be fixed by the Board of Directors in the resolution or resolutions authorizing the issuance of that particular series. In designating any series of Preferred Stock the Board of Directors has authority without further action by the holders of Common Stock, to fix the number of shares constituting that series and to fix the dividend rights, dividend rate, conversion rights, rights and terms of redemption (including any sinking fund provisions), and the liquidation preferences of that series of Preferred Stock. The issuance of Preferred Stock could adversely affect the voting power of holders of Common Stock and the likelihood that such holders will receive dividend payments and payments upon liquidation and could have the effect of delaying, deferring or preventing a change in control of the Company. The Company has no present plans to issue any shares of Preferred Stock.

COMMON STOCK

Each share of Common Stock has one vote on all matters presented to the shareholders. Since the Common Stock does not have cumulative voting rights, the holders of more than 50% of the shares may, if they choose to do so, elect all of the directors and, in that event, the holders of the remaining shares will not be able to elect any directors. Subject to the rights and preferences of any Preferred Stock which may be designated and issued, the holders of Common Stock are entitled to dividends when and as declared by the Board of Directors and are entitled on liquidation to all assets remaining after payment of liabilities, subject to the liquidation preferences of any shares of Preferred Stock. The Common Stock has no preemptive or other subscription rights. There are no conversion rights or redemption or sinking fund provisions with respect to the Common Stock.

LIMITATION OF DIRECTOR LIABILITY

The Company's Restated Articles of Incorporation provide that the Company's directors will have no personal liability to the Company or its shareholders for monetary damages for breach or alleged breach of the directors' duty of care. This provision in the Restated Articles of Incorporation does not eliminate the directors' fiduciary duty of care, and in appropriate circumstances, equitable remedies such as an injunction or other forms of non-monetary relief should remain available under Texas law. Furthermore, each director will continue to be subject to liability for (i) a breach of the directors' duty of loyalty, (ii) acts or omissions not in good faith or involving intentional misconduct or knowing violations of law, (iii) any transaction from which a director derives an improper personal benefit, or (iv) an act or omission for which the liability of a director is expressly provided by an applicable statute. This provision does not affect a director's responsibilities under any other laws, such as the federal securities laws or state or federal environmental laws.

SHARES ELIGIBLE FOR FUTURE SALE

Sales of a substantial number of shares of Common Stock in the open market after this offering could adversely affect the trading price of the Common Stock. Immediately after this offering, the Selling Shareholder will hold 507,272 shares representing approximately 9.76% of the outstanding shares of Common Stock. A decision by the Selling Shareholder to sell shares of Common Stock could adversely affect the trading price of the Common Stock. Upon consummation of this offering, the Company will have 5,200,000 shares of Common Stock outstanding excluding 89,000 shares of Common Stock issuable upon exercise of outstanding employee stock options. Of such outstanding shares, the Company estimates that approximately 4,410,000 shares will be freely tradeable without restriction or further registration under the Securities Act unless purchased by an "affiliate" of the Company, as that term is defined in Rule 144 under the Securities Act. The remaining shares were acquired in transactions exempt from registration under the Securities Act and are or formerly were "restricted securities" within the meaning of Rule 144 and may not be resold unless they are registered under the Securities Act or are sold pursuant to an applicable exemption from registration, including Rule 144 under the Securities Act.

In general, under Rule 144 as currently in effect, a person (or persons whose shares are aggregated) who has beneficially owned shares for at least one year from the later of the date the shares were acquired from the Company or from an "affiliate" of the Company, is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of one percent of the then outstanding shares of Common Stock or the average weekly trading volume in the Common Stock during the four calendar weeks preceding such sale. Sales under Rule 144 are also subject to the availability of certain public information about the Company, restrictions on the manner of sale and notice requirements. A person who is not deemed an affiliate of the Company under the Securities Act, has not been an affiliate during the preceding 90 days and has beneficially owned shares for at least two years from the later of the date the shares were acquired from the Company or from an "affiliate" of the Company is entitled to sell such shares under Rule 144(k) without regard to the volume limitations and other restrictions described above.

See "Underwriting" for a description of certain agreements prohibiting the Company, the directors and officers thereof and the Selling Shareholder from selling shares of Common Stock (other than the shares sold pursuant to this Prospectus) for a period of 120 days from the date of this Prospectus.

TRANSFER AGENT AND REGISTRAR

The transfer agent and registrar for the Common Stock is ChaseMellon Shareholder Services, L.L.C., Dallas, Texas.

UNDERWRITING

Subject to the terms and conditions of an Underwriting Agreement, the Underwriters named below, through their representatives, Raymond James & Associates, Inc. and Principal Financial Securities, Inc. (the "Representatives"), have severally agreed to purchase from the Company and the Selling Shareholder the following respective numbers of shares of Common Stock at the initial price to public less the underwriting discounts and commissions set forth on the cover page of this Prospectus:

NAME	NUMBER OF SHARES
Raymond James & Associates, Inc.	
Principal Financial Securities, Inc.	
Total	1,500,000

The Underwriting Agreement provides that the obligations of the several Underwriters to pay for and accept delivery of the shares of Common Stock offered hereby are subject to certain conditions. The Underwriters are obligated to take and pay for all shares of Common Stock offered hereby (other than those covered by the over-allotment option described below) if any such shares are to be purchased.

The Underwriters, through the Representatives, propose to offer part of the shares of Common Stock directly to the public at the offering price set forth on the cover page of this Prospectus and part of the shares to certain dealers at a price that represents a concession not in excess of $ per share under the initial price to public. The Underwriters may allow, and such dealers may re-allow, a concession not in excess of $ per share to certain other dealers. After the initial offering of the shares to the public, the offering price and other selling terms may be changed by the Representatives. The Representatives of the Underwriters have advised the Company that the Underwriters do not intend to confirm sales to any accounts over which they exercise discretionary authority.

The Company has granted the Underwriters an option, exercisable not later than 30 days after the date of this Prospectus, to purchase up to an aggregate of 225,000 additional shares of Common Stock, at the initial price to public, less the underwriting discounts and commissions set forth on the cover page of this Prospectus. To the extent that the Underwriters exercise such option, each of the Underwriters will have a firm commitment to purchase approximately the same percentage thereof that the number of shares of Common Stock to be purchased by it shown in the above table bears to the total shown, and the Company will be obligated, pursuant to the option, to sell such shares to the Underwriters. The Underwriters may exercise their option only to cover over-allotments made in connection with the sale of the shares of Common Stock offered hereby. If purchased, the Underwriters will sell such additional shares on the same terms as those on which the shares that the Underwriters have agreed to purchase from the Company and the Selling Shareholder are being offered.

This offering of Common Stock is made for delivery when, as and if accepted by the Underwriters and subject to prior sale and to withdrawal, cancellation or modification of this offering without notice. The Underwriters reserve the right to reject an order for the purchase of shares in whole or in part.

Until the distribution of Common Stock in this offering is completed, rules of the Securities and Exchange Commission may limit the ability of the Underwriters and certain selling group members to bid for and purchase the Common Stock. As an exception to these rules, the Representatives are permitted to engage in certain transactions that stabilize the price of the Common Stock. Such transactions consist of bids or purchases for the purpose of pegging, fixing or maintaining the price of the Common Stock. If the Underwriters create a short position in the Common Stock in connection with this offering, i.e., if they sell more shares of Common Stock than are set forth on the cover page of this Prospectus, the Representatives may reduce the short position by purchasing Common Stock in the open market. The Representatives may also elect to reduce any short position by exercising all or part of the over-allotment option described above. The Representatives may also impose a penalty bid on certain Underwriters and selling group members. This means that if the Representatives purchase shares of Common Stock in the open market to reduce the Underwriters' short position or to stabilize the price of the Common Stock, they may reclaim the amount of the selling concession from the Underwriters and selling group members who sold those shares as part of this offering. In general, purchases of a security for the purpose of stabilization or to reduce a short position could cause the price of the security to be higher than it might be in the absence of such purchases. The imposition of a penalty bid might also have an effect on the price of a security to the extent that it discouraged resales of any security. Neither the Company, the Selling Shareholder nor any of the Underwriters makes any representation or predictions as to the direction or magnitude of any effect that the transactions described above may have on the price of the Common Stock. In addition, neither the Company, the Selling Shareholder nor any of the Underwriters makes any representation that the Representatives will engage in such transactions or the such transactions, once commenced, will not be discontinued without notice.

The Company, the Selling Shareholder and officers and directors of the Company, which upon consummation of this offering will own or have the right to acquire in the aggregate 817,706 shares of Common Stock, have agreed that they will not, without the prior written consent of Raymond James &

Associates, Inc., sell, offer to sell, contract to sell or otherwise transfer or dispose of any shares of Common Stock (other than the shares offered by the Selling Shareholder in this offering), options, rights or warrants to acquire shares of Common Stock, or securities exchangeable for or convertible into shares of Common Stock, during the 120-day period commencing on the date of this Prospectus, except that the Company may issue shares of Common Stock upon exercise of options outstanding under the 1991 Plan and may grant additional options under the 1991 Plan, provided that without the prior written consent of Raymond James & Associates, Inc., such additional options shall not be exercisable during such period.

The Company and the Selling Shareholder have agreed to indemnify the Underwriters against, and to contribute to losses arising out of, certain civil liabilities, including liabilities under the Securities Act.

Prior to the filing of the Registration Statement of which this Prospectus is a part, the Company paid the Representatives of the Underwriters a due diligence and advisory fee in the aggregate amount of $25,000.

The foregoing includes a summary of the principal terms of the Underwriting Agreement and does not purport to be complete. Reference is made to the form of Underwriting Agreement that is on file as an exhibit to the Registration Statement of which this Prospectus is a part.

LEGAL MATTERS

The validity of the Common Stock offered hereby will be passed upon for the Company by Stubbeman, McRae, Sealy, Laughlin & Browder, Inc., Midland, Texas. Certain matters relating to this offering will be passed upon for the Underwriters by Thompson & Knight, P.C., Dallas, Texas.

EXPERTS

The financial statements of the Company as of September 30, 1995 and 1996 and for each of the years in the three-year period ended September 30, 1996 have been included herein and in the Registration Statement in reliance upon the report of KPMG Peat Marwick LLP, independent certified public accountants, appearing elsewhere herein, and upon the authority of said firm as experts in accounting and auditing.

AVAILABLE INFORMATION

The Company has filed with the Commission a registration statement on Form S-1 (as amended and together with all exhibits thereto, the "Registration Statement") under the Securities Act with respect to the shares of Common Stock offered by this Prospectus. As permitted by the rules and regulations of the Commission, this Prospectus does not contain all of the information set forth in the Registration Statement. For further information with respect to the Company and the Common Stock offered, reference is made to the Registration Statement. Statements contained in this Prospectus concerning the provisions of any contract, agreement or other document are not necessarily complete. With respect to each contract, agreement or other document filed as an exhibit to the Registration Statement, reference is made to the exhibit for the complete contents of the exhibit, and each statement concerning its provisions is qualified in its entirety by such reference.

The Company is subject to the informational requirements of the Exchange Act, and in accordance therewith files reports, proxy statements and other information with the Commission, which can be inspected and copied at the public reference facilities maintained by the Commission at 450 Fifth Street, N.W., Judiciary Plaza, Room 1024, Washington, D.C. 20549, and at the following regional offices of the Commission: Chicago Regional Office, 500 W. Madison Street, Suite 1400, Chicago, Illinois 60661, and New York Regional Office, 7 World Trade Center, New York, New York 10048. Copies of such material may also be obtained by mail at prescribed rates from the Public Reference Section of the Commission at 450 Fifth Street, N.W., Judiciary Plaza, Washington, D.C. 20549. The Commission maintains an Internet world wide web site that contains reports, proxy and information reports and other materials that are filed through the Commission's Electronic Data Gathering, Analysis and Retrieval System. The site can be accessed at http://www.sec.gov.

INDEX TO FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT

The Board of Directors and Stockholders
Dawson Geophysical Company:

We have audited the accompanying balance sheets of Dawson Geophysical Company as of September 30, 1995 and 1996, and the related statements of operations, stockholders' equity, and cash flows for each of the years in the three-year period ended September 30, 1996. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Dawson Geophysical Company as of September 30, 1995 and 1996, and the results of its operations and its cash flows for each of the years in the three-year period ended September 30, 1996, in conformity with generally accepted accounting principles.

KPMG PEAT MARWICK LLP

Midland, Texas
November 5, 1996

DAWSON GEOPHYSICAL COMPANY

BALANCE SHEETS

ASSETS

	SEPTEMBER 30, 1995	SEPTEMBER 30, 1996	JUNE 30, 1997 (UNAUDITED)
Current assets:			
Cash and cash equivalents	$ 1,671,000	$ 1,493,000	$ 2,645,000
Marketable securities	3,767,000	988,000	3,680,000
Accounts receivable	5,008,000	6,161,000	8,454,000
Income taxes receivable	126,000	193,000	--
Prepaid expenses	220,000	148,000	293,000
Total current assets	10,792,000	8,983,000	15,072,000
Property, plant and equipment	39,248,000	56,368,000	55,225,000
Less accumulated depreciation	(17,698,000)	(23,442,000)	(25,550,000)
Net property, plant and equipment	21,550,000	32,926,000	29,675,000
	$ 32,342,000	$ 41,909,000	$ 44,747,000
LIABILITIES AND STOCKHOLDERS' EQUITY			
Current liabilities:			
Current maturities of long-term debt	$ --	$ 857,000	$ 857,000
Accounts payable	682,000	2,079,000	1,560,000
Accrued liabilities:			
Income taxes payable	--	--	174,000
Payroll costs and other taxes	291,000	560,000	294,000
Other	178,000	144,000	297,000
Total current liabilities	1,151,000	3,640,000	3,182,000
Long-term debt, less current maturities	--	4,857,000	4,214,000
Deferred income taxes	335,000	608,000	1,131,000
Stockholders' equity:			
Preferred stock -- par value $1.00 per share; 5,000,000 shares authorized, none outstanding	--	--	--
Common stock -- par value $.33 1/3 per share; 10,000,000 shares authorized, 4,149,050 shares as of September 30, 1995 and 4,161,550 shares as of September 30, 1996 and 4,199,250 shares as of June 30, 1997, issued and outstanding	1,383,000	1,387,000	1,400,000
Additional paid-in capital	16,973,000	17,021,000	17,171,000
Net unrealized loss on marketable securities	(13,000)	(5,000)	--
Retained earnings	12,513,000	14,401,000	17,649,000
Total stockholders' equity	30,856,000	32,804,000	36,220,000
Contingencies (See note 11)			
	$ 32,342,000	$ 41,909,000	$ 44,747,000

See accompanying notes to the financial statements.

DAWSON GEOPHYSICAL COMPANY

STATEMENTS OF OPERATIONS

	YEARS ENDED SEPTEMBER 30,			NINE MONTHS ENDED JUNE 30,	
	1994	1995	1996	1996	1997
				(UNAUDITED)	
Operating revenues	$23,027,000	$28,188,000	$33,518,000	$24,485,000	$34,304,000
Operating costs:					
Operating expenses	15,478,000	20,067,000	23,763,000	17,613,000	22,840,000
General and administrative	887,000	975,000	1,299,000	1,031,000	1,052,000
Depreciation	3,016,000	4,150,000	5,818,000	4,104,000	5,456,000
	19,381,000	25,192,000	30,880,000	22,748,000	29,348,000
Income from operations	3,646,000	2,996,000	2,638,000	1,737,000	4,956,000
Other income (expense):					
Interest and dividend income	209,000	399,000	253,000	187,000	167,000
Interest expense	(376,000)	(170,000)	(144,000)	(26,000)	(341,000)
Gain on disposal of assets	68,000	76,000	11,000	9,000	196,000
Other	(30,000)	8,000	2,000	1,000	15,000
Proceeds from litigation settlement	--	131,000	--	--	--
Income before income tax expense	3,517,000	3,440,000	2,760,000	1,908,000	4,993,000
Income tax expense:					
Current	1,212,000	970,000	599,000	373,000	1,222,000
Deferred	39,000	296,000	273,000	314,000	523,000
	1,251,000	1,266,000	872,000	687,000	1,745,000
Net income	$ 2,266,000	$ 2,174,000	$ 1,888,000	$ 1,221,000	$ 3,248,000
Income per common share	$ .74	$ .54	$ .45	$ .29	$ .78
Weighted average equivalent common shares outstanding	3,045,294	3,989,949	4,182,891	4,180,520	4,190,713

See accompanying notes to the financial statements.

DAWSON GEOPHYSICAL COMPANY

STATEMENTS OF CASH FLOWS

	YEARS ENDED SEPTEMBER 30,			NINE MONTHS ENDED JUNE 30,	
	1994	1995	1996	1996	1997
				(UNAUDITED)	
Cash flows from operating activities:					
Net income	$ 2,266,000	$ 2,174,000	$ 1,888,000	$ 1,221,000	$ 3,248,000
Adjustments to reconcile net income to net cash provided by operating activities:					
Depreciation	3,016,000	4,150,000	5,818,000	4,104,000	5,456,000
Gain on disposal of assets	(68,000)	(76,000)	(11,000)	(9,000)	(196,000)
Non-cash interest income	(56,000)	(229,000)	(101,000)	--	--
Deferred income taxes	39,000	296,000	273,000	314,000	523,000
Other	44,000	--	--	(82,000)	(3,000)
Change in current assets and liabilities:					
Decrease (increase) in accounts receivable	46,000	(704,000)	(1,153,000)	(613,000)	(2,293,000)
Decrease (increase) in prepaid expenses	(47,000)	(21,000)	72,000	13,000	(145,000)
Decrease (increase) in income taxes receivable	--	(126,000)	(67,000)	(285,000)	193,000
Increase (decrease) in accounts payable	(213,000)	548,000	(222,000)	2,163,000	(519,000)
Increase (decrease) in accrued liabilities	261,000	(118,000)	235,000	22,000	(113,000)
Increase (decrease) in income taxes payable	101,000	(121,000)	--	--	174,000
Net cash provided by operating activities	5,389,000	5,773,000	6,732,000	6,848,000	6,325,000
Cash flows from investing activities:					
Proceeds from disposal of assets	69,000	273,000	33,000	31,000	288,000
Capital expenditures	(6,161,000)	(10,961,000)	(15,597,000)	(10,490,000)	(2,340,000)
Proceeds from sale of marketable securities	--	--	2,884,000	745,000	742,000
Proceeds from maturity of marketable securities	2,750,000	7,827,000	2,100,000	2,100,000	--
Investment in marketable securities	(2,662,000)	(5,935,000)	(2,096,000)	(2,096,000)	(3,377,000)
Net cash used in investing activities	(6,004,000)	(8,796,000)	(12,676,000)	(9,710,000)	(4,687,000)
Cash flows from financing activities:					
Principal payments on debt	(14,625,000)	(7,875,000)	(286,000)	(71,000)	(643,000)
Proceeds from debt	15,267,000	1,500,000	6,000,000	3,854,000	--
Issuance of common stock	--	10,776,000	--	--	--
Proceeds from exercise of stock options	29,000	142,000	52,000	52,000	157,000
Net cash provided (used in) by financing activities	671,000	4,543,000	5,766,000	3,835,000	(486,000)
Net increase (decrease) in cash and cash equivalents	56,000	1,520,000	(178,000)	973,000	1,152,000
Cash and cash equivalents at beginning of year	95,000	151,000	1,671,000	1,671,000	1,493,000
Cash and cash equivalents at end of year	$ 151,000	$ 1,671,000	$ 1,493,000	$ 2,644,000	$ 2,645,000

See accompanying notes to the financial statements.

DAWSON GEOPHYSICAL COMPANY

STATEMENTS OF STOCKHOLDERS' EQUITY

	COMMON STOCK					
	NUMBER OF SHARES	AMOUNT	ADDITIONAL PAID-IN CAPITAL	NET UNREALIZED LOSS ON MARKETABLE SECURITIES	RETAINED EARNINGS	TOTAL
Balance, September 30, 1993	2,996,050	$ 999,000	$ 6,410,000	$ --	$ 8,073,000	$15,482,000
Exercise of stock options	6,750	2,000	27,000	--	--	29,000
Net unrealized loss on marketable securities	--	--	--	(91,000)	--	(91,000)
Net Income	--	--	--	--	2,266,000	2,266,000
Balance, September 30, 1994	3,002,800	1,001,000	6,437,000	(91,000)	10,339,000	17,686,000
Issuance of common stock	1,114,000	371,000	10,405,000	--	--	10,776,000
Exercise of stock options	32,250	11,000	131,000	--	--	142,000
Net unrealized gain on marketable securities	--	--	--	78,000	--	78,000
Net Income	--	--	--	--	2,174,000	2,174,000
Balance, September 30, 1995	4,149,050	1,383,000	16,973,000	(13,000)	12,513,000	30,856,000
Exercise of stock options	12,500	4,000	48,000	--	--	52,000
Net unrealized gain on marketable securities	--	--	--	8,000	--	8,000
Net Income	--	--	--	--	1,888,000	1,888,000
Balance, September 30, 1996	4,161,550	1,387,000	17,021,000	(5,000)	14,401,000	32,804,000
Exercise of stock options (unaudited)	36,500	12,000	145,000	--	--	157,000
Stock compensation (unaudited)	1,200	1,000	5,000	--	--	6,000
Net unrealized gain on marketable securities (unaudited)	--	--	--	5,000	--	5,000
Net income (unaudited)	--	--	--	--	3,248,000	3,248,000
Balance June 30, 1997 (unaudited)	4,199,250	$1,400,000	$17,171,000	$ --	$17,649,000	$36,220,000

See accompanying notes to the financial statements.

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Organization and Nature of Operations

Dawson Geophysical Company (the "Company"), which was incorporated in Texas in 1952, has been listed and traded on the Nasdaq National Market under the symbol "DWSN" since 1981.

The Company acquires and processes 3-D seismic data for major and intermediate-sized oil and gas companies and independent oil operators who retain exclusive rights to the information obtained. The Company's land-based acquisition crews operate primarily in the southwestern United States, and data processing is performed by geophysicists at the Company's computer center in Midland, Texas.

Cash Equivalents

For purposes of the statements of cash flows, the Company considers demand deposits, certificates of deposit and all highly liquid debt instruments purchased with a maturity of three months or less to be cash equivalents.

Marketable Securities

The Company accounts for its investments in marketable securities in accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities" (Statement 115). In accordance with Statement 115, the Company has classified its investment portfolio consisting of U.S. Treasury securities as "available-for-sale" and records the net unrealized holding gains and losses as a separate component of stockholders' equity. The cost of marketable securities sold is based on the specific identification method.

Concentrations of Credit Risk

Financial instruments which potentially expose the Company to concentrations of credit risk, as defined by Statement of Financial Accounting Standards No. 105, consist primarily of trade accounts receivable and marketable securities. The Company's sales are to customers whose activities relate to oil and gas exploration and production. However, accounts receivable are well diversified among many customers, and a significant portion of the receivables are from major oil companies, which management believes minimizes potential credit risk. The Company generally extends unsecured credit to these customers; therefore, collection of receivables may be affected by the economy surrounding the oil and gas industry. The Company invests primarily in U.S. Treasury securities which are a low risk investment. However, the Company closely monitors extensions of credit and has not experienced significant credit losses in recent years.

Property, Plant and Equipment

Property, plant and equipment are carried at cost. Depreciation is computed using the straight-line method. When assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts, and any resulting gain or loss is reflected in the results of operations for the period.

Impairment of Long-Lived Assets

In March, 1995, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 121, "Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of" (Statement 121) which requires companies to assess their long-lived assets for impairment. Statement 121 requires companies to review for impairment whenever events or changes in circumstances

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

indicate that the carrying amount of a long-lived asset may not be recoverable. The Company adopted Statement 121 as of September 30, 1995. The effect of the adoption of Statement 121 was not material to the Company and accordingly, no provision was recorded in the Statement of Operations for the years ended September 30, 1995 and 1996.

Income Taxes

The Company accounts for state and federal income taxes in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes" (Statement 109). Under the asset and liability method of Statement 109, deferred income taxes are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Under Statement 109, the effect on deferred taxes of a change in tax rates is recognized in income in the period that includes the enactment date.

Income per Common Share

Income per common share is computed based on the weighted average common shares and common share equivalents outstanding during each year. The dilutive effect of stock options granted is included in the computation of income per common share. The effect of common share equivalents on a fully diluted basis as compared to a primary basis was less than 3% for 1994, 1995 and 1996.

Use of Estimates in the Preparation of Financial Statements

Preparation of the accompanying financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Interim Financial Statements

The interim financial information as of June 30, 1997, and for the nine months ended June 30, 1996 and 1997, is unaudited. However, in the opinion of management, these interim financial statements include all the necessary adjustments to fairly present the results of the interim periods, and all such adjustments are of a normal recurring nature. The interim financial statements should be read in conjunction with the audited financial statements for the years ended September 30, 1994, 1995 and 1996.

Reclassifications

Certain amounts have been reclassified in 1994 to conform to the 1995 and 1996 presentation.

2. MARKETABLE SECURITIES

Marketable securities, consisting entirely of U.S. Treasury Securities, had a cost of $3,780,000 and $993,000 and a market value of approximately $3,767,000 and $988,000 at September 30, 1995 and 1996, respectively.

As of September 30, 1995 and 1996, gross unrealized holding losses were $13,000 and $5,000, respectively. U.S. Treasury Securities held at September 30, 1996 will mature in March 1998.

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

During 1995, the Company received final settlement of $131,000 of the class action lawsuit related to certain preferred stock purchased in 1987.

3. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, together with annual depreciation rates, consist of the following:

	SEPTEMBER 30		
	1995	1996	RATES
Land	$ 836,000	$ 836,000	--
Buildings and improvements	1,159,000	1,214,000	3 to 12.5 percent
Machinery and equipment	35,077,000	52,150,000	10 to 20 percent
Equipment in process(a)	2,176,000	2,168,000	--
	$39,248,000	$56,368,000	

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(a) Equipment in process has not been placed into service and accordingly has not been subject to depreciation.

4. SHORT-TERM AND LONG-TERM DEBT

As of April 1, 1996, the Company has two notes payable that exist under a loan agreement with a bank. The loan agreement consists of (1) a revolving line of credit of $5,000,000 to mature April 15, 1997 with funding availability determined by a borrowing base calculation; and (2) a term note of $6,000,000 to mature March 15, 2003. Both notes are secured by eligible accounts receivable and equipment purchased from loan proceeds. The loan agreement contains various restrictive covenants and compliance requirements. Among others, the agreement requires that no liens exist upon any of the collateral nor any vehicle owned by the Company. The notes bear interest at the bank's prime rate (8.25% at September 30, 1996). The term note requires monthly principal and interest payments.

The Company borrowed $6,000,000 through three advances on the term note for the purchase of capital equipment. At September 30, 1996, the current maturity of the long-term debt is $857,000. For fiscal years 1998 through 2002, the annual maturity is $857,000, and for fiscal year 2003, the annual maturity will be the balance. As of November 15, 1996, the Company has not utilized the revolving line of credit.

The Company entered into a loan agreement, as amended (the "Loan Agreement"), with Norwest Bank Texas, N.A. ("Norwest"). The Loan Agreement consists of (1) a revolving line of credit of $6,000,000 which matures on April 15, 1999, (2) a term note in the aggregate principal amount of $6,000,000 bearing interest at Norwest's prime rate and which matures on March 15, 2003 and (3) a term note in the aggregate principal amount of $5,000,000 bearing interest at the prime rate as published in The Wall Street Journal and which matures on April 15, 2003. The $5,000,000 term note, together with working capital, were utilized to finance the purchase of equipment placed into service in August 1997. The term notes are secured by eligible accounts receivable and equipment purchased from loan proceeds. At September 30, 1997, approximately $9.5 million was outstanding under the term notes all of which were bearing interest at 8.5% per annum.

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

5. STOCK OPTIONS

The Company's 1991 Incentive Stock Option Plan, which extends the 1981 Plan, provides options to purchase 150,000 shares of authorized but unissued common stock of the Company. The option price is the market value of the Company's common stock at date of grant. Options are exercisable 25% annually from the date of the grant and the options expire five years from date of grant.

The transactions under the 1991 Plan are summarized as follows:

	OPTION PRICE PER SHARE	NUMBER OF OPTIONED SHARES
Balance as of September 30, 1993	$ 3.625 to $ 8.875	133,750
Granted	$7.25	15,000
Exercised	$ 4.25 to $ 4.75	(6,750)
Cancelled or expired	$ 4.75 to $ 8.875	(7,000)
Balance as of September 30, 1994	$ 3.625 to $ 8.875	135,000
Granted	$11.25	17,000
Exercised	$ 3.625 to $ 4.75	(32,250)
Cancelled or expired	$ 4.75 to $ 8.875	(7,000)
Balance as of September 30, 1995	$ 4.25 to $ 11.25	112,750
Exercised	$4.25	(12,500)
Balance as of September 30, 1996	$ 4.25 to $ 11.25	100,250

Options for 62,500, 54,250 and 73,000 shares were exercisable as of September 30, 1994, 1995 and 1996, respectively.

6. EMPLOYEE STOCK PURCHASE PLAN

The Company has an employee stock purchase plan to invest in the Company's common stock for the benefit of eligible employees. Participants were entitled to contribute a percentage, not to exceed 5%, of their biweekly salary to the plan. On a bi-weekly basis, the Company matches the participants' contributions and directs the purchase of shares of the Company's common stock. There are no vesting requirements for the participants. The Company contributed $88,659, $164,530 and $198,863 to the plan during 1994, 1995 and 1996, respectively.

7. INCOME TAXES

Income tax expense (benefit) attributable to income before extraordinary item consists of:

	YEAR ENDED SEPTEMBER 30,		
	1994	1995	1996
Current:			
U.S. federal	$1,128,000	$ 859,000	$596,000
State	84,000	111,000	3,000
	1,212,000	970,000	599,000
Deferred -- U.S. federal	39,000	296,000	273,000
Total	$1,251,000	$1,266,000	$872,000

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

Income tax expense varies from the amount computed by multiplying income before taxes by the statutory income tax rate. The reason for these differences and the related tax effects are as follows:

	YEAR ENDED SEPTEMBER 30,		
	1994	1995	1996
Expense computed at statutory rates	$1,196,000	$1,169,000	$938,000
Effect of:			
State income taxes, net of federal income tax benefit	56,000	73,000	10,000
Other	(1,000)	24,000	(76,000)
Income tax expense	$1,251,000	$1,266,000	$872,000

A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. During 1995, the Company decreased the valuation allowance as a result of the expiration and utilization of the capital loss carryforward.

8. STATEMENT OF CASH FLOWS

The Company paid current and estimated tax payments of $1,091,000, $1,019,000 and $619,000 in 1994, 1995 and 1996, respectively. Payments of interest were $376,000, $170,000 and $144,000 in 1994, 1995 and 1996, respectively. During 1995, the Company exchanged certain buildings and land plus cash of $425,000 for buildings and land held by a third party.

9. MAJOR CUSTOMERS

The Company operates in only one business segment, contract seismic data acquisition and processing services. The major customers in 1994, 1995 and 1996 varied and sales to these customers, as a percentage of operating revenues, were as follows:

	1994	1995	1996
Customer A	--	--	11%
Customer B	--	20%	--
Customer C	--	16%	--
Customer D	28%	--	--

10. EQUITY OFFERING

During the first quarter of fiscal 1995, the Company completed a public offering of 1,114,000 shares with net proceeds of approximately $10,776,000 used to acquire seismic equipment and retire debt.

11. CONTINGENCIES

The Company is a defendant in two lawsuits pending in the 112th and 83rd District Courts of Pecos County, Texas (respectively, Cause No. 8812, Ernestine Bernal, et al. vs. Javier Antonio Orona, et al.; and Cause No. P5565-83-CV, Carla Jaquez, et al. vs. Javier Antonio Orona, et al.) relating to a July 1995 accident involving a van owned by the Company which was used to transport employees to various job sites and a non-Company owned vehicle. The accident resulted in the deaths of four Company employees who were passengers in such van. The Company is one of several named defendants in such suits. Other named defendants include the estate of the deceased driver of such van, who was an employee of the Company, the driver of such non-Company owned vehicle, who was then an employee of the Company, the owner of such vehicle, and Ford Motor Company, the manufacturer of the Company van involved in such accident. In

DAWSON GEOPHYSICAL COMPANY

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)
(THE INFORMATION AND AMOUNTS FOR INTERIM PERIODS ARE UNAUDITED)

general, the claims against the Company include allegations of negligence, gross negligence and/or intentional tort as a result of, among other things, the Company's alleged failure to provide safe transportation for its employees and to properly select, train and supervise the deceased driver of such van. The plaintiffs in such suits are seeking actual damages from the defendants of $15.5 million, additional unspecified actual damages, pre-judgment and post-judgment interest and costs of suit as well as exemplary and punitive damages in an amount not to exceed four times the amount of actual damages. The Company believes that it has meritorious defenses to the claims asserted against it in such suits and it intends to continue to vigorously defend itself against such claims. In addition, the Company believes that it has approximately $11 million of liability insurance coverage to provide against an unfavorable outcome. Such suits are currently in the discovery stage and the Company currently has pending before the court a motion for summary judgment in Cause No. 8812 requesting that the Company be dismissed from such suit based upon various legal theories. Such motion has not yet been heard by the court. A trial date of July 20, 1998 has been set in Cause No. 8812. No trial date has yet been set for Cause No. P5565-83-CV. Due to the uncertainties inherent in litigation, no assurance can be given as to the ultimate outcome of such suits or the adequacy or availability of the Company's liability insurance to cover the damages, if any, which may be assessed against the Company in such suits. A judgment awarding plaintiffs an amount significantly exceeding the Company's available insurance coverage could have a material adverse effect on the Company's financial condition, results of operations and liquidity.

The Company is party to other legal actions arising in the ordinary course of its business, none of which management believes will result in a material adverse effect on the Company's financial position or results of operation, as the Company believes it is adequately insured.

12. QUARTERLY FINANCIAL DATA (UNAUDITED)

	QUARTER ENDED			
	DECEMBER 31	MARCH 31	JUNE 31	SEPTEMBER 30
1995:				
Operating revenues	$7,016,000	$7,467,000	$7,461,000	$6,244,000
Income from operations	$ 848,000	$ 930,000	$ 873,000	$ 344,000
Net income	$ 547,000	$ 647,000	$ 713,000	$ 267,000
Net Income per common share	$ .16	$ .15	$ .17	$ .06
1996:				
Operating revenues	$7,358,000	$8,572,000	$8,555,000	$9,033,000
Income from operations	$ 56,000	$ 931,000	$ 750,000	$ 901,000
Net income	$ 77,000	$ 630,000	$ 514,000	$ 667,000
Net Income per common share	$ .02	$ .15	$ .12	$ .16

NO DEALER, SALESPERSON OR OTHER PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS IN CONNECTION WITH THIS OFFERING AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY, THE SELLING SHAREHOLDER OR THE UNDERWRITERS. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL, OR A SOLICITATION OF AN OFFER TO BUY, TO ANY PERSON IN ANY JURISDICTION IN WHICH SUCH OFFER TO SELL OR SOLICITATION IS NOT AUTHORIZED, OR IN WHICH THE PERSON MAKING SUCH OFFER OR SOLICITATION IS NOT QUALIFIED TO DO SO, OR TO ANY PERSON TO WHOM IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCES, CREATE ANY IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY OR THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO THE DATE HEREOF.

TABLE OF CONTENTS

1,500,000 SHARES

[DAWSON LOGO]

DAWSON
GEOPHYSICAL
COMPANY

COMMON STOCK

PROSPECTUS

RAYMOND JAMES & ASSOCIATES, INC.

PRINCIPAL FINANCIAL SECURITIES, INC.

, 1997

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, incurred or to be incurred in connection with the sale of the common Stock being registered (all amounts are estimated except the SEC registration fee, the NASD filing fee and the Nasdaq National Market filing fee) all of which will be paid by the Registrant:

SEC registration fee	$11,826.70
NASD filing fee	4,403.00
Nasdaq National Market filing fee	17,500.00
Printing and engraving costs	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue Sky fees and expenses	10,000.00
Transfer agent and registrar fees	*
Miscellaneous	
Total	$ *

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* To be supplied by amendment.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Article Seven of the Articles of Incorporation, as amended, of Dawson Geophysical Company (the "Registrant") provides as follows:

> "A director of the corporation shall not be personally liable to the corporation or its shareholders for monetary damages for an act or omission in such director's capacity as a director, except for liability for (i) a breach of a director's duty of loyalty to the corporation or its shareholders; (ii) an act or omission not in good faith or that involves intentional misconduct or a knowing violation of the law; (iii) a transaction from which a director received an improper benefit, whether or not the benefit resulted from an action taken within the scope of the director's office; (iv) an act or omission for which the liability of a director is expressly provided by statue; or (v) an act related to an unlawful stock repurchase or payment of a dividend. If the laws of the State of Texas are hereafter amended to authorize corporate action further eliminating or limiting the personal liability of a director of the corporation, then the liability of a director of the corporation shall thereupon automatically be eliminated or limited to the fullest extent permitted by such laws. Any repeal or modification of this Article Seven by the shareholders of the corporation shall not adversely affect any right or protection of a director existing at the time of such repeal or modification with respect to events or circumstances occurring or existing prior to such time."

Article IX of the Bylaws of the Registrant provides that:

> "To the extent permitted by Texas Business Corporation Act Article 2.02-1, the corporation shall indemnify any present or former Director, officer, employee, or agent of the corporation against judgments, penalties (including excise and similar taxes), fines, settlements, and reasonable expenses actually incurred by the person in connection with a proceeding in which the person was, is, or is threatened to be made a named defendant or respondent because the person is or was a Director, officer, employee, or agent of the corporation."

Article 2.02-1 of the Texas Business Corporation Act permits corporations to indemnify a person who was or is a director, officer, employee, or agent of a corporation or who serves at the corporation's request as a director, officer, partner, proprietor, trustee, employee, or agent of another corporation, partnership, trust, joint venture, or other enterprise (an "outside enterprise"), who was, is, or is threatened to be named a defendant in a legal proceeding by virtue of such person's position in the corporation or in an outside enterprise, but only if the person acted in good faith and reasonably believed, in the case of conduct in the person's official capacity, that the conduct was in or, in the case of all other conduct, that the conduct was not opposed to the corporation's best interest, and, in the case of a criminal proceeding, the person had no reasonable cause to believe the conduct was unlawful. A person may be indemnified within the above limitations against judgments, penalties (including excise and similar taxes), fines, settlements, and reasonable expenses actually incurred; however, indemnification is limited to reasonable expenses actually incurred in a proceeding in which the person is found liable to the corporation or is found to have improperly received a personal benefit and shall not be made in respect of any proceeding in which the person shall have been found liable for willful or intentional misconduct in the performance of his duty to the corporation. A corporation must indemnify a director, officer, employee, or agent against reasonable expenses incurred in connection with a proceeding in which the person is a party because of the person's corporate position, if the person was successful, on the merits or otherwise, in the defense of the proceeding. Under certain circumstances, a corporation may also advance expenses to such person.

Indemnification can be made by the corporation only upon a determination made in the manner prescribed by the statute that indemnification is proper in the circumstances because the party seeking indemnification has met the applicable standard of conduct as set forth in Article 2.02-1 of the Texas Business Corporation Act.

Article 2.02-1 of the Texas Business Corporation Act also permits a corporation to purchase and maintain insurance or to make other arrangements on behalf of any of the above persons against any liability asserted against and incurred by the person in such capacity, or arising out of the person's status as such a person, whether or not the corporation would have the powers to indemnify the person against the liability under applicable law.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

The following information relates to all securities sold by the Registrant within the past three years and not registered under the Securities Act of 1933 (the "Securities Act").

The only securities sold by the Registrant within the past three years and not registered under the Securities Act have been in connection with the exercise of employee stock options granted to certain key employees of the Registrant pursuant to the Registrant's 1991 Incentive Stock Option Plan. During the past three years, 17 employees of the Company exercised stock options for the purchase of a total of 81,250 shares of Common Stock at an average exercise price of $4.33 per share.

Each of the transactions described above was conducted in reliance upon the exemption from registration provided in Section 4(2) of the Securities Act and the rules and regulations promulgated thereunder. Furthermore, each of the certificates representing the Registrant's securities issued in connection with such transactions contains a restrictive legend, as appropriate, and each person acquiring such securities from the Registrant furnished investment representations to the Registrant and no underwriters participated in such transactions.

No other sales of securities were made by the Registrant during the past three year period.

SCHEDULES:

The schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission are not required under the related instructions or are inapplicable and, therefore, have been omitted.

ITEM 16. EXHIBITS.

Exhibits.

EXHIBIT NO.	DESCRIPTION OF EXHIBIT
1.1 (1)	-- Proposed form of Underwriting Agreement.
3.1 (2)	-- Restated and Amended Articles of Incorporation of Dawson Geophysical Company.
3.2 (2)	-- Bylaws of Dawson Geophysical Company.
5.1 (1)	-- Opinion of Stubbeman, McRae, Sealy, Laughlin & Browder, Inc., counsel for the Company.
10.1 (2)	-- Form of Short Term Seismograph Service Agreement for Periodic Performance between Dawson Geophysical Company and clients.
10.2 (2)	-- Form of Supplemental Agreement for Geophysical Services for seismograph services between Dawson Geophysical Company and clients.
10.3 (2)	-- License Agreement granting license to use system for seismic exploration, dated May 15, 1992 between Dawson Geophysical Company and Techno Geophysical Services, Ltd.
10.4 (2)	-- Dawson Geophysical Company 1991 Incentive Stock Option Plan.
10.5 (2)	-- Dawson Geophysical Company Employee Stock Purchase Plan.
10.6 (3)	-- Loan Agreement dated April 1, 1996 by and between Dawson Geophysical Company and Norwest Bank Texas, N.A.
10.7 (4)	-- First Amendment to Loan Agreement, dated April 15, 1997.
10.8 (3)	-- Security Agreement dated April 1, 1996 relating to the Loan Agreement between Dawson Geophysical Company and Norwest Bank Texas, N.A.
10.9	-- First Amendment to Security Agreement, dated April 15, 1997.
10.10(3)	-- Term Note of Dawson Geophysical Company dated April 1, 1996.
10.11(3)	-- Revolving Note of Dawson Geophysical Company dated April 1, 1996.
10.12(4)	-- Term Note of Dawson Geophysical Company dated April 15, 1997.
10.13(4)	-- Revolving Note of Dawson Geophysical Company, Dated April 15, 1997.
23.1	-- Consent of KPMG Peat Marwick LLP
23.2 (1)	-- Consent of Stubbeman, McRae, Sealy, Laughlin & Browder, Inc. (included in their opinion filed as Exhibit 5.1).
24.1	-- Power of Attorney (included on the signature page of this Registration Statement).

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(1) To be filed by amendment.

(2) Incorporated by reference to Registrant's Form S-1, dated October 19, 1994 (Commission File No. 33-85328).

(3) Incorporated by reference to the Registrant's Annual Report on Form 10-K for the fiscal year ended September 30, 1996.

(4) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1997.

ITEM 17. UNDERTAKINGS

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer, or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The undersigned registrant hereby undertakes that:

(1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Midland, and the State of Texas, on the 21st day of October, 1997.

DAWSON GEOPHYSICAL COMPANY

By /s/ L. DECKER DAWSON

L. Decker Dawson
President

POWER OF ATTORNEY

Each of the undersigned hereby appoints L. Decker Dawson, Floyd B. Graham, and Howell W. Pardue, and each of them (with full power to act alone), as attorneys and agents for the undersigned, with full power of substitution, for and in the name, place and stead of the undersigned, to sign and file with the Securities and Exchange Commission under the Securities Act of 1933, any and all amendments, including post-effective amendments, and exhibits to this Registration Statement and any and all applications, instruments, and other documents to be filed with the Securities and Exchange Commission pertaining to the registration of the securities covered hereby, with full power and authority to do and perform any and all acts and things whatsoever requisite or desirable.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE	TITLE	DATE
/s/ L. DECKER DAWSON L. Decker Dawson	Director, President (Principal Executive Officer)	October 21, 1997
/s/ FLOYD B. GRAHAM Floyd B. Graham	Director, Vice-President	October 21, 1997
/s/ HOWELL W. PARDUE Howell W. Pardue	Director, Vice-President	October 21, 1997
/s/ CALVIN J. CLEMENTS Calvin J. Clements	Director	October 21, 1997
/s/ MATTHEW P. MURPHY Matthew P. Murphy	Director	October 21, 1997
/s/ TIM C. THOMPSON Tim C. Thompson	Director	October 21, 1997
/s/ CHRISTINA W. HAGAN Christina W. Hagan	Vice President, Chief Financial Officer (Principal Financial and Accounting Officer)	October 21, 1997

INDEX TO EXHIBITS

EXHIBIT NO.	DESCRIPTION OF EXHIBIT
1.1 (1)	-- Proposed form of Underwriting Agreement.
3.1 (2)	-- Restated and Amended Articles of Incorporation of Dawson Geophysical Company.
3.2 (2)	-- Bylaws of Dawson Geophysical Company.
5.1 (1)	-- Opinion of Stubbeman, McRae, Sealy, Laughlin & Browder, Inc., counsel for the Company.
10.1 (2)	-- Form of Short Term Seismograph Service Agreement for Periodic Performance between Dawson Geophysical Company and clients.
10.2 (2)	-- Form of Supplemental Agreement for Geophysical Services for seismograph services between Dawson Geophysical Company and clients.
10.3 (2)	-- License Agreement granting license to use system for seismic exploration, dated May 15, 1992 between Dawson Geophysical Company and Techno Geophysical Services, Ltd.
10.4 (2)	-- Dawson Geophysical Company 1991 Incentive Stock Option Plan.
10.5 (2)	-- Dawson Geophysical Company Employee Stock Purchase Plan.
10.6 (3)	-- Loan Agreement dated April 1, 1996 by and between Dawson Geophysical Company and Norwest Bank Texas, N.A.
10.7 (4)	-- First Amendment to Loan Agreement, dated April 15, 1997.
10.8 (3)	-- Security Agreement dated April 1, 1996 relating to the Loan Agreement between Dawson Geophysical Company and Norwest Bank Texas, N.A.
10.9	-- First Amendment to Security Agreement, dated April 15, 1997.
10.10(3)	-- Term Note of Dawson Geophysical Company dated April 1, 1996.
10.11(3)	-- Revolving Note of Dawson Geophysical Company dated April 1, 1996.
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(4) Incorporated by reference to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 1997.

EXHIBIT 10.9

FIRST AMENDMENT TO SECURITY AGREEMENT

This First Amendment to Security Agreement (the "First Amendment to Security Agreement"), dated as of April 15, 1997, is made and entered into by and between Dawson Geophysical Company, a Texas corporation (the "Debtor"), and Norwest Bank Texas, N.A., a national banking association (the "Secured Party").

WITNESSETH

WHEREAS, the Debtor and the Secured Party have entered into that certain Loan Agreement, dated as of April 1, 1996, providing for the loans and the other matters set forth therein;

WHEREAS, pursuant to the terms and conditions of the Loan Agreement, the Debtor and the Secured Party also entered into that certain Security Agreement, dated as of April 1, 1996;

WHEREAS, at the request of Debtor, the Lender is willing to amend the Loan Agreement to provide for, among other things, additional financing requested by the Debtor, but only upon and subject to the terms and conditions of that certain First Amendment to Loan Agreement, dated of even date herewith, and the further condition precedent that Debtor execute and deliver this First Amendment to Security Agreement;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, the parties hereto hereby agree as follows:

SECTION 1. DEFINED TERMS.

All terms defined in the Security Agreement, and not otherwse defined in this First Amendment, shall have the meanings given them in the Security Agreement when used herein.

SECTION 2. AMENDMENTS TO SECURITY AGREEMENT.

(a) All references in the Security Agreement to "Secured Party" and "Norwest Bank Texas, Midland, N.A." shall mean Norwest Bank Texas, N.A., a national banking association with its principal offices at 500 West Texas, Midland, Texas 79701.

(b) all references to the "Notes" appearing in the Security Agreement shall mean and be deemed to include the same "Notes" as are described and defined in the Loan Agreement, as amended by that certain First Amendment to Loan Agreement, dated of even date herewith.

(c) Exhibit B to the Security Agreement is hereby deleted in its entirety and a new Exhibit B in the form and content attached to this First Amendment to Security Agreement shall be, and it hereby is, substituted in place thereof.

SECTION 3. NO OTHER AMENDMENTS; RATIFICATION.

Except as expressly amended and modified by this First Amendment to Security Agreement, all of the provisions and covenants of the Security Agreement and all exhibits thereto are and shall continue to remain in full force and effect in accordance with the terms thereof and all of such provisions, covenants and exhibits are hereby ratified and confirmed by the Debtor as of the date of this First Amendment to Security Agreement as if the Security Agreement were executed as of the date of this First Amendment to Security Agreement.

SECTION 4. COUNTERPARTS.

This First Amendment to Security Agreement may be executed by one or more of the parties hereto in any number of separate counterparts and all of said counterparts taken together shall be deemed to constitute one and the same instrument.

SECTION 5. GOVERNING LAW.

THIS FIRST AMENDMENT TO SECURITY AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED AND INTERPRETED IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS.

SECTION 6. GLOBAL AMENDMENT OF SECURITY AGREEMENT.

The Security Agreement is hereby modified wherever necessary or appropriate, and even though not specifically addressed herein, so as to conform to the amendments to the Security Agreement as set forth herein, and the Debtor covenants to observe, comply with and perform each and all of the terms and provisions of the Security Agreement, as modified hereby. The Security Agreement is hereby amended so that any reference to such Security Agreement shall mean the Security Agreement as amended hereby.

IN WITNESS WHEREOF, the parties hereto have caused this First Amendment to Security Agreement to be executed and delivered by their respective duly authorized officers as of the date and year first above written.

NORWEST BANK TEXAS, N.A.,
a national banking association

BY: /s/ MARK D. McKINNEY

Mark D. McKinney,
Senior Vice President

DAWSON GEOPHYSICAL COMPANY

BY: /s/ L. DECKER DAWSON

L. Decker Dawson,
President

EXHIBIT 23.1

CONSENT OF INDEPENDENT AUDITORS

The Board of Directors and Shareholders
Dawson Geophysical Company:

We consent to the use of our report included herein and to the reference to our firm under the headings "Selected Financial Data" and "Experts" in the Prospectus.

KPMG PEAT MARWICK LLP

Midland, Texas
October 21, 1997