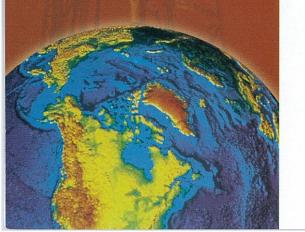


Profile of Independent Producers



Jerry Jordan *IPAA Chairman*

The characteristics of the U.S. independent oil and gas industry that have made it a reliable source of energy supplies for the past century have been confirmed in a recent profile survey of independents conducted by the Independent Petroleum Association.



The major conclusions of the survey include:

- Independents range in size from small one-or-two person companies up to very large public firms. More than one-fifth of responding independents are publicly traded firms, with their stock being traded primarily on the NYSE.
- The typical independent has been in business 23.5 years, employs 12 full-time and 2 part-time people and produces median gross revenues of \$4,600,000.
- The offshore area continues to be one of the popular domains of the independents. Currently, 12% of responding firms operate in federal waters, while 20.4% operate in state waters, a slight decrease for federal and an increase in state from the 1998 survey.
- Nearly 11.6% of responding firms currently operate internationally. More than one-quarter of responding firms plan to pursue international opportunities within the next five years. The areas most often indicated for future exploration include Canada and South America.
- Nearly one-third of independents expect to participate in horizontal drilling ventures by 2000.
- The most common forms of organization for responding firms are C Corporations and S Corporations, with over 76% of respondents being organized in this way.
- Independents tend to be well-educated with a large majority holding a degree from some level of higher education. Over 55% of independents surveyed possess a professional background in either engineering or finance.

The following summarizes the results of the survey's nine major components, with highlights including: demographics, company profile, capital formation, technology, international operations, public lands—onshore, public lands—offshore, oil and gas operations, and marginal well operations.

Demographic Summary

Perhaps one of the most important results of a study of this nature is the development of a demographic profile of the association's membership. The following table shows the demographic highlights as reported by the 2000 survey participants.

| All Valid Respondents* |
|---------------------------|
| 31.5% |
| 28.7 |
| 12.6 |
| 11.9 |
| 4.2 |
| 3.5 |
| 2.8 |
| 2.8 |
| 2.1 |
| |

The vast majority of survey respondents is either owners of the reporting company or holds a high-level management position within the company. As depicted in the demographic summary table above, the highest percentage of valid respondents, 31.5%, are owners of the reporting company, with an additional 28.7% holding the position of president.

| AGE GROUP | All Valid |
|-------------|--------------|
| | Respondents* |
| 20-39 | 4.2 |
| 40-49 | 41.5 |
| 50-59 | 17.6 |
| 60-65 | 10.6 |
| 66 and over | 26.1 |

A comparison of age groups indicates the largest percentage of respondents, 41.5%, are between 40 and 49 years of age. An additional 26.1% are 66 and over, while 17.6% of respondents are between 50 and 59. Entrants into the industry tend to closely track crude oil prices, whereas the largest age group reflected the last extended period of higher prices. An effort must be made to attract new employees into the industry or the current human resource problem will be exacerbated. Compared to the 1998 survey, the 20-39 group shrunk by 34%.

| LEVEL OF EDUCATION COMPLETE | All Valid |
|-----------------------------|--------------|
| | Respondents* |
| High School | 5.6 |
| Bachelors degree | 56.3 |
| Masters degree | 35.9 |
| Doctorate | 2.1 |

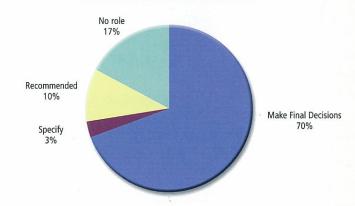
The oil and natural gas industry tends to be a highly educated industry with 56.3% of the independents responding possessing a Bachelor's degree, and an additional 38.0% possessing degrees beyond the undergraduate level. The number holding a Masters degree has risen by 6.4% since the 1998 survey. Engineering and finance are the predominant areas of professional background representing 55.2% of total respondents. Since 1998, the percentage of geologists has dropped by 9.3% and the percentage of respondents with financial backgrounds has risen by 5.1%.

| PROFESSIONAL BACKGROUND | | All Valid Respondents* |
|-------------------------|---|---------------------------|
| Engineer | | 38.4 |
| Finance | | 16.8 |
| Geologist | | 13.6 |
| Landman | | 12.8 |
| Accountant | , | 8.0 |
| Marketing | | 4.8 |
| Economics | | 2.4 |
| Lawyer | | 2.4 |

The respondents hold a high level of authority. Over 68 percent of the respondents report that they are responsible for making the final decision in the companies purchase of oil field service and supplies, an additional 14 percent play some role in the decision process

Graph 1:

ROLE IN PURCHASE DECISION

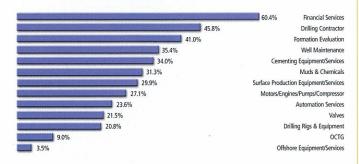


*Throughout this report, a distinction will be made between numbers expressed as a percent of the total sample size of 144 versus numbers expressed as a percent of the valid, non-missing responses. As illustrated in table 1, "Position in Company", 1 survey had missing or invalid information. Therefore, the percents shown are based on 143 responses rather than 144. This "valid" percent will be used throughout the report unless otherwise noted.

Of the services typically recommended by respondents, 60.4 percent report that they typically recommend financial services, 45.8 percent said that they recommend drilling contractor services and 41.0 percent recommend formation evaluation/well completion services

Graph 2:

SERVICES TYPICALLY RECOMMENDED

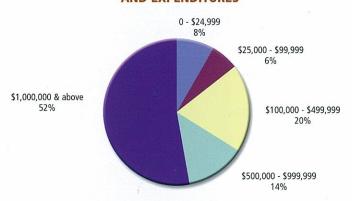


Company Profile Information

The profile indicates that the typical firm has been in business for 23.5 years and has gross revenues of \$4,599,000 and net income of \$650,603. In addition, the typical independent employs 12 full-time and 2 part-time employees. As these figures indicate, independents are small businesses that help fuel their regions' economic activity.

Graph 3:

ANNUAL OIL FIELD SERVICES AND EXPENDITURES

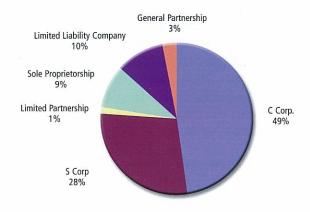


As expected, the dominant business activity of association members is production (89.6%) and exploration (79.2%) with an aggregate of 84.1% in the collective E & P sector. The remainder of the membership is comprised of service-supply firms, consultants, financial providers, marketers and royalty owners.

A large percentage of independents are organized as C Corporations and S Corporations at 47.8% and 28.4%, respectively. A total of 94.9% of responding companies are classified as independent (versus integrated) for tax purposes. Although not indicative of the industry as a whole, more than one-fifth of responding companies reported their stock is publicly traded. Of these firms, the NYSE is the predominant exchange at 57.1%.

Graph 4:

FORM OF BUSINESS ORGANIZATION



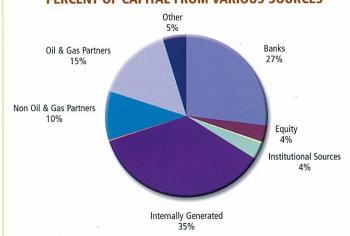
The remaining Independents were registered on NASDAQ and AMEX exchanges at 25.0% and 10.7% respectively with the NASDAQ proportion growing almost 7% since the 1998 survey and the AMEX declining by 5%.

Capital Formation

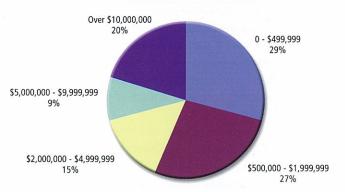
Although the mix of capital coming into the industry has been changing, the most frequently mentioned source of capital is generated through internal sources at 35% followed by banks at 26.9% and outside investors (oil & gas partners) at 15.1%. This is why the industry's capital expenditures are highly correlated to crude oil prices; most of the industry uses internally or industry generated funds for reinvestment. Private debt, private equity and industry partnerships represent the largest percentage of total funding for operations. The largest percentage of projects financed through outside sources are relatively small with 29.1% of projects being \$0-\$499,999 and an additional 27.2% being \$500,000-\$1,999,999.

Graph 5:

PERCENT OF CAPITAL FROM VARIOUS SOURCES



SIZE OF PROJECT FINANCED THROUGH OUTSIDE SOURCES OF CAPITAL



Price expectation plays a large part in the budgeting process for exploration and production companies. The 1999-2000 crude oil and natural gas markets were less favorable to the industry than in previous surveys, which was reflected by more modest expectations of capital expenditure budgets. Median capital expenditures for 1999 were \$1,850,000 and median budgeted capital expenditures for 2000 are \$2,000,000. As might be expected capital expenditures increase with company gross revenues. Budgeted expenditures for 2000 ranged from \$105,000 in the smallest firms to \$125,000,000 in the largest firms, a decline of 58% and 65% respectively from the 1998 survey results. Once again, over 82% of the private companies used outside financing of less than \$5 million, compared with publicly traded companies which had 58% over \$10 million.

Volatility of prices is something that all producers continue to face, but futures, at 27.8% have replaced long-term contracts as the financial instruments most frequently used to guarantee price levels. The use of long-term contracts, which was most popular in 1998, has fallen to second place at 21.5% and the use of swaps comes in third at 16.7%.

Technology

Besides company personnel, in many cases, the use of technology is the second biggest contributor to the independents' relative success. Technology can contribute significantly to a company's bottom line in the forms of improved efficiency and reduced costs. The survey highlighted the following two technologies — horizontal drilling and 3-D seismic. While the typical firm did not participate in any horizontal drilling ventures in 1999, 32.8% of respondents expect to do so in 2000.

The median budget for seismic activity of companies in 2000 is \$350,000, compared to a budget of \$500,000 for the 1998 survey. The range of the median averages of companies was from \$50,000 at the smallest companies to \$5 million at the largest. The use of 3-D seismic is now more prevalent, outpacing 2-D with a median of 92.5% representing 3-D and 41.5% representing 2-D. 4-D seismic, which is 3-D seismic that is time

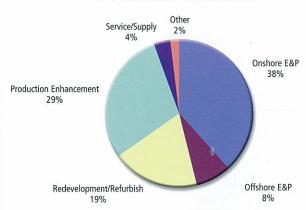
lapsed to show fluid movements, is not being significantly used by independents at this time. 3-D seismic is becoming an extremely important exploration and exploitation tool that has become more competitively priced due to the increased speed and memory of the computer.

International Operations

The international arena is an area where many independents are considering risking relatively small amounts of their exploration budgets for large reserve payoffs. However, the low-price commodity environment took a toll on international ambitions over the past two years as companies attempted to consolidate and build more defensive balance sheets. Only 11.6% of responding firms reported participating in international operations, a decrease of 5.2% from the 1998 survey. Of those independents that did not participate in international operations, a total of 27.3 percent of firms plan to do so within the next five years. The projects responding independents will be pursuing internationally are onshore E & P and production enhancements [Graph 7]. The biggest hindrances to international operations were the necessary capital expenditure and political uncertainty [Graph 8]. Latin America and Canada remain popular venues due to their geographic proximity and relatively low political risk.

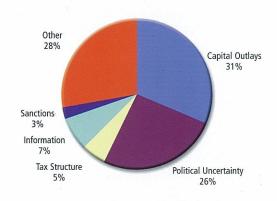
Graph 7:

WHAT KIND OF INTERNATIONAL PROJECTS DO YOU PLAN TO PURSUE?



Graph 8:

BIGGEST HINDRANCE IN OPERATING INTERNATIONALLY



Public Lands-Onshore

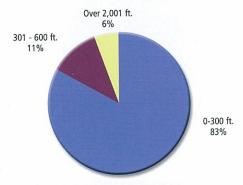
Almost 49% of responding independents reported they currently hold federal or Indian leases. Of those who hold such leases, the median number held is 5, a decrease of 50% from the 1998 survey. The median daily federal production of crude oil was 4.5 bbls per day, while the median daily federal production of natural gas was 50 Mcf per day; compared to 120 bbls and 550 Mcf in the 1998 survey. The median percentage of U.S. production that federal production represents is 1% of their production compared to 11% in 1998. The typical independent operates 2.3 marginal crude oil wells (down from 10 in 1998) and 4.8 marginal natural gas wells on federal lands. The two greatest hindrances impeding pursuit of federal land opportunities are government regulations at 41.0%, and environmental costs at 27.8%.

Public Lands-Offshore

The offshore area continues to be one of the fastest growing domains for the industry and especially for independents. While 12.0% of responding independents currently operate in federal waters, 20.4% operate in state waters. More than 23% of respondents plan to operate offshore in the next five years, an increase of 3% compared to 1998. When asked about the biggest hindrance impeding pursuit of offshore opportunities, 27.8% of responding independents indicated financial constraints, 23.6% indicated no interest offshore, 19.4% cited environmental costs, and 19.4% cited government regulations.

Graph 9:

INDEPENDENTS' OFFSHORE OPERATIONS BY WATER DEPTH



A total of 10.6% of independents reported having drilled wells in federal waters in 1999, while 9.8% drilled wells in state waters, down from respective numbers of 16.4% and 10.5% in 1998. Of those firms who drilled wells the median number of wells was 5.5 in federal waters and 1 well in state waters. The median offshore crude oil and natural gas production for 1999 was 283,750 bbls and 14,313 Mmcf, respectively. This proportion indicates the increased premium for natural gas over oil since the 1998 survey, with oil dropping by 63% and gas growing by 27%. Of the independents operating offshore, 86.4% are operating in water of less than 300 feet and almost 5% are operating in ultra-deepwater over 2,001 feet.

Oil and Gas Operations

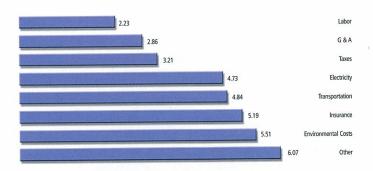
The typical respondent reported a median gross crude oil production per day of 350 barrels, and a net production per day of 270 barrels. The typical respondent also reported a median gross natural gas production of 3,700 million cubic feet and net production of 3,400 million cubic feet. The largest percentage of independents would increase their exploration budget in 2000 for crude oil at \$25.00 and above per barrel and their exploration budget for natural gas at the range of \$2.80-\$3.20.

The typical responding independent currently operates 80.0 gross and 48.0 net crude oil wells and 92.5 gross and 85.0 net natural gas wells. The typical responding firm drilled 3.0 crude oil wells and 6.0 natural gas wells in 1999 and plans to drill 5.0 crude oil wells and 10.0 natural gas wells in 2000. Many independents have been continuing to orient their drilling portfolios towards more gas-directed drilling.

Crude oil and natural gas reserves (median) at the end of 1999 were 22.6 MMBbls and 2,651MMcf, respectively, for respondents reporting. The largest percentage of natural gas, 30.3%, is gathered through intrastate pipelines, followed by interstate pipelines at 29.4% and producer/gatherers at 21.9%. The remaining 18.5% is gathered through an independent gatherer. In the 1998 survey, interstate pipelines and intrastate lines were switched at 34.4% and 30.2% respectively. A total of 60.0% of the respondents market their own crude oil and natural gas. The median amount of crude oil sold was 387 bbls. The median amount of natural gas sold was 75 Mcf.

Graph 10:

RANKING OF COST CENTER



The largest percentage of responding firms, 36.4%, reported labor as their largest cost center. This is followed by general and administrative expenses as the largest cost center of 24.5% of responding firms. The cost centers identified as the largest by the least number of respondents were environmental costs and insurance, both at 1.0% of respondents.

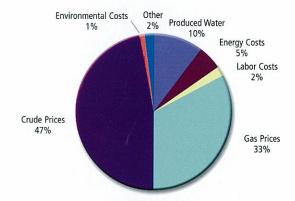
Marginal wells

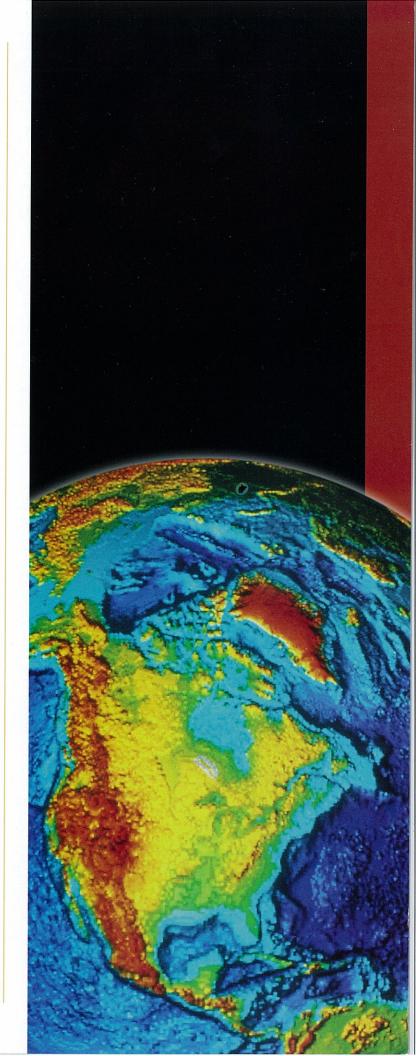
Crude oil production from marginal wells accounted for large quantities of total production in nearly every size company. A marginal well is a well that produces less than 15 bbls per day of crude oil or less than 90 Mcf per day of natural gas. Marginal oil accounts for 75 percent of all crude production for small independents, between 30 percent and 60 percent of mid-sized independents and up to 20 percent for large companies.

Responding independents reported operating a median number of 53.0 gross and 35.0 net marginal crude oil wells and 35.0 gross and 25.0 net marginal natural gas wells. Marginal wells represented 74.0% of total crude oil production (up from 65% in 1998) and 50.0% of total natural gas production for the reporting companies. As expected, the biggest concern of marginal well operators was the price of crude oil and natural gas. Other concerns listed were environmental costs, produced water, and the costs associated with decommissioning a well [Graph 11]. Responding independents further reported they operated a median of 20 wells that broke even or lost money in 1999, up from 13 in 1997. The median cost to operate a marginal well was \$8.68 per barrel of oil equivalent, excluding taxes and corporate overhead expenses. The median cost to decommission a 5,000 foot well was \$10,000 and \$20,000 to decommission a 10,000 foot well, up from \$7,500 and \$15,000 in the 1998 survey.

Graph 11:

BIGGEST CONCERN OF MARGINAL WELL OPERATIONS







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