INDEPENDENT PETROLEUM ASSOCIATION OF AMERICA

1998 Profile of Independent Producers

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 in association with Industry Insights, Inc. of Columbus, Ohio.

The major conclusions of the survey include:

- Although independents range in size from small one-or-two person companies up to very large public firms, the typical independent is a highly efficient small-business owner who has been established for many years.
- The offshore area continues to be one of the fastest growing domains of the independents. Currently, 14.4% of responding firms operate in federal waters, while 19.4% operate in state waters; an increase from the 1996 survey of three percent for both, respectively.
- Nearly 17.0% 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 1998.
- The most common forms of organization for responding firms are C Corporations and S Corporations.
- The typical independent has been in business 24.5 years, employs 11 full-time and 2 part-time people and produces median gross revenues of $4,000,000.
- Independents tend to be well-educated with a large majority holding a degree from some level of higher education. Nearly 60% of independents surveyed possess a professional background in either engineering or geology.

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

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 1998 survey participants.

Position In Company	All Valid Respondents*
Owner	27.0%
President	22.1
CEO	12.7
Vice President	9.8
Manager	8.3
CFO	6.4
Partner	6.4
Other	6.4
COO	1.0

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 to the left, the highest percentage of valid respondents, 27.0%, are owners of the reporting company, with an additional 22.1% holding the position of president.

Age Group	All Valid Respondents*
20-39	12.3
40-49	30.0
50-59	21.7
60-65	13.3
66 and over	22.7

A comparison of age groups indicates the largest percentage of respondents, 30.0%, are between 40 and 49 years of age. An additional 22.7% are 66 and over, while 21.7% of respondents are between 50 and 59. Entrants into the industry tends to closely track crude oil prices, whereas the largest age group was during 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.

Level Of Education Complete	All Valid Respondents*
High School	8.0
Bachelors Degree	55.5
Masters Degree	29.5
Doctorate	7.0

The oil and natural gas industry tends to be a highly educated industry with 55.5% of the independents responding possessing a bachelor's degree, and an additional 36.5% possessing degrees beyond the undergraduate level. Understandably, engineering and geology are the predominate areas of professional background representing 58.5% of total respondents.

Professional Background	All Valid Respondents*
Engineer	35.6
Geologist	22.9
Finance	11.7
Accountant	11.7
Landman	5.9
Economics	4.8
Marketing	3.7
Lawyer	3.7

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].

Of the services typically recommended by respondents, 68.8 percent report that they typically recommend financial services, 50.5 percent said that they recommend drilling contractor services and 44.2 percent recommend formation evaluation/well completion services [Graph 2].

*Throughout this report, a distinction will be made between numbers expressed as a percent of the total sample size of 208 versus numbers expressed as a percent of the valid, non-missing responses. As illustrated in table 1, "Position in Company", 4 surveys had missing or invalid information. Therefore, the

percents shown are based on 204 responses rather than 208. This “valid” percent will be used throughout the report unless otherwise noted.

Company Profile Information

The profile indicates that the typical firm has been in business for 24.5 years and has gross revenues of $4,000,000 and net income of $500,000. In addition, the typical independent employs 11 full-time and 2 part-time employees. As these figures indicate, independents are small businesses that help fuel their regions’ economic activity.

As expected, the dominant business activity of association members is business activity of 83.7% of responding firms is exploration and production. The remainder of the membership is comprised of service-supply firms, financial providers, marketers, royalty owners and consultants.

A large percentage of independents are organized as C Corporations and S Corporations at 47.6% and 27.7%, respectively. A total of 91.4% of responding companies are classified as independent (versus integrated) for tax purposes. More than one fifth of responding companies reported their stock is publicly traded. Of these firms, the NYSE is the predominant exchange at 54.5%. The remaining Independents were registered on NASDAQ and AMEX exchanges at 18.2% and 15.9% respectively.

While the upstream industry is very technology intensive, 42.6% of respondents reported that they are not connected to the internet. As with several operational areas in the independent sector, internet connectivity is very generational.

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 36.2 % followed by banks 27.8 % and outside investors (oil & gas partners) at 20.3 %. 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. Since crude oil prices were relatively strong in this survey cycle, internal funds were higher than the 1996 survey, as well as Bank investments. Private debt, industry partnerships and private equity represent the largest percentage of total funding for operations.

Price expectation plays a large part in the budgeting process for exploration and production companies. The 1997-98 crude oil and natural gas markets were much more favorable to the industry than in previous surveys, which was reflected by increased expectations of capital expenditure budgets. Median capital expenditures for 1997 were $1,950,000 and median budgeted capital expenditures for 1998 are $3,000,000. As might be expected capital expenditures increase with company gross revenues, however both actual and budgeted numbers are twice what was reported in the 1996 survey. Budgeted expenditures for 1998 ranged from $180,000 in the smallest firms to $192,500,000 in the largest firms.

Since most independents use internally generated funds and project financing, the largest percentage of projects financed through outside sources are relatively small with 32.5% of projects being $0 – $499,999 and an additional 27.3% being $500,000 – $1,999,999. Once again, over 85 % of the private companies using outside financing of less than $5 million, compared with public traded companies which had 68 % over $10 million.

Volatility of prices is something that all producers face, and long term contracts are the financial instruments most frequently used by a margin of two-to-one to guarantee price levels, compared to futures, options, swaps and production agreements.

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. With 47 companies responding, The typical firm participated in a median number of 2 horizontal drilling ventures in 1997, with 31.6% of the 171 respondents expecting to do so in 1998.

The median budget for seismic activity of companies in 1998 is $500,000. The range of the median averages of companies was from $27,500 at the smallest companies to $7.5 million at the largest. The use of 3-D seismic is now more prevalent, outpacing 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. The 1998 seismic budgets represented a median increase of 100 percent over 1996 survey levels, which indicates that much smaller companies are now using seismic. 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. In 1998, 16.8 percent of responding firms reported participating in international operations, an increase from 14.2 in 1996 and 11 percent in the 1994 Profile survey. Public companies already have a much larger stake in international operations than private companies with 44.2 percent already operating internationally. Of those independents that did not participate in international operations, a total of 28.9 percent of firms plan to do so within the next five years–this is also an increase of over 3.5 percent. 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].

Public Lands—onshore

Nearly all of the information remained the same for federal lands since the 1996 Profile survey. Slightly more than 43% of responding independents reported they currently hold federal or Indian leases. Of those who hold such leases, the median number held is 10. The median daily federal production of crude oil was 120 bbls per day, while the median daily federal production of natural gas was 550 Mcf per day. The median percentage of U.S. production that federal production represents is 11% of their production. The typical independent operates 10 marginal crude oil wells and 4.5 marginal natural gas wells on federal lands. The two greatest hindrances impeding pursuit of federal land opportunities are government regulations at 28.8%, and environmental costs at 25.5%.

Public Lands—offshore

The offshore area continues to be one of the fastest growing domains for the industry and especially for independents, who drilled XX percent of the wells in the Gulf of Mexico in 1997. While 14.4% of responding independents currently operate in federal waters, 19.4% operate in state waters, both are up from 11.4 % and 16.9 % from the 1996 Profile survey respectively. More than 20% of respondents plan to operate offshore in the next 5 years. When asked about the biggest hindrance impeding pursuit of offshore opportunities, 24.5% of responding independents indicated no interest offshore, 19.2% cited environmental costs, and 17.8% cited government regulations.

A total of 16.4% of independents reported having drilled wells in federal waters in 1997, while 10.5% drilled wells in state waters. Of those firms who drilled wells the median number of wells was 13.5 in federal waters and 1 well in state waters. The median offshore crude oil and natural gas production for 1997 was 446,500 bbls and 11,287 mmcf, respectively. Independents tend to operate in the shallow waters of the Gulf of Mexico, with 85 percent operating in water of less than 300 feet and just over 13 percent operating in more than 750 feet, an increase of 5 percentage points from the 1996 Profile survey.

Oil And Gas Operations

The typical respondent reported a median gross crude oil production per day of 350 barrels, and due to a statistical anomaly, a median net production per day of 400 barrels. The typical respondent also reported a median gross natural gas production of 3,750 million cubic feet and net production of 2,750 million cubic feet. The largest percentage of independents would increase their exploration budget in 1998 for crude oil at $21.00-$22.99 per barrel and their exploration budget for natural gas at $2.60 and above.

The typical responding independent currently operates 60.0 gross and 47.5 net crude oil wells and 37.5 gross and 41.0 net natural gas wells, again a statistical anomaly. The typical responding firm drilled 5.0 crude oil wells and 8.0 natural gas wells in 1997 and plans to drill 5.0 crude oil wells and 6.0 natural gas wells in 1998. Although this survey was performed before crude oil prices declined. Many independents have been changing their drilling portfolios towards more gas directed drilling.

Crude oil and natural gas reserves (median) at the end of 1997 were 17.8 MMBbls and 2,800 MMcf, respectively for respondents reporting. The largest percentage of natural gas, 34.4%, is gathered through interstate pipelines, followed by intrastate pipelines at 30.2% and producer/gatherers at 18.3%. The remaining 17.1% is gathered through an independent gatherer. A total of 58.7% of the 38 respondents market their own crude oil and natural gas. The median amount of crude oil sold was 185 bbls. The median amount of natural gas sold was 100 Mcf.

The largest percentage of responding firms, 42.3%, 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 and then taxes.

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 40.0 gross and 25.0 net marginal crude oil wells and 20.0 gross and 21.0 net marginal natural gas wells. Marginal wells represented 65.0% of total crude oil production 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 13 wells that broke even or lost money in 1997. The median cost to operate a marginal well was $9.00 per barrel of oil equivalent, excluding taxes and corporate overhead expenses. The median cost to decommission a 5,000 foot well was $7,500 and $15,000 to decommission a 10,000 foot well.

Taxes

With taxes as the third largest cost center for independents, IPAA has listed several tax proposals to aid independent operators. Several of these proposals are listed in the National Exploration and Production Act. In order to better quantify some of the data, we found the following out about independent operations.

Independents reported a median of 5.0 inactive wells (less than 2 years old). Of those responding, 39.7% reported that a permanent Federal tax holiday would allow them to produce these wells economically.

The median amount incurred for geological and geophysical expenses for the last fiscal year was $300,000.

Only 10.3% of respondents can currently claim the EOR credit and expanding this credit was not one of the most important of the listed IPAA objectives. Of those claiming the EOR credit, 43.8% use miscible fluid displacement to qualify for the credit. One of the most popular IPAA objectives deemed important by 31.4% of respondents was all geological and geophysical costs being expensed in the year taken. A total of 56.3% of respondents' claim the IDC's preferences have caused them to pay the alternative minimum tax. In addition, the typical responding firm has paid a median of $30,000 in delay rentals during the last tax year.

The median number of qualified Section 29 wells operated was 60. The median number of these wells that have been recompleted into new production zones was 3. Respondents would recomplete a median of 10 qualified Section 29 wells into new production zones.