

Acceptable Profit Levels Demand Cuts

An unexpected drilling collapse, starting last year, has forced the service and supply business to embark on a new round of downsizing. By John A Miller

SINCE 1986, *Petroleum Management*, now incorporated into *Petroleum Economist*, has undertaken periodic studies (*PM* 9/87, 6-7/88, 10/90) of the oilfield service and supply industry to summarise industry restructuring efforts and to estimate, given expected levels of drilling activity, additional efforts which would be required to return the industry to acceptable levels of profitability.

The October 1990 study concluded that "the oil service industry is in its final stages of consolidation. By the end of 1990, it is estimated that the industry will have reduced its asset and cost base to the point that it will generate an operating return of approximately 11% on total industry assets. Expected increases in drilling activity in 1991 and beyond, together with the general anticipation of

higher prices for products and services should see this industry return to more historical industry profitability levels."

Any expectations of increased US drilling activity were gone by the end of 1991, when US drilling suffered a third major collapse. The decline in activity has continued in 1992, setting new lows each week. The 623 rigs running on 24 April 1992 represent the lowest level of rig activity since Hughes Tool Company began recording weekly counts in January 1940.

More downsizing

Accordingly, most oil service and supply companies are again required to implement actions to downsize operations, especially in the United States. Actions commenced in fourth-quarter 1991 and are continuing.

Moderate increases in international drilling activity of about 3-5% per year are insufficient to offset the collapse in US drilling, currently estimated to be down 30% from 1990 levels and remaining that way for several years. Given the level of activity, resultant markets for oil service and supply products (see Table 1) and the absence of price increases, industry-wide reductions of \$1.3bn in costs and \$2.7bn in assets are required to return this industry to historical and acceptable levels of profitability. In addition, the shift towards drilling outside the US will require the redeployment of US assets and costs to international locations.

As always, we rely on data published by public companies to comply with Securities and Exchange Commission requirements. These requirements provide

that public companies disclose revenues, identifiable assets and operating profits for industries in which they operate. Twelve of these public companies were analysed in order to develop composite financial ratios that would be representative of the industry as a whole (see Table II).

Performance gap

The purpose of the study is to compare 1991 industry cost and asset structures with a cost and asset structure that would yield an acceptable operating return on total industry assets, given a projected level of drilling activity. In essence we are comparing the "as-is situation" with the "should-be situation" as a way to quantify the performance gap.

We use a 15% operating return on total assets to represent the should-be situation and an acceptable short-term goal for industry performance. On an industry basis, this level of defined profitability has not been achieved in the last decade, so it is fair to use it as a benchmark goal to be attained. This measure is equivalent to a traditional return on capital employed (ROCE) of 11-13%.

Applying the composite financial ratios of the sample companies to the 1991

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Table I

Drilling activity	Rig count			Worldwide market (\$bn)
	US	Rest of World (excluding former CPEs)	Total	
1986	964	1 253	2 217	27.4
1987	936	1 157	2 093	21.7
1988	936	1 218	2 154	24.6
1989	869	1 048	1 917	22.0
1990	1 010	1 041	2 051	25.8
1991	860	1 029	1 889	24.4
1992*	707	1 064	1 771	23.4
1993*	701	1 104	1 805	24.7

* Forecast

† Products include: Contract drilling, rig equipment and supplies, pumping services, drilling fluids, wireline services, downhole drilling tools and services, pressure control drilling and completion equipment.

Source: Spears and Associates, Tulsa, Oklahoma.

estimated worldwide market for drilling and completion as a whole (see Table 1) would imply an estimated total industry cost structure of approximately \$21.8bn and assets of about \$22.2bn. This is the basis for the as-is situation.

While there are many combinations of asset turnover ratios and operating profit percentages that would result in an operating return on total assets of 15%, we selected a 12.5% operating income percentage and a 1.2-times asset turnover on sales. The resultant should-be cost and

asset structure, based on projected 1992 industry revenues, implies a cost and asset structure of \$20.5bn and \$19.5bn, respectively.

A comparison of the as-is with the should-be is the basis underlining the study conclusion that industry-wide cost reductions of \$1.3bn and asset reductions of \$2.7bn are required to return the industry to acceptable levels of profitability.

The most important factor in a study of this kind is the linking of existing industry cost and asset structures to

expected market activity. Good estimates of future drilling activity are vital in reaching accurate conclusions. Conclusions reached are valid only when projected drilling activity is reasonably close to actual activity.

World drilling down

The comprehensive projections of Spears & Associates were used to establish the principal assumptions of drilling activity on which this study was based. Spears' projections are based on a model that considers worldwide energy supply and demand, oil and gas prices, investment ploughback rates, production rates, historical drilling costs by type and depth of well, and economic growth. Spears' projections are generally representative of the industry outlook.

Overall, the 1992 worldwide market is expected to be down 9% since 1990. No increases are projected in North American drilling activity for the next 3-5 years. The strength of an increased market forecast for 1993 is entirely based on international drilling where the climate for drilling improves.

What's next?

Having gone on record in late 1990 that, given four years of stability, the industry had hit bottom, we concluded that additional opportunities to downsize and restructure operations significantly

surprised when a third US drilling collapse occurred, despite a Middle East war and destruction of oil producing facilities.

By now, most oil service companies have downsized and restructured existing operations to the point that very little additional internal consolidation can be accomplished. The mega-mergers and restructurings of 1987-88 have all been completed. Recent acquisitions and divestitures by oilfield service companies have tended to be strategic in nature and not always for the purpose of consolidating operations to reduce cost and reduce assets. Industry leaders must again focus on reducing the scale of US operations and look to all industry segments for consolidation opportunities.

Rig activity is likely to remain at low levels. The industry has introduced new products to improve substantially the effectiveness and efficiency of drilling. 3D seismic, MWD, top-drive and performance-drilling systems are examples. These improvements will continue and suggest that current levels of rig activity may be sufficient to replace reserves. A January 1992 Morgan Stanley study of improved drilling efficiency concluded that the average active rig today is 50% more productive than in the 1970s.

For the immediate and longer-term future, several daunting obstacles remain. If new technologies continue, as



About the author:

John A Miller is a consultant adjunct with the American Productivity and Quality Center, and president of M N Consulting Incorporated, both based in Houston. He is a master instructor and content expert in the areas of activity-based cost management and benchmarking. Miller has written frequently on the subject of cost and asset management.

Also, even in the absence of further technology-driven efficiencies, how do industry participants advance to the level of acceptable returns to shareholders?

Industry participants which are able to accomplish this over the next five or so years will have three factors working for them. They will be active players in further consolidation within the market segment. They will be upgrading their position to higher-yielding market segments. And they will be selectively, but aggressively, investing in those technologies that drive drilling- and finding-cost efficiencies.

It is hard to believe that since 1982 the industry has reduced both its asset and cost base by over \$40bn and yet more remains to be done. These reductions came on the heels of the industry's largest expansion, in which a similar amount of costs and assets were added during the previous 10 years. While other industries have experienced similar expansions and contractions, no other industry, to our knowledge, has had the challenges of rapid growth and contractions experienced by the oil service industry.

Industry leaders can be justifiably proud of their achievement to date. They have taken the difficult actions necessary to restore their industry to profitability. Unfortunately, in spite of what has been accomplished, more needs to be done. But the industry is up to the task.

Industry leaders must remain aggressive in reducing costs and assets if they are to be in a position to reward their stockholders with acceptable levels of return. □

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Table II
Comparative analysis of revenues, costs and assets
Selected public companies (\$m)

	Revenues			Operating cost structure			Identifiable assets		
	1991	1990	1989	1991	1990	1989	1991	1990	1989
Baroid	616	521	415	562	472	392	525	502	470
Baker Hughes	2 192	1 733	1 374	1 987	1 584	1 242	2 235	2 027	1 254
Dresser Industries	634	589	509	580	531	480	465	410	351
Western Atlas (Litton and Dresser Industries)	1 166	989	850	1 061	910	800	1 018	887	890
Varco International	217	132	87	196	120	82	204	186	101
Smith International	403	388	312	366	346	293	397	396	326
Cooper Industries	1 225	1 114	650	1 037	970	586	1 454	1 450	1 383
Halliburton Company	2 939	2 916	2 448	2 784	2 633	2 280	2 457	2 284	1 995
Schlumberger	3 847	3 241	2 698	3 245	2 699	2 358	3 533	2 829	2 516
Tidewater	185	151	135	148	139	135	263	252	279
Energy Venkness	178	153	108	165	142	100	178	132	87
Parker Industries	107	104	99	109	118	130	195	151	156
Totals	13 709	12 031	9 685	12 240	10 664	8 878	12 914	11 506	9 808

Key composite ratios

Operating costs as a percentage of revenues	-	-	-	89.3%	88.6%	91.7%	-	-	-
Year-end asset turnover on revenues	-	-	-	-	-	-	1.1x	1.1x	1.0x

Source: Business/Industry segment information - Latest 10-K filing with the Securities and Exchange Commission and Miller-Newlin & Company estimates.

were gone, so management leaders would have to focus on improving the efficiency and effectiveness of their organisations for incremental improvement. Like everyone else, we were dismayed and

they have over the last five years, to result in less wells and less rigs working to meet energy demand and maintain reserves at present levels, the service industry's progress will be threatened.