



The Upcoming “People Shortage”

As year-end results continue to trickle in, we took a peek at some preliminary data on salaries, growth prospects, college enrollment and demographics of oil and gas employment. Herold has been warning about the coming shortage of talented energy personnel for the past several years. Lofty oil and gas prices, rising service costs, and the realization that the era of cheap oil may be behind us have finally propelled the issue to the forefront: the energy talent pool is limited and the number of students studying the earth sciences needs to increase more rapidly. We are encouraged by signs of renewed interests by students to the oil industry, the rising pay for geologists/engineers, and efforts to attract students and retain employees.

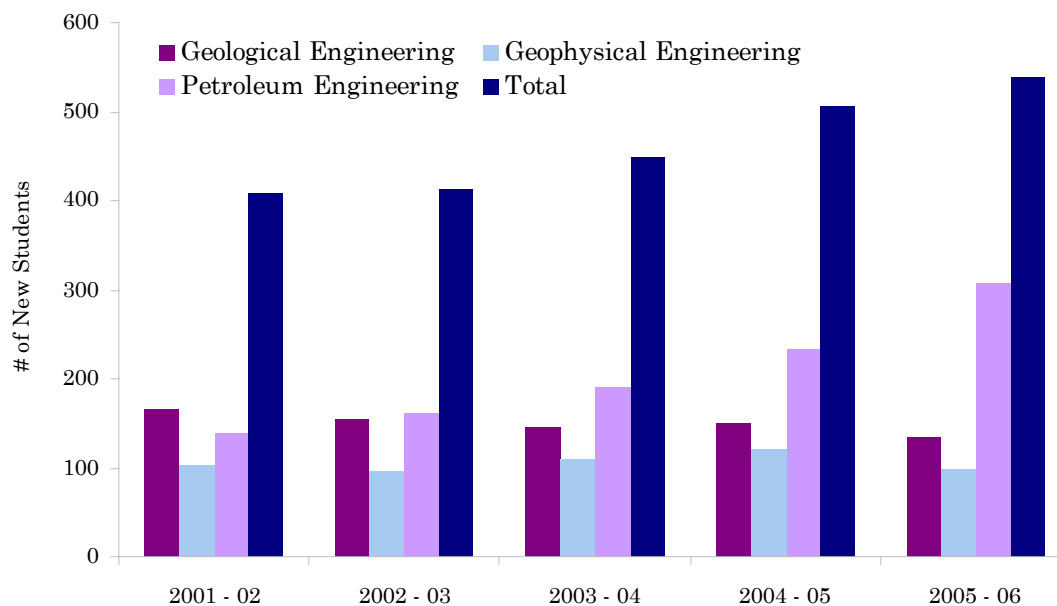
BLS Predicts Falling Demand for Oil & Gas Workers

Despite the need to find additional oil and gas resources to replenish a declining resource base, the government’s Bureau of Labor Statistics continues to predict a gloomy employment future for the industry. The BLS anticipates a 6% decline for the oil and gas extraction field over the next decade compared with an employment increase of 14% in all industries combined. In fact, the need for petroleum engineers and geoscientists are slated to decline by 4% and 11%, respectively, according to the BLS.

Studies in Energy on the Rise

Despite the government’s gloomy outlook, we are also encouraged by the renewed interest in the study of earth sciences. Recent data from the prestigious Colorado School of Mines show that enrollment of new students have risen over the past five years. New CSM students (studying petroleum, geophysical and geological engineering) in 2005/06 increased by nearly one-third from 2001/02 levels.

Enrollment on the Rise



Source: Colorado School of Mines

Oil Industry Offers Attractive Salaries

Perhaps the oil industry is being recognized as technologically savvy and forward thinking industry. Or students might be attracted to the relatively high salaries that the oil industry offers. According to a 2004 survey by the Society of Petroleum Engineers, the average annual salary in the U.S. for the least experienced engineers with a bachelor's degree or less were \$72,439. Not too shabby for entry level positions.

Another study also shows demand for petroleum geologists on the rise. Overall, salaries rose by 8% in six age groups, with salaries for geologists with 10 – 14 years of experience rising almost 15% in the past year, according to the 2005 Geological Salary Survey. The so-called “graying of the oil industry” is evident in the AAPG’s mean age of 49. Over one-half of the survey’s respondents had over 20 years of experience. In order to lure new talent, the survey found that some companies are giving substantial bonuses in lieu of salary increases. For example, one company said it issued bonuses of over 50% to top performers, with cash signing bonuses for new hires becoming common.

2005 Geological Salary Survey				
Years Experience	High	Average	Low	Ave. Salary % Chg Since '99
0-2	\$80,000	\$67,800	\$62,000	28%
3-5	83,000	75,600	70,000	23%
6-9	110,000	77,500	57,000	-1%
9-14	132,000	107,500	92,000	29%
15-19	121,000	116,000	105,000	23%
20-24	125,000	112,800	100,000	NA
25+	170,000	128,300	100,000	NA

Source: American Association of Petroleum Geologists (AAPG)

Indeed, oil and gas workers are relatively well paid. BLS found that managers’ salaries are more than one-third higher than median hourly earnings for all industries, while median wages for petroleum engineers are 11% higher than those for all engineers.

Table 2. Median hourly earnings of the largest occupations in oil and gas extraction and support activities for mining, May 2004			
Occupation	Oil and gas extraction	Support activities for mining	All industries
General and operations managers	\$49.93	\$37.57	\$37.22
Petroleum engineers	47.24	36.68	42.55
First-line supervisors/managers of construction trades and extraction workers	27.44	24.9	24.25
Petroleum pump system operators, refinery operators, and gaugers	23.52	22.12	24.27
Wellhead pumpers	16.73	14.82	16.31
Rotary drill operators, oil and gas	16.17	17.34	17.11
Service unit operators, oil, gas, and mining	15.87	14.58	14.75
Derrick operators, oil and gas	15.26	16.18	16.11
Roustabouts, oil and gas	12.6	11.89	11.94
Helpers-Extraction workers	11.58	12.77	12.66

Source: BLS

The Future for Energy Workers Looks Bright

While the development of alternate fuels and new energy technologies will be a force to be reckoned with in the future, petroleum and natural gas will continue to be the dominant fuels in the intermediate to long-term. Faced with dwindling energy, mineral, and water resources along with increasing concerns about the environment and natural hazards, oil companies face a challenging future. In Houston, experienced geoscientists and geologists are a valued commodity. One recent example is Shell hired 50% more than then the 1,000 positions it originally intended to fill.

We anticipate a further tightening of the job market. While it has been considered a “soft” issue in the past, the upcoming people shortage has become a “real” issue for all oil companies pressured to replace production on a consistent basis and at above-par rates. Industry groups and companies have taken strides to attract young people by supporting programs aimed at bringing together students and professionals; job fairs; and mentorship programs within companies.

We strongly disagree with the BLS’s gloomy stance on prospects for oil and gas extraction workers over the next decade. With enrollment at petroleum science schools on the increase, starting salaries in the \$60,000 + range, and cash signing bonus becoming more common, we feel the industry will start attracting new talent. However, we strongly believe that the need to attract and retain talent will continue to be an operational challenge for oil companies in the years to come.