



**Society of Petroleum Engineers  
Richardson, Texas**



**2012 SPE Membership Salary Survey Highlight Report - September 2012 –  
REVISED VERSION**

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## **SPE presents its annual salary survey for 2012**

Invitations to participate in the Annual SPE Salary Survey were successfully sent to 59,332 professional members via e-mail on 13 July 2012. This year 8,436 members provided valid responses, resulting in a 14.2 percent response rate. This sample of completed responses produces a margin of error of  $\pm 1.04$  percent at a 95 percent confidence level. Salary information and other data in the reports are entirely self-reported, as we rely on members to provide information to help us understand more about the condition of the industry.

This year's participants are based in 96 different countries and 40 U.S states. They represent citizenship in 99 countries and their employers are based in 86 countries. In 2012, over half of respondents (53.0 percent) were based in countries outside of the United States. The representation of international members reflects the increasing international growth and presence of SPE.



## General Findings

*All compensation data presented in this Highlight Report is expressed in US dollars. Data collected in local currencies has been converted to US dollars (USD) using the exchange rate as of 15 August 2012, which is the effective date of this year's data.*

Compensation in the petroleum industry continues to follow the growth trend of recent years in 2012, with 79.0 percent of respondents reporting an increase in base pay. The average increase in base pay for those who reported receiving an increase was 8.7 percent. The year over year salary growth came in at 2.9 percent, with an average self-reported income of USD 210,319 in 2012 and USD 204,368 in 2011. Respondents reported an overall net change (taking both positive and negative changes into consideration) of 6.7 percent in base pay from 2011 to 2012 compared to a 6.3 percent net change from 2010 to 2011.

Mean base pay increased from USD 148,301 in 2011 to USD 152,789 in 2012, an increase of 3.0 percent. Bonus and extra income remained steady from 2011 to 2012, staying in-between \$56,000 and \$58,000 on average.

A third of respondents (33.4 percent) indicated that they received a car allowance in 2012. The Middle East and Africa had the highest percentage of employees who reported receiving a car allowance, with 59.0 percent in the Middle East, and 64.4 percent in Africa.

The average age of energy and petroleum professionals reported in the survey leveled at 43 years, which was the 2010 average, after a slight increase in 2011 to 44 years.

Experience decreased slightly at an average of 18 years in 2012 from 19 years in 2011, possibly reflecting a younger workforce.

The education level of participants was higher in this year's sample, with 43.3 percent indicating they have beyond a Bachelor's Degree.

Three out of four professionals (73.7%) indicated that they are a citizen of the country in which they work in 2012 and North Americans were again most likely to work in their home countries.

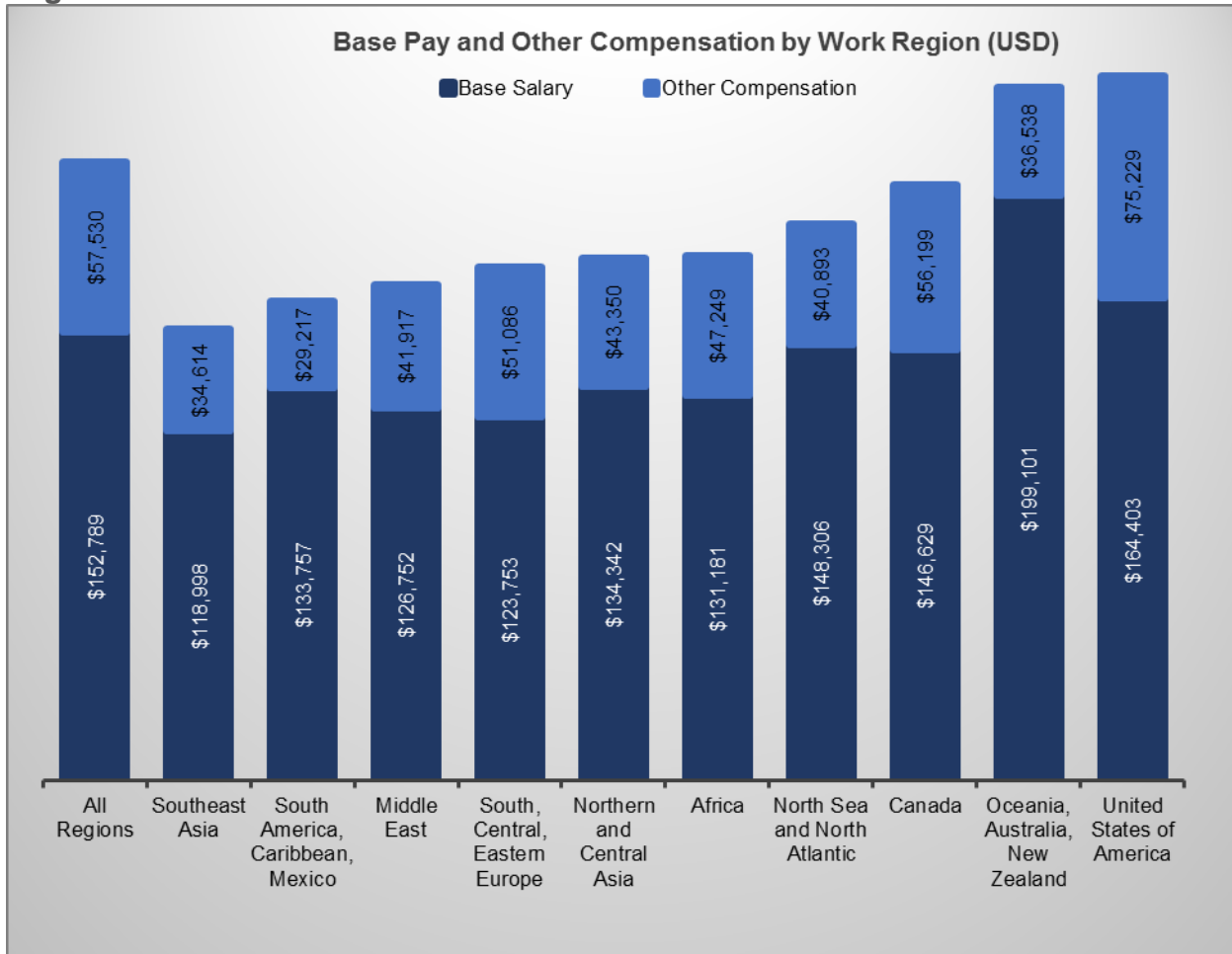


**Figure 1**

| Summary of Results by Work Region (All compensation data is expressed in US dollars) |        | Total<br>(n=8,437) | United States of America<br>(n=3,964) | Africa<br>(n=357) | Oceania<br>(n=409) | Canada<br>(n=634) | Middle East<br>(n=449) | North Sea and North Atlantic<br>(n=1,227) | Northern and Central Asia<br>(n=202) | South America, Caribbean and Mexico<br>(n=474) | South, Central and Eastern Europe<br>(n=191) | Southeast Asia<br>(n=529) |
|--|--------|--------------------|---------------------------------------|-------------------|--------------------|-------------------|------------------------|---|--------------------------------------|--|--|---------------------------|
| Base Pay   | Mean   | \$152,789          | \$164,403                             | \$131,181         | \$199,101          | \$146,629         | \$126,752              | \$148,306                                 | \$134,342                            | \$133,757                                      | \$123,753                                    | \$118,998                 |
|  | Median | \$140,000          | \$150,500                             | \$101,458         | \$179,224          | \$136,517         | \$110,000              | \$135,504                                 | \$100,000                            | \$91,355                                       | \$98,548                                     | \$89,839                  |
| Other Compensation   | Mean   | \$57,530           | \$75,229                              | \$47,249          | \$36,538           | \$56,199          | \$41,917               | \$40,893                                  | \$43,350                             | \$29,217                                       | \$51,086                                     | \$34,614                  |
|  | Median | \$25,000           | \$35,000                              | \$19,023          | \$18,756           | \$30,337          | \$18,187               | \$18,000                                  | \$10,023                             | \$9,920  | \$10,440                                     | \$9,794                   |
| Total Compensation   | Mean   | \$210,319          | \$239,632                             | \$178,430         | \$235,639          | \$202,828         | \$168,669              | \$189,199                                 | \$177,693                            | \$162,973                                      | \$174,839                                    | \$153,613                 |
|  | Median | \$171,227          | \$192,900                             | \$142,145         | \$208,400          | \$171,911         | \$141,735              | \$160,369                                 | \$120,271                            | \$103,576                                      | \$120,105                                    | \$103,175                 |
| Average Base Pay Increase  |        | 8.7%               | 8.0%                                  | 9.8%              | 10.7%              | 7.6%              | 10.1%                  | 7.4%                                      | 10.6%                                | 14.4%  | 7.9%   | 9.5%                      |
| % With Car Allowance   |        | 33.4%              | 25.1%                                 | 64.4%             | 24.2%              | 23.3%             | 59.0%                  | 40.7%                                     | 36.6%                                | 35.9%  | 45.0%  | 47.4%                     |
| Average Age  |        | 43                 | 45                                    | 40                | 41                 | 42                | 41                     | 43  | 41                                   | 41   | 43   | 39                        |
| Average Years of Experience  |        | 18                 | 20                                    | 14                | 16                 | 17                | 16                     | 17  | 16                                   | 15   | 17   | 15                        |
| % With Education Beyond Bachelor's Degree  |        | 43.3%              | 32.6%                                 | 51.3%             | 40.6%              | 27.4%             | 46.5%                  | 71.8%                                     | 68.8%                                | 57.2%  | 70.7%  | 39.1%                     |
| % Citizens Who Work in Home Region   |        | 73.7%              | 87.3%                                 | 58.8%             | 69.2%              | 84.4%             | 24.9%                  | 64.6%                                     | 52.5%                                | 69.2%  | 53.9%  | 54.6%                     |



Figure 2





## Job Categories and Total Compensation

Compensation in the executive/top management category increased more than any other category at 10.4 percent year over year, but the average age of these professionals remained consistent with 2011 at 52 years old. Technician/specialists/support staff salaries showed the second largest increase at 6.3 percent year over year, while average age remained consistent year over year at 41 years old. Supervisor/superintendent/lead salaries decreased the most with a 1.2 percent (decrease).

Top-level compensation in South, Central, and Eastern Europe, as well as the United States showed the strongest growth among regions from 2011 to 2012.

**Figure 3**

| Total Compensation by Job Category and Work Region | All Regions | United States of America (n=3,964) | Africa (n=357) | Oceania (n=409) | Canada (n=634) | Middle East (n=449) | North Sea and North Atlantic (n=1,227) | Northern and Central Asia (n=202) | South America, Caribbean and Mexico (n=474) | South, Central and Eastern Europe (n=191) | Southeast Asia (n=529) |
|--|-------------|------------------------------------|----------------|-----------------|----------------|---------------------|--|-----------------------------------|---|---|------------------------|
| Executive/Top Management                           | \$450,734   | \$518,140                          | \$254,235      | \$370,003       | \$385,134      | \$321,693           | \$309,931                              | \$351,228                         | \$325,975                                   | \$532,863                                 | \$291,247              |
| Manager/ Director                                  | \$275,546   | \$284,282                          | \$326,963      | \$323,545       | \$255,244      | \$215,243           | \$261,280                              | \$270,117                         | \$334,471                                   | \$230,408                                 | \$241,691              |
| Supervisor/ Superintendent/ Lead                   | \$188,150   | \$217,392                          | \$181,716      | \$248,651       | \$208,259      | \$138,777           | \$187,488                              | \$186,250                         | \$129,493                                   | \$104,423                                 | \$138,180              |
| Professional/ Individual Contributor               | \$159,399   | \$181,498                          | \$125,949      | \$179,550       | \$157,181      | \$148,387           | \$138,949                              | \$107,727                         | \$102,354                                   | \$132,964                                 | \$108,814              |
| Technician/ Specialist/ Support Staff              | \$114,042   | \$134,459                          | \$90,887       | \$165,977       | \$123,521      | \$88,941            | \$118,309                              | \$77,332                          | \$87,987                                    | \$76,201                                  | \$94,485               |



**Figure 4**

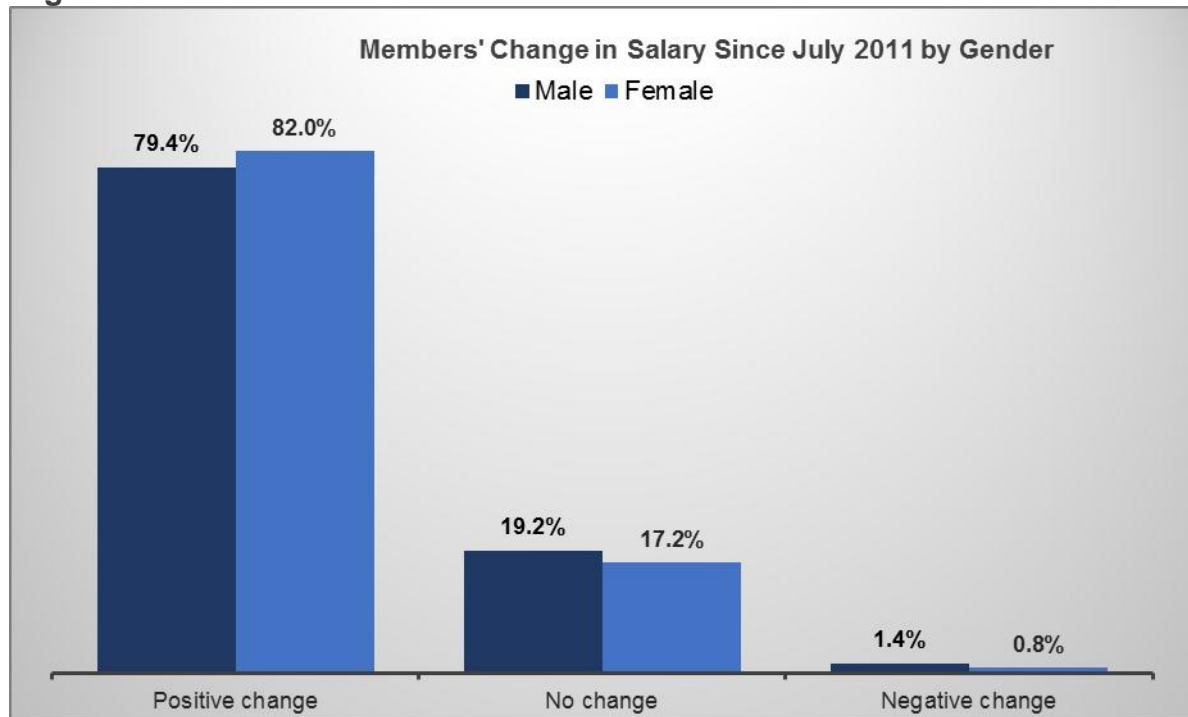
| Job Function                                | All Regions | United States of America | Africa    | Oceania   | Canada    | Middle East | North Sea and North Atlantic | Northern and Central Asia | South America, Caribbean and Mexico | South, Central and Eastern Europe | Southeast Asia |
|---|-------------|--------------------------|-----------|-----------|-----------|-------------|------------------------------|---------------------------|-------------------------------------|-----------------------------------|----------------|
| College/University/Academic                 | \$89,037    | \$110,585                |           | \$83,409  | \$86,655  | \$108,015   | \$103,957                    | \$54,428                  | \$64,826                            | \$20,954                          | \$54,616       |
| Computer or Information Technology          | \$135,525   | \$139,585                | \$29,381  | \$135,000 | \$152,396 | \$51,052    | \$145,558                    |                           |                                     | \$41,876                          | \$135,703      |
| Earth Science/Geology                       | \$151,259   | \$158,618                | \$65,604  | \$179,274 | \$185,984 | \$152,325   | \$157,971                    | \$96,646                  | \$114,897                           | \$95,753                          | \$113,488      |
| Engineering - Chemical/Chemistry            | \$120,682   | \$129,432                | \$112,272 | \$140,917 | \$120,881 | \$105,187   | \$122,592                    |                           | \$30,418                            | \$77,595                          | \$93,733       |
| Engineering - Civil/Construction/Facilities | \$161,017   | \$165,878                | \$86,181  | \$226,005 | \$131,334 | \$187,095   | \$156,690                    | \$147,822                 | \$96,832                            | \$107,339                         | \$206,281      |
| Engineering - Completions                   | \$141,225   | \$144,646                | \$94,631  | \$173,250 | \$133,219 | \$134,520   | \$152,227                    | \$133,860                 | \$96,440                            | \$86,311                          | \$33,219       |
| Engineering - Drilling                      | \$157,826   | \$162,157                | \$76,842  | \$276,270 | \$154,360 | \$134,648   | \$162,339                    | \$141,513                 | \$112,409                           | \$130,336                         | \$139,767      |
| Engineering - Health/Safety/Environment     | \$162,498   | \$145,067                | \$45,023  | \$315,300 | \$144,939 | \$133,457   | \$195,616                    | \$390,750                 | \$56,866                            | \$128,505                         | \$101,805      |
| Engineering - Production                    | \$139,395   | \$151,435                | \$118,538 | \$214,946 | \$144,445 | \$93,333    | \$143,031                    | \$66,965                  | \$80,082                            | \$108,018                         | \$55,357       |
| Engineering - Reservoir                     | \$156,975   | \$168,463                | \$53,226  | \$179,834 | \$154,822 | \$129,367   | \$144,511                    | \$132,988                 | \$207,663                           | \$103,524                         | \$87,370       |
| Engineering - Other or Combination of Above | \$164,196   | \$166,425                | \$168,104 | \$215,338 | \$152,431 | \$137,431   | \$172,655                    | \$161,710                 | \$121,097                           | \$159,106                         | \$122,524      |
| Finance or Administration                   | \$193,493   | \$207,950                | \$35,621  | \$167,062 | \$153,053 | \$522,066   | \$178,644                    | \$107,634                 | \$190,680                           | \$125,069                         | \$127,615      |
| Geophysics/Petrophysics/Physics             | \$151,835   | \$161,328                | \$99,801  | \$217,092 | \$159,911 | \$124,812   | \$145,272                    | \$134,171                 | \$125,224                           | \$134,070                         | \$120,697      |
| Non-Engineering Technical                   | \$127,368   | \$120,115                | \$251,093 | \$187,967 | \$124,159 | \$168,829   | \$136,681                    | \$207,820                 | \$96,504                            | \$104,522                         | \$18,783       |
| Professional Training                       | \$119,405   | \$117,739                |           |           |           | \$101,755   | \$191,603                    | \$9,000                   |                                     | \$132,500                         |                |
| Research                                    | \$115,365   | \$121,774                | \$87,800  | \$140,844 | \$118,732 | \$52,855    | \$120,982                    | \$17,269                  | \$94,343                            | \$73,167                          | \$60,625       |
| Sales or Marketing                          | \$142,095   | \$141,782                | \$53,068  | \$169,817 | \$155,111 | \$173,978   | \$143,725                    | \$102,823                 | \$187,111                           | \$136,177                         | \$62,616       |
| Other or Combination of Above               | \$187,315   | \$191,196                | \$146,470 | \$236,027 | \$190,464 | \$143,904   | \$193,987                    | \$142,939                 | \$132,080                           | \$181,673                         | \$101,007      |



## The Impact of Gender

Women represented a slightly larger proportion of respondents in the 2012 study compared with 2011, totaling 10.9 percent of participants. Females continue to be about 2.5 percent more likely to experience positive salary growth over the previous year than their male colleagues. Professionals of both genders were much more likely to have an increase in salary or remain stable than experience negative salary changes in 2012 than in 2011.

**Figure 5**







## Experience Level and Compensation

Experience continues to be a strong indicator of compensation at all levels. Bonuses have remained relatively consistent over the past year as a percentage of overall compensation for males. However, the percentage of overall compensation made up by the bonus for females has increased by about 3.1 percent on average.

The overall trend remains consistent between both genders, although women in the industry were less likely to experience a decrease in compensation compared to their male colleagues.

**Figure 6**

| Compensation by gender and experience | Female                          |                      |  |  |   | Male                            |                      |  |  |   |
|---------------------------------------|---------------------------------|----------------------|--|--|---|---------------------------------|----------------------|--|--|---|
|                                       | Executive/<br>Top<br>Management | Manager/<br>Director | Supervisor/<br>Superintendent/<br>Lead | Professional/<br>Individual<br>Contributor | Technician/<br>Specialist/<br>Support Staff | Executive/<br>Top<br>Management | Manager/<br>Director | Supervisor/<br>Superintendent/<br>Lead | Professional/<br>Individual<br>Contributor | Technician/<br>Specialist/<br>Support Staff |
| Average Years of Experience           | 18.6                            | 19.6                 | 14.5                                   | 9.1  | 15.2  | 28.7                            | 24.3                 | 19.5                                   | 14.7                                       | 15.5  |
| Number of Records                     | 19                              | 104                  | 126                                    | 609  | 65  | 574                             | 1,873                | 1,447                                  | 3,286                                      | 333   |
| Average Base Salary                   | \$215,642                       | \$164,098            | \$126,254                              | \$105,455                                  | \$89,730                                    | \$238,652                       | \$197,768            | \$150,305                              | \$129,273                                  | \$96,437                                    |
| Average Other Compensation            | \$414,511                       | \$56,831             | \$30,500                               | \$24,714                                   | \$16,396                                    | \$206,142                       | \$80,811             | \$40,579                               | \$35,543                                   | \$19,150                                    |
| Average Total Compensation            | \$630,153                       | \$220,929            | \$156,754                              | \$130,169                                  | \$106,126                                   | \$444,795                       | \$278,579            | \$190,884                              | \$164,816                                  | \$115,587                                   |

\*Estimates based on proportionate trend due to limited representation



## How to Learn More

This report represents a sample of current compensation in the industry. Presentation of every possible combination of the many jobs, geographies, and employer types and an analysis of the data dispersion in all of the compensation elements included are not possible in this summary; however detailed reports are available through the SPE Bookstore at [www.spe.org/store](http://www.spe.org/store) beginning in late November 2012.

SPE will make detailed summary reports available for download, in .pdf file format containing charts and descriptive statistics of trends, through the SPE Bookstore at a USD 50 member price and USD 125 non-member price.

Data tables, containing the raw data from the survey responses for those who prefer to do additional analysis, will be made available for download through the bookstore as well, to provide the opportunity for individual analysis and localization of data. Pricing for access to data for analysis will be USD 225 for SPE members and USD 425 for non-members, also available in late November 2012.

In addition to our annual reports, SPE is making available for download, beginning in late November 2012, a historical summary of SPE Salary Survey Highlights dating back to the first survey in 1967. The SPE Salary survey became an annual study beginning in 1984, with previous editions having been conducted in alternate years. The archive document will include the highlights through 2010. Highlights of the two most current years are available on SPE.org. The archive .pdf document will be available through the SPE Bookstore at a price of USD 125 for SPE members and USD 325 for non-members.

Inquiries regarding purchase may be addressed through the SPE Bookstore Website. Other questions regarding the survey can be addressed to [speresearch@spe.org](mailto:speresearch@spe.org).

Thank you for your interest in this important project and your continued support of SPE!

The SPE Research Team