



# New Mexico State Personnel Office

2600 Cerrillos Road  
Santa Fe, New Mexico 87505-0127

## Classification Description

### PETROLEUM SPECIALIST

<u>Class Title</u>	<u>Class Code</u>	<u>Pay Band</u>	<u>Alt Pay Band*</u>
Petroleum Specialist-B	E2171B	65	70
Petroleum Specialist-O	E2171O	70	75
Petroleum Specialist-A	E2171A	75	80

*\*In accordance with SPB Rule 1.7.4.10 NMAC, the assignment to alternative pay bands shall be reviewed annually to determine their appropriateness.*

### Occupation Description

Devise methods to improve oil and gas well production and determine the need for new or modified tool designs. Oversee drilling and offer technical advice to achieve economical and satisfactory progress.

### Nature of Work

Petroleum Specialists design methods for extracting oil and gas from deposits below the earth. Once these resources have been discovered, petroleum engineers work with geologists and other specialists to understand the geologic formation and properties of the rock containing the reservoir, to determine the drilling methods to be used, and to monitor drilling and production operations. They design equipment and processes to achieve the maximum profitable recovery of oil and gas. Because only a small proportion of oil and gas in a reservoir flows out under natural forces, petroleum engineers develop and use various enhanced recovery methods, including injecting water, chemicals, gases, or steam into an oil reservoir to force out more of the oil and doing computer-controlled drilling or fracturing to connect a larger area of a reservoir to a single well. Because even the best techniques in use today recover only a portion of the oil and gas in a reservoir, petroleum engineers research and develop technology and methods for increasing the recovery of these resources and lowering the cost of drilling and production operations.

### Distinguishing Characteristics of Levels

*Note: Examples of Work are intended to be cumulative for each progressively higher level of work. The omission of specific statements does not preclude management from assigning other duties which are reasonably within the scope of the duties.*

### Basic

- Employees in this Role perform standardized engineering duties relative to regulation of oil and gas production.

### Recommended Education and Experience for Full Performance

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and four (4) years of experience in a government regulatory role including oil field experience.

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### Minimum Qualifications

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and two (2) years of experience in a government regulatory role including oil field experience. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling six (6) years may substitute for the required education and experience.

### Operational

- Employees in this Role review, evaluate, and approve applications from the oil and gas industry.
- Employees conduct hearings to review evidence from applicants for exceptions to rules and evaluate gas well tests and test procedures.

### Recommended Education and Experience for Full Performance\*

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and six (6) years of experience in a government regulatory role including oil field experience.

### Minimum Qualifications

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and four (4) years of experience in a government regulatory role including oil field experience. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling eight (8) years may substitute for the required education and experience.

### Advanced

- Employees in this Role solve problems in the development of engineering related policies/procedures for oil and gas production and conservation.

### Recommended Education and Experience for Full Performance

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and eight(8) years of experience in a government regulatory role including oil field experience.

### Minimum Qualifications

Bachelor's Degree in Environmental, Mechanical, Civil, or Geological Engineering and six (6) years of experience in a government regulatory role including oil field experience. Any combination of education from an accredited college or university in a related field and/or direct experience in this occupation totaling ten (10) years may substitute for the required education and experience.

### Knowledge and Skills

*Note: This information has been produced by compiling information and documentation provided by O\*NET. O\*NET™ is a trademark of the U.S. Department of Labor, Employment and Training Administration.*

### Knowledge

**Engineering and Technology** — Knowledge of the practical application of engineering science and technology. This includes applying principles, techniques, procedures, and equipment to the design and production of various goods and services.

**Mathematics** — Knowledge of arithmetic, algebra, geometry, calculus, statistics, and their

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applications.

**Physics** — Knowledge and prediction of physical principles, laws, their interrelationships, and applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.

**Computers and Electronics** — Knowledge of circuit boards, processors, chips, electronic equipment, and computer hardware and software, including applications and programming.

**Administration and Management** — Knowledge of business and management principles involved in strategic planning, resource allocation, human resources modeling, leadership technique, production methods, and coordination of people and resources.

**Economics and Accounting** — Knowledge of economic and accounting principles and practices, the financial markets, banking and the analysis and reporting of financial data.

**Chemistry** — Knowledge of the chemical composition, structure, and properties of substances and of the chemical processes and transformations that they undergo. This includes uses of chemicals and their interactions, danger signs, production techniques, and disposal methods.

**English Language** — Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar.

### Skills

**Reading Comprehension** — Understanding written sentences and paragraphs in work related documents.

**Active Listening** — Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times.

**Speaking** — Talking to others to convey information effectively.

**Complex Problem Solving** — Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions.

**Critical Thinking** — Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems.

**Writing** — Communicating effectively in writing as appropriate for the needs of the audience.

**Monitoring** — Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action.

**Coordination** — Adjusting actions in relation to others' actions.

**Judgment and Decision Making** — Considering the relative costs and benefits of potential actions to choose the most appropriate one.

**Systems Analysis** — Determining how a system should work and how changes in conditions, operations, and the environment will affect outcomes.

### Statutory Requirements:

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**Conditions of Employment:** Working Conditions for individual positions in this classification will vary based on each *agency's utilization, essential functions, and the recruitment needs* at the time a vacancy is posted. All requirements are subject to possible modification to reasonably accommodate individuals with disabilities.

**Default FLSA Status:** Exempt. FLSA status may be determined to be different at the agency level based on the agency's utilization of the position.

**Bargaining Unit:** This position may be covered by a collective bargaining agreement and all terms/conditions of that agreement apply and must be adhered to.

**Established:** 07/07/2001

**Revised:** 7/27/2012

*\*Adapted from the United States Bureau of Labor Statistics and are intended to illustrate the typical education and experience required for this occupation.*

*Note: Classification description subject to change. Please refer to the SPO website [www.spo.state.nm.us](http://www.spo.state.nm.us) to ensure this represents the most current copy of the description.*