



New Mexico State Personnel Office

2600 Cerrillos Road
Santa Fe, New Mexico 87505-0127

Classification Description

GEOLOGICAL AND PETROLEUM TECHNICIANS

<u>Class Title</u>	<u>Class Code</u>	<u>Pay Band</u>	<u>Alt Pay Band*</u>
Geological and Petroleum Technicians-B	F4041B	45	
Geological and Petroleum Technicians-O	F4041O	50	
Geological and Petroleum Technicians-A	F4041A	55	

**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

Assist scientists in the use of electrical, sonic or nuclear measuring instruments in both laboratory and production activities to obtain data indicating potential sources of metallic ore, gas or petroleum. Analyze mud and drill cuttings. Chart pressure, temperature and other characteristics of wells or bore holes. Investigate and collect information leading to the possible discovery of new oil fields.

Nature of Work

Geological and petroleum technicians assist in oil and gas exploration operations, collecting and examining geological data or testing geological samples to determine their petroleum content and their mineral and element composition. Some petroleum technicians, called scouts, collect information about oil well and gas well drilling operations, geological and geophysical prospecting, and land or lease contracts.

Distinguishing Characteristics of Levels

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 assist in the measurement of and recording of physical and geologic conditions in oil or gas wells.
- Employees monitor instruments lowered into wells, perform analysis of the mud from well, examine geological data or test geological samples, and collect information about oil and gas well drilling operations; review regulatory submissions; monitor and analyze field activity data; perform calculations; and ensure compliance with regulations.

Recommended Education and Experience for Full Performance

High school diploma or General Educational Development (GED) test and two (2) years of relevant experience.

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Minimum Qualifications

High school diploma or GED and six (6) months experience in the oil and gas industry.

Operational

- Employees in this Role assist in the analysis of oil and gas conservation, oil field equipment operations, drilling operations, and application of practices and procedures used in oil and gas drilling and production.
- Employees prepare technical reports clearly and concisely, read and interpret regulations accurately, and establish and maintain effective working relationships with oil Industry personnel.

Recommended Education and Experience for Full Performance

Associates Degree in Environmental Science, Engineering Technology or Petroleum Technology and two (2) years of experience working in the oil and gas industry.

Minimum Qualifications

High school diploma or GED and one (1) year experience in the oil and gas industry.

Advanced

- Employees in this Role conduct inspection of drilling, casing, cementing, and plugging operations on wells and oil and gas production operations.
- Employees gather water samples from fresh water wells and oil wells and review drilling permits for accuracy and completeness.
- Employee apply rules, regulations, policies, general geology, casing and cementing techniques, production practices and well testing, and assist field representatives in preparation of technical reports.

Recommended Education and Experience for Full Performance

Associates degree in Environmental Science, Engineering Technology or Petroleum Technology and four (4) years of experience in the oil and gas industry.

Minimum Qualifications

High school diploma or GED and two (2) year's experience in the oil and gas industry.

Knowledge and Skills

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Knowledge

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

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 applications.

Physics — Knowledge and prediction of physical principles, laws, their interrelationships, and

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applications to understanding fluid, material, and atmospheric dynamics, and mechanical, electrical, atomic and sub-atomic structures and processes.

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

Geography — Knowledge of principles and methods for describing the features of land, sea, and air masses, including their physical characteristics, locations, interrelationships, and distribution of plant, animal, and human life.

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.

Customer and Personal Service — Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction.

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.

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

Speaking — Talking to others to convey information effectively.

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

Time Management — Managing one's own time and the time of others.

Coordination — Adjusting actions in relation to others' actions.

Science — Using scientific rules and methods to solve problems.

Social Perceptiveness — Being aware of others' reactions and understanding why they react as they do.

Statutory Requirements: N/A

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.

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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: 9/20/2011

**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 to ensure this represents the most current copy of the description.