

GENERAL DESCRIPTION OF CLASS

The GEOLOGIST 1 assists in investigating, collecting, and analyzing geological field samples and data and in preparing geologic maps, reports and statistics of findings, recommendations and published information. Employees in this class learn and assist in a specialized field such as engineering, hydro, economic, petroleum, geothermal, or hazard geology.

DISTINGUISHING FEATURES

This is the first level of a four-level series. Employees in this class assist higher level geologists in geological investigations, surveys and related activities by recording data obtained from field investigations and preparing preliminary geologic reports. At this level, employees work on a project-by-project basis and require guidance and direction in performing the work.

DUTIES AND RESPONSIBILITIES

The duties listed below are not inclusive but characteristic of the type and level of work associated with this class. Individual positions may perform all or some combination of the duties listed below as well as other related duties.

1. Geologic Activities

Research source documents such as geologic literature or publications, maps, well logs, cross sections, profiles, aerial photos, pumpage rate, and precipitation records, water level records from wells, and other historical data to assist in analysis of projects.

Assist higher level geologist in field investigations or surveys and collecting samples for lab analysis. Assist in analyzing field samples and data to identify rock and soil types, groundwater conditions and resources, quality mineral resources, and geothermal energy, petroleum and natural gas potential, or instability problems or hazards such as earthquakes, volcanoes, and landslides.

2. Mapping and Report Writing

Review previously published maps and current project data. Assist higher level geologists by drafting geological maps and cross sections or reducing and analyzing field data manually or with computer applications.

Compile and interpret information from geologic source documents and laboratory test results, drill logs, and other field studies. Prepare preliminary technical reports of findings and recommendations under the guidance of a higher level geologist or supervisor.

3. Project Activities

Respond to public inquiries regarding specific geologic project. Assist higher level geologist by issuing project-related permits and inspecting work performed by outside agencies and contractors to ensure proper application and compliance with applicable laws, rules, and regulations. Perform simple laboratory tests on material samples obtained from drilling crew.

RELATIONSHIPS WITH OTHERS

Employees in this class contact exploration crews daily to discuss type, frequency and amount of samples to be collected and to ensure that the crews follow proper field sampling and testing procedures. They occasionally contact, in person or by phone, peers, private industry, contractors, local, State and Federal officials, and the public to provide or obtain information, advice, or assistance and contact other agencies, contractors or private industry when inspecting their work for proper application and compliance with rules and regulations.

SUPERVISION RECEIVED

Employees in this class receive close to general supervision from a supervisor who assigns work orally or through written instructions. Employees conduct independent field activities but require guidance and direction. In progress work is reviewed through informal meetings and upon completion of each assigned project for accuracy, completeness, timeliness, and to ensure compliance with State and Federal laws, rules, and regulations.

Employees in this class follow State and Federal laws, rules, and regulations, agency policies and procedures, and reference materials related to the general field or a specific area of geology, ensuring that project activities are consistent with those directives.

GENERAL INFORMATION

Some positions in the class require the willingness to work in all terrains and weather or to work extended hours on field trips.

KNOWLEDGE AND SKILLS (KS)

Basic knowledge of the theories, principles, practices and techniques of geology.
Basic knowledge of surveying and geologic mapping techniques.
Basic knowledge of mathematics (multiplication, division, trigonometry, and algebra).
Basic knowledge of field and laboratory techniques and procedures used in geologic investigations.

Skill in written communications.
Skill in reading geologic and topographic maps, cross sections and profiles.
Skill in communicating orally with a variety of people.
Skill in collecting, organizing, interpreting, and summarizing technical information from various resource documents.
Skill in preparing geological maps, cross sections, and other related maps.
Skill in classifying and maintaining logs of soil and rock samples.
Skill in computing geologic processes.
Skill in organizing, presenting and writing reports and papers on findings and making recommendations.

Some positions in this class may require the following:

Basic knowledge of use of explosives.
Skill in operating a computer for analyzing data and producing desired reports.

NOTE: The KNOWLEDGE and SKILLS are required for initial consideration. Some duties performed by positions in this class may require different KS's. No attempt is made to describe every KS required for **all** positions in this class. Additional KS requirements will be explained on the recruiting announcement.

Adopted 1/90

Revised