

1311,Physical Science Technician,GS-04

PD Tracking Number 0002027

Major Duties

GS-1311-04 (Standard PD)

Major Duties

Field

{ } Assists scientists in field phases of geologic data collection projects. Tasks include measuring stratigraphic units, collecting samples, making field observations of structure and stratigraphy, identifying basic rock types, plant occurrences, and vegetation structure. Assembles field data on base maps.

{ } Assists scientists on field phases of geophysical data collection projects. Tasks include installing and operating temporary and permanent geophysical data collection equipment, creating site location maps, installing data telemetry systems, and assembling simple circuits and electronic subsystems of data collection equipment.

{ } Assists with drilling and coring projects by recording logs of drill cuttings and cores and making simple descriptions of hole stratigraphy from logs. Plots log strips of geologic sections for drill holes. May serve as alternate on-site Contract Officer Representative (COR).

Laboratory

{ } Assist in the preparation of water samples for nitrogen, carbon, oxygen, hydrogen, and sulfur isotopic analyses. Materials and equipment comprise various reagents, including strong acids and bases, balances, vacuum equipment, ovens, torches, distillation apparatus, standard measuring devices, and glassware. Routine measurements include weights, pressures, temperatures, pH, and ammonia and nitrate concentrations.

{ } Performs a range of duties to prepare rock, ore, and mineral samples for mineralogical and chemical analyses by crushing, grinding, sieving, weighing, polishing, mounting, and/or ashing. Operates laboratory equipment. Keeps records of the status of samples being processed.

{ } Measures samples for laboratory experiments using standard laboratory testing equipment and procedures.

Computer Related

{ } Operates computers, terminals, and peripheral data processing equipment to store, retrieve, edit, update, manipulate, and analyze recorded data or standard data bases.

{ } Modifies reports from other sources to fit into the relational databases of programs used by

project. This may include changing scales and information content and reformatting tabular data.

Office

{ } Assists scientists in office phase of scientific projects. Tasks include: 1) performing library searches and gathering technical data, statistics, and maps from other sources, such as geological, geophysical, productions and engineering reports; or 2) plotting data on maps and charts; or 3) organizing, cataloguing, and filing data and preparing information for interpretation, maps and reports; or 4) compiling geologic and other natural resources data from existing maps, computer data files, and aerial photographs and performing basic field checking, if required; or 5) performing basic mathematical calculations to reduce scientific data.

{ } Assists in text preparation of manuscripts by proofreading for consistency of information presented in textual, tabular, or chart materials.

Factor Statements

Factor 1. Knowledge Required by the Position Level 1-3 350 points

{ } Knowledge of a body of standardized rules, procedures, or operations requiring considerable training and experience to perform the full range of standard assignments and to resolve recurring problems, and to operate and adjust varied equipment.

{ } Knowledge of computer processing rules for the input, storage, and manipulation of data.

{ } Skill in using computer systems languages sufficient to make minor enhancements to existing programs.

{ } Skill in researching, organizing, and summarizing technical information and performing required calculations.

Factor 2. Supervisory Controls Level 2-2 125 points

Detailed instructions are given for assignments. Employee works independently to perform recurring tasks. Specific instructions are received for new, more difficult assignments. Work is reviewed to assure technical accuracy and compliance.

Factor 3. Guidelines Level 3-1 25 points

Guidelines consist of oral instructions, written guides, charts, manuals, schedules, standard operating procedures, and bureau guidelines. The employee works in strict adherence to guidelines, which are typically directly applicable, specific, and used repetitively in the work.

Factor 4. Complexity Level 4-2 75 points

Assignments consist of performing routine procedural tasks and operating a variety of equipment that can be accomplished by applying established methods and procedures. The employee uses judgment in choosing the right course of action and executing the proper task sequences for completing the work and determines which information to refer to higher-graded personnel.

Factor 5. Scope and Effect Level 5-2 75 points

Work supports researchers or program /project operations. Work affects the accuracy, reliability, or acceptability of research and laboratory processes.

Factor 6. Personal Contacts Level 6-1 10 points

Contacts are with employees in the immediate organization, office, or work unit.

Factor 7. Purpose of Contacts Level 7-1 20 points

Contacts are for obtaining or exchanging information.

Factor 8. Physical Demands Level 8-2 20 points

Laboratory work requires prolonged periods of standing and manual dexterity to operate equipment. Field work requires moderate to strenuous activities such as hiking digging, lifting, and driving a vehicle.

Factor 9. Work Environment Level 9-2 20 points

Field work involves moderate risks and discomforts, exposure to other conditions such as rain, cold/hot weather, and rapidly running or icy streams and rivers. Laboratory work involves exposure to moderate risks or discomforts such as high levels of noise and vibration, dust, grease, exposed moving parts of machinery, or irritant fumes and chemicals. Work requires protective clothing, gear, and observance of safety precautions.

TOTAL POINTS: 720

GRADE CONVERSION: GS-4

GS-1300T, JFS for Technical Work in the Physical Sciences Group 08/02

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