

POSITION DESCRIPTION (Please Read Instructions on the back)

1. Agency Position No
S0291

2. Reason for Submission
NEW

3. Service

4. Employing Office Location

5. Duty Station

6. OPM Certification No

Explanation

7. Fair Labor Standards Act
Non-Exempt

8. Financial Statements Required

9. Subject to IA Action
YES

10. Position Status

11. Position is
NON-SUPERVISORY

12. Sensitivity
1 - Nonsensitive/Low

13. Competitive Level Code

14. Agency Use

15. Drug Test Required
NO

16. ADP Status
NO

17. Classified/Graded by	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Office of Personnel Management						
b. Department, Agency or Establishment						
c. Second Level Review	Physical Science Technician	GS	1311	6	L . P	08/17/2004
d. First Level Review						
e. Recommended by Supervisor or Initiating Office						

18. Organizational Title of Position (if different from official title)

19. Name of Employee (if vacant, specify)

20. Department, Agency or Establishment
U.S. DEPT. OF THE INTERIOR

c. Third Subdivision

a. First Subdivision
U.S. GEOLOGICAL SURVEY

d. Fourth Subdivision

b. Second Subdivision

e. Fifth Subdivision

21. Employee Review- This is an accurate description of the major duties and responsibilities of my position.

Signature of Employee (optional)

Supervisory Certification. I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Name and Title of Supervisor
Mark Sogge, Acting Deputy Director, USGS

b. Typed Name and Title of Higher-Level Supervisor or Manager (optional)

Signature Date
/s/ Mark Sogge 07/30/2015

Signature Date

23. Classification/Job Grading Certification
I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.

24. Position Classification Standards Used in Classifying/Grading Position
GS-1300T, JFS for Tech Work in the Phy Sci

Typed Name and Title of Official Taking Action
Lorilee Penn Human Resources Specialist

Information for Employees
The standards and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S Office of Personnel Management.

Signature Date
Lorilee Penn /s/ 08/17/2004

25. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee (Optional)										
b. Supervisor										
c. Classifier										

26. Remarks

27. Description of Major Duties and Responsibilities (See Attached)

PD Tracking Number 0002029

Major Duties

GS-1311-06 (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 in mapping geologic formations and structures, which may include complete traverses. Work involves recognition, description, classification, and interpretation of geologic units and the measurement of structural data.

{ } 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. This may include operation of small, short-term field equipment networks spread over a few square miles of territory.

{ } Calibrates, installs, and maintains field instrument sites for monitoring such parameters as seismicity, tilt, gas, strain, video and temperature, etc. Constructs and maintains telemetry and recording interface equipment, and parts of field units (dc-dcconverters, AGG cards, Summing Amps, radio cables, antennas, etc.). For permanent network calibration, installation, and maintenance, the incumbent is responsible for subsystems as well as individual units.

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

{ } As directed by field supervisor, supervises or trains entry level technicians in equipment installation and maintenance.

Laboratory

{ } Prepares 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. Trains entry level technicians in the laboratory.

{ } 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 and maintains laboratory equipment. Keeps records of the status of samples being processed. Provides written summary of results upon completion of work

{ } Measures samples for laboratory experiments using standard laboratory testing equipment and procedures. Curates and prepares samples for analysis, which may include micropaleontologic analysis, x-ray diffraction analysis, bulk and grain density measurements, bulk chemical analysis, SEM analysis, carbonate analysis, and thin section cutting.

Computer Related

{ } Operates computers, terminals, and peripheral data processing equipment to store, retrieve, edit, update, manipulate, and analyze recorded data or standard data bases. The incumbent is expected to independently identify recurring and/or new data and database problems, and bring them to the attention of the supervisor.

{ } Modifies reports from other sources to fit into the relational databases of programs used by project. This may include changing of scales, information content and reformatting of tabular data.

{ } Prepares a variety of tables, base maps, and computer generated plots using standard computer routines.

{ } Processes and plots data using standard or specially developed computer software.

{ } Tabulates laboratory and field data, reduces data, and constructs descriptive plots. Performs automated photogrammetric analysis and grain-size analysis.

{ } Uses geographic information system (GIS) techniques to archive and graphically present data. Composes descriptive reports of activities. Prepares maps and illustrations using computer graphic software.

{ } As directed, trains entry level technicians in specific sections of standard data processing and database work activities.

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, production 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.

{ } Performs project support by such activities as drafting straightforward illustrations using a variety of art media, including graphics software; preparing reports that summarize data and advising supervisor of its quality; correlating data from many sources (film, seismic and geochemical); preparing complex tables, graphs, cross sections, and data plots for interpretation of data; entering data into computer formats and using library programs to perform calculations and generate plots; organizing and setting up files; and compiling and analyzing field and laboratory data.

Factor Statements

Factor 1. Knowledge Required by the Position Level 1-4 550 points

{ } Knowledge of technical methods, principles, and practices to carry out a variety of technical duties common to the specialty area and/or to operate complex equipment systems with numerous components or parts, which must be calibrated to achieve desired results.

{ } Knowledge of basic geologic theory and techniques of geologic map making.

{ } Knowledge of fundamental geophysical methodology in order to assist in making field measurements of geophysical parameters.

{ } Basic knowledge of electronic instruments with fundamental mechanical skills in order to maintain and repair equipment. Sufficient knowledge of geology and hydrology to select proper field sites.

{ } Knowledge of basic laboratory principles to assess readings and measurements taken, tests executed, observations made, work completed, samples collected, etc., and to understand and relate the significance of the results to the higher project objectives.

{ } Knowledge of the basic features of computing systems sufficient to input, store, and retrieve data, as well as direct or train entry level technicians in basic work activities.

{ } Skill in the use of standard or specially developed computer software to process and plot data.

{ } Elementary knowledge of computerized GIS techniques for archival and graphical presentation of project data.

{ } Skill in researching information; determining the relevancy of data; assimilating, summarizing, and accurately reporting technical information; and performing required calculations.

{ } Skill in library techniques sufficient to locate references and construct information data bases.

Factor 2. Supervisory Controls Level 2-3 275 points

Work is assigned in terms of priorities, objectives, and/or deadlines by the supervisor or project leader. The methodology and techniques to be utilized will generally be left to the incumbent. Findings will be checked upon completion for soundness and correlation to results of other similar tests.

Factor 3. Guidelines Level 3-2 125 points

A number of technical manuals and textbooks, general laboratory policies, and pertinent safety regulations are specific and applicable to assignments. Because of the number, similarity, linkage, and overlapping nature of the guidelines, the employee exercises judgment in selecting the appropriate guidelines. Situations where guidelines are inadequate are referred to the supervisor or higher graded specialist.

Factor 4. Complexity Level 4-2 75 points

Assignments consist of performing routine procedural tasks, and operating a variety of equipment that require the ability to make choices. The employee exercises independent action, choosing the right course of action and executing the proper task sequences for completing the work.

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 pts.

Laboratory work require 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 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 may require protective clothing, gear, and observance of safety precautions.

TOTAL POINTS: 1170

GRADE CONVERSION: GS-6

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

Rev. 8/2004