

POSITION DESCRIPTION (Please Read Instructions on the Back)

2. Reason for Submission ☐ Redescription ☐ Reestablishment		3. Service ☐ Hdqtrs ☒ Field		4. Employing Office Location		5. Duty Station		1. Agency Position No.	
6. OPM Certification No.		7. Fair Labor Standards Act ☐ Exempt ☒ Nonexempt		8. Financial Statements Required ☐ Executive Personnel Financial Disclosure ☐ Employment and Financial Interest		9. Subject to IA Action ☒ Yes ☐ No		10. Position Status ☒ Competitive ☐ Excepted (Specify in Remarks)	
11. Position is ☐ Supervisory ☐ Managerial ☒ Neither		12. Sensitivity ☒ 1-Non-Sensitive ☐ 2-Noncritical Sensitive ☐ 3-Critical ☐ 4-Special Sensitive		13. Competitive Level Code		14. Agency Use		*R59	

15. 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	05		
d. First Level Review						
e. Recommended by Supervisor or Initiating Office						

16. Organizational Title of Position (if different from official title) Physical Science Technician		17. Name of Employee (if vacant, specify)	
18. Department, Agency, or Establishment Department of the Interior		c. Third Subdivision	
a. First Subdivision National Park Service		d. Fourth Subdivision	
b. Second Subdivision		e. Fifth Subdivision	
		Signature of Employee (optional)	

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

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

21. 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.

22. Position Classification Standards Used in Classifying/Grading Position
Physical Science Technician Series, GS-1311, 04/67; Grade Level Guide for Aid and Technician Work in the Biological Sciences, GS-400, 12/91.

23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee (optional)										
b. Supervisor										
c. Classifier										

24. Remarks *Agency Use Code should be entered in FPPS as last three spaces of position allocation number.

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

**NATIONAL PARK SERVICE
BENCHMARK POSITION DESCRIPTION**

**Physical Science Technician
GS-1311-05**

Introduction

This position is located in a National Park Service organization. The purpose of the position is to perform routine and uncomplicated physical science technical tasks (e.g., in chemistry, geology, geophysics, oceanography, hydrology, physics, atmospheric science, and/or other physical sciences).

Technician work is typically associated with and supportive of a professional field; work may involve substantial elements of the work of the professional field, but requires less than full knowledge of the field involved. This position is intended to report to a specialist or resources manager in the same or a related field. If the incumbent is not supervised by a professional specialist in a related profession, then technical direction must be obtained from a specialist in a central office or center.

The incumbent of this position performs primarily routine functions; in contrast to positions at the GS-06 level, which perform with more independence, the incumbent receives specific instructions for non-routine assignments, and refers unfamiliar situations to the supervisor for resolution. The work of this position is also more closely reviewed than similar positions at the GS-06 level.

Major Duties (80-100%)

Implements established natural resource management projects (e.g., field examinations, field surveys, inventories, etc.) related to one or more of the physical sciences. Collects and organizes field data following instructions and standardized procedures. Ensures adequate quality control of data collected.

Performs routine and recurring testing of collected samples. Records all data collected and provides preliminary assessment of the information. Seeks assistance for situations not covered by instructions or guidelines.

Monitors and evaluates conditions in assigned program area. Evaluates observed conditions and problems, and makes preliminary determinations on the cause of problems noted. Provides results to higher-level specialists for analysis.

Assists in the preparation of reports, plans, and guidelines. Draft project reports may include literature research, descriptions of methods, preparation of graphs and charts, and summary of findings. Performs research and assists in writing scientific reports. Assists in developing graphs, computations, engineering curves, mathematical calculations, and illustrations for technical studies and presentations.

Provides logistical support and area orientation for contract or cooperating scientists; provides technical information, ensures quality control and adherence to policies, and solves logistical or operational problems within the scope of the incumbent's knowledge and authority.

Installs, operates, and maintains complex sampling, monitoring, and laboratory equipment and

instruments. Inventories equipment, evaluates quality assurance compliance, and calibrates equipment as necessary.

Provides advice, assistance, and training to students, student conservation assistants, and volunteers involved in resource management projects and field research.

Utilizes a variety of computer programs to compile, reduce, store, retrieve, analyze, and report data and other resource management information, including natural science research and long-term monitoring projects. Runs computer analysis of data and prepares statistical reports or portions of reports. Maintains and organizes computer databases.

Provides information to other employees and visitors about the park physical science management program; refers unusual questions to the supervisor. May develop and present related interpretive programs to the public.

Performs a variety of administrative duties in support of resource management and research projects. This may include completing requisitions for supplies and equipment, maintaining office files and records, etc.

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

Knowledge of established practices, procedures, and techniques of one or more of the physical sciences.

Knowledge of routine NPS natural resource management practices, methods, and procedures.

Knowledge of data collection techniques, including installation, operation, and maintenance of testing and sampling equipment.

Ability to follow detailed sampling and laboratory procedures, train others to accurately follow procedures, and recognize departures from established quality control/quality assurance guidelines.

Basic understanding of the principles and techniques of one or more of the physical sciences to support, understand, and relate results to the broader natural resource function.

Ability to make mathematical calculations; generate graphs, curves, and charts; draft maps; and produce illustrations for broader studies.

Basic knowledge of research techniques and ability to assist in performing research.

Ability to communicate information in a clear and concise manner, including the ability to develop reports and present information.

Knowledge of database management, word processing, and specialized software programs essential to resource management activities.

Factor 2. Supervisory Controls Level 2-2; 125 points

The supervisor establishes required quantity and quality, deadlines, and priorities, and provides instructions for new assignments. The incumbent is relied upon to independently carry routine assignments through to completion. Unusual situations are referred to the supervisor. Work is reviewed for accuracy, quality, and compliance with standards and procedures.

Factor 3. Guidelines Level 3-2; 125 points

Guidelines consist of a variety of written references and manuals as well as oral instructions covering procedures, directions, and precedents. The incumbent exercises judgment to identify problems and applicable solution guidelines.

Factor 4. Complexity Level 4-2; 75 points

Duties involve a variety of related technical assignments that support the organization's natural resource management function. Decisions regarding what needs to be done involve various choices requiring the incumbent to recognize the existence of and differences among a few easily recognizable situations.

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

The incumbent performs routine natural resource management tasks. The work performed affects the accuracy, reliability, and acceptability of further processes.

Factor 6. Personal Contacts Level 6-2; 25 points

Contacts are with co-workers and at times employees of other parks and central offices as well as with the general public, partners, and contract and cooperating scientists.

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

The purpose of contacts is to obtain, relay, and exchange information.

Factor 8. Physical Demands Level 8-2; 20 points

The work is partially sedentary with prolonged standing, walking, and bending often required. Heavy items (e.g., packs and equipment) must be lifted and carried on a routine basis.

Factor 9. Work Environment Level 9-2; 20 points

The work is performed in an office, laboratory, and in the field. Field work includes exposure to extreme weather and terrain conditions, poisonous plants, biting insects, and wild animals. Laboratory work may involve exposure to hazardous chemicals.

POSITION EVALUATION STATEMENT

Title, Series, and Grade: Physical Science Technician, GS-1311-05

Standards Used: Physical Science Technician Series, GS-1311, 4/67

Grade Level Guide for Aid and Technician Work in the Biological Sciences,
GS-400, 12/91

Factors assigned using the Physical Science Technician Standard: Level III, Degree C

Factors assigned using the GLG for Aid and Technician Work in Biological Sciences:

EVALUATION FACTORS	POINTS ASSIGNED	FACTOR LEVEL	COMMENTS
1. Knowledge Required	550	1-4	Knowledge of the technical methods and procedures for a work area to carry out a variety of technical duties; knowledge required to operate complex equipment systems.
2. Supervisory Controls	125	2-2	Supervisor provides instructions on recurring assignments, and provides additional specific guidance and reference sources for new or difficult assignments; employee performs recurring assignments independently, and refers situations not covered by instructions or precedents to supervisor; work and methods evaluated for accuracy and adequacy.
3. Guidelines	125	3-2	Incumbent must choose the most appropriate from several guidelines; uses judgment to handle aspects of work not completely covered by guidelines.
4. Complexity	75	4-2	Work involves performing related technical tasks of limited scope or difficulty; employee selects from among clearly recognizable alternatives; actions taken are similar, although the specific pattern of actions may differ.
5. Scope and Effect	75	5-2	Work involves the execution of specific rules, regulations, or

			procedures; work products affect the accuracy, reliability, or acceptability of further procedures, processes, or services.
6. Personal Contacts	--	2	Contacts with general public in moderately structured setting.
7. Purpose of Contacts	45	A	Exchange information.
8. Physical Demands	20	8-2	Prolonged standing, bending, and lifting.
9. Work Environment	20	9-2	Encounters moderate risks which require safety precautions.
TOTAL POINTS	1035		
Grade Conversion	GS-05		

Resources Careers

Other Specializations: Please check if this position is involved in any of these program areas. Because other series and/or standard position descriptions exist to cover the following types of work, none should be the primary focus of the position. Further, it is NOT recommended that any of these specializations be used as a parenthetical to the basic title.

_____ **WATER RESOURCES:** Positions concerned with watershed management and subsurface water; monitors water quality and recommends methods and programs to maintain quality; monitors and/or recommends mitigating actions for land uses.

_____ **AIR QUALITY:** Positions concerned with monitoring and recording air quality data; monitoring and maintenance of testing and data collection equipment; and coordinating data exchange with the EPA and the state.

_____ **GIS:** Positions concerned with mapping, simple data analysis, and some data development using Geographic Information Systems and related equipment.

_____ **CAVES:** Positions concerned with monitoring, researching, and conserving cave and karst management resources.

_____ **GEOLOGY:** Positions concerned with surficial or Quaternary geology, geomorphology, engineering geology, structural geology, stratigraphy, mineralogy, paleontology, and historical geology to apply the associated standard field and laboratory methods to monitor, research, and collect data to support the conservation or understanding of mineralogic, geologic, and related resources; monitors and/or recommends mitigating actions for land uses; and coordinates data exchange with other entities.

_____ **OCEANOGRAPHY:** Positions concerned with monitoring, researching, and conserving the chemical, biologic, and geologic aspects of oceanic environments.

_____ **GEOPHYSICS:** Positions concerned with physics of the structure, composition, and physical properties of the earth and its atmosphere, i.e., science that deals with weather, winds, tides, etc.

_____ **PHYSICS:** Positions concerned with the properties, changes, interactions, etc. of matter and energy; physics is subdivided into mechanical, thermodynamics, optics, acoustics, etc.

_____ **MINES:** Positions concerned with examining, surveying, inventorying, and sampling abandoned mines and mineral sites.

_____ **CHEMISTRY:** Positions concerned with the investigation, analysis, and interpretation of the composition, molecular structure, and properties of substances; the transformation which they undergo; and the amounts of matter and energy included in these transformations.

_____ **VOLCANOLOGY:** Positions concerned with researching, monitoring, and recording data about volcanoes.