

POSITION DESCRIPTION (Please Read Instructions on the back)

1. Agency Position No
S0268

2. Reason for Submission NEW	3. Service	4. Employing Office Location	5. Duty Station	6. OPM Certification No
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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	Hydrologic Technician	GS	1316	9	K . S	05/21/2008
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)
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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 /s/ Mark Sogge	Signature
Date 07/30/2015	Date

23. Classification/Job Grading Certification <i>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.</i>	24. Position Classification Standards Used in Classifying/Grading Position GS-1300T, JFS for Tech Work in the Phy Sci
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Typed Name and Title of Official Taking Action Kevin Scott Human Resources Specialist (Classification/Policy)	Information for Employees <i>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.</i>
Signature Kevin Scott /s/	Signature
Date 05/21/2008	Date

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

26. Remarks

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

1316,Hydrologic Technician,GS-09

Based on PD Tracking Number 0002019

PD Tracking Number 0005102

Major Duties

GS-1316-09 (Standard PD)

Major Duties

Surface Water: Makes stream discharge measurements at all stages, at times under extremely adverse conditions. Applies seasoned judgment to compensate for field conditions and subtle problems. Determines the most effective method, technique and protocol for the collection of representative data. Observes and makes detailed notes of various hydraulic or environmental conditions which may have a bearing on discharge. Computes and checks the full range of surface-water records from field data. Plots discharge measurements, develops stage-discharge, velocity index curves and/or other complex ratings such as those used at culverts, gates, pumps, etc. and estimates extensive periods of missing record and non-routine flow of tidal, backwater, or ice periods. Documents the procedure used to compute records. Performs and reviews statistical and/or technical analyses of a wide variety of hydrologic data collected in the field. Prepares material for publication, including maps, tables and other illustrative material. Prepares plots, drafts, or sketches from surveying notes. Performs general office review and/or quality-assurance review for complex surface-water records checking methods and accuracy of computation, plotting and analyzing differences in hydrographs and making necessary changes to correct inconsistencies in data. Assures accuracy, uniformity, and compliance with technical standards.

Ground Water: Performs a full range of water-level and discharge measurements from wells and springs. Observes and makes detailed notes of various hydraulic or environmental conditions. Computes, checks, and reviews a wide variety of ground-water level records. Tasks involve analyzing possible courses of action, techniques and procedures. Performs and reviews statistical and/or technical analyses of hydrologic data collected in the field. Documents procedure used to compute records. Instructs others in the proper methods of record computation. Checks and reviews record computations and insures timely processing and proper storage of data. Manages the files of geophysical logs, makes additions and provides retrieval and indexing of logs. Conducts quality-assurance review of a wide variety of ground-water records to assure accuracy, uniformity, and compliance with technical standards. Verifies the accuracy of data summaries. Operates a variety of well logging instrumentation and records detailed findings. Plans and conducts a variety of aquifer tests. Computes and analyzes data for interpretation and review.

Water Quality: Performs full range of field measurements such as water temperature, specific conductance, pH, dissolved oxygen and alkalinity. Collects, processes, and prepares for lab analysis, the full range of samples using the most appropriate technique and protocol depending upon complex field conditions. Utilizes multiple techniques to compute, check and review a wide variety of water-quality monitoring records. Performs and reviews statistical and/or technical analysis of the hydrologic data collected. Prepares summaries and data reports of results of field activities, including the preparation of materials for publications, such as tables of data, maps, and

other illustrative material. Determines the accuracy of results obtained. Assembles, evaluates, and prepares field and laboratory data for tabulation, analysis and subsequent publication. Documents procedure used to compute records. Applying seasoned judgment, conducts quality-assurance review of water-quality records and data summaries to ensure accuracy, uniformity, and compliance with technical standards. Instructs technical personnel regarding field and laboratory methods and procedures.

Sediment: Collects and processes a wide variety of complex suspended sediment, bedload, and bed material samples. Computes, checks and reviews a wide variety of measurements for analyses and computation. Utilizes transport curves and other methods to estimate when sample data are lacking. Performs and reviews statistical and/or technical analysis of the hydrologic data collected. Enters sediment data into the water-quality and/or daily-values file using automated systems. Assembles and prepares data for tabulation and subsequent publication. Writes analyses describing the procedure used to compute records. Uses appropriate sediment computation programs to process a wide variety of sediment load data. Input data for the programs are: (1) sediment grain-size data and (2) discharge data. Applies quality-assurance techniques and makes corrections based on review of the sediment data.

Instrumentation: Configures, installs, maintains and services a wide variety of sensing, recording and communications equipment and instrumentation. Troubleshoots a wide range of hydrologic instrumentation in the office. Maintains a detailed inventory and repair log on hydrologic instrumentation. Calibrates meters and analytical equipment. Determines appropriate equipment for complex field or laboratory activities depending upon data collection needs and field conditions.

Infrastructure: Leads a team in the construction and removal of a variety of gages and supporting structures. Develops plans for new gaging stations, artificial controls, and other supporting structures; and for the rehabilitation of existing stations. Identifies and procures materials for construction and repair jobs. Schedules and/or obtains appropriate vehicles, equipment, and supplies. Performs safety inspection of equipment and work area.

Datums/Altitude/Elevation: Leads a team on complex, high-accuracy determination of vertical and horizontal datums using appropriate survey and geo-stationary reference techniques. Flags high-water marks and documents their reliability. Measures and records crest-stage gage high-water marks and documents their reliability. Determines cross-sections for indirect measurements of flow and/or area ratings.

Operates a government motor vehicle as an incidental driver.

FACTOR STATEMENTS

FACTOR 1 - KNOWLEDGE REQUIRED BY THE POSITION (Level 1-6, 950 points)

- Extensive practical knowledge of hydrologic principles and programs. Ability to sequentially plan the full range of standard and non-routine hydrologic field activities and office procedures in order to collect, compute, and analyze hydrologic data. Applies seasoned judgment and experience in order to resolve hydrologic problems with multiple intangible and subtle variables, to collect data during unusual or extreme events, and to modify procedures and methods to obtain and interpret accurate results.
- Data compilation and computations require the ability to integrate, customize and make non-

routine interpretations of data in order to prepare datum corrections, plot and analyze hydrographs, transfer data to maps and reconstruct long periods of inconsistent or missing records.

- Knowledge of and ability to follow field and lab safety procedures.
- Extensive knowledge of computer hardware and software programs in order to perform a wide range of activities related to the maintenance of hydrologic data, instrumentation and equipment such as the storage, manipulation and retrieval of data for complex reports or hydrologic inquiries, database administration, equipment program changes, or web programming and maintenance to display hydrologic information.
- Extensive practical knowledge of electronic technology, equipment mechanics and instrumentation in order to install, operate, maintain and calibrate a variety of electronic equipment and a wide range of hydrologic data-measuring instruments.
- Skill and ingenuity to modify techniques and conventional applications in order to accomplish assignment objectives under, at times, difficult field conditions or with limited resources.

FACTOR 2 - SUPERVISORY CONTROLS (Level 2-3, 275 points)

Works under the general direction of the supervisor or a higher graded employee. Assignments involving prescribed or standard methods are given in terms of objectives to be achieved. The employee uses initiative to independently accomplish such assignments with the supervisor providing assistance in solving unfamiliar technical problems. Methods applied by the technician in performing tasks are not normally reviewed. Completed work is reviewed for accuracy and technical adequacy.

FACTOR 3 - GUIDELINES (Level 3-3, 275 points)

Guidelines include a series of manuals on techniques of water resources investigations (TWRI), WRD Data Reports Preparation Guide, agency procedural directives, oral instructions, standard accepted recording forms, protocols and previously established methods. The employee locates and selects the appropriate guideline or procedure; however, the guidelines may not be completely applicable to the assignment or contain gaps in specificity. The employee independently resolves technical problems by deviating from or adapting guides. The technician formulates and recommends revised approaches and procedures. Situations involving significant deviation from established guidelines are generally discussed with the supervisor for additional guidance.

FACTOR 4 - COMPLEXITY (Level 4-3, 150 points)

Work consists of the full range of data collection and computation duties that typically involve the application of differing and unrelated technical approaches and procedures to complete an assignment. The work requires the employee to consider and select from several possible courses of action, methods, and techniques. The technician displays initiative, resourcefulness, and judgment adjust work methods and procedures to accommodate unusual conditions found at the worksite and to identify and resolve anomalies or inconsistencies in data.

FACTOR 5 - SCOPE AND EFFECT (Level 5-3, 150 points)

The purpose of the work is to perform conventional assignments involving the collection, computation and compilation of hydrologic data that affect the understanding of the hydrologic environment and to disseminate hydrologic data through reports and other mediums. Work efforts have an impact on the accuracy and adequacy of field, office and/or laboratory processes and methods used, the data and resulting reports, and/or data-resource management decisions.

FACTOR 6 - PERSONAL CONTACTS (Level 6-2, 25 points)

Primary contacts are with personnel within the District. On occasion, contacts may be made with personnel from higher-level organizations, State or local governments, or other Federal agencies. Contacts with the general public occur during the performance of routine field or office activities.

FACTOR 7 - PURPOSE OF CONTACTS (Level 7-2, 50 points)

Contacts are chiefly to clarify or exchange information, provide advice, plan or coordinate work activities, resolve technical problems, and provide technical assistance or training.

FACTOR 8 - PHYSICAL DEMANDS

(Level 8-2, 20 points)

{ } The work requires some physical exertion such as:

long periods of standing;

walking over rough, uneven, or rocky surfaces;

recurring bending, crouching, stooping, stretching, reaching, or similar activity; or

recurring lifting of moderately heavy items weighing less than 23 kilograms (under 50 pounds) such as lifting and carrying stream gauging weights, data collection and monitoring devices, or sample trays.

Or

(Level 8-3, 50 points)

{ } The work regularly requires considerable dexterity, agility, and strenuous physical exertion such as that needed to:

climb, or work from, tall ladders or scaffolding;

work in areas where footing is treacherous such as on slippery river banks, in steep or rocky terrain, and in fast-moving water;

lift heavy objects weighing 23 kilograms (over 50 pounds) or more;

crouch or crawl in constricted areas; and

defend oneself or others against physical attack.

FACTOR 9 - WORK ENVIRONMENT (Level 9-2, 20 points)

The work regularly involves moderate risks or discomforts associated with visiting field sites with limited access, under adverse weather or flooding conditions, or exposure to irritant or toxic chemicals. Work may require the use of special clothing or gear such as masks, coats, boots, goggles, respirators, or life jackets.

TOTAL POINTS: 1915

GRADE CONVERSION: GS-9

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

Source Document STD PD S0268

Rev 8/2004