

POSITION DESCRIPTION						
1. Position Number			2. Explanation (show any positions replaced)			
3. Reason for Submission <input type="checkbox"/> New <input type="checkbox"/> Redescription <input type="checkbox"/> Reestablishment <input type="checkbox"/> Standardized PD <input type="checkbox"/> Other						
4. Service <input type="checkbox"/> HQ <input type="checkbox"/> Field	5. Subject to Identical Addition (IA) Action <input type="checkbox"/> Yes (multiple use) <input type="checkbox"/> No (single incumbent)					
6. Position Specifications Subject to Random Drug Testing <input type="checkbox"/> Yes <input type="checkbox"/> No Subject to Medical Standards/Surveillance <input type="checkbox"/> Yes <input type="checkbox"/> No Telework Suitable <input type="checkbox"/> Yes <input type="checkbox"/> No Fire Position <input type="checkbox"/> Yes <input type="checkbox"/> No Law Enforcement Position <input type="checkbox"/> Yes <input type="checkbox"/> No			7. Financial Statement Required <input type="checkbox"/> Executive Personnel-OGE-278 <input type="checkbox"/> Employment and Financial Interest-OGE-450 <input type="checkbox"/> None required		10. Position Sensitivity and Risk Designation <u>Non-Sensitive</u> <input type="checkbox"/> Non-Sensitive: Low-Risk <u>Public Trust</u> <input type="checkbox"/> Non-Sensitive: Moderate-Risk <input type="checkbox"/> Non-Sensitive: High-Risk <u>National Security</u> <input type="checkbox"/> Noncritical-Sensitive: Moderate-Risk <input type="checkbox"/> Noncritical-Sensitive: High-Risk <input type="checkbox"/> Critical-Sensitive: High-Risk <input type="checkbox"/> Special Sensitive: High-Risk	
		8. Miscellaneous Functional Code: -- BUS: --	9. Full Performance Level Pay Plan: Grade:			
11. Position is <input type="checkbox"/> 2-Supervisory <input type="checkbox"/> 4-Supervisor (CSRA) <input type="checkbox"/> 5-Management Official <input type="checkbox"/> 6-Leader: Type I <input type="checkbox"/> 7-Leader: Type II <input type="checkbox"/> 8-Non-Supervisory		12. Position Status <input type="checkbox"/> Competitive <input type="checkbox"/> SES <input type="checkbox"/> Excepted (specify in remarks) <input type="checkbox"/> SL/ST			15. Fair Labor Standards Act <input type="checkbox"/> Exempt <input type="checkbox"/> Nonexempt	
	13. Duty Station	14. Employing Office Location	16. Cybersecurity Code #1: #2: -- #3: --	17. Competitive Area Code: Competitive Level Code:		
18. Classified/Graded by	Official Title of Position		Pay Plan	Occupational Code	Grade	Initial Date
a. Department, Bureau, or Office						
b. Second Level Review			--		--	
19. Organizational Title of Position (if different from, or in addition to, official title)			20. Name of Employee (if vacant, specify)			
21. Department, Agency, or Establishment U.S. Department of the Interior			c. Third Subdivision			
a. Bureau/First Subdivision			d. Fourth Subdivision			
b. Second Subdivision			e. Fifth Subdivision			
22. 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, but not limited to: FLSA determinations; position sensitivity and requirements; and appointment/payment of public funds. 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		Date	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			
Typed Name and Title of Official Taking Action						
Signature		Date				
25. Position Review	Initials	Date	Initials	Date		
a. Supervisor						
b. Classifier						
26. Remarks						

1316 Hydrologic Technician GS-07
PD #SPD0007

INTRODUCTION

This position performs technical work in support of professional or technical employees engaged in hydrologic data collect activities. Work requires application of subject matter experience and exercise of judgment within the context of a broad range of technical concepts.

A standard Position Description (PD) covers similar positions in multiple locations of an organization. Use of a Standard Position Description does not diminish management's responsibilities to adhere to position management principles and DOI/USGS policies.

MAJOR DUTIES (include percentages of time equal to 100%)

Surface Water: Uses resourcefulness to make stream discharge measurements, using the various techniques, equipment and protocols depending upon field conditions or other unforeseen circumstances. Observes and makes detailed notes of various hydraulic or environmental conditions which may have a bearing on discharge. Computes and checks surface-water records from field data where hydrologic conditions are fairly stable. Reviews the plotting of discharge measurements. Develops stage-discharge and/or velocity index curves and ratings. Estimates periods of missing record and non-routine flow such as tidal, backwater, or ice periods. Performs office review for selected surface-water records. _____%

Surface Water: Reviews gage-height data and discharge measurements to check methods and accuracy of computation. Plots and analyzes differences in hydrographs by comparing records and makes changes to correct inconsistencies in data. Performs routine phases of statistical and technical analyses of the hydrologic data collected in the field. Prepares material for publication, including maps, tables, and other illustrative material. Prepares plots, drafts, or sketches from surveying field notes. Reviews surface-water records to assure accuracy, uniformity, and compliance with Division standards. Verifies the accuracy of data summaries. Documents the procedure used to compute records. _____%

Ground Water: Performs water-level and discharge measurements from wells and springs adjusting approach for unforeseen circumstances. Observes and notes various hydraulic and environmental conditions. Computes and checks ground-water records from field data where hydrologic conditions are fairly stable. Reviews plots of water-level measurements. Performs routine statistical and technical analyses of the hydrologic data collected in the field. Reviews ground-water records to assure accuracy, uniformity, and compliance with technical standards. Verifies the accuracy of data summaries. Documents the procedure used to compute records. Performs ground-level measurements in support of aquifer tests. Performs routine analyses and computation of data assembled during pumping tests. _____%

Water Quality (Field): Performs routine field measurements such as water temperature, specific conductance, pH, dissolved oxygen and alkalinity selecting the appropriate technique, protocol, and equipment. Observes and notes various hydraulic or environmental conditions. Collects and processes a wide variety of samples modifying approaches as necessary in order to ensure the integrity of the data. Performs various field analyses of sample constituents. Prepares representative samples for lab analyses. Computes and checks water-quality monitoring records using basic techniques. _____%

Water Quality (Analysis) Performs routine phases of statistical and technical laboratory analysis of the hydrologic data collected. Prepares summaries and basic data reports of results of field activities, including the preparation of materials for publications such as tables of data, maps, and other illustrative material. Documents the procedure used to compute records. Conducts quality assurance review of water-quality records to ensure accuracy, uniformity, and compliance with technical standards. _____%

Sediment: Collects, processes, computes and checks varied suspended sediment and bedload samples modifying approaches due to unforeseen conditions. computes and checks measurements for analyses and computation. Performs routine phases of statistical and technical analysis of 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. Documents the procedure used to compute records. Uses sediment computation programs to process routine sediment load data. Input data for the programs are: (1) sediment grain-size data and (2) discharge data. Applies initial quality-control techniques and makes corrections to sediment data based on review of the sediment data. _____%

Instrumentation: Installs, maintains and services a variety of sensing, recording and communications equipment and instrumentation. Troubleshoots selected hydrologic instrumentation in the office. Maintains repair logs on hydrologic instrumentation. Calibrates meters and analytical equipment. Determines appropriate equipment for field or laboratory activities depending upon data collection needs and field conditions. With general instructions, performs simple construction of gages and supporting structures. Identifies and procures materials for construction and repair jobs. Schedules and/or obtains appropriate vehicles, equipment, and supplies. Performs routine safety inspections of equipment and work areas. _____%

Datums/Altitude/Elevation: With general instructions, establishes vertical and horizontal datums using appropriate survey and geo-stationary reference techniques using well-established electronic forms. Flags high-water marks and documents their reliability. Measures and records crest-stage gage high-water marks. Assists in surveying predetermined cross-sections for indirect measurements of flow and/or area ratings. _____%

Data Management: Enters, retrieves, edits, and analyzes hydrologic data using one or more of several databases, spreadsheets, and graphics software programs. Monitors water-quality sampling frequencies for timely data collection and reports discrepancies. Provides technical assistance for office personnel concerning the application and use of hydrologic software. Gathers, tabulates, and enters hydrologic data from other agencies into the appropriate databases. Maintains log of lost records and contributing factors, and briefs project chief periodically. Compiles, retrieves, assembles, and formats hydrologic data for routine and customized recurring and one-time reports. _____%

Operates a Government vehicle as an incidental driver.

Operates and/or maintains motorized watercraft.

Factor Statements

FACTOR 1 - KNOWLEDGE REQUIRED BY THE POSITION (Level 1-4, 550 points)

Practical knowledge of hydrologic principles, practices, procedures and techniques in addition to the ability to sequentially apply a wide range of standard hydrologic data collection and office computation procedures in order to collect and/or compute and compile hydrologic data. Ability to perform standard data compilation and computation activities that include, but are not limited to, applying datum corrections, plotting and analyzing hydrographs, transferring data to maps and reconstructing short periods of inconsistent or missing records.

Knowledge of and ability to follow field and lab safety procedures. Knowledge of one or more computer systems and automated databases in order to enter, transfer, retrieve and manipulate hydrologic data; to operate computerized equipment; to generate a variety of standard reports; and/or respond to routine hydrologic data requests. Practical knowledge of electronic technology and equipment mechanics in order to operate, maintain, install, and service a variety of scientific instruments and equipment.

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), USGS and DOI 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 to 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 Center or Office. 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 8-1, 5 points) Work of the position takes place mostly in an office or laboratory setting. No special physical effort is required.

(Level 8-2, 20 points) The position requires moderate periods of standing and sitting while in the office. While in the field, considerable walking, lifting, bending, climbing, stream wading, or working in motorized watercraft is necessary to collect data.

(Level 8-3, 50 points) The work regularly requires considerable dexterity, agility, and strenuous physical exertion such as: climbing and/or working from tall ladders and scaffolding; work in areas where footing is treacherous such as slippery or icy river banks, steep rocky terrain, cableways, or fast-moving water; lifting heavy objects weighing 23 kilograms (50 pounds) or more, or crouching or crawling in restricted areas.

FACTOR 9 - WORK ENVIRONMENT

(Level 9-1) The work takes place in office and laboratory settings with adequate heat, light, and ventilation.

(Level 9-2, 20 points) Office conditions do not require special safety precautions; field conditions may include extreme heat or cold, rain or snow; hazardous conditions such as ice or flooding; or exposure to irritant

or toxic chemicals. Work may require the use of personal protective equipment such as masks, coats, boots, goggles, respirators, or life jackets.

TOTAL POINTS: 1485-1545

GRADE CONVERSION: GS-7

CLASSIFICATION STANDARD(S) USED

Job Family Position Classification Standard for Technical Work in the Physical Sciences Group, GS-1300, August 2002

Positions with a field work component require a pre-employment medical exam to ensure the technician can perform the essential duties of the position, with or without accommodation. (Replaces PD S0266)

Series Determination	The 1316 series covers one-grade interval technical positions that perform nonprofessional work that requires practical knowledge of the methods, procedures, and instrumentation used in hydrologic studies. Hydrologic technicians gather information on the quantity, quality, availability, movement, and distribution of ground water and surface water. They also evaluate water samples and data and carry out related duties that support professional work in hydrology. Work in this series does not require full professional knowledge of hydrology	
Evaluation Summary		Points
Knowledge Required by the Position	Like level 1-4, position requires technical knowledge gained through training or experience take measurements, preserve samples, conduct analyses or computations.	550
Supervisory Controls	Work is assigned with general information regarding expectations and deadlines. Like level 2-3 the employee independently carries out assignments and in accordance with established methods. Working is reviewed for overall soundness and validity of findings.	275
Guidelines	The employee uses standard instructions, USGS policies, DOI directives, and equipment catalogues and instructions. Like work at 3-3, the employee uses judgement to modify approaches to accommodate varying conditions or recommend revised procedures.	275
Complexity	Work involves a full range of data collection and computational duties requiring the application of differing technical approaches. Like work described at 4-3 in the standard, the employee selects from among many alternatives to determine approaches. Work requires application of independent judgment to a range of standard problems.	150
Scope and Effect	Work involves using established criteria and methods to collect, analyze, and interpret data. Like work at 5-3, work affects the accuracy of reports and the quality of studies performed by hydrologists.	150
Personal Contacts	Contacts are USGS employees in the Center or Office, with the general public in field work assignments, and with representative of other agencies and organizations. 6-2	75
Purpose of Contacts	Contacts are to consult on or resolve technical problems and coordinate work activities. 7-B	
Physical Demands	Varies – see check boxes on PD	
Work Environment	Varies – see check boxes on PD	
Total Points	1485-1545	
Points Range	1355-1600	
Final Grade		07
Official Title	Hydrologic Technician	
Standard(s) used to evaluate the position	Job Family Position Classification Standard for Technical Work in the Physical Sciences Group, GS-1300, August 2002; Aid and	

	Technical Work in the Biological Sciences Series, GS-0400 TS-111 December 1991	
Comments:		

Tamara Lamb-Gheneo, 4/25/20