

1316,Hydrologic Technician,GS-04

Based on PD Tracking Number 0005092

PD Tracking Number 0005096

Major Duties

GS-1316-04 (Standard PD)

Major Duties

Surface Water: Performs routine measurements of stage and discharge at designated locations applying uniform and established methods. Observes and notes hydraulic or environmental conditions. Reviews gage-height data and discharge measurements to check methods and accuracy of computations. Plots simple hydrographs for comparing records. Prepares tables, charts and other graphic material used in publications. Computes and checks surface-water records from field data where hydrologic conditions are stable. Prepares plots, drafts, or sketches from surveying field notes. Plots discharge measurements on simple rating curves and/or hydrographs.

Ground Water: Performs routine water-level and discharge measurements from wells and springs applying uniform and established methods. Observes and notes hydraulic and environmental conditions. Computes and checks straightforward ground-water records from field notes where conditions are stable. Plots water-level measurements. Following well-defined methods, prepares maps, charts, tables, and other graphic material for publication. Prepares plots, drafts, or sketches from surveying notes. Verifies the accuracy of data summaries. Maintains files of geophysical logs.

Water Quality: Follows well-established procedures in performing routine water-quality field measurements for parameters such as temperature, specific conductance, pH, dissolved oxygen and alkalinity. Notes field conditions. Using established methods, collects and processes routine samples and performs limited field or lab analyses of sample constituents. Prepares and ships samples for lab analyses. Prepares tables, charts, maps, and other graphic material used in publications. Assembles and prepares field and laboratory data for tabulation analysis and subsequent publication.

Sediment: Collects, computes, processes and checks routine sediment samples where uniform and established methods exist. Performs limited computation and review of straightforward measurements. Enters sediment data into water-quality and/or daily-values file using automated systems. Assembles and prepares data for tabulation and subsequent publication.

Datum/Altitude/Elevation: Records notes for leveling parties in connection with verifying the datum of gages.

Instrumentation: Performs maintenance and servicing of routine sensing and recording equipment. Participates in inventory and troubleshooting of hydrologic instrumentation in the office. Prepares repair logs on hydrologic instrumentation. Calibrates meters and analytical equipment using established techniques and protocols.

Infrastructure: Assists in simple gage and supporting structure construction and removal activities. Performs routine safety inspection of equipment and work areas.

Operates a government motor vehicle as an incidental driver.

FACTOR STATEMENTS

FACTOR 1 - Knowledge Required by the Position (Level 1-3, 350 points)

Basic knowledge of hydrologic processes, methods, and techniques.

The ability to sequentially apply standard hydrologic data collection and office computation procedures in order to collect and/or compute and compile hydrologic data.

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.

Knowledge of basic electronic technology and equipment mechanics in order to assist in the operation and maintenance of scientific instruments and equipment.

FACTOR 2 - SUPERVISORY CONTROLS (Level 2-2, 125 points)

The supervisor or higher graded employee provides general instructions for assignments in terms of approach to be followed, guidelines, procedures or unique requirements. Detailed information and assistance is provided for new, difficult or unfamiliar technical problems. The employee independently performs recurring tasks resolving routine problems. Completed work and methods used are reviewed for adequacy and adherence to instructions.

FACTOR 3 - GUIDELINES (Level 3-2, 125 points)

Guidelines include a series of manuals on techniques of water resources investigations (TWRI), WRD Data Reports Preparation Guide, agency procedural directives, oral instructions, and previously established methods. These guidelines are typically detailed and are directly applicable to the assigned work. The employee can easily locate and select the appropriate guideline or procedure for each assigned task. Situations involving deviations from established methods are discussed with the supervisor for additional guidance.

FACTOR 4 - COMPLEXITY (Level 4-2, 75 points)

Assignments consist of performing a variety of procedural tasks or a couple of more complex tasks related to regular and recurring data collection, compilation, and computation work. The technician must recognize differences in conditions in order to select and execute the appropriate sequence

of established data collection and computation procedures; to operate instruments and servicing equipment; and, to recognize anomalous situations that may adversely impact or affect measurements or data collected. Assignments require accuracy and attention to detail.

FACTOR 5 - SCOPE AND EFFECT (Level 5-2, 75 points)

The purpose of the work is to perform data collection, compilation and computation activities in support of higher level technicians or hydrologists. Work efforts affect the accuracy, reliability, or acceptability of the data.

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 7-1, 20 points)

Contacts are to obtain advice or direction, and to clarify or exchange information.

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: 835

GRADE CONVERSION: GS-4