



Submit resume and cover letter to:
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Berthoud, CO 80513
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Posted: 5/6/2025
By: JG
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By:

Electronic Instrumentation Technician

Division/Department: Environmental Services Division/Field Services Department
Reports to: Automated Monitoring Supervisor/Field Services Department Manager
Location: Berthoud, CO
Type of Position: Full-time
Status: Non-exempt
Salary Range: \$32.57 - \$41.35

GENERAL STATEMENT

This position installs, operates and maintains electronic data monitoring and telemetry equipment for the purpose of collecting time series data to support water resources and water quality programs.

ESSENTIAL DUTIES AND RESPONSIBILITIES

- Installs and mounts instrumentation systems including dataloggers, telemetry, water quality sondes, environmental sensors, and a variety of other systems. Inspects installed systems to assure proper operation.
- Installs, operates, and maintains the data collection networks.
- Fabricates, mounts and wires systems and devices.
- Designs and repairs instrumentation systems, equipment, and components, both in the field and in the shop.
- Diagnoses, troubleshoots, updates and repairs malfunctioning systems and equipment, calibration problems and other measuring, recording, and transmitting device failures.
- Calibrates sensors in the field and/or on the bench according to prescribed procedures.
- Cleans, lubricates, and changes component parts.
- Assists in development and implementation of improved procedures, methods, and technologies.
- Develops, writes, and updates standard operating procedures (SOP) for department operations.
- Research new technology, tests and recommends improvements to proficiently maintain an up-to-date network/operation.
- Maintains inventory, spare parts, location of service and maintenance records for all associated equipment.
- Operates equipment such as cranes/hoists, soil augers, manlifts, skid loaders, forklifts, and pickup trailer combinations.
- Coordinates activities with other departments and partner agencies.
- Maintains a safe workspace and environment in all areas, including assigned vehicles, shops,

storage areas, office, and work sites.

- Uses required safety/protective devices provided by Northern Water in the performance of all duties. Examples of equipment that may be worn includes hard hats, safety glasses, safety belts, steel-toed boots, hearing protection, and air monitors for confined space entry.
- Cross-trains as necessary in other department positions within the Field Services Department to accommodate schedules.

OTHER DUTIES AND RESPONSIBILITIES

- Performs other duties as assigned.

EDUCATION AND EXPERIENCE REQUIREMENTS

Education

- An associate degree at an accredited college of Applied Electronics or related field. Emphasis in instrumentation and/or data telemetry desired.
- Three to five years of education, training or related experience in data collection related to water resources, water quality and weather data may be substituted for education requirement.

Experience

- A minimum of one year's practical work experience in the fields of electronics, instrumentation, and data telemetry. Experience in water measurement, water quality monitoring and weather stations is desired. One year of additional college studies in electronics may be substituted for an equal time of required work experience.

LICENSE, CERTIFICATE AND CREDENTIAL REQUIREMENTS

- Valid driver's license.
- Current certification or ability to obtain certification in the operation of overhead cranes, forklifts, and manlifts.

KNOWLEDGE, SKILLS AND ABILITIES

Knowledge

- Proficient knowledge of electronics, including the maintenance, programming, calibration, and repair of electronic equipment and instruments.
- Good working knowledge of cellular and radio transmission technology for data.
- Competent with weather and environmental sensors (temperature, relative humidity, rainfall, precipitation, wind speed/direction, and solar radiation), water level sensors (pressure transducers, shaft encoders, load cells, and sonic transducers) as well as water quality sensors (pH, temperature, conductivity, dissolve oxygen, and turbidity).
- Good working knowledge of machines and tools, including their designs, uses, repair and maintenance.

Skills

- Safely drive vehicles and equipment in snow-packed, muddy, and slippery conditions. Ability to back vehicles and turn equipment around in confined areas, including towed vehicles and trailers.
- Legible penmanship.
- Prioritize, organize, and coordinate work activities to efficiently accomplish assigned duties.
- Initiative, discretion, and use of independent judgment in accomplishing day-to-day activities within established guidelines and at supervisor's direction.
- Maintains a positive attitude, good work ethic, conscientious job efforts, and dependability.

- Maintains high level of accuracy in work assignments with great attention to detail.

Abilities

- Works well both independently and as a team player, maintaining open and accurate communications with coworkers and supervisor.
- Troubleshoots and maintains equipment and tools.
- Installs equipment, machines, wiring or programs to meet specifications.
- Repairs machines or systems using required tools.
- Performs routine maintenance on equipment and determining when and what kind of maintenance is needed.
- Determines the kind of tools and equipment needed to do a job.
- Identifies and analyzes problems to develop alternatives and make recommendations.

PHYSICAL REQUIREMENTS

- Endure extended periods of driving, sitting, standing, walking, stooping, kneeling, bending, lifting, and climbing. Safely lift and carry items weighing 50 lbs.
- Accurately and productively work for extended time periods at a computer workstation and/or an electronics workbench. Activities may include repetitive data entry, instrument testing, and production of specialty equipment.
- Perform duties outdoors, exposed to temperature extremes, intense sunlight, rain/snow, high winds, rough terrain, unstable footing, dust, pollen, bees/wasps/spiders/ants/mosquitoes, snakes, cactus, and loud noise.
- Accomplish assigned work safely and to quality standards despite adverse conditions.
- Safely install, service, and remove instrumentation from elevated locations of 0 to 50 feet (masts/towers), flowing water (streams, rivers, and ditches/canals) and other locations. Use of manlifts, ladders, safety harnesses/lines and other safety equipment.
- Work/wade safely in, on and around waterways including flowing water.
- Must be able to meet the physical requirements of a post job offer physical examination.

Reasonable accommodations will be made to enable qualified individuals with disabilities to perform the essential functions of the job.

OTHER REQUIREMENTS

- Maintains a personal appearance appropriate for job position and image of Northern Water.

This job description in no way states or implies that these are the only duties to be performed by this employee.

Northern Water provides equal employment opportunities (EEO) to all employees and applicants for employment without regard to race, color, religion, sex, marital status, sexual orientation, gender identity, national origin, disability, genetics, veteran status or other legally protected characteristics. Northern Water complies with applicable state and local laws governing nondiscrimination in employment in every location in which the company has facilities. Northern Water also prohibits any form of workplace harassment in accordance with these laws. This policy applies to all terms and conditions of employment, including recruiting, hiring, placement, promotion, termination, layoff, recall, transfer, leaves of absence, compensation, and training.