

## JOB DESCRIPTION

**Job Title:** Field/Laboratory Technician  
**Reports To:** Lab Director  
**FLSA Status:** Non-Exempt  
**Department:** Water Resources  
**Date:** December 13, 2024  
**Salary:** \$47,000 – \$57,000

### Summary:

Prepare samples and perform qualitative and quantitative chemical and bacteriological analysis requiring intermediate laboratory skills meeting quality system and standard operating procedure requirements. Duties include quality control analysis, maintenance of environmental standards and equipment, and other work involving practical application of chemistry and related sciences. Collect, test and analyze water and other related samples to determine physical, chemical and bacteriologic components. In addition, perform a variety of skilled and semi-skilled technical duties in the operation and maintenance of water treatment plants.

### Essential Duties and Responsibilities include the following. Other duties may be assigned.

- Prepare and analyze water and samples by planning and executing laboratory tests according to procedures.
- Setup required laboratory equipment, materials, and supplies for conducting chemical tests.
- Enter, verify and interpret data including recording data in the Laboratory Information Management System (LIMS).
- Monitor quality to ensure compliance with applicable regulatory regulations, standards, and specifications.
- Assist the QA Manager in establishing procedures and good lab practices.
- Maintain and revise standard operating procedures for chemical testing.
- Coordinate, plan, and perform daily laboratory functions.
- Maintain, troubleshoot, calibrate, and sterilize equipment.
- Maintain the laboratory in a clean, safe, and organized manner.
- Identify new equipment needs, research and develop specifications for instrumentation.
- Analyze root causes for problems and suggest corrective actions.
- Develop or revise the test analytical methods to ensure quality, productivity and consistency.
- Report equipment repair and maintenance requests in timely manner.
- Perform all necessary reporting.
- Perform other tasks as designated by supervisory personnel.
- Collect samples from various locations and from various plant treatment processes in a valid manner consistent with good water sampling practices to prevent cross-contamination and inaccurate results.
- Document the collection of samples and other data by following established protocols. Submit clear and detailed field records documenting all sampling and monitoring activities.
- Make inspections of treatment process components and equipment, including monitoring plant operations through reading gauges, graphs, meters, and computer control panels.
- Monitor and document chemical inventories, change chemical cylinders/containers and

- make chemical solutions when required.
- Calculate flow rates and chemical dosages and calibrate equipment.
- Perform plant preventative maintenance tasks.
- Perform routine maintenance on assigned equipment, including the calibration, maintenance, and service of process control instrumentation.
- Assist in maintaining and repairing water treatment equipment, including, but not limited to, pumps, generators, fans, feeders, and filters.
- Maintain a current knowledge of water chemistry, bacteriology, water quality assurance, EPA certified procedures, and related fields relevant to work.
- Perform other tasks as designated by supervisory personnel.

**Qualifications:**

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skill, and/or ability required. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

**Education/Experience:**

Preferred bachelor's degree (BS) in chemistry from an accredited four-year college or university and one (1) year related experience and/or training.

**Language Ability:**

Ability to read, analyze, and interpret technical procedures, professional journals, written procedures, instruction manuals, and governmental regulations. Ability to write reports, business correspondence, and procedure manuals. Ability to effectively present information and respond to questions from groups of managers, clients, customers, and the general public.

**Math Ability:**

Ability to compute rate, ratio, and percentage and to draw and interpret bar graphs. Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical solutions. Ability to work with mathematical concepts such as probability and statistical inference, and fundamentals of plane and solid geometry and trigonometry. Ability to calculate geometrical factors such as proportions, area, circumference, and volume.

**Reasoning Ability:**

Ability to define problems, collect data, establish facts, and draw valid conclusions. Ability to solve practical problems and deal with a variety of concrete variables in situations where only limited standardization exists. Ability to interpret an extensive variety of technical instructions in mathematical or diagram form and deal with several abstract and concrete variables.

**Computer Skills:**

Database Software, Work Order Processing, Word Processing, Excel, E-Mail, Internet Software, and Laboratory Information Management System (LIMS).

**Other Knowledge, Skills, & Abilities:**

None required for this position. Additional laboratory and safety training may be required.

**Preferred Certificates and Licenses:**

Valid State of Texas Driver's License. Texas Class C Water Operator Certificate (Groundwater).

**Supervisory Responsibilities:**

This position has no supervisory responsibilities.

**Work Environment:**

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly exposed to fumes or airborne particles, and outdoor weather conditions. The employee is frequently exposed to work near

moving mechanical parts; toxic or caustic chemicals; biological hazards; risk of electrical shock; and vibration. The noise level in the work environment is usually moderate.

**Physical Demands:**

The physical demands described are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodation may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee regularly uses hands to finger, handle, or feel; reach with hands and arms; and talk or hear. The employee is frequently required to stand, walk, or sit. The employee may occasionally lift and/or move up to 50 pounds.

Specific vision abilities required by this job include close vision, distance vision, depth perception, and ability to adjust focus.