



LABORATORY ASSISTANT JOB DESCRIPTION

Basic Function

The Laboratory Assistant, reporting to the Laboratory Manager, will be responsible for implementing the quality assurance program for a medium-sized ethanol plant. Primary goals are to assure testing and quality assurances are completed efficiently and that high productivity goals are met by responding to changing conditions in timely manner.

Essential duties and responsibilities include, but are not limited to:

- Performs laboratory tests according to prescribed standards to determine chemical and physical characteristics or composition of solid, liquid or gaseous materials for such purpose as quality control, process control, or product development.
- Set up, adjusts, and operates laboratory equipments and instruments such as HPLC, microscope, centrifuge, agitators, refractometer, analytical balance, spectrophotometer, colorimeter and other equipments.
- Test materials for presence and content of elements or substances, such as hydrocarbons and impurities.
- Test samples of manufactured products to verify conformity to specifications.
- Records test results on standardized forms and writes test reports describing procedures used.
- Cleans and sterilizes laboratory equipment.
- Prepare graphs and charts.
- Prepare chemical solutions according to standard formulas.
- Add chemicals or raw materials to process solutions or product batches to correct or establish formulation required to meet specifications.
- Calibrates laboratory instruments.
- Collects samples from various part of the process for laboratory analysis, using sample container: samples contents of tanks cars, and process units by lowering sample container into contents at various depths or by opening bleeder valves to release flow of products into container.
- Collects samples taken by others workers.
- Pours samples from containers into samples bottles and ties identification tags to bottles or marks identifying information on them.
- Receives or draws samples of product and performs standard tests to ascertain if acidity, alkalinity, and viscosity conform to specifications, using hydrometer and other test equipment.
- Enter required data in computer.
- Generate Certificate of Analysis (CofA) for Final Product commodities.
- Communication and coordination with Operations for consistent operations.
- Perform diagnostic analysis of lab equipment for preventative maintenance.
- Troubleshoot and repair equipment or facilitate repairs as required.

Qualifications and Competencies

The requirements listed below are representative of the knowledge, skill or ability necessary to perform this job successfully:

- **Education/Experience:**
 - o An Associates degree in Chemistry or related scientific field
 - o Two years experience in a QA laboratory in a process industry



LABORATORY ASSISTANT JOB DESCRIPTION

- Experience with implementing effective quality assurance programs
- Experience with automated lab equipment (such as HPLC)
- **Skills:**
 - Thorough knowledge of Standard Laboratory Practices and Test Methods
 - Understanding of HPLC Chromatography
 - Demonstrated ability to apply analytical chemistry to standard wet lab testing
 - Must have the ability to work effectively with computerized lab equipment
 - Must be proficient with basic office computer software, e.g. email, word processing and spreadsheets
 - Demonstrated interpersonal skills
 - Ability to work with all levels within the organization and the ability to work in a diverse group
- **Physical Requirements:**
 - Must be able to perform job duties while wearing a respirator
 - Must be able to lift and work overhead, to stoop and to crouch
 - Must be able to lift and/or move 60 lbs on a regular basis
 - Must be able to climb ladders and work at elevations of 175 ft.

Environment:

- While performing the duties of this job, the employee will be regularly exposed to work near moving mechanical parts.
- The employee will be regularly exposed to very dusty and noisy conditions
- The employee will be exposed to outdoor weather conditions
- The employee may be exposed to chemicals used in the process

Note: Valid Driver's License required for insurance purposes. Plant Management retains the discretion to add to or change the duties of this position at any time.

Department/Division:	Operations
Reports to:	Laboratory Manager
Experience Level:	Experienced (2+ years)
Location:	Keyes, CA
Employment Type:	Full-Time
FLSA Status:	Non-Exempt