

# CASE STUDY



## HOW CANYON LABS GAINED REAL-TIME VISIBILITY INTO CRITICAL LAB ENVIRONMENTS



### CLIENT PROFILE

**Client:** Canyon Labs

**Location:** Salt Lake City, Utah

**Industry:** Medical Device, Laboratory Testing, and Analytical Services

**Focus Areas:** Packaging, Microbiology, and Chemistry

**Departments Served:** Laboratory Operations, Equipment Maintenance, Quality, and Facilities

**Solutions Utilized:**

- Rees Environmental Monitoring System (EMS)
- Continuous monitoring of temperature and humidity across laboratories, incubators, ovens, refrigerators, and freezers
- Monitoring of clean room differential pressure
- Environmental monitoring for packaging, microbiology, and chemistry testing environments
- Cloud-based real-time data access and alarm notifications
- Custom chamber mapping kit for internal mapping studies across incubators, refrigerators, freezers, ovens, and other controlled equipment
- Temperature mapping for ultra-low freezers, refrigerators, incubators, depyrogenation ovens, and autoclaves

### BACKGROUND

Canyon Labs operates packaging, microbiology, and chemistry laboratories in which environmental conditions directly affect testing accuracy. Maintaining precise temperature and humidity levels across incubators, freezers, ovens, laboratories, and storage areas is critical to daily operations. The facility operates under ISO 17025 accreditation, requiring reliable monitoring and documentation of environmental conditions.

Richard Floyd, who oversees equipment, calibrations, maintenance, and facility operations, is responsible for ensuring these environments remain within required parameters. Because the lab stores samples and conducts testing under strict conditions, continuous monitoring is essential to maintaining accuracy, consistency, and overall lab operations.

Floyd was already familiar with the Rees monitoring system from his previous experience in a similar role, where he had worked with the system for many years. When he joined Canyon Labs, that experience helped drive the monitoring strategy he would later implement at the new facility.

### THE CHALLENGE

When Floyd joined Canyon Labs, environmental monitoring and mapping processes were not fully established.

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Temperature and humidity monitoring existed, but relied on another platform that made it difficult to access data and generate meaningful reports. According to Floyd, retrieving information from the system was cumbersome, and the reporting lacked clarity.

At the same time, equipment mapping had largely been outsourced and had not yet been fully implemented internally. Floyd was brought in to establish a more reliable approach for monitoring and mapping the lab's equipment and environments.

## WHY CANYON LABS CHOSE REES

Floyd had previously worked with the Rees monitoring system and had been using the platform since 2010. That experience gave him firsthand insight into the system's reliability, data accessibility, and reporting capabilities.

When he joined Canyon Labs and began evaluating monitoring solutions, that experience played a major role in the decision to implement the Rees system again. Because the facility was still building out its monitoring infrastructure, it was an ideal opportunity to introduce a system he already trusted and had successfully managed in another laboratory environment.

The ability to quickly access monitoring data and generate meaningful reports was a major advantage. During one client audit, Floyd demonstrated how the system tracked environmental conditions in real time.

The reaction was immediate.

“She was blown away. She said, ‘This is the future. Everybody needs this.’”

## THE SOLUTION

### Environmental Monitoring System

Today, the Rees monitoring system tracks conditions throughout the facility, including:

- Packaging, Microbiology, and Chemistry Laboratories
- Ovens, Incubators
- Refrigerators and freezers
- Sample storage environments
- Clean room differential pressures

The system continuously monitors temperature, humidity, and differential pressure across testing areas and controlled storage equipment, helping ensure environmental conditions remain within required parameters. In controlled environments, real-time pressure monitoring helps maintain positive pressure conditions, ensuring proper airflow and reducing the risk of contamination.

As Canyon Labs grows, additional environments will be added to the monitoring network.

### CUSTOM CHAMBER MAPPING KIT

In addition to monitoring, Canyon Labs partnered with Rees engineers to develop a custom chamber mapping solution.

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Previously, mapping required managing multiple individual modules and power supplies. Rees worked closely with the Canyon Labs team to develop a single integrated enclosure that simplified the process.

The custom fixture now supports mapping across a wide temperature range, including:

- Ultra-low freezers
- Refrigerators
- Incubators
- Walk-in chambers
- Depyrogenation ovens
- Autoclaves

The system reduced complexity and made mapping easier to deploy across multiple chambers within the facility.

“Going from the original setup to the new fixture was just incredible. I don’t have to worry about all the different modules or power supplies. It’s all in one case.”

## IMPACT

### Improved Visibility

The monitoring system provides immediate access to environmental data across the facility. Staff can quickly view chamber conditions and verify that environments remain within required parameters.

According to Floyd, the system is simple enough that new users can quickly learn how to access data and view equipment conditions.

“It takes about five minutes to show someone the basics of how to access the system and see what their chambers are doing.”

## INTERNAL MAPPING CAPABILITY

The custom mapping kit allowed Canyon Labs to perform mapping studies internally rather than outsourcing them.

This capability also supported the qualification of an autoclave used to produce media internally, helping the company reduce operational costs.

“Previously, that had to be outsourced. The mapping kit gave us an affordable solution and helped us move forward.”

## STRONG TECHNICAL PARTNERSHIP

Floyd credits the collaboration between Canyon Labs and the Rees engineering and service teams as a major factor in the project’s success.

Rees engineers worked closely with the lab to develop the custom mapping fixture and troubleshoot challenges during the development process.

“They were completely invested in the project. Every time a problem came up, they were all hands on deck trying to figure it out.”

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## ONGOING SUPPORT

Beyond the technology itself, Canyon Labs values the support provided by the Rees team.

Floyd has worked with Rees since 2010 and says the company's service and technical support have consistently stood out.

"In my opinion there's nothing better on the market. And you'll never find better tech support."

## LOOKING AHEAD

Canyon Labs plans to continue expanding the monitoring system as the facility grows and additional equipment comes online.

With real-time visibility into environmental conditions and the ability to perform mapping internally, the lab now has the infrastructure needed to support future operations.