



# 14

## Factors to Consider When Investing in an Enterprise-Level LIMS

Today's oil and gas and chemicals companies are challenged by increasing demands to reduce costs, increase output and improve productivity so that shareholder value is optimized.

Because data is generated across the entire operation, from exploration to extraction to refining, disparate and non-integrated data sources can lead to loss of efficiency, missed opportunities and potentially lost revenue. An enterprise-level Laboratory Information Management System (LIMS) is an essential software solution enabling the laboratory to receive data from remote operational sites, centralize data across all lab instruments, and connect the

lab with other enterprise systems upstream and downstream. A LIMS manages workflow and SOPs and can enable compliance with regulatory or industry requirements such as ISO 17025. With good data, management can have confidence in their daily operations, and customers will have confidence they are receiving quality product that meets the required specifications.

Here are fourteen reasons to invest in an enterprise-level LIMS.

### 1 IMPROVED PRODUCTIVITY

Improve laboratory productivity, testing and sample traceability via a centralized, searchable database integrated with lab instruments, remote field collection sites and downstream facilities.

### 2 COMPLIANCE

Ensure compliance with regulatory or quality standards through the use of standardized processes, ISO-compliant workflow and SOPs, with standard reports built into the LIMS.

### 3 INTEGRATION

Achieve tighter integration between lab-generated information, remote sites, downstream facilities and existing enterprise systems, making data available where and when it is needed.

### 4 DEPENDABLE RESULTS

Deliver accurate, consistent and traceable results upstream or downstream by having access to all data related to sample testing securely stored in a centralized database.

### 5 REDUCED ERRORS

Eliminate paper or manual data management processes and reduce data transcription errors, saving time and personnel cost.

### 6 BETTER DECISION MAKING

Collaborate and share information for faster, more informed decisions, improving operational efficiency product quality and margins.

### 7 LIFE CYCLE MANAGEMENT

Manage the entire sample life cycle from receipt to certificate of analysis to report generation.

### 8 DATA VISUALIZATION

Access powerful and intuitive data visualization capabilities by having raw instrument data stored in the LIMS and archived for any future need.

### 9 TRACKING

Track field samples or environmental samples taken to monitor the compliance of the facility and have regulatory documentation available for audit or management review.

### 10 COST REDUCTION

Reduce costs by centralizing and consolidating IT and technical support personnel, and by using the built-in LIMS workflows which save time in lab processes and sample handling.

### 11 FASTER PROBLEM SOLVING

Identify and solve problems faster, and even anticipate them before they occur by having access to real-time information across the organization.

### 12 REDUCED DOWNTIME

Reduce downtime and production time through scheduled instrument maintenance, built-in ISO 17025 SOPs, increasing efficiency and reducing impact on revenue.

### 13 IMPROVED PURCHASING POWER

Streamline vendor relationships and improve purchasing power with contracts and requirements stored in the LIMS.

### 14 QUALITY CONTROL

Improve quality control process with SOPs and workflow built into the LIMS, alerting management to out-of-spec samples or procedures.