

# Project Case Study

## LabWare Implementation & Data Migration at a leading oil analysis

### Situation

The client is a national provider of industrial diagnostic evaluations and maintenance solutions for a broad spectrum of industries, including production machinery, manufacturing equipment, power generation, marine, heavy construction, mining, trucking, transit and aircraft industries. To better support their laboratory operations as well as their customers' data reporting requirements, the client decided to move from their home grown legacy LIMS to LabWare LIMS v6. This new LIMS would be hosted in the cloud and support their 5 key laboratories located throughout the US and provide data viewing tools to their various customers. To make the transition from one system to another, the client contracted CSols to assist them with data migration, system configuration, instrument integration, and on-going support of the new LIMS.

### Objectives

The client wanted to move into a commercial, state of the art LIMS system, and to develop a powerful, user friendly web based User Interface across all five laboratories. CSols helped develop the migration tools and assisted the client in performing the migration. In parallel, CSols implemented a considerable amount of custom configuration and coding on the templates and modules of the new LIMS. CSols was able to accomplish the migration and the configuration (including templates, reports, customized modules, and functions emulating legacy functions) in about 18 months to the client's satisfaction.

### Challenges

The client faced many challenges on this project from migrating over 11 years of data that equaled over a quarter billion results, to aligning the system migration with system development and customer driven go-lives. CSols was able to assist the client in overcoming the challenges listed below, by providing the expertise, planning, resources, and execution required to meet the client's project objectives.

- Data Migration with Parallel System Development
- Implementing the system in the cloud & resolving performance issues
- Instrument Interfacing to the cloud based system
- Go-live without impacting lab operations and customer access to their data

### CSols' Role in the Solution

CSols consultants performed a variety of roles on the client's LIMS project including:

- Data Migration module(s)
  - Extract, Translate, & load
  - Data mapping, integrated it into the code (ETL) Extract Transform Load
- Configuration of templates and modification of baseline modules

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**PROJECT AT A GLANCE**

**BUSINESS SECTOR:**  
Contract Testing Lab

**INFORMATICS SYSTEM:**  
LIMS: LabWare v6

**SERVICE OFFERING:**  
Implementation  
Data Migration

**ELEMENTS:**  
5 Site  
5 Labs  
18 Months  
4 CSols Team Members

*(Continuation...)*

## **CSols' Role in the Solution**

- Labstation Instrument Integration (30 + instruments)
- Custom functionality
  - interpretation manager configuration
  - custom database extracts based on customer
  - consuming SOAP vertical and a web service and sending data there
- Created Crystal Reports
- Mentoring, System Support, and Training

## **Benefits**

- The client is able to reduce capital expenditure and maintain backup and disaster recovery capabilities more easily since they purchased a LIMS and moved to the Cloud.
- Improving efficiency and turnaround time from hours to minutes. Client now has faster accessibility to test data, interpreting results, and distributing the information to their clients.
- The client's internal customers received increased functionality to external client resulting in improved visibility and usability through the newly sophisticated web user interface.
- Enhanced the Client's marketability to potential new customers due to the increase of new features. For example: seamless integration of the new customer's data.
- Increased ability to implement on-going changes for both technical and business reasons due to the foresight and knowledge from CSols creating and saving code within the system. For example, the client can: expand to more sites, add new instruments, or migrate new client's data effortlessly.
- Confidently made justifiable decisions regarding their LIMS based on the experience and wise counsel of CSols, who quickly became the client's trusted advisor.