

# ASSET TRACKING WITH RFID TECHNOLOGY

**CASE  
STUDY**

## 01 CUSTOMER'S CHALLENGE

A government operated anti-doping laboratory in the Middle East occupies a new 4-story building and has a staff of over 250. The facility is used by sport governing bodies as well professional sports associations for processing doping and drug screenings. In addition to doping and drug screenings, the facility is also occupied by other entities that are using it for biochemistry research and testing.

In the past, samples from athletes entered the building and were accompanied by a collection paper work. These samples and their paperwork were brought into the facility, manually entered into a system, and then processed. The challenges the facility faced were that their existing system was not thorough and, therefore, error-prone. Furthermore, insufficient security measures were in place to prevent tampering and to address the multi-user nature of the large facility.

**Challenges:** existing software was error prone and insufficient security measures

## CONTINUOUS & AUTOMATED TRACKING WITH LIMFINITY® RFID

## 02 OUR APPROACH

RURO was asked to provide a solution to monitor the movement of sample vials within the facility as well as provide vial location and other information on staff. It was a goal of both provider and customer teams to keep the system autonomous where possible. Thus requiring minimal human interaction. By combining comprehensive information management and integration software with some of the latest RFID devices available, RURO created an ideal mix of detailed functionality and automation to help the customer address their greatest issues.

## 03 THE SOLUTION

RURO implemented an integrated software and RFID solution with workflow management and altering to the customer's specifications. RFID hardware was strategically placed within the facility at lab benches, above ceiling panels, and other locations. A healthcare style RFID enabled cart was utilized to provide continuous visibility as vials move along system indicated pathways and delivered. Samples are initially registered in the solution's software interface then are processed and designated to laboratory or storage areas within the facility. Specific route information and personnel are assigned to vials before they can be delivered using the RFID enabled cart.



As an example of a workflow within the solution, primary sample bottles can be registered with associated sub samples also captured and tagged as they are aliquoted. Once this process completes, primary sample bottles can be assigned to refrigerated storage locations while sub samples may be designated to labs for testing. During these vials separate deliveries and even once they are delivered, visibility is perpetually maintained in real time by RFID antennas located under the work surfaces in the labs, in hallways or ceilings, and in storage areas.

This system enabled tracking of vials and their movement in the RFID enabled cart and also the employees who control them. The solution sets time limits for vials to reach their assigned destinations and maps allowable paths throughout the facility along the way. Any deviation from rules configured in the solution's software result in alerts delivered within the user interface to overseeing staff and as emails or texts to appropriate non-software user personnel.

Example List of Alert and Rules Categories:

- Lost vial visibility
- Wrong cart ID
- Deviation from route
- Designated employee not in proximity to cart
- Unauthorized vial movement
- Vial not delivered by deadline
- Cart offline with vials

The solution includes a graphical dashboard displaying the live location of items within the facility. The facility is digitally mapped, including every area, and the location feed of items and staff is in real time. The solution is capable of displaying movement, such as of personnel or of the RFID enabled cart on route to a delivery.

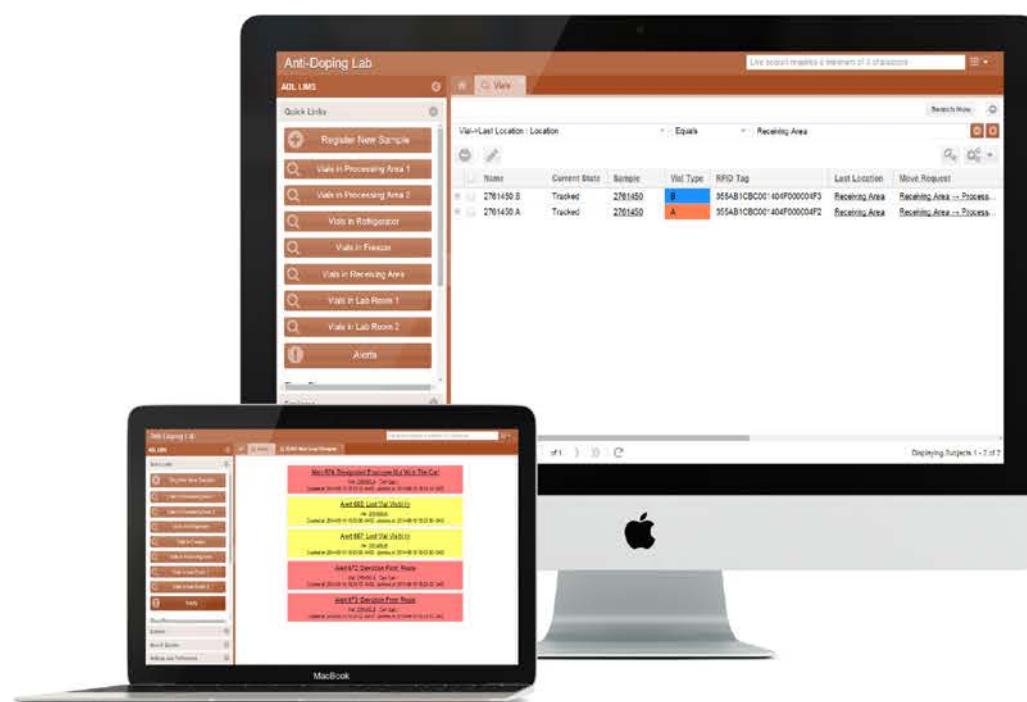
## 04 RESULTS

This RFID powered solution provides continuous tracking and traceability along with complete chain of custody. Information on test results associated with sample vial is also captured along with details on which employees authorized any movements or testing. Constant, real time visibility and pre-defined routes ensure that vials do not deviate from authorized areas. Any exceptions in the system are raised on an alert screen as well in emails or text messages to appropriate personnel. These attributes and others of RURO's solution represent a complete, turnkey application for the customer, who has automated instruments and software rule sets completing oversight, data management, registration and many of its facilities security tasks.

## INTERESTED IN LIMFINITY® RFID?

For additional information on Limfinity® RFID, please contact RURO at (888) 881-7876 or visit our website at [www.ruro.com](http://www.ruro.com).

Thank you for your interest in RURO and our Limfinity® solution! We look forward to hearing from you soon!



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