



WinLIMS – Mobile Applications

Many organizations have the need to perform off-site sampling that includes accurate, convenient and timely identification. The sampling process can also include data readings (e.g. pressure, pH, temperature, etc.) that augment the results that will be acquired from tests that are performed when the samples arrive in the laboratory.

Traditionally the identification of samples and results are acquired outside of the lab are recorded on paper and then transcribed from paper into the local LIMS or other electronically recorded system. Unfortunately, this process is flawed due to its inherent inefficiency and the data transcription errors that often occur. In addition, there is a time delay that occurs between sampling, and laboratory receipt that adds costly scheduling and data communication inefficiencies.

The WinLIMS Mobile Application Suite that is included as an OTS (Off-The-Shelf) module will add efficiency, save time, eliminate transcription errors and add to your organization's bottom line. The application allows off-site samplers to create new samples or access pre-logged samples while in the field using both WiFi and cellular access using a smart phone or tablet. Sample descriptive information and field-tested results can be recorded and the data will be immediately available to all users of the WinLIMS software.

The WinLIMS Mobile Application Suite is a general, device-independent application (no download required) suite that can be accessed using any WinLIMS 8[®] system or later. This Mobile Application Suite can be adjusted to accommodate local needs and desires and should be considered to be a 'starting point' for any mobile application requirements your organization may have.

Applications are not limited to sample login and results entry. Single purpose applications can be created for a variety of other uses including, but not limited to:

- Critical Result Alerts
- High Priority Logins
- Reporting
- Results Review
- General Queries
- And More!

This document will describe some of the basic functionality that is included within WinLIMS as a part of the basic software so you can see the ease and power of the software. Please note that the examples included represent a minimalist application for demonstration purposes. Your system will always be self-configured to accommodate local needs.

Access to the application is initiated using a shortcut on your mobile phone or tablet PC. Since the application is device independent, you can use mobile phones or tablets that use iOS, Android, Windows operating systems. Upon opening the WinLIMS Mobile Application, you will need to log in using your secure user name and password in order to gain access and apply your system security privileges. Once you've gained access, you can create samples or locate existing samples for editing of sample descriptive information including the entry of field-acquired results.

Let's begin by showing how samples can be created using the WinLIMS Mobile Application.



WinLIMS Mobile

Off Site Sample Login

enter Submitter

enter Sample Type

enter Sample Description

enter Date Sampled

3:30 PM

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The screen to the left shows how a sample is conveniently created using a remote hand-held device by entering a few pieces of descriptive information:

Submitter which can be selected from a filterable dropdown or manually entered via the keyboard of your device.

Sample Type which must be selected from the filterable dropdown.

Sample Description which is entered via the keyboard of your device.

Date Sampled which is selected via a calendar selection that is presented upon tapping (or clicking) into the field.

Time Sampled which is selected using a time-selector which allows selection in 15 minute intervals.

WinLIMS Mobile

Off Site Sample Login

C Type a value to use as a filter

Century Pacific

Colorado Metals

Contango

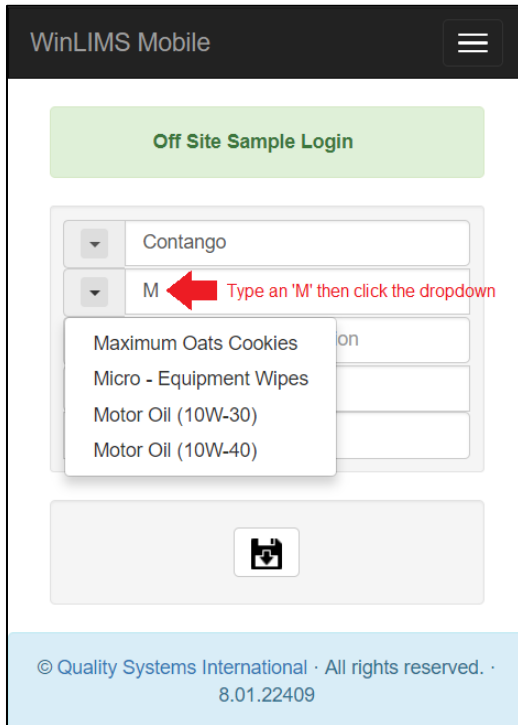
3:30 PM


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Tap the dropdown button that appears next to the **enter Submitter** field and a list of predefined **Submitter** values will be presented. Note that the sort order can be set by you. In our example, it is based on the most frequent submitters for convenience.

If you wish to filter the values (in case the list is long), just type a letter (e.g. a 'C') into the field and then tap the dropdown and you'll see that the list is filtered based on the entered character(s). Of course you can enter more than one letter and the list will be filtered accordingly.

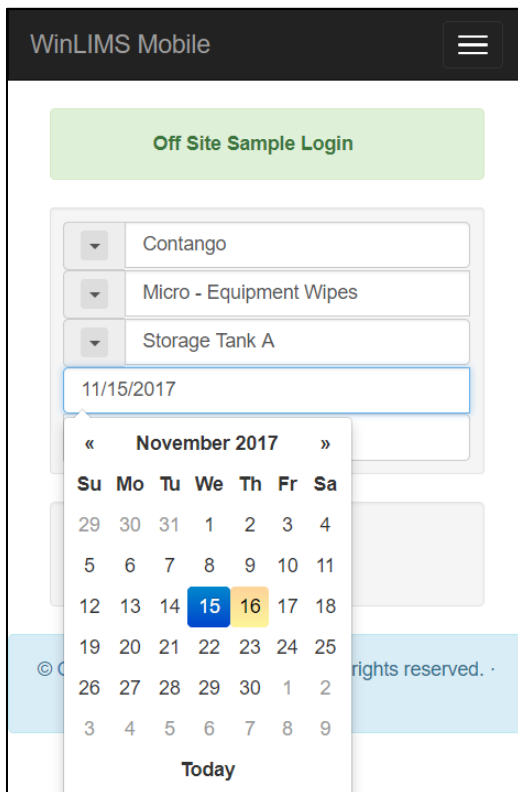
Select **Contango** from the dropdown.



Tap the dropdown  button that appears next to the **enter Sample Type** field and a list of predefined **Sample Type** values will be presented. Note that the sort order can be set by you.

If you wish to filter the values (in case the list is long), just type a letter (e.g. a '**M**') into the field and then tap the dropdown and you'll see that the list is filtered based on the entered character(s). Of course you can enter more than one letter and the list will be filtered accordingly.

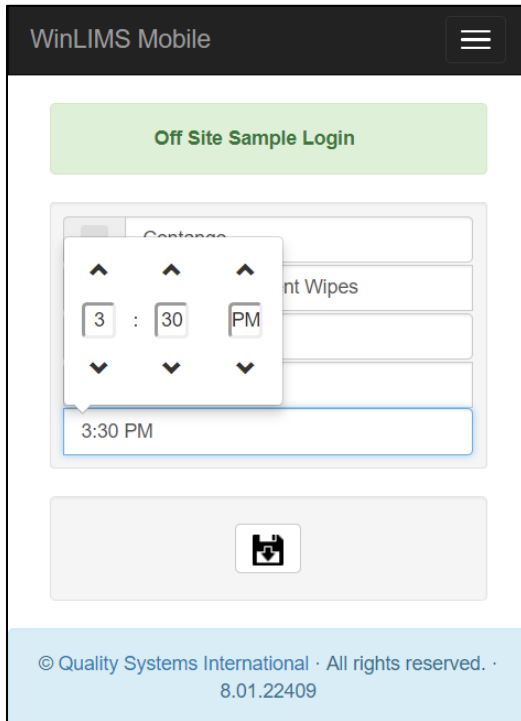
Select **Micro – Equipment Wipes** from the dropdown.



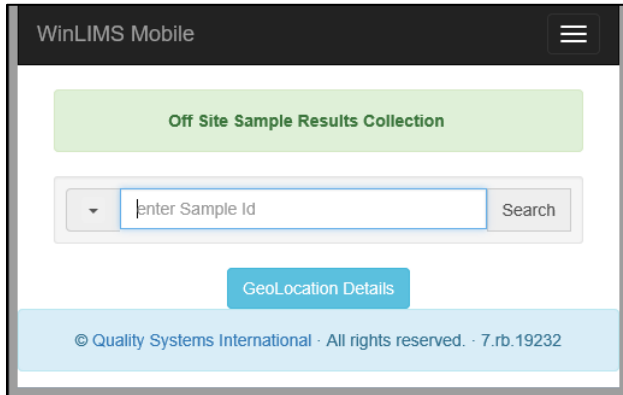
Manually enter a value into the **enter Sample Description** field (e.g. **Storage Tank A**).

Tap into the **enter Date Sampled** field and a calendar selector will be displayed. Navigate to the desired date (if not immediately available) and select the date by tapping on it within the calendar.

The calendar selector will close and the selected date will be returned to the field.

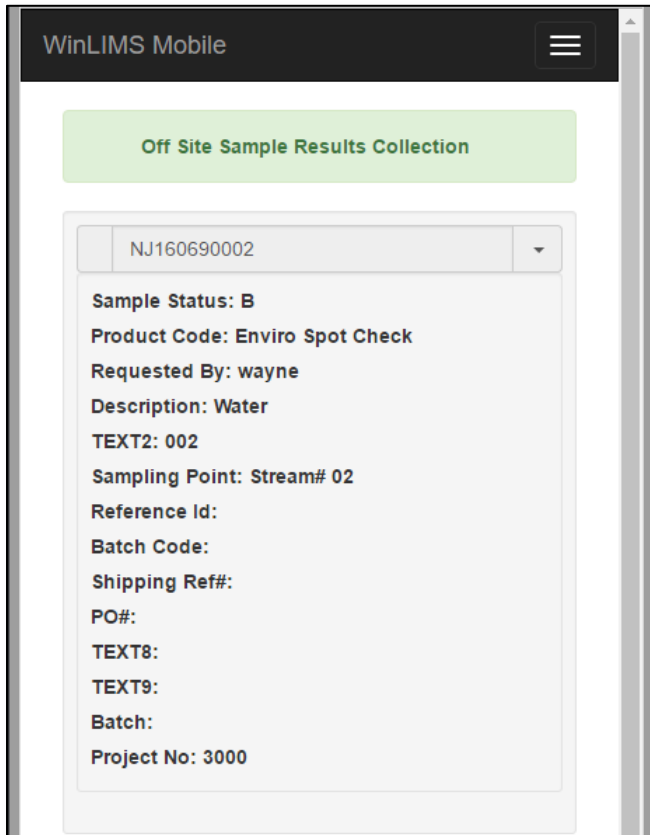


If you don't need to select a date or time the app can simply pull in the information from your mobile device.



You'll initially identify the sample by entering the unique Sample Id. You can do this via:

- Manually entering the **Sample Id** or scan it in via a barcode
- Selecting the **Sample Id** from the dropdown
- Scanning the **Sample Id** using a barcode scanner

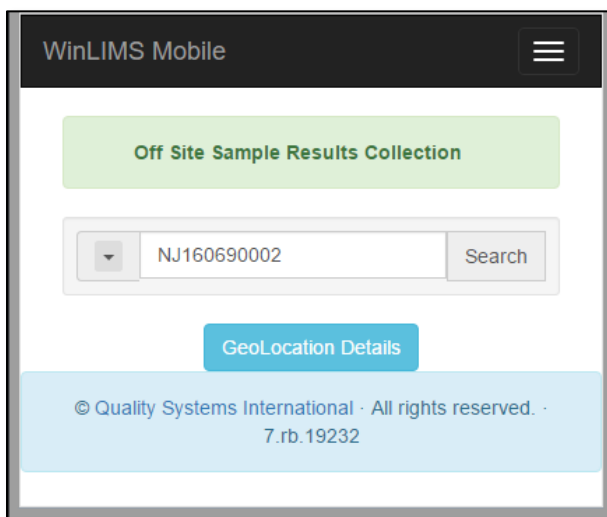


The **Sample Id** is used within the application because it is a unique and terse way to ensure that the data entered goes to the right place in the database. Unfortunately, the human mind doesn't really work the same way as a computer so we need additional descriptive information in order to ensure we're collecting data for the correct sample.

To accommodate this need in a manner that makes proper use of the limited screen space provided within hand-held tools (phones and tablets), the dropdown button that appears to the far right of the **Sample Id** field can be clicked to display all of the sample's descriptive information.

Upon clicking the button, the user-defined fields will be displayed as shown in the illustration to the left. Of course the fields in your system will reflect your sample identification metadata. The review of this information will ensure that the data is collected for the correct sample.

To close the list of descriptors and recover your screen space, just re-click the dropdown button.

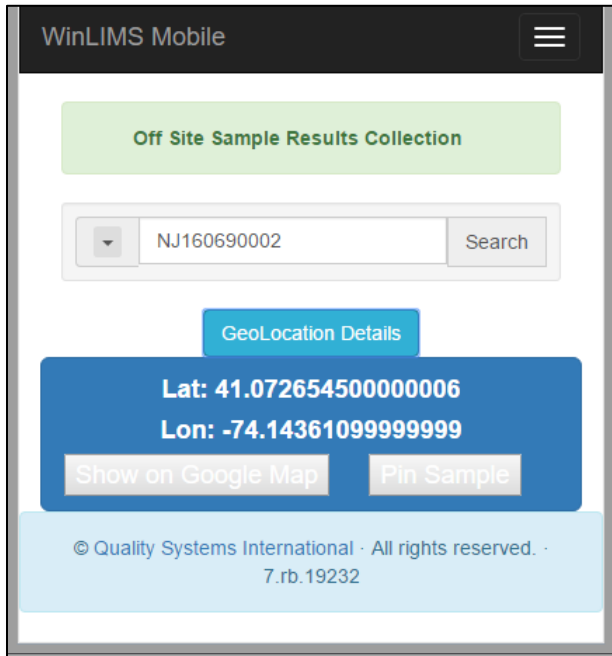


Once you've entered the **Sample Id**, click the **Search** button that appears next to the field.

After identifying the sample, there are several options.



If you click the **GeoLocation Details** button and you have Location Services activated on your device...



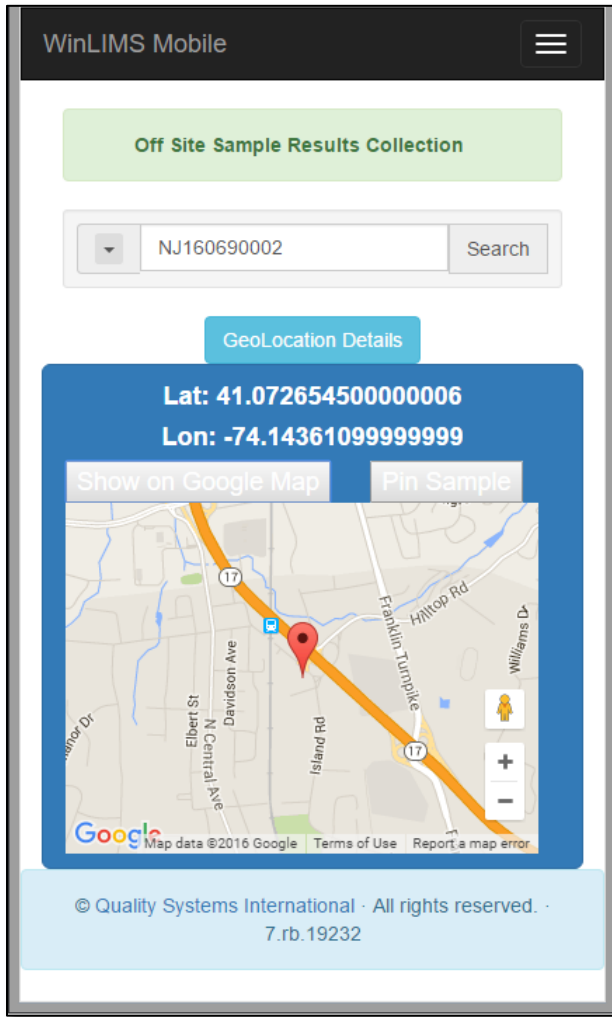
The Latitude and Longitude of your device will be returned to the application and displayed for your review as shown in the illustration to the left.

Two buttons will appear below the GPS Coordinates. These are named:

- **Show on Google Map**
- **Pin Sample**



If you click on the **Show on Google Map** button...



The section of the application will be expanded to display Google Maps and your current position will be 'pinned' to the map. You're free to use the standard navigation tools provided by Google Maps in order to size and position the map as desired.

Pin Sample

GeoLocation Details

Click the **Pin Sample** button and the **GPS Coordinates** will be assigned to the Sample's record in the database for future use. These will be recorded in the **Latitude** and **Longitude** fields.

To close the Google Map presentation, click the **GeoLocation Details** button again and the display will collapse.



WinLIMS Mobile

Off Site Sample Results Collection

NJ160690002

Parameter: As (total)

enter result

Advance to next result upon save.

GeoLocation Details

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With respect to results entry...

After searching for the sample, the 1st **Parameter** will be presented below the **Sample Id**. The name of the **Parameter** as defined within WinLIMS will be displayed. In the example illustration to the left, the **Parameter** name is **As (total)**.

The order of Parameters is defined based on the way tests and samples are assigned within the WinLIMS application. You have total control of the order when creating WinLIMS Methods, Sample Types and Samples.

WinLIMS Mobile

Off Site Sample Results Collection

NJ160690002

Parameter: As (total)

36.58

Advance to next result upon save.

GeoLocation Details

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Position your cursor in the field below the **Parameter** name and enter the desired result.



When you're satisfied with the entered result, click the **Save** button below and the data will be immediately transferred to WinLIMS.

To advance to the next parameter based on the WinLIMS-assigned order, click the **Next Parameter** button.



Advance to next result upon save.



To return to a previously displayed Parameter, click on the **Previous Parameter** button.

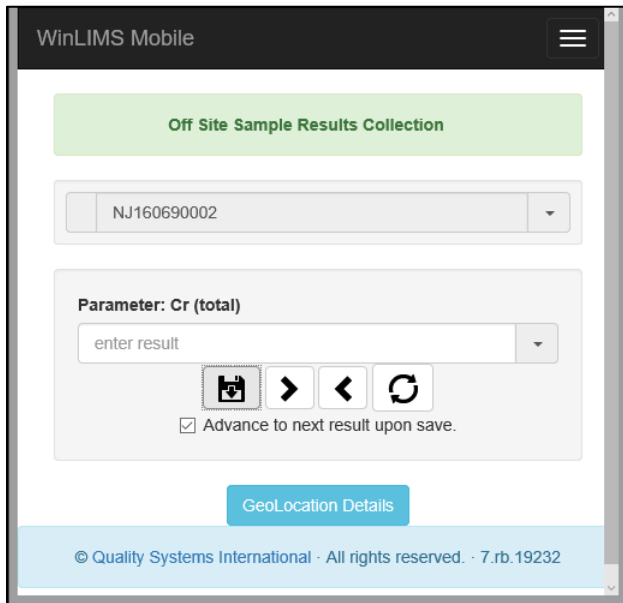
If you wish to retrieve another sample, click the **Clear for New Sample** button and the application will be reset to allow you to search for a new Sample.

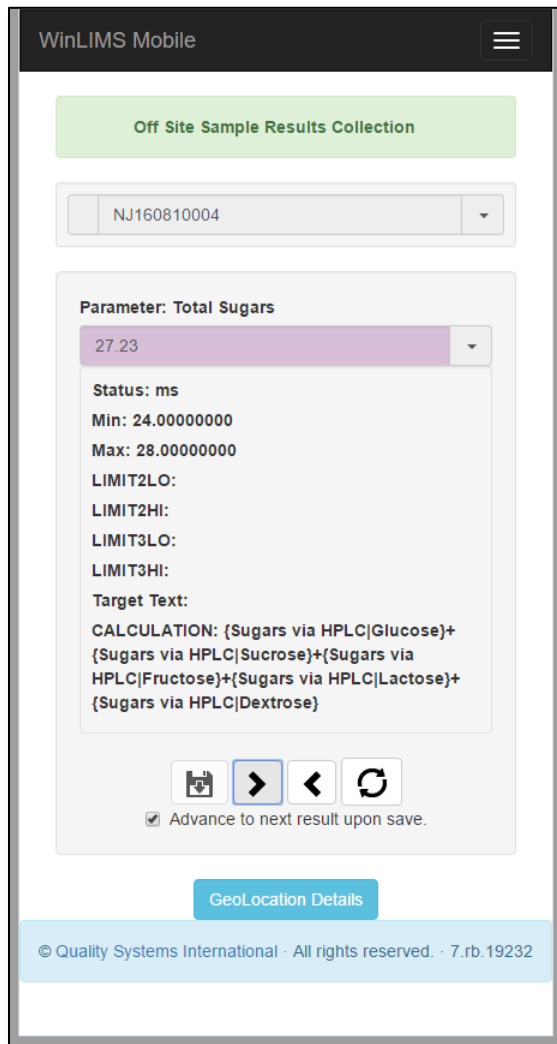
The checkbox named **Advance to next result upon save** is used to add convenience. If this is checked, as soon as you click the **Save** button, the result will be saved and you'll be advanced to the next Parameter. This is a highly recommended option as it will prove to be a convenient time-saver.

Since this option is turned on (checked), upon clicking the Save button, you're immediately advanced to the next parameter.

In the example illustration shown to the left, the next **Parameter** is **Cr (total)** is retrieved to allow you to enter its associated data.

At this point you can use the buttons to enter results and navigate to the parameter of interest for results entry.





When you navigate to a parameter for which results have been previously recorded and wish to review the details of the result, just click the dropdown button that is associated with the **Result** field.

Upon doing so, the dropdown will display information such as the **Status** of the result along with any **Limit(s)**, target values or **Calculations** that are associated with the **Parameter**.

To close the detailed information, just re-click the dropdown button.

As the data is entered via the application, the data will be available for use within WinLIMS in a matter of seconds. For example, the data entered via the Mobile Application used while producing this documentation is viewed within standard WinLIMS pages as shown in the following illustration. This is an illustration that displays the information for **Sample ID NJ160690002** within the **Sample Manager** page. The results for **As (total)** and **Cr (total)** were entered via the hand-held Mobile Application.

Please contact QSI at 201.251.2101, or sales@qsius.com for more information, or to schedule a demo of our class-leading WinLIMS application!