



# FCSI Introduces LeaDeRS: A Complete Leak Detection Survey Solution for Gas Distribution Office

## Leak Detection Survey Storage

LeaDeRS uses FCSI's n-dimensional geometry to store the time/value data gathered from your gas leak detection system. This data is configurable to incorporate all the data from the gas detector and your requirements. The examples shown in this presentation include the time the data was collected, the value from a collector, and the location.

As seen in Figure 1, the leak survey data is drawn in black as a line representation of the route with highlighted portions. Yellow signifying medium levels and red signifying high levels of gas detected. When the survey is selected, the route is drawn with a buffer as to not confuse the user between the selected survey and medium and high levels drawn along the route. This buffer also reflects the buffer used to identify gas mains that are deemed inspected by the survey.

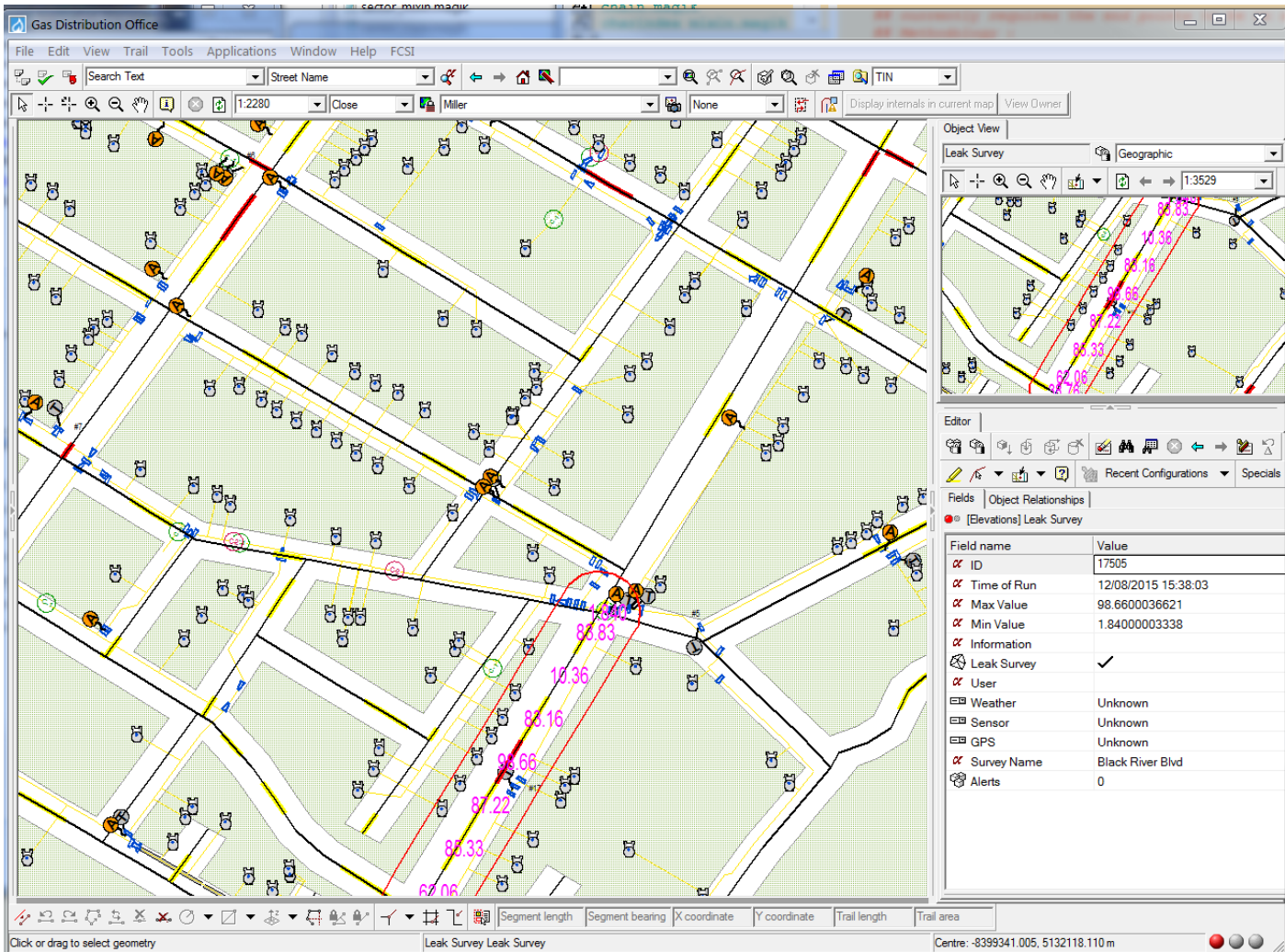


Figure 1 Leak Survey Display

## A Complete Leak Survey Solution for Gas Distribution Office

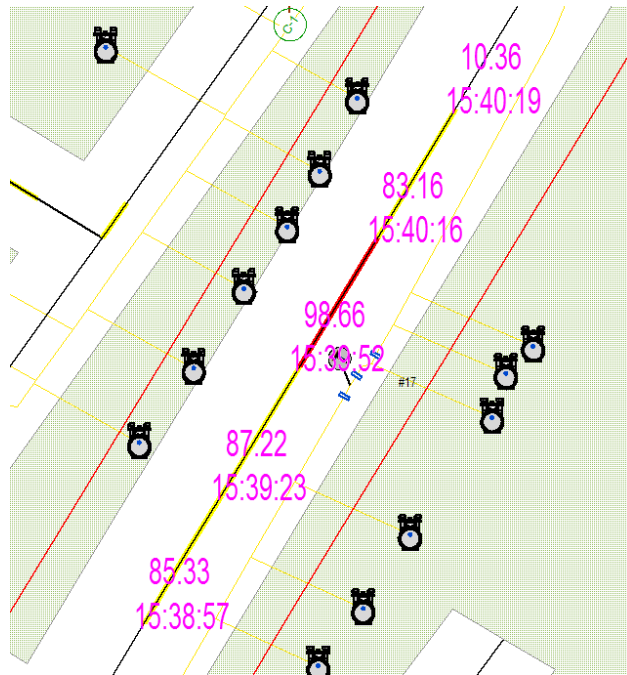


Figure 2 More Detailed Survey Selection

At different zoom scales more information on the leak survey can be displayed. In Figure 1, the survey detector values are displayed at a “neighborhood” scale. Figure 2 demonstrates a more detailed view where the times are also shown. This functionality is provided through Magik code which can be modified to support your specific requirements.

The survey data storage can be included in your current datastore or a separate datastore. The data shown demonstrates storage of the leak survey is not included in the standard GDO datastore.

## Object Relations with Leak Surveys

Figure 3 demonstrates the ability to add object relations between gas main objects and the leak surveys. This allows you to see the relationship using the standard GDO object editor. Highlighting of the leak survey is also supported. This gives you the ability to identify which leak survey is referenced in the list.

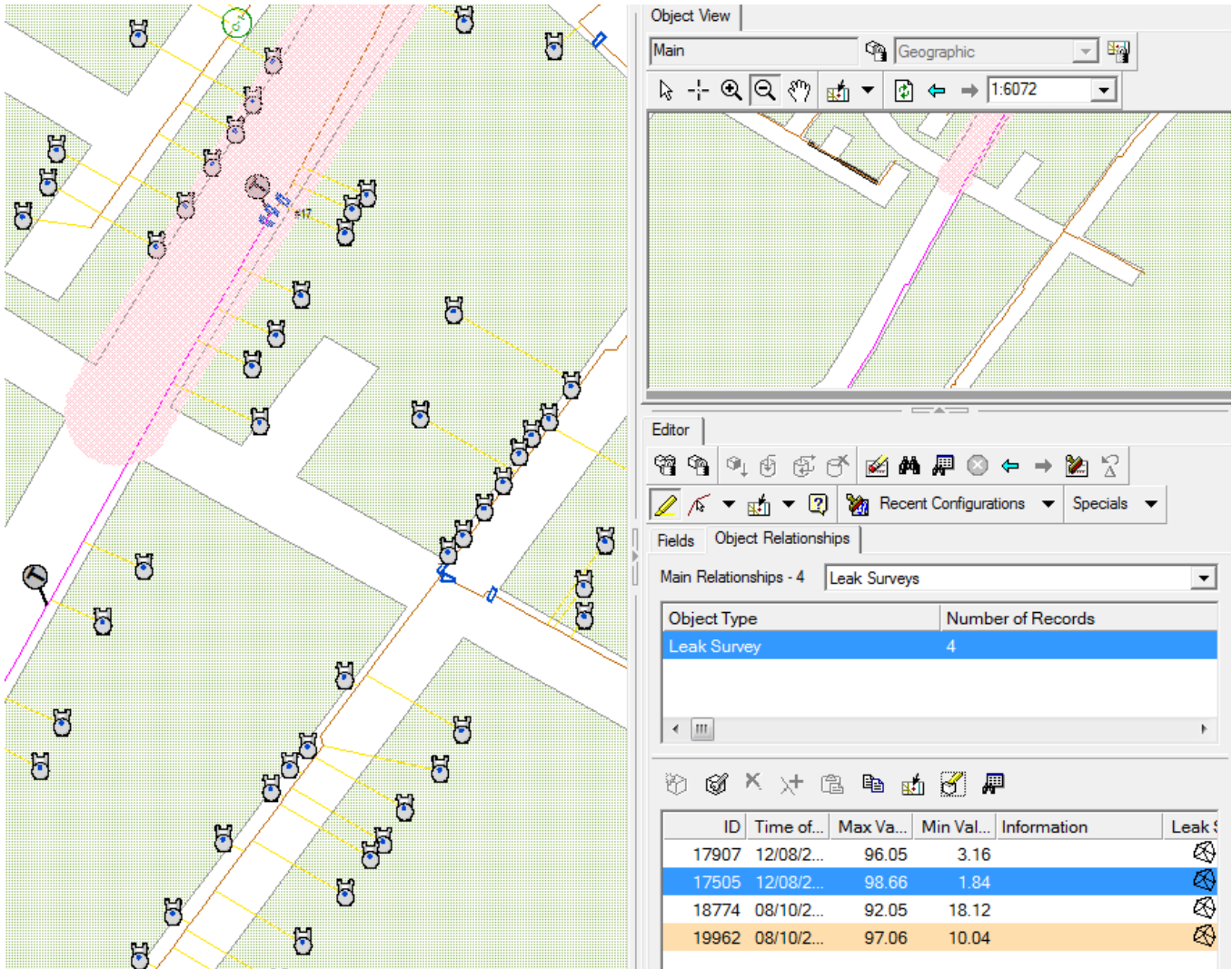


Figure 3 Pipe Object Relationship with Leak Survey

## Survey Reports

Reports can be run on gas mains (and other objects) to return the portions in and out of the buffers of the nearby leak surveys. The reports can also be configured to support aging of leak surveys as seen in Figure 4. The report functionality is based on the Reports Generation software by FCSI, which means your reports can be customized to the consumer with specific data. In Figure 4, The Report generated includes only the Survey Date, the Survey Max Value, and the Survey Name. If there are any portions of the gas main that is not part of a valid leak survey, those are listed as “No Survey”. The Reports are very customizable and can include additional data such as pipe length, pressure, and consequence data.

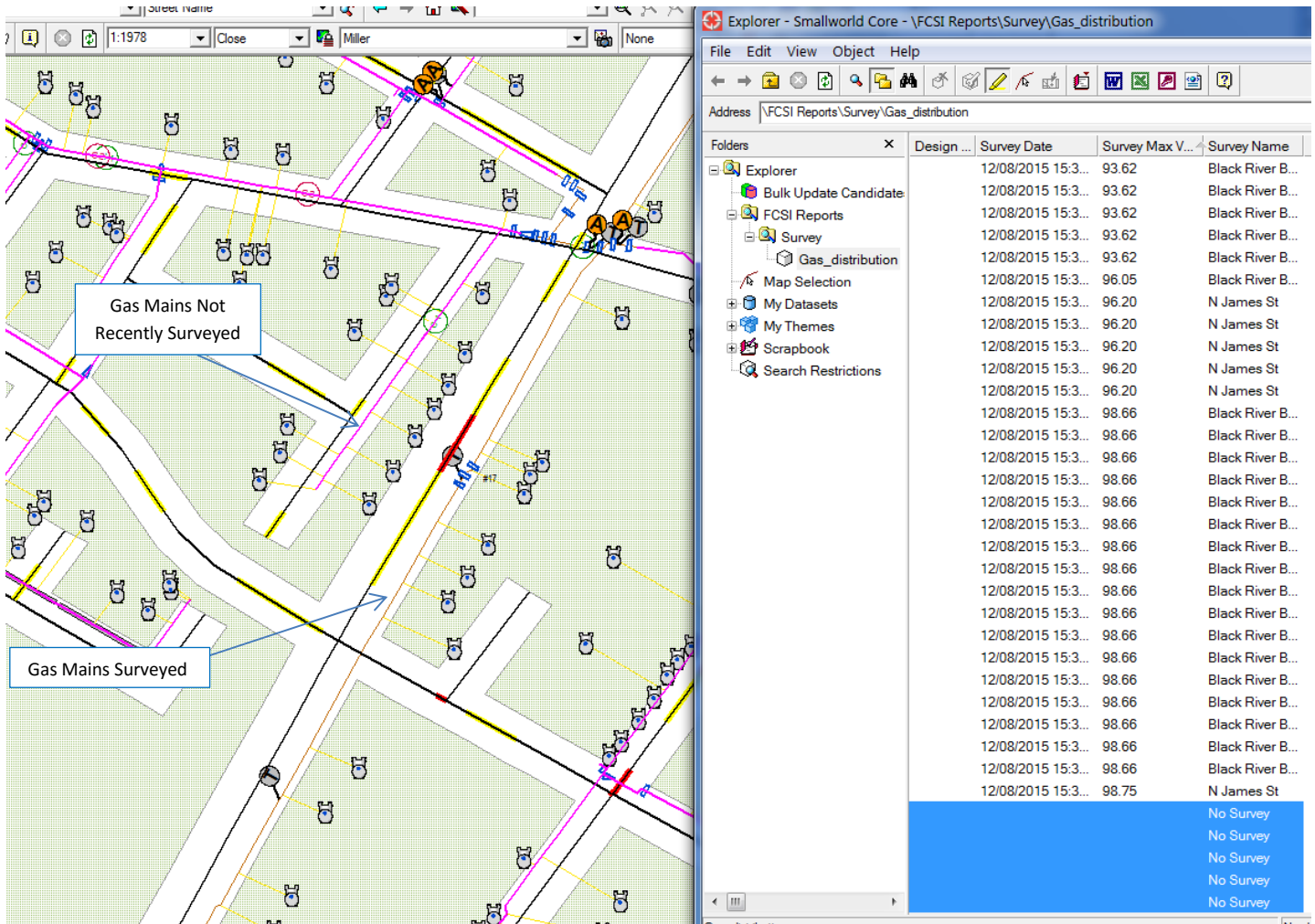


Figure 4 Survey Reporting Results

Figure 4 demonstrates a report on gas mains that are based on the date of the survey. The results highlighted in pink are gas mains or portions of gas mains that were not within the buffer of a recent survey. The surveys are shown in black with red and yellow highlights.

FCSI has developed an application that displays only the Explorer plugin, which allows any user to generate the reports without a graphical application. This application allows reports to be generated by non GIS users at any time.