Acknowledging LEL Over-Range Conditions

6 July 2011

Industrial Scientific portable gas monitoring instruments utilizing catalytic bead LEL sensors include automatic over-range protection to help prevent damage to the combustible gas sensors in the event that there is exposure to gas concentrations greater than 100% of the LEL. This protection includes removing power from the LEL sensor and results in the instrument displaying an over-range condition, along with a latched audible and visual alarm signal.

The LEL over-range condition is cleared by turning the instrument off and then back on again in a clean air environment in order to restore power to the sensor. As indicated in the Warnings and Cautionary Statements section of each Industrial Scientific portable gas monitor instruction manual, the calibration of the sensor should be verified after an incident that has caused the combustible gas sensor to display an over-range condition. Conditions may exist where the automatic protection cannot prevent damage to the sensor. As such, a bump test or calibration of the instrument should be performed prior to further use to verify the integrity and calibration of the combustible gas sensor.

Based on the statements above, Industrial Scientific strongly recommends that a bump test or full calibration of the combustible gas sensor is performed prior to further use of any portable gas monitor after an LEL over-range condition has occurred.

For additional information on Industrial Scientific gas monitoring products and services, visit us at www.indsci.com.

David D. Wagner
Director of Product Knowledge