
**EMISSION MEASUREMENT CENTER
APPROVED ALTERNATIVE METHOD (ALT-002)**

EVALUATION OF GAS TANKS FOR CARBON MONOXIDE ANALYSIS

SUMMARY

Gas tanks are sometimes used as an alternative to Tedlar bags in Methods 10, 10A, and 10B to determine carbon monoxide (CO). Although stability tests have not been conducted on samples from fluid catalytic cracking units in petroleum refineries, CO is not expected to be unstable in the gas tanks. Unless otherwise notified, gas tanks may be used in lieu of Tedlar bags if the samples are analyzed within 1-week.

DISCUSSION

Method 10B laboratory tests have shown that both precision of the analysis and the accuracy of the collection procedure were both within 5 percent of the actual value, except at concentrations below 20 ppm CO, each were within 10 percent of the actual value. Laboratory CO samples and car exhaust samples (ranging from 9.26 to 516 ppm) were stable in gas tanks over a 1-week period.

REFERENCE

1. Laboratory Report: Evaluation of Evacuated Tanks for Carbon Monoxide Analysis, Lori Tussey Lay, December 1, 1988.