FIGURE 3 TO APPENDIX B OF PART 75--SINGLE COMPONENT PLUS BALANCE GAS CYLINDERS
EPA PROTOCOL GAS VERIFICATION PROGRAM RESULTS
EPA CYLINDER GAS ASSAYS PERFORMED BY NIST [NIST to Insert: Month, Year]

Specialty Gas Company Name	EPA Protocol Gas Production Site Name	Vendor ID	Stamped Cylinder ID	Gas Component, e.g., SO2							Supplied Complete Docu-menta-tion (Yes/No)
				Tag Value (e.g., ppm SO2)	Audit Results				Vendor Analytical Method (e.g., FTIR)	Vendor Ref Std Used (e.g., NTRM)	
					Orig Tag Value (Pass/Fail)	Orig Tag (% dif)	Re-analyzed Value (Pass/Fail)	Re-analysis (% dif)			

% dif = 100 x (Tag Value – NIST Value) / NIST Value

A gaseous component is said to fail when the absolute value of the difference between the audit and vendor concentration values is greater than 2.20%. The 2.20% value is determined by using the "paired t test" at 95% confidence, with an uncertainty of plus or minus 2.0% (fixed by Part 75, Appendix A, section 5.1.4(b)) for the gas vendor and an expanded uncertainty (coverage factor k=2) of plus or minus 1.0% (maximum acceptable) for the audit. If on future audits, e.g., for very low concentration gases, the plus or minus 1.0% audit expanded uncertainty value changes, the 2.20% value may change. If the difference between the audit value and the vendor value is plus or minus 2.20% or less, then (because of the uncertainties in the total measurement system) statistically there is no difference between the two values. Thus, a difference of 2.10% would be interpreted as being equal to one of, for example, 0.40%.

Nothing can be said regarding the performance of any EPA Protocol gas production site inadvertently not included in the audit. Any accuracy assessment is an instantaneous snapshot of the process being measured. These results should not be regarded as a final statement on the accuracy of EPA Protocol gases. They can be used as a general indicator of the current status of the accuracy of EPA Protocol gases as a whole. However, individual results should not be taken as definitive indicators of the analytical capabilities of individual producers. EPA presents this information without assigning a rating to the gas vendors, for example, who is the best, who is approved, or is not approved and specifically does not endorse any particular vendor.

NOTE: For cylinders with more than one component plus balance gas, change the title appropriately, e.g., "FIGURE 3 TO APPENDIX B OF PART 75 – BI-BLEND PLUS BALANCE GAS CYLINDERS . . ." and add appropriate columns to Figure 3 for the additional components following the same format used in the columns for SO2 above.