





Red Ball Technical Gas Service 555 Craig Kennedy Way Shreveport, LA 71107 800-551-8150 PGVP Vendor ID # G12025

CERTIFIED GAS CERTIFICATE OF ANALYSIS

Cylinder Number: Product ID Number: Cylinder Pressure: COA # CC774119 127963 1900 PSIG CC774119.20250124-0

Certification Date: Expiration Date: MFG Facility: Lot Number: Tracking Number: 01/27/2025 01/26/2029 - Shreveport - LA CC774119.20250124 111151501

Previous Certification Dates:

This mixture is for laboratory use only, not for drug, household or other use.

This mixture is certified in Mole % to be within ±2% of the actual number reported with a confidence of 95%.

This mixture was manufactured by scale; weights traceable to N.I.S.T. Certificate #822/266926-02.

Do Not Use This Cylinder Below 100 psig (0.7 Megapascal).

Certified Concentration(s)

Component	Concentration	Analytical Accuracy	Analytical Principle
Carbon Monoxide	84.5 PPM	± 2% NIST	GCF
Nitric Oxide	8.95 PPM	± 2% NIST	Chemiluminescence

Total Oxides of Nitrogen 9.03 PPM
Nitrogen Balance

Analytical Measurement Data Available Online.

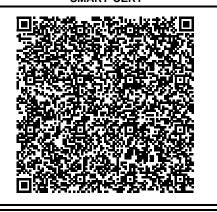
Reference Standard(s)

Serial Number	Lot	Expiration	Туре	Balance	Component	Concentration	Uncertainty(%)	NIST Reference
CC352962	CC352962.20231207	12/10/2028	GMIS	N2	NO	9.82 PPM	0.523	C2384201.01A
CC749180	CC749180.20230908	08/22/2027	GMIS	N2	NO	29.2 PPM	0.449	C2384201.01A
EB0032215	EB0032215.20221004	08/06/2032	GMIS	N2	CO	353.4 PPM	0.317	SRM 1681b
EB0098871	EB0098871.20220728	08/06/2032	GMIS	N2	CO	100.1 PPM	0.333	SRM 1680b

Analytical Instrumentation

Component	Principle	Make	Model	Serial	MPC Date
NO	Chemiluminescence	Thermo	T42C	42C-68400-360	01/07/2025
CO	GCF	Thermo	T48i	11708001	01/14/2025

SMART-CERT



This is to certify the gases referenced have been calibrated/tested, and verified to meet the defined specifications. This calibration/test was performed using Gases or Scales that are traceable through National Institute of Standards and Technology (NIST) to the International System of Units (SI). The basis of compliance stated is a comparison of the measurement parameters to the specified or required calibration/testing process. The expanded uncertainties use a coverage factor of k=2 to approximate the 95% confidence level of the measurement, unless otherwise noted. This calibration certificate applies only to the item described and shall not be reproduced other than in full, without written approval from Red Ball Technical Gas Services. If not included, the uncertainty of calibrations are available upon request and were taken into account when determining pass or fail.

Battan Jellun

Brittany Johnson Analytical Chemist Assay Laboratory: Red Ball TGS Version 02-H, Revised on 2024-07-17