

CERTIFICATE OF ANALYSIS

Grade of Product: EPA Protocol

Part Number: E04NI99E15A00B2
 Cylinder Number: EB0125049
 Laboratory: 124 - Durham (SAP) - NC
 PGVP Number: B22019
 Gas Code: CO,NO,NOX,SO2,BALN
 Reference Number: 122-401605352-1
 Cylinder Volume: 144.4 CF
 Cylinder Pressure: 2015 PSIG
 Valve Outlet: 660
 Certification Date: Oct 08, 2019
 Expiration Date: Oct 08, 2022

Certification performed in accordance with "EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards (May 2012)" document EPA 600/R-12/531, using the assay procedures listed. Analytical Methodology does not require correction for analytical interference. This cylinder has a total analytical uncertainty as stated below with a confidence level of 95%. There are no significant impurities which affect the use of this calibration mixture. All concentrations are on a volume/volume basis unless otherwise noted.
 Do Not Use This Cylinder below 100 psig, i.e., 0.7 megapascals.

ANALYTICAL RESULTS

Component	Requested Concentration	Actual Concentration	Method	Total Relative Uncertainty	Assay Dates
NOX	20.00 PPM	20.08 PPM	G1	+/- 1.3% NIST Traceable	10/01/2019, 10/08/2019
CARBON MONOXIDE	20.00 PPM	19.98 PPM	G1	+/- 0.8% NIST Traceable	10/01/2019
NITRIC OXIDE	20.00 PPM	20.08 PPM	G1	+/- 1.3% NIST Traceable	10/01/2019, 10/08/2019
SULFUR DIOXIDE	20.00 PPM	19.91 PPM	G1	+/- 1.0% NIST Traceable	10/01/2019, 10/08/2019
NITROGEN	Balance				

CALIBRATION STANDARDS

Type	Lot ID	Cylinder No	Concentration	Uncertainty	Expiration Date
NTRM	15010214	KAL004167	24.35 PPM CARBON MONOXIDE/NITROGEN	+/- 0.3%	Sep 04, 2021
PRM	PRM	D62879	10.01 PPM NITROGEN DIOXIDE/AIR	+/- 1.9%	Aug 17, 2018
NTRM	16060620	CC442578	50.42 PPM NITRIC OXIDE/NITROGEN	+/- 0.8%	Jun 27, 2020
GMS	124206889114	CC322698	4.432 PPM NITROGEN DIOXIDE/NITROGEN	+/- 2.0%	Aug 15, 2021
NTRM	17060727	CC486278	15.90 PPM SULFUR DIOXIDE/NITROGEN	+/- 0.9%	Jul 23, 2023

The SRM, PRM or RGM noted above is only in reference to the GMS used in the assay and not part of the analysis.

ANALYTICAL EQUIPMENT

Instrument/Make/Model	Analytical Principle	Last Multipoint Calibration
Nicolet 6700 AHR0801333 CO	FTIR	Sep 12, 2019
Nicolet 6700 AHR0801333 NO	FTIR	Sep 12, 2019
Nicolet 6700 AHR0801333 NO2	FTIR	Sep 12, 2019
Nicolet 6700 AHR0801333 SO2	FTIR	Sep 12, 2019

Triad Data Available Upon Request

APPROVED
[Signature]

Approved for Release

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ADK 12/17/20
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