Airborne Labs International
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USP Equivalent Carbon Dioxide (CO_2) Analysis Report

ALI Track No.:
Received On:
Report Date:
Payment Mode: CC

Phone:
Attn.:
E-Mail:
Sample ID. : Vaporized Liquid CO_2 from
Sample ID. : Received in

Sampled On:

Test Description/Units	Result	Spec. Limit
CO_2 Identification (pass/fail by DT):	----------	Full Scale Min.
Comments: Gastec 2HT CO_2 Identification (0-100% scale) Detector Tube Method. Report "Pass" if GT 99% tube scale		
Water Vapor (H_2O, ppm w/v, DT, [CH]):	----------	150 Max.*
Comments: Gastec 6L. *Results described for 1 atm = 14.7 psia (0 psig) conditions. MDL = 2 ppm w/v. Report nd 2		
Ammonia (NH_3, ppm v/v, DT):	----------	25 Max.
Comments: Gastec 3La. MDL = 0.5 ppm, report nd 0.5 ppm		
Hydrogen Sulfide (H_2S, ppm v/v DT):	----------	1 Max.
Comments: Gastec 4LT. MDL 0.05 ppm v/v, report LT 0.05 ppm		
Oxides of Nitrogen (NO_x, ppm v/v, DT):	----------	Report
Comments: Note 1: Gastec 11L, speciation for NO & NO_2 is required. MDL = 0.2, report nd 0.2 ppm		
Nitric Oxide (NO, ppm v/v, DT):	----------	2.5 Max.
Comments: Gastec 10. MDL = 1 ppm, (report NO value by subtraction NO_2 from NO_X)		
Carbon Monoxide (CO, ppm v/v, DT):	----------	10 Max.
Comments: Gastec 1LK. MDL = 1 ppm, report nd 1 ppm		
Nitrogen Dioxide (NO_2, ppm v/v, DT):	----------	2.5 Max.
Comments: Gastec 10 or Gastec 9L. MDL = 0.5 ppm, report nd 0.5 ppm		
Sulfur Dioxide (SO_2, ppm v/v, DT):	----------	5 Max.
Comments: Gastec 5La. MDL = 0.25 ppm, report nd 0.25 ppm		
CO_2 Purity (% v/v, ZN, [GC]):	----------	99.0 Min.
Comments: % Purity obtained by air gas subtraction method. Report 99.9+ if applicable		

L.T. = less than the amount specified. **G.T.** = greater than the amount specified. **M.D.L**. = method detection limit (for quantitation). **tr** = trace amount less than the report detection limit was observed. **nd** = indicates the impurity was not detectable and below the report detection limit. -- = test not performed. **na** = not available. **%** = percent. **ppm** = parts per million. **ppb** = parts per billion. **v/v** = volume analyte/volume sample. **w/v** = weight analyte/volume sample, **w/w** = weight analyte/weight sample. **{result}** indicates the result was obtained by the method listed within brackets. **Unit Conversions:** 1 ppm v/v = 1μL/L = 1,000 ppb = 0.0001% v/v, 1 ppm w/v = 1 μg/L = 1 mg/m^3, v/v. NTP = 760 mm Hg, 20ºC, [68ºF], 293.14ºK, R = 0.082057L*Atm/ºK *Mole, For Water Vapor unit conversions: ppm v/v X 0.000749 = mg/L w/v, ppm v/v X 0.749 = ppm w/v = mg / m^3 = mg / 1000L. For Conversions between Dew Point and ppm v/v or ppm w/v units, refer to CGA G-7.1 Table or other appropriate published conversion tables.

Report Summary: Customer requested a USP equivalent CO_2 test program.

Reviewed by/ Date:

Laboratory Manager *mm/dd/yy*

Laboratory Manager

Attachments: none
Addendum: Signatures, Instrument & Notebook data on-file

ISO Statement

Statements of conformity (pass or fail) resulting from the test/analysis performed on the above sample will not take into account the reported measurement uncertainty unless otherwise specified. This is a shared risk decision rule in which the customer also has responsibility for determining acceptance of the results. The methods Airborne Labs International uses are developed by Airborne Labs International and are based on the current revisions of international, national, or industry standards unless otherwise specified. Methods can be reviewed by the customer upon request. The acceptance criteria of the above item are based on ISBT specifications, NFPA, CGA, USP, or other industry specifications unless otherwise specified on the contract.