

Certificate of Analysis

Quality Control

is in compliance with the air/gas quality portion of the specification:

Oxygen Compat. Air-2003 (I) & CGA G-7.1-2018 Grade E

as analyzed and reported on this certificate for the sample described under section "sample & report information"



Analytical Test Methods:	Media Sampled:	Estimate of Uncertainty:
Gases & Vapors: CAT-A-01 Gas Chromatography/Mass Spectrometry	Source Bottle: 795209	The average estimate of uncertainty at standard specification limits for 10 compounds normally reported is $\pm 3.24\%$ at a 95% confidence interval ($k=2$). For more detailed uncertainty information, contact Trace Analytica, LLC.
Oil & Particulate: CAT-A-03 Analytical Gravimetry	Ambient Bottle: 432154	
Particle Size: CAT-A-04 Optical Microscopy	Source Filter: 7200	
Pressure Dew Point: CAT-A-07 Gas Detector Tube	Detector Tube: Draeger 5-a/P	

Maria Sandoval
Maria Sandoval, Laboratory Director

Results of Test: PASS

Sample & Report Information

From:
Trace Analytics, LLC
15768 Hamilton Pool Road
Austin, Texas 78738

To:
Jon Ehm
Big Island Divers
74-5467 Kaiwi Street
Kailua Kona, HI 96740

Analytes	Source Results (1)	Ambient Results	Specification Allowable Limits
Oxygen, Volume %	21.1	20.9	20-22
Nitrogen, Volume %	78.0	78.2	N/A
Argon, Volume %	0.9	0.9	N/A
Nitrogen Plus Argon, Volume %	78.9	N/A	N/A
Carbon Monoxide (CO), ppmv	<0.5	<0.5	2
Carbon Dioxide (CO2), ppmv	509	460	1000
Water Content (H2O), ppmv/Dewpoint, °F (DT)	<8.5 / <-79	N/A	24 / -65 (W)
TVHC (including CH4), ppmv	2.1	6.3	25
Methane (CH4) ppmv	2.1	2.0	N/A
TVHC (excluding CH4), ppmv	<0.7	4.3	N/A
Oil (condensed) & Particulate, mg/m3	0.09	N/A	0.1
Odor (provided by customer)	None/Slight	N/A	None/Slight
Other	N/A	N/A	N/A
Other	N/A	N/A	N/A
Other	N/A	N/A	N/A

Sampled For	Quality Control
Sampled By	Jon P Ehm
Sampled On	3/22/2021
Received On	3/30/2021
Analyzed On	4/5/2021
Sampled From	Compressor
Make	Bauer
Model	VA20-E3/230
Serial No.	107338
Cylinder(s)	4
Other ID	Nitrox Compressor
Sample Phase	Routine
Customer Comments	
Report Number	21-09886
Customer ID	39702
Date Reported	4/5/2021
Frequency	Semi-Annual

(1) Results apply to the sample as received from the customer. Information supplied by the customer can affect the validity of results.
 (DT) Water content Pass/Fail was determined by water vapor detector tube analysis.
 (I) This specification for oxygen compatible air is taken from ANSI/CGA G-7.1 Grade E as modified by International Association of Nitrox and Technical Divers (IANTD) in their document Blending Standards, 2003.
 (W) Dew point is expressed in °F at one atmosphere pressure absolute.
 (DT) Detector tube readings performed by the customer. Dew point is calculated at 1 atmosphere pressure (14.7 psia) from the detector tube reading.