

# Certificate of Analysis

## SA Scuba Shack

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

### CGA G-7.1-2018 Grade E (2)

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: 7025279	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 Analytics, LLC.
Oil & Particulate:	CAT-A-03 Analytical Gravimetry	Ambient Bottle: 442369	
Particle Size:	CAT-A-04 Optical Microscopy	Source Filter: 1236173	
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:	Analytes	Source Results (1)	Ambient Results	Specification Allowable Limits	Sampled For
Trace Analytics, LLC 15768 Hamilton Pool Road Austin, Texas 78738	Oxygen, Volume %	21.0	20.9	20-22	SA Scuba Shack
	Nitrogen, Volume %	78.1	78.2	N/A	Sampled By David Guernsey
	Argon, Volume %	0.9	0.9	N/A	Sampled On 4/11/2024
	Nitrogen Plus Argon, Volume %	79.0	N/A	N/A	Received On 4/15/2024
	Carbon Monoxide (CO), ppmv	1.1	1.1	10	Analyzed On 4/16/2024
	Carbon Dioxide (CO2), ppmv	564	556	1000	Sampled From Compressor
	Water Content (H2O), ppmv/Dewpoint, °F (DT)	N/A	N/A	N/A / N/A (W)	Comp Make Alkin
	TVHC (including CH4), ppmv	5.4	6.2	25	Model W4-15-345 FP6M
	Methane (CH4) ppmv	2.1	1.9	N/A	Serial No. 948564
	TVHC (excluding CH4), ppmv	3.3	4.3	N/A	Filtration Alkin
To: MR. DAVID GUERNSEY SA SCUBA SHACK 10102 HUEBNER RD SAN ANTONIO, TX 78240 UNITED STATES	Oil (condensed) & Particulate, mg/m3	0.06	N/A	5	Cylinder(s) Cascade
	Odor (provided by customer)	None/Slight	N/A	None/Slight	
	Other	N/A	N/A	N/A	
	Other	N/A	N/A	N/A	Hours 1237
	Other	N/A	N/A	N/A	Sample Phase After Filter Change
	(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.				Customer Comments
	(2) This specification is intended for or applications that do not require a water content specification. CGA G-7.1-2011 has no water content limit for Grade E, for which the typical use is listed as SCUBA air. As allowed by CGA G-7.1-2011, Table 1, Note 6, water content is not specified <b>but is</b> reported. Note 6: "The water content of compressed air required for any particular QVL [grade] can vary with the intended use from saturated to very dry."				Report Number 24-12549
	(W) Dew point is expressed in °F at one atmosphere pressure absolute. (P) Evidence of the presence of particulate was observed with the naked eye on the filter at the time of analysis.				Customer ID 33744
Date Reported 4/16/2024					
Frequency Quarterly					