

# 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".

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Analytical Test Methods:		Media Sampled:	Estimate of Uncertainty:
Gases & Vapors:	CAT-A-01 Gas Chromatography/Mass Spectrometry	Source Bottle: 7022335	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: 445979	
Particle Size:	CAT-A-04 Optical Microscopy	Source Filter: 1236134	
Pressure Dew Point:	CAT-A-07 Gas Detector Tube	Detector Tube: Draeger 5-a/P	

Maria Sandoval, Laboratory Director

**Results of Test: PASS**

**Sample & Report Information (2)**

<b>From:</b> Trace Analytics, LLC 15768 Hamilton Pool Road Austin, Texas 78738  <b>To:</b> MR. DAVID GUERNSEY SA SCUBA SHACK 10102 HUEBNER RD SAN ANTONIO, TX 78240 UNITED STATES	Analytes	Source Results (1)	Ambient Results	Specification Allowable Limits	Sampled For	SA Scuba Shack
	Oxygen, Volume %	21.0	21.1	20-22	Sampled By	Not Provided
	Nitrogen, Volume %	78.1	78.0	N/A	Sampled On	8/16/2024
	Argon, Volume %	0.9	0.9	N/A	Received On	8/22/2024
	Nitrogen Plus Argon, Volume %	79.0	N/A	N/A	Analyzed On	8/26/2024
	Carbon Monoxide (CO), ppmv	1.3	<0.5	10	Sampled From	Compressor & Stored Air
	Carbon Dioxide (CO2), ppmv	487	453	1000	Comp Make	Alkin
	Water Content (H2O), ppmv/Dewpoint, °F (DT)	N/A	N/A	N/A / N/A (W)	Model	W4-15-345 FP6M
	TVHC (including CH4), ppmv	9.1	6.7	25	Serial No.	948564
	Methane (CH4) ppmv	2.3	2.1	N/A	Filtration	Alkin
	TVHC (excluding CH4), ppmv	6.8	4.6	N/A		
	Oil (condensed) & Particulate, mg/m3	<0.05	N/A	5		
	Odor (provided by customer)	None/Slight	N/A	None/Slight	Hours	1295.04
Other	N/A	N/A	N/A	Sample Phase	Routine	
Other	N/A	N/A	N/A	Customer Comments		
Other	N/A	N/A	N/A	Report Number	24-27435	
				Customer ID	33744	
				Date Reported	8/26/2024	
				Frequency	Quarterly	

(1) Results apply to the sample as received from the customer. Information supplied by the customer can affect the validity of results. (2) Information in this section is supplied by the customer (except dates received, analyzed and reported). (DT) Water content Pass/Fail was determined by water vapor detector tube analysis.

(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 **but is** 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."

(W) Dew point is expressed in °F at one atmosphere pressure absolute.