

**Trace Analytics, LLC**

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AirCheck✓Report™

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Customer No.: 4777**Report No.: 10-27042**

Spree Expeditions, Inc.
Mr. Robert Wasson
1107 Key Plaza # 157

Key West FL 33040

Date Received: **Mon, December 6, 2010**
 Date Analyzed: **Mon, December 6, 2010**
 Date Reported: **Tue, December 7, 2010**
 Sampled By: **Melanie Wasson**
 Date Sampled: **Wed, December 1, 2010**
 Air Source ID: **Mako Compressor & Stored Air,
 S/N 5406EH167**

Results vs Oxygen Compat. Air-1995(I) & CGA G-7.1-2004 Grade E(2) Gas Quality Specification

Limiting Characteristic		Concentration			QC Results, %*	
		Source	Ambient	Specification	Accuracy	Precision
Oxygen, Volume %		20.8	N/A	20-22	100	0.4
Nitrogen / Argon, Volume %		78.3 / 0.9	N/A / N/A	N/A - N/A	100	0.4
Carbon Monoxide (CO), ppmv		<0.3	N/A	2	101	1.3
Carbon Dioxide (CO ₂), ppmv		325	N/A	1000	99	2.4
Water (H ₂ O), ppmv/Dewpoint, °F		103 / -44	N/A	N/A/N/A (W)	102	2.1
Total Volatile Hydrocarbon Content (TVHC)	TVHC (including CH ₄), ppmv	2.7	N/A	25	101	1.8
	Methane (CH ₄), ppmv	1.9	N/A	N/A	100	0.6
	TVHC (excluding CH ₄), ppmv	0.8	N/A	N/A	101	1.8
Oil (condensed) & Particulate, mg/m ³		<0.04	N/A	0.1	100	0.2
Odor (provided by customer)		None/Slight	N/A	None/Slight	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A

This sample COMPLIES with the air/gas quality portion of the above referenced specification.

Customer
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(2) Water content is reported although not required by CGA G-7.1 for breathing air not used in conjunction with SCBA.
 (I) This specification for oxygen compatible air is taken from ANSI/CGA G-7.1-1989 Grade E as modified by International Association of Nitrox and Technical Divers (IANTD) in their document Blending Standards, 1998.
 (W) Dew point is expressed in °F at one atmosphere pressure absolute.

*Accuracy relates observed to expected results (100% is complete agreement). Precision relates to reproducibility (0.0% is complete agreement).

Analytical Test Methods	Gases & Vapors Oil & Particulate Particle Size	CAT-A-01 CAT-A-03 CAT-A-04	Gas Chromatography/Mass Spectrometry Analytical Gravimetry Optical Microscopy
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Media Sample Numbers	Source Bottle: 749906 Source Filter: 144222 Ambient Bottle: N/A
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Accredited In The **Chemical** Field of Testing

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Richard A. Smith, C.I.H., Laboratory Director

R. A. Smith

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Customer No.: 4777**Report No.: 10-27044**

Spree Expeditions, Inc.
Mr. Robert Wasson
1107 Key Plaza # 157

Key West FL 33040Date Received: **Mon, December 6, 2010**Date Analyzed: **Mon, December 6, 2010**Date Reported: **Tue, December 7, 2010**Sampled By: **Melanie Wasson**Date Sampled: **Wed, December 1, 2010**

Air Source ID: **Mako Compressor & Stored Air,**
S/N 5406E868

Results vs Enriched Air Nitrox 32%-1995 & CGA G-7.1-2004 Grade E Gas Quality Specification

Limiting Characteristic		Concentration			QC Results, %*	
		Source	Ambient	Specification	Accuracy	Precision
Oxygen, Volume %		32.5	N/A	31.0-33.0	100	0.4
Nitrogen / Argon, Volume %		66.9 / 0.6	N/A / N/A	N/A - N/A	100	0.4
Carbon Monoxide (CO), ppmv		<0.3	N/A	10	101	1.3
Carbon Dioxide (CO ₂), ppmv		<4	N/A	1000	99	2.4
Water (H ₂ O), ppmv/Dewpoint, °F		3.6 / -90	N/A	N/A/N/A (W)	102	2.1
Total Volatile Hydrocarbon Content (TVHC)	TVHC (including CH ₄), ppmv	1.8	N/A	25	101	1.8
	Methane (CH ₄), ppmv	1.8	N/A	N/A	100	0.6
	TVHC (excluding CH ₄), ppmv	<0.7	N/A	N/A	101	1.8
Oil (condensed) & Particulate, mg/m ³		<0.04	N/A	0.1	100	0.2
Odor (provided by customer)		None/Slight	N/A	None/Slight	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A
Other		N/A	N/A	N/A	N/A	N/A

This sample COMPLIES with the air/gas quality portion of the above referenced specification.

Customer
Comments

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(C) This specification is a combination of industry standards referenced in "PADI Enriched Air Operations and Resources Guide" ©International PADI, Inc. 1995.
 (W) Dew point is expressed in °F at one atmosphere pressure absolute.

*Accuracy relates observed to expected results (100% is complete agreement). Precision relates to reproducibility (0.0% is complete agreement).

Analytical
Test
Methods

Gases & Vapors
Oil & Particulate
Particle Size

CAT-A-01
CAT-A-03
CAT-A-04

Gas Chromatography/Mass Spectrometry
Analytical Gravimetry
Optical Microscopy

Media
Sample
Numbers

Source Bottle: 749949
Source Filter: 123974
Ambient Bottle: N/A



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Richard A. Smith, C.I.H., Laboratory Director

R. A. Smith