Aircheck Report and Certificate

From:

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

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To: Total Diving 6356 Sherbrooke West Montreal, QC H4B 1M9 CANADA

TRACE Analytics

Report 15-34432, Sampled on

12/18/2015



Analysis Certificate

Next Sample Due Quarterly, Approximately

3/18/2016

TOTAL DIVING

IS IN COMPLIANCE WITH THE AIR/GAS QUALITY PORTION OF THE SPECIFICATION:

CSA STANDARD Z275.2-2011 OCCUPATIONAL SAFETY CODE FOR DIVING OPERATIONS (H)

AS ANALYZED AND REPORTED ON THIS CERTIFICATE

FOR THE SAMPLE DESCRIBED UNDER SECTION "SAMPLE & REPORT INFORMATION"



Results of Test: PASS

American Assn for Laboratory Accreditation 1991: Certificate No. 322.01 Chemical Field of Testing Pichard A Smith Laboratory Director

Analytical Test Methods	Media Sampled		Estimate of Uncertainty	
Gases & Vapors CAT-A-01 Gas Chromatography/Mass Spectrometry Oil & Particulate CAT-A-03 Analytical Gravimetry Particle Size CAT-A-04 Optical Microscopy	Source Bottle: Ambient Bottle: Source Filter:	N/A	The average analytical uncertainty (k=2) is 98.8±2.4% (relative) at the specification limit for the ten compounds normally reported. For uncertainty information for a specific compound, contact Trace.	

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Sample & Repo	ort Information	
Sampled For	Total Diving	
Sampled By	Sebastien Savignac	
Sampled On	12/18/2015	
Received On	12/22/2015	
Analyzed On	12/23/2015	
Sampled From	Compressor & Stored Air	
Make	Jordair	
Model	K15-3EV	
Serial No.	82/23/6/01	
Cylinder(s)	4	
Hours	3366	L
Sample Phase	Routine	L
Customer		
Comments		
Report Number	15-34432	
Customer ID	2292	
Date Reported	12/28/2015	
Frequency	Quarterly	
Next Sample		
Next Sample Due Approx	3/18/2016	

	<i>Analytes</i>	Source Results	Ambient Results	Specification ¹ Allowable Limits	
	Oxygen, Volume %	20.9	N/A	20-22	
	Nitrogen, Volume %	78.2	N/A	N/A	
	Argon, Volume %	0.9	N/A	N/A	
	Nitrogen Plus Argon, Volume %	79.1	N/A	78-80	
	Carbon Monoxide (CO), ppmv	<0.3	N/A	3	
	Carbon Dioxide (CO ₂), ppmv	441	N/A	600	
	Water Content (H ₂ O), ppmv/Dewpoint, °F	<3.4 / <-91	N/A	27 / -63 (W)	
	Atmospheric Dew Point, °F (DT)	<-98	N/A	N/A	
	TVHC (including CH ₄), ppmv	2.3	N/A	15	
	Methane (CH₄) ppmv	2.3	N/A	10	
	TVHC (excluding CH ₄), ppmv	<0.7	N/A	5	
	Oil (condensed) & Particulate, mg/m ³	<0.03	N/A	0.1	
	Odor (provided by customer)	None/Slight	N/A	None/Slight	
	Halogenated Hydrocarbons, ppmv	<0.1	N/A	5	
	Atmospheric Dewpoint, °C	<-68	N/A	-53	
	Pressure Dewpoint, °C	-23	N/A	0	
(I) Compressed breathing six in cultipleur and pining > 15.3 MDs (2016 pairs) shall be us an atmospheric day, pairs > 53°C (63°C) as years years > 27 mJ (m ³ /mm) a					

(H) Compressed breathing air in cylinders and piping \geq 15.3 MPa (2216 psig) shall have an atmospheric dew point \leq -53°C (-63°F) or water vapor \leq 27 mL/m³ (ppm) and SHOULD have a pressure dew point \leq 5°C (9°F) below the lowest temperature towhich the cylinder or piping can be exposed during any time of the year at that geographic location. If an operating pressure is not provided, we will use 20.7 MPa (3000 psig).

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

(DT) Dew point is calculated at 1 atmosphere pressure (14.7 psia) from the detector tube reading.