

TECHNICAL VERIFICATION DOSSIER

Independent Testing Summary and Verification Record

InhaleH2 Hydrogen Inhalation Machine | Model TIM-100

Document control	Value
Document ID	IH2-TSVR-001
Revision	1 - Tester review final
Prepared for	InhaleH2 LLC
Prepared date	August 11, 2026
Independent reviewer	Randy Sharpe, Director of Testing, H2 Analytics
Product covered	TIM-100 beta unit, subject to the configuration limitations stated in this document

Purpose

This document presents a traceable, plain-language summary of available independent laboratory and engineering test records for review by universities, hospitals, research organizations, and other institutional stakeholders. It does not replace the underlying reports, certify the device for clinical use, or expand the scope of testing performed.

CONTROLLING RECORDS If this summary differs from an original report, the original report controls. The original reports should accompany any externally distributed signed copy.

1. Scope and Interpretation

Two different testing activities are summarized. They evaluated different samples, configurations, and endpoints and must not be treated as one combined certification.

Record	Test article / sample	Scope
SGS Workorder 25051302	Sample identified as 'Inhale H2 (beta)'; matrix reported as aqueous / drinking water	Chemical analysis, including metals, selected inorganic parameters, and 18 PFAS analytes
H2 Analytics H2AR-251109-1	TIM-100 production unit, serial 10058	Engineering inspection, gas-concentration measurements, functional checks, sensor response observations, and noise measurements

Sources: SGS Workorder 25051302, pp. 1-2 and subcontract reports; H2 Analytics Report H2AR-251109-1, pp. 1-4.

Interpretive boundaries

- Results are reported exactly as stated or conservatively paraphrased from the source reports.
- 'Not detected' means not detected at the applicable laboratory detection or reporting limit; it does not establish absolute absence.
- Testing of one sample or one production unit does not by itself establish lot-to-lot or ongoing manufacturing conformity.
- No clinical efficacy, treatment outcome, biocompatibility, electrical-safety standard, electromagnetic-compatibility standard, or regulatory clearance conclusion is made in these reports.
- This document should not be represented as hospital approval, medical-device certification, or a general declaration that the device is safe for every intended environment or use.

2. Source Records

Ref.	Record	Issuer	Date
[1]	Engineering Test Report, Report # H2AR-251109-1	H2 Analytics	November 9, 2025
[2]	Analytical Report, Workorder #25051302 (full report)	SGS Silver State Analytical Laboratories	June 16, 2025
[3]	Analytical results excerpt / summary from Workorder #25051302	SGS and subcontract laboratories	June 2025

3. SGS Aqueous-Sample Testing

Field	Reported information
Workorder	25051302
Laboratory sample ID	25051302-01
Client sample ID	Inhale H2 (beta)
Sampled by	Randy Sharpe
Date/time sampled	May 30, 2025 at 8:00
Primary laboratory	SGS Silver State Analytical Laboratories, Las Vegas
Accreditation stated	NV930/CA3029
Subcontracted analyses	PFAS by EPA 537.1; anions by EPA 300.0

Source: [2], pp. 1-2, 18, and 28.

3.1 PFAS results

All 18 PFAS analytes listed in the subcontract report were reported as ND (not detected), with qualifier U (undetected). Detection limits varied by analyte from 0.556 to 0.975 ng/L; the reported LOQ/CL was 1.93 ng/L.

Analyte	Result	Qualifier	Detection limit (ng/L)
NEtFOSAA	ND	U	0.822
NMeFOSAA	ND	U	0.751
PFBS	ND	U	0.606
PFDA	ND	U	0.607
PFDoA	ND	U	0.556
PFHpA	ND	U	0.598
PFHxA	ND	U	0.788
PFHxS	ND	U	0.855
PFNA	ND	U	0.653
PFOA	ND	U	0.627
PFOS	ND	U	0.975
PFTreA	ND	U	0.611
PFTriA	ND	U	0.627
PFuNA	ND	U	0.687
NaDONA	ND	U	0.662
9Cl-PF3ONS	ND	U	0.624
11Cl-PF3OUdS	ND	U	0.802
HFPO-DA (GenX)	ND	U	0.923

Source: [2], p. 18. ND = not detected; U = undetected. Results should be expressed as 'not detected at the stated detection limits,' not 'PFAS-free.'

3.2 Metals and other reported parameters

Parameter	Reported result	Method
Aluminum	< 0.0500 mg/L	EPA 200.7
Antimony	< 1 µg/L	EPA 200.8
Arsenic	< 1 µg/L	EPA 200.8
Barium	2 µg/L	EPA 200.8
Beryllium	< 1 µg/L	EPA 200.8
Boron	< 0.0500 mg/L	EPA 200.7
Cadmium	< 1 µg/L	EPA 200.8
Calcium	< 1.00 mg/L	EPA 200.7
Chromium	< 1 µg/L	EPA 200.8
Copper	1 µg/L	EPA 200.8
Cyanide, free	< 0.0500 mg/L (S)	SM 4500CN E
Hardness (as CaCO ₃)	ND mg/L	SM 2340 B
Iron	< 0.100 mg/L	EPA 200.7
Lead	< 1 µg/L	EPA 200.8
Magnesium	< 1.00 mg/L	EPA 200.7
Manganese	< 1 µg/L	EPA 200.8
Mercury	< 0.320 µg/L	EPA 245.1
Nickel	< 1 µg/L	EPA 200.8
Platinum	< 0.200 µg/L (S)	EPA 6010B
Selenium	< 1 µg/L	EPA 200.8
Silica, dissolved (as SiO ₂)	0.270 mg/L	EPA 200.7
Silver	< 1 µg/L	EPA 200.8
Sodium	< 1.00 mg/L	EPA 200.7
Titanium	< 0.0200 mg/L	EPA 200.7
Zinc	< 10 µg/L	EPA 200.8

Source: [2], p. 2. 'S' means the batch matrix spike and/or matrix spike duplicate was outside acceptance limits while the batch laboratory control sample was acceptable.

The subcontract report also reported chloride, fluoride, nitrate as N, nitrite as N, and sulfate as ND at its stated reporting limits.

Parameter	Result	Reporting limit	Method
Chloride	ND	5.0 mg/L	EPA 300.0
Fluoride	ND	0.50 mg/L	EPA 300.0
Nitrate, total (as N)	ND	0.50 mg/L	EPA 300.0
Nitrite, total (as N)	ND	0.50 mg/L	EPA 300.0
Sulfate	ND	5.0 mg/L	EPA 300.0

Source: [2], p. 28.

QUALIFIED pH RESULT The report lists pH 3.67 with qualifier H. SGS defines H as ‘sample analyzed beyond holding time for this parameter.’ The pH value should not be presented without this qualification.

4. H2 Analytics Unit Evaluation

Field	Tested configuration
Device	Inhale H2 Hydrogen Inhalation Machine
Model	TIM-100 unit
Serial number	10058
Control board revision	4.0
Control-board firmware	2.0.6
Display-knob firmware	2.0.4
Product received	October 27, 2025
Report number / date	H2AR-251109-1 / November 9, 2025

Source: [1], p. 1.

4.1 Mixed-air hydrogen concentration

H2 Analytics reported initial gas-chromatography measurements, then adjusted the room-air flow rate to 11.6 SLPM and repeated the measurements. Both datasets are retained below.

Selected H2	Initial measured mean	Initial SD	Final measured mean	Final SD
1%	1.28%	0.01	1.07%	0.04
2%	2.43%	0.06	1.99%	0.00
3%	3.44%	0.04	3.19%	0.12
4%	4.66%	0.03	4.20%	0.12

Source: [1], p. 2. Concentrations are reported as percent hydrogen by volume.

4.2 Functional observations reported as operating correctly

- Continuity between the AC earth-ground prong and accessible metal components was verified.
- The digital display knob operated and allowed selection of hydrogen percentage and runtime.
- The room-air pump was secured with a steel bracket; the HEPA-filter interlock operated.
- The electrolysis water pump self-primed and circulated water; the report observed cell operating temperature at or below approximately 37°C at 25°C room temperature.
- The low-water sensor and water-flow sensor stopped hydrogen production under the tested conditions.
- The cabinet temperature sensor detected tested low- and high-temperature conditions.
- Two 1% hydrogen leak sensors responded to direct exposure to 1% calibration gas by stopping hydrogen production and displaying an error.
- Fan-motor current monitoring detected a stopped fan motor under the tested condition.

Source: [1], pp. 1-4. These are test observations for the identified unit, not claims of conformity to a named consensus standard.

5. Other Reported Measurements and Observations

Topic	Reported result / observation
Mixed-air flow	Approximately 11.6-12 L/min depending on selected H2%; room-air flow adjusted to 11.6 SLPM during testing.
Breathing bag	Deflated only slightly during a 'normal' inhale-exhale observation; could be fully deflated by three consecutive large breaths. The report identifies this as an observation, not an objective test.
TDS sensor	A water-purity error occurred at a separate TDS-meter reading of 6 ppm during the described challenge test.
Noise - ambient	34.2 dB.
Noise - standby	49 dB front; 45 dB left; 46 dB right; 47 dB rear, measured at one meter.
Noise - 4% setting	60 dB front; 54 dB left; 51 dB right; 53 dB rear, measured at one meter.
Factory process	The report states that the factory conducts a 24-hour pre-test burn-in.

Source: [1], pp. 1-4.

6. Claims Supported by These Records

Appropriate factual description
'The identified aqueous sample was analyzed for the listed parameters using the methods stated in SGS Workorder 25051302.'
'The 18 PFAS analytes listed in the report were not detected at the stated detection limits.'
'H2 Analytics measured the identified production unit at the four reported settings and obtained the values shown in Section 4.1.'
'Specified functional responses were observed on serial number 10058 under the reported test conditions.'
'The source reports are available for review and include stated limitations and recommendations.'

7. Independent Tester Attestation

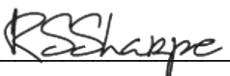
VERIFICATION The undersigned reviewer confirms that this summary accurately reflects the cited third-party reports. This verification does not expand the scope of the underlying testing.

I have reviewed this Independent Testing Summary and Verification Record and the cited source reports. To the best of my knowledge, this document accurately represents the testing performed, the identity and configuration of the tested sample and device, the reported results, and the limitations stated in the source records, subject to any comments or exceptions entered below. This summary does not expand, replace, or alter the original laboratory and engineering reports.

Document creation by May Anderson, PE | InhaleH2, Director of Product

Signature 

Reviewer name Randy Sharpe | H2 Analytics, Director of Testing

Signature  **Date** 8/18/2026