Hydrogen Water Testing & Certification

Description of the H2 Analytics Product Certification Program

(I) Initial Inquiry

a) The first step in the H2 Analytics Certification process is to contact us and schedule an interview for us to determine the product's eligibility and the specific testing protocol. If possible, we would like to speak with a representative who is familiar with the product's technical aspects. For each product you wish to certify, you will be asked to provide the product name, model number, and other identifiers as they appear on the product and in your marketing. The product must be clearly labeled with the name and model number, and include a lot number and/or an expiration date, if applicable.

You should be prepared to provide technical information about the product, such as amperage, cycle times, water flow rates, and other specifications that may apply. If products that are "essentially the same" in design, function, and other specifications have been issued different model numbers (e.g., because they are offered in different colors), we can include these model numbers on the Certificate of Compliance. During this interview, we can also answer any questions you may have about the certification process.

b) During the interview, we will also request links to your website and samples of your marketing materials. This will permit us to conduct a preliminary review to determine whether any illegal, deceptive, or pseudoscientific claims are used to promote the product. While a more comprehensive review will be done during the certification process, this preliminary review will help us resolve any marketing issues as early as possible. If these issues cannot be resolved, the application for certification will be denied.

(II) Certification Options

a) Standard Certification: Any entity selling a branded hydrogen water product, including manufacturers, distributors, and retailers, may submit its product for formal certification testing. Upon successful completion of all applicable tests, the product becomes eligible for certification, and the applicant may purchase a Certificate of Compliance and the H2 Analytics Seal. Applicants selling identical products under two or more brands may certify each brand and receive separate certification documents for those brands, while paying for a single certification.

1. The manufacturer must sign an affidavit verifying that the products are materially identical.
2. A document processing fee applies to each additional brand.

b) OEM Compliance Verification: OEM manufacturers who sell only unbranded products can submit a product for testing to verify that it is compliant with IHSA performance standards. Although this is technically not a certification (unbranded products are not eligible for certification), H2 Analytics will issue a Product Compliance letter that OEM manufacturers can use to show their private-label clients that their branded version of the product is eligible to receive an H2 Analytics Certificate of Compliance and Certification Seal without the need to submit their branded product to H2 Analytics for formal testing.

c) OEM-Verified Certification: Distributors and retailers may certify their branded product when it has been verified to be the same as an OEM manufacturer's product already certified by H2 Analytics to be compliant. To be eligible for this certification, the OEM manufacturer must have an unexpired Product Compliance letter issued by H2 Analytics and must also sign an Affidavit of Equivalence to Compliant Product verifying that the branded product is materially the same as the OEM manufacturer's compliant product listed on the Product Compliance letter. For this option, distributors and retailers are not required to submit their products for testing or to pay the testing fees normally associated with a standard certification, but only the administrative costs associated with issuing the Certificate of Compliance and Seal. This certification has the same three-year term as the standard certification and offers considerable time and cost savings.

d) Standard Certification + OEM Compliance Verification: Manufacturers who sell branded products and also sell the same products to private-label distributors & retailers can submit their branded product for testing to verify that it is compliant with IHSA performance standards, purchase a Certificate of Compliance and H2 Analytics Seal for their branded product, and also receive a Product Compliance letter that they can use to show their private-label clients that their branded version of the product is eligible to receive an H2 Analytics Certificate of Compliance and Certification Seal without the need to submit their branded product to H2 Analytics for formal testing. The manufacturer must sign an Affidavit of Equivalence to Compliant Product verifying that the private-label product is materially the same as the manufacturer's compliant product, as shown on the manufacturer's Product Compliance letter.

e) Certification Upgrade: Clients whose hydrogen testing has been performed by H2 Analytics may later elect to certify that product using the previously obtained hydrogen test results, without repeating the hydrogen testing portion of the certification. A discount will be applied to the certification fee. To be eligible:

1. The decision to certify must be made no more than 90 days after the hydrogen test date;
2. The hydrogen test results must meet the minimum IHSA dissolved test standards in effect at the time of certification;
3. The product submitted for testing must have been factory-new and market-ready, including final branding and labeling.

(III) Eligibility

a) The applicant must be requesting certification for a branded hydrogen water product for which IHSA standards have been established. At this time, IHSA has established performance standards only for hydrogen drinking water products.

b) The applicant must be requesting either certification or compliance verification for a product that is either manufactured, distributed, or sold by the applicant, and must comply with the following conditions:

1. Manufacturers, Distributors, and Retailers may request certification only for branded products whose brand they own. Products containing brands not owned by the Applicant may be certified only with the brand owner's written permission.
2. OEM Manufacturers may request compliance verification for any unbranded product they own and manufacture that is intended for private labeling. This manufacturer testing verifies for their white-label clients that the product is eligible for OEM-Verified certification at a reduced cost, as it has already successfully passed our compliance testing.
3. The product for which certification or compliance verification is being requested must have a unique name, brand, or model number that distinguishes it from products manufactured, distributed, or sold by others that may be, or appear to be, the same.
4. Products with cosmetic or minor packaging variations that do not impact function (e.g., color) or the consumer's ability to distinguish them from similar products do not require separate certifications. These variations can be listed on the Certificate of Compliance to avoid confusion.

c) To avoid unnecessary costs, we will verify that your product does not utilize a design that we have determined will be unable to pass any of our testing protocols because of inherent design limitations (e.g., alkaline ionizers/electrolyzers that do not function properly using distilled water). If we determine this to be the case, we will advise you not to pursue certification testing.

d) The product must be marketed or market-ready at the time of certification. Engineering prototypes or beta-test units are not eligible.

e) Each applicant's name will be submitted to the IHSA review board to ensure that there are no known issues that would prevent an applicant from receiving certification.

f) Accessories included with the product (e.g., inhalation adapters) for which there are no IHSA performance standards will not be tested for compliance. To avoid confusion, exclusions such as this are normally listed on the Certificate of Compliance.

(IV) Cost Quote

a) After reviewing the technical requirements, a quote will be sent. Quotes will specify the costs associated with testing, the cost of obtaining the Certificate & Seal, and any annual renewal fees. If applicable, the annual renewal payment will be due on each anniversary of the certification.

b) After receiving the quote, please feel free to contact us with any follow-up questions you may have. If the quote is acceptable and you wish to proceed with the certification testing, contact us.

c) If a product fails to meet minimum IHSA performance standards, and no retest is desired, you will not be charged any costs associated with issuing the certification documents that include the Certificate of Compliance, test reports, H2 Analytics Seal graphics, and any renewal fee as specified in the original quote.

(V) Certification Agreement

a) Once you have decided to proceed with the certification testing, an H2 Analytics Product Certification Agreement will be sent to you. This legally binding agreement lists the products to be tested and the responsibilities of all parties covered by the agreement, and must be signed by an authorized agent of your company.

b) After we have received the signed agreement, payment for testing, and the product sample(s), we will schedule the testing and inform you of the estimated completion date.

(VI) Product Samples and Performance Testing

a) You will be required to send a sample of your product(s) to H2 Analytics; the quantity of product required to perform the testing will be stated on the testing quote. If you require us to return the product after testing is complete, you must agree to pay the applicable shipping costs. The product must be in new, factory-sealed condition, must include identifiable model/serial/lot numbers, and must be the same product offered for sale to the general public. If the product is not a pitcher or flow-through device (e.g., tablets, prepackaged water, or powders), we will need enough product to perform multiple tests, typically at least 24 servings, depending on the type and number of tests. Please note that testing cannot be scheduled until the product samples have been received. Once scheduled, the time required to perform the testing, data analysis & reporting will vary depending on the type of product and third-party laboratory scheduling, but can normally be completed in three to four weeks. **b)** Except for water quality, there are currently no IHSA standards for testing other safety parameters of the product. Therefore, the H2 Analytics Certification does not verify the safety of the electrical system, accessories that may be included, or other components.

c) Because there are currently no IHSA performance standards for inhaled hydrogen gas, we cannot certify hydrogen inhalation devices or any hydrogen inhalation accessories that may be included with any hydrogen water device submitted for certification. If requested, a separate laboratory analysis to verify the gas flow rate can be performed for an additional charge.

d) Machines that produce more than one type of hydrogen drinking water (e.g., hot and cold) may require two separate water analyses instead of one.

e) Please see the attached document for a detailed description of the testing.

(VII) Evaluation and Notification of Test Results

a) If the product meets or exceeds all IHSA performance standards and a Certificate of Compliance and Seal are to be issued:

1. A letter will be sent indicating that the product has passed all applicable tests.
2. The product will be issued a Certificate of Compliance with a registration number, IHSA logo, and H2 Analytics Seal. Applicable laboratory test reports will also be issued.
3. The company name, product name, model number, expiration date, and registration number will be added to our online verification database of approved products.
4. A graphic image of the H_2 Analytics certification seal (in multiple formats) will be emailed to you. You may choose to create individual adhesive labels containing the seal that can be applied to each product or embed the seal into your existing artwork for product labels, packaging, marketing brochures, and website. You are responsible for creating any custom labels and the associated costs.

b) If the product meets or exceeds all IHSA performance standards and a Certificate of Compliance and Seal are not issued:

1. A letter indicating that the product has passed all applicable tests will be sent.
2. A signed Product Compliance letter will be sent showing the product's eligibility to receive a Certificate of Compliance when branded.
3. The company name, product name, model number, and registration number will not be added to our database of approved products or our website's approved products page.
4. H2 Analytics agrees to privately verify the compliance status of any product for which we have issued a Product Compliance letter when contacted.

c) If the product fails to meet the minimum IHSA performance requirements:

1. You will be sent a letter explaining which IHSA performance standard(s) were not met. H2 Analytics may, but is not obligated to, recommend corrective actions that could help the product meet the applicable performance standard(s).
2. If you wish to appeal the test results, H2 Analytics agrees to review the test standards and methods used in the testing, discuss any portion of the testing that you feel is inaccurate, incorrect, or not applicable to your product, and refer the appeal to an IHSA representative if appropriate.
3. If you wish to perform a retest, additional charges may be incurred. The amount of the additional charges will be dependent on which portion(s) of the testing failed.
4. If no retest is desired, you will not be charged any of the costs associated with obtaining the Certificate of Compliance and Seal as specified in the original quote; costs associated with testing are not refundable.

(VIII) Verification and Limitations on Use of Certification and IHSA Logo

a) Consumers will be able to verify a product's certification status by viewing our certified products webpage (https://www.h2-analytics.com/verify-a-certified-product), by contacting H2 Analytics using our contact page (https://www.h2-analytics.com/contact).
b) Certifications and compliance verifications will be valid for 3 years from the date of issuance.
c) The IHSA logo will appear on the Certificate of Compliance to validate their endorsement of the certification, but the IHSA logo may not be used in any other way, including product packaging, instruction manuals, marketing materials, videos, websites, or social media. You are free to use the Certificate of Compliance and H2 Analytics Seal for any sales and marketing purposes consistent with the terms of the H2 Analytics Certification Agreement.
d) The H2 Analytics Certification confirms that the tested unit complies only with the performance standards set forth by IHSA. Other evaluations of the product, such as comparable market value or aesthetics (size, color, durability, functionality, etc.), that are not directly related to the stated performance standards will not be made.
e) Although specific in-house testing protocols are determined by H2 Analytics, the H_2-measuring method (gas chromatography) and applicable performance standards for H_2 products are established by the International Hydrogen Standards Association (IHSA) and are subject to change without notice. More information on IHSA testing and performance standards is available at www.intlhsa.org.

(IX) Confidentiality

a) H2 Analytics considers all correspondence, emails, phone conversations, video sessions, client lists, and test results to be CONFIDENTIAL, and will not sell, transfer, show, or release this information to any outside party unless specifically requested to do so in writing by an authorized agent of APPLICANT'S company.
b) If a product successfully meets all IHSA performance standards and is issued a Certificate of Compliance, specific information related to the product and testing, including company name, product name, model number, certification registration number, certification status, and expiration date, will be available to the public on our website.



Sample Certificate of Compliance

Hydrogen Water Testing & Certification

Certification Test Details

The following is a list of tests included in the H2 Analytics Certification Program. Not every test applies to every product.

Packaging/Marketing/Labeling Check: Verify that the marketing does not include pseudoscientific or medical claims.

Dissolved H_2: Using gas chromatography (GC), verify that the product has a minimum dissolved H_2 of 0.5 mg/L (500 ppb). For canned beverages, the minimum dissolved H_2 concentration is 1.0 mg/L, and the recommended serving size must ensure a daily dose of at least 0.5 mg of H_2.

Water Quality: Ensure that the water does not contain heavy metals or other harmful compounds. Except for prepackaged drinks, water samples are produced in-house and then submitted to a third-party lab. The specific tests to be performed will be determined based on the type of product (drinking water or electrolyte beverage):

- Products that use a PEM/SPE membrane to produce hydrogen-infused water electrolytically are tested for anions, heavy metals, and the six PFAS compounds currently regulated by the U.S. EPA
- Electrolyte hydrogen beverages, including flavored tablets and powders, are tested for heavy metals and cyanide (free), but not routinely tested for anions or PFAS.
- The formulations of prepackaged hydrogen water/beverages must be evaluated to determine the required testing.
- The client may request additional water testing for contaminants that are not routinely required (additional fee will apply).

pH/ΔpH: Ensure that the product does not raise the starting pH by more than 1.5 units, and that the final pH is not greater than 9.5.

H_2/pH with High-TDS Source Water: For devices that include two electrolytic cells (alkaline ionizer & PEM), perform a separate test of the alkaline ionizer cell to ensure that, when supplied with high-TDS water, the cell can produce an H_2 concentration of at least 0.5 mg/L while not elevating the pH of the source water by more than 1.5 units.

Chlorine/Ozone: Ensure that the product does not add chlorine or ozone to the drinking water.

Chlorine Removal: Ensure that devices with internal filters can remove chlorine from the source water.

Manual & Automatic Pressure-Relief Valve: Ensure that devices designed to build pressure (to elevate the H_2 concentration) include a pressure relief valve for safety. If the design includes a manual pressure-release valve, test to ensure that it functions properly.

Shelf Life: For prepackaged drinks, verify that the package maintains the minimum dissolved H_2 concentration for the time specified by the manufacturer, or for at least 6 months if no expiration date is listed.

Certification Standards

Our test standards and protocols are established by, or in cooperation with, the International Hydrogen Standards Association (IHSA), which is currently the only certifying body for products that produce hydrogen water. (www.intlhsa.org). When IHSA does not explicitly define a test standard or method, we use established standards, methods, and best practices.

Turnaround Time for Certification Testing

Certification testing: Once the product and payment have been received, the testing can usually be performed and the Certificate of Compliance, H2 Analytics seal, and associated reports issued in 3-4 weeks.

Hydrogen Water Testing & Certification

2505 Anthem Village Dr Suite E385 Henderson, NV 89052

LABORATORY REPORT

Report number: H2AR-2611XX-1

Client Information		Product Information			
Client	Hydrogen Water Co.	Name	H2 Bottle	Brand	Good H2
Address	1234 Main St Anywhere, CA 98765 USA	Type	Electrolytic Batch	Model	X-1234
		Mfg Date	1/1/2026	S/N	1000

Product Description

The product is a portable electrolytic bottle/pitcher and was received for testing on 10/29/26 in a factory-new box that included a hydrogen (H_2) generator base, a Tritan™ bottle with a screw-on cap, a user manual, and a USB-C charging cable. The bottle has a rechargeable battery and uses a proton exchange membrane with platinum electrodes (SPE/PEM) to produce hydrogen gas via electrolysis. The SPE/PEM can produce H_2-infused water using any type of drinking water. When the cap is tightly secured and the electrolysis cycle begins, H_2 gas is produced and is infused into the water. If the internal pressure rises above normal atmospheric pressure (1 ATM/ 14.7 PSI), the level of dissolved H2 in the water can exceed the sea-level saturation point of 1.57 mg/L (1570 ppb), according to Henry's law. Two preprogrammed cycle times are available: 5 minutes by pressing the power button once, and 10 minutes by pressing it twice. The front-panel digital display shows a battery indicator and the time remaining in the cycle. Oxygen gas (O_2), produced at the anode, is vented through a port in the bottom of the unit.

Scope of Testing

Determine the dissolved H_2 concentration (DH_2) and calculated dose for 5- and 10-minute cycles using room-temperature distilled water (DW).

Test Results

Distilled Water (N = 3)				
Cycle Time (min)	DH_2 (mg/L)	DH_2 (ppb)	SD (mg/L)	Dose (mg)
5	3.00	3000	0.10	0.75
10	6.00	6000	0.20	1.50

Test Equipment and Conditions

SRI 8610C gas chromatograph, Hayesep-D 6M; detector, TCD; carrier gas, N_2; column temp, 60 °C.
GC test method: static headspace (HS-GC); equilibration time, 3 min.
GC Calibration: performed on the day of testing using calibration gas; PQL: 50 µg/L; LOD: 20 µg/L.
Vortexer: H2 Analytics, H2A-TE-3001 (0-2400 RPM).
Water: generic; distilled, TDS = 0; water temp = 25 °C ± 1.5 °C.
pH/temperature meter: Oakton pH6⁺ with temperature probe; 3-point pH calibration (4.01, 7.00, 10.01).
Lab elevation: 914 meters (0.90 atm). All measurements were adjusted to SATP.

Sample

Test Methods

Dissolved H_2 concentration and dose

Preparation

Before testing, the membrane was wetted by filling the bottle/pitcher with warm distilled water (60 °C) and operating for at least one hour until the gas production stabilized. The battery was charged overnight.

Procedure

For each test, the bottle was connected to a power transformer via the USB-C cable, filled with 250 mL of distilled water and the cap was securely tightened. After completion of each cycle, the cap was removed, and a 2000 µL sample was drawn from the bottle using a gas-tight syringe. The sample was injected into the headspace vial and vortexed for 3 minutes to allow the dissolved H_2 to equilibrate with the headspace. After equilibration, a 1000 µL sample of the headspace was drawn using a gas-tight syringe and injected into the GC for analysis. Three tests were conducted, the results recorded, and the mean and standard deviations were calculated. The amount of H_2 delivered when drinking the entire bottle was calculated from the dissolved H_2 concentration and water volume and reported as "H_2 Dose". Attachments 1 & 2 show sample chromatograms.

Discussion

No anomalies or unexpected observations were noted during testing.

Notes: The reported results reflect testing under controlled laboratory conditions. Results obtained under actual conditions may vary due to water composition, temperature, pH, product preparation, operating conditions, and other factors. Oxygen (O_2) values may appear on the accompanying chromatograms but are not included in the reported test results because O_2 concentrations can be significantly affected by sparging and sample handling. DH_2 = Dissolved H_2; SD = Standard Deviation.

Sample



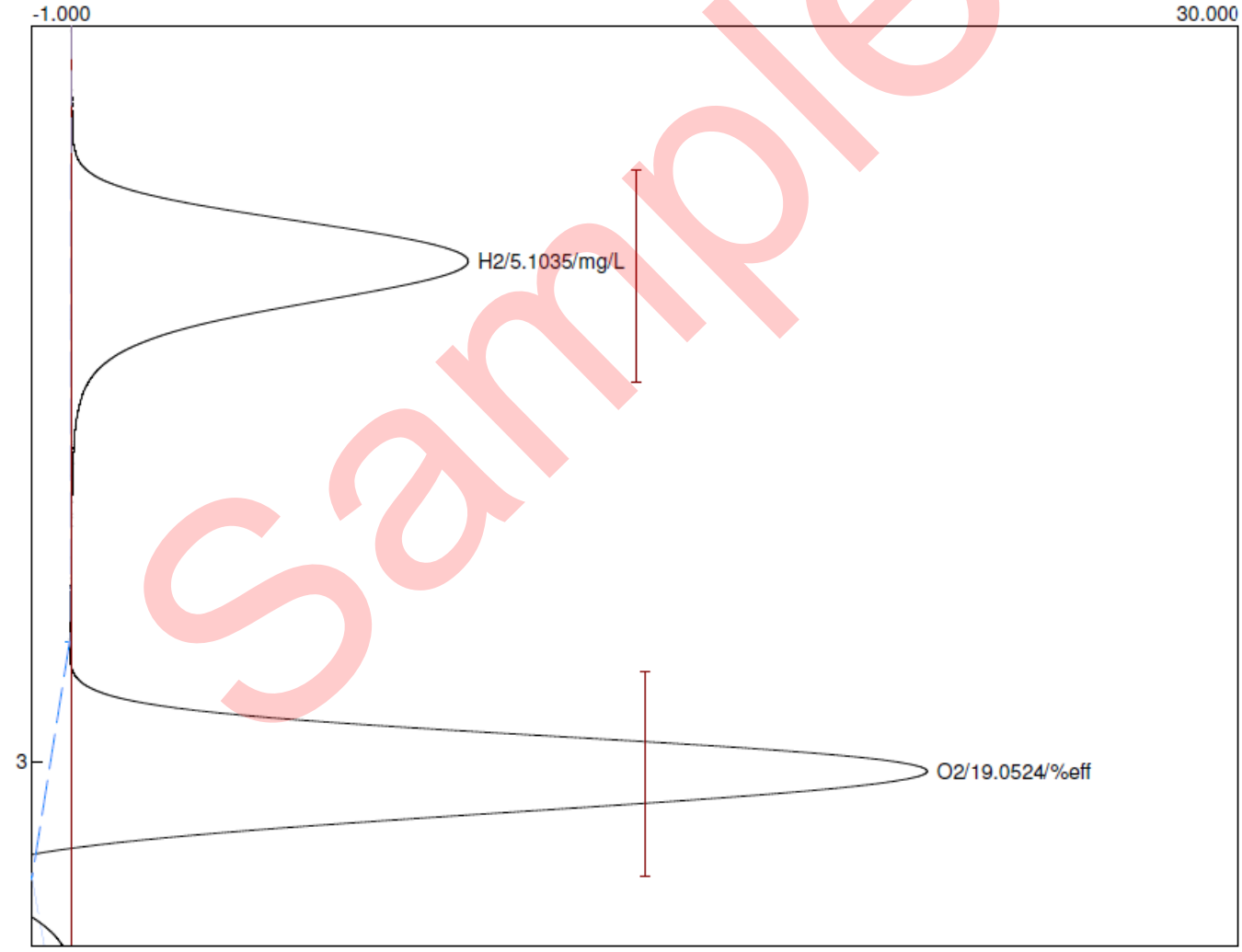
Report Authorization

Approved By: Randy S. Sharpe, Director of Testing, H2 Analytics 11/1/2026

Attachment 1

Hydrogen Water Testing & Certification

Lab name: H2 Analytics
Client: XYZ Company
Client ID: H2A-1111
Collected: 1/1/2024
Holding time: 120
Analysis date: 01/22/2024 14:01:26
Method: Static HS Analysis (GCHS)
Lab ID: HNV
Description: TCD CH1 60C
Column: Hayesep-D 6 meters 60C
Carrier: N2 @ 20psi (20 mL/min)
Components: AqH2O2.cpt
Integration: Peak sens=90.0 Base sens=90.0 Min area= 0.10 Standard= 1.000 Sample= 1.000 Tangents=off
ontrol filename: DEFAULT.CON
Data file: XYZ Company Sample.CHR ()
Sample: H2 Bottle
Operator: rs
Comments: DH2 Test Run
QC batch: 225 mL



Sample

Component	Retention	Area	External	Units
H2	2.320	85.6890	5.1035	mg/L
O2	3.013	166.2332	19.0524	%eff

Sample GC Chromatogram

SGS Silver State Analytical Laboratories
3626 E. Sunset Road, Suite 100
Las Vegas, NV 89120
(702) 873-4478
www.ssalabs.com

Analytical Report

Workorder#: 25040052
Date Reported: 4/14/2025

Client: H2 Analytics
Project Name: H2AP-250327-1
PO #:

Sampled By: Randy Sharpe

Laboratory Accreditation Number: NV930/CA3029

Laboratory ID	Client Sample ID	Date/Time Sampled	Date Received
25040052-01		04/01/2025 12:00	4/1/2025

Parameter	Method	Result	Units	PQL	Analyst	Date/Time Analyzed	Data Flag
Aluminum	EPA 200.7	< 0.0500	mg/L	0.05	JG	04/02/2025 15:36	
Antimony	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Arsenic	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Barium	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Beryllium	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Boron	EPA 200.7	< 0.0500	mg/L	0.05	JG	04/02/2025 15:36	
Cadmium	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Calcium	EPA 200.7	< 1.00	mg/L	1	JG	04/02/2025 15:36	
Chloride	EPA 300.0	< 0.100	mg/L	0.1	DT	04/01/2025 21:33	L
Chromium	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Copper	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Cyanide, Free	SM 4500CN E	< 0.0500	mg/L	0.05	DT	04/02/2025 12:53	
Fluoride	EPA 300.0	< 0.0500	mg/L	0.05	DT	04/01/2025 21:33	
Hardness (As CaCO3)	SM 2340 B	ND	mg/L	1	JG	04/04/2025 16:51	
Hardness, Calcium (As CaCO3)	SM 2340 B	ND	mg/L	1	JG	04/04/2025 16:51	
Hardness, Magnesium (As CaCO3)	SM 2340 B	ND	mg/L	1	JG	04/04/2025 16:51	
Iron	EPA 200.7	< 0.100	mg/L	0.1	JG	04/02/2025 15:36	
Lead	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Magnesium	EPA 200.7	< 1.00	mg/L	1	JG	04/02/2025 15:36	
Manganese	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Mercury	EPA 245.1	< 0.320	µg/L	0.32	JG	04/03/2025 15:57	
Nickel	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Nitrate as N	EPA 300.0	< 0.0500	mg/L	0.05	DT	04/01/2025 21:33	
Nitrite as N	EPA 300.0	< 0.0500	mg/L	0.05	DT	04/01/2025 21:33	
pH	SM 4500H+ B	6.04	pH Units		KR	04/01/2025 16:02	H
Platinum	EPA 6010B	< 0.200	µg/L	0.2	JG	04/04/2025 10:20	
Selenium	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Silica, Dissolved (as SiO2)	EPA 200.7	< 0.100	mg/L	0.1	JG	04/04/2025 11:01	
Silver	EPA200.8	< 1.0	µg/L	1	JG	04/02/2025 16:31	
Sodium	EPA 200.7	< 1.00	mg/L	1	JG	04/02/2025 15:36	
SUB	SUB	See Report			MM		
Sulfate	EPA 300.0	< 0.100	mg/L	0.1	DT	04/01/2025 21:33	L
Titanium	EPA 200.7	< 0.0200	mg/L	0.02	JG	04/04/2025 10:12	
Zinc	EPA200.8	< 10	µg/L	10	JG	04/02/2025 16:31	

Sample

Sample Profile B Water Contaminant Report

Hydrogen Water Testing & Certification

Drinking Water & Electrolyte Beverage Contaminant List (profile B & C)

Parameter	Method	MCL	Units	Test Profile
Aluminum	EPA 200.7	200	µg/L	B & C
Antimony	EPA 200.8	6	µg/L	B & C
Arsenic	EPA 200.8	10	µg/L	B & C
Barium	EPA 200.8	2	mg/L	B & C
Beryllium	EPA 200.8	4	µg/L	B & C
Boron	EPA 200.7	unreg	n/a	B & C
Cadmium	EPA 200.8	100	µg/L	B & C
Calcium	EPA 200.7	unreg	n/a	B & C
Chloride	EPA 300.0	250 (sec)	mg/L	B
Chromium	EPA 200.8	100	µg/L	B & C
Copper	EPA 200.8	1.3 (al)	mg/L	B & C
Cyanide, Free	SM 4500CN	200	µg/L	B & C
Fluoride	EPA 300.0/SM 4500FC	4 (pri) 2 (sec)	mg/L	B
Hardness (As CaCO3)	SM 2340 B	unreg	n/a	B
Hardness, Calcium (As CaCO3)	SM 2340 B	unreg	n/a	B
Hardness, Magnesium (As CaCO3)	SM 2340 B	unreg	n/a	B
Iron	EPA 200.7	300 (sec)	µg/L	B & C
Lead	EPA 200.8	15 (al)	µg/L	B & C
Magnesium	EPA 200.7	unreg	n/a	B & C
Manganese	EPA 200.8	500	µg/L	B & C
Mercury	EPA 245.1	2	µg/L	B & C
Molybdenum	EPA 200.8	0.1	mg/L	B & C
Nickel	EPA 200.8	100.0	µg/L	B & C
Nitrate as N	EPA 300.0	10	mg/L	B
Nitrite as N	EPA 300.0	1	mg/L	B
pH	SM 4500H+ B	<9.5 (IHSA)	unitless	B
Platinum	EPA 6010B	unreg	n/a	B
Potassium	EPA 200.7	unreg	n/a	B
Selenium	EPA 200.8	50	µg/L	B & C
Silica, Dissolved (as SiO2)	EPA 200.7	unreg	n/a	B & C
Silver	EPA 200.8	100 (sec)	µg/L	B & C
Sodium	EPA 200.7	unreg	n/a	B & C
Sulfate	EPA 300.0	250 (sec)	mg/L	B
Thallium	EPA 200.8	2	µg/L	B & C
Titanium	EPA 200.7	unreg	n/a	B & C
Zinc	EPA 200.8	5 (sec)	mg/L	B & C
	PFAS			
PFOA	EPA 537.1/1633A	4	ng/L	B
PFOS	EPA 537.1/1633A	4	ng/L	B
PFNA	EPA 537.1/1633A	10	ng/L	B
PFHxS	EPA 537.1/1633A	10	ng/L	B
HFPO-DA (GenX)	EPA 537.1/1633A	10	ng/L	B
PFBS	EPA 537.1/1633A	n/a	ng/L	B
Hazard Index	EPA 537.1	<1.0	n/a	B

Profile B: Drinking water; Profile C: Electrolyte beverages; MCL- Maximum Contaminant Level; sec-Secondary MCL

al- Action Level; unreg-Unregulated by EPA; IHSA-International Hydrogen Standards Association

H2 Analytics Contaminant List Profile B and C Rev 4.3

Sample

Sample Water Contaminant List (Profile B & C)

Hydrogen Water Testing & Certification

H2 Analytics 2505 Anthem Village Dr Suite E385 Henderson, NV 89052
www.h2-analytics.com

Laboratory Report
H2 Analytics Certification Test Summary

Sample

Company	XYZ Company
Client #	H2A-9999
Project Description	IHSA Certification
Project #	H2AP-260101-1
IHSA Registration # #	26-0101-1-PB

Product Name	H2 Bottle
Product Control #	H2A-9999-01
Product Type	Bottle
Product Class	I
Water Test Profile	B

Parameter	Test Standard	Test Method	Units	Result	PQL	LOD	Pass/Fail/Pending	Comments
Marketing Analysis	No pseudoscientific or medical claims	n/a	n/a	NF	n/a	n/a	Pass	
Dissolved Hydrogen (H_2)	≥ 0.5	HS-GC	mg/L	see report	0.05	0.02	Pass	all except RTD
Dissolved Hydrogen (H_2) RTD	≥ 1.0	HS-GC	mg/L		0.05	0.02	Pass	RTD
Water-Quality Analysis	various	various	see report				Pass	transferred under CCR
H_2/pH_{max} TDS_{fs}	pH incr < + 1.5	electrode	pH	n/a	0.5	0.1	Pass	electrolytic dual-cell devices, source EC = 2000 mg/L (NaCl)
	H_2 ≥ 0.5	HS-GC	mg/L	n/a	0.05	0.02	Pass	
Final pH	≤ 9.5	electrode	pH	2.81	0.5	0.1	Pass	reactives and RTD
Change in pH (ΔpH)	pH incr < + 1.5	electrode	pH	-3.47	0.5	0.1	Pass	all except RTD
Chlorine	ND	OTO	mg/L	n/a	0.5	0	Pass	prthotolidine
Ozone	ND	ITS	mg/L	n/a	0.05	0	Pass	indigo trisulfonate
Pressure Relief Valve	present	n/a	------	n/a	n/a	n/a	Pass	pressurized batch devices
Shelf Life	H_2 ≥ 0.5 after 1 yr	n/a	mg/L	n/a	0.05	0.02	Pass	results after 1 yr
IHSA Certification Test Results	meets or exceeds all test stds	n/a					Pass	reg # 25-0401-1-PB

PQL: practical quantitation level; LOD: limit of detection; ND: none detected; NF: none found; RTD: ready to drink; EC: electrical conductivity; CCR: chain of custody record
Units of mg/L are equivalent to parts-per-million (PPM); parts-per-billion (PPB) = PPM x 1000

INDEPENDENTLY TESTED ★ APPROVED ★ H2 ANALYTICS

RSSharpe

Approved By: Randy Sharpe, Director of Testing

6/1/2026

Sample IHSA Test Summary

Rev 1.3

Sample Certification Test Summary