



PERRY JOHNSON LABORATORY ACCREDITATION, INC.

Certificate of Accreditation

Perry Johnson Laboratory Accreditation, Inc. has assessed the Laboratory of:

ALS Group USA, Corp.
3337 Michelson Drive, Irvine, CA 92612

(Hereinafter called the Organization) and hereby declares that Organization is accredited in accordance with the recognized International Standard:

ISO/IEC 17025:2017
and the
**ILAC G7:04/2021 Accreditation Requirements and Operating Criteria for
Horseracing Laboratories**

This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality management system (as outlined by the joint ISO-ILAC-IAF Communiqué dated April 2017):

Chemical Testing
(As detailed in the supplement)

Accreditation claims for such testing and/or calibration services shall only be made from addresses referenced within this certificate. This Accreditation is granted subject to the system rules governing the Accreditation referred to above, and the Organization hereby covenants with the Accreditation body's duty to observe and comply with the said rules.

For PJLA:

Tracy Szerszen
President

<i>Initial Accreditation Date:</i>	<i>Issue Date:</i>	<i>Expiration Date:</i>
December 10, 2020	March 30, 2022	April 30, 2024
<i>Revision Date:</i>	<i>Accreditation No.:</i>	<i>Certificate No.:</i>
September 16, 2022	113426	L22-186-R1

Perry Johnson Laboratory
Accreditation, Inc. (PJLA)
755 W. Big Beaver, Suite 1325
Troy, Michigan 48084

The validity of this certificate is maintained through ongoing assessments based on a continuous accreditation cycle. The validity of this certificate should be confirmed through the PJLA website: www.pjilabs.com



Certificate of Accreditation: Supplement

ALS Group USA, Corp.

3337 Michelson Drive, Irvine, CA 92612

Contact Name: Minh-Nguyet Hong Phone: 714-730-6239

Accreditation is granted to the facility to perform the following testing:

FIELD OF TEST	ITEMS, MATERIALS OR PRODUCTS TESTED	SPECIFIC TESTS OR PROPERTIES MEASURED	SPECIFICATION, STANDARD METHOD OR TECHNIQUE USED
Chemical ^F	Biological Material	Specific Gravity	In-House Methods and Manufacturer's Instructions ILAC-G7:04/2021 Refractometer
		Instrumental Screen	In-House Methods ILAC-G7:04/2021 LC/MS
		Drug Confirmation	In-house Methods ILAC-G7:04/2021 LC/MS
	Nutritional Supplements	Liquid Chromatography, Various Detectors	In-House Methods HPLC UHPLC
		Instrumental Screen	In-House Methods LC/MS
		Confirmation of Chemical Identity	In-house Methods LC/MS
	Drinking Water System Components	Compounds of Toxicological Concern	NSF/ANSI/CAN 61 & 372, ICP-OES ICP/MS XRF
	Rubber, Plastic and Metal Components	Fungus Resistance Testing	MIL-STD-810 Method 508 RTCA/DO-160 Section 13 Fungus Chamber
	Toxic Chemical Elements of Drinking Water	Mercury	EPA 245.1
Metals and Trace Elements in Non-Potable Water	EPA 245.1 (1994 Rev. 3.0)		
Inorganic Constituents in Hazardous Waste (Matrix Aqueous)	EPA 7470 A		
Inorganic Constituents in Hazardous Waste	EPA 7471 A		



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Chemical ^F	Drinking Water	Turbidity	EPA 180.1
		Aluminum	EPA 200.7
		Boron	
		Calcium	
		Hardness (Calculation)	
		Iron	
		Magnesium	
		Potassium	
		Sodium	
		Zinc	
		Antimony	
		Arsenic	
		Barium	
		Beryllium	
		Cadmium	
		Chromium	
		Copper	
		Lead	
		Manganese	
		Mercury	
		Nickel	
		Selenium	
		Silver	
		Thallium	
		Vanadium	
		Zinc	
		Chloride	EPA 300.0
		Fluoride	
		Nitrate (as N)	
		Nitrite (as N)	
		Sulfate (as SO ₄)	
		Alkalinity	SM 2320 B-1997
		Hardness	SM 2340 C-1997
Specific Conductance	SM 2510 B-1997		
Residue, Filterable TDS	SM 2540 C-1997		
Chlorine, Free	SM 4500-Cl G-2000		



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Chemical ^F	Drinking Water	Chlorine, Total Residual	SM 4500-Cl G-2000
		Hydrogen Ion (pH)	SM 4500-H+ B-2000
		Phosphate, Ortho (as P)	SM 4500-P E-1999
		Silica	SM 4500-SiO ₂ D-1997
		Organic Carbon-Dissolved (DOC)	SM 5310C-2000
		Organic Carbon-Total (TOC)	SM 5310C-2000
		UV254	SM 5910B-2011
	Aqueous	Turbidity	EPA 180.1 (1993 Rev. 2.0)
		Aluminum	EPA 200.7 (1994 Rev. 4.4)
		Antimony	
		Arsenic	
		Barium	
		Beryllium	
		Boron	
		Cadmium	
		Calcium	
		Chromium	
		Cobalt	
		Copper	
		Iron	
		Lead	
		Magnesium	
		Manganese	
		Molybdenum	
		Nickel	
		Potassium	
		Selenium	
Silver			
Sodium			
Thallium			
Tin			
Vanadium			
Zinc			



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Chemical ^F	Aqueous	Aluminum	EPA 200.8 (1994 Rev. 5.4)
		Antimony	
		Arsenic	
		Barium	
		Beryllium	
		Cadmium	
		Chromium	
		Cobalt	
		Copper	
		Iron	
		Lead	
		Manganese	
		Molybdenum	
		Nickel	
		Selenium	
		Silver	
		Thallium	
		Vanadium	
		Zinc	
		Chloride	EPA 300.0 (1993 Rev. 2.1)
		Fluoride	
		Nitrate (as N)	
		Nitrite (as N)	
		Sulfate (as SO ₄)	



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Chemical ^F	Aqueous	Color	SM 2120 B-2011
		Turbidity	SM 2130 B-2011
		Alkalinity	SM 2320 B-2011
		Hardness (Calculation)	SM 2340 B-2011
		Hardness	SM 2340 C-2011
		Specific Conductance	SM 2510 B-2011
		Residue, Total	SM 2540 B-2011
		Residue, Filterable TDS	SM 2540 C-2011
		Residue, Non-filterable TSS	SM 2540 D-2011
		Residue, Settleable	SM 2540 F-2011
		Chlorine, Free	SM 4500-Cl G-2011
		Chlorine, Total Residual	SM 4500-Cl G-2011
		Hydrogen Ion (pH)	SM 4500-H+ B-2011
		Phosphate, Ortho (as P)	SM 4500-P E-2011
		Phosphorus, Total	SM 4500-P E-2011
		Sulfide (as S)	SM 4500-S D-2011
		Environmental ^F	
Carbonaceous BOD			
Chemical Oxygen Demand	SM 5220 D-2011		
Organic carbon-Total (TOC)	SM 5310 C-2011		
Ammonia (as N)	Timberline Ammonia-001		
Solids	Waste Extraction Test (WET)		CCR Chapter 11, Article 5, Appendix II
	TCLP Inorganics		EPA 1311
	Ignitability		EPA 1010
	Antimony		EPA 6010 B
	Arsenic		
	Barium		
Beryllium			
Cadmium			



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Environmental ^F	Solids	Chromium	EPA 6010 B
		Cobalt	
		Copper	
		Lead	
		Molybdenum	
		Nickel	
		Selenium	
		Silver	
		Thallium	
		Vanadium	
		Zinc	
		Antimony	
		Arsenic	
		Barium	
		Beryllium	
		Cadmium	
		Chromium	
		Cobalt	
		Copper	
		Lead	
		Molybdenum	
		Nickel	
		Selenium	
		Silver	
		Thallium	
		Vanadium	
		Zinc	
Mercury	EPA 6020B		
Corrosivity - pH Determination	EPA 9045 C		
Microbiological ^F	Aqueous/Solids	Enterococci	Enterolert
		Total Coliform, Enumeration	SM 9221 B, C-2006
		Fecal Coliform, Enumeration	SM 9221 C, E-2006
		<i>E. coli</i> , Enumeration	SM 9223 B-2004
			SM 9223 B-2004 Colilert
		Fecal Streptococci	SM 9230 B-2007



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Microbiological	Drinking Water	Heterotrophic Bacteria	SM 9215 B
		Total Coliform, P/A	SM 9223 B Colisure
		<i>E. coli</i> , P/A	
		Total Coliform, Enumeration *	
		<i>E. coli</i> , Enumeration	

1. The presence of a superscript F means that the laboratory performs testing of the indicated parameter at its fixed location. Example: Outside Micrometer^F would mean that the laboratory performs this testing at its fixed location.

