



PERRY JOHNSON LABORATORY ACCREDITATION, INC.



Certificate of Accreditation

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

Precision Analytical Laboratories, LLC
3430 16th Street, Everett, WA 98201

*(Hereinafter called the Organization) and hereby declares that Organization has met the requirements of
and is accredited in accordance with the following Standard:*

TNI Environmental Laboratory Standard, Volume 1 - 2016

Environmental Testing
(As detailed in the supplement)

Accreditation claims for such activities shall only be made from the 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 Szorszen
President

Initial Accreditation Date:

June 29, 2022

Issue Date:

September 30, 2026

Expiration Date

October 31, 2028

Accreditation No:

117740

Certificate No:

L26-891

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.pjlab.com



Certificate of Accreditation: Supplement



Precision Analytical Laboratories, LLC

3430 16th Street, Everett, WA 98201

Contact Name: Julia Redfield Phone: 425-317-8298

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

Code

General Chemistry

ASTM D6304 by Coulometric Karl Fischer Titrator (Code: TITR)	30032418
Solids and Chemical (Code: S)	
Percent Water	8641
ASTM D93 by Pensky Martens Closed Cup Tester (Code: CAL)	30005813
Non-Potable Water (Code: NPW)	
Flash Point	6117
Solids and Chemical (Code: S)	
Flash Point	6117
EPA 180.1 by Turbidimeter (Code: Turbidimeter)	10011800
Non-Potable Water (Code: NPW)	
Turbidity	2055
EPA 9045 by Ion Selective Electrode (Code: ISE)	10256005
Solids and Chemical (Code: S)	
pH	1900
SM 2340 B-2021 by AA or ICP (Code: CALC)	20046440
Drinking Water (Code: DW)	
Hardness (Calculation)	1750
SM 2540D by Gravimetry (Code: GRAV)	60042004
Non-Potable Water (Code: NPW)	
Total Suspended Solids and Chemicals	3973
SM 5210B by Oxygen Meter (Code: Galv)	20135028
Non-Potable Water (Code: NPW)	
Biochemical Oxygen Demand	1530
Inorganic	
EPA 200.7 by Atomic Emission - Inductively Coupled Plasma Spectrometer (Code: ICP-AES)	10014003
Non-Potable Water (Code: NPW)	
Aluminum	1000
Antimony	1005
Arsenic	1010
Barium	1015
Beryllium	1020
Boron	1025
Cadmium	1030
Chromium	1040
Cobalt	1050
Copper	1055
Iron	1070



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EPA 200.7 by Atomic Emission - Inductively Coupled Plasma Spectrometer (Code: ICP-AES)	10014003
Non-Potable Water (Code: NPW)	
Lead	1075
Manganese	1090
Molybdenum	1100
Nickel	1105
Selenium	1140
Silver	1150
Strontium	1160
Thallium	1165
Tin	1175
Titanium	1180
Vanadium	1185
Zinc	1190
EPA 200.8 by Inductively Coupled Plasma – Mass Spectrometry (Code: ICP-MS)	10014809
Drinking Water (Code: DW)	
Aluminum	1000
Antimony	1005
Arsenic	1010
Barium	1015
Beryllium	1020
Cadmium	1030
Chromium	1040
Copper	1055
Lead	1075
Manganese	1090
Molybdenum	1090
Nickel	1105
Selenium	1140
Silver	1150
Thallium	1165
Vanadium	1185
Zinc	1190
EPA 245.1 by Atomic Absorption – Cold Vapor Spectrometry (Code: CVAAS)	10036609
Drinking Water (Code: DW)	
Mercury	1095
Non-Potable Water (Code: NPW)	
Mercury	1095



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EPA 6010D by Atomic Emission - Inductively Coupled Plasma Spectrometer (Code: ICP-AES)

10155950

Solids and Chemical (Code: S)

Aluminum	1000
Antimony	1005
Arsenic	1010
Barium	1015
Beryllium	1020
Boron	1025
Cadmium	1030
Chromium	1040
Cobalt	1050
Copper	1055
Iron	1070
Lead	1075
Manganese	1090
Molybdenum	1100
Nickel	1105
Selenium	1140
Silver	1150
Strontium	1160
Thallium	1165
Titanium	1165
Vanadium	1185
Zinc	1190

EPA 6020B by Inductively Coupled Plasma – Mass Spectrometry (Code: ICP-MS)

10156420

Air (Code: A)

Lead	1075
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Solids and Chemical (Code: S)

Aluminum	1000
Antimony	1005
Arsenic	1010
Barium	1015
Beryllium	1020
Boron	1025
Cadmium	1030
Calcium	1035
Chromium	1040
Cobalt	1050



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Inorganic

EPA 6020B by Inductively Coupled Plasma – Mass Spectrometry (Code: ICP-MS)	10156420
Solids and Chemical (Code: S)	
Copper	1055
Iron	1070
Lead	1075
Magnesium	1804
Manganese	1090
Molybdenum	1100
Nickel	1105
Selenium	1140
Silver	1150
Thallium	1165
Vanadium	1185
Zinc	1190
EPA 7196A by Ultraviolet or Visible Molecular Absorption Spectrometer (Code: Molecular Absorption Spectrometer)	10162400
Solids and Chemical (Code: S)	
Hexavalent Chromium	1045
EPA 7471A by Atomic Absorption – Cold Vapor Spectrometry (Code: CVAAS)	10166208
Solids and Chemical (Code: S)	
Mercury	1095
SM 4500-CN- E-2016 by Ultraviolet or Visible Molecular Absorption Spectrometer (Code: Molecular Absorption Spectrometer)	10060001
Drinking Water (Code: DW)	
Cyanide	1645
SM5910 by Spectrometry (Code: UV-VIS)	20146252
Aqueous (Code: A)	
UV254	2060
Inorganic Chemistry	
EPA 1664B by Gravimetry (Code: GRAV)	10261617
Non-Potable Water (Code: NPW)	
Total Petroleum Hydrocarbons (TPH)	1853
EPA 200.7 by Atomic Emission - Inductively Coupled Plasma Spectrometer (Code: ICP-AES)	10013806
Non-Potable Water (Code: NPW)	
Calcium	1035
Magnesium	1085
Potassium	1125



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Inorganic Chemistry	
EPA 200.7 by Atomic Emission - Inductively Coupled Plasma Spectrometer (Code: ICP-AES)	10013806
Non-Potable Water (Code: NPW)	
Sodium	1155
EPA 200.7 by Inductively Coupled Plasma Atomic Emission Spectrometry (ICP/AES) (Code: ICP-AES)	10013806
Drinking Water (Code: DW)	
Ca Hardness as CaCO ₃	1550
Hardness (Calculation)	1750
Non-Potable Water (Code: NPW)	
Calcium hardness as CaCO ₃	1550
Hardness (Calculation)	1755
EPA 300.0 by Ion Chromatography (IC) (Code: IC-COND)	10053200
Solids and Chemical (Code: S)	
Bromide	1540
Chloride	1575
Fluoride	1730
Nitrate (as N)	1810
Nitrite (as N)	1840
Orthophosphate (as P), Dissolved	1870
Sulfate	2000
EPA 6020B by Mass Spectrometry - Inductively Coupled Plasma (Code: ICP-MS)	10156420
Air (Code: A)	
Arsenic	1010
Barium	1015
Cadmium	1030
Chromium	1040
Copper	1055
Lead	1075
Nickel	1105
Selenium	1140
Silver	1150
Zinc	1190
EPA 7471A by Cold Vapor Atomic Absorption Spectrophotometry (CVAAS) (Code: CVAAS)	10166457
Air (Code: A)	
Mercury	1095
SM 2320 B-2021 by Titrimetry (Code: TITR)	20045447
Non-Potable Water (Code: NPW)	
Alkalinity (as CaCO ₃)	1505



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Inorganic Chemistry

SM 2340 C-2011 by Inductively Coupled Plasma Optical Emission Spectrometry (ICP/OES) (Code: TITR) 20047614

Non-Potable Water (Code: NPW)

Hardness (Total, as CaCO₃, By Calculation) 1755

SM 2540 C-2020 by Gravimetry (Code: GRAV) 20050479

Non-Potable Water (Code: NPW)

TDS 1955

SM 4500-O G-2021 by Electrode (Code: ISE) 20121691

Non-Potable Water (Code: NPW)

Oxygen, Dissolved 1880

SM 4500-P E-2021 by Ultraviolet or Visible Molecular Absorption Spectrometer (Code: UV-VIS) 20124236

Non-Potable Water (Code: NPW)

Phosphorus, Total 1910

SM 5220 D-2011 by Spectrophotometry (Code: UV-VIS) 20136816

Non-Potable Water (Code: NPW)

Chemical Oxygen Demand (COD) 1565

Organic

EPA 1664A by Gravimetry (Code: GRAV) 10127807

Non-Potable Water (Code: NPW)

Hexane Extractable Material - Silica Gel Treated (HEM-SGT) 6142

Hexane Extractable Material (HEM) 6143

EPA 608.3 by Gas Chromatography – Electron Capture Detector (Code: GC-ECD) 10103807

Non-Potable Water (Code: NPW)

4,4'-DDD 7355

4,4'-DDE 7360

4,4'-DDT 7365

Aldrin 7025

Alpha Chlordane 7240

Alpha-BHC 7110

Beta-BHC 7115

Delta-BHC 7105

Dieldrin 7470

Endosulfan I 7510

Endosulfan II 7515

Endosulfan Sulfate 7520

Endrin 7540

Endrin Aldehyde 7530

Endrin Ketone 7535



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Organic

EPA 608.3 by Gas Chromatography – Electron Capture Detector (Code: GC-ECD)	10103807
Non-Potable Water (Code: NPW)	
Gamma Chlordane	7245
Gamma-BHC	7120
Heptachlor	7685
Heptachlor Epoxide	7690
Methoxychlor	7810
EPA 624.1 by Gas Chromatography – Mass Spectrometer (Code: GC-MS)	10298121
Non-Potable Water (Code: NPW)	
1,2,4-Trichlorobenzene	5155
1,2,4-Trimethylbenzene	5210
1,2-Dichlorobenzene	4610
1,3,5-Trimethylbenzene	5215
1,3-Dichlorobenzene	4615
1,4-Dichlorobenzene	4620
Benzene	4375
Chlorobenzene	4475
Ethylbenzene	4765
m & p-Xylene	6240
Naphthalene	5005
o-Xylene	5250
Toluene	5140
Xylenes, Total	5260
EPA 625.1 by Gas Chromatography – Mass Spectrometer (Code: GC-MS)	10300024
Non-Potable Water (Code: NPW)	
1,2,4-Trichlorobenzene	5150
1,2-Dichlorobenzene	4610
1,3-Dichlorobenzene	4615
1,4-Dichlorobenzene	4620
2,2'-Oxybis(1-chloropropane)	4659
2,3,4,6-Tetrachlorophenol	6735
2,4,5-Trichlorophenol	6835
2,4,6-Trichlorophenol	6840
2,4-Dichlorophenol	6000
2,4-Dimethylphenol	6130
2,4-Dinitrophenol	6175
2,4-Dinitrotoluene	6185
2,6-Dinitrotoluene	6190



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EPA 625.1 by Gas Chromatography – Mass Spectrometer (Code: GC-MS)	10300024
Non-Potable Water (Code: NPW)	
2-Chloronaphthalene	5795
2-Chlorophenol	5800
2-Methylphenol	6400
2-Nitrophenol	6490
4,6-Dinitro-2-methylphenol	6360
4-Bromophenyl Phenyl Ether	5660
4-Chloro-3-Methylphenol	5700
4-Chlorophenyl Phenyl Ether	5825
4-Methylphenol	6410
Acenaphthene	5500
Acenaphthylene	5505
Anthracene	5555
Azobenzene	5562
Benzo(a)anthracene	5575
Benzo(a)pyrene	5580
Benzo(b)fluoranthene	5585
Benzo(g,h,i)perylene	5590
Benzo(k)fluoranthene	5600
Bis(2-chloroethoxy)Methane	5760
bis(2-Chloroethyl)ether	5765
Bis(2-ethylhexyl)Phthalate	6065
Butyl Benzyl Phthalate	5670
Carbazole	5680
Chrysene	5855
Dibenz(a,h)anthracene	5895
Diethyl Phthalate	6070
Dimethyl Phthalate	6135
Di-n-Butylphthalate	5925
Di-n-Octylphthalate	6200
Fluoranthene	6265
Fluorene	6270
Hexachlorobenzene	6275
Hexachlorobutadiene	4835
Hexachloroethane	4840
Indo (1,2,3-cd)pyrene	6315
Isophorone	6320



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Non-Potable Water (Code: NPW)	
Napthalene	5005
n-Decane	5875
Nitrobenzene	5015
N-Nitroso-di-n-propylamine	6545
n-Octadecane	6580
Pentachlorophenol	6605
Phenanthrene	6615
Phenol	6625
Pyrene	6665

Organic Chemistry

EPA 624.1 by Gas Chromatography - Mass Spectrometer (Code: GC-MS)	10298121
Non-Potable Water (Code: NPW)	
1,1,1,2-Tetrachloroethane	5105
1,1,1-Trichloroethane	5160
1,1,2,2-Tetrachloroethane	5110
1,1,2-Trichloroethane	5165
1,1-Dichloroethane	4630
1,1-Dichloroethylene	4640
1,1-Dichloropropene	4670
1,2,3-Trichlorobenzene	5150
1,2,3-Trichloropropane (TCP)	5180
1,2-Dibromo-3-Chloropropane (DBCP)	4570
1,2-Dichloroethane (Ethylene Dichloride, EDC)	4635
1,2-Dichloropropane	4655
1,3-Dichloropropane	4660
2,2-Dichloropropane	4665
2-Chlorotoluene	4535
4-Chlorotoluene (p-Chlorotoluene)	4540
4-Isopropyltoluene (p-Isopropyltoluene, p-Cymene)	4910
Bromobenzene	4385
Bromochloromethane	4390
Bromodichloromethane	4390
Bromoform	4400
Bromomethane	4950
Carbon Tetrachloride	4455
Chlorodibromomethane (Dibromochloromethane)	44575



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EPA 624.1 by Gas Chromatography - Mass Spectrometer (Code: GC-MS)	10298121
Non-Potable Water (Code: NPW)	
Chloroethane (Ethyl Chloride)	4485
Chloroform	4505
cis-1,2-Dichloroethylene	4645
cis-1,3-Dichloropropene	4680
Dibromomethane (Methylene Bromide)	4595
Hexachlorobutadiene	4835
Isopropylbenzene (Cumene)	4900
Methyl Chloride (Chloromethane)	4960
Methyl tert Butyl Ether (MTBE)	5000
Methylene Chloride (Dichloromethane)	4975
n-Butylbenzene	4435
n-Propylbenzene (1-phenylpropane)	5090
sec-Butylbenzene	4440
Styrene	5100
tert-Butylbenzene	4445
trans-1,2-Dichloroethylene	4700
trans-1,3-Dichloropropylene	4685
Trichloroethene (TCE, Trichloroethylene)	5170
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
Vinyl Chloride (Chloroethene)	5235
EPA 624.1 by Gas Chromatography Mass Spectrometry (GC/MS) (Code: GC-MS)	10298121
Non-Potable Water (Code: NPW)	
1,1,2-Trichloro-1,2,2-Trifluoroethane (Trichlorotrifluoroethane, Freon 113)	5185
Di-Isopropylether (DIPE, Propane)	9375
Ethyl tert Butyl Ether (ETBE, 2-Ethoxy-2-Methylpropane)	4770
tert-Amyl Methyl Ether (TAME)	4370
tert-Butyl methyl ether (MTBE)	5000
Trichlorofluoromethane (Fluorotrichloromethane, Freon 11)	5175
NWTPH-Dx by Gas Chromatography Mass Spectrometry (GC/MS) (Code: GC-MS)	90018409
Non-Potable Water (Code: NPW)	
Diesel Range Organics (DRO, C10 - C28, Total Petroleum Hydrocarbons (TPH))	9369

No Preparation methods on scope

Footnotes: