

Environmental Laboratory Accreditation Program



EDMUND G. BROWN JR.
Governor

November 18, 2014

Lawrence J. Chrystal
Babcock Laboratories, Inc.
PO Box 432
Riverside, CA 92502

Dear Lawrence J. Chrystal:

Certificate No. 2698

This is to advise you that the laboratory named above has been certified as an environmental testing laboratory pursuant to the provisions of the Health and Safety Code (HSC), Division 101, Part 1, Chapter 4, Section 100825, *et seq.*

The Fields of Testing for which this laboratory has been certified are indicated on the enclosed "Fields of Testing." The certificate shall remain in effect until **May 31, 2016** unless it is revoked. This certificate is subject to an annual fee as prescribed by HSC 100860.1(a).


The application for renewal of this certificate must be received before the expiration date of this certificate to remain in force according to the HSC 100845(a).

Any changes in laboratory location or structural alterations, which may affect adversely the quality of analysis in the Fields of Testing for which this laboratory has been granted a certificate, require prior notification. Notification is also required for changes in ownership or laboratory director within 30 days after the change (HSC, Section 100845(b) and (d)).

Your continued cooperation with the above requirements is essential for maintaining the high quality of the data produced by environmental laboratories certified by the State of California.

If you have any questions, please contact Elano Galvez at (818) 551-2013.

Sincerely,


for

Christine Sotelo, Chief
Environmental Laboratory Accreditation Program

Enclosure



Babcock Laboratories, Inc.

6100 & 6110 Quail Valley Court
Riverside, CA 92507
Phone: (951) 653-3351

Certificate No.: 2698
Renew Date: 5/31/2016

Field of Testing: 101 - Microbiology of Drinking Water

101.010	001	Heterotrophic Bacteria	SM9215B
101.020	001	Total Coliform	SM9221A,B
101.021	001	Fecal Coliform	SM9221E (MTF/EC)
101.050	001	Total Coliform	SM9222A,B,C
101.054	001	Total Coliform	SM9222C
101.060	002	Total Coliform	SM9223
101.060	003	E. coli	SM9223
101.115	001	Total Coliform	Colitag
101.115	002	E. coli	Colitag
101.120	001	Total Coliform (Enumeration)	SM9221A,B,C
101.130	001	Fecal Coliform (Enumeration)	SM9221E (MTF/EC)
101.140	001	Total Coliform (Enumeration)	SM9222A,B,C
101.160	001	Total Coliform (Enumeration)	SM9223
101.195	001	Heterotrophic Bacteria	SM9215B
101.200	001	E. coli (Enumeration)	SM9223B
101.210	001	E. coli (Enumeration)	SM9221B,F-2006
101.300	001	E. coli	SM9223B
101.305	001	E. coli	SM9221B,F-2006
101.307	001	Enterococci	SM9230B
101.310	001	Enterococci	Enterolert

Field of Testing: 102 - Inorganic Chemistry of Drinking Water

102.030	003	Chloride	EPA 300.0
102.030	005	Fluoride	EPA 300.0
102.030	006	Nitrate	EPA 300.0
102.030	007	Nitrite	EPA 300.0
102.030	010	Sulfate	EPA 300.0
102.040	001	Bromide	EPA 300.1
102.040	002	Chlorite	EPA 300.1
102.040	003	Chlorate	EPA 300.1
102.040	004	Bromate	EPA 300.1
102.045	001	Perchlorate	EPA 314.0
102.048	001	Perchlorate	EPA 332.0
102.100	001	Alkalinity	SM2320B
102.120	001	Hardness	SM2340B
102.130	001	Conductivity	SM2510B
102.140	001	Total Dissolved Solids	SM2540C
102.163	001	Chlorine, Free and Total	SM4500-CI G
102.180	001	Chlorine Dioxide	SM4500-CIO2 D

102.190	001	Cyanide, Total	SM4500-CN E
102.192	001	Cyanide, amenable	SM4500-CN G
102.200	001	Fluoride	SM4500-F C
102.210	001	Hydrogen Ion (pH)	SM4500-H+ B
102.220	001	Nitrite	SM4500-NO2 B
102.240	001	Phosphate, Ortho	SM4500-P E
102.260	001	Total Organic Carbon	SM5310B
102.261	001	Organic carbon-Dissolved DOC	SM5310B
102.261	002	TOC/DOC	SM5310B
102.270	001	Surfactants	SM5540C
102.280	001	UV254	SM5910B
102.510	006	Hardness (calculation)	SM3120B
102.520	001	Calcium	EPA 200.7
102.520	002	Magnesium	EPA 200.7
102.520	003	Potassium	EPA 200.7
102.520	004	Silica	EPA 200.7
102.520	005	Sodium	EPA 200.7
102.520	006	Hardness (calculation)	EPA 200.7
102.558	001	Chlorine, Free, Combined, Total	SM4500-Cl G-OO
102.565	001	Cyanide	OIA-1677, DW

Field of Testing: 103 - Toxic Chemical Elements of Drinking Water

103.030	001	Mercury	SM3112B
103.130	001	Aluminum	EPA 200.7
103.130	003	Barium	EPA 200.7
103.130	004	Beryllium	EPA 200.7
103.130	005	Cadmium	EPA 200.7
103.130	007	Chromium	EPA 200.7
103.130	008	Copper	EPA 200.7
103.130	009	Iron	EPA 200.7
103.130	011	Manganese	EPA 200.7
103.130	012	Nickel	EPA 200.7
103.130	015	Silver	EPA 200.7
103.130	017	Zinc	EPA 200.7
103.130	018	Boron	EPA 200.7
103.140	001	Aluminum	EPA 200.8
103.140	002	Antimony	EPA 200.8
103.140	003	Arsenic	EPA 200.8
103.140	004	Barium	EPA 200.8
103.140	005	Beryllium	EPA 200.8
103.140	006	Cadmium	EPA 200.8
103.140	007	Chromium	EPA 200.8
103.140	008	Copper	EPA 200.8
103.140	009	Lead	EPA 200.8
103.140	010	Manganese	EPA 200.8
103.140	011	Mercury	EPA 200.8
103.140	012	Nickel	EPA 200.8
103.140	013	Selenium	EPA 200.8

103.140	014	Silver	EPA 200.8
103.140	015	Thallium	EPA 200.8
103.140	016	Zinc	EPA 200.8
103.140	018	Vanadium	EPA 200.8
103.310	001	Chromium (VI)	EPA 218.6
103.311	001	Chromium (VI)	EPA 218.7

Field of Testing: 104 - Volatile Organic Chemistry of Drinking Water

104.030	001	1,2-Dibromoethane	EPA 504.1
104.030	002	1,2-Dibromo-3-chloropropane	EPA 504.1
104.035	001	1,2,3-Trichloropropane	SRL 524M-TCP
104.036	001	1,2,3-Trichloropropane	SRL 525M-TCP
104.040	000	Volatile Organic Compounds	EPA 524.2
104.040	001	Benzene	EPA 524.2
104.040	007	n-Butylbenzene	EPA 524.2
104.040	008	sec-Butylbenzene	EPA 524.2
104.040	009	tert-Butylbenzene	EPA 524.2
104.040	010	Carbon Tetrachloride	EPA 524.2
104.040	011	Chlorobenzene	EPA 524.2
104.040	015	2-Chlorotoluene	EPA 524.2
104.040	016	4-Chlorotoluene	EPA 524.2
104.040	019	1,3-Dichlorobenzene	EPA 524.2
104.040	020	1,2-Dichlorobenzene	EPA 524.2
104.040	021	1,4-Dichlorobenzene	EPA 524.2
104.040	022	Dichlorodifluoromethane	EPA 524.2
104.040	023	1,1-Dichloroethane	EPA 524.2
104.040	024	1,2-Dichloroethane	EPA 524.2
104.040	025	1,1-Dichloroethene	EPA 524.2
104.040	026	cis-1,2-Dichloroethene	EPA 524.2
104.040	027	trans-1,2-Dichloroethene	EPA 524.2
104.040	028	Dichloromethane	EPA 524.2
104.040	029	1,2-Dichloropropane	EPA 524.2
104.040	033	cis-1,3-Dichloropropene	EPA 524.2
104.040	034	trans-1,3-Dichloropropene	EPA 524.2
104.040	035	Ethylbenzene	EPA 524.2
104.040	037	Isopropylbenzene	EPA 524.2
104.040	039	Naphthalene	EPA 524.2
104.040	041	N-propylbenzene	EPA 524.2
104.040	042	Styrene	EPA 524.2
104.040	044	1,1,2,2-Tetrachloroethane	EPA 524.2
104.040	045	Tetrachloroethene	EPA 524.2
104.040	046	Toluene	EPA 524.2
104.040	048	1,2,4-Trichlorobenzene	EPA 524.2
104.040	049	1,1,1-Trichloroethane	EPA 524.2
104.040	050	1,1,2-Trichloroethane	EPA 524.2
104.040	051	Trichloroethene	EPA 524.2
104.040	052	Trichlorofluoromethane	EPA 524.2
104.040	054	1,2,4-Trimethylbenzene	EPA 524.2

104.040	055	1,3,5-Trimethylbenzene	EPA 524.2
104.040	056	Vinyl Chloride	EPA 524.2
104.040	057	Xylenes, Total	EPA 524.2
104.045	001	Bromodichloromethane	EPA 524.2
104.045	002	Bromoform	EPA 524.2
104.045	003	Chloroform	EPA 524.2
104.045	004	Dibromochloromethane	EPA 524.2
104.045	005	Trihalomethanes	EPA 524.2
104.050	002	Methyl tert-butyl Ether (MTBE)	EPA 524.2
104.050	004	tert-Amyl Methyl Ether (TAME)	EPA 524.2
104.050	005	Ethyl tert-butyl Ether (ETBE)	EPA 524.2
104.050	006	Trichlorotrifluoroethane	EPA 524.2
104.050	007	tert-Butyl Alcohol (TBA)	EPA 524.2
104.050	008	Carbon Disulfide	EPA 524.2
104.050	009	Methyl Isobutyl Ketone	EPA 524.2
104.055	001	Benzene	EPA 524.3
104.055	002	Carbon Tetrachloride	EPA 524.3
104.055	003	Chlorobenzene	EPA 524.3
104.055	004	1,2-Dichlorobenzene	EPA 524.3
104.055	005	1,4-Dichlorobenzene	EPA 524.3
104.055	006	1,2-Dichloroethane	EPA 524.3
104.055	007	cis-1,2-Dichloroethene	EPA 524.3
104.055	008	trans-1,2-Dichloroethene	EPA 524.3
104.055	009	Dichloromethane	EPA 524.3
104.055	010	1,2-Dichloropropane	EPA 524.3
104.055	011	Ethylbenzene	EPA 524.3
104.055	012	Styrene	EPA 524.3
104.055	013	Tetrachloroethene	EPA 524.3
104.055	014	1,1,1-Trichloroethane	EPA 524.3
104.055	015	Trichloroethene	EPA 524.3
104.055	016	Toluene	EPA 524.3
104.055	017	1,2,4-Trichlorobenzene	EPA 524.3
104.055	018	1,1-Dichloroethene	EPA 524.3
104.055	019	1,1,2-Trichloroethane	EPA 524.3
104.055	020	Vinyl Chloride	EPA 524.3
104.055	021	Xylenes, Total	EPA 524.3
104.055	022	1,2-Dibromo-3-chloropropane	EPA 524.3
104.055	023	1,2-Dibromoethane	EPA 524.3
104.055	024	Trihalomethanes, Total	EPA 524.3
104.055	025	Methyl Isobutyl Ketone	EPA 524.3
104.055	026	Trichlorotrifluoroethane	EPA 524.3
104.055	027	Nitrobenzene	EPA 524.3

Field of Testing: 105 - Semi-volatile Organic Chemistry of Drinking Water

105.010	001	Aldrin	EPA 505
105.010	002	Alachlor	EPA 505
105.010	004	Chlordane	EPA 505
105.010	005	Dieldrin	EPA 505

105.010	006	Endrin	EPA 505
105.010	007	Heptachlor	EPA 505
105.010	008	Heptachlor Epoxide	EPA 505
105.010	009	Hexachlorobenzene	EPA 505
105.010	010	Hexachlorocyclopentadiene	EPA 505
105.010	011	Lindane	EPA 505
105.010	012	Methoxychlor	EPA 505
105.010	014	Toxaphene	EPA 505
105.010	015	PCBs as Aroclors (screen)	EPA 505
105.040	000	Chlorinated Pesticides	EPA 508
105.040	016	PCBs as Aroclors (screen)	EPA 508
105.082	009	Chlorinated Acids	EPA 515.3
105.090	029	Polynuclear Aromatic Hydrocarbons	EPA 525.2
105.090	030	Adipates	EPA 525.2
105.090	031	Phthalates	EPA 525.2
105.090	032	Other Extractables	EPA 525.2
105.101	001	Carbofuran	EPA 531.2
105.101	002	Oxamyl	EPA 531.2
105.101	003	Aldicarb	EPA 531.2
105.101	004	Aldicarb Sulfone	EPA 531.2
105.101	005	Aldicarb Sulfoxide	EPA 531.2
105.101	006	Carbaryl	EPA 531.2
105.101	007	3-Hydroxycarbofuran	EPA 531.2
105.101	008	Methomyl	EPA 531.2
105.120	001	Glyphosate	EPA 547
105.140	001	Endothall	EPA 548.1
105.190	009	Haloacetic Acids	SM6251B

Field of Testing: 106 - Radiochemistry of Drinking Water

106.092	001	Uranium	EPA 200.8
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Field of Testing: 107 - Microbiology of Wastewater

107.010	001	Heterotrophic Bacteria	SM9215B
107.020	001	Total Coliform	SM9221B,C-2006
107.030	001	Total Coliform with Chlorine Present	SM9221B,C-2006
107.040	001	Fecal Coliform	SM9221C,E (MTF/EC)
107.050	001	Fecal Coliform with Chlorine Present	SM9221E-2006
107.100	001	Fecal Streptococci	SM9230B
107.100	002	Enterococci	SM9230B
107.242	001	Enterococci	Enterolert
107.245	001	E. coli	SM9223
107.247	001	E. coli	SM9221B,F-2006

Field of Testing: 108 - Inorganic Chemistry of Wastewater

108.090	001	Residue, Volatile	EPA 160.4
108.112	001	Boron	EPA 200.7
108.112	002	Calcium	EPA 200.7
108.112	003	Hardness (calculation)	EPA 200.7
108.112	004	Magnesium	EPA 200.7

108.112	005	Potassium	EPA 200.7
108.112	006	Silica	EPA 200.7
108.112	007	Sodium	EPA 200.7
108.120	001	Bromide	EPA 300.0
108.120	002	Chloride	EPA 300.0
108.120	003	Fluoride	EPA 300.0
108.120	004	Nitrate	EPA 300.0
108.120	008	Sulfate	EPA 300.0
108.120	013	Nitrate-Nitrite (as N)	EPA 300.0
108.120	014	Nitrite as N	EPA 300.0
108.120	015	Phosphate, Ortho (as P)	EPA 300.0
108.211	001	Kjeldahl Nitrogen	EPA 351.2
108.362	001	Phenols, Total	EPA 420.4
108.381	002	Oil & Grease Total	EPA 1664 Rev. B
108.385	001	Color	SM2120B-2001
108.390	001	Turbidity	SM2130B-2001
108.410	001	Alkalinity	SM2320B-1997
108.420	001	Hardness (calculation)	SM2340B-1997
108.430	001	Conductivity	SM2510B-1997
108.439	001	Residue, Volatile	SM2540E-1997
108.440	001	Residue, Total	SM2540B-1997
108.441	001	Residue, Filterable TDS	SM2540C-1997
108.442	001	Residue, Non-filterable TSS	SM2540D-1997
108.443	001	Residue, Settleable	SM2540F-1997
108.465	001	Chlorine, Total	SM4500-Cl G-2000
108.465	002	Chlorine, Free	SM4500-Cl G-2000
108.470	001	Cyanide, Total	SM4500-CN B or C-1999
108.472	001	Cyanide, Total	SM4500-CN C,E-1999
108.473	001	Cyanide, amenable	SM4500-CN G-1999
108.480	001	Fluoride	SM4500-F B,C-1997
108.490	001	Hydrogen Ion (pH)	SM4500-H+ B-2000
108.506	002	Ammonia (as N)	SM4500-NH3 G-1997
108.508	002	Ammonia (as N)	SM4500-NH3 G-1997
108.510	001	Nitrite	SM4500-NO2- B-2000
108.530	001	Dissolved Oxygen	SM4500-O C
108.531	001	Dissolved Oxygen	SM4500-O G
108.540	001	Phosphate, Ortho	SM4500-P E-1999
108.541	001	Phosphorus, Total	SM4500-P E-1999
108.580	001	Sulfide	SM4500-S= D
108.592	001	Biochemical Oxygen Demand	SM5210B-2001
108.592	001	Biochemical Oxygen Demand	SM5210B-2001
108.595	001	Chemical Oxygen Demand	SM5220D-1997
108.596	001	Organic Carbon-Total (TOC)	SM5310B-2000
108.605	001	Surfactants	SM5540C-2000
108.927	001	Cyanide, available	OIA-1677-09

Field of Testing: 109 - Toxic Chemical Elements of Wastewater

109.010	001	Aluminum	EPA 200.7
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109.010	002	Antimony	EPA 200.7
109.010	003	Arsenic	EPA 200.7
109.010	004	Barium	EPA 200.7
109.010	005	Beryllium	EPA 200.7
109.010	006	Boron	EPA 200.7
109.010	007	Cadmium	EPA 200.7
109.010	009	Chromium	EPA 200.7
109.010	010	Cobalt	EPA 200.7
109.010	011	Copper	EPA 200.7
109.010	012	Iron	EPA 200.7
109.010	013	Lead	EPA 200.7
109.010	015	Manganese	EPA 200.7
109.010	016	Molybdenum	EPA 200.7
109.010	017	Nickel	EPA 200.7
109.010	019	Selenium	EPA 200.7
109.010	021	Silver	EPA 200.7
109.010	023	Thallium	EPA 200.7
109.010	024	Tin	EPA 200.7
109.010	025	Titanium	EPA 200.7
109.010	026	Vanadium	EPA 200.7
109.010	027	Zinc	EPA 200.7
109.020	001	Aluminum	EPA 200.8
109.020	002	Antimony	EPA 200.8
109.020	003	Arsenic	EPA 200.8
109.020	004	Barium	EPA 200.8
109.020	005	Beryllium	EPA 200.8
109.020	006	Cadmium	EPA 200.8
109.020	007	Chromium	EPA 200.8
109.020	008	Cobalt	EPA 200.8
109.020	009	Copper	EPA 200.8
109.020	010	Lead	EPA 200.8
109.020	011	Manganese	EPA 200.8
109.020	012	Molybdenum	EPA 200.8
109.020	013	Nickel	EPA 200.8
109.020	014	Selenium	EPA 200.8
109.020	015	Silver	EPA 200.8
109.020	016	Thallium	EPA 200.8
109.020	017	Vanadium	EPA 200.8
109.020	018	Zinc	EPA 200.8
109.020	020	Gold	EPA 200.8
109.020	021	Iron	EPA 200.8
109.020	022	Tin	EPA 200.8
109.020	023	Titanium	EPA 200.8
109.104	001	Chromium (VI)	EPA 218.6
109.400	001	Mercury	SM3112B
109.811	001	Chromium (VI)	SM3500-Cr D (18th/19th)

Field of Testing: 110 - Volatile Organic Chemistry of Wastewater

110.040	000	Purgeable Organic Compounds	EPA 624
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Field of Testing: 111 - Semi-volatile Organic Chemistry of Wastewater

111.100	000	Base/Neutral & Acid Organics	EPA 625
111.101	000	Organochlorine Pesticides & PCBs	EPA 625
111.102	001	2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD) Screening O	EPA 625
111.103	000	Nitrosamines	EPA 625
111.170	000	Organochlorine Pesticides	EPA 608

Field of Testing: 114 - Inorganic Chemistry of Hazardous Waste

114.010	001	Antimony	EPA 6010B
114.010	002	Arsenic	EPA 6010B
114.010	003	Barium	EPA 6010B
114.010	004	Beryllium	EPA 6010B
114.010	005	Cadmium	EPA 6010B
114.010	006	Chromium	EPA 6010B
114.010	007	Cobalt	EPA 6010B
114.010	008	Copper	EPA 6010B
114.010	009	Lead	EPA 6010B
114.010	010	Molybdenum	EPA 6010B
114.010	011	Nickel	EPA 6010B
114.010	012	Selenium	EPA 6010B
114.010	013	Silver	EPA 6010B
114.010	014	Thallium	EPA 6010B
114.010	015	Vanadium	EPA 6010B
114.010	016	Zinc	EPA 6010B
114.020	001	Antimony	EPA 6020
114.020	002	Arsenic	EPA 6020
114.020	003	Barium	EPA 6020
114.020	004	Beryllium	EPA 6020
114.020	005	Cadmium	EPA 6020
114.020	006	Chromium	EPA 6020
114.020	007	Cobalt	EPA 6020
114.020	008	Copper	EPA 6020
114.020	009	Lead	EPA 6020
114.020	010	Molybdenum	EPA 6020
114.020	011	Nickel	EPA 6020
114.020	012	Selenium	EPA 6020
114.020	013	Silver	EPA 6020
114.020	014	Thallium	EPA 6020
114.020	015	Vanadium	EPA 6020
114.020	016	Zinc	EPA 6020
114.025	001	Mercury	EPA 6020A
114.103	001	Chromium (VI)	EPA 7196A
114.106	001	Chromium (VI)	EPA 7199
114.140	001	Mercury	EPA 7470A
114.141	001	Mercury	EPA 7471A
114.221	001	Cyanide, Total	EPA 9012A

114.240	001	Corrosivity - pH Determination	EPA 9040B
114.241	001	Corrosivity - pH Determination	EPA 9045C
114.250	001	Fluoride	EPA 9056
114.270	001	Fluoride	EPA 9214

Field of Testing: 115 - Extraction Test of Hazardous Waste

115.020	001	Toxicity Characteristic Leaching Procedure (TCLP)	EPA 1311
115.030	001	Waste Extraction Test (WET)	CCR Chapter 11, Article 5, Appendix II
115.040	001	Synthetic Precipitation Leaching Procedure (SPLP)	EPA 1312

Field of Testing: 116 - Volatile Organic Chemistry of Hazardous Waste

116.010	000	EDB and DBCP	EPA 8011
116.030	001	Gasoline-range Organics	EPA 8015B
116.080	000	Volatile Organic Compounds	EPA 8260B
116.080	120	Oxygenates	EPA 8260B
116.100	001	Total Petroleum Hydrocarbons - Gasoline	LUFT GC/MS
116.100	010	BTEX and MTBE	LUFT GC/MS
116.110	001	Total Petroleum Hydrocarbons - Gasoline	LUFT

Field of Testing: 117 - Semi-volatile Organic Chemistry of Hazardous Waste

117.010	001	Diesel-range Total Petroleum Hydrocarbons	EPA 8015B
117.015	001	Diesel-range Total Petroleum Hydrocarbons	LUFT GC/MS
117.016	001	Diesel-range Total Petroleum Hydrocarbons	LUFT
117.017	001	TRPH Screening	EPA 418.1
117.110	000	Extractable Organics	EPA 8270C
117.111	070	PCBs	EPA 8270C
117.111	071	Pesticides	EPA 8270C
117.210	000	Organochlorine Pesticides	EPA 8081A
117.220	000	PCBs	EPA 8082
117.240	000	Organophosphorus Pesticides	EPA 8141A
117.250	000	Chlorinated Herbicides	EPA 8151A

Field of Testing: 120 - Physical Properties of Hazardous Waste

120.010	001	Ignitability	EPA 1010
120.070	001	Corrosivity - pH Determination	EPA 9040B
120.080	001	Corrosivity - pH Determination	EPA 9045C

Field of Testing: 126 - Microbiology of Recreational Water

126.010	001	Total Coliform (Enumeration)	SM9221B,C-2006
126.030	001	Fecal Coliform (Enumeration)	SM9221B,E-2006
126.050	001	Total Coliform (Enumeration)	SM9223B-2004
126.050	002	E. coli (Enumeration)	SM9223B-2004
126.060	001	Enterococci	SM9230C
126.080	001	Enterococci	Enterolert