

Iowa Department of Natural Resources Laboratory Certification

This is to certify that
Davy Laboratories

115 6th Street South
La Crosse, WI 54601

IA Lab #304

has complied with 567 Iowa Administrative Code Chapter 83 and is
certified to analyze samples for some or all of the analytes in the following programs:

Clean Water Act (CWA (WW))

The specific analytes and methods that have been certified are contained on the "Approved Parameter List"
attached to the above-named laboratory's most current letter of certification.

Effective 09/01/2018
Expires 09/01/2020

*Certification status may change during the certificate
period and possession of this certificate does not provide
authority to analyze samples or use methods other than
those specified in the most recent letter of certification
from the Iowa Department of Natural Resources.*



Kathleen A. Lee
Laboratory Certification Authority

A handwritten signature in black ink that reads "Kathleen A. Lee".

CHANGES FROM PRIOR CERTIFICATE

Prog.	Cont. ID #	Contaminant Name	Method	Method Code	Status
WW	NA	Chromium VI (Dissolved)	3500-Cr B (20, 21)		Certified
WW	NA	Oil and Grease	1664 B		Certified
WW	NA	Arsenic (Total)	6010D		Certified
WW	NA	Cadmium (Total)	6010D		Certified
WW	NA	Chromium (Total)	6010D		Certified
WW	NA	Copper (Total)	6010D		Certified
WW	NA	Lead (Total)	6010D		Certified
WW	NA	Molybdenum (Total)	6010D		Certified
WW	NA	Nickel (Total)	6010D		Certified
WW	NA	Selenium (Total)	6010D		Certified
WW	NA	Zinc (Total)	6010D		Certified

End of list.

(Refer to the SHL evaluation report for additional information regarding status.)

APPROVED PARAMETER LIST

Contaminant ID #	Contaminant Name	Source	Method Name	Status	SDWIS Report Code
WW-MICRO - A/S #1 Regulated (INCOMPLETE group)					
	Coliform Bacteria (Fecal)	SM	9222 D	Certified	NA
	Coliform Bacteria (Fecal)	SM	9223B 18QTFC	Certified	9223B-18QTFC
	Coliform Bacteria (E-coli)	SM	9223 B	Certified	NA
WW-IOC - A/S #1 Regulated (INCOMPLETE group)					
	Aluminum (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Aluminum (Total)	SM	3113 B (18, 19)	Certified	NA
	Ammonia (as N)	SM	4500-NH3 B (Distillation)	Certified	NA
	Ammonia (as N)	SM	4500-NH3 C (20-22)(Titration)	Certified	NA
	Ammonia (as N)	SM	4500-NH3 C-97 (Titr.)(ONLINE)	Certified	NA
	Ammonia (as N)	SM	4500-NH3 D (19-21)(ISE)	Certified	NA
	Ammonia (as N)	SM	4500-NH3 D-97 (ISE)(ONLINE)	Certified	NA
	Antimony (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Antimony (Total)	SM	3113 B (18, 19)	Certified	NA
	Arsenic (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Arsenic (Total)	SM	3113 B (18, 19)	Certified	NA
	Barium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Beryllium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Beryllium (Total)	SM	3113 B (18, 19)	Certified	NA
	Biochemical Oxygen Demand (BOD5)	SM	5210 B	Certified	NA
	Carb. Biochemical Oxygen Demand (CBOD5)	SM	5210 B	Certified	NA
	Boron (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Cadmium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Cadmium (Total)	SM	3111 B (18, 19)	Certified	NA
	Cadmium (Total)	SM	3113 B (18, 19)	Certified	NA
	Calcium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Calcium (Total)	SM	3111 B (18, 19)	Certified	NA
	Chromium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Chromium (Total)	SM	3111 B (18, 19)	Certified	NA
	Chromium (Total)	SM	3113 B (18, 19)	Certified	NA
	Chromium VI (Dissolved)	SM	3500-Cr B (20, 21)	Certified	NA
	Cobalt (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Copper (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Copper (Total)	SM	3111 B (18, 19)	Certified	NA
	Copper (Total)	SM	3113 B (18, 19)	Certified	NA
	Cyanide (Total)	SM	4500-CN C,E	Certified	NA
	Cyanide Amenable to Chlorination	SM	4500-CN C,G	Certified	NA
	Fluoride (Total)	EPA	300.0 Rev 2.1 (1993)	Certified	NA
	Fluoride (Total)	SM	4500-F C (ISE)	Certified	NA
	Iron (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Iron (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Kjeldahl Nitrogen (Total as N)	EPA	351.2 Rev 2.0 (1993)	Certified	NA
	Kjeldahl Nitrogen (Total as N)	SM	4500-NH3 C (20-22)(Titration)	Certified	NA
	Lead (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Lead (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Lead (Total)	SM	3113 B (18, 19, 21)	Certified	NA
	Magnesium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Magnesium (Total)	SM	3111 B (18, 19)	Certified	NA

APPROVED PARAMETER LIST

Contaminant ID #	Contaminant Name	Source	Method Name	Status	SDWIS Report Code
	Manganese (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Manganese (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Mercury (Total)	EPA	245.1 Rev 3.0 (1994)	Certified	NA
	Molybdenum (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Molybdenum (Total)	SM	3113 B (18, 19, 21)	Certified	NA
	Nickel (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Nickel (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Nickel (Total)	SM	3113 B (18, 19, 21)	Certified	NA
	Nitrate (as N)	SM	Calculate (NO3-N&NO2-N)-NO2-N	Certified	NA
	Nitrate (as N)	SM	4500-NO3 D	Certified	NA
	Nitrate-Nitrite (Total as N)	EPA	353.2 Rev 2.0 (1993)	Certified	NA
	Nitrite (as N)	EPA	300.0 Rev 2.1 (1993)	Certified	NA
	Nitrite (as N)	SM	4500-NO2 B	Certified	NA
	Nitrogen (Total)	EPA/SM	Calculate TKN + NO2-N + NO3-N	Certified	NA
	Organic Nitrogen (as N)	SM	Calculate (TKN-N - NH3-N)	Certified	NA
	Potassium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Potassium (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Selenium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Selenium (Total)	SM	3113 B (18, 19)	Certified	NA
	Silver (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Silver (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Silver (Total)	SM	3113 B (18, 19, 21)	Certified	NA
	Sodium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Sodium (Total)	SM	3111 B (18, 19, 21)	Certified	NA
	Sulfate	ASTM	D516-07	Certified	NA
	Sulfide	SM	4500-S D	Certified	NA
	Sulfide	SM	4500-S F (19, 20, 21)	Certified	NA
	Thallium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Tin (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Titanium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Vanadium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Zinc (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Zinc (Total)	SM	3111 B (18, 19, 21)	Certified	NA

WW-IOC - A/S #2 Regulated (INCOMPLETE group)

	Acidity as CaCO3	SM	2310 B(4a)	Certified	NA
	Alkalinity as CaCO3	SM	2320 B	Certified	NA
	Bromide	EPA	300.0 Rev 2.1 (1993)	Certified	NA
	Calcium (Total)	EPA	200.7 Rev 4.4 (1994)	Certified	NA
	Chloride	SM	4500-Cl B	Certified	NA
	Chloride	SM	4500-Cl E	Certified	NA
	Chemical Oxygen Demand (COD)	SM	5220 D	Certified	NA
	Hardness (Total as CaCO3)	SM	2340 C	Certified	NA
	Oil and Grease	EPA	1664 A	Certified	NA
	Oil and Grease	EPA	1664 B	Certified	NA
	Orthophosphate (as P)	EPA	365.1 Rev 2.0 (1993)	Certified	NA
	Orthophosphate (as P)	SM	4500-P E (18, 19, 20)	Certified	NA
	Phenols	EPA	420.1 (Rev 1978)	Certified	NA
	Phosphorus (Total)	EPA	365.1 Rev 2.0 (1993)	Certified	NA
	Phosphorus (Total)	EPA	365.3 (Issued 1978)	Certified	NA

APPROVED PARAMETER LIST

Contaminant ID #	Contaminant Name	Source	Method Name	Status	SDWIS Report Code
	Residue-Filterable (TDS)	SM	2540 C	Certified	NA
	Residue-Nonfilterable (TSS)	USGS	I-3765-85	Certified	NA
	Residue-Total	SM	2540 B	Certified	NA
	Silica	SM	4500-SiO2 C (20, 21)	Certified	NA
	Specific conductance	SM	2510 B	Certified	NA
	Surfactants	SM	5540 C	Certified	NA
	Turbidity	SM	2130 B	Certified	NA

WW-IOC - A/S #3 Regulated Sludge (INCOMPLETE group)

Arsenic (Total)	EPA	6010C	Certified	NA
Arsenic (Total)	EPA	6010D	Certified	NA
Arsenic (Total)	EPA	7010	Certified	NA
Cadmium (Total)	EPA	6010C	Certified	NA
Cadmium (Total)	EPA	6010D	Certified	NA
Cadmium (Total)	EPA	7000A	Certified	NA
Chromium (Total)	EPA	6010C	Certified	NA
Chromium (Total)	EPA	6010D	Certified	NA
Chromium (Total)	EPA	7000A	Certified	NA
Copper (Total)	EPA	6010C	Certified	NA
Copper (Total)	EPA	6010D	Certified	NA
Copper (Total)	EPA	7000A	Certified	NA
Lead (Total)	EPA	6010C	Certified	NA
Lead (Total)	EPA	6010D	Certified	NA
Lead (Total)	EPA	7000A	Certified	NA
Mercury (Total)	EPA	7471B	Certified	NA
Molybdenum (Total)	EPA	6010C	Certified	NA
Molybdenum (Total)	EPA	6010D	Certified	NA
Molybdenum (Total)	EPA	7010	Certified	NA
Nickel (Total)	EPA	6010C	Certified	NA
Nickel (Total)	EPA	6010D	Certified	NA
Nickel (Total)	EPA	7000A	Certified	NA
Residue-Total	SM	2540 G	Certified	NA
Residue-Total	SM	2540 B	Certified	NA
Selenium (Total)	EPA	6010C	Certified	NA
Selenium (Total)	EPA	6010D	Certified	NA
Selenium (Total)	EPA	7010	Certified	NA
Zinc (Total)	EPA	6010C	Certified	NA
Zinc (Total)	EPA	6010D	Certified	NA
Zinc (Total)	EPA	7000A	Certified	NA

WW-IOC - A/S #1 Excluded (INCOMPLETE group)

Alkalinity as CaCO3	SM	2320 B	Certified	NA
Chlorine, Total residual	SM	4500-Cl G-00 (ONLINE)	Certified	NA
Hydrogen Ion (pH)	SM	4500-H+ B	Certified	NA
Oxygen, dissolved	SM	4500-O G	Certified	NA
Residue-Filterable (TDS)	SM	2540 C	Certified	NA
Residue-Settleable	SM	2540 F	Certified	NA
Residue-Volatile	EPA	160.4	Certified	NA

End of list.

(If status is Provisional, refer to the SHL evaluation report for description and required action to upgrade status to Certified.)

PERSONNEL AND REPORTING REQUIREMENTS

Personnel:

Jennifer M. Buchholz, Laboratory Director	Paula Vollmar, Client Services
Julie Klimek, QA/QC Officer	Stephanie Tollefson, Microbiology Supervisor

Reporting Requirements:

CWA Reporting:

Refer to paragraph 567 IAC 83.6(6) "c" and include information required in paragraphs 567 IAC 63.2(2) "b" through "e".

RECOMMENDATION FROM SHL

To: IDNR
From: SHL Laboratory Appraisal Officers

This recommendation is in accordance with Chapter 83 of the Iowa Administrative Code (IAC-567) for the analyte(s) and method(s) listed in the letter of certification.

LABORATORY INFORMATION

Contact Name	Phone Number	Fax Number
Jennifer M Buchholtz, Responsible Party	608/782-3130	608/784-6611
Julie Klimek, Laboratory Contact	608/782-3130	608/784-6611

Date Fee Paid	Amount Paid	Program	Date Fee Expires
06/20/2018	\$1600.00	CWA Inorganic Chemicals (IOC)	09/01/2020
06/20/2018	\$800.00	CWA Bacteria	09/01/2020

Program	Date of Iowa onsite	Resident state onsite	Resident state certification expires
WW		10/03/2016	12/31/2018
SW		10/03/2016	12/31/2018

EVALUATION REPORT

The equipment and procedures employed in the microbiological and/or chemical analyses of environmental samples by this laboratory conformed to the provisions in the *"Manual for the Certification of Laboratories Analyzing Environmental Samples for the Iowa Department of Natural Resources"* (2003) except for the items indicated. Chapter 1 of the manual pertains to certification of laboratories analyzing samples of drinking water and incorporates by reference the *"Manual for the Certification of Laboratories Analyzing Drinking Water: Criteria and Procedures, Quality Assurance, Fifth Edition, January 2005"* available at <http://www.epa.gov/safewater/labcert/index.html>. Chapter 2 pertains to laboratories analyzing samples for the underground storage tank program. Chapter 3 pertains to laboratories analyzing samples for the wastewater and sewage sludge disposal programs. Chapter 4 pertains to the laboratories analyzing samples for the solid waste and contaminated site programs.

This report is divided into several sections dealing with aspects of laboratory operations. Deficiencies noted during the evaluation are enumerated followed by recommendations and comments (if applicable). Some deficiencies address requirements that must have documented corrective actions completed within a specific time period as indicated in the "REQUIRED ACTIONS" section(s) of the narrative. Other deficiencies address explicit or implicit requirements of the regulation or method that must be corrected and will be verified during future onsite visits. Some of the recommendations presented concern good laboratory practices and should be carefully considered and implemented whenever possible. Comments address special circumstances or information pertinent to the laboratory.

This report was generated for the Iowa Department of Natural Resources under the Environmental Laboratory Certification Program by the State Hygienic Laboratory. The evaluation was conducted by John Kempf, Jeff Wasson.

State Hygienic Laboratory
2220 S. Ankeny Blvd.
Ankeny, IA 50021
515/725-1600

State Hygienic Laboratory
2490 Crosspark Road
Coralville, IA 52241
319/335-4500

1 GENERAL

This laboratory has pursued reciprocal laboratory certification under the Iowa Wastewater Program. The laboratory possesses current resident state / NELAP certification and has provided an onsite evaluation report with corrective actions. At the time of application, the laboratory had satisfactorily completed PT analyses within the last 12 months for all analyses recommended for full certification.

The laboratory is reminded that the Iowa Administrative Code and Laboratory Certification Manual require the laboratory to submit copies of all PT results to IDNR or the SHL within 30 days of receipt of results. Laboratories using DMR-QA studies to meet annual PT requirements must submit copies of vendor reports as the vendors may not provide the results to Iowa. Submit copies of PT reports to

Iowa Department of Natural Resources
Attn: Kathy Lee
Environmental Laboratory Certification Officer
Environmental Services Division
502 E. 9th Street
Des Moines, IA 50319
Kathy.Lee@dnr.iowa.gov

It is recommended that certification be granted for the analyte-method pairs listed on the letter of certification. This recommendation is based upon receipt of the resident state current certification and verification that an onsite evaluation has been conducted.

1.1 Personnel

Name	Title	Education	Essential
Jennifer M. Buchholz	Laboratory Director	BS.	Yes
Paula Vollmar	Client Services	BS.	Yes
Julie Klimek	QA/QC Officer	HS.	Yes
Jeremiah Hubbard	Inorganic Supervisor	BS.	
Steve Hults	Metals Manager	BS.	
Cynthia Stierman	Organic Supervisor	BS.	
Stephanie Tollefson	Microbiology Supervisor	BS.	Yes
Eddie Clark	Sample Control Manager	HS.	

2 CONCLUSIONS

It is recommended this laboratory be certified to analyze environmental samples and report the results for the parameters listed in the attached letter of certification issued by the Iowa Department of Natural Resources, Environmental Services Division. This certification is contingent upon continued satisfactory performance of annual proficiency testing samples and future evaluations. Items indicated as deficiencies must be corrected. Questions or concerns should be addressed to the appraisal officer(s).