

COMMONWEALTH OF KENTUCKY

Energy and Environment Cabinet

Wastewater Laboratory Certification Program

In Accordance with KRS 224.10-670 and 401 KAR Chapter 5

THIS CERTIFIES THAT

Alloway - Lima

1101 N. Cole Street

Lima, OH 45805

Laboratory Number: 98028

Has fulfilled the requirements governing the Certification of Wastewater Laboratories and is hereby granted certification for the analytes and associated methods listed on the annually updated table.

Given under our hands this 1st day of January, 2015

at Frankfort, Kentucky. This Certificate is valid until December 31, 2015.

Kentucky
UNBRIDLED SPIRIT™

Franklin Hall
Certification Program Manager

Laboratory Name: Alloway - Lima
KY Lab ID #: 98028

KY Category	CAS #	Analyte	Status	Reference Method	MDL	MRL	Units	ATP	Method Mod
ORG/Pest/Herb/PCB	72-54-8	4,4-DDD	Interim	EPA 608	0.026	0.5	ug/L		
ORG/Pest/Herb/PCB	72-55-9	4,4-DDE	Interim	EPA 608	0.027	0.5	ug/L		
ORG/Pest/Herb/PCB	50-29-3	4,4-DDT	Interim	EPA 608	0.026	0.5	ug/L		
ORG/Pest/Herb/PCB	309-00-2	Aldrin	Interim	EPA 608	0.024	0.25	ug/L		
ORG/Pest/Herb/PCB	57-74-9	Chlordane	Interim	EPA 608	0.056	0.5	ug/L		
ORG/Pest/Herb/PCB	60-57-1	Dieldrin	Interim	EPA 608	0.028	0.5	ug/L		
ORG/Pest/Herb/PCB	959-98-8	Endosulfan I	Interim	EPA 608	0.028	0.25	ug/L		
ORG/Pest/Herb/PCB	33213-65-9	Endosulfan II	Interim	EPA 608	0.026	0.5	ug/L		
ORG/Pest/Herb/PCB	1031-07-8	Endosulfan Sulfate	Interim	EPA 608	0.028	0.5	ug/L		
ORG/Pest/Herb/PCB	72-20-8	Endrin	Interim	EPA 608	0.028	0.5	ug/L		
ORG/Pest/Herb/PCB	7421-93-4	Endrin aldehyde	Interim	EPA 608	0.029	0.5	ug/L		
ORG/Pest/Herb/PCB	76-44-8	Heptachlor	Interim	EPA 608	0.024	0.25	ug/L		
ORG/Pest/Herb/PCB	1024-57-3	Heptachlor epoxide	Interim	EPA 608	0.027	0.25	ug/L		
ORG/Pest/Herb/PCB	58-89-9	Lindane (gamma-BHC)	Interim	EPA 608	0.024	0.25	ug/L		
ORG/Pest/Herb/PCB	72-43-5	Methoxychlor	Interim	EPA 608	0.022	2.5	ug/L		
ORG/Pest/Herb/PCB	12674-11-2	PCB-1016	Interim	EPA 608	1.978	5	ug/L		
ORG/Pest/Herb/PCB	11104-28-2	PCB-1221	Interim	EPA 608	1.348	5	ug/L		
ORG/Pest/Herb/PCB	11141-16-5	PCB-1232	Interim	EPA 608	0.597	5	ug/L		
ORG/Pest/Herb/PCB	53469-21-9	PCB-1242	Interim	EPA 608	1.847	5	ug/L		
ORG/Pest/Herb/PCB	12672-29-6	PCB-1248	Interim	EPA 608	1.103	5	ug/L		
ORG/Pest/Herb/PCB	11097-69-1	PCB-1254	Interim	EPA 608	2.63	5	ug/L		
ORG/Pest/Herb/PCB	11096-82-5	PCB-1260	Interim	EPA 608	1.791	5	ug/L		
ORG/Pest/Herb/PCB	8001-35-2	Toxaphene	Interim	EPA 608	0.692	12.5	ug/L		
ORG/Pest/Herb/PCB	319-84-6	α -BHC (Alpha-BHC)	Interim	EPA 608	0.023	0.25	ug/L		
ORG/Pest/Herb/PCB	319-85-7	β -BHC (Beta-BHC)	Interim	EPA 608	0.039	0.25	ug/L		
ORG/Pest/Herb/PCB	319-86-8	δ -BHC (Delta-BHC)	Interim	EPA 608	0.024	0.25	ug/L		
ORG/Semi-Volatiles	120-82-1	1,2,4-Trichlorobenzene	Interim	EPA 625	2.648	10	ug/L		
ORG/Semi-Volatiles	122-66-7	1,2-diphenylhydrazine	Interim	EPA 625	2.624	10	ug/L		
ORG/Semi-Volatiles	39638-32-9	chloroisopropyl ether	Interim	EPA 625	2.190	10	ug/L		
ORG/Semi-Volatiles	88-06-2	2,4,6-Trichlorophenol	Interim	EPA 625	7.112	20	ug/L		
ORG/Semi-Volatiles	120-83-2	2,4-Dichlorophenol	Interim	EPA 625	4.080	10	ug/L		
ORG/Semi-Volatiles	105-67-9	2,4-Dimethylphenol	Interim	EPA 625	5.072	10	ug/L		
ORG/Semi-Volatiles	51-28-5	2,4-Dinitrophenol	Interim	EPA 625	21.474	50	ug/L		
ORG/Semi-Volatiles	121-14-2	2,4-Dinitrotoluene	Interim	EPA 625	2.273	20	ug/L		
ORG/Semi-Volatiles	606-20-2	2,6-Dinitrotoluene	Interim	EPA 625	2.639	10	ug/L		
ORG/Semi-Volatiles	91-58-7	2-Chloronaphthalene	Interim	EPA 625	2.129	10	ug/L		

KY Category	CAS #	Analyte	Status	Reference Method	MDL	MRL	Units	ATP	Method Mod
ORG/Semi-Volatiles	95-57-8	2-Chlorophenol	Interim	EPA 625	3.480	10	ug/L		
ORG/Semi-Volatiles	8071-51-0	2-Methyl-4,6-Dinitrophenol	Interim	EPA 625	9.196	50	ug/L		
ORG/Semi-Volatiles	88-75-5	2-Nitrophenol	Interim	EPA 625	3.344	10	ug/L		
ORG/Semi-Volatiles	91-94-1	3,3-Dichlorobenzidine	Interim	EPA 625	5.856	20	ug/L		
ORG/Semi-Volatiles	101-55-3	4-Bromophenyl phenyl ether	Interim	EPA 625	3.109	10	ug/L		
ORG/Semi-Volatiles	59-50-7	4-Chloro-3-methyl phenol	Interim	EPA 625	13.654	50	ug/L		
ORG/Semi-Volatiles	7005-72-3	4-Chlorophenyl phenyl ether	Interim	EPA 625	2.754	50	ug/L		
ORG/Semi-Volatiles	100-02-7	4-Nitrophenol	Interim	EPA 625	9.803	50	ug/L		
ORG/Semi-Volatiles	83-32-9	Acenaphthene	Interim	EPA 625	2.453	10	ug/L		
ORG/Semi-Volatiles	208-96-8	Acenaphthylene	Interim	EPA 625	2.712	10	ug/L		
ORG/Semi-Volatiles	120-12-7	Anthracene	Interim	EPA 625	2.806	10	ug/L		
ORG/Semi-Volatiles	92-87-5	Benzidine	Interim	EPA 625	5.687	50	ug/L		
ORG/Semi-Volatiles	56-55-3	Benzo(a)anthracene	Interim	EPA 625	2.775	10	ug/L		
ORG/Semi-Volatiles	50-32-8	Benzo(a)pyrene	Interim	EPA 625	2.866	10	ug/L		
ORG/Semi-Volatiles	205-99-2	Benzo(b)fluoranthene	Interim	EPA 625	2.973	10	ug/L		
ORG/Semi-Volatiles	191-24-2	Benzo(g,h,i)perylene	Interim	EPA 625	3.319	10	ug/L		
ORG/Semi-Volatiles	207-08-9	Benzo(K)fluoranthene	Interim	EPA 625	3.245	10	ug/L		
ORG/Semi-Volatiles	111-91-1	bis(2-chloroethoxy)methane	Interim	EPA 625	2.446	10	ug/L		
ORG/Semi-Volatiles	111-44-4	bis(2-chloroethyl)ether	Interim	EPA 625	2.547	10	ug/L		
ORG/Semi-Volatiles	117-81-7	bis(2-ethylhexyl)phthalate	Interim	EPA 625	2.760	5	ug/L		
ORG/Semi-Volatiles	85-68-7	Butyl Benzyl Phthalate	Interim	EPA 625	2.153	10	ug/L		
ORG/Semi-Volatiles	218-01-9	Chrysene	Interim	EPA 625	2.843	10	ug/L		
ORG/Semi-Volatiles	53-70-3	Dibenzo(a,h)anthracene	Interim	EPA 625	3.129	10	ug/L		
ORG/Semi-Volatiles	84-66-2	Diethyl phthalate	Interim	EPA 625	2.631	10	ug/L		
ORG/Semi-Volatiles	131-11-3	Dimethyl phthalate	Interim	EPA 625	2.537	10	ug/L		
ORG/Semi-Volatiles	84-74-2	Di-n-butyl phthalate	Interim	EPA 625	3.646	10	ug/L		
ORG/Semi-Volatiles	117-84-0	Di-n-octyl phthalate	Interim	EPA 625	2.633	10	ug/L		
ORG/Semi-Volatiles	206-44-0	Fluoranthene	Interim	EPA 625	3.337	10	ug/L		
ORG/Semi-Volatiles	86-73-7	Fluorene	Interim	EPA 625	2.560	10	ug/L		
ORG/Semi-Volatiles	118-74-1	Hexachlorobenzene	Interim	EPA 625	2.805	10	ug/L		
ORG/Semi-Volatiles	87-68-3	Hexachlorobutadiene	Interim	EPA 625	2.086	10	ug/L		
ORG/Semi-Volatiles	77-47-4	Hexachlorocyclopentadiene	Interim	EPA 625	2.281	10	ug/L		
ORG/Semi-Volatiles	67-72-1	Hexachloroethane	Interim	EPA 625	2.259	10	ug/L		
ORG/Semi-Volatiles	193-39-5	Indeno(1,2,3-cd)pyrene	Interim	EPA 625	2.926	20	ug/L		
ORG/Semi-Volatiles	78-59-1	Isophorone	Interim	EPA 625	2.116	10	ug/L		
ORG/Semi-Volatiles	91-20-3	Naphthalene	Interim	EPA 625	3.002	10	ug/L		

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ORG/Semi-Volatiles	98-95-3	Nitrobenzene	Interim	EPA 625	4.226	10	ug/L		
ORG/Semi-Volatiles	62-75-9	N-Nitrosodimethylamine	Interim	EPA 625	2.047	10	ug/L		
ORG/Semi-Volatiles	621-64-7	N-Nitrosodi-n-propylamine	Interim	EPA 625	2.577	10	ug/L		
ORG/Semi-Volatiles	86-30-6	N-Nitrosodiphenylamine	Interim	EPA 625	3.520	10	ug/L		
ORG/Semi-Volatiles	87-86-5	Pentachlorophenol	Interim	EPA 625	7.443	50	ug/L		
ORG/Semi-Volatiles	85-01-8	Phenanthrene	Interim	EPA 625	2.378	10	ug/L		
ORG/Semi-Volatiles	108-95-2	Phenol	Interim	EPA 625	1.984	10	ug/L		
ORG/Semi-Volatiles	129-00-0	Pyrene	Interim	EPA 625	2.46	10	ug/L		
ORG/Volatiles	71-55-6	1,1,1-Trichloroethane	Interim	EPA 624	0.164	5	ug/L		
ORG/Volatiles	79-34-5	1,1,2,2-Tetrachloroethane	Interim	EPA 624	0.182	5	ug/L		
ORG/Volatiles	79-00-5	1,1,2-Trichloroethane	Interim	EPA 624	0.339	5	ug/L		
ORG/Volatiles	75-34-3	1,1-Dichloroethane	Interim	EPA 624	0.254	5	ug/L		
ORG/Volatiles	75-34-4	1,1-Dichloroethene	Interim	EPA 624	0.625	5	ug/L		
ORG/Volatiles	95-50-1	1,2-Dichlorobenzene (o-Dichlorobenzene)	Interim	EPA 624	0.472	5	ug/L		
ORG/Volatiles	78-87-5	1,2-Dichlorobenzene (o-Dichlorobenzene)	Interim	EPA 625	3.184	10	ug/L		
ORG/Volatiles	107-06-2	1,2-Dichloroethane	Interim	EPA 624	0.342	5	ug/L		
ORG/Volatiles	78-87-5	1,2-Dichloropropane	Interim	EPA 624	0.398	5	ug/L		
ORG/Volatiles	541-73-1	1,3-Dichlorobenzene	Interim	EPA 624	0.538	5	ug/L		
ORG/Volatiles	541-73-1	1,3-Dichlorobenzene	Interim	EPA 625	3.095	10	ug/L		
ORG/Volatiles	106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	Interim	EPA 624	0.497	5	ug/L		
ORG/Volatiles	106-46-7	1,4-Dichlorobenzene (p-Dichlorobenzene)	Interim	EPA 625	2.918	10	ug/L		
ORG/Volatiles	110-75-8	2-Chloroethylvinyl ether	Interim	EPA 624	0.730	10	ug/L		
ORG/Volatiles	107-02-8	Acrolein	Interim	EPA 624	1.907	50	ug/L		
ORG/Volatiles	107-13-1	Acrylonitrile	Interim	EPA 624	1.078	50	ug/L		
ORG/Volatiles	71-43-2	Benzene	Interim	EPA 624	0.329	5	ug/L		
ORG/Volatiles	75-27-4	Bromodichloromethane	Interim	EPA 624	0.203	5	ug/L		
ORG/Volatiles	75-25-2	Bromoform	Interim	EPA 624	0.823	5	ug/L		
ORG/Volatiles	74-83-9	Bromomethane (Methylbromide)	Interim	EPA 624	1.057	10	ug/L		
ORG/Volatiles	56-23-5	Carbon tetrachloride	Interim	EPA 624	0.248	5	ug/L		
ORG/Volatiles	108-90-7	Chlorobenzene	Interim	EPA 624	0.427	5	ug/L		
ORG/Volatiles	75-00-3	Chloroethane	Interim	EPA 624	1.129	10	ug/L		
ORG/Volatiles	67-66-3	Chloroform	Interim	EPA 624	0.806	5	ug/L		
ORG/Volatiles	74-87-3	Chloromethane	Interim	EPA 624	0.840	10	ug/L		
ORG/Volatiles	542-75-6	cis-1,3-Dichloropropene	Interim	EPA 624	0.278	5	ug/L		
ORG/Volatiles	124-48-1	Dibromochloromethane	Interim	EPA 624	0.498	5	ug/L		
ORG/Volatiles	75-71-8	Dichlorodifluoromethane	Interim	EPA 624	0.207	5	ug/L		

KY Category	CAS #	Analyte	Status	Reference Method	MDL	MRL	Units	ATP	Method Mod
ORG/Volatiles	100-41-4	Ethylbenzene	Interim	EPA 624	0.160	5	ug/L		
ORG/Volatiles	75-09-2	Methylene chloride	Interim	EPA 624	1.382	10	ug/L		
ORG/Volatiles	127-18-4	Tetrachloroethene	Interim	EPA 624	0.772	5	ug/L		
ORG/Volatiles	108-88-3	Toluene	Interim	EPA 624	0.331	5	ug/L		
ORG/Volatiles	156-60-5	trans-1,2-Dichloroethene	Interim	EPA 624	0.265	5	ug/L		
ORG/Volatiles	99614-02-5	trans-1,3-Dichloropropene	Interim	EPA 624	0.372	5	ug/L		
ORG/Volatiles	79-01-6	Trichloroethene	Interim	EPA 624	0.283	5	ug/L		
ORG/Volatiles	75-69-4	Trichlorofluoromethane	Interim	EPA 624	0.487	10	ug/L		
ORG/Volatiles	75-01-4	Vinyl chloride	Interim	EPA 624	0.376	10	ug/L		
Toxicity	N/A	Toxicity, acute - Ceriodaphnia dubia	Interim	EPA 2002	N/A	1	TUA		
Toxicity	N/A	Toxicity, acute - Pimephales promelas	Interim	EPA 2000	N/A	1	TUA		
Toxicity	N/A	Toxicity, chronic - Ceriodaphnia dubia	Interim	EPA 1002	N/A	1	TUC		
Toxicity	N/A	Toxicity, chronic - Pimephales promelas	Interim	EPA 1000	N/A	1	TUC		

COMMONWEALTH OF KENTUCKY

Energy and Environment Cabinet

Wastewater Laboratory Certification Program

In Accordance with KRS 224.10-670 and 401 KAR Chapter 5

THIS CERTIFIES THAT

Hoffman Analytic Services, Inc.

DBA Alloway-Marion

1776 Marion Waldo Road

Marion, OH 43302

Laboratory Number: 90018

Has fulfilled the requirements governing the Certification of Wastewater Laboratories and is hereby granted certification for the analytes and associated methods listed on the annually updated table.

Given under our hands this 1st day of January, 2015

at Frankfort, Kentucky. This Certificate is valid until December 31, 2015.

Kentucky
UNBRIDLED SPIRIT™

Franklin Chaffin
Certification Program Manager

KY Category	CAS #	Analyte	Status	Reference Method	MDL	MRL	Units	ATP	Method Mod
Inorganic/Gen Chem	N/A	Alkalinity	Certified	SM 2320 B-1997	1.68	2	mg/L		
Inorganic/Gen Chem	7664-41-7	Ammonia	Certified	EPA 350.1 Rev 2.0	0.02459	0.05	mg/L		
Inorganic/Gen Chem	7726-95-6	Bromide	Interim	EPA 300.0 Rev 2.1	0.0036	0.01	mg/L		
Inorganic/Gen Chem	C-004	Chemical Oxygen Demand	Certified	EPA 410.4 Rev 2.0	6.12151	10	mg/L		
Inorganic/Gen Chem	16887-00-6	Chloride	Certified	EPA 300.0 Rev 2.1	0.239	2	mg/L		
Inorganic/Gen Chem	N/A	Color	Certified	SM 2120 B-2001	N/A	5	Pt-Co		
Inorganic/Gen Chem	57-12-5	Cyanide - Free	Certified	ASTM D7237-10	0.00109	0.003	mg/L		
Inorganic/Gen Chem	57-12-5	Cyanide - Total	Certified	EPA 335.4 Rev 1.0	0.00074	0.005	mg/L		
Inorganic/Gen Chem	7782-41-4	Fluoride	Certified	SM 4500F ⁻ C-1997	0.00682	0.1	mg/L		
Inorganic/Gen Chem	N/A	Hardness - Total, Calculation	Certified	SM 2340 B-1997	N/A	1	mg/L		
Inorganic/Gen Chem	N/A	Kjeldahl Nitrogen - Total (TKN)	Certified	EPA 351.2 Rev 2.0	0.1357	0.5	mg/L		
Inorganic/Gen Chem	C-005	Nitrate-nitrite (as N)	Certified	SM 4500NO ₃ F-2000	0.00576	0.05	mg/L		
Inorganic/Gen Chem	C-007	Oil and Grease	Certified	EPA 1664A	2.65986	5	mg/L		
Inorganic/Gen Chem	98059-61-1	Ortho-phosphate	Certified	SM 4500P E-1999	0.00168	0.01	mg/L		
Inorganic/Gen Chem	N/A	Phenols (Total Phenolics)	Certified	EPA 420.4, Rev 1.0	0.00598	0.05	mg/L		
Inorganic/Gen Chem	7723-14-0	Phosphorus	Certified	SM 4500P E-1999	0.00168	0.01	mg/L		
Inorganic/Gen Chem	7664-93-9	Sulfate	Certified	EPA 300.0 Rev 2.1	0.52135	2	mg/L		
Inorganic/Gen Chem	9073-75-0	Sulfide	Certified	SM 4500S ²⁻ D-2000	0.00736	0.05	mg/L		
Inorganic/Gen Chem	N/A	Surfactants	Interim	SM 5540 C-2000	0.00989	0.05	mg/L		
Inorganic/Gen Chem	10052	Total Dissolved Solids	Certified	SM 2540 C-1997	N/A	20	mg/L		
Inorganic/Gen Chem	C-012	Total Organic Carbon (TOC)	Certified	SM 5310 B-2000	0.18566	0.7	mg/L		
Inorganic/Gen Chem	N/A	Total Solids	Certified	SM 2540 B-1997	N/A	20	mg/L		
Inorganic/Gen Chem	10050	Total Suspended Solids	Certified	SM 2540 D-1997	N/A	2	mg/L		
Inorganic/Metals	7429-0-5	Aluminum	Certified	EPA 200.7 Rev 4.4	0.03207	0.2	mg/L		
Inorganic/Metals	7440-36-0	Antimony	Certified	EPA 200.8 Rev 5.4	0.05389	0.6	ug/L		
Inorganic/Metals	7440-38-2	Arsenic	Certified	EPA 200.8 Rev 5.4	0.04675	0.6	ug/L		
Inorganic/Metals	7440-39-3	Barium	Certified	EPA 200.8 Rev 5.4	0.18545	2	ug/L		
Inorganic/Metals	7440-41-7	Beryllium	Certified	EPA 200.8 Rev 5.4	0.0101	0.1	ug/L		
Inorganic/Metals	7440-41-7	Beryllium	Certified	EPA 200.7 Rev 4.4	0.00130	0.005	mg/L		
Inorganic/Metals	7440-43-9	Cadmium	Certified	EPA 200.8 Rev 5.4	0.00907	0.1	ug/L		
Inorganic/Metals	7440-70-2	Calcium	Certified	EPA 200.7 Rev 4.4	0.02721	0.1	mg/L		
Inorganic/Metals	7440-47-3	Chromium	Certified	EPA 200.8 Rev 5.4	0.15287	2	ug/L		
Inorganic/Metals	7440-48-4	Cobalt	Certified	EPA 200.7 Rev 4.4	0.0005	0.01	mg/L		

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Inorganic/Metals	7440-50-8	Copper	Certified	EPA 200.8 Rev 5.4	0.18214	2	ug/L		
Inorganic/Metals	7439-89-6	Iron	Certified	EPA 200.7 Rev 4.4	0.01195	0.04	mg/L		
Inorganic/Metals	7439-92-1	Lead	Certified	EPA 200.8 Rev 5.4	0.03413	0.4	ug/L		
Inorganic/Metals	7439-95-4	Magnesium	Certified	EPA 200.7 Rev 4.4	0.04478	0.1	mg/L		
Inorganic/Metals	7439-96-5	Manganese	Certified	EPA 200.7 Rev 4.4	0.00362	0.01	mg/L		
Inorganic/Metals	7439-97-6	Mercury	Certified	EPA 245.1 Rev 3.0	0.05274	0.2	ug/L		
Inorganic/Metals	7439-97-6	Mercury	Certified	EPA 1631E	0.09496	0.5	ng/L		
Inorganic/Metals	7439-97-6	Mercury	Certified	EPA 1631E	0.11284	0.5	ng/L		
Inorganic/Metals	7439-98-7	Molybdenum	Certified	EPA 200.8 Rev 5.4	0.13093	2	ug/L		
Inorganic/Metals	7440-02-0	Nickel	Certified	EPA 200.8 Rev 5.4	0.17816	2	ug/L		
Inorganic/Metals	7440-09-7	Potassium	Certified	EPA 200.7 Rev 4.4	0.1283	1	mg/L		
Inorganic/Metals	7782-49-2	Selenium	Certified	EPA 200.8 Rev 5.4	0.11097	0.6	ug/L		
Inorganic/Metals	7440-22-4	Silver	Certified	EPA 200.8 Rev 5.4	0.14609	0.4	ug/L		
Inorganic/Metals	7440-22-4	Silver	Certified	EPA 200.7 Rev 4.4	0.0029	0.005	mg/L		
Inorganic/Metals	7440-23-5	Sodium	Certified	EPA 200.7 Rev 4.4	0.10904	0.4	mg/L		
Inorganic/Metals	7440-28-0	Thallium	Certified	EPA 200.8 Rev 5.4	0.016	0.2	ug/L		
Inorganic/Metals	7440-62-2	Vanadium	Certified	EPA 200.7 Rev 4.4	0.0058	0.01	mg/L		
Inorganic/Metals	7440-66-6	Zinc	Certified	EPA 200.7 Rev 4.4	0.00056	0.01	mg/L		