

Chemical Analysis Report

SW-DIST-2023-09-12-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Run 1**
Request ID: **RQ-2023-07-31-28**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 06-OCT-2023 11:42



Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: CHASSAHOWITZKA RIVER DOWNSTREAM OF HOUSES **Collection Date/Time: 09/11/2023 11:00**

Field ID: G5SW0065

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435928	DEP SOP: NU-094-1	Color (true)	32		PCU	P434860	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P434872	
	EPA 300.0 Rev. 2.1	Chloride	3.7E+03		mg Cl/L	P434985	
		Sulfate	500		mg SO4/L	P434989	
	SM 2320 B-2011	Total Alkalinity	177		mg CaCO3/L	P435062	
	SM 2540 C-2015	TDS	6.22E+03		mg/L	P435297	
	SM 2540 D-2015	TSS	3	I	mg/L	P435203	
	SM 4500-F- C-2011	Fluoride	0.26		mg F/L	P435066	
2435929	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P434992	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.47		mg N/L	P435446	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.13		mg N/L	P435339	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P435230	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P435498	

Ref. Method and Comment:

SM 2320 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 5310 B-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: HOMOSASSA RIVER DOWNRIVER STREAM OF BOAT RAMP **Collection Date/Time: 09/11/2023 12:55**

Field ID: G5SW0189

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435930	DEP SOP: NU-094-1	Color (true)	45		PCU	P434860	
	EPA 180.1 Rev. 2.0	Turbidity	3.7		NTU	P434872	
	EPA 300.0 Rev. 2.1	Chloride	3.0E+03		mg Cl/L	P434985	
		Sulfate	390		mg SO4/L	P434989	
	SM 2320 B-2011	Total Alkalinity	143		mg CaCO3/L	P435062	
	SM 2540 C-2015	TDS	5.03E+03		mg/L	P435297	
	SM 2540 D-2015	TSS	6	I	mg/L	P435203	
	SM 4500-F- C-2011	Fluoride	0.22		mg F/L	P435589	
2435931	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P434992	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P435446	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.066		mg N/L	P435339	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P434898	
	SM 5310 B-2011	Organic Carbon	7.3		mg C/L	P435498	
2435947	EPA 200.7 Rev. 4.4	Calcium	114		mg/L	P435143	
		Iron	170	I	ug/L	P435143	
		Magnesium	196		mg/L	P435143	
		Potassium	59		mg/L	P435143	
		Sodium	1.61E+03		mg/L	P435143	
		Strontium	1.38E+03		ug/L	P435143	
		Tin	9.0	U	ug/L	P435143	
		Titanium	2.2	U	ug/L	P435143	
		Vanadium	6.0	U	ug/L	P435143	
		Zinc	15	U	ug/L	P435143	
	EPA 200.8 Rev. 5.4	Aluminum	47	I	ug/L	P435143	
		Antimony	0.20	U	ug/L	P435143	
		Arsenic	1.45		ug/L	P435143	
		Barium	8.8		ug/L	P435143	
		Beryllium	0.040	U	ug/L	P435143	
		Boron	640		ug/L	P435143	
		Cadmium	0.080	U	ug/L	P435143	
		Chromium	4.0	U	ug/L	P435143	
		Cobalt	0.16	I	ug/L	P435143	
		Copper	1.6	U	ug/L	P435143	
		Lead	0.80	U	ug/L	P435143	
		Manganese	18.3		ug/L	P435143	
		Molybdenum	1.6	I	ug/L	P435143	
		Nickel	2.0	U	ug/L	P435143	
		Selenium	0.80	U	ug/L	P435143	
		Silver	0.040	U	ug/L	P435143	
		Thallium	0.40	U	ug/L	P435143	

Field ID: G5SW0189

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2320 B-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Sample Location: LAKE ROUSSEAU AT CENTER

Collection Date/Time: 09/11/2023 14:20

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435926	DEP SOP: NU-094-1	Color (true)	18		PCU	P434860	
	EPA 180.1 Rev. 2.0	Turbidity	4.4		NTU	P434872	
	EPA 300.0 Rev. 2.1	Chloride	9.1		mg Cl/L	P434985	
		Sulfate	25		mg SO4/L	P434989	
	SM 2320 B-2011	Total Alkalinity	101		mg CaCO3/L	P435268	
	SM 2540 C-2015	TDS	162		mg/L	P435297	
	SM 2540 D-2015	TSS	4	I	mg/L	P435203	
	SM 4500-F- C-2011	Fluoride	0.097	I	mg F/L	P435051	
2435927	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P434995	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.71		mg N/L	P435445	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.033		mg N/L	P435252	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P435246	
	SM 5310 B-2011	Organic Carbon	5.2		mg C/L	P435498	
2435942	EPA 8270E	Aldrin	0.69	U	ng/L	P435010	
		Alpha-BHC	0.11	U	ng/L	P435010	
		Alpha-Chlordane	0.21	U	ng/L	P435010	
		PCB-1016	2.1	U	ng/L	P435010	
		Beta-BHC	0.11	U	ng/L	P435010	
		PCB-1221	2.1	U	ng/L	P435010	
		Beta-Cyfluthrin	1.3	U	ng/L	P435010	
		PCB-1232	2.1	U	ng/L	P435010	
		Bifenthrin	0.53	U	ng/L	P435010	
		PCB-1242	2.1	U	ng/L	P435010	
		PCB-1248	2.1	U	ng/L	P435010	
		Chlorothalonil	3.8	U	ng/L	P435010	
		PCB-1254	2.1	U	ng/L	P435010	
		Cis-Nonachlor	0.21	U	ng/L	P435010	
		PCB-1260	2.1	U	ng/L	P435010	
		Cypermethrin	1.6	U	ng/L	P435010	
		Dacthal	0.16	U	ng/L	P435010	
		DDD-p,p'	0.26	U	ng/L	P435010	
		DDE-p,p'	0.21	U	ng/L	P435010	
		DDT-p,p'	0.85	UJ	ng/L	P435010	LCS, MS
		Delta-BHC	0.42	U	ng/L	P435010	
		Deltamethrin	1.3	U	ng/L	P435010	
		Dichlobenil	0.26	U	ng/L	P435010	
		Dicofol	1.3	U	ng/L	P435010	
		Diieldrin	0.42	U	ng/L	P435010	
		Endosulfan I	0.42	U	ng/L	P435010	
		Endosulfan II	0.95	U	ng/L	P435010	
		Endosulfan Sulfate	0.32	U	ng/L	P435010	
		Endrin	0.95	U	ng/L	P435010	
		Endrin Aldehyde	0.79	U	ng/L	P435010	
		Endrin Ketone	0.42	U	ng/L	P435010	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435942	EPA 8270E	Esfenvalerate	0.79	U	ng/L	P435010	
		Ethalfuralin	0.16	U	ng/L	P435010	
		Fenpropathrin	0.26	U	ng/L	P435010	
		Gamma-BHC	0.13	U	ng/L	P435010	
		Gamma-Chlordane	0.21	U	ng/L	P435010	
		Heptachlor	0.21	U	ng/L	P435010	
		Heptachlor Epoxide	0.26	U	ng/L	P435010	
		Hexachlorobenzene**	1.1	U	ng/L	P435010	
		Kepone	14	UJ	ng/L	P435010	CCV
		Lambda-Cyhalothrin	0.79	U	ng/L	P435010	
		Methoprene	0.79	U	ng/L	P435010	
		Methoxychlor	0.32	UJ	ng/L	P435010	LCS, MS
		MGK-264	0.21	U	ng/L	P435010	
		Mirex	0.37	U	ng/L	P435010	
		Oxychlordane	0.32	U	ng/L	P435010	
		Permethrin	1.7	U	ng/L	P435010	
		Phenothrin	0.95	U	ng/L	P435010	
		Piperonyl Butoxide	0.80		ng/L	P435010	
		Prallethrin	2.1	U	ng/L	P435010	
		Tau-Fluvalinate	0.26	U	ng/L	P435010	
		Tetramethrin	0.79	U	ng/L	P435010	
		Trans-Nonachlor	0.21	U	ng/L	P435010	
		Triclosan Methyl	0.16	U	ng/L	P435010	
		Trifluralin	0.21	U	ng/L	P435010	
	EPA 8276	Chlordane	2.1	U	ng/L	P435010	
	Toxaphene	16	U	ng/L	P435010		
2435943	EPA 8270E	Oxybenzone**	10	U	ng/L	P434753	
		Acetochlor	0.21	U	ng/L	P434753	
		Octinoxate**	160	U	ng/L	P434753	
		Alachlor	0.42	UJ	ng/L	P434753	LCS
		Avobenzone**	100	U	ng/L	P434753	
		Ametryn	1.2	U	ng/L	P434753	
		Atrazine	0.55	I	ng/L	P434753	
		PBDE-47**	4.2	U	ng/L	P434753	
		Atrazine Desethyl	1.4	U	ng/L	P434753	
		PBDE-99**	5.2	U	ng/L	P434753	
		Azinphos Methyl	3.1	U	ng/L	P434753	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P434753	
		Azoxystrobin	0.42	U	ng/L	P434753	
		Bromacil	0.63	U	ng/L	P434753	
		2-Ethylhexyl	13	U	ng/L	P434753	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P434753	
		Dechlorane Plus**	31	U	ng/L	P434753	
		Caffeine**	16	I	ng/L	P434753	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435943	EPA 8270E	Dechlorane 602**	5.2	U	ng/L	P434753	RPD
		Carbophenothion	0.52	U	ng/L	P434753	
		Dechlorane 603**	4.2	U	ng/L	P434753	
		Carfentrazone Ethyl	0.16	U	ng/L	P434753	
		Hexabromobenzene**	6.3	U	ng/L	P434753	RPD
		Chlorfenapyr	0.31	U	ng/L	P434753	
		PBB-153**	8.4	U	ng/L	P434753	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P434753	
		Pentabromotoluene**	3.1	U	ng/L	P434753	
		Chlorpyrifos Methyl	0.10	U	ng/L	P434753	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	73	U	ng/L	P434753	
		Coumaphos	1.1	U	ng/L	P434753	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	16	U	ng/L	P434753	
		Cyanazine	5.2	U	ng/L	P434753	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.6	I	ng/L	P434753	
		Cyprodinil	0.21	U	ng/L	P434753	
		Tetradecachloro-m-terphenyl**	7.8	UJ	ng/L	P434753	LCS
		Demeton	3.7	U	ng/L	P434753	
		Diazinon	0.13	UJ	ng/L	P434753	CCV
		Difenoconazole	0.63	U	ng/L	P434753	
		Dimethenamid	0.10	U	ng/L	P434753	
		Dimethomorph	0.31	U	ng/L	P434753	
		Disulfoton	0.63	U	ng/L	P434753	
		Dithiopyr	1.0	U	ng/L	P434753	
		EPTC	0.52	U	ng/L	P434753	
		Ethion	0.31	U	ng/L	P434753	
		Ethoprop	0.13	U	ng/L	P434753	
		Etridiazole	0.10	U	ng/L	P434753	
		Fenamiphos	0.47	U	ng/L	P434753	
		Fenbuconazole	0.52	U	ng/L	P434753	
		Fipronil	0.21	U	ng/L	P434753	
		Fipronil Desulfinyl**	0.10	U	ng/L	P434753	
		Fipronil Sulfide	0.10	U	ng/L	P434753	
		Fipronil Sulfone	0.13	I	ng/L	P434753	
		Fluazifop-P-butyl	0.10	U	ng/L	P434753	
		Fludioxonil	0.10	U	ng/L	P434753	
		Flumioxazin	3.1	U	ng/L	P434753	
		Flutolanil	0.10	UJ	ng/L	P434753	LCS
		Fluxapyroxad	0.26	U	ng/L	P434753	
		Fonofos	0.16	U	ng/L	P434753	
		Hexazinone	0.52	U	ng/L	P434753	
		Imazalil	0.68	U	ng/L	P434753	
		Iprodione	0.52	U	ng/L	P434753	MS
		Loratadine**	0.31	U	ng/L	P434753	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435943	EPA 8270E	Malathion	0.37	U	ng/L	P434753	
		Metalaxyl	0.52	U	ng/L	P434753	
		Metolachlor	0.78	U	ng/L	P434753	
		Metribuzin	0.42	U	ng/L	P434753	
		Mevinphos	1.0	U	ng/L	P434753	
		Molinate	0.26	UJ	ng/L	P434753	LCS
		Myclobutanil	0.37	U	ng/L	P434753	
		Naled	2.6	U	ng/L	P434753	
		Napropamide	0.73	U	ng/L	P434753	
		Norflurazon	1.0	U	ng/L	P434753	
		Oxadiazon	0.37	U	ng/L	P434753	
		Oxyfluorfen	0.21	U	ng/L	P434753	
		Parathion Ethyl	0.16	U	ng/L	P434753	
		Parathion Methyl	0.21	U	ng/L	P434753	MS
		Pendimethalin	0.78	U	ng/L	P434753	
		Phenytol**	5.5	U	ng/L	P434753	
		Phorate	0.26	U	ng/L	P434753	
		Prodiamine	0.21	U	ng/L	P434753	
		Prometon	3.1	U	ng/L	P434753	
		Prometryn	0.37	U	ng/L	P434753	
		Pronamide	0.10	U	ng/L	P434753	
		Propanil	0.10	U	ng/L	P434753	
		Propargite	0.84	U	ng/L	P434753	
		Propiconazole	0.63	U	ng/L	P434753	
		Pyraflufen Ethyl	0.31	U	ng/L	P434753	
		Pyridaben	1.5	U	ng/L	P434753	
		Pyriproxyfen	0.26	U	ng/L	P434753	
		Simazine	0.26	U	ng/L	P434753	
		Stirophos	0.42	U	ng/L	P434753	
		Sulfentrazone	1.5	UJ	ng/L	P434753	CCV, RPD
		Tebuconazole	1.5	U	ng/L	P434753	
		Terbufos	0.21	U	ng/L	P434753	
		Terbutylazine	0.21	U	ng/L	P434753	
		Thiobencarb	0.52	U	ng/L	P434753	
		Triadimefon	0.16	U	ng/L	P434753	
2435946	EPA 8321B	2,4-D	0.010		ug/L	P434924	
		Acesulfame K	0.10	U	ug/L	P434773	
		2,4,5-T	0.0040	U	ug/L	P434924	
		AMPA	0.10	U	ug/L	P434773	
		Acetaminophen	0.0080	U	ug/L	P434924	
		Acetamiprid	0.0020	U	ug/L	P434924	
		Endothall	0.25	U	ug/L	P434773	
		Glufosinate	0.10	U	ug/L	P434773	
		Glyphosate	0.10	U	ug/L	P434773	
		Afidopyropen	0.0020	U	ug/L	P434924	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2435946	EPA 8321B	Bentazon	8.0E-04	U	ug/L	P434924	
		Sucralose	0.037	I	ug/L	P434773	
		Benzovindiflupyr	0.0020	U	ug/L	P434924	
		Carbamazepine	8.0E-04	U	ug/L	P434924	
		Clothianidin	0.0020	U	ug/L	P434924	
		Dinotefuran	0.0020	U	ug/L	P434924	
		Diuron	0.0020	U	ug/L	P434924	
		Fenuron	0.032	U	ug/L	P434924	
		Fluridone	0.0039		ug/L	P434924	
		Imazapyr	0.0040	U	ug/L	P434924	
		Hydrocodone	0.0020	U	ug/L	P434924	
		Ibuprofen	0.080	U	ug/L	P434924	
		Imidacloprid	0.0020	U	ug/L	P434924	
		Linuron	0.0040	U	ug/L	P434924	
		Mandestrobin	0.0020	U	ug/L	P434924	
		MCPP	0.0020	U	ug/L	P434924	
		Naproxen	0.0083	I	ug/L	P434924	
		Primidone	0.0040	U	ug/L	P434924	
		Pyraclostrobin	0.0020	U	ug/L	P434924	
		Silvex	0.0040	U	ug/L	P434924	
		Thiamethoxam	0.0020	U	ug/L	P434924	
		Tolfenpyrad	0.0020	U	ug/L	P434924	
		Triclopyr	0.0040	U	ug/L	P434924	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

SM 5310 B-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P434860

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434872

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P435143

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P435143

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434985

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434989

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434992

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434995

Component	Result	Code	Units
Ammonia-N	0.002	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435445

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435446

Component	Result	Code	Units
Kjeldahl Nitrogen	0.080	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435339

Component	Result	Code	Units
NO2NO3-N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434898

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435230

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435246

Component	Result	Code	Units
Total-P	0.002	U	mg P/L

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.50	U	ng/L
Metaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P434753

Component	Result	Code	Units
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8270E

Batch ID: P435010

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P435010

Component	Result	Code	Units
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P435010

Component	Result	Code	Units
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P435010

Component	Result	Code	Units
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P435010

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P434773

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P434924

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P434924

Component	Result	Code	Units
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P435062

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2320 B-2011
Batch ID: P435268

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO3/L

Reference Method: SM 2540 C-2015
Batch ID: P435297

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P435203

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P435066

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P435589

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P435498

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P434860

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434872

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	102		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P435143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	80 - 120
Iron	105		P	80 - 120
Magnesium	102		P	80 - 120
Potassium	101		P	80 - 120
Sodium	101		P	80 - 120
Strontium	103		P	80 - 120
Tin	105		P	80 - 120
Titanium	103		P	80 - 120
Vanadium	104		P	80 - 120
Zinc	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P435143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.8		P	85 - 115
Antimony	98.8		P	85 - 115
Arsenic	99.2		P	85 - 115
Barium	102		P	85 - 115
Beryllium	91.1		P	85 - 115
Boron	104		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	99.9		P	85 - 115
Cobalt	97.8		P	85 - 115
Copper	96.1		P	85 - 115
Lead	95.0		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	99.6		P	85 - 115
Nickel	96.7		P	85 - 115
Selenium	99.2		P	85 - 115
Silver	112		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	101		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434992

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.4		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435445

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	107		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435446

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	105		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	96.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	102		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	104		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P435246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 8270E

Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7		P	42 - 162
Acetochlor	86.5		P	69 - 123
Alachlor	62.6		F	65 - 118
Ametryn	98.9		P	58 - 141
Atrazine	79.2		P	73 - 118
Atrazine Desethyl	80.2		P	32 - 125
Avobenzone	113		P	40 - 203
Azinphos Methyl	120		P	36 - 197
Azoxystrobin	70.9		P	58 - 226
Bromacil	80.3		P	48 - 120
Butylate	41.3		P	27 - 85.0
Caffeine	112		P	40 - 137
Carbophenothion	84.8		P	54 - 132
Carfentrazone Ethyl	98.3		P	60 - 142
Chlorfenapyr	96.2		P	53 - 117
Chlorpyrifos Ethyl	75.5		P	59 - 116
Chlorpyrifos Methyl	81.2		P	66 - 119
Coumaphos	129		P	11 - 234
Cyanazine	96.9		P	61 - 248
Cyprodinil	72.0		P	50 - 147
Dechlorane 602	77.4		P	50 - 150
Dechlorane 603	97.9		P	50 - 150
Dechlorane Plus	96.9		P	47 - 182
Demeton	49.6		P	30 - 138
Diazinon	82.8		P	67 - 126
Difenoconazole	85.4		P	38 - 205
Dimethenamid	78.8		P	57 - 111
Dimethomorph	100		P	16 - 212
Disulfoton	88.8		P	46 - 126
Dithiopyr	73.2		P	62 - 115
EPTC	39.5		P	28 - 80.0
Ethion	105		P	24 - 122
Ethoprop	71.2		P	62 - 113
Etridiazole	47.2		P	28 - 92.0
Fenamiphos	81.0		P	57 - 128
Fenbuconazole	58.9		P	52 - 155
Fipronil	81.5		P	63 - 130
Fipronil Desulfinyl	77.3		P	61 - 130
Fipronil Sulfide	84.7		P	56 - 117
Fipronil Sulfone	85.9		P	52 - 118
Fluazifop-P-butyl	79.2		P	61 - 128
Fludioxonil	62.6		P	59 - 129
Flumioxazin	99.0		P	30 - 250
Flutolanil	47.6		F	53 - 127
Fluxapyroxad	89.9		P	42 - 132
Fonofos	63.5		P	61 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexabromobenzene	52.9		P	50 - 150
Hexazinone	72.7		P	46 - 139
Imazalil	80.5		P	40 - 139
Iprodione	56.5		P	40 - 146
Loratadine	117		P	10 - 224
Malathion	105		P	61 - 135
Metaxyl	86.9		P	58 - 121
Metolachlor	85.9		P	64 - 118
Metribuzin	71.3		P	45 - 245
Mevinphos	71.6		P	49 - 118
Molinate	39.5		F	42 - 92.0
Myclobutanil	56.0		P	55 - 127
Naled	24.7		P	10 - 114
Napropamide	67.1		P	39 - 121
Norflurazon	83.1		P	55 - 129
Octinoxate	85.7		P	26 - 166
Oxadiazon	67.0		P	54 - 115
Oxybenzone	95.3		P	49 - 135
Oxyfluorfen	84.2		P	64 - 139
Parathion Ethyl	77.6		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	76.5		P	50 - 150
PBDE-47	80.2		P	41 - 148
PBDE-99	70.6		P	38 - 147
Pendimethalin	99.7		P	52 - 118
Pentabromotoluene	70.6		P	50 - 150
Phenytoin	67.8		P	10 - 162
Phorate	78.3		P	40 - 122
Prodiamine	31.6		P	26 - 141
Prometon	60.5		P	54 - 122
Prometryn	88.9		P	61 - 128
Pronamide	88.7		P	72 - 121
Propanil	85.5		P	45 - 144
Propargite	86.1		P	10 - 199
Propiconazole	56.9		P	56 - 127
Pyraflufen Ethyl	109		P	56 - 140
Pyridaben	110		P	26 - 211
Pyriproxyfen	97.5		P	33 - 194
Simazine	86.2		P	67 - 121
Stirophos	83.6		P	20 - 142
Sulfentrazone	75.2		P	21 - 144
Tebuconazole	81.7		P	10 - 122
Terbufos	85.1		P	60 - 129
Terbutylazine	70.6		P	69 - 113
Tetradecachloro-m-terphenyl	62.6		F	70 - 200
Thiobencarb	87.7		P	51 - 120
Tri-o-cresyl Phosphate	95.0		P	49 - 150
Triadimefon	81.8		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	83.6		P	70 - 180

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P435010

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	64.0		P	30 - 96.0
Alpha-BHC	92.7		P	70 - 109
Alpha-Chlordane	64.0		P	45 - 107
Beta-BHC	106		P	64 - 138
Beta-Cyfluthrin	69.9		P	17 - 141
Bifenthrin	53.8		P	10 - 113
Chlorothalonil	90.1		P	26 - 180
Cis-Nonachlor	65.1		P	37 - 102
Cypermethrin	80.1		P	20 - 133
Dacthal	80.7		P	69 - 114
DDD-p,p'	103		P	42 - 105
DDE-p,p'	66.7		P	42 - 106
DDT-p,p'	116		F	42 - 107
Delta-BHC	99.9		P	67 - 144
Deltamethrin	46.4		P	15 - 149
Dichlobenil	84.5		P	46 - 117
Dicofol	74.1		P	34 - 114
Dieldrin	70.5		P	50 - 108
Endosulfan I	69.6		P	55 - 104
Endosulfan II	83.7		P	51 - 111
Endosulfan Sulfate	76.5		P	56 - 121
Endrin	75.3		P	10 - 106
Endrin Aldehyde	70.0		P	34 - 114
Endrin Ketone	99.6		P	63 - 177
Esfenvalerate	85.2		P	29 - 143
Ethalfuralin	72.3		P	46 - 96.0
Fenpropathrin	67.8		P	28 - 115
Gamma-BHC	98.5		P	65 - 121
Gamma-Chlordane	60.0		P	39 - 103
Heptachlor	83.6		P	39 - 94.0
Heptachlor Epoxide	72.2		P	54 - 104
Hexachlorobenzene	60.7		P	36 - 100
Kepone	93.7		P	10 - 225
Lambda-Cyhalothrin	62.4		P	10 - 135
Methoprene	57.4		P	10 - 109
Methoxychlor	113		F	52 - 112
MGK-264	99.2		P	44 - 117
Mirex	52.5		P	20 - 90.0
Oxychlordane	77.5		P	44 - 102
PCB-1016	88.9		P	45 - 107
PCB-1260	103		P	40 - 118
Permethrin	76.6		P	18 - 135
Phenothrin	54.4		P	10 - 102
Piperonyl Butoxide	153		P	28 - 156
Prallethrin	80.9		P	28 - 113
Tau-Fluvalinate	56.6		P	10 - 123
Tetramethrin	95.2		P	18 - 158
Trans-Nonachlor	65.9		P	39 - 104
Triclosan Methyl	83.1		P	54 - 108
Trifluralin	68.6		P	46 - 97.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P435010

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	76.2		P	52 - 117
Toxaphene	93.6		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P434773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	137		P	40 - 150
AMPA	83.8		P	40 - 150
Endothall	100		P	40 - 150
Glufosinate	99.2		P	40 - 150
Glyphosate	98.6		P	40 - 150
Sucralose	94.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	89.0		P	40 - 150
2,4,5-T	77.3		P	40 - 150
Acetaminophen	70.9		P	30 - 150
Acetamiprid	84.3		P	40 - 150
Afidopyropen	73.1		P	30 - 150
Bentazon	91.6		P	30 - 150
Benzovindiflupyr	82.8		P	40 - 150
Carbamazepine	89.8		P	40 - 150
Clothianidin	89.3		P	40 - 150
Dinotefuran	97.3		P	40 - 150
Diuron	87.2		P	40 - 150
Fenuron	90.6		P	40 - 150
Fluridone	80.5		P	40 - 150
Hydrocodone	94.6		P	40 - 150
Ibuprofen	77.2		P	40 - 150
Imazapyr	74.1		P	40 - 150
Imidacloprid	83.5		P	40 - 150
Linuron	77.8		P	40 - 150
Mandestrobin	97.2		P	40 - 150
MCPP	90.2		P	40 - 150
Naproxen	64.1		P	40 - 150
Primidone	87.1		P	40 - 150
Pyraclostrobin	78.3		P	40 - 150
Silvex	76.5		P	40 - 150
Thiamethoxam	91.0		P	40 - 150
Tolfenpyrad	42.8		P	30 - 150
Triclopyr	82.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P435062

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.3		P	92 - 105

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P435268

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P435297

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	99.6		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P435203

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	95.3		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435066

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.3		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P435498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P435143

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435947	Iron	102	105	P/P	80 - 120
2435947	Strontium	102	103	P/P	80 - 120
2435947	Tin	94.6	103	P/P	80 - 120
2435947	Titanium	103	108	P/P	80 - 120
2435947	Vanadium	104	108	P/P	80 - 120
2435947	Zinc	101	103	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P435143

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435947	Aluminum	102	102	P/P	70 - 130
2435947	Antimony	102	102	P/P	70 - 130
2435947	Arsenic	110	109	P/P	70 - 130
2435947	Barium	104	105	P/P	70 - 130
2435947	Beryllium	97.8	104	P/P	70 - 130
2435947	Boron	99.5	106	P/P	70 - 130
2435947	Cadmium	101	99.5	P/P	70 - 130
2435947	Chromium	93.8	93.8	P/P	70 - 130
2435947	Cobalt	96.4	96.5	P/P	70 - 130
2435947	Copper	96.0	94.9	P/P	70 - 130
2435947	Lead	97.7	99.7	P/P	70 - 130
2435947	Manganese	93.7	93.2	P/P	70 - 130
2435947	Molybdenum	109	110	P/P	70 - 130
2435947	Nickel	94.2	95.4	P/P	70 - 130
2435947	Selenium	106	104	P/P	70 - 130
2435947	Silver	104	105	P/P	70 - 130
2435947	Thallium	105	108	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P434985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435706	Chloride	106		P	90 - 110
2435866	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P434989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435706	Sulfate	101		P	90 - 110
2435866	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P434992

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435518	Ammonia-N	104	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435909	Ammonia-N	98.2	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435445

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435910	Kjeldahl Nitrogen	100	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436086	Kjeldahl Nitrogen	89.9	106	F/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435311	NO2NO3-N	92.0	93.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435339

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435503	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436086	Total-P	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435230

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436372	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435957	Total-P	106	107	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	109	85.3	P/P	26 - 165
2436113	Acetochlor	87.3	88.9	P/P	67 - 124
2436113	Alachlor	77.6	88.2	P/P	60 - 120
2436113	Ametryn	103	108	P/P	54 - 216

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	Atrazine	91.4	95.0	P/P	66 - 128
2436113	Atrazine Desethyl	77.5	80.2	P/P	15 - 122
2436113	Avobenzone	108	117	P/P	37 - 178
2436113	Azinphos Methyl	155	154	P/P	40 - 292
2436113	Azoxystrobin	86.8	86.0	P/P	35 - 220
2436113	Bromacil	98.4	97.4	P/P	45 - 127
2436113	Butylate	57.2	65.3	P/P	20 - 83.0
2436113	Caffeine	110	104	P/P	10 - 194
2436113	Carbophenothion	89.1	83.9	P/P	57 - 127
2436113	Carfentrazone Ethyl	90.5	77.3	P/P	51 - 141
2436113	Chlorfenapyr	107	108	P/P	46 - 111
2436113	Chlorpyrifos Ethyl	112	110	P/P	52 - 120
2436113	Chlorpyrifos Methyl	135	133	F/F	63 - 119
2436113	Coumaphos	194	190	P/P	10 - 228
2436113	Cyanazine	81.8	86.5	P/P	59 - 241
2436113	Cyprodinil	63.8	67.6	P/P	47 - 146
2436113	Dechlorane 602	82.2	60.0	P/P	50 - 150
2436113	Dechlorane 603	119	111	P/P	50 - 150
2436113	Dechlorane Plus	119	95.2	P/P	50 - 150
2436113	Demeton	95.9	107	P/P	40 - 136
2436113	Diazinon	75.3	80.0	P/P	69 - 132
2436113	Difenoconazole	61.7	70.2	P/P	57 - 258
2436113	Dimethenamid	81.5	80.6	P/P	54 - 110
2436113	Dimethomorph	70.0	83.8	P/P	28 - 210
2436113	Disulfoton	93.8	104	P/P	43 - 133
2436113	Dithiopyr	88.1	79.6	P/P	39 - 116
2436113	EPTC	46.5	57.2	P/P	20 - 78.0
2436113	Ethion	74.2	60.6	P/P	17 - 119
2436113	Ethoprop	91.4	85.4	P/P	66 - 120
2436113	Etridiazole	69.2	83.5	P/P	28 - 96.0
2436113	Fenamiphos	95.7	81.1	P/P	41 - 126
2436113	Fenbuconazole	136	129	P/P	42 - 169
2436113	Fipronil	98.4	96.9	P/P	61 - 132
2436113	Fipronil Desulfinyl	97.4	95.7	P/P	56 - 132
2436113	Fipronil Sulfide	86.0	85.4	P/P	48 - 119
2436113	Fipronil Sulfone	104	103	P/P	42 - 131
2436113	Fluazifop-P-butyl	92.1	101	P/P	53 - 131
2436113	Fludioxonil	111	112	P/P	56 - 127
2436113	Flumioxazin	69.7	77.8	P/P	19 - 300
2436113	Flutolanil	99.1	94.4	P/P	41 - 127
2436113	Fluxapyroxad	145	131	P/P	42 - 172
2436113	Fonofos	97.8	97.9	P/P	59 - 113
2436113	Hexabromobenzene	93.2	67.2	P/P	50 - 150
2436113	Hexazinone	84.4	85.1	P/P	66 - 122
2436113	Imazalil	102	108	P/P	21 - 283
2436113	Iprodione	186	183	F/F	43 - 150
2436113	Loratadine	185	198	P/P	23 - 201
2436113	Malathion	114	118	P/P	58 - 136
2436113	Metaxyl	85.3	84.0	P/P	55 - 120
2436113	Metolachlor	74.1	85.4	P/P	57 - 121
2436113	Metribuzin	78.7	86.9	P/P	58 - 294
2436113	Mevinphos	109	109	P/P	50 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P434753

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436113	Molinate	62.9	70.9	P/P	42 - 93.0
2436113	Myclobutanil	65.6	66.7	P/P	55 - 125
2436113	Naled	48.4	49.4	P/P	18 - 200
2436113	Napropamide	89.5	88.4	P/P	39 - 110
2436113	Norflurazon	85.4	77.3	P/P	48 - 128
2436113	Octinoxate	98.1	100	P/P	21 - 159
2436113	Oxadiazon	94.3	92.0	P/P	43 - 112
2436113	Oxybenzone	107	108	P/P	41 - 142
2436113	Oxyfluorfen	78.5	78.0	P/P	64 - 153
2436113	Parathion Ethyl	84.7	79.3	P/P	69 - 114
2436113	Parathion Methyl	171	183	F/F	79 - 139
2436113	PBB-153	108	98.4	P/P	50 - 150
2436113	PBDE-47	84.9	70.5	P/P	27 - 144
2436113	PBDE-99	86.4	61.8	P/P	18 - 150
2436113	Pendimethalin	64.9	67.5	P/P	50 - 139
2436113	Pentabromotoluene	89.1	87.5	P/P	50 - 150
2436113	Phenytoin	41.6	35.6	P/P	10 - 146
2436113	Phorate	76.7	66.5	P/P	54 - 161
2436113	Prodiamine	81.1	90.3	P/P	30 - 161
2436113	Prometon	64.0	71.3	P/P	45 - 134
2436113	Prometryn	73.7	76.6	P/P	45 - 137
2436113	Pronamide	90.2	94.3	P/P	65 - 133
2436113	Propanil	91.2	91.8	P/P	49 - 142
2436113	Propargite	120	110	P/P	10 - 203
2436113	Propiconazole	126	110	P/P	38 - 146
2436113	Pyraflufen Ethyl	84.4	81.4	P/P	34 - 153
2436113	Pyridaben	103	107	P/P	12 - 192
2436113	Pyriproxyfen	82.8	76.4	P/P	33 - 180
2436113	Simazine	88.9	94.0	P/P	51 - 157
2436113	Stirophos	46.8	45.6	P/P	10 - 128
2436113	Sulfentrazone	173	78.4	P/P	53 - 186
2436113	Tebuconazole	116	102	P/P	10 - 133
2436113	Terbufos	94.6	104	P/P	65 - 139
2436113	Terbutylazine	88.6	91.4	P/P	66 - 117
2436113	Tetradecachloro-m-terphenyl	95.7	96.9	P/P	70 - 200
2436113	Thiobencarb	80.8	84.4	P/P	51 - 119
2436113	Tri-o-cresyl Phosphate	108	109	P/P	31 - 144
2436113	Triadimefon	69.5	75.6	P/P	48 - 119
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.5	97.6	P/P	50 - 150
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.3	99.4	P/P	50 - 150
2436113	Tris(2-chloroethyl) phosphate (TCEP)	87.3	88.3	P/P	70 - 180

Reference Method: EPA 8270E
Batch ID: P435010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435942	Aldrin	58.6	60.7	P/P	24 - 81.0
2435942	Alpha-BHC	91.0	81.6	P/P	65 - 110
2435942	Alpha-Chlordane	69.8	66.0	P/P	43 - 119
2435942	Beta-BHC	134	138	P/P	54 - 165
2435942	Beta-Cyfluthrin	92.8	83.7	P/P	27 - 165
2435942	Bifenthrin	82.0	76.3	P/P	17 - 117

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P435010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435942	Chlorothalonil	143	147	P/P	10 - 255
2435942	Cis-Nonachlor	68.6	63.1	P/P	34 - 98.0
2435942	Cypermethrin	115	87.8	P/P	25 - 143
2435942	Dacthal	74.6	71.0	P/P	55 - 139
2435942	DDD-p,p'	104	102	P/P	30 - 109
2435942	DDE-p,p'	67.2	67.5	P/P	35 - 106
2435942	DDT-p,p'	171	156	F/F	41 - 101
2435942	Delta-BHC	115	115	P/P	58 - 165
2435942	Deltamethrin	59.9	46.6	P/P	10 - 194
2435942	Dichlobenil	53.2	63.3	P/P	22 - 114
2435942	Dicofol	79.9	83.3	P/P	17 - 133
2435942	Dieldrin	70.1	71.2	P/P	45 - 129
2435942	Endosulfan I	81.0	76.9	P/P	49 - 104
2435942	Endosulfan II	93.0	88.7	P/P	37 - 117
2435942	Endosulfan Sulfate	79.7	70.4	P/P	38 - 128
2435942	Endrin	78.3	78.9	P/P	35 - 116
2435942	Endrin Aldehyde	44.0	55.1	P/P	19 - 108
2435942	Endrin Ketone	87.1	81.8	P/P	44 - 134
2435942	Esfenvalerate	115	94.2	P/P	27 - 176
2435942	Ethalfuralin	66.7	63.0	P/P	49 - 100
2435942	Fenpropathrin	82.0	76.1	P/P	34 - 117
2435942	Gamma-BHC	113	106	P/P	59 - 129
2435942	Gamma-Chlordane	63.4	67.5	P/P	33 - 107
2435942	Heptachlor	81.2	89.1	P/P	37 - 94.0
2435942	Heptachlor Epoxide	67.1	73.5	P/P	38 - 118
2435942	Hexachlorobenzene	55.6	57.7	P/P	35 - 97.0
2435942	Kepone	76.5	77.4	P/P	10 - 221
2435942	Lambda-Cyhalothrin	93.2	86.7	P/P	23 - 190
2435942	Methoprene	80.1	91.5	P/P	21 - 109
2435942	Methoxychlor	119	104	F/P	46 - 118
2435942	MGK-264	111	104	P/P	39 - 122
2435942	Mirex	59.5	55.1	P/P	25 - 90.0
2435942	Oxychlordane	86.5	83.4	P/P	42 - 100
2435942	Permethrin	97.4	90.6	P/P	33 - 181
2435942	Phenothrin	76.8	77.7	P/P	12 - 125
2435942	Piperonyl Butoxide	145	136	P/P	10 - 178
2435942	Prallethrin	92.4	91.3	P/P	24 - 122
2435942	Tau-Fluvalinate	98.4	73.2	P/P	13 - 151
2435942	Tetramethrin	100	77.8	P/P	16 - 172
2435942	Trans-Nonachlor	71.9	62.2	P/P	39 - 100
2435942	Triclosan Methyl	85.7	83.0	P/P	43 - 110
2435942	Trifluralin	65.9	64.1	P/P	45 - 94.0
2436668	PCB-1016	86.4	88.4	P/P	45 - 107
2436668	PCB-1260	87.1	84.9	P/P	40 - 112

Reference Method: EPA 8276
Batch ID: P435010

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2436668	Chlordane	78.9	73.7	P/P	43 - 123
2436668	Toxaphene	111	101	P/P	27 - 156

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P434773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435764	Acesulfame K	147	144	P/P	40 - 150
2435764	AMPA	68.0	66.8	P/P	40 - 150
2435764	Endothall	146	145	P/P	40 - 150
2435764	Glufosinate	85.3	90.6	P/P	40 - 150
2435764	Glyphosate	80.8	88.5	P/P	40 - 150
2435764	Sucralose	101	97.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P434924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435764	2,4-D	105	112	P/P	40 - 150
2435764	2,4,5-T	106	108	P/P	40 - 150
2435764	Acetaminophen	84.0	83.8	P/P	30 - 150
2435764	Acetamiprid	61.2	62.7	P/P	40 - 150
2435764	Afidopyropen	73.7	68.9	P/P	30 - 150
2435764	Bentazon	57.6	56.6	P/P	30 - 150
2435764	Benzovindiflupyr	113	110	P/P	40 - 150
2435764	Carbamazepine	74.8	75.5	P/P	40 - 150
2435764	Clothianidin	90.5	90.6	P/P	40 - 150
2435764	Dinotefuran	61.3	60.4	P/P	40 - 150
2435764	Diuron	64.1	64.3	P/P	40 - 150
2435764	Fenuron	48.7	49.4	P/P	40 - 150
2435764	Fluridone	70.6	66.5	P/P	40 - 150
2435764	Hydrocodone	59.6	58.3	P/P	40 - 150
2435764	Ibuprofen	74.2	76.6	P/P	40 - 150
2435764	Imazapyr	76.0	76.5	P/P	40 - 150
2435764	Imidacloprid	116	116	P/P	40 - 150
2435764	Linuron	74.2	73.9	P/P	40 - 150
2435764	Mandestrobin	107	101	P/P	40 - 150
2435764	MCPP	117	122	P/P	40 - 150
2435764	Naproxen	82.6	94.2	P/P	40 - 150
2435764	Primidone	92.2	88.8	P/P	40 - 150
2435764	Pyraclostrobin	98.2	97.5	P/P	40 - 150
2435764	Silvex	110	105	P/P	40 - 150
2435764	Thiamethoxam	74.7	77.0	P/P	40 - 150
2435764	Tolfenpyrad	72.6	70.0	P/P	30 - 150
2435764	Triclopyr	122	117	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2435986	Fluoride	99.1	100	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P435066

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2434151	Fluoride	102	103	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P435589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2438825	Fluoride	100	99.0	P/P	94 - 106

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P434860

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435951	Color (true)	1.74	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P434872

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435808	Turbidity	5.02	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P435143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435947	Calcium	3.10	Spike	P	0 - 20
2435947	Iron	2.04	Spike	P	0 - 20
2435947	Magnesium	2.98	Spike	P	0 - 20
2435947	Potassium	1.81	Spike	P	0 - 20
2435947	Sodium	1.59	Spike	P	0 - 20
2435947	Strontium	0.661	Spike	P	0 - 20
2435947	Tin	8.40	Spike	P	0 - 20
2435947	Titanium	4.34	Spike	P	0 - 20
2435947	Vanadium	3.32	Spike	P	0 - 20
2435947	Zinc	2.29	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P435143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435947	Aluminum	0.577	Spike	P	0 - 20
2435947	Antimony	0.296	Spike	P	0 - 20
2435947	Arsenic	0.987	Spike	P	0 - 20
2435947	Barium	0.384	Spike	P	0 - 20
2435947	Beryllium	6.15	Spike	P	0 - 20
2435947	Boron	1.47	Spike	P	0 - 20
2435947	Cadmium	0.993	Spike	P	0 - 20
2435947	Chromium	0.0448	Spike	P	0 - 20
2435947	Cobalt	0.0554	Spike	P	0 - 20
2435947	Copper	1.18	Spike	P	0 - 20
2435947	Lead	2.00	Spike	P	0 - 20
2435947	Manganese	0.503	Spike	P	0 - 20
2435947	Molybdenum	0.287	Spike	P	0 - 20
2435947	Nickel	1.21	Spike	P	0 - 20
2435947	Selenium	2.14	Spike	P	0 - 20
2435947	Silver	0.775	Spike	P	0 - 20
2435947	Thallium	2.50	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435706	Chloride	0.278	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435706	Sulfate	1.16	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434992

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435518	Ammonia-N	1.34	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435909	Ammonia-N	2.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435445

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435910	Kjeldahl Nitrogen	2.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P435446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436086	Kjeldahl Nitrogen	14.8	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435252

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435311	NO2NO3-N	1.08	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P435339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435503	NO2NO3-N	0.962	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P434898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436086	Total-P	0.673	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436372	Total-P	0.0454	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P435246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435957	Total-P	0.795	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	24.7	Spike	P	0 - 37
2436113	Acetochlor	1.82	Spike	P	0 - 28
2436113	Alachlor	12.9	Spike	P	0 - 30
2436113	Ametryn	5.07	Spike	P	0 - 32
2436113	Atrazine	2.39	Spike	P	0 - 41
2436113	Atrazine Desethyl	3.45	Spike	P	0 - 36
2436113	Avobenzone	8.57	Spike	P	0 - 36
2436113	Azinphos Methyl	0.395	Spike	P	0 - 75
2436113	Azoxystrobin	0.919	Spike	P	0 - 39
2436113	Bromacil	0.926	Spike	P	0 - 33
2436113	Butylate	13.3	Spike	P	0 - 44
2436113	Caffeine	4.82	Spike	P	0 - 74
2436113	Carbophenothion	6.08	Spike	P	0 - 25
2436113	Carfentrazone Ethyl	15.7	Spike	P	0 - 27
2436113	Chlorfenapyr	0.681	Spike	P	0 - 24
2436113	Chlorpyrifos Ethyl	2.13	Spike	P	0 - 26
2436113	Chlorpyrifos Methyl	1.72	Spike	P	0 - 26
2436113	Coumaphos	1.91	Spike	P	0 - 28
2436113	Cyanazine	5.53	Spike	P	0 - 48
2436113	Cyprodinil	5.81	Spike	P	0 - 29
2436113	Dechlorane 602	31.3	Spike	F	0 - 30
2436113	Dechlorane 603	6.76	Spike	P	0 - 30
2436113	Dechlorane Plus	22.0	Spike	P	0 - 30
2436113	Demeton	10.9	Spike	P	0 - 33
2436113	Diazinon	5.93	Spike	P	0 - 29
2436113	Difenoconazole	12.8	Spike	P	0 - 34
2436113	Dimethenamid	1.05	Spike	P	0 - 39
2436113	Dimethomorph	18.0	Spike	P	0 - 51
2436113	Disulfoton	9.88	Spike	P	0 - 30
2436113	Dithiopyr	10.2	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	EPTC	20.7	Spike	P	0 - 43
2436113	Ethion	20.2	Spike	P	0 - 79
2436113	Ethoprop	6.80	Spike	P	0 - 29
2436113	Etridiazole	18.8	Spike	P	0 - 33
2436113	Fenamiphos	16.5	Spike	P	0 - 40
2436113	Fenbuconazole	5.75	Spike	P	0 - 74
2436113	Fipronil	1.52	Spike	P	0 - 29
2436113	Fipronil Desulfinyl	1.62	Spike	P	0 - 32
2436113	Fipronil Sulfide	0.622	Spike	P	0 - 30
2436113	Fipronil Sulfone	0.145	Spike	P	0 - 33
2436113	Fluazifop-P-butyl	8.89	Spike	P	0 - 38
2436113	Fludioxonil	0.586	Spike	P	0 - 29
2436113	Flumioxazin	11.1	Spike	P	0 - 51
2436113	Flutolanil	4.83	Spike	P	0 - 25
2436113	Fluxapyroxad	9.09	Spike	P	0 - 45
2436113	Fonofos	0.0527	Spike	P	0 - 27
2436113	Hexabromobenzene	32.4	Spike	F	0 - 30
2436113	Hexazinone	0.673	Spike	P	0 - 30
2436113	Imazalil	6.08	Spike	P	0 - 100
2436113	Iprodione	2.01	Spike	P	0 - 33
2436113	Loratadine	7.04	Spike	P	0 - 56
2436113	Malathion	3.22	Spike	P	0 - 37
2436113	Metalaxyl	1.61	Spike	P	0 - 40
2436113	Metolachlor	6.16	Spike	P	0 - 29
2436113	Metribuzin	7.52	Spike	P	0 - 45
2436113	Mevinphos	0.647	Spike	P	0 - 29
2436113	Molinate	11.9	Spike	P	0 - 33
2436113	Myclobutanil	1.63	Spike	P	0 - 26
2436113	Naled	1.96	Spike	P	0 - 37
2436113	Napropamide	1.19	Spike	P	0 - 44
2436113	Norflurazon	9.95	Spike	P	0 - 30
2436113	Octinoxate	2.35	Spike	P	0 - 45
2436113	Oxadiazon	1.32	Spike	P	0 - 28
2436113	Oxybenzone	0.578	Spike	P	0 - 46
2436113	Oxyfluorfen	0.508	Spike	P	0 - 28
2436113	Parathion Ethyl	6.55	Spike	P	0 - 31
2436113	Parathion Methyl	6.60	Spike	P	0 - 29
2436113	PBB-153	8.85	Spike	P	0 - 30
2436113	PBDE-47	18.5	Spike	P	0 - 36
2436113	PBDE-99	33.2	Spike	P	0 - 40
2436113	Pendimethalin	3.92	Spike	P	0 - 33
2436113	Pentabromotoluene	1.85	Spike	P	0 - 30
2436113	Phenytoin	15.7	Spike	P	0 - 100
2436113	Phorate	14.1	Spike	P	0 - 36
2436113	Prodiamine	10.7	Spike	P	0 - 71
2436113	Prometon	4.93	Spike	P	0 - 36
2436113	Prometryn	3.93	Spike	P	0 - 28
2436113	Pronamide	4.36	Spike	P	0 - 24
2436113	Propanil	0.598	Spike	P	0 - 28
2436113	Propargite	9.21	Spike	P	0 - 43
2436113	Propiconazole	12.1	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P434753

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436113	Pyraflufen Ethyl	3.59	Spike	P	0 - 29
2436113	Pyridaben	3.35	Spike	P	0 - 30
2436113	Pyriproxyfen	7.98	Spike	P	0 - 79
2436113	Simazine	2.56	Spike	P	0 - 29
2436113	Stirophos	2.52	Spike	P	0 - 61
2436113	Sulfentrazone	75.1	Spike	F	0 - 33
2436113	Tebuconazole	9.84	Spike	P	0 - 69
2436113	Terbufos	9.19	Spike	P	0 - 29
2436113	Terbuthylazine	3.15	Spike	P	0 - 32
2436113	Tetradecachloro-m-terphenyl	1.19	Spike	P	0 - 30
2436113	Thiobencarb	4.46	Spike	P	0 - 26
2436113	Tri-o-cresyl Phosphate	0.764	Spike	P	0 - 33
2436113	Triadimefon	8.39	Spike	P	0 - 28
2436113	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.82	Spike	P	0 - 30
2436113	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	1.02	Spike	P	0 - 30
2436113	Tris(2-chloroethyl) phosphate (TCEP)	1.15	Spike	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P435010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435942	Aldrin	3.55	Spike	P	0 - 41
2435942	Alpha-BHC	10.9	Spike	P	0 - 25
2435942	Alpha-Chlordane	5.58	Spike	P	0 - 32
2435942	Beta-BHC	2.66	Spike	P	0 - 33
2435942	Beta-Cyfluthrin	10.4	Spike	P	0 - 43
2435942	Bifenthrin	7.19	Spike	P	0 - 52
2435942	Chlorothalonil	2.55	Spike	P	0 - 82
2435942	Cis-Nonachlor	8.47	Spike	P	0 - 33
2435942	Cypermethrin	27.2	Spike	P	0 - 51
2435942	Dacthal	4.92	Spike	P	0 - 27
2435942	DDD-p,p'	2.35	Spike	P	0 - 39
2435942	DDE-p,p'	0.434	Spike	P	0 - 31
2435942	DDT-p,p'	9.15	Spike	P	0 - 29
2435942	Delta-BHC	0.491	Spike	P	0 - 35
2435942	Deltamethrin	25.0	Spike	P	0 - 100
2435942	Dichlobenil	17.3	Spike	P	0 - 40
2435942	Dicofol	4.25	Spike	P	0 - 37
2435942	Dieldrin	1.57	Spike	P	0 - 27
2435942	Endosulfan I	5.20	Spike	P	0 - 23
2435942	Endosulfan II	4.79	Spike	P	0 - 34
2435942	Endosulfan Sulfate	12.4	Spike	P	0 - 36
2435942	Endrin	0.733	Spike	P	0 - 45
2435942	Endrin Aldehyde	22.4	Spike	P	0 - 76
2435942	Endrin Ketone	6.31	Spike	P	0 - 43
2435942	Esfenvalerate	20.0	Spike	P	0 - 51
2435942	Ethalfuralin	5.75	Spike	P	0 - 22
2435942	Fenpropathrin	7.49	Spike	P	0 - 49
2435942	Gamma-BHC	6.28	Spike	P	0 - 28
2435942	Gamma-Chlordane	6.28	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P435010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435942	Heptachlor	9.23	Spike	P	0 - 29
2435942	Heptachlor Epoxide	9.10	Spike	P	0 - 33
2435942	Hexachlorobenzene	3.56	Spike	P	0 - 36
2435942	Kepone	1.06	Spike	P	0 - 85
2435942	Lambda-Cyhalothrin	7.28	Spike	P	0 - 55
2435942	Methoprene	13.3	Spike	P	0 - 53
2435942	Methoxychlor	13.5	Spike	P	0 - 50
2435942	MGK-264	6.29	Spike	P	0 - 43
2435942	Mirex	7.58	Spike	P	0 - 40
2435942	Oxychlordane	3.65	Spike	P	0 - 31
2435942	Permethrin	7.18	Spike	P	0 - 50
2435942	Phenothrin	1.19	Spike	P	0 - 58
2435942	Piperonyl Butoxide	5.11	Spike	P	0 - 100
2435942	Prallethrin	1.22	Spike	P	0 - 39
2435942	Tau-Fluvalinate	29.3	Spike	P	0 - 54
2435942	Tetramethrin	25.3	Spike	P	0 - 51
2435942	Trans-Nonachlor	14.5	Spike	P	0 - 39
2435942	Triclosan Methyl	3.16	Spike	P	0 - 31
2435942	Trifluralin	2.78	Spike	P	0 - 22
2436668	PCB-1016	2.31	Spike	P	0 - 25
2436668	PCB-1260	2.58	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P435010

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2436668	Chlordane	6.86	Spike	P	0 - 28
2436668	Toxaphene	9.97	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P434773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435764	Acesulfame K	2.10	Spike	P	0 - 30
2435764	AMPA	1.75	Spike	P	0 - 30
2435764	Endothall	0.524	Spike	P	0 - 30
2435764	Glufosinate	6.02	Spike	P	0 - 30
2435764	Glyphosate	9.12	Spike	P	0 - 30
2435764	Sucralose	3.11	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P434924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435764	2,4-D	6.19	Spike	P	0 - 30
2435764	2,4,5-T	1.74	Spike	P	0 - 30
2435764	Acetaminophen	0.272	Spike	P	0 - 30
2435764	Acetamidrid	2.54	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P434924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435764	Afidopyropen	6.73	Spike	P	0 - 30
2435764	Bentazon	1.65	Spike	P	0 - 30
2435764	Benzovindiflupyr	2.30	Spike	P	0 - 30
2435764	Carbamazepine	1.02	Spike	P	0 - 30
2435764	Clothianidin	0.161	Spike	P	0 - 30
2435764	Dinotefuran	1.49	Spike	P	0 - 30
2435764	Diuron	0.295	Spike	P	0 - 30
2435764	Fenuron	1.58	Spike	P	0 - 30
2435764	Fluridone	5.92	Spike	P	0 - 30
2435764	Hydrocodone	2.10	Spike	P	0 - 30
2435764	Ibuprofen	3.17	Spike	P	0 - 30
2435764	Imazapyr	0.580	Spike	P	0 - 30
2435764	Imidacloprid	0.332	Spike	P	0 - 30
2435764	Linuron	0.444	Spike	P	0 - 30
2435764	Mandestrobin	5.32	Spike	P	0 - 30
2435764	MCPP	3.92	Spike	P	0 - 30
2435764	Naproxen	13.2	Spike	P	0 - 30
2435764	Primidone	3.70	Spike	P	0 - 30
2435764	Pyraclostrobin	0.746	Spike	P	0 - 30
2435764	Silvex	4.77	Spike	P	0 - 30
2435764	Thiamethoxam	3.09	Spike	P	0 - 30
2435764	Tolfenpyrad	3.60	Spike	P	0 - 30
2435764	Triclopyr	3.85	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P435268

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Total Alkalinity	1.56	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P435297

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435580	TDS	2.50	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P435051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435986	Fluoride	1.00	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P435066

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2434151	Fluoride	0.473	Spike	P	0 - 1.9

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P435589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2438825	Fluoride	0.990	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P435498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2435840	Organic Carbon	0.287	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2435942
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	56.5	P	37 - 129
EPA 8270E	Decachlorobiphenyl	69.0	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	50.7	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	56.8	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	50.7	P	28 - 102
EPA 8276	PCNB	94.9	P	49 - 115

Lab Sample ID: 2435943
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.4	P	20 - 200
EPA 8270E	Simazine-d10	103	P	62 - 142
EPA 8270E	Terbufos-d10	59.8	P	58 - 132
EPA 8270E	Terphenyl-d14	68.0	P	52 - 137

Lab Sample ID: 2435946
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	116	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.6	P	30 - 160
EPA 8321B	Diuron-d6	71.4	P	30 - 160
EPA 8321B	Endothall-d6	98.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.4	P	30 - 160
EPA 8321B	Primidone-d5	94.9	P	30 - 160
EPA 8321B	Sucralose-d6	95.9	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A121479

Included Lab Sample IDs: 2435926, 2435928, 2435930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	100	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A121482

Included Lab Sample IDs: 2435926, 2435928, 2435930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.5	99.0	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121485

Included Lab Sample IDs: 2435926, 2435928, 2435930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.3	100	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A121513

Included Lab Sample IDs: 2435946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	139	129	P/P	60 - 160
Sucralose	106	91.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121515

Included Lab Sample IDs: 2435946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	80.9	86.1	P/P	60 - 160
Endothall	96.2	103	P/P	60 - 160
Glufosinate	102	105	P/P	60 - 160
Glyphosate	89.1	96.8	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A121518

Included Lab Sample IDs: 2435946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.2	95.5	P/P	50 - 150
2,4,5-T	88.6	82.6	P/P	50 - 150
Acetaminophen	89.4	89.6	P/P	60 - 160
Acetamiprid	113	114	P/P	50 - 150
Afidopyropen	96.6	119	P/P	50 - 150
Bentazon	121	113	P/P	50 - 160
Benzovindiflupyr	106	105	P/P	50 - 150
Carbamazepine	113	114	P/P	60 - 150
Clothianidin	103	105	P/P	60 - 150
Dinotefuran	117	116	P/P	50 - 150
Diuron	114	112	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121518
Included Lab Sample IDs: 2435946

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	110	109	P/P	60 - 150
Fluridone	102	101	P/P	60 - 160
Hydrocodone	116	118	P/P	60 - 150
Ibuprofen	110	77.3	P/P	50 - 160
Imazapyr	88.8	90.2	P/P	50 - 150
Imidacloprid	99.5	101	P/P	60 - 150
Linuron	121	104	P/P	60 - 150
Mandestrobin	122	114	P/P	50 - 150
MCPP	90.0	89.0	P/P	50 - 150
Naproxen	87.8	74.5	P/P	50 - 160
Primidone	103	105	P/P	60 - 150
Pyraclostrobin	111	111	P/P	60 - 150
Silvex	97.0	83.1	P/P	50 - 150
Thiamethoxam	113	114	P/P	50 - 150
Tolfenpyrad	99.9	103	P/P	60 - 150
Triclopyr	102	89.9	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121535
Included Lab Sample IDs: 2435927, 2435929, 2435931

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	98.9	P/P	90 - 110
Ammonia-N	99.3	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121536
Included Lab Sample IDs: 2435931

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121553
Included Lab Sample IDs: 2435926

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	104	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A121560
Included Lab Sample IDs: 2435928, 2435930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.5	97.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121560
Included Lab Sample IDs: 2435928

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A121560

Included Lab Sample IDs: 2435928

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121637

Included Lab Sample IDs: 2435947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.4	99.5	P/P	90 - 110
Antimony	94.5	95.0	P/P	90 - 110
Arsenic	99.6	101	P/P	90 - 110
Barium	98.6	100	P/P	90 - 110
Beryllium	97.2	98.0	P/P	90 - 110
Boron	99.7	100	P/P	90 - 110
Cadmium	101	99.9	P/P	90 - 110
Chromium	99.4	98.7	P/P	90 - 110
Cobalt	98.0	98.6	P/P	90 - 110
Copper	96.8	98.0	P/P	90 - 110
Lead	93.0	92.6	P/P	90 - 110
Manganese	99.7	99.7	P/P	90 - 110
Molybdenum	98.3	99.4	P/P	90 - 110
Nickel	97.1	98.8	P/P	90 - 110
Selenium	100	101	P/P	90 - 110
Silver	100	99.7	P/P	90 - 110
Thallium	98.8	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121654

Included Lab Sample IDs: 2435927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.5	96.0	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A121658

Included Lab Sample IDs: 2435926

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.1	97.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121676

Included Lab Sample IDs: 2435947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	95.3	94.8	P/P	90 - 110
Iron	95.5	94.6	P/P	90 - 110
Magnesium	95.3	94.1	P/P	90 - 110
Potassium	93.4	92.3	P/P	90 - 110
Sodium	95.1	94.5	P/P	90 - 110
Strontium	100	99.2	P/P	90 - 110
Tin	100	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121676

Included Lab Sample IDs: 2435947

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Titanium	98.5	97.7	P/P	90 - 110
Vanadium	99.0	98.3	P/P	90 - 110
Zinc	100	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121683

Included Lab Sample IDs: 2435929

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	93.8	96.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121689

Included Lab Sample IDs: 2435943

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenytoin	104		P	80 - 120
Sulfentrazone	144*		F	80 - 120

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121694

Included Lab Sample IDs: 2435929, 2435931

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121695

Included Lab Sample IDs: 2435942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	100		P	80 - 120
Alpha-BHC	97.7		P	80 - 120
Alpha-Chlordane	84.8		P	80 - 120
Beta-BHC	97.4		P	80 - 120
Beta-Cyfluthrin	106		P	80 - 120
Bifenthrin	110		P	80 - 120
Chlorothalonil	86.9		P	80 - 120
Cis-Nonachlor	114		P	80 - 120
Cypermethrin	110		P	80 - 120
Dacthal	80.1		P	80 - 120
DDD-p,p'	91.4		P	80 - 120
DDE-p,p'	96.2		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	85.3		P	80 - 120
Deltamethrin	89.9		P	80 - 120
Dichlobenil	95.8		P	80 - 120
Dieldrin	99.9		P	80 - 120
Endosulfan I	87.4		P	80 - 120
Endosulfan II	109		P	80 - 120
Endosulfan Sulfate	86.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121695
Included Lab Sample IDs: 2435942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin	94.1		P	80 - 120
Endrin Aldehyde	98.3		P	80 - 120
Endrin Ketone	109		P	80 - 120
Esfenvalerate	94.2		P	80 - 120
Ethalfuralin	83.7		P	80 - 120
Fenpropathrin	97.4		P	80 - 120
Gamma-BHC	104		P	80 - 120
Gamma-Chlordane	83.8		P	80 - 120
Heptachlor	110		P	80 - 120
Heptachlor Epoxide	81.6		P	80 - 120
Hexachlorobenzene	94.8		P	80 - 120
Kepone	72.7*		F	80 - 120
Lambda-Cyhalothrin	98.7		P	80 - 120
Methoprene	98.2		P	80 - 120
Methoxychlor	119		P	80 - 120
MGK-264	103		P	80 - 120
Mirex	97.5		P	80 - 120
Oxychlordane	97.3		P	80 - 120
Permethrin	105		P	80 - 120
Phenothrin	117		P	80 - 120
Piperonyl Butoxide	117		P	80 - 120
Prallethrin	102		P	80 - 120
Tau-Fluvalinate	86.8		P	80 - 120
Tetramethrin	106		P	80 - 120
Trans-Nonachlor	94.9		P	80 - 120
Triclosan Methyl	87.6		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A121698
Included Lab Sample IDs: 2435927

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	100	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A121716
Included Lab Sample IDs: 2435943

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.8		P	80 - 120
Avobenzene	94.2		P	80 - 120
Dechlorane 602	99.2		P	80 - 120
Dechlorane 603	102		P	80 - 120
Dechlorane Plus	105		P	80 - 120
Hexabromobenzene	92.7		P	80 - 120
Octinoxate	95.9		P	80 - 120
Oxybenzone	102		P	80 - 120
PBB-153	95.3		P	80 - 120
PBDE-47	95.2		P	80 - 120
PBDE-99	96.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121716
Included Lab Sample IDs: 2435943

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pentabromotoluene	102		P	80 - 120
Tetradecachloro-m-terphenyl	96.1		P	80 - 120
Tri-o-cresyl Phosphate	102		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	93.3		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A121719
Included Lab Sample IDs: 2435942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	94.7		P	80 - 120
PCB-1260	93.3		P	80 - 120

Reference Method: EPA 8276
Run ID: A121738
Included Lab Sample IDs: 2435942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	91.6		P	80 - 120
Toxaphene	98.5		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A121761
Included Lab Sample IDs: 2435927, 2435929, 2435931

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	96.9	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A121781
Included Lab Sample IDs: 2435942

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dicofol	94.4		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A121786
Included Lab Sample IDs: 2435927, 2435929, 2435931

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	96.5	P/P	90 - 110
Kjeldahl Nitrogen	96.5	97.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121790
Included Lab Sample IDs: 2435930

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A121927
 Included Lab Sample IDs: 2435943

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	99.1		P	80 - 120
Atrazine	103		P	80 - 120
Atrazine Desethyl	112		P	80 - 120
Azinphos Methyl	94.1		P	80 - 120
Azoxystrobin	100		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	95.6		P	80 - 120
Carbophenothion	103		P	80 - 120
Carfentrazone Ethyl	97.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	97.0		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Coumaphos	92.9		P	80 - 120
Cyanazine	114		P	80 - 120
Cyprodinil	97.6		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	127*		F	80 - 120
Difenoconazole	92.2		P	80 - 120
Dimethenamid	111		P	80 - 120
Dimethomorph	110		P	80 - 120
Disulfoton	108		P	80 - 120
Dithiopyr	108		P	80 - 120
EPTC	109		P	80 - 120
Ethion	114		P	80 - 120
Ethoprop	97.4		P	80 - 120
Etridiazole	107		P	80 - 120
Fenamiphos	93.4		P	80 - 120
Fenbuconazole	106		P	80 - 120
Fipronil	90.9		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	89.4		P	80 - 120
Fipronil Sulfone	95.7		P	80 - 120
Fluazifop-P-butyl	98.6		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	93.5		P	80 - 120
Flutolanil	89.0		P	80 - 120
Fluxapyroxad	95.7		P	80 - 120
Fonofos	99.9		P	80 - 120
Hexazinone	94.3		P	80 - 120
Imazalil	91.4		P	80 - 120
Iprodione	90.7		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	97.4		P	80 - 120
Metalaxyl	111		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	91.4		P	80 - 120
Mevinphos	103		P	80 - 120
Molinate	96.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121927
Included Lab Sample IDs: 2435943

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	97.7		P	80 - 120
Naled	116		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	103		P	80 - 120
Oxadiazon	96.7		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	99.3		P	80 - 120
Pendimethalin	97.9		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	114		P	80 - 120
Prometryn	107		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	110		P	80 - 120
Propargite	93.9		P	80 - 120
Propiconazole	93.0		P	80 - 120
Pyraflufen Ethyl	104		P	80 - 120
Pyridaben	107		P	80 - 120
Pyriproxyfen	97.0		P	80 - 120
Simazine	100		P	80 - 120
Stirophos	89.6		P	80 - 120
Tebuconazole	90.3		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	106		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	109		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	101				1.74	
EPA 180.1 Rev. 2.0	Turbidity	102				5.02	
EPA 200.7 Rev. 4.4	Calcium	102					3.10
	Iron	105	102	105			2.04
	Magnesium	102					2.98
	Potassium	101					1.81
	Sodium	101					1.59
	Strontium	103	102	103			0.661
	Tin	105	94.6	103			8.40
	Titanium	103	103	108			4.34
	Vanadium	104	104	108			3.32
	Zinc	105	101	103			2.29
EPA 200.8 Rev. 5.4	Aluminum	98.8	102	102			0.577
	Antimony	98.8	102	102			0.296
	Arsenic	99.2	110	109			0.987
	Barium	102	104	105			0.384
	Beryllium	91.1	97.8	104			6.15
	Boron	104	99.5	106			1.47
	Cadmium	103	101	99.5			0.993
	Chromium	99.9	93.8	93.8			0.0448
	Cobalt	97.8	96.4	96.5			0.0554
	Copper	96.1	96.0	94.9			1.18
	Lead	95.0	97.7	99.7			2.00
	Manganese	101	93.7	93.2			0.503
	Molybdenum	99.6	109	110			0.287
	Nickel	96.7	94.2	95.4			1.21
	Selenium	99.2	106	104			2.14
	Silver	112	104	105			0.775
	Thallium	103	105	108			2.50
EPA 300.0 Rev. 2.1	Chloride	101	106	106		0.278	
	Sulfate	102	101	104		1.16	
EPA 350.1 Rev. 2.0	Ammonia-N	96.4	104	105			1.34
	Ammonia-N	98.2	98.2	100			2.12
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	107	100	104			2.00
	Kjeldahl Nitrogen	105	89.9	106			14.8
EPA 353.2 Rev. 2.0	NO2NO3-N	96.5	92.0	93.0			1.08
	NO2NO3-N	102	101	102			0.962
EPA 365.1 Rev. 2.0	Total-P	106	101	100			0.673
	Total-P	104	101	101			0.0454
	Total-P	105	106	107			0.795
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	74.7	109	85.3			24.7
	Acetochlor	86.5	87.3	88.9			1.82
	Alachlor	62.6	77.6	88.2			12.9
	Aldrin	64.0	58.6	60.7			3.55
	Alpha-BHC	92.7	91.0	81.6			10.9
	Alpha-Chlordane	64.0	69.8	66.0			5.58
	Ametryn	98.9	103	108			5.07
	Atrazine	79.2	91.4	95.0			2.39
	Atrazine Desethyl	80.2	77.5	80.2			3.45
	Avobenzone	113	108	117			8.57
	Azinphos Methyl	120	155	154			0.395
	Azoxystrobin	70.9	86.8	86.0			0.919

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Beta-BHC	106	134	138		2.66
	Beta-Cyfluthrin	69.9	92.8	83.7		10.4
	Bifenthrin	53.8	82.0	76.3		7.19
	Bromacil	80.3	98.4	97.4		0.926
	Butylate	41.3	57.2	65.3		13.3
	Caffeine	112	110	104		4.82
	Carbophenothion	84.8	89.1	83.9		6.08
	Carfentrazone Ethyl	98.3	90.5	77.3		15.7
	Chlorfenapyr	96.2	107	108		0.681
	Chlorothalonil	90.1	143	147		2.55
	Chlorpyrifos Ethyl	75.5	112	110		2.13
	Chlorpyrifos Methyl	81.2	135	133		1.72
	Cis-Nonachlor	65.1	68.6	63.1		8.47
	Coumaphos	129	194	190		1.91
	Cyanazine	96.9	81.8	86.5		5.53
	Cypermethrin	80.1	115	87.8		27.2
	Cyprodinil	72.0	63.8	67.6		5.81
	Dacthal	80.7	74.6	71.0		4.92
	DDD-p,p'	103	104	102		2.35
	DDE-p,p'	66.7	67.2	67.5		0.434
	DDT-p,p'	116	171	156		9.15
	Dechlorane 602	77.4	82.2	60.0		31.3
	Dechlorane 603	97.9	119	111		6.76
	Dechlorane Plus	96.9	119	95.2		22.0
	Delta-BHC	99.9	115	115		0.491
	Deltamethrin	46.4	59.9	46.6		25.0
	Demeton	49.6	95.9	107		10.9
	Diazinon	82.8	75.3	80.0		5.93
	Dichlobenil	84.5	53.2	63.3		17.3
	Dicofol	74.1	79.9	83.3		4.25
	Dieldrin	70.5	70.1	71.2		1.57
	Difenoconazole	85.4	61.7	70.2		12.8
	Dimethenamid	78.8	81.5	80.6		1.05
	Dimethomorph	100	70.0	83.8		18.0
	Disulfoton	88.8	93.8	104		9.88
	Dithiopyr	73.2	88.1	79.6		10.2
	Endosulfan I	69.6	81.0	76.9		5.20
	Endosulfan II	83.7	93.0	88.7		4.79
	Endosulfan Sulfate	76.5	79.7	70.4		12.4
	Endrin	75.3	78.3	78.9		0.733
	Endrin Aldehyde	70.0	44.0	55.1		22.4
	Endrin Ketone	99.6	87.1	81.8		6.31
	EPTC	39.5	46.5	57.2		20.7
	Esfenvalerate	85.2	115	94.2		20.0
	Ethalfuralin	72.3	66.7	63.0		5.75
	Ethion	105	74.2	60.6		20.2
	Ethoprop	71.2	91.4	85.4		6.80
	Etridiazole	47.2	69.2	83.5		18.8
	Fenamiphos	81.0	95.7	81.1		16.5
	Fenbuconazole	58.9	136	129		5.75
	Fenpropathrin	67.8	82.0	76.1		7.49
	Fipronil	81.5	98.4	96.9		1.52
	Fipronil Desulfinyl	77.3	97.4	95.7		1.62
	Fipronil Sulfide	84.7	86.0	85.4		0.622

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fipronil Sulfone	85.9	104	103			0.145
	Fluazifop-P-butyl	79.2	92.1	101			8.89
	Fludioxonil	62.6	111	112			0.586
	Flumioxazin	99.0	69.7	77.8			11.1
	Flutolanil	47.6	99.1	94.4			4.83
	Fluxapyroxad	89.9	145	131			9.09
	Fonofos	63.5	97.8	97.9			0.0527
	Gamma-BHC	98.5	113	106			6.28
	Gamma-Chlordane	60.0	63.4	67.5			6.28
	Heptachlor	83.6	81.2	89.1			9.23
	Heptachlor Epoxide	72.2	67.1	73.5			9.10
	Hexabromobenzene	52.9	93.2	67.2			32.4
	Hexachlorobenzene	60.7	55.6	57.7			3.56
	Hexazinone	72.7	84.4	85.1			0.673
	Imazalil	80.5	102	108			6.08
	Iprodione	56.5	186	183			2.01
	Kepone	93.7	76.5	77.4			1.06
	Lambda-Cyhalothrin	62.4	93.2	86.7			7.28
	Loratadine	117	185	198			7.04
	Malathion	105	114	118			3.22
	Metalaxyl	86.9	85.3	84.0			1.61
	Methoprene	57.4	80.1	91.5			13.3
	Methoxychlor	113	119	104			13.5
	Metolachlor	85.9	74.1	85.4			6.16
	Metribuzin	71.3	78.7	86.9			7.52
	Mevinphos	71.6	109	109			0.647
	MGK-264	99.2	111	104			6.29
	Mirex	52.5	59.5	55.1			7.58
	Molinate	39.5	62.9	70.9			11.9
	Myclobutanil	56.0	65.6	66.7			1.63
	Naled	24.7	48.4	49.4			1.96
	Napropamide	67.1	89.5	88.4			1.19
	Norflurazon	83.1	85.4	77.3			9.95
	Octinoxate	85.7	98.1	100			2.35
	Oxadiazon	67.0	94.3	92.0			1.32
	Oxybenzone	95.3	107	108			0.578
	Oxychlordane	77.5	86.5	83.4			3.65
	Oxyfluorfen	84.2	78.5	78.0			0.508
	Parathion Ethyl	77.6	84.7	79.3			6.55
	Parathion Methyl	104	171	183			6.60
	PBB-153	76.5	108	98.4			8.85
	PBDE-47	80.2	84.9	70.5			18.5
	PBDE-99	70.6	86.4	61.8			33.2
	PCB-1016	88.9	86.4	88.4			2.31
	PCB-1260	103	84.9	87.1			2.58
	Pendimethalin	99.7	64.9	67.5			3.92
	Pentabromotoluene	70.6	89.1	87.5			1.85
	Permethrin	76.6	97.4	90.6			7.18
	Phenothrin	54.4	76.8	77.7			1.19
	Phenytoln	67.8	41.6	35.6			15.7
	Phorate	78.3	76.7	66.5			14.1
	Piperonyl Butoxide	153	145	136			5.11
	Prallethrin	80.9	92.4	91.3			1.22
	Prodimamine	31.6	81.1	90.3			10.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Prometon	60.5	64.0	71.3		4.93
	Prometryn	88.9	73.7	76.6		3.93
	Pronamide	88.7	90.2	94.3		4.36
	Propanil	85.5	91.2	91.8		0.598
	Propargite	86.1	120	110		9.21
	Propiconazole	56.9	126	110		12.1
	Pyraflufen Ethyl	109	84.4	81.4		3.59
	Pyridaben	110	103	107		3.35
	Pyriproxyfen	97.5	82.8	76.4		7.98
	Simazine	86.2	88.9	94.0		2.56
	Stirophos	83.6	46.8	45.6		2.52
	Sulfentrazone	75.2	173	78.4		75.1
	Tau-Fluvalinate	56.6	98.4	73.2		29.3
	Tebuconazole	81.7	116	102		9.84
	Terbufos	85.1	94.6	104		9.19
	Terbuthylazine	70.6	88.6	91.4		3.15
	Tetradecachloro-m-terphenyl	62.6	95.7	96.9		1.19
	Tetramethrin	95.2	100	77.8		25.3
	Thiobencarb	87.7	80.8	84.4		4.46
	Trans-Nonachlor	65.9	71.9	62.2		14.5
	Tri-o-cresyl Phosphate	95.0	108	109		0.764
	Triadimefon	81.8	69.5	75.6		8.39
	Triclosan Methyl	83.1	85.7	83.0		3.16
	Trifluralin	68.6	65.9	64.1		2.78
	Tris(1-chloro-2-propyl) phosphate (TCPP)	87.0	94.5	97.6		2.82
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.9	98.3	99.4		1.02
	Tris(2-chloroethyl) phosphate (TCEP)	83.6	87.3	88.3		1.15
EPA 8276	Chlordane	76.2	78.9	73.7		6.86
	Toxaphene	93.6	111	101		9.97
EPA 8321B	2,4-D	89.0	105	112		6.19
	2,4,5-T	77.3	106	108		1.74
	Acesulfame K	137	147	144		2.10
	Acetaminophen	70.9	84.0	83.8		0.272
	Acetamiprid	84.3	61.2	62.7		2.54
	Afidopyropen	73.1	73.7	68.9		6.73
	AMPA	83.8	68.0	66.8		1.75
	Bentazon	91.6	57.6	56.6		1.65
	Benzovindiflupyr	82.8	113	110		2.30
	Carbamazepine	89.8	74.8	75.5		1.02
	Clothianidin	89.3	90.5	90.6		0.161
	Dinotefuran	97.3	61.3	60.4		1.49
	Diuron	87.2	64.1	64.3		0.295
	Endothall	100	146	145		0.524
	Fenuron	90.6	48.7	49.4		1.58
	Fluridone	80.5	70.6	66.5		5.92
	Glufosinate	99.2	85.3	90.6		6.02
	Glyphosate	98.6	80.8	88.5		9.12
	Hydrocodone	94.6	59.6	58.3		2.10
	Ibuprofen	77.2	74.2	76.6		3.17
	Imazapyr	74.1	76.0	76.5		0.580
	Imidacloprid	83.5	116	116		0.332

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Linuron	77.8	74.2	73.9		0.444
	Mandestrobin	97.2	107	101		5.32
	MCCP	90.2	117	122		3.92
	Naproxen	64.1	82.6	94.2		13.2
	Primidone	87.1	92.2	88.8		3.70
	Pyraclostrobin	78.3	98.2	97.5		0.746
	Silvex	76.5	110	105		4.77
	Sucralose	94.9	101	97.9		3.11
	Thiamethoxam	91.0	74.7	77.0		3.09
	Tolfenpyrad	42.8	72.6	70.0		3.60
	Triclopyr	82.3	122	117		3.85
SM 2320 B-2011	Total Alkalinity	97.3				
	Total Alkalinity	98.1			1.56	
SM 2540 C-2015	TDS	99.6			2.50	
SM 2540 D-2015	TSS	95.3				
SM 4500-F- C-2011	Fluoride	99.3	99.1	100		1.00
	Fluoride	99.3	102	103		0.473
	Fluoride	100	100	99.0		0.990
SM 5310 B-2011	Organic Carbon	96.3				0.287

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2435926, 2435928, 2435930
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2435926, 2435928, 2435930
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2435947
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2435947
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2435926, 2435928, 2435930
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2435926, 2435928, 2435930
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2435927, 2435929, 2435931
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2435927, 2435929, 2435931
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2435927, 2435929, 2435931
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2435927, 2435929, 2435931
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2435943
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2435942
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2435943
EPA 8270E	PCBs in water matrices by GC/MS/MS	2435942
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2435942
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2435946
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2435926, 2435928, 2435930
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2435926, 2435928, 2435930
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2435926, 2435928, 2435930
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2435926, 2435928, 2435930
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2435927, 2435929, 2435931

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	09/12/2023			09/12/2023 15:19	Chandler E Cox	2435926
	09/12/2023			09/12/2023 15:20	Chandler E Cox	2435928, 2435930
	09/12/2023			09/12/2023 14:38	Khloe J Berg	2435926
EPA 180.1 Rev. 2.0	09/12/2023			09/12/2023 14:40	Khloe J Berg	2435928
	09/12/2023			09/12/2023 14:42	Khloe J Berg	2435930
	09/12/2023	09/18/2023 13:12	George D Taylor	09/20/2023 17:03	McKinley C Carter	2435947
EPA 200.7 Rev. 4.4	09/12/2023	09/18/2023 13:12	George D Taylor	09/20/2023 17:35	McKinley C Carter	2435947
	09/12/2023	09/18/2023 13:12	George D Taylor	09/19/2023 19:51	Emily M Philpot	2435947
	09/12/2023	09/18/2023 13:12	George D Taylor	09/19/2023 21:37	Emily M Philpot	2435947
EPA 200.8 Rev. 5.4	09/12/2023			09/14/2023 00:03	James L Waggeberby	2435926
	09/12/2023			09/14/2023 00:18	James L Waggeberby	2435928
	09/12/2023			09/14/2023 00:34	James L Waggeberby	2435930
EPA 300.0 Rev. 2.1	09/12/2023			09/14/2023 11:32	Khloe J Berg	2435929
	09/12/2023			09/14/2023 11:34	Khloe J Berg	2435931
	09/12/2023			09/14/2023 12:53	Khloe J Berg	2435927
EPA 350.1 Rev. 2.0	09/12/2023	09/25/2023 15:30	Simonne.V. Calhoun	09/27/2023 12:34	Samantha L Bates	2435927
	09/12/2023	09/25/2023 15:30	Simonne.V. Calhoun	09/27/2023 12:50	Samantha L Bates	2435929
	09/12/2023	09/25/2023 15:30	Simonne.V. Calhoun	09/27/2023 12:52	Samantha L Bates	2435931
EPA 351.2 Rev. 2.0	09/12/2023			09/18/2023 15:50	Anna M. Plaviak	2435927
	09/12/2023			09/20/2023 13:06	Anna M. Plaviak	2435929
	09/12/2023			09/20/2023 13:07	Anna M. Plaviak	2435931
EPA 353.2 Rev. 2.0	09/12/2023	09/13/2023 18:31	Adam P Silver	09/14/2023 14:38	James L Waggeberby	2435931
	09/12/2023	09/19/2023 16:30	Alexis Price	09/21/2023 12:06	Simonne.V. Calhoun	2435929
	09/12/2023	09/20/2023 15:00	Alexis Price	09/21/2023 13:16	Simonne.V. Calhoun	2435927
EPA 365.1 Rev. 2.0	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/19/2023 23:44	Arthur Maknenko	2435943
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/20/2023 00:58	Julie Wi	2435943
	09/12/2023	09/13/2023 08:30	Rasheda Ghaffari	09/28/2023 22:31	Julie Wi	2435943
EPA 8270E	09/12/2023	09/18/2023 08:30	Rasheda Ghaffari	09/20/2023 01:30	Julie Wi	2435942
	09/12/2023	09/18/2023 08:30	Rasheda Ghaffari	09/20/2023 21:47	Lipi Saha	2435942
	09/12/2023	09/18/2023 08:30	Rasheda Ghaffari	09/26/2023 23:23	Julie Wi	2435942
EPA 8276	09/12/2023	09/18/2023 08:30	Rasheda Ghaffari	09/22/2023 13:50	Arthur Maknenko	2435942
EPA 8321B	09/12/2023	09/13/2023 08:00	Hana Lee	09/13/2023 11:19	Tae K Lee	2435946
	09/12/2023	09/13/2023 08:00	Hana Lee	09/13/2023 20:56	Tae K Lee	2435946
	09/12/2023	09/13/2023 14:00	Hoor Shaik	09/13/2023 21:50	Juyoung Kim	2435946
SM 2320 B-2011	09/12/2023			09/14/2023 22:19	Dale L. Simmons	2435928
	09/12/2023			09/14/2023 22:33	Dale L. Simmons	2435930
	09/12/2023			09/20/2023 14:14	Adam P Silver	2435926
SM 2540 C-2015	09/12/2023			09/13/2023 15:46	Yijie Li	2435926, 2435928, 2435930
SM 2540 D-2015	09/12/2023			09/13/2023 15:46	Yijie Li	2435926, 2435928, 2435930
SM 4500-F- C-2011	09/12/2023			09/14/2023 08:20	Chandler E Cox	2435926

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500-F- C-2011	09/12/2023			09/14/2023 20:10	Dale L. Simmons	2435928
	09/12/2023			09/27/2023 06:44	Adam P Silver	2435930
SM 5310 B-2011	09/12/2023			09/25/2023 19:15	Elise M. Gillis	2435927
	09/12/2023			09/25/2023 19:28	Elise M. Gillis	2435929
	09/12/2023			09/25/2023 19:51	Elise M. Gillis	2435931