

Chemical Analysis Report

NW-DIST-2023-07-18-02

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

Event Description: **Escambia Bay Run**
Request ID: **RQ-2023-07-17-43**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 04-AUG-2023 10:15

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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: ESCAMBIA BAY SECT D BUOY N12

Collection Date/Time: 07/17/2023 10:05

Field ID: G4NW0029

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424480	EPA 200.7 Rev. 4.4	Calcium	55.3		mg/L	P432700	
		Iron	630		ug/L	P432700	
		Magnesium	158		mg/L	P432700	
		Potassium	48		mg/L	P432700	
		Sodium	1.30E+03		mg/L	P432700	
		Strontium	901		ug/L	P432700	
		Tin	3.0	U	ug/L	P432700	
		Titanium	7.8		ug/L	P432700	
		Vanadium	2.4	I	ug/L	P432700	
		Zinc	5.0	U	ug/L	P432700	
	EPA 200.8 Rev. 5.4	Aluminum	222		ug/L	P432700	
		Antimony	0.061	I	ug/L	P432700	
		Arsenic	1.08		ug/L	P432700	
		Barium	18.6		ug/L	P432700	
		Beryllium	0.030	I	ug/L	P432700	
		Boron	515		ug/L	P432700	
		Cadmium	0.020	U	ug/L	P432700	
		Chromium	0.47	I	ug/L	P432700	
		Cobalt	0.230		ug/L	P432700	
		Copper	0.43	I	ug/L	P432700	
		Lead	0.27	I	ug/L	P432700	
		Manganese	47.5		ug/L	P432700	
		Molybdenum	1.80		ug/L	P432700	
		Nickel	0.50	U	ug/L	P432700	
		Selenium	0.20	U	ug/L	P432700	
		Silver	0.010	U	ug/L	P432700	
		Thallium	0.10	U	ug/L	P432700	
	SM 2340 B-2011	Hardness	788		mg/L	P432700	

Sample Location: ESCAMBIA BAY SEC B BACKGR STA

Collection Date/Time: 07/17/2023 09:45

Field ID: G4NW0025

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424479	EPA 200.7 Rev. 4.4	Calcium	31.1		mg/L	P432700	
		Iron	1.14E+03		ug/L	P432700	
		Magnesium	78.7		mg/L	P432700	
		Potassium	23.9		mg/L	P432700	
		Sodium	630		mg/L	P432700	
		Strontium	464		ug/L	P432700	
		Tin	3.0	U	ug/L	P432700	
		Titanium	12.5		ug/L	P432700	
		Vanadium	2.1	I	ug/L	P432700	
		Zinc	5.0	U	ug/L	P432700	
	EPA 200.8 Rev. 5.4	Aluminum	369		ug/L	P432700	
		Antimony	0.060	I	ug/L	P432700	
		Arsenic	1.06		ug/L	P432700	
		Barium	21.4		ug/L	P432700	
		Beryllium	0.048		ug/L	P432700	
		Boron	273		ug/L	P432700	
		Cadmium	0.020	U	ug/L	P432700	
		Chromium	0.70	I	ug/L	P432700	
		Cobalt	0.353		ug/L	P432700	
		Copper	0.59	I	ug/L	P432700	
		Lead	0.42		ug/L	P432700	
		Manganese	81.7		ug/L	P432700	
		Molybdenum	0.97		ug/L	P432700	
		Nickel	0.67	I	ug/L	P432700	
		Selenium	0.20	U	ug/L	P432700	
		Silver	0.010	U	ug/L	P432700	
		Thallium	0.10	U	ug/L	P432700	
	SM 2340 B-2011	Hardness	402		mg/L	P432700	

Sample Location: TROUT BAYOU

Collection Date/Time: 07/17/2023 10:30

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424452	DEP SOP: NU-094-1	Color (true)	75		PCU	P432649	
	EPA 180.1 Rev. 2.0	Turbidity	6.9		NTU	P432655	
	EPA 300.0 Rev. 2.1	Chloride	2.0E+03		mg Cl/L	P432732	
		Sulfate	280		mg SO4/L	P432734	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P432743	
	SM 2540 C-2015	TDS	3.61E+03	J	mg/L	P433230	
	SM 2540 D-2015	TSS	10	I	mg/L	P433083	
	SM 4500-F- C-2011	Fluoride	0.21		mg F/L	P432746	
2424453	EPA 350.1 Rev. 2.0	Ammonia-N	0.039		mg N/L	P432774	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P433266	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.009	I	mg N/L	P432763	
	EPA 365.1 Rev. 2.0	Total-P	0.026		mg P/L	P432735	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P432840	
2424472	EPA 8321B	Aldicarb	0.020	U	ug/L	P432814	
		Aldicarb Sulfone	0.0020	U	ug/L	P432814	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P432814	MS
		Carbaryl	0.0020	U	ug/L	P432814	MS
		Carbofuran	0.0020	U	ug/L	P432814	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P432814	
		Methiocarb	0.0020	U	ug/L	P432814	MS
		Methomyl	0.0020	U	ug/L	P432814	
		Oxamyl	0.0020	U	ug/L	P432814	
		Propoxur	0.0020	U	ug/L	P432814	MS
2424473		Acesulfame K	0.10	U	ug/L	P432617	
		2,4-D	0.0020	U	ug/L	P432629	
		AMPA	1.0	U	ug/L	P432617	
		2,4,5-T	0.0040	U	ug/L	P432629	
		Acetaminophen	0.0080	U	ug/L	P432629	
		Endothall	0.25	U	ug/L	P432617	
		Acetamiprid	0.0020	U	ug/L	P432629	
		Glufosinate	1.0	U	ug/L	P432617	
		Glyphosate	1.0	U	ug/L	P432617	
		Afidopyropen	0.0020	U	ug/L	P432629	
		Sucralose	0.098		ug/L	P432617	
		Bentazon	8.0E-04	U	ug/L	P432629	
		Benzovindiflupyr	0.0020	U	ug/L	P432629	
		Carbamazepine	8.0E-04	U	ug/L	P432629	
		Clothianidin	0.0020	U	ug/L	P432629	
		Dinotefuran	0.0020	U	ug/L	P432629	
		Diuron	0.0020	U	ug/L	P432629	
		Fenuron	0.032	U	ug/L	P432629	
		Fluridone	8.0E-04	U	ug/L	P432629	
		Imazapyr	0.017		ug/L	P432629	
Hydrocodone	0.0020	U	ug/L	P432629			

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424473	EPA 8321B	Ibuprofen	0.080	U	ug/L	P432629	
		Imidacloprid	0.0024	I	ug/L	P432629	
		Linuron	0.0040	U	ug/L	P432629	
		Mandestrobin	0.0020	U	ug/L	P432629	
		MCP	0.0020	U	ug/L	P432629	
		Naproxen	0.0080	U	ug/L	P432629	
		Primidone	0.0040	U	ug/L	P432629	
		Pyraclostrobin	0.0020	U	ug/L	P432629	
		Silvex	0.0040	U	ug/L	P432629	
		Thiamethoxam	0.0020	U	ug/L	P432629	
		Tolfenpyrad	0.0020	U	ug/L	P432629	
		Triclopyr	0.0040	U	ug/L	P432629	
2424476	EPA 8270E	Aldrin	0.67	U	ng/L	P432706	
		Alpha-BHC	0.10	U	ng/L	P432706	
		Alpha-Chlordane	0.20	U	ng/L	P432706	
		PCB-1016	2.0	U	ng/L	P432706	MS
		Beta-BHC	0.10	U	ng/L	P432706	
		PCB-1221	2.0	U	ng/L	P432706	
		Beta-Cyfluthrin	1.3	U	ng/L	P432706	
		PCB-1232	2.0	U	ng/L	P432706	
		Bifenthrin	0.51	U	ng/L	P432706	
		PCB-1242	2.0	U	ng/L	P432706	
		PCB-1248	2.0	U	ng/L	P432706	
		Chlorothalonil	3.7	U	ng/L	P432706	
		PCB-1254	2.0	U	ng/L	P432706	
		Cis-Nonachlor	0.20	U	ng/L	P432706	
		PCB-1260	2.0	U	ng/L	P432706	MS
		Cypermethrin	1.5	U	ng/L	P432706	
		Dacthal	0.15	U	ng/L	P432706	
		DDD-p,p'	0.26	U	ng/L	P432706	
		DDE-p,p'	0.20	U	ng/L	P432706	
		DDT-p,p'	0.82	U	ng/L	P432706	
		Delta-BHC	0.41	U	ng/L	P432706	
		Deltamethrin	1.3	U	ng/L	P432706	
		Dichlobenil	0.26	U	ng/L	P432706	
		Dicofol	1.3	U	ng/L	P432706	
		Dieldrin	0.41	U	ng/L	P432706	
		Endosulfan I	0.41	U	ng/L	P432706	
		Endosulfan II	0.92	U	ng/L	P432706	
		Endosulfan Sulfate	0.31	U	ng/L	P432706	
		Endrin	0.92	U	ng/L	P432706	
		Endrin Aldehyde	0.77	U	ng/L	P432706	
		Endrin Ketone	0.41	U	ng/L	P432706	
		Esfenvalerate	0.77	U	ng/L	P432706	
		Ethalfuralin	0.15	U	ng/L	P432706	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424476	EPA 8270E	Fenpropathrin	0.26	U	ng/L	P432706	
		Gamma-BHC	0.13	U	ng/L	P432706	
		Gamma-Chlordane	0.20	U	ng/L	P432706	
		Heptachlor	0.20	U	ng/L	P432706	
		Heptachlor Epoxide	0.26	U	ng/L	P432706	
		Hexachlorobenzene**	1.0	U	ng/L	P432706	
		Kepone	14	UJ	ng/L	P432706	CCV
		Lambda-Cyhalothrin	0.77	U	ng/L	P432706	
		Methoprene	0.77	U	ng/L	P432706	
		Methoxychlor	0.31	U	ng/L	P432706	
		MGK-264	0.20	U	ng/L	P432706	
		Mirex	0.36	U	ng/L	P432706	
		Oxychlordane	0.31	U	ng/L	P432706	
		Permethrin	1.6	U	ng/L	P432706	
		Phenothrin	0.92	U	ng/L	P432706	
		Piperonyl Butoxide	0.49	I	ng/L	P432706	
		Prallethrin	2.0	U	ng/L	P432706	
		Tau-Fluvalinate	0.26	U	ng/L	P432706	
		Tetramethrin	0.77	U	ng/L	P432706	
		Trans-Nonachlor	0.20	U	ng/L	P432706	
		Triclosan Methyl	0.15	U	ng/L	P432706	
		Trifluralin	0.20	U	ng/L	P432706	
	EPA 8276	Chlordane	2.0	U	ng/L	P432706	MS
		Toxaphene	37	I	ng/L	P432706	
2424477	EPA 8270E	Oxybenzone**	10	U	ng/L	P432528	
		Acetochlor	0.20	U	ng/L	P432528	
		Octinoxate**	290	I	ng/L	P432528	
		Alachlor	0.41	U	ng/L	P432528	MS
		Avobenzone**	100	U	ng/L	P432528	
		Ametryn	1.1	U	ng/L	P432528	
		Atrazine	4.0		ng/L	P432528	
		PBDE-47**	4.1	U	ng/L	P432528	
		Atrazine Desethyl	1.3	U	ng/L	P432528	
		PBDE-99**	5.1	U	ng/L	P432528	
		Azinphos Methyl	3.1	UJ	ng/L	P432528	CCV
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P432528	
		Azoxystrobin	0.41	U	ng/L	P432528	
		Bromacil	0.61	U	ng/L	P432528	
		2-Ethylhexyl	12	U	ng/L	P432528	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P432528	
		Dechlorane Plus**	31	U	ng/L	P432528	
		Caffeine**	27	I	ng/L	P432528	
		Dechlorane 602**	5.1	U	ng/L	P432528	RPD
		Carbophenothion	0.51	U	ng/L	P432528	MS, RPD

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424477	EPA 8270E	Dechlorane 603**	4.1	U	ng/L	P432528	
		Carfentrazone Ethyl	0.15	U	ng/L	P432528	
		Hexabromobenzene**	6.1	U	ng/L	P432528	
		Chlorfenapyr	0.31	U	ng/L	P432528	RPD
		PBB-153**	8.1	U	ng/L	P432528	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P432528	
		Pentabromotoluene**	3.1	U	ng/L	P432528	
		Chlorpyrifos Methyl	0.10	U	ng/L	P432528	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P432528	
		Coumaphos	1.1	U	ng/L	P432528	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	17	I	ng/L	P432528	
		Cyanazine	5.1	U	ng/L	P432528	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.5	U	ng/L	P432528	
		Cyprodinil	0.20	U	ng/L	P432528	
		Tetradecachloro-m-terphenyl**	7.6	UJ	ng/L	P432528	CCV, LCS, RPD
		Demeton	3.6	U	ng/L	P432528	
		Diazinon	0.13	U	ng/L	P432528	
		Difenoconazole	0.61	U	ng/L	P432528	
		Dimethenamid	0.10	U	ng/L	P432528	
		Dimethomorph	0.31	U	ng/L	P432528	
		Disulfoton	0.61	U	ng/L	P432528	
		Dithiopyr	1.0	U	ng/L	P432528	RPD
		EPTC	0.51	U	ng/L	P432528	
		Ethion	0.31	U	ng/L	P432528	
		Ethoprop	0.13	U	ng/L	P432528	
		Etridiazole	0.10	U	ng/L	P432528	
		Fenamiphos	0.46	U	ng/L	P432528	
		Fenbuconazole	0.51	UJ	ng/L	P432528	LCS
		Fipronil	0.20	U	ng/L	P432528	
		Fipronil Desulfinyl**	0.10	U	ng/L	P432528	
		Fipronil Sulfide	0.13	I	ng/L	P432528	
		Fipronil Sulfone	0.41	I	ng/L	P432528	
		Fluazifop-P-butyl	0.10	U	ng/L	P432528	
		Fludioxonil	0.10	U	ng/L	P432528	
		Flumioxazin	3.1	U	ng/L	P432528	
		Flutolanil	0.10	U	ng/L	P432528	
		Fluxapyroxad	0.25	U	ng/L	P432528	
		Fonofos	0.15	U	ng/L	P432528	
		Hexazinone	0.51	U	ng/L	P432528	
		Imazalil	0.66	U	ng/L	P432528	
		Iprodione	0.51	U	ng/L	P432528	
		Loratadine**	0.31	U	ng/L	P432528	
		Malathion	0.36	U	ng/L	P432528	
		Metalaxyl	0.51	U	ng/L	P432528	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2424477	EPA 8270E	Metolachlor	0.76	U	ng/L	P432528	
		Metribuzin	0.41	U	ng/L	P432528	
		Mevinphos	1.0	U	ng/L	P432528	
		Molinate	0.25	U	ng/L	P432528	
		Myclobutanil	0.36	U	ng/L	P432528	
		Naled	2.5	U	ng/L	P432528	
		Napropamide	0.71	U	ng/L	P432528	
		Norflurazon	1.0	U	ng/L	P432528	
		Oxadiazon	0.36	U	ng/L	P432528	
		Oxyfluorfen	0.20	U	ng/L	P432528	
		Parathion Ethyl	0.15	U	ng/L	P432528	
		Parathion Methyl	0.20	U	ng/L	P432528	
		Pendimethalin	0.76	U	ng/L	P432528	
		Phenytol**	5.4	U	ng/L	P432528	
		Phorate	0.25	U	ng/L	P432528	
		Prodiamine	0.20	U	ng/L	P432528	
		Prometon	3.1	U	ng/L	P432528	
		Prometryn	0.36	U	ng/L	P432528	
		Pronamide	0.10	U	ng/L	P432528	
		Propanil	0.10	U	ng/L	P432528	
		Propargite	0.81	U	ng/L	P432528	
		Propiconazole	0.61	U	ng/L	P432528	
		Pyraflufen Ethyl	0.31	U	ng/L	P432528	RPD
		Pyridaben	1.4	U	ng/L	P432528	
		Pyriproxyfen	0.25	UJ	ng/L	P432528	CCV
		Simazine	0.25	U	ng/L	P432528	
		Stirophos	0.41	U	ng/L	P432528	
		Sulfentrazone	1.4	U	ng/L	P432528	
		Tebuconazole	1.4	U	ng/L	P432528	
		Terbufos	0.20	U	ng/L	P432528	
		Terbuthylazine	0.20	U	ng/L	P432528	
		Thiobencarb	0.51	U	ng/L	P432528	
		Triadimefon	0.15	U	ng/L	P432528	

Ref. Method and Comment:

SM 2540 C-2015: Constant dry weight was not attained.

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

EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

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

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. 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: P432649

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432655

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432700

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: P432700

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: P432732

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: P432734

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432774

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433266

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432763

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432735

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

Reference Method: EPA 8270E
Batch ID: P432528

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432528

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432528

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432528

Component	Result	Code	Units
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
Prodiatone	0.20	U	ng/L
Prodiatone	0.20	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432528

Component	Result	Code	Units
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: P432706

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432706

Component	Result	Code	Units
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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432706

Component	Result	Code	Units
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
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: P432706

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: P432617

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: P432629

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P432629

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
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P432814

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P432743

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P433230

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P433083

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P432746

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P432840

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: P432649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432700

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	104		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	102		P	85 - 115
Sodium	103		P	85 - 115
Strontium	98.2		P	85 - 115
Tin	101		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	99.9		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432700

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.4		P	80 - 120
Antimony	99.3		P	80 - 120
Arsenic	99.7		P	80 - 120
Barium	102		P	80 - 120
Beryllium	97.0		P	80 - 120
Boron	99.7		P	80 - 120
Cadmium	97.3		P	80 - 120
Chromium	95.7		P	80 - 120
Cobalt	101		P	80 - 120
Copper	98.3		P	80 - 120
Lead	94.3		P	80 - 120
Manganese	97.2		P	80 - 120
Molybdenum	97.1		P	80 - 120
Nickel	99.4		P	80 - 120
Selenium	99.1		P	80 - 120
Silver	103		P	80 - 120
Thallium	96.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432732

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: P432734

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433266

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432763

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432735

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

Reference Method: EPA 8270E
Batch ID: P432528

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	65.1		P	42 - 162
Acetochlor	92.2		P	69 - 123
Alachlor	81.3		P	65 - 118
Ametryn	113		P	58 - 141
Atrazine	85.0		P	73 - 118
Atrazine Desethyl	94.3		P	32 - 125
Avobenzone	126		P	40 - 203
Azinphos Methyl	50.6		P	36 - 197
Azoxystrobin	84.5		P	58 - 226
Bromacil	93.3		P	48 - 120
Butylate	58.1		P	27 - 85.0
Caffeine	82.6		P	40 - 137
Carbophenothion	90.6		P	54 - 132
Carfentrazone Ethyl	96.6		P	60 - 142
Chlorfenapyr	82.2		P	53 - 117
Chlorpyrifos Ethyl	97.7		P	59 - 116
Chlorpyrifos Methyl	96.9		P	66 - 119
Coumaphos	52.4		P	11 - 234
Cyanazine	125		P	61 - 248
Cyprodinil	95.0		P	50 - 147
Dechlorane 602	80.7		P	50 - 150
Dechlorane 603	84.4		P	50 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432528

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dechlorane Plus	80.4		P	47 - 182
Demeton	79.3		P	30 - 138
Diazinon	105		P	67 - 126
Difenoconazole	55.5		P	38 - 205
Dimethenamid	77.4		P	57 - 111
Dimethomorph	72.7		P	16 - 212
Disulfoton	95.8		P	46 - 126
Dithiopyr	102		P	62 - 115
EPTC	52.0		P	28 - 80.0
Ethion	82.4		P	24 - 122
Ethoprop	91.3		P	62 - 113
Etridiazole	59.8		P	28 - 92.0
Fenamiphos	93.2		P	57 - 128
Fenbuconazole	29.7		F	52 - 155
Fipronil	76.7		P	63 - 130
Fipronil Desulfinyl	96.6		P	61 - 130
Fipronil Sulfide	87.5		P	56 - 117
Fipronil Sulfone	83.3		P	52 - 118
Fluazifop-P-butyl	111		P	61 - 128
Fludioxonil	79.2		P	59 - 129
Flumioxazin	67.1		P	30 - 250
Flutolanil	85.6		P	53 - 127
Fluxapyroxad	81.0		P	42 - 132
Fonofos	84.3		P	61 - 110
Hexabromobenzene	63.3		P	50 - 150
Hexazinone	101		P	46 - 139
Imazalil	75.5		P	40 - 139
Iprodione	79.9		P	40 - 146
Loratadine	66.9		P	10 - 224
Malathion	82.3		P	61 - 135
Metalaxyl	88.9		P	58 - 121
Metolachlor	96.8		P	64 - 118
Metribuzin	125		P	45 - 245
Mevinphos	71.3		P	49 - 118
Molinate	52.6		P	42 - 92.0
Myclobutanil	90.9		P	55 - 127
Naled	33.1		P	10 - 114
Napropamide	91.2		P	39 - 121
Norflurazon	83.8		P	55 - 129
Octinoxate	108		P	26 - 166
Oxadiazon	86.9		P	54 - 115
Oxybenzone	114		P	49 - 135
Oxyfluorfen	111		P	64 - 139
Parathion Ethyl	94.5		P	70 - 111
Parathion Methyl	107		P	76 - 136
PBB-153	77.0		P	50 - 150
PBDE-47	88.9		P	41 - 148
PBDE-99	69.6		P	38 - 147
Pendimethalin	94.9		P	52 - 118
Pentabromotoluene	79.2		P	50 - 150
Phenytoin	73.4		P	10 - 162
Phorate	89.6		P	40 - 122

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432528

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prodiamine	39.3		P	26 - 141
Prometon	103		P	54 - 122
Prometryn	102		P	61 - 128
Pronamide	111		P	72 - 121
Propanil	105		P	45 - 144
Propargite	90.8		P	10 - 199
Propiconazole	62.2		P	56 - 127
Pyraflufen Ethyl	93.0		P	56 - 140
Pyridaben	51.1		P	26 - 211
Pyriproxyfen	67.4		P	33 - 194
Simazine	77.1		P	67 - 121
Stirophos	87.8		P	20 - 142
Sulfentrazone	71.3		P	21 - 144
Tebuconazole	79.4		P	10 - 122
Terbufos	103		P	60 - 129
Terbutylazine	83.7		P	69 - 113
Tetradecachloro-m-terphenyl	59.1		F	70 - 200
Thiobencarb	89.2		P	51 - 120
Tri-o-cresyl Phosphate	106		P	49 - 150
Triadimefon	87.8		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	125		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.3		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	112		P	70 - 180

Reference Method: EPA 8270E

Batch ID: P432706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.6		P	30 - 96.0
Alpha-BHC	82.0		P	70 - 109
Alpha-Chlordane	72.8		P	45 - 107
Beta-BHC	70.4		P	64 - 138
Beta-Cyfluthrin	66.6		P	17 - 141
Bifenthrin	57.6		P	10 - 113
Chlorothalonil	36.2		P	26 - 180
Cis-Nonachlor	74.8		P	37 - 102
Cypermethrin	101		P	20 - 133
Dacthal	85.2		P	69 - 114
DDD-p,p'	80.2		P	42 - 105
DDE-p,p'	75.5		P	42 - 106
DDT-p,p'	85.3		P	42 - 107
Delta-BHC	88.7		P	67 - 144
Deltamethrin	89.3		P	15 - 149
Dichlobenil	85.1		P	46 - 117
Dicofol	63.2		P	34 - 114
Dieldrin	87.3		P	50 - 108
Endosulfan I	89.4		P	55 - 104
Endosulfan II	78.0		P	51 - 111
Endosulfan Sulfate	87.7		P	56 - 121
Endrin	76.7		P	10 - 106
Endrin Aldehyde	77.4		P	34 - 114
Endrin Ketone	95.3		P	63 - 177

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Esfenvalerate	94.6		P	29 - 143
Ethalfuralin	65.6		P	46 - 96.0
Fenpropathrin	85.3		P	28 - 115
Gamma-BHC	84.8		P	65 - 121
Gamma-Chlordane	74.8		P	39 - 103
Heptachlor	67.0		P	39 - 94.0
Heptachlor Epoxide	86.3		P	54 - 104
Hexachlorobenzene	76.4		P	36 - 100
Kepone	35.1		P	10 - 225
Lambda-Cyhalothrin	78.2		P	10 - 135
Methoprene	60.6		P	10 - 109
Methoxychlor	79.6		P	52 - 112
MGK-264	93.9		P	44 - 117
Mirex	60.2		P	20 - 90.0
Oxychlordane	82.2		P	44 - 102
PCB-1016	73.4		P	45 - 107
PCB-1260	77.7		P	40 - 112
Permethrin	87.2		P	18 - 135
Phenothrin	76.4		P	10 - 102
Piperonyl Butoxide	143		P	28 - 156
Prallethrin	81.9		P	28 - 113
Tau-Fluvalinate	73.7		P	10 - 123
Tetramethrin	118		P	18 - 158
Trans-Nonachlor	74.0		P	39 - 104
Triclosan Methyl	83.9		P	54 - 108
Trifluralin	63.7		P	46 - 97.0

Reference Method: EPA 8276

Batch ID: P432706

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.7		P	52 - 117
Toxaphene	88.8		P	44 - 125

Reference Method: EPA 8321B

Batch ID: P432617

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	98.1		P	40 - 150
AMPA	126		P	40 - 150
Endothall	110		P	40 - 150
Glufosinate	84.1		P	40 - 150
Glyphosate	86.3		P	40 - 150
Sucralose	107		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	82.0		P	40 - 150
2,4,5-T	68.9		P	40 - 150
Acetaminophen	70.7		P	30 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P432629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetamiprid	75.7		P	40 - 150
Afidopyropen	69.0		P	30 - 150
Bentazon	131		P	30 - 150
Benzovindiflupyr	92.3		P	40 - 150
Carbamazepine	75.3		P	40 - 150
Clothianidin	84.8		P	40 - 150
Dinotefuran	92.3		P	40 - 150
Diuron	71.7		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	92.6		P	40 - 150
Hydrocodone	84.7		P	40 - 150
Ibuprofen	67.9		P	40 - 150
Imazapyr	84.9		P	40 - 150
Imidacloprid	77.9		P	40 - 150
Linuron	69.3		P	40 - 150
Mandestrobin	91.3		P	40 - 150
MCPP	84.3		P	40 - 150
Naproxen	72.8		P	40 - 150
Primidone	78.8		P	40 - 150
Pyraclostrobin	87.3		P	40 - 150
Silvex	77.1		P	40 - 150
Thiamethoxam	91.3		P	40 - 150
Tolfenpyrad	60.6		P	30 - 150
Triclopyr	68.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	67.6		P	40 - 150
Aldicarb	66.9		P	30 - 150
Aldicarb Sulfone	78.3		P	40 - 150
Aldicarb Sulfoxide	78.5		P	40 - 150
Carbaryl	60.3		P	40 - 150
Carbofuran	73.5		P	40 - 150
Methiocarb	56.9		P	40 - 150
Methomyl	79.3		P	40 - 150
Oxamyl	78.8		P	40 - 150
Propoxur	66.4		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P432743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.0		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P433230

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P433083

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	103		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P432746

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

Reference Method: SM 5310 B-2011
Batch ID: P432840

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P432700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424324	Calcium	98.8		P	80 - 120
2424324	Iron	108	106	P/P	80 - 120
2424324	Magnesium	101		P	80 - 120
2424324	Potassium	108	106	P/P	80 - 120
2424324	Sodium	106	105	P/P	80 - 120
2424324	Strontium	102	101	P/P	80 - 120
2424324	Tin	103	99.9	P/P	80 - 120
2424324	Titanium	106	104	P/P	80 - 120
2424324	Vanadium	106	104	P/P	80 - 120
2424324	Zinc	101	98.3	P/P	80 - 120
2424542	Calcium	103		P	80 - 120
2424542	Iron	106		P	80 - 120
2424542	Magnesium	103		P	80 - 120
2424542	Potassium	107		P	80 - 120
2424542	Sodium	102		P	80 - 120
2424542	Strontium	99.3		P	80 - 120
2424542	Tin	99.5		P	80 - 120
2424542	Titanium	101		P	80 - 120
2424542	Vanadium	102		P	80 - 120
2424542	Zinc	103		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P432700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424324	Aluminum	95.9	96.0	P/P	80 - 120
2424324	Antimony	101	99.5	P/P	80 - 120
2424324	Arsenic	100	98.7	P/P	80 - 120
2424324	Barium	102	102	P/P	80 - 120
2424324	Beryllium	97.1	95.4	P/P	80 - 120
2424324	Boron	98.5	98.0	P/P	80 - 120
2424324	Cadmium	99.4	96.3	P/P	80 - 120
2424324	Chromium	99.1	97.6	P/P	80 - 120
2424324	Cobalt	97.3	95.9	P/P	80 - 120
2424324	Copper	94.2	93.2	P/P	80 - 120
2424324	Lead	94.9	93.8	P/P	80 - 120
2424324	Manganese	96.1	93.7	P/P	80 - 120
2424324	Molybdenum	99.1	97.9	P/P	80 - 120
2424324	Nickel	95.1	93.5	P/P	80 - 120
2424324	Selenium	100	97.4	P/P	80 - 120
2424324	Silver	103	102	P/P	80 - 120
2424324	Thallium	100	100	P/P	80 - 120
2424542	Aluminum	99.3		P	80 - 120
2424542	Antimony	99.3		P	80 - 120
2424542	Arsenic	98.7		P	80 - 120
2424542	Barium	100		P	80 - 120
2424542	Beryllium	93.3		P	80 - 120
2424542	Boron	102		P	80 - 120
2424542	Cadmium	97.8		P	80 - 120
2424542	Chromium	96.3		P	80 - 120
2424542	Cobalt	98.2		P	80 - 120
2424542	Copper	98.6		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P432700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424542	Lead	94.9		P	80 - 120
2424542	Manganese	96.4		P	80 - 120
2424542	Molybdenum	96.6		P	80 - 120
2424542	Nickel	95.7		P	80 - 120
2424542	Selenium	99.9		P	80 - 120
2424542	Silver	101		P	80 - 120
2424542	Thallium	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P432732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424386	Chloride	103		P	90 - 110
2424505	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P432734

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424386	Sulfate	98.6		P	90 - 110
2424505	Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P432774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424446	Ammonia-N	106	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P433266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2426250	Kjeldahl Nitrogen	108	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P432763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424402	NO2NO3-N	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P432735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424446	Total-P	91.8	92.6	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P432528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424015	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	108	92.7	P/P	26 - 165
2424015	Acetochlor	90.5	90.4	P/P	67 - 124

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424015	Alachlor	116	123	P/F	60 - 120
2424015	Ametryn	113	109	P/P	54 - 216
2424015	Atrazine Desethyl	88.3	112	P/P	15 - 122
2424015	Avobenzone	118	110	P/P	37 - 178
2424015	Azinphos Methyl	64.2	66.0	P/P	40 - 292
2424015	Bromacil	104	107	P/P	45 - 127
2424015	Butylate	75.1	52.2	P/P	20 - 83.0
2424015	Carbophenothion	90.8	129	P/F	57 - 127
2424015	Carfentrazone Ethyl	103	132	P/P	51 - 141
2424015	Chlorfenapyr	79.2	105	P/P	46 - 111
2424015	Chlorpyrifos Ethyl	101	104	P/P	52 - 120
2424015	Chlorpyrifos Methyl	75.8	84.7	P/P	63 - 119
2424015	Coumaphos	121	132	P/P	10 - 228
2424015	Cyanazine	180	194	P/P	59 - 241
2424015	Cyprodinil	87.2	110	P/P	47 - 146
2424015	Dechlorane 602	92.1	65.2	P/P	50 - 150
2424015	Dechlorane 603	88.0	75.9	P/P	50 - 150
2424015	Dechlorane Plus	72.4	71.2	P/P	50 - 150
2424015	Demeton	78.5	85.4	P/P	40 - 136
2424015	Diazinon	86.5	108	P/P	69 - 132
2424015	Difenoconazole	130	104	P/P	57 - 258
2424015	Dimethenamid	74.6	76.3	P/P	54 - 110
2424015	Dimethomorph	170	160	P/P	28 - 210
2424015	Disulfoton	90.8	98.6	P/P	43 - 133
2424015	Dithiopyr	68.9	51.3	P/P	39 - 116
2424015	EPTC	62.8	48.2	P/P	20 - 78.0
2424015	Ethion	75.4	50.7	P/P	17 - 119
2424015	Ethoprop	90.9	101	P/P	66 - 120
2424015	Etridiazole	79.8	64.8	P/P	28 - 96.0
2424015	Fenamiphos	113	117	P/P	41 - 126
2424015	Fenbuconazole	76.5	77.8	P/P	42 - 169
2424015	Fipronil	91.5	108	P/P	61 - 132
2424015	Fipronil Desulfinyl	80.9	93.1	P/P	56 - 132
2424015	Fipronil Sulfide	92.1	113	P/P	48 - 119
2424015	Fipronil Sulfone	103	99.8	P/P	42 - 131
2424015	Fluazifop-P-butyl	86.8	119	P/P	53 - 131
2424015	Fludioxonil	68.8	78.8	P/P	56 - 127
2424015	Flumioxazin	153	115	P/P	19 - 300
2424015	Flutolanil	90.5	98.0	P/P	41 - 127
2424015	Fluxapyroxad	121	93.2	P/P	42 - 172
2424015	Fonofos	70.3	91.3	P/P	59 - 113
2424015	Hexabromobenzene	109	111	P/P	50 - 150
2424015	Hexazinone	103	101	P/P	66 - 122
2424015	Imazalil	90.7	86.3	P/P	21 - 283
2424015	Iprodione	101	92.8	P/P	43 - 150
2424015	Loratadine	150	140	P/P	23 - 201
2424015	Malathion	75.9	78.4	P/P	58 - 136
2424015	Metalaxyl	97.3	88.7	P/P	55 - 120
2424015	Metribuzin	93.8	99.7	P/P	58 - 294
2424015	Mevinphos	85.3	86.6	P/P	50 - 126
2424015	Molinate	63.9	54.1	P/P	42 - 93.0
2424015	Myclobutanil	99.4	106	P/P	55 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432528

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424015	Naled	33.9	42.4	P/P	18 - 200
2424015	Napropamide	88.3	78.8	P/P	39 - 110
2424015	Norflurazon	97.1	112	P/P	48 - 128
2424015	Octinoxate	103	108	P/P	21 - 159
2424015	Oxybenzone	110	112	P/P	41 - 142
2424015	Oxyfluorfen	128	132	P/P	64 - 153
2424015	Parathion Ethyl	104	101	P/P	69 - 114
2424015	Parathion Methyl	91.4	105	P/P	79 - 139
2424015	PBB-153	106	99.9	P/P	50 - 150
2424015	PBDE-47	104	81.6	P/P	27 - 144
2424015	PBDE-99	97.6	74.3	P/P	18 - 150
2424015	Pendimethalin	95.0	106	P/P	50 - 139
2424015	Pentabromotoluene	92.9	96.8	P/P	50 - 150
2424015	Phenytoin	45.1	21.6	P/P	10 - 146
2424015	Phorate	89.3	100	P/P	54 - 161
2424015	Prodiamine	39.4	50.9	P/P	30 - 161
2424015	Prometon	128	126	P/P	45 - 134
2424015	Prometryn	63.2	56.5	P/P	45 - 137
2424015	Pronamide	113	117	P/P	65 - 133
2424015	Propanil	100	105	P/P	49 - 142
2424015	Propargite	111	84.7	P/P	10 - 203
2424015	Pyraflufen Ethyl	83.8	120	P/P	34 - 153
2424015	Pyriproxyfen	93.6	84.9	P/P	33 - 180
2424015	Simazine	124	126	P/P	51 - 157
2424015	Stirophos	39.0	25.3	P/P	10 - 128
2424015	Sulfentrazone	57.1	67.9	P/P	53 - 186
2424015	Tebuconazole	100	63.0	P/P	10 - 133
2424015	Terbufos	97.0	120	P/P	65 - 139
2424015	Terbutylazine	73.6	89.7	P/P	66 - 117
2424015	Tetradecachloro-m-terphenyl	77.6	105	P/P	70 - 200
2424015	Thiobencarb	93.2	97.9	P/P	51 - 119
2424015	Tri-o-cresyl Phosphate	108	108	P/P	31 - 144
2424015	Triadimefon	94.2	98.9	P/P	48 - 119
2424015	Tris(1-chloro-2-propyl) phosphate (TCPP)	112	118	P/P	50 - 150
2424015	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.4	95.6	P/P	50 - 150
2424015	Tris(2-chloroethyl) phosphate (TCEP)	108	111	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P432706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424476	Aldrin	60.2	54.5	P/P	24 - 81.0
2424476	Alpha-BHC	75.6	76.4	P/P	65 - 110
2424476	Alpha-Chlordane	69.9	84.2	P/P	43 - 119
2424476	Beta-BHC	61.8	63.0	P/P	54 - 165
2424476	Beta-Cyfluthrin	99.1	94.8	P/P	27 - 165
2424476	Bifenthrin	95.8	103	P/P	17 - 117
2424476	Chlorothalonil	76.5	90.1	P/P	10 - 255
2424476	Cis-Nonachlor	69.0	69.4	P/P	34 - 98.0
2424476	Cypermethrin	136	137	P/P	25 - 143
2424476	Dacthal	74.7	85.6	P/P	55 - 139
2424476	DDD-p,p'	69.4	69.9	P/P	30 - 109

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424476	DDE-p,p'	75.3	69.2	P/P	35 - 106
2424476	DDT-p,p'	98.5	97.7	P/P	41 - 101
2424476	Delta-BHC	83.2	89.8	P/P	58 - 165
2424476	Deltamethrin	122	134	P/P	10 - 194
2424476	Dichlobenil	28.5	30.6	P/P	22 - 114
2424476	Dicofol	65.8	63.2	P/P	17 - 133
2424476	Dieldrin	88.1	82.9	P/P	45 - 129
2424476	Endosulfan I	89.4	90.9	P/P	49 - 104
2424476	Endosulfan II	66.5	63.1	P/P	37 - 117
2424476	Endosulfan Sulfate	70.1	67.6	P/P	38 - 128
2424476	Endrin	74.0	68.6	P/P	35 - 116
2424476	Endrin Aldehyde	42.6	45.4	P/P	19 - 108
2424476	Endrin Ketone	81.3	78.7	P/P	44 - 134
2424476	Esfenvalerate	140	151	P/P	27 - 176
2424476	Ethalfuralin	67.7	71.4	P/P	49 - 100
2424476	Fenpropathrin	114	110	P/P	34 - 117
2424476	Gamma-BHC	98.6	91.7	P/P	59 - 129
2424476	Gamma-Chlordane	73.5	73.7	P/P	33 - 107
2424476	Heptachlor	85.2	74.2	P/P	37 - 94.0
2424476	Heptachlor Epoxide	83.6	88.4	P/P	38 - 118
2424476	Hexachlorobenzene	72.5	72.5	P/P	35 - 97.0
2424476	Kepone	16.1	12.2	P/P	10 - 221
2424476	Lambda-Cyhalothrin	122	129	P/P	23 - 190
2424476	Methoprene	80.8	87.2	P/P	21 - 109
2424476	Methoxychlor	72.1	75.0	P/P	46 - 118
2424476	MGK-264	90.2	85.7	P/P	39 - 122
2424476	Mirex	64.1	61.3	P/P	25 - 90.0
2424476	Oxychlordane	91.9	93.5	P/P	42 - 100
2424476	Permethrin	123	136	P/P	33 - 181
2424476	Phenothrin	109	123	P/P	12 - 125
2424476	Piperonyl Butoxide	143	153	P/P	10 - 178
2424476	Prallethrin	73.9	73.5	P/P	24 - 122
2424476	Tau-Fluvalinate	133	138	P/P	13 - 151
2424476	Tetramethrin	120	133	P/P	16 - 172
2424476	Trans-Nonachlor	70.0	73.5	P/P	39 - 100
2424476	Triclosan Methyl	75.6	76.2	P/P	43 - 110
2424476	Trifluralin	64.7	66.1	P/P	45 - 94.0
2424521	PCB-1016	44.5	41.1	F/F	45 - 107
2424521	PCB-1260	29.1	28.5	F/F	40 - 112

Reference Method: EPA 8276

Batch ID: P432706

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424521	Chlordane	34.7	36.3	F/F	43 - 123
2424521	Toxaphene	43.3	38.7	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P432617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424524	Acesulfame K	130	136	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P432617

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424524	AMPA	83.7	80.8	P/P	40 - 150
2424524	Endothall	94.5	97.2	P/P	40 - 150
2424524	Glufosinate	63.7	65.6	P/P	40 - 150
2424524	Glyphosate	63.0	62.6	P/P	40 - 150
2424524	Sucralose	109	113	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424473	2,4-D	98.9	90.0	P/P	40 - 150
2424473	2,4,5-T	97.9	82.2	P/P	40 - 150
2424473	Acetaminophen	73.7	70.9	P/P	30 - 150
2424473	Acetamiprid	58.0	48.3	P/P	40 - 150
2424473	Afidopyropen	64.3	48.0	P/P	30 - 150
2424473	Bentazon	85.2	79.3	P/P	30 - 150
2424473	Benzovindiflupyr	83.9	77.2	P/P	40 - 150
2424473	Carbamazepine	51.8	46.5	P/P	40 - 150
2424473	Clothianidin	76.5	70.0	P/P	40 - 150
2424473	Dinotefuran	69.1	70.9	P/P	40 - 150
2424473	Diuron	40.4	45.0	P/P	40 - 150
2424473	Fenuron	58.2	51.4	P/P	40 - 150
2424473	Fluridone	76.7	71.5	P/P	40 - 150
2424473	Hydrocodone	60.9	59.2	P/P	40 - 150
2424473	Ibuprofen	65.0	51.8	P/P	40 - 150
2424473	Imazapyr	90.2	83.5	P/P	40 - 150
2424473	Imidacloprid	108	99.2	P/P	40 - 150
2424473	Linuron	47.0	52.0	P/P	40 - 150
2424473	Mandestrobin	82.9	74.6	P/P	40 - 150
2424473	MCPP	105	99.5	P/P	40 - 150
2424473	Naproxen	86.0	77.7	P/P	40 - 150
2424473	Primidone	78.4	66.6	P/P	40 - 150
2424473	Pyraclostrobin	82.9	73.2	P/P	40 - 150
2424473	Silvex	91.1	90.1	P/P	40 - 150
2424473	Thiamethoxam	71.6	69.1	P/P	40 - 150
2424473	Tolfenpyrad	61.4	52.6	P/P	30 - 150
2424473	Triclopyr	89.6	77.6	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424488	3-Hydroxycarbofuran	49.1	50.2	P/P	40 - 150
2424488	Aldicarb	42.9	34.2	P/P	30 - 150
2424488	Aldicarb Sulfone	60.1	61.6	P/P	40 - 150
2424488	Aldicarb Sulfoxide	25.2	26.5	F/F	40 - 150
2424488	Carbaryl	42.7	37.8	P/F	40 - 150
2424488	Carbofuran	43.5	42.2	P/P	40 - 150
2424488	Methiocarb	39.2	45.2	F/P	40 - 150
2424488	Methomyl	60.8	50.9	P/P	40 - 150
2424488	Oxamyl	60.2	59.2	P/P	40 - 150
2424488	Propoxur	40.8	38.8	P/F	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P432746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424548	Fluoride	102	103	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P432840

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424453	Organic Carbon	93.6	95.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P432649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424414	Color (true)	3.24	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424316	Turbidity	2.07	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424324	Calcium	1.17	Spike	P	0 - 20
2424324	Iron	1.06	Spike	P	0 - 20
2424324	Magnesium	0.734	Spike	P	0 - 20
2424324	Potassium	1.26	Spike	P	0 - 20
2424324	Sodium	0.550	Spike	P	0 - 20
2424324	Strontium	1.06	Spike	P	0 - 20
2424324	Tin	2.88	Spike	P	0 - 20
2424324	Titanium	2.07	Spike	P	0 - 20
2424324	Vanadium	1.78	Spike	P	0 - 20
2424324	Zinc	2.58	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424324	Aluminum	0.139	Spike	P	0 - 20
2424324	Antimony	1.41	Spike	P	0 - 20
2424324	Arsenic	1.23	Spike	P	0 - 20
2424324	Barium	0.237	Spike	P	0 - 20
2424324	Beryllium	1.73	Spike	P	0 - 20
2424324	Boron	0.447	Spike	P	0 - 20
2424324	Cadmium	3.15	Spike	P	0 - 20
2424324	Chromium	1.51	Spike	P	0 - 20
2424324	Cobalt	1.44	Spike	P	0 - 20
2424324	Copper	1.08	Spike	P	0 - 20
2424324	Lead	1.17	Spike	P	0 - 20
2424324	Manganese	1.64	Spike	P	0 - 20
2424324	Molybdenum	1.18	Spike	P	0 - 20
2424324	Nickel	1.67	Spike	P	0 - 20
2424324	Selenium	2.92	Spike	P	0 - 20
2424324	Silver	0.145	Spike	P	0 - 20
2424324	Thallium	0.393	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424386	Chloride	0.685	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P432734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424386	Sulfate	2.07	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424446	Ammonia-N	0.509	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2426250	Kjeldahl Nitrogen	3.27	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424402	NO2NO3-N	0.535	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424446	Total-P	0.762	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P432528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424015	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	14.8	Spike	P	0 - 37
2424015	Acetochlor	0.0708	Spike	P	0 - 28
2424015	Alachlor	5.74	Spike	P	0 - 30
2424015	Ametryn	3.84	Spike	P	0 - 32
2424015	Atrazine	4.49	Spike	P	0 - 41
2424015	Atrazine Desethyl	13.4	Spike	P	0 - 36
2424015	Avobenzene	7.21	Spike	P	0 - 36
2424015	Azinphos Methyl	2.82	Spike	P	0 - 75
2424015	Azoxystrobin	22.4	Spike	P	0 - 39

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P432528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424015	Bromacil	2.15	Spike	P	0 - 33
2424015	Butylate	35.9	Spike	P	0 - 44
2424015	Caffeine	7.26	Spike	P	0 - 74
2424015	Carbophenothion	34.6	Spike	F	0 - 25
2424015	Carfentrazone Ethyl	24.8	Spike	P	0 - 27
2424015	Chlorfenapyr	27.9	Spike	F	0 - 24
2424015	Chlorpyrifos Ethyl	2.17	Spike	P	0 - 26
2424015	Chlorpyrifos Methyl	11.1	Spike	P	0 - 26
2424015	Coumaphos	8.28	Spike	P	0 - 28
2424015	Cyanazine	7.55	Spike	P	0 - 48
2424015	Cyprodinil	23.4	Spike	P	0 - 29
2424015	Dechlorane 602	34.1	Spike	F	0 - 30
2424015	Dechlorane 603	14.8	Spike	P	0 - 30
2424015	Dechlorane Plus	1.68	Spike	P	0 - 30
2424015	Demeton	8.43	Spike	P	0 - 33
2424015	Diazinon	22.5	Spike	P	0 - 29
2424015	Difenoconazole	22.3	Spike	P	0 - 34
2424015	Dimethenamid	2.23	Spike	P	0 - 39
2424015	Dimethomorph	5.94	Spike	P	0 - 51
2424015	Disulfoton	8.26	Spike	P	0 - 30
2424015	Dithiopyr	29.3	Spike	F	0 - 26
2424015	EPTC	26.2	Spike	P	0 - 43
2424015	Ethion	39.1	Spike	P	0 - 79
2424015	Ethoprop	10.1	Spike	P	0 - 29
2424015	Etridiazole	20.7	Spike	P	0 - 33
2424015	Fenamiphos	3.28	Spike	P	0 - 40
2424015	Fenbuconazole	1.70	Spike	P	0 - 74
2424015	Fipronil	14.7	Spike	P	0 - 29
2424015	Fipronil Desulfinyl	9.81	Spike	P	0 - 32
2424015	Fipronil Sulfide	14.4	Spike	P	0 - 30
2424015	Fipronil Sulfone	2.33	Spike	P	0 - 33
2424015	Fluazifop-P-butyl	31.3	Spike	P	0 - 38
2424015	Fludioxonil	13.5	Spike	P	0 - 29
2424015	Flumioxazin	28.6	Spike	P	0 - 51
2424015	Flutolanil	7.97	Spike	P	0 - 25
2424015	Fluxapyroxad	14.8	Spike	P	0 - 45
2424015	Fonofos	25.9	Spike	P	0 - 27
2424015	Hexabromobenzene	2.31	Spike	P	0 - 30
2424015	Hexazinone	1.56	Spike	P	0 - 30
2424015	Imazalil	4.95	Spike	P	0 - 100
2424015	Iprodione	8.47	Spike	P	0 - 33
2424015	Loratadine	6.31	Spike	P	0 - 56
2424015	Malathion	3.29	Spike	P	0 - 37
2424015	Metalaxyl	9.26	Spike	P	0 - 40
2424015	Metolachlor	1.35	Spike	P	0 - 29
2424015	Metribuzin	6.07	Spike	P	0 - 45
2424015	Mevinphos	1.46	Spike	P	0 - 29
2424015	Molinate	16.7	Spike	P	0 - 33
2424015	Myclobutanil	4.61	Spike	P	0 - 26
2424015	Naled	22.2	Spike	P	0 - 37
2424015	Napropamide	11.3	Spike	P	0 - 44

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P432528

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424015	Norflurazon	14.5	Spike	P	0 - 30
2424015	Octinoxate	4.50	Spike	P	0 - 45
2424015	Oxadiazon	0.657	Spike	P	0 - 28
2424015	Oxybenzone	1.34	Spike	P	0 - 46
2424015	Oxyfluorfen	3.23	Spike	P	0 - 28
2424015	Parathion Ethyl	2.68	Spike	P	0 - 31
2424015	Parathion Methyl	13.9	Spike	P	0 - 29
2424015	PBB-153	5.91	Spike	P	0 - 30
2424015	PBDE-47	23.7	Spike	P	0 - 36
2424015	PBDE-99	27.2	Spike	P	0 - 40
2424015	Pendimethalin	11.2	Spike	P	0 - 33
2424015	Pentabromotoluene	4.04	Spike	P	0 - 30
2424015	Phenytoin	70.7	Spike	P	0 - 100
2424015	Phorate	11.3	Spike	P	0 - 36
2424015	Prodiamine	25.5	Spike	P	0 - 71
2424015	Prometon	1.62	Spike	P	0 - 36
2424015	Prometryn	11.2	Spike	P	0 - 28
2424015	Pronamide	3.36	Spike	P	0 - 24
2424015	Propanil	3.74	Spike	P	0 - 28
2424015	Propargite	26.6	Spike	P	0 - 43
2424015	Propiconazole	23.0	Spike	P	0 - 33
2424015	Pyraflufen Ethyl	35.7	Spike	F	0 - 29
2424015	Pyridaben	6.16	Spike	P	0 - 30
2424015	Pyriproxyfen	9.76	Spike	P	0 - 79
2424015	Simazine	1.47	Spike	P	0 - 29
2424015	Stirophos	42.4	Spike	P	0 - 61
2424015	Sulfentrazone	12.0	Spike	P	0 - 33
2424015	Tebuconazole	37.0	Spike	P	0 - 69
2424015	Terbufos	21.6	Spike	P	0 - 29
2424015	Terbutylazine	19.7	Spike	P	0 - 32
2424015	Tetradecachloro-m-terphenyl	30.4	Spike	F	0 - 30
2424015	Thiobencarb	4.93	Spike	P	0 - 26
2424015	Tri-o-cresyl Phosphate	0.802	Spike	P	0 - 33
2424015	Triadimefon	4.47	Spike	P	0 - 28
2424015	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.01	Spike	P	0 - 30
2424015	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.744	Spike	P	0 - 30
2424015	Tris(2-chloroethyl) phosphate (TCEP)	3.16	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P432706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424476	Aldrin	9.99	Spike	P	0 - 41
2424476	Alpha-BHC	1.03	Spike	P	0 - 25
2424476	Alpha-Chlordane	18.6	Spike	P	0 - 32
2424476	Beta-BHC	1.91	Spike	P	0 - 33
2424476	Beta-Cyfluthrin	4.48	Spike	P	0 - 43
2424476	Bifenthrin	6.89	Spike	P	0 - 52
2424476	Chlorothalonil	16.4	Spike	P	0 - 82
2424476	Cis-Nonachlor	0.499	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P432706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424476	Cypermethrin	0.525	Spike	P	0 - 51
2424476	Dacthal	13.6	Spike	P	0 - 27
2424476	DDD-p,p'	0.738	Spike	P	0 - 39
2424476	DDE-p,p'	8.40	Spike	P	0 - 31
2424476	DDT-p,p'	0.801	Spike	P	0 - 29
2424476	Delta-BHC	7.65	Spike	P	0 - 35
2424476	Deltamethrin	9.79	Spike	P	0 - 100
2424476	Dichlobenil	7.06	Spike	P	0 - 40
2424476	Dicofol	3.92	Spike	P	0 - 37
2424476	Dieldrin	6.07	Spike	P	0 - 27
2424476	Endosulfan I	1.64	Spike	P	0 - 23
2424476	Endosulfan II	5.27	Spike	P	0 - 34
2424476	Endosulfan Sulfate	3.74	Spike	P	0 - 36
2424476	Endrin	7.65	Spike	P	0 - 45
2424476	Endrin Aldehyde	6.37	Spike	P	0 - 76
2424476	Endrin Ketone	3.25	Spike	P	0 - 43
2424476	Esfenvalerate	7.38	Spike	P	0 - 51
2424476	Ethalfuralin	5.29	Spike	P	0 - 22
2424476	Fenpropathrin	3.32	Spike	P	0 - 49
2424476	Gamma-BHC	7.23	Spike	P	0 - 28
2424476	Gamma-Chlordane	0.191	Spike	P	0 - 40
2424476	Heptachlor	13.7	Spike	P	0 - 29
2424476	Heptachlor Epoxide	5.50	Spike	P	0 - 33
2424476	Hexachlorobenzene	0.0517	Spike	P	0 - 36
2424476	Kepone	27.6	Spike	P	0 - 85
2424476	Lambda-Cyhalothrin	5.93	Spike	P	0 - 55
2424476	Methoprene	7.65	Spike	P	0 - 53
2424476	Methoxychlor	4.01	Spike	P	0 - 50
2424476	MGK-264	5.08	Spike	P	0 - 43
2424476	Mirex	4.55	Spike	P	0 - 40
2424476	Oxychlordane	1.70	Spike	P	0 - 31
2424476	Permethrin	9.75	Spike	P	0 - 50
2424476	Phenothrin	11.4	Spike	P	0 - 58
2424476	Piperonyl Butoxide	6.18	Spike	P	0 - 100
2424476	Prallethrin	0.565	Spike	P	0 - 39
2424476	Tau-Fluvalinate	3.72	Spike	P	0 - 54
2424476	Tetramethrin	10.1	Spike	P	0 - 51
2424476	Trans-Nonachlor	4.84	Spike	P	0 - 39
2424476	Triclosan Methyl	0.815	Spike	P	0 - 31
2424476	Trifluralin	2.14	Spike	P	0 - 22
2424521	PCB-1016	7.85	Spike	P	0 - 25
2424521	PCB-1260	2.30	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P432706

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424521	Chlordane	4.69	Spike	P	0 - 28
2424521	Toxaphene	8.93	Spike	P	0 - 27

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P432617

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424524	Acesulfame K	3.94	Spike	P	0 - 30
2424524	AMPA	3.60	Spike	P	0 - 30
2424524	Endothall	2.85	Spike	P	0 - 30
2424524	Glufosinate	3.00	Spike	P	0 - 30
2424524	Glyphosate	0.581	Spike	P	0 - 30
2424524	Sucralose	3.45	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P432629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424473	2,4-D	9.44	Spike	P	0 - 30
2424473	2,4,5-T	17.5	Spike	P	0 - 30
2424473	Acetaminophen	3.84	Spike	P	0 - 30
2424473	Acetamiprid	18.3	Spike	P	0 - 30
2424473	Afidopyropen	28.9	Spike	P	0 - 30
2424473	Bentazon	7.25	Spike	P	0 - 30
2424473	Benzovindiflupyr	8.31	Spike	P	0 - 30
2424473	Carbamazepine	10.8	Spike	P	0 - 30
2424473	Clothianidin	8.83	Spike	P	0 - 30
2424473	Dinotefuran	2.56	Spike	P	0 - 30
2424473	Diuron	10.6	Spike	P	0 - 30
2424473	Fenuron	12.3	Spike	P	0 - 30
2424473	Fluridone	6.96	Spike	P	0 - 30
2424473	Hydrocodone	2.85	Spike	P	0 - 30
2424473	Ibuprofen	22.7	Spike	P	0 - 30
2424473	Imazapyr	6.22	Spike	P	0 - 30
2424473	Imidacloprid	8.13	Spike	P	0 - 30
2424473	Linuron	10.2	Spike	P	0 - 30
2424473	Mandestrobin	10.5	Spike	P	0 - 30
2424473	MCPP	5.55	Spike	P	0 - 30
2424473	Naproxen	10.2	Spike	P	0 - 30
2424473	Primidone	16.3	Spike	P	0 - 30
2424473	Pyraclostrobin	12.5	Spike	P	0 - 30
2424473	Silvex	1.10	Spike	P	0 - 30
2424473	Thiamethoxam	3.45	Spike	P	0 - 30
2424473	Tolfenpyrad	15.4	Spike	P	0 - 30
2424473	Triclopyr	14.4	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P432814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424488	3-Hydroxycarbofuran	2.09	Spike	P	0 - 30
2424488	Aldicarb	22.6	Spike	P	0 - 30
2424488	Aldicarb Sulfone	2.59	Spike	P	0 - 30
2424488	Aldicarb Sulfoxide	5.06	Spike	P	0 - 30
2424488	Carbaryl	12.3	Spike	P	0 - 30
2424488	Carbofuran	3.07	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P432814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424488	Methiocarb	14.2	Spike	P	0 - 30
2424488	Methomyl	17.8	Spike	P	0 - 30
2424488	Oxamyl	1.74	Spike	P	0 - 30
2424488	Propoxur	4.93	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P432743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424548	Total Alkalinity	0.463	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P433230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424465	TDS	4.86	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P432746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424548	Fluoride	0.953	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P432840

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424453	Organic Carbon	0.971	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2424472
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	41.3	P	30 - 160

Lab Sample ID: 2424473
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	70.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	48.1	P	30 - 160
EPA 8321B	Diuron-d6	32.1	P	30 - 160
EPA 8321B	Endothall-d6	86.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	53.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.5	P	30 - 160
EPA 8321B	Primidone-d5	74.5	P	30 - 160
EPA 8321B	Sucralose-d6	75.0	P	30 - 160

Lab Sample ID: 2424476
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	76.4	P	37 - 129
EPA 8270E	Decachlorobiphenyl	105	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	54.3	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	59.6	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	51.2	P	28 - 102
EPA 8276	PCNB	76.6	P	49 - 115

Lab Sample ID: 2424477
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.6	P	20 - 200
EPA 8270E	Simazine-d10	79.4	P	62 - 142
EPA 8270E	Terbufos-d10	81.7	P	58 - 132
EPA 8270E	Terphenyl-d14	86.6	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A120464

Included Lab Sample IDs: 2424452

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	103	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120467

Included Lab Sample IDs: 2424452

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A120479

Included Lab Sample IDs: 2424452

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	100	99.7	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A120504

Included Lab Sample IDs: 2424473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	105	115	P/P	60 - 160
Sucralose	95.5	102	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A120505

Included Lab Sample IDs: 2424473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	83.0	105	P/P	60 - 160
Endothall	99.7	125	P/P	60 - 160
Glufosinate	87.7	80.1	P/P	60 - 160
Glyphosate	98.3	94.5	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A120511

Included Lab Sample IDs: 2424452

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.8	95.6	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120511

Included Lab Sample IDs: 2424452

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	106	105	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120513

Included Lab Sample IDs: 2424453

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120518

Included Lab Sample IDs: 2424453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	97.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A120538

Included Lab Sample IDs: 2424479, 2424480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	102	P/P	90 - 110
Iron	104	104	P/P	90 - 110
Magnesium	103	103	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Sodium	103	103	P/P	90 - 110
Strontium	100	102	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	100	100	P/P	90 - 110
Vanadium	100	101	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120540

Included Lab Sample IDs: 2424479, 2424480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.0	98.9	P/P	90 - 110
Antimony	96.4	98.1	P/P	90 - 110
Arsenic	96.5	97.5	P/P	90 - 110
Barium	97.4	99.4	P/P	90 - 110
Beryllium	93.5	94.8	P/P	90 - 110
Boron	97.2	97.9	P/P	90 - 110
Cadmium	96.6	97.3	P/P	90 - 110
Chromium	94.3	96.9	P/P	90 - 110
Cobalt	97.0	97.7	P/P	90 - 110
Copper	95.3	94.6	P/P	90 - 110
Lead	93.0	93.6	P/P	90 - 110
Manganese	97.5	97.6	P/P	90 - 110
Molybdenum	94.9	96.1	P/P	90 - 110
Nickel	95.3	95.7	P/P	90 - 110
Selenium	97.1	97.9	P/P	90 - 110
Silver	98.6	100	P/P	90 - 110
Thallium	96.8	97.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A120546
 Included Lab Sample IDs: 2424477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.5		P	80 - 120
Alachlor	92.5		P	80 - 120
Ametryn	98.8		P	80 - 120
Atrazine	92.1		P	80 - 120
Atrazine Desethyl	115		P	80 - 120
Azinphos Methyl	186*		F	80 - 120
Azoxystrobin	98.5		P	80 - 120
Bromacil	99.4		P	80 - 120
Butylate	98.5		P	80 - 120
Caffeine	105		P	80 - 120
Carbophenothion	100		P	80 - 120
Carfentrazone Ethyl	101		P	80 - 120
Chlorfenapyr	86.2		P	80 - 120
Chlorpyrifos Ethyl	90.0		P	80 - 120
Chlorpyrifos Methyl	98.7		P	80 - 120
Coumaphos	98.9		P	80 - 120
Cyanazine	113		P	80 - 120
Cyprodinil	105		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	99.4		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Dimethomorph	90.6		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	111		P	80 - 120
EPTC	96.4		P	80 - 120
Ethion	90.5		P	80 - 120
Ethoprop	95.2		P	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	92.8		P	80 - 120
Fenbuconazole	85.0		P	80 - 120
Fipronil	91.4		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	107		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	96.5		P	80 - 120
Fludioxonil	102		P	80 - 120
Flumioxazin	96.0		P	80 - 120
Flutolanil	104		P	80 - 120
Fluxapyroxad	105		P	80 - 120
Fonofos	97.1		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	105		P	80 - 120
Iprodione	90.9		P	80 - 120
Loratadine	90.3		P	80 - 120
Malathion	84.9		P	80 - 120
Metalaxyl	95.6		P	80 - 120
Metolachlor	97.8		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	84.5		P	80 - 120
Molinate	82.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120546
Included Lab Sample IDs: 2424477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	93.6		P	80 - 120
Naled	106		P	80 - 120
Napropamide	108		P	80 - 120
Norflurazon	106		P	80 - 120
Oxadiazon	103		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	95.8		P	80 - 120
Parathion Methyl	87.1		P	80 - 120
Pendimethalin	98.1		P	80 - 120
Phenytoin	100		P	80 - 120
Phorate	99.9		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	99.3		P	80 - 120
Pronamide	104		P	80 - 120
Propanil	117		P	80 - 120
Propargite	99.2		P	80 - 120
Propiconazole	87.9		P	80 - 120
Pyraflufen Ethyl	103		P	80 - 120
Pyridaben	99.1		P	80 - 120
Pyriproxyfen	152*		F	80 - 120
Simazine	84.1		P	80 - 120
Stiophos	91.5		P	80 - 120
Sulfentrazone	95.2		P	80 - 120
Tebuconazole	104		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	90.5		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	107		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A120551
Included Lab Sample IDs: 2424453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.9	95.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A120569
Included Lab Sample IDs: 2424480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	95.3	95.9	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A120570
Included Lab Sample IDs: 2424477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.9		P	80 - 120
Avobenzene	99.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120570
Included Lab Sample IDs: 2424477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dechlorane 602	99.0		P	80 - 120
Dechlorane 603	95.4		P	80 - 120
Dechlorane Plus	95.8		P	80 - 120
Hexabromobenzene	96.8		P	80 - 120
Octinoxate	92.3		P	80 - 120
Oxybenzone	95.3		P	80 - 120
PBB-153	97.4		P	80 - 120
PBDE-47	96.2		P	80 - 120
PBDE-99	97.5		P	80 - 120
Pentabromotoluene	97.0		P	80 - 120
Tetradecachloro-m-terphenyl	125*		F	80 - 120
Tri-o-cresyl Phosphate	100		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	91.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.0		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	93.0		P	80 - 120

Reference Method: EPA 8321B
Run ID: A120571
Included Lab Sample IDs: 2424473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	105	104	P/P	50 - 150
2,4,5-T	96.3	99.5	P/P	50 - 150
3-Hydroxycarbofuran	106	103	P/P	60 - 150
Acetaminophen	120	106	P/P	60 - 160
Acetamiprid	123	123	P/P	50 - 150
Afidopyropen	110	115	P/P	50 - 150
Aldicarb	104	113	P/P	60 - 150
Aldicarb Sulfone	106	103	P/P	50 - 150
Aldicarb Sulfoxide	111	105	P/P	50 - 150
Bentazon	133	127	P/P	50 - 160
Benzovindiflupyr	113	111	P/P	50 - 150
Carbamazepine	118	125	P/P	60 - 150
Carbaryl	119	121	P/P	60 - 150
Carbofuran	109	122	P/P	50 - 150
Clothianidin	124	118	P/P	60 - 150
Dinotefuran	125	108	P/P	50 - 150
Diuron	132	131	P/P	60 - 160
Fenuron	116	112	P/P	60 - 150
Fluridone	126	128	P/P	60 - 160
Hydrocodone	123	117	P/P	60 - 150
Ibuprofen	87.9	75.4	P/P	50 - 160
Imazapyr	110	97.2	P/P	50 - 150
Imidacloprid	101	102	P/P	60 - 150
Linuron	103	97.2	P/P	60 - 150
Mandestrobin	116	118	P/P	50 - 150
MCPP	108	101	P/P	50 - 150
Methiocarb	103	110	P/P	50 - 150
Methomyl	113	120	P/P	50 - 150
Naproxen	87.3	75.3	P/P	50 - 160
Oxamyl	105	108	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A120571
Included Lab Sample IDs: 2424473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	118	96.6	P/P	60 - 150
Propoxur	108	113	P/P	50 - 150
Pyraclostrobin	123	121	P/P	60 - 150
Silvex	102	98.8	P/P	50 - 150
Thiamethoxam	119	134	P/P	50 - 150
Tolfenpyrad	107	117	P/P	60 - 150
Triclopyr	99.9	100	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A120572
Included Lab Sample IDs: 2424476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	103		P	80 - 120
PCB-1260	106		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A120585
Included Lab Sample IDs: 2424453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A120595
Included Lab Sample IDs: 2424476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	106		P	80 - 120
Alpha-BHC	98.6		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	100		P	80 - 120
Beta-Cyfluthrin	101		P	80 - 120
Bifenthrin	101		P	80 - 120
Chlorothalonil	106		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	112		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	112		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	96.8		P	80 - 120
Deltamethrin	96.1		P	80 - 120
Dichlobenil	112		P	80 - 120
Dicofol	92.7		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	112		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	107		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A120595
Included Lab Sample IDs: 2424476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Ketone	99.4		P	80 - 120
Esfenvalerate	113		P	80 - 120
Ethalfuralin	104		P	80 - 120
Fenpropathrin	110		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	92.5		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	106		P	80 - 120
Kepone	25.0*		F	80 - 120
Lambda-Cyhalothrin	114		P	80 - 120
Methoprene	107		P	80 - 120
Methoxychlor	98.1		P	80 - 120
MGK-264	106		P	80 - 120
Mirex	103		P	80 - 120
Oxychlordane	106		P	80 - 120
Permethrin	112		P	80 - 120
Phenothrin	111		P	80 - 120
Piperonyl Butoxide	111		P	80 - 120
Prallethrin	100		P	80 - 120
Tau-Fluvalinate	103		P	80 - 120
Tetramethrin	107		P	80 - 120
Trans-Nonachlor	98.9		P	80 - 120
Triclosan Methyl	96.6		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8276
Run ID: A120633
Included Lab Sample IDs: 2424476

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.2		P	80 - 120
Toxaphene	100		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A120795
Included Lab Sample IDs: 2424453

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.0	99.1	P/P	90 - 110

* 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)	102					3.24	
EPA 180.1 Rev. 2.0	Turbidity	99.2					2.07	
EPA 200.7 Rev. 4.4	Calcium	104	98.8	103				1.17
	Iron	104	108	106	106			1.06
	Magnesium	105	101	103				0.734
	Potassium	102	108	106	107			1.26
	Sodium	103	106	105	102			0.550
	Strontium	98.2	102	101	99.3			1.06
	Tin	101	103	99.9	99.5			2.88
	Titanium	100	106	104	101			2.07
	Vanadium	99.9	106	104	102			1.78
	Zinc	100	101	98.3	103			2.58
EPA 200.8 Rev. 5.4	Aluminum	98.4	95.9	96.0	99.3			0.139
	Antimony	99.3	101	99.5	99.3			1.41
	Arsenic	99.7	100	98.7	98.7			1.23
	Barium	102	102	102	100			0.237
	Beryllium	97.0	97.1	95.4	93.3			1.73
	Boron	99.7	98.5	98.0	102			0.447
	Cadmium	97.3	99.4	96.3	97.8			3.15
	Chromium	95.7	99.1	97.6	96.3			1.51
	Cobalt	101	97.3	95.9	98.2			1.44
	Copper	98.3	94.2	93.2	98.6			1.08
	Lead	94.3	94.9	93.8	94.9			1.17
	Manganese	97.2	96.1	93.7	96.4			1.64
	Molybdenum	97.1	99.1	97.9	96.6			1.18
	Nickel	99.4	95.1	93.5	95.7			1.67
	Selenium	99.1	100	97.4	99.9			2.92
	Silver	103	103	102	101			0.145
	Thallium	96.2	100	100	100			0.393
EPA 300.0 Rev. 2.1	Chloride	101	103	102			0.685	
	Sulfate	98.3	98.6	96.9			2.07	
EPA 350.1 Rev. 2.0	Ammonia-N	93.6	106	106				0.509
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	108	103				3.27
EPA 353.2 Rev. 2.0	NO2NO3-N	104	104	102				0.535
EPA 365.1 Rev. 2.0	Total-P	101	91.8	92.6				0.762
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	65.1	108	92.7				14.8
	Acetochlor	92.2	90.5	90.4				0.0708
	Alachlor	81.3	116	123				5.74
	Aldrin	61.6	60.2	54.5				9.99
	Alpha-BHC	82.0	75.6	76.4				1.03
	Alpha-Chlordane	72.8	69.9	84.2				18.6
	Ametryn	113	113	109				3.84
	Atrazine	85.0						4.49
	Atrazine Desethyl	94.3	88.3	112				13.4
	Avobenzone	126	118	110				7.21
	Azinphos Methyl	50.6	64.2	66.0				2.82
	Azoxystrobin	84.5						22.4
	Beta-BHC	70.4	61.8	63.0				1.91
	Beta-Cyfluthrin	66.6	99.1	94.8				4.48
	Bifenthrin	57.6	95.8	103				6.89
	Bromacil	93.3	104	107				2.15
	Butylate	58.1	75.1	52.2				35.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Caffeine	82.6					7.26
	Carbophenothion	90.6	90.8	129			34.6
	Carfentrazone Ethyl	96.6	103	132			24.8
	Chlorfenapyr	82.2	79.2	105			27.9
	Chlorothalonil	36.2	76.5	90.1			16.4
	Chlorpyrifos Ethyl	97.7	101	104			2.17
	Chlorpyrifos Methyl	96.9	75.8	84.7			11.1
	Cis-Nonachlor	74.8	69.0	69.4			0.499
	Coumaphos	52.4	121	132			8.28
	Cyanazine	125	180	194			7.55
	Cypermethrin	101	136	137			0.525
	Cyprodinil	95.0	87.2	110			23.4
	Dacthal	85.2	74.7	85.6			13.6
	DDD-p,p'	80.2	69.4	69.9			0.738
	DDE-p,p'	75.5	75.3	69.2			8.40
	DDT-p,p'	85.3	98.5	97.7			0.801
	Dechlorane 602	80.7	92.1	65.2			34.1
	Dechlorane 603	84.4	88.0	75.9			14.8
	Dechlorane Plus	80.4	72.4	71.2			1.68
	Delta-BHC	88.7	83.2	89.8			7.65
	Deltamethrin	89.3	122	134			9.79
	Demeton	79.3	78.5	85.4			8.43
	Diazinon	105	86.5	108			22.5
	Dichlobenil	85.1	28.5	30.6			7.06
	Dicofol	63.2	65.8	63.2			3.92
	Dieldrin	87.3	88.1	82.9			6.07
	Difenoconazole	55.5	130	104			22.3
	Dimethenamid	77.4	74.6	76.3			2.23
	Dimethomorph	72.7	170	160			5.94
	Disulfoton	95.8	90.8	98.6			8.26
	Dithiopyr	102	68.9	51.3			29.3
	Endosulfan I	89.4	89.4	90.9			1.64
	Endosulfan II	78.0	66.5	63.1			5.27
	Endosulfan Sulfate	87.7	70.1	67.6			3.74
	Endrin	76.7	74.0	68.6			7.65
	Endrin Aldehyde	77.4	42.6	45.4			6.37
	Endrin Ketone	95.3	81.3	78.7			3.25
	EPTC	52.0	62.8	48.2			26.2
	Esfenvalerate	94.6	140	151			7.38
	Ethalfuralin	65.6	67.7	71.4			5.29
	Ethion	82.4	75.4	50.7			39.1
	Ethoprop	91.3	90.9	101			10.1
	Etridiazole	59.8	79.8	64.8			20.7
	Fenamiphos	93.2	113	117			3.28
	Fenbuconazole	29.7	76.5	77.8			1.70
	Fenpropathrin	85.3	114	110			3.32
	Fipronil	76.7	91.5	108			14.7
	Fipronil Desulfanyl	96.6	80.9	93.1			9.81
	Fipronil Sulfide	87.5	92.1	113			14.4
	Fipronil Sulfone	83.3	103	99.8			2.33
	Fluazifop-P-butyl	111	86.8	119			31.3
	Fludioxonil	79.2	68.8	78.8			13.5
	Flumioxazin	67.1	153	115			28.6
	Flutolanil	85.6	90.5	98.0			7.97

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Fluxapyroxad	81.0	121	93.2		14.8
	Fonofos	84.3	70.3	91.3		25.9
	Gamma-BHC	84.8	98.6	91.7		7.23
	Gamma-Chlordane	74.8	73.5	73.7		0.191
	Heptachlor	67.0	85.2	74.2		13.7
	Heptachlor Epoxide	86.3	83.6	88.4		5.50
	Hexabromobenzene	63.3	109	111		2.31
	Hexachlorobenzene	76.4	72.5	72.5		0.0517
	Hexazinone	101	103	101		1.56
	Imazalil	75.5	90.7	86.3		4.95
	Iprodione	79.9	101	92.8		8.47
	Kepone	35.1	16.1	12.2		27.6
	Lambda-Cyhalothrin	78.2	122	129		5.93
	Loratadine	66.9	150	140		6.31
	Malathion	82.3	75.9	78.4		3.29
	Metalaxyl	88.9	97.3	88.7		9.26
	Methoprene	60.6	80.8	87.2		7.65
	Methoxychlor	79.6	72.1	75.0		4.01
	Metolachlor	96.8				1.35
	Metribuzin	125	93.8	99.7		6.07
	Mevinphos	71.3	85.3	86.6		1.46
	MGK-264	93.9	90.2	85.7		5.08
	Mirex	60.2	64.1	61.3		4.55
	Molinate	52.6	63.9	54.1		16.7
	Myclobutanil	90.9	99.4	106		4.61
	Naled	33.1	33.9	42.4		22.2
	Napropamide	91.2	88.3	78.8		11.3
	Norflurazon	83.8	97.1	112		14.5
	Octinoxate	108	103	108		4.50
	Oxadiazon	86.9				0.657
	Oxybenzone	114	110	112		1.34
	Oxychlordane	82.2	91.9	93.5		1.70
	Oxyfluorfen	111	128	132		3.23
	Parathion Ethyl	94.5	104	101		2.68
	Parathion Methyl	107	91.4	105		13.9
	PBB-153	77.0	106	99.9		5.91
	PBDE-47	88.9	104	81.6		23.7
	PBDE-99	69.6	97.6	74.3		27.2
	PCB-1016	73.4	44.5	41.1		7.85
	PCB-1260	77.7	29.1	28.5		2.30
	Pendimethalin	94.9	95.0	106		11.2
	Pentabromotoluene	79.2	92.9	96.8		4.04
	Permethrin	87.2	123	136		9.75
	Phenothrin	76.4	109	123		11.4
	Phenytoin	73.4	45.1	21.6		70.7
	Phorate	89.6	89.3	100		11.3
	Piperonyl Butoxide	143	143	153		6.18
	Prallethrin	81.9	73.9	73.5		0.565
	Prodiamine	39.3	39.4	50.9		25.5
	Prometon	103	128	126		1.62
	Prometryn	102	63.2	56.5		11.2
	Pronamide	111	113	117		3.36
	Propanil	105	100	105		3.74
	Propargite	90.8	111	84.7		26.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Propiconazole	62.2				23.0
	Pyraflufen Ethyl	93.0	83.8	120		35.7
	Pyridaben	51.1				6.16
	Pyriproxyfen	67.4	93.6	84.9		9.76
	Simazine	77.1	124	126		1.47
	Stirophos	87.8	39.0	25.3		42.4
	Sulfentrazone	71.3	67.9	57.1		12.0
	Tau-Fluvalinate	73.7	133	138		3.72
	Tebuconazole	79.4	63.0	100		37.0
	Terbufos	103	120	97.0		21.6
	Terbutylazine	83.7	89.7	73.6		19.7
	Tetradecachloro-m-terphenyl	59.1	77.6	105		30.4
	Tetramethrin	118	120	133		10.1
	Thiobencarb	89.2	97.9	93.2		4.93
	Trans-Nonachlor	74.0	70.0	73.5		4.84
	Tri-o-cresyl Phosphate	106	108	108		0.802
	Triadimefon	87.8	98.9	94.2		4.47
	Triclosan Methyl	83.9	75.6	76.2		0.815
	Trifluralin	63.7	64.7	66.1		2.14
	Tris(1-chloro-2-propyl) phosphate (TCPP)	125	112	118		2.01
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.3	96.4	95.6		0.744
	Tris(2-chloroethyl) phosphate (TCEP)	112	108	111		3.16
EPA 8276	Chlordane	78.7	34.7	36.3		4.69
	Toxaphene	88.8	43.3	38.7		8.93
EPA 8321B	2,4-D	82.0	98.9	90.0		9.44
	2,4,5-T	68.9	97.9	82.2		17.5
	3-Hydroxycarbofuran	67.6	49.1	50.2		2.09
	Acesulfame K	98.1	130	136		3.94
	Acetaminophen	70.7	73.7	70.9		3.84
	Acetamiprid	75.7	58.0	48.3		18.3
	Afidopyropen	69.0	64.3	48.0		28.9
	Aldicarb	66.9	42.9	34.2		22.6
	Aldicarb Sulfone	78.3	60.1	61.6		2.59
	Aldicarb Sulfoxide	78.5	25.2	26.5		5.06
	AMPA	126	80.8	83.7		3.60
	Bentazon	131	85.2	79.3		7.25
	Benzovindiflupyr	92.3	83.9	77.2		8.31
	Carbamazepine	75.3	51.8	46.5		10.8
	Carbaryl	60.3	42.7	37.8		12.3
	Carbofuran	73.5	43.5	42.2		3.07
	Clothianidin	84.8	76.5	70.0		8.83
	Dinotefuran	92.3	69.1	70.9		2.56
	Diuron	71.7	40.4	45.0		10.6
	Endothall	110	94.5	97.2		2.85
	Fenuron	101	58.2	51.4		12.3
	Fluridone	92.6	76.7	71.5		6.96
	Glufosinate	84.1	63.7	65.6		3.00
	Glyphosate	86.3	62.6	63.0		0.581
	Hydrocodone	84.7	60.9	59.2		2.85
	Ibuprofen	67.9	65.0	51.8		22.7
	Imazapyr	84.9	90.2	83.5		6.22

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Imidacloprid	77.9	108	99.2		8.13
	Linuron	69.3	47.0	52.0		10.2
	Mandestrobin	91.3	82.9	74.6		10.5
	MCPP	84.3	105	99.5		5.55
	Methiocarb	56.9	39.2	45.2		14.2
	Methomyl	79.3	60.8	50.9		17.8
	Naproxen	72.8	86.0	77.7		10.2
	Oxamyl	78.8	60.2	59.2		1.74
	Primidone	78.8	78.4	66.6		16.3
	Propoxur	66.4	40.8	38.8		4.93
	Pyraclostrobin	87.3	82.9	73.2		12.5
	Silvex	77.1	91.1	90.1		1.10
	Sucralose	107	109	113		3.45
	Thiamethoxam	91.3	71.6	69.1		3.45
	Tolfenpyrad	60.6	61.4	52.6		15.4
	Triclopyr	68.6	89.6	77.6		14.4
SM 2320 B-2011	Total Alkalinity	95.0				0.463
SM 2540 C-2015	TDS	102				4.86
SM 2540 D-2015	TSS	103				
SM 4500-F- C-2011	Fluoride	102	102	103		0.953
SM 5310 B-2011	Organic Carbon	94.0	93.6	95.0		0.971

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2424452
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2424452
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2424479, 2424480
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2424479, 2424480
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2424452
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2424452
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2424453
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2424453
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2424453
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2424453
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2424477
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2424476
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2424477
EPA 8270E	PCBs in water matrices by GC/MS/MS	2424476
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2424476
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2424472
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2424473
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2424452
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2424479, 2424480
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2424452
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2424452
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2424452
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2424453

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	07/18/2023			07/18/2023 14:36	Chandler E Cox	2424452
EPA 180.1 Rev. 2.0	07/18/2023			07/18/2023 14:01	Anna M. Plaviak	2424452
EPA 200.7 Rev. 4.4	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 14:25	Samatha Luckman	2424479
	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 14:33	Samatha Luckman	2424479
	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 14:40	Samatha Luckman	2424480
	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 14:48	Samatha Luckman	2424480
EPA 200.8 Rev. 5.4	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 20:03	Conrad Hartmann	2424479
	07/18/2023	07/19/2023 13:40	George D Taylor	07/20/2023 20:13	Conrad Hartmann	2424480
	07/18/2023	07/19/2023 13:40	George D Taylor	07/21/2023 19:11	Emily M Philpot	2424480
EPA 300.0 Rev. 2.1	07/18/2023			07/19/2023 21:48	James L Waggeberby	2424452
EPA 350.1 Rev. 2.0	07/18/2023			07/20/2023 12:53	Ping Hua	2424453
EPA 351.2 Rev. 2.0	07/18/2023	08/01/2023 10:22	Dana G. Hughes	08/02/2023 12:18	Samantha L Bates	2424453
EPA 353.2 Rev. 2.0	07/18/2023			07/20/2023 10:42	Beverly Y. Sanders	2424453
EPA 365.1 Rev. 2.0	07/18/2023	07/20/2023 14:21	Adam P Silver	07/24/2023 11:49	Simonne.V. Calhoun	2424453
EPA 8270E	07/18/2023	07/18/2023 14:30	Rasheda Ghaffari	07/20/2023 19:05	Vandana T. Nagar	2424477
	07/18/2023	07/18/2023 14:30	Rasheda Ghaffari	07/21/2023 21:38	Arthur Maknenko	2424477
	07/18/2023	07/20/2023 08:30	Rasheda Ghaffari	07/22/2023 01:01	Lipi Saha	2424476
	07/18/2023	07/20/2023 08:30	Rasheda Ghaffari	07/23/2023 23:13	Michael Poppell	2424476
EPA 8276	07/18/2023	07/20/2023 08:30	Rasheda Ghaffari	07/25/2023 16:16	Arthur Maknenko	2424476
EPA 8321B	07/18/2023	07/19/2023 03:00	Tae K Lee	07/19/2023 05:47	Tae K Lee	2424473
	07/18/2023	07/19/2023 03:00	Tae K Lee	07/19/2023 10:01	Tae K Lee	2424473
	07/18/2023	07/19/2023 03:00	Tae K Lee	07/19/2023 11:33	Tae K Lee	2424473
	07/18/2023	07/19/2023 14:00	Hoor Shaik	07/21/2023 03:37	Juyoung Kim	2424473
	07/18/2023	07/21/2023 14:00	Hoor Shaik	07/21/2023 16:32	Juyoung Kim	2424472
SM 2320 B-2011	07/18/2023			07/19/2023 23:59	Dale L. Simmons	2424452
SM 2340 B-2011	07/18/2023			07/20/2023 14:25	Samatha Luckman	2424479
	07/18/2023			07/20/2023 14:48	Samatha Luckman	2424480
SM 2540 C-2015	07/18/2023			07/21/2023 17:02	Yijie Li	2424452
SM 2540 D-2015	07/18/2023			07/21/2023 17:02	Yijie Li	2424452
SM 4500-F- C-2011	07/18/2023			07/19/2023 23:59	Dale L. Simmons	2424452
SM 5310 B-2011	07/18/2023			07/20/2023 13:49	Khloe J Berg	2424453