

Chemical Analysis Report

SE-DIST-2023-05-09-01

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

Event Description: **SMP - Broward/Palm Beach**
Request ID: **RQ-2023-05-01-51**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Andrew Luering

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 30-MAY-2023 12:01

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

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: 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: ICWW South of Hillsboro Blvd

Collection Date/Time: 05/08/2023 10:15

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2407585	DEP SOP: NU-094-1	Color (true)	4.3	I	PCU	P429618	
	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P429622	
	EPA 300.0 Rev. 2.1	Chloride	1.8E+04		mg Cl/L	P429717	
		Sulfate	2.5E+03		mg SO4/L	P429720	
	SM 2320 B-2011	Total Alkalinity	126		mg CaCO3/L	P429832	
	SM 2540 C-2015	TDS	2.94E+04		mg/L	P430021	
	SM 2540 D-2015	TSS	6	I	mg/L	P429894	
	SM 4500-F- C-2011	Fluoride	1.2		mg F/L	P429888	
2407586	EPA 350.1 Rev. 2.0	Ammonia-N	0.022		mg N/L	P429737	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32	I	mg N/L	P429625	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P430006	
	EPA 365.1 Rev. 2.0	Total-P	0.031		mg P/L	P429770	
	SM 5310 B-2011	Organic Carbon	3.3	I	mg C/L	P429964	
2407608	EPA 8321B	Aldicarb	0.020	U	ug/L	P429589	
		Aldicarb Sulfone	0.0020	U	ug/L	P429589	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P429589	
		Carbaryl	0.0020	U	ug/L	P429589	
		Carbofuran	0.0020	U	ug/L	P429589	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P429589	
		Methiocarb	0.0020	U	ug/L	P429589	
		Methomyl	0.0020	U	ug/L	P429589	
		Oxamyl	0.0020	U	ug/L	P429589	
		Propoxur	0.0020	U	ug/L	P429589	
2407609		Acesulfame K	0.10	U	ug/L	P429732	
		2,4-D	0.0034	I	ug/L	P429588	
		AMPA	10	U	ug/L	P429732	
		2,4,5-T	0.0040	U	ug/L	P429588	
		Acetaminophen	0.0080	U	ug/L	P429588	
		Endothall	0.25	U	ug/L	P429732	
		Acetamiprid	0.0020	U	ug/L	P429588	
		Glufosinate	10	U	ug/L	P429732	
		Glyphosate	10	U	ug/L	P429732	
		Afidopyropen	0.0020	U	ug/L	P429588	
		Sucralose	0.043		ug/L	P429732	
		Bentazon	0.042		ug/L	P429588	MS
		Benzovindiflupyr	0.0020	U	ug/L	P429588	
		Carbamazepine	8.0E-04	U	ug/L	P429588	
		Clothianidin	0.0020	U	ug/L	P429588	
		Dinotefuran	0.0020	U	ug/L	P429588	
		Diuron	0.0028	I	ug/L	P429588	
		Fenuron	0.032	U	ug/L	P429588	
		Fluridone	0.011		ug/L	P429588	
		Imazapyr	0.021		ug/L	P429588	
Hydrocodone	0.0020	U	ug/L	P429588			

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2407609	EPA 8321B	Ibuprofen	0.080	U	ug/L	P429588	
		Imidacloprid	0.0039	I	ug/L	P429588	
		Linuron	0.0040	U	ug/L	P429588	
		Mandestrobin	0.0020	U	ug/L	P429588	
		MCP	0.0020	U	ug/L	P429588	
		Naproxen	0.0080	U	ug/L	P429588	
		Primidone	0.0040	U	ug/L	P429588	
		Pyraclostrobin	0.0020	U	ug/L	P429588	
		Silvex	0.0040	U	ug/L	P429588	
		Thiamethoxam	0.0020	U	ug/L	P429588	
		Tolfenpyrad	0.0020	U	ug/L	P429588	
		Triclopyr	0.0040	U	ug/L	P429588	
2407610	EPA 8270E	Aldrin	0.68	U	ng/L	P429735	
		Alpha-BHC	0.10	U	ng/L	P429735	
		Alpha-Chlordane	0.21	U	ng/L	P429735	
		PCB-1016	2.1	U	ng/L	P429735	
		Beta-BHC	0.10	U	ng/L	P429735	
		PCB-1221	2.1	U	ng/L	P429735	
		Beta-Cyfluthrin	1.3	U	ng/L	P429735	
		PCB-1232	2.1	U	ng/L	P429735	
		Bifenthrin	0.52	U	ng/L	P429735	
		PCB-1242	2.1	U	ng/L	P429735	
		PCB-1248	2.1	U	ng/L	P429735	
		Chlorothalonil	3.8	U	ng/L	P429735	
		PCB-1254	2.1	U	ng/L	P429735	
		Cis-Nonachlor	0.21	U	ng/L	P429735	
		PCB-1260	2.1	U	ng/L	P429735	
		Cypermethrin	1.6	U	ng/L	P429735	
		Dacthal	0.16	U	ng/L	P429735	RPD
		DDD-p,p'	0.26	U	ng/L	P429735	
		DDE-p,p'	0.21	U	ng/L	P429735	
		DDT-p,p'	0.26	U	ng/L	P429735	
		Delta-BHC	0.42	U	ng/L	P429735	
		Deltamethrin	1.3	U	ng/L	P429735	
		Dichlobenil	0.26	U	ng/L	P429735	
		Dicofol	1.3	U	ng/L	P429735	
		Dieldrin	0.42	U	ng/L	P429735	
		Endosulfan I	0.42	U	ng/L	P429735	
		Endosulfan II	0.42	U	ng/L	P429735	
		Endosulfan Sulfate	0.31	U	ng/L	P429735	
		Endrin	0.42	U	ng/L	P429735	
		Endrin Aldehyde	0.78	U	ng/L	P429735	
		Endrin Ketone	0.42	U	ng/L	P429735	
		Esfenvalerate	0.78	U	ng/L	P429735	
		Ethalfuralin	0.16	U	ng/L	P429735	

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Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2407610	EPA 8270E	Fenpropathrin	0.26	U	ng/L	P429735	
		Gamma-BHC	0.13	U	ng/L	P429735	
		Gamma-Chlordane	0.21	U	ng/L	P429735	
		Heptachlor	0.21	U	ng/L	P429735	
		Heptachlor Epoxide	0.26	U	ng/L	P429735	
		Hexachlorobenzene**	1.0	U	ng/L	P429735	
		Kepone	5.2	UJ	ng/L	P429735	CCV
		Lambda-Cyhalothrin	0.78	U	ng/L	P429735	
		Methoprene	0.78	U	ng/L	P429735	
		Methoxychlor	0.31	U	ng/L	P429735	
		MGK-264	0.21	U	ng/L	P429735	
		Mirex	0.37	U	ng/L	P429735	
		Oxychlordane	0.31	U	ng/L	P429735	
		Permethrin	1.7	U	ng/L	P429735	
		Phenothrin	0.94	U	ng/L	P429735	
		Piperonyl Butoxide	0.16	U	ng/L	P429735	
		Prallethrin	2.1	U	ng/L	P429735	
		Tau-Fluvalinate	0.26	U	ng/L	P429735	
		Tetramethrin	0.78	U	ng/L	P429735	
		Trans-Nonachlor	0.21	U	ng/L	P429735	
		Triclosan Methyl	0.16	U	ng/L	P429735	
		Trifluralin	0.21	U	ng/L	P429735	
		Chlordane	2.1	U	ng/L	P429735	
		Toxaphene	16	U	ng/L	P429735	
2407611	EPA 8270E	Oxybenzone**	10	U	ng/L	P429600	
		Acetochlor	0.20	U	ng/L	P429600	
		Octinoxate**	20	U	ng/L	P429600	
		Alachlor	0.40	U	ng/L	P429600	
		Avobenzone**	100	U	ng/L	P429600	
		Ametryn	1.1	U	ng/L	P429600	
		Atrazine	11		ng/L	P429600	
		PBDE-47**	4.0	U	ng/L	P429600	
		Atrazine Desethyl	1.3	U	ng/L	P429600	
		PBDE-99**	5.0	U	ng/L	P429600	
		Azinphos Methyl	3.0	U	ng/L	P429600	
		Tri-o-cresyl Phosphate**	6.0	U	ng/L	P429600	
		Azoxystrobin	0.40	U	ng/L	P429600	
		Bromacil	0.60	U	ng/L	P429600	
		2-Ethylhexyl	12	U	ng/L	P429600	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.20	U	ng/L	P429600	
		Dechlorane Plus**	30	U	ng/L	P429600	
		Caffeine**	9.6	I	ng/L	P429600	
		Dechlorane 602**	5.0	U	ng/L	P429600	
		Carbophenothion	0.50	U	ng/L	P429600	

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2407611	EPA 8270E	Dechlorane 603**	4.0	U	ng/L	P429600	
		Carfentrazone Ethyl	0.15	U	ng/L	P429600	
		Hexabromobenzene**	6.0	U	ng/L	P429600	
		Chlorfenapyr	0.30	U	ng/L	P429600	
		PBB-153**	8.0	U	ng/L	P429600	
		Chlorpyrifos Ethyl	0.30	U	ng/L	P429600	
		Pentabromotoluene**	3.0	U	ng/L	P429600	
		Chlorpyrifos Methyl	0.10	U	ng/L	P429600	
		Tris(2-chloroethyl) phosphate (TCEP)**	70	U	ng/L	P429600	
		Coumaphos	1.1	U	ng/L	P429600	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	43	I	ng/L	P429600	
		Cyanazine	5.0	UJ	ng/L	P429600	CCV
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.1	I	ng/L	P429600	
		Cyprodinil	0.20	U	ng/L	P429600	
		Tetradecachloro-m-terphenyl**	7.5	U	ng/L	P429600	
		Demeton	3.5	U	ng/L	P429600	
		Diazinon	0.13	U	ng/L	P429600	
		Difenoconazole	0.60	U	ng/L	P429600	RPD
		Dimethenamid	0.10	U	ng/L	P429600	
		Dimethomorph	0.30	U	ng/L	P429600	
		Disulfoton	0.60	U	ng/L	P429600	
		Dithiopyr	1.0	U	ng/L	P429600	
		EPTC	0.50	U	ng/L	P429600	
		Ethion	0.30	U	ng/L	P429600	
		Ethoprop	0.13	U	ng/L	P429600	
		Etridiazole	0.10	U	ng/L	P429600	
		Fenamiphos	0.45	U	ng/L	P429600	
		Fenbuconazole	0.50	U	ng/L	P429600	
		Fipronil	0.91	I	ng/L	P429600	
		Fipronil Desulfinyl**	0.27	I	ng/L	P429600	
		Fipronil Sulfide	0.20	I	ng/L	P429600	
		Fipronil Sulfone	0.36	I	ng/L	P429600	
		Fluazifop-P-butyl	0.10	U	ng/L	P429600	
		Fludioxonil	0.10	U	ng/L	P429600	
		Flumioxazin	3.0	U	ng/L	P429600	
		Flutolanil	0.10	U	ng/L	P429600	
		Fluxapyroxad	0.94	I	ng/L	P429600	
		Fonofos	0.15	U	ng/L	P429600	
		Hexazinone	0.50	U	ng/L	P429600	
		Imazalil	0.65	U	ng/L	P429600	
		Iprodione	0.50	U	ng/L	P429600	
		Loratadine**	0.30	U	ng/L	P429600	
		Malathion	0.35	U	ng/L	P429600	
		Metalaxyl	0.62	I	ng/L	P429600	

Field ID: G4SE0147

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2407611	EPA 8270E	Metolachlor	0.98	I	ng/L	P429600	
		Metribuzin	0.40	U	ng/L	P429600	
		Mevinphos	1.0	U	ng/L	P429600	
		Molinate	0.25	U	ng/L	P429600	
		Myclobutanil	0.35	U	ng/L	P429600	
		Naled	2.5	U	ng/L	P429600	
		Napropamide	0.70	U	ng/L	P429600	
		Norflurazon	1.0	U	ng/L	P429600	
		Oxadiazon	4.1		ng/L	P429600	
		Oxyfluorfen	0.20	U	ng/L	P429600	
		Parathion Ethyl	0.15	U	ng/L	P429600	
		Parathion Methyl	0.20	U	ng/L	P429600	
		Pendimethalin	0.75	U	ng/L	P429600	
		Phenytol**	5.3	U	ng/L	P429600	
		Phorate	0.25	U	ng/L	P429600	
		Prodiamine	0.20	U	ng/L	P429600	
		Prometon	3.0	U	ng/L	P429600	
		Prometryn	0.35	U	ng/L	P429600	
		Pronamide	0.10	U	ng/L	P429600	
		Propanil	0.10	U	ng/L	P429600	
		Propargite	0.80	U	ng/L	P429600	
		Propiconazole	0.60	U	ng/L	P429600	
		Pyraflufen Ethyl	0.30	U	ng/L	P429600	
		Pyridaben	1.4	U	ng/L	P429600	
		Pyriproxyfen	0.25	U	ng/L	P429600	
		Simazine	0.25	U	ng/L	P429600	
		Stirophos	0.40	U	ng/L	P429600	
		Sulfentrazone	4.4	I	ng/L	P429600	
		Tebuconazole	1.4	U	ng/L	P429600	
		Terbufos	0.20	U	ng/L	P429600	
		Terbuthylazine	0.20	U	ng/L	P429600	
		Thiobencarb	0.50	U	ng/L	P429600	
		Triadimefon	0.15	U	ng/L	P429600	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of analytical difficulties.

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.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429618

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429622

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429717

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429720

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429737

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429625

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430006

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429770

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

Reference Method: EPA 8270E
Batch ID: P429600

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
Alachlor	0.40	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429600

Component	Result	Code	Units
Ametryn	1.1	U	ng/L
Atrazine	0.20	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
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	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
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	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
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429600

Component	Result	Code	Units
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	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
Parathion Ethyl	0.15	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
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	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
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429600

Component	Result	Code	Units
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: P429735

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'	0.25	U	ng/L
DDT-p,p'	0.25	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	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429735

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	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	5.0	U	ng/L
Kepone	5.0	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429735

Component	Result	Code	Units
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: P429735

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: P429588

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P429588

Component	Result	Code	Units
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: P429589

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: EPA 8321B
Batch ID: P429732

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: SM 2320 B-2011
Batch ID: P429832

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

Reference Method: SM 2540 C-2015
Batch ID: P430021

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P429894

Component	Result	Code	Units
TSS	3	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P429888

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P429964

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: P429618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.9		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429622

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429717

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429625

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430006

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: P429770

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429600

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	103		P	42 - 162
Acetochlor	77.4		P	69 - 123
Alachlor	92.1		P	65 - 118
Ametryn	139		P	58 - 141

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P429600

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine	96.1		P	73 - 118
Atrazine Desethyl	108		P	32 - 125
Avobenzone	152		P	40 - 203
Azinphos Methyl	94.8		P	36 - 197
Azoxystrobin	109		P	58 - 226
Bromacil	108		P	48 - 120
Butylate	71.4		P	27 - 85.0
Caffeine	85.8		P	40 - 137
Carbophenothion	115		P	54 - 132
Carfentrazone Ethyl	130		P	60 - 142
Chlorfenapyr	87.6		P	53 - 117
Chlorpyrifos Ethyl	101		P	59 - 116
Chlorpyrifos Methyl	88.8		P	66 - 119
Coumaphos	118		P	11 - 234
Cyanazine	177		P	61 - 248
Cyprodinil	77.4		P	50 - 147
Dechlorane 602	88.0		P	50 - 150
Dechlorane 603	143		P	50 - 150
Dechlorane Plus	103		P	47 - 182
Demeton	80.6		P	30 - 138
Diazinon	121		P	67 - 126
Difenoconazole	72.8		P	38 - 205
Dimethenamid	108		P	57 - 111
Dimethomorph	183		P	16 - 212
Disulfoton	122		P	46 - 126
Dithiopyr	115		P	62 - 115
EPTC	64.5		P	28 - 80.0
Ethion	83.4		P	24 - 122
Ethoprop	103		P	62 - 113
Etridiazole	82.0		P	28 - 92.0
Fenamiphos	86.0		P	57 - 128
Fenbuconazole	65.1		P	52 - 155
Fipronil	109		P	63 - 130
Fipronil Desulfinyl	102		P	61 - 130
Fipronil Sulfide	115		P	56 - 117
Fipronil Sulfone	109		P	52 - 118
Fluazifop-P-butyl	74.3		P	61 - 128
Fludioxonil	98.4		P	59 - 129
Flumioxazin	90.0		P	30 - 250
Flutolanil	84.7		P	53 - 127
Fluxapyroxad	91.9		P	42 - 132
Fonofos	98.5		P	61 - 110
Hexabromobenzene	129		P	50 - 150
Hexazinone	93.8		P	46 - 139
Imazalil	86.6		P	40 - 139
Iprodione	96.3		P	40 - 146
Loratadine	134		P	10 - 224
Malathion	103		P	61 - 135
Metalaxyl	95.1		P	58 - 121
Metolachlor	95.9		P	64 - 118
Metribuzin	104		P	45 - 245
Mevinphos	97.7		P	49 - 118

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429600

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	66.4		P	42 - 92.0
Myclobutanil	115		P	55 - 127
Naled	39.1		P	10 - 114
Napropamide	78.7		P	39 - 121
Norflurazon	102		P	55 - 129
Octinoxate	117		P	26 - 166
Oxadiazon	107		P	54 - 115
Oxybenzone	131		P	49 - 135
Oxyfluorfen	124		P	64 - 139
Parathion Ethyl	101		P	70 - 111
Parathion Methyl	101		P	76 - 136
PBB-153	135		P	50 - 150
PBDE-47	113		P	41 - 148
PBDE-99	99.0		P	38 - 147
Pendimethalin	103		P	52 - 118
Pentabromotoluene	117		P	50 - 150
Phenytoin	60.4		P	10 - 162
Phorate	117		P	40 - 122
Prodiamine	71.3		P	26 - 141
Prometon	67.7		P	54 - 122
Prometryn	110		P	61 - 128
Pronamide	121		P	72 - 121
Propanil	130		P	45 - 144
Propargite	81.0		P	10 - 199
Propiconazole	96.6		P	56 - 127
Pyraflufen Ethyl	64.6		P	56 - 140
Pyridaben	99.8		P	26 - 211
Pyriproxyfen	90.5		P	33 - 194
Simazine	85.1		P	67 - 121
Stirophos	84.8		P	20 - 142
Sulfentrazone	93.4		P	21 - 144
Tebuconazole	65.3		P	10 - 122
Terbufos	124		P	60 - 129
Terbutylazine	94.6		P	69 - 113
Tetradecachloro-m-terphenyl	185		P	70 - 200
Thiobencarb	109		P	51 - 120
Tri-o-cresyl Phosphate	121		P	49 - 150
Triadimefon	103		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	102		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	106		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	117		P	70 - 180

Reference Method: EPA 8270E

Batch ID: P429735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	47.4		P	10 - 92.0
Alpha-BHC	84.0		P	75 - 107
Alpha-Chlordane	67.8		P	50 - 108
Beta-BHC	93.9		P	36 - 138
Beta-Cyfluthrin	59.9		P	20 - 161
Bifenthrin	41.6		P	10 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorothalonil	78.2		P	26 - 186
Cis-Nonachlor	62.2		P	42 - 119
Cypermethrin	67.3		P	22 - 150
Dacthal	100		P	72 - 119
DDD-p,p'	62.9		P	45 - 107
DDE-p,p'	65.5		P	48 - 106
DDT-p,p'	61.8		P	48 - 110
Delta-BHC	92.1		P	54 - 140
Deltamethrin	76.8		P	22 - 189
Dichlobenil	89.3		P	36 - 117
Dicofol	72.7		P	46 - 155
Dieldrin	69.1		P	54 - 110
Endosulfan I	64.9		P	59 - 105
Endosulfan II	69.1		P	51 - 118
Endosulfan Sulfate	66.2		P	57 - 121
Endrin	66.3		P	10 - 120
Endrin Aldehyde	61.8		P	34 - 118
Endrin Ketone	95.1		P	69 - 177
Esfenvalerate	56.4		P	23 - 168
Ethalfuralin	63.2		P	49 - 99.0
Fenpropathrin	70.2		P	34 - 117
Gamma-BHC	91.0		P	72 - 117
Gamma-Chlordane	66.1		P	43 - 106
Heptachlor	59.0		P	41 - 98.0
Heptachlor Epoxide	82.8		P	57 - 106
Hexachlorobenzene	60.8		P	36 - 99.0
Kepone	71.9		P	16 - 215
Lambda-Cyhalothrin	53.2		P	21 - 177
Methoprene	40.3		P	10 - 119
Methoxychlor	83.4		P	60 - 112
MGK-264	88.1		P	26 - 122
Mirex	40.0		P	10 - 169
Oxychlordane	69.5		P	43 - 105
PCB-1016	69.6		P	48 - 112
PCB-1260	60.4		P	44 - 118
Permethrin	59.6		P	24 - 148
Phenothrin	39.9		P	10 - 106
Piperonyl Butoxide	79.4		P	10 - 139
Prallethrin	60.6		P	17 - 109
Tau-Fluvalinate	48.4		P	13 - 131
Tetramethrin	89.2		P	10 - 132
Trans-Nonachlor	63.4		P	44 - 106
Triclosan Methyl	71.5		P	59 - 109
Trifluralin	64.5		P	44 - 101

Reference Method: EPA 8276

Batch ID: P429735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	64.9		P	61 - 116
Toxaphene	67.3		P	48 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429588

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	87.9		P	40 - 150
2,4,5-T	94.3		P	40 - 150
Acetaminophen	95.9		P	30 - 150
Acetamiprid	81.4		P	40 - 150
Afidopyropen	64.9		P	30 - 150
Bentazon	149		P	30 - 150
Benzovindiflupyr	89.5		P	40 - 150
Carbamazepine	92.5		P	40 - 150
Clothianidin	88.4		P	40 - 150
Dinotefuran	107		P	40 - 150
Diuron	89.3		P	40 - 150
Fenuron	93.2		P	40 - 150
Fluridone	86.4		P	40 - 150
Hydrocodone	93.3		P	40 - 150
Ibuprofen	99.5		P	40 - 150
Imazapyr	87.5		P	40 - 150
Imidacloprid	97.2		P	40 - 150
Linuron	89.7		P	40 - 150
Mandestrobin	87.5		P	40 - 150
MCPP	92.8		P	40 - 150
Naproxen	101		P	40 - 150
Primidone	89.2		P	40 - 150
Pyraclostrobin	86.6		P	40 - 150
Silvex	96.2		P	40 - 150
Thiamethoxam	83.8		P	40 - 150
Tolfenpyrad	54.8		P	30 - 150
Triclopyr	85.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	82.2		P	40 - 150
Aldicarb	53.3		P	30 - 150
Aldicarb Sulfone	86.8		P	40 - 150
Aldicarb Sulfoxide	110		P	40 - 150
Carbaryl	89.6		P	40 - 150
Carbofuran	85.0		P	40 - 150
Methiocarb	88.7		P	40 - 150
Methomyl	87.2		P	40 - 150
Oxamyl	92.1		P	40 - 150
Propoxur	78.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P429732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	102		P	40 - 150
AMPA	112		P	40 - 150
Endothall	80.5		P	40 - 150
Glufosinate	97.6		P	40 - 150
Glyphosate	121		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P429732

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	87.9		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P429832

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.6		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P430021

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	103		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P429894

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	97.4		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429888

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

Reference Method: SM 5310 B-2011
Batch ID: P429964

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429717

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407573	Chloride	96.6		P	90 - 110
2407660	Chloride	99.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429720

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407573	Sulfate	97.7		P	90 - 110
2407660	Sulfate	98.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407586	Ammonia-N	104	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429625

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405529	Kjeldahl Nitrogen	96.9	91.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430006

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407485	NO2NO3-N	104	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429770

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407586	Total-P	91.4	94.3	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P429600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407708	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.1	112	P/P	26 - 165
2407708	Acetochlor	74.2	84.6	P/P	67 - 124
2407708	Alachlor	82.7	81.3	P/P	60 - 120
2407708	Ametryn	118	113	P/P	54 - 216
2407708	Atrazine	105	100	P/P	66 - 128
2407708	Atrazine Desethyl	101	107	P/P	15 - 122
2407708	Avobenzone	131	161	P/P	37 - 178
2407708	Azinphos Methyl	81.7	103	P/P	40 - 292
2407708	Azoxystrobin	83.4	114	P/P	35 - 220
2407708	Bromacil	112	108	P/P	45 - 127
2407708	Butylate	74.4	70.4	P/P	20 - 83.0
2407708	Caffeine	112	101	P/P	10 - 194
2407708	Carbophenothion	103	109	P/P	57 - 127
2407708	Carfentrazone Ethyl	119	120	P/P	51 - 141

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407708	Chlorfenapyr	81.4	88.6	P/P	46 - 111
2407708	Chlorpyrifos Ethyl	89.4	84.9	P/P	52 - 120
2407708	Chlorpyrifos Methyl	86.9	102	P/P	63 - 119
2407708	Coumaphos	117	123	P/P	10 - 228
2407708	Cyanazine	145	165	P/P	59 - 241
2407708	Cyprodinil	84.0	80.3	P/P	47 - 146
2407708	Dechlorane 602	74.0	89.8	P/P	50 - 150
2407708	Dechlorane 603	118	143	P/P	50 - 150
2407708	Dechlorane Plus	86.8	91.3	P/P	50 - 150
2407708	Demeton	75.9	81.9	P/P	40 - 136
2407708	Diazinon	113	119	P/P	69 - 132
2407708	Difenoconazole	58.2	94.4	P/P	57 - 258
2407708	Dimethenamid	97.7	103	P/P	54 - 110
2407708	Dimethomorph	167	183	P/P	28 - 210
2407708	Disulfoton	105	106	P/P	43 - 133
2407708	Dithiopyr	102	101	P/P	39 - 116
2407708	EPTC	67.4	65.6	P/P	20 - 78.0
2407708	Ethion	72.5	74.2	P/P	17 - 119
2407708	Ethoprop	92.0	97.3	P/P	66 - 120
2407708	Etridiazole	74.9	70.7	P/P	28 - 96.0
2407708	Fenamiphos	74.5	74.1	P/P	41 - 126
2407708	Fenbuconazole	47.2	77.0	P/P	42 - 169
2407708	Fipronil	92.3	100	P/P	61 - 132
2407708	Fipronil Desulfinyl	96.8	101	P/P	56 - 132
2407708	Fipronil Sulfide	100	106	P/P	48 - 119
2407708	Fipronil Sulfone	95.3	103	P/P	42 - 131
2407708	Fluazifop-P-butyl	75.9	84.3	P/P	53 - 131
2407708	Fludioxonil	86.7	88.5	P/P	56 - 127
2407708	Flumioxazin	66.7	112	P/P	19 - 300
2407708	Flutolanil	74.9	83.4	P/P	41 - 127
2407708	Fluxapyroxad	80.9	83.7	P/P	42 - 172
2407708	Fonofos	93.1	107	P/P	59 - 113
2407708	Hexabromobenzene	125	132	P/P	50 - 150
2407708	Hexazinone	97.7	93.6	P/P	66 - 122
2407708	Imazalil	79.6	85.1	P/P	21 - 283
2407708	Iprodione	85.0	88.0	P/P	43 - 150
2407708	Loratadine	100	155	P/P	23 - 201
2407708	Malathion	99.7	92.0	P/P	58 - 136
2407708	Metalaxyl	90.3	92.4	P/P	55 - 120
2407708	Metolachlor	86.7	82.8	P/P	57 - 121
2407708	Metribuzin	101	109	P/P	58 - 294
2407708	Mevinphos	92.4	98.7	P/P	50 - 126
2407708	Molinate	66.5	67.2	P/P	42 - 93.0
2407708	Myclobutanil	106	99.3	P/P	55 - 125
2407708	Naled	38.0	37.3	P/P	18 - 200
2407708	Napropamide	72.4	68.1	P/P	39 - 110
2407708	Norflurazon	92.1	94.9	P/P	48 - 128
2407708	Octinoxate	107	119	P/P	21 - 159
2407708	Oxadiazon	90.4	90.1	P/P	43 - 112
2407708	Oxybenzone	127	122	P/P	41 - 142
2407708	Oxyfluorfen	101	101	P/P	64 - 153
2407708	Parathion Ethyl	95.3	101	P/P	69 - 114

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407708	Parathion Methyl	93.4	107	P/P	79 - 139
2407708	PBB-153	112	138	P/P	50 - 150
2407708	PBDE-47	101	110	P/P	27 - 144
2407708	PBDE-99	84.3	104	P/P	18 - 150
2407708	Pendimethalin	104	108	P/P	50 - 139
2407708	Pentabromotoluene	108	116	P/P	50 - 150
2407708	Phenytoin	59.6	56.9	P/P	10 - 146
2407708	Phorate	107	111	P/P	54 - 161
2407708	Prodiamine	67.6	70.5	P/P	30 - 161
2407708	Prometon	71.0	59.1	P/P	45 - 134
2407708	Prometryn	95.3	103	P/P	45 - 137
2407708	Pronamide	111	108	P/P	65 - 133
2407708	Propanil	128	102	P/P	49 - 142
2407708	Propargite	61.4	63.4	P/P	10 - 203
2407708	Propiconazole	87.3	95.5	P/P	38 - 146
2407708	Pyraflufen Ethyl	71.2	78.0	P/P	34 - 153
2407708	Pyridaben	94.6	102	P/P	12 - 192
2407708	Pyriproxyfen	84.8	82.5	P/P	33 - 180
2407708	Simazine	90.9	91.2	P/P	51 - 157
2407708	Stiropfos	70.8	69.7	P/P	10 - 128
2407708	Sulfentrazone	87.4	109	P/P	53 - 186
2407708	Tebuconazole	62.7	57.8	P/P	10 - 133
2407708	Terbufos	116	121	P/P	65 - 139
2407708	Terbutylazine	88.0	90.0	P/P	66 - 117
2407708	Tetradecachloro-m-terphenyl	170	184	P/P	70 - 200
2407708	Thiobencarb	104	101	P/P	51 - 119
2407708	Tri-o-cresyl Phosphate	112	118	P/P	31 - 144
2407708	Triadimefon	92.1	85.7	P/P	48 - 119
2407708	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.4	87.0	P/P	50 - 150
2407708	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.4	108	P/P	50 - 150
2407708	Tris(2-chloroethyl) phosphate (TCEP)	112	111	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P429735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407610	PCB-1016	72.9	70.5	P/P	46 - 111
2407610	PCB-1260	65.0	64.8	P/P	45 - 114
2407741	Aldrin	45.4	42.9	P/P	20 - 82.0
2407741	Alpha-BHC	80.6	80.4	P/P	71 - 109
2407741	Alpha-Chlordane	57.8	64.0	P/P	42 - 106
2407741	Beta-BHC	96.2	91.5	P/P	69 - 180
2407741	Beta-Cyfluthrin	77.1	80.0	P/P	18 - 175
2407741	Bifenthrin	58.7	61.9	P/P	21 - 128
2407741	Chlorothalonil	82.1	84.8	P/P	10 - 300
2407741	Cis-Nonachlor	52.6	52.3	P/P	34 - 106
2407741	Cypermethrin	79.2	76.9	P/P	22 - 158
2407741	Dacthal	98.5	74.7	P/P	54 - 116
2407741	DDD-p,p'	52.9	56.0	P/P	34 - 107
2407741	DDE-p,p'	53.4	56.6	P/P	33 - 110
2407741	DDT-p,p'	59.5	59.4	P/P	50 - 122
2407741	Delta-BHC	90.7	90.8	P/P	77 - 193

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P429735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407741	Deltamethrin	91.2	99.0	P/P	10 - 195
2407741	Dichlobenil	77.0	76.5	P/P	25 - 113
2407741	Dicofol	72.9	68.9	P/P	38 - 247
2407741	Dieldrin	56.3	57.9	P/P	45 - 118
2407741	Endosulfan I	55.5	59.6	P/P	51 - 106
2407741	Endosulfan II	59.3	61.6	P/P	37 - 122
2407741	Endosulfan Sulfate	54.9	60.1	P/P	43 - 132
2407741	Endrin	58.5	59.4	P/P	29 - 101
2407741	Endrin Aldehyde	59.3	52.9	P/P	19 - 110
2407741	Endrin Ketone	73.4	94.1	P/P	60 - 140
2407741	Esfenvalerate	72.6	77.8	P/P	26 - 199
2407741	Ethalfuralin	61.0	64.1	P/P	45 - 99.0
2407741	Fenpropathrin	92.1	83.0	P/P	35 - 120
2407741	Gamma-BHC	91.2	87.5	P/P	63 - 128
2407741	Gamma-Chlordane	57.1	59.1	P/P	40 - 104
2407741	Heptachlor	54.1	56.5	P/P	36 - 97.0
2407741	Heptachlor Epoxide	81.9	73.5	P/P	49 - 184
2407741	Hexachlorobenzene	58.0	58.5	P/P	39 - 96.0
2407741	Kepone	87.9	84.0	P/P	10 - 217
2407741	Lambda-Cyhalothrin	74.7	75.9	P/P	21 - 193
2407741	Methoprene	52.4	64.1	P/P	20 - 106
2407741	Methoxychlor	89.4	82.7	P/P	53 - 118
2407741	MGK-264	91.7	88.9	P/P	40 - 118
2407741	Mirex	41.0	43.0	P/P	26 - 92.0
2407741	Oxychlordane	68.1	67.3	P/P	44 - 99.0
2407741	Permethrin	69.4	72.0	P/P	33 - 182
2407741	Phenothrin	61.8	60.8	P/P	10 - 129
2407741	Piperonyl Butoxide	63.9	66.0	P/P	10 - 211
2407741	Prallethrin	60.1	62.9	P/P	24 - 113
2407741	Tau-Fluvalinate	69.3	74.5	P/P	14 - 149
2407741	Tetramethrin	101	94.3	P/P	17 - 151
2407741	Trans-Nonachlor	58.6	57.3	P/P	42 - 102
2407741	Triclosan Methyl	58.4	63.6	P/P	48 - 108
2407741	Trifluralin	62.3	63.9	P/P	47 - 96.0

Reference Method: EPA 8276
Batch ID: P429735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407610	Chlordane	75.9	75.0	P/P	53 - 126
2407610	Toxaphene	86.0	85.7	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P429588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405849	2,4-D	87.0	93.4	P/P	40 - 150
2405849	2,4,5-T	87.1	89.0	P/P	40 - 150
2405849	Acetaminophen	90.9	93.3	P/P	30 - 150
2405849	Acetamiprid	91.0	92.7	P/P	40 - 150
2405849	Afidopyropen	86.1	100	P/P	30 - 150
2405849	Bentazon	162	156	F/F	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P429588

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405849	Benzovindiflupyr	77.8	79.6	P/P	40 - 150
2405849	Carbamazepine	87.4	93.2	P/P	40 - 150
2405849	Clothianidin	84.4	89.7	P/P	40 - 150
2405849	Dinotefuran	96.1	96.2	P/P	40 - 150
2405849	Diuron	67.8	77.3	P/P	40 - 150
2405849	Fenuron	72.2	75.2	P/P	40 - 150
2405849	Fluridone	84.2	83.9	P/P	40 - 150
2405849	Hydrocodone	75.3	78.8	P/P	40 - 150
2405849	Ibuprofen	68.9	83.6	P/P	40 - 150
2405849	Imazapyr	107	108	P/P	40 - 150
2405849	Imidacloprid	101	105	P/P	40 - 150
2405849	Linuron	78.5	82.6	P/P	40 - 150
2405849	Mandestrobin	82.1	81.5	P/P	40 - 150
2405849	MCPP	90.4	99.1	P/P	40 - 150
2405849	Naproxen	98.8	85.3	P/P	40 - 150
2405849	Primidone	77.6	82.1	P/P	40 - 150
2405849	Pyraclostrobin	78.0	81.8	P/P	40 - 150
2405849	Silvex	101	100	P/P	40 - 150
2405849	Thiamethoxam	84.1	85.1	P/P	40 - 150
2405849	Tolfenpyrad	47.2	49.0	P/P	30 - 150
2405849	Triclopyr	87.0	96.1	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429589

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407608	3-Hydroxycarbofuran	82.1	82.2	P/P	40 - 150
2407608	Aldicarb	57.6	74.7	P/P	30 - 150
2407608	Aldicarb Sulfone	74.7	73.8	P/P	40 - 150
2407608	Aldicarb Sulfoxide	53.5	53.4	P/P	40 - 150
2407608	Carbaryl	80.5	84.7	P/P	40 - 150
2407608	Carbofuran	73.8	73.8	P/P	40 - 150
2407608	Methiocarb	75.8	78.2	P/P	40 - 150
2407608	Methomyl	76.7	76.4	P/P	40 - 150
2407608	Oxamyl	79.9	78.7	P/P	40 - 150
2407608	Propoxur	72.8	73.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429732

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407444	Acesulfame K	136	142	P/P	40 - 150
2407444	AMPA	91.5	87.2	P/P	40 - 150
2407444	Endothall	83.9	80.7	P/P	40 - 150
2407444	Glufosinate	97.6	95.3	P/P	40 - 150
2407444	Glyphosate	123	117	P/P	40 - 150
2407444	Sucralose	97.7	83.9	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P429888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P429888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2405381	Fluoride	104	105	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P429964

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409134	Organic Carbon	94.7	93.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407523	Color (true)	7.11	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P429622

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407424	Turbidity	1.63	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429717

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407573	Chloride	0.365	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407573	Sulfate	0.542	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407586	Ammonia-N	0.810	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P429625

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405529	Kjeldahl Nitrogen	5.05	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430006

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407485	NO2NO3-N	1.86	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P429770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407586	Total-P	3.08	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P429600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407708	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	16.4	Spike	P	0 - 37
2407708	Acetochlor	13.0	Spike	P	0 - 28
2407708	Alachlor	1.72	Spike	P	0 - 30
2407708	Ametryn	4.66	Spike	P	0 - 32
2407708	Atrazine	4.56	Spike	P	0 - 41
2407708	Atrazine Desethyl	5.24	Spike	P	0 - 36
2407708	Avobenzone	20.7	Spike	P	0 - 36
2407708	Azinphos Methyl	23.3	Spike	P	0 - 75
2407708	Azoxystrobin	31.1	Spike	P	0 - 39
2407708	Bromacil	3.09	Spike	P	0 - 33
2407708	Butylate	5.53	Spike	P	0 - 44
2407708	Caffeine	10.7	Spike	P	0 - 74
2407708	Carbophenothion	5.53	Spike	P	0 - 25
2407708	Carfentrazone Ethyl	0.268	Spike	P	0 - 27
2407708	Chlorfenapyr	8.46	Spike	P	0 - 24
2407708	Chlorpyrifos Ethyl	5.17	Spike	P	0 - 26
2407708	Chlorpyrifos Methyl	16.3	Spike	P	0 - 26
2407708	Coumaphos	5.10	Spike	P	0 - 28
2407708	Cyanazine	13.1	Spike	P	0 - 48
2407708	Cyprodinil	4.49	Spike	P	0 - 29
2407708	Dechlorane 602	19.3	Spike	P	0 - 30
2407708	Dechlorane 603	19.1	Spike	P	0 - 30
2407708	Dechlorane Plus	5.11	Spike	P	0 - 30
2407708	Demeton	7.61	Spike	P	0 - 33
2407708	Diazinon	5.45	Spike	P	0 - 29
2407708	Difenoconazole	47.5	Spike	F	0 - 34
2407708	Dimethenamid	4.99	Spike	P	0 - 39
2407708	Dimethomorph	9.09	Spike	P	0 - 51
2407708	Disulfoton	0.858	Spike	P	0 - 30
2407708	Dithiopyr	1.25	Spike	P	0 - 26
2407708	EPTC	2.80	Spike	P	0 - 43
2407708	Ethion	2.42	Spike	P	0 - 79
2407708	Ethoprop	5.65	Spike	P	0 - 29
2407708	Etridiazole	5.73	Spike	P	0 - 33
2407708	Fenamiphos	0.531	Spike	P	0 - 40
2407708	Fenbuconazole	48.0	Spike	P	0 - 74
2407708	Fipronil	8.22	Spike	P	0 - 29
2407708	Fipronil Desulfinyl	4.59	Spike	P	0 - 32
2407708	Fipronil Sulfide	5.32	Spike	P	0 - 30
2407708	Fipronil Sulfone	6.76	Spike	P	0 - 33
2407708	Fluazifop-P-butyl	10.4	Spike	P	0 - 38
2407708	Fludioxonil	2.05	Spike	P	0 - 29
2407708	Flumioxazin	50.3	Spike	P	0 - 51
2407708	Flutolanil	10.7	Spike	P	0 - 25
2407708	Fluxapyroxad	3.40	Spike	P	0 - 45
2407708	Fonofos	14.0	Spike	P	0 - 27
2407708	Hexabromobenzene	5.67	Spike	P	0 - 30
2407708	Hexazinone	4.33	Spike	P	0 - 30
2407708	Imazalil	6.71	Spike	P	0 - 100
2407708	Iprodione	3.42	Spike	P	0 - 33
2407708	Loratadine	42.7	Spike	P	0 - 56

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P429600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407708	Malathion	7.95	Spike	P	0 - 37
2407708	Metalaxyl	2.30	Spike	P	0 - 40
2407708	Metolachlor	4.60	Spike	P	0 - 29
2407708	Metribuzin	8.08	Spike	P	0 - 45
2407708	Mevinphos	6.59	Spike	P	0 - 29
2407708	Molinate	1.06	Spike	P	0 - 33
2407708	Myclobutanil	6.32	Spike	P	0 - 26
2407708	Naled	1.82	Spike	P	0 - 37
2407708	Napropamide	6.06	Spike	P	0 - 44
2407708	Norflurazon	3.08	Spike	P	0 - 30
2407708	Octinoxate	10.5	Spike	P	0 - 45
2407708	Oxadiazon	0.332	Spike	P	0 - 28
2407708	Oxybenzone	3.24	Spike	P	0 - 46
2407708	Oxyfluorfen	0.330	Spike	P	0 - 28
2407708	Parathion Ethyl	5.41	Spike	P	0 - 31
2407708	Parathion Methyl	13.5	Spike	P	0 - 29
2407708	PBB-153	20.5	Spike	P	0 - 30
2407708	PBDE-47	8.65	Spike	P	0 - 36
2407708	PBDE-99	20.7	Spike	P	0 - 40
2407708	Pendimethalin	3.55	Spike	P	0 - 33
2407708	Pentabromotoluene	7.14	Spike	P	0 - 30
2407708	Phenytol	4.73	Spike	P	0 - 100
2407708	Phorate	4.47	Spike	P	0 - 36
2407708	Prodiamine	4.17	Spike	P	0 - 71
2407708	Prometon	18.3	Spike	P	0 - 36
2407708	Prometryn	6.39	Spike	P	0 - 28
2407708	Pronamide	2.20	Spike	P	0 - 24
2407708	Propanil	23.0	Spike	P	0 - 28
2407708	Propargite	3.28	Spike	P	0 - 43
2407708	Propiconazole	9.00	Spike	P	0 - 33
2407708	Pyraflufen Ethyl	9.12	Spike	P	0 - 29
2407708	Pyridaben	7.90	Spike	P	0 - 30
2407708	Pyriproxyfen	2.71	Spike	P	0 - 79
2407708	Simazine	0.331	Spike	P	0 - 29
2407708	Stirophos	1.64	Spike	P	0 - 61
2407708	Sulfentrazone	22.4	Spike	P	0 - 33
2407708	Tebuconazole	8.08	Spike	P	0 - 69
2407708	Terbufos	3.82	Spike	P	0 - 29
2407708	Terbuthylazine	2.25	Spike	P	0 - 32
2407708	Tetradecachloro-m-terphenyl	7.57	Spike	P	0 - 30
2407708	Thiobencarb	3.38	Spike	P	0 - 26
2407708	Tri-o-cresyl Phosphate	5.44	Spike	P	0 - 33
2407708	Triadimefon	7.20	Spike	P	0 - 28
2407708	Tris(1-chloro-2-propyl) phosphate (TCPP)	8.18	Spike	P	0 - 30
2407708	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	9.55	Spike	P	0 - 30
2407708	Tris(2-chloroethyl) phosphate (TCEP)	1.37	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P429735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407610	PCB-1016	3.33	Spike	P	0 - 32
2407610	PCB-1260	0.387	Spike	P	0 - 31
2407741	Aldrin	5.76	Spike	P	0 - 41
2407741	Alpha-BHC	0.212	Spike	P	0 - 25
2407741	Alpha-Chlordane	10.2	Spike	P	0 - 33
2407741	Beta-BHC	5.01	Spike	P	0 - 36
2407741	Beta-Cyfluthrin	3.70	Spike	P	0 - 42
2407741	Bifenthrin	5.19	Spike	P	0 - 53
2407741	Chlorothalonil	3.23	Spike	P	0 - 71
2407741	Cis-Nonachlor	0.575	Spike	P	0 - 29
2407741	Cypermethrin	2.90	Spike	P	0 - 40
2407741	Dacthal	27.4	Spike	F	0 - 26
2407741	DDD-p,p'	5.84	Spike	P	0 - 39
2407741	DDE-p,p'	5.73	Spike	P	0 - 33
2407741	DDT-p,p'	0.297	Spike	P	0 - 40
2407741	Delta-BHC	0.168	Spike	P	0 - 37
2407741	Deltamethrin	8.12	Spike	P	0 - 100
2407741	Dichlobenil	0.666	Spike	P	0 - 40
2407741	Dicofol	5.70	Spike	P	0 - 31
2407741	Dieldrin	2.81	Spike	P	0 - 27
2407741	Endosulfan I	7.12	Spike	P	0 - 23
2407741	Endosulfan II	3.84	Spike	P	0 - 28
2407741	Endosulfan Sulfate	9.15	Spike	P	0 - 38
2407741	Endrin	1.52	Spike	P	0 - 63
2407741	Endrin Aldehyde	11.3	Spike	P	0 - 60
2407741	Endrin Ketone	24.7	Spike	P	0 - 37
2407741	Esfenvalerate	6.91	Spike	P	0 - 52
2407741	Ethalfuralin	4.82	Spike	P	0 - 23
2407741	Fenpropathrin	10.3	Spike	P	0 - 32
2407741	Gamma-BHC	4.15	Spike	P	0 - 17
2407741	Gamma-Chlordane	3.56	Spike	P	0 - 40
2407741	Heptachlor	4.25	Spike	P	0 - 29
2407741	Heptachlor Epoxide	10.9	Spike	P	0 - 25
2407741	Hexachlorobenzene	0.821	Spike	P	0 - 36
2407741	Kepone	4.58	Spike	P	0 - 93
2407741	Lambda-Cyhalothrin	1.58	Spike	P	0 - 55
2407741	Methoprene	20.2	Spike	P	0 - 53
2407741	Methoxychlor	7.83	Spike	P	0 - 29
2407741	MGK-264	3.15	Spike	P	0 - 35
2407741	Mirex	4.83	Spike	P	0 - 46
2407741	Oxychlordane	1.16	Spike	P	0 - 29
2407741	Permethrin	3.61	Spike	P	0 - 44
2407741	Phenothrin	1.53	Spike	P	0 - 56
2407741	Piperonyl Butoxide	2.81	Spike	P	0 - 100
2407741	Prallethrin	4.64	Spike	P	0 - 42
2407741	Tau-Fluvalinate	7.22	Spike	P	0 - 54
2407741	Tetramethrin	6.69	Spike	P	0 - 51
2407741	Trans-Nonachlor	2.19	Spike	P	0 - 37
2407741	Triclosan Methyl	8.57	Spike	P	0 - 31
2407741	Trifluralin	2.49	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P429735

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407610	Chlordane	1.24	Spike	P	0 - 25
2407610	Toxaphene	0.401	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P429588

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405849	2,4-D	6.87	Spike	P	0 - 30
2405849	2,4,5-T	2.12	Spike	P	0 - 30
2405849	Acetaminophen	2.57	Spike	P	0 - 30
2405849	Acetamiprid	1.85	Spike	P	0 - 30
2405849	Afidopyropen	15.2	Spike	P	0 - 30
2405849	Bentazon	2.87	Spike	P	0 - 30
2405849	Benzovindiflupyr	2.18	Spike	P	0 - 30
2405849	Carbamazepine	6.11	Spike	P	0 - 30
2405849	Clothianidin	6.06	Spike	P	0 - 30
2405849	Dinotefuran	0.105	Spike	P	0 - 30
2405849	Diuron	11.5	Spike	P	0 - 30
2405849	Fenuron	4.10	Spike	P	0 - 30
2405849	Fluridone	0.407	Spike	P	0 - 30
2405849	Hydrocodone	4.60	Spike	P	0 - 30
2405849	Ibuprofen	19.2	Spike	P	0 - 30
2405849	Imazapyr	0.875	Spike	P	0 - 30
2405849	Imidacloprid	3.35	Spike	P	0 - 30
2405849	Linuron	5.09	Spike	P	0 - 30
2405849	Mandestrobin	0.769	Spike	P	0 - 30
2405849	MCP	9.22	Spike	P	0 - 30
2405849	Naproxen	14.6	Spike	P	0 - 30
2405849	Primidone	5.58	Spike	P	0 - 30
2405849	Pyraclostrobin	4.78	Spike	P	0 - 30
2405849	Silvex	0.907	Spike	P	0 - 30
2405849	Thiamethoxam	1.21	Spike	P	0 - 30
2405849	Tolfenpyrad	3.59	Spike	P	0 - 30
2405849	Triclopyr	9.91	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P429589

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407608	3-Hydroxycarbofuran	0.0561	Spike	P	0 - 30
2407608	Aldicarb	25.8	Spike	P	0 - 30
2407608	Aldicarb Sulfone	1.23	Spike	P	0 - 30
2407608	Aldicarb Sulfoxide	0.257	Spike	P	0 - 30
2407608	Carbaryl	5.17	Spike	P	0 - 30
2407608	Carbofuran	0.0298	Spike	P	0 - 30
2407608	Methiocarb	3.16	Spike	P	0 - 30
2407608	Methomyl	0.487	Spike	P	0 - 30
2407608	Oxamyl	1.49	Spike	P	0 - 30
2407608	Propoxur	0.561	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429732

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407444	Acesulfame K	3.91	Spike	P	0 - 30
2407444	AMPA	4.83	Spike	P	0 - 30
2407444	Endothall	3.84	Spike	P	0 - 30
2407444	Glufosinate	2.42	Spike	P	0 - 30
2407444	Glyphosate	5.08	Spike	P	0 - 30
2407444	Sucralose	13.6	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P429832

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2406052	Total Alkalinity	0.346	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P430021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405966	TDS	2.66	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P429888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2405381	Fluoride	0.531	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P429964

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409134	Organic Carbon	1.12	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2407608
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	62.6	P	30 - 160

Lab Sample ID: 2407609
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	88.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	100	P	30 - 160
EPA 8321B	Diuron-d6	79.1	P	30 - 160
EPA 8321B	Endothall-d6	87.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.1	P	30 - 160
EPA 8321B	Primidone-d5	80.5	P	30 - 160
EPA 8321B	Sucralose-d6	44.4	P	30 - 160

Lab Sample ID: 2407610
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	78.9	P	29 - 130
EPA 8270E	Decachlorobiphenyl	57.1	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	58.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	56.6	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	46.7	P	30 - 101
EPA 8276	PCNB	94.0	P	48 - 121

Lab Sample ID: 2407611
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	98.4	P	20 - 200
EPA 8270E	Simazine-d10	97.7	P	62 - 142
EPA 8270E	Terbufos-d10	84.9	P	58 - 132
EPA 8270E	Terphenyl-d14	90.2	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A119047
Included Lab Sample IDs: 2407585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.1	99.6	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A119049
Included Lab Sample IDs: 2407585

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: A119070
Included Lab Sample IDs: 2407585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.3	98.9	P/P	90 - 110
Sulfate	98.3	98.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A119098
Included Lab Sample IDs: 2407586

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A119099
Included Lab Sample IDs: 2407586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.3	99.5	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A119143
Included Lab Sample IDs: 2407585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.4	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A119149
Included Lab Sample IDs: 2407586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.5	100	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A119152
Included Lab Sample IDs: 2407611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119152
Included Lab Sample IDs: 2407611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzene	111		P	80 - 120
Dechlorane 602	103		P	80 - 120
Dechlorane 603	105		P	80 - 120
Dechlorane Plus	95.2		P	80 - 120
Hexabromobenzene	102		P	80 - 120
Octinoxate	97.1		P	80 - 120
Oxybenzone	97.1		P	80 - 120
PBB-153	104		P	80 - 120
PBDE-47	98.7		P	80 - 120
PBDE-99	107		P	80 - 120
Pentabromotoluene	96.9		P	80 - 120
Tetradecachloro-m-terphenyl	104		P	80 - 120
Tri-o-cresyl Phosphate	99.9		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	86.0		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.7		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	98.4		P	80 - 120

Reference Method: EPA 8321B
Run ID: A119170
Included Lab Sample IDs: 2407609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.1	103	P/P	50 - 150
2,4,5-T	97.8	96.3	P/P	50 - 150
3-Hydroxycarbofuran	96.9	96.1	P/P	60 - 150
Acetaminophen	103	104	P/P	60 - 160
Acetamiprid	107	105	P/P	50 - 150
Afidopyropen	90.5	109	P/P	50 - 150
Aldicarb	99.8	100	P/P	60 - 150
Aldicarb Sulfone	102	97.4	P/P	50 - 150
Aldicarb Sulfoxide	100	114	P/P	50 - 150
Bentazon	126	130	P/P	50 - 160
Benzovindiflupyr	106	102	P/P	50 - 150
Carbamazepine	116	107	P/P	60 - 150
Carbaryl	120	117	P/P	60 - 150
Carbofuran	101	105	P/P	50 - 150
Clothianidin	89.1	95.3	P/P	60 - 150
Dinotefuran	114	107	P/P	50 - 150
Diuron	102	112	P/P	60 - 160
Fenuron	95.1	93.7	P/P	60 - 150
Fluridone	108	129	P/P	60 - 160
Hydrocodone	97.0	103	P/P	60 - 150
Ibuprofen	97.3	109	P/P	50 - 160
Imazapyr	90.8	98.8	P/P	50 - 150
Imidacloprid	105	105	P/P	60 - 150
Linuron	115	109	P/P	60 - 150
Mandestrobin	105	105	P/P	50 - 150
MCPP	93.5	104	P/P	50 - 150
Methiocarb	106	112	P/P	50 - 150
Methomyl	108	96.6	P/P	50 - 150
Naproxen	84.4	64.2	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A119170
Included Lab Sample IDs: 2407608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxamyl	101	94.0	P/P	50 - 150
Primidone	91.3	92.3	P/P	60 - 150
Propoxur	118	105	P/P	50 - 150
Pyraclostrobin	108	105	P/P	60 - 150
Silvex	87.3	94.9	P/P	50 - 150
Thiamethoxam	88.9	90.0	P/P	50 - 150
Tolfenpyrad	95.5	99.6	P/P	60 - 150
Triclopyr	103	93.9	P/P	50 - 150

Reference Method: SM 4500-F- C-2011
Run ID: A119179
Included Lab Sample IDs: 2407585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	104	103	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A119190
Included Lab Sample IDs: 2407609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	114	116	P/P	60 - 160
Endothall	85.5	80.8	P/P	60 - 160
Glufosinate	102	98.6	P/P	60 - 160
Glyphosate	115	117	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A119191
Included Lab Sample IDs: 2407609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	151	154	P/P	60 - 160
Sucralose	90.6	70.3	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A119213
Included Lab Sample IDs: 2407586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	94.0	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A119218
Included Lab Sample IDs: 2407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	102		P	80 - 120
Alpha-BHC	97.6		P	80 - 120
Alpha-Chlordane	108		P	80 - 120
Beta-BHC	95.9		P	80 - 120
Beta-Cyfluthrin	92.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119218
Included Lab Sample IDs: 2407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bifenthrin	94.3		P	80 - 120
Chlorothalonil	95.8		P	80 - 120
Cis-Nonachlor	98.8		P	80 - 120
Cypermethrin	91.8		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	94.8		P	80 - 120
DDE-p,p'	99.5		P	80 - 120
Delta-BHC	92.6		P	80 - 120
Deltamethrin	85.2		P	80 - 120
Dichlobenil	98.3		P	80 - 120
Dicofol	97.8		P	80 - 120
Dieldrin	99.2		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	101		P	80 - 120
Endosulfan Sulfate	88.1		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	98.4		P	80 - 120
Endrin Ketone	90.6		P	80 - 120
Esfenvalerate	91.4		P	80 - 120
Ethalfuralin	104		P	80 - 120
Fenpropathrin	95.1		P	80 - 120
Gamma-BHC	97.2		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	71.2*		F	80 - 120
Lambda-Cyhalothrin	93.0		P	80 - 120
Methoprene	96.5		P	80 - 120
Methoxychlor	94.1		P	80 - 120
MGK-264	94.2		P	80 - 120
Mirex	98.2		P	80 - 120
Oxychlordane	101		P	80 - 120
Permethrin	94.2		P	80 - 120
Phenothrin	96.0		P	80 - 120
Piperonyl Butoxide	92.1		P	80 - 120
Prallethrin	97.7		P	80 - 120
Tau-Fluvalinate	88.1		P	80 - 120
Tetramethrin	93.1		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	109		P	80 - 120
Trifluralin	98.3		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A119230
Included Lab Sample IDs: 2407586

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276
Run ID: A119251
Included Lab Sample IDs: 2407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	103		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119304
Included Lab Sample IDs: 2407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.6		P	80 - 120
PCB-1260	104		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119319
Included Lab Sample IDs: 2407610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDT-p,p'	98.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119367
Included Lab Sample IDs: 2407611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	84.7		P	80 - 120
Alachlor	90.7		P	80 - 120
Ametryn	99.6		P	80 - 120
Atrazine	85.7		P	80 - 120
Atrazine Desethyl	85.1		P	80 - 120
Azinphos Methyl	85.0		P	80 - 120
Azoxystrobin	97.7		P	80 - 120
Bromacil	98.6		P	80 - 120
Butylate	98.0		P	80 - 120
Caffeine	116		P	80 - 120
Carbophenothion	97.7		P	80 - 120
Carfentrazone Ethyl	96.1		P	80 - 120
Chlorfenapyr	83.7		P	80 - 120
Chlorpyrifos Ethyl	91.3		P	80 - 120
Chlorpyrifos Methyl	97.0		P	80 - 120
Coumaphos	95.0		P	80 - 120
Cyanazine	75.8*		F	80 - 120
Cyprodinil	95.0		P	80 - 120
Demeton	98.6		P	80 - 120
Diazinon	99.2		P	80 - 120
Difenoconazole	94.2		P	80 - 120
Dimethenamid	99.5		P	80 - 120
Dimethomorph	85.5		P	80 - 120
Disulfoton	99.9		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	100		P	80 - 120
Ethion	88.4		P	80 - 120
Ethoprop	99.3		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119367
Included Lab Sample IDs: 2407611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Etridiazole	97.1		P	80 - 120
Fenamiphos	90.4		P	80 - 120
Fenbuconazole	85.3		P	80 - 120
Fipronil	84.7		P	80 - 120
Fipronil Desulfinyl	97.6		P	80 - 120
Fipronil Sulfide	97.3		P	80 - 120
Fipronil Sulfone	96.2		P	80 - 120
Fluazifop-P-butyl	97.8		P	80 - 120
Fludioxonil	106		P	80 - 120
Flumioxazin	92.0		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	97.1		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	99.4		P	80 - 120
Iprodione	84.2		P	80 - 120
Loratadine	80.1		P	80 - 120
Malathion	83.6		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	98.1		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	105		P	80 - 120
Molinate	88.3		P	80 - 120
Myclobutanil	88.1		P	80 - 120
Naled	92.6		P	80 - 120
Napropamide	95.6		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	102		P	80 - 120
Oxyfluorfen	94.5		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	85.3		P	80 - 120
Pendimethalin	97.9		P	80 - 120
Phenytoin	102		P	80 - 120
Phorate	85.0		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	106		P	80 - 120
Pronamide	97.7		P	80 - 120
Propanil	105		P	80 - 120
Propargite	98.7		P	80 - 120
Propiconazole	104		P	80 - 120
Pyraflufen Ethyl	95.0		P	80 - 120
Pyridaben	102		P	80 - 120
Pyriproxyfen	98.4		P	80 - 120
Simazine	83.7		P	80 - 120
Stirophos	81.9		P	80 - 120
Sulfentrazone	99.6		P	80 - 120
Tebuconazole	98.5		P	80 - 120
Terbufos	104		P	80 - 120
Terbuthylazine	87.2		P	80 - 120
Thiobencarb	101		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A119367
Included Lab Sample IDs: 2407611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triadimefon	97.2		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	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	98.9				7.11	
EPA 180.1 Rev. 2.0	Turbidity	101				1.63	
EPA 300.0 Rev. 2.1	Chloride	99.1	96.6	99.0		0.365	
	Sulfate	98.0	97.7	98.0		0.542	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	104	105			0.810
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	96.9	91.6			5.05
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	104	104	106			1.86
EPA 365.1 Rev. 2.0	Total-P	99.7	91.4	94.3			3.08
EPA 8270E	2-Ethylhexyl	103	95.1	112			16.4
	2,3,4,5-tetrabromobenzoate (EHTBB)						
	Acetochlor	77.4	74.2	84.6			13.0
	Alachlor	92.1	82.7	81.3			1.72
	Aldrin	47.4	45.4	42.9			5.76
	Alpha-BHC	84.0	80.6	80.4			0.212
	Alpha-Chlordane	67.8	57.8	64.0			10.2
	Ametryn	139	118	113			4.66
	Atrazine	96.1	105	100			4.56
	Atrazine Desethyl	108	101	107			5.24
	Avobenzone	152	131	161			20.7
	Azinphos Methyl	94.8	81.7	103			23.3
	Azoxystrobin	109	83.4	114			31.1
	Beta-BHC	93.9	96.2	91.5			5.01
	Beta-Cyfluthrin	59.9	77.1	80.0			3.70
	Bifenthrin	41.6	58.7	61.9			5.19
	Bromacil	108	112	108			3.09
	Butylate	71.4	74.4	70.4			5.53
	Caffeine	85.8	112	101			10.7
	Carbophenothion	115	103	109			5.53
	Carfentrazone Ethyl	130	119	120			0.268
	Chlorfenapyr	87.6	81.4	88.6			8.46
	Chlorothalonil	78.2	82.1	84.8			3.23
	Chlorpyrifos Ethyl	101	89.4	84.9			5.17
	Chlorpyrifos Methyl	88.8	86.9	102			16.3
	Cis-Nonachlor	62.2	52.6	52.3			0.575
	Coumaphos	118	117	123			5.10
	Cyanazine	177	145	165			13.1
	Cypermethrin	67.3	79.2	76.9			2.90
	Cyprodinil	77.4	84.0	80.3			4.49
	Dacthal	100	98.5	74.7			27.4
	DDD-p,p'	62.9	52.9	56.0			5.84
	DDE-p,p'	65.5	53.4	56.6			5.73
	DDT-p,p'	61.8	59.5	59.4			0.297
	Dechlorane 602	88.0	74.0	89.8			19.3
	Dechlorane 603	143	118	143			19.1
	Dechlorane Plus	103	86.8	91.3			5.11
	Delta-BHC	92.1	90.7	90.8			0.168
	Deltamethrin	76.8	91.2	99.0			8.12
	Demeton	80.6	75.9	81.9			7.61
	Diazinon	121	113	119			5.45
	Dichlobenil	89.3	77.0	76.5			0.666
	Dicofol	72.7	72.9	68.9			5.70
	Dieldrin	69.1	56.3	57.9			2.81
	Difenoconazole	72.8	58.2	94.4			47.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Dimethenamid	108	97.7	103			4.99
	Dimethomorph	183	167	183			9.09
	Disulfoton	122	105	106			0.858
	Dithiopyr	115	102	101			1.25
	Endosulfan I	64.9	55.5	59.6			7.12
	Endosulfan II	69.1	59.3	61.6			3.84
	Endosulfan Sulfate	66.2	54.9	60.1			9.15
	Endrin	66.3	58.5	59.4			1.52
	Endrin Aldehyde	61.8	59.3	52.9			11.3
	Endrin Ketone	95.1	73.4	94.1			24.7
	EPTC	64.5	67.4	65.6			2.80
	Esfenvalerate	56.4	72.6	77.8			6.91
	Ethalfuralin	63.2	61.0	64.1			4.82
	Ethion	83.4	72.5	74.2			2.42
	Ethoprop	103	92.0	97.3			5.65
	Etridiazole	82.0	74.9	70.7			5.73
	Fenamiphos	86.0	74.5	74.1			0.531
	Fenbuconazole	65.1	47.2	77.0			48.0
	Fenpropathrin	70.2	92.1	83.0			10.3
	Fipronil	109	92.3	100			8.22
	Fipronil Desulfinyl	102	96.8	101			4.59
	Fipronil Sulfide	115	100	106			5.32
	Fipronil Sulfone	109	95.3	103			6.76
	Fluazifop-P-butyl	74.3	75.9	84.3			10.4
	Fludioxonil	98.4	86.7	88.5			2.05
	Flumioxazin	90.0	66.7	112			50.3
	Flutolanil	84.7	74.9	83.4			10.7
	Fluxapyroxad	91.9	80.9	83.7			3.40
	Fonofos	98.5	93.1	107			14.0
	Gamma-BHC	91.0	91.2	87.5			4.15
	Gamma-Chlordane	66.1	57.1	59.1			3.56
	Heptachlor	59.0	54.1	56.5			4.25
	Heptachlor Epoxide	82.8	81.9	73.5			10.9
	Hexabromobenzene	129	125	132			5.67
	Hexachlorobenzene	60.8	58.0	58.5			0.821
	Hexazinone	93.8	97.7	93.6			4.33
	Imazalil	86.6	79.6	85.1			6.71
	Iprodione	96.3	85.0	88.0			3.42
	Kepone	71.9	87.9	84.0			4.58
	Lambda-Cyhalothrin	53.2	74.7	75.9			1.58
	Loratadine	134	100	155			42.7
	Malathion	103	99.7	92.0			7.95
	Metalaxyl	95.1	90.3	92.4			2.30
	Methoprene	40.3	52.4	64.1			20.2
	Methoxychlor	83.4	89.4	82.7			7.83
	Metolachlor	95.9	86.7	82.8			4.60
	Metribuzin	104	101	109			8.08
	Mevinphos	97.7	92.4	98.7			6.59
	MGK-264	88.1	91.7	88.9			3.15
	Mirex	40.0	41.0	43.0			4.83
	Molinate	66.4	66.5	67.2			1.06
	Myclobutanil	115	106	99.3			6.32
	Naled	39.1	38.0	37.3			1.82
	Napropamide	78.7	72.4	68.1			6.06

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Norflurazon	102	92.1	94.9		3.08
	Octinoxate	117	107	119		10.5
	Oxadiazon	107	90.4	90.1		0.332
	Oxybenzone	131	127	122		3.24
	Oxychlordane	69.5	68.1	67.3		1.16
	Oxyfluorfen	124	101	101		0.330
	Parathion Ethyl	101	95.3	101		5.41
	Parathion Methyl	101	93.4	107		13.5
	PBB-153	135	112	138		20.5
	PBDE-47	113	101	110		8.65
	PBDE-99	99.0	84.3	104		20.7
	PCB-1016	69.6	72.9	70.5		3.33
	PCB-1260	60.4	65.0	64.8		0.387
	Pendimethalin	103	104	108		3.55
	Pentabromotoluene	117	108	116		7.14
	Permethrin	59.6	69.4	72.0		3.61
	Phenothrin	39.9	61.8	60.8		1.53
	Phenytoin	60.4	59.6	56.9		4.73
	Phorate	117	107	111		4.47
	Piperonyl Butoxide	79.4	63.9	66.0		2.81
	Prallethrin	60.6	60.1	62.9		4.64
	Prodiamine	71.3	67.6	70.5		4.17
	Prometon	67.7	71.0	59.1		18.3
	Prometryn	110	95.3	103		6.39
	Pronamide	121	111	108		2.20
	Propanil	130	128	102		23.0
	Propargite	81.0	61.4	63.4		3.28
	Propiconazole	96.6	87.3	95.5		9.00
	Pyraflufen Ethyl	64.6	71.2	78.0		9.12
	Pyridaben	99.8	94.6	102		7.90
	Pyriproxyfen	90.5	84.8	82.5		2.71
	Simazine	85.1	90.9	91.2		0.331
	Stirophos	84.8	70.8	69.7		1.64
	Sulfentrazone	93.4	87.4	109		22.4
	Tau-Fluvalinate	48.4	69.3	74.5		7.22
	Tebuconazole	65.3	62.7	57.8		8.08
	Terbufos	124	116	121		3.82
	Terbutylazine	94.6	88.0	90.0		2.25
	Tetradecachloro-m-terphenyl	185	170	184		7.57
	Tetramethrin	89.2	101	94.3		6.69
	Thiobencarb	109	104	101		3.38
	Trans-Nonachlor	63.4	58.6	57.3		2.19
	Tri-o-cresyl Phosphate	121	112	118		5.44
	Triadimefon	103	92.1	85.7		7.20
	Triclosan Methyl	71.5	58.4	63.6		8.57
	Trifluralin	64.5	62.3	63.9		2.49
	Tris(1-chloro-2-propyl) phosphate (TCPP)	102	94.4	87.0		8.18
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	106	98.4	108		9.55
	Tris(2-chloroethyl) phosphate (TCEP)	117	112	111		1.37
EPA 8276	Chlordane	64.9	75.9	75.0		1.24
	Toxaphene	67.3	86.0	85.7		0.401

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	2,4-D	87.9	87.0	93.4			6.87
	2,4,5-T	94.3	87.1	89.0			2.12
	3-Hydroxycarbofuran	82.2	82.1	82.2			0.0561
	Acesulfame K	102	136	142			3.91
	Acetaminophen	95.9	90.9	93.3			2.57
	Acetamiprid	81.4	91.0	92.7			1.85
	Afidopyropen	64.9	86.1	100			15.2
	Aldicarb	53.3	57.6	74.7			25.8
	Aldicarb Sulfone	86.8	74.7	73.8			1.23
	Aldicarb Sulfoxide	110	53.5	53.4			0.257
	AMPA	112	91.5	87.2			4.83
	Bentazon	149	162	156			2.87
	Benzovindiflupyr	89.5	77.8	79.6			2.18
	Carbamazepine	92.5	87.4	93.2			6.11
	Carbaryl	89.6	80.5	84.7			5.17
	Carbofuran	85.0	73.8	73.8			0.0298
	Clothianidin	88.4	84.4	89.7			6.06
	Dinotefuran	107	96.1	96.2			0.105
	Diuron	89.3	67.8	77.3			11.5
	Endothall	80.5	83.9	80.7			3.84
	Fenuron	93.2	72.2	75.2			4.10
	Fluridone	86.4	84.2	83.9			0.407
	Glufosinate	97.6	97.6	95.3			2.42
	Glyphosate	121	123	117			5.08
	Hydrocodone	93.3	75.3	78.8			4.60
	Ibuprofen	99.5	68.9	83.6			19.2
	Imazapyr	87.5	107	108			0.875
	Imidacloprid	97.2	101	105			3.35
	Linuron	89.7	78.5	82.6			5.09
	Mandestrobin	87.5	82.1	81.5			0.769
	MCPP	92.8	90.4	99.1			9.22
	Methiocarb	88.7	75.8	78.2			3.16
	Methomyl	87.2	76.7	76.4			0.487
	Naproxen	101	98.8	85.3			14.6
	Oxamyl	92.1	79.9	78.7			1.49
	Primidone	89.2	77.6	82.1			5.58
	Propoxur	78.7	72.8	73.2			0.561
	Pyraclostrobin	86.6	78.0	81.8			4.78
	Silvex	96.2	101	100			0.907
	Sucralose	87.9	97.7	83.9			13.6
	Thiamethoxam	83.8	84.1	85.1			1.21
	Tolfenpyrad	54.8	47.2	49.0			3.59
	Triclopyr	85.6	87.0	96.1			9.91
SM 2320 B-2011	Total Alkalinity	98.6				0.346	
SM 2540 C-2015	TDS	103				2.66	
SM 2540 D-2015	TSS	97.4					
SM 4500-F- C-2011	Fluoride	100	104	105			0.531
SM 5310 B-2011	Organic Carbon	97.0	94.7	93.4			1.12

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2407585

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2407585
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2407585
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2407585
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2407586
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2407586
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2407586
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2407586
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2407611
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2407610
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2407611
EPA 8270E	PCBs in water matrices by GC/MS/MS	2407610
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2407610
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2407608
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2407609
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2407585
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2407585
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2407585
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2407585
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2407586

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	05/09/2023			05/09/2023 14:39	Samantha L Bates	2407585
EPA 180.1 Rev. 2.0	05/09/2023			05/09/2023 13:07	Chandler E Cox	2407585
EPA 300.0 Rev. 2.1	05/09/2023			05/11/2023 06:10	James L Waggeberby	2407585
EPA 350.1 Rev. 2.0	05/09/2023			05/11/2023 11:46	Khloe J Berg	2407586
EPA 351.2 Rev. 2.0	05/09/2023	05/10/2023 12:06	Dana G. Hughes	05/11/2023 11:23	Ping Hua	2407586
EPA 353.2 Rev. 2.0	05/09/2023			05/16/2023 14:07	Anna M. Plaviak	2407586
EPA 365.1 Rev. 2.0	05/09/2023	05/11/2023 15:10	Adam P Silver	05/12/2023 15:51	James L Waggeberby	2407586
EPA 8270E	05/09/2023	05/11/2023 08:00	Fe-Val Siddell	05/12/2023 22:49	Arthur Maknenko	2407611
	05/09/2023	05/11/2023 08:00	Fe-Val Siddell	05/14/2023 18:31	Vandana T. Nagar	2407611
	05/09/2023	05/12/2023 09:00	Rasheda Ghaffari	05/16/2023 19:54	Michael Poppell	2407610
	05/09/2023	05/12/2023 09:00	Rasheda Ghaffari	05/17/2023 18:24	Vandana T. Nagar	2407610
	05/09/2023	05/12/2023 09:00	Rasheda Ghaffari	05/18/2023 20:03	Michael Poppell	2407610
EPA 8276	05/09/2023	05/12/2023 09:00	Rasheda Ghaffari	05/18/2023 03:06	Arthur Maknenko	2407610
EPA 8321B	05/09/2023	05/10/2023 09:00	Hoor Shaik	05/11/2023 19:45	Juyoung Kim	2407608
	05/09/2023	05/10/2023 11:00	Hoor Shaik	05/12/2023 03:35	Juyoung Kim	2407609
	05/09/2023	05/12/2023 09:00	Manjita Shrestha	05/12/2023 12:57	Manjita Shrestha	2407609
	05/09/2023	05/12/2023 09:00	Manjita Shrestha	05/12/2023 23:26	Manjita Shrestha	2407609
	05/09/2023	05/12/2023 09:00	Manjita Shrestha	05/13/2023 06:05	Manjita Shrestha	2407609
SM 2320 B-2011	05/09/2023			05/11/2023 20:05	Dale L. Simmons	2407585
SM 2540 C-2015	05/09/2023			05/10/2023 15:30	Yijie Li	2407585
SM 2540 D-2015	05/09/2023			05/10/2023 15:30	Yijie Li	2407585
SM 4500-F- C-2011	05/09/2023			05/16/2023 01:16	Dale L. Simmons	2407585
SM 5310 B-2011	05/09/2023			05/17/2023 04:43	Elise M. Gillis	2407586