Chemical Analysis Report

CEN-DIST-2022-11-04-01

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

Event Description: **Lake Ann - Seminole Co Sampling**
Request ID: **RQ-2022-10-31-47**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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Certified by: Colin Wright, Program Administrator

Date Certified: 01-DEC-2022 10:57

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: Lake Ann @ Center **Collection Date/Time: 11/03/2022 12:20**

Field ID: G2CE0097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367604	DEP SOP: NU-094-1	Color (true)	34		PCU	P421977	
	EPA 180.1 Rev. 2.0	Turbidity	3.2		NTU	P421960	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P422247	
		Sulfate	8.5		mg SO4/L	P422250	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P422256	
	SM 2540 C-2015	TDS	68		mg/L	P422521	
	SM 2540 D-2015	TSS	4	I	mg/L	P422339	
	SM 4500-F- C-2011	Fluoride	0.033	I	mg F/L	P422896	
2367605	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P422436	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P422242	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P422143	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P422192	
	SM 5310 B-2011	Organic Carbon	7.0		mg C/L	P422611	
2367606	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P421941	
2367608	EPA 8321B	Aldicarb	0.020	U	ug/L	P421979	
		Aldicarb Sulfone	0.0020	U	ug/L	P421979	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P421979	
		Carbaryl	0.0020	U	ug/L	P421979	
		Carbofuran	0.0020	U	ug/L	P421979	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P421979	
		Methiocarb	0.0020	U	ug/L	P421979	
		Methomyl	0.0020	U	ug/L	P421979	
		Oxamyl	0.0020	U	ug/L	P421979	
		Propoxur	0.0020	U	ug/L	P421979	
2367609		2,4-D	0.045		ug/L	P422148	
		Acesulfame K	0.10	U	ug/L	P421996	
		2,4,5-T	0.0040	U	ug/L	P422148	
		AMPA	0.10	U	ug/L	P421996	
		Acetaminophen	0.0080	U	ug/L	P422148	
		Acetamiprid	0.0020	U	ug/L	P422148	
		Endothall	0.25	U	ug/L	P421996	
		Glufosinate	0.10	U	ug/L	P421996	
		Glyphosate	0.10	U	ug/L	P421996	
		Afidopyropen	0.0020	U	ug/L	P422148	
		Bentazon	0.070		ug/L	P422148	
		Sucralose	0.82		ug/L	P421996	
		Benzovindiflupyr	0.0020	U	ug/L	P422148	
		Carbamazepine	8.0E-04	U	ug/L	P422148	
		Clothianidin	0.031		ug/L	P422148	
		Dinotefuran	0.0042	I	ug/L	P422148	
		Diuron	0.0050	I	ug/L	P422148	
		Fenuron	0.032	U	ug/L	P422148	
		Fluridone	0.0046		ug/L	P422148	

Field ID: G2CE0097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367609	EPA 8321B	Imazapyr	0.030		ug/L	P422148	
		Hydrocodone	0.0020	U	ug/L	P422148	
		Ibuprofen	0.20	U	ug/L	P422148	
		Imidacloprid	0.032		ug/L	P422148	MS
		Linuron	0.0040	U	ug/L	P422148	
		Mandestrobin	0.0020	U	ug/L	P422148	
		MCPP	0.0040	U	ug/L	P422148	
		Naproxen	0.0080	U	ug/L	P422148	
		Primidone	0.0040	U	ug/L	P422148	
		Pyraclostrobin	0.0020	U	ug/L	P422148	
		Silvex	0.0040	U	ug/L	P422148	
		Thiamethoxam	0.0048	I	ug/L	P422148	MS
		Tolfenpyrad	0.0020	U	ug/L	P422148	
		Triclopyr	0.0040	U	ug/L	P422148	
2367610	EPA 8270E	Aldrin	0.66	U	ng/L	P421968	
		Alpha-BHC	0.10	U	ng/L	P421968	
		Alpha-Chlordane	0.20	U	ng/L	P421968	
		PCB-1016	2.0	U	ng/L	P421968	
		Beta-BHC	0.10	U	ng/L	P421968	
		PCB-1221	2.0	U	ng/L	P421968	
		Beta-Cyfluthrin	1.3	U	ng/L	P421968	
		PCB-1232	2.0	U	ng/L	P421968	
		Bifenthrin	0.51	U	ng/L	P421968	
		PCB-1242	2.0	U	ng/L	P421968	
		PCB-1248	2.0	U	ng/L	P421968	
		Chlorothalonil	1.3	U	ng/L	P421968	
		PCB-1254	2.0	U	ng/L	P421968	
		Cis-Nonachlor	0.20	U	ng/L	P421968	
		PCB-1260	2.0	U	ng/L	P421968	
		Cypermethrin	1.5	U	ng/L	P421968	
		Dacthal	0.15	U	ng/L	P421968	
		DDD-p,p'	0.26	U	ng/L	P421968	
		DDE-p,p'	0.20	U	ng/L	P421968	
		DDT-p,p'	0.26	U	ng/L	P421968	
		Delta-BHC	0.41	U	ng/L	P421968	
		Deltamethrin	1.3	U	ng/L	P421968	MS, RPD
		Dichlobenil	0.26	U	ng/L	P421968	
		Dicofol	1.3	U	ng/L	P421968	
		Dieldrin	0.41	U	ng/L	P421968	MS
		Endosulfan I	0.41	U	ng/L	P421968	
		Endosulfan II	0.41	U	ng/L	P421968	
		Endosulfan Sulfate	0.31	U	ng/L	P421968	
		Endrin	0.41	U	ng/L	P421968	
		Endrin Aldehyde	0.77	U	ng/L	P421968	MS, RPD
		Endrin Ketone	0.41	U	ng/L	P421968	

Field ID: G2CE0097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367610	EPA 8270E	Esfenvalerate	0.77	U	ng/L	P421968	
		Ethalfluralin	0.15	U	ng/L	P421968	
		Fenpropathrin	0.26	U	ng/L	P421968	RPD
		Gamma-BHC	0.13	U	ng/L	P421968	
		Gamma-Chlordane	0.20	U	ng/L	P421968	
		Heptachlor	0.20	U	ng/L	P421968	
		Heptachlor Epoxide	0.26	U	ng/L	P421968	
		Hexachlorobenzene**	1.0	U	ng/L	P421968	
		Kepone	5.1	U	ng/L	P421968	
		Lambda-Cyhalothrin	0.77	U	ng/L	P421968	
		Methoprene	0.77	U	ng/L	P421968	
		Methoxychlor	0.31	U	ng/L	P421968	
		MGK-264	0.20	U	ng/L	P421968	
		Mirex	0.36	U	ng/L	P421968	
		Oxychlordane	0.31	U	ng/L	P421968	
		Permethrin	1.6	U	ng/L	P421968	
		Phenothrin	0.92	U	ng/L	P421968	
		Piperonyl Butoxide	0.51	I	ng/L	P421968	
		Prallethrin	2.0	U	ng/L	P421968	
		Tau-Fluvalinate	0.26	U	ng/L	P421968	
		Tetramethrin	0.77	U	ng/L	P421968	
		Trans-Nonachlor	0.20	U	ng/L	P421968	
		Triclosan Methyl	0.15	U	ng/L	P421968	
		Trifluralin	0.20	U	ng/L	P421968	
	EPA 8276	Chlordane	2.0	U	ng/L	P421968	
		Toxaphene	15	U	ng/L	P421968	
2367611	EPA 8270E	Oxybenzone**	10	U	ng/L	P422125	
		Acetochlor	0.25	U	ng/L	P422125	
		Octinoxate**	20	U	ng/L	P422125	
		Alachlor	0.25	U	ng/L	P422125	
		Avobenzone**	100	U	ng/L	P422125	
		Ametryn	0.60	U	ng/L	P422125	
		Atrazine	330		ng/L	P422125	
		PBDE-47**	4.0	U	ng/L	P422125	
		Atrazine Desethyl	11		ng/L	P422125	
		PBDE-99**	5.0	U	ng/L	P422125	
		Azinphos Methyl	2.0	U	ng/L	P422125	
		Tri-o-cresyl Phosphate**	6.0	U	ng/L	P422125	
		Azoxystrobin	3.3		ng/L	P422125	
		Bromacil	0.50	U	ng/L	P422125	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P422125	
		Butylate	0.40	U	ng/L	P422125	
		Dechlorane Plus**	30	U	ng/L	P422125	
		Caffeine**	20	I	ng/L	P422125	

Field ID: G2CE0097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367611	EPA 8270E	Carbophenothion	0.20	U	ng/L	P422125	
		Carfentrazone Ethyl	0.10	U	ng/L	P422125	
		Chlorfenapyr	0.18	U	ng/L	P422125	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P422125	RPD
		Chlorpyrifos Methyl	0.050	U	ng/L	P422125	
		Coumaphos	0.50	U	ng/L	P422125	
		Cyanazine	3.3	U	ng/L	P422125	
		Cyprodinil	0.10	U	ng/L	P422125	
		Demeton	1.5	U	ng/L	P422125	
		Diazinon	0.13	U	ng/L	P422125	
		Difenoconazole	0.60	U	ng/L	P422125	
		Dimethenamid	0.10	U	ng/L	P422125	
		Dimethomorph	0.18	U	ng/L	P422125	
		Disulfoton	0.50	U	ng/L	P422125	
		Dithiopyr	0.63	U	ng/L	P422125	
		EPTC	1.3	U	ng/L	P422125	
		Ethion	0.15	U	ng/L	P422125	
		Ethoprop	0.10	U	ng/L	P422125	
		Etridiazole	0.15	U	ng/L	P422125	
		Fenamiphos	0.50	U	ng/L	P422125	
		Fenbuconazole	0.13	U	ng/L	P422125	
		Fipronil	1.7		ng/L	P422125	MS
		Fipronil Desulfinyl**	2.6		ng/L	P422125	
		Fipronil Sulfide	1.1		ng/L	P422125	
		Fipronil Sulfone	4.0		ng/L	P422125	
		Fluazifop-P-butyl	0.10	U	ng/L	P422125	
		Fludioxonil	0.13	U	ng/L	P422125	
		Flumioxazin	4.5	U	ng/L	P422125	
		Flutolanil	0.10	U	ng/L	P422125	
		Fluxapyroxad	0.16	I	ng/L	P422125	
		Fonofos	0.20	U	ng/L	P422125	
		Hexazinone	0.50	U	ng/L	P422125	
		Imazalil	0.75	U	ng/L	P422125	
		Iprodione	0.60	UJ	ng/L	P422125	LCS, MS
		Loratadine**	0.35	U	ng/L	P422125	
		Malathion	0.35	U	ng/L	P422125	
		Metalaxyl	0.96	I	ng/L	P422125	
		Metolachlor	0.35	U	ng/L	P422125	
		Metribuzin	1.5	U	ng/L	P422125	
		Mevinphos	1.1	U	ng/L	P422125	
		Molinate	0.30	U	ng/L	P422125	
		Myclobutanil	0.89	I	ng/L	P422125	
		Naled	1.5	U	ng/L	P422125	
		Napropamide	0.40	U	ng/L	P422125	
		Norflurazon	0.77	I	ng/L	P422125	

Field ID: G2CE0097 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2367611	EPA 8270E	Oxadiazon	3.8		ng/L	P422125	
		Oxyfluorfen	0.15	U	ng/L	P422125	
		Parathion Ethyl	0.25	U	ng/L	P422125	
		Parathion Methyl	0.55	U	ng/L	P422125	
		Pendimethalin	1.0	U	ng/L	P422125	
		Phenytoin**	3.5	U	ng/L	P422125	MS
		Phorate	0.53	U	ng/L	P422125	
		Prodiamine	0.18	U	ng/L	P422125	
		Prometon	0.90	U	ng/L	P422125	
		Prometryn	0.20	UJ	ng/L	P422125	LCS, MS
		Pronamide	0.15	U	ng/L	P422125	
		Propanil	0.13	U	ng/L	P422125	
		Propargite	1.5	U	ng/L	P422125	
		Propiconazole	3.0		ng/L	P422125	
		Pyraflufen Ethyl	0.25	U	ng/L	P422125	
		Pyridaben	4.0		ng/L	P422125	
		Pyriproxyfen	0.13	U	ng/L	P422125	
		Simazine	0.50	U	ng/L	P422125	
		Stirophos	0.13	U	ng/L	P422125	
		Sulfentrazone	3.0		ng/L	P422125	
		Tebuconazole	1.1	I	ng/L	P422125	
		Terbufos	0.10	U	ng/L	P422125	
		Terbuthylazine	0.43	U	ng/L	P422125	
		Thiobencarb	0.60	U	ng/L	P422125	
		Triadimefon	0.25	U	ng/L	P422125	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: MS accuracy for atrazine and norflurazon 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: P421977

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421960

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422436

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422143

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422192

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421941

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P421968

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	1.2	U	ng/L
Chlorothalonil	1.2	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
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
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P421968

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P421968

Component	Result	Code	Units
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 8270E
Batch ID: P422125

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	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Dechlorane Plus	30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P422125

Component	Result	Code	Units
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	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	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	4.5	U	ng/L
Flumioxazin	4.5	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P422125

Component	Result	Code	Units
Iprodione	0.60	U	ng/L
Loratadine	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	1.5	U	ng/L
Metribuzin	1.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	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	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P422125

Component	Result	Code	Units
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276
Batch ID: P421968

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: P421979

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P421979

Component	Result	Code	Units
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P421996

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: P422148

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	0.20	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	0.0040	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: SM 2320 B-2011
Batch ID: P422256

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: P422521

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P422339

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P422611

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: P421977

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.0		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421960

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422436

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: P422242

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.6		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422143

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422192

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.8		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P421968

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.4		P	10 - 92.0
Alpha-BHC	94.6		P	75 - 107
Alpha-Chlordane	72.7		P	50 - 108
Beta-BHC	78.5		P	36 - 138
Beta-Cyfluthrin	68.4		P	20 - 161
Bifenthrin	47.1		P	10 - 119
Chlorothalonil	121		P	26 - 186
Cis-Nonachlor	68.8		P	42 - 119
Cypermethrin	69.7		P	22 - 150
Dacthal	90.7		P	72 - 119
DDD-p,p'	62.2		P	45 - 107
DDE-p,p'	69.0		P	48 - 106
DDT-p,p'	71.1		P	48 - 110
Delta-BHC	86.2		P	54 - 140
Deltamethrin	77.2		P	22 - 189
Dichlobenil	57.2		P	36 - 117
Dicofol	79.9		P	46 - 155
Dieldrin	74.2		P	54 - 110
Endosulfan I	76.3		P	59 - 105
Endosulfan II	83.1		P	51 - 118
Endosulfan Sulfate	76.0		P	57 - 121
Endrin	74.3		P	10 - 120
Endrin Aldehyde	53.7		P	34 - 118
Endrin Ketone	86.4		P	69 - 177
Esfenvalerate	80.6		P	23 - 168
Ethalfluralin	73.1		P	49 - 99.0
Fenpropathrin	62.7		P	34 - 117
Gamma-BHC	89.2		P	72 - 117
Gamma-Chlordane	70.9		P	43 - 106
Heptachlor	69.2		P	41 - 98.0
Heptachlor Epoxide	78.5		P	57 - 106
Hexachlorobenzene	51.4		P	36 - 99.0
Kepone	81.2		P	16 - 215
Lambda-Cyhalothrin	57.5		P	21 - 177
Methoprene	58.8		P	10 - 119
Methoxychlor	87.5		P	60 - 112
MGK-264	79.9		P	26 - 122
Mirex	50.2		P	10 - 169
Oxychlordane	69.6		P	43 - 105
PCB-1016	80.1		P	48 - 112
PCB-1260	79.1		P	44 - 118
Permethrin	62.2		P	24 - 148
Phenothrin	53.5		P	10 - 106
Piperonyl Butoxide	89.4		P	10 - 139
Prallethrin	81.1		P	17 - 109
Tau-Fluvalinate	64.2		P	13 - 131
Tetramethrin	85.8		P	10 - 132
Trans-Nonachlor	74.1		P	44 - 106
Triclosan Methyl	77.1		P	59 - 109
Trifluralin	74.9		P	44 - 101

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P422125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.1		P	42 - 162
Acetochlor	107		P	69 - 123
Alachlor	85.3		P	65 - 118
Ametryn	107		P	58 - 141
Atrazine	103		P	73 - 118
Atrazine Desethyl	77.9		P	32 - 125
Avobenzone	90.1		P	40 - 203
Azinphos Methyl	155		P	36 - 197
Azoxystrobin	109		P	58 - 226
Bromacil	119		P	48 - 120
Butylate	62.5		P	27 - 85.0
Caffeine	78.2		P	40 - 137
Carbophenothion	110		P	54 - 132
Carfentrazone Ethyl	114		P	60 - 142
Chlorfenapyr	107		P	53 - 117
Chlorpyrifos Ethyl	92.9		P	59 - 116
Chlorpyrifos Methyl	104		P	66 - 119
Coumaphos	103		P	11 - 234
Cyanazine	204		P	61 - 248
Cyprodinil	123		P	50 - 147
Dechlorane Plus	80.2		P	47 - 182
Demeton	92.7		P	30 - 138
Diazinon	94.6		P	67 - 126
Difenoconazole	93.1		P	38 - 205
Dimethenamid	81.1		P	57 - 111
Dimethomorph	106		P	16 - 212
Disulfoton	104		P	46 - 126
Dithiopyr	100		P	62 - 115
EPTC	60.1		P	28 - 80.0
Ethion	75.7		P	24 - 122
Ethoprop	108		P	62 - 113
Etridiazole	85.3		P	28 - 92.0
Fenamiphos	111		P	57 - 128
Fenbuconazole	84.8		P	52 - 155
Fipronil	94.1		P	63 - 130
Fipronil Desulfinyl	97.7		P	61 - 130
Fipronil Sulfide	84.2		P	56 - 117
Fipronil Sulfone	87.8		P	52 - 118
Fluazifop-P-butyl	106		P	61 - 128
Fludioxonil	100		P	59 - 129
Flumioxazin	95.4		P	30 - 250
Flutolanil	100		P	53 - 127
Fluxapyroxad	108		P	42 - 132
Fonofos	90.9		P	61 - 110
Hexazinone	106		P	46 - 139
Imazalil	83.6		P	40 - 139
Iprodione	243		F	40 - 146
Loratadine	87.2		P	10 - 224
Malathion	111		P	61 - 135
Metalaxyl	92.9		P	58 - 121
Metolachlor	114		P	64 - 118
Metribuzin	98.8		P	45 - 245

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P422125

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mevinphos	88.5		P	49 - 118
Molinate	80.0		P	42 - 92.0
Myclobutanil	112		P	55 - 127
Naled	76.6		P	10 - 114
Napropamide	94.1		P	39 - 121
Norflurazon	103		P	55 - 129
Octinoxate	85.2		P	26 - 166
Oxadiazon	97.8		P	54 - 115
Oxybenzone	60.9		P	49 - 135
Oxyfluorfen	118		P	64 - 139
Parathion Ethyl	107		P	70 - 111
Parathion Methyl	129		P	76 - 136
PBDE-47	73.0		P	41 - 148
PBDE-99	71.1		P	38 - 147
Pendimethalin	104		P	52 - 118
Phenytoin	145		P	10 - 162
Phorate	66.9		P	40 - 122
Prodiamine	87.0		P	26 - 141
Prometon	100		P	54 - 122
Prometryn	134		F	61 - 128
Pronamide	119		P	72 - 121
Propanil	96.5		P	45 - 144
Propargite	143		P	10 - 199
Propiconazole	105		P	56 - 127
Pyraflufen Ethyl	97.8		P	56 - 140
Pyridaben	137		P	26 - 211
Pyriproxyfen	161		P	33 - 194
Simazine	107		P	67 - 121
Stirophos	117		P	20 - 142
Sulfentrazone	83.9		P	21 - 144
Tebuconazole	110		P	10 - 122
Terbufos	118		P	60 - 129
Terbuthylazine	105		P	69 - 113
Thiobencarb	111		P	51 - 120
Tri-o-cresyl Phosphate	62.9		P	49 - 150
Triadimefon	96.9		P	56 - 114

Reference Method: EPA 8276
Batch ID: P421968

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	90.7		P	61 - 116
Toxaphene	91.8		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P421979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	80.3		P	40 - 150
Aldicarb	93.1		P	30 - 150
Aldicarb Sulfone	94.5		P	40 - 150
Aldicarb Sulfoxide	117		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P421979

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbaryl	80.8		P	40 - 150
Carbofuran	88.8		P	40 - 150
Methiocarb	75.9		P	40 - 150
Methomyl	101		P	40 - 150
Oxamyl	94.5		P	40 - 150
Propoxur	79.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P421996

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	125		P	40 - 150
AMPA	91.5		P	40 - 150
Endothall	115		P	40 - 150
Glufosinate	79.5		P	40 - 150
Glyphosate	92.9		P	40 - 150
Sucralose	98.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P422148

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	104		P	40 - 150
2,4,5-T	89.5		P	40 - 150
Acetaminophen	96.6		P	30 - 150
Acetamiprid	88.3		P	40 - 150
Afidopyropen	37.4		P	30 - 150
Bentazon	97.7		P	30 - 150
Benzovindiflupyr	89.3		P	40 - 150
Carbamazepine	97.1		P	40 - 150
Clothianidin	98.8		P	40 - 150
Dinotefuran	104		P	40 - 150
Diuron	81.6		P	40 - 150
Fenuron	110		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	105		P	40 - 150
Ibuprofen	94.7		P	40 - 150
Imazapyr	95.8		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	82.3		P	40 - 150
Mandestrobin	105		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	86.3		P	40 - 150
Primidone	95.2		P	40 - 150
Pyraclostrobin	86.5		P	40 - 150
Silvex	79.6		P	40 - 150
Thiamethoxam	104		P	40 - 150
Tolfenpyrad	50.5		P	30 - 150
Triclopyr	90.2		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P422256

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.2		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P422521

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

Reference Method: SM 2540 D-2015
Batch ID: P422339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	98.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422611

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: P422247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367639	Chloride	105		P	90 - 110
2367672	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367639	Sulfate	109		P	90 - 110
2367672	Sulfate	110		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422436

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367581	Ammonia-N	98.6	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367475	Kjeldahl Nitrogen	93.4	95.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422143

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367569	NO2NO3-N	107	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422192

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367605	Total-P	104	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367570	O-Phosphate-P	99.0	99.9	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P421968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367768	Aldrin	53.4	62.9	P/P	20 - 82.0
2367768	Alpha-BHC	80.4	83.0	P/P	71 - 109
2367768	Alpha-Chlordane	68.1	57.2	P/P	42 - 106
2367768	Beta-BHC	87.6	78.4	P/P	69 - 180
2367768	Beta-Cyfluthrin	95.9	66.5	P/P	18 - 175
2367768	Bifenthrin	69.2	51.7	P/P	21 - 128
2367768	Chlorothalonil	146	139	P/P	10 - 300
2367768	Cis-Nonachlor	63.1	49.6	P/P	34 - 106

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P421968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367768	Cypermethrin	103	71.0	P/P	22 - 158
2367768	Dacthal	87.7	77.2	P/P	54 - 116
2367768	DDD-p,p'	77.3	52.2	P/P	34 - 107
2367768	DDE-p,p'	69.1	54.8	P/P	33 - 110
2367768	DDT-p,p'	63.7	61.9	P/P	50 - 122
2367768	Delta-BHC	103	92.8	P/P	77 - 193
2367768	Deltamethrin	2.15	75.0	F/P	10 - 195
2367768	Dichlobenil	68.6	72.1	P/P	25 - 113
2367768	Dicofol	80.7	69.6	P/P	38 - 247
2367768	Dieldrin	135	42.1	F/F	45 - 118
2367768	Endosulfan I	67.8	60.6	P/P	51 - 106
2367768	Endosulfan II	76.6	64.9	P/P	37 - 122
2367768	Endosulfan Sulfate	84.2	64.4	P/P	43 - 132
2367768	Endrin	72.3	57.5	P/P	29 - 101
2367768	Endrin Aldehyde	53.3	15.2	P/F	19 - 110
2367768	Endrin Ketone	72.4	87.6	P/P	60 - 140
2367768	Esfenvalerate	107	85.4	P/P	26 - 199
2367768	Ethalfluralin	67.4	68.0	P/P	45 - 99.0
2367768	Fenpropathrin	77.7	54.8	P/P	35 - 120
2367768	Gamma-BHC	96.7	85.4	P/P	63 - 128
2367768	Gamma-Chlordane	75.6	62.9	P/P	40 - 104
2367768	Heptachlor	60.3	76.8	P/P	36 - 97.0
2367768	Heptachlor Epoxide	137	72.1	P/P	49 - 184
2367768	Hexachlorobenzene	57.8	45.2	P/P	39 - 96.0
2367768	Kepone	92.4	199	P/P	10 - 217
2367768	Lambda-Cyhalothrin	86.6	63.6	P/P	21 - 193
2367768	Methoprene	62.8	54.2	P/P	20 - 106
2367768	Methoxychlor	69.0	78.0	P/P	53 - 118
2367768	MGK-264	98.3	73.1	P/P	40 - 118
2367768	Mirex	53.9	39.6	P/P	26 - 92.0
2367768	Oxychlordane	69.6	70.1	P/P	44 - 99.0
2367768	Permethrin	90.2	57.7	P/P	33 - 182
2367768	Phenothrin	75.7	62.2	P/P	10 - 129
2367768	Piperonyl Butoxide	111	81.0	P/P	10 - 211
2367768	Prallethrin	72.3	58.4	P/P	24 - 113
2367768	Tau-Fluvalinate	85.6	70.6	P/P	14 - 149
2367768	Tetramethrin	94.6	77.8	P/P	17 - 151
2367768	Trans-Nonachlor	73.5	61.0	P/P	42 - 102
2367768	Triclosan Methyl	70.6	58.9	P/P	48 - 108
2367768	Trifluralin	68.4	65.8	P/P	47 - 96.0
2367790	PCB-1016	72.0	77.3	P/P	46 - 111
2367790	PCB-1260	66.6	65.4	P/P	45 - 114

Reference Method: EPA 8270E
Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	111	107	P/P	26 - 165
2367538	Acetochlor	99.6	91.5	P/P	67 - 124
2367538	Alachlor	86.7	74.5	P/P	60 - 120
2367538	Ametryn	112	101	P/P	54 - 216
2367538	Atrazine Desethyl	75.8	65.2	P/P	15 - 122

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	Avobenzone	121	117	P/P	37 - 178
2367538	Azinphos Methyl	145	140	P/P	40 - 292
2367538	Azoxystrobin	130	129	P/P	35 - 220
2367538	Bromacil	125	125	P/P	45 - 127
2367538	Butylate	52.8	42.0	P/P	20 - 83.0
2367538	Caffeine	85.9	87.9	P/P	10 - 194
2367538	Carbophenothion	123	116	P/P	57 - 127
2367538	Carfentrazone Ethyl	128	117	P/P	51 - 141
2367538	Chlorfenapyr	101	106	P/P	46 - 111
2367538	Chlorpyrifos Ethyl	82.2	115	P/P	52 - 120
2367538	Chlorpyrifos Methyl	102	102	P/P	63 - 119
2367538	Coumaphos	110	97.6	P/P	10 - 228
2367538	Cyanazine	212	220	P/P	59 - 241
2367538	Cyprodinil	125	111	P/P	47 - 146
2367538	Dechlorane Plus	114	98.5	P/P	50 - 150
2367538	Demeton	131	115	P/P	40 - 136
2367538	Diazinon	88.8	85.6	P/P	69 - 132
2367538	Difenoconazole	103	89.9	P/P	57 - 258
2367538	Dimethenamid	79.4	74.3	P/P	54 - 110
2367538	Dimethomorph	135	115	P/P	28 - 210
2367538	Disulfoton	104	91.2	P/P	43 - 133
2367538	Dithiopyr	115	96.3	P/P	39 - 116
2367538	EPTC	55.2	40.6	P/P	20 - 78.0
2367538	Ethion	71.7	68.6	P/P	17 - 119
2367538	Ethoprop	117	115	P/P	66 - 120
2367538	Etridiazole	83.0	75.0	P/P	28 - 96.0
2367538	Fenamiphos	113	96.1	P/P	41 - 126
2367538	Fenbuconazole	114	85.0	P/P	42 - 169
2367538	Fipronil	139	126	F/P	61 - 132
2367538	Fipronil Desulfinyl	101	102	P/P	56 - 132
2367538	Fipronil Sulfide	96.9	90.4	P/P	48 - 119
2367538	Fipronil Sulfone	128	119	P/P	42 - 131
2367538	Fluazifop-P-butyl	105	110	P/P	53 - 131
2367538	Fludioxonil	111	93.9	P/P	56 - 127
2367538	Flumioxazin	89.5	90.7	P/P	19 - 300
2367538	Flutolanil	106	98.0	P/P	41 - 127
2367538	Fluxapyroxad	115	97.6	P/P	42 - 172
2367538	Fonofos	90.4	76.2	P/P	59 - 113
2367538	Hexazinone	113	103	P/P	66 - 122
2367538	Imazalil	102	98.3	P/P	21 - 283
2367538	Iprodione	266	248	F/F	43 - 150
2367538	Loratadine	92.1	85.3	P/P	23 - 201
2367538	Malathion	102	101	P/P	58 - 136
2367538	Metalaxyl	89.2	91.0	P/P	55 - 120
2367538	Metolachlor	119	119	P/P	57 - 121
2367538	Metribuzin	117	117	P/P	58 - 294
2367538	Mevinphos	99.5	87.3	P/P	50 - 126
2367538	Molinate	80.9	74.8	P/P	42 - 93.0
2367538	Myclobutanil	122	102	P/P	55 - 125
2367538	Naled	110	81.1	P/P	18 - 200
2367538	Napropamide	98.4	89.7	P/P	39 - 110
2367538	Octinoxate	112	103	P/P	21 - 159

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P422125

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367538	Oxadiazon	94.2	87.0	P/P	43 - 112
2367538	Oxybenzone	91.9	78.6	P/P	41 - 142
2367538	Oxyfluorfen	121	122	P/P	64 - 153
2367538	Parathion Ethyl	107	104	P/P	69 - 114
2367538	Parathion Methyl	134	125	P/P	79 - 139
2367538	PBDE-47	97.7	94.4	P/P	27 - 144
2367538	PBDE-99	95.0	91.3	P/P	18 - 150
2367538	Pendimethalin	119	99.6	P/P	50 - 139
2367538	Phenytoin	116	157	P/F	10 - 146
2367538	Phorate	89.8	73.9	P/P	54 - 161
2367538	Prodiamine	75.5	78.3	P/P	30 - 161
2367538	Prometon	118	100	P/P	45 - 134
2367538	Prometryn	143	149	F/F	45 - 137
2367538	Pronamide	119	123	P/P	65 - 133
2367538	Propanil	91.5	96.8	P/P	49 - 142
2367538	Propargite	149	144	P/P	10 - 203
2367538	Propiconazole	112	93.8	P/P	38 - 146
2367538	Pyraflufen Ethyl	103	95.1	P/P	34 - 153
2367538	Pyridaben	167	144	P/P	12 - 192
2367538	Pyriproxyfen	139	164	P/P	33 - 180
2367538	Simazine	109	115	P/P	51 - 157
2367538	Stirophos	113	126	P/P	10 - 128
2367538	Sulfentrazone	98.6	87.3	P/P	53 - 186
2367538	Tebuconazole	122	114	P/P	10 - 133
2367538	Terbufos	126	114	P/P	65 - 139
2367538	Terbuthylazine	103	99.3	P/P	66 - 117
2367538	Thiobencarb	108	117	P/P	51 - 119
2367538	Tri-o-cresyl Phosphate	90.6	82.4	P/P	31 - 144
2367538	Triadimefon	91.3	113	P/P	48 - 119

Reference Method: EPA 8276
Batch ID: P421968

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367790	Chlordane	72.7	78.1	P/P	53 - 126
2367790	Toxaphene	77.1	85.5	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P421979

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368035	3-Hydroxycarbofuran	76.2	78.5	P/P	40 - 150
2368035	Aldicarb	87.5	81.7	P/P	30 - 150
2368035	Aldicarb Sulfone	102	102	P/P	40 - 150
2368035	Aldicarb Sulfoxide	124	128	P/P	40 - 150
2368035	Carbaryl	90.9	93.1	P/P	40 - 150
2368035	Carbofuran	96.6	98.2	P/P	40 - 150
2368035	Methiocarb	80.0	84.0	P/P	40 - 150
2368035	Methomyl	105	103	P/P	40 - 150
2368035	Oxamyl	95.5	97.8	P/P	40 - 150
2368035	Propoxur	86.9	84.9	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P421996

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367490	Acesulfame K	140	144	P/P	40 - 150
2367490	AMPA	88.8	84.1	P/P	40 - 150
2367490	Endothall	120	120	P/P	40 - 150
2367490	Glufosinate	73.9	79.4	P/P	40 - 150
2367490	Glyphosate	81.2	88.1	P/P	40 - 150
2367490	Sucralose	97.5	97.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P422148

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2368036	2,4,5-T	80.6	79.5	P/P	40 - 150
2368036	Acetaminophen	110	115	P/P	30 - 150
2368036	Acetamiprid	97.8	93.4	P/P	40 - 150
2368036	Afidopyropen	41.9	39.2	P/P	30 - 150
2368036	Bentazon	88.1	90.8	P/P	30 - 150
2368036	Benzovindiflupyr	92.0	96.1	P/P	40 - 150
2368036	Carbamazepine	97.7	99.8	P/P	40 - 150
2368036	Clothianidin	125	125	P/P	40 - 150
2368036	Dinotefuran	133	137	P/P	40 - 150
2368036	Diuron	79.6	80.9	P/P	40 - 150
2368036	Fenuron	99.8	105	P/P	40 - 150
2368036	Fluridone	99.8	103	P/P	40 - 150
2368036	Hydrocodone	123	131	P/P	40 - 150
2368036	Ibuprofen	97.2	92.1	P/P	40 - 150
2368036	Imazapyr	108	113	P/P	40 - 150
2368036	Imidacloprid	164	174	F/F	40 - 150
2368036	Linuron	81.1	80.7	P/P	40 - 150
2368036	Mandestrobin	107	109	P/P	40 - 150
2368036	MCPP	104	109	P/P	40 - 150
2368036	Naproxen	76.9	84.6	P/P	40 - 150
2368036	Primidone	118	117	P/P	40 - 150
2368036	Pyraclostrobin	96.5	98.6	P/P	40 - 150
2368036	Silvex	90.6	93.7	P/P	40 - 150
2368036	Thiamethoxam	158	165	F/F	40 - 150
2368036	Tolfenpyrad	55.3	56.0	P/P	30 - 150
2368036	Triclopyr	86.5	84.8	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367774	Fluoride	101	102	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P422611

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2367614	Organic Carbon	98.4		P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P421977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367577	Color (true)	3.29	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367474	Turbidity	4.66	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367639	Chloride	0.107	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P422250

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367639	Sulfate	0.285	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P422436

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367581	Ammonia-N	0.610	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P422242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367475	Kjeldahl Nitrogen	1.56	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P422143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367569	NO2NO3-N	0.432	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P422192

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367605	Total-P	1.53	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P421941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367570	O-Phosphate-P	0.905	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P421968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367768	Aldrin	16.4	Spike	P	0 - 41
2367768	Alpha-BHC	3.25	Spike	P	0 - 25
2367768	Alpha-Chlordane	14.3	Spike	P	0 - 33
2367768	Beta-BHC	11.1	Spike	P	0 - 36
2367768	Beta-Cyfluthrin	36.2	Spike	P	0 - 42
2367768	Bifenthrin	29.0	Spike	P	0 - 53
2367768	Chlorothalonil	5.37	Spike	P	0 - 71
2367768	Cis-Nonachlor	23.9	Spike	P	0 - 29
2367768	Cypermethrin	36.5	Spike	P	0 - 40
2367768	Dacthal	12.7	Spike	P	0 - 26
2367768	DDD-p,p'	38.8	Spike	P	0 - 39
2367768	DDE-p,p'	23.1	Spike	P	0 - 33
2367768	DDT-p,p'	2.85	Spike	P	0 - 40
2367768	Delta-BHC	9.93	Spike	P	0 - 37
2367768	Deltamethrin	189	Spike	F	0 - 100
2367768	Dichlobenil	4.11	Spike	P	0 - 40
2367768	Dicofol	14.8	Spike	P	0 - 31
2367768	Dieldrin	19.7	Spike	P	0 - 27
2367768	Endosulfan I	11.3	Spike	P	0 - 23
2367768	Endosulfan II	16.4	Spike	P	0 - 28
2367768	Endosulfan Sulfate	26.6	Spike	P	0 - 38
2367768	Endrin	22.7	Spike	P	0 - 63
2367768	Endrin Aldehyde	111	Spike	F	0 - 60
2367768	Endrin Ketone	17.6	Spike	P	0 - 37
2367768	Esfenvalerate	22.1	Spike	P	0 - 52
2367768	Ethalfluralin	0.988	Spike	P	0 - 23
2367768	Fenpropathrin	34.5	Spike	F	0 - 32
2367768	Gamma-BHC	12.4	Spike	P	0 - 17
2367768	Gamma-Chlordane	18.3	Spike	P	0 - 40
2367768	Heptachlor	24.1	Spike	P	0 - 29
2367768	Heptachlor Epoxide	12.3	Spike	P	0 - 25
2367768	Hexachlorobenzene	24.4	Spike	P	0 - 36
2367768	Kepone	60.8	Spike	P	0 - 93
2367768	Lambda-Cyhalothrin	30.7	Spike	P	0 - 55
2367768	Methoprene	14.8	Spike	P	0 - 53
2367768	Methoxychlor	12.4	Spike	P	0 - 29
2367768	MGK-264	29.4	Spike	P	0 - 35
2367768	Mirex	30.6	Spike	P	0 - 46
2367768	Oxychlordane	0.756	Spike	P	0 - 29
2367768	Permethrin	43.9	Spike	P	0 - 44
2367768	Phenothrin	19.6	Spike	P	0 - 56
2367768	Piperonyl Butoxide	30.9	Spike	P	0 - 100
2367768	Prallethrin	21.4	Spike	P	0 - 42
2367768	Tau-Fluvalinate	19.1	Spike	P	0 - 54

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P421968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367768	Tetramethrin	19.5	Spike	P	0 - 51
2367768	Trans-Nonachlor	18.5	Spike	P	0 - 37
2367768	Triclosan Methyl	18.1	Spike	P	0 - 31
2367768	Trifluralin	3.93	Spike	P	0 - 30
2367790	PCB-1016	7.11	Spike	P	0 - 32
2367790	PCB-1260	1.85	Spike	P	0 - 31

Reference Method: EPA 8270E
Batch ID: P422125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367538	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	3.91	Spike	P	0 - 37
2367538	Acetochlor	8.44	Spike	P	0 - 28
2367538	Alachlor	15.2	Spike	P	0 - 30
2367538	Ametryn	6.92	Spike	P	0 - 32
2367538	Atrazine	5.42	Spike	P	0 - 41
2367538	Atrazine Desethyl	11.8	Spike	P	0 - 36
2367538	Avobenzone	3.40	Spike	P	0 - 36
2367538	Azinphos Methyl	3.09	Spike	P	0 - 75
2367538	Azoxystrobin	1.00	Spike	P	0 - 39
2367538	Bromacil	0.0178	Spike	P	0 - 33
2367538	Butylate	22.8	Spike	P	0 - 44
2367538	Caffeine	2.26	Spike	P	0 - 74
2367538	Carbophenothion	5.46	Spike	P	0 - 25
2367538	Carfentrazone Ethyl	8.98	Spike	P	0 - 27
2367538	Chlorfenapyr	5.15	Spike	P	0 - 24
2367538	Chlorpyrifos Ethyl	32.9	Spike	F	0 - 26
2367538	Chlorpyrifos Methyl	0.775	Spike	P	0 - 26
2367538	Coumaphos	11.7	Spike	P	0 - 28
2367538	Cyanazine	3.90	Spike	P	0 - 48
2367538	Cyprodinil	11.5	Spike	P	0 - 29
2367538	Dechlorane Plus	15.0	Spike	P	0 - 30
2367538	Demeton	13.3	Spike	P	0 - 33
2367538	Diazinon	3.63	Spike	P	0 - 29
2367538	Difenoconazole	14.0	Spike	P	0 - 34
2367538	Dimethenamid	6.58	Spike	P	0 - 39
2367538	Dimethomorph	16.2	Spike	P	0 - 51
2367538	Disulfoton	13.1	Spike	P	0 - 30
2367538	Dithiopyr	18.1	Spike	P	0 - 26
2367538	EPTC	30.6	Spike	P	0 - 43
2367538	Ethion	4.42	Spike	P	0 - 79
2367538	Ethoprop	2.20	Spike	P	0 - 29
2367538	Etridiazole	10.1	Spike	P	0 - 33
2367538	Fenamiphos	16.3	Spike	P	0 - 40
2367538	Fenbuconazole	29.3	Spike	P	0 - 74
2367538	Fipronil	10.1	Spike	P	0 - 29
2367538	Fipronil Desulfinyl	0.389	Spike	P	0 - 32
2367538	Fipronil Sulfide	6.88	Spike	P	0 - 30
2367538	Fipronil Sulfone	6.87	Spike	P	0 - 33
2367538	Fluazifop-P-butyl	4.81	Spike	P	0 - 38

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P422125

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367538	Fludioxonil	16.5	Spike	P	0 - 29
2367538	Flumioxazin	1.35	Spike	P	0 - 51
2367538	Flutolanil	8.07	Spike	P	0 - 25
2367538	Fluxapyroxad	14.5	Spike	P	0 - 45
2367538	Fonofos	17.0	Spike	P	0 - 27
2367538	Hexazinone	5.13	Spike	P	0 - 30
2367538	Imazalil	3.96	Spike	P	0 - 100
2367538	Iprodione	6.84	Spike	P	0 - 33
2367538	Loratadine	7.73	Spike	P	0 - 56
2367538	Malathion	0.579	Spike	P	0 - 37
2367538	Metalaxyl	1.90	Spike	P	0 - 40
2367538	Metolachlor	0.366	Spike	P	0 - 29
2367538	Metribuzin	0.520	Spike	P	0 - 45
2367538	Mevinphos	13.1	Spike	P	0 - 29
2367538	Molinate	7.87	Spike	P	0 - 33
2367538	Myclobutanil	16.8	Spike	P	0 - 26
2367538	Naled	30.5	Spike	P	0 - 37
2367538	Napropamide	9.24	Spike	P	0 - 44
2367538	Norflurazon	13.8	Spike	P	0 - 30
2367538	Octinoxate	9.07	Spike	P	0 - 45
2367538	Oxadiazon	6.28	Spike	P	0 - 28
2367538	Oxybenzone	15.6	Spike	P	0 - 46
2367538	Oxyfluorfen	0.736	Spike	P	0 - 28
2367538	Parathion Ethyl	3.15	Spike	P	0 - 31
2367538	Parathion Methyl	6.46	Spike	P	0 - 29
2367538	PBDE-47	3.46	Spike	P	0 - 36
2367538	PBDE-99	3.98	Spike	P	0 - 40
2367538	Pendimethalin	17.3	Spike	P	0 - 33
2367538	Phenytoin	30.3	Spike	P	0 - 100
2367538	Phorate	19.4	Spike	P	0 - 36
2367538	Prodiamine	3.65	Spike	P	0 - 71
2367538	Prometon	16.6	Spike	P	0 - 36
2367538	Prometryn	3.69	Spike	P	0 - 28
2367538	Pronamide	3.15	Spike	P	0 - 24
2367538	Propanil	5.67	Spike	P	0 - 28
2367538	Propargite	3.79	Spike	P	0 - 43
2367538	Propiconazole	13.5	Spike	P	0 - 33
2367538	Pyraflufen Ethyl	8.23	Spike	P	0 - 29
2367538	Pyridaben	14.9	Spike	P	0 - 30
2367538	Pyriproxyfen	16.5	Spike	P	0 - 79
2367538	Simazine	4.61	Spike	P	0 - 29
2367538	Stirophos	10.7	Spike	P	0 - 61
2367538	Sulfentrazone	10.3	Spike	P	0 - 33
2367538	Tebuconazole	6.71	Spike	P	0 - 69
2367538	Terbufos	10.1	Spike	P	0 - 29
2367538	Terbuthylazine	3.51	Spike	P	0 - 32
2367538	Thiobencarb	8.03	Spike	P	0 - 26
2367538	Tri-o-cresyl Phosphate	9.43	Spike	P	0 - 33
2367538	Triadimefon	21.7	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P421968

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367790	Chlordane	7.17	Spike	P	0 - 25
2367790	Toxaphene	10.4	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P421979

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368035	3-Hydroxycarbofuran	3.04	Spike	P	0 - 30
2368035	Aldicarb	6.94	Spike	P	0 - 30
2368035	Aldicarb Sulfone	0.220	Spike	P	0 - 30
2368035	Aldicarb Sulfoxide	2.97	Spike	P	0 - 30
2368035	Carbaryl	2.39	Spike	P	0 - 30
2368035	Carbofuran	1.66	Spike	P	0 - 30
2368035	Methiocarb	4.93	Spike	P	0 - 30
2368035	Methomyl	1.32	Spike	P	0 - 30
2368035	Oxamyl	2.35	Spike	P	0 - 30
2368035	Propoxur	2.32	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P421996

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367490	Acesulfame K	3.00	Spike	P	0 - 30
2367490	AMPA	5.35	Spike	P	0 - 30
2367490	Endothall	0.484	Spike	P	0 - 30
2367490	Glufosinate	7.21	Spike	P	0 - 30
2367490	Glyphosate	8.22	Spike	P	0 - 30
2367490	Sucralose	0.190	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P422148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368036	2,4-D	3.46	Spike	P	0 - 30
2368036	2,4,5-T	1.43	Spike	P	0 - 30
2368036	Acetaminophen	4.72	Spike	P	0 - 30
2368036	Acetamiprid	4.59	Spike	P	0 - 30
2368036	Afidopyropen	6.75	Spike	P	0 - 30
2368036	Bentazon	3.09	Spike	P	0 - 30
2368036	Benzovindiflupyr	4.35	Spike	P	0 - 30
2368036	Carbamazepine	2.12	Spike	P	0 - 30
2368036	Clothianidin	0.201	Spike	P	0 - 30
2368036	Dinotefuran	2.98	Spike	P	0 - 30
2368036	Diuron	0.799	Spike	P	0 - 30
2368036	Fenuron	4.64	Spike	P	0 - 30
2368036	Fluridone	2.96	Spike	P	0 - 30
2368036	Hydrocodone	5.87	Spike	P	0 - 30
2368036	Ibuprofen	5.38	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P422148

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2368036	Imazapyr	4.47	Spike	P	0 - 30
2368036	Imidacloprid	6.07	Spike	P	0 - 30
2368036	Linuron	0.461	Spike	P	0 - 30
2368036	Mandestrobin	1.35	Spike	P	0 - 30
2368036	MCPP	4.77	Spike	P	0 - 30
2368036	Naproxen	9.54	Spike	P	0 - 30
2368036	Primidone	0.482	Spike	P	0 - 30
2368036	Pyraclostrobin	2.10	Spike	P	0 - 30
2368036	Silvex	3.39	Spike	P	0 - 30
2368036	Thiamethoxam	4.23	Spike	P	0 - 30
2368036	Tolfenpyrad	1.09	Spike	P	0 - 30
2368036	Triclopyr	2.01	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P422256

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367355	Total Alkalinity	0.815	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P422521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367474	TDS	6.61	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P422896

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367774	Fluoride	0.972	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P422611

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2367614	Organic Carbon	1.60	Sample	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2367608
Field Sample ID: G2CE0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	63.8	P	30 - 160

Lab Sample ID: 2367609
Field Sample ID: G2CE0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.3	P	30 - 160
EPA 8321B	Diuron-d6	72.3	P	30 - 160
EPA 8321B	Endothall-d6	122	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.4	P	30 - 160
EPA 8321B	Primidone-d5	96.6	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	30 - 160

Lab Sample ID: 2367610
Field Sample ID: G2CE0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	65.4	P	29 - 130
EPA 8270E	Decachlorobiphenyl	50.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	38.6	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	48.7	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	39.7	P	30 - 101
EPA 8276	PCNB	65.0	P	48 - 121

Lab Sample ID: 2367611
Field Sample ID: G2CE0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	105	P	20 - 200
EPA 8270E	Simazine-d10	116	P	62 - 142
EPA 8270E	Terbufos-d10	126	P	58 - 132
EPA 8270E	Terphenyl-d14	77.3	P	52 - 137

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8276
Run ID: 4115930
Included Lab Sample IDs: 2367610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.3		P	80 - 120
Toxaphene	101		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A115753
Included Lab Sample IDs: 2367606

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A115758
Included Lab Sample IDs: 2367604

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	101	100	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A115766
Included Lab Sample IDs: 2367604

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A115800
Included Lab Sample IDs: 2367604

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	98.7	P/P	90 - 110
Sulfate	103	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A115831
Included Lab Sample IDs: 2367605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	105	106	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A115857
Included Lab Sample IDs: 2367608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	92.2	93.0	P/P	60 - 150
Aldicarb	95.1	96.8	P/P	60 - 150
Aldicarb Sulfone	92.5	96.3	P/P	50 - 150
Aldicarb Sulfoxide	120	121	P/P	50 - 150
Carbaryl	105	101	P/P	60 - 150
Carbofuran	101	104	P/P	50 - 150
Methiocarb	84.0	81.9	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A115857
Included Lab Sample IDs: 2367608

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Methomyl	97.9	94.8	P/P	50 - 150
Oxamyl	102	102	P/P	50 - 150
Propoxur	99.0	94.7	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A115866
Included Lab Sample IDs: 2367611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.3		P	80 - 120
Alachlor	92.5		P	80 - 120
Ametryn	84.9		P	80 - 120
Atrazine Desethyl	93.7		P	80 - 120
Azinphos Methyl	86.5		P	80 - 120
Azoxystrobin	99.6		P	80 - 120
Bromacil	87.9		P	80 - 120
Butylate	91.0		P	80 - 120
Caffeine	95.4		P	80 - 120
Carbophenothion	89.7		P	80 - 120
Carfentrazone Ethyl	95.3		P	80 - 120
Chlorfenapyr	90.3		P	80 - 120
Chlorpyrifos Ethyl	93.9		P	80 - 120
Chlorpyrifos Methyl	95.8		P	80 - 120
Coumaphos	83.0		P	80 - 120
Cyanazine	92.0		P	80 - 120
Cyprodinil	80.6		P	80 - 120
Demeton	95.6		P	80 - 120
Diazinon	89.7		P	80 - 120
Difenoconazole	82.6		P	80 - 120
Dimethenamid	96.2		P	80 - 120
Dimethomorph	106		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	82.2		P	80 - 120
EPTC	96.4		P	80 - 120
Ethion	85.9		P	80 - 120
Ethoprop	98.7		P	80 - 120
Etridiazole	98.1		P	80 - 120
Fenamiphos	90.6		P	80 - 120
Fenbuconazole	89.1		P	80 - 120
Fipronil	97.9		P	80 - 120
Fipronil Desulfinyl	80.6		P	80 - 120
Fipronil Sulfide	83.9		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	88.0		P	80 - 120
Fludioxonil	88.3		P	80 - 120
Flumioxazin	88.8		P	80 - 120
Flutolanil	92.7		P	80 - 120
Fluxapyroxad	83.8		P	80 - 120
Fonofos	90.4		P	80 - 120
Hexazinone	97.6		P	80 - 120
Imazalil	90.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A115866
Included Lab Sample IDs: 2367611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iprodione	96.7		P	80 - 120
Loratadine	85.1		P	80 - 120
Malathion	94.6		P	80 - 120
Metalaxyl	81.6		P	80 - 120
Metolachlor	94.8		P	80 - 120
Metribuzin	95.5		P	80 - 120
Mevinphos	92.1		P	80 - 120
Molinate	103		P	80 - 120
Myclobutanil	92.8		P	80 - 120
Naled	90.2		P	80 - 120
Napropamide	87.2		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	91.1		P	80 - 120
Oxyfluorfen	87.6		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	103		P	80 - 120
Phenytoin	90.7		P	80 - 120
Phorate	96.2		P	80 - 120
Prodiamine	91.3		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	80.8		P	80 - 120
Pronamide	91.1		P	80 - 120
Propanil	85.5		P	80 - 120
Propargite	82.0		P	80 - 120
Propiconazole	90.7		P	80 - 120
Pyraflufen Ethyl	92.0		P	80 - 120
Pyridaben	91.7		P	80 - 120
Pyriproxyfen	89.4		P	80 - 120
Simazine	104		P	80 - 120
Stirophos	91.5		P	80 - 120
Sulfentrazone	83.0		P	80 - 120
Tebuconazole	82.4		P	80 - 120
Terbufos	92.2		P	80 - 120
Terbuthylazine	94.3		P	80 - 120
Thiobencarb	97.6		P	80 - 120
Triadimefon	94.9		P	80 - 120

Reference Method: EPA 8321B
Run ID: A115877
Included Lab Sample IDs: 2367609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	95.3	92.9	P/P	60 - 160
Endothall	125	113	P/P	60 - 160
Glufosinate	81.4	79.6	P/P	60 - 160
Glyphosate	89.3	91.5	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A115879
Included Lab Sample IDs: 2367609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	133	130	P/P	60 - 160
Sucralose	101	96.4	P/P	60 - 160

Reference Method: SM 2320 B-2011
Run ID: A115885
Included Lab Sample IDs: 2367604

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	95.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A115901
Included Lab Sample IDs: 2367605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	98.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115903
Included Lab Sample IDs: 2367611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115904
Included Lab Sample IDs: 2367610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	100		P	80 - 120
PCB-1260	101		P	80 - 120

Reference Method: EPA 8321B
Run ID: A115912
Included Lab Sample IDs: 2367609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	84.7	88.0	P/P	50 - 150
2,4,5-T	93.9	102	P/P	50 - 150
Acetaminophen	97.3	91.9	P/P	60 - 160
Acetamiprid	102	97.3	P/P	50 - 150
Afidopyropen	88.0	86.5	P/P	50 - 150
Bentazon	95.0	96.8	P/P	50 - 160
Benzovindiflupyr	90.9	92.7	P/P	50 - 150
Carbamazepine	103	100	P/P	60 - 150
Clothianidin	96.2	94.1	P/P	60 - 150
Dinotefuran	103	101	P/P	50 - 150
Diuron	94.8	95.7	P/P	60 - 160
Fenuron	86.4	91.6	P/P	60 - 150
Fluridone	94.9	88.8	P/P	60 - 160
Hydrocodone	97.6	99.6	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A115912
Included Lab Sample IDs: 2367609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	110	106	P/P	50 - 160
Imazapyr	96.9	100	P/P	50 - 150
Imidacloprid	94.0	87.1	P/P	60 - 150
Linuron	89.0	81.2	P/P	60 - 150
Mandestrobin	99.8	98.6	P/P	50 - 150
MCPP	96.0	95.6	P/P	50 - 150
Naproxen	98.1	83.6	P/P	50 - 160
Primidone	98.8	91.6	P/P	60 - 150
Pyraclostrobin	89.8	89.8	P/P	60 - 150
Silvex	85.1	89.3	P/P	50 - 150
Thiamethoxam	99.2	99.9	P/P	50 - 150
Tolfenpyrad	82.6	82.5	P/P	60 - 150
Triclopyr	93.9	101	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A115918
Included Lab Sample IDs: 2367611

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.5		P	80 - 120
Avobenzone	92.1		P	80 - 120
Dechlorane Plus	86.3		P	80 - 120
Octinoxate	97.0		P	80 - 120
Oxybenzone	98.4		P	80 - 120
PBDE-47	92.0		P	80 - 120
PBDE-99	85.3		P	80 - 120
Tri-o-cresyl Phosphate	96.2		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A115946
Included Lab Sample IDs: 2367605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.2	94.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A115966
Included Lab Sample IDs: 2367605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	98.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115993
Included Lab Sample IDs: 2367610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.7		P	80 - 120
Alpha-BHC	97.7		P	80 - 120
Alpha-Chlordane	97.2		P	80 - 120
Beta-BHC	92.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A115993
Included Lab Sample IDs: 2367610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-Cyfluthrin	89.7		P	80 - 120
Bifenthrin	97.3		P	80 - 120
Chlorothalonil	90.3		P	80 - 120
Cis-Nonachlor	95.9		P	80 - 120
Cypermethrin	89.7		P	80 - 120
Dacthal	97.6		P	80 - 120
DDD-p,p'	92.3		P	80 - 120
DDE-p,p'	97.9		P	80 - 120
DDT-p,p'	98.6		P	80 - 120
Delta-BHC	89.2		P	80 - 120
Deltamethrin	89.8		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	88.6		P	80 - 120
Dieldrin	95.7		P	80 - 120
Endosulfan I	97.6		P	80 - 120
Endosulfan II	95.7		P	80 - 120
Endosulfan Sulfate	91.1		P	80 - 120
Endrin	99.5		P	80 - 120
Endrin Aldehyde	91.0		P	80 - 120
Endrin Ketone	98.0		P	80 - 120
Esfenvalerate	91.0		P	80 - 120
Ethalfluralin	98.7		P	80 - 120
Fenpropathrin	90.7		P	80 - 120
Gamma-BHC	98.0		P	80 - 120
Gamma-Chlordane	95.5		P	80 - 120
Heptachlor	97.8		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	95.2		P	80 - 120
Kepone	99.1		P	80 - 120
Lambda-Cyhalothrin	90.7		P	80 - 120
Methoprene	96.4		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	94.3		P	80 - 120
Mirex	96.7		P	80 - 120
Oxychlordane	97.0		P	80 - 120
Permethrin	92.2		P	80 - 120
Phenothrin	89.7		P	80 - 120
Piperonyl Butoxide	90.7		P	80 - 120
Prallethrin	95.0		P	80 - 120
Tau-Fluvalinate	90.4		P	80 - 120
Tetramethrin	94.9		P	80 - 120
Trans-Nonachlor	98.7		P	80 - 120
Triclosan Methyl	97.5		P	80 - 120
Trifluralin	97.6		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A116047
Included Lab Sample IDs: 2367605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	98.3	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A116180
Included Lab Sample IDs: 2367604

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	101	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		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	98.0				3.29	
EPA 180.1 Rev. 2.0	Turbidity	101				4.66	
EPA 300.0 Rev. 2.1	Chloride	105	105	106		0.107	
	Sulfate	107	109	110		0.285	
EPA 350.1 Rev. 2.0	Ammonia-N	97.6	98.6	99.8			0.610
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.6	93.4	95.1			1.56
EPA 353.2 Rev. 2.0	NO2NO3-N	106	107	106			0.432
EPA 365.1 Rev. 2.0	Total-P	105	104	102			1.53
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	99.0	99.9			0.905
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.1	111	107			3.91
	Acetochlor	107	99.6	91.5			8.44
	Alachlor	85.3	86.7	74.5			15.2
	Aldrin	61.4	53.4	62.9			16.4
	Alpha-BHC	94.6	80.4	83.0			3.25
	Alpha-Chlordane	72.7	68.1	57.2			14.3
	Ametryn	107	112	101			6.92
	Atrazine	103					5.42
	Atrazine Desethyl	77.9	75.8	65.2			11.8
	Avobenzone	90.1	121	117			3.40
	Azinphos Methyl	155	145	140			3.09
	Azoxystrobin	109	130	129			1.00
	Beta-BHC	78.5	87.6	78.4			11.1
	Beta-Cyfluthrin	68.4	95.9	66.5			36.2
	Bifenthrin	47.1	69.2	51.7			29.0
	Bromacil	119	125	125			0.0178
	Butylate	62.5	52.8	42.0			22.8
	Caffeine	78.2	85.9	87.9			2.26
	Carbophenothion	110	123	116			5.46
	Carfentrazone Ethyl	114	128	117			8.98
	Chlorfenapyr	107	101	106			5.15
	Chlorothalonil	121	146	139			5.37
	Chlorpyrifos Ethyl	92.9	82.2	115			32.9
	Chlorpyrifos Methyl	104	102	102			0.775
	Cis-Nonachlor	68.8	63.1	49.6			23.9
	Coumaphos	103	110	97.6			11.7
	Cyanazine	204	212	220			3.90
	Cypermethrin	69.7	103	71.0			36.5
	Cyprodinil	123	125	111			11.5
	Dacthal	90.7	87.7	77.2			12.7
	DDD-p,p'	62.2	77.3	52.2			38.8
	DDE-p,p'	69.0	69.1	54.8			23.1
	DDT-p,p'	71.1	63.7	61.9			2.85
	Dechlorane Plus	80.2	114	98.5			15.0
	Delta-BHC	86.2	103	92.8			9.93
	Deltamethrin	77.2	2.15	75.0			189
	Demeton	92.7	131	115			13.3
	Diazinon	94.6	88.8	85.6			3.63
	Dichlobenil	57.2	68.6	72.1			4.11
	Dicofol	79.9	80.7	69.6			14.8
	Dieldrin	74.2	135	42.1			19.7
	Difenoconazole	93.1	103	89.9			14.0
	Dimethenamid	81.1	79.4	74.3			6.58

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Dimethomorph	106	135	115			16.2
	Disulfoton	104	104	91.2			13.1
	Dithiopyr	100	115	96.3			18.1
	Endosulfan I	76.3	67.8	60.6			11.3
	Endosulfan II	83.1	76.6	64.9			16.4
	Endosulfan Sulfate	76.0	84.2	64.4			26.6
	Endrin	74.3	72.3	57.5			22.7
	Endrin Aldehyde	53.7	53.3	15.2			111
	Endrin Ketone	86.4	72.4	87.6			17.6
	EPTC	60.1	55.2	40.6			30.6
	Esfenvalerate	80.6	107	85.4			22.1
	Ethalfluralin	73.1	67.4	68.0			0.988
	Ethion	75.7	71.7	68.6			4.42
	Ethoprop	108	117	115			2.20
	Etridiazole	85.3	83.0	75.0			10.1
	Fenamiphos	111	113	96.1			16.3
	Fenbuconazole	84.8	114	85.0			29.3
	Fenpropathrin	62.7	77.7	54.8			34.5
	Fipronil	94.1	139	126			10.1
	Fipronil Desulfinyl	97.7	101	102			0.389
	Fipronil Sulfide	84.2	96.9	90.4			6.88
	Fipronil Sulfone	87.8	128	119			6.87
	Fluazifop-P-butyl	106	105	110			4.81
	Fludioxonil	100	111	93.9			16.5
	Flumioxazin	95.4	89.5	90.7			1.35
	Flutolanil	100	106	98.0			8.07
	Fluxapyroxad	108	115	97.6			14.5
	Fonofos	90.9	90.4	76.2			17.0
	Gamma-BHC	89.2	96.7	85.4			12.4
	Gamma-Chlordane	70.9	75.6	62.9			18.3
	Heptachlor	69.2	60.3	76.8			24.1
	Heptachlor Epoxide	78.5	137	72.1			12.3
	Hexachlorobenzene	51.4	57.8	45.2			24.4
	Hexazinone	106	113	103			5.13
	Imazalil	83.6	102	98.3			3.96
	Iprodione	243	266	248			6.84
	Kepone	81.2	92.4	199			60.8
	Lambda-Cyhalothrin	57.5	86.6	63.6			30.7
	Loratadine	87.2	92.1	85.3			7.73
	Malathion	111	102	101			0.579
	Metalaxyl	92.9	89.2	91.0			1.90
	Methoprene	58.8	62.8	54.2			14.8
	Methoxychlor	87.5	69.0	78.0			12.4
	Metolachlor	114	119	119			0.366
	Metribuzin	98.8	117	117			0.520
	Mevinphos	88.5	99.5	87.3			13.1
	MGK-264	79.9	98.3	73.1			29.4
	Mirex	50.2	53.9	39.6			30.6
	Molinate	80.0	80.9	74.8			7.87
	Myclobutanil	112	122	102			16.8
	Naled	76.6	110	81.1			30.5
	Napropamide	94.1	98.4	89.7			9.24
	Norflurazon	103					13.8
	Octinoxate	85.2	112	103			9.07

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Oxadiazon	97.8	94.2	87.0			6.28
	Oxybenzone	60.9	91.9	78.6			15.6
	Oxychlordane	69.6	69.6	70.1			0.756
	Oxyfluorfen	118	121	122			0.736
	Parathion Ethyl	107	107	104			3.15
	Parathion Methyl	129	134	125			6.46
	PBDE-47	73.0	97.7	94.4			3.46
	PBDE-99	71.1	95.0	91.3			3.98
	PCB-1016	80.1	72.0	77.3			7.11
	PCB-1260	79.1	66.6	65.4			1.85
	Pendimethalin	104	119	99.6			17.3
	Permethrin	62.2	90.2	57.7			43.9
	Phenothrin	53.5	75.7	62.2			19.6
	Phenytoin	145	116	157			30.3
	Phorate	66.9	89.8	73.9			19.4
	Piperonyl Butoxide	89.4	111	81.0			30.9
	Prallethrin	81.1	72.3	58.4			21.4
	Prodiamine	87.0	75.5	78.3			3.65
	Prometon	100	118	100			16.6
	Prometryn	134	143	149			3.69
	Pronamide	119	119	123			3.15
	Propanil	96.5	91.5	96.8			5.67
	Propargite	143	149	144			3.79
	Propiconazole	105	112	93.8			13.5
	Pyraflufen Ethyl	97.8	103	95.1			8.23
	Pyridaben	137	167	144			14.9
	Pyriproxyfen	161	139	164			16.5
	Simazine	107	109	115			4.61
	Stirophos	117	113	126			10.7
	Sulfentrazone	83.9	98.6	87.3			10.3
	Tau-Fluvalinate	64.2	85.6	70.6			19.1
	Tebuconazole	110	122	114			6.71
	Terbufos	118	126	114			10.1
	Terbuthylazine	105	103	99.3			3.51
	Tetramethrin	85.8	94.6	77.8			19.5
	Thiobencarb	111	108	117			8.03
	Trans-Nonachlor	74.1	73.5	61.0			18.5
	Tri-o-cresyl Phosphate	62.9	90.6	82.4			9.43
	Triadimefon	96.9	91.3	113			21.7
	Triclosan Methyl	77.1	70.6	58.9			18.1
	Trifluralin	74.9	68.4	65.8			3.93
EPA 8276	Chlordane	90.7	72.7	78.1			7.17
	Toxaphene	91.8	77.1	85.5			10.4
EPA 8321B	2,4-D	104					3.46
	2,4,5-T	89.5	80.6	79.5			1.43
	3-Hydroxycarbofuran	80.3	76.2	78.5			3.04
	Acesulfame K	125	140	144			3.00
	Acetaminophen	96.6	110	115			4.72
	Acetamiprid	88.3	97.8	93.4			4.59
	Afidopyropen	37.4	41.9	39.2			6.75
	Aldicarb	93.1	87.5	81.7			6.94
	Aldicarb Sulfone	94.5	102	102			0.220
	Aldicarb Sulfoxide	117	124	128			2.97
	AMPA	91.5	88.8	84.1			5.35

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Bentazon	97.7	88.1	90.8			3.09
	Benzovindiflupyr	89.3	92.0	96.1			4.35
	Carbamazepine	97.1	97.7	99.8			2.12
	Carbaryl	80.8	90.9	93.1			2.39
	Carbofuran	88.8	96.6	98.2			1.66
	Clothianidin	98.8	125	125			0.201
	Dinotefuran	104	133	137			2.98
	Diuron	81.6	79.6	80.9			0.799
	Endothall	115	120	120			0.484
	Fenuron	110	99.8	105			4.64
	Fluridone	102	99.8	103			2.96
	Glufosinate	79.5	73.9	79.4			7.21
	Glyphosate	92.9	81.2	88.1			8.22
	Hydrocodone	105	123	131			5.87
	Ibuprofen	94.7	97.2	92.1			5.38
	Imazapyr	95.8	108	113			4.47
	Imidacloprid	103	164	174			6.07
	Linuron	82.3	81.1	80.7			0.461
	Mandestrobin	105	107	109			1.35
	MCPP	105	104	109			4.77
	Methiocarb	75.9	80.0	84.0			4.93
	Methomyl	101	105	103			1.32
	Naproxen	86.3	76.9	84.6			9.54
	Oxamyl	94.5	95.5	97.8			2.35
	Primidone	95.2	118	117			0.482
	Propoxur	79.0	86.9	84.9			2.32
	Pyraclostrobin	86.5	96.5	98.6			2.10
	Silvex	79.6	90.6	93.7			3.39
	Sucralose	98.9	97.5	97.7			0.190
	Thiamethoxam	104	158	165			4.23
	Tolfenpyrad	50.5	55.3	56.0			1.09
	Triclopyr	90.2	86.5	84.8			2.01
SM 2320 B-2011	Total Alkalinity	96.2				0.815	
SM 2540 C-2015	TDS	104				6.61	
SM 2540 D-2015	TSS	98.1					
SM 4500-F- C-2011	Fluoride	100	101	102			0.972
SM 5310 B-2011	Organic Carbon	97.0	98.4			1.60	

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2367604
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2367604
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2367604
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2367604
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2367605
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2367605
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2367605
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2367605
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2367606
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2367611
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2367610

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2367611
EPA 8270E	PCBs in water matrices by GC/MS/MS	2367610
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2367610
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2367608
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2367609
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2367604
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2367604
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2367604
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2367604
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2367605

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	11/04/2022			11/04/2022 16:59	Chandler E Cox	2367604
EPA 180.1 Rev. 2.0	11/04/2022			11/04/2022 14:03	Khloe J Berg	2367604
EPA 300.0 Rev. 2.1	11/04/2022			11/11/2022 07:20	Anna M. Plaviak	2367604
EPA 350.1 Rev. 2.0	11/04/2022			11/16/2022 14:43	Ping Hua	2367605
EPA 351.2 Rev. 2.0	11/04/2022	11/14/2022 12:38	Alexandra J Mattheus	11/15/2022 16:35	Alexandra J Mattheus	2367605
EPA 353.2 Rev. 2.0	11/04/2022			11/09/2022 10:54	Beverly Y. Sanders	2367605
EPA 365.1 Rev. 2.0	11/04/2022	11/10/2022 11:40	Simonne.V. Calhoun	11/14/2022 16:11	James L Waggerby	2367605
EPA 365.1 Rev. 2.0 dissolved	11/04/2022			11/04/2022 13:13	Elise M. Gillis	2367606
EPA 8270E	11/04/2022	11/08/2022 08:00	Fe-Val Siddell	11/09/2022 19:25	Vandana T. Nagar	2367610
	11/04/2022	11/08/2022 08:00	Fe-Val Siddell	11/14/2022 22:19	Julie Wi	2367610
	11/04/2022	11/08/2022 08:30	Rasheda Ghaffari	11/10/2022 00:31	Michael Poppell	2367611
	11/04/2022	11/08/2022 08:30	Rasheda Ghaffari	11/10/2022 16:48	Arthur Maknenko	2367611
	11/04/2022	11/08/2022 08:30	Rasheda Ghaffari	11/11/2022 20:52	Michael Poppell	2367611
EPA 8276	11/04/2022	11/08/2022 08:00	Fe-Val Siddell	11/10/2022 12:03	Lipi Saha	2367610
EPA 8321B	11/04/2022	11/08/2022 09:00	June Rhew	11/09/2022 21:34	Juyoung Kim	2367608
	11/04/2022	11/09/2022 10:20	Manjita Shrestha	11/09/2022 11:48	Manjita Shrestha	2367609
	11/04/2022	11/09/2022 10:20	Manjita Shrestha	11/10/2022 02:48	Manjita Shrestha	2367609
	11/04/2022	11/10/2022 09:30	June Rhew	11/10/2022 20:13	Juyoung Kim	2367609
SM 2320 B-2011	11/04/2022			11/10/2022 12:09	Adam P Silver	2367604
SM 2540 C-2015	11/04/2022			11/09/2022 16:35	Yijie Li	2367604
SM 2540 D-2015	11/04/2022			11/09/2022 16:35	Yijie Li	2367604
SM 4500-F- C-2011	11/04/2022			11/30/2022 07:41	Dale L. Simmons	2367604
SM 5310 B-2011	11/04/2022			11/18/2022 11:25	Khloe J Berg	2367605