

Chemical Analysis Report

CEN-DIST-2022-10-18-02

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

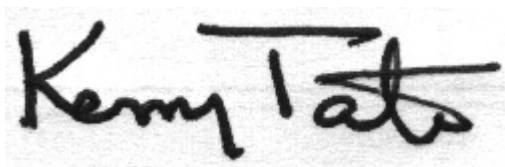
Event Description: **Volusia Blue and Little Haw**
Request ID: **RQ-2022-10-17-20**
Customer: **CEN-DIST**
Project ID: **SMP**

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

For additional information please contact
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 08-NOV-2022 09:20

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style.

NON-CONFORMANCE REPORT INCLUDED

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: Volusia Blue near vent

Collection Date/Time: 10/17/2022 11:33

Field ID: G2CE0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2362965	DEP SOP: NU-094-1	Color (true)	2.9	I	PCU	P421043	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P421048	
	EPA 300.0 Rev. 2.1	Chloride	230		mg Cl/L	P421609	
		Sulfate	40		mg SO4/L	P421612	
	SM 2320 B-2011	Total Alkalinity	149		mg CaCO3/L	P421305	
	SM 2540 C-2015	TDS	572		mg/L	P421545	
	SM 2540 D-2015	TSS	2	U	mg/L	P421494	
	SM 4500-F- C-2011	Fluoride	0.081	I	mg F/L	P421310	
2362966	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	UY	mg N/L	P421406	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	IY	mg N/L	P421288	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.83	Y	mg N/L	P421176	
	EPA 365.1 Rev. 2.0	Total-P	0.072	Y	mg P/L	P421088	
	SM 5310 B-2011	Organic Carbon	1.7	Y	mg C/L	P421234	
2362968	EPA 8321B	Aldicarb	0.020	U	ug/L	P421082	
		Aldicarb Sulfone	0.0020	U	ug/L	P421082	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P421082	
		Carbaryl	0.0020	U	ug/L	P421082	
		Carbofuran	0.0020	U	ug/L	P421082	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P421082	
		Methiocarb	0.0020	U	ug/L	P421082	
		Methomyl	0.0020	U	ug/L	P421082	
		Oxamyl	0.0020	U	ug/L	P421082	
		Propoxur	0.0020	U	ug/L	P421082	
		2,4-D	0.0020	U	ug/L	P421081	
		Acesulfame K	0.10	U	ug/L	P421007	
		2,4,5-T	0.0040	U	ug/L	P421081	
2362969		AMPA	0.10	U	ug/L	P421007	
		Acetaminophen	0.0080	U	ug/L	P421081	
		Acetamiprid	0.0020	U	ug/L	P421081	
		Endothall	0.25	U	ug/L	P421007	
		Glufosinate	0.10	U	ug/L	P421007	
		Glyphosate	0.10	U	ug/L	P421007	
		Afidopyropen	0.0020	U	ug/L	P421081	
		Bentazon	0.054		ug/L	P421081	
		Sucralose	0.67		ug/L	P421007	
		Benzovindiflupyr	0.0020	U	ug/L	P421081	
		Carbamazepine	0.0039		ug/L	P421081	
		Clothianidin	0.0083		ug/L	P421081	
		Dinotefuran	0.0020	U	ug/L	P421081	
		Diuron	0.0020	U	ug/L	P421081	
		Fenuron	0.032	U	ug/L	P421081	
		Fluridone	8.0E-04	U	ug/L	P421081	
		Imazapyr	0.012	I	ug/L	P421081	
		Hydrocodone	0.0020	U	ug/L	P421081	

Field ID: G2CE0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2362969	EPA 8321B	Ibuprofen	0.20	U	ug/L	P421081	
		Imidacloprid	0.0045	I	ug/L	P421081	
		Linuron	0.0040	U	ug/L	P421081	
		Mandestrobin	0.0020	U	ug/L	P421081	
		MCP	0.0040	U	ug/L	P421081	
		Naproxen	0.0080	U	ug/L	P421081	
		Primidone	0.0063	I	ug/L	P421081	
		Pyraclostrobin	0.0020	U	ug/L	P421081	
		Silvex	0.0040	U	ug/L	P421081	
		Thiamethoxam	0.0020	U	ug/L	P421081	
		Tolfenpyrad	0.0020	U	ug/L	P421081	
		Triclopyr	0.0040	U	ug/L	P421081	
2362970	EPA 8270E	Aldrin	0.71	U	ng/L	P420962	
		Alpha-BHC	0.11	U	ng/L	P420962	
		Alpha-Chlordane	0.22	U	ng/L	P420962	
		PCB-1016	2.2	U	ng/L	P420962	
		Beta-BHC	0.18	I	ng/L	P420962	
		PCB-1221	2.2	U	ng/L	P420962	
		Beta-Cyfluthrin	1.4	U	ng/L	P420962	
		PCB-1232	2.2	U	ng/L	P420962	
		Bifenthrin	0.54	U	ng/L	P420962	
		PCB-1242	2.2	U	ng/L	P420962	
		PCB-1248	2.2	U	ng/L	P420962	
		Chlorothalonil	1.4	U	ng/L	P420962	
		PCB-1254	2.2	U	ng/L	P420962	
		Cis-Nonachlor	0.22	U	ng/L	P420962	
		PCB-1260	2.2	U	ng/L	P420962	
		Cypermethrin	1.6	U	ng/L	P420962	
		Dacthal	0.16	U	ng/L	P420962	
		DDD-p,p'	0.27	U	ng/L	P420962	
		DDE-p,p'	0.22	U	ng/L	P420962	
		DDT-p,p'	0.27	U	ng/L	P420962	
		Delta-BHC	0.44	U	ng/L	P420962	
		Deltamethrin	1.4	U	ng/L	P420962	
		Dichlobenil	0.27	U	ng/L	P420962	
		Dicofol	1.4	U	ng/L	P420962	
		Dieldrin	1.6	I	ng/L	P420962	
		Endosulfan I	0.44	U	ng/L	P420962	
		Endosulfan II	0.44	U	ng/L	P420962	
		Endosulfan Sulfate	0.33	U	ng/L	P420962	
		Endrin	0.44	U	ng/L	P420962	
		Endrin Aldehyde	0.82	U	ng/L	P420962	
		Endrin Ketone	0.44	U	ng/L	P420962	
		Esfenvalerate	0.82	U	ng/L	P420962	
		Ethalfuralin	0.16	U	ng/L	P420962	

Field ID: G2CE0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2362970	EPA 8270E	Fenpropathrin	0.27	U	ng/L	P420962	
		Gamma-BHC	0.14	U	ng/L	P420962	
		Gamma-Chlordane	0.22	U	ng/L	P420962	
		Heptachlor	0.22	U	ng/L	P420962	
		Heptachlor Epoxide	0.27	U	ng/L	P420962	
		Hexachlorobenzene**	1.1	U	ng/L	P420962	
		Kepone	40		ng/L	P420962	
		Lambda-Cyhalothrin	0.82	U	ng/L	P420962	
		Methoprene	0.82	U	ng/L	P420962	
		Methoxychlor	0.33	U	ng/L	P420962	
		MGK-264	0.26	I	ng/L	P420962	
		Mirex	0.38	U	ng/L	P420962	
		Oxychlordane	0.33	U	ng/L	P420962	
		Permethrin	1.7	U	ng/L	P420962	
		Phenothrin	0.98	U	ng/L	P420962	
		Piperonyl Butoxide	0.16	U	ng/L	P420962	
		Prallethrin	2.2	U	ng/L	P420962	
		Tau-Fluvalinate	0.27	U	ng/L	P420962	
		Tetramethrin	0.82	U	ng/L	P420962	
		Trans-Nonachlor	0.22	U	ng/L	P420962	
		Triclosan Methyl	0.16	U	ng/L	P420962	
		Trifluralin	0.22	I	ng/L	P420962	
		Chlordane	2.7	U	ng/L	P420962	
		Toxaphene	16	U	ng/L	P420962	
2362971	EPA 8270E	Oxybenzone**	10	U	ng/L	P421054	
		Acetochlor	0.25	U	ng/L	P421054	
		Octinoxate**	20	U	ng/L	P421054	
		Alachlor	0.25	U	ng/L	P421054	
		Avobenzone**	100	U	ng/L	P421054	
		Ametryn	0.61	U	ng/L	P421054	
		Atrazine	0.97	I	ng/L	P421054	
		PBDE-47**	4.1	U	ng/L	P421054	
		Atrazine Desethyl	2.5	I	ng/L	P421054	
		PBDE-99**	5.1	U	ng/L	P421054	
		Azinphos Methyl	2.0	U	ng/L	P421054	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P421054	
		Azoxystrobin	0.51	U	ng/L	P421054	
		Bromacil	0.51	U	ng/L	P421054	
		2-Ethylhexyl	12	U	ng/L	P421054	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.41	U	ng/L	P421054	
		Dechlorane Plus**	30	U	ng/L	P421054	
		Caffeine**	8.6	I	ng/L	P421054	
		Carbophenothion	0.20	U	ng/L	P421054	
		Carfentrazone Ethyl	0.10	U	ng/L	P421054	

Field ID: G2CE0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2362971	EPA 8270E	Chlorfenapyr	0.18	U	ng/L	P421054	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P421054	
		Chlorpyrifos Methyl	0.051	U	ng/L	P421054	
		Coumaphos	0.51	U	ng/L	P421054	
		Cyanazine	3.3	U	ng/L	P421054	
		Cyprodinil	0.10	U	ng/L	P421054	
		Demeton	1.5	U	ng/L	P421054	
		Diazinon	0.13	U	ng/L	P421054	
		Difenoconazole	0.61	U	ng/L	P421054	
		Dimethenamid	0.10	U	ng/L	P421054	
		Dimethomorph	0.18	U	ng/L	P421054	
		Disulfoton	0.51	U	ng/L	P421054	
		Dithiopyr	0.64	U	ng/L	P421054	
		EPTC	1.3	U	ng/L	P421054	
		Ethion	0.15	UJ	ng/L	P421054	LCS
		Ethoprop	0.10	U	ng/L	P421054	
		Etridiazole	0.15	U	ng/L	P421054	
		Fenamiphos	0.51	U	ng/L	P421054	
		Fenbuconazole	0.13	U	ng/L	P421054	
		Fipronil	0.25	U	ng/L	P421054	
		Fipronil Desulfinyl**	0.13	U	ng/L	P421054	
		Fipronil Sulfide	0.15	U	ng/L	P421054	
		Fipronil Sulfone	0.44	I	ng/L	P421054	
		Fluazifop-P-butyl	0.10	U	ng/L	P421054	
		Fludioxonil	0.13	U	ng/L	P421054	
		Flumioxazin	4.6	U	ng/L	P421054	
		Flutolanil	0.10	U	ng/L	P421054	
		Fluxapyroxad	0.10	U	ng/L	P421054	
		Fonofos	0.20	UJ	ng/L	P421054	RPD
		Hexazinone	0.51	U	ng/L	P421054	
		Imazalil	0.76	U	ng/L	P421054	
		Iprodione	0.61	U	ng/L	P421054	
		Loratadine**	0.36	U	ng/L	P421054	
		Malathion	0.36	U	ng/L	P421054	
		Metalaxyl	0.76	U	ng/L	P421054	
		Metolachlor	0.36	U	ng/L	P421054	
		Metribuzin	1.5	U	ng/L	P421054	
		Mevinphos	1.1	U	ng/L	P421054	
		Molinate	0.30	U	ng/L	P421054	
		Myclobutanil	0.25	U	ng/L	P421054	
		Naled	1.5	U	ng/L	P421054	
		Napropamide	0.41	UJ	ng/L	P421054	LCS
		Norflurazon	0.51	U	ng/L	P421054	
		Oxadiazon	0.30	U	ng/L	P421054	
		Oxyfluorfen	0.15	U	ng/L	P421054	

Field ID: G2CE0242

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2362971	EPA 8270E	Parathion Ethyl	0.25	U	ng/L	P421054	
		Parathion Methyl	0.56	U	ng/L	P421054	
		Pendimethalin	1.0	U	ng/L	P421054	
		Phenytol**	3.6	U	ng/L	P421054	
		Phorate	0.53	U	ng/L	P421054	
		Prodiatone	0.18	U	ng/L	P421054	
		Prometon	0.91	U	ng/L	P421054	
		Prometryn	0.20	U	ng/L	P421054	
		Pronamide	0.15	U	ng/L	P421054	
		Propanil	0.13	U	ng/L	P421054	
		Propargite	1.5	U	ng/L	P421054	
		Propiconazole	0.51	U	ng/L	P421054	
		Pyraflufen Ethyl	0.25	U	ng/L	P421054	
		Pyridaben	0.46	U	ng/L	P421054	
		Pyriproxyfen	0.13	U	ng/L	P421054	
		Simazine	0.51	U	ng/L	P421054	
		Stirophos	0.13	U	ng/L	P421054	
		Sulfentrazone	22		ng/L	P421054	
		Tebuconazole	0.51	U	ng/L	P421054	
		Terbufos	0.10	U	ng/L	P421054	
		Terbutylazine	0.43	U	ng/L	P421054	
		Thiobencarb	0.61	U	ng/L	P421054	
		Triadimefon	0.25	U	ng/L	P421054	

Ref. Method and Comment:

EPA 350.1 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample. The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 353.2 Rev. 2.0: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 365.1 Rev. 2.0: Total-P: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

SM 5310 B-2011: The sample was received unpreserved: pH > 2. Sample preserved in laboratory.

EPA 8270E: MS accuracy for kepone not assessed due to high content of this parameter in the sample spiked.

EPA 8270E: MS accuracy for sulfentrazone not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Non-Conformance Report

NCR ID: 9588

Event(s)

CEN-DIST-2022-10-18-02

Job(s)

TLH-2022-10-18-54

Sample(s)

2362966

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample not preserved to pH > 2.

Resolution: Sample preserved in the laboratory with sulfuric acid on 10/18/2022.

H2SO4 Lot# SA2145160 | Expiration Date: 06/02/2023

Authorized by/Date: Kyle Klug 10/18/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P421043

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421048

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421609

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421612

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421406

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421288

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P421176

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421088

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

Reference Method: EPA 8270E
Batch ID: P420962

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P420962

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P420962

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P420962

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

Reference Method: EPA 8270E

Batch ID: P421054

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
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421054

Component	Result	Code	Units
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 Desulfanyl	0.12	U	ng/L
Fipronil Desulfanyl	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
Iprodione	0.60	U	ng/L
Loratadine	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421054

Component	Result	Code	Units
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
Phenytol	3.5	U	ng/L
Phenytol	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
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P421054

Component	Result	Code	Units
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
Terbutylazine	0.42	U	ng/L
Terbutylazine	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: P420962

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P421007

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: P421081

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P421081

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: EPA 8321B

Batch ID: P421082

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

Reference Method: SM 2320 B-2011

Batch ID: P421305

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: P421545

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P421494

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P421310

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P421234

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: P421043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.3		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421048

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421609

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	95.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421612

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421406

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421288

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: P421176

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421088

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	108		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P420962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.4		P	10 - 92.0
Alpha-BHC	89.6		P	75 - 107
Alpha-Chlordane	73.4		P	50 - 108
Beta-BHC	102		P	36 - 138

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P420962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Beta-Cyfluthrin	69.7		P	20 - 161
Bifenthrin	43.1		P	10 - 119
Chlorothalonil	76.1		P	26 - 186
Cis-Nonachlor	68.1		P	42 - 119
Cypermethrin	74.8		P	22 - 150
Dacthal	87.6		P	72 - 119
DDD-p,p'	68.2		P	45 - 107
DDE-p,p'	73.7		P	48 - 106
DDT-p,p'	72.8		P	48 - 110
Delta-BHC	113		P	54 - 140
Deltamethrin	85.0		P	22 - 189
Dichlobenil	81.0		P	36 - 117
Dicofol	83.7		P	46 - 155
Dieldrin	76.5		P	54 - 110
Endosulfan I	82.8		P	59 - 105
Endosulfan II	94.1		P	51 - 118
Endosulfan Sulfate	83.7		P	57 - 121
Endrin	78.8		P	10 - 120
Endrin Aldehyde	78.7		P	34 - 118
Endrin Ketone	87.7		P	69 - 177
Esfenvalerate	68.1		P	23 - 168
Ethalfuralin	74.7		P	49 - 99.0
Fenpropathrin	65.7		P	34 - 117
Gamma-BHC	97.9		P	72 - 117
Gamma-Chlordane	71.2		P	43 - 106
Heptachlor	61.6		P	41 - 98.0
Heptachlor Epoxide	78.5		P	57 - 106
Hexachlorobenzene	69.4		P	36 - 99.0
Kepone	67.6		P	16 - 215
Lambda-Cyhalothrin	54.0		P	21 - 177
Methoprene	51.2		P	10 - 119
Methoxychlor	77.8		P	60 - 112
MGK-264	97.5		P	26 - 122
Mirex	58.5		P	10 - 169
Oxychlordane	76.7		P	43 - 105
PCB-1016	75.9		P	48 - 112
PCB-1260	87.0		P	44 - 118
Permethrin	70.2		P	24 - 148
Phenothrin	52.9		P	10 - 106
Piperonyl Butoxide	101		P	10 - 139
Prallethrin	77.4		P	17 - 109
Tau-Fluvalinate	47.5		P	13 - 131
Tetramethrin	101		P	10 - 132
Trans-Nonachlor	69.4		P	44 - 106
Triclosan Methyl	77.5		P	59 - 109
Trifluralin	72.4		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P421054

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	109		P	26 - 165

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P421054

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	107		P	69 - 123
Alachlor	101		P	65 - 118
Ametryn	77.2		P	54 - 216
Atrazine	93.2		P	73 - 118
Atrazine Desethyl	87.6		P	32 - 125
Avobenzone	124		P	37 - 178
Azinphos Methyl	116		P	40 - 292
Azoxystrobin	136		P	35 - 220
Bromacil	106		P	48 - 120
Butylate	66.8		P	27 - 85.0
Caffeine	92.8		P	40 - 137
Carbophenothion	95.5		P	57 - 127
Carfentrazone Ethyl	91.8		P	60 - 142
Chlorfenapyr	99.7		P	53 - 117
Chlorpyrifos Ethyl	83.0		P	59 - 116
Chlorpyrifos Methyl	80.6		P	66 - 119
Coumaphos	181		P	11 - 234
Cyanazine	160		P	61 - 248
Cyprodinil	143		P	50 - 147
Dechlorane Plus	141		P	50 - 150
Demeton	82.0		P	30 - 138
Diazinon	104		P	67 - 126
Difenoconazole	190		P	38 - 205
Dimethenamid	71.5		P	57 - 111
Dimethomorph	209		P	16 - 212
Disulfoton	87.0		P	46 - 126
Dithiopyr	106		P	62 - 115
EPTC	65.5		P	28 - 80.0
Ethion	7.22		F	17 - 119
Ethoprop	97.7		P	66 - 120
Etridiazole	72.4		P	28 - 92.0
Fenamiphos	67.4		P	57 - 128
Fenbuconazole	75.8		P	42 - 169
Fipronil	117		P	63 - 130
Fipronil Desulfinyl	86.3		P	61 - 130
Fipronil Sulfide	102		P	56 - 117
Fipronil Sulfone	95.6		P	52 - 118
Fluazifop-P-butyl	80.4		P	61 - 128
Fludioxonil	123		P	59 - 129
Flumioxazin	70.8		P	30 - 250
Flutolanil	115		P	53 - 127
Fluxapyroxad	123		P	42 - 132
Fonofos	94.8		P	59 - 113
Hexazinone	85.0		P	46 - 139
Imazalil	129		P	40 - 139
Iprodione	53.7		P	43 - 150
Loratadine	180		P	10 - 224
Malathion	97.5		P	61 - 135
Metalaxyl	111		P	58 - 121
Metolachlor	104		P	64 - 118
Metribuzin	100		P	45 - 245
Mevinphos	70.2		P	49 - 118

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P421054

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	76.6		P	42 - 92.0
Myclobutanil	98.6		P	55 - 127
Naled	103		P	10 - 114
Napropamide	2.34		F	39 - 110
Norflurazon	87.7		P	55 - 129
Octinoxate	98.0		P	21 - 159
Oxadiazon	101		P	54 - 115
Oxybenzone	104		P	41 - 142
Oxyfluorfen	94.9		P	64 - 139
Parathion Ethyl	98.5		P	70 - 111
Parathion Methyl	106		P	76 - 136
PBDE-47	89.8		P	27 - 144
PBDE-99	96.5		P	18 - 150
Pendimethalin	75.9		P	52 - 118
Phenytoin	24.3		P	10 - 146
Phorate	73.2		P	40 - 122
Prodiamine	66.5		P	26 - 141
Prometon	117		P	54 - 122
Prometryn	126		P	61 - 128
Pronamide	115		P	72 - 121
Propanil	89.0		P	45 - 144
Propargite	136		P	10 - 199
Propiconazole	90.7		P	56 - 127
Pyraflufen Ethyl	55.8		P	34 - 153
Pyridaben	114		P	26 - 211
Pyriproxyfen	49.3		P	33 - 180
Simazine	86.8		P	67 - 121
Stirophos	77.4		P	20 - 142
Sulfentrazone	78.8		P	21 - 144
Tebuconazole	110		P	10 - 122
Terbufos	112		P	60 - 129
Terbuthylazine	100		P	69 - 113
Thiobencarb	91.9		P	51 - 120
Tri-o-cresyl Phosphate	86.1		P	31 - 144
Triadimefon	112		P	56 - 114

Reference Method: EPA 8276

Batch ID: P420962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	84.4		P	61 - 116
Toxaphene	93.8		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P421007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	101		P	40 - 150
Endothall	98.4		P	40 - 150
Glufosinate	106		P	40 - 150
Glyphosate	99.8		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
 Batch ID: P421007

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	83.4		P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P421081

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	89.2		P	30 - 160
2,4,5-T	85.2		P	30 - 160
Acetaminophen	95.5		P	30 - 150
Acetamiprid	85.2		P	30 - 160
Afidopyropen	51.7		P	30 - 160
Bentazon	108		P	30 - 150
Benzovindiflupyr	73.3		P	30 - 160
Carbamazepine	76.1		P	30 - 160
Clothianidin	95.6		P	30 - 160
Dinotefuran	98.6		P	30 - 160
Diuron	77.8		P	30 - 160
Fenuron	100		P	30 - 160
Fluridone	90.2		P	30 - 160
Hydrocodone	91.6		P	30 - 160
Ibuprofen	58.6		P	30 - 160
Imazapyr	92.2		P	30 - 160
Imidacloprid	95.7		P	30 - 160
Linuron	78.1		P	30 - 160
Mandestrobin	91.0		P	30 - 160
MCPP	103		P	30 - 160
Naproxen	76.9		P	30 - 160
Primidone	96.2		P	30 - 160
Pyraclostrobin	61.5		P	30 - 160
Silvex	71.2		P	30 - 160
Thiamethoxam	95.9		P	30 - 160
Tolfenpyrad	30.3		P	30 - 160
Triclopyr	81.3		P	30 - 160

Reference Method: EPA 8321B
 Batch ID: P421082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	89.2		P	30 - 160
Aldicarb	74.4		P	30 - 150
Aldicarb Sulfone	94.2		P	30 - 160
Aldicarb Sulfoxide	95.8		P	30 - 160
Carbaryl	78.5		P	30 - 160
Carbofuran	78.2		P	30 - 160
Methiocarb	71.1		P	30 - 160
Methomyl	91.2		P	30 - 160
Oxamyl	93.8		P	30 - 160
Propoxur	75.4		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-2011
Batch ID: P421305

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P421545

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

Reference Method: SM 2540 D-2015
Batch ID: P421494

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P421310

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.2		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P421234

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421609

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363186	Chloride	98.1		P	90 - 110
2363196	Chloride	94.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363186	Sulfate	99.5		P	90 - 110
2363196	Sulfate	94.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421406

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362936	Ammonia-N	97.4	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P421176

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363072	NO2NO3-N	93.4	93.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421088

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362985	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P420962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362637	PCB-1016	80.6	68.8	P/P	46 - 111
2362637	PCB-1260	90.1	79.0	P/P	45 - 114
2362970	Aldrin	61.8	65.6	P/P	20 - 82.0
2362970	Alpha-BHC	87.5	90.1	P/P	71 - 109
2362970	Alpha-Chlordane	71.0	69.1	P/P	42 - 106
2362970	Beta-BHC	86.1	86.5	P/P	69 - 180
2362970	Beta-Cyfluthrin	80.3	81.1	P/P	18 - 175
2362970	Bifenthrin	71.6	80.7	P/P	21 - 128
2362970	Chlorothalonil	63.8	60.1	P/P	10 - 300
2362970	Cis-Nonachlor	59.7	58.1	P/P	34 - 106
2362970	Cypermethrin	86.6	86.9	P/P	22 - 158
2362970	Dacthal	81.2	79.9	P/P	54 - 116
2362970	DDD-p,p'	57.0	55.2	P/P	34 - 107
2362970	DDE-p,p'	71.0	69.9	P/P	33 - 110
2362970	DDT-p,p'	72.3	78.1	P/P	50 - 122
2362970	Delta-BHC	102	110	P/P	77 - 193
2362970	Deltamethrin	103	102	P/P	10 - 195
2362970	Dichlobenil	79.1	64.8	P/P	25 - 113
2362970	Dicofol	87.9	92.3	P/P	38 - 247
2362970	Dieldrin	71.7	71.2	P/P	45 - 118

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P420962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362970	Endosulfan I	78.2	77.2	P/P	51 - 106
2362970	Endosulfan II	85.0	82.8	P/P	37 - 122
2362970	Endosulfan Sulfate	70.3	63.2	P/P	43 - 132
2362970	Endrin	74.9	74.3	P/P	29 - 101
2362970	Endrin Aldehyde	61.0	53.1	P/P	19 - 110
2362970	Endrin Ketone	73.6	72.6	P/P	60 - 140
2362970	Esfenvalerate	83.3	86.9	P/P	26 - 199
2362970	Ethalfuralin	81.2	83.1	P/P	45 - 99.0
2362970	Fenpropathrin	72.2	74.2	P/P	35 - 120
2362970	Gamma-BHC	95.6	98.0	P/P	63 - 128
2362970	Gamma-Chlordane	72.1	71.7	P/P	40 - 104
2362970	Heptachlor	68.8	66.1	P/P	36 - 97.0
2362970	Heptachlor Epoxide	80.6	78.5	P/P	49 - 184
2362970	Hexachlorobenzene	75.1	76.6	P/P	39 - 96.0
2362970	Lambda-Cyhalothrin	78.5	79.6	P/P	21 - 193
2362970	Methoprene	71.5	75.5	P/P	20 - 106
2362970	Methoxychlor	85.2	90.0	P/P	53 - 118
2362970	MGK-264	86.6	82.3	P/P	40 - 118
2362970	Mirex	65.7	63.6	P/P	26 - 92.0
2362970	Oxychlordane	75.9	80.2	P/P	44 - 99.0
2362970	Permethrin	83.5	87.1	P/P	33 - 182
2362970	Phenothrin	69.2	72.4	P/P	10 - 129
2362970	Piperonyl Butoxide	97.3	94.1	P/P	10 - 211
2362970	Prallethrin	71.0	72.8	P/P	24 - 113
2362970	Tau-Fluvalinate	77.0	85.7	P/P	14 - 149
2362970	Tetramethrin	112	122	P/P	17 - 151
2362970	Trans-Nonachlor	68.5	69.9	P/P	42 - 102
2362970	Triclosan Methyl	70.9	70.8	P/P	48 - 108
2362970	Trifluralin	75.6	77.6	P/P	47 - 96.0

Reference Method: EPA 8270E

Batch ID: P421054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362971	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	80.2	80.5	P/P	26 - 165
2362971	Acetochlor	116	103	P/P	67 - 124
2362971	Alachlor	101	99.6	P/P	60 - 120
2362971	Ametryn	138	117	P/P	54 - 216
2362971	Atrazine	89.8	97.4	P/P	66 - 128
2362971	Atrazine Desethyl	67.7	49.0	P/P	15 - 122
2362971	Avobenzene	93.7	100	P/P	37 - 178
2362971	Azinphos Methyl	180	205	P/P	40 - 292
2362971	Azoxystrobin	75.8	80.9	P/P	35 - 220
2362971	Bromacil	104	111	P/P	45 - 127
2362971	Butylate	61.3	51.0	P/P	20 - 83.0
2362971	Caffeine	96.1	93.7	P/P	10 - 194
2362971	Carbophenothion	90.0	75.4	P/P	57 - 127
2362971	Carfentrazone Ethyl	75.6	64.6	P/P	51 - 141
2362971	Chlorfenapyr	67.8	83.5	P/P	46 - 111
2362971	Chlorpyrifos Ethyl	70.7	87.4	P/P	52 - 120
2362971	Chlorpyrifos Methyl	76.0	64.2	P/P	63 - 119
2362971	Coumaphos	156	180	P/P	10 - 228

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P421054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362971	Cyanazine	138	198	P/P	59 - 241
2362971	Cyprodinil	121	143	P/P	47 - 146
2362971	Dechlorane Plus	111	113	P/P	50 - 150
2362971	Demeton	77.2	77.8	P/P	40 - 136
2362971	Diazinon	82.3	80.3	P/P	69 - 132
2362971	Difenoconazole	254	238	P/P	57 - 258
2362971	Dimethenamid	100	80.2	P/P	54 - 110
2362971	Dimethomorph	159	121	P/P	28 - 210
2362971	Disulfoton	86.5	80.8	P/P	43 - 133
2362971	Dithiopyr	94.5	101	P/P	39 - 116
2362971	EPTC	62.2	46.4	P/P	20 - 78.0
2362971	Ethion	74.1	72.8	P/P	17 - 119
2362971	Ethoprop	107	81.1	P/P	66 - 120
2362971	Etridiazole	61.7	57.7	P/P	28 - 96.0
2362971	Fenamiphos	96.6	93.6	P/P	41 - 126
2362971	Fenbuconazole	88.6	77.0	P/P	42 - 169
2362971	Fipronil	92.6	97.6	P/P	61 - 132
2362971	Fipronil Desulfinyl	62.5	67.5	P/P	56 - 132
2362971	Fipronil Sulfide	85.2	92.2	P/P	48 - 119
2362971	Fipronil Sulfone	67.8	88.4	P/P	42 - 131
2362971	Fluazifop-P-butyl	88.6	83.5	P/P	53 - 131
2362971	Fludioxonil	105	125	P/P	56 - 127
2362971	Flumioxazin	137	229	P/P	19 - 300
2362971	Flutolanil	111	115	P/P	41 - 127
2362971	Fluxapyroxad	103	137	P/P	42 - 172
2362971	Fonofos	60.2	85.9	P/P	59 - 113
2362971	Hexazinone	94.2	96.0	P/P	66 - 122
2362971	Imazalil	93.7	78.4	P/P	21 - 283
2362971	Iprodione	85.0	95.2	P/P	43 - 150
2362971	Loratadine	162	171	P/P	23 - 201
2362971	Malathion	89.6	119	P/P	58 - 136
2362971	Metalaxyl	112	86.2	P/P	55 - 120
2362971	Metolachlor	104	108	P/P	57 - 121
2362971	Metribuzin	83.5	90.1	P/P	58 - 294
2362971	Mevinphos	62.9	64.1	P/P	50 - 126
2362971	Molinate	79.9	58.1	P/P	42 - 93.0
2362971	Myclobutanil	92.0	97.6	P/P	55 - 125
2362971	Naled	87.4	98.6	P/P	18 - 200
2362971	Napropamide	81.2	65.4	P/P	39 - 110
2362971	Norflurazon	93.9	120	P/P	48 - 128
2362971	Octinoxate	89.8	73.4	P/P	21 - 159
2362971	Oxadiazon	87.8	75.5	P/P	43 - 112
2362971	Oxybenzone	84.6	75.3	P/P	41 - 142
2362971	Oxyfluorfen	91.5	112	P/P	64 - 153
2362971	Parathion Ethyl	91.8	104	P/P	69 - 114
2362971	Parathion Methyl	90.4	112	P/P	79 - 139
2362971	PBDE-47	77.5	73.4	P/P	27 - 144
2362971	PBDE-99	68.3	73.7	P/P	18 - 150
2362971	Pendimethalin	70.3	72.5	P/P	50 - 139
2362971	Phenytoin	58.9	83.4	P/P	10 - 146
2362971	Phorate	67.1	58.9	P/P	54 - 161
2362971	Prodiamine	54.8	77.4	P/P	30 - 161

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P421054

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362971	Prometon	105	108	P/P	45 - 134
2362971	Prometryn	99.4	92.2	P/P	45 - 137
2362971	Pronamide	125	100	P/P	65 - 133
2362971	Propanil	91.3	79.6	P/P	49 - 142
2362971	Propargite	201	174	P/P	10 - 203
2362971	Propiconazole	90.7	114	P/P	38 - 146
2362971	Pyraflufen Ethyl	48.4	50.0	P/P	34 - 153
2362971	Pyridaben	77.1	83.1	P/P	12 - 192
2362971	Pyriproxyfen	96.8	91.6	P/P	33 - 180
2362971	Simazine	87.9	86.4	P/P	51 - 157
2362971	Stirophos	57.9	82.0	P/P	10 - 128
2362971	Tebuconazole	38.6	52.5	P/P	10 - 133
2362971	Terbufos	86.6	84.7	P/P	65 - 139
2362971	Terbuthylazine	83.8	89.3	P/P	66 - 117
2362971	Thiobencarb	97.6	82.5	P/P	51 - 119
2362971	Tri-o-cresyl Phosphate	72.3	65.8	P/P	31 - 144
2362971	Triadimefon	96.1	87.5	P/P	48 - 119

Reference Method: EPA 8276

Batch ID: P420962

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362637	Chlordane	84.4	67.6	P/P	53 - 126
2362637	Toxaphene	126	142	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P421007

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363721	Acesulfame K	106	106	P/P	40 - 150
2363721	AMPA	107	117	P/P	40 - 150
2363721	Endothall	98.4	97.7	P/P	40 - 150
2363721	Glufosinate	108	111	P/P	40 - 150
2363721	Glyphosate	119	125	P/P	40 - 150
2363721	Sucralose	81.7	82.3	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P421081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362969	2,4-D	93.0	97.2	P/P	30 - 160
2362969	2,4,5-T	82.9	91.1	P/P	30 - 160
2362969	Acetaminophen	98.3	103	P/P	30 - 150
2362969	Acetamiprid	93.5	92.2	P/P	30 - 160
2362969	Afidopyropen	75.1	64.1	P/P	30 - 160
2362969	Bentazon	53.6	72.1	P/P	30 - 150
2362969	Benzovindiflupyr	77.4	82.6	P/P	30 - 160
2362969	Carbamazepine	74.3	79.5	P/P	30 - 160
2362969	Clothianidin	93.9	97.3	P/P	30 - 160
2362969	Dinotefuran	106	110	P/P	30 - 160
2362969	Diuron	77.5	79.6	P/P	30 - 160
2362969	Fenuron	100	105	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P421081

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362969	Fluridone	91.0	92.3	P/P	30 - 160
2362969	Hydrocodone	93.0	95.3	P/P	30 - 160
2362969	Ibuprofen	59.6	58.3	P/P	30 - 160
2362969	Imazapyr	92.1	96.2	P/P	30 - 160
2362969	Imidacloprid	113	122	P/P	30 - 160
2362969	Linuron	73.4	82.1	P/P	30 - 160
2362969	Mandestrobin	90.6	95.8	P/P	30 - 160
2362969	MCCP	103	109	P/P	30 - 160
2362969	Naproxen	70.1	75.8	P/P	30 - 160
2362969	Primidone	93.3	103	P/P	30 - 160
2362969	Pyraclostrobin	80.4	83.4	P/P	30 - 160
2362969	Silvex	76.3	81.9	P/P	30 - 160
2362969	Thiamethoxam	104	107	P/P	30 - 160
2362969	Tolfenpyrad	48.5	48.0	P/P	30 - 160
2362969	Triclopyr	79.8	86.4	P/P	30 - 160

Reference Method: EPA 8321B

Batch ID: P421082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2362968	3-Hydroxycarbofuran	96.3	101	P/P	30 - 160
2362968	Aldicarb	82.0	76.8	P/P	30 - 150
2362968	Aldicarb Sulfone	99.9	112	P/P	30 - 160
2362968	Aldicarb Sulfoxide	60.9	64.1	P/P	30 - 160
2362968	Carbaryl	74.5	85.7	P/P	30 - 160
2362968	Carbofuran	79.4	86.8	P/P	30 - 160
2362968	Methiocarb	71.9	75.8	P/P	30 - 160
2362968	Methomyl	94.6	106	P/P	30 - 160
2362968	Oxamyl	97.3	109	P/P	30 - 160
2362968	Propoxur	77.4	82.7	P/P	30 - 160

Reference Method: SM 4500-F- C-2011

Batch ID: P421310

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363803	Fluoride	96.8	97.4	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P421234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2363238	Organic Carbon	97.0	98.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P421043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362895	Color (true)	2.30	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P421048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362935	Turbidity	8.60	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421609

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363186	Chloride	0.0789	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P421612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363186	Sulfate	0.888	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P421406

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362936	Ammonia-N	1.73	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P421288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362751	Kjeldahl Nitrogen	5.39	Sample	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P421176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363072	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P421088

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362985	Total-P	0.0227	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P420962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362637	PCB-1016	15.8	Spike	P	0 - 32
2362637	PCB-1260	13.2	Spike	P	0 - 31
2362970	Aldrin	5.92	Spike	P	0 - 41
2362970	Alpha-BHC	3.01	Spike	P	0 - 25
2362970	Alpha-Chlordane	2.68	Spike	P	0 - 33
2362970	Beta-BHC	0.383	Spike	P	0 - 36
2362970	Beta-Cyfluthrin	0.968	Spike	P	0 - 42
2362970	Bifenthrin	12.0	Spike	P	0 - 53
2362970	Chlorothalonil	5.88	Spike	P	0 - 71
2362970	Cis-Nonachlor	2.74	Spike	P	0 - 29
2362970	Cypermethrin	0.384	Spike	P	0 - 40
2362970	Dacthal	1.67	Spike	P	0 - 26
2362970	DDD-p,p'	3.30	Spike	P	0 - 39
2362970	DDE-p,p'	1.69	Spike	P	0 - 33
2362970	DDT-p,p'	7.71	Spike	P	0 - 40
2362970	Delta-BHC	8.36	Spike	P	0 - 37
2362970	Deltamethrin	0.988	Spike	P	0 - 100
2362970	Dichlobenil	19.8	Spike	P	0 - 40
2362970	Dicofol	4.87	Spike	P	0 - 31
2362970	Dieldrin	0.519	Spike	P	0 - 27
2362970	Endosulfan I	1.28	Spike	P	0 - 23
2362970	Endosulfan II	2.60	Spike	P	0 - 28
2362970	Endosulfan Sulfate	10.7	Spike	P	0 - 38
2362970	Endrin	0.720	Spike	P	0 - 63
2362970	Endrin Aldehyde	13.8	Spike	P	0 - 60
2362970	Endrin Ketone	1.36	Spike	P	0 - 37
2362970	Esfenvalerate	4.25	Spike	P	0 - 52
2362970	Ethalfuralin	2.38	Spike	P	0 - 23
2362970	Fenpropathrin	2.65	Spike	P	0 - 32
2362970	Gamma-BHC	2.51	Spike	P	0 - 17
2362970	Gamma-Chlordane	0.550	Spike	P	0 - 40
2362970	Heptachlor	4.03	Spike	P	0 - 29
2362970	Heptachlor Epoxide	2.64	Spike	P	0 - 25
2362970	Hexachlorobenzene	2.01	Spike	P	0 - 36
2362970	Kepone	38.4	Spike	P	0 - 93
2362970	Lambda-Cyhalothrin	1.44	Spike	P	0 - 55
2362970	Methoprene	5.50	Spike	P	0 - 53
2362970	Methoxychlor	5.47	Spike	P	0 - 29
2362970	MGK-264	4.65	Spike	P	0 - 35
2362970	Mirex	3.34	Spike	P	0 - 46
2362970	Oxychlordane	5.50	Spike	P	0 - 29
2362970	Permethrin	4.19	Spike	P	0 - 44
2362970	Phenothrin	4.46	Spike	P	0 - 56
2362970	Piperonyl Butoxide	3.39	Spike	P	0 - 100
2362970	Prallethrin	2.51	Spike	P	0 - 42
2362970	Tau-Fluvalinate	10.6	Spike	P	0 - 54
2362970	Tetramethrin	8.85	Spike	P	0 - 51
2362970	Trans-Nonachlor	2.10	Spike	P	0 - 37
2362970	Triclosan Methyl	0.172	Spike	P	0 - 31
2362970	Trifluralin	2.55	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P421054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362971	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	0.326	Spike	P	0 - 37
2362971	Acetochlor	12.1	Spike	P	0 - 28
2362971	Alachlor	1.54	Spike	P	0 - 30
2362971	Ametryn	16.4	Spike	P	0 - 32
2362971	Atrazine	6.46	Spike	P	0 - 41
2362971	Atrazine Desethyl	25.4	Spike	P	0 - 36
2362971	Avobenzone	6.93	Spike	P	0 - 36
2362971	Azinphos Methyl	12.9	Spike	P	0 - 75
2362971	Azoxystrobin	6.54	Spike	P	0 - 39
2362971	Bromacil	6.52	Spike	P	0 - 33
2362971	Butylate	18.4	Spike	P	0 - 44
2362971	Caffeine	2.46	Spike	P	0 - 74
2362971	Carbophenothion	17.6	Spike	P	0 - 25
2362971	Carfentrazone Ethyl	15.7	Spike	P	0 - 27
2362971	Chlorfenapyr	20.8	Spike	P	0 - 24
2362971	Chlorpyrifos Ethyl	21.1	Spike	P	0 - 26
2362971	Chlorpyrifos Methyl	16.9	Spike	P	0 - 26
2362971	Coumaphos	14.0	Spike	P	0 - 28
2362971	Cyanazine	35.6	Spike	P	0 - 48
2362971	Cyprodinil	16.4	Spike	P	0 - 29
2362971	Dechlorane Plus	1.51	Spike	P	0 - 30
2362971	Demeton	0.767	Spike	P	0 - 33
2362971	Diazinon	2.41	Spike	P	0 - 29
2362971	Difenoconazole	6.60	Spike	P	0 - 34
2362971	Dimethenamid	22.2	Spike	P	0 - 39
2362971	Dimethomorph	27.5	Spike	P	0 - 51
2362971	Disulfoton	6.75	Spike	P	0 - 30
2362971	Dithiopyr	6.32	Spike	P	0 - 26
2362971	EPTC	29.1	Spike	P	0 - 43
2362971	Ethion	1.77	Spike	P	0 - 79
2362971	Ethoprop	27.4	Spike	P	0 - 29
2362971	Etridiazole	6.62	Spike	P	0 - 33
2362971	Fenamiphos	3.11	Spike	P	0 - 40
2362971	Fenbuconazole	14.0	Spike	P	0 - 74
2362971	Fipronil	5.29	Spike	P	0 - 29
2362971	Fipronil Desulfinyl	7.76	Spike	P	0 - 32
2362971	Fipronil Sulfide	7.91	Spike	P	0 - 30
2362971	Fipronil Sulfone	20.7	Spike	P	0 - 33
2362971	Fluazifop-P-butyl	5.90	Spike	P	0 - 38
2362971	Fludioxonil	17.3	Spike	P	0 - 29
2362971	Flumioxazin	50.6	Spike	P	0 - 51
2362971	Flutolanil	3.11	Spike	P	0 - 25
2362971	Fluxapyroxad	27.6	Spike	P	0 - 45
2362971	Fonofos	35.1	Spike	F	0 - 27
2362971	Hexazinone	1.89	Spike	P	0 - 30
2362971	Imazalil	17.7	Spike	P	0 - 100
2362971	Iprodione	11.3	Spike	P	0 - 33
2362971	Loratadine	5.53	Spike	P	0 - 56
2362971	Malathion	28.3	Spike	P	0 - 37
2362971	Metalaxyl	26.4	Spike	P	0 - 40
2362971	Metolachlor	3.77	Spike	P	0 - 29

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P421054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362971	Metribuzin	7.62	Spike	P	0 - 45
2362971	Mevinphos	1.80	Spike	P	0 - 29
2362971	Molinate	31.6	Spike	P	0 - 33
2362971	Myclobutanil	5.89	Spike	P	0 - 26
2362971	Naled	12.1	Spike	P	0 - 37
2362971	Napropamide	21.5	Spike	P	0 - 44
2362971	Norflurazon	24.1	Spike	P	0 - 30
2362971	Octinoxate	20.1	Spike	P	0 - 45
2362971	Oxadiazon	15.1	Spike	P	0 - 28
2362971	Oxybenzone	11.7	Spike	P	0 - 46
2362971	Oxyfluorfen	20.3	Spike	P	0 - 28
2362971	Parathion Ethyl	12.3	Spike	P	0 - 31
2362971	Parathion Methyl	21.2	Spike	P	0 - 29
2362971	PBDE-47	5.43	Spike	P	0 - 36
2362971	PBDE-99	7.49	Spike	P	0 - 40
2362971	Pendimethalin	3.04	Spike	P	0 - 33
2362971	Phenytoin	34.5	Spike	P	0 - 100
2362971	Phorate	13.1	Spike	P	0 - 36
2362971	Prodiamine	34.2	Spike	P	0 - 71
2362971	Prometon	2.98	Spike	P	0 - 36
2362971	Prometryn	7.55	Spike	P	0 - 28
2362971	Pronamide	22.2	Spike	P	0 - 24
2362971	Propanil	13.6	Spike	P	0 - 28
2362971	Propargite	14.0	Spike	P	0 - 43
2362971	Propiconazole	22.5	Spike	P	0 - 33
2362971	Pyraflufen Ethyl	3.08	Spike	P	0 - 29
2362971	Pyridaben	7.49	Spike	P	0 - 30
2362971	Pyriproxyfen	5.62	Spike	P	0 - 79
2362971	Simazine	1.68	Spike	P	0 - 29
2362971	Stirophos	34.4	Spike	P	0 - 61
2362971	Sulfentrazone	14.4	Spike	P	0 - 33
2362971	Tebuconazole	30.6	Spike	P	0 - 69
2362971	Terbufos	2.22	Spike	P	0 - 29
2362971	Terbuthylazine	6.37	Spike	P	0 - 32
2362971	Thiobencarb	16.8	Spike	P	0 - 26
2362971	Tri-o-cresyl Phosphate	9.51	Spike	P	0 - 33
2362971	Triadimefon	9.39	Spike	P	0 - 28

Reference Method: EPA 8276

Batch ID: P420962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362637	Chlordane	22.1	Spike	P	0 - 25
2362637	Toxaphene	11.5	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P421007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report

Precision

Reference Method: EPA 8321B

Batch ID: P421007

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363721	Acesulfame K	0.105	Spike	P	0 - 30
2363721	AMPA	8.75	Spike	P	0 - 30
2363721	Endothall	0.762	Spike	P	0 - 30
2363721	Glufosinate	3.32	Spike	P	0 - 30
2363721	Glyphosate	4.19	Spike	P	0 - 30
2363721	Sucralose	0.737	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P421081

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362969	2,4-D	4.42	Spike	P	0 - 30
2362969	2,4,5-T	9.52	Spike	P	0 - 30
2362969	Acetaminophen	5.09	Spike	P	0 - 30
2362969	Acetamiprid	1.38	Spike	P	0 - 30
2362969	Afidopyropen	15.8	Spike	P	0 - 30
2362969	Bentazon	2.49	Spike	P	0 - 30
2362969	Benzovindiflupyr	6.61	Spike	P	0 - 30
2362969	Carbamazepine	5.39	Spike	P	0 - 30
2362969	Clothianidin	3.26	Spike	P	0 - 30
2362969	Dinotefuran	3.82	Spike	P	0 - 30
2362969	Diuron	2.66	Spike	P	0 - 30
2362969	Fenuron	4.30	Spike	P	0 - 30
2362969	Fluridone	1.44	Spike	P	0 - 30
2362969	Hydrocodone	2.43	Spike	P	0 - 30
2362969	Ibuprofen	2.18	Spike	P	0 - 30
2362969	Imazapyr	3.75	Spike	P	0 - 30
2362969	Imidacloprid	7.27	Spike	P	0 - 30
2362969	Linuron	11.2	Spike	P	0 - 30
2362969	Mandestrobin	5.58	Spike	P	0 - 30
2362969	MCPP	5.13	Spike	P	0 - 30
2362969	Naproxen	7.76	Spike	P	0 - 30
2362969	Primidone	9.22	Spike	P	0 - 30
2362969	Pyraclostrobin	3.63	Spike	P	0 - 30
2362969	Silvex	7.08	Spike	P	0 - 30
2362969	Thiamethoxam	2.83	Spike	P	0 - 30
2362969	Tolfenpyrad	0.912	Spike	P	0 - 30
2362969	Triclopyr	7.99	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P421082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362968	3-Hydroxycarbofuran	4.79	Spike	P	0 - 30
2362968	Aldicarb	6.62	Spike	P	0 - 30
2362968	Aldicarb Sulfone	11.4	Spike	P	0 - 30
2362968	Aldicarb Sulfoxide	5.10	Spike	P	0 - 30
2362968	Carbaryl	14.0	Spike	P	0 - 30
2362968	Carbofuran	8.92	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P421082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362968	Methiocarb	5.33	Spike	P	0 - 30
2362968	Methomyl	11.0	Spike	P	0 - 30
2362968	Oxamyl	11.6	Spike	P	0 - 30
2362968	Propoxur	6.58	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P421305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363803	Total Alkalinity	0.742	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P421545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362934	TDS	3.92	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P421494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2362934	TSS	6.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P421310

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363803	Fluoride	0.490	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P421234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2363238	Organic Carbon	0.722	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2362968
Field Sample ID: G2CE0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	64.0	P	30 - 160

Lab Sample ID: 2362969
Field Sample ID: G2CE0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.4	P	30 - 160
EPA 8321B	Diuron-d6	82.8	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.5	P	30 - 160
EPA 8321B	Primidone-d5	99.7	P	30 - 160
EPA 8321B	Sucralose-d6	86.7	P	30 - 160

Lab Sample ID: 2362970
Field Sample ID: G2CE0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	71.2	P	29 - 130
EPA 8270E	Decachlorobiphenyl	62.3	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	68.9	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	61.2	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	58.9	P	30 - 101
EPA 8276	PCNB	85.0	P	48 - 121

Lab Sample ID: 2362971
Field Sample ID: G2CE0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	60.7	P	20 - 200
EPA 8270E	Simazine-d10	72.5	P	62 - 142
EPA 8270E	Terbufos-d10	87.1	P	58 - 132
EPA 8270E	Terphenyl-d14	86.5	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A115369

Included Lab Sample IDs: 2362965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.7	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A115372

Included Lab Sample IDs: 2362965

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A115424

Included Lab Sample IDs: 2362966

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	92.0	91.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A115447

Included Lab Sample IDs: 2362969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.4	101	P/P	60 - 160
Sucralose	83.6	80.3	P/P	60 - 160

Reference Method: SM 5310 B-2011

Run ID: A115451

Included Lab Sample IDs: 2362966

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.4	99.1	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A115462

Included Lab Sample IDs: 2362969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	111	P/P	60 - 160
Endothall	99.1	104	P/P	60 - 160
Glufosinate	106	108	P/P	60 - 160
Glyphosate	104	107	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A115465

Included Lab Sample IDs: 2362966

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276
Run ID: A115471
Included Lab Sample IDs: 2362970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.2		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A115475
Included Lab Sample IDs: 2362965

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	95.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A115475
Included Lab Sample IDs: 2362965

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

Reference Method: EPA 8321B
Run ID: A115492
Included Lab Sample IDs: 2362969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	103	103	P/P	50 - 150
2,4,5-T	127	129	P/P	50 - 150
3-Hydroxycarbofuran	111	113	P/P	60 - 150
Acetaminophen	110	112	P/P	60 - 160
Acetamiprid	106	108	P/P	50 - 150
Afidopyropen	99.2	103	P/P	50 - 150
Aldicarb	111	110	P/P	60 - 150
Aldicarb Sulfone	104	107	P/P	50 - 150
Aldicarb Sulfoxide	106	106	P/P	50 - 150
Bentazon	122	122	P/P	50 - 160
Benzovindiflupyr	101	101	P/P	50 - 160
Carbamazepine	97.1	98.7	P/P	60 - 150
Carbaryl	114	106	P/P	60 - 150
Carbofuran	107	107	P/P	50 - 150
Clothianidin	106	98.9	P/P	60 - 150
Dinotefuran	103	107	P/P	50 - 150
Diuron	105	104	P/P	60 - 160
Fenuron	111	113	P/P	60 - 150
Fluridone	106	103	P/P	60 - 160
Hydrocodone	104	102	P/P	60 - 150
Ibuprofen	100	104	P/P	50 - 160
Imazapyr	108	107	P/P	50 - 150
Imidacloprid	99.4	101	P/P	60 - 150
Linuron	114	113	P/P	60 - 150
Mandestrobin	109	107	P/P	50 - 150
MCP	124	122	P/P	50 - 150
Methiocarb	98.7	98.2	P/P	50 - 150
Methomyl	107	107	P/P	50 - 150
Naproxen	84.2	88.9	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A115492
Included Lab Sample IDs: 2362968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxamyl	107	107	P/P	50 - 150
Primidone	110	111	P/P	60 - 150
Propoxur	112	113	P/P	50 - 150
Pyraclostrobin	104	104	P/P	60 - 150
Silvex	105	104	P/P	50 - 150
Thiamethoxam	110	107	P/P	50 - 150
Tolfenpyrad	100	103	P/P	60 - 150
Triclopyr	125	124	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A115503
Included Lab Sample IDs: 2362966

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	102	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A115504
Included Lab Sample IDs: 2362971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	98.0		P	80 - 120
Avobenzene	102		P	80 - 120
Dechlorane Plus	106		P	80 - 120
Octinoxate	102		P	80 - 120
Oxybenzone	101		P	80 - 120
PBDE-47	98.6		P	80 - 120
PBDE-99	101		P	80 - 120
Tri-o-cresyl Phosphate	98.4		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A115509
Included Lab Sample IDs: 2362966

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

Reference Method: EPA 8270E
Run ID: A115532
Included Lab Sample IDs: 2362970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	99.5		P	80 - 120
Alpha-Chlordane	106		P	80 - 120
Beta-BHC	96.8		P	80 - 120
Beta-Cyfluthrin	98.6		P	80 - 120
Bifenthrin	95.6		P	80 - 120
Chlorothalonil	87.8		P	80 - 120
Cis-Nonachlor	101		P	80 - 120
Cypermethrin	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115532
Included Lab Sample IDs: 2362970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dacthal	99.5		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	99.2		P	80 - 120
Delta-BHC	92.5		P	80 - 120
Deltamethrin	97.6		P	80 - 120
Dichlobenil	98.5		P	80 - 120
Dicofol	99.8		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	94.4		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	99.4		P	80 - 120
Endrin Ketone	98.0		P	80 - 120
Esfenvalerate	99.3		P	80 - 120
Ethalfuralin	104		P	80 - 120
Fenpropathrin	99.5		P	80 - 120
Gamma-BHC	98.6		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	97.7		P	80 - 120
Kepone	84.6		P	80 - 120
Lambda-Cyhalothrin	98.9		P	80 - 120
Methoprene	103		P	80 - 120
Methoxychlor	97.1		P	80 - 120
MGK-264	97.1		P	80 - 120
Mirex	105		P	80 - 120
Oxychlordane	99.8		P	80 - 120
Permethrin	101		P	80 - 120
Phenothrin	97.3		P	80 - 120
Piperonyl Butoxide	95.1		P	80 - 120
Prallethrin	93.5		P	80 - 120
Tau-Fluvalinate	95.1		P	80 - 120
Tetramethrin	93.2		P	80 - 120
Trans-Nonachlor	103		P	80 - 120
Triclosan Methyl	99.8		P	80 - 120
Trifluralin	102		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A115558
Included Lab Sample IDs: 2362965

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115581
Included Lab Sample IDs: 2362971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	89.0		P	80 - 120
Alachlor	98.1		P	80 - 120
Ametryn	98.5		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	83.5		P	80 - 120
Azinphos Methyl	92.1		P	80 - 120
Azoxystrobin	88.6		P	80 - 120
Bromacil	98.7		P	80 - 120
Butylate	108		P	80 - 120
Caffeine	98.5		P	80 - 120
Carfentrazone Ethyl	81.7		P	80 - 120
Chlorfenapyr	90.8		P	80 - 120
Chlorpyrifos Methyl	91.2		P	80 - 120
Coumaphos	100		P	80 - 120
Cyanazine	105		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	94.8		P	80 - 120
Diazinon	98.4		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	101		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	103		P	80 - 120
Ethoprop	90.0		P	80 - 120
Etridiazole	104		P	80 - 120
Fenamiphos	98.4		P	80 - 120
Fipronil	90.9		P	80 - 120
Fipronil Desulfinyl	94.2		P	80 - 120
Fipronil Sulfide	114		P	80 - 120
Fipronil Sulfone	84.3		P	80 - 120
Fludioxonil	82.6		P	80 - 120
Flumioxazin	83.9		P	80 - 120
Flutolanil	95.8		P	80 - 120
Fluxapyroxad	84.1		P	80 - 120
Hexazinone	98.0		P	80 - 120
Imazalil	87.8		P	80 - 120
Loratadine	90.8		P	80 - 120
Malathion	88.9		P	80 - 120
Metalaxyl	108		P	80 - 120
Metolachlor	87.8		P	80 - 120
Metribuzin	96.0		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.6		P	80 - 120
Myclobutanil	96.3		P	80 - 120
Naled	108		P	80 - 120
Napropamide	91.3		P	80 - 120
Norflurazon	83.8		P	80 - 120
Oxadiazon	87.6		P	80 - 120
Oxyfluorfen	89.0		P	80 - 120
Parathion Ethyl	116		P	80 - 120
Pendimethalin	104		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A115581
Included Lab Sample IDs: 2362971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenytoin	97.8		P	80 - 120
Phorate	92.2		P	80 - 120
Prodiamine	95.8		P	80 - 120
Prometon	93.2		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	107		P	80 - 120
Propanil	88.9		P	80 - 120
Propargite	91.8		P	80 - 120
Propiconazole	83.5		P	80 - 120
Simazine	98.7		P	80 - 120
Stirophos	88.3		P	80 - 120
Terbufos	108		P	80 - 120
Terbuthylazine	117		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115588
Included Lab Sample IDs: 2362970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	96.6		P	80 - 120

Reference Method: EPA 8270E
Run ID: A115663
Included Lab Sample IDs: 2362971

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbophenothion	95.9		P	80 - 120
Chlorpyrifos Ethyl	97.8		P	80 - 120
Dimethomorph	97.2		P	80 - 120
Ethion	96.0		P	80 - 120
Fenbuconazole	101		P	80 - 120
Fluazifop-P-butyl	90.4		P	80 - 120
Fonofos	92.7		P	80 - 120
Iprodione	98.5		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pyraflufen Ethyl	89.0		P	80 - 120
Pyridaben	103		P	80 - 120
Pyriproxyfen	97.6		P	80 - 120
Sulfentrazone	92.0		P	80 - 120
Tebuconazole	96.9		P	80 - 120
Thiobencarb	92.8		P	80 - 120
Triadimefon	92.2		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)	97.3				2.30	
EPA 180.1 Rev. 2.0	Turbidity	100				8.60	
EPA 300.0 Rev. 2.1	Chloride	95.8	98.1	94.1		0.0789	
	Sulfate	96.5	99.5	94.1		0.888	
EPA 350.1 Rev. 2.0	Ammonia-N	99.0	97.4	100			1.73
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104				5.39	
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	96.0	93.4	93.4			0.0
EPA 365.1 Rev. 2.0	Total-P	108	107	107			0.0227
EPA 8270E	2-Ethylhexyl	109	80.2	80.5			0.326
	2,3,4,5-tetrabromobenzoate (EHTBB)						
	Acetochlor	107	116	103			12.1
	Alachlor	101	101	99.6			1.54
	Aldrin	56.4	61.8	65.6			5.92
	Alpha-BHC	89.6	87.5	90.1			3.01
	Alpha-Chlordane	73.4	71.0	69.1			2.68
	Ametryn	77.2	138	117			16.4
	Atrazine	93.2	89.8	97.4			6.46
	Atrazine Desethyl	87.6	67.7	49.0			25.4
	Avobenzone	124	93.7	100			6.93
	Azinphos Methyl	116	180	205			12.9
	Azoxystrobin	136	75.8	80.9			6.54
	Beta-BHC	102	86.1	86.5			0.383
	Beta-Cyfluthrin	69.7	80.3	81.1			0.968
	Bifenthrin	43.1	71.6	80.7			12.0
	Bromacil	106	104	111			6.52
	Butylate	66.8	61.3	51.0			18.4
	Caffeine	92.8	96.1	93.7			2.46
	Carbophenothion	95.5	90.0	75.4			17.6
	Carfentrazone Ethyl	91.8	75.6	64.6			15.7
	Chlorfenapyr	99.7	67.8	83.5			20.8
	Chlorothalonil	76.1	63.8	60.1			5.88
	Chlorpyrifos Ethyl	83.0	70.7	87.4			21.1
	Chlorpyrifos Methyl	80.6	76.0	64.2			16.9
	Cis-Nonachlor	68.1	59.7	58.1			2.74
	Coumaphos	181	156	180			14.0
	Cyanazine	160	138	198			35.6
	Cypermethrin	74.8	86.6	86.9			0.384
	Cyprodinil	143	121	143			16.4
	Dacthal	87.6	81.2	79.9			1.67
	DDD-p,p'	68.2	57.0	55.2			3.30
	DDE-p,p'	73.7	71.0	69.9			1.69
	DDT-p,p'	72.8	72.3	78.1			7.71
	Dechlorane Plus	141	111	113			1.51
	Delta-BHC	113	102	110			8.36
	Deltamethrin	85.0	103	102			0.988
	Demeton	82.0	77.2	77.8			0.767
	Diazinon	104	82.3	80.3			2.41
	Dichlobenil	81.0	79.1	64.8			19.8
	Dicofol	83.7	87.9	92.3			4.87
	Dieldrin	76.5	71.7	71.2			0.519
	Difenoconazole	190	254	238			6.60
	Dimethenamid	71.5	100	80.2			22.2
	Dimethomorph	209	159	121			27.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Disulfoton	87.0	86.5	80.8			6.75
	Dithiopyr	106	94.5	101			6.32
	Endosulfan I	82.8	78.2	77.2			1.28
	Endosulfan II	94.1	85.0	82.8			2.60
	Endosulfan Sulfate	83.7	70.3	63.2			10.7
	Endrin	78.8	74.9	74.3			0.720
	Endrin Aldehyde	78.7	61.0	53.1			13.8
	Endrin Ketone	87.7	73.6	72.6			1.36
	EPTC	65.5	62.2	46.4			29.1
	Esfenvalerate	68.1	83.3	86.9			4.25
	Ethalfuralin	74.7	81.2	83.1			2.38
	Ethion	7.22	74.1	72.8			1.77
	Ethoprop	97.7	107	81.1			27.4
	Etridiazole	72.4	61.7	57.7			6.62
	Fenamiphos	67.4	96.6	93.6			3.11
	Fenbuconazole	75.8	88.6	77.0			14.0
	Fenpropathrin	65.7	72.2	74.2			2.65
	Fipronil	117	92.6	97.6			5.29
	Fipronil Desulfinyl	86.3	62.5	67.5			7.76
	Fipronil Sulfide	102	85.2	92.2			7.91
	Fipronil Sulfone	95.6	67.8	88.4			20.7
	Fluazifop-P-butyl	80.4	88.6	83.5			5.90
	Fludioxonil	123	105	125			17.3
	Flumioxazin	70.8	137	229			50.6
	Flutolanil	115	111	115			3.11
	Fluxapyroxad	123	103	137			27.6
	Fonofos	94.8	60.2	85.9			35.1
	Gamma-BHC	97.9	95.6	98.0			2.51
	Gamma-Chlordane	71.2	72.1	71.7			0.550
	Heptachlor	61.6	68.8	66.1			4.03
	Heptachlor Epoxide	78.5	80.6	78.5			2.64
	Hexachlorobenzene	69.4	75.1	76.6			2.01
	Hexazinone	85.0	94.2	96.0			1.89
	Imazalil	129	93.7	78.4			17.7
	Iprodione	53.7	85.0	95.2			11.3
	Kepone	67.6					38.4
	Lambda-Cyhalothrin	54.0	78.5	79.6			1.44
	Loratadine	180	162	171			5.53
	Malathion	97.5	89.6	119			28.3
	Metalaxyl	111	112	86.2			26.4
	Methoprene	51.2	71.5	75.5			5.50
	Methoxychlor	77.8	85.2	90.0			5.47
	Metolachlor	104	104	108			3.77
	Metribuzin	100	83.5	90.1			7.62
	Mevinphos	70.2	62.9	64.1			1.80
	MGK-264	97.5	86.6	82.3			4.65
	Mirex	58.5	65.7	63.6			3.34
	Molinate	76.6	79.9	58.1			31.6
	Myclobutanil	98.6	92.0	97.6			5.89
	Naled	103	87.4	98.6			12.1
	Napropamide	2.34	81.2	65.4			21.5
	Norflurazon	87.7	93.9	120			24.1
	Octinoxate	98.0	89.8	73.4			20.1
	Oxadiazon	101	87.8	75.5			15.1

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Oxybenzone	104	84.6	75.3		11.7
	Oxychlordane	76.7	75.9	80.2		5.50
	Oxyfluorfen	94.9	91.5	112		20.3
	Parathion Ethyl	98.5	91.8	104		12.3
	Parathion Methyl	106	90.4	112		21.2
	PBDE-47	89.8	77.5	73.4		5.43
	PBDE-99	96.5	68.3	73.7		7.49
	PCB-1016	75.9	80.6	68.8		15.8
	PCB-1260	87.0	90.1	79.0		13.2
	Pendimethalin	75.9	70.3	72.5		3.04
	Permethrin	70.2	83.5	87.1		4.19
	Phenothrin	52.9	69.2	72.4		4.46
	Phenytol	24.3	58.9	83.4		34.5
	Phorate	73.2	67.1	58.9		13.1
	Piperonyl Butoxide	101	97.3	94.1		3.39
	Prallethrin	77.4	71.0	72.8		2.51
	Prodiamine	66.5	54.8	77.4		34.2
	Prometon	117	105	108		2.98
	Prometryn	126	99.4	92.2		7.55
	Pronamide	115	125	100		22.2
	Propanil	89.0	91.3	79.6		13.6
	Propargite	136	201	174		14.0
	Propiconazole	90.7	90.7	114		22.5
	Pyraflufen Ethyl	55.8	48.4	50.0		3.08
	Pyridaben	114	77.1	83.1		7.49
	Pyriproxyfen	49.3	96.8	91.6		5.62
	Simazine	86.8	87.9	86.4		1.68
	Stirophos	77.4	57.9	82.0		34.4
	Sulfentrazone	78.8				14.4
	Tau-Fluvalinate	47.5	77.0	85.7		10.6
	Tebuconazole	110	38.6	52.5		30.6
	Terbufos	112	86.6	84.7		2.22
	Terbutylazine	100	83.8	89.3		6.37
	Tetramethrin	101	112	122		8.85
	Thiobencarb	91.9	97.6	82.5		16.8
	Trans-Nonachlor	69.4	68.5	69.9		2.10
	Tri-o-cresyl Phosphate	86.1	72.3	65.8		9.51
	Triadimefon	112	96.1	87.5		9.39
	Triclosan Methyl	77.5	70.9	70.8		0.172
	Trifluralin	72.4	75.6	77.6		2.55
EPA 8276	Chlordane	84.4	84.4	67.6		22.1
	Toxaphene	93.8	126	142		11.5
EPA 8321B	2,4-D	89.2	93.0	97.2		4.42
	2,4,5-T	85.2	82.9	91.1		9.52
	3-Hydroxycarbofuran	89.2	96.3	101		4.79
	Acesulfame K	101	106	106		0.105
	Acetaminophen	95.5	98.3	103		5.09
	Acetamiprid	85.2	93.5	92.2		1.38
	Afidopyropen	51.7	75.1	64.1		15.8
	Aldicarb	74.4	82.0	76.8		6.62
	Aldicarb Sulfone	94.2	99.9	112		11.4
	Aldicarb Sulfoxide	95.8	60.9	64.1		5.10
	AMPA	101	107	117		8.75
	Bentazon	108	53.6	72.1		2.49

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	Benzovindiflupyr	73.3	77.4	82.6			6.61
	Carbamazepine	76.1	74.3	79.5			5.39
	Carbaryl	78.5	74.5	85.7			14.0
	Carbofuran	78.2	79.4	86.8			8.92
	Clothianidin	95.6	93.9	97.3			3.26
	Dinotefuran	98.6	106	110			3.82
	Diuron	77.8	77.5	79.6			2.66
	Endothall	98.4	98.4	97.7			0.762
	Fenuron	100	100	105			4.30
	Fluridone	90.2	91.0	92.3			1.44
	Glufosinate	106	108	111			3.32
	Glyphosate	99.8	119	125			4.19
	Hydrocodone	91.6	93.0	95.3			2.43
	Ibuprofen	58.6	59.6	58.3			2.18
	Imazapyr	92.2	92.1	96.2			3.75
	Imidacloprid	95.7	113	122			7.27
	Linuron	78.1	73.4	82.1			11.2
	Mandestrobin	91.0	90.6	95.8			5.58
	MCPP	103	103	109			5.13
	Methiocarb	71.1	71.9	75.8			5.33
	Methomyl	91.2	94.6	106			11.0
	Naproxen	76.9	70.1	75.8			7.76
	Oxamyl	93.8	97.3	109			11.6
	Primidone	96.2	93.3	103			9.22
	Propoxur	75.4	77.4	82.7			6.58
	Pyraclostrobin	61.5	80.4	83.4			3.63
	Silvex	71.2	76.3	81.9			7.08
	Sucralose	83.4	81.7	82.3			0.737
	Thiamethoxam	95.9	104	107			2.83
	Tolfenpyrad	30.3	48.5	48.0			0.912
	Triclopyr	81.3	79.8	86.4			7.99
SM 2320 B-2011	Total Alkalinity	103				0.742	
SM 2540 C-2015	TDS	102				3.92	
SM 2540 D-2015	TSS	91.1				6.45	
SM 4500-F- C-2011	Fluoride	99.2	96.8	97.4			0.490
SM 5310 B-2011	Organic Carbon	97.2	97.0	98.3			0.722

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2362965
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2362965
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2362965
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2362965
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2362966
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2362966
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2362966
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2362966
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2362971
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2362970
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2362971
EPA 8270E	PCBs in water matrices by GC/MS/MS	2362970

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2362970
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2362968
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2362969
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2362965
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2362965
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2362965
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2362965
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2362966

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	10/18/2022			10/18/2022 15:07	Blanca Fach	2362965
EPA 180.1 Rev. 2.0	10/18/2022			10/18/2022 14:26	Khloe J Berg	2362965
EPA 300.0 Rev. 2.1	10/18/2022			10/27/2022 17:14	Anna M. Plaviak	2362965
EPA 350.1 Rev. 2.0	10/18/2022			10/25/2022 17:21	Judith K. Clark	2362966
EPA 351.2 Rev. 2.0	10/18/2022	10/24/2022 14:48	Samantha L Bates	10/25/2022 12:21	Samantha L Bates	2362966
EPA 353.2 Rev. 2.0	10/18/2022			10/20/2022 10:55	Beverly Y. Sanders	2362966
EPA 365.1 Rev. 2.0	10/18/2022	10/20/2022 15:06	Adam P Silver	10/23/2022 13:31	James L Waggeberby	2362966
EPA 8270E	10/18/2022	10/19/2022 08:30	Rasheda Ghaffari	10/21/2022 19:03	Vandana T. Nagar	2362970
	10/18/2022	10/19/2022 08:30	Rasheda Ghaffari	10/24/2022 04:06	Julie Wi	2362970
	10/18/2022	10/20/2022 08:00	Fe-Val Siddell	10/24/2022 18:47	Lipi Saha	2362971
	10/18/2022	10/20/2022 08:00	Fe-Val Siddell	10/26/2022 18:30	Michael Poppell	2362971
	10/18/2022	10/20/2022 08:00	Fe-Val Siddell	10/31/2022 17:39	Michael Poppell	2362971
EPA 8276	10/18/2022	10/19/2022 08:30	Rasheda Ghaffari	10/22/2022 17:40	Arthur Maknenko	2362970
EPA 8321B	10/18/2022	10/20/2022 06:30	Umesh Chiluwal	10/20/2022 09:13	Umesh Chiluwal	2362969
	10/18/2022	10/20/2022 06:30	Umesh Chiluwal	10/21/2022 16:04	Umesh Chiluwal	2362969
	10/18/2022	10/20/2022 09:30	June Rhew	10/24/2022 16:50	Juyoung Kim	2362969
	10/18/2022	10/24/2022 09:30	June Rhew	10/25/2022 01:08	Juyoung Kim	2362968
SM 2320 B-2011	10/18/2022			10/22/2022 11:05	Dale L. Simmons	2362965
SM 2540 C-2015	10/18/2022			10/19/2022 16:26	Yijie Li	2362965
SM 2540 D-2015	10/18/2022			10/19/2022 16:26	Yijie Li	2362965
SM 4500-F- C-2011	10/18/2022			10/22/2022 11:05	Dale L. Simmons	2362965
SM 5310 B-2011	10/18/2022			10/20/2022 19:44	Khloe J Berg	2362966