Chemical Analysis Report

NW-DIST-2022-09-01-02

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

Event Description: **Pensacola Run**
Request ID: **RQ-2022-08-29-22**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Goverment Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 22-SEP-2022 10:52

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Jones Creek upstream of Old Corey Field Rd **Collection Date/Time: 08/31/2022 09:50**

Field ID: G4NW0114 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353629	EPA 8270E	Aldrin	0.75	U	ng/L	P419139	
		Alpha-BHC	0.12	U	ng/L	P419139	
		Alpha-Chlordane	0.23	U	ng/L	P419139	
		PCB-1016	2.3	U	ng/L	P419139	
		Beta-BHC	0.12	U	ng/L	P419139	
		PCB-1221	2.3	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.3	U	ng/L	P419139	
		Bifenthrin	0.58	U	ng/L	P419139	
		PCB-1242	2.3	U	ng/L	P419139	
		Carbophenothion	1.0	U	ng/L	P419139	
		PCB-1248	2.3	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.3	U	ng/L	P419139	
		Cis-Nonachlor	0.23	U	ng/L	P419139	
		PCB-1260	2.3	U	ng/L	P419139	
		Cypermethrin	1.7	U	ng/L	P419139	
		Dacthal	0.17	U	ng/L	P419139	
		DDD-p,p'	0.29	U	ng/L	P419139	
		DDE-p,p'	0.23	U	ng/L	P419139	
		DDT-p,p'	0.29	U	ng/L	P419139	
		Delta-BHC	0.46	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.29	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	0.46	U	ng/L	P419139	
		Endosulfan I	0.46	U	ng/L	P419139	
		Endosulfan II	0.46	U	ng/L	P419139	
		Endosulfan Sulfate	0.35	U	ng/L	P419139	
		Endrin	0.46	U	ng/L	P419139	
		Endrin Aldehyde	0.87	U	ng/L	P419139	
		Endrin Ketone	0.46	U	ng/L	P419139	
		Esfenvalerate	0.87	U	ng/L	P419139	
		Ethalfluralin	0.17	U	ng/L	P419139	
		Fenpropathrin	0.29	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.23	U	ng/L	P419139	
		Heptachlor	0.23	U	ng/L	P419139	
		Heptachlor Epoxide	0.29	U	ng/L	P419139	
		Hexachlorobenzene**	1.2	U	ng/L	P419139	
		Kepone	5.8	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.87	U	ng/L	P419139	
		Methoprene	0.87	U	ng/L	P419139	
		Methoxychlor	0.35	U	ng/L	P419139	

Field ID: G4NW0114 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353629	EPA 8270E	MGK-264	0.23	U	ng/L	P419139	
		Mirex	0.41	U	ng/L	P419139	
		Oxychlordane	0.35	U	ng/L	P419139	
		Permethrin	1.9	U	ng/L	P419139	
		Phenothrin	1.0	U	ng/L	P419139	
		Piperonyl Butoxide	0.17	U	ng/L	P419139	
		Prallethrin	2.3	U	ng/L	P419139	
		Tau-Fluvalinate	0.29	U	ng/L	P419139	
		Tetramethrin	0.87	U	ng/L	P419139	
		Trans-Nonachlor	0.23	U	ng/L	P419139	
		Triclosan Methyl	0.17	U	ng/L	P419139	
		Trifluralin	0.23	U	ng/L	P419139	
	EPA 8276	Chlordane	2.9	UJ	ng/L	P419139	LCS
		Toxaphene	17	U	ng/L	P419139	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Jackson Creek upstream of Prieto Drive **Collection Date/Time: 08/31/2022 10:20**

Field ID: G4NW0505 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353630	EPA 8270E	Aldrin	0.71	U	ng/L	P419139	
		Alpha-BHC	0.11	U	ng/L	P419139	
		Alpha-Chlordane	1.2		ng/L	P419139	
		PCB-1016	2.2	U	ng/L	P419139	
		Beta-BHC	0.11	U	ng/L	P419139	
		PCB-1221	2.2	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.2	U	ng/L	P419139	
		Bifenthrin	0.55	U	ng/L	P419139	
		PCB-1242	2.2	U	ng/L	P419139	
		Carbophenothion	0.98	U	ng/L	P419139	
		PCB-1248	2.2	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.2	U	ng/L	P419139	
		Cis-Nonachlor	0.22	U	ng/L	P419139	
		PCB-1260	2.2	U	ng/L	P419139	
		Cypermethrin	1.6	U	ng/L	P419139	
		Dacthal	0.16	U	ng/L	P419139	
		DDD-p,p'	0.27	U	ng/L	P419139	
		DDE-p,p'	0.22	U	ng/L	P419139	
		DDT-p,p'	0.27	U	ng/L	P419139	
		Delta-BHC	0.44	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.27	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	12		ng/L	P419139	
		Endosulfan I	0.44	U	ng/L	P419139	
		Endosulfan II	0.44	U	ng/L	P419139	
		Endosulfan Sulfate	0.33	U	ng/L	P419139	
		Endrin	0.44	U	ng/L	P419139	
		Endrin Aldehyde	0.82	U	ng/L	P419139	
		Endrin Ketone	0.44	U	ng/L	P419139	
		Esfenvalerate	0.82	U	ng/L	P419139	
		Ethalfluralin	0.16	U	ng/L	P419139	
		Fenpropathrin	0.27	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.93	I	ng/L	P419139	
		Heptachlor	0.22	U	ng/L	P419139	
		Heptachlor Epoxide	9.5		ng/L	P419139	
		Hexachlorobenzene**	1.1	U	ng/L	P419139	
		Kepone	5.5	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.82	U	ng/L	P419139	
		Methoprene	0.82	U	ng/L	P419139	
		Methoxychlor	0.33	U	ng/L	P419139	

Field ID: G4NW0505 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353630	EPA 8270E	MGK-264	0.22	U	ng/L	P419139	
		Mirex	0.38	U	ng/L	P419139	
		Oxychlordane	0.33	U	ng/L	P419139	
		Permethrin	1.7	U	ng/L	P419139	
		Phenothrin	0.98	U	ng/L	P419139	
		Piperonyl Butoxide	0.16	U	ng/L	P419139	
		Prallethrin	2.2	U	ng/L	P419139	
		Tau-Fluvalinate	0.27	U	ng/L	P419139	
		Tetramethrin	0.82	U	ng/L	P419139	
		Trans-Nonachlor	0.28	I	ng/L	P419139	
		Triclosan Methyl	0.16	U	ng/L	P419139	
		Trifluralin	0.22	U	ng/L	P419139	
	EPA 8276	Chlordane	19	J	ng/L	P419139	LCS
		Toxaphene	16	U	ng/L	P419139	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Jackson Creek downstream of Old Corry Rd. **Collection Date/Time: 08/31/2022 10:10**

Field ID: G4NW0412 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353631	EPA 8270E	Aldrin	0.71	U	ng/L	P419139	
		Alpha-BHC	0.11	U	ng/L	P419139	
		Alpha-Chlordane	1.8		ng/L	P419139	
		PCB-1016	2.2	U	ng/L	P419139	
		Beta-BHC	0.11	U	ng/L	P419139	
		PCB-1221	2.2	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.2	U	ng/L	P419139	
		Bifenthrin	0.55	U	ng/L	P419139	
		PCB-1242	2.2	U	ng/L	P419139	
		Carbophenothion	0.99	U	ng/L	P419139	
		PCB-1248	2.2	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.2	U	ng/L	P419139	
		Cis-Nonachlor	0.22	U	ng/L	P419139	
		PCB-1260	2.2	U	ng/L	P419139	
		Cypermethrin	1.6	U	ng/L	P419139	
		Dacthal	0.16	U	ng/L	P419139	
		DDD-p,p'	0.27	U	ng/L	P419139	
		DDE-p,p'	0.22	U	ng/L	P419139	
		DDT-p,p'	0.27	U	ng/L	P419139	
		Delta-BHC	0.44	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.27	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	19		ng/L	P419139	
		Endosulfan I	0.44	U	ng/L	P419139	
		Endosulfan II	0.44	U	ng/L	P419139	
		Endosulfan Sulfate	0.33	U	ng/L	P419139	
		Endrin	0.44	U	ng/L	P419139	
		Endrin Aldehyde	0.82	U	ng/L	P419139	
		Endrin Ketone	0.44	U	ng/L	P419139	
		Esfenvalerate	0.82	U	ng/L	P419139	
		Ethalfluralin	0.16	U	ng/L	P419139	
		Fenpropathrin	0.27	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.95	I	ng/L	P419139	
		Heptachlor	0.22	U	ng/L	P419139	
		Heptachlor Epoxide	9.9		ng/L	P419139	
		Hexachlorobenzene**	1.1	U	ng/L	P419139	
		Kepone	5.5	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.82	U	ng/L	P419139	
		Methoprene	0.82	U	ng/L	P419139	
		Methoxychlor	0.33	U	ng/L	P419139	

Field ID: G4NW0412 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353631	EPA 8270E	MGK-264	0.22	U	ng/L	P419139	
		Mirex	0.38	U	ng/L	P419139	
		Oxychlordane	0.33	U	ng/L	P419139	
		Permethrin	1.8	U	ng/L	P419139	
		Phenothrin	0.99	U	ng/L	P419139	
		Piperonyl Butoxide	0.16	U	ng/L	P419139	
		Prallethrin	2.2	U	ng/L	P419139	
		Tau-Fluvalinate	0.27	U	ng/L	P419139	
		Tetramethrin	0.82	U	ng/L	P419139	
		Trans-Nonachlor	0.24	I	ng/L	P419139	
		Triclosan Methyl	0.16	U	ng/L	P419139	
		Trifluralin	0.22	U	ng/L	P419139	
	EPA 8276	Chlordane	24	J	ng/L	P419139	LCS
		Toxaphene	16	U	ng/L	P419139	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Bayou Marcus Creek upstream of Patricia Drive Collection Date/Time: 08/31/2022 10:40

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353621	EPA 8321B	Aldicarb	0.020	U	ug/L	P418942	
		Aldicarb Sulfone	0.0020	U	ug/L	P418942	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P418942	
		Carbaryl	0.0020	U	ug/L	P418942	
		Carbofuran	0.0020	U	ug/L	P418942	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P418942	
		Methiocarb	0.0020	U	ug/L	P418942	
		Methomyl	0.0020	U	ug/L	P418942	
		Oxamyl	0.0020	U	ug/L	P418942	
		Propoxur	0.0020	U	ug/L	P418942	
2353622		2,4-D	0.0031	I	ug/L	P419091	
		Acesulfame K	0.10	U	ug/L	P418988	
		2,4,5-T	0.0040	U	ug/L	P419091	
		AMPA	0.10	U	ug/L	P418988	
		Acetaminophen	0.018	I	ug/L	P419091	
		Acetamiprid	0.0020	U	ug/L	P419091	
		Endothall	0.25	U	ug/L	P418988	
		Glufosinate	0.10	U	ug/L	P418988	
		Glyphosate	0.10	U	ug/L	P418988	
		Afidopyropen	0.0021	I	ug/L	P419091	
		Bentazon	0.0019	I	ug/L	P419091	
		Sucralose	0.50		ug/L	P418988	
		Benzovindiflupyr	0.0020	U	ug/L	P419091	
		Carbamazepine	0.0019	I	ug/L	P419091	
		Clothianidin	0.0020	U	ug/L	P419091	
		Dinotefuran	0.0020	U	ug/L	P419091	
		Diuron	0.035		ug/L	P419091	
		Fenuron	0.032	U	ug/L	P419091	
		Fluridone	1.0E-03	I	ug/L	P419091	
		Imazapyr	0.0092	I	ug/L	P419091	
		Hydrocodone	0.0020	U	ug/L	P419091	
		Ibuprofen	0.080	U	ug/L	P419091	
		Imidacloprid	0.010		ug/L	P419091	
		Linuron	0.0040	U	ug/L	P419091	
		Mandestrobin	0.0020	U	ug/L	P419091	
		MCPP	0.0040	U	ug/L	P419091	
		Naproxen	0.014	I	ug/L	P419091	
		Primidone	0.0040	U	ug/L	P419091	
		Pyraclostrobin	0.0020	U	ug/L	P419091	
		Silvex	0.0040	U	ug/L	P419091	
		Thiamethoxam	0.0020	U	ug/L	P419091	RPD
		Tolfenpyrad	0.0020	U	ug/L	P419091	
		Triclopyr	0.0040	U	ug/L	P419091	
2353632	EPA 8270E	Aldrin	0.72	U	ng/L	P419139	

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353632	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P419139	
		Alpha-Chlordane	0.22	U	ng/L	P419139	
		PCB-1016	2.2	U	ng/L	P419139	
		Beta-BHC	0.11	U	ng/L	P419139	
		PCB-1221	2.2	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.2	U	ng/L	P419139	
		Bifenthrin	0.55	U	ng/L	P419139	
		PCB-1242	2.2	U	ng/L	P419139	
		PCB-1248	2.2	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.2	U	ng/L	P419139	
		Cis-Nonachlor	0.22	U	ng/L	P419139	
		PCB-1260	2.2	U	ng/L	P419139	
		Cypermethrin	1.7	U	ng/L	P419139	
		Dacthal	0.17	U	ng/L	P419139	
		DDD-p,p'	0.28	U	ng/L	P419139	
		DDE-p,p'	0.22	U	ng/L	P419139	
		DDT-p,p'	0.28	U	ng/L	P419139	
		Delta-BHC	0.44	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.28	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	1.2	I	ng/L	P419139	
		Endosulfan I	0.44	U	ng/L	P419139	
		Endosulfan II	0.44	U	ng/L	P419139	
		Endosulfan Sulfate	0.33	U	ng/L	P419139	
		Endrin	0.44	U	ng/L	P419139	
		Endrin Aldehyde	0.83	U	ng/L	P419139	
		Endrin Ketone	0.44	U	ng/L	P419139	
		Esfenvalerate	0.83	U	ng/L	P419139	
		Ethalfluralin	0.17	U	ng/L	P419139	
		Fenpropathrin	0.28	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.22	U	ng/L	P419139	
		Heptachlor	0.22	U	ng/L	P419139	
		Heptachlor Epoxide	0.74	I	ng/L	P419139	
		Hexachlorobenzene**	1.1	U	ng/L	P419139	
		Kepone	5.5	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.83	U	ng/L	P419139	
		Methoprene	0.83	U	ng/L	P419139	
		Methoxychlor	0.33	U	ng/L	P419139	
		MGK-264	0.22	U	ng/L	P419139	
		Mirex	0.39	U	ng/L	P419139	
		Oxychlordane	0.33	U	ng/L	P419139	

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353632	EPA 8270E	Permethrin	1.8	U	ng/L	P419139	
		Phenothrin	0.99	U	ng/L	P419139	
		Piperonyl Butoxide	0.17	U	ng/L	P419139	
		Prallethrin	2.2	U	ng/L	P419139	
		Tau-Fluvalinate	0.28	U	ng/L	P419139	
		Tetramethrin	0.83	U	ng/L	P419139	
		Trans-Nonachlor	0.22	U	ng/L	P419139	
		Triclosan Methyl	0.17	U	ng/L	P419139	
		Trifluralin	0.22	U	ng/L	P419139	
	EPA 8276	Chlordane	2.8	UJ	ng/L	P419139	LCS
		Toxaphene	17	U	ng/L	P419139	
2353633	EPA 8270E	Oxybenzone**	10	U	ng/L	P418990	
		Acetochlor	0.25	U	ng/L	P418990	RPD
		Octinoxate**	20	U	ng/L	P418990	
		Alachlor	0.25	U	ng/L	P418990	RPD
		Avobenzone**	100	U	ng/L	P418990	RPD
		Ametryn	0.61	U	ng/L	P418990	
		Atrazine	3.4		ng/L	P418990	
		PBDE-47**	4.1	U	ng/L	P418990	
		Atrazine Desethyl	1.5	U	ng/L	P418990	
		PBDE-99**	5.1	U	ng/L	P418990	
		Azinphos Methyl	2.0	U	ng/L	P418990	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P418990	
		Azoxystrobin	0.57	I	ng/L	P418990	
		Bromacil	3.5		ng/L	P418990	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P418990	
		Butylate	0.41	U	ng/L	P418990	
		Dechlorane Plus**	31	U	ng/L	P418990	RPD
		Caffeine**	10	I	ng/L	P418990	
		Carbophenothion	0.20	U	ng/L	P418990	RPD
		Carfentrazone Ethyl	0.10	U	ng/L	P418990	RPD
		Chlorfenapyr	0.18	U	ng/L	P418990	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P418990	
		Chlorpyrifos Methyl	0.051	U	ng/L	P418990	RPD
		Coumaphos	0.51	U	ng/L	P418990	RPD
		Cyanazine	3.3	U	ng/L	P418990	
		Cyprodinil	0.10	U	ng/L	P418990	
		Demeton	1.5	U	ng/L	P418990	RPD
		Diazinon	0.13	U	ng/L	P418990	RPD
		Difenoconazole	0.61	U	ng/L	P418990	RPD
		Dimethenamid	0.10	U	ng/L	P418990	MS, RPD
		Dimethomorph	0.18	U	ng/L	P418990	RPD
		Disulfoton	0.51	U	ng/L	P418990	
		Dithiopyr	0.70	IV	ng/L	P418990	RPD

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353633	EPA 8270E	EPTC	1.3	U	ng/L	P418990	
		Ethion	0.15	U	ng/L	P418990	
		Ethoprop	0.10	U	ng/L	P418990	
		Etridiazole	0.15	U	ng/L	P418990	MS, RPD
		Fenamiphos	0.51	U	ng/L	P418990	
		Fenbuconazole	0.13	U	ng/L	P418990	
		Fipronil	0.68	I	ng/L	P418990	
		Fipronil Desulfinyl**	0.22	I	ng/L	P418990	RPD
		Fipronil Sulfide	0.41	I	ng/L	P418990	
		Fipronil Sulfone	1.9		ng/L	P418990	
		Fluazifop-P-butyl	0.10	U	ng/L	P418990	RPD
		Fludioxonil	0.13	U	ng/L	P418990	RPD
		Flumioxazin	1.8	U	ng/L	P418990	
		Flutolanil	0.35	I	ng/L	P418990	RPD
		Fluxapyroxad	0.10	U	ng/L	P418990	
		Fonofos	0.20	U	ng/L	P418990	RPD
		Hexazinone	0.51	U	ng/L	P418990	
		Imazalil	0.76	UJ	ng/L	P418990	LCS, MS, RPD
		Iprodione	0.61	U	ng/L	P418990	
		Loratadine**	0.10	U	ng/L	P418990	RPD
		Malathion	0.36	U	ng/L	P418990	
		Metalaxyl	0.76	U	ng/L	P418990	
		Metolachlor	0.52	I	ng/L	P418990	
		Metribuzin	2.5	U	ng/L	P418990	
		Mevinphos	1.1	U	ng/L	P418990	
		Molinate	0.31	U	ng/L	P418990	
		Myclobutanil	0.25	U	ng/L	P418990	RPD
		Naled	1.5	U	ng/L	P418990	RPD
		Napropamide	0.41	U	ng/L	P418990	
		Norflurazon	0.51	U	ng/L	P418990	
		Oxadiazon	0.31	U	ng/L	P418990	RPD
		Oxyfluorfen	0.15	U	ng/L	P418990	RPD
		Parathion Ethyl	0.25	U	ng/L	P418990	RPD
		Parathion Methyl	0.56	U	ng/L	P418990	RPD
		Pendimethalin	1.0	U	ng/L	P418990	
		Phenytoin**	3.6	U	ng/L	P418990	
		Phorate	0.54	U	ng/L	P418990	
		Prodiamine	0.18	U	ng/L	P418990	
		Prometon	0.92	U	ng/L	P418990	RPD
		Prometryn	0.20	U	ng/L	P418990	RPD
		Pronamide	0.15	U	ng/L	P418990	
		Propanil	0.13	U	ng/L	P418990	
		Propargite	1.5	U	ng/L	P418990	RPD
		Propiconazole	0.51	U	ng/L	P418990	

Field ID: G5NW0155 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353633	EPA 8270E	Pyraflufen Ethyl	0.25	U	ng/L	P418990	RPD
		Pyridaben	0.46	U	ng/L	P418990	RPD
		Pyriproxyfen	0.13	U	ng/L	P418990	
		Simazine	0.51	U	ng/L	P418990	
		Stirophos	0.13	U	ng/L	P418990	
		Sulfentrazone	4.3		ng/L	P418990	
		Tebuconazole	0.51	U	ng/L	P418990	
		Terbufos	0.10	U	ng/L	P418990	
		Terbuthylazine	0.43	U	ng/L	P418990	MS, RPD
		Thiobencarb	0.61	U	ng/L	P418990	
		Triadimefon	0.25	U	ng/L	P418990	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: V - Due to the presence of dithiopyr in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Carpenter Creek upstream of 9th Avenue **Collection Date/Time: 08/31/2022 11:15**

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353619	EPA 8321B	2,4-D	0.0020	U	ug/L	P419091	
		Acesulfame K	0.10	U	ug/L	P418802	
		2,4,5-T	0.0040	U	ug/L	P419091	
		AMPA	0.10	U	ug/L	P418802	
		Acetaminophen	0.0080	U	ug/L	P419091	
		Acetamiprid	0.0020	U	ug/L	P419091	
		Endothall	0.25	U	ug/L	P418802	
		Glufosinate	0.10	I	ug/L	P418802	
		Glyphosate	0.10	U	ug/L	P418802	
		Afidopyropen	0.0039	I	ug/L	P419091	
		Bentazon	0.0013	I	ug/L	P419091	
		Sucralose	0.41		ug/L	P418802	
		Benzovindiflupyr	0.0020	U	ug/L	P419091	
		Carbamazepine	0.0017	I	ug/L	P419091	
		Clothianidin	0.0020	U	ug/L	P419091	
		Dinotefuran	0.0020	U	ug/L	P419091	
		Diuron	0.034		ug/L	P419091	
		Fenuron	0.032	U	ug/L	P419091	
		Fluridone	8.0E-04	U	ug/L	P419091	
		Imazapyr	0.014	I	ug/L	P419091	
		Hydrocodone	0.0020	U	ug/L	P419091	
		Ibuprofen	0.080	U	ug/L	P419091	
		Imidacloprid	0.019		ug/L	P419091	
		Linuron	0.0040	U	ug/L	P419091	
		Mandestrobin	0.0020	U	ug/L	P419091	
		MCPP	0.0040	U	ug/L	P419091	
		Naproxen	0.0080	U	ug/L	P419091	
		Primidone	0.0040	U	ug/L	P419091	
		Pyraclostrobin	0.0020	U	ug/L	P419091	
		Silvex	0.0040	U	ug/L	P419091	
		Thiamethoxam	0.0020	U	ug/L	P419091	RPD
		Tolfenpyrad	0.0020	U	ug/L	P419091	
		Triclopyr	0.0040	U	ug/L	P419091	
2353627	EPA 8270E	Aldrin	0.72	U	ng/L	P419139	
		Alpha-BHC	0.11	U	ng/L	P419139	
		Alpha-Chlordane	0.22	U	ng/L	P419139	
		PCB-1016	2.2	U	ng/L	P419139	
		Beta-BHC	0.11	U	ng/L	P419139	
		PCB-1221	2.2	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.2	U	ng/L	P419139	
		Bifenthrin	0.55	U	ng/L	P419139	
		PCB-1242	2.2	U	ng/L	P419139	
		Carbophenothion	1.0	U	ng/L	P419139	

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353627	EPA 8270E	PCB-1248	2.2	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.2	U	ng/L	P419139	
		Cis-Nonachlor	0.22	U	ng/L	P419139	
		PCB-1260	2.2	U	ng/L	P419139	
		Cypermethrin	1.7	U	ng/L	P419139	
		Dacthal	0.17	U	ng/L	P419139	
		DDD-p,p'	0.28	U	ng/L	P419139	
		DDE-p,p'	0.22	U	ng/L	P419139	
		DDT-p,p'	0.28	U	ng/L	P419139	
		Delta-BHC	0.44	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.28	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	3.3		ng/L	P419139	
		Endosulfan I	0.44	U	ng/L	P419139	
		Endosulfan II	0.44	U	ng/L	P419139	
		Endosulfan Sulfate	0.33	U	ng/L	P419139	
		Endrin	0.44	U	ng/L	P419139	
		Endrin Aldehyde	0.83	U	ng/L	P419139	
		Endrin Ketone	0.44	U	ng/L	P419139	
		Esfenvalerate	0.83	U	ng/L	P419139	
		Ethalfluralin	0.17	U	ng/L	P419139	
		Fenpropathrin	0.28	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.22	U	ng/L	P419139	
		Heptachlor	0.22	U	ng/L	P419139	
		Heptachlor Epoxide	3.0		ng/L	P419139	
		Hexachlorobenzene**	1.1	U	ng/L	P419139	
		Kepone	5.5	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.83	U	ng/L	P419139	
		Methoprene	0.83	U	ng/L	P419139	
		Methoxychlor	0.33	U	ng/L	P419139	
		MGK-264	0.22	U	ng/L	P419139	
		Mirex	0.39	U	ng/L	P419139	
		Oxychlordane	0.33	U	ng/L	P419139	
		Permethrin	1.8	U	ng/L	P419139	
		Phenothrin	1.0	U	ng/L	P419139	
		Piperonyl Butoxide	0.17	U	ng/L	P419139	
		Prallethrin	2.2	U	ng/L	P419139	
		Tau-Fluvalinate	0.28	U	ng/L	P419139	
		Tetramethrin	0.83	U	ng/L	P419139	
		Trans-Nonachlor	0.22	U	ng/L	P419139	
		Triclosan Methyl	0.17	U	ng/L	P419139	
		Trifluralin	0.22	U	ng/L	P419139	

Field ID: G4NW0415 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353627	EPA 8276	Chlordane	5.3	I J	ng/L	P419139	LCS
		Toxaphene	17	U	ng/L	P419139	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Carpenter Creek below Target Stormwater Pond **Collection Date/Time: 08/31/2022 11:30**

Field ID: G4NW0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353620	EPA 8321B	2,4-D	0.0020	U	ug/L	P419091	
		Acesulfame K	0.10	U	ug/L	P418988	
		2,4,5-T	0.0040	U	ug/L	P419091	
		AMPA	0.10	U	ug/L	P418988	
		Acetaminophen	0.0080	U	ug/L	P419091	
		Acetamiprid	0.0020	U	ug/L	P419091	
		Endothall	0.25	U	ug/L	P418988	
		Glufosinate	0.10	U	ug/L	P418988	
		Glyphosate	0.10	U	ug/L	P418988	
		Afidopyropen	0.0020	U	ug/L	P419091	
		Bentazon	0.0010	I	ug/L	P419091	
		Sucralose	0.36		ug/L	P418988	
		Benzovindiflupyr	0.0020	U	ug/L	P419091	
		Carbamazepine	0.0018	I	ug/L	P419091	
		Clothianidin	0.0020	U	ug/L	P419091	
		Dinotefuran	0.0020	U	ug/L	P419091	
		Diuron	0.032		ug/L	P419091	
		Fenuron	0.032	U	ug/L	P419091	
		Fluridone	8.0E-04	U	ug/L	P419091	
		Imazapyr	0.011	I	ug/L	P419091	
		Hydrocodone	0.0020	U	ug/L	P419091	
		Ibuprofen	0.080	U	ug/L	P419091	
		Imidacloprid	0.017		ug/L	P419091	
		Linuron	0.0040	U	ug/L	P419091	
		Mandestrobin	0.0020	U	ug/L	P419091	
		MCPP	0.0040	U	ug/L	P419091	
		Naproxen	0.0080	U	ug/L	P419091	
		Primidone	0.0040	U	ug/L	P419091	
		Pyraclostrobin	0.0020	U	ug/L	P419091	
		Silvex	0.0040	U	ug/L	P419091	
		Thiamethoxam	0.0020	UJ	ug/L	P419091	RPD
		Tolfenpyrad	0.0020	U	ug/L	P419091	
		Triclopyr	0.0040	U	ug/L	P419091	
2353628	EPA 8270E	Aldrin	0.73	U	ng/L	P419139	
		Alpha-BHC	0.11	U	ng/L	P419139	
		Alpha-Chlordane	0.22	U	ng/L	P419139	
		PCB-1016	2.2	U	ng/L	P419139	
		Beta-BHC	0.11	U	ng/L	P419139	
		PCB-1221	2.2	U	ng/L	P419139	
		Beta-Cyfluthrin	1.4	U	ng/L	P419139	
		PCB-1232	2.2	U	ng/L	P419139	
		Bifenthrin	0.56	U	ng/L	P419139	
		PCB-1242	2.2	U	ng/L	P419139	

Field ID: G4NW0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353628	EPA 8270E	Carbophenothion	1.0	U	ng/L	P419139	
		PCB-1248	2.2	U	ng/L	P419139	
		Chlorothalonil	1.4	U	ng/L	P419139	
		PCB-1254	2.2	U	ng/L	P419139	
		Cis-Nonachlor	0.22	U	ng/L	P419139	
		PCB-1260	2.2	U	ng/L	P419139	
		Cypermethrin	1.7	U	ng/L	P419139	
		Dacthal	0.17	U	ng/L	P419139	
		DDD-p,p'	0.28	U	ng/L	P419139	
		DDE-p,p'	0.22	U	ng/L	P419139	
		DDT-p,p'	0.28	U	ng/L	P419139	
		Delta-BHC	0.45	U	ng/L	P419139	
		Deltamethrin	1.4	UJ	ng/L	P419139	CCV
		Dichlobenil	0.28	U	ng/L	P419139	
		Dicofol	1.4	U	ng/L	P419139	
		Dieldrin	3.5		ng/L	P419139	
		Endosulfan I	0.45	U	ng/L	P419139	
		Endosulfan II	0.45	U	ng/L	P419139	
		Endosulfan Sulfate	0.34	U	ng/L	P419139	
		Endrin	0.45	U	ng/L	P419139	
		Endrin Aldehyde	0.84	U	ng/L	P419139	
		Endrin Ketone	0.45	U	ng/L	P419139	
		Esfenvalerate	0.84	U	ng/L	P419139	
		Ethalfluralin	0.17	U	ng/L	P419139	
		Fenpropathrin	0.28	U	ng/L	P419139	
		Gamma-BHC	0.14	U	ng/L	P419139	
		Gamma-Chlordane	0.22	U	ng/L	P419139	
		Heptachlor	0.22	U	ng/L	P419139	
		Heptachlor Epoxide	2.5		ng/L	P419139	
		Hexachlorobenzene**	1.1	U	ng/L	P419139	
		Kepone	5.6	U	ng/L	P419139	
		Lambda-Cyhalothrin	0.84	U	ng/L	P419139	
		Methoprene	0.84	U	ng/L	P419139	
		Methoxychlor	0.34	U	ng/L	P419139	
		MGK-264	0.22	U	ng/L	P419139	
		Mirex	0.39	U	ng/L	P419139	
		Oxychlordane	0.34	U	ng/L	P419139	
		Permethrin	1.8	U	ng/L	P419139	
		Phenothrin	1.0	U	ng/L	P419139	
		Piperonyl Butoxide	0.17	U	ng/L	P419139	
		Prallethrin	2.2	U	ng/L	P419139	
		Tau-Fluvalinate	0.28	U	ng/L	P419139	
		Tetramethrin	0.84	U	ng/L	P419139	
		Trans-Nonachlor	0.22	U	ng/L	P419139	
		Triclosan Methyl	0.17	U	ng/L	P419139	

Field ID: G4NW0244 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353628	EPA 8270E	Trifluralin	0.22	U	ng/L	P419139	
	EPA 8276	Chlordane	4.7	I J	ng/L	P419139	LCS
		Toxaphene	17	U	ng/L	P419139	

Ref. Method and Comment:
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Marcus Creek upstream of Marcus Pointe Blvd Collection Date/Time: 08/31/2022 12:10

Field ID: G4NW0179 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2353615	DEP SOP: NU-094-1	Color (true)	47	A	PCU	P419021	
	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P419015	
	EPA 300.0 Rev. 2.1	Chloride	7.7		mg Cl/L	P419470	
		Sulfate	2.0		mg SO4/L	P419473	
	SM 2320 B-2011	Total Alkalinity	73		mg CaCO3/L	P419411	
	SM 2540 C-2011	TDS	102	A	mg/L	P419430	
	SM 2540 D-2011	TSS	2	I A	mg/L	P419320	
	SM 4500-F- C-2011	Fluoride	0.036	I	mg F/L	P419389	
2353616	EPA 350.1 Rev. 2.0	Ammonia-N	0.037		mg N/L	P419144	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.33		mg N/L	P419174	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.23		mg N/L	P419295	
	EPA 365.1 Rev. 2.0	Total-P	0.01		mg P/L	P419248	
	SM 5310 B-2011	Organic Carbon	5.2		mg C/L	P419188	
2353636	EPA 200.7 Rev. 4.4	Calcium	22.0		mg/L	P419103	
		Iron	1.22E+03		ug/L	P419103	
		Magnesium	4.14		mg/L	P419103	
		Potassium	5.3		mg/L	P419103	
		Sodium	6.4		mg/L	P419103	
		Strontium	82.1		ug/L	P419103	
		Tin	4.7	I	ug/L	P419103	
		Titanium	0.75	U	ug/L	P419103	
		Vanadium	2.0	U	ug/L	P419103	
		Zinc	5.0	U	ug/L	P419103	
	EPA 200.8 Rev. 5.4	Aluminum	15	I	ug/L	P419103	
		Antimony	0.050	U	ug/L	P419103	
		Arsenic	0.54		ug/L	P419103	
		Barium	28.1		ug/L	P419103	
		Beryllium	0.010	U	ug/L	P419103	
		Boron	106		ug/L	P419103	
		Cadmium	0.020	U	ug/L	P419103	
		Chromium	0.94	I	ug/L	P419103	
		Cobalt	0.163		ug/L	P419103	
		Copper	0.46	I	ug/L	P419103	
		Lead	0.20	U	ug/L	P419103	
		Manganese	193		ug/L	P419103	
		Molybdenum	0.15	U	ug/L	P419103	
		Nickel	0.50	U	ug/L	P419103	
		Selenium	0.20	U	ug/L	P419103	
		Silver	0.010	U	ug/L	P419103	
		Thallium	0.10	U	ug/L	P419103	
	SM 2340 B-2011	Hardness	71.9		mg/L	P419103	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P419021

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419015

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419103

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419103

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419470

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419473

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419144

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419174

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419295

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419248

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

Reference Method: EPA 8270E
Batch ID: P418990

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418990

Component	Result	Code	Units
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
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	0.21	I	ng/L
Dithiopyr	0.18	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418990

Component	Result	Code	Units
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	1.8	U	ng/L
Flumioxazin	1.8	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	0.10	U	ng/L
Loratadine	0.10	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	2.5	U	ng/L
Metribuzin	2.5	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P418990

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419139

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
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419139

Component	Result	Code	Units
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P419139

Component	Result	Code	Units
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P419139

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: P418802

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: P418942

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

Reference Method: EPA 8321B
Batch ID: P418988

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P418988

Component	Result	Code	Units
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P419091

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	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: P419411

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

Reference Method: SM 2540 C-2011
Batch ID: P419430

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P419320

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P419389

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P419188

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: P419021

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: P419015

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	108		P	85 - 115
Iron	110		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	104		P	85 - 115
Sodium	104		P	85 - 115
Strontium	104		P	85 - 115
Tin	110		P	85 - 115
Titanium	107		P	85 - 115
Vanadium	106		P	85 - 115
Zinc	109		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	103		P	85 - 115
Barium	105		P	85 - 115
Beryllium	99.9		P	85 - 115
Boron	101		P	85 - 115
Cadmium	99.4		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	98.9		P	85 - 115
Copper	101		P	85 - 115
Lead	92.8		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	98.8		P	85 - 115
Nickel	102		P	85 - 115
Selenium	101		P	85 - 115
Silver	88.8		P	85 - 115
Thallium	97.4		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419470

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419473

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419144

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.9		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419295

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419248

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

Reference Method: EPA 8270E
Batch ID: P418990

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	59.7		P	50 - 150
Acetochlor	73.7		P	70 - 121
Alachlor	68.6		P	68 - 119
Ametryn	76.5		P	64 - 139
Atrazine	79.0		P	76 - 120
Atrazine Desethyl	52.1		P	44 - 126
Avobenzone	62.2		P	59 - 206
Azinphos Methyl	90.2		P	43 - 192
Azoxystrobin	79.5		P	36 - 224
Bromacil	71.4		P	52 - 121
Butylate	52.7		P	28 - 91.0
Caffeine	61.3		P	50 - 134
Carbophenothion	74.5		P	56 - 129
Carfentrazone Ethyl	82.5		P	60 - 141
Chlorfenapyr	76.0		P	56 - 115
Chlorpyrifos Ethyl	74.5		P	60 - 118
Chlorpyrifos Methyl	74.8		P	68 - 119
Coumaphos	80.1		P	18 - 250
Cyanazine	83.7		P	61 - 250
Cyprodinil	66.4		P	55 - 145
Dechlorane Plus	64.9		P	50 - 150
Demeton	60.6		P	30 - 159

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P418990

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diazinon	71.3		P	70 - 123
Difenoconazole	84.9		P	49 - 204
Dimethenamid	64.6		P	64 - 115
Dimethomorph	70.3		P	12 - 219
Disulfoton	68.9		P	44 - 125
Dithiopyr	78.6		P	64 - 115
EPTC	47.2		P	28 - 86.0
Ethion	76.6		P	33 - 125
Ethoprop	68.3		P	64 - 116
Etridiazole	45.1		P	34 - 91.0
Fenamiphos	76.0		P	12 - 127
Fenbuconazole	76.8		P	59 - 151
Fipronil	71.5		P	67 - 129
Fipronil Desulfinyl	84.8		P	65 - 127
Fipronil Sulfide	73.4		P	61 - 116
Fipronil Sulfone	60.5		P	55 - 117
Fluazifop-P-butyl	75.0		P	62 - 127
Fludioxonil	65.0		P	62 - 128
Flumioxazin	81.0		P	33 - 250
Flutolanil	71.9		P	56 - 127
Fluxapyroxad	71.8		P	45 - 128
Fonofos	66.3		P	62 - 111
Hexazinone	79.0		P	46 - 139
Imazalil	32.9		F	38 - 142
Iprodione	84.5		P	47 - 135
Loratadine	71.1		P	10 - 244
Malathion	79.0		P	61 - 139
Metalaxyl	71.1		P	10 - 119
Metolachlor	69.2		P	65 - 118
Metribuzin	71.0		P	51 - 250
Mevinphos	63.1		P	53 - 121
Molinate	57.1		P	42 - 96.0
Myclobutanil	67.6		P	55 - 128
Naled	75.9		P	10 - 98.0
Napropamide	65.9		P	49 - 121
Norflurazon	67.2		P	61 - 126
Octinoxate	56.3		P	30 - 159
Oxadiazon	61.0		P	59 - 116
Oxybenzone	59.1		P	59 - 147
Oxyfluorfen	83.9		P	64 - 137
Parathion Ethyl	77.2		P	70 - 112
Parathion Methyl	88.4		P	76 - 133
PBDE-47	61.3		P	50 - 150
PBDE-99	61.2		P	50 - 150
Pendimethalin	57.7		P	52 - 117
Phenytoin	55.3		P	10 - 199
Phorate	58.0		P	48 - 121
Prodiamine	32.2		P	26 - 142
Prometon	66.0		P	43 - 123
Prometryn	73.4		P	66 - 127
Pronamide	86.4		P	75 - 121
Propanil	73.1		P	45 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P418990

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propargite	71.1		P	42 - 208
Propiconazole	67.5		P	60 - 125
Pyraflufen Ethyl	70.7		P	70 - 138
Pyridaben	72.1		P	35 - 245
Pyriproxyfen	68.3		P	30 - 149
Simazine	76.5		P	72 - 125
Stirophos	81.0		P	29 - 164
Sulfentrazone	76.7		P	21 - 139
Tebuconazole	63.4		P	10 - 115
Terbufos	77.4		P	60 - 123
Terbuthylazine	75.6		P	72 - 115
Thiobencarb	63.6		P	31 - 139
Tri-o-cresyl Phosphate	65.0		P	50 - 150
Triadimefon	66.9		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P419139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	59.5		P	10 - 92.0
Alpha-BHC	94.8		P	75 - 107
Alpha-Chlordane	66.6		P	50 - 108
Beta-BHC	131		P	36 - 138
Beta-Cyfluthrin	72.7		P	20 - 161
Bifenthrin	58.5		P	10 - 119
Carbophenothion	54.2		P	19 - 94.0
Chlorothalonil	47.2		P	26 - 186
Cis-Nonachlor	65.3		P	42 - 119
Cypermethrin	72.8		P	22 - 150
Dacthal	86.1		P	72 - 119
DDD-p,p'	64.4		P	45 - 107
DDE-p,p'	63.7		P	48 - 106
DDT-p,p'	68.8		P	48 - 110
Delta-BHC	132		P	54 - 140
Deltamethrin	50.5		P	22 - 189
Dichlobenil	93.4		P	36 - 117
Dicofol	77.6		P	46 - 155
Dieldrin	71.0		P	54 - 110
Endosulfan I	70.8		P	59 - 105
Endosulfan II	77.1		P	51 - 118
Endosulfan Sulfate	77.6		P	57 - 121
Endrin	69.5		P	10 - 120
Endrin Aldehyde	67.1		P	34 - 118
Endrin Ketone	80.6		P	69 - 177
Esfenvalerate	73.0		P	23 - 168
Ethalfluralin	75.1		P	49 - 99.0
Fenpropathrin	76.6		P	34 - 117
Gamma-BHC	87.7		P	72 - 117
Gamma-Chlordane	67.8		P	43 - 106
Heptachlor	62.9		P	41 - 98.0
Heptachlor Epoxide	77.5		P	57 - 106
Hexachlorobenzene	71.6		P	36 - 99.0

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P419139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kepone	152		P	16 - 215
Lambda-Cyhalothrin	65.5		P	21 - 177
Methoprene	64.1		P	10 - 119
Methoxychlor	87.4		P	60 - 112
MGK-264	83.9		P	26 - 122
Mirex	52.6		P	10 - 169
Oxychlordane	68.1		P	43 - 105
PCB-1016	80.2		P	48 - 112
PCB-1260	87.4		P	44 - 118
Permethrin	72.0		P	24 - 148
Phenothrin	59.4		P	10 - 106
Piperonyl Butoxide	90.1		P	10 - 139
Prallethrin	76.3		P	17 - 109
Tau-Fluvalinate	62.6		P	13 - 131
Tetramethrin	116		P	10 - 132
Trans-Nonachlor	70.0		P	44 - 106
Triclosan Methyl	72.5		P	59 - 109
Trifluralin	76.9		P	44 - 101

Reference Method: EPA 8276
Batch ID: P419139

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	117		F	61 - 116
Toxaphene	101		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P418802

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	104		P	40 - 150
Endothall	97.1		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	99.6		P	40 - 150
Sucralose	97.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	53.0		P	40 - 150
Aldicarb	65.9		P	30 - 150
Aldicarb Sulfone	98.1		P	40 - 150
Aldicarb Sulfoxide	88.6		P	40 - 150
Carbaryl	80.8		P	40 - 150
Carbofuran	87.4		P	40 - 150
Methiocarb	98.9		P	40 - 150
Methomyl	92.8		P	40 - 150
Oxamyl	93.8		P	40 - 150
Propoxur	87.6		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P418988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	112		P	40 - 150
AMPA	103		P	40 - 150
Endothall	99.2		P	40 - 150
Glufosinate	85.2		P	40 - 150
Glyphosate	112		P	40 - 150
Sucralose	102		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P419091

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	70.6		P	40 - 150
2,4,5-T	65.1		P	40 - 150
Acetaminophen	89.9		P	30 - 150
Acetamiprid	84.3		P	40 - 150
Afidopyropen	45.3		P	30 - 150
Bentazon	105		P	30 - 150
Benzovindiflupyr	101		P	40 - 150
Carbamazepine	74.8		P	40 - 150
Clothianidin	81.4		P	40 - 150
Dinotefuran	87.1		P	40 - 150
Diuron	88.7		P	40 - 150
Fenuron	109		P	40 - 150
Fluridone	95.9		P	40 - 150
Hydrocodone	89.5		P	40 - 150
Ibuprofen	59.6		P	40 - 150
Imazapyr	79.6		P	40 - 150
Imidacloprid	99.9		P	40 - 150
Linuron	102		P	40 - 150
Mandestrobin	99.6		P	40 - 150
MCPP	83.0		P	40 - 150
Naproxen	115		P	40 - 150
Primidone	116		P	40 - 150
Pyraclostrobin	89.3		P	40 - 150
Silvex	59.6		P	40 - 150
Thiamethoxam	108		P	40 - 150
Tolfenpyrad	41.5		P	30 - 150
Triclopyr	60.1		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P419411

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.4		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P419389

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P419188

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353636	Calcium	105		P	80 - 120
2353636	Iron	110	106	P/P	80 - 120
2353636	Magnesium	105		P	80 - 120
2353636	Potassium	101		P	80 - 120
2353636	Sodium	103		P	80 - 120
2353636	Strontium	104	103	P/P	80 - 120
2353636	Tin	110	109	P/P	80 - 120
2353636	Titanium	109	109	P/P	80 - 120
2353636	Vanadium	107	107	P/P	80 - 120
2353636	Zinc	106	107	P/P	80 - 120
2353686	Calcium	111		P	80 - 120
2353686	Iron	111		P	80 - 120
2353686	Magnesium	110		P	80 - 120
2353686	Potassium	114		P	80 - 120
2353686	Sodium	108		P	80 - 120
2353686	Strontium	105		P	80 - 120
2353686	Tin	111		P	80 - 120
2353686	Titanium	110		P	80 - 120
2353686	Vanadium	108		P	80 - 120
2353686	Zinc	109		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353636	Aluminum	99.6	99.7	P/P	80 - 120
2353636	Antimony	106	106	P/P	80 - 120
2353636	Arsenic	104	103	P/P	80 - 120
2353636	Barium	104	105	P/P	80 - 120
2353636	Beryllium	103	99.0	P/P	80 - 120
2353636	Boron	97.9	97.4	P/P	80 - 120
2353636	Cadmium	101	102	P/P	80 - 120
2353636	Chromium	100	100	P/P	80 - 120
2353636	Cobalt	97.8	97.3	P/P	80 - 120
2353636	Copper	96.5	97.2	P/P	80 - 120
2353636	Lead	93.6	93.7	P/P	80 - 120
2353636	Manganese	100	93.5	P/P	80 - 120
2353636	Molybdenum	102	102	P/P	80 - 120
2353636	Nickel	101	99.4	P/P	80 - 120
2353636	Selenium	102	101	P/P	80 - 120
2353636	Silver	86.9	87.8	P/P	80 - 120
2353636	Thallium	99.4	100	P/P	80 - 120
2353686	Aluminum	101		P	80 - 120
2353686	Antimony	105		P	80 - 120
2353686	Arsenic	105		P	80 - 120
2353686	Barium	105		P	80 - 120
2353686	Beryllium	99.9		P	80 - 120
2353686	Boron	99.4		P	80 - 120
2353686	Cadmium	99.0		P	80 - 120
2353686	Chromium	104		P	80 - 120
2353686	Cobalt	98.2		P	80 - 120
2353686	Copper	104		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353686	Lead	93.5		P	80 - 120
2353686	Manganese	102		P	80 - 120
2353686	Molybdenum	100		P	80 - 120
2353686	Nickel	102		P	80 - 120
2353686	Selenium	101		P	80 - 120
2353686	Silver	87.6		P	80 - 120
2353686	Thallium	97.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353590	Chloride	100		P	90 - 110
2353615	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353590	Sulfate	99.8		P	90 - 110
2353615	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353616	Ammonia-N	98.2	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353975	Kjeldahl Nitrogen	95.8	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353616	NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419248

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353651	Total-P	104	106	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P418990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353329	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	77.6	104	P/P	50 - 150
2353329	Acetochlor	66.0	124	P/P	65 - 124

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P418990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353329	Alachlor	62.8	87.0	P/P	61 - 121
2353329	Ametryn	63.6	82.0	P/P	52 - 216
2353329	Atrazine	83.7	124	P/P	68 - 133
2353329	Atrazine Desethyl	51.2	65.6	P/P	15 - 160
2353329	Avobenzone	64.2	98.6	P/P	59 - 206
2353329	Azinphos Methyl	73.8	109	P/P	40 - 292
2353329	Azoxystrobin	75.7	113	P/P	12 - 242
2353329	Bromacil	64.2	79.9	P/P	54 - 167
2353329	Butylate	31.1	46.4	P/P	14 - 94.0
2353329	Caffeine	85.2	89.2	P/P	10 - 226
2353329	Carbophenothion	59.2	85.9	P/P	49 - 122
2353329	Carfentrazone Ethyl	61.6	85.2	P/P	53 - 138
2353329	Chlorfenapyr	84.3	109	P/P	50 - 150
2353329	Chlorpyrifos Ethyl	89.8	112	P/P	52 - 122
2353329	Chlorpyrifos Methyl	88.9	115	P/P	66 - 117
2353329	Coumaphos	60.5	85.8	P/P	50 - 220
2353329	Cyanazine	71.2	105	P/P	43 - 245
2353329	Cyprodinil	68.6	92.2	P/P	50 - 150
2353329	Dechlorane Plus	80.9	112	P/P	50 - 150
2353329	Demeton	56.3	80.1	P/P	43 - 188
2353329	Diazinon	77.2	122	P/P	69 - 131
2353329	Difenoconazole	74.4	104	P/P	34 - 231
2353329	Dimethenamid	55.0	77.2	F/P	55 - 118
2353329	Dimethomorph	70.9	98.0	P/P	50 - 150
2353329	Disulfoton	65.4	87.2	P/P	38 - 141
2353329	Dithiopyr	63.5	85.1	P/P	42 - 116
2353329	EPTC	24.9	36.0	P/P	18 - 85.0
2353329	Ethion	51.0	74.9	P/P	10 - 131
2353329	Ethoprop	70.0	83.9	P/P	65 - 129
2353329	Etridiazole	35.4	52.1	F/P	50 - 150
2353329	Fenamiphos	60.4	82.4	P/P	31 - 137
2353329	Fenbuconazole	92.0	129	P/P	57 - 160
2353329	Fipronil	67.7	89.3	P/P	62 - 132
2353329	Fipronil Desulfinyl	67.2	90.9	P/P	57 - 131
2353329	Fipronil Sulfide	52.4	66.3	P/P	15 - 138
2353329	Fipronil Sulfone	47.2	61.7	P/P	21 - 134
2353329	Fluazifop-P-butyl	57.5	84.5	P/P	54 - 133
2353329	Fludioxonil	65.1	97.6	P/P	58 - 127
2353329	Flumioxazin	94.0	124	P/P	33 - 300
2353329	Flutolanil	53.8	89.3	P/P	42 - 130
2353329	Fluxapyroxad	52.7	74.9	P/P	23 - 141
2353329	Fonofos	58.9	80.8	P/P	58 - 119
2353329	Hexazinone	73.1	100	P/P	68 - 172
2353329	Imazalil	21.3	66.1	F/P	48 - 283
2353329	Iprodione	62.4	82.4	P/P	38 - 140
2353329	Loratadine	63.8	97.4	P/P	50 - 150
2353329	Malathion	65.4	90.8	P/P	40 - 137
2353329	Metalaxyl	58.6	83.4	P/P	21 - 129
2353329	Metolachlor	58.1	91.3	P/P	55 - 122
2353329	Metribuzin	63.1	98.2	P/P	38 - 187
2353329	Mevinphos	76.9	85.0	P/P	54 - 134
2353329	Molinate	46.0	66.6	P/P	41 - 97.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P418990

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353329	Myclobutanil	66.5	91.4	P/P	56 - 125
2353329	Naled	62.2	86.3	P/P	10 - 108
2353329	Napropamide	55.2	71.6	P/P	50 - 150
2353329	Norflurazon	52.7	62.7	P/P	32 - 122
2353329	Octinoxate	75.8	98.5	P/P	25 - 150
2353329	Oxadiazon	46.5	65.6	P/P	40 - 119
2353329	Oxybenzone	70.0	90.0	P/P	59 - 147
2353329	Oxyfluorfen	90.0	119	P/P	61 - 153
2353329	Parathion Ethyl	68.1	92.8	P/P	59 - 130
2353329	Parathion Methyl	82.8	111	P/P	65 - 155
2353329	PBDE-47	73.6	94.6	P/P	50 - 150
2353329	PBDE-99	70.7	93.8	P/P	50 - 150
2353329	Pendimethalin	54.1	73.3	P/P	49 - 138
2353329	Phenytoin	56.8	72.1	P/P	50 - 200
2353329	Phorate	63.4	72.0	P/P	54 - 161
2353329	Prodiamine	48.0	65.3	P/P	33 - 161
2353329	Prometon	55.4	78.1	P/P	48 - 140
2353329	Prometryn	61.6	85.8	P/P	55 - 134
2353329	Pronamide	74.0	91.2	P/P	66 - 137
2353329	Propanil	61.2	82.4	P/P	50 - 150
2353329	Propargite	94.4	140	P/P	50 - 200
2353329	Propiconazole	54.1	68.7	P/P	36 - 150
2353329	Pyraflufen Ethyl	69.9	115	P/P	50 - 150
2353329	Pyridaben	62.0	88.8	P/P	50 - 200
2353329	Pyriproxyfen	48.9	74.1	P/P	10 - 165
2353329	Simazine	62.9	78.3	P/P	57 - 145
2353329	Stirophos	51.9	69.4	P/P	50 - 150
2353329	Sulfentrazone	59.1	74.9	P/P	34 - 140
2353329	Tebuconazole	39.8	52.8	P/P	10 - 127
2353329	Terbufos	79.4	97.8	P/P	59 - 138
2353329	Terbuthylazine	65.8	93.3	F/P	68 - 119
2353329	Thiobencarb	53.1	70.2	P/P	50 - 150
2353329	Tri-o-cresyl Phosphate	73.3	93.8	P/P	50 - 150
2353329	Triadimefon	53.4	67.7	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P419139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353933	PCB-1016	101	103	P/P	46 - 111
2353933	PCB-1260	96.2	85.9	P/P	45 - 114
2354003	Aldrin	61.3	60.8	P/P	20 - 82.0
2354003	Alpha-BHC	84.9	86.1	P/P	71 - 109
2354003	Alpha-Chlordane	71.1	74.5	P/P	42 - 106
2354003	Beta-BHC	85.0	77.4	P/P	69 - 180
2354003	Beta-Cyfluthrin	98.9	83.8	P/P	18 - 175
2354003	Bifenthrin	71.4	71.6	P/P	21 - 128
2354003	Carbophenothion	70.3	68.3	P/P	10 - 126
2354003	Chlorothalonil	88.7	86.2	P/P	10 - 300
2354003	Cis-Nonachlor	67.6	71.4	P/P	34 - 106
2354003	Cypermethrin	96.2	80.2	P/P	22 - 158
2354003	Dacthal	88.4	88.7	P/P	54 - 116

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P419139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2354003	DDD-p,p'	78.7	79.1	P/P	34 - 107
2354003	DDE-p,p'	73.5	77.6	P/P	33 - 110
2354003	DDT-p,p'	67.3	71.8	P/P	50 - 122
2354003	Delta-BHC	113	108	P/P	77 - 193
2354003	Deltamethrin	106	80.2	P/P	10 - 195
2354003	Dichlobenil	82.5	81.9	P/P	25 - 113
2354003	Dicofol	77.9	80.3	P/P	38 - 247
2354003	Dieldrin	72.2	75.2	P/P	45 - 118
2354003	Endosulfan I	75.9	79.4	P/P	51 - 106
2354003	Endosulfan II	84.2	85.4	P/P	37 - 122
2354003	Endosulfan Sulfate	110	93.4	P/P	43 - 132
2354003	Endrin	80.4	84.8	P/P	29 - 101
2354003	Endrin Aldehyde	94.9	73.3	P/P	19 - 110
2354003	Endrin Ketone	96.1	85.5	P/P	60 - 140
2354003	Esfenvalerate	93.3	77.0	P/P	26 - 199
2354003	Ethalfluralin	73.1	80.2	P/P	45 - 99.0
2354003	Fenpropathrin	85.2	79.0	P/P	35 - 120
2354003	Gamma-BHC	84.1	89.4	P/P	63 - 128
2354003	Gamma-Chlordane	66.3	72.0	P/P	40 - 104
2354003	Heptachlor	55.1	57.4	P/P	36 - 97.0
2354003	Heptachlor Epoxide	64.0	68.4	P/P	49 - 184
2354003	Hexachlorobenzene	68.9	76.9	P/P	39 - 96.0
2354003	Kepone	200	95.5	P/P	10 - 217
2354003	Lambda-Cyhalothrin	79.1	72.1	P/P	21 - 193
2354003	Methoprene	70.1	72.0	P/P	20 - 106
2354003	Methoxychlor	69.7	70.5	P/P	53 - 118
2354003	MGK-264	93.1	86.8	P/P	40 - 118
2354003	Mirex	60.2	62.7	P/P	26 - 92.0
2354003	Oxychlordane	70.6	73.9	P/P	44 - 99.0
2354003	Permethrin	87.2	72.3	P/P	33 - 182
2354003	Phenothrin	65.1	62.6	P/P	10 - 129
2354003	Piperonyl Butoxide	115	108	P/P	10 - 211
2354003	Prallethrin	81.7	82.4	P/P	24 - 113
2354003	Tau-Fluvalinate	92.4	77.8	P/P	14 - 149
2354003	Tetramethrin	109	98.6	P/P	17 - 151
2354003	Trans-Nonachlor	68.9	74.2	P/P	42 - 102
2354003	Triclosan Methyl	81.5	85.7	P/P	48 - 108
2354003	Trifluralin	71.1	78.7	P/P	47 - 96.0

Reference Method: EPA 8276
Batch ID: P419139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353933	Chlordane	109	108	P/P	53 - 126
2353933	Toxaphene	120	108	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P418802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352891	Acesulfame K	99.6	98.9	P/P	40 - 150
2352891	AMPA	105	108	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P418802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2352891	Endothall	92.9	96.0	P/P	40 - 150
2352891	Glufosinate	96.5	94.1	P/P	40 - 150
2352891	Glyphosate	87.9	83.3	P/P	40 - 150
2352891	Sucralose	95.8	95.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418942

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353621	3-Hydroxycarbofuran	58.8	47.4	P/P	40 - 150
2353621	Aldicarb	62.6	73.7	P/P	30 - 150
2353621	Aldicarb Sulfone	85.5	88.3	P/P	40 - 150
2353621	Aldicarb Sulfoxide	48.7	45.7	P/P	40 - 150
2353621	Carbaryl	96.6	77.3	P/P	40 - 150
2353621	Carbofuran	90.6	70.4	P/P	40 - 150
2353621	Methiocarb	105	90.6	P/P	40 - 150
2353621	Methomyl	92.6	85.9	P/P	40 - 150
2353621	Oxamyl	94.6	86.5	P/P	40 - 150
2353621	Propoxur	82.2	75.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P418988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353620	Acesulfame K	111	111	P/P	40 - 150
2353620	AMPA	101	105	P/P	40 - 150
2353620	Endothall	91.4	91.8	P/P	40 - 150
2353620	Glufosinate	71.2	73.3	P/P	40 - 150
2353620	Glyphosate	93.0	95.9	P/P	40 - 150
2353620	Sucralose	98.2	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P419091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353620	2,4-D	71.7	66.0	P/P	40 - 150
2353620	2,4,5-T	64.5	68.3	P/P	40 - 150
2353620	Acetaminophen	80.1	90.7	P/P	30 - 150
2353620	Acetamiprid	56.4	54.3	P/P	40 - 150
2353620	Afidopyropen	39.6	33.7	P/P	30 - 150
2353620	Bentazon	107	107	P/P	30 - 150
2353620	Benzovindiflupyr	93.6	91.6	P/P	40 - 150
2353620	Carbamazepine	88.5	93.3	P/P	40 - 150
2353620	Clothianidin	87.5	83.3	P/P	40 - 150
2353620	Dinotefuran	91.7	96.9	P/P	40 - 150
2353620	Diuron	84.1	84.6	P/P	40 - 150
2353620	Fenuron	96.2	87.2	P/P	40 - 150
2353620	Fluridone	83.4	106	P/P	40 - 150
2353620	Hydrocodone	87.9	118	P/P	40 - 150
2353620	Ibuprofen	62.6	55.4	P/P	40 - 150
2353620	Imazapyr	67.6	78.3	P/P	40 - 150
2353620	Imidacloprid	95.6	107	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P419091

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353620	Linuron	86.4	110	P/P	40 - 150
2353620	Mandestrobin	97.6	99.8	P/P	40 - 150
2353620	MCPP	70.8	75.1	P/P	40 - 150
2353620	Naproxen	64.6	87.4	P/P	40 - 150
2353620	Primidone	79.2	97.3	P/P	40 - 150
2353620	Pyraclostrobin	93.8	101	P/P	40 - 150
2353620	Silvex	66.0	64.8	P/P	40 - 150
2353620	Thiamethoxam	77.7	115	P/P	40 - 150
2353620	Tolfenpyrad	59.1	63.6	P/P	30 - 150
2353620	Triclopyr	57.3	66.9	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P419389

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353650	Fluoride	99.9	98.0	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P419188

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2353844	Organic Carbon	99.8	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P419021

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353615	Color (true)	0.964	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P419015

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353547	Turbidity	14.7	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P419103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353636	Calcium	2.26	Spike	P	0 - 20
2353636	Iron	3.28	Spike	P	0 - 20
2353636	Magnesium	3.69	Spike	P	0 - 20
2353636	Potassium	2.49	Spike	P	0 - 20
2353636	Sodium	1.54	Spike	P	0 - 20
2353636	Strontium	0.885	Spike	P	0 - 20
2353636	Tin	1.01	Spike	P	0 - 20
2353636	Titanium	0.407	Spike	P	0 - 20
2353636	Vanadium	0.0197	Spike	P	0 - 20
2353636	Zinc	0.246	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P419103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353636	Aluminum	0.0665	Spike	P	0 - 20
2353636	Antimony	0.276	Spike	P	0 - 20
2353636	Arsenic	1.06	Spike	P	0 - 20
2353636	Barium	1.12	Spike	P	0 - 20
2353636	Beryllium	3.66	Spike	P	0 - 20
2353636	Boron	0.254	Spike	P	0 - 20
2353636	Cadmium	0.672	Spike	P	0 - 20
2353636	Chromium	0.279	Spike	P	0 - 20
2353636	Cobalt	0.515	Spike	P	0 - 20
2353636	Copper	0.734	Spike	P	0 - 20
2353636	Lead	0.104	Spike	P	0 - 20
2353636	Manganese	1.13	Spike	P	0 - 20
2353636	Molybdenum	0.0878	Spike	P	0 - 20
2353636	Nickel	1.67	Spike	P	0 - 20
2353636	Selenium	0.515	Spike	P	0 - 20
2353636	Silver	0.959	Spike	P	0 - 20
2353636	Thallium	0.972	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353590	Chloride	0.461	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P419473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353590	Sulfate	0.382	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P419144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353616	Ammonia-N	0.347	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P419174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353975	Kjeldahl Nitrogen	3.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P419295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353616	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P419248

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353651	Total-P	1.70	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P418990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353329	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	29.3	Spike	P	0 - 30
2353329	Acetochlor	54.2	Spike	F	0 - 27
2353329	Alachlor	32.4	Spike	F	0 - 27
2353329	Ametryn	25.2	Spike	P	0 - 34
2353329	Atrazine	25.4	Spike	P	0 - 41
2353329	Atrazine Desethyl	24.6	Spike	P	0 - 38
2353329	Avobenzone	42.1	Spike	F	0 - 30
2353329	Azinphos Methyl	38.9	Spike	P	0 - 62
2353329	Azoxystrobin	28.3	Spike	P	0 - 32

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P418990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353329	Bromacil	21.8	Spike	P	0 - 30
2353329	Butylate	39.5	Spike	P	0 - 59
2353329	Caffeine	4.54	Spike	P	0 - 60
2353329	Carbophenothion	36.8	Spike	F	0 - 25
2353329	Carfentrazone Ethyl	32.1	Spike	F	0 - 26
2353329	Chlorfenapyr	25.3	Spike	P	0 - 30
2353329	Chlorpyrifos Ethyl	22.4	Spike	P	0 - 27
2353329	Chlorpyrifos Methyl	26.0	Spike	F	0 - 26
2353329	Coumaphos	34.7	Spike	F	0 - 30
2353329	Cyanazine	38.1	Spike	P	0 - 58
2353329	Cyprodinil	29.3	Spike	P	0 - 30
2353329	Dechlorane Plus	32.2	Spike	F	0 - 30
2353329	Demeton	34.8	Spike	F	0 - 25
2353329	Diazinon	44.9	Spike	F	0 - 29
2353329	Difenoconazole	33.5	Spike	F	0 - 25
2353329	Dimethenamid	33.7	Spike	F	0 - 30
2353329	Dimethomorph	32.1	Spike	F	0 - 30
2353329	Disulfoton	28.6	Spike	P	0 - 33
2353329	Dithiopyr	27.3	Spike	F	0 - 22
2353329	EPTC	36.5	Spike	P	0 - 38
2353329	Ethion	37.9	Spike	P	0 - 79
2353329	Ethoprop	18.1	Spike	P	0 - 23
2353329	Etridiazole	38.2	Spike	F	0 - 30
2353329	Fenamiphos	30.9	Spike	P	0 - 58
2353329	Fenbuconazole	33.4	Spike	P	0 - 37
2353329	Fipronil	27.5	Spike	P	0 - 33
2353329	Fipronil Desulfinyl	29.9	Spike	F	0 - 26
2353329	Fipronil Sulfide	23.4	Spike	P	0 - 37
2353329	Fipronil Sulfone	26.6	Spike	P	0 - 50
2353329	Fluazifop-P-butyl	38.1	Spike	F	0 - 24
2353329	Fludioxonil	39.9	Spike	F	0 - 26
2353329	Flumioxazin	27.2	Spike	P	0 - 37
2353329	Flutolanil	28.3	Spike	F	0 - 26
2353329	Fluxapyroxad	30.6	Spike	P	0 - 34
2353329	Fonofos	31.3	Spike	F	0 - 27
2353329	Hexazinone	31.2	Spike	P	0 - 36
2353329	Imazalil	102	Spike	F	0 - 65
2353329	Iprodione	27.6	Spike	P	0 - 33
2353329	Loratadine	41.6	Spike	F	0 - 30
2353329	Malathion	32.5	Spike	P	0 - 44
2353329	Metalaxyl	34.9	Spike	P	0 - 38
2353329	Metolachlor	31.2	Spike	P	0 - 36
2353329	Metribuzin	43.5	Spike	P	0 - 63
2353329	Mevinphos	9.97	Spike	P	0 - 26
2353329	Molinate	36.6	Spike	P	0 - 40
2353329	Myclobutanil	31.6	Spike	F	0 - 21
2353329	Naled	32.5	Spike	F	0 - 26
2353329	Napropamide	25.9	Spike	P	0 - 30
2353329	Norflurazon	17.4	Spike	P	0 - 24
2353329	Octinoxate	26.0	Spike	P	0 - 30
2353329	Oxadiazon	34.1	Spike	F	0 - 27

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P418990

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353329	Oxybenzone	25.0	Spike	P	0 - 30
2353329	Oxyfluorfen	27.8	Spike	F	0 - 24
2353329	Parathion Ethyl	30.6	Spike	F	0 - 28
2353329	Parathion Methyl	29.3	Spike	F	0 - 27
2353329	PBDE-47	24.9	Spike	P	0 - 30
2353329	PBDE-99	28.2	Spike	P	0 - 30
2353329	Pendimethalin	30.1	Spike	P	0 - 31
2353329	Phenytoin	23.8	Spike	P	0 - 30
2353329	Phorate	12.8	Spike	P	0 - 27
2353329	Prodiamine	30.6	Spike	P	0 - 52
2353329	Prometon	34.1	Spike	F	0 - 31
2353329	Prometryn	32.9	Spike	F	0 - 28
2353329	Pronamide	20.8	Spike	P	0 - 26
2353329	Propanil	29.6	Spike	P	0 - 30
2353329	Propargite	39.1	Spike	F	0 - 30
2353329	Propiconazole	23.8	Spike	P	0 - 31
2353329	Pyraflufen Ethyl	48.7	Spike	F	0 - 30
2353329	Pyridaben	35.6	Spike	F	0 - 30
2353329	Pyriproxyfen	41.1	Spike	P	0 - 50
2353329	Simazine	21.8	Spike	P	0 - 29
2353329	Stirophos	28.9	Spike	P	0 - 30
2353329	Sulfentrazone	23.5	Spike	P	0 - 33
2353329	Tebuconazole	24.7	Spike	P	0 - 44
2353329	Terbufos	20.7	Spike	P	0 - 29
2353329	Terbuthylazine	34.6	Spike	F	0 - 27
2353329	Thiobencarb	27.7	Spike	P	0 - 30
2353329	Tri-o-cresyl Phosphate	24.6	Spike	P	0 - 30
2353329	Triadimefon	23.5	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P419139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353933	PCB-1016	2.39	Spike	P	0 - 32
2353933	PCB-1260	11.4	Spike	P	0 - 31
2354003	Aldrin	0.937	Spike	P	0 - 41
2354003	Alpha-BHC	1.38	Spike	P	0 - 25
2354003	Alpha-Chlordane	4.64	Spike	P	0 - 33
2354003	Beta-BHC	9.44	Spike	P	0 - 36
2354003	Beta-Cyfluthrin	16.5	Spike	P	0 - 42
2354003	Bifenthrin	0.212	Spike	P	0 - 53
2354003	Carbophenothion	2.90	Spike	P	0 - 30
2354003	Chlorothalonil	2.86	Spike	P	0 - 71
2354003	Cis-Nonachlor	5.49	Spike	P	0 - 29
2354003	Cypermethrin	18.2	Spike	P	0 - 40
2354003	Dacthal	0.443	Spike	P	0 - 26
2354003	DDD-p,p'	0.545	Spike	P	0 - 39
2354003	DDE-p,p'	5.42	Spike	P	0 - 33
2354003	DDT-p,p'	6.55	Spike	P	0 - 40
2354003	Delta-BHC	5.33	Spike	P	0 - 37

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P419139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2354003	Deltamethrin	27.4	Spike	P	0 - 100
2354003	Dichlobenil	0.716	Spike	P	0 - 40
2354003	Dicofol	3.09	Spike	P	0 - 31
2354003	Dieldrin	4.15	Spike	P	0 - 27
2354003	Endosulfan I	4.56	Spike	P	0 - 23
2354003	Endosulfan II	1.51	Spike	P	0 - 28
2354003	Endosulfan Sulfate	16.1	Spike	P	0 - 38
2354003	Endrin	5.38	Spike	P	0 - 63
2354003	Endrin Aldehyde	25.6	Spike	P	0 - 60
2354003	Endrin Ketone	11.7	Spike	P	0 - 37
2354003	Esfenvalerate	19.2	Spike	P	0 - 52
2354003	Ethalfluralin	9.20	Spike	P	0 - 23
2354003	Fenpropathrin	7.51	Spike	P	0 - 32
2354003	Gamma-BHC	6.08	Spike	P	0 - 17
2354003	Gamma-Chlordane	8.29	Spike	P	0 - 40
2354003	Heptachlor	4.05	Spike	P	0 - 29
2354003	Heptachlor Epoxide	6.73	Spike	P	0 - 25
2354003	Hexachlorobenzene	10.9	Spike	P	0 - 36
2354003	Kepone	70.8	Spike	P	0 - 93
2354003	Lambda-Cyhalothrin	9.18	Spike	P	0 - 55
2354003	Methoprene	2.56	Spike	P	0 - 53
2354003	Methoxychlor	1.08	Spike	P	0 - 29
2354003	MGK-264	6.98	Spike	P	0 - 35
2354003	Mirex	4.05	Spike	P	0 - 46
2354003	Oxychlordane	4.63	Spike	P	0 - 29
2354003	Permethrin	18.7	Spike	P	0 - 44
2354003	Phenothrin	3.90	Spike	P	0 - 56
2354003	Piperonyl Butoxide	6.63	Spike	P	0 - 100
2354003	Prallethrin	0.769	Spike	P	0 - 42
2354003	Tau-Fluvalinate	17.1	Spike	P	0 - 54
2354003	Tetramethrin	9.67	Spike	P	0 - 51
2354003	Trans-Nonachlor	7.42	Spike	P	0 - 37
2354003	Triclosan Methyl	5.02	Spike	P	0 - 31
2354003	Trifluralin	10.2	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P419139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353933	Chlordane	1.13	Spike	P	0 - 25
2353933	Toxaphene	9.99	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P418802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352891	Acesulfame K	0.674	Spike	P	0 - 30
2352891	AMPA	2.20	Spike	P	0 - 30
2352891	Endothall	3.24	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P418802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2352891	Glufosinate	2.45	Spike	P	0 - 30
2352891	Glyphosate	5.37	Spike	P	0 - 30
2352891	Sucralose	0.783	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P418942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353621	3-Hydroxycarbofuran	21.4	Spike	P	0 - 30
2353621	Aldicarb	16.3	Spike	P	0 - 30
2353621	Aldicarb Sulfone	3.25	Spike	P	0 - 30
2353621	Aldicarb Sulfoxide	6.48	Spike	P	0 - 30
2353621	Carbaryl	22.2	Spike	P	0 - 30
2353621	Carbofuran	25.1	Spike	P	0 - 30
2353621	Methiocarb	15.1	Spike	P	0 - 30
2353621	Methomyl	7.52	Spike	P	0 - 30
2353621	Oxamyl	8.92	Spike	P	0 - 30
2353621	Propoxur	8.57	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P418988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353620	Acesulfame K	0.483	Spike	P	0 - 30
2353620	AMPA	3.86	Spike	P	0 - 30
2353620	Endothall	0.349	Spike	P	0 - 30
2353620	Glufosinate	2.88	Spike	P	0 - 30
2353620	Glyphosate	3.06	Spike	P	0 - 30
2353620	Sucralose	2.04	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P419091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353620	2,4-D	8.28	Spike	P	0 - 30
2353620	2,4,5-T	5.75	Spike	P	0 - 30
2353620	Acetaminophen	12.4	Spike	P	0 - 30
2353620	Acetamiprid	3.84	Spike	P	0 - 30
2353620	Afidopyropen	16.1	Spike	P	0 - 30
2353620	Bentazon	0.0786	Spike	P	0 - 30
2353620	Benzovindiflupyr	2.20	Spike	P	0 - 30
2353620	Carbamazepine	4.77	Spike	P	0 - 30
2353620	Clothianidin	4.86	Spike	P	0 - 30
2353620	Dinotefuran	5.51	Spike	P	0 - 30
2353620	Diuron	0.445	Spike	P	0 - 30
2353620	Fenuron	9.79	Spike	P	0 - 30
2353620	Fluridone	23.5	Spike	P	0 - 30
2353620	Hydrocodone	29.2	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P419091

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353620	Ibuprofen	12.2	Spike	P	0 - 30
2353620	Imazapyr	12.4	Spike	P	0 - 30
2353620	Imidacloprid	9.49	Spike	P	0 - 30
2353620	Linuron	23.9	Spike	P	0 - 30
2353620	Mandestrobin	2.22	Spike	P	0 - 30
2353620	MCPP	5.91	Spike	P	0 - 30
2353620	Naproxen	30.0	Spike	P	0 - 30
2353620	Primidone	20.5	Spike	P	0 - 30
2353620	Pyraclostrobin	7.29	Spike	P	0 - 30
2353620	Silvex	1.78	Spike	P	0 - 30
2353620	Thiamethoxam	38.8	Spike	F	0 - 30
2353620	Tolfenpyrad	7.47	Spike	P	0 - 30
2353620	Triclopyr	15.6	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P419411

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353959	Total Alkalinity	0.145	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P419430

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353615	TDS	5.88	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P419389

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353650	Fluoride	1.45	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P419188

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2353844	Organic Carbon	1.08	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2353619
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	75.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.6	P	30 - 160
EPA 8321B	Diuron-d6	92.6	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	97.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.3	P	30 - 160
EPA 8321B	Primidone-d5	95.8	P	30 - 160
EPA 8321B	Sucralose-d6	99.5	P	30 - 160

Lab Sample ID: 2353620
Field Sample ID: G4NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	76.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	66.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	101	P	30 - 160
EPA 8321B	Diuron-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	94.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	81.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	56.0	P	30 - 160
EPA 8321B	Primidone-d5	61.8	P	30 - 160
EPA 8321B	Sucralose-d6	102	P	30 - 160

Lab Sample ID: 2353621
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	79.0	P	30 - 160

Lab Sample ID: 2353622
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	75.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	102	P	30 - 160
EPA 8321B	Diuron-d6	96.9	P	30 - 160
EPA 8321B	Endothall-d6	85.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	77.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	132	P	30 - 160
EPA 8321B	Primidone-d5	54.5	P	30 - 160
EPA 8321B	Sucralose-d6	97.0	P	30 - 160

Lab Sample ID: 2353627
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	72.6	P	29 - 130
EPA 8270E	Decachlorobiphenyl	56.2	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	62.2	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	33.9	P	30 - 97.0

Quality Assurance Report
Surrogates

Lab Sample ID: 2353627
Field Sample ID: G4NW0415

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	54.5	P	30 - 101
EPA 8276	PCNB	90.2	P	48 - 121

Lab Sample ID: 2353628
Field Sample ID: G4NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	78.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	61.4	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	58.1	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	32.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	56.0	P	30 - 101
EPA 8276	PCNB	85.7	P	48 - 121

Lab Sample ID: 2353629
Field Sample ID: G4NW0114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	105	P	29 - 130
EPA 8270E	Decachlorobiphenyl	79.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	62.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	39.6	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	71.6	P	30 - 101
EPA 8276	PCNB	96.6	P	48 - 121

Lab Sample ID: 2353630
Field Sample ID: G4NW0505

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	81.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	66.6	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	59.2	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	42.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	62.8	P	30 - 101
EPA 8276	PCNB	94.2	P	48 - 121

Lab Sample ID: 2353631
Field Sample ID: G4NW0412

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.1	P	29 - 130
EPA 8270E	Decachlorobiphenyl	57.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	58.3	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	31.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	63.5	P	30 - 101
EPA 8276	PCNB	88.9	P	48 - 121

Lab Sample ID: 2353632
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	74.4	P	29 - 130

Quality Assurance Report
Surrogates

Lab Sample ID: 2353632
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	55.0	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	57.6	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	34.4	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	57.5	P	30 - 101
EPA 8276	PCNB	82.2	P	48 - 121

Lab Sample ID: 2353633
Field Sample ID: G5NW0155

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	53.2	P	20 - 200
EPA 8270E	Simazine-d10	90.9	P	71 - 140
EPA 8270E	Terbufos-d10	88.7	P	62 - 131
EPA 8270E	Terphenyl-d14	55.9	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A114489
Included Lab Sample IDs: 2353615

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

Reference Method: DEP SOP: NU-094-1
Run ID: A114493
Included Lab Sample IDs: 2353615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A114549
Included Lab Sample IDs: 2353616

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

Reference Method: EPA 8321B
Run ID: A114551
Included Lab Sample IDs: 2353619

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	104	P/P	60 - 160
Sucralose	102	101	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A114552
Included Lab Sample IDs: 2353619

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	101	P/P	60 - 160
Endothall	88.4	85.8	P/P	60 - 160
Glufosinate	92.7	95.7	P/P	60 - 160
Glyphosate	105	105	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A114565
Included Lab Sample IDs: 2353620, 2353622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	115	114	P/P	60 - 160
Sucralose	101	106	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A114567
Included Lab Sample IDs: 2353620, 2353622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	104	102	P/P	60 - 160
Endothall	105	87.1	P/P	60 - 160
Glufosinate	73.0	78.7	P/P	60 - 160
Glyphosate	108	102	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: SM 5310 B-2011
Run ID: A114572
Included Lab Sample IDs: 2353616

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.7	96.6	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A114587
Included Lab Sample IDs: 2353627, 2353628, 2353629, 2353630, 2353631, 2353632

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	105		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	109		P	80 - 120
Beta-BHC	98.0		P	80 - 120
Beta-Cyfluthrin	99.3		P	80 - 120
Bifenthrin	102		P	80 - 120
Carbophenothion	101		P	80 - 120
Chlorothalonil	104		P	80 - 120
Cis-Nonachlor	103		P	80 - 120
Cypermethrin	99.0		P	80 - 120
Dacthal	104		P	80 - 120
DDD-p,p'	110		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	102		P	80 - 120
Deltamethrin	77.1*		F	80 - 120
Dichlobenil	97.4		P	80 - 120
Dicofol	97.5		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	108		P	80 - 120
Endosulfan II	105		P	80 - 120
Endosulfan Sulfate	100		P	80 - 120
Endrin	103		P	80 - 120
Endrin Aldehyde	97.8		P	80 - 120
Endrin Ketone	98.9		P	80 - 120
Esfenvalerate	102		P	80 - 120
Ethalfluralin	102		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	90.4		P	80 - 120
Gamma-Chlordane	102		P	80 - 120
Heptachlor	106		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	99.7		P	80 - 120
Kepone	92.8		P	80 - 120
Lambda-Cyhalothrin	102		P	80 - 120
Methoprene	99.7		P	80 - 120
Methoxychlor	98.8		P	80 - 120
MGK-264	96.2		P	80 - 120
Mirex	103		P	80 - 120
Oxychlordane	100		P	80 - 120
Permethrin	99.7		P	80 - 120
Phenothrin	99.1		P	80 - 120
Piperonyl Butoxide	84.2		P	80 - 120
Prallethrin	88.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114587
Included Lab Sample IDs: 2353627, 2353628, 2353629, 2353630, 2353631, 2353632

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tau-Fluvalinate	101		P	80 - 120
Tetramethrin	90.3		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	105		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114590
Included Lab Sample IDs: 2353627, 2353628, 2353629, 2353630, 2353631, 2353632

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	111		P	80 - 120
PCB-1260	99.1		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114597
Included Lab Sample IDs: 2353633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.6		P	80 - 120
Avobenzone	95.8		P	80 - 120
Dechlorane Plus	97.3		P	80 - 120
Octinoxate	96.9		P	80 - 120
Oxybenzone	93.7		P	80 - 120
PBDE-47	96.8		P	80 - 120
PBDE-99	98.1		P	80 - 120
Tri-o-cresyl Phosphate	98.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A114598
Included Lab Sample IDs: 2353633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	99.6		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	99.1		P	80 - 120
Atrazine Desethyl	104		P	80 - 120
Azinphos Methyl	114		P	80 - 120
Azoxystrobin	98.0		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	101		P	80 - 120
Caffeine	89.3		P	80 - 120
Carbophenothion	107		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	108		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	110		P	80 - 120
Cyanazine	105		P	80 - 120
Cyprodinil	106		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114598
Included Lab Sample IDs: 2353633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Demeton	104		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	106		P	80 - 120
Dimethenamid	106		P	80 - 120
Dimethomorph	99.1		P	80 - 120
Disulfoton	99.7		P	80 - 120
Dithiopyr	107		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	106		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	98.0		P	80 - 120
Fenamiphos	97.2		P	80 - 120
Fenbuconazole	105		P	80 - 120
Fipronil	99.6		P	80 - 120
Fipronil Desulfinyl	107		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	98.4		P	80 - 120
Flumioxazin	107		P	80 - 120
Flutolanil	97.6		P	80 - 120
Fluxapyroxad	108		P	80 - 120
Fonofos	103		P	80 - 120
Hexazinone	99.9		P	80 - 120
Imazalil	101		P	80 - 120
Iprodione	105		P	80 - 120
Loratadine	95.1		P	80 - 120
Malathion	104		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	100		P	80 - 120
Metribuzin	99.7		P	80 - 120
Mevinphos	99.0		P	80 - 120
Molinate	99.0		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	118		P	80 - 120
Napropamide	98.7		P	80 - 120
Norflurazon	102		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	109		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	100		P	80 - 120
Pendimethalin	92.3		P	80 - 120
Phenytoin	105		P	80 - 120
Phorate	99.7		P	80 - 120
Prodiamine	112		P	80 - 120
Prometon	97.3		P	80 - 120
Prometryn	103		P	80 - 120
Pronamide	95.3		P	80 - 120
Propanil	94.4		P	80 - 120
Propargite	104		P	80 - 120
Propiconazole	106		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A114598
Included Lab Sample IDs: 2353633

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraflufen Ethyl	99.3		P	80 - 120
Pyridaben	106		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	93.9		P	80 - 120
Stirophos	109		P	80 - 120
Sulfentrazone	112		P	80 - 120
Tebuconazole	105		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	101		P	80 - 120
Thiobencarb	98.4		P	80 - 120
Triadimefon	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A114600
Included Lab Sample IDs: 2353615

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

Reference Method: EPA 8321B
Run ID: A114605
Included Lab Sample IDs: 2353619, 2353620, 2353622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.7	99.8	P/P	50 - 150
2,4-D	99.8	120	P/P	50 - 150
2,4,5-T	93.1	99.9	P/P	50 - 150
2,4,5-T	99.9	133	P/P	50 - 150
3-Hydroxycarbofuran	102	78.1	P/P	60 - 150
Acetaminophen	78.2	90.4	P/P	60 - 160
Acetaminophen	90.4	102	P/P	60 - 160
Acetamiprid	102	90.8	P/P	50 - 150
Acetamiprid	90.8	90.4	P/P	50 - 150
Afidopyropen	105	147	P/P	50 - 150
Afidopyropen	96.3	105	P/P	50 - 150
Aldicarb	116	99.3	P/P	60 - 150
Aldicarb Sulfone	96.4	101	P/P	50 - 150
Aldicarb Sulfoxide	103	77.2	P/P	50 - 150
Bentazon	107	95.2	P/P	50 - 160
Bentazon	95.2	114	P/P	50 - 160
Benzovindiflupyr	105	126	P/P	50 - 150
Benzovindiflupyr	118	105	P/P	50 - 150
Carbamazepine	112	117	P/P	60 - 150
Carbamazepine	117	123	P/P	60 - 150
Carbaryl	118	113	P/P	60 - 150
Carbofuran	99.3	83.9	P/P	50 - 150
Clothianidin	106	104	P/P	60 - 150
Clothianidin	92.1	106	P/P	60 - 150
Dinotefuran	101	84.1	P/P	50 - 150
Dinotefuran	84.1	108	P/P	50 - 150

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Reference Method: EPA 8321B
Run ID: A114605
Included Lab Sample IDs: 2353619, 2353620, 2353622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	100	139	P/P	60 - 160
Diuron	99.8	100	P/P	60 - 160
Fenuron	94.2	95.2	P/P	60 - 150
Fenuron	95.2	112	P/P	60 - 150
Fluridone	113	125	P/P	60 - 160
Fluridone	120	113	P/P	60 - 160
Hydrocodone	116	92.9	P/P	60 - 150
Hydrocodone	92.9	108	P/P	60 - 150
Ibuprofen	109	115	P/P	50 - 160
Ibuprofen	61.4	109	P/P	50 - 160
Imazapyr	89.5	90.1	P/P	50 - 150
Imazapyr	90.1	96.7	P/P	50 - 150
Imidacloprid	130	85.7	P/P	60 - 150
Imidacloprid	85.7	138	P/P	60 - 150
Linuron	106	117	P/P	60 - 150
Linuron	117	140	P/P	60 - 150
Mandestrobin	102	112	P/P	50 - 150
Mandestrobin	112	127	P/P	50 - 150
MCPP	105	118	P/P	50 - 150
MCPP	89.8	105	P/P	50 - 150
Methiocarb	102	112	P/P	50 - 150
Methomyl	98.9	96.5	P/P	50 - 150
Naproxen	118	137	P/P	50 - 160
Naproxen	137	144	P/P	50 - 160
Oxamyl	102	85.7	P/P	50 - 150
Primidone	68.2	93.7	P/P	60 - 150
Primidone	93.7	108	P/P	60 - 150
Propoxur	111	114	P/P	50 - 150
Pyraclostrobin	112	114	P/P	60 - 150
Pyraclostrobin	114	124	P/P	60 - 150
Silvex	70.1	96.6	P/P	50 - 150
Silvex	96.6	108	P/P	50 - 150
Thiamethoxam	67.4	97.4	P/P	50 - 150
Thiamethoxam	97.4	117	P/P	50 - 150
Tolfenpyrad	118	124	P/P	60 - 150
Tolfenpyrad	119	118	P/P	60 - 150
Triclopyr	105	120	P/P	50 - 150
Triclopyr	96.8	105	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114607
Included Lab Sample IDs: 2353616

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114624
Included Lab Sample IDs: 2353616

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

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Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114624
Included Lab Sample IDs: 2353616

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114629
Included Lab Sample IDs: 2353636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	98.2	P/P	90 - 110
Antimony	101	101	P/P	90 - 110
Arsenic	105	105	P/P	90 - 110
Barium	99.7	100	P/P	90 - 110
Beryllium	101	102	P/P	90 - 110
Boron	99.9	95.1	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Chromium	104	104	P/P	90 - 110
Cobalt	100	99.4	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Lead	91.8	91.6	P/P	90 - 110
Manganese	103	103	P/P	90 - 110
Molybdenum	99.3	98.8	P/P	90 - 110
Nickel	103	102	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Silver	98.4	98.6	P/P	90 - 110
Thallium	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114650
Included Lab Sample IDs: 2353616

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	99.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A114660
Included Lab Sample IDs: 2353615

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

Reference Method: EPA 8276
Run ID: A114666
Included Lab Sample IDs: 2353627, 2353628, 2353629, 2353630, 2353631, 2353632

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.9		P	80 - 120
Chlordane	97.9		P	80 - 120
Toxaphene	92.4		P	80 - 120
Toxaphene	94.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: SM 2320 B-2011
Run ID: A114670
Included Lab Sample IDs: 2353615

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.8	101	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A114713
Included Lab Sample IDs: 2353636

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	106	102	P/P	90 - 110
Iron	108	106	P/P	90 - 110
Magnesium	107	105	P/P	90 - 110
Potassium	104	103	P/P	90 - 110
Sodium	103	100	P/P	90 - 110
Strontium	99.7	97.9	P/P	90 - 110
Tin	105	105	P/P	90 - 110
Titanium	103	99.7	P/P	90 - 110
Vanadium	102	100	P/P	90 - 110
Zinc	104	100	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A114733
Included Lab Sample IDs: 2353627

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDD-p,p'	101		P	80 - 120
DDT-p,p'	99.3		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			Precision		
						LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	97.3					0.964	
EPA 180.1 Rev. 2.0	Turbidity	96.4					14.7	
EPA 200.7 Rev. 4.4	Calcium	108	105	111				2.26
	Iron	110	110	106	111			3.28
	Magnesium	106	105	110				3.69
	Potassium	104	101	114				2.49
	Sodium	104	103	108				1.54
	Strontium	104	104	103	105			0.885
	Tin	110	110	109	111			1.01
	Titanium	107	109	109	110			0.407
	Vanadium	106	107	107	108			0.0197
	Zinc	109	106	107	109			0.246
EPA 200.8 Rev. 5.4	Aluminum	102	99.6	99.7	101			0.0665
	Antimony	104	106	106	105			0.276
	Arsenic	103	104	103	105			1.06
	Barium	105	104	105	105			1.12
	Beryllium	99.9	103	99.0	99.9			3.66
	Boron	101	97.9	97.4	99.4			0.254
	Cadmium	99.4	101	102	99.0			0.672
	Chromium	102	100	100	104			0.279
	Cobalt	98.9	97.8	97.3	98.2			0.515
	Copper	101	96.5	97.2	104			0.734
	Lead	92.8	93.6	93.7	93.5			0.104
	Manganese	102	100	93.5	102			1.13
	Molybdenum	98.8	102	102	100			0.0878
	Nickel	102	101	99.4	102			1.67
	Selenium	101	102	101	101			0.515
	Silver	88.8	86.9	87.8	87.6			0.959
	Thallium	97.4	99.4	100	97.7			0.972
EPA 300.0 Rev. 2.1	Chloride	102	100	102			0.461	
	Sulfate	101	99.8	101			0.382	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	98.2	98.8				0.347
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.9	95.8	102				3.49
EPA 353.2 Rev. 2.0	NO2NO3-N	101	98.0					0.0
EPA 365.1 Rev. 2.0	Total-P	107	104	106				1.70
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	59.7	77.6	104				29.3
	Acetochlor	73.7	66.0	124				54.2
	Alachlor	68.6	62.8	87.0				32.4
	Aldrin	59.5	61.3	60.8				0.937
	Alpha-BHC	94.8	84.9	86.1				1.38
	Alpha-Chlordane	66.6	71.1	74.5				4.64
	Ametryn	76.5	63.6	82.0				25.2
	Atrazine	79.0	83.7	124				25.4
	Atrazine Desethyl	52.1	51.2	65.6				24.6
	Avobenzone	62.2	64.2	98.6				42.1
	Azinphos Methyl	90.2	73.8	109				38.9
	Azoxystrobin	79.5	75.7	113				28.3
	Beta-BHC	131	85.0	77.4				9.44
	Beta-Cyfluthrin	72.7	98.9	83.8				16.5
	Bifenthrin	58.5	71.4	71.6				0.212
	Bromacil	71.4	64.2	79.9				21.8
	Butylate	52.7	31.1	46.4				39.5

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Caffeine	61.3	85.2	89.2			4.54
	Carbophenothion	74.5	59.2	85.9			36.8
	Carbophenothion	54.2	70.3	68.3			2.90
	Carfentrazone Ethyl	82.5	61.6	85.2			32.1
	Chlorfenapyr	76.0	84.3	109			25.3
	Chlorothalonil	47.2	88.7	86.2			2.86
	Chlorpyrifos Ethyl	74.5	89.8	112			22.4
	Chlorpyrifos Methyl	74.8	88.9	115			26.0
	Cis-Nonachlor	65.3	67.6	71.4			5.49
	Coumaphos	80.1	60.5	85.8			34.7
	Cyanazine	83.7	71.2	105			38.1
	Cypermethrin	72.8	96.2	80.2			18.2
	Cyprodinil	66.4	68.6	92.2			29.3
	Dacthal	86.1	88.4	88.7			0.443
	DDD-p,p'	64.4	78.7	79.1			0.545
	DDE-p,p'	63.7	73.5	77.6			5.42
	DDT-p,p'	68.8	67.3	71.8			6.55
	Dechlorane Plus	64.9	80.9	112			32.2
	Delta-BHC	132	113	108			5.33
	Deltamethrin	50.5	106	80.2			27.4
	Demeton	60.6	56.3	80.1			34.8
	Diazinon	71.3	77.2	122			44.9
	Dichlobenil	93.4	82.5	81.9			0.716
	Dicofol	77.6	77.9	80.3			3.09
	Dieldrin	71.0	72.2	75.2			4.15
	Difenoconazole	84.9	74.4	104			33.5
	Dimethenamid	64.6	55.0	77.2			33.7
	Dimethomorph	70.3	70.9	98.0			32.1
	Disulfoton	68.9	65.4	87.2			28.6
	Dithiopyr	78.6	63.5	85.1			27.3
	Endosulfan I	70.8	75.9	79.4			4.56
	Endosulfan II	77.1	84.2	85.4			1.51
	Endosulfan Sulfate	77.6	110	93.4			16.1
	Endrin	69.5	80.4	84.8			5.38
	Endrin Aldehyde	67.1	94.9	73.3			25.6
	Endrin Ketone	80.6	96.1	85.5			11.7
	EPTC	47.2	24.9	36.0			36.5
	Esfenvalerate	73.0	93.3	77.0			19.2
	Ethalfluralin	75.1	73.1	80.2			9.20
	Ethion	76.6	51.0	74.9			37.9
	Ethoprop	68.3	70.0	83.9			18.1
	Etridiazole	45.1	35.4	52.1			38.2
	Fenamiphos	76.0	60.4	82.4			30.9
	Fenbuconazole	76.8	92.0	129			33.4
	Fenpropathrin	76.6	85.2	79.0			7.51
	Fipronil	71.5	67.7	89.3			27.5
	Fipronil Desulfinyl	84.8	67.2	90.9			29.9
	Fipronil Sulfide	73.4	52.4	66.3			23.4
	Fipronil Sulfone	60.5	47.2	61.7			26.6
	Fluazifop-P-butyl	75.0	57.5	84.5			38.1
	Fludioxonil	65.0	65.1	97.6			39.9
	Flumioxazin	81.0	94.0	124			27.2
	Flutolanil	71.9	53.8	89.3			28.3
	Fluxapyroxad	71.8	52.7	74.9			30.6

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Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Fonofos	66.3	58.9	80.8			31.3
	Gamma-BHC	87.7	84.1	89.4			6.08
	Gamma-Chlordane	67.8	66.3	72.0			8.29
	Heptachlor	62.9	55.1	57.4			4.05
	Heptachlor Epoxide	77.5	64.0	68.4			6.73
	Hexachlorobenzene	71.6	68.9	76.9			10.9
	Hexazinone	79.0	73.1	100			31.2
	Imazalil	32.9	21.3	66.1			102
	Iprodione	84.5	62.4	82.4			27.6
	Kepone	152	200	95.5			70.8
	Lambda-Cyhalothrin	65.5	79.1	72.1			9.18
	Loratadine	71.1	63.8	97.4			41.6
	Malathion	79.0	65.4	90.8			32.5
	Metalaxyl	71.1	58.6	83.4			34.9
	Methoprene	64.1	70.1	72.0			2.56
	Methoxychlor	87.4	69.7	70.5			1.08
	Metolachlor	69.2	58.1	91.3			31.2
	Metribuzin	71.0	63.1	98.2			43.5
	Mevinphos	63.1	76.9	85.0			9.97
	MGK-264	83.9	93.1	86.8			6.98
	Mirex	52.6	60.2	62.7			4.05
	Molinate	57.1	46.0	66.6			36.6
	Myclobutanil	67.6	66.5	91.4			31.6
	Naled	75.9	62.2	86.3			32.5
	Napropamide	65.9	55.2	71.6			25.9
	Norflurazon	67.2	52.7	62.7			17.4
	Octinoxate	56.3	75.8	98.5			26.0
	Oxadiazon	61.0	46.5	65.6			34.1
	Oxybenzone	59.1	70.0	90.0			25.0
	Oxychlordane	68.1	70.6	73.9			4.63
	Oxyfluorfen	83.9	90.0	119			27.8
	Parathion Ethyl	77.2	68.1	92.8			30.6
	Parathion Methyl	88.4	82.8	111			29.3
	PBDE-47	61.3	73.6	94.6			24.9
	PBDE-99	61.2	70.7	93.8			28.2
	PCB-1016	80.2	101	103			2.39
	PCB-1260	87.4	96.2	85.9			11.4
	Pendimethalin	57.7	54.1	73.3			30.1
	Permethrin	72.0	87.2	72.3			18.7
	Phenothrin	59.4	65.1	62.6			3.90
	Phenytoin	55.3	56.8	72.1			23.8
	Phorate	58.0	63.4	72.0			12.8
	Piperonyl Butoxide	90.1	115	108			6.63
	Prallethrin	76.3	81.7	82.4			0.769
	Prodiamine	32.2	48.0	65.3			30.6
	Prometon	66.0	55.4	78.1			34.1
	Prometryn	73.4	61.6	85.8			32.9
	Pronamide	86.4	74.0	91.2			20.8
	Propanil	73.1	61.2	82.4			29.6
	Propargite	71.1	94.4	140			39.1
	Propiconazole	67.5	54.1	68.7			23.8
	Pyraflufen Ethyl	70.7	69.9	115			48.7
	Pyridaben	72.1	62.0	88.8			35.6
	Pyriproxyfen	68.3	48.9	74.1			41.1

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Simazine	76.5	62.9	78.3			21.8
	Stirophos	81.0	51.9	69.4			28.9
	Sulfentrazone	76.7	59.1	74.9			23.5
	Tau-Fluvalinate	62.6	92.4	77.8			17.1
	Tebuconazole	63.4	39.8	52.8			24.7
	Terbufos	77.4	79.4	97.8			20.7
	Terbuthylazine	75.6	65.8	93.3			34.6
	Tetramethrin	116	109	98.6			9.67
	Thiobencarb	63.6	53.1	70.2			27.7
	Trans-Nonachlor	70.0	68.9	74.2			7.42
	Tri-o-cresyl Phosphate	65.0	73.3	93.8			24.6
	Triadimefon	66.9	53.4	67.7			23.5
	Triclosan Methyl	72.5	81.5	85.7			5.02
	Trifluralin	76.9	71.1	78.7			10.2
EPA 8276	Chlordane	117	109	108			1.13
	Toxaphene	101	120	108			9.99
EPA 8321B	2,4-D	70.6	71.7	66.0			8.28
	2,4,5-T	65.1	64.5	68.3			5.75
	3-Hydroxycarbofuran	53.0	58.8	47.4			21.4
	Acesulfame K	101	99.6	98.9			0.674
	Acesulfame K	112	111	111			0.483
	Acetaminophen	89.9	80.1	90.7			12.4
	Acetamiprid	84.3	56.4	54.3			3.84
	Afidopyropen	45.3	39.6	33.7			16.1
	Aldicarb	65.9	62.6	73.7			16.3
	Aldicarb Sulfone	98.1	85.5	88.3			3.25
	Aldicarb Sulfoxide	88.6	48.7	45.7			6.48
	AMPA	104	105	108			2.20
	AMPA	103	101	105			3.86
	Bentazon	105	107	107			0.0786
	Benzovindiflupyr	101	93.6	91.6			2.20
	Carbamazepine	74.8	88.5	93.3			4.77
	Carbaryl	80.8	96.6	77.3			22.2
	Carbofuran	87.4	90.6	70.4			25.1
	Clothianidin	81.4	87.5	83.3			4.86
	Dinotefuran	87.1	91.7	96.9			5.51
	Diuron	88.7	84.1	84.6			0.445
	Endothall	97.1	92.9	96.0			3.24
	Endothall	99.2	91.4	91.8			0.349
	Fenuron	109	96.2	87.2			9.79
	Fluridone	95.9	83.4	106			23.5
	Glufosinate	103	96.5	94.1			2.45
	Glufosinate	85.2	71.2	73.3			2.88
	Glyphosate	99.6	87.9	83.3			5.37
	Glyphosate	112	93.0	95.9			3.06
	Hydrocodone	89.5	87.9	118			29.2
	Ibuprofen	59.6	62.6	55.4			12.2
	Imazapyr	79.6	67.6	78.3			12.4
	Imidacloprid	99.9	95.6	107			9.49
	Linuron	102	86.4	110			23.9
	Mandestrobin	99.6	97.6	99.8			2.22
	MCPP	83.0	70.8	75.1			5.91
	Methiocarb	98.9	105	90.6			15.1
	Methomyl	92.8	92.6	85.9			7.52

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Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Naproxen	115	64.6	87.4			30.0
	Oxamyl	93.8	94.6	86.5			8.92
	Primidone	116	79.2	97.3			20.5
	Propoxur	87.6	82.2	75.5			8.57
	Pyraclostrobin	89.3	93.8	101			7.29
	Silvex	59.6	66.0	64.8			1.78
	Sucralose	97.7	95.8	95.0			0.783
	Sucralose	102	98.2	101			2.04
	Thiamethoxam	108	77.7	115			38.8
	Tolfenpyrad	41.5	59.1	63.6			7.47
	Triclopyr	60.1	57.3	66.9			15.6
SM 2320 B-2011	Total Alkalinity	98.4				0.145	
SM 2540 C-2011	TDS					5.88	
SM 4500-F- C-2011	Fluoride	102	99.9	98.0			1.45
SM 5310 B-2011	Organic Carbon	95.0	99.8	101			1.08

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2353615
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2353615
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2353636
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2353636
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2353615
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2353615
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2353616
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2353616
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2353616
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2353616
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2353633
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2353627, 2353628, 2353629, 2353630, 2353631, 2353632
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2353633
EPA 8270E	PCBs in water matrices by GC/MS/MS	2353627, 2353628, 2353629, 2353630, 2353631, 2353632
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2353627, 2353628, 2353629, 2353630, 2353631, 2353632
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2353621
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2353619, 2353620, 2353622
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2353615
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2353636
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2353615
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2353615
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2353615
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2353616

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	09/01/2022			09/01/2022 15:04	Anna M. Plaviak	2353615
EPA 180.1 Rev. 2.0	09/01/2022			09/01/2022 13:39	Chandler E Cox	2353615
EPA 200.7 Rev. 4.4	09/01/2022	09/06/2022 10:20	Megan Whitefoot	09/14/2022 08:10	McKinley C Carter	2353636
EPA 200.8 Rev. 5.4	09/01/2022	09/06/2022 10:20	Megan Whitefoot	09/08/2022 21:21	Megan Whitefoot	2353636
EPA 300.0 Rev. 2.1	09/01/2022			09/10/2022 07:43	Anna M. Plaviak	2353615
EPA 350.1 Rev. 2.0	09/01/2022			09/06/2022 12:31	Ping Hua	2353616
EPA 351.2 Rev. 2.0	09/01/2022	09/07/2022 13:36	Samantha L Bates	09/08/2022 14:26	Samantha L Bates	2353616
EPA 353.2 Rev. 2.0	09/01/2022			09/08/2022 10:34	Beverly Y. Sanders	2353616
EPA 365.1 Rev. 2.0	09/01/2022	09/08/2022 16:33	Adam P Silver	09/09/2022 14:07	James L Waggerby	2353616
EPA 8270E	09/01/2022	09/01/2022 14:00	Rasheda Ghaffari	09/06/2022 02:36	Michael Poppell	2353633
	09/01/2022	09/01/2022 14:00	Rasheda Ghaffari	09/06/2022 17:12	Lipi Saha	2353633
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 19:40	Vandana T. Nagar	2353627
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 20:10	Vandana T. Nagar	2353628
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 20:39	Vandana T. Nagar	2353629
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 21:09	Vandana T. Nagar	2353630
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 21:38	Vandana T. Nagar	2353631
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 22:08	Vandana T. Nagar	2353632
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 23:20	Julie Wi	2353627
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/07/2022 23:50	Julie Wi	2353628
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/08/2022 00:20	Julie Wi	2353629
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/08/2022 00:50	Julie Wi	2353630
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/08/2022 01:20	Julie Wi	2353631
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/08/2022 01:50	Julie Wi	2353632
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/08/2022 23:15	Vandana T. Nagar	2353627
EPA 8276	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 03:00	Arthur Maknenko	2353627
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 03:55	Arthur Maknenko	2353628
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 04:51	Arthur Maknenko	2353629
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 05:46	Arthur Maknenko	2353630
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 07:37	Arthur Maknenko	2353631
	09/01/2022	09/06/2022 08:00	Fe-Val Siddell	09/09/2022 08:33	Arthur Maknenko	2353632
EPA 8321B	09/01/2022	09/01/2022 14:00	Umesh Chiluwal	09/02/2022 03:37	Umesh Chiluwal	2353619
	09/01/2022	09/01/2022 14:00	Umesh Chiluwal	09/03/2022 04:23	Umesh Chiluwal	2353619
	09/01/2022	09/02/2022 13:00	Hoor Shaik	09/07/2022 18:31	Juyoung Kim	2353621
	09/01/2022	09/06/2022 09:30	June Rhew	09/08/2022 10:06	Juyoung Kim	2353620
	09/01/2022	09/06/2022 09:30	June Rhew	09/08/2022 13:13	Juyoung Kim	2353619
	09/01/2022	09/06/2022 09:30	June Rhew	09/08/2022 13:34	Juyoung Kim	2353622
	09/01/2022	09/06/2022 12:30	Umesh Chiluwal	09/06/2022 14:01	Umesh Chiluwal	2353620
	09/01/2022	09/06/2022 12:30	Umesh Chiluwal	09/06/2022 14:14	Umesh Chiluwal	2353622
	09/01/2022	09/06/2022 12:30	Umesh Chiluwal	09/06/2022 23:40	Umesh Chiluwal	2353620
	09/01/2022	09/06/2022 12:30	Umesh Chiluwal	09/06/2022 23:55	Umesh Chiluwal	2353622

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	09/01/2022			09/11/2022 23:47	Dale L. Simmons	2353615
SM 2340 B-2011	09/01/2022			09/14/2022 08:10	McKinley C Carter	2353636
SM 2540 C-2011	09/01/2022			09/02/2022 16:08	Yijie Li	2353615
SM 2540 D-2011	09/01/2022			09/02/2022 16:08	Yijie Li	2353615
SM 4500-F- C-2011	09/01/2022			09/09/2022 13:24	Dale L. Simmons	2353615
SM 5310 B-2011	09/01/2022			09/06/2022 21:02	Khloe J Berg	2353616