Chemical Analysis Report

SE-DIST-2022-04-12-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Hollywood**
Request ID: **RQ-2022-02-28-33**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
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2199 South Rock Road
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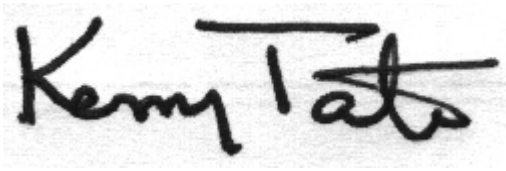
Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 29-APR-2022 13:01



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: Dania Cutoff @ Griffin Marine Park **Collection Date/Time: 04/11/2022 10:45**

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318363	EPA 180.1 Rev. 2.0	Turbidity	1.5		NTU	P412262	
	SM 2320 B-2011	Total Alkalinity	160		mg CaCO3/L	P412808	
	SM 2540 D-2011	TSS	7	I	mg/L	P412561	
	SM 4500-F- C-2011	Fluoride	0.90		mg F/L	P412811	
2318364	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P412302	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P412510	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.037		mg N/L	P412399	
	EPA 365.1 Rev. 2.0	Total-P	0.032		mg P/L	P412600	
	SM 5310 B-2011	Organic Carbon	5.4		mg C/L	P412477	
2318374	EPA 8321B	Acesulfame K	0.10	U	ug/L	P412342	
		2,4-D	0.0035	I	ug/L	P412254	
		AMPA	10	U	ug/L	P412342	
		2,4,5-T	0.0040	U	ug/L	P412254	
		Acetaminophen	0.0082	I	ug/L	P412254	
		Endothall	0.25	U	ug/L	P412342	
		Acetamiprid	0.0020	U	ug/L	P412254	
		Glufosinate	10	U	ug/L	P412342	
		Glyphosate	10	U	ug/L	P412342	
		Afidopyropen	0.0020	U	ug/L	P412254	
		Sucralose	0.21		ug/L	P412342	
		Bentazon	0.029		ug/L	P412254	
		Benzovindiflupyr	0.0020	U	ug/L	P412254	
		Carbamazepine	0.0029	I	ug/L	P412254	
		Clothianidin	0.0020	U	ug/L	P412254	
		Dinotefuran	0.0020	U	ug/L	P412254	
		Diuron	0.0095		ug/L	P412254	
		Fenuron	0.032	U	ug/L	P412254	MS
		Fluridone	0.0080		ug/L	P412254	
		Imazapyr	0.050		ug/L	P412254	
		Hydrocodone	0.0020	U	ug/L	P412254	
		Ibuprofen	0.020	U	ug/L	P412254	
		Imidacloprid	0.0030	I	ug/L	P412254	
		Linuron	0.0040	U	ug/L	P412254	
		Mandestrobin	0.0020	U	ug/L	P412254	
		MCPP	0.0040	U	ug/L	P412254	
		Naproxen	0.0080	U	ug/L	P412254	
		Primidone	0.0040	U	ug/L	P412254	
		Pyraclostrobin	0.0020	U	ug/L	P412254	
		Silvex	0.0040	U	ug/L	P412254	
		Thiamethoxam	0.0020	U	ug/L	P412254	
		Tolfenpyrad	0.0020	U	ug/L	P412254	
		Triclopyr	0.0040	U	ug/L	P412254	
2318377	EPA 8270E	Oxybenzone**	9.4	U	ng/L	P412269	
		Acetochlor	0.23	U	ng/L	P412269	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318377	EPA 8270E	Octinoxate**	19	U	ng/L	P412269	
		Alachlor	0.23	U	ng/L	P412269	
		Avobenzone**	94	U	ng/L	P412269	
		Ametryn	0.56	U	ng/L	P412269	
		Atrazine	9.0		ng/L	P412269	
		Atrazine Desethyl	1.4	U	ng/L	P412269	
		Azinphos Methyl	1.9	U	ng/L	P412269	
		Azoxystrobin**	0.47	U	ng/L	P412269	
		Bromacil	0.47	U	ng/L	P412269	
		Butylate	0.37	U	ng/L	P412269	
		Caffeine**	32		ng/L	P412269	
		Carbophenothion	0.19	U	ng/L	P412269	
		Carfentrazone Ethyl**	0.094	U	ng/L	P412269	
		Chlorfenapyr**	0.16	UJ	ng/L	P412269	LCS
		Chlorpyrifos Ethyl	0.23	U	ng/L	P412269	
		Chlorpyrifos Methyl	0.047	U	ng/L	P412269	
		Coumaphos**	0.47	U	ng/L	P412269	
		Cyanazine	3.0	U	ng/L	P412269	
		Cyprodinil**	0.094	U	ng/L	P412269	
		Demeton	1.4	U	ng/L	P412269	
		Diazinon	0.12	U	ng/L	P412269	
		Difenoconazole**	0.56	U	ng/L	P412269	
		Dimethenamid**	0.094	U	ng/L	P412269	
		Dimethomorph**	0.16	U	ng/L	P412269	MS
		Disulfoton	0.47	U	ng/L	P412269	
		Dithiopyr**	0.16	U	ng/L	P412269	
		EPTC	1.2	U	ng/L	P412269	
		Ethion	0.14	U	ng/L	P412269	
		Ethoprop	0.094	U	ng/L	P412269	
		Etridiazole**	0.14	U	ng/L	P412269	
		Fenamiphos	0.47	U	ng/L	P412269	
		Fenbuconazole**	0.12	U	ng/L	P412269	
		Fipronil	0.23	U	ng/L	P412269	
		Fipronil Desulfinyl**	0.12	U	ng/L	P412269	
		Fipronil Sulfide	0.18	I	ng/L	P412269	
		Fipronil Sulfone	0.34	I	ng/L	P412269	
		Fluazifop-P-butyl**	0.094	U	ng/L	P412269	
		Fludioxonil**	0.12	U	ng/L	P412269	
		Flumioxazin**	1.6	U	ng/L	P412269	
		Flutolanil**	0.094	U	ng/L	P412269	
		Fluxapyroxad**	0.094	U	ng/L	P412269	
		Fonofos	0.19	U	ng/L	P412269	
		Hexazinone	2.3		ng/L	P412269	
		Imazalil**	0.70	U	ng/L	P412269	
		Iprodione**	0.56	U	ng/L	P412269	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318377	EPA 8270E	Loratadine**	0.094	U	ng/L	P412269	
		Malathion	0.33	U	ng/L	P412269	
		Metalaxyl	0.70	U	ng/L	P412269	
		Metolachlor	0.33	U	ng/L	P412269	
		Metribuzin	2.3	U	ng/L	P412269	
		Mevinphos	0.98	U	ng/L	P412269	
		Molinate	0.28	U	ng/L	P412269	
		Myclobutanil**	0.23	U	ng/L	P412269	
		Naled**	1.4	U	ng/L	P412269	
		Napropamide**	0.37	U	ng/L	P412269	
		Norflurazon	0.47	U	ng/L	P412269	
		Oxadiazon	0.47	I	ng/L	P412269	
		Oxyfluorfen**	0.14	U	ng/L	P412269	
		Parathion Ethyl	0.23	U	ng/L	P412269	
		Parathion Methyl	0.51	U	ng/L	P412269	
		Pendimethalin	0.94	U	ng/L	P412269	
		Phenytoin**	3.3	U	ng/L	P412269	MS, RPD
		Phorate	0.49	U	ng/L	P412269	
		Prodiamine**	0.16	U	ng/L	P412269	MS, RPD
		Prometon	0.84	U	ng/L	P412269	
		Prometryn	0.19	U	ng/L	P412269	
		Pronamide**	0.14	U	ng/L	P412269	
		Propanil**	0.12	U	ng/L	P412269	
		Propargite**	1.4	U	ng/L	P412269	
		Propiconazole**	0.53	I	ng/L	P412269	
		Pyraflufen Ethyl**	0.23	U	ng/L	P412269	
		Pyridaben**	0.42	U	ng/L	P412269	
		Pyriproxyfen**	0.12	U	ng/L	P412269	
		Simazine	0.47	U	ng/L	P412269	
		Stirophos**	0.12	U	ng/L	P412269	
		Sulfentrazone**	3.3		ng/L	P412269	
		Tebuconazole**	0.47	U	ng/L	P412269	
		Terbufos	0.094	U	ng/L	P412269	
		Terbuthylazine	0.40	U	ng/L	P412269	
		Thiobencarb**	0.56	U	ng/L	P412269	
		Triadimefon**	0.23	U	ng/L	P412269	
2318380	EPA 200.7 Rev. 4.4	Calcium	321		mg/L	P412394	
		Iron	120	U	ug/L	P412394	
		Magnesium	894		mg/L	P412394	
		Strontium	5.32E+03		ug/L	P412394	
		Tin	150	U	ug/L	P412394	
		Titanium	3.9	I	ug/L	P412394	
		Vanadium	8.0	U	ug/L	P412394	
		Zinc	20	U	ug/L	P412394	
	EPA 200.8 Rev. 5.4	Aluminum	20	U	ug/L	P412394	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318380	EPA 200.8 Rev. 5.4	Antimony	0.20	U	ug/L	P412394	
		Arsenic	2.19		ug/L	P412394	
		Beryllium	0.10	U	ug/L	P412394	
		Cadmium	0.080	U	ug/L	P412394	
		Chromium	1.6	U	ug/L	P412394	
		Cobalt	0.080	U	ug/L	P412394	
		Copper	7.3		ug/L	P412394	
		Lead	2.0	U	ug/L	P412394	
		Manganese	6.7		ug/L	P412394	
		Molybdenum	8.4		ug/L	P412394	
		Nickel	2.0	U	ug/L	P412394	
		Selenium	0.80	U	ug/L	P412394	
		Silver	0.040	U	ug/L	P412394	
		Thallium	1.0	U	ug/L	P412394	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 8270E: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 04/19/2022.

Sample Location: North New River Canal (NNR-3) **Collection Date/Time: 04/11/2022 11:15**

Field ID: G4SENNR3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318375	EPA 8321B	Aldicarb	0.020	U	ug/L	P412371	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P412371	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P412371	
		Carbaryl	0.0020	U	ug/L	P412371	
		Carbofuran	0.0020	U	ug/L	P412371	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P412371	
		Methiocarb	0.0020	U	ug/L	P412371	
		Methomyl	0.0020	U	ug/L	P412371	
		Oxamyl	0.0020	U	ug/L	P412371	
		Propoxur	0.0020	U	ug/L	P412371	
2318376		2,4-D	0.10		ug/L	P412254	
		Acesulfame K	0.10	U	ug/L	P412352	
		2,4,5-T	0.0040	U	ug/L	P412254	
		AMPA	0.10	U	ug/L	P412352	
		Acetaminophen	0.0080	U	ug/L	P412254	
		Acetamiprid	0.0020	U	ug/L	P412254	
		Endothall	0.25	U	ug/L	P412352	
		Glufosinate	0.10	U	ug/L	P412352	
		Glyphosate	0.10	U	ug/L	P412352	
		Afidopyropen	0.0020	U	ug/L	P412254	
		Bentazon	0.012		ug/L	P412254	
		Sucralose	0.025	I	ug/L	P412352	
		Benzovindiflupyr	0.0020	U	ug/L	P412254	
		Carbamazepine	8.0E-04	U	ug/L	P412254	
		Clothianidin	0.0020	U	ug/L	P412254	
		Dinotefuran	0.0020	U	ug/L	P412254	
		Diuron	0.0020	U	ug/L	P412254	
		Fenuron	0.032	U	ug/L	P412254	MS
		Fluridone	8.9E-04	I	ug/L	P412254	
		Imazapyr	0.059		ug/L	P412254	
		Hydrocodone	0.0020	U	ug/L	P412254	
		Ibuprofen	0.020	U	ug/L	P412254	
		Imidacloprid	0.0047	I	ug/L	P412254	
		Linuron	0.0040	U	ug/L	P412254	
		Mandestrobin	0.0020	U	ug/L	P412254	
		MCPP	0.0040	U	ug/L	P412254	
		Naproxen	0.0080	U	ug/L	P412254	
		Primidone	0.0040	U	ug/L	P412254	
		Pyraclostrobin	0.0020	U	ug/L	P412254	
		Silvex	0.0040	U	ug/L	P412254	
		Thiamethoxam	0.0020	U	ug/L	P412254	
		Tolfenpyrad	0.0020	U	ug/L	P412254	
		Triclopyr	0.0040	U	ug/L	P412254	
2318378	EPA 8270E	Aldrin	0.68	U	ng/L	P412338	

Field ID: G4SENNR3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318378	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P412338	
		Alpha-Chlordane	0.21	U	ng/L	P412338	
		PCB-1016	2.1	U	ng/L	P412338	
		Beta-BHC	0.11	U	ng/L	P412338	
		PCB-1221	2.1	U	ng/L	P412338	
		Beta-Cyfluthrin**	1.3	U	ng/L	P412338	
		PCB-1232	2.1	U	ng/L	P412338	
		Bifenthrin**	0.53	U	ng/L	P412338	
		PCB-1242	2.1	U	ng/L	P412338	
		PCB-1248	2.1	U	ng/L	P412338	
		Chlorothalonil	1.3	U	ng/L	P412338	
		PCB-1254	2.1	U	ng/L	P412338	
		Cis-Nonachlor**	0.21	U	ng/L	P412338	
		PCB-1260	2.1	U	ng/L	P412338	
		Cypermethrin	1.6	U	ng/L	P412338	
		Dacthal**	0.16	U	ng/L	P412338	
		DDD-p,p'	0.26	U	ng/L	P412338	
		DDE-p,p'	0.21	U	ng/L	P412338	
		DDT-p,p'	0.26	U	ng/L	P412338	
		Delta-BHC	0.42	U	ng/L	P412338	
		Deltamethrin**	1.3	U	ng/L	P412338	
		Dichlobenil**	0.26	U	ng/L	P412338	
		Dicofol	1.3	U	ng/L	P412338	
		Dieldrin	0.42	U	ng/L	P412338	
		Endosulfan I	0.42	U	ng/L	P412338	
		Endosulfan II	0.42	U	ng/L	P412338	
		Endosulfan Sulfate	0.32	U	ng/L	P412338	
		Endrin	0.42	U	ng/L	P412338	
		Endrin Aldehyde	0.79	U	ng/L	P412338	
		Endrin Ketone	0.42	U	ng/L	P412338	MS, RPD
		Esfenvalerate**	0.79	U	ng/L	P412338	
		Ethalfluralin**	0.16	U	ng/L	P412338	
		Fenpropathrin**	0.26	U	ng/L	P412338	
		Gamma-BHC	0.13	U	ng/L	P412338	
		Gamma-Chlordane	0.21	U	ng/L	P412338	
		Heptachlor	0.21	U	ng/L	P412338	
		Heptachlor Epoxide	0.26	U	ng/L	P412338	
		Hexachlorobenzene**	1.1	U	ng/L	P412338	
		Kepone**	5.3	U	ng/L	P412338	
		Lambda-Cyhalothrin**	0.79	U	ng/L	P412338	
		Methoprene**	0.79	U	ng/L	P412338	
		Methoxychlor	0.32	U	ng/L	P412338	
		MGK-264**	0.21	U	ng/L	P412338	
		Mirex	0.74	U	ng/L	P412338	
		Oxychlordane**	0.32	U	ng/L	P412338	

Field ID: G4SENNR3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318378	EPA 8270E	Permethrin	1.7	U	ng/L	P412338	
		Phenothrin**	0.95	U	ng/L	P412338	
		Piperonyl Butoxide**	2.3		ng/L	P412338	
		Prallethrin**	2.1	U	ng/L	P412338	
		Tau-Fluvalinate**	0.26	U	ng/L	P412338	
		Tetramethrin**	0.79	U	ng/L	P412338	
		Trans-Nonachlor**	0.21	U	ng/L	P412338	
		Triclosan Methyl**	0.16	U	ng/L	P412338	
		Trifluralin	0.21	U	ng/L	P412338	
	EPA 8276	Chlordane	2.6	U	ng/L	P412338	
		Toxaphene	16	U	ng/L	P412338	
2318379	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P412269	
		Acetochlor	0.24	U	ng/L	P412269	
		Octinoxate**	19	U	ng/L	P412269	
		Alachlor	0.24	U	ng/L	P412269	
		Avobenzone**	96	U	ng/L	P412269	
		Ametryn	0.58	U	ng/L	P412269	
		Atrazine	22		ng/L	P412269	
		Atrazine Desethyl	1.4	U	ng/L	P412269	
		Azinphos Methyl	1.9	U	ng/L	P412269	
		Azoxystrobin**	0.48	U	ng/L	P412269	
		Bromacil	0.48	U	ng/L	P412269	
		Butylate	0.39	U	ng/L	P412269	
		Caffeine**	7.2	U	ng/L	P412269	
		Carbophenothion	0.19	U	ng/L	P412269	
		Carfentrazone Ethyl**	0.096	U	ng/L	P412269	
		Chlorfenapyr**	0.17	UJ	ng/L	P412269	LCS
		Chlorpyrifos Ethyl	0.24	U	ng/L	P412269	
		Chlorpyrifos Methyl	0.048	U	ng/L	P412269	
		Coumaphos**	0.48	U	ng/L	P412269	
		Cyanazine	3.1	U	ng/L	P412269	
		Cyprodinil**	0.096	U	ng/L	P412269	
		Demeton	1.4	U	ng/L	P412269	
		Diazinon	0.12	U	ng/L	P412269	
		Difenoconazole**	0.58	U	ng/L	P412269	
		Dimethenamid**	0.096	U	ng/L	P412269	
		Dimethomorph**	0.17	U	ng/L	P412269	MS
		Disulfoton	0.48	U	ng/L	P412269	
		Dithiopyr**	0.17	U	ng/L	P412269	
		EPTC	1.2	U	ng/L	P412269	
		Ethion	0.14	U	ng/L	P412269	
		Ethoprop	0.096	U	ng/L	P412269	
		Etridiazole**	0.14	U	ng/L	P412269	
		Fenamiphos	0.48	U	ng/L	P412269	
		Fenbuconazole**	0.12	U	ng/L	P412269	

Field ID: G4SENNR3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318379	EPA 8270E	Fipronil	0.24	U	ng/L	P412269	
		Fipronil Desulfinyl**	0.12	U	ng/L	P412269	
		Fipronil Sulfide	0.14	U	ng/L	P412269	
		Fipronil Sulfone	0.14	U	ng/L	P412269	
		Fluazifop-P-butyl**	0.096	U	ng/L	P412269	
		Fludioxonil**	0.12	U	ng/L	P412269	
		Flumioxazin**	1.7	U	ng/L	P412269	
		Flutolanil**	0.096	U	ng/L	P412269	
		Fluxapyroxad**	0.16	I	ng/L	P412269	
		Fonofos	0.19	U	ng/L	P412269	
		Hexazinone	1.5	I	ng/L	P412269	
		Imazalil**	0.72	U	ng/L	P412269	
		Iprodione**	0.58	U	ng/L	P412269	
		Loratadine**	0.096	U	ng/L	P412269	
		Malathion	0.34	U	ng/L	P412269	
		Metalaxyl	0.72	U	ng/L	P412269	
		Metolachlor	1.5		ng/L	P412269	
		Metribuzin	2.4	U	ng/L	P412269	
		Mevinphos	1.0	U	ng/L	P412269	
		Molinate	0.29	U	ng/L	P412269	
		Myclobutanil**	0.24	U	ng/L	P412269	
		Naled**	1.4	U	ng/L	P412269	
		Napropamide**	0.39	U	ng/L	P412269	
		Norflurazon	0.48	U	ng/L	P412269	
		Oxadiazon	0.83	I	ng/L	P412269	
		Oxyfluorfen**	0.14	U	ng/L	P412269	
		Parathion Ethyl	0.24	U	ng/L	P412269	
		Parathion Methyl	0.53	U	ng/L	P412269	
		Pendimethalin	0.96	U	ng/L	P412269	
		Phenytoin**	3.4	U	ng/L	P412269	MS, RPD
		Phorate	0.51	U	ng/L	P412269	
		Prodiamine**	0.17	U	ng/L	P412269	MS, RPD
		Prometon	0.87	U	ng/L	P412269	
		Prometryn	0.19	U	ng/L	P412269	
		Pronamide**	0.14	U	ng/L	P412269	
		Propanil**	0.12	U	ng/L	P412269	
		Propargite**	1.4	U	ng/L	P412269	
		Propiconazole**	0.48	U	ng/L	P412269	
		Pyraflufen Ethyl**	0.24	U	ng/L	P412269	
		Pyridaben**	0.43	U	ng/L	P412269	
		Pyriproxyfen**	0.12	U	ng/L	P412269	
		Simazine	0.48	U	ng/L	P412269	
		Stirophos**	0.12	U	ng/L	P412269	
		Sulfentrazone**	0.48	U	ng/L	P412269	
		Tebuconazole**	0.48	U	ng/L	P412269	

Field ID: G4SENNR3 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2318379	EPA 8270E	Terbufos	0.096	U	ng/L	P412269	
		Terbuthylazine	0.41	U	ng/L	P412269	
		Thiobencarb**	0.58	U	ng/L	P412269	
		Triadimefon**	0.24	U	ng/L	P412269	

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412262

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P412394

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	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: P412394

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	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 350.1 Rev. 2.0
Batch ID: P412302

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412510

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412399

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412600

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

Reference Method: EPA 8270E
Batch ID: P412269

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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	0.18	U	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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412269

Component	Result	Code	Units
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
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E
Batch ID: P412338

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412338

Component	Result	Code	Units
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
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	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P412338

Component	Result	Code	Units
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P412338

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: P412254

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P412254

Component	Result	Code	Units
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P412342

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: P412352

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: P412371

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P412371

Component	Result	Code	Units
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P412808

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

Reference Method: SM 2540 D-2011
Batch ID: P412561

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P412811

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P412477

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412262

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.3		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P412394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Iron	110		P	85 - 115
Magnesium	104		P	85 - 115
Strontium	104		P	85 - 115
Tin	102		P	85 - 115
Titanium	106		P	85 - 115
Vanadium	99.1		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P412394

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	102		P	85 - 115
Beryllium	94.0		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	98.4		P	85 - 115
Cobalt	103		P	85 - 115
Copper	98.6		P	85 - 115
Lead	103		P	85 - 115
Manganese	99.6		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	100		P	85 - 115
Selenium	99.0		P	85 - 115
Silver	105		P	85 - 115
Thallium	105		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412302

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412510

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412600

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.6		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P412269

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	87.7		P	70 - 121
Alachlor	92.3		P	68 - 119
Ametryn	103		P	64 - 139
Atrazine	105		P	76 - 120
Atrazine Desethyl	64.9		P	44 - 126
Avobenzone	91.4		P	76 - 212
Azinphos Methyl	107		P	43 - 192
Azoxystrobin	142		P	36 - 224
Bromacil	66.7		P	52 - 121
Butylate	74.3		P	28 - 91.0
Caffeine	76.0		P	50 - 134
Carbophenothion	119		P	56 - 129
Carfentrazone Ethyl	129		P	60 - 141
Chlorfenapyr	122		F	56 - 115
Chlorpyrifos Ethyl	86.3		P	60 - 118
Chlorpyrifos Methyl	71.6		P	68 - 119
Coumaphos	65.0		P	18 - 250
Cyanazine	179		P	61 - 250
Cyprodinil	59.0		P	55 - 145
Demeton	71.4		P	30 - 159
Diazinon	72.4		P	70 - 123
Difenoconazole	62.8		P	49 - 204
Dimethenamid	69.6		P	64 - 115
Dimethomorph	170		P	12 - 219
Disulfoton	72.2		P	44 - 125
Dithiopyr	86.8		P	64 - 115
EPTC	61.6		P	28 - 86.0
Ethion	36.3		P	33 - 125
Ethoprop	104		P	64 - 116
Etridiazole	69.2		P	34 - 91.0
Fenamiphos	71.8		P	12 - 127
Fenbuconazole	84.1		P	59 - 151
Fipronil	67.8		P	67 - 129
Fipronil Desulfinyl	118		P	65 - 127
Fipronil Sulfide	113		P	61 - 116
Fipronil Sulfone	116		P	55 - 117
Fluazifop-P-butyl	110		P	62 - 127
Fludioxonil	126		P	62 - 128
Flumioxazin	62.2		P	33 - 250
Flutolanil	71.1		P	56 - 127
Fluxapyroxad	59.6		P	45 - 128
Fonofos	70.1		P	62 - 111
Hexazinone	80.1		P	46 - 139
Imazalil	47.7		P	38 - 142
Iprodione	70.8		P	47 - 135
Loratadine	220		P	10 - 244

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P412269

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Malathion	77.3		P	61 - 139
Metalaxyl	57.8		P	10 - 119
Metolachlor	78.0		P	65 - 118
Metribuzin	89.1		P	51 - 250
Mevinphos	80.7		P	53 - 121
Molinate	60.0		P	42 - 96.0
Myclobutanil	66.1		P	55 - 128
Naled	75.6		P	10 - 98.0
Napropamide	53.2		P	49 - 121
Norflurazon	110		P	61 - 126
Octinoxate	85.2		P	30 - 159
Oxadiazon	65.2		P	59 - 116
Oxybenzone	77.1		P	61 - 139
Oxyfluorfen	76.6		P	64 - 137
Parathion Ethyl	98.3		P	70 - 112
Parathion Methyl	86.2		P	76 - 133
Pendimethalin	78.5		P	52 - 117
Phenytoin	15.6		P	10 - 199
Phorate	83.5		P	48 - 121
Prodiamine	31.8		P	26 - 142
Prometon	74.2		P	43 - 123
Prometryn	95.6		P	66 - 127
Pronamide	100		P	75 - 121
Propanil	85.5		P	45 - 150
Propargite	90.0		P	42 - 208
Propiconazole	109		P	60 - 125
Pyraflufen Ethyl	108		P	70 - 138
Pyridaben	71.3		P	35 - 245
Pyriproxyfen	78.5		P	30 - 149
Simazine	98.3		P	72 - 125
Stirophos	35.9		P	29 - 164
Sulfentrazone	48.7		P	21 - 139
Tebuconazole	15.3		P	10 - 115
Terbufos	105		P	60 - 123
Terbuthylazine	75.8		P	72 - 115
Thiobencarb	76.7		P	31 - 139
Triadimefon	100		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P412338

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	47.4		P	10 - 93.0
Alpha-BHC	96.4		P	75 - 106
Alpha-Chlordane	78.6		P	50 - 109
Beta-BHC	102		P	36 - 138
Beta-Cyfluthrin	65.1		P	23 - 167
Bifenthrin	47.0		P	11 - 123
Chlorothalonil	47.8		P	27 - 190
Cis-Nonachlor	67.6		P	40 - 111
Cypermethrin	65.6		P	25 - 155
Dacthal	89.4		P	72 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P412338

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	73.4		P	47 - 108
DDE-p,p'	74.6		P	48 - 107
DDT-p,p'	74.1		P	49 - 111
Delta-BHC	107		P	54 - 138
Deltamethrin	76.5		P	22 - 189
Dichlobenil	89.7		P	32 - 113
Dicofol	72.3		P	50 - 108
Dieldrin	76.7		P	56 - 110
Endosulfan I	80.2		P	60 - 105
Endosulfan II	78.0		P	50 - 120
Endosulfan Sulfate	87.7		P	55 - 121
Endrin	77.6		P	31 - 119
Endrin Aldehyde	100		P	36 - 116
Endrin Ketone	103		P	69 - 177
Esfenvalerate	67.4		P	10 - 179
Ethalfluralin	80.1		P	49 - 99.0
Fenpropathrin	60.8		P	35 - 119
Gamma-BHC	94.4		P	69 - 120
Gamma-Chlordane	72.7		P	45 - 107
Heptachlor	70.4		P	41 - 100
Heptachlor Epoxide	92.6		P	58 - 106
Hexachlorobenzene	73.7		P	39 - 100
Kepone	108		P	10 - 191
Lambda-Cyhalothrin	51.3		P	21 - 206
Methoprene	48.8		P	10 - 129
Methoxychlor	85.4		P	61 - 111
MGK-264	72.4		P	20 - 123
Mirex	52.9		P	10 - 182
Oxychlordane	78.6		P	39 - 110
PCB-1016	83.8		P	49 - 111
PCB-1260	101		P	42 - 116
Permethrin	64.6		P	26 - 152
Phenothrin	39.8		P	10 - 109
Piperonyl Butoxide	96.3		P	19 - 147
Prallethrin	69.6		P	14 - 109
Tau-Fluvalinate	52.4		P	16 - 134
Tetramethrin	86.5		P	10 - 125
Trans-Nonachlor	66.6		P	45 - 107
Triclosan Methyl	78.9		P	60 - 110
Trifluralin	75.6		P	44 - 101

Reference Method: EPA 8276
Batch ID: P412338

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	96.4		P	61 - 118
Toxaphene	81.2		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P412254

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P412254

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.5		P	40 - 150
2,4,5-T	74.5		P	40 - 150
Acetaminophen	65.9		P	30 - 150
Acetamiprid	102		P	40 - 150
Afidopyropen	99.0		P	40 - 150
Bentazon	93.7		P	30 - 150
Benzovindiflupyr	101		P	40 - 150
Carbamazepine	115		P	40 - 150
Clothianidin	104		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	76.7		P	40 - 150
Fenuron	114		P	40 - 150
Fluridone	95.3		P	40 - 150
Hydrocodone	97.9		P	40 - 150
Ibuprofen	108		P	40 - 150
Imazapyr	107		P	40 - 150
Imidacloprid	94.3		P	40 - 150
Linuron	78.3		P	40 - 150
Mandestrobin	108		P	40 - 150
MCPP	110		P	40 - 150
Naproxen	81.0		P	40 - 150
Primidone	116		P	40 - 150
Pyraclostrobin	86.0		P	40 - 150
Silvex	66.9		P	40 - 150
Thiamethoxam	113		P	40 - 150
Tolfenpyrad	48.5		P	30 - 150
Triclopyr	71.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412342

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.8		P	40 - 150
AMPA	87.4		P	40 - 150
Endothall	110		P	40 - 150
Glufosinate	93.1		P	40 - 150
Glyphosate	107		P	40 - 150
Sucralose	83.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412352

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	86.5		P	40 - 150
AMPA	99.5		P	40 - 150
Endothall	114		P	40 - 150
Glufosinate	109		P	40 - 150
Glyphosate	127		P	40 - 150
Sucralose	78.2		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P412371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	93.1		P	40 - 150
Aldicarb	81.9		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150
Aldicarb Sulfoxide	115		P	40 - 150
Carbaryl	79.2		P	40 - 150
Carbofuran	97.5		P	40 - 150
Methiocarb	83.4		P	40 - 150
Methomyl	96.2		P	40 - 150
Oxamyl	106		P	40 - 150
Propoxur	89.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P412808

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P412811

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P412477

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.6		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P412394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318261	Iron	104	105	P/P	70 - 130
2318261	Tin	77.6	89.5	P/P	70 - 130
2318261	Titanium	86.0	90.4	P/P	70 - 130
2318261	Vanadium	101	101	P/P	70 - 130
2318261	Zinc	100	101	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P412394

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318261	Aluminum	119	126	P/P	70 - 130
2318261	Antimony	101	101	P/P	70 - 130
2318261	Arsenic	115	117	P/P	70 - 130
2318261	Beryllium	108	105	P/P	70 - 130
2318261	Cadmium	94.9	94.6	P/P	70 - 130
2318261	Chromium	103	102	P/P	70 - 130
2318261	Cobalt	114	115	P/P	70 - 130
2318261	Copper	109	110	P/P	70 - 130
2318261	Lead	110	111	P/P	70 - 130
2318261	Manganese	98.5	98.6	P/P	70 - 130
2318261	Molybdenum	115	116	P/P	70 - 130
2318261	Nickel	119	120	P/P	70 - 130
2318261	Selenium	103	103	P/P	70 - 130
2318261	Silver	95.7	95.2	P/P	70 - 130
2318261	Thallium	111	112	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412302

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318298	Ammonia-N	100	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412510

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2317821	Kjeldahl Nitrogen	91.3	90.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318322	NO2NO3-N	98.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318357	Total-P	98.8	97.7	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318871	Acetochlor	100	113	P/P	65 - 124
2318871	Alachlor	94.4	109	P/P	61 - 121
2318871	Ametryn	132	126	P/P	52 - 216
2318871	Atrazine Desethyl	43.6	51.0	P/P	15 - 160
2318871	Avobenzone	85.1	92.0	P/P	59 - 206
2318871	Azinphos Methyl	106	99.2	P/P	40 - 292
2318871	Azoxystrobin	118	126	P/P	12 - 242
2318871	Bromacil	68.9	100	P/P	54 - 167
2318871	Butylate	50.3	41.4	P/P	14 - 94.0
2318871	Caffeine	85.9	85.4	P/P	10 - 226
2318871	Carbophenothion	70.1	54.7	P/P	49 - 122
2318871	Carfentrazone Ethyl	123	116	P/P	53 - 138
2318871	Chlorfenapyr	59.9	64.6	P/P	50 - 150
2318871	Chlorpyrifos Ethyl	77.5	91.3	P/P	52 - 122
2318871	Chlorpyrifos Methyl	74.1	95.2	P/P	66 - 117
2318871	Coumaphos	161	166	P/P	50 - 220
2318871	Cyanazine	58.7	70.1	P/P	43 - 245
2318871	Cyprodinil	68.7	92.8	P/P	50 - 150
2318871	Demeton	65.7	76.6	P/P	43 - 188
2318871	Diazinon	69.6	81.2	P/P	69 - 131
2318871	Difenoconazole	101	105	P/P	34 - 231
2318871	Dimethenamid	73.2	87.0	P/P	55 - 118
2318871	Dimethomorph	179	158	F/F	50 - 150
2318871	Disulfoton	63.3	74.4	P/P	38 - 141
2318871	Dithiopyr	90.2	80.9	P/P	42 - 116
2318871	EPTC	54.8	49.7	P/P	18 - 85.0
2318871	Ethion	45.3	30.3	P/P	10 - 131
2318871	Ethoprop	83.3	87.8	P/P	65 - 129
2318871	Etridiazole	58.1	62.9	P/P	50 - 150
2318871	Fenamiphos	69.4	61.7	P/P	31 - 137
2318871	Fenbuconazole	79.9	92.0	P/P	57 - 160
2318871	Fipronil	72.3	73.0	P/P	62 - 132
2318871	Fipronil Desulfinyl	125	111	P/P	57 - 131
2318871	Fipronil Sulfide	50.4	50.1	P/P	15 - 138
2318871	Fipronil Sulfone	60.9	63.7	P/P	21 - 134
2318871	Fluazifop-P-butyl	57.9	72.6	P/P	54 - 133
2318871	Fludioxonil	70.0	86.3	P/P	58 - 127
2318871	Flumioxazin	121	105	P/P	33 - 300
2318871	Flutolanil	70.8	76.0	P/P	42 - 130
2318871	Fluxapyroxad	61.7	75.8	P/P	23 - 141
2318871	Fonofos	91.8	92.1	P/P	58 - 119
2318871	Hexazinone	105	113	P/P	68 - 172
2318871	Imazalil	80.0	75.8	P/P	48 - 283
2318871	Iprodione	73.5	87.7	P/P	38 - 140
2318871	Loratadine	147	145	P/P	50 - 150
2318871	Malathion	77.2	93.8	P/P	40 - 137
2318871	Metalaxyl	71.8	102	P/P	21 - 129
2318871	Metolachlor	96.1	119	P/P	55 - 122
2318871	Metribuzin	93.6	90.9	P/P	38 - 187
2318871	Mevinphos	66.1	63.9	P/P	54 - 134
2318871	Molinate	74.2	75.2	P/P	41 - 97.0
2318871	Myclobutanil	71.6	86.8	P/P	56 - 125

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412269

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318871	Naled	77.9	86.8	P/P	10 - 108
2318871	Napropamide	53.5	58.1	P/P	50 - 150
2318871	Norflurazon	115	113	P/P	32 - 122
2318871	Octinoxate	74.6	80.6	P/P	25 - 150
2318871	Oxadiazon	66.3	76.7	P/P	40 - 119
2318871	Oxybenzone	70.2	82.5	P/P	59 - 147
2318871	Oxyfluorfen	89.8	103	P/P	61 - 153
2318871	Parathion Ethyl	107	97.1	P/P	59 - 130
2318871	Parathion Methyl	105	99.4	P/P	65 - 155
2318871	Pendimethalin	111	96.1	P/P	49 - 138
2318871	Phenytoin	4.46	17.5	F/F	50 - 200
2318871	Phorate	99.8	95.3	P/P	54 - 161
2318871	Prodiamine	213	117	F/P	33 - 161
2318871	Prometon	94.5	89.3	P/P	48 - 140
2318871	Prometryn	109	98.7	P/P	55 - 134
2318871	Pronamide	80.8	101	P/P	66 - 137
2318871	Propanil	121	117	P/P	50 - 150
2318871	Propargite	91.6	87.0	P/P	50 - 200
2318871	Propiconazole	109	96.8	P/P	36 - 150
2318871	Pyraflufen Ethyl	105	84.8	P/P	50 - 150
2318871	Pyridaben	53.7	54.2	P/P	50 - 200
2318871	Pyriproxyfen	78.7	88.3	P/P	10 - 165
2318871	Simazine	95.2	79.5	P/P	57 - 145
2318871	Stirophos	89.5	83.1	P/P	50 - 150
2318871	Sulfentrazone	71.1	73.7	P/P	34 - 140
2318871	Tebuconazole	92.0	82.1	P/P	10 - 127
2318871	Terbufos	82.2	92.1	P/P	59 - 138
2318871	Terbuthylazine	71.0	76.2	P/P	68 - 119
2318871	Thiobencarb	83.0	97.2	P/P	50 - 150
2318871	Triadimefon	71.0	81.0	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P412338

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318339	Aldrin	64.4	64.7	P/P	10 - 89.0
2318339	Alpha-BHC	94.2	95.4	P/P	71 - 105
2318339	Alpha-Chlordane	72.7	72.2	P/P	43 - 107
2318339	Beta-BHC	118	120	P/P	57 - 152
2318339	Beta-Cyfluthrin	78.7	79.6	P/P	29 - 186
2318339	Bifenthrin	61.7	63.5	P/P	19 - 119
2318339	Chlorothalonil	129	157	P/P	10 - 245
2318339	Cis-Nonachlor	66.7	72.7	P/P	36 - 110
2318339	Cypermethrin	84.2	84.6	P/P	24 - 169
2318339	Dacthal	87.8	87.9	P/P	62 - 115
2318339	DDD-p,p'	73.0	73.2	P/P	36 - 109
2318339	DDE-p,p'	75.9	75.7	P/P	30 - 114
2318339	DDT-p,p'	80.7	80.5	P/P	42 - 108
2318339	Delta-BHC	126	131	P/P	60 - 164
2318339	Deltamethrin	60.7	63.2	P/P	10 - 210
2318339	Dichlobenil	61.3	56.2	P/P	23 - 108
2318339	Dicofol	77.1	76.2	P/P	44 - 109

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P412338

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318339	Dieldrin	78.4	80.2	P/P	37 - 119
2318339	Endosulfan I	81.4	82.1	P/P	52 - 105
2318339	Endosulfan II	72.9	74.6	P/P	35 - 127
2318339	Endosulfan Sulfate	80.0	78.9	P/P	39 - 130
2318339	Endrin	79.1	78.6	P/P	30 - 116
2318339	Endrin Aldehyde	81.8	86.1	P/P	20 - 110
2318339	Endrin Ketone	96.2	140	P/F	48 - 134
2318339	Esfenvalerate	86.9	86.5	P/P	10 - 199
2318339	Ethalfluralin	86.9	87.4	P/P	48 - 95.0
2318339	Fenpropathrin	77.1	77.2	P/P	37 - 121
2318339	Gamma-BHC	99.1	104	P/P	61 - 126
2318339	Gamma-Chlordane	78.4	77.8	P/P	39 - 105
2318339	Heptachlor	76.0	75.7	P/P	38 - 96.0
2318339	Heptachlor Epoxide	96.8	94.0	P/P	42 - 114
2318339	Hexachlorobenzene	82.7	83.0	P/P	39 - 93.0
2318339	Kepone	58.0	68.3	P/P	10 - 215
2318339	Lambda-Cyhalothrin	72.8	75.6	P/P	10 - 204
2318339	Methoprene	71.0	72.1	P/P	17 - 108
2318339	Methoxychlor	98.5	97.3	P/P	56 - 115
2318339	MGK-264	82.1	79.5	P/P	35 - 120
2318339	Mirex	60.6	62.2	P/P	10 - 178
2318339	Oxychlordane	79.3	82.9	P/P	47 - 91.0
2318339	Permethrin	77.8	79.3	P/P	27 - 170
2318339	Phenothrin	65.1	66.4	P/P	10 - 133
2318339	Piperonyl Butoxide	93.3	96.5	P/P	23 - 150
2318339	Prallethrin	75.1	79.2	P/P	21 - 113
2318339	Tau-Fluvalinate	70.2	70.2	P/P	16 - 158
2318339	Tetramethrin	106	102	P/P	22 - 132
2318339	Trans-Nonachlor	72.5	76.1	P/P	43 - 102
2318339	Triclosan Methyl	79.6	80.2	P/P	49 - 109
2318339	Trifluralin	86.1	86.6	P/P	48 - 93.0
2318668	PCB-1016	85.4	82.1	P/P	46 - 110
2318668	PCB-1260	84.4	86.1	P/P	42 - 111

Reference Method: EPA 8276
Batch ID: P412338

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318668	Chlordane	91.5	88.2	P/P	55 - 128
2318668	Toxaphene	90.1	90.5	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P412254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318087	2,4-D	77.0	93.1	P/P	40 - 150
2318087	2,4,5-T	72.1	75.2	P/P	40 - 150
2318087	Acetaminophen	102	97.5	P/P	30 - 150
2318087	Acetamiprid	85.8	74.4	P/P	40 - 150
2318087	Afidopyropen	80.8	74.7	P/P	40 - 150
2318087	Bentazon	81.3	79.8	P/P	30 - 150
2318087	Benzovindiflupyr	108	98.8	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P412254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318087	Carbamazepine	112	110	P/P	40 - 150
2318087	Clothianidin	95.4	96.2	P/P	40 - 150
2318087	Dinotefuran	112	110	P/P	40 - 150
2318087	Diuron	94.1	93.8	P/P	40 - 150
2318087	Fenuron	142	156	P/F	40 - 150
2318087	Fluridone	93.2	91.5	P/P	40 - 150
2318087	Hydrocodone	94.9	104	P/P	40 - 150
2318087	Ibuprofen	127	130	P/P	40 - 150
2318087	Imazapyr	102	90.8	P/P	40 - 150
2318087	Imidacloprid	115	98.9	P/P	40 - 150
2318087	Linuron	75.8	59.2	P/P	40 - 150
2318087	Mandestrobin	93.0	101	P/P	40 - 150
2318087	MCPP	115	94.7	P/P	40 - 150
2318087	Naproxen	70.5	55.6	P/P	40 - 150
2318087	Primidone	140	138	P/P	40 - 150
2318087	Pyraclostrobin	87.1	86.0	P/P	40 - 150
2318087	Silvex	61.0	59.7	P/P	40 - 150
2318087	Thiamethoxam	116	115	P/P	40 - 150
2318087	Tolfenpyrad	45.0	46.8	P/P	30 - 150
2318087	Triclopyr	74.1	65.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412342

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318087	Acesulfame K	94.1	93.8	P/P	40 - 150
2318087	AMPA	86.9	83.6	P/P	40 - 150
2318087	Endothall	118	116	P/P	40 - 150
2318087	Glufosinate	90.0	89.2	P/P	40 - 150
2318087	Glyphosate	125	117	P/P	40 - 150
2318087	Sucralose	87.0	78.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412352

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318391	Acesulfame K	95.8	101	P/P	40 - 150
2318391	AMPA	80.2	91.9	P/P	40 - 150
2318391	Endothall	115	122	P/P	40 - 150
2318391	Glufosinate	110	112	P/P	40 - 150
2318391	Glyphosate	101	117	P/P	40 - 150
2318391	Sucralose	74.2	81.7	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P412371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318337	3-Hydroxycarbofuran	93.5	104	P/P	40 - 150
2318337	Aldicarb	63.1	110	P/P	30 - 150
2318337	Aldicarb Sulfone	95.3	112	P/P	40 - 150
2318337	Aldicarb Sulfoxide	57.8	59.7	P/P	40 - 150
2318337	Carbaryl	65.4	64.1	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P412371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318337	Carbofuran	91.9	106	P/P	40 - 150
2318337	Methiocarb	86.3	92.8	P/P	40 - 150
2318337	Methomyl	88.7	96.5	P/P	40 - 150
2318337	Oxamyl	93.4	102	P/P	40 - 150
2318337	Propoxur	74.9	81.1	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P412811

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2319759	Fluoride	99.1	97.7	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P412477

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2318660	Organic Carbon	87.1	88.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P412262

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318385	Turbidity	7.81	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P412394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318261	Calcium	1.90	Spike	P	0 - 20
2318261	Iron	0.366	Spike	P	0 - 20
2318261	Magnesium	1.35	Spike	P	0 - 20
2318261	Strontium	1.36	Spike	P	0 - 20
2318261	Tin	14.2	Spike	P	0 - 20
2318261	Titanium	3.70	Spike	P	0 - 20
2318261	Vanadium	0.135	Spike	P	0 - 20
2318261	Zinc	0.786	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P412394

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318261	Aluminum	5.23	Spike	P	0 - 20
2318261	Antimony	0.132	Spike	P	0 - 20
2318261	Arsenic	1.40	Spike	P	0 - 20
2318261	Beryllium	2.97	Spike	P	0 - 20
2318261	Cadmium	0.257	Spike	P	0 - 20
2318261	Chromium	0.0921	Spike	P	0 - 20
2318261	Cobalt	0.851	Spike	P	0 - 20
2318261	Copper	1.06	Spike	P	0 - 20
2318261	Lead	0.719	Spike	P	0 - 20
2318261	Manganese	0.138	Spike	P	0 - 20
2318261	Molybdenum	1.08	Spike	P	0 - 20
2318261	Nickel	0.597	Spike	P	0 - 20
2318261	Selenium	0.317	Spike	P	0 - 20
2318261	Silver	0.538	Spike	P	0 - 20
2318261	Thallium	1.09	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P412302

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318298	Ammonia-N	0.343	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P412510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2317821	Kjeldahl Nitrogen	0.349	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P412399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318322	NO2NO3-N	2.02	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P412600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318357	Total-P	1.11	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P412269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318871	Acetochlor	11.8	Spike	P	0 - 27
2318871	Alachlor	14.2	Spike	P	0 - 27
2318871	Ametryn	4.70	Spike	P	0 - 34
2318871	Atrazine	5.73	Spike	P	0 - 41
2318871	Atrazine Desethyl	10.3	Spike	P	0 - 38
2318871	Avobenzone	7.73	Spike	P	0 - 30
2318871	Azinphos Methyl	6.45	Spike	P	0 - 62
2318871	Azoxystrobin	5.72	Spike	P	0 - 32
2318871	Bromacil	29.7	Spike	P	0 - 30
2318871	Butylate	19.3	Spike	P	0 - 59
2318871	Caffeine	0.662	Spike	P	0 - 60
2318871	Carbophenothion	24.6	Spike	P	0 - 25
2318871	Carfentrazone Ethyl	6.27	Spike	P	0 - 26
2318871	Chlorfenapyr	7.51	Spike	P	0 - 30
2318871	Chlorpyrifos Ethyl	16.4	Spike	P	0 - 27
2318871	Chlorpyrifos Methyl	25.0	Spike	P	0 - 26
2318871	Coumaphos	3.28	Spike	P	0 - 30
2318871	Cyanazine	17.7	Spike	P	0 - 58
2318871	Cyprodinil	29.9	Spike	P	0 - 30
2318871	Demeton	15.3	Spike	P	0 - 25
2318871	Diazinon	15.3	Spike	P	0 - 29
2318871	Difenoconazole	4.46	Spike	P	0 - 25
2318871	Dimethenamid	17.2	Spike	P	0 - 30
2318871	Dimethomorph	12.4	Spike	P	0 - 30
2318871	Disulfoton	16.1	Spike	P	0 - 33
2318871	Dithiopyr	10.9	Spike	P	0 - 22
2318871	EPTC	9.88	Spike	P	0 - 38
2318871	Ethion	39.8	Spike	P	0 - 79
2318871	Ethoprop	5.28	Spike	P	0 - 23
2318871	Etridiazole	7.93	Spike	P	0 - 30
2318871	Fenamiphos	11.7	Spike	P	0 - 58
2318871	Fenbuconazole	14.2	Spike	P	0 - 37
2318871	Fipronil	0.934	Spike	P	0 - 33
2318871	Fipronil Desulfinyl	11.8	Spike	P	0 - 26
2318871	Fipronil Sulfide	0.580	Spike	P	0 - 37
2318871	Fipronil Sulfone	4.42	Spike	P	0 - 50
2318871	Fluazifop-P-butyl	22.6	Spike	P	0 - 24

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P412269

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318871	Fludioxonil	20.9	Spike	P	0 - 26
2318871	Flumioxazin	13.4	Spike	P	0 - 37
2318871	Flutolanil	7.09	Spike	P	0 - 26
2318871	Fluxapyroxad	20.4	Spike	P	0 - 34
2318871	Fonofos	0.386	Spike	P	0 - 27
2318871	Hexazinone	6.91	Spike	P	0 - 36
2318871	Imazalil	5.35	Spike	P	0 - 65
2318871	Iprodione	17.7	Spike	P	0 - 33
2318871	Loratadine	1.88	Spike	P	0 - 30
2318871	Malathion	19.4	Spike	P	0 - 44
2318871	Metalaxyl	32.3	Spike	P	0 - 38
2318871	Metolachlor	18.2	Spike	P	0 - 36
2318871	Metribuzin	2.91	Spike	P	0 - 63
2318871	Mevinphos	3.27	Spike	P	0 - 26
2318871	Molinate	1.33	Spike	P	0 - 40
2318871	Myclobutanil	19.1	Spike	P	0 - 21
2318871	Naled	10.8	Spike	P	0 - 26
2318871	Napropamide	8.26	Spike	P	0 - 30
2318871	Norflurazon	1.05	Spike	P	0 - 24
2318871	Octinoxate	7.63	Spike	P	0 - 30
2318871	Oxadiazon	13.0	Spike	P	0 - 27
2318871	Oxybenzone	16.1	Spike	P	0 - 30
2318871	Oxyfluorfen	13.2	Spike	P	0 - 24
2318871	Parathion Ethyl	9.97	Spike	P	0 - 28
2318871	Parathion Methyl	5.39	Spike	P	0 - 27
2318871	Pendimethalin	13.9	Spike	P	0 - 31
2318871	Phenytoin	119	Spike	F	0 - 30
2318871	Phorate	4.56	Spike	P	0 - 27
2318871	Prodiamine	58.3	Spike	F	0 - 52
2318871	Prometon	5.66	Spike	P	0 - 31
2318871	Prometryn	9.58	Spike	P	0 - 28
2318871	Pronamide	22.3	Spike	P	0 - 26
2318871	Propanil	2.70	Spike	P	0 - 30
2318871	Propargite	5.18	Spike	P	0 - 30
2318871	Propiconazole	12.3	Spike	P	0 - 31
2318871	Pyraflufen Ethyl	20.9	Spike	P	0 - 30
2318871	Pyridaben	0.855	Spike	P	0 - 30
2318871	Pyriproxyfen	11.5	Spike	P	0 - 50
2318871	Simazine	10.3	Spike	P	0 - 29
2318871	Stirophos	7.39	Spike	P	0 - 30
2318871	Sulfentrazone	3.20	Spike	P	0 - 33
2318871	Tebuconazole	11.3	Spike	P	0 - 44
2318871	Terbufos	11.4	Spike	P	0 - 29
2318871	Terbuthylazine	7.04	Spike	P	0 - 27
2318871	Thiobencarb	15.7	Spike	P	0 - 30
2318871	Triadimefon	13.1	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P412338

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318339	Aldrin	0.350	Spike	P	0 - 37
2318339	Alpha-BHC	1.23	Spike	P	0 - 16
2318339	Alpha-Chlordane	0.737	Spike	P	0 - 28
2318339	Beta-BHC	1.77	Spike	P	0 - 32
2318339	Beta-Cyfluthrin	1.25	Spike	P	0 - 41
2318339	Bifenthrin	2.92	Spike	P	0 - 36
2318339	Chlorothalonil	18.9	Spike	P	0 - 54
2318339	Cis-Nonachlor	8.63	Spike	P	0 - 33
2318339	Cypermethrin	0.458	Spike	P	0 - 38
2318339	Dacthal	0.0569	Spike	P	0 - 23
2318339	DDD-p,p'	0.340	Spike	P	0 - 35
2318339	DDE-p,p'	0.320	Spike	P	0 - 27
2318339	DDT-p,p'	0.186	Spike	P	0 - 31
2318339	Delta-BHC	4.15	Spike	P	0 - 30
2318339	Deltamethrin	4.11	Spike	P	0 - 76
2318339	Dichlobenil	8.80	Spike	P	0 - 33
2318339	Dicofol	1.15	Spike	P	0 - 24
2318339	Dieldrin	2.03	Spike	P	0 - 35
2318339	Endosulfan I	0.849	Spike	P	0 - 25
2318339	Endosulfan II	2.32	Spike	P	0 - 31
2318339	Endosulfan Sulfate	1.43	Spike	P	0 - 38
2318339	Endrin	0.626	Spike	P	0 - 53
2318339	Endrin Aldehyde	5.18	Spike	P	0 - 81
2318339	Endrin Ketone	37.4	Spike	F	0 - 33
2318339	Esfenvalerate	0.483	Spike	P	0 - 46
2318339	Ethalfluralin	0.606	Spike	P	0 - 22
2318339	Fenpropathrin	0.113	Spike	P	0 - 29
2318339	Gamma-BHC	4.68	Spike	P	0 - 17
2318339	Gamma-Chlordane	0.730	Spike	P	0 - 28
2318339	Heptachlor	0.488	Spike	P	0 - 28
2318339	Heptachlor Epoxide	2.89	Spike	P	0 - 23
2318339	Hexachlorobenzene	0.405	Spike	P	0 - 22
2318339	Kepone	5.54	Spike	P	0 - 61
2318339	Lambda-Cyhalothrin	3.76	Spike	P	0 - 52
2318339	Methoprene	1.49	Spike	P	0 - 38
2318339	Methoxychlor	1.20	Spike	P	0 - 29
2318339	MGK-264	3.23	Spike	P	0 - 41
2318339	Mirex	2.61	Spike	P	0 - 39
2318339	Oxychlordane	4.45	Spike	P	0 - 33
2318339	Permethrin	1.88	Spike	P	0 - 39
2318339	Phenothrin	2.08	Spike	P	0 - 52
2318339	Piperonyl Butoxide	3.38	Spike	P	0 - 91
2318339	Prallethrin	5.33	Spike	P	0 - 34
2318339	Tau-Fluvalinate	0.0401	Spike	P	0 - 41
2318339	Tetramethrin	3.60	Spike	P	0 - 43
2318339	Trans-Nonachlor	4.79	Spike	P	0 - 31
2318339	Triclosan Methyl	0.745	Spike	P	0 - 24
2318339	Trifluralin	0.503	Spike	P	0 - 23
2318668	PCB-1016	3.95	Spike	P	0 - 32
2318668	PCB-1260	2.02	Spike	P	0 - 31

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P412338

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318668	Chlordane	3.63	Spike	P	0 - 25
2318668	Toxaphene	0.501	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P412254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318087	2,4-D	19.0	Spike	P	0 - 30
2318087	2,4,5-T	4.17	Spike	P	0 - 30
2318087	Acetaminophen	4.53	Spike	P	0 - 30
2318087	Acetamiprid	14.3	Spike	P	0 - 30
2318087	Afidopyropen	7.90	Spike	P	0 - 30
2318087	Bentazon	1.89	Spike	P	0 - 30
2318087	Benzovindiflupyr	8.82	Spike	P	0 - 30
2318087	Carbamazepine	2.45	Spike	P	0 - 30
2318087	Clothianidin	0.793	Spike	P	0 - 30
2318087	Dinotefuran	1.89	Spike	P	0 - 30
2318087	Diuron	0.255	Spike	P	0 - 30
2318087	Fenuron	9.54	Spike	P	0 - 30
2318087	Fluridone	1.85	Spike	P	0 - 30
2318087	Hydrocodone	8.98	Spike	P	0 - 30
2318087	Ibuprofen	1.80	Spike	P	0 - 30
2318087	Imazapyr	11.2	Spike	P	0 - 30
2318087	Imidacloprid	14.9	Spike	P	0 - 30
2318087	Linuron	24.7	Spike	P	0 - 30
2318087	Mandestrobin	8.33	Spike	P	0 - 30
2318087	MCPP	19.7	Spike	P	0 - 30
2318087	Naproxen	23.6	Spike	P	0 - 30
2318087	Primidone	1.73	Spike	P	0 - 30
2318087	Pyraclostrobin	1.32	Spike	P	0 - 30
2318087	Silvex	2.26	Spike	P	0 - 30
2318087	Thiamethoxam	0.550	Spike	P	0 - 30
2318087	Tolfenpyrad	3.91	Spike	P	0 - 30
2318087	Triclopyr	11.9	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P412342

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318087	Acesulfame K	0.303	Spike	P	0 - 30
2318087	AMPA	3.91	Spike	P	0 - 30
2318087	Endothall	1.64	Spike	P	0 - 30
2318087	Glufosinate	0.838	Spike	P	0 - 30
2318087	Glyphosate	6.42	Spike	P	0 - 30
2318087	Sucralose	9.70	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P412352

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318391	Acesulfame K	4.94	Spike	P	0 - 30
2318391	AMPA	12.5	Spike	P	0 - 30
2318391	Endothall	5.70	Spike	P	0 - 30
2318391	Glufosinate	1.81	Spike	P	0 - 30
2318391	Glyphosate	14.5	Spike	P	0 - 30
2318391	Sucralose	9.25	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P412371

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318337	3-Hydroxycarbofuran	10.8	Spike	P	0 - 30
2318337	Aldicarb	54.3	Spike	F	0 - 30
2318337	Aldicarb Sulfone	16.4	Spike	P	0 - 30
2318337	Aldicarb Sulfoxide	3.26	Spike	P	0 - 30
2318337	Carbaryl	1.96	Spike	P	0 - 30
2318337	Carbofuran	13.8	Spike	P	0 - 30
2318337	Methiocarb	7.20	Spike	P	0 - 30
2318337	Methomyl	8.46	Spike	P	0 - 30
2318337	Oxamyl	8.63	Spike	P	0 - 30
2318337	Propoxur	7.91	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P412808

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319759	Total Alkalinity	3.36	Sample	P	0 - 5.2

Reference Method: SM 4500-F- C-2011
Batch ID: P412811

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2319759	Fluoride	0.953	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P412477

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2318660	Organic Carbon	1.12	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2318374
Field Sample ID: G4SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	131	P	30 - 160
EPA 8321B	Acetaminophen-d4	116	P	30 - 160
EPA 8321B	Carbamazepine-d10	151	P	30 - 160
EPA 8321B	Diuron-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	85.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	70.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	111	P	30 - 160
EPA 8321B	Primidone-d5	72.1	P	30 - 160
EPA 8321B	Sucralose-d6	62.7	P	30 - 160

Lab Sample ID: 2318375
Field Sample ID: G4SENNR3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	70.9	P	30 - 160

Lab Sample ID: 2318376
Field Sample ID: G4SENNR3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	128	P	30 - 160
EPA 8321B	Acetaminophen-d4	120	P	30 - 160
EPA 8321B	Carbamazepine-d10	140	P	30 - 160
EPA 8321B	Diuron-d6	80.5	P	30 - 160
EPA 8321B	Endothall-d6	86.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	60.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	115	P	30 - 160
EPA 8321B	Primidone-d5	129	P	30 - 160
EPA 8321B	Sucralose-d6	63.8	P	30 - 160

Lab Sample ID: 2318377
Field Sample ID: G4SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	56.3	P	20 - 200
EPA 8270E	Simazine-d10	77.0	P	71 - 140
EPA 8270E	Terbufos-d10	94.9	P	62 - 131
EPA 8270E	Terphenyl-d14	93.3	P	50 - 124

Lab Sample ID: 2318378
Field Sample ID: G4SENNR3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	72.2	P	38 - 115
EPA 8270E	Decachlorobiphenyl	94.5	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	81.2	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	75.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	75.9	P	30 - 97.0
EPA 8276	PCNB	81.9	P	45 - 119

Quality Assurance Report
Surrogates

Lab Sample ID: 2318379
Field Sample ID: G4SENNR3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	49.3	P	20 - 200
EPA 8270E	Simazine-d10	92.5	P	71 - 140
EPA 8270E	Terbufos-d10	98.9	P	62 - 131
EPA 8270E	Terphenyl-d14	70.9	P	50 - 124

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A111434
Included Lab Sample IDs: 2318363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	99.5	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A111449
Included Lab Sample IDs: 2318364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A111492
Included Lab Sample IDs: 2318364

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

Reference Method: SM 5310 B-2011
Run ID: A111518
Included Lab Sample IDs: 2318364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.0	94.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A111539
Included Lab Sample IDs: 2318380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	98.2	98.5	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Beryllium	97.0	97.1	P/P	90 - 110
Cadmium	96.7	97.2	P/P	90 - 110
Chromium	96.7	95.7	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Lead	98.5	98.7	P/P	90 - 110
Manganese	97.8	96.4	P/P	90 - 110
Molybdenum	98.1	97.8	P/P	90 - 110
Nickel	104	104	P/P	90 - 110
Selenium	97.3	97.4	P/P	90 - 110
Silver	103	103	P/P	90 - 110
Thallium	97.0	97.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A111562
Included Lab Sample IDs: 2318380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	103	P/P	90 - 110
Cobalt	101	105	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111564
Included Lab Sample IDs: 2318377, 2318379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.3		P	80 - 120
Alachlor	106		P	80 - 120
Ametryn	110		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	98.9		P	80 - 120
Bromacil	109		P	80 - 120
Butylate	109		P	80 - 120
Caffeine	112		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	118		P	80 - 120
Chlorfenapyr	98.1		P	80 - 120
Chlorpyrifos Ethyl	91.9		P	80 - 120
Chlorpyrifos Methyl	94.7		P	80 - 120
Coumaphos	99.1		P	80 - 120
Cyanazine	93.1		P	80 - 120
Cyprodinil	99.4		P	80 - 120
Demeton	95.0		P	80 - 120
Diazinon	108		P	80 - 120
Difenoconazole	100		P	80 - 120
Dimethenamid	97.3		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	97.6		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	108		P	80 - 120
Ethion	106		P	80 - 120
Ethoprop	98.4		P	80 - 120
Etridiazole	95.0		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	96.4		P	80 - 120
Fipronil	96.5		P	80 - 120
Fipronil Desulfinyl	113		P	80 - 120
Fipronil Sulfide	90.2		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fluazifop-P-butyl	106		P	80 - 120
Fludioxonil	101		P	80 - 120
Flumioxazin	112		P	80 - 120
Flutolanil	108		P	80 - 120
Fluxapyroxad	106		P	80 - 120
Fonofos	98.0		P	80 - 120
Hexazinone	106		P	80 - 120
Imazalil	106		P	80 - 120
Iprodione	110		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	96.1		P	80 - 120
Metalaxyl	96.8		P	80 - 120
Metolachlor	95.9		P	80 - 120
Metribuzin	88.3		P	80 - 120
Mevinphos	92.3		P	80 - 120
Molinate	112		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111564
Included Lab Sample IDs: 2318377, 2318379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	105		P	80 - 120
Naled	91.0		P	80 - 120
Napropamide	109		P	80 - 120
Norflurazon	106		P	80 - 120
Oxadiazon	106		P	80 - 120
Oxyfluorfen	110		P	80 - 120
Parathion Ethyl	95.4		P	80 - 120
Parathion Methyl	95.8		P	80 - 120
Pendimethalin	96.7		P	80 - 120
Phenytoin	98.6		P	80 - 120
Phorate	86.9		P	80 - 120
Prodiamine	114		P	80 - 120
Prometon	95.2		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	101		P	80 - 120
Propanil	101		P	80 - 120
Propargite	109		P	80 - 120
Propiconazole	109		P	80 - 120
Pyraflufen Ethyl	108		P	80 - 120
Pyridaben	106		P	80 - 120
Pyriproxyfen	105		P	80 - 120
Simazine	94.2		P	80 - 120
Stirophos	106		P	80 - 120
Sulfentrazone	98.9		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	97.5		P	80 - 120
Terbuthylazine	100		P	80 - 120
Thiobencarb	99.6		P	80 - 120
Triadimefon	89.9		P	80 - 120

Reference Method: EPA 8276
Run ID: A111588
Included Lab Sample IDs: 2318378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.7		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111594
Included Lab Sample IDs: 2318378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.7		P	80 - 120
Alpha-BHC	99.5		P	80 - 120
Alpha-Chlordane	95.6		P	80 - 120
Beta-BHC	99.3		P	80 - 120
Beta-Cyfluthrin	92.9		P	80 - 120
Bifenthrin	93.9		P	80 - 120
Chlorothalonil	112		P	80 - 120
Cis-Nonachlor	96.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111594
Included Lab Sample IDs: 2318378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cypermethrin	95.3		P	80 - 120
Dacthal	96.6		P	80 - 120
DDD-p,p'	96.4		P	80 - 120
DDE-p,p'	98.1		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	93.8		P	80 - 120
Dichlobenil	95.5		P	80 - 120
Dicofol	93.5		P	80 - 120
Dieldrin	94.3		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	97.4		P	80 - 120
Endosulfan Sulfate	100		P	80 - 120
Endrin	99.9		P	80 - 120
Endrin Aldehyde	91.8		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	96.8		P	80 - 120
Ethalfluralin	97.8		P	80 - 120
Fenpropathrin	95.8		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	97.2		P	80 - 120
Heptachlor	99.2		P	80 - 120
Heptachlor Epoxide	98.4		P	80 - 120
Hexachlorobenzene	99.3		P	80 - 120
Kepone	110		P	80 - 120
Lambda-Cyhalothrin	92.8		P	80 - 120
Methoprene	97.4		P	80 - 120
Methoxychlor	99.5		P	80 - 120
MGK-264	94.4		P	80 - 120
Mirex	97.6		P	80 - 120
Oxychlordane	99.1		P	80 - 120
Permethrin	95.6		P	80 - 120
Phenothrin	94.5		P	80 - 120
Piperonyl Butoxide	93.7		P	80 - 120
Prallethrin	99.5		P	80 - 120
Tau-Fluvalinate	94.7		P	80 - 120
Tetramethrin	95.0		P	80 - 120
Trans-Nonachlor	96.7		P	80 - 120
Triclosan Methyl	97.3		P	80 - 120
Trifluralin	99.7		P	80 - 120

Reference Method: EPA 8321B
Run ID: A111604
Included Lab Sample IDs: 2318374, 2318376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	85.1	77.3	P/P	60 - 160
Sucralose	71.9	77.5	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A111607
Included Lab Sample IDs: 2318374, 2318376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	76.2	79.6	P/P	60 - 160
AMPA	80.7	86.7	P/P	60 - 160
Endothall	102	100	P/P	60 - 160
Glufosinate	84.2	92.7	P/P	60 - 160
Glufosinate	95.8	93.2	P/P	60 - 160
Glyphosate	108	109	P/P	60 - 160
Glyphosate	109	105	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A111610
Included Lab Sample IDs: 2318364

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A111618
Included Lab Sample IDs: 2318380

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	105	105	P/P	90 - 110
Iron	103	102	P/P	90 - 110
Magnesium	103	102	P/P	90 - 110
Strontium	101	101	P/P	90 - 110
Tin	99.0	101	P/P	90 - 110
Titanium	102	102	P/P	90 - 110
Vanadium	102	102	P/P	90 - 110
Zinc	102	104	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A111632
Included Lab Sample IDs: 2318378

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.0		P	80 - 120
PCB-1260	97.8		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111635
Included Lab Sample IDs: 2318377, 2318379

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	90.5		P	80 - 120
Octinoxate	91.4		P	80 - 120
Oxybenzone	97.7		P	80 - 120

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2318374, 2318376

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2318374, 2318376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	104	107	P/P	50 - 150
2,4-D	104	104	P/P	50 - 150
2,4,5-T	117	128	P/P	50 - 150
2,4,5-T	128	109	P/P	50 - 150
3-Hydroxycarbofuran	95.4	89.9	P/P	60 - 150
Acetaminophen	83.9	99.5	P/P	60 - 160
Acetaminophen	99.5	87.4	P/P	60 - 160
Acetamiprid	96.7	96.8	P/P	50 - 150
Acetamiprid	96.8	104	P/P	50 - 150
Afidopyropen	110	110	P/P	50 - 150
Afidopyropen	130	110	P/P	50 - 150
Aldicarb	90.0	124	P/P	60 - 150
Aldicarb Sulfone	97.1	102	P/P	50 - 150
Aldicarb Sulfoxide	101	98.1	P/P	50 - 150
Bentazon	107	112	P/P	50 - 160
Bentazon	112	111	P/P	50 - 160
Benzovindiflupyr	105	94.0	P/P	50 - 150
Benzovindiflupyr	123	105	P/P	50 - 150
Carbamazepine	104	111	P/P	60 - 150
Carbamazepine	111	92.6	P/P	60 - 150
Carbaryl	101	95.0	P/P	60 - 150
Carbofuran	119	98.2	P/P	50 - 150
Clothianidin	116	75.3	P/P	60 - 150
Clothianidin	75.3	64.5	P/P	60 - 150
Dinotefuran	102	100	P/P	50 - 150
Dinotefuran	102	102	P/P	50 - 150
Diuron	125	99.3	P/P	60 - 160
Diuron	97.5	125	P/P	60 - 160
Fenuron	88.9	87.0	P/P	60 - 150
Fenuron	91.5	88.9	P/P	60 - 150
Fluridone	115	95.3	P/P	60 - 160
Fluridone	95.3	95.0	P/P	60 - 160
Hydrocodone	101	102	P/P	60 - 150
Hydrocodone	103	101	P/P	60 - 150
Ibuprofen	127	137	P/P	50 - 160
Ibuprofen	137	128	P/P	50 - 160
Imazapyr	110	125	P/P	50 - 150
Imazapyr	125	142	P/P	50 - 150
Imidacloprid	86.8	94.8	P/P	60 - 150
Imidacloprid	94.8	93.3	P/P	60 - 150
Linuron	113	60.7	P/P	60 - 150
Linuron	60.7	134	P/P	60 - 150
Mandestrobin	113	97.4	P/P	50 - 150
Mandestrobin	97.4	103	P/P	50 - 150
MCPP	111	114	P/P	50 - 150
MCPP	129	111	P/P	50 - 150
Methiocarb	98.5	106	P/P	50 - 150
Methomyl	94.5	82.4	P/P	50 - 150
Naproxen	107	66.0	P/P	50 - 160
Naproxen	66.0	148	P/P	50 - 160
Oxamyl	97.3	91.8	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A111642
Included Lab Sample IDs: 2318374, 2318376

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Primidone	115	87.4	P/P	60 - 150
Primidone	87.4	147	P/P	60 - 150
Propoxur	108	89.1	P/P	50 - 150
Pyraclostrobin	101	99.8	P/P	60 - 150
Pyraclostrobin	99.8	107	P/P	60 - 150
Silvex	111	120	P/P	50 - 150
Silvex	120	112	P/P	50 - 150
Thiamethoxam	90.9	92.2	P/P	50 - 150
Thiamethoxam	98.8	90.9	P/P	50 - 150
Tolfenpyrad	105	111	P/P	60 - 150
Tolfenpyrad	112	105	P/P	60 - 150
Triclopyr	104	105	P/P	50 - 150
Triclopyr	105	119	P/P	50 - 150

Reference Method: SM 2320 B-2011
Run ID: A111656
Included Lab Sample IDs: 2318363

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.6	98.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A111656
Included Lab Sample IDs: 2318363

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A111662
Included Lab Sample IDs: 2318364

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	98.8	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	96.3				7.81	
EPA 200.7 Rev. 4.4	Calcium	107					1.90
	Iron	110	104	105			0.366
	Magnesium	104					1.35
	Strontium	104					1.36
	Tin	102	77.6	89.5			14.2
	Titanium	106	86.0	90.4			3.70
	Vanadium	99.1	101	101			0.135
	Zinc	105	100	101			0.786
EPA 200.8 Rev. 5.4	Aluminum	103	119	126			5.23
	Antimony	101	101	101			0.132
	Arsenic	102	115	117			1.40
	Beryllium	94.0	108	105			2.97
	Cadmium	100	94.9	94.6			0.257
	Chromium	98.4	103	102			0.0921
	Cobalt	103	114	115			0.851
	Copper	98.6	109	110			1.06
	Lead	103	110	111			0.719
	Manganese	99.6	98.5	98.6			0.138
	Molybdenum	101	115	116			1.08
	Nickel	100	119	120			0.597
	Selenium	99.0	103	103			0.317
	Silver	105	95.7	95.2			0.538
	Thallium	105	111	112			1.09
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	100	100			0.343
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.0	91.3	90.9			0.349
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	98.0	100			2.02
EPA 365.1 Rev. 2.0	Total-P	99.6	98.8	97.7			1.11
EPA 8270E	Acetochlor	87.7	100	113			11.8
	Alachlor	92.3	94.4	109			14.2
	Aldrin	47.4	64.4	64.7			0.350
	Alpha-BHC	96.4	94.2	95.4			1.23
	Alpha-Chlordane	78.6	72.7	72.2			0.737
	Ametryn	103	132	126			4.70
	Atrazine	105					5.73
	Atrazine Desethyl	64.9	43.6	51.0			10.3
	Avobenzone	91.4	85.1	92.0			7.73
	Azinphos Methyl	107	106	99.2			6.45
	Azoxystrobin	142	118	126			5.72
	Beta-BHC	102	118	120			1.77
	Beta-Cyfluthrin	65.1	78.7	79.6			1.25
	Bifenthrin	47.0	61.7	63.5			2.92
	Bromacil	66.7	68.9	100			29.7
	Butylate	74.3	50.3	41.4			19.3
	Caffeine	76.0	85.9	85.4			0.662
	Carbophenothion	119	70.1	54.7			24.6
	Carfentrazone Ethyl	129	123	116			6.27
	Chlorfenapyr	122	59.9	64.6			7.51
	Chlorothalonil	47.8	129	157			18.9
	Chlorpyrifos Ethyl	86.3	77.5	91.3			16.4
	Chlorpyrifos Methyl	71.6	74.1	95.2			25.0
	Cis-Nonachlor	67.6	66.7	72.7			8.63
	Coumaphos	65.0	161	166			3.28
	Cyanazine	179	58.7	70.1			17.7

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Cypermethrin	65.6	84.2	84.6			0.458
	Cyprodinil	59.0	68.7	92.8			29.9
	Dacthal	89.4	87.8	87.9			0.0569
	DDD-p,p'	73.4	73.0	73.2			0.340
	DDE-p,p'	74.6	75.9	75.7			0.320
	DDT-p,p'	74.1	80.7	80.5			0.186
	Delta-BHC	107	126	131			4.15
	Deltamethrin	76.5	60.7	63.2			4.11
	Demeton	71.4	65.7	76.6			15.3
	Diazinon	72.4	69.6	81.2			15.3
	Dichlobenil	89.7	61.3	56.2			8.80
	Dicofol	72.3	77.1	76.2			1.15
	Dieldrin	76.7	78.4	80.2			2.03
	Difenoconazole	62.8	101	105			4.46
	Dimethenamid	69.6	73.2	87.0			17.2
	Dimethomorph	170	179	158			12.4
	Disulfoton	72.2	63.3	74.4			16.1
	Dithiopyr	86.8	90.2	80.9			10.9
	Endosulfan I	80.2	81.4	82.1			0.849
	Endosulfan II	78.0	72.9	74.6			2.32
	Endosulfan Sulfate	87.7	80.0	78.9			1.43
	Endrin	77.6	79.1	78.6			0.626
	Endrin Aldehyde	100	81.8	86.1			5.18
	Endrin Ketone	103	96.2	140			37.4
	EPTC	61.6	54.8	49.7			9.88
	Esfenvalerate	67.4	86.9	86.5			0.483
	Ethalfluralin	80.1	86.9	87.4			0.606
	Ethion	36.3	45.3	30.3			39.8
	Ethoprop	104	83.3	87.8			5.28
	Etridiazole	69.2	58.1	62.9			7.93
	Fenamiphos	71.8	69.4	61.7			11.7
	Fenbuconazole	84.1	79.9	92.0			14.2
	Fenpropathrin	60.8	77.1	77.2			0.113
	Fipronil	67.8	72.3	73.0			0.934
	Fipronil Desulfinyl	118	111	125			11.8
	Fipronil Sulfide	113	50.4	50.1			0.580
	Fipronil Sulfone	116	60.9	63.7			4.42
	Fluazifop-P-butyl	110	57.9	72.6			22.6
	Fludioxonil	126	70.0	86.3			20.9
	Flumioxazin	62.2	121	105			13.4
	Flutolanil	71.1	70.8	76.0			7.09
	Fluxapyroxad	59.6	61.7	75.8			20.4
	Fonofos	70.1	91.8	92.1			0.386
	Gamma-BHC	94.4	99.1	104			4.68
	Gamma-Chlordane	72.7	78.4	77.8			0.730
	Heptachlor	70.4	76.0	75.7			0.488
	Heptachlor Epoxide	92.6	96.8	94.0			2.89
	Hexachlorobenzene	73.7	82.7	83.0			0.405
	Hexazinone	80.1	105	113			6.91
	Imazalil	47.7	80.0	75.8			5.35
	Iprodione	70.8	73.5	87.7			17.7
	Kepone	108	58.0	68.3			5.54
	Lambda-Cyhalothrin	51.3	72.8	75.6			3.76
	Loratadine	220	147	145			1.88

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Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Malathion	77.3	77.2	93.8			19.4
	Metalaxyl	57.8	71.8	102			32.3
	Methoprene	48.8	71.0	72.1			1.49
	Methoxychlor	85.4	98.5	97.3			1.20
	Metolachlor	78.0	96.1	119			18.2
	Metribuzin	89.1	93.6	90.9			2.91
	Mevinphos	80.7	66.1	63.9			3.27
	MGK-264	72.4	82.1	79.5			3.23
	Mirex	52.9	60.6	62.2			2.61
	Molinate	60.0	74.2	75.2			1.33
	Myclobutanil	66.1	71.6	86.8			19.1
	Naled	75.6	77.9	86.8			10.8
	Napropamide	53.2	53.5	58.1			8.26
	Norflurazon	110	115	113			1.05
	Octinoxate	85.2	74.6	80.6			7.63
	Oxadiazon	65.2	66.3	76.7			13.0
	Oxybenzone	77.1	70.2	82.5			16.1
	Oxychlordane	78.6	79.3	82.9			4.45
	Oxyfluorfen	76.6	89.8	103			13.2
	Parathion Ethyl	98.3	107	97.1			9.97
	Parathion Methyl	86.2	105	99.4			5.39
	PCB-1016	83.8	85.4	82.1			3.95
	PCB-1260	101	84.4	86.1			2.02
	Pendimethalin	78.5	111	96.1			13.9
	Permethrin	64.6	77.8	79.3			1.88
	Phenothrin	39.8	65.1	66.4			2.08
	Phenytoin	15.6	4.46	17.5			119
	Phorate	83.5	99.8	95.3			4.56
	Piperonyl Butoxide	96.3	93.3	96.5			3.38
	Prallethrin	69.6	75.1	79.2			5.33
	Prodiamine	31.8	213	117			58.3
	Prometon	74.2	94.5	89.3			5.66
	Prometryn	95.6	109	98.7			9.58
	Pronamide	100	80.8	101			22.3
	Propanil	85.5	121	117			2.70
	Propargite	90.0	91.6	87.0			5.18
	Propiconazole	109	109	96.8			12.3
	Pyraflufen Ethyl	108	105	84.8			20.9
	Pyridaben	71.3	53.7	54.2			0.855
	Pyriproxyfen	78.5	78.7	88.3			11.5
	Simazine	98.3	95.2	79.5			10.3
	Stirophos	35.9	89.5	83.1			7.39
	Sulfentrazone	48.7	71.1	73.7			3.20
	Tau-Fluvalinate	52.4	70.2	70.2			0.0401
	Tebuconazole	15.3	92.0	82.1			11.3
	Terbufos	105	82.2	92.1			11.4
	Terbuthylazine	75.8	71.0	76.2			7.04
	Tetramethrin	86.5	106	102			3.60
	Thiobencarb	76.7	83.0	97.2			15.7
	Trans-Nonachlor	66.6	72.5	76.1			4.79
	Triadimefon	100	71.0	81.0			13.1
	Triclosan Methyl	78.9	79.6	80.2			0.745
	Trifluralin	75.6	86.1	86.6			0.503
EPA 8276	Chlordane	96.4	91.5	88.2			3.63

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8276	Toxaphene	81.2	90.1	90.5			0.501
EPA 8321B	2,4-D	98.5	77.0	93.1			19.0
	2,4,5-T	74.5	72.1	75.2			4.17
	3-Hydroxycarbofuran	93.1	93.5	104			10.8
	Acesulfame K	93.8	94.1	93.8			0.303
	Acesulfame K	86.5	95.8	101			4.94
	Acetaminophen	65.9	102	97.5			4.53
	Acetamiprid	102	85.8	74.4			14.3
	Afidopyropen	99.0	80.8	74.7			7.90
	Aldicarb	81.9	63.1	110			54.3
	Aldicarb Sulfone	102	95.3	112			16.4
	Aldicarb Sulfoxide	115	57.8	59.7			3.26
	AMPA	87.4	86.9	83.6			3.91
	AMPA	99.5	80.2	91.9			12.5
	Bentazon	93.7	81.3	79.8			1.89
	Benzovindiflupyr	101	108	98.8			8.82
	Carbamazepine	115	112	110			2.45
	Carbaryl	79.2	65.4	64.1			1.96
	Carbofuran	97.5	91.9	106			13.8
	Clothianidin	104	95.4	96.2			0.793
	Dinotefuran	101	112	110			1.89
	Diuron	76.7	94.1	93.8			0.255
	Endothall	110	118	116			1.64
	Endothall	114	115	122			5.70
	Fenuron	114	142	156			9.54
	Fluridone	95.3	93.2	91.5			1.85
	Glufosinate	93.1	90.0	89.2			0.838
	Glufosinate	109	110	112			1.81
	Glyphosate	107	125	117			6.42
	Glyphosate	127	101	117			14.5
	Hydrocodone	97.9	94.9	104			8.98
	Ibuprofen	108	127	130			1.80
	Imazapyr	107	102	90.8			11.2
	Imidacloprid	94.3	115	98.9			14.9
	Linuron	78.3	75.8	59.2			24.7
	Mandestrobin	108	93.0	101			8.33
	MCPP	110	115	94.7			19.7
	Methiocarb	83.4	86.3	92.8			7.20
	Methomyl	96.2	88.7	96.5			8.46
	Naproxen	81.0	70.5	55.6			23.6
	Oxamyl	106	93.4	102			8.63
	Primidone	116	140	138			1.73
	Propoxur	89.4	74.9	81.1			7.91
	Pyraclostrobin	86.0	87.1	86.0			1.32
	Silvex	66.9	61.0	59.7			2.26
	Sucralose	83.8	87.0	78.8			9.70
	Sucralose	78.2	74.2	81.7			9.25
	Thiamethoxam	113	116	115			0.550
	Tolfenpyrad	48.5	45.0	46.8			3.91
	Triclopyr	71.2	74.1	65.8			11.9
SM 2320 B-2011	Total Alkalinity	97.7				3.36	
SM 4500-F- C-2011	Fluoride	101	99.1	97.7			0.953
SM 5310 B-2011	Organic Carbon	97.6	87.1	88.4			1.12

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2318363
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2318380
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2318380
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2318364
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2318364
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2318364
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2318364
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2318377, 2318379
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2318378
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2318377, 2318379
EPA 8270E	PCBs in water matrices by GC/MS/MS	2318378
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2318378
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2318375
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2318374, 2318376
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2318363
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2318363
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2318363
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2318364

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	04/12/2022			04/12/2022 14:55	Khloe J Berg	2318363
EPA 200.7 Rev. 4.4	04/12/2022	04/15/2022 09:45	Megan Whitefoot	04/21/2022 23:54	Josef B Mick	2318380
	04/12/2022	04/15/2022 09:45	Megan Whitefoot	04/22/2022 00:02	Josef B Mick	2318380
EPA 200.8 Rev. 5.4	04/12/2022	04/15/2022 09:45	Megan Whitefoot	04/18/2022 18:55	Alexander Thompson	2318380
	04/12/2022	04/15/2022 09:45	Megan Whitefoot	04/18/2022 20:50	Alexander Thompson	2318380
	04/12/2022	04/15/2022 09:45	Megan Whitefoot	04/19/2022 13:15	Alexander Thompson	2318380
EPA 350.1 Rev. 2.0	04/12/2022			04/13/2022 12:40	Ping Hua	2318364
EPA 351.2 Rev. 2.0	04/12/2022	04/20/2022 14:20	Samantha L Bates	04/21/2022 13:23	Samantha L Bates	2318364
EPA 353.2 Rev. 2.0	04/12/2022			04/14/2022 16:35	Nathaniel J Jones	2318364
EPA 365.1 Rev. 2.0	04/12/2022	04/21/2022 17:55	Simonne.V. Calhoun	04/22/2022 16:15	Sarah A Nixon	2318364
EPA 8270E	04/12/2022	04/15/2022 08:00	Fe-Val Siddell	04/18/2022 20:40	Michael Poppell	2318377
	04/12/2022	04/15/2022 08:00	Fe-Val Siddell	04/18/2022 21:07	Michael Poppell	2318379
	04/12/2022	04/15/2022 08:00	Fe-Val Siddell	04/21/2022 18:40	Lipi Saha	2318377
	04/12/2022	04/15/2022 08:00	Fe-Val Siddell	04/21/2022 19:04	Lipi Saha	2318379
	04/12/2022	04/15/2022 08:00	Rasheda Ghaffari	04/18/2022 22:34	Julie Wi	2318378
	04/12/2022	04/15/2022 08:00	Rasheda Ghaffari	04/19/2022 20:13	Vandana T. Nagar	2318378
EPA 8276	04/12/2022	04/15/2022 08:00	Rasheda Ghaffari	04/20/2022 09:50	Arthur Maknenko	2318378
EPA 8321B	04/12/2022	04/14/2022 08:30	June Rhew	04/15/2022 23:07	Juyoung Kim	2318374
	04/12/2022	04/14/2022 08:30	June Rhew	04/16/2022 00:16	Juyoung Kim	2318376
	04/12/2022	04/14/2022 10:00	Manjita Shrestha	04/15/2022 16:45	Manjita Shrestha	2318374
	04/12/2022	04/14/2022 10:00	Manjita Shrestha	04/15/2022 20:51	Manjita Shrestha	2318374
	04/12/2022	04/14/2022 10:00	Manjita Shrestha	04/16/2022 01:59	Manjita Shrestha	2318374
	04/12/2022	04/14/2022 11:00	Manjita Shrestha	04/15/2022 17:00	Manjita Shrestha	2318376
	04/12/2022	04/14/2022 11:00	Manjita Shrestha	04/16/2022 03:16	Manjita Shrestha	2318376
	04/12/2022	04/15/2022 14:00	June Rhew	04/16/2022 08:55	Juyoung Kim	2318375
SM 2320 B-2011	04/12/2022			04/22/2022 09:07	Sarah A Nixon	2318363
SM 2540 D-2011	04/12/2022			04/13/2022 14:26	Yijie Li	2318363
SM 4500-F- C-2011	04/12/2022			04/22/2022 12:46	Sarah A Nixon	2318363
SM 5310 B-2011	04/12/2022			04/16/2022 00:56	Judith K. Clark	2318364