

Chemical Analysis Report

CEN-DIST-2022-08-17-01

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

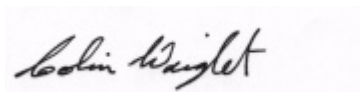
Event Description: **Dead River Bio and Lake Hatch Drain**
Request ID: **RQ-2022-08-15-22**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Colin Wright, Program Administrator

Date Certified: 08-SEP-2022 13:36

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

Case Narrative

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

Results for the following analytical groups are included in this report: 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: Dead River @ 1250m north of Lake Hatchineha Collection Date/Time: 08/16/2022 10:13

Field ID: G4CE0167

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350210	DEP SOP: NU-094-1	Color (true)	380		PCU	P418272	
	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P418266	
	EPA 300.0 Rev. 2.1	Chloride	25		mg Cl/L	P418867	
		Sulfate	0.97		mg SO4/L	P418870	
	SM 2320 B-2011	Total Alkalinity	30		mg CaCO3/L	P418456	
	SM 2540 C-2011	TDS	173	A	mg/L	P418646	
	SM 2540 D-2011	TSS	3	IA	mg/L	P418606	
2350211	SM 4500-F- C-2011	Fluoride	0.090	I	mg F/L	P418466	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.013		mg N/L	P418680	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.4		mg N/L	P418448	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.024		mg N/L	P418529	
	EPA 365.1 Rev. 2.0	Total-P	0.061		mg P/L	P418370	
2350212	SM 5310 B-2011	Organic Carbon	33		mg C/L	P418470	
2350212	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P418254	
2350220	EPA 8321B	2,4-D	0.0020	U	ug/L	P418371	
		Acesulfame K	0.10	U	ug/L	P418300	
		2,4,5-T	0.0040	U	ug/L	P418371	
		AMPA	0.10	U	ug/L	P418300	
		Acetaminophen	0.0080	U	ug/L	P418371	
		Acetamiprid	0.0020	U	ug/L	P418371	
		Endothall	0.25	U	ug/L	P418300	
		Glufosinate	0.10	U	ug/L	P418300	
		Glyphosate	0.10	U	ug/L	P418300	
		Afidopyropen	0.0020	U	ug/L	P418371	
		Bentazon	0.066		ug/L	P418371	
		Sucralose	1.2		ug/L	P418300	
		Benzovindiflupyr	0.0020	U	ug/L	P418371	
		Carbamazepine	8.0E-04	U	ug/L	P418371	
		Clothianidin	0.0020	U	ug/L	P418371	
		Dinotefuran	0.0020	U	ug/L	P418371	
		Diuron	0.0020	U	ug/L	P418371	
		Fenuron	0.032	U	ug/L	P418371	
		Fluridone	0.0019	I	ug/L	P418371	
		Imazapyr	0.14		ug/L	P418371	
		Hydrocodone	0.0020	U	ug/L	P418371	
		Ibuprofen	0.080	U	ug/L	P418371	
		Imidacloprid	0.0020	U	ug/L	P418371	
		Linuron	0.0040	U	ug/L	P418371	
		Mandestrobin	0.0020	U	ug/L	P418371	
		MCP	0.0040	U	ug/L	P418371	
		Naproxen	0.0080	U	ug/L	P418371	
		Primidone	0.0040	U	ug/L	P418371	
		Pyraclostrobin	0.0020	U	ug/L	P418371	

Field ID: G4CE0167

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350220	EPA 8321B	Silvex	0.0040	U	ug/L	P418371	
		Thiamethoxam	0.0020	U	ug/L	P418371	
		Tolfenpyrad	0.0020	U	ug/L	P418371	
		Triclopyr	0.0040	U	ug/L	P418371	
2350225	EPA 200.7 Rev. 4.4	Calcium	12.7		mg/L	P418293	
		Iron	370		ug/L	P418293	
		Magnesium	2.96		mg/L	P418293	
		Potassium	2.3		mg/L	P418293	
		Sodium	15.4		mg/L	P418293	
		Strontium	78.0		ug/L	P418293	
		Tin	3.1	I	ug/L	P418293	
		Titanium	1.4	I	ug/L	P418293	
		Vanadium	2.0	U	ug/L	P418293	
		Zinc	5.0	U	ug/L	P418293	
	EPA 200.8 Rev. 5.4	Aluminum	138		ug/L	P418293	
		Antimony	0.065	I	ug/L	P418293	
		Arsenic	0.46		ug/L	P418293	
		Barium	11.0		ug/L	P418293	
		Beryllium	0.023	I	ug/L	P418293	
		Boron	32.9		ug/L	P418293	
		Cadmium	0.020	U	ug/L	P418293	
		Chromium	0.42	I	ug/L	P418293	
		Cobalt	0.102		ug/L	P418293	
		Copper	0.40	U	ug/L	P418293	
	SM 2340 B-2011	Lead	0.28	I	ug/L	P418293	
		Manganese	4.20		ug/L	P418293	
		Molybdenum	0.21	I	ug/L	P418293	
		Nickel	0.50	U	ug/L	P418293	
		Selenium	0.20	U	ug/L	P418293	
		Silver	0.010	U	ug/L	P418293	
		Thallium	0.10	U	ug/L	P418293	
		Hardness	44.0		mg/L	P418293	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Lake Hatchineha Drain downstream of drainage field

Collection Date/Time: 08/16/2022 10:51

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350213	DEP SOP: NU-094-1	Color (true)	75		PCU	P418273	
	EPA 180.1 Rev. 2.0	Turbidity	6.6		NTU	P418266	
	EPA 300.0 Rev. 2.1	Chloride	15		mg Cl/L	P418867	
		Sulfate	11		mg SO4/L	P418870	
	SM 2320 B-2011	Total Alkalinity	41		mg CaCO3/L	P418456	
	SM 2540 C-2011	TDS	125		mg/L	P418646	
	SM 2540 D-2011	TSS	12		mg/L	P418606	
	SM 4500-F- C-2011	Fluoride	0.079	I	mg F/L	P418466	
2350214	EPA 350.1 Rev. 2.0	Ammonia-N	0.17		mg N/L	P418680	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P418448	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.040		mg N/L	P418529	
	EPA 365.1 Rev. 2.0	Total-P	0.060		mg P/L	P418370	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P418470	
2350221	EPA 8321B	Aldicarb	0.020	U	ug/L	P418426	
		Aldicarb Sulfone	0.0020	U	ug/L	P418426	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P418426	
		Carbaryl	0.0020	U	ug/L	P418426	
		Carbofuran	0.0020	U	ug/L	P418426	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P418426	
		Methiocarb	0.0020	U	ug/L	P418426	
		Methomyl	0.0020	U	ug/L	P418426	
		Oxamyl	0.0020	U	ug/L	P418426	
		Propoxur	0.0020	U	ug/L	P418426	
2350222		2,4-D	0.019		ug/L	P418371	
		Acesulfame K	0.10	U	ug/L	P418300	
		2,4,5-T	0.0040	U	ug/L	P418371	
		AMPA	0.10	U	ug/L	P418300	
		Acetaminophen	0.0080	U	ug/L	P418371	
		Acetamiprid	0.0020	U	ug/L	P418371	
		Endothall	0.25	U	ug/L	P418300	
		Glufosinate	0.10	U	ug/L	P418300	
		Glyphosate	0.10	U	ug/L	P418300	
		Afidopyropen	0.0020	U	ug/L	P418371	
		Bentazon	0.022		ug/L	P418371	
		Sucralose	0.13		ug/L	P418300	
		Benzovindiflupyr	0.0020	U	ug/L	P418371	
		Carbamazepine	8.0E-04	U	ug/L	P418371	
		Clothianidin	0.0020	U	ug/L	P418371	
		Dinotefuran	0.0020	U	ug/L	P418371	
		Diuron	0.0020	U	ug/L	P418371	
		Fenuron	0.032	U	ug/L	P418371	
		Fluridone	0.010		ug/L	P418371	
		Imazapyr	0.022		ug/L	P418371	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350222	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P418371	
		Ibuprofen	0.080	U	ug/L	P418371	
		Imidacloprid	0.0075	I	ug/L	P418371	
		Linuron	0.0040	U	ug/L	P418371	
		Mandestrobin	0.0020	U	ug/L	P418371	
		MCP	0.0040	U	ug/L	P418371	
		Naproxen	0.0080	U	ug/L	P418371	
		Primidone	0.0040	U	ug/L	P418371	
		Pyraclostrobin	0.0020	U	ug/L	P418371	
		Silvex	0.0040	U	ug/L	P418371	
		Thiamethoxam	0.0020	U	ug/L	P418371	
		Tolfenpyrad	0.0020	U	ug/L	P418371	
		Triclopyr	0.0040	U	ug/L	P418371	
2350223	EPA 8270E	Aldrin	0.67	U	ng/L	P418277	
		Alpha-BHC	0.10	U	ng/L	P418277	
		Alpha-Chlordane	0.20	U	ng/L	P418277	
		PCB-1016	2.0	U	ng/L	P418277	
		Beta-BHC	0.10	U	ng/L	P418277	
		PCB-1221	2.0	U	ng/L	P418277	
		Beta-Cyfluthrin	1.3	U	ng/L	P418277	
		PCB-1232	2.0	U	ng/L	P418277	
		Bifenthrin	0.51	U	ng/L	P418277	
		PCB-1242	2.0	U	ng/L	P418277	
		PCB-1248	2.0	U	ng/L	P418277	
		Chlorothalonil	1.3	U	ng/L	P418277	
		PCB-1254	2.0	U	ng/L	P418277	
		Cis-Nonachlor	0.20	U	ng/L	P418277	
		PCB-1260	2.0	U	ng/L	P418277	
		Cypermethrin	1.5	U	ng/L	P418277	
		Dacthal	0.15	U	ng/L	P418277	
		DDD-p,p'	0.26	U	ng/L	P418277	
		DDE-p,p'	0.20	U	ng/L	P418277	
		DDT-p,p'	0.26	U	ng/L	P418277	
		Delta-BHC	0.41	U	ng/L	P418277	
		Deltamethrin	1.3	U	ng/L	P418277	
		Dichlobenil	0.26	U	ng/L	P418277	
		Dicofol	1.3	U	ng/L	P418277	
		Dieldrin	0.41	U	ng/L	P418277	
		Endosulfan I	0.41	U	ng/L	P418277	
		Endosulfan II	0.41	U	ng/L	P418277	
		Endosulfan Sulfate	0.31	U	ng/L	P418277	
		Endrin	0.41	U	ng/L	P418277	
		Endrin Aldehyde	0.77	U	ng/L	P418277	
		Endrin Ketone	0.41	U	ng/L	P418277	
		Esfenvalerate	0.77	U	ng/L	P418277	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2350223	EPA 8270E	Ethalfuralin	0.15	U	ng/L	P418277		
		Fenpropathrin	0.26	UJ	ng/L	P418277	CCV	
		Gamma-BHC	0.13	U	ng/L	P418277	RPD	
		Gamma-Chlordane	0.20	U	ng/L	P418277		
		Heptachlor	0.20	U	ng/L	P418277		
		Heptachlor Epoxide	0.26	U	ng/L	P418277		
		Hexachlorobenzene**	1.0	U	ng/L	P418277		
		Kepone	5.1	U	ng/L	P418277		
		Lambda-Cyhalothrin	0.77	U	ng/L	P418277		
		Methoprene	0.77	U	ng/L	P418277		
		Methoxychlor	0.37	I	ng/L	P418277		
		MGK-264	0.20	U	ng/L	P418277		
		Mirex	0.36	U	ng/L	P418277		
		Oxychlordane	0.31	U	ng/L	P418277		
		Permethrin	1.6	U	ng/L	P418277		
		Phenothrin	0.92	U	ng/L	P418277		
		Piperonyl Butoxide	0.22	I	ng/L	P418277		
		Prallethrin	2.0	U	ng/L	P418277		
		Tau-Fluvalinate	0.26	U	ng/L	P418277		
		Tetramethrin	0.77	U	ng/L	P418277		
		Trans-Nonachlor	0.20	U	ng/L	P418277		
		Triclosan Methyl	0.15	U	ng/L	P418277		
		Trifluralin	0.20	U	ng/L	P418277		
		EPA 8276	Chlordane	2.6	U	ng/L	P418277	
			Toxaphene	15	U	ng/L	P418277	
2350224	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P418246		
		Acetochlor	0.24	U	ng/L	P418246		
		Octinoxate**	19	U	ng/L	P418246		
		Alachlor	0.24	U	ng/L	P418246		
		Avobenzone**	96	U	ng/L	P418246		
		Ametryn	2.6		ng/L	P418246		
		Atrazine	2.0		ng/L	P418246		
		PBDE-47**	3.8	U	ng/L	P418246		
		Atrazine Desethyl	1.4	U	ng/L	P418246		
		PBDE-99**	4.8	U	ng/L	P418246		
		Azinphos Methyl	1.9	U	ng/L	P418246		
		Tri-o-cresyl Phosphate**	5.7	U	ng/L	P418246		
		Azoxystrobin	0.73	I	ng/L	P418246		
		Bromacil	11		ng/L	P418246		
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P418246		
		Butylate	0.38	U	ng/L	P418246		
		Dechlorane Plus**	29	U	ng/L	P418246		
		Caffeine**	7.2	U	ng/L	P418246		
		Carbophenothion	0.19	U	ng/L	P418246		

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350224	EPA 8270E	Carfentrazone Ethyl	0.096	U	ng/L	P418246	
		Chlorfenapyr	0.17	U	ng/L	P418246	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P418246	
		Chlorpyrifos Methyl	0.048	U	ng/L	P418246	
		Coumaphos	0.48	U	ng/L	P418246	
		Cyanazine	3.1	U	ng/L	P418246	
		Cyprodinil	0.096	U	ng/L	P418246	
		Demeton	1.4	U	ng/L	P418246	
		Diazinon	0.12	U	ng/L	P418246	
		Difenoconazole	0.57	U	ng/L	P418246	
		Dimethenamid	0.096	UJ	ng/L	P418246	LCS
		Dimethomorph	0.17	U	ng/L	P418246	
		Disulfoton	0.48	U	ng/L	P418246	
		Dithiopyr	0.52	IV	ng/L	P418246	
		EPTC	1.2	U	ng/L	P418246	
		Ethion	0.14	U	ng/L	P418246	
		Ethoprop	0.096	U	ng/L	P418246	
		Etridiazole	0.14	U	ng/L	P418246	
		Fenamiphos	0.48	U	ng/L	P418246	
		Fenbuconazole	0.27	I	ng/L	P418246	
		Fipronil	0.24	U	ng/L	P418246	
		Fipronil Desulfinyl**	0.12	U	ng/L	P418246	
		Fipronil Sulfide	0.14	U	ng/L	P418246	
		Fipronil Sulfone	0.14	U	ng/L	P418246	
		Fluazifop-P-butyl	0.096	U	ng/L	P418246	
		Fludioxonil	0.12	U	ng/L	P418246	
		Flumioxazin	1.7	U	ng/L	P418246	
		Flutolanil	0.096	U	ng/L	P418246	
		Fluxapyroxad	0.096	U	ng/L	P418246	
		Fonofos	0.19	U	ng/L	P418246	
		Hexazinone	0.64	I	ng/L	P418246	
		Imazalil	0.72	U	ng/L	P418246	
		Iprodione	0.57	U	ng/L	P418246	
		Loratadine**	0.096	U	ng/L	P418246	
		Malathion	0.33	U	ng/L	P418246	
		Metalaxyl	7.2		ng/L	P418246	
		Metolachlor	0.48	I	ng/L	P418246	
		Metribuzin	2.4	U	ng/L	P418246	
		Mevinphos	1.0	U	ng/L	P418246	
		Molinate	0.29	U	ng/L	P418246	
		Myclobutanil	0.24	U	ng/L	P418246	
		Naled	1.4	U	ng/L	P418246	
		Napropamide	0.38	U	ng/L	P418246	
		Norflurazon	28		ng/L	P418246	
		Oxadiazon	0.29	U	ng/L	P418246	

Field ID: G4CE0168

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2350224	EPA 8270E	Oxyfluorfen	0.14	U	ng/L	P418246	
		Parathion Ethyl	0.24	U	ng/L	P418246	
		Parathion Methyl	0.53	U	ng/L	P418246	
		Pendimethalin	0.96	U	ng/L	P418246	
		Phenytain**	3.3	UJ	ng/L	P418246	MS
		Phorate	0.50	U	ng/L	P418246	
		Prodiamine	0.17	U	ng/L	P418246	
		Prometon	0.86	U	ng/L	P418246	
		Prometryn	0.19	U	ng/L	P418246	
		Pronamide	0.14	U	ng/L	P418246	
		Propanil	0.12	U	ng/L	P418246	
		Propargite	1.4	U	ng/L	P418246	
		Propiconazole	0.48	U	ng/L	P418246	
		Pyraflufen Ethyl	0.24	UJ	ng/L	P418246	LCS
		Pyridaben	0.43	U	ng/L	P418246	
		Pyriproxyfen	0.12	U	ng/L	P418246	
		Simazine	0.48	U	ng/L	P418246	
		Stirophos	0.12	UJ	ng/L	P418246	MS
		Sulfentrazone	0.48	U	ng/L	P418246	
		Tebuconazole	0.48	U	ng/L	P418246	
		Terbufos	0.096	U	ng/L	P418246	
		Terbuthylazine	0.41	U	ng/L	P418246	
		Thiobencarb	0.57	U	ng/L	P418246	
		Triadimefon	0.24	U	ng/L	P418246	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for bromacil and norflurazon not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blanks and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P418272

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P418273

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418266

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418293

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: P418293

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418867

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418870

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418448

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418529

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418370

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418254

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

Reference Method: EPA 8270E
Batch ID: P418246

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418246

Component	Result	Code	Units
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
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	0.44	I	ng/L
Dithiopyr	0.37	I	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418246

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418246

Component	Result	Code	Units
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatone	0.18	U	ng/L
Prodiatone	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418246

Component	Result	Code	Units
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E

Batch ID: P418277

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418277

Component	Result	Code	Units
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P418277

Component	Result	Code	Units
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: P418277

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: P418300

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: P418371

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P418371

Component	Result	Code	Units
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: EPA 8321B

Batch ID: P418426

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

Reference Method: SM 2320 B-2011

Batch ID: P418456

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

Reference Method: SM 2540 C-2011

Batch ID: P418646

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P418606

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P418466

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P418470

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: P418272

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P418273

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.1		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418293

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	99.2		P	80 - 120
Iron	98.7		P	80 - 120
Magnesium	99.2		P	80 - 120
Potassium	104		P	80 - 120
Sodium	104		P	80 - 120
Strontium	101		P	80 - 120
Tin	97.2		P	80 - 120
Titanium	98.4		P	80 - 120
Vanadium	98.4		P	80 - 120
Zinc	97.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418293

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	99.2		P	85 - 115
Arsenic	101		P	85 - 115
Barium	104		P	85 - 115
Beryllium	94.9		P	85 - 115
Boron	99.9		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	96.9		P	85 - 115
Copper	98.3		P	85 - 115
Lead	96.5		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	99.4		P	85 - 115
Nickel	99.4		P	85 - 115
Selenium	101		P	85 - 115
Silver	102		P	85 - 115
Thallium	97.0		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418867

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418870

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418448

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	97.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418370

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	109		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418254

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

Reference Method: EPA 8270E
Batch ID: P418246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	85.9		P	50 - 150
Acetochlor	75.0		P	70 - 121
Alachlor	72.3		P	68 - 119
Ametryn	76.9		P	64 - 139
Atrazine	81.5		P	76 - 120
Atrazine Desethyl	52.5		P	44 - 126
Avobenzone	77.1		P	76 - 212
Azinphos Methyl	97.3		P	43 - 192
Azoxystrobin	102		P	36 - 224
Bromacil	53.2		P	52 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	44.5		P	28 - 91.0
Caffeine	89.3		P	50 - 134
Carbophenothion	74.6		P	56 - 129
Carfentrazone Ethyl	79.1		P	60 - 141
Chlorfenapyr	76.6		P	56 - 115
Chlorpyrifos Ethyl	78.9		P	60 - 118
Chlorpyrifos Methyl	86.0		P	68 - 119
Coumaphos	79.5		P	18 - 250
Cyanazine	66.4		P	61 - 250
Cyprodinil	70.5		P	55 - 145
Dechlorane Plus	101		P	50 - 150
Demeton	71.8		P	30 - 159
Diazinon	81.2		P	70 - 123
Difenoconazole	82.8		P	49 - 204
Dimethenamid	58.9		F	64 - 115
Dimethomorph	101		P	12 - 219
Disulfoton	76.0		P	44 - 125
Dithiopyr	72.3		P	64 - 115
EPTC	43.9		P	28 - 86.0
Ethion	39.6		P	33 - 125
Ethoprop	79.5		P	64 - 116
Etridiazole	49.3		P	34 - 91.0
Fenamiphos	74.3		P	12 - 127
Fenbuconazole	71.6		P	59 - 151
Fipronil	71.1		P	67 - 129
Fipronil Desulfinyl	79.3		P	65 - 127
Fipronil Sulfide	61.3		P	61 - 116
Fipronil Sulfone	57.7		P	55 - 117
Fluazifop-P-butyl	73.3		P	62 - 127
Fludioxonil	67.9		P	62 - 128
Flumioxazin	98.1		P	33 - 250
Flutolanil	65.8		P	56 - 127
Fluxapyroxad	58.8		P	45 - 128
Fonofos	73.8		P	62 - 111
Hexazinone	73.7		P	46 - 139
Imazalil	61.8		P	38 - 142
Iprodione	68.7		P	47 - 135
Loratadine	98.4		P	10 - 244
Malathion	91.0		P	61 - 139
Metalaxyl	66.2		P	10 - 119
Metolachlor	71.5		P	65 - 118
Metribuzin	88.8		P	51 - 250
Mevinphos	72.1		P	53 - 121
Molinate	58.4		P	42 - 96.0
Myclobutanil	64.6		P	55 - 128
Naled	60.8		P	10 - 98.0
Napropamide	58.8		P	49 - 121
Norflurazon	65.3		P	61 - 126
Octinoxate	70.2		P	30 - 159
Oxadiazon	59.9		P	59 - 116
Oxybenzone	62.0		P	61 - 139
Oxyfluorfen	81.7		P	64 - 137

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	85.3		P	70 - 112
Parathion Methyl	96.7		P	76 - 133
PBDE-47	73.7		P	50 - 150
PBDE-99	72.6		P	50 - 150
Pendimethalin	72.7		P	52 - 117
Phenytoin	12.4		P	10 - 199
Phorate	71.5		P	48 - 121
Prodiamine	36.6		P	26 - 142
Prometon	56.9		P	43 - 123
Prometryn	66.7		P	66 - 127
Pronamide	80.7		P	75 - 121
Propanil	69.9		P	45 - 150
Propargite	46.2		P	42 - 208
Propiconazole	60.8		P	60 - 125
Pyraflufen Ethyl	68.6		F	70 - 138
Pyridaben	81.5		P	35 - 245
Pyriproxyfen	66.3		P	30 - 149
Simazine	76.6		P	72 - 125
Stirophos	50.7		P	29 - 164
Sulfentrazone	31.2		P	21 - 139
Tebuconazole	33.2		P	10 - 115
Terbufos	88.6		P	60 - 123
Terbutylazine	73.9		P	72 - 115
Thiobencarb	66.9		P	31 - 139
Tri-o-cresyl Phosphate	74.6		P	50 - 150
Triadimefon	65.1		P	65 - 116

Reference Method: EPA 8270E

Batch ID: P418277

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.2		P	10 - 92.0
Alpha-BHC	93.9		P	75 - 107
Alpha-Chlordane	72.7		P	50 - 108
Beta-BHC	116		P	36 - 138
Beta-Cyfluthrin	71.2		P	20 - 161
Bifenthrin	50.7		P	10 - 119
Chlorothalonil	71.3		P	26 - 186
Cis-Nonachlor	74.2		P	42 - 119
Cypermethrin	73.6		P	22 - 150
Dacthal	89.9		P	72 - 119
DDD-p,p'	68.0		P	45 - 107
DDE-p,p'	67.7		P	48 - 106
DDT-p,p'	69.0		P	48 - 110
Delta-BHC	118		P	54 - 140
Deltamethrin	77.2		P	22 - 189
Dichlobenil	93.2		P	36 - 117
Dicofol	72.2		P	46 - 155
Dieldrin	75.9		P	54 - 110
Endosulfan I	76.0		P	59 - 105
Endosulfan II	74.9		P	51 - 118
Endosulfan Sulfate	90.8		P	57 - 121

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P418277

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	75.0		P	10 - 120
Endrin Aldehyde	83.7		P	34 - 118
Endrin Ketone	87.8		P	69 - 177
Esfenvalerate	71.0		P	23 - 168
Ethalfuralin	70.2		P	49 - 99.0
Fenpropathrin	99.0		P	34 - 117
Gamma-BHC	95.3		P	72 - 117
Gamma-Chlordane	69.6		P	43 - 106
Heptachlor	63.5		P	41 - 98.0
Heptachlor Epoxide	76.4		P	57 - 106
Hexachlorobenzene	73.2		P	36 - 99.0
Kepone	123		P	16 - 215
Lambda-Cyhalothrin	62.9		P	21 - 177
Methoprene	64.4		P	10 - 119
Methoxychlor	68.1		P	60 - 112
MGK-264	80.5		P	26 - 122
Mirex	52.2		P	10 - 169
Oxychlordane	72.2		P	43 - 105
PCB-1016	74.3		P	48 - 112
PCB-1260	72.3		P	44 - 118
Permethrin	72.5		P	24 - 148
Phenothrin	50.3		P	10 - 106
Piperonyl Butoxide	95.7		P	10 - 139
Prallethrin	64.2		P	17 - 109
Tau-Fluvalinate	63.8		P	13 - 131
Tetramethrin	73.7		P	10 - 132
Trans-Nonachlor	77.2		P	44 - 106
Triclosan Methyl	76.3		P	59 - 109
Trifluralin	71.2		P	44 - 101

Reference Method: EPA 8276

Batch ID: P418277

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.5		P	61 - 116
Toxaphene	84.3		P	48 - 124

Reference Method: EPA 8321B

Batch ID: P418300

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.5		P	40 - 150
AMPA	111		P	40 - 150
Endothall	108		P	40 - 150
Glufosinate	117		P	40 - 150
Glyphosate	109		P	40 - 150
Sucralose	107		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418371

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

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P418371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	66.7		P	40 - 150
2,4,5-T	72.5		P	40 - 150
Acetaminophen	88.1		P	30 - 150
Acetamiprid	80.9		P	40 - 150
Afidopyropen	89.0		P	30 - 150
Bentazon	114		P	30 - 150
Benzovindiflupyr	98.5		P	40 - 150
Carbamazepine	117		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	108		P	40 - 150
Diuron	86.2		P	40 - 150
Fenuron	113		P	40 - 150
Fluridone	90.2		P	40 - 150
Hydrocodone	99.0		P	40 - 150
Ibuprofen	81.9		P	40 - 150
Imazapyr	86.3		P	40 - 150
Imidacloprid	93.3		P	40 - 150
Linuron	101		P	40 - 150
Mandestrobin	101		P	40 - 150
MCPP	85.7		P	40 - 150
Naproxen	148		P	40 - 150
Primidone	89.4		P	40 - 150
Pyraclostrobin	88.9		P	40 - 150
Silvex	66.8		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	40.5		P	30 - 150
Triclopyr	68.9		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	84.9		P	40 - 150
Aldicarb	62.2		P	30 - 150
Aldicarb Sulfone	92.3		P	40 - 150
Aldicarb Sulfoxide	86.8		P	40 - 150
Carbaryl	86.0		P	40 - 150
Carbofuran	77.9		P	40 - 150
Methiocarb	73.8		P	40 - 150
Methomyl	82.3		P	40 - 150
Oxamyl	91.7		P	40 - 150
Propoxur	90.7		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P418456

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.7		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P418466

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

Reference Method: SM 5310 B-2011
Batch ID: P418470

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P418293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350007	Iron	96.8		P	80 - 120
2350007	Magnesium	99.9		P	80 - 120
2350007	Potassium	104		P	80 - 120
2350007	Sodium	104		P	80 - 120
2350007	Strontium	99.3		P	80 - 120
2350007	Tin	93.7		P	80 - 120
2350007	Titanium	96.3		P	80 - 120
2350007	Vanadium	97.5		P	80 - 120
2350007	Zinc	94.9		P	80 - 120
2350044	Calcium	101	96.2	P/P	80 - 120
2350044	Iron	99.1	97.1	P/P	80 - 120
2350044	Magnesium	99.6	97.2	P/P	80 - 120
2350044	Potassium	103	99.1	P/P	80 - 120
2350044	Sodium	104	99.3	P/P	80 - 120
2350044	Strontium	100	96.7	P/P	80 - 120
2350044	Tin	97.6	94.9	P/P	80 - 120
2350044	Titanium	98.0	94.4	P/P	80 - 120
2350044	Vanadium	96.7	93.5	P/P	80 - 120
2350044	Zinc	97.2	94.2	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P418293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350007	Aluminum	97.4		P	75 - 125
2350007	Antimony	102		P	75 - 125
2350007	Arsenic	98.4		P	75 - 125
2350007	Barium	102		P	75 - 125
2350007	Beryllium	91.9		P	75 - 125
2350007	Boron	97.6		P	75 - 125
2350007	Cadmium	104		P	75 - 125
2350007	Chromium	105		P	75 - 125
2350007	Cobalt	92.0		P	75 - 125
2350007	Copper	90.6		P	75 - 125
2350007	Lead	95.7		P	75 - 125
2350007	Manganese	101		P	75 - 125
2350007	Molybdenum	101		P	75 - 125
2350007	Nickel	94.1		P	75 - 125
2350007	Selenium	98.7		P	75 - 125
2350007	Silver	98.9		P	75 - 125
2350007	Thallium	98.3		P	75 - 125
2350044	Aluminum	104	103	P/P	80 - 120
2350044	Antimony	99.4	101	P/P	80 - 120
2350044	Arsenic	100	102	P/P	80 - 120
2350044	Barium	104	105	P/P	80 - 120
2350044	Beryllium	95.5	94.8	P/P	80 - 120
2350044	Boron	101	98.7	P/P	80 - 120
2350044	Cadmium	100	102	P/P	80 - 120
2350044	Chromium	103	102	P/P	80 - 120
2350044	Cobalt	97.5	96.3	P/P	80 - 120
2350044	Copper	101	101	P/P	80 - 120
2350044	Lead	98.7	97.9	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350044	Manganese	104	103	P/P	80 - 120
2350044	Molybdenum	99.4	101	P/P	80 - 120
2350044	Nickel	101	99.7	P/P	80 - 120
2350044	Selenium	101	102	P/P	80 - 120
2350044	Silver	101	99.8	P/P	80 - 120
2350044	Thallium	98.7	98.6	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418867

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349934	Chloride	96.7		P	90 - 110
2350213	Chloride	97.0		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349934	Sulfate	97.4		P	90 - 110
2350213	Sulfate	96.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349824	Ammonia-N	97.4	99.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350099	NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350101	Total-P	108	107	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418254

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349827	O-Phosphate-P	94.3	97.1	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P418246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350224	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	76.4	73.5	P/P	50 - 150
2350224	Acetochlor	82.9	92.0	P/P	65 - 124
2350224	Alachlor	68.4	80.0	P/P	61 - 121

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350224	Ametryn	54.1	62.9	P/P	52 - 216
2350224	Atrazine	89.4	101	P/P	68 - 133
2350224	Atrazine Desethyl	44.0	51.0	P/P	15 - 160
2350224	Avobenzone	84.2	79.5	P/P	59 - 206
2350224	Azinphos Methyl	102	100	P/P	40 - 292
2350224	Azoxystrobin	102	126	P/P	12 - 242
2350224	Butylate	56.8	43.7	P/P	14 - 94.0
2350224	Caffeine	86.9	91.2	P/P	10 - 226
2350224	Carbophenothion	78.1	82.1	P/P	49 - 122
2350224	Carfentrazone Ethyl	80.5	79.0	P/P	53 - 138
2350224	Chlorfenapyr	76.3	70.4	P/P	50 - 150
2350224	Chlorpyrifos Ethyl	75.6	73.1	P/P	52 - 122
2350224	Chlorpyrifos Methyl	85.9	80.6	P/P	66 - 117
2350224	Coumaphos	50.3	52.0	P/P	50 - 220
2350224	Cyanazine	71.4	71.5	P/P	43 - 245
2350224	Cyprodinil	68.1	73.9	P/P	50 - 150
2350224	Dechlorane Plus	90.5	81.3	P/P	50 - 150
2350224	Demeton	90.0	92.6	P/P	43 - 188
2350224	Diazinon	87.0	97.5	P/P	69 - 131
2350224	Difenoconazole	104	102	P/P	34 - 231
2350224	Dimethenamid	70.0	74.6	P/P	55 - 118
2350224	Dimethomorph	103	137	P/P	50 - 150
2350224	Disulfoton	81.1	84.6	P/P	38 - 141
2350224	Dithiopyr	57.8	57.6	P/P	42 - 116
2350224	EPTC	52.5	49.8	P/P	18 - 85.0
2350224	Ethion	55.6	40.8	P/P	10 - 131
2350224	Ethoprop	91.5	86.4	P/P	65 - 129
2350224	Etridiazole	63.1	61.8	P/P	50 - 150
2350224	Fenamiphos	70.4	67.7	P/P	31 - 137
2350224	Fenbuconazole	76.2	73.3	P/P	57 - 160
2350224	Fipronil	80.4	84.5	P/P	62 - 132
2350224	Fipronil Desulfinyl	86.1	82.2	P/P	57 - 131
2350224	Fipronil Sulfide	64.4	64.4	P/P	15 - 138
2350224	Fipronil Sulfone	70.2	76.3	P/P	21 - 134
2350224	Fluazifop-P-butyl	79.4	85.5	P/P	54 - 133
2350224	Fludioxonil	73.7	82.8	P/P	58 - 127
2350224	Flumioxazin	111	113	P/P	33 - 300
2350224	Flutolanil	69.4	83.8	P/P	42 - 130
2350224	Fluxapyroxad	71.5	68.5	P/P	23 - 141
2350224	Fonofos	80.7	78.8	P/P	58 - 119
2350224	Hexazinone	82.3	79.8	P/P	68 - 172
2350224	Imazalil	61.7	86.9	P/P	48 - 283
2350224	Iprodione	75.5	81.1	P/P	38 - 140
2350224	Loratadine	101	136	P/P	50 - 150
2350224	Malathion	92.1	83.8	P/P	40 - 137
2350224	Metalaxyl	69.0	73.2	P/P	21 - 129
2350224	Metolachlor	71.2	79.4	P/P	55 - 122
2350224	Metribuzin	94.3	100	P/P	38 - 187
2350224	Mevinphos	78.7	77.0	P/P	54 - 134
2350224	Molinate	68.4	65.5	P/P	41 - 97.0
2350224	Myclobutanil	73.7	77.4	P/P	56 - 125
2350224	Naled	85.7	88.3	P/P	10 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350224	Napropamide	55.0	62.3	P/P	50 - 150
2350224	Octinoxate	70.8	68.3	P/P	25 - 150
2350224	Oxadiazon	66.0	75.6	P/P	40 - 119
2350224	Oxybenzone	71.3	71.2	P/P	59 - 147
2350224	Oxyfluorfen	92.2	102	P/P	61 - 153
2350224	Parathion Ethyl	90.1	94.6	P/P	59 - 130
2350224	Parathion Methyl	110	109	P/P	65 - 155
2350224	PBDE-47	75.4	70.4	P/P	50 - 150
2350224	PBDE-99	65.4	61.2	P/P	50 - 150
2350224	Pendimethalin	87.0	92.3	P/P	49 - 138
2350224	Phenytol	24.5	27.9	F/F	50 - 200
2350224	Phorate	85.7	83.9	P/P	54 - 161
2350224	Prodiamine	48.1	52.5	P/P	33 - 161
2350224	Prometon	74.5	77.2	P/P	48 - 140
2350224	Prometryn	65.8	65.3	P/P	55 - 134
2350224	Pronamide	87.3	85.4	P/P	66 - 137
2350224	Propanil	84.0	87.2	P/P	50 - 150
2350224	Propargite	55.2	53.6	P/P	50 - 200
2350224	Propiconazole	68.3	71.8	P/P	36 - 150
2350224	Pyraflufen Ethyl	70.6	71.9	P/P	50 - 150
2350224	Pyridaben	80.7	69.2	P/P	50 - 200
2350224	Pyriproxyfen	69.4	65.4	P/P	10 - 165
2350224	Simazine	84.2	93.3	P/P	57 - 145
2350224	Stirophos	49.4	37.8	F/F	50 - 150
2350224	Sulfentrazone	81.1	77.4	P/P	34 - 140
2350224	Tebuconazole	44.2	42.3	P/P	10 - 127
2350224	Terbufos	102	104	P/P	59 - 138
2350224	Terbuthylazine	87.2	94.2	P/P	68 - 119
2350224	Thiobencarb	69.5	69.8	P/P	50 - 150
2350224	Tri-o-cresyl Phosphate	75.6	71.3	P/P	50 - 150
2350224	Triadimefon	74.6	69.7	P/P	50 - 150

Reference Method: EPA 8270E

Batch ID: P418277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350620	Aldrin	48.6	54.8	P/P	20 - 82.0
2350620	Alpha-BHC	84.2	96.5	P/P	71 - 109
2350620	Alpha-Chlordane	64.9	74.0	P/P	42 - 106
2350620	Beta-BHC	103	122	P/P	69 - 180
2350620	Beta-Cyfluthrin	63.4	71.0	P/P	18 - 175
2350620	Bifenthrin	45.9	49.1	P/P	21 - 128
2350620	Chlorothalonil	71.1	79.0	P/P	10 - 300
2350620	Cis-Nonachlor	64.2	76.7	P/P	34 - 106
2350620	Cypermethrin	61.4	68.9	P/P	22 - 158
2350620	Dacthal	82.2	98.8	P/P	54 - 116
2350620	DDD-p,p'	63.1	72.2	P/P	34 - 107
2350620	DDE-p,p'	65.0	72.3	P/P	33 - 110
2350620	DDT-p,p'	61.4	68.7	P/P	50 - 122
2350620	Delta-BHC	105	132	P/P	77 - 193
2350620	Deltamethrin	62.9	74.6	P/P	10 - 195
2350620	Dichlobenil	86.6	97.6	P/P	25 - 113

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P418277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350620	Dicofol	64.5	75.4	P/P	38 - 247
2350620	Dieldrin	67.9	80.5	P/P	45 - 118
2350620	Endosulfan I	70.5	86.3	P/P	51 - 106
2350620	Endosulfan II	68.8	81.2	P/P	37 - 122
2350620	Endosulfan Sulfate	76.2	84.0	P/P	43 - 132
2350620	Endrin	71.0	83.3	P/P	29 - 101
2350620	Endrin Aldehyde	73.1	77.3	P/P	19 - 110
2350620	Endrin Ketone	78.5	92.3	P/P	60 - 140
2350620	Esfenvalerate	59.1	69.5	P/P	26 - 199
2350620	Ethalfuralin	64.9	75.1	P/P	45 - 99.0
2350620	Fenpropathrin	94.5	109	P/P	35 - 120
2350620	Gamma-BHC	89.1	106	P/P	63 - 128
2350620	Gamma-Chlordane	62.9	69.1	P/P	40 - 104
2350620	Heptachlor	59.5	65.0	P/P	36 - 97.0
2350620	Heptachlor Epoxide	71.8	87.1	P/P	49 - 184
2350620	Hexachlorobenzene	68.6	77.6	P/P	39 - 96.0
2350620	Kepone	116	125	P/P	10 - 217
2350620	Lambda-Cyhalothrin	55.1	62.3	P/P	21 - 193
2350620	Methoprene	53.9	60.9	P/P	20 - 106
2350620	Methoxychlor	61.0	74.2	P/P	53 - 118
2350620	MGK-264	77.8	92.0	P/P	40 - 118
2350620	Mirex	51.7	56.2	P/P	26 - 92.0
2350620	Oxychlordane	70.1	80.8	P/P	44 - 99.0
2350620	Permethrin	62.5	68.4	P/P	33 - 182
2350620	Phenothrin	47.4	53.6	P/P	10 - 129
2350620	Piperonyl Butoxide	83.7	101	P/P	10 - 211
2350620	Prallethrin	68.1	73.8	P/P	24 - 113
2350620	Tau-Fluvalinate	57.0	61.6	P/P	14 - 149
2350620	Tetramethrin	72.4	86.5	P/P	17 - 151
2350620	Trans-Nonachlor	72.4	78.0	P/P	42 - 102
2350620	Triclosan Methyl	71.4	81.3	P/P	48 - 108
2350620	Trifluralin	64.8	76.3	P/P	47 - 96.0
2350970	PCB-1016	98.3	81.9	P/P	46 - 111
2350970	PCB-1260	92.3	82.4	P/P	45 - 114

Reference Method: EPA 8276

Batch ID: P418277

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350970	Chlordane	115	106	P/P	53 - 126
2350970	Toxaphene	132	118	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P418300

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349650	Acesulfame K	79.1	90.9	P/P	40 - 150
2349650	AMPA	103	98.5	P/P	40 - 150
2349650	Endothall	127	131	P/P	40 - 150
2349650	Glufosinate	103	102	P/P	40 - 150
2349650	Glyphosate	110	107	P/P	40 - 150
2349650	Sucralose	93.0	109	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P418371

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350002	2,4-D	68.8	70.9	P/P	40 - 150
2350002	2,4,5-T	68.5	72.4	P/P	40 - 150
2350002	Acetaminophen	71.5	74.1	P/P	30 - 150
2350002	Acetamiprid	57.5	58.9	P/P	40 - 150
2350002	Afidopyropen	52.4	67.1	P/P	30 - 150
2350002	Bentazon	103	90.0	P/P	30 - 150
2350002	Benzovindiflupyr	70.0	92.2	P/P	40 - 150
2350002	Carbamazepine	90.8	90.3	P/P	40 - 150
2350002	Clothianidin	66.9	55.7	P/P	40 - 150
2350002	Dinotefuran	96.9	96.5	P/P	40 - 150
2350002	Diuron	76.3	86.0	P/P	40 - 150
2350002	Fenuron	80.3	80.9	P/P	40 - 150
2350002	Fluridone	93.5	109	P/P	40 - 150
2350002	Hydrocodone	103	104	P/P	40 - 150
2350002	Ibuprofen	71.3	75.7	P/P	40 - 150
2350002	Imazapyr	70.8	74.5	P/P	40 - 150
2350002	Imidacloprid	53.3	65.8	P/P	40 - 150
2350002	Linuron	86.8	80.1	P/P	40 - 150
2350002	Mandestrobin	89.9	89.6	P/P	40 - 150
2350002	MCCP	75.3	65.7	P/P	40 - 150
2350002	Naproxen	84.6	81.0	P/P	40 - 150
2350002	Primidone	46.9	51.1	P/P	40 - 150
2350002	Pyraclostrobin	84.9	84.6	P/P	40 - 150
2350002	Silvex	63.0	63.6	P/P	40 - 150
2350002	Thiamethoxam	94.8	92.0	P/P	40 - 150
2350002	Tolfenpyrad	46.9	50.0	P/P	30 - 150
2350002	Triclopyr	65.7	66.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P418426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350563	3-Hydroxycarbofuran	88.2	96.2	P/P	40 - 150
2350563	Aldicarb	63.5	54.5	P/P	30 - 150
2350563	Aldicarb Sulfone	86.0	94.5	P/P	40 - 150
2350563	Aldicarb Sulfoxide	44.4	42.8	P/P	40 - 150
2350563	Carbaryl	73.3	72.1	P/P	40 - 150
2350563	Carbofuran	76.3	79.0	P/P	40 - 150
2350563	Methiocarb	70.4	89.8	P/P	40 - 150
2350563	Methomyl	77.9	79.9	P/P	40 - 150
2350563	Oxamyl	87.0	92.4	P/P	40 - 150
2350563	Propoxur	82.3	82.7	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P418466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2350630	Fluoride	102	101	P/P	94 - 104

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P418470

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2349844	Organic Carbon	99.3	99.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P418272

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350028	Color (true)	10.3	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P418273

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350233	Color (true)	0.354	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P418266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350028	Turbidity	16.4	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P418293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350044	Calcium	3.24	Spike	P	0 - 20
2350044	Iron	1.71	Spike	P	0 - 20
2350044	Magnesium	1.92	Spike	P	0 - 20
2350044	Potassium	3.43	Spike	P	0 - 20
2350044	Sodium	2.90	Spike	P	0 - 20
2350044	Strontium	3.67	Spike	P	0 - 20
2350044	Tin	2.80	Spike	P	0 - 20
2350044	Titanium	3.72	Spike	P	0 - 20
2350044	Vanadium	3.45	Spike	P	0 - 20
2350044	Zinc	3.17	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350044	Aluminum	1.03	Spike	P	0 - 20
2350044	Antimony	1.09	Spike	P	0 - 20
2350044	Arsenic	1.83	Spike	P	0 - 20
2350044	Barium	0.945	Spike	P	0 - 20
2350044	Beryllium	0.704	Spike	P	0 - 20
2350044	Boron	2.31	Spike	P	0 - 20
2350044	Cadmium	1.22	Spike	P	0 - 20
2350044	Chromium	0.615	Spike	P	0 - 20
2350044	Cobalt	1.24	Spike	P	0 - 20
2350044	Copper	0.177	Spike	P	0 - 20
2350044	Lead	0.873	Spike	P	0 - 20
2350044	Manganese	0.230	Spike	P	0 - 20
2350044	Molybdenum	1.68	Spike	P	0 - 20
2350044	Nickel	0.824	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P418293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350044	Selenium	1.11	Spike	P	0 - 20
2350044	Silver	1.12	Spike	P	0 - 20
2350044	Thallium	0.183	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418867

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349934	Chloride	0.727	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P418870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349934	Sulfate	0.715	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P418680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349824	Ammonia-N	1.83	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P418448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349825	Kjeldahl Nitrogen	0.0836	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P418529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350099	NO2NO3-N	0.509	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P418370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350101	Total-P	1.07	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418254

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P418254

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349827	O-Phosphate-P	2.73	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P418246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350224	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	3.87	Spike	P	0 - 30
2350224	Acetochlor	10.5	Spike	P	0 - 27
2350224	Alachlor	15.7	Spike	P	0 - 27
2350224	Ametryn	6.93	Spike	P	0 - 34
2350224	Atrazine	7.54	Spike	P	0 - 41
2350224	Atrazine Desethyl	14.7	Spike	P	0 - 38
2350224	Avobenzone	5.73	Spike	P	0 - 30
2350224	Azinphos Methyl	2.32	Spike	P	0 - 62
2350224	Azoxystrobin	18.2	Spike	P	0 - 32
2350224	Bromacil	19.9	Spike	P	0 - 30
2350224	Butylate	26.1	Spike	P	0 - 59
2350224	Caffeine	4.77	Spike	P	0 - 60
2350224	Carbophenothion	5.02	Spike	P	0 - 25
2350224	Carfentrazone Ethyl	1.87	Spike	P	0 - 26
2350224	Chlorfenapyr	8.01	Spike	P	0 - 30
2350224	Chlorpyrifos Ethyl	3.45	Spike	P	0 - 27
2350224	Chlorpyrifos Methyl	6.36	Spike	P	0 - 26
2350224	Coumaphos	3.30	Spike	P	0 - 30
2350224	Cyanazine	0.158	Spike	P	0 - 58
2350224	Cyprodinil	8.14	Spike	P	0 - 30
2350224	Dechlorane Plus	10.7	Spike	P	0 - 30
2350224	Demeton	2.80	Spike	P	0 - 25
2350224	Diazinon	11.4	Spike	P	0 - 29
2350224	Difenoconazole	1.73	Spike	P	0 - 25
2350224	Dimethenamid	6.38	Spike	P	0 - 30
2350224	Dimethomorph	28.4	Spike	P	0 - 30
2350224	Disulfoton	4.19	Spike	P	0 - 33
2350224	Dithiopyr	0.207	Spike	P	0 - 22
2350224	EPTC	5.27	Spike	P	0 - 38
2350224	Ethion	30.6	Spike	P	0 - 79
2350224	Ethoprop	5.73	Spike	P	0 - 23
2350224	Etridiazole	2.16	Spike	P	0 - 30
2350224	Fenamiphos	3.97	Spike	P	0 - 58
2350224	Fenbuconazole	3.46	Spike	P	0 - 37
2350224	Fipronil	4.98	Spike	P	0 - 33
2350224	Fipronil Desulfinyl	4.63	Spike	P	0 - 26
2350224	Fipronil Sulfide	0.00776	Spike	P	0 - 37
2350224	Fipronil Sulfone	8.31	Spike	P	0 - 50
2350224	Fluazifop-P-butyl	7.37	Spike	P	0 - 24
2350224	Fludioxonil	11.7	Spike	P	0 - 26
2350224	Flumioxazin	2.23	Spike	P	0 - 37
2350224	Flutolanil	18.7	Spike	P	0 - 26
2350224	Fluxapyroxad	4.30	Spike	P	0 - 34
2350224	Fonofos	2.40	Spike	P	0 - 27

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350224	Hexazinone	2.79	Spike	P	0 - 36
2350224	Imazalil	34.0	Spike	P	0 - 65
2350224	Iprodione	7.14	Spike	P	0 - 33
2350224	Loratadine	29.3	Spike	P	0 - 30
2350224	Malathion	9.40	Spike	P	0 - 44
2350224	Metalaxyl	3.54	Spike	P	0 - 38
2350224	Metolachlor	10.3	Spike	P	0 - 36
2350224	Metribuzin	6.04	Spike	P	0 - 63
2350224	Mevinphos	2.22	Spike	P	0 - 26
2350224	Molinate	4.32	Spike	P	0 - 40
2350224	Myclobutanil	4.83	Spike	P	0 - 21
2350224	Naled	2.95	Spike	P	0 - 26
2350224	Napropamide	12.5	Spike	P	0 - 30
2350224	Norflurazon	4.63	Spike	P	0 - 24
2350224	Octinoxate	3.67	Spike	P	0 - 30
2350224	Oxadiazon	13.5	Spike	P	0 - 27
2350224	Oxybenzone	0.0905	Spike	P	0 - 30
2350224	Oxyfluorfen	10.5	Spike	P	0 - 24
2350224	Parathion Ethyl	4.84	Spike	P	0 - 28
2350224	Parathion Methyl	1.07	Spike	P	0 - 27
2350224	PBDE-47	6.75	Spike	P	0 - 30
2350224	PBDE-99	6.55	Spike	P	0 - 30
2350224	Pendimethalin	5.88	Spike	P	0 - 31
2350224	Phenytoin	13.0	Spike	P	0 - 30
2350224	Phorate	2.19	Spike	P	0 - 27
2350224	Prodiamine	8.77	Spike	P	0 - 52
2350224	Prometon	3.49	Spike	P	0 - 31
2350224	Prometryn	0.847	Spike	P	0 - 28
2350224	Pronamide	2.20	Spike	P	0 - 26
2350224	Propanil	3.71	Spike	P	0 - 30
2350224	Propargite	2.97	Spike	P	0 - 30
2350224	Propiconazole	4.93	Spike	P	0 - 31
2350224	Pyraflufen Ethyl	1.86	Spike	P	0 - 30
2350224	Pyridaben	15.3	Spike	P	0 - 30
2350224	Pyriproxyfen	5.80	Spike	P	0 - 50
2350224	Simazine	10.2	Spike	P	0 - 29
2350224	Stirophos	26.6	Spike	P	0 - 30
2350224	Sulfentrazone	4.68	Spike	P	0 - 33
2350224	Tebuconazole	4.34	Spike	P	0 - 44
2350224	Terbufos	2.59	Spike	P	0 - 29
2350224	Terbutylazine	7.67	Spike	P	0 - 27
2350224	Thiobencarb	0.510	Spike	P	0 - 30
2350224	Tri-o-cresyl Phosphate	5.79	Spike	P	0 - 30
2350224	Triadimefon	6.83	Spike	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P418277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350620	Aldrin	12.0	Spike	P	0 - 41

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P418277

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350620	Alpha-BHC	13.6	Spike	P	0 - 25
2350620	Alpha-Chlordane	13.1	Spike	P	0 - 33
2350620	Beta-BHC	16.3	Spike	P	0 - 36
2350620	Beta-Cyfluthrin	11.3	Spike	P	0 - 42
2350620	Bifenthrin	6.64	Spike	P	0 - 53
2350620	Chlorothalonil	10.5	Spike	P	0 - 71
2350620	Cis-Nonachlor	17.7	Spike	P	0 - 29
2350620	Cypermethrin	11.6	Spike	P	0 - 40
2350620	Dacthal	18.4	Spike	P	0 - 26
2350620	DDD-p,p'	13.4	Spike	P	0 - 39
2350620	DDE-p,p'	10.6	Spike	P	0 - 33
2350620	DDT-p,p'	11.3	Spike	P	0 - 40
2350620	Delta-BHC	22.4	Spike	P	0 - 37
2350620	Deltamethrin	17.0	Spike	P	0 - 100
2350620	Dichlobenil	11.9	Spike	P	0 - 40
2350620	Dicofol	15.6	Spike	P	0 - 31
2350620	Dieldrin	17.0	Spike	P	0 - 27
2350620	Endosulfan I	20.1	Spike	P	0 - 23
2350620	Endosulfan II	16.6	Spike	P	0 - 28
2350620	Endosulfan Sulfate	9.64	Spike	P	0 - 38
2350620	Endrin	16.0	Spike	P	0 - 63
2350620	Endrin Aldehyde	5.65	Spike	P	0 - 60
2350620	Endrin Ketone	16.2	Spike	P	0 - 37
2350620	Esfenvalerate	16.1	Spike	P	0 - 52
2350620	Ethalfuralin	14.6	Spike	P	0 - 23
2350620	Fenpropathrin	14.2	Spike	P	0 - 32
2350620	Gamma-BHC	17.5	Spike	F	0 - 17
2350620	Gamma-Chlordane	9.40	Spike	P	0 - 40
2350620	Heptachlor	8.88	Spike	P	0 - 29
2350620	Heptachlor Epoxide	19.3	Spike	P	0 - 25
2350620	Hexachlorobenzene	12.4	Spike	P	0 - 36
2350620	Kepone	7.82	Spike	P	0 - 93
2350620	Lambda-Cyhalothrin	12.2	Spike	P	0 - 55
2350620	Methoprene	12.2	Spike	P	0 - 53
2350620	Methoxychlor	19.5	Spike	P	0 - 29
2350620	MGK-264	16.8	Spike	P	0 - 35
2350620	Mirex	8.32	Spike	P	0 - 46
2350620	Oxychlordane	14.2	Spike	P	0 - 29
2350620	Permethrin	9.05	Spike	P	0 - 44
2350620	Phenothrin	12.3	Spike	P	0 - 56
2350620	Piperonyl Butoxide	19.2	Spike	P	0 - 100
2350620	Prallethrin	7.92	Spike	P	0 - 42
2350620	Tau-Fluvalinate	7.79	Spike	P	0 - 54
2350620	Tetramethrin	17.9	Spike	P	0 - 51
2350620	Trans-Nonachlor	7.39	Spike	P	0 - 37
2350620	Triclosan Methyl	12.9	Spike	P	0 - 31
2350620	Trifluralin	16.3	Spike	P	0 - 30
2350970	PCB-1016	18.2	Spike	P	0 - 32
2350970	PCB-1260	11.3	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P418277

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350970	Chlordane	8.62	Spike	P	0 - 25
2350970	Toxaphene	11.5	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P418300

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349650	Acesulfame K	13.8	Spike	P	0 - 30
2349650	AMPA	4.26	Spike	P	0 - 30
2349650	Endothall	2.83	Spike	P	0 - 30
2349650	Glufosinate	0.409	Spike	P	0 - 30
2349650	Glyphosate	3.07	Spike	P	0 - 30
2349650	Sucralose	15.2	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P418371

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350002	2,4-D	2.78	Spike	P	0 - 30
2350002	2,4,5-T	5.55	Spike	P	0 - 30
2350002	Acetaminophen	3.62	Spike	P	0 - 30
2350002	Acetamiprid	2.51	Spike	P	0 - 30
2350002	Afidopyropen	24.5	Spike	P	0 - 30
2350002	Bentazon	8.29	Spike	P	0 - 30
2350002	Benzovindiflupyr	27.3	Spike	P	0 - 30
2350002	Carbamazepine	0.568	Spike	P	0 - 30
2350002	Clothianidin	18.2	Spike	P	0 - 30
2350002	Dinotefuran	0.482	Spike	P	0 - 30
2350002	Diuron	11.9	Spike	P	0 - 30
2350002	Fenuron	0.732	Spike	P	0 - 30
2350002	Fluridone	15.4	Spike	P	0 - 30
2350002	Hydrocodone	1.10	Spike	P	0 - 30
2350002	Ibuprofen	6.05	Spike	P	0 - 30
2350002	Imazapyr	4.43	Spike	P	0 - 30
2350002	Imidacloprid	19.9	Spike	P	0 - 30
2350002	Linuron	8.07	Spike	P	0 - 30
2350002	Mandestrobin	0.383	Spike	P	0 - 30
2350002	MCPP	9.35	Spike	P	0 - 30
2350002	Naproxen	4.33	Spike	P	0 - 30
2350002	Primidone	8.47	Spike	P	0 - 30
2350002	Pyraclostrobin	0.375	Spike	P	0 - 30
2350002	Silvex	0.989	Spike	P	0 - 30
2350002	Thiamethoxam	2.91	Spike	P	0 - 30
2350002	Tolfenpyrad	6.38	Spike	P	0 - 30
2350002	Triclopyr	1.32	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P418426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350563	3-Hydroxycarbofuran	8.72	Spike	P	0 - 30
2350563	Aldicarb	15.3	Spike	P	0 - 30
2350563	Aldicarb Sulfone	9.46	Spike	P	0 - 30
2350563	Aldicarb Sulfoxide	3.89	Spike	P	0 - 30
2350563	Carbaryl	1.62	Spike	P	0 - 30
2350563	Carbofuran	3.48	Spike	P	0 - 30
2350563	Methiocarb	24.1	Spike	P	0 - 30
2350563	Methomyl	2.45	Spike	P	0 - 30
2350563	Oxamyl	6.07	Spike	P	0 - 30
2350563	Propoxur	0.492	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P418456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350630	Total Alkalinity	1.01	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P418646

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350210	TDS	3.47	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P418466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2350630	Fluoride	0.484	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P418470

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2349844	Organic Carbon	0.0327	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2350220
Field Sample ID: G4CE0167

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	69.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	62.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	94.6	P	30 - 160
EPA 8321B	Diuron-d6	98.4	P	30 - 160
EPA 8321B	Endothall-d6	128	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	90.1	P	30 - 160
EPA 8321B	Primidone-d5	31.9	P	30 - 160
EPA 8321B	Sucralose-d6	110	P	30 - 160

Lab Sample ID: 2350221
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	90.4	P	30 - 160

Lab Sample ID: 2350222
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	63.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	56.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.9	P	30 - 160
EPA 8321B	Diuron-d6	92.9	P	30 - 160
EPA 8321B	Endothall-d6	140	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	52.4	P	30 - 160
EPA 8321B	Primidone-d5	39.7	P	30 - 160
EPA 8321B	Sucralose-d6	107	P	30 - 160

Lab Sample ID: 2350223
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	70.5	P	29 - 130
EPA 8270E	Decachlorobiphenyl	40.9	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	47.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	52.7	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	62.3	P	30 - 101
EPA 8276	PCNB	81.5	P	48 - 121

Lab Sample ID: 2350224
Field Sample ID: G4CE0168

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	42.1	P	20 - 200
EPA 8270E	Simazine-d10	76.7	P	71 - 140
EPA 8270E	Terbufos-d10	80.9	P	62 - 131
EPA 8270E	Terphenyl-d14	54.5	P	52 - 141

Quality Assurance Report

Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A114158

Included Lab Sample IDs: 2350212

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A114165

Included Lab Sample IDs: 2350210, 2350213

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: A114167

Included Lab Sample IDs: 2350210, 2350213

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 110
Color (true)	101	99.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A114235

Included Lab Sample IDs: 2350220, 2350222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	114	114	P/P	60 - 160
Endothall	109	122	P/P	60 - 160
Glufosinate	114	110	P/P	60 - 160
Glyphosate	111	108	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A114238

Included Lab Sample IDs: 2350220, 2350222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.5	95.3	P/P	60 - 160
Sucralose	109	109	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A114240

Included Lab Sample IDs: 2350210, 2350213

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.7	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A114240

Included Lab Sample IDs: 2350210, 2350213

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A114244

Included Lab Sample IDs: 2350211, 2350214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.1	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A114256

Included Lab Sample IDs: 2350225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.3	96.1	P/P	90 - 110
Antimony	98.6	96.9	P/P	90 - 110
Arsenic	98.0	96.4	P/P	90 - 110
Barium	97.9	96.4	P/P	90 - 110
Beryllium	93.9	95.5	P/P	90 - 110
Cadmium	106	105	P/P	90 - 110
Chromium	105	104	P/P	90 - 110
Cobalt	92.3	91.7	P/P	90 - 110
Copper	93.7	92.6	P/P	90 - 110
Lead	92.6	92.0	P/P	90 - 110
Manganese	101	100	P/P	90 - 110
Molybdenum	96.7	96.3	P/P	90 - 110
Nickel	92.5	91.9	P/P	90 - 110
Selenium	103	100	P/P	90 - 110
Silver	97.8	97.4	P/P	90 - 110
Thallium	98.2	97.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114261

Included Lab Sample IDs: 2350224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.6		P	80 - 120
Alachlor	96.2		P	80 - 120
Ametryn	87.4		P	80 - 120
Atrazine	100		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	103		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	94.9		P	80 - 120
Butylate	100		P	80 - 120
Caffeine	95.3		P	80 - 120
Carbophenothion	101		P	80 - 120
Carfentrazone Ethyl	97.3		P	80 - 120
Chlorfenapyr	102		P	80 - 120
Chlorpyrifos Ethyl	103		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Coumaphos	97.9		P	80 - 120
Cyanazine	95.4		P	80 - 120
Cyprodinil	93.9		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	103		P	80 - 120
Difenoconazole	98.1		P	80 - 120
Dimethenamid	94.2		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A114261
Included Lab Sample IDs: 2350224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dimethomorph	96.4		P	80 - 120
Disulfoton	98.0		P	80 - 120
Dithiopyr	95.0		P	80 - 120
EPTC	101		P	80 - 120
Ethion	102		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	94.6		P	80 - 120
Fenbuconazole	94.5		P	80 - 120
Fipronil	98.2		P	80 - 120
Fipronil Desulfinyl	97.5		P	80 - 120
Fipronil Sulfide	95.7		P	80 - 120
Fipronil Sulfone	92.5		P	80 - 120
Fluazifop-P-butyl	90.5		P	80 - 120
Fludioxonil	96.9		P	80 - 120
Flumioxazin	93.9		P	80 - 120
Flutolanil	94.7		P	80 - 120
Fluxapyroxad	95.4		P	80 - 120
Fonofos	98.7		P	80 - 120
Hexazinone	96.9		P	80 - 120
Imazalil	98.0		P	80 - 120
Iprodione	96.1		P	80 - 120
Loratadine	99.8		P	80 - 120
Malathion	98.6		P	80 - 120
Metalaxyl	87.7		P	80 - 120
Metolachlor	96.3		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	101		P	80 - 120
Molinate	100		P	80 - 120
Myclobutanil	94.1		P	80 - 120
Naled	100		P	80 - 120
Napropamide	96.3		P	80 - 120
Norflurazon	98.7		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	98.0		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	106		P	80 - 120
Pendimethalin	97.5		P	80 - 120
Phenytol	97.3		P	80 - 120
Phorate	102		P	80 - 120
Prodiamine	94.9		P	80 - 120
Prometon	95.6		P	80 - 120
Prometryn	93.0		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	94.2		P	80 - 120
Propargite	98.9		P	80 - 120
Propiconazole	97.7		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	95.9		P	80 - 120
Pyriproxyfen	97.7		P	80 - 120
Simazine	106		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114261
Included Lab Sample IDs: 2350224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Stirophos	105		P	80 - 120
Sulfentrazone	98.8		P	80 - 120
Tebuconazole	96.9		P	80 - 120
Terbufos	99.4		P	80 - 120
Terbuthylazine	104		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	97.5		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A114268
Included Lab Sample IDs: 2350211, 2350214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.0	97.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A114284
Included Lab Sample IDs: 2350225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	93.7	93.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A114302
Included Lab Sample IDs: 2350211, 2350214

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

Reference Method: EPA 8270E
Run ID: A114311
Included Lab Sample IDs: 2350223

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	93.9		P	80 - 120
Alpha-BHC	97.3		P	80 - 120
Alpha-Chlordane	98.1		P	80 - 120
Beta-BHC	92.1		P	80 - 120
Beta-Cyfluthrin	93.5		P	80 - 120
Bifenthrin	97.9		P	80 - 120
Chlorothalonil	92.5		P	80 - 120
Cis-Nonachlor	107		P	80 - 120
Cypermethrin	90.9		P	80 - 120
Dacthal	96.1		P	80 - 120
DDD-p,p'	98.1		P	80 - 120
DDE-p,p'	97.6		P	80 - 120
DDT-p,p'	99.0		P	80 - 120
Delta-BHC	88.9		P	80 - 120
Deltamethrin	88.0		P	80 - 120
Dichlobenil	101		P	80 - 120
Dicofol	95.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A114311
Included Lab Sample IDs: 2350223

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dieldrin	100		P	80 - 120
Endosulfan I	96.6		P	80 - 120
Endosulfan II	97.9		P	80 - 120
Endosulfan Sulfate	90.4		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	98.7		P	80 - 120
Endrin Ketone	102		P	80 - 120
Esfenvalerate	89.9		P	80 - 120
Ethalfuralin	94.9		P	80 - 120
Fenpropathrin	126*		F	80 - 120
Gamma-BHC	89.3		P	80 - 120
Gamma-Chlordane	93.7		P	80 - 120
Heptachlor	97.2		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	99.3		P	80 - 120
Kepone	82.2		P	80 - 120
Lambda-Cyhalothrin	96.3		P	80 - 120
Methoprene	101		P	80 - 120
Methoxychlor	85.3		P	80 - 120
MGK-264	98.3		P	80 - 120
Mirex	99.6		P	80 - 120
Oxychlordane	98.7		P	80 - 120
Permethrin	95.0		P	80 - 120
Phenothrin	93.3		P	80 - 120
Piperonyl Butoxide	96.2		P	80 - 120
Prallethrin	96.9		P	80 - 120
Tau-Fluvalinate	93.6		P	80 - 120
Tetramethrin	92.0		P	80 - 120
Trans-Nonachlor	108		P	80 - 120
Triclosan Methyl	96.2		P	80 - 120
Trifluralin	97.8		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A114314
Included Lab Sample IDs: 2350211, 2350214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.8	97.2	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A114332
Included Lab Sample IDs: 2350225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	96.6	95.5	P/P	90 - 110
Tin	93.2	90.7	P/P	90 - 110
Titanium	97.0	94.7	P/P	90 - 110
Vanadium	99.9	97.6	P/P	90 - 110
Zinc	99.8	98.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A114335

Included Lab Sample IDs: 2350210, 2350213

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	97.8	98.6	P/P	90 - 110
Chloride	98.6	98.4	P/P	90 - 110
Sulfate	98.5	99.3	P/P	90 - 110
Sulfate	99.3	99.1	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114340

Included Lab Sample IDs: 2350224

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	96.8		P	80 - 120
Avobenzone	94.1		P	80 - 120
Dechlorane Plus	97.7		P	80 - 120
Octinoxate	93.7		P	80 - 120
Oxybenzone	92.9		P	80 - 120
PBDE-47	96.9		P	80 - 120
PBDE-99	97.8		P	80 - 120
Tri-o-cresyl Phosphate	101		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A114343

Included Lab Sample IDs: 2350211, 2350214

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	98.6	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A114363

Included Lab Sample IDs: 2350223

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	102		P	80 - 120
PCB-1260	97.1		P	80 - 120

Reference Method: EPA 8321B

Run ID: A114369

Included Lab Sample IDs: 2350220, 2350222

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	110	107	P/P	50 - 150
2,4,5-T	116	93.6	P/P	50 - 150
3-Hydroxycarbofuran	97.7	99.8	P/P	60 - 150
Acetaminophen	90.1	90.8	P/P	60 - 160
Acetamiprid	122	115	P/P	50 - 150
Afidopyropen	94.4	108	P/P	50 - 150
Aldicarb	127	99.8	P/P	60 - 150
Aldicarb Sulfone	102	102	P/P	50 - 150
Aldicarb Sulfoxide	97.4	98.6	P/P	50 - 150
Bentazon	96.7	111	P/P	50 - 160
Benzovindiflupyr	115	112	P/P	50 - 150
Carbamazepine	106	113	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A114369
Included Lab Sample IDs: 2350221

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbaryl	89.8	101	P/P	60 - 150
Carbofuran	91.0	113	P/P	50 - 150
Clothianidin	86.1	95.8	P/P	60 - 150
Dinotefuran	102	99.7	P/P	50 - 150
Diuron	89.8	94.2	P/P	60 - 160
Fenuron	95.4	93.1	P/P	60 - 150
Fluridone	102	105	P/P	60 - 160
Hydrocodone	96.1	95.5	P/P	60 - 150
Ibuprofen	60.3	104	P/P	50 - 160
Imazapyr	83.0	72.3	P/P	50 - 150
Imidacloprid	97.8	100	P/P	60 - 150
Linuron	97.1	111	P/P	60 - 150
Mandestrobin	94.9	98.1	P/P	50 - 150
MCP	88.0	85.1	P/P	50 - 150
Methiocarb	93.8	113	P/P	50 - 150
Methomyl	95.1	96.8	P/P	50 - 150
Naproxen	110	111	P/P	50 - 160
Oxamyl	95.4	100	P/P	50 - 150
Primidone	102	87.3	P/P	60 - 150
Propoxur	106	106	P/P	50 - 150
Pyraclostrobin	99.8	95.7	P/P	60 - 150
Silvex	99.3	71.3	P/P	50 - 150
Thiamethoxam	103	99.1	P/P	50 - 150
Tolfenpyrad	93.6	98.7	P/P	60 - 150
Triclopyr	106	83.0	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A114391
Included Lab Sample IDs: 2350223

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.1		P	80 - 120
Toxaphene	96.7		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A114528
Included Lab Sample IDs: 2350225

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	97.8	P/P	90 - 110
Iron	101	97.5	P/P	90 - 110
Magnesium	101	97.8	P/P	90 - 110
Potassium	102	97.4	P/P	90 - 110
Sodium	99.2	94.2	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 SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	99.6				10.3	
	Color (true)	97.8				0.354	
EPA 180.1 Rev. 2.0	Turbidity	97.1				16.4	
EPA 200.7 Rev. 4.4	Calcium	99.2	101	96.2			3.24
	Iron	98.7	96.8	99.1	97.1		1.71
	Magnesium	99.2	99.9	99.6	97.2		1.92
	Potassium	104	104	103	99.1		3.43
	Sodium	104	104	104	99.3		2.90
	Strontium	101	99.3	100	96.7		3.67
	Tin	97.2	93.7	97.6	94.9		2.80
	Titanium	98.4	96.3	98.0	94.4		3.72
	Vanadium	98.4	97.5	96.7	93.5		3.45
	Zinc	97.7	94.9	97.2	94.2		3.17
EPA 200.8 Rev. 5.4	Aluminum	103	104	103	97.4		1.03
	Antimony	99.2	99.4	101	102		1.09
	Arsenic	101	100	102	98.4		1.83
	Barium	104	104	105	102		0.945
	Beryllium	94.9	95.5	94.8	91.9		0.704
	Boron	99.9	97.6	101	98.7		2.31
	Cadmium	103	100	102	104		1.22
	Chromium	102	103	102	105		0.615
	Cobalt	96.9	97.5	96.3	92.0		1.24
	Copper	98.3	101	101	90.6		0.177
	Lead	96.5	98.7	97.9	95.7		0.873
	Manganese	101	104	103	101		0.230
	Molybdenum	99.4	99.4	101	101		1.68
	Nickel	99.4	101	99.7	94.1		0.824
	Selenium	101	101	102	98.7		1.11
	Silver	102	101	99.8	98.9		1.12
	Thallium	97.0	98.7	98.6	98.3		0.183
EPA 300.0 Rev. 2.1	Chloride	98.0	96.7	97.0		0.727	
	Sulfate	98.6	97.4	96.2		0.715	
EPA 350.1 Rev. 2.0	Ammonia-N	100	97.4	99.4			1.83
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101					0.0836
EPA 353.2 Rev. 2.0	NO2NO3-N	97.5	98.5	98.0			0.509
EPA 365.1 Rev. 2.0	Total-P	109	108	107			1.07
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	94.3	97.1			2.73
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	85.9	76.4	73.5			3.87
	Acetochlor	75.0	82.9	92.0			10.5
	Alachlor	72.3	68.4	80.0			15.7
	Aldrin	44.2	48.6	54.8			12.0
	Alpha-BHC	93.9	84.2	96.5			13.6
	Alpha-Chlordane	72.7	64.9	74.0			13.1
	Ametryn	76.9	54.1	62.9			6.93
	Atrazine	81.5	89.4	101			7.54
	Atrazine Desethyl	52.5	44.0	51.0			14.7
	Avobenzone	77.1	84.2	79.5			5.73
	Azinphos Methyl	97.3	102	100			2.32
	Azoxystrobin	102	102	126			18.2
	Beta-BHC	116	103	122			16.3
	Beta-Cyfluthrin	71.2	63.4	71.0			11.3
	Bifenthrin	50.7	45.9	49.1			6.64

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Bromacil	53.2				19.9
	Butylate	44.5	56.8	43.7		26.1
	Caffeine	89.3	86.9	91.2		4.77
	Carbophenothion	74.6	78.1	82.1		5.02
	Carfentrazone Ethyl	79.1	80.5	79.0		1.87
	Chlorfenapyr	76.6	76.3	70.4		8.01
	Chlorothalonil	71.3	71.1	79.0		10.5
	Chlorpyrifos Ethyl	78.9	75.6	73.1		3.45
	Chlorpyrifos Methyl	86.0	85.9	80.6		6.36
	Cis-Nonachlor	74.2	64.2	76.7		17.7
	Coumaphos	79.5	50.3	52.0		3.30
	Cyanazine	66.4	71.4	71.5		0.158
	Cypermethrin	73.6	61.4	68.9		11.6
	Cyprodinil	70.5	68.1	73.9		8.14
	Dacthal	89.9	82.2	98.8		18.4
	DDD-p,p'	68.0	63.1	72.2		13.4
	DDE-p,p'	67.7	65.0	72.3		10.6
	DDT-p,p'	69.0	61.4	68.7		11.3
	Dechlorane Plus	101	90.5	81.3		10.7
	Delta-BHC	118	105	132		22.4
	Deltamethrin	77.2	62.9	74.6		17.0
	Demeton	71.8	90.0	92.6		2.80
	Diazinon	81.2	87.0	97.5		11.4
	Dichlobenil	93.2	86.6	97.6		11.9
	Dicofol	72.2	64.5	75.4		15.6
	Dieldrin	75.9	67.9	80.5		17.0
	Difenoconazole	82.8	104	102		1.73
	Dimethenamid	58.9	70.0	74.6		6.38
	Dimethomorph	101	103	137		28.4
	Disulfoton	76.0	81.1	84.6		4.19
	Dithiopyr	72.3	57.8	57.6		0.207
	Endosulfan I	76.0	70.5	86.3		20.1
	Endosulfan II	74.9	68.8	81.2		16.6
	Endosulfan Sulfate	90.8	76.2	84.0		9.64
	Endrin	75.0	71.0	83.3		16.0
	Endrin Aldehyde	83.7	73.1	77.3		5.65
	Endrin Ketone	87.8	78.5	92.3		16.2
	EPTC	43.9	52.5	49.8		5.27
	Esfenvalerate	71.0	59.1	69.5		16.1
	Ethalfuralin	70.2	64.9	75.1		14.6
	Ethion	39.6	55.6	40.8		30.6
	Ethoprop	79.5	91.5	86.4		5.73
	Etridiazole	49.3	63.1	61.8		2.16
	Fenamiphos	74.3	70.4	67.7		3.97
	Fenbuconazole	71.6	76.2	73.3		3.46
	Fenpropathrin	99.0	94.5	109		14.2
	Fipronil	71.1	80.4	84.5		4.98
	Fipronil Desulfinyl	79.3	86.1	82.2		4.63
	Fipronil Sulfide	61.3	64.4	64.4		0.0077
	Fipronil Sulfone	57.7	70.2	76.3		8.31
	Fluazifop-P-butyl	73.3	79.4	85.5		7.37
	Fludioxonil	67.9	73.7	82.8		11.7
	Flumioxazin	98.1	111	113		2.23
	Flutolanil	65.8	69.4	83.8		18.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Fluxapyroxad	58.8	71.5	68.5		4.30
	Fonofos	73.8	80.7	78.8		2.40
	Gamma-BHC	95.3	89.1	106		17.5
	Gamma-Chlordane	69.6	62.9	69.1		9.40
	Heptachlor	63.5	59.5	65.0		8.88
	Heptachlor Epoxide	76.4	71.8	87.1		19.3
	Hexachlorobenzene	73.2	68.6	77.6		12.4
	Hexazinone	73.7	82.3	79.8		2.79
	Imazalil	61.8	61.7	86.9		34.0
	Iprodione	68.7	75.5	81.1		7.14
	Kepone	123	116	125		7.82
	Lambda-Cyhalothrin	62.9	55.1	62.3		12.2
	Loratadine	98.4	101	136		29.3
	Malathion	91.0	92.1	83.8		9.40
	Metalaxyl	66.2	69.0	73.2		3.54
	Methoprene	64.4	53.9	60.9		12.2
	Methoxychlor	68.1	61.0	74.2		19.5
	Metolachlor	71.5	71.2	79.4		10.3
	Metribuzin	88.8	94.3	100		6.04
	Mevinphos	72.1	78.7	77.0		2.22
	MGK-264	80.5	77.8	92.0		16.8
	Mirex	52.2	51.7	56.2		8.32
	Molinate	58.4	68.4	65.5		4.32
	Myclobutanil	64.6	73.7	77.4		4.83
	Naled	60.8	85.7	88.3		2.95
	Napropamide	58.8	55.0	62.3		12.5
	Norflurazon	65.3				4.63
	Octinoxate	70.2	70.8	68.3		3.67
	Oxadiazon	59.9	66.0	75.6		13.5
	Oxybenzone	62.0	71.3	71.2		0.0905
	Oxychlordane	72.2	70.1	80.8		14.2
	Oxyfluorfen	81.7	92.2	102		10.5
	Parathion Ethyl	85.3	90.1	94.6		4.84
	Parathion Methyl	96.7	110	109		1.07
	PBDE-47	73.7	75.4	70.4		6.75
	PBDE-99	72.6	65.4	61.2		6.55
	PCB-1016	74.3	98.3	81.9		18.2
	PCB-1260	72.3	92.3	82.4		11.3
	Pendimethalin	72.7	87.0	92.3		5.88
	Permethrin	72.5	62.5	68.4		9.05
	Phenothrin	50.3	47.4	53.6		12.3
	Phenytoin	12.4	24.5	27.9		13.0
	Phorate	71.5	85.7	83.9		2.19
	Piperonyl Butoxide	95.7	83.7	101		19.2
	Prallethrin	64.2	68.1	73.8		7.92
	Prodiamine	36.6	48.1	52.5		8.77
	Prometon	56.9	74.5	77.2		3.49
	Prometryn	66.7	65.8	65.3		0.847
	Pronamide	80.7	87.3	85.4		2.20
	Propanil	69.9	84.0	87.2		3.71
	Propargite	46.2	55.2	53.6		2.97
	Propiconazole	60.8	68.3	71.8		4.93
	Pyraflufen Ethyl	68.6	70.6	71.9		1.86
	Pyridaben	81.5	80.7	69.2		15.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pyriproxyfen	66.3	69.4	65.4		5.80
	Simazine	76.6	84.2	93.3		10.2
	Stirophos	50.7	49.4	37.8		26.6
	Sulfentrazone	31.2	81.1	77.4		4.68
	Tau-Fluvalinate	63.8	57.0	61.6		7.79
	Tebuconazole	33.2	44.2	42.3		4.34
	Terbufos	88.6	102	104		2.59
	Terbutylazine	73.9	87.2	94.2		7.67
	Tetramethrin	73.7	72.4	86.5		17.9
	Thiobencarb	66.9	69.5	69.8		0.510
	Trans-Nonachlor	77.2	72.4	78.0		7.39
	Tri-o-cresyl Phosphate	74.6	75.6	71.3		5.79
	Triadimefon	65.1	74.6	69.7		6.83
	Triclosan Methyl	76.3	71.4	81.3		12.9
	Trifluralin	71.2	64.8	76.3		16.3
EPA 8276	Chlordane	79.5	115	106		8.62
	Toxaphene	84.3	132	118		11.5
EPA 8321B	2,4-D	66.7	68.8	70.9		2.78
	2,4,5-T	72.5	68.5	72.4		5.55
	3-Hydroxycarbofuran	84.9	88.2	96.2		8.72
	Acesulfame K	93.5	79.1	90.9		13.8
	Acetaminophen	88.1	71.5	74.1		3.62
	Acetamiprid	80.9	57.5	58.9		2.51
	Afidopyropen	89.0	52.4	67.1		24.5
	Aldicarb	62.2	63.5	54.5		15.3
	Aldicarb Sulfone	92.3	86.0	94.5		9.46
	Aldicarb Sulfoxide	86.8	44.4	42.8		3.89
	AMPA	111	103	98.5		4.26
	Bentazon	114	103	90.0		8.29
	Benzovindiflupyr	98.5	70.0	92.2		27.3
	Carbamazepine	117	90.8	90.3		0.568
	Carbaryl	86.0	73.3	72.1		1.62
	Carbofuran	77.9	76.3	79.0		3.48
	Clothianidin	100	66.9	55.7		18.2
	Dinotefuran	108	96.9	96.5		0.482
	Diuron	86.2	76.3	86.0		11.9
	Endothall	108	127	131		2.83
	Fenuron	113	80.3	80.9		0.732
	Fluridone	90.2	93.5	109		15.4
	Glufosinate	117	103	102		0.409
	Glyphosate	109	110	107		3.07
	Hydrocodone	99.0	103	104		1.10
	Ibuprofen	81.9	71.3	75.7		6.05
	Imazapyr	86.3	70.8	74.5		4.43
	Imidacloprid	93.3	53.3	65.8		19.9
	Linuron	101	86.8	80.1		8.07
	Mandestrobin	101	89.9	89.6		0.383
	MCPPP	85.7	75.3	65.7		9.35
	Methiocarb	73.8	70.4	89.8		24.1
	Methomyl	82.3	77.9	79.9		2.45
	Naproxen	148	84.6	81.0		4.33
	Oxamyl	91.7	87.0	92.4		6.07
	Primidone	89.4	46.9	51.1		8.47
	Propoxur	90.7	82.3	82.7		0.492

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Pyraclostrobin	88.9	84.9	84.6		0.375
	Silvex	66.8	63.0	63.6		0.989
	Sucralose	107	93.0	109		15.2
	Thiamethoxam	101	94.8	92.0		2.91
	Tolfenpyrad	40.5	46.9	50.0		6.38
	Triclopyr	68.9	65.7	66.5		1.32
SM 2320 B-2011	Total Alkalinity	99.7			1.01	
SM 2540 C-2011	TDS				3.47	
SM 4500-F- C-2011	Fluoride	102	102	101		0.484
SM 5310 B-2011	Organic Carbon	97.0	99.3	99.4		0.0327

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2350210, 2350213
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2350210, 2350213
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2350225
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2350225
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2350210, 2350213
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2350210, 2350213
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2350211, 2350214
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2350211, 2350214
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2350211, 2350214
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2350211, 2350214
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2350212
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2350224
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2350223
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2350224
EPA 8270E	PCBs in water matrices by GC/MS/MS	2350223
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2350223
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2350221
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2350220, 2350222
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2350210, 2350213
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2350225
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2350210, 2350213
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2350210, 2350213
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2350210, 2350213
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2350211, 2350214

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	08/17/2022			08/17/2022 16:34	Anna M. Plaviak	2350213
	08/17/2022			08/17/2022 16:53	Anna M. Plaviak	2350210
EPA 180.1 Rev. 2.0	08/17/2022			08/17/2022 15:24	Khloe J Berg	2350210
	08/17/2022			08/17/2022 15:26	Khloe J Berg	2350213
EPA 200.7 Rev. 4.4	08/17/2022	08/18/2022 10:30	Megan Whitefoot	08/25/2022 05:44	McKinley C Carter	2350225
	08/17/2022	08/18/2022 10:30	Megan Whitefoot	09/03/2022 02:31	McKinley C Carter	2350225
EPA 200.8 Rev. 5.4	08/17/2022	08/18/2022 10:30	Megan Whitefoot	08/22/2022 19:34	Emily M Philpot	2350225
	08/17/2022	08/18/2022 10:30	Megan Whitefoot	08/24/2022 02:18	Megan Whitefoot	2350225
EPA 300.0 Rev. 2.1	08/17/2022			08/26/2022 16:28	Anna M. Plaviak	2350213
	08/17/2022			08/26/2022 20:00	Anna M. Plaviak	2350210
EPA 350.1 Rev. 2.0	08/17/2022			08/25/2022 10:32	Judith K. Clark	2350211
	08/17/2022			08/25/2022 10:33	Judith K. Clark	2350214
EPA 351.2 Rev. 2.0	08/17/2022	08/23/2022 16:31	Samantha L Bates	08/24/2022 17:18	Samantha L Bates	2350211
	08/17/2022	08/23/2022 16:31	Samantha L Bates	08/24/2022 17:19	Samantha L Bates	2350214
EPA 353.2 Rev. 2.0	08/17/2022			08/23/2022 10:41	Beverly Y. Sanders	2350211
	08/17/2022			08/23/2022 10:42	Beverly Y. Sanders	2350214
EPA 365.1 Rev. 2.0	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 11:46	James L Waggeberby	2350211
	08/17/2022	08/23/2022 18:30	Simonne.V. Calhoun	08/24/2022 11:47	James L Waggeberby	2350214
EPA 365.1 Rev. 2.0 dissolved	08/17/2022			08/17/2022 13:24	Elise M. Gillis	2350212
EPA 8270E	08/17/2022	08/19/2022 08:00	Fe-Val Siddell	08/22/2022 17:25	Michael Poppell	2350224
	08/17/2022	08/19/2022 08:00	Fe-Val Siddell	08/24/2022 20:01	Lipi Saha	2350224
	08/17/2022	08/22/2022 08:00	Fe-Val Siddell	08/24/2022 22:09	Vandana T. Nagar	2350223
	08/17/2022	08/22/2022 08:00	Fe-Val Siddell	08/26/2022 02:06	Julie Wi	2350223
EPA 8276	08/17/2022	08/22/2022 08:00	Fe-Val Siddell	08/26/2022 13:50	Arthur Maknenko	2350223
EPA 8321B	08/17/2022	08/19/2022 09:00	Umesh Chiluwal	08/19/2022 13:08	Umesh Chiluwal	2350220
	08/17/2022	08/19/2022 09:00	Umesh Chiluwal	08/19/2022 13:21	Umesh Chiluwal	2350222
	08/17/2022	08/19/2022 09:00	Umesh Chiluwal	08/19/2022 21:54	Umesh Chiluwal	2350220
	08/17/2022	08/19/2022 09:00	Umesh Chiluwal	08/19/2022 22:09	Umesh Chiluwal	2350222
	08/17/2022	08/22/2022 09:30	June Rhew	08/26/2022 11:24	Juyoung Kim	2350220
	08/17/2022	08/22/2022 09:30	June Rhew	08/26/2022 11:45	Juyoung Kim	2350222
	08/17/2022	08/23/2022 09:30	June Rhew	08/26/2022 06:13	Juyoung Kim	2350221
SM 2320 B-2011	08/17/2022			08/20/2022 02:34	Adam P Silver	2350210
	08/17/2022			08/20/2022 02:47	Adam P Silver	2350213
SM 2340 B-2011	08/17/2022			09/03/2022 02:31	McKinley C Carter	2350225
SM 2540 C-2011	08/17/2022			08/19/2022 15:07	Yijie Li	2350210, 2350213
SM 2540 D-2011	08/17/2022			08/19/2022 15:07	Yijie Li	2350210, 2350213
SM 4500-F- C-2011	08/17/2022			08/20/2022 02:34	Adam P Silver	2350210
	08/17/2022			08/20/2022 02:47	Adam P Silver	2350213
SM 5310 B-2011	08/17/2022			08/19/2022 23:53	Judith K. Clark	2350211
	08/17/2022			08/20/2022 00:08	Judith K. Clark	2350214