

Chemical Analysis Report

SW-DIST-2023-10-11-01

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

Event Description: **Run 1**
Request ID: **RQ-2023-09-11-57**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 07-NOV-2023 10:14



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: HOMOSASSA RIVER DOWNRIVER STREAM OF BOAT RAMP **Collection Date/Time: 10/10/2023 12:30**

Field ID: G5SW0189

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444293	DEP SOP: NU-094-1	Color (true)	17		PCU	P436366	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P436362	
	EPA 300.0 Rev. 2.1	Chloride	4.2E+03		mg Cl/L	P436656	
		Sulfate	600		mg SO4/L	P436662	
	SM 2320 B-2011	Total Alkalinity	138		mg CaCO3/L	P436469	
	SM 2540 C-2015	TDS	6.98E+03		mg/L	P436961	
	SM 2540 D-2015	TSS	3	I	mg/L	P436854	
	SM 4500-F- C-2011	Fluoride	0.30		mg F/L	P436805	
2444295	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P436539	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.42		mg N/L	P436498	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P436876	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P436460	
	SM 5310 B-2011	Organic Carbon	3.6		mg C/L	P436658	
2444326	EPA 200.7 Rev. 4.4	Calcium	132		mg/L	P436543	
		Iron	90	U	ug/L	P436543	
		Magnesium	254		mg/L	P436543	
		Potassium	88		mg/L	P436543	
		Sodium	2.29E+03		mg/L	P436543	
		Strontium	1.74E+03		ug/L	P436543	
		Tin	9.0	U	ug/L	P436543	
		Titanium	2.4	I	ug/L	P436543	
	EPA 200.8 Rev. 5.4	Vanadium	6.0	U	ug/L	P436543	
		Zinc	15	U	ug/L	P436543	
		Aluminum	50	U	ug/L	P436543	
		Antimony	0.50	U	ug/L	P436543	
		Arsenic	1.2	I	ug/L	P436543	
		Barium	8.6		ug/L	P436543	
		Beryllium	0.10	U	ug/L	P436543	
		Boron	841		ug/L	P436543	
		Cadmium	0.20	U	ug/L	P436543	
		Chromium	1.6	U	ug/L	P436543	
		Cobalt	0.87		ug/L	P436543	
		Copper	1.6	U	ug/L	P436543	
		Lead	2.0	U	ug/L	P436543	
		Manganese	11.2		ug/L	P436543	
		Molybdenum	2.3	I	ug/L	P436543	
		Nickel	5.0	U	ug/L	P436543	
		Selenium	2.0	U	ug/L	P436543	
		Silver	0.040	U	ug/L	P436543	
		Thallium	1.0	U	ug/L	P436543	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Sample Location: LAKE ROUSSEAU AT CENTER

Collection Date/Time: 10/10/2023 13:45

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444291	DEP SOP: NU-094-1	Color (true)	17		PCU	P436366	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P436362	
	EPA 300.0 Rev. 2.1	Chloride	10		mg Cl/L	P436656	
		Sulfate	25		mg SO4/L	P436662	
	SM 2320 B-2011	Total Alkalinity	99	A	mg CaCO3/L	P436469	
	SM 2540 C-2015	TDS	160	A	mg/L	P436961	
	SM 2540 D-2015	TSS	3	IA	mg/L	P436854	
2444292	SM 4500-F- C-2011	Fluoride	0.093	I	mg F/L	P436575	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.020		mg N/L	P436613	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.53		mg N/L	P437063	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.37		mg N/L	P436455	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P436648	
2444304	EPA 8270E	SM 5310 B-2011	Organic Carbon	4.6	mg C/L	P436521	
		Aldrin	0.74	U	ng/L	P436476	
		Alpha-BHC	0.11	U	ng/L	P436476	
		Alpha-Chlordane	0.23	U	ng/L	P436476	
		PCB-1016	2.3	U	ng/L	P436476	
		Beta-BHC	0.11	U	ng/L	P436476	
		PCB-1221	2.3	U	ng/L	P436476	
		Beta-Cyfluthrin	1.4	U	ng/L	P436476	
		PCB-1232	2.3	U	ng/L	P436476	
		Bifenthrin	0.57	U	ng/L	P436476	
		PCB-1242	2.3	U	ng/L	P436476	
		PCB-1248	2.3	U	ng/L	P436476	
		Chlorothalonil	4.1	UJ	ng/L	P436476	CCV
		PCB-1254	2.3	U	ng/L	P436476	
		Cis-Nonachlor	0.23	U	ng/L	P436476	
		PCB-1260	2.3	U	ng/L	P436476	
		Cypermethrin	1.7	U	ng/L	P436476	
		Dacthal	0.17	U	ng/L	P436476	
		DDD-p,p'	0.28	U	ng/L	P436476	
		DDE-p,p'	0.23	U	ng/L	P436476	
		DDT-p,p'	0.91	U	ng/L	P436476	
		Delta-BHC	0.46	U	ng/L	P436476	
		Deltamethrin	1.4	U	ng/L	P436476	
		Dichlobenil	0.28	U	ng/L	P436476	
		Dicofol	1.4	U	ng/L	P436476	
		Diieldrin	0.46	U	ng/L	P436476	
		Endosulfan I	0.46	U	ng/L	P436476	
		Endosulfan II	1.0	U	ng/L	P436476	
		Endosulfan Sulfate	0.34	U	ng/L	P436476	
		Endrin	1.0	U	ng/L	P436476	
		Endrin Aldehyde	0.85	U	ng/L	P436476	
		Endrin Ketone	0.46	U	ng/L	P436476	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2444304	EPA 8270E	Esfenvalerate	0.85	U	ng/L	P436476	CCV	
		Ethalfuralin	0.17	U	ng/L	P436476		
		Fenpropathrin	0.28	U	ng/L	P436476		
		Gamma-BHC	0.14	U	ng/L	P436476		
		Gamma-Chlordane	0.23	U	ng/L	P436476		
		Heptachlor	0.23	U	ng/L	P436476		
		Heptachlor Epoxide	0.28	U	ng/L	P436476		
		Hexachlorobenzene**	1.1	U	ng/L	P436476		
		Kepone	15	UJ	ng/L	P436476		
		Lambda-Cyhalothrin	0.85	U	ng/L	P436476		
		Methoprene	0.85	U	ng/L	P436476		
		Methoxychlor	0.34	U	ng/L	P436476		
		MGK-264	0.23	U	ng/L	P436476		
		Mirex	0.40	U	ng/L	P436476		
		Oxychlordane	0.34	U	ng/L	P436476		
		Permethrin	1.8	U	ng/L	P436476		
		Phenothrin	1.0	U	ng/L	P436476		
		Piperonyl Butoxide	0.17	U	ng/L	P436476		
		Prallethrin	2.3	U	ng/L	P436476		
		Tau-Fluvalinate	0.28	U	ng/L	P436476		
		Tetramethrin	0.85	U	ng/L	P436476		
		Trans-Nonachlor	0.23	U	ng/L	P436476		
		Triclosan Methyl	0.17	U	ng/L	P436476		
		Trifluralin	0.23	U	ng/L	P436476		
	EPA 8276	Chlordane	2.3	U	ng/L	P436476		
		Toxaphene	17	U	ng/L	P436476		
2444305	EPA 8270E	Oxybenzone**	11	U	ng/L	P436398	RPD	
		Acetochlor	0.22	U	ng/L	P436398		
		Octinoxate**	160	U	ng/L	P436398		
		Alachlor	0.44	U	ng/L	P436398		
		Avobenzone**	110	U	ng/L	P436398		
		Ametryn	1.2	U	ng/L	P436398		
		Atrazine	0.99	I	ng/L	P436398		
		PBDE-47**	4.4	U	ng/L	P436398		
		Atrazine Desethyl	1.4	U	ng/L	P436398		
		PBDE-99**	5.5	U	ng/L	P436398		
		Azinphos Methyl	3.3	U	ng/L	P436398		
		Tri-o-cresyl Phosphate**	6.6	U	ng/L	P436398		
		Azoxystrobin	0.44	U	ng/L	P436398		
		Bromacil	0.66	U	ng/L	P436398		
		2-Ethylhexyl	13	U	ng/L	P436398		
		2,3,4,5-tetrabromobenzoate (EHTBB)**						
		Butylate	0.49	U	ng/L	P436398		
		Dechlorane Plus**	33	U	ng/L	P436398		
		Caffeine**	8.2	U	ng/L	P436398		

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444305	EPA 8270E	Dechlorane 602**	5.5	U	ng/L	P436398	
		Carbophenothion	0.55	U	ng/L	P436398	
		Dechlorane 603**	4.4	U	ng/L	P436398	
		Carfentrazone Ethyl	0.16	U	ng/L	P436398	
		Hexabromobenzene**	6.6	U	ng/L	P436398	
		Chlorfenapyr	0.33	U	ng/L	P436398	
		PBB-153**	6.6	U	ng/L	P436398	
		Chlorpyrifos Ethyl	0.33	U	ng/L	P436398	
		Pentabromotoluene**	3.3	U	ng/L	P436398	
		Chlorpyrifos Methyl	0.11	U	ng/L	P436398	
		Tris(2-chloroethyl) phosphate (TCEP)**	60	U	ng/L	P436398	
		Coumaphos	1.2	U	ng/L	P436398	RPD
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	27	U	ng/L	P436398	
		Cyanazine	5.5	U	ng/L	P436398	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	U	ng/L	P436398	
		Cyprodinil	0.22	U	ng/L	P436398	
		Tetradecachloro-m-terphenyl**	8.2	U	ng/L	P436398	
		Demeton	3.8	U	ng/L	P436398	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	66	U	ng/L	P436398	
		Diazinon	0.14	U	ng/L	P436398	
		Difenoconazole	0.66	U	ng/L	P436398	MS
		Dimethenamid	0.11	U	ng/L	P436398	
		Dimethomorph	0.33	U	ng/L	P436398	
		Disulfoton	0.66	U	ng/L	P436398	
		Dithiopyr	1.1	U	ng/L	P436398	
		EPTC	0.55	U	ng/L	P436398	
		Ethion	0.33	U	ng/L	P436398	
		Ethoprop	0.14	UJ	ng/L	P436398	CCV
		Etridiazole	0.11	U	ng/L	P436398	RPD
		Fenamiphos	0.49	U	ng/L	P436398	
		Fenbuconazole	0.55	U	ng/L	P436398	
		Fipronil	0.29	I	ng/L	P436398	
		Fipronil Desulfinyl**	0.24	I	ng/L	P436398	
		Fipronil Sulfide	0.18	I	ng/L	P436398	
		Fipronil Sulfone	0.30	I	ng/L	P436398	
		Fluazifop-P-butyl	0.11	UJ	ng/L	P436398	LCS, MS
		Fludioxonil	0.11	U	ng/L	P436398	
		Flumioxazin	3.3	U	ng/L	P436398	
		Flutolanil	0.11	U	ng/L	P436398	
		Fluxapyroxad	0.27	UJ	ng/L	P436398	CCV, LCS
		Fonofos	0.16	U	ng/L	P436398	
		Hexazinone	0.55	U	ng/L	P436398	
		Imazalil	0.71	U	ng/L	P436398	
		Iprodione	0.55	U	ng/L	P436398	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444305	EPA 8270E	Loratadine**	0.33	U	ng/L	P436398	
		Malathion	0.38	U	ng/L	P436398	
		Metalaxyl	0.64	I	ng/L	P436398	
		Metolachlor	0.82	U	ng/L	P436398	
		Metribuzin	0.44	U	ng/L	P436398	
		Mevinphos	1.1	U	ng/L	P436398	
		Molinate	0.27	U	ng/L	P436398	
		Myclobutanil	0.38	U	ng/L	P436398	
		Naled	2.7	U	ng/L	P436398	
		Napropamide	0.77	U	ng/L	P436398	
		Norflurazon	1.1	U	ng/L	P436398	
		Oxadiazon	0.38	U	ng/L	P436398	
		Oxyfluorfen	0.22	U	ng/L	P436398	
		Parathion Ethyl	0.16	U	ng/L	P436398	
		Parathion Methyl	0.22	U	ng/L	P436398	
		Pendimethalin	1.9	U	ng/L	P436398	
		Phenytain**	5.8	U	ng/L	P436398	
		Phorate	0.27	U	ng/L	P436398	
		Prodiamine	0.22	U	ng/L	P436398	
		Prometon	3.3	U	ng/L	P436398	
		Prometryn	0.38	U	ng/L	P436398	
		Pronamide	0.11	U	ng/L	P436398	
		Propanil	0.11	U	ng/L	P436398	
		Propargite	0.88	U	ng/L	P436398	
		Propiconazole	0.66	U	ng/L	P436398	
		Pyraflufen Ethyl	0.33	U	ng/L	P436398	
		Pyridaben	1.5	U	ng/L	P436398	
		Pyriproxyfen	0.27	U	ng/L	P436398	
		Simazine	1.4		ng/L	P436398	
		Stirophos	0.44	U	ng/L	P436398	
		Sulfentrazone	1.5	U	ng/L	P436398	MS
		Tebuconazole	1.5	U	ng/L	P436398	
		Terbufos	0.22	U	ng/L	P436398	
		Terbutylazine	0.22	U	ng/L	P436398	
		Thiobencarb	0.55	U	ng/L	P436398	
		Triadimefon	0.16	U	ng/L	P436398	
2444306	EPA 8321B	2,4-D	0.0025	I	ug/L	P436414	
		Acesulfame K	0.10	U	ug/L	P436253	
		2,4,5-T	0.0040	U	ug/L	P436414	
		AMPA	0.10	U	ug/L	P436253	
		Acetaminophen	0.0080	U	ug/L	P436414	
		Acetamiprid	0.0020	U	ug/L	P436414	
		Endothall	0.25	U	ug/L	P436253	
		Glufosinate	0.10	U	ug/L	P436253	
		Glyphosate	0.10	U	ug/L	P436253	

Field ID: G4SW0118

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444306	EPA 8321B	Afidopyropen	0.0020	U	ug/L	P436414	
		Bentazon	8.5E-04	I	ug/L	P436414	
		Sucralose	0.063		ug/L	P436253	
		Benzovindiflupyr	0.0020	U	ug/L	P436414	
		Carbamazepine	8.0E-04	U	ug/L	P436414	
		Clothianidin	0.0020	U	ug/L	P436414	
		Dinotefuran	0.0020	U	ug/L	P436414	
		Diuron	0.0020	U	ug/L	P436414	
		Fenuron	0.032	U	ug/L	P436414	MS
		Fluridone	0.0025	I	ug/L	P436414	
		Imazapyr	0.0040	U	ug/L	P436414	
		Hydrocodone	0.0020	U	ug/L	P436414	
		Ibuprofen	0.080	U	ug/L	P436414	
		Imidacloprid	0.0020	U	ug/L	P436414	
		Linuron	0.0040	U	ug/L	P436414	
		Mandestrobin	0.0020	U	ug/L	P436414	
		MCPP	0.0020	U	ug/L	P436414	
		Naproxen	0.0080	U	ug/L	P436414	MS
		Primidone	0.0040	U	ug/L	P436414	
		Pyraclostrobin	0.0020	U	ug/L	P436414	
		Silvex	0.0040	U	ug/L	P436414	
		Thiamethoxam	0.0020	U	ug/L	P436414	
		Tolfenpyrad	0.0020	U	ug/L	P436414	
		Triclopyr	0.0040	U	ug/L	P436414	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low 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 some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: CHASSAHOWITZKA RIVER DOWNSTREAM OF HOUSES **Collection Date/Time: 10/10/2023 10:45**

Field ID: G5SW0065

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2444294	DEP SOP: NU-094-1	Color (true)	18		PCU	P436366	
	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P436362	
	EPA 300.0 Rev. 2.1	Chloride	5.1E+03		mg Cl/L	P436656	
		Sulfate	720		mg SO4/L	P436662	
	SM 2320 B-2011	Total Alkalinity	173		mg CaCO3/L	P436469	
	SM 2540 C-2015	TDS	8.41E+03		mg/L	P436962	
	SM 2540 D-2015	TSS	4	I	mg/L	P436857	
	SM 4500-F- C-2011	Fluoride	0.32		mg F/L	P436805	
2444296	EPA 350.1 Rev. 2.0	Ammonia-N	0.023		mg N/L	P436485	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.30	I	mg N/L	P436727	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P436876	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P436460	
	SM 5310 B-2011	Organic Carbon	3.1		mg C/L	P436522	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P436366

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436362

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P436543

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: P436543

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436656

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436662

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436485

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436539

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436613

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436498

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436727

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436455

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436876

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436460

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436648

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

Reference Method: EPA 8270E
Batch ID: P436398

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P436398

Component	Result	Code	Units
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P436398

Component	Result	Code	Units
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8270E

Batch ID: P436476

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P436476

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

Reference Method: EPA 8276

Batch ID: P436476

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P436253

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: P436414

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P436414

Component	Result	Code	Units
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	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P436469

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

Reference Method: SM 2540 C-2015
Batch ID: P436961

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P436962

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P436854

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P436857

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P436575

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

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Reference Method: SM 4500-F- C-2011
Batch ID: P436805

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P436521

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

Reference Method: SM 5310 B-2011
Batch ID: P436522

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

Reference Method: SM 5310 B-2011
Batch ID: P436658

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: P436366

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436362

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P436543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	80 - 120
Iron	103		P	80 - 120
Magnesium	98.5		P	85 - 115
Potassium	92.7		P	85 - 115
Sodium	98.3		P	85 - 115
Strontium	98.3		P	85 - 115
Tin	101		P	85 - 115
Titanium	96.9		P	85 - 115
Vanadium	98.1		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P436543

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.8		P	85 - 115
Antimony	98.6		P	85 - 115
Arsenic	97.2		P	85 - 115
Barium	100		P	85 - 115
Beryllium	93.3		P	85 - 115
Boron	101		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.8		P	85 - 115
Cobalt	94.4		P	85 - 115
Copper	101		P	85 - 115
Lead	90.8		P	85 - 115
Manganese	99.8		P	85 - 115
Molybdenum	97.1		P	85 - 115
Nickel	95.0		P	85 - 115
Selenium	101		P	85 - 115
Silver	105		P	85 - 115
Thallium	98.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436656

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436662

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436485

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436539

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436613

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436727

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436455

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436876

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.5		P	90 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P436460

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P436648

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

Reference Method: EPA 8270E

Batch ID: P436398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	78.0		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	47.9		P	37 - 154
Acetochlor	80.3		P	64 - 124
Alachlor	67.8		P	61 - 118
Ametryn	154		P	47 - 158
Atrazine	88.1		P	68 - 121
Atrazine Desethyl	82.4		P	30 - 119
Avobenzone	108		P	48 - 193
Azinphos Methyl	61.6		P	30 - 194
Azoxystrobin	77.8		P	58 - 154
Bromacil	102		P	47 - 126
Butylate	71.4		P	31 - 83.0
Caffeine	137		P	10 - 180
Carbophenothion	91.2		P	59 - 133
Carfentrazone Ethyl	101		P	59 - 147
Chlorfenapyr	81.1		P	52 - 118
Chlorpyrifos Ethyl	94.7		P	59 - 119
Chlorpyrifos Methyl	118		P	65 - 123
Coumaphos	104		P	11 - 223
Cyanazine	213		P	63 - 250
Cyprodinil	133		P	52 - 143
Dechlorane 602	51.5		P	23 - 142
Dechlorane 603	107		P	51 - 171
Dechlorane Plus	97.3		P	46 - 161
Demeton	96.9		P	42 - 119
Diazinon	129		P	67 - 132
Difenoconazole	39.1		P	12 - 204
Dimethenamid	64.0		P	53 - 113
Dimethomorph	167		P	13 - 238
Disulfoton	90.2		P	56 - 126
Dithiopyr	78.3		P	58 - 127
EPTC	68.5		P	31 - 78.0
Ethion	46.8		P	24 - 127
Ethoprop	102		P	60 - 118
Etridiazole	66.4		P	32 - 91.0
Fenamiphos	92.1		P	54 - 129
Fenbuconazole	44.4		P	31 - 162
Fipronil	119		P	56 - 131
Fipronil Desulfinyl	74.5		P	58 - 132
Fipronil Sulfide	85.2		P	51 - 123

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P436398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fipronil Sulfone	95.8		P	50 - 125
Fluazifop-P-butyl	140		F	52 - 132
Fludioxonil	82.1		P	52 - 129
Flumioxazin	42.9		P	34 - 250
Flutolanil	104		P	45 - 128
Fluxapyroxad	29.8		F	31 - 150
Fonofos	101		P	60 - 116
Hexabromobenzene	81.7		P	52 - 165
Hexazinone	92.7		P	59 - 120
Imazalil	81.2		P	39 - 134
Iprodione	118		P	39 - 243
Loratadine	134		P	10 - 240
Malathion	111		P	53 - 145
Metalaxyl	74.9		P	59 - 120
Metolachlor	113		P	64 - 122
Metribuzin	42.2		P	33 - 128
Mevinphos	94.9		P	48 - 119
Molinate	79.7		P	42 - 89.0
Myclobutanil	81.3		P	54 - 129
Naled	33.4		P	10 - 138
Napropamide	74.3		P	40 - 122
Norflurazon	52.3		P	49 - 132
Octinoxate	123		P	29 - 176
Oxadiazon	71.5		P	50 - 115
Oxybenzone	115		P	45 - 145
Oxyfluorfen	113		P	62 - 149
Parathion Ethyl	110		P	68 - 119
Parathion Methyl	96.7		P	68 - 147
PBB-153	61.4		P	42 - 179
PBDE-47	73.7		P	44 - 141
PBDE-99	54.3		P	36 - 141
Pendimethalin	112		P	59 - 158
Pentabromotoluene	93.6		P	58 - 148
Phenytoin	32.9		P	10 - 151
Phorate	96.8		P	44 - 124
Prodiamine	34.9		P	10 - 136
Prometon	113		P	45 - 131
Prometryn	126		P	52 - 140
Pronamide	108		P	70 - 129
Propanil	103		P	54 - 144
Propargite	48.9		P	10 - 191
Propiconazole	64.1		P	49 - 128
Pyraflufen Ethyl	70.1		P	46 - 141
Pyridaben	84.6		P	29 - 198
Pyriproxyfen	50.1		P	33 - 221
Simazine	84.3		P	62 - 119
Stirophos	28.4		P	13 - 144
Sulfentrazone	23.2		P	12 - 152
Tebuconazole	43.8		P	10 - 135
Terbufos	113		P	67 - 136
Terbutylazine	94.5		P	66 - 113
Tetradecachloro-m-terphenyl	149		P	30 - 235

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P436398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiobencarb	82.0		P	51 - 125
Tri-o-cresyl Phosphate	107		P	50 - 150
Triadimefon	83.3		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	127		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.7		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	104		P	59 - 166

Reference Method: EPA 8270E

Batch ID: P436476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	55.7		P	30 - 96.0
Alpha-BHC	90.4		P	70 - 109
Alpha-Chlordane	73.1		P	45 - 107
Beta-BHC	84.0		P	64 - 138
Beta-Cyfluthrin	75.3		P	17 - 141
Bifenthrin	58.2		P	10 - 113
Chlorothalonil	37.6		P	26 - 180
Cis-Nonachlor	67.0		P	37 - 102
Cypermethrin	70.0		P	20 - 133
Dacthal	83.8		P	69 - 114
DDD-p,p'	85.1		P	42 - 105
DDE-p,p'	75.6		P	42 - 106
DDT-p,p'	71.8		P	42 - 107
Delta-BHC	76.7		P	67 - 144
Deltamethrin	69.3		P	15 - 149
Dichlobenil	77.7		P	46 - 117
Dicofol	77.2		P	34 - 114
Dieldrin	73.8		P	50 - 108
Endosulfan I	79.3		P	55 - 104
Endosulfan II	83.0		P	51 - 111
Endosulfan Sulfate	82.8		P	56 - 121
Endrin	76.4		P	10 - 106
Endrin Aldehyde	76.0		P	34 - 114
Endrin Ketone	95.3		P	63 - 177
Esfenvalerate	68.8		P	29 - 143
Ethalfuralin	73.7		P	46 - 96.0
Fenpropathrin	72.0		P	28 - 115
Gamma-BHC	91.6		P	65 - 121
Gamma-Chlordane	74.1		P	39 - 103
Heptachlor	63.4		P	39 - 94.0
Heptachlor Epoxide	76.4		P	54 - 104
Hexachlorobenzene	60.4		P	36 - 100
Kepone	49.5		P	10 - 225
Lambda-Cyhalothrin	67.2		P	10 - 135
Methoprene	61.8		P	10 - 109
Methoxychlor	82.0		P	52 - 112
MGK-264	90.0		P	44 - 117
Mirex	59.9		P	20 - 90.0
Oxychlordane	72.7		P	44 - 102
PCB-1016	64.4		P	45 - 107
PCB-1260	78.3		P	40 - 118

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P436476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Permethrin	72.4		P	18 - 135
Phenothrin	57.4		P	10 - 102
Piperonyl Butoxide	105		P	28 - 156
Prallethrin	79.4		P	28 - 113
Tau-Fluvalinate	68.2		P	10 - 123
Tetramethrin	90.6		P	18 - 158
Trans-Nonachlor	73.1		P	39 - 104
Triclosan Methyl	78.2		P	54 - 108
Trifluralin	77.3		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P436476

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.1		P	52 - 117
Toxaphene	86.0		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P436253

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	95.4		P	40 - 150
AMPA	72.8		P	40 - 150
Endothall	94.3		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	94.2		P	40 - 150
Sucralose	124		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P436414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	62.9		P	40 - 150
2,4,5-T	68.5		P	40 - 150
Acetaminophen	81.1		P	30 - 150
Acetamiprid	81.1		P	40 - 150
Afidopyropen	69.5		P	30 - 150
Bentazon	94.8		P	30 - 150
Benzovindiflupyr	93.1		P	40 - 150
Carbamazepine	71.3		P	40 - 150
Clothianidin	81.9		P	40 - 150
Dinotefuran	92.7		P	40 - 150
Diuron	69.1		P	40 - 150
Fenuron	87.5		P	40 - 150
Fluridone	74.2		P	40 - 150
Hydrocodone	84.3		P	40 - 150
Ibuprofen	65.7		P	40 - 150
Imazapyr	73.9		P	40 - 150
Imidacloprid	79.2		P	40 - 150
Linuron	58.0		P	40 - 150
Mandestrobin	80.1		P	40 - 150
MCPP	77.9		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P436414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Naproxen	62.6		P	40 - 150
Primidone	76.1		P	40 - 150
Pyraclostrobin	70.4		P	40 - 150
Silvex	68.5		P	40 - 150
Thiamethoxam	77.1		P	40 - 150
Tolfenpyrad	54.5		P	30 - 150
Triclopyr	69.6		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P436469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.5		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P436961

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	91.6		P	85 - 115

Reference Method: SM 2540 C-2015
Batch ID: P436962

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	92.8		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P436854

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	107		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P436857

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	103		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P436575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.5		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P436805

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	94 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P436521

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.5		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P436522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P436658

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.6		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P436543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444326	Iron	101	104	P/P	70 - 130
2444326	Strontium	94.2	97.2	P/P	70 - 130
2444326	Tin	93.3	92.6	P/P	70 - 130
2444326	Titanium	93.4	94.7	P/P	70 - 130
2444326	Vanadium	98.1	99.0	P/P	70 - 130
2444326	Zinc	95.0	96.1	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P436543

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444326	Aluminum	102	103	P/P	70 - 130
2444326	Antimony	101	99.8	P/P	70 - 130
2444326	Arsenic	105	106	P/P	70 - 130
2444326	Barium	96.9	96.1	P/P	70 - 130
2444326	Beryllium	105	102	P/P	70 - 130
2444326	Boron	116	113	P/P	70 - 130
2444326	Cadmium	99.3	99.9	P/P	70 - 130
2444326	Chromium	95.9	97.4	P/P	70 - 130
2444326	Cobalt	91.1	91.9	P/P	70 - 130
2444326	Copper	102	103	P/P	70 - 130
2444326	Lead	94.1	94.2	P/P	70 - 130
2444326	Manganese	99.1	98.6	P/P	70 - 130
2444326	Molybdenum	104	106	P/P	70 - 130
2444326	Nickel	96.3	97.5	P/P	70 - 130
2444326	Selenium	107	105	P/P	70 - 130
2444326	Silver	96.1	97.9	P/P	70 - 130
2444326	Thallium	98.1	99.9	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P436656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444148	Chloride	105		P	90 - 110
2444424	Chloride	109		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P436662

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444148	Sulfate	102		P	90 - 110
2444424	Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P436485

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2443959	Ammonia-N	103	104	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436539

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444383	Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436613

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444251	Ammonia-N	99.8	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444122	Kjeldahl Nitrogen	102	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436727

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2445431	Kjeldahl Nitrogen	112	105	F/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447104	Kjeldahl Nitrogen	106	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436455

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444251	NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P436876

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444295	NO2NO3-N	99.5		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436460

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444122	Total-P	98.9	99.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P436648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444197	Total-P	109	108	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P436398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444261	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	77.4	97.3	P/P	50 - 150
2444261	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.4	114	P/P	29 - 155
2444261	Acetochlor	97.1	98.2	P/P	60 - 124
2444261	Alachlor	76.0	81.8	P/P	54 - 122
2444261	Ametryn	123	146	P/P	51 - 208
2444261	Atrazine Desethyl	77.8	102	P/P	13 - 124
2444261	Avobenzone	98.9	143	P/P	35 - 187
2444261	Azinphos Methyl	57.7	90.7	P/P	43 - 276
2444261	Azoxystrobin	98.2	106	P/P	52 - 300
2444261	Bromacil	104	112	P/P	44 - 134
2444261	Butylate	77.4	67.0	P/P	23 - 82.0
2444261	Caffeine	87.2	96.2	P/P	10 - 277
2444261	Carbophenothion	96.8	99.0	P/P	47 - 135
2444261	Carfentrazone Ethyl	99.7	95.1	P/P	46 - 147
2444261	Chlorfenapyr	63.6	64.4	P/P	43 - 114
2444261	Chlorpyrifos Ethyl	120	108	P/P	47 - 124
2444261	Chlorpyrifos Methyl	123	128	P/P	60 - 135
2444261	Coumaphos	63.0	127	P/P	10 - 222
2444261	Cyanazine	128	113	P/P	10 - 257
2444261	Cyprodinil	112	115	P/P	42 - 148
2444261	Dechlorane 602	53.6	73.0	P/P	14 - 133
2444261	Dechlorane 603	94.1	105	P/P	18 - 191
2444261	Dechlorane Plus	81.2	80.7	P/P	23 - 154
2444261	Demeton	80.1	78.1	P/P	41 - 137
2444261	Diazinon	137	115	P/P	64 - 139
2444261	Difenoconazole	43.6	90.5	F/P	46 - 254
2444261	Dimethenamid	77.7	85.0	P/P	47 - 117
2444261	Dimethomorph	138	255	P/P	14 - 255
2444261	Disulfoton	115	113	P/P	52 - 130
2444261	Dithiopyr	60.6	57.2	P/P	40 - 121
2444261	EPTC	70.2	61.3	P/P	19 - 78.0
2444261	Ethion	52.9	76.9	P/P	12 - 124
2444261	Ethoprop	99.5	98.4	P/P	68 - 144
2444261	Etridiazole	65.2	36.4	P/P	26 - 96.0
2444261	Fenamiphos	115	129	P/P	41 - 129
2444261	Fenbuconazole	36.4	78.9	P/P	26 - 169
2444261	Fipronil	87.8	101	P/P	46 - 145
2444261	Fipronil Desulfinyl	95.3	110	P/P	47 - 136
2444261	Fipronil Sulfide	90.0	105	P/P	41 - 127
2444261	Fipronil Sulfone	78.0	73.3	P/P	35 - 133
2444261	Fluazifop-P-butyl	136	112	F/P	46 - 131
2444261	Fludioxonil	80.6	74.5	P/P	51 - 124
2444261	Flumioxazin	71.8	117	P/P	10 - 289
2444261	Flutolanil	69.3	75.5	P/P	34 - 130
2444261	Fluxapyroxad	46.4	46.3	P/P	10 - 197
2444261	Fonofos	103	94.1	P/P	42 - 131
2444261	Hexabromobenzene	102	114	P/P	47 - 178
2444261	Imazalil	43.5	67.2	P/P	37 - 252
2444261	Iprodione	83.2	92.8	P/P	34 - 265
2444261	Loratadine	208	169	P/P	20 - 231
2444261	Malathion	93.6	91.1	P/P	34 - 164
2444261	Metalaxyl	76.5	90.4	P/P	49 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P436398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444261	Metolachlor	88.4	92.2	P/P	54 - 125
2444261	Metribuzin	73.2	62.1	P/P	51 - 139
2444261	Mevinphos	89.4	104	P/P	46 - 130
2444261	Molinate	67.0	61.7	P/P	39 - 93.0
2444261	Myclobutanil	78.3	92.3	P/P	50 - 130
2444261	Naled	59.2	81.9	P/P	10 - 150
2444261	Napropamide	66.5	84.4	P/P	10 - 109
2444261	Norflurazon	69.8	84.9	P/P	36 - 134
2444261	Octinoxate	107	116	P/P	18 - 170
2444261	Oxadiazon	75.2	87.5	P/P	43 - 112
2444261	Oxybenzone	110	124	P/P	33 - 154
2444261	Oxyfluorfen	111	118	P/P	62 - 154
2444261	Parathion Ethyl	97.5	100	P/P	65 - 120
2444261	Parathion Methyl	142	149	P/P	77 - 185
2444261	PBB-153	98.3	132	P/P	23 - 193
2444261	PBDE-47	82.0	101	P/P	31 - 139
2444261	PBDE-99	70.9	96.7	P/P	24 - 138
2444261	Pendimethalin	117	119	P/P	50 - 146
2444261	Pentabromotoluene	92.6	102	P/P	54 - 152
2444261	Phenytoin	50.5	57.0	P/P	10 - 157
2444261	Phorate	112	91.9	P/P	54 - 161
2444261	Prodiamine	60.6	63.2	P/P	29 - 160
2444261	Prometon	118	130	P/P	38 - 145
2444261	Prometryn	108	107	P/P	32 - 151
2444261	Pronamide	112	125	P/P	61 - 140
2444261	Propanil	100	110	P/P	50 - 147
2444261	Propargite	56.0	67.9	P/P	10 - 190
2444261	Propiconazole	66.7	74.6	P/P	30 - 146
2444261	Pyraflufen Ethyl	79.3	87.9	P/P	30 - 147
2444261	Pyridaben	33.4	79.3	P/P	15 - 195
2444261	Pyriproxyfen	63.5	90.8	P/P	31 - 218
2444261	Stiropfos	23.6	21.3	P/P	10 - 134
2444261	Sulfentrazone	46.3	56.6	F/P	53 - 186
2444261	Tebuconazole	41.2	61.6	P/P	10 - 133
2444261	Terbufos	106	100	P/P	65 - 151
2444261	Terbuthylazine	83.2	98.8	P/P	62 - 117
2444261	Tetradecachloro-m-terphenyl	146	137	P/P	10 - 260
2444261	Thiobencarb	87.9	90.9	P/P	48 - 122
2444261	Tri-o-cresyl Phosphate	100	118	P/P	32 - 151
2444261	Triadimefon	57.1	75.3	P/P	46 - 124
2444261	Tris(1-chloro-2-propyl) phosphate (TCPP)	111	121	P/P	51 - 154
2444261	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	92.9	96.3	P/P	59 - 147
2444261	Tris(2-chloroethyl) phosphate (TCEP)	106	113	P/P	65 - 156

Reference Method: EPA 8270E

Batch ID: P436476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444320	Aldrin	63.2	54.0	P/P	24 - 81.0
2444320	Alpha-BHC	93.2	87.3	P/P	65 - 110
2444320	Alpha-Chlordane	82.8	80.4	P/P	43 - 119
2444320	Beta-BHC	88.6	76.7	P/P	54 - 165

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P436476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444320	Beta-Cyfluthrin	89.9	81.3	P/P	27 - 165
2444320	Bifenthrin	77.5	54.3	P/P	17 - 117
2444320	Chlorothalonil	82.3	55.4	P/P	10 - 255
2444320	Cis-Nonachlor	79.2	72.5	P/P	34 - 98.0
2444320	Cypermethrin	105	90.1	P/P	25 - 143
2444320	Dacthal	98.0	89.2	P/P	55 - 139
2444320	DDD-p,p'	88.8	86.6	P/P	30 - 109
2444320	DDE-p,p'	77.6	77.7	P/P	35 - 106
2444320	DDT-p,p'	85.3	79.7	P/P	41 - 101
2444320	Delta-BHC	100	82.2	P/P	58 - 165
2444320	Deltamethrin	110	102	P/P	10 - 194
2444320	Dichlobenil	68.5	59.3	P/P	22 - 114
2444320	Dicofol	73.8	76.8	P/P	17 - 133
2444320	Dieldrin	79.7	77.9	P/P	45 - 129
2444320	Endosulfan I	93.1	93.3	P/P	49 - 104
2444320	Endosulfan II	91.4	85.9	P/P	37 - 117
2444320	Endosulfan Sulfate	76.6	75.9	P/P	38 - 128
2444320	Endrin	85.3	76.9	P/P	35 - 116
2444320	Endrin Aldehyde	54.5	41.3	P/P	19 - 108
2444320	Endrin Ketone	83.3	90.0	P/P	44 - 134
2444320	Esfenvalerate	101	83.3	P/P	27 - 176
2444320	Ethalfuralin	70.4	78.5	P/P	49 - 100
2444320	Fenpropathrin	83.3	75.2	P/P	34 - 117
2444320	Gamma-BHC	98.4	86.3	P/P	59 - 129
2444320	Gamma-Chlordane	84.1	76.4	P/P	33 - 107
2444320	Heptachlor	75.6	68.6	P/P	37 - 94.0
2444320	Heptachlor Epoxide	90.2	84.4	P/P	38 - 118
2444320	Hexachlorobenzene	64.8	59.9	P/P	35 - 97.0
2444320	Kepone	46.2	47.2	P/P	10 - 221
2444320	Lambda-Cyhalothrin	95.6	75.6	P/P	23 - 190
2444320	Methoprene	66.0	57.5	P/P	21 - 109
2444320	Methoxychlor	91.0	88.3	P/P	46 - 118
2444320	MGK-264	99.2	91.6	P/P	39 - 122
2444320	Mirex	63.7	54.2	P/P	25 - 90.0
2444320	Oxychlordane	82.4	78.7	P/P	42 - 100
2444320	Permethrin	92.0	77.5	P/P	33 - 181
2444320	Phenothrin	74.1	57.9	P/P	12 - 125
2444320	Piperonyl Butoxide	99.6	93.8	P/P	10 - 178
2444320	Prallethrin	85.2	78.8	P/P	24 - 122
2444320	Tau-Fluvalinate	81.9	76.3	P/P	13 - 151
2444320	Tetramethrin	111	93.1	P/P	16 - 172
2444320	Trans-Nonachlor	79.5	73.4	P/P	39 - 100
2444320	Triclosan Methyl	89.4	92.0	P/P	43 - 110
2444320	Trifluralin	70.9	70.1	P/P	45 - 94.0
2444327	PCB-1016	75.2	70.6	P/P	45 - 107
2444327	PCB-1260	89.1	84.1	P/P	40 - 112

Reference Method: EPA 8276
Batch ID: P436476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444327	Chlordane	81.3	96.0	P/P	43 - 123

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P436476

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444327	Toxaphene	77.7	94.7	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P436253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444338	Acesulfame K	108	112	P/P	40 - 150
2444338	AMPA	71.4	70.7	P/P	40 - 150
2444338	Endothall	110	106	P/P	40 - 150
2444338	Glufosinate	98.5	94.8	P/P	40 - 150
2444338	Glyphosate	79.2	75.1	P/P	40 - 150
2444338	Sucralose	129	129	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P436414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444259	2,4-D	91.3	99.7	P/P	40 - 150
2444259	2,4,5-T	93.9	104	P/P	40 - 150
2444259	Acetaminophen	75.7	80.7	P/P	30 - 150
2444259	Acetamiprid	50.9	52.1	P/P	40 - 150
2444259	Afidopyropen	70.5	70.9	P/P	30 - 150
2444259	Bentazon	86.7	85.1	P/P	30 - 150
2444259	Benzovindiflupyr	80.1	86.6	P/P	40 - 150
2444259	Carbamazepine	43.1	45.1	P/P	40 - 150
2444259	Clothianidin	54.9	58.6	P/P	40 - 150
2444259	Dinotefuran	57.3	59.9	P/P	40 - 150
2444259	Diuron	42.3	42.5	P/P	40 - 150
2444259	Fenuron	33.2	35.6	F/F	40 - 150
2444259	Fluridone	51.7	54.2	P/P	40 - 150
2444259	Hydrocodone	54.7	58.0	P/P	40 - 150
2444259	Ibuprofen	51.8	50.1	P/P	40 - 150
2444259	Imazapyr	82.3	73.0	P/P	40 - 150
2444259	Imidacloprid	76.8	79.7	P/P	40 - 150
2444259	Linuron	54.2	49.7	P/P	40 - 150
2444259	Mandestrobin	66.5	73.4	P/P	40 - 150
2444259	MCPP	107	114	P/P	40 - 150
2444259	Naproxen	171	149	F/P	40 - 150
2444259	Primidone	57.9	51.1	P/P	40 - 150
2444259	Pyraclostrobin	79.4	79.7	P/P	40 - 150
2444259	Silvex	93.3	107	P/P	40 - 150
2444259	Thiamethoxam	63.8	66.6	P/P	40 - 150
2444259	Tolfenpyrad	58.7	61.9	P/P	30 - 150
2444259	Triclopyr	97.9	106	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P436575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444069	Fluoride	102	101	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P436805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444293	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P436521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444041	Organic Carbon	97.1	97.2	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P436522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444296	Organic Carbon	92.2	90.6	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P436658

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2444488	Organic Carbon	95.0	97.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P436366

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444150	Color (true)	1.21	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P436362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444144	Turbidity	5.89	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P436543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444326	Calcium	2.52	Spike	P	0 - 20
2444326	Iron	2.64	Spike	P	0 - 20
2444326	Magnesium	0.820	Spike	P	0 - 20
2444326	Potassium	0.112	Spike	P	0 - 20
2444326	Sodium	0.851	Spike	P	0 - 20
2444326	Strontium	1.62	Spike	P	0 - 20
2444326	Tin	0.757	Spike	P	0 - 20
2444326	Titanium	1.33	Spike	P	0 - 20
2444326	Vanadium	0.959	Spike	P	0 - 20
2444326	Zinc	1.18	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P436543

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444326	Aluminum	0.960	Spike	P	0 - 20
2444326	Antimony	1.17	Spike	P	0 - 20
2444326	Arsenic	1.33	Spike	P	0 - 20
2444326	Barium	0.774	Spike	P	0 - 20
2444326	Beryllium	3.41	Spike	P	0 - 20
2444326	Boron	0.562	Spike	P	0 - 20
2444326	Cadmium	0.582	Spike	P	0 - 20
2444326	Chromium	1.54	Spike	P	0 - 20
2444326	Cobalt	0.828	Spike	P	0 - 20
2444326	Copper	1.15	Spike	P	0 - 20
2444326	Lead	0.131	Spike	P	0 - 20
2444326	Manganese	0.426	Spike	P	0 - 20
2444326	Molybdenum	1.73	Spike	P	0 - 20
2444326	Nickel	1.22	Spike	P	0 - 20
2444326	Selenium	2.69	Spike	P	0 - 20
2444326	Silver	1.86	Spike	P	0 - 20
2444326	Thallium	1.80	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444148	Chloride	0.189	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P436662

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444148	Sulfate	1.49	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436485

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2443959	Ammonia-N	0.161	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436539

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444383	Ammonia-N	0.114	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P436613

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444251	Ammonia-N	0.505	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444122	Kjeldahl Nitrogen	0.640	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P436727

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2445431	Kjeldahl Nitrogen	5.60	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447104	Kjeldahl Nitrogen	2.67	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436455

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444251	NO2NO3-N	1.49	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P436876

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444295	NO2NO3-N	0.705	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P436460

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444122	Total-P	0.126	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P436648

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444197	Total-P	0.534	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P436398

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444261	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	22.8	Spike	P	0 - 30
2444261	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	24.3	Spike	P	0 - 35
2444261	Acetochlor	1.09	Spike	P	0 - 28
2444261	Alachlor	7.38	Spike	P	0 - 30
2444261	Ametryn	16.7	Spike	P	0 - 32
2444261	Atrazine	2.86	Spike	P	0 - 33
2444261	Atrazine Desethyl	24.0	Spike	P	0 - 36
2444261	Avobenzene	36.3	Spike	F	0 - 35
2444261	Azinphos Methyl	44.5	Spike	P	0 - 62
2444261	Azoxystrobin	7.43	Spike	P	0 - 39
2444261	Bromacil	7.05	Spike	P	0 - 33
2444261	Butylate	14.4	Spike	P	0 - 51
2444261	Caffeine	9.89	Spike	P	0 - 100
2444261	Carbophenothion	2.22	Spike	P	0 - 34
2444261	Carfentrazone Ethyl	4.74	Spike	P	0 - 33
2444261	Chlorfenapyr	1.20	Spike	P	0 - 28
2444261	Chlorpyrifos Ethyl	10.6	Spike	P	0 - 31
2444261	Chlorpyrifos Methyl	3.48	Spike	P	0 - 27
2444261	Coumaphos	67.2	Spike	F	0 - 62
2444261	Cyanazine	11.9	Spike	P	0 - 48
2444261	Cyprodinil	3.03	Spike	P	0 - 29
2444261	Dechlorane 602	30.7	Spike	P	0 - 60
2444261	Dechlorane 603	10.9	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P436398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444261	Dechlorane Plus	0.619	Spike	P	0 - 38
2444261	Demeton	2.54	Spike	P	0 - 33
2444261	Diazinon	17.4	Spike	P	0 - 32
2444261	Difenoconazole	69.9	Spike	P	0 - 71
2444261	Dimethenamid	8.98	Spike	P	0 - 60
2444261	Dimethomorph	59.4	Spike	P	0 - 61
2444261	Disulfoton	1.11	Spike	P	0 - 30
2444261	Dithiopyr	5.88	Spike	P	0 - 28
2444261	EPTC	13.5	Spike	P	0 - 56
2444261	Ethion	37.0	Spike	P	0 - 79
2444261	Ethoprop	1.07	Spike	P	0 - 31
2444261	Etridiazole	56.7	Spike	F	0 - 43
2444261	Fenamiphos	11.1	Spike	P	0 - 43
2444261	Fenbuconazole	73.6	Spike	P	0 - 79
2444261	Fipronil	14.4	Spike	P	0 - 46
2444261	Fipronil Desulfinyl	13.9	Spike	P	0 - 36
2444261	Fipronil Sulfide	15.1	Spike	P	0 - 34
2444261	Fipronil Sulfone	6.13	Spike	P	0 - 47
2444261	Fluazifop-P-butyl	19.6	Spike	P	0 - 38
2444261	Fludioxonil	7.88	Spike	P	0 - 29
2444261	Flumioxazin	47.5	Spike	P	0 - 63
2444261	Flutolanil	8.53	Spike	P	0 - 36
2444261	Fluxapyroxad	0.155	Spike	P	0 - 65
2444261	Fonofos	9.17	Spike	P	0 - 35
2444261	Hexabromobenzene	11.1	Spike	P	0 - 41
2444261	Hexazinone	0.365	Spike	P	0 - 31
2444261	Imazalil	42.9	Spike	P	0 - 52
2444261	Iprodione	11.0	Spike	P	0 - 49
2444261	Loratadine	20.5	Spike	P	0 - 59
2444261	Malathion	2.78	Spike	P	0 - 77
2444261	Metalaxyl	12.8	Spike	P	0 - 76
2444261	Metolachlor	4.20	Spike	P	0 - 29
2444261	Metribuzin	16.4	Spike	P	0 - 51
2444261	Mevinphos	15.4	Spike	P	0 - 31
2444261	Molinate	8.23	Spike	P	0 - 39
2444261	Myclobutanil	16.4	Spike	P	0 - 34
2444261	Naled	32.1	Spike	P	0 - 37
2444261	Napropamide	23.8	Spike	P	0 - 100
2444261	Norflurazon	19.6	Spike	P	0 - 54
2444261	Octinoxate	7.88	Spike	P	0 - 35
2444261	Oxadiazon	15.2	Spike	P	0 - 34
2444261	Oxybenzone	11.7	Spike	P	0 - 35
2444261	Oxyfluorfen	6.21	Spike	P	0 - 28
2444261	Parathion Ethyl	2.70	Spike	P	0 - 31
2444261	Parathion Methyl	4.88	Spike	P	0 - 29
2444261	PBB-153	29.0	Spike	P	0 - 49
2444261	PBDE-47	20.7	Spike	P	0 - 36
2444261	PBDE-99	30.8	Spike	P	0 - 46
2444261	Pendimethalin	1.39	Spike	P	0 - 31
2444261	Pentabromotoluene	9.50	Spike	P	0 - 16
2444261	Phenytol	12.1	Spike	P	0 - 100

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P436398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444261	Phorate	19.6	Spike	P	0 - 36
2444261	Prodiamine	4.17	Spike	P	0 - 68
2444261	Prometon	9.87	Spike	P	0 - 35
2444261	Prometryn	0.802	Spike	P	0 - 33
2444261	Pronamide	11.4	Spike	P	0 - 24
2444261	Propanil	9.37	Spike	P	0 - 28
2444261	Propargite	19.2	Spike	P	0 - 53
2444261	Propiconazole	11.1	Spike	P	0 - 44
2444261	Pyraflufen Ethyl	10.3	Spike	P	0 - 61
2444261	Pyridaben	35.9	Spike	P	0 - 43
2444261	Pyriproxyfen	35.4	Spike	P	0 - 82
2444261	Simazine	7.23	Spike	P	0 - 29
2444261	Stirophos	10.3	Spike	P	0 - 100
2444261	Sulfentrazone	20.0	Spike	P	0 - 64
2444261	Tebuconazole	39.6	Spike	P	0 - 76
2444261	Terbufos	5.98	Spike	P	0 - 29
2444261	Terbutylazine	17.1	Spike	P	0 - 28
2444261	Tetradecachloro-m-terphenyl	6.75	Spike	P	0 - 42
2444261	Thiobencarb	3.43	Spike	P	0 - 26
2444261	Tri-o-cresyl Phosphate	15.9	Spike	P	0 - 24
2444261	Triadimefon	18.2	Spike	P	0 - 40
2444261	Tris(1-chloro-2-propyl) phosphate (TCPP)	8.59	Spike	P	0 - 30
2444261	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	3.59	Spike	P	0 - 22
2444261	Tris(2-chloroethyl) phosphate (TCEP)	5.91	Spike	P	0 - 15

Reference Method: EPA 8270E

Batch ID: P436476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444320	Aldrin	15.7	Spike	P	0 - 41
2444320	Alpha-BHC	6.56	Spike	P	0 - 25
2444320	Alpha-Chlordane	2.96	Spike	P	0 - 32
2444320	Beta-BHC	14.5	Spike	P	0 - 33
2444320	Beta-Cyfluthrin	10.0	Spike	P	0 - 43
2444320	Bifenthrin	35.3	Spike	P	0 - 52
2444320	Chlorothalonil	39.1	Spike	P	0 - 82
2444320	Cis-Nonachlor	8.82	Spike	P	0 - 33
2444320	Cypermethrin	15.4	Spike	P	0 - 51
2444320	Dacthal	9.37	Spike	P	0 - 27
2444320	DDD-p,p'	2.43	Spike	P	0 - 39
2444320	DDE-p,p'	0.113	Spike	P	0 - 31
2444320	DDT-p,p'	6.72	Spike	P	0 - 29
2444320	Delta-BHC	19.9	Spike	P	0 - 35
2444320	Deltamethrin	7.29	Spike	P	0 - 100
2444320	Dichlobenil	14.4	Spike	P	0 - 40
2444320	Dicofol	4.00	Spike	P	0 - 37
2444320	Dieldrin	2.28	Spike	P	0 - 27
2444320	Endosulfan I	0.167	Spike	P	0 - 23
2444320	Endosulfan II	6.27	Spike	P	0 - 34
2444320	Endosulfan Sulfate	0.893	Spike	P	0 - 36

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P436476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444320	Endrin	10.4	Spike	P	0 - 45
2444320	Endrin Aldehyde	27.7	Spike	P	0 - 76
2444320	Endrin Ketone	7.76	Spike	P	0 - 43
2444320	Esfenvalerate	18.9	Spike	P	0 - 51
2444320	Ethalfuralin	10.8	Spike	P	0 - 22
2444320	Fenpropathrin	10.2	Spike	P	0 - 49
2444320	Gamma-BHC	13.1	Spike	P	0 - 28
2444320	Gamma-Chlordane	9.56	Spike	P	0 - 40
2444320	Heptachlor	9.78	Spike	P	0 - 29
2444320	Heptachlor Epoxide	6.63	Spike	P	0 - 33
2444320	Hexachlorobenzene	7.99	Spike	P	0 - 36
2444320	Kepone	2.01	Spike	P	0 - 85
2444320	Lambda-Cyhalothrin	23.3	Spike	P	0 - 55
2444320	Methoprene	13.7	Spike	P	0 - 53
2444320	Methoxychlor	3.04	Spike	P	0 - 50
2444320	MGK-264	7.97	Spike	P	0 - 43
2444320	Mirex	16.0	Spike	P	0 - 40
2444320	Oxychlordane	4.63	Spike	P	0 - 31
2444320	Permethrin	17.1	Spike	P	0 - 50
2444320	Phenothrin	24.5	Spike	P	0 - 58
2444320	Piperonyl Butoxide	5.96	Spike	P	0 - 100
2444320	Prallethrin	7.85	Spike	P	0 - 39
2444320	Tau-Fluvalinate	7.03	Spike	P	0 - 54
2444320	Tetramethrin	17.6	Spike	P	0 - 51
2444320	Trans-Nonachlor	7.93	Spike	P	0 - 39
2444320	Triclosan Methyl	2.92	Spike	P	0 - 31
2444320	Trifluralin	1.09	Spike	P	0 - 22
2444327	PCB-1016	6.32	Spike	P	0 - 25
2444327	PCB-1260	5.71	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P436476

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444327	Chlordane	16.6	Spike	P	0 - 28
2444327	Toxaphene	16.9	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P436253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444338	Acesulfame K	3.69	Spike	P	0 - 30
2444338	AMPA	0.985	Spike	P	0 - 30
2444338	Endothall	3.51	Spike	P	0 - 30
2444338	Glufosinate	3.84	Spike	P	0 - 30
2444338	Glyphosate	5.36	Spike	P	0 - 30
2444338	Sucralose	0.0789	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P436414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444259	2,4-D	8.17	Spike	P	0 - 30
2444259	2,4,5-T	10.2	Spike	P	0 - 30
2444259	Acetaminophen	6.31	Spike	P	0 - 30
2444259	Acetamiprid	2.26	Spike	P	0 - 30
2444259	Afidopyropen	0.474	Spike	P	0 - 30
2444259	Bentazon	1.90	Spike	P	0 - 30
2444259	Benzovindiflupyr	7.81	Spike	P	0 - 30
2444259	Carbamazepine	4.61	Spike	P	0 - 30
2444259	Clothianidin	6.45	Spike	P	0 - 30
2444259	Dinotefuran	4.50	Spike	P	0 - 30
2444259	Diuron	0.355	Spike	P	0 - 30
2444259	Fenuron	6.92	Spike	P	0 - 30
2444259	Fluridone	3.98	Spike	P	0 - 30
2444259	Hydrocodone	5.79	Spike	P	0 - 30
2444259	Ibuprofen	3.24	Spike	P	0 - 30
2444259	Imazapyr	8.50	Spike	P	0 - 30
2444259	Imidacloprid	3.61	Spike	P	0 - 30
2444259	Linuron	8.77	Spike	P	0 - 30
2444259	Mandestrobin	9.89	Spike	P	0 - 30
2444259	MCP	6.19	Spike	P	0 - 30
2444259	Naproxen	13.4	Spike	P	0 - 30
2444259	Primidone	12.4	Spike	P	0 - 30
2444259	Pyraclostrobin	0.377	Spike	P	0 - 30
2444259	Silvex	13.8	Spike	P	0 - 30
2444259	Thiamethoxam	4.34	Spike	P	0 - 30
2444259	Tolfenpyrad	5.24	Spike	P	0 - 30
2444259	Triclopyr	7.65	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P436469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444291	Total Alkalinity	0.490	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P436961

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444291	TDS	5.00	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P436962

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444967	TDS	6.51	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P436575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444069	Fluoride	0.513	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P436805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444293	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P436521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444041	Organic Carbon	0.116	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P436522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444296	Organic Carbon	1.67	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P436658

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2444488	Organic Carbon	1.30	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2444304
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	79.3	P	37 - 129
EPA 8270E	Decachlorobiphenyl	78.1	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	58.5	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	47.6	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	53.1	P	28 - 102
EPA 8276	PCNB	104	P	49 - 115

Lab Sample ID: 2444305
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	65.5	P	20 - 200
EPA 8270E	Simazine-d10	115	P	58 - 137
EPA 8270E	Terbufos-d10	91.1	P	50 - 134
EPA 8270E	Terphenyl-d14	110	P	44 - 134

Lab Sample ID: 2444306
Field Sample ID: G4SW0118

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	58.4	P	30 - 160
EPA 8321B	Diuron-d6	36.2	P	30 - 160
EPA 8321B	Endothall-d6	80.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	62.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	61.9	P	30 - 160
EPA 8321B	Primidone-d5	70.1	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122058
Included Lab Sample IDs: 2444306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	110	109	P/P	60 - 160
Sucralose	130	133	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A122059
Included Lab Sample IDs: 2444306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	71.1	77.8	P/P	60 - 160
Endothall	87.3	104	P/P	60 - 160
Glufosinate	93.9	101	P/P	60 - 160
Glyphosate	95.9	110	P/P	60 - 160

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A122083
Included Lab Sample IDs: 2444291, 2444293, 2444294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A122085
Included Lab Sample IDs: 2444291, 2444293, 2444294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.6	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122130
Included Lab Sample IDs: 2444292

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

Reference Method: SM 2320 B-2011
Run ID: A122131
Included Lab Sample IDs: 2444291, 2444293, 2444294

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	98.6	P/P	90 - 110
Total Alkalinity	98.0	95.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122140
Included Lab Sample IDs: 2444296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	98.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A122154

Included Lab Sample IDs: 2444292, 2444296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	96.5	P/P	90 - 110
Organic Carbon	96.5	94.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122164

Included Lab Sample IDs: 2444295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.1	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122167

Included Lab Sample IDs: 2444295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	98.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122173

Included Lab Sample IDs: 2444306

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	86.0	86.2	P/P	50 - 150
2,4,5-T	87.0	88.4	P/P	50 - 150
Acetaminophen	109	115	P/P	60 - 160
Acetamiprid	106	103	P/P	50 - 150
Afidopyropen	112	101	P/P	50 - 150
Bentazon	117	108	P/P	50 - 160
Benzovindiflupyr	131	108	P/P	50 - 150
Carbamazepine	99.9	103	P/P	60 - 150
Clothianidin	104	106	P/P	60 - 150
Dinotefuran	106	110	P/P	50 - 150
Diuron	109	110	P/P	60 - 160
Fenuron	109	104	P/P	60 - 150
Fluridone	104	99.5	P/P	60 - 160
Hydrocodone	101	106	P/P	60 - 150
Ibuprofen	93.9	83.4	P/P	50 - 160
Imazapyr	84.5	83.6	P/P	50 - 150
Imidacloprid	96.8	93.4	P/P	60 - 150
Linuron	103	103	P/P	60 - 150
Mandestrobin	110	104	P/P	50 - 150
MCPP	92.3	82.6	P/P	50 - 150
Naproxen	101	102	P/P	50 - 160
Primidone	98.4	98.5	P/P	60 - 150
Pyraclostrobin	116	106	P/P	60 - 150
Silvex	84.4	98.1	P/P	50 - 150
Thiamethoxam	104	102	P/P	50 - 150
Tolfenpyrad	128	115	P/P	60 - 150
Triclopyr	76.7	85.9	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A122184

Included Lab Sample IDs: 2444291

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

Reference Method: EPA 8276

Run ID: A122185

Included Lab Sample IDs: 2444304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	105		P	80 - 120
Toxaphene	99.3		P	80 - 120

Reference Method: EPA 8270E

Run ID: A122188

Included Lab Sample IDs: 2444304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	95.2		P	80 - 120
PCB-1260	101		P	80 - 120

Reference Method: EPA 8270E

Run ID: A122191

Included Lab Sample IDs: 2444304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	102		P	80 - 120
Alpha-BHC	105		P	80 - 120
Alpha-Chlordane	114		P	80 - 120
Beta-BHC	96.7		P	80 - 120
Beta-Cyfluthrin	103		P	80 - 120
Bifenthrin	114		P	80 - 120
Chlorothalonil	134*		F	80 - 120
Cis-Nonachlor	96.4		P	80 - 120
Cypermethrin	115		P	80 - 120
Dacthal	97.1		P	80 - 120
DDD-p,p'	105		P	80 - 120
DDE-p,p'	99.3		P	80 - 120
DDT-p,p'	115		P	80 - 120
Delta-BHC	117		P	80 - 120
Deltamethrin	103		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	99.3		P	80 - 120
Dieldrin	108		P	80 - 120
Endosulfan I	114		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	103		P	80 - 120
Endrin	106		P	80 - 120
Endrin Aldehyde	107		P	80 - 120
Endrin Ketone	99.7		P	80 - 120
Esfenvalerate	118		P	80 - 120
Ethalfuralin	108		P	80 - 120
Fenpropathrin	113		P	80 - 120
Gamma-BHC	99.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122191
Included Lab Sample IDs: 2444304

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Gamma-Chlordane	112		P	80 - 120
Heptachlor	110		P	80 - 120
Heptachlor Epoxide	103		P	80 - 120
Hexachlorobenzene	104		P	80 - 120
Kepone	134*		F	80 - 120
Lambda-Cyhalothrin	114		P	80 - 120
Methoprene	106		P	80 - 120
Methoxychlor	118		P	80 - 120
MGK-264	105		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	107		P	80 - 120
Permethrin	116		P	80 - 120
Phenothrin	109		P	80 - 120
Piperonyl Butoxide	110		P	80 - 120
Prallethrin	112		P	80 - 120
Tau-Fluvalinate	105		P	80 - 120
Tetramethrin	114		P	80 - 120
Trans-Nonachlor	106		P	80 - 120
Triclosan Methyl	103		P	80 - 120
Trifluralin	105		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122194
Included Lab Sample IDs: 2444295, 2444296

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122195
Included Lab Sample IDs: 2444292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.9	100	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122209
Included Lab Sample IDs: 2444291, 2444293, 2444294

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

Reference Method: SM 5310 B-2011
Run ID: A122210
Included Lab Sample IDs: 2444295

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.3	96.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122212

Included Lab Sample IDs: 2444326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	102	P/P	90 - 110
Antimony	98.1	98.0	P/P	90 - 110
Arsenic	101	98.5	P/P	90 - 110
Beryllium	101	100	P/P	90 - 110
Boron	100	103	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Cobalt	96.9	95.1	P/P	90 - 110
Lead	92.0	92.7	P/P	90 - 110
Manganese	100	101	P/P	90 - 110
Molybdenum	99.0	98.1	P/P	90 - 110
Nickel	97.7	96.0	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Thallium	97.8	98.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122238

Included Lab Sample IDs: 2444326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	99.0	97.3	P/P	90 - 110
Chromium	102	99.9	P/P	90 - 110
Copper	104	102	P/P	90 - 110
Silver	99.9	97.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122256

Included Lab Sample IDs: 2444326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Magnesium	95.3	90.1	P/P	90 - 110
Potassium	93.4	97.7	P/P	90 - 110
Sodium	99.5	103	P/P	90 - 110
Strontium	101	106	P/P	90 - 110
Tin	98.9	99.6	P/P	90 - 110
Titanium	98.7	98.8	P/P	90 - 110
Vanadium	99.4	99.3	P/P	90 - 110
Zinc	99.2	100	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122259

Included Lab Sample IDs: 2444293, 2444294

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

Reference Method: EPA 8270E

Run ID: A122283

Included Lab Sample IDs: 2444305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	94.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122283
Included Lab Sample IDs: 2444305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.1		P	80 - 120
Avobenzone	92.4		P	80 - 120
Dechlorane 602	96.4		P	80 - 120
Dechlorane 603	96.5		P	80 - 120
Dechlorane Plus	93.4		P	80 - 120
Hexabromobenzene	90.2		P	80 - 120
Octinoxate	88.9		P	80 - 120
Oxybenzone	94.1		P	80 - 120
PBB-153	89.9		P	80 - 120
PBDE-47	90.4		P	80 - 120
PBDE-99	86.4		P	80 - 120
Pentabromotoluene	100		P	80 - 120
Tetradecachloro-m-terphenyl	89.7		P	80 - 120
Tri-o-cresyl Phosphate	92.4		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	94.4		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	101		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122287
Included Lab Sample IDs: 2444296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122291
Included Lab Sample IDs: 2444292

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122293
Included Lab Sample IDs: 2444295, 2444296

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	98.5	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A122300
Included Lab Sample IDs: 2444326

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	97.9	P/P	90 - 110
Iron	98.8	98.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122432

Included Lab Sample IDs: 2444292

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.7	94.7	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A122457

Included Lab Sample IDs: 2444305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.5		P	80 - 120
Alachlor	95.5		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	115		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	105		P	80 - 120
Azoxystrobin	95.8		P	80 - 120
Bromacil	96.9		P	80 - 120
Butylate	102		P	80 - 120
Caffeine	110		P	80 - 120
Carbophenothion	109		P	80 - 120
Carfentrazone Ethyl	109		P	80 - 120
Chlorfenapyr	86.9		P	80 - 120
Chlorpyrifos Ethyl	89.2		P	80 - 120
Chlorpyrifos Methyl	105		P	80 - 120
Coumaphos	108		P	80 - 120
Cyanazine	100		P	80 - 120
Cyprodinil	102		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	108		P	80 - 120
Difenoconazole	96.4		P	80 - 120
Dimethenamid	113		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	103		P	80 - 120
Dithiopyr	110		P	80 - 120
EPTC	98.4		P	80 - 120
Ethion	92.0		P	80 - 120
Ethoprop	62.2*		F	80 - 120
Etridiazole	103		P	80 - 120
Fenamiphos	90.6		P	80 - 120
Fenbuconazole	96.6		P	80 - 120
Fipronil	93.0		P	80 - 120
Fipronil Desulfinyl	102		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	104		P	80 - 120
Fluazifop-P-butyl	98.6		P	80 - 120
Fludioxonil	100		P	80 - 120
Flumioxazin	115		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	77.2*		F	80 - 120
Fonofos	90.2		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	115		P	80 - 120
Iprodione	90.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122457
Included Lab Sample IDs: 2444305

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Loratadine	95.0		P	80 - 120
Malathion	87.0		P	80 - 120
Metalaxyl	93.3		P	80 - 120
Metolachlor	98.8		P	80 - 120
Metribuzin	92.1		P	80 - 120
Mevinphos	86.1		P	80 - 120
Molinate	87.4		P	80 - 120
Myclobutanil	94.7		P	80 - 120
Naled	107		P	80 - 120
Napropamide	114		P	80 - 120
Norflurazon	117		P	80 - 120
Oxadiazon	105		P	80 - 120
Oxyfluorfen	112		P	80 - 120
Parathion Ethyl	97.7		P	80 - 120
Parathion Methyl	96.3		P	80 - 120
Pendimethalin	104		P	80 - 120
Phenytoin	95.7		P	80 - 120
Phorate	97.7		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	99.4		P	80 - 120
Prometryn	98.6		P	80 - 120
Pronamide	108		P	80 - 120
Propanil	95.4		P	80 - 120
Propargite	103		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	104		P	80 - 120
Pyridaben	104		P	80 - 120
Pyriproxyfen	108		P	80 - 120
Simazine	90.1		P	80 - 120
Stirophos	92.9		P	80 - 120
Sulfentrazone	94.7		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	85.1		P	80 - 120
Terbuthylazine	93.4		P	80 - 120
Thiobencarb	109		P	80 - 120
Triadimefon	113		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	100				1.21	
EPA 180.1 Rev. 2.0	Turbidity	104				5.89	
EPA 200.7 Rev. 4.4	Calcium	104					2.52
	Iron	103	101	104			2.64
	Magnesium	98.5					0.820
	Potassium	92.7					0.112
	Sodium	98.3					0.851
	Strontium	98.3	94.2	97.2			1.62
	Tin	101	93.3	92.6			0.757
	Titanium	96.9	93.4	94.7			1.33
	Vanadium	98.1	98.1	99.0			0.959
	Zinc	101	95.0	96.1			1.18
EPA 200.8 Rev. 5.4	Aluminum	96.8	102	103			0.960
	Antimony	98.6	101	99.8			1.17
	Arsenic	97.2	105	106			1.33
	Barium	100	96.9	96.1			0.774
	Beryllium	93.3	105	102			3.41
	Boron	101	116	113			0.562
	Cadmium	101	99.3	99.9			0.582
	Chromium	99.8	95.9	97.4			1.54
	Cobalt	94.4	91.1	91.9			0.828
	Copper	101	102	103			1.15
	Lead	90.8	94.1	94.2			0.131
	Manganese	99.8	99.1	98.6			0.426
	Molybdenum	97.1	104	106			1.73
	Nickel	95.0	96.3	97.5			1.22
	Selenium	101	107	105			2.69
	Silver	105	96.1	97.9			1.86
	Thallium	98.6	98.1	99.9			1.80
EPA 300.0 Rev. 2.1	Chloride	105	105	109		0.189	
	Sulfate	104	102	106		1.49	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	103	104			0.161
	Ammonia-N	98.8	100	101			0.114
	Ammonia-N	101	99.8	100			0.505
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.5	102	103			0.640
	Kjeldahl Nitrogen	109	112	105			5.60
	Kjeldahl Nitrogen	102	106	101			2.67
EPA 353.2 Rev. 2.0	NO2NO3-N	102	100	102			1.49
	NO2NO3-N	99.5	99.5				0.705
EPA 365.1 Rev. 2.0	Total-P	103	98.9	99.0			0.126
	Total-P	107	109	108			0.534
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpe ntylphenol (UV-328)	78.0	77.4	97.3			22.8
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	47.9	89.4	114			24.3
	Acetochlor	80.3	97.1	98.2			1.09
	Alachlor	67.8	76.0	81.8			7.38
	Aldrin	55.7	63.2	54.0			15.7
	Alpha-BHC	90.4	93.2	87.3			6.56
	Alpha-Chlordane	73.1	82.8	80.4			2.96
	Ametryn	154	123	146			16.7
	Atrazine	88.1					2.86
	Atrazine Desethyl	82.4	77.8	102			24.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Avobenzene	108	98.9	143		36.3
	Azinphos Methyl	61.6	57.7	90.7		44.5
	Azoxystrobin	77.8	98.2	106		7.43
	Beta-BHC	84.0	88.6	76.7		14.5
	Beta-Cyfluthrin	75.3	89.9	81.3		10.0
	Bifenthrin	58.2	77.5	54.3		35.3
	Bromacil	102	104	112		7.05
	Butylate	71.4	77.4	67.0		14.4
	Caffeine	137	87.2	96.2		9.89
	Carbophenothion	91.2	96.8	99.0		2.22
	Carfentrazone Ethyl	101	99.7	95.1		4.74
	Chlorfenapyr	81.1	63.6	64.4		1.20
	Chlorothalonil	37.6	82.3	55.4		39.1
	Chlorpyrifos Ethyl	94.7	120	108		10.6
	Chlorpyrifos Methyl	118	123	128		3.48
	Cis-Nonachlor	67.0	79.2	72.5		8.82
	Coumaphos	104	63.0	127		67.2
	Cyanazine	213	128	113		11.9
	Cypermethrin	70.0	105	90.1		15.4
	Cyprodinil	133	112	115		3.03
	Dacthal	83.8	98.0	89.2		9.37
	DDD-p,p'	85.1	88.8	86.6		2.43
	DDE-p,p'	75.6	77.6	77.7		0.113
	DDT-p,p'	71.8	85.3	79.7		6.72
	Dechlorane 602	51.5	53.6	73.0		30.7
	Dechlorane 603	107	94.1	105		10.9
	Dechlorane Plus	97.3	81.2	80.7		0.619
	Delta-BHC	76.7	100	82.2		19.9
	Deltamethrin	69.3	110	102		7.29
	Demeton	96.9	80.1	78.1		2.54
	Diazinon	129	137	115		17.4
	Dichlobenil	77.7	68.5	59.3		14.4
	Dicofol	77.2	73.8	76.8		4.00
	Dieldrin	73.8	79.7	77.9		2.28
	Difenoconazole	39.1	43.6	90.5		69.9
	Dimethenamid	64.0	77.7	85.0		8.98
	Dimethomorph	167	138	255		59.4
	Disulfoton	90.2	115	113		1.11
	Dithiopyr	78.3	60.6	57.2		5.88
	Endosulfan I	79.3	93.1	93.3		0.167
	Endosulfan II	83.0	91.4	85.9		6.27
	Endosulfan Sulfate	82.8	76.6	75.9		0.893
	Endrin	76.4	85.3	76.9		10.4
	Endrin Aldehyde	76.0	54.5	41.3		27.7
	Endrin Ketone	95.3	83.3	90.0		7.76
	EPTC	68.5	70.2	61.3		13.5
	Esfenvalerate	68.8	101	83.3		18.9
	Ethalfuralin	73.7	70.4	78.5		10.8
	Ethion	46.8	52.9	76.9		37.0
	Ethoprop	102	99.5	98.4		1.07
	Etridiazole	66.4	65.2	36.4		56.7
	Fenamiphos	92.1	115	129		11.1
	Fenbuconazole	44.4	36.4	78.9		73.6
	Fenpropathrin	72.0	83.3	75.2		10.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fipronil	119	87.8	101			14.4
	Fipronil Desulfinyl	74.5	95.3	110			13.9
	Fipronil Sulfide	85.2	90.0	105			15.1
	Fipronil Sulfone	95.8	78.0	73.3			6.13
	Fluazifop-P-butyl	140	136	112			19.6
	Fludioxonil	82.1	80.6	74.5			7.88
	Flumioxazin	42.9	71.8	117			47.5
	Flutolanil	104	69.3	75.5			8.53
	Fluxapyroxad	29.8	46.4	46.3			0.155
	Fonofos	101	103	94.1			9.17
	Gamma-BHC	91.6	98.4	86.3			13.1
	Gamma-Chlordane	74.1	84.1	76.4			9.56
	Heptachlor	63.4	75.6	68.6			9.78
	Heptachlor Epoxide	76.4	90.2	84.4			6.63
	Hexabromobenzene	81.7	102	114			11.1
	Hexachlorobenzene	60.4	64.8	59.9			7.99
	Hexazinone	92.7					0.365
	Imazalil	81.2	43.5	67.2			42.9
	Iprodione	118	83.2	92.8			11.0
	Kepone	49.5	46.2	47.2			2.01
	Lambda-Cyhalothrin	67.2	95.6	75.6			23.3
	Loratadine	134	208	169			20.5
	Malathion	111	93.6	91.1			2.78
	Metalaxyl	74.9	76.5	90.4			12.8
	Methoprene	61.8	66.0	57.5			13.7
	Methoxychlor	82.0	91.0	88.3			3.04
	Metolachlor	113	88.4	92.2			4.20
	Metribuzin	42.2	73.2	62.1			16.4
	Mevinphos	94.9	89.4	104			15.4
	MGK-264	90.0	99.2	91.6			7.97
	Mirex	59.9	63.7	54.2			16.0
	Molinate	79.7	67.0	61.7			8.23
	Myclobutanil	81.3	78.3	92.3			16.4
	Naled	33.4	59.2	81.9			32.1
	Napropamide	74.3	66.5	84.4			23.8
	Norflurazon	52.3	69.8	84.9			19.6
	Octinoxate	123	107	116			7.88
	Oxadiazon	71.5	75.2	87.5			15.2
	Oxybenzone	115	110	124			11.7
	Oxychlordane	72.7	82.4	78.7			4.63
	Oxyfluorfen	113	111	118			6.21
	Parathion Ethyl	110	97.5	100			2.70
	Parathion Methyl	96.7	142	149			4.88
	PBB-153	61.4	98.3	132			29.0
	PBDE-47	73.7	82.0	101			20.7
	PBDE-99	54.3	70.9	96.7			30.8
	PCB-1016	64.4	75.2	70.6			6.32
	PCB-1260	78.3	89.1	84.1			5.71
	Pendimethalin	112	117	119			1.39
	Pentabromotoluene	93.6	92.6	102			9.50
	Permethrin	72.4	92.0	77.5			17.1
	Phenothrin	57.4	74.1	57.9			24.5
	Phenytol	32.9	50.5	57.0			12.1
	Phorate	96.8	112	91.9			19.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Piperonyl Butoxide	105	99.6	93.8		5.96
	Prallethrin	79.4	85.2	78.8		7.85
	Prodiamine	34.9	60.6	63.2		4.17
	Prometon	113	118	130		9.87
	Prometryn	126	108	107		0.802
	Pronamide	108	112	125		11.4
	Propanil	103	100	110		9.37
	Propargite	48.9	56.0	67.9		19.2
	Propiconazole	64.1	66.7	74.6		11.1
	Pyraflufen Ethyl	70.1	79.3	87.9		10.3
	Pyridaben	84.6	33.4	79.3		35.9
	Pyriproxyfen	50.1	63.5	90.8		35.4
	Simazine	84.3				7.23
	Stirophos	28.4	23.6	21.3		10.3
	Sulfentrazone	23.2	46.3	56.6		20.0
	Tau-Fluvalinate	68.2	81.9	76.3		7.03
	Tebuconazole	43.8	41.2	61.6		39.6
	Terbufos	113	106	100		5.98
	Terbutylazine	94.5	83.2	98.8		17.1
	Tetradecachloro-m-terphenyl	149	146	137		6.75
	Tetramethrin	90.6	111	93.1		17.6
	Thiobencarb	82.0	87.9	90.9		3.43
	Trans-Nonachlor	73.1	79.5	73.4		7.93
	Tri-o-cresyl Phosphate	107	100	118		15.9
	Triadimefon	83.3	57.1	75.3		18.2
	Triclosan Methyl	78.2	89.4	92.0		2.92
	Trifluralin	77.3	70.9	70.1		1.09
	Tris(1-chloro-2-propyl) phosphate (TCPP)	127	111	121		8.59
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.7	92.9	96.3		3.59
	Tris(2-chloroethyl) phosphate (TCEP)	104	106	113		5.91
EPA 8276	Chlordane	78.1	81.3	96.0		16.6
	Toxaphene	86.0	77.7	94.7		16.9
EPA 8321B	2,4-D	62.9	91.3	99.7		8.17
	2,4,5-T	68.5	93.9	104		10.2
	Acesulfame K	95.4	108	112		3.69
	Acetaminophen	81.1	75.7	80.7		6.31
	Acetamiprid	81.1	50.9	52.1		2.26
	Afidopyropen	69.5	70.5	70.9		0.474
	AMPA	72.8	71.4	70.7		0.985
	Bentazon	94.8	86.7	85.1		1.90
	Benzovindiflupyr	93.1	80.1	86.6		7.81
	Carbamazepine	71.3	43.1	45.1		4.61
	Clothianidin	81.9	54.9	58.6		6.45
	Dinotefuran	92.7	57.3	59.9		4.50
	Diuron	69.1	42.3	42.5		0.355
	Endothall	94.3	110	106		3.51
	Fenuron	87.5	33.2	35.6		6.92
	Fluridone	74.2	51.7	54.2		3.98
	Glufosinate	103	98.5	94.8		3.84
	Glyphosate	94.2	79.2	75.1		5.36
	Hydrocodone	84.3	54.7	58.0		5.79

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Ibuprofen	65.7	51.8	50.1		3.24
	Imazapyr	73.9	82.3	73.0		8.50
	Imidacloprid	79.2	76.8	79.7		3.61
	Linuron	58.0	54.2	49.7		8.77
	Mandestrobin	80.1	66.5	73.4		9.89
	MCPP	77.9	107	114		6.19
	Naproxen	62.6	171	149		13.4
	Primidone	76.1	57.9	51.1		12.4
	Pyraclostrobin	70.4	79.4	79.7		0.377
	Silvex	68.5	93.3	107		13.8
	Sucralose	124	129	129		0.0789
	Thiamethoxam	77.1	63.8	66.6		4.34
	Tolfenpyrad	54.5	58.7	61.9		5.24
	Triclopyr	69.6	97.9	106		7.65
SM 2320 B-2011	Total Alkalinity	97.5			0.490	
SM 2540 C-2015	TDS	91.6			5.00	
	TDS	92.8			6.51	
SM 2540 D-2015	TSS	107				
	TSS	103				
SM 4500-F- C-2011	Fluoride	98.5	102	101		0.513
	Fluoride	101	101	101		0.0
SM 5310 B-2011	Organic Carbon	94.5	97.1	97.2		0.116
	Organic Carbon	96.6	92.2	90.6		1.67
	Organic Carbon	95.6	95.0	97.1		1.30

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2444291, 2444293, 2444294
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2444291, 2444293, 2444294
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2444326
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2444326
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2444291, 2444293, 2444294
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2444291, 2444293, 2444294
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2444292, 2444295, 2444296
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2444292, 2444295, 2444296
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2444292, 2444295, 2444296
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2444292, 2444295, 2444296
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2444305
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2444304
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2444305
EPA 8270E	PCBs in water matrices by GC/MS/MS	2444304
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2444304
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2444306
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2444291, 2444293, 2444294
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2444291, 2444293, 2444294
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2444291, 2444293, 2444294
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2444291, 2444293, 2444294
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2444292, 2444295, 2444296

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	10/11/2023			10/11/2023 15:02	Chandler E Cox	2444291
	10/11/2023			10/11/2023 15:03	Chandler E Cox	2444293, 2444294
	10/11/2023			10/11/2023 14:06	Samantha L Bates	2444291
EPA 180.1 Rev. 2.0	10/11/2023			10/11/2023 14:08	Samantha L Bates	2444293
	10/11/2023			10/11/2023 14:09	Samantha L Bates	2444294
	10/11/2023	10/16/2023 12:55	George D Taylor	10/20/2023 05:08	McKinley C Carter	2444326
EPA 200.7 Rev. 4.4	10/11/2023	10/16/2023 12:55	George D Taylor	10/20/2023 05:39	McKinley C Carter	2444326
	10/11/2023	10/16/2023 12:55	George D Taylor	10/23/2023 22:47	McKinley C Carter	2444326
	10/11/2023	10/16/2023 12:55	George D Taylor	10/17/2023 17:30	Conrad Hartmann	2444326
EPA 200.8 Rev. 5.4	10/11/2023	10/16/2023 12:55	George D Taylor	10/18/2023 14:00	Conrad Hartmann	2444326
	10/11/2023			10/17/2023 15:11	James L Waggeberby	2444291
	10/11/2023			10/17/2023 15:26	James L Waggeberby	2444293
EPA 300.0 Rev. 2.1	10/11/2023			10/17/2023 15:41	James L Waggeberby	2444294
	10/11/2023			10/13/2023 13:07	Ping Hua	2444296
	10/11/2023			10/16/2023 12:46	Ping Hua	2444295
EPA 350.1 Rev. 2.0	10/11/2023			10/17/2023 13:27	Ping Hua	2444292
	10/11/2023	10/13/2023 15:51	Simonne.V. Calhoun	10/16/2023 11:51	Samantha L Bates	2444295
	10/11/2023	10/19/2023 15:24	Samantha L Bates	10/23/2023 10:11	Samantha L Bates	2444296
EPA 351.2 Rev. 2.0	10/11/2023	10/27/2023 09:39	Samantha L Bates	10/30/2023 10:13	Samantha L Bates	2444292
	10/11/2023			10/12/2023 13:46	Anna M. Plaviak	2444292
	10/11/2023			10/23/2023 12:12	Anna M. Plaviak	2444295
EPA 353.2 Rev. 2.0	10/11/2023			10/23/2023 12:18	Anna M. Plaviak	2444296
	10/11/2023	10/13/2023 12:30	Adam P Silver	10/17/2023 11:08	James L Waggeberby	2444295
	10/11/2023	10/13/2023 12:30	Adam P Silver	10/17/2023 11:09	James L Waggeberby	2444296
EPA 365.1 Rev. 2.0	10/11/2023	10/18/2023 13:42	Adam P Silver	10/23/2023 11:05	Chandler E Cox	2444292
	10/11/2023	10/12/2023 08:00	Fe-Val Siddell	10/13/2023 23:51	Julie Wi	2444304
	10/11/2023	10/12/2023 08:00	Fe-Val Siddell	10/17/2023 02:39	Julie Wi	2444304
EPA 8270E	10/11/2023	10/16/2023 08:00	Fe-Val Siddell	10/20/2023 18:00	Arthur Maknenko	2444305
	10/11/2023	10/16/2023 08:00	Fe-Val Siddell	10/23/2023 16:52	Vandana T. Nagar	2444305
	10/11/2023	10/12/2023 08:00	Fe-Val Siddell	10/15/2023 20:52	Arthur Maknenko	2444304
EPA 8276	10/11/2023	10/11/2023 13:00	Hana Lee	10/11/2023 19:30	Tae K Lee	2444306
EPA 8321B	10/11/2023	10/11/2023 13:00	Hana Lee	10/12/2023 20:35	Tae K Lee	2444306
	10/11/2023	10/13/2023 16:00	Hoor Shaik	10/14/2023 04:45	Juyoung Kim	2444306
	10/11/2023			10/12/2023 19:51	Chandler E Cox	2444291
SM 2320 B-2011	10/11/2023			10/12/2023 20:57	Chandler E Cox	2444293
	10/11/2023			10/12/2023 21:09	Chandler E Cox	2444294
	10/11/2023			10/16/2023 15:32	Yijie Li	2444291, 2444293, 2444294
SM 2540 C-2015	10/11/2023			10/16/2023 15:32	Yijie Li	2444291, 2444293, 2444294
SM 2540 D-2015	10/11/2023			10/16/2023 17:00	Adam P Silver	2444291
SM 4500-F- C-2011	10/11/2023			10/20/2023 06:40	Dale L. Simmons	2444293

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 4500-F- C-2011	10/11/2023			10/20/2023 06:54	Dale L. Simmons	2444294
SM 5310 B-2011	10/11/2023			10/13/2023 23:37	Elise M. Gillis	2444292
	10/11/2023			10/14/2023 00:55	Elise M. Gillis	2444296
	10/11/2023			10/16/2023 20:52	Khloe J Berg	2444295