

Chemical Analysis Report

NW-DIST-2023-05-17-02

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

Event Description: **Escambia Bay Run**
Request ID: **RQ-2023-05-15-36**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 08-JUN-2023 13:12



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: TROUT BAYOU

Collection Date/Time: 05/15/2023 11:40

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410185	DEP SOP: NU-094-1	Color (true)	23		PCU	P429993	
	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P430008	
	EPA 300.0 Rev. 2.1	Chloride	4.9E+03		mg Cl/L	P430145	
		Sulfate	700		mg SO4/L	P430147	
	SM 2320 B-2011	Total Alkalinity	46	A	mg CaCO3/L	P430440	
	SM 2540 C-2015	TDS	7.24E+03		mg/L	P430683	
	SM 2540 D-2015	TSS	4	I	mg/L	P430522	RPD
	SM 4500-F- C-2011	Fluoride	0.38		mg F/L	P430444	MS
2410186	EPA 350.1 Rev. 2.0	Ammonia-N	0.019		mg N/L	P430075	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.35	I	mg N/L	P430051	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P430293	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P430043	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P430100	
2410192	EPA 8321B	Aldicarb	0.020	U	ug/L	P430052	
		Aldicarb Sulfone	0.0020	U	ug/L	P430052	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P430052	MS
		Carbaryl	0.0020	U	ug/L	P430052	
		Carbofuran	0.0020	U	ug/L	P430052	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P430052	
		Methiocarb	0.0020	U	ug/L	P430052	
		Methomyl	0.0020	U	ug/L	P430052	
		Oxamyl	0.0020	U	ug/L	P430052	
		Propoxur	0.0020	U	ug/L	P430052	
2410193	Acesulfame K	0.10	U	ug/L	P429908		
	2,4-D	0.0027	I	ug/L	P429946		
	AMPA	1.0	U	ug/L	P429908		
	2,4,5-T	0.0040	U	ug/L	P429946		
	Acetaminophen	0.0080	U	ug/L	P429946		
	Endothall	0.25	U	ug/L	P429908		
	Acetamiprid	0.0020	U	ug/L	P429946		
	Glufosinate	1.0	U	ug/L	P429908		
	Glyphosate	1.0	U	ug/L	P429908		
	Afidopyropen	0.0020	U	ug/L	P429946		
	Sucralose	0.085		ug/L	P429908		
	Bentazon	8.0E-04	U	ug/L	P429946		
	Benzovindiflupyr	0.0020	U	ug/L	P429946		
	Carbamazepine	8.0E-04	U	ug/L	P429946		
	Clothianidin	0.0020	U	ug/L	P429946		
	Dinotefuran	0.0020	U	ug/L	P429946		
	Diuron	0.0020	U	ug/L	P429946		
	Fenuron	0.032	U	ug/L	P429946		
	Fluridone	8.0E-04	U	ug/L	P429946		
	Imazapyr	0.0059	I	ug/L	P429946		
Hydrocodone	0.0020	U	ug/L	P429946			

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410193	EPA 8321B	Ibuprofen	0.080	U	ug/L	P429946	
		Imidacloprid	0.0024	I	ug/L	P429946	
		Linuron	0.0040	U	ug/L	P429946	
		Mandestrobin	0.0020	U	ug/L	P429946	
		MCP	0.0020	U	ug/L	P429946	
		Naproxen	0.0080	U	ug/L	P429946	MS
		Primidone	0.0040	U	ug/L	P429946	
		Pyraclostrobin	0.0020	U	ug/L	P429946	
		Silvex	0.0040	U	ug/L	P429946	
		Thiamethoxam	0.0020	U	ug/L	P429946	
		Tolfenpyrad	0.0020	U	ug/L	P429946	
		Triclopyr	0.0040	U	ug/L	P429946	
2410194	EPA 8270E	Aldrin	0.78	U	ng/L	P429934	
		Alpha-BHC	0.12	U	ng/L	P429934	
		Alpha-Chlordane	0.24	U	ng/L	P429934	
		PCB-1016	2.4	U	ng/L	P429934	
		Beta-BHC	0.12	U	ng/L	P429934	
		PCB-1221	2.4	U	ng/L	P429934	
		Beta-Cyfluthrin	1.5	U	ng/L	P429934	
		PCB-1232	2.4	U	ng/L	P429934	
		Bifenthrin	0.60	U	ng/L	P429934	
		PCB-1242	2.4	U	ng/L	P429934	
		PCB-1248	2.4	U	ng/L	P429934	
		Chlorothalonil	4.3	U	ng/L	P429934	
		PCB-1254	2.4	U	ng/L	P429934	
		Cis-Nonachlor	0.24	U	ng/L	P429934	
		PCB-1260	2.4	U	ng/L	P429934	
		Cypermethrin	1.8	U	ng/L	P429934	
		Dacthal	0.18	U	ng/L	P429934	MS
		DDD-p,p'	0.30	U	ng/L	P429934	
		DDE-p,p'	0.24	U	ng/L	P429934	
		DDT-p,p'	0.30	U	ng/L	P429934	
		Delta-BHC	0.48	U	ng/L	P429934	
		Deltamethrin	1.5	U	ng/L	P429934	
		Dichlobenil	0.30	U	ng/L	P429934	RPD
		Dicofol	1.5	U	ng/L	P429934	
		Dieldrin	0.48	U	ng/L	P429934	
		Endosulfan I	0.48	U	ng/L	P429934	
		Endosulfan II	0.48	U	ng/L	P429934	
		Endosulfan Sulfate	0.36	U	ng/L	P429934	
		Endrin	0.48	U	ng/L	P429934	
		Endrin Aldehyde	0.90	U	ng/L	P429934	
		Endrin Ketone	0.48	U	ng/L	P429934	
		Esfenvalerate	0.90	U	ng/L	P429934	
		Ethalfuralin	0.20	I	ng/L	P429934	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410194	EPA 8270E	Fenpropathrin	0.30	U	ng/L	P429934	
		Gamma-BHC	0.15	U	ng/L	P429934	
		Gamma-Chlordane	0.24	U	ng/L	P429934	
		Heptachlor	0.24	U	ng/L	P429934	
		Heptachlor Epoxide	0.30	U	ng/L	P429934	
		Hexachlorobenzene**	1.2	U	ng/L	P429934	
		Kepone	6.0	U	ng/L	P429934	
		Lambda-Cyhalothrin	0.90	U	ng/L	P429934	
		Methoprene	0.90	U	ng/L	P429934	
		Methoxychlor	0.36	U	ng/L	P429934	
		MGK-264	0.24	U	ng/L	P429934	
		Mirex	0.42	U	ng/L	P429934	
		Oxychlordane	0.36	U	ng/L	P429934	
		Permethrin	1.9	U	ng/L	P429934	
		Phenothrin	1.1	U	ng/L	P429934	
		Piperonyl Butoxide	0.43	I	ng/L	P429934	
		Prallethrin	2.4	U	ng/L	P429934	
		Tau-Fluvalinate	0.30	U	ng/L	P429934	
		Tetramethrin	0.90	U	ng/L	P429934	
		Trans-Nonachlor	0.24	U	ng/L	P429934	
		Triclosan Methyl	0.18	U	ng/L	P429934	
		Trifluralin	0.25	I	ng/L	P429934	
		Chlordane	2.4	U	ng/L	P429934	
		Toxaphene	18	U	ng/L	P429934	
2410195	EPA 8270E	Oxybenzone**	11	U	ng/L	P430033	
		Acetochlor	0.23	U	ng/L	P430033	
		Octinoxate**	23	U	ng/L	P430033	
		Alachlor	0.46	U	ng/L	P430033	
		Avobenzone**	110	U	ng/L	P430033	MS
		Ametryn	1.3	U	ng/L	P430033	
		Atrazine	30		ng/L	P430033	
		PBDE-47**	4.6	U	ng/L	P430033	
		Atrazine Desethyl	6.3	I	ng/L	P430033	
		PBDE-99**	5.7	U	ng/L	P430033	
		Azinphos Methyl	3.4	U	ng/L	P430033	
		Tri-o-cresyl Phosphate**	6.8	U	ng/L	P430033	
		Azoxystrobin	0.46	U	ng/L	P430033	
		Bromacil	0.68	U	ng/L	P430033	
		2-Ethylhexyl	14	UJ	ng/L	P430033	LCS
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.23	U	ng/L	P430033	
		Dechlorane Plus**	34	U	ng/L	P430033	
		Caffeine**	17	I	ng/L	P430033	
		Dechlorane 602**	5.7	U	ng/L	P430033	RPD
		Carbophenothion	0.57	U	ng/L	P430033	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410195	EPA 8270E	Dechlorane 603**	4.6	U	ng/L	P430033	
		Carfentrazone Ethyl	0.17	U	ng/L	P430033	
		Hexabromobenzene**	6.8	U	ng/L	P430033	
		Chlorfenapyr	0.34	U	ng/L	P430033	
		PBB-153**	9.1	U	ng/L	P430033	MS, RPD
		Chlorpyrifos Ethyl	0.34	U	ng/L	P430033	
		Pentabromotoluene**	3.4	U	ng/L	P430033	
		Chlorpyrifos Methyl	0.11	U	ng/L	P430033	
		Tris(2-chloroethyl) phosphate (TCEP)**	80	U	ng/L	P430033	
		Coumaphos	1.2	U	ng/L	P430033	RPD
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	17	U	ng/L	P430033	
		Cyanazine	5.7	U	ng/L	P430033	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.8	U	ng/L	P430033	
		Cyprodinil	0.23	U	ng/L	P430033	
		Tetradecachloro-m-terphenyl**	8.5	U	ng/L	P430033	MS
		Demeton	4.0	U	ng/L	P430033	
		Diazinon	0.14	U	ng/L	P430033	
		Difenoconazole	0.68	U	ng/L	P430033	MS, RPD
		Dimethenamid	0.11	U	ng/L	P430033	
		Dimethomorph	0.34	U	ng/L	P430033	
		Disulfoton	0.68	U	ng/L	P430033	
		Dithiopyr	1.1	U	ng/L	P430033	
		EPTC	0.57	U	ng/L	P430033	
		Ethion	0.34	U	ng/L	P430033	
		Ethoprop	0.14	U	ng/L	P430033	
		Etridiazole	0.11	U	ng/L	P430033	
		Fenamiphos	0.51	U	ng/L	P430033	
		Fenbuconazole	0.57	U	ng/L	P430033	MS
		Fipronil	0.23	U	ng/L	P430033	
		Fipronil Desulfinyl**	0.31	I	ng/L	P430033	
		Fipronil Sulfide	0.14	I	ng/L	P430033	
		Fipronil Sulfone	0.25	I	ng/L	P430033	
		Fluazifop-P-butyl	0.11	U	ng/L	P430033	
		Fludioxonil	0.11	U	ng/L	P430033	
		Flumioxazin	3.4	U	ng/L	P430033	RPD
		Flutolanil	0.11	U	ng/L	P430033	
		Fluxapyroxad	0.28	U	ng/L	P430033	
		Fonofos	0.17	U	ng/L	P430033	
		Hexazinone	0.57	U	ng/L	P430033	
		Imazalil	0.74	U	ng/L	P430033	
		Iprodione	0.57	U	ng/L	P430033	RPD
		Loratadine**	0.34	U	ng/L	P430033	
		Malathion	0.40	U	ng/L	P430033	
		Metalaxyl	0.57	U	ng/L	P430033	

Field ID: G4NW0443

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410195	EPA 8270E	Metolachlor	1.3	I	ng/L	P430033	
		Metribuzin	0.46	U	ng/L	P430033	
		Mevinphos	1.1	U	ng/L	P430033	
		Molinate	0.28	U	ng/L	P430033	
		Myclobutanil	0.40	U	ng/L	P430033	
		Naled	2.8	U	ng/L	P430033	
		Napropamide	0.80	U	ng/L	P430033	
		Norflurazon	1.1	U	ng/L	P430033	
		Oxadiazon	0.40	U	ng/L	P430033	
		Oxyfluorfen	0.23	U	ng/L	P430033	
		Parathion Ethyl	0.17	U	ng/L	P430033	
		Parathion Methyl	0.23	U	ng/L	P430033	
		Pendimethalin	0.85	U	ng/L	P430033	
		Phenytol**	6.0	U	ng/L	P430033	
		Phorate	0.28	U	ng/L	P430033	
		Prodiatamine	0.23	U	ng/L	P430033	
		Prometon	3.4	U	ng/L	P430033	
		Prometryn	0.40	U	ng/L	P430033	
		Pronamide	0.11	U	ng/L	P430033	
		Propanil	0.11	U	ng/L	P430033	
		Propargite	0.91	U	ng/L	P430033	
		Propiconazole	0.68	U	ng/L	P430033	
		Pyraflufen Ethyl	0.34	U	ng/L	P430033	
		Pyridaben	1.6	U	ng/L	P430033	RPD
		Pyriproxyfen	0.28	U	ng/L	P430033	
		Simazine	0.28	U	ng/L	P430033	
		Stirophos	0.46	U	ng/L	P430033	
		Sulfentrazon	1.6	U	ng/L	P430033	
		Tebuconazole	1.6	U	ng/L	P430033	
		Terbufos	0.23	U	ng/L	P430033	
		Terbuthylazine	0.23	U	ng/L	P430033	
		Thiobencarb	0.57	U	ng/L	P430033	RPD
		Triadimefon	0.17	U	ng/L	P430033	

Ref. Method and Comment:

EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.

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

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

Sample Location: ESCAMBIA BAY SEC B BACKGR STA

Collection Date/Time: 05/15/2023 10:50

Field ID: G4NW0025

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410196	EPA 200.7 Rev. 4.4	Calcium	59.6		mg/L	P430036	
		Iron	570		ug/L	P430036	
		Magnesium	163		mg/L	P430036	
		Potassium	51		mg/L	P430036	
		Sodium	1.23E+03		mg/L	P430036	
		Strontium	940		ug/L	P430036	
		Tin	3.0	U	ug/L	P430036	
		Titanium	5.6		ug/L	P430036	
		Vanadium	2.0	U	ug/L	P430036	
		Zinc	5.0	U	ug/L	P430036	
	EPA 200.8 Rev. 5.4	Aluminum	193		ug/L	P430036	
		Antimony	0.071	I	ug/L	P430036	
		Arsenic	0.68		ug/L	P430036	
		Barium	23.6		ug/L	P430036	
		Beryllium	0.024	I	ug/L	P430036	
		Boron	516		ug/L	P430036	
		Cadmium	0.020	U	ug/L	P430036	
		Chromium	0.40	U	ug/L	P430036	
		Cobalt	0.194		ug/L	P430036	
		Copper	0.40	U	ug/L	P430036	
		Lead	0.21	I	ug/L	P430036	
		Manganese	32.2		ug/L	P430036	
		Molybdenum	1.72		ug/L	P430036	
		Nickel	0.50	U	ug/L	P430036	
		Selenium	0.20	U	ug/L	P430036	
		Silver	0.010	U	ug/L	P430036	
		Thallium	0.10	U	ug/L	P430036	
	SM 2340 B-2011	Hardness	819		mg/L	P430036	

Sample Location: ESCAMBIA BAY SECT D BUOY N12

Collection Date/Time: 05/15/2023 11:15

Field ID: G4NW0029

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2410197	EPA 200.7 Rev. 4.4	Calcium	58.1		mg/L	P430036	
		Iron	450		ug/L	P430036	
		Magnesium	158		mg/L	P430036	
		Potassium	51		mg/L	P430036	
		Sodium	1.24E+03		mg/L	P430036	
		Strontium	942		ug/L	P430036	
		Tin	3.0	U	ug/L	P430036	
		Titanium	5.8		ug/L	P430036	
		Vanadium	2.0	U	ug/L	P430036	
		Zinc	5.0	U	ug/L	P430036	
	EPA 200.8 Rev. 5.4	Aluminum	158		ug/L	P430036	
		Antimony	0.073	I	ug/L	P430036	
		Arsenic	0.65		ug/L	P430036	
		Barium	21.2		ug/L	P430036	
		Beryllium	0.023	I	ug/L	P430036	
		Boron	523		ug/L	P430036	
		Cadmium	0.020	U	ug/L	P430036	
		Chromium	0.40	U	ug/L	P430036	
		Cobalt	0.153		ug/L	P430036	
		Copper	0.40	U	ug/L	P430036	
		Lead	0.20	U	ug/L	P430036	
		Manganese	20.2		ug/L	P430036	
		Molybdenum	1.77		ug/L	P430036	
		Nickel	0.50	U	ug/L	P430036	
		Selenium	0.20	U	ug/L	P430036	
		Silver	0.010	U	ug/L	P430036	
		Thallium	0.10	U	ug/L	P430036	
	SM 2340 B-2011	Hardness	796		mg/L	P430036	

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P429993

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430008

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430036

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: P430036

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: P430145

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: P430147

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430075

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430051

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430293

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430043

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

Reference Method: EPA 8270E
Batch ID: P429934

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429934

Component	Result	Code	Units
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429934

Component	Result	Code	Units
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P430033

Component	Result	Code	Units
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8276

Batch ID: P429934

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

Reference Method: EPA 8321B

Batch ID: P429908

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: P429946

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P429946

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	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: EPA 8321B

Batch ID: P430052

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

Reference Method: SM 2320 B-2011

Batch ID: P430440

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P430683

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P430522

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P430100

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: P429993

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.7		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430008

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.6		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430036

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	80 - 120
Iron	104		P	80 - 120
Magnesium	103		P	80 - 120
Potassium	101		P	80 - 120
Sodium	95.4		P	80 - 120
Strontium	99.9		P	80 - 120
Tin	106		P	80 - 120
Titanium	102		P	80 - 120
Vanadium	102		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430036

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.6		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	99.7		P	85 - 115
Barium	103		P	85 - 115
Beryllium	94.6		P	85 - 115
Boron	98.5		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	95.1		P	85 - 115
Cobalt	99.8		P	85 - 115
Copper	96.8		P	85 - 115
Lead	102		P	85 - 115
Manganese	97.6		P	85 - 115
Molybdenum	98.8		P	85 - 115
Nickel	98.6		P	85 - 115
Selenium	99.4		P	85 - 115
Silver	103		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430145

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430147

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430075

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.6		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430051

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430293

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430043

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

Reference Method: EPA 8270E
Batch ID: P429934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	38.7		P	10 - 92.0
Alpha-BHC	87.6		P	75 - 107
Alpha-Chlordane	68.4		P	50 - 108
Beta-BHC	108		P	36 - 138
Beta-Cyfluthrin	71.7		P	20 - 161
Bifenthrin	37.4		P	10 - 119
Chlorothalonil	90.6		P	26 - 186
Cis-Nonachlor	62.5		P	42 - 119
Cypermethrin	71.7		P	22 - 150
Dacthal	95.0		P	72 - 119
DDD-p,p'	61.6		P	45 - 107
DDE-p,p'	69.4		P	48 - 106
DDT-p,p'	61.8		P	48 - 110
Delta-BHC	109		P	54 - 140
Deltamethrin	77.9		P	22 - 189
Dichlobenil	80.4		P	36 - 117
Dicofol	66.9		P	46 - 155
Dieldrin	70.5		P	54 - 110
Endosulfan I	70.9		P	59 - 105
Endosulfan II	81.6		P	51 - 118
Endosulfan Sulfate	92.3		P	57 - 121
Endrin	69.1		P	10 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P429934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin Aldehyde	88.0		P	34 - 118
Endrin Ketone	133		P	69 - 177
Esfenvalerate	64.2		P	23 - 168
Ethalfuralin	67.4		P	49 - 99.0
Fenpropathrin	53.7		P	34 - 117
Gamma-BHC	94.8		P	72 - 117
Gamma-Chlordane	66.2		P	43 - 106
Heptachlor	62.0		P	41 - 98.0
Heptachlor Epoxide	84.7		P	57 - 106
Hexachlorobenzene	54.2		P	36 - 99.0
Kepone	150		P	16 - 215
Lambda-Cyhalothrin	47.9		P	21 - 177
Methoprene	47.0		P	10 - 119
Methoxychlor	77.4		P	60 - 112
MGK-264	77.7		P	26 - 122
Mirex	50.2		P	10 - 169
Oxychlordane	70.9		P	43 - 105
PCB-1016	62.2		P	48 - 112
PCB-1260	82.7		P	44 - 118
Permethrin	53.6		P	24 - 148
Phenothrin	31.9		P	10 - 106
Piperonyl Butoxide	81.1		P	10 - 139
Prallethrin	58.7		P	17 - 109
Tau-Fluvalinate	54.9		P	13 - 131
Tetramethrin	49.4		P	10 - 132
Trans-Nonachlor	66.4		P	44 - 106
Triclosan Methyl	73.5		P	59 - 109
Trifluralin	72.4		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	34.7		F	42 - 162
Acetochlor	83.3		P	69 - 123
Alachlor	117		P	65 - 118
Ametryn	97.7		P	58 - 141
Atrazine	92.1		P	73 - 118
Atrazine Desethyl	93.9		P	32 - 125
Avobenzone	168		P	40 - 203
Azinphos Methyl	94.7		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	92.9		P	48 - 120
Butylate	61.6		P	27 - 85.0
Caffeine	107		P	40 - 137
Carbophenothion	130		P	54 - 132
Carfentrazone Ethyl	101		P	60 - 142
Chlorfenapyr	85.0		P	53 - 117
Chlorpyrifos Ethyl	86.7		P	59 - 116
Chlorpyrifos Methyl	94.1		P	66 - 119
Coumaphos	114		P	11 - 234
Cyanazine	202		P	61 - 248

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cyprodinil	95.6		P	50 - 147
Dechlorane 602	99.8		P	50 - 150
Dechlorane 603	124		P	50 - 150
Dechlorane Plus	129		P	47 - 182
Demeton	65.6		P	30 - 138
Diazinon	92.8		P	67 - 126
Difenoconazole	116		P	38 - 205
Dimethenamid	91.3		P	57 - 111
Dimethomorph	132		P	16 - 212
Disulfoton	83.7		P	46 - 126
Dithiopyr	89.4		P	62 - 115
EPTC	47.0		P	28 - 80.0
Ethion	82.1		P	24 - 122
Ethoprop	80.9		P	62 - 113
Etridiazole	87.2		P	28 - 92.0
Fenamiphos	84.1		P	57 - 128
Fenbuconazole	86.9		P	52 - 155
Fipronil	125		P	63 - 130
Fipronil Desulfinyl	127		P	61 - 130
Fipronil Sulfide	91.3		P	56 - 117
Fipronil Sulfone	88.2		P	52 - 118
Fluazifop-P-butyl	80.4		P	61 - 128
Fludioxonil	95.3		P	59 - 129
Flumioxazin	111		P	30 - 250
Flutolanil	96.3		P	53 - 127
Fluxapyroxad	124		P	42 - 132
Fonofos	88.3		P	61 - 110
Hexabromobenzene	116		P	50 - 150
Hexazinone	92.0		P	46 - 139
Imazalil	97.7		P	40 - 139
Iprodione	132		P	40 - 146
Loratadine	120		P	10 - 224
Malathion	129		P	61 - 135
Metaxyl	112		P	58 - 121
Metolachlor	106		P	64 - 118
Metribuzin	100		P	45 - 245
Mevinphos	88.0		P	49 - 118
Molinate	58.2		P	42 - 92.0
Myclobutanil	89.5		P	55 - 127
Naled	43.1		P	10 - 114
Napropamide	81.3		P	39 - 121
Norflurazon	77.8		P	55 - 129
Octinoxate	120		P	26 - 166
Oxadiazon	81.1		P	54 - 115
Oxybenzone	119		P	49 - 135
Oxyfluorfen	108		P	64 - 139
Parathion Ethyl	98.3		P	70 - 111
Parathion Methyl	92.7		P	76 - 136
PBB-153	89.0		P	50 - 150
PBDE-47	104		P	41 - 148
PBDE-99	64.6		P	38 - 147
Pendimethalin	103		P	52 - 118

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pentabromotoluene	111		P	50 - 150
Phenytoin	58.2		P	10 - 162
Phorate	84.4		P	40 - 122
Prodiamine	72.1		P	26 - 141
Prometon	85.5		P	54 - 122
Prometryn	128		P	61 - 128
Pronamide	93.6		P	72 - 121
Propanil	139		P	45 - 144
Propargite	119		P	10 - 199
Propiconazole	86.4		P	56 - 127
Pyraflufen Ethyl	68.1		P	56 - 140
Pyridaben	119		P	26 - 211
Pyriproxyfen	130		P	33 - 194
Simazine	79.7		P	67 - 121
Stirophos	105		P	20 - 142
Sulfentrazone	108		P	21 - 144
Tebuconazole	101		P	10 - 122
Terbufos	87.2		P	60 - 129
Terbutylazine	105		P	69 - 113
Tetradecachloro-m-terphenyl	180		P	70 - 200
Thiobencarb	84.2		P	51 - 120
Tri-o-cresyl Phosphate	123		P	49 - 150
Triadimefon	79.3		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	125		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	123		P	70 - 180

Reference Method: EPA 8276

Batch ID: P429934

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.9		P	53 - 126
Toxaphene	90.6		P	56 - 211

Reference Method: EPA 8321B

Batch ID: P429908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	92.2		P	40 - 150
AMPA	106		P	40 - 150
Endothall	85.6		P	40 - 150
Glufosinate	84.6		P	40 - 150
Glyphosate	102		P	40 - 150
Sucralose	117		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	96.3		P	40 - 150
2,4,5-T	90.4		P	40 - 150
Acetaminophen	82.2		P	30 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P429946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetamiprid	69.3		P	40 - 150
Afidopyropen	80.8		P	30 - 150
Bentazon	103		P	30 - 150
Benzovindiflupyr	82.2		P	40 - 150
Carbamazepine	85.0		P	40 - 150
Clothianidin	79.4		P	40 - 150
Dinotefuran	88.5		P	40 - 150
Diuron	89.0		P	40 - 150
Fenuron	83.4		P	40 - 150
Fluridone	94.5		P	40 - 150
Hydrocodone	86.8		P	40 - 150
Ibuprofen	61.2		P	40 - 150
Imazapyr	87.8		P	40 - 150
Imidacloprid	76.6		P	40 - 150
Linuron	80.5		P	40 - 150
Mandestrobin	84.3		P	40 - 150
MCPP	81.9		P	40 - 150
Naproxen	72.9		P	40 - 150
Primidone	88.4		P	40 - 150
Pyraclostrobin	82.6		P	40 - 150
Silvex	78.0		P	40 - 150
Thiamethoxam	76.5		P	40 - 150
Tolfenpyrad	60.0		P	30 - 150
Triclopyr	85.3		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P430052

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	76.4		P	40 - 150
Aldicarb	50.7		P	30 - 150
Aldicarb Sulfone	91.1		P	40 - 150
Aldicarb Sulfoxide	97.0		P	40 - 150
Carbaryl	79.1		P	40 - 150
Carbofuran	64.7		P	40 - 150
Methiocarb	77.2		P	40 - 150
Methomyl	84.4		P	40 - 150
Oxamyl	88.5		P	40 - 150
Propoxur	73.1		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P430440

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.8		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P430683

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P430522

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	92.7		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	104		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P430100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P430036

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410005	Calcium	102	102	P/P	80 - 120
2410005	Iron	104	102	P/P	80 - 120
2410005	Magnesium	102	100	P/P	80 - 120
2410005	Potassium	102	101	P/P	80 - 120
2410005	Sodium	93.3	91.9	P/P	80 - 120
2410005	Strontium	96.9	96.4	P/P	80 - 120
2410005	Tin	103	101	P/P	80 - 120
2410005	Titanium	99.3	99.0	P/P	80 - 120
2410005	Vanadium	98.4	98.5	P/P	80 - 120
2410005	Zinc	99.1	99.1	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P430036

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410005	Aluminum	99.5	101	P/P	80 - 120
2410005	Antimony	105	105	P/P	80 - 120
2410005	Arsenic	100	100	P/P	80 - 120
2410005	Barium	105	103	P/P	80 - 120
2410005	Beryllium	94.0	94.6	P/P	80 - 120
2410005	Boron	98.3	99.6	P/P	80 - 120
2410005	Cadmium	102	99.5	P/P	80 - 120
2410005	Chromium	93.8	96.4	P/P	80 - 120
2410005	Cobalt	99.1	101	P/P	80 - 120
2410005	Copper	96.2	99.2	P/P	80 - 120
2410005	Lead	103	103	P/P	80 - 120
2410005	Manganese	96.8	99.3	P/P	80 - 120
2410005	Molybdenum	98.8	98.6	P/P	80 - 120
2410005	Nickel	96.7	98.8	P/P	80 - 120
2410005	Selenium	99.9	99.8	P/P	80 - 120
2410005	Silver	102	101	P/P	80 - 120
2410005	Thallium	101	102	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P430145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409971	Chloride	103		P	90 - 110
2410135	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P430147

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409971	Sulfate	100		P	90 - 110
2410135	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P430075

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2407779	Ammonia-N	100	103	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P430051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410138	Kjeldahl Nitrogen	109	111	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P430293

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409789	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P430043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410297	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P429934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409823	PCB-1016	60.0	50.6	P/P	46 - 111
2409823	PCB-1260	75.7	62.7	P/P	45 - 114
2410545	Aldrin	54.7	52.3	P/P	20 - 82.0
2410545	Alpha-BHC	80.4	89.3	P/P	71 - 109
2410545	Alpha-Chlordane	73.9	61.6	P/P	42 - 106
2410545	Beta-BHC	118	134	P/P	69 - 180
2410545	Beta-Cyfluthrin	87.0	81.3	P/P	18 - 175
2410545	Bifenthrin	45.6	42.8	P/P	21 - 128
2410545	Chlorothalonil	47.6	45.2	P/P	10 - 300
2410545	Cis-Nonachlor	66.6	67.8	P/P	34 - 106
2410545	Cypermethrin	89.8	81.8	P/P	22 - 158
2410545	Dacthal	110	123	P/F	54 - 116
2410545	DDD-p,p'	64.2	65.8	P/P	34 - 107
2410545	DDE-p,p'	72.2	72.3	P/P	33 - 110
2410545	DDT-p,p'	68.0	65.3	P/P	50 - 122
2410545	Delta-BHC	122	143	P/P	77 - 193
2410545	Deltamethrin	110	105	P/P	10 - 195
2410545	Dichlobenil	38.3	63.0	P/P	25 - 113
2410545	Dicofol	62.6	70.2	P/P	38 - 247
2410545	Dieldrin	75.3	79.0	P/P	45 - 118
2410545	Endosulfan I	73.5	70.7	P/P	51 - 106
2410545	Endosulfan II	72.7	75.7	P/P	37 - 122
2410545	Endosulfan Sulfate	80.6	101	P/P	43 - 132
2410545	Endrin	74.9	76.8	P/P	29 - 101
2410545	Endrin Aldehyde	78.8	97.0	P/P	19 - 110
2410545	Endrin Ketone	60.2	75.0	P/P	60 - 140
2410545	Esfenvalerate	88.8	84.9	P/P	26 - 199
2410545	Ethalfuralin	68.2	71.4	P/P	45 - 99.0
2410545	Fenpropathrin	56.0	55.2	P/P	35 - 120
2410545	Gamma-BHC	106	117	P/P	63 - 128
2410545	Gamma-Chlordane	73.7	60.7	P/P	40 - 104
2410545	Heptachlor	66.2	62.8	P/P	36 - 97.0
2410545	Heptachlor Epoxide	108	98.4	P/P	49 - 184
2410545	Hexachlorobenzene	52.9	49.6	P/P	39 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410545	Kepone	150	158	P/P	10 - 217
2410545	Lambda-Cyhalothrin	62.2	61.5	P/P	21 - 193
2410545	Methoprene	55.0	45.8	P/P	20 - 106
2410545	Methoxychlor	78.7	88.1	P/P	53 - 118
2410545	MGK-264	107	116	P/P	40 - 118
2410545	Mirex	52.5	49.6	P/P	26 - 92.0
2410545	Oxychlordane	81.0	74.8	P/P	44 - 99.0
2410545	Permethrin	70.3	61.5	P/P	33 - 182
2410545	Phenothrin	59.8	54.1	P/P	10 - 129
2410545	Piperonyl Butoxide	82.5	84.7	P/P	10 - 211
2410545	Prallethrin	64.8	70.3	P/P	24 - 113
2410545	Tau-Fluvalinate	73.9	73.3	P/P	14 - 149
2410545	Tetramethrin	73.7	83.0	P/P	17 - 151
2410545	Trans-Nonachlor	70.9	63.7	P/P	42 - 102
2410545	Triclosan Methyl	74.0	68.4	P/P	48 - 108
2410545	Trifluralin	69.8	68.6	P/P	47 - 96.0

Reference Method: EPA 8270E

Batch ID: P430033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410434	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.3	127	P/P	26 - 165
2410434	Acetochlor	72.7	79.9	P/P	67 - 124
2410434	Alachlor	89.0	94.0	P/P	60 - 120
2410434	Ametryn	121	93.8	P/P	54 - 216
2410434	Atrazine Desethyl	86.2	107	P/P	15 - 122
2410434	Avobenzone	135	184	P/F	37 - 178
2410434	Azinphos Methyl	65.9	85.7	P/P	40 - 292
2410434	Azoxystrobin	81.3	96.4	P/P	35 - 220
2410434	Bromacil	65.4	76.4	P/P	45 - 127
2410434	Butylate	62.0	59.5	P/P	20 - 83.0
2410434	Caffeine	106	131	P/P	10 - 194
2410434	Carbophenothion	100	118	P/P	57 - 127
2410434	Carfentrazone Ethyl	69.1	77.1	P/P	51 - 141
2410434	Chlorfenapyr	68.7	75.3	P/P	46 - 111
2410434	Chlorpyrifos Ethyl	108	85.3	P/P	52 - 120
2410434	Chlorpyrifos Methyl	79.0	81.6	P/P	63 - 119
2410434	Coumaphos	61.4	92.8	P/P	10 - 228
2410434	Cyanazine	164	237	P/P	59 - 241
2410434	Cyprodinil	84.3	87.8	P/P	47 - 146
2410434	Dechlorane 602	75.7	109	P/P	50 - 150
2410434	Dechlorane 603	102	135	P/P	50 - 150
2410434	Dechlorane Plus	106	93.5	P/P	50 - 150
2410434	Demeton	63.1	70.6	P/P	40 - 136
2410434	Diazinon	89.5	86.1	P/P	69 - 132
2410434	Difenoconazole	45.9	114	F/P	57 - 258
2410434	Dimethenamid	72.9	84.6	P/P	54 - 110
2410434	Dimethomorph	143	101	P/P	28 - 210
2410434	Disulfoton	75.7	84.7	P/P	43 - 133
2410434	Dithiopyr	76.0	80.0	P/P	39 - 116
2410434	EPTC	51.0	49.6	P/P	20 - 78.0
2410434	Ethion	95.9	111	P/P	17 - 119

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P430033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410434	Ethoprop	100	94.8	P/P	66 - 120
2410434	Etridiazole	77.1	85.9	P/P	28 - 96.0
2410434	Fenamiphos	68.7	61.9	P/P	41 - 126
2410434	Fenbuconazole	37.4	73.6	F/P	42 - 169
2410434	Fipronil	98.6	111	P/P	61 - 132
2410434	Fipronil Desulfinyl	94.9	105	P/P	56 - 132
2410434	Fipronil Sulfide	75.5	86.7	P/P	48 - 119
2410434	Fipronil Sulfone	68.2	78.9	P/P	42 - 131
2410434	Fluazifop-P-butyl	75.1	77.3	P/P	53 - 131
2410434	Fludioxonil	73.9	84.7	P/P	56 - 127
2410434	Flumioxazin	57.0	112	P/P	19 - 300
2410434	Flutolanil	91.8	101	P/P	41 - 127
2410434	Fluxapyroxad	92.7	118	P/P	42 - 172
2410434	Fonofos	91.8	81.9	P/P	59 - 113
2410434	Hexabromobenzene	124	133	P/P	50 - 150
2410434	Hexazinone	97.6	84.9	P/P	66 - 122
2410434	Imazalil	178	104	P/P	21 - 283
2410434	Iprodione	81.2	53.7	P/P	43 - 150
2410434	Loratadine	146	90.5	P/P	23 - 201
2410434	Malathion	75.7	96.0	P/P	58 - 136
2410434	Metalaxyl	101	114	P/P	55 - 120
2410434	Metolachlor	91.2	97.0	P/P	57 - 121
2410434	Metribuzin	94.3	94.5	P/P	58 - 294
2410434	Mevinphos	81.2	73.6	P/P	50 - 126
2410434	Molinate	57.7	61.5	P/P	42 - 93.0
2410434	Myclobutanil	72.4	80.7	P/P	55 - 125
2410434	Naled	37.9	40.9	P/P	18 - 200
2410434	Napropamide	62.2	73.3	P/P	39 - 110
2410434	Norflurazon	57.0	68.2	P/P	48 - 128
2410434	Octinoxate	106	116	P/P	21 - 159
2410434	Oxadiazon	65.1	74.1	P/P	43 - 112
2410434	Oxybenzone	114	124	P/P	41 - 142
2410434	Oxyfluorfen	100	97.1	P/P	64 - 153
2410434	Parathion Ethyl	93.8	96.5	P/P	69 - 114
2410434	Parathion Methyl	94.7	86.5	P/P	79 - 139
2410434	PBB-153	107	150	P/F	50 - 150
2410434	PBDE-47	101	118	P/P	27 - 144
2410434	PBDE-99	78.0	112	P/P	18 - 150
2410434	Pendimethalin	109	100	P/P	50 - 139
2410434	Pentabromotoluene	109	117	P/P	50 - 150
2410434	Phenytoin	65.8	58.1	P/P	10 - 146
2410434	Phorate	83.1	96.7	P/P	54 - 161
2410434	Prodiamine	57.9	59.8	P/P	30 - 161
2410434	Prometon	110	86.4	P/P	45 - 134
2410434	Prometryn	99.4	117	P/P	45 - 137
2410434	Pronamide	82.4	84.1	P/P	65 - 133
2410434	Propanil	125	126	P/P	49 - 142
2410434	Propargite	85.7	97.5	P/P	10 - 203
2410434	Propiconazole	63.7	67.5	P/P	38 - 146
2410434	Pyraflufen Ethyl	58.6	70.3	P/P	34 - 153
2410434	Pyridaben	71.8	111	P/P	12 - 192
2410434	Pyriproxyfen	90.8	122	P/P	33 - 180

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P430033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410434	Simazine	72.2	72.4	P/P	51 - 157
2410434	Stirophos	79.3	98.0	P/P	10 - 128
2410434	Sulfentrazone	92.8	111	P/P	53 - 186
2410434	Tebuconazole	76.8	82.6	P/P	10 - 133
2410434	Terbufos	90.9	80.0	P/P	65 - 139
2410434	Terbutylazine	96.9	94.6	P/P	66 - 117
2410434	Tetradecachloro-m-terphenyl	193	215	P/F	70 - 200
2410434	Thiobencarb	55.0	75.8	P/P	51 - 119
2410434	Tri-o-cresyl Phosphate	100	120	P/P	31 - 144
2410434	Triadimefon	77.4	83.8	P/P	48 - 119
2410434	Tris(1-chloro-2-propyl) phosphate (TCPP)	107	89.7	P/P	50 - 150
2410434	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	114	P/P	50 - 150
2410434	Tris(2-chloroethyl) phosphate (TCEP)	118	119	P/P	70 - 180

Reference Method: EPA 8276

Batch ID: P429934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409823	Chlordane	73.8	64.5	P/P	53 - 126
2409823	Toxaphene	83.0	78.1	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P429908

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409832	Acesulfame K	80.8	81.0	P/P	40 - 150
2409832	AMPA	97.6	102	P/P	40 - 150
2409832	Endothall	95.1	92.9	P/P	40 - 150
2409832	Glufosinate	74.2	82.1	P/P	40 - 150
2409832	Glyphosate	90.3	100	P/P	40 - 150
2409832	Sucralose	119	96.2	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P429946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409703	2,4-D	109	116	P/P	40 - 150
2409703	2,4,5-T	101	111	P/P	40 - 150
2409703	Acetaminophen	78.6	83.2	P/P	30 - 150
2409703	Acetamiprid	90.8	89.3	P/P	40 - 150
2409703	Afidopyropen	86.6	89.4	P/P	30 - 150
2409703	Bentazon	113	116	P/P	30 - 150
2409703	Benzovindiflupyr	79.4	82.4	P/P	40 - 150
2409703	Carbamazepine	87.9	94.3	P/P	40 - 150
2409703	Clothianidin	93.8	97.2	P/P	40 - 150
2409703	Dinotefuran	96.0	87.9	P/P	40 - 150
2409703	Diuron	93.0	96.5	P/P	40 - 150
2409703	Fenuron	80.5	81.1	P/P	40 - 150
2409703	Fluridone	93.3	95.0	P/P	40 - 150
2409703	Hydrocodone	90.4	95.7	P/P	40 - 150
2409703	Ibuprofen	67.4	72.6	P/P	40 - 150
2409703	Imazapyr	111	119	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P429946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2409703	Imidacloprid	94.7	99.1	P/P	40 - 150
2409703	Linuron	89.9	72.9	P/P	40 - 150
2409703	Mandestrobin	85.9	91.8	P/P	40 - 150
2409703	MCCP	89.0	90.9	P/P	40 - 150
2409703	Naproxen	45.8	33.8	P/F	40 - 150
2409703	Primidone	96.0	92.1	P/P	40 - 150
2409703	Pyraclostrobin	80.5	82.1	P/P	40 - 150
2409703	Silvex	85.8	92.7	P/P	40 - 150
2409703	Thiamethoxam	99.5	102	P/P	40 - 150
2409703	Tolfenpyrad	46.6	55.2	P/P	30 - 150
2409703	Triclopyr	101	115	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P430052

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410775	3-Hydroxycarbofuran	79.3	73.1	P/P	40 - 150
2410775	Aldicarb	39.8	48.5	P/P	30 - 150
2410775	Aldicarb Sulfone	82.5	82.8	P/P	40 - 150
2410775	Aldicarb Sulfoxide	36.6	35.2	F/F	40 - 150
2410775	Carbaryl	76.5	81.7	P/P	40 - 150
2410775	Carbofuran	62.0	62.4	P/P	40 - 150
2410775	Methiocarb	79.6	82.6	P/P	40 - 150
2410775	Methomyl	68.5	71.0	P/P	40 - 150
2410775	Oxamyl	65.5	71.0	P/P	40 - 150
2410775	Propoxur	65.2	65.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P430444

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2408857	Fluoride	108	108	F/F	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P430100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2410138	Organic Carbon	94.2	93.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P429993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410293	Color (true)	3.19	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P430008

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410283	Turbidity	15.7	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P430036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410005	Calcium	0.797	Spike	P	0 - 20
2410005	Iron	1.51	Spike	P	0 - 20
2410005	Magnesium	1.81	Spike	P	0 - 20
2410005	Potassium	0.926	Spike	P	0 - 20
2410005	Sodium	1.16	Spike	P	0 - 20
2410005	Strontium	0.517	Spike	P	0 - 20
2410005	Tin	1.88	Spike	P	0 - 20
2410005	Titanium	0.310	Spike	P	0 - 20
2410005	Vanadium	0.0937	Spike	P	0 - 20
2410005	Zinc	0.0255	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P430036

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410005	Aluminum	1.33	Spike	P	0 - 20
2410005	Antimony	0.522	Spike	P	0 - 20
2410005	Arsenic	0.0372	Spike	P	0 - 20
2410005	Barium	1.82	Spike	P	0 - 20
2410005	Beryllium	0.654	Spike	P	0 - 20
2410005	Boron	1.09	Spike	P	0 - 20
2410005	Cadmium	2.57	Spike	P	0 - 20
2410005	Chromium	2.68	Spike	P	0 - 20
2410005	Cobalt	2.30	Spike	P	0 - 20
2410005	Copper	3.12	Spike	P	0 - 20
2410005	Lead	0.0983	Spike	P	0 - 20
2410005	Manganese	2.14	Spike	P	0 - 20
2410005	Molybdenum	0.197	Spike	P	0 - 20
2410005	Nickel	2.10	Spike	P	0 - 20
2410005	Selenium	0.152	Spike	P	0 - 20
2410005	Silver	0.379	Spike	P	0 - 20
2410005	Thallium	1.01	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409971	Chloride	3.09	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P430147

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409971	Sulfate	2.73	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P430075

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2407779	Ammonia-N	2.06	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P430051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410138	Kjeldahl Nitrogen	0.872	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P430293

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409789	NO2NO3-N	0.473	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P430043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410297	Total-P	0.343	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P429934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409823	PCB-1016	16.9	Spike	P	0 - 32
2409823	PCB-1260	18.9	Spike	P	0 - 31
2410545	Aldrin	4.47	Spike	P	0 - 41
2410545	Alpha-BHC	10.5	Spike	P	0 - 25
2410545	Alpha-Chlordane	18.2	Spike	P	0 - 33
2410545	Beta-BHC	12.9	Spike	P	0 - 36
2410545	Beta-Cyfluthrin	6.72	Spike	P	0 - 42
2410545	Bifenthrin	6.21	Spike	P	0 - 53
2410545	Chlorothalonil	5.19	Spike	P	0 - 71

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P429934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410545	Cis-Nonachlor	1.85	Spike	P	0 - 29
2410545	Cypermethrin	9.41	Spike	P	0 - 40
2410545	Dacthal	11.0	Spike	P	0 - 26
2410545	DDD-p,p'	2.45	Spike	P	0 - 39
2410545	DDE-p,p'	0.0541	Spike	P	0 - 33
2410545	DDT-p,p'	4.02	Spike	P	0 - 40
2410545	Delta-BHC	15.7	Spike	P	0 - 37
2410545	Deltamethrin	5.12	Spike	P	0 - 100
2410545	Dichlobenil	48.8	Spike	F	0 - 40
2410545	Dicofol	11.3	Spike	P	0 - 31
2410545	Dieldrin	4.84	Spike	P	0 - 27
2410545	Endosulfan I	3.89	Spike	P	0 - 23
2410545	Endosulfan II	3.93	Spike	P	0 - 28
2410545	Endosulfan Sulfate	22.0	Spike	P	0 - 38
2410545	Endrin	2.40	Spike	P	0 - 63
2410545	Endrin Aldehyde	20.8	Spike	P	0 - 60
2410545	Endrin Ketone	21.9	Spike	P	0 - 37
2410545	Esfenvalerate	4.47	Spike	P	0 - 52
2410545	Ethalfuralin	4.49	Spike	P	0 - 23
2410545	Fenpropathrin	1.58	Spike	P	0 - 32
2410545	Gamma-BHC	9.74	Spike	P	0 - 17
2410545	Gamma-Chlordane	19.3	Spike	P	0 - 40
2410545	Heptachlor	5.29	Spike	P	0 - 29
2410545	Heptachlor Epoxide	9.51	Spike	P	0 - 25
2410545	Hexachlorobenzene	6.44	Spike	P	0 - 36
2410545	Kepone	4.93	Spike	P	0 - 93
2410545	Lambda-Cyhalothrin	1.03	Spike	P	0 - 55
2410545	Methoprene	18.2	Spike	P	0 - 53
2410545	Methoxychlor	11.3	Spike	P	0 - 29
2410545	MGK-264	8.87	Spike	P	0 - 35
2410545	Mirex	5.71	Spike	P	0 - 46
2410545	Oxychlordane	7.93	Spike	P	0 - 29
2410545	Permethrin	13.3	Spike	P	0 - 44
2410545	Phenothrin	10.0	Spike	P	0 - 56
2410545	Piperonyl Butoxide	2.64	Spike	P	0 - 100
2410545	Prallethrin	8.13	Spike	P	0 - 42
2410545	Tau-Fluvalinate	0.785	Spike	P	0 - 54
2410545	Tetramethrin	11.9	Spike	P	0 - 51
2410545	Trans-Nonachlor	10.7	Spike	P	0 - 37
2410545	Triclosan Methyl	7.84	Spike	P	0 - 31
2410545	Trifluralin	1.79	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	28.5	Spike	P	0 - 37
2410434	Acetochlor	9.52	Spike	P	0 - 28
2410434	Alachlor	5.43	Spike	P	0 - 30
2410434	Ametryn	25.7	Spike	P	0 - 32

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	Atrazine	6.70	Spike	P	0 - 41
2410434	Atrazine Desethyl	21.8	Spike	P	0 - 36
2410434	Avobenzone	31.1	Spike	P	0 - 36
2410434	Azinphos Methyl	26.1	Spike	P	0 - 75
2410434	Azoxystrobin	17.0	Spike	P	0 - 39
2410434	Bromacil	15.6	Spike	P	0 - 33
2410434	Butylate	4.20	Spike	P	0 - 44
2410434	Caffeine	20.8	Spike	P	0 - 74
2410434	Carbophenothion	15.7	Spike	P	0 - 25
2410434	Carfentrazone Ethyl	10.9	Spike	P	0 - 27
2410434	Chlorfenapyr	9.20	Spike	P	0 - 24
2410434	Chlorpyrifos Ethyl	23.7	Spike	P	0 - 26
2410434	Chlorpyrifos Methyl	3.17	Spike	P	0 - 26
2410434	Coumaphos	40.7	Spike	F	0 - 28
2410434	Cyanazine	36.1	Spike	P	0 - 48
2410434	Cyprodinil	4.09	Spike	P	0 - 29
2410434	Dechlorane 602	35.8	Spike	F	0 - 30
2410434	Dechlorane 603	28.4	Spike	P	0 - 30
2410434	Dechlorane Plus	12.9	Spike	P	0 - 30
2410434	Demeton	11.3	Spike	P	0 - 33
2410434	Diazinon	3.86	Spike	P	0 - 29
2410434	Difenoconazole	84.9	Spike	F	0 - 34
2410434	Dimethenamid	15.0	Spike	P	0 - 39
2410434	Dimethomorph	34.5	Spike	P	0 - 51
2410434	Disulfoton	11.2	Spike	P	0 - 30
2410434	Dithiopyr	5.10	Spike	P	0 - 26
2410434	EPTC	2.66	Spike	P	0 - 43
2410434	Ethion	14.8	Spike	P	0 - 79
2410434	Ethoprop	5.55	Spike	P	0 - 29
2410434	Etridiazole	10.8	Spike	P	0 - 33
2410434	Fenamiphos	10.5	Spike	P	0 - 40
2410434	Fenbuconazole	65.3	Spike	P	0 - 74
2410434	Fipronil	11.8	Spike	P	0 - 29
2410434	Fipronil Desulfinyl	9.71	Spike	P	0 - 32
2410434	Fipronil Sulfide	13.8	Spike	P	0 - 30
2410434	Fipronil Sulfone	14.6	Spike	P	0 - 33
2410434	Fluazifop-P-butyl	2.92	Spike	P	0 - 38
2410434	Fludioxonil	13.7	Spike	P	0 - 29
2410434	Flumioxazin	65.0	Spike	F	0 - 51
2410434	Flutolanil	9.07	Spike	P	0 - 25
2410434	Fluxapyroxad	23.8	Spike	P	0 - 45
2410434	Fonofos	11.4	Spike	P	0 - 27
2410434	Hexabromobenzene	6.74	Spike	P	0 - 30
2410434	Hexazinone	13.9	Spike	P	0 - 30
2410434	Imazalil	52.4	Spike	P	0 - 100
2410434	Iprodione	40.9	Spike	F	0 - 33
2410434	Loratadine	46.9	Spike	P	0 - 56
2410434	Malathion	23.6	Spike	P	0 - 37
2410434	Metalaxyl	11.4	Spike	P	0 - 40
2410434	Metolachlor	5.30	Spike	P	0 - 29
2410434	Metribuzin	0.195	Spike	P	0 - 45

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P430033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410434	Mevinphos	9.86	Spike	P	0 - 29
2410434	Molinate	6.38	Spike	P	0 - 33
2410434	Myclobutanil	10.8	Spike	P	0 - 26
2410434	Naled	7.60	Spike	P	0 - 37
2410434	Napropamide	16.3	Spike	P	0 - 44
2410434	Norflurazon	17.9	Spike	P	0 - 30
2410434	Octinoxate	9.85	Spike	P	0 - 45
2410434	Oxadiazon	12.9	Spike	P	0 - 28
2410434	Oxybenzone	8.10	Spike	P	0 - 46
2410434	Oxyfluorfen	3.10	Spike	P	0 - 28
2410434	Parathion Ethyl	2.81	Spike	P	0 - 31
2410434	Parathion Methyl	9.08	Spike	P	0 - 29
2410434	PBB-153	33.8	Spike	F	0 - 30
2410434	PBDE-47	15.4	Spike	P	0 - 36
2410434	PBDE-99	35.7	Spike	P	0 - 40
2410434	Pendimethalin	8.60	Spike	P	0 - 33
2410434	Pentabromotoluene	6.72	Spike	P	0 - 30
2410434	Phenytoin	12.4	Spike	P	0 - 100
2410434	Phorate	15.1	Spike	P	0 - 36
2410434	Prodiamine	3.24	Spike	P	0 - 71
2410434	Prometon	23.9	Spike	P	0 - 36
2410434	Prometryn	16.6	Spike	P	0 - 28
2410434	Pronamide	2.10	Spike	P	0 - 24
2410434	Propanil	1.03	Spike	P	0 - 28
2410434	Propargite	12.9	Spike	P	0 - 43
2410434	Propiconazole	5.70	Spike	P	0 - 33
2410434	Pyraflufen Ethyl	18.1	Spike	P	0 - 29
2410434	Pyridaben	43.2	Spike	F	0 - 30
2410434	Pyriproxyfen	29.1	Spike	P	0 - 79
2410434	Simazine	0.139	Spike	P	0 - 29
2410434	Stirophos	21.1	Spike	P	0 - 61
2410434	Sulfentrazone	17.8	Spike	P	0 - 33
2410434	Tebuconazole	7.27	Spike	P	0 - 69
2410434	Terbufos	12.8	Spike	P	0 - 29
2410434	Terbuthylazine	2.43	Spike	P	0 - 32
2410434	Tetradecachloro-m-terphenyl	10.4	Spike	P	0 - 30
2410434	Thiobencarb	31.7	Spike	F	0 - 26
2410434	Tri-o-cresyl Phosphate	17.8	Spike	P	0 - 33
2410434	Triadimefon	7.92	Spike	P	0 - 28
2410434	Tris(1-chloro-2-propyl) phosphate (TCPP)	18.0	Spike	P	0 - 30
2410434	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	9.69	Spike	P	0 - 30
2410434	Tris(2-chloroethyl) phosphate (TCEP)	0.807	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P429934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409823	Chlordane	13.4	Spike	P	0 - 25
2409823	Toxaphene	6.03	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P429908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409832	Acesulfame K	0.158	Spike	P	0 - 30
2409832	AMPA	4.23	Spike	P	0 - 30
2409832	Endothall	2.43	Spike	P	0 - 30
2409832	Glufosinate	10.1	Spike	P	0 - 30
2409832	Glyphosate	9.05	Spike	P	0 - 30
2409832	Sucralose	14.0	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P429946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2409703	2,4-D	5.80	Spike	P	0 - 30
2409703	2,4,5-T	10.1	Spike	P	0 - 30
2409703	Acetaminophen	5.61	Spike	P	0 - 30
2409703	Acetamiprid	1.65	Spike	P	0 - 30
2409703	Afidopyropen	3.21	Spike	P	0 - 30
2409703	Bentazon	2.28	Spike	P	0 - 30
2409703	Benzovindiflupyr	3.64	Spike	P	0 - 30
2409703	Carbamazepine	7.03	Spike	P	0 - 30
2409703	Clothianidin	3.55	Spike	P	0 - 30
2409703	Dinotefuran	8.83	Spike	P	0 - 30
2409703	Diuron	3.77	Spike	P	0 - 30
2409703	Fenuron	0.752	Spike	P	0 - 30
2409703	Fluridone	1.85	Spike	P	0 - 30
2409703	Hydrocodone	5.71	Spike	P	0 - 30
2409703	Ibuprofen	7.43	Spike	P	0 - 30
2409703	Imazapyr	7.02	Spike	P	0 - 30
2409703	Imidacloprid	4.55	Spike	P	0 - 30
2409703	Linuron	21.0	Spike	P	0 - 30
2409703	Mandestrobin	6.54	Spike	P	0 - 30
2409703	MCPP	2.08	Spike	P	0 - 30
2409703	Naproxen	20.1	Spike	P	0 - 30
2409703	Primidone	4.19	Spike	P	0 - 30
2409703	Pyraclostrobin	1.93	Spike	P	0 - 30
2409703	Silvex	7.76	Spike	P	0 - 30
2409703	Thiamethoxam	2.22	Spike	P	0 - 30
2409703	Tolfenpyrad	16.9	Spike	P	0 - 30
2409703	Triclopyr	12.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P430052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410775	3-Hydroxycarbofuran	8.16	Spike	P	0 - 30
2410775	Aldicarb	19.8	Spike	P	0 - 30
2410775	Aldicarb Sulfone	0.336	Spike	P	0 - 30
2410775	Aldicarb Sulfoxide	3.94	Spike	P	0 - 30
2410775	Carbaryl	6.55	Spike	P	0 - 30
2410775	Carbofuran	0.728	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P430052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410775	Methiocarb	3.80	Spike	P	0 - 30
2410775	Methomyl	3.67	Spike	P	0 - 30
2410775	Oxamyl	8.01	Spike	P	0 - 30
2410775	Propoxur	0.205	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P430440

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410185	Total Alkalinity	0.321	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P430683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410643	TDS	3.55	Sample	P	0 - 10

Reference Method: SM 2540 D-2015
Batch ID: P430522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410378	TSS	11.3	Sample	F	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P430444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2408857	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P430100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2410138	Organic Carbon	0.956	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2410192
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	74.1	P	30 - 160

Lab Sample ID: 2410193
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	74.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.3	P	30 - 160
EPA 8321B	Diuron-d6	82.5	P	30 - 160
EPA 8321B	Endothall-d6	90.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	47.2	P	30 - 160
EPA 8321B	Primidone-d5	98.9	P	30 - 160
EPA 8321B	Sucralose-d6	59.0	P	30 - 160

Lab Sample ID: 2410194
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	85.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	53.3	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	60.0	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	59.1	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	61.1	P	30 - 101
EPA 8276	PCNB	79.2	P	48 - 121

Lab Sample ID: 2410195
Field Sample ID: G4NW0443

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	126	P	20 - 200
EPA 8270E	Simazine-d10	92.2	P	62 - 142
EPA 8270E	Terbufos-d10	74.5	P	58 - 132
EPA 8270E	Terphenyl-d14	86.7	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A119211

Included Lab Sample IDs: 2410185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.3	98.7	P/P	90 - 110
Sulfate	99.7	99.1	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A119223

Included Lab Sample IDs: 2410185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.4	98.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A119231

Included Lab Sample IDs: 2410185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A119259

Included Lab Sample IDs: 2410186

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

Reference Method: SM 5310 B-2011

Run ID: A119268

Included Lab Sample IDs: 2410186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	92.2	97.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119269

Included Lab Sample IDs: 2410196, 2410197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	97.8	P/P	90 - 110
Iron	102	98.9	P/P	90 - 110
Magnesium	101	97.7	P/P	90 - 110
Potassium	100	99.9	P/P	90 - 110
Sodium	92.9	92.6	P/P	90 - 110
Strontium	97.9	102	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	99.4	102	P/P	90 - 110
Vanadium	98.8	101	P/P	90 - 110
Zinc	98.6	97.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A119280

Included Lab Sample IDs: 2410186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.7	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A119283

Included Lab Sample IDs: 2410186

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

Reference Method: EPA 8321B

Run ID: A119295

Included Lab Sample IDs: 2410193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.2	98.9	P/P	60 - 160
Sucralose	111	127	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119298

Included Lab Sample IDs: 2410196, 2410197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.2	98.5	P/P	90 - 110
Aluminum	98.5	98.1	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Antimony	103	103	P/P	90 - 110
Arsenic	99.3	98.6	P/P	90 - 110
Arsenic	99.4	99.3	P/P	90 - 110
Barium	99.9	100	P/P	90 - 110
Barium	100	100	P/P	90 - 110
Beryllium	95.8	95.9	P/P	90 - 110
Beryllium	96.5	95.8	P/P	90 - 110
Boron	95.5	99.1	P/P	90 - 110
Boron	97.4	95.5	P/P	90 - 110
Cadmium	98.4	99.5	P/P	90 - 110
Cadmium	99.5	100	P/P	90 - 110
Chromium	95.2	96.4	P/P	90 - 110
Chromium	96.1	95.2	P/P	90 - 110
Cobalt	100	98.8	P/P	90 - 110
Cobalt	98.8	99.3	P/P	90 - 110
Copper	96.3	96.3	P/P	90 - 110
Copper	97.9	96.3	P/P	90 - 110
Manganese	94.9	96.8	P/P	90 - 110
Manganese	96.8	97.5	P/P	90 - 110
Molybdenum	98.1	97.7	P/P	90 - 110
Molybdenum	99.0	98.1	P/P	90 - 110
Nickel	96.4	96.8	P/P	90 - 110
Nickel	97.3	96.4	P/P	90 - 110
Selenium	100	101	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Silver	102	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A119298

Included Lab Sample IDs: 2410196, 2410197

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

Reference Method: EPA 8321B

Run ID: A119309

Included Lab Sample IDs: 2410193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	116	123	P/P	60 - 160
Endothall	89.1	87.4	P/P	60 - 160
Glufosinate	88.2	91.5	P/P	60 - 160
Glyphosate	110	99.7	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A119321

Included Lab Sample IDs: 2410194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.6		P	80 - 120
PCB-1260	96.8		P	80 - 120

Reference Method: EPA 8276

Run ID: A119335

Included Lab Sample IDs: 2410194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.1		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E

Run ID: A119361

Included Lab Sample IDs: 2410194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	96.3		P	80 - 120
Alpha-BHC	99.4		P	80 - 120
Alpha-Chlordane	97.5		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	99.4		P	80 - 120
Bifenthrin	103		P	80 - 120
Chlorothalonil	96.4		P	80 - 120
Cis-Nonachlor	95.4		P	80 - 120
Cypermethrin	97.7		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	98.4		P	80 - 120
DDE-p,p'	98.6		P	80 - 120
DDT-p,p'	99.4		P	80 - 120
Delta-BHC	98.2		P	80 - 120
Deltamethrin	94.6		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119361
Included Lab Sample IDs: 2410194

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan I	93.2		P	80 - 120
Endosulfan II	91.2		P	80 - 120
Endosulfan Sulfate	89.1		P	80 - 120
Endrin	98.4		P	80 - 120
Endrin Aldehyde	97.0		P	80 - 120
Endrin Ketone	90.8		P	80 - 120
Esfenvalerate	95.2		P	80 - 120
Ethalfuralin	97.3		P	80 - 120
Fenpropathrin	99.4		P	80 - 120
Gamma-BHC	97.5		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	96.8		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	99.4		P	80 - 120
Kepone	86.1		P	80 - 120
Lambda-Cyhalothrin	101		P	80 - 120
Methoprene	96.7		P	80 - 120
Methoxychlor	103		P	80 - 120
MGK-264	99.1		P	80 - 120
Mirex	97.8		P	80 - 120
Oxychlordane	98.0		P	80 - 120
Permethrin	102		P	80 - 120
Phenothrin	99.4		P	80 - 120
Piperonyl Butoxide	93.6		P	80 - 120
Prallethrin	97.1		P	80 - 120
Tau-Fluvalinate	99.2		P	80 - 120
Tetramethrin	103		P	80 - 120
Trans-Nonachlor	99.1		P	80 - 120
Triclosan Methyl	98.3		P	80 - 120
Trifluralin	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A119362
Included Lab Sample IDs: 2410196, 2410197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	98.2	98.5	P/P	90 - 110
Thallium	99.0	97.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A119364
Included Lab Sample IDs: 2410186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	98.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A119395
Included Lab Sample IDs: 2410193

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

Reference Method: EPA 8321B
Run ID: A119395
Included Lab Sample IDs: 2410193

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.4	97.1	P/P	50 - 150
2,4,5-T	101	96.1	P/P	50 - 150
3-Hydroxycarbofuran	105	108	P/P	60 - 150
Acetaminophen	82.9	80.9	P/P	60 - 160
Acetamiprid	100	104	P/P	50 - 150
Afidopyropen	86.7	92.0	P/P	50 - 150
Aldicarb	116	81.7	P/P	60 - 150
Aldicarb Sulfone	112	111	P/P	50 - 150
Aldicarb Sulfoxide	107	105	P/P	50 - 150
Bentazon	125	130	P/P	50 - 160
Benzovindiflupyr	108	105	P/P	50 - 150
Carbamazepine	117	108	P/P	60 - 150
Carbaryl	94.0	100	P/P	60 - 150
Carbofuran	91.6	98.3	P/P	50 - 150
Clothianidin	102	98.1	P/P	60 - 150
Dinotefuran	114	116	P/P	50 - 150
Diuron	120	116	P/P	60 - 160
Fenuron	102	102	P/P	60 - 150
Fluridone	117	118	P/P	60 - 160
Hydrocodone	114	119	P/P	60 - 150
Ibuprofen	65.4	64.9	P/P	50 - 160
Imazapyr	95.0	92.2	P/P	50 - 150
Imidacloprid	94.7	95.0	P/P	60 - 150
Linuron	90.5	102	P/P	60 - 150
Mandestrobin	99.4	103	P/P	50 - 150
MCPP	98.1	109	P/P	50 - 150
Methiocarb	102	103	P/P	50 - 150
Methomyl	103	101	P/P	50 - 150
Naproxen	64.7	74.4	P/P	50 - 160
Oxamyl	105	102	P/P	50 - 150
Primidone	107	102	P/P	60 - 150
Propoxur	102	101	P/P	50 - 150
Pyraclostrobin	103	107	P/P	60 - 150
Silvex	62.4	70.2	P/P	50 - 150
Thiamethoxam	98.8	97.6	P/P	50 - 150
Tolfenpyrad	105	109	P/P	60 - 150
Triclopyr	74.3	75.1	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A119398
Included Lab Sample IDs: 2410195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzone	104		P	80 - 120
Dechlorane 602	100		P	80 - 120
Dechlorane 603	99.4		P	80 - 120
Dechlorane Plus	93.8		P	80 - 120
Hexabromobenzene	100		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	96.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119398
Included Lab Sample IDs: 2410195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBB-153	100		P	80 - 120
PBDE-47	98.6		P	80 - 120
PBDE-99	101		P	80 - 120
Pentabromotoluene	101		P	80 - 120
Tetradecachloro-m-terphenyl	107		P	80 - 120
Tri-o-cresyl Phosphate	97.1		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	83.8		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.3		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	93.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119420
Included Lab Sample IDs: 2410195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.9		P	80 - 120
Alachlor	96.1		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	89.9		P	80 - 120
Atrazine Desethyl	108		P	80 - 120
Azinphos Methyl	89.8		P	80 - 120
Azoxystrobin	97.7		P	80 - 120
Bromacil	97.5		P	80 - 120
Butylate	98.3		P	80 - 120
Caffeine	103		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	98.5		P	80 - 120
Chlorfenapyr	92.6		P	80 - 120
Chlorpyrifos Ethyl	87.8		P	80 - 120
Chlorpyrifos Methyl	95.7		P	80 - 120
Coumaphos	101		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	94.8		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	99.3		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	98.5		P	80 - 120
Dimethomorph	95.7		P	80 - 120
Disulfoton	96.5		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	96.5		P	80 - 120
Ethion	84.7		P	80 - 120
Ethoprop	101		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	91.3		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	92.8		P	80 - 120
Fipronil Desulfanyl	103		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	115		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119420
Included Lab Sample IDs: 2410195

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fludioxonil	99.5		P	80 - 120
Flumioxazin	97.8		P	80 - 120
Flutolanil	87.4		P	80 - 120
Fluxapyroxad	107		P	80 - 120
Fonofos	98.0		P	80 - 120
Hexazinone	98.1		P	80 - 120
Imazalil	105		P	80 - 120
Iprodione	88.3		P	80 - 120
Loratadine	93.0		P	80 - 120
Malathion	91.5		P	80 - 120
Metaxyl	89.8		P	80 - 120
Metolachlor	98.7		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	93.2		P	80 - 120
Molinate	85.2		P	80 - 120
Myclobutanil	91.9		P	80 - 120
Naled	94.2		P	80 - 120
Napropamide	98.3		P	80 - 120
Norflurazon	99.5		P	80 - 120
Oxadiazon	107		P	80 - 120
Oxyfluorfen	95.0		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	87.1		P	80 - 120
Pendimethalin	113		P	80 - 120
Phenytoin	95.7		P	80 - 120
Phorate	90.9		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	98.6		P	80 - 120
Propanil	94.0		P	80 - 120
Propargite	108		P	80 - 120
Propiconazole	91.6		P	80 - 120
Pyraflufen Ethyl	112		P	80 - 120
Pyridaben	111		P	80 - 120
Pyriproxyfen	110		P	80 - 120
Simazine	91.8		P	80 - 120
Stirophos	85.4		P	80 - 120
Sulfentrazone	107		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbuthylazine	90.3		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	104		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A119421
Included Lab Sample IDs: 2410185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.7	94.3	P/P	90 - 110

Quality Assurance Report

Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A119421

Included Lab Sample IDs: 2410185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	109	107	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A119423

Included Lab Sample IDs: 2410197

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	96.7				3.19	
EPA 180.1 Rev. 2.0	Turbidity	97.6				15.7	
EPA 200.7 Rev. 4.4	Calcium	103	102	102			0.797
	Iron	104	104	102			1.51
	Magnesium	103	102	100			1.81
	Potassium	101	102	101			0.926
	Sodium	95.4	93.3	91.9			1.16
	Strontium	99.9	96.9	96.4			0.517
	Tin	106	103	101			1.88
	Titanium	102	99.3	99.0			0.310
	Vanadium	102	98.4	98.5			0.0937
	Zinc	102	99.1	99.1			0.0255
EPA 200.8 Rev. 5.4	Aluminum	99.6	99.5	101			1.33
	Antimony	104	105	105			0.522
	Arsenic	99.7	100	100			0.0372
	Barium	103	105	103			1.82
	Beryllium	94.6	94.0	94.6			0.654
	Boron	98.5	98.3	99.6			1.09
	Cadmium	101	102	99.5			2.57
	Chromium	95.1	93.8	96.4			2.68
	Cobalt	99.8	99.1	101			2.30
	Copper	96.8	96.2	99.2			3.12
	Lead	102	103	103			0.0983
	Manganese	97.6	96.8	99.3			2.14
	Molybdenum	98.8	98.8	98.6			0.197
	Nickel	98.6	96.7	98.8			2.10
	Selenium	99.4	99.9	99.8			0.152
	Silver	103	102	101			0.379
	Thallium	101	101	102			1.01
EPA 300.0 Rev. 2.1	Chloride	99.6	103	106		3.09	
	Sulfate	99.6	100	102		2.73	
EPA 350.1 Rev. 2.0	Ammonia-N	96.6	103	100			2.06
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108	109	111			0.872
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	103	103			0.473
EPA 365.1 Rev. 2.0	Total-P	101	102	102			0.343
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	34.7	95.3	127			28.5
	Acetochlor	83.3	72.7	79.9			9.52
	Alachlor	117	89.0	94.0			5.43
	Aldrin	38.7	54.7	52.3			4.47
	Alpha-BHC	87.6	80.4	89.3			10.5
	Alpha-Chlordane	68.4	73.9	61.6			18.2
	Ametryn	97.7	121	93.8			25.7
	Atrazine	92.1					6.70
	Atrazine Desethyl	93.9	86.2	107			21.8
	Avobenzone	168	135	184			31.1
	Azinphos Methyl	94.7	65.9	85.7			26.1
	Azoxystrobin	104	81.3	96.4			17.0
	Beta-BHC	108	118	134			12.9
	Beta-Cyfluthrin	71.7	87.0	81.3			6.72
	Bifenthrin	37.4	45.6	42.8			6.21
	Bromacil	92.9	65.4	76.4			15.6
	Butylate	61.6	62.0	59.5			4.20

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Caffeine	107	106	131		20.8
	Carbophenothion	130	100	118		15.7
	Carfentrazone Ethyl	101	69.1	77.1		10.9
	Chlorfenapyr	85.0	68.7	75.3		9.20
	Chlorothalonil	90.6	47.6	45.2		5.19
	Chlorpyrifos Ethyl	86.7	108	85.3		23.7
	Chlorpyrifos Methyl	94.1	79.0	81.6		3.17
	Cis-Nonachlor	62.5	66.6	67.8		1.85
	Coumaphos	114	61.4	92.8		40.7
	Cyanazine	202	164	237		36.1
	Cypermethrin	71.7	89.8	81.8		9.41
	Cyprodinil	95.6	84.3	87.8		4.09
	Dacthal	95.0	110	123		11.0
	DDD-p,p'	61.6	64.2	65.8		2.45
	DDE-p,p'	69.4	72.2	72.3		0.0541
	DDT-p,p'	61.8	68.0	65.3		4.02
	Dechlorane 602	99.8	75.7	109		35.8
	Dechlorane 603	124	102	135		28.4
	Dechlorane Plus	129	106	93.5		12.9
	Delta-BHC	109	122	143		15.7
	Deltamethrin	77.9	110	105		5.12
	Demeton	65.6	63.1	70.6		11.3
	Diazinon	92.8	89.5	86.1		3.86
	Dichlobenil	80.4	38.3	63.0		48.8
	Dicofol	66.9	62.6	70.2		11.3
	Dieldrin	70.5	75.3	79.0		4.84
	Difenoconazole	116	45.9	114		84.9
	Dimethenamid	91.3	72.9	84.6		15.0
	Dimethomorph	132	143	101		34.5
	Disulfoton	83.7	75.7	84.7		11.2
	Dithiopyr	89.4	76.0	80.0		5.10
	Endosulfan I	70.9	73.5	70.7		3.89
	Endosulfan II	81.6	72.7	75.7		3.93
	Endosulfan Sulfate	92.3	80.6	101		22.0
	Endrin	69.1	74.9	76.8		2.40
	Endrin Aldehyde	88.0	78.8	97.0		20.8
	Endrin Ketone	133	60.2	75.0		21.9
	EPTC	47.0	51.0	49.6		2.66
	Esfenvalerate	64.2	88.8	84.9		4.47
	Ethalfuralin	67.4	68.2	71.4		4.49
	Ethion	82.1	95.9	111		14.8
	Ethoprop	80.9	100	94.8		5.55
	Etridiazole	87.2	77.1	85.9		10.8
	Fenamiphos	84.1	68.7	61.9		10.5
	Fenbuconazole	86.9	37.4	73.6		65.3
	Fenpropathrin	53.7	56.0	55.2		1.58
	Fipronil	125	98.6	111		11.8
	Fipronil Desulfinyl	127	94.9	105		9.71
	Fipronil Sulfide	91.3	75.5	86.7		13.8
	Fipronil Sulfone	88.2	68.2	78.9		14.6
	Fluazifop-P-butyl	80.4	75.1	77.3		2.92
	Fludioxonil	95.3	73.9	84.7		13.7
	Flumioxazin	111	57.0	112		65.0
	Flutolanil	96.3	91.8	101		9.07

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fluxapyroxad	124	92.7	118			23.8
	Fonofos	88.3	91.8	81.9			11.4
	Gamma-BHC	94.8	106	117			9.74
	Gamma-Chlordane	66.2	73.7	60.7			19.3
	Heptachlor	62.0	66.2	62.8			5.29
	Heptachlor Epoxide	84.7	108	98.4			9.51
	Hexabromobenzene	116	124	133			6.74
	Hexachlorobenzene	54.2	52.9	49.6			6.44
	Hexazinone	92.0	97.6	84.9			13.9
	Imazalil	97.7	178	104			52.4
	Iprodione	132	81.2	53.7			40.9
	Kepone	150	150	158			4.93
	Lambda-Cyhalothrin	47.9	62.2	61.5			1.03
	Loratadine	120	146	90.5			46.9
	Malathion	129	75.7	96.0			23.6
	Metalaxyl	112	101	114			11.4
	Methoprene	47.0	55.0	45.8			18.2
	Methoxychlor	77.4	78.7	88.1			11.3
	Metolachlor	106	91.2	97.0			5.30
	Metribuzin	100	94.3	94.5			0.195
	Mevinphos	88.0	81.2	73.6			9.86
	MGK-264	77.7	107	116			8.87
	Mirex	50.2	52.5	49.6			5.71
	Molinate	58.2	57.7	61.5			6.38
	Myclobutanil	89.5	80.7	72.4			10.8
	Naled	43.1	40.9	37.9			7.60
	Napropamide	81.3	73.3	62.2			16.3
	Norflurazon	77.8	68.2	57.0			17.9
	Octinoxate	120	106	116			9.85
	Oxadiazon	81.1	74.1	65.1			12.9
	Oxybenzone	119	114	124			8.10
	Oxychlordane	70.9	81.0	74.8			7.93
	Oxyfluorfen	108	97.1	100			3.10
	Parathion Ethyl	98.3	96.5	93.8			2.81
	Parathion Methyl	92.7	86.5	94.7			9.08
	PBB-153	89.0	107	150			33.8
	PBDE-47	104	101	118			15.4
	PBDE-99	64.6	78.0	112			35.7
	PCB-1016	62.2	60.0	50.6			16.9
	PCB-1260	82.7	75.7	62.7			18.9
	Pendimethalin	103	100	109			8.60
	Pentabromotoluene	111	109	117			6.72
	Permethrin	53.6	70.3	61.5			13.3
	Phenothrin	31.9	59.8	54.1			10.0
	Phenytoin	58.2	58.1	65.8			12.4
	Phorate	84.4	96.7	83.1			15.1
	Piperonyl Butoxide	81.1	82.5	84.7			2.64
	Prallethrin	58.7	64.8	70.3			8.13
	Prodiamine	72.1	59.8	57.9			3.24
	Prometon	85.5	86.4	110			23.9
	Prometryn	128	117	99.4			16.6
	Pronamide	93.6	84.1	82.4			2.10
	Propanil	139	126	125			1.03
	Propargite	119	97.5	85.7			12.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Propiconazole	86.4	67.5	63.7		5.70
	Pyraflufen Ethyl	68.1	70.3	58.6		18.1
	Pyridaben	119	111	71.8		43.2
	Pyriproxyfen	130	122	90.8		29.1
	Simazine	79.7	72.4	72.2		0.139
	Stirophos	105	98.0	79.3		21.1
	Sulfentrazone	108	111	92.8		17.8
	Tau-Fluvalinate	54.9	73.9	73.3		0.785
	Tebuconazole	101	82.6	76.8		7.27
	Terbufos	87.2	80.0	90.9		12.8
	Terbutylazine	105	94.6	96.9		2.43
	Tetradecachloro-m-terphenyl	180	193	215		10.4
	Tetramethrin	49.4	73.7	83.0		11.9
	Thiobencarb	84.2	75.8	55.0		31.7
	Trans-Nonachlor	66.4	70.9	63.7		10.7
	Tri-o-cresyl Phosphate	123	100	120		17.8
	Triadimefon	79.3	83.8	77.4		7.92
	Triclosan Methyl	73.5	74.0	68.4		7.84
	Trifluralin	72.4	69.8	68.6		1.79
	Tris(1-chloro-2-propyl) phosphate (TCPP)	125	107	89.7		18.0
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	110	103	114		9.69
	Tris(2-chloroethyl) phosphate (TCEP)	123	118	119		0.807
EPA 8276	Chlordane	79.9	73.8	64.5		13.4
	Toxaphene	90.6	83.0	78.1		6.03
EPA 8321B	2,4-D	96.3	109	116		5.80
	2,4,5-T	90.4	101	111		10.1
	3-Hydroxycarbofuran	76.4	79.3	73.1		8.16
	Acesulfame K	92.2	80.8	81.0		0.158
	Acetaminophen	82.2	78.6	83.2		5.61
	Acetamiprid	69.3	90.8	89.3		1.65
	Afidopyropen	80.8	86.6	89.4		3.21
	Aldicarb	50.7	39.8	48.5		19.8
	Aldicarb Sulfone	91.1	82.5	82.8		0.336
	Aldicarb Sulfoxide	97.0	35.2	36.6		3.94
	AMPA	106	97.6	102		4.23
	Bentazon	103	113	116		2.28
	Benzovindiflupyr	82.2	79.4	82.4		3.64
	Carbamazepine	85.0	87.9	94.3		7.03
	Carbaryl	79.1	76.5	81.7		6.55
	Carbofuran	64.7	62.0	62.4		0.728
	Clothianidin	79.4	93.8	97.2		3.55
	Dinotefuran	88.5	96.0	87.9		8.83
	Diuron	89.0	93.0	96.5		3.77
	Endothall	85.6	95.1	92.9		2.43
	Fenuron	83.4	80.5	81.1		0.752
	Fluridone	94.5	93.3	95.0		1.85
	Glufosinate	84.6	74.2	82.1		10.1
	Glyphosate	102	90.3	100		9.05
	Hydrocodone	86.8	90.4	95.7		5.71
	Ibuprofen	61.2	67.4	72.6		7.43
	Imazapyr	87.8	111	119		7.02

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Imidacloprid	76.6	94.7	99.1		4.55
	Linuron	80.5	89.9	72.9		21.0
	Mandestrobin	84.3	85.9	91.8		6.54
	MCPP	81.9	89.0	90.9		2.08
	Methiocarb	77.2	79.6	82.6		3.80
	Methomyl	84.4	68.5	71.0		3.67
	Naproxen	72.9	45.8	33.8		20.1
	Oxamyl	88.5	71.0	65.5		8.01
	Primidone	88.4	96.0	92.1		4.19
	Propoxur	73.1	65.2	65.0		0.205
	Pyraclostrobin	82.6	80.5	82.1		1.93
	Silvex	78.0	85.8	92.7		7.76
	Sucralose	117	119	96.2		14.0
	Thiamethoxam	76.5	99.5	102		2.22
	Tolfenpyrad	60.0	46.6	55.2		16.9
	Triclopyr	85.3	101	115		12.2
SM 2320 B-2011	Total Alkalinity	99.8			0.321	
SM 2540 C-2015	TDS	103			3.55	
SM 2540 D-2015	TSS	92.7			11.3	
SM 4500-F- C-2011	Fluoride	104	108	108		0.0
SM 5310 B-2011	Organic Carbon	98.2	94.2	93.1		0.956

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2410185
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2410185
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2410196, 2410197
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2410196, 2410197
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2410185
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2410185
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2410186
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2410186
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2410186
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2410186
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2410195
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2410194
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2410195
EPA 8270E	PCBs in water matrices by GC/MS/MS	2410194
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2410194
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2410192
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2410193
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2410185
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2410196, 2410197
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2410185
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2410185
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2410185
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2410186

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	05/17/2023			05/17/2023 10:54	Anna M. Plaviak	2410185
EPA 180.1 Rev. 2.0	05/17/2023			05/17/2023 10:46	Khloe J Berg	2410185
EPA 200.7 Rev. 4.4	05/17/2023	05/18/2023 09:30	George D Taylor	05/18/2023 16:47	McKinley C Carter	2410196
	05/17/2023	05/18/2023 09:30	George D Taylor	05/18/2023 16:55	McKinley C Carter	2410196
	05/17/2023	05/18/2023 09:30	George D Taylor	05/18/2023 17:03	McKinley C Carter	2410197
	05/17/2023	05/18/2023 09:30	George D Taylor	05/18/2023 17:10	McKinley C Carter	2410197
	05/17/2023	05/18/2023 09:30	George D Taylor	05/25/2023 16:03	McKinley C Carter	2410197
EPA 200.8 Rev. 5.4	05/17/2023	05/18/2023 09:30	George D Taylor	05/19/2023 15:28	Conrad Hartmann	2410196
	05/17/2023	05/18/2023 09:30	George D Taylor	05/19/2023 16:30	Conrad Hartmann	2410197
	05/17/2023	05/18/2023 09:30	George D Taylor	05/23/2023 18:41	Conrad Hartmann	2410196
	05/17/2023	05/18/2023 09:30	George D Taylor	05/23/2023 18:50	Conrad Hartmann	2410197
EPA 300.0 Rev. 2.1	05/17/2023			05/18/2023 23:19	James L Waggeberby	2410185
EPA 350.1 Rev. 2.0	05/17/2023			05/18/2023 14:33	Ping Hua	2410186
EPA 351.2 Rev. 2.0	05/17/2023	05/18/2023 11:55	Simonne.V. Calhoun	05/19/2023 13:38	Ping Hua	2410186
EPA 353.2 Rev. 2.0	05/17/2023			05/24/2023 08:54	Beverly Y. Sanders	2410186
EPA 365.1 Rev. 2.0	05/17/2023	05/18/2023 13:13	Adam P Silver	05/19/2023 14:53	Chandler E Cox	2410186
EPA 8270E	05/17/2023	05/18/2023 08:00	Fe-Val Siddell	05/19/2023 23:09	Vandana T. Nagar	2410194
	05/17/2023	05/18/2023 08:00	Fe-Val Siddell	05/23/2023 00:09	Michael Poppell	2410194
	05/17/2023	05/22/2023 08:00	Fe-Val Siddell	05/23/2023 15:12	Vandana T. Nagar	2410195
	05/17/2023	05/22/2023 08:00	Fe-Val Siddell	05/24/2023 17:52	Arthur Maknenko	2410195
EPA 8276	05/17/2023	05/18/2023 08:00	Fe-Val Siddell	05/23/2023 15:50	Lipi Saha	2410194
EPA 8321B	05/17/2023	05/19/2023 09:00	Manjita Shrestha	05/19/2023 20:48	Manjita Shrestha	2410193
	05/17/2023	05/19/2023 09:00	Manjita Shrestha	05/20/2023 07:17	Manjita Shrestha	2410193
	05/17/2023	05/19/2023 09:00	Manjita Shrestha	05/20/2023 22:13	Manjita Shrestha	2410193
	05/17/2023	05/22/2023 09:00	Hoor Shaik	05/24/2023 21:38	Juyoung Kim	2410192
	05/17/2023	05/22/2023 09:00	Hoor Shaik	05/25/2023 03:54	Juyoung Kim	2410193
SM 2320 B-2011	05/17/2023			05/25/2023 09:32	Dale L. Simmons	2410185
SM 2340 B-2011	05/17/2023			05/18/2023 16:55	McKinley C Carter	2410196
	05/17/2023			05/18/2023 17:10	McKinley C Carter	2410197
SM 2540 C-2015	05/17/2023			05/19/2023 16:01	Yijie Li	2410185
SM 2540 D-2015	05/17/2023			05/19/2023 16:01	Yijie Li	2410185
SM 4500-F- C-2011	05/17/2023			05/25/2023 06:50	Dale L. Simmons	2410185
SM 5310 B-2011	05/17/2023			05/19/2023 04:02	Elise M. Gillis	2410186