

Chemical Analysis Report

NW-DIST-2023-08-10-01

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

Event Description: **Holmes Run**
Request ID: **RQ-2023-08-07-63**
Customer: **NW-DIST**
Project ID: **SMP**

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

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 29-AUG-2023 14:41



NON-CONFORMANCE REPORT INCLUDED

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: CHOCTAWHATCHEE RIVER UPSTREAM HWY 90 BOAT RAMP **Collection Date/Time: 08/09/2023 10:50**

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430087	DEP SOP: NU-094-1	Color (true)	18		PCU	P433709	
	EPA 180.1 Rev. 2.0	Turbidity	10		NTU	P433716	
	EPA 300.0 Rev. 2.1	Chloride	5.6		mg Cl/L	P434077	
		Sulfate	2.4		mg SO4/L	P434080	
	SM 2320 B-2011	Total Alkalinity	48		mg CaCO3/L	P433830	
	SM 2540 C-2015	TDS	70		mg/L	P433932	
	SM 2540 D-2015	TSS	11		mg/L	P433820	
	SM 4500-F- C-2011	Fluoride	0.046	I	mg F/L	P433929	
2430088	EPA 350.1 Rev. 2.0	Ammonia-N	0.009		mg N/L	P434068	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.19	I	mg N/L	P433813	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.57		mg N/L	P434369	
	EPA 365.1 Rev. 2.0	Total-P	0.046		mg P/L	P433770	
	SM 5310 B-2011	Organic Carbon	2.6		mg C/L	P433846	
2430103	EPA 8321B	Aldicarb	0.020	U	ug/L	P433683	
		Aldicarb Sulfone	0.0020	U	ug/L	P433683	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P433683	MS
		Carbaryl	0.0020	U	ug/L	P433683	
		Carbofuran	0.0020	U	ug/L	P433683	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P433683	
		Methiocarb	0.0020	U	ug/L	P433683	
		Methomyl	0.0020	U	ug/L	P433683	
		Oxamyl	0.0020	U	ug/L	P433683	
		Propoxur	0.0020	U	ug/L	P433683	
2430104		2,4-D	0.0052	I	ug/L	P433687	
		Acesulfame K	0.10	U	ug/L	P433621	MS
		2,4,5-T	0.0040	U	ug/L	P433687	
		AMPA	0.10	U	ug/L	P433621	
		Acetaminophen	0.0080	U	ug/L	P433687	
		Endothall	0.25	U	ug/L	P433621	
		Acetamiprid	0.0020	U	ug/L	P433687	MS
		Glufosinate	0.10	U	ug/L	P433621	
		Glyphosate	0.10	U	ug/L	P433621	
		Afidopyropen	0.0020	U	ug/L	P433687	
		Bentazon	0.0067		ug/L	P433687	
		Sucralose	1.1		ug/L	P433621	
		Benzovindiflupyr	0.0020	U	ug/L	P433687	
		Carbamazepine	9.0E-04	I	ug/L	P433687	MS
		Clothianidin	0.0020	U	ug/L	P433687	
		Dinotefuran	0.0024	I	ug/L	P433687	
		Diuron	0.0020	U	ug/L	P433687	MS
		Fenuron	0.032	U	ug/L	P433687	MS
		Fluridone	8.0E-04	U	ug/L	P433687	
		Imazapyr	0.012	I	ug/L	P433687	

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Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430104	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P433687	
		Ibuprofen	0.080	U	ug/L	P433687	
		Imidacloprid	0.0056	I	ug/L	P433687	
		Linuron	0.0040	U	ug/L	P433687	
		Mandestrobin	0.0020	U	ug/L	P433687	
		MCP	0.0020	U	ug/L	P433687	
		Naproxen	0.0080	U	ug/L	P433687	
		Primidone	0.0040	U	ug/L	P433687	
		Pyraclostrobin	0.0020	U	ug/L	P433687	
		Silvex	0.0040	U	ug/L	P433687	
		Thiamethoxam	0.0020	U	ug/L	P433687	
		Tolfenpyrad	0.0020	U	ug/L	P433687	
		Triclopyr	0.0040	U	ug/L	P433687	
2430112	EPA 8270E	Aldrin	0.70	U	ng/L	P433679	
		Alpha-BHC	0.11	U	ng/L	P433679	
		Alpha-Chlordane	0.22	U	ng/L	P433679	
		PCB-1016	2.2	U	ng/L	P433679	
		Beta-BHC	0.11	U	ng/L	P433679	
		PCB-1221	2.2	U	ng/L	P433679	
		Beta-Cyfluthrin	1.3	U	ng/L	P433679	
		PCB-1232	2.2	U	ng/L	P433679	
		Bifenthrin	0.54	U	ng/L	P433679	
		PCB-1242	2.2	U	ng/L	P433679	
		PCB-1248	2.2	U	ng/L	P433679	
		Chlorothalonil	3.9	U	ng/L	P433679	
		PCB-1254	2.2	U	ng/L	P433679	
		Cis-Nonachlor	0.22	U	ng/L	P433679	
		PCB-1260	2.2	U	ng/L	P433679	
		Cypermethrin	1.6	U	ng/L	P433679	
		Dacthal	0.16	U	ng/L	P433679	
		DDD-p,p'	0.27	U	ng/L	P433679	
		DDE-p,p'	0.22	U	ng/L	P433679	
		DDT-p,p'	0.86	U	ng/L	P433679	
		Delta-BHC	0.43	U	ng/L	P433679	
		Deltamethrin	1.3	U	ng/L	P433679	
		Dichlobenil	0.27	U	ng/L	P433679	
		Dicofol	1.3	U	ng/L	P433679	
		Dieldrin	0.43	U	ng/L	P433679	
		Endosulfan I	0.43	U	ng/L	P433679	
		Endosulfan II	0.97	U	ng/L	P433679	
		Endosulfan Sulfate	0.32	U	ng/L	P433679	
		Endrin	0.97	U	ng/L	P433679	
		Endrin Aldehyde	0.81	U	ng/L	P433679	
		Endrin Ketone	0.43	U	ng/L	P433679	
		Esfenvalerate	0.81	U	ng/L	P433679	

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Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430112	EPA 8270E	Ethalfuralin	0.16	U	ng/L	P433679	CCV
		Fenpropathrin	0.27	U	ng/L	P433679	
		Gamma-BHC	0.13	U	ng/L	P433679	
		Gamma-Chlordane	0.22	U	ng/L	P433679	
		Heptachlor	0.22	U	ng/L	P433679	
		Heptachlor Epoxide	0.27	U	ng/L	P433679	
		Hexachlorobenzene**	1.1	U	ng/L	P433679	
		Kepone	15	UJ	ng/L	P433679	
		Lambda-Cyhalothrin	0.81	U	ng/L	P433679	
		Methoprene	0.81	U	ng/L	P433679	
		Methoxychlor	0.32	U	ng/L	P433679	
		MGK-264	0.22	U	ng/L	P433679	
		Mirex	0.38	U	ng/L	P433679	
		Oxychlordane	0.32	U	ng/L	P433679	
		Permethrin	1.7	U	ng/L	P433679	
		Phenothrin	0.97	U	ng/L	P433679	
		Piperonyl Butoxide	0.34	I	ng/L	P433679	
		Prallethrin	2.2	U	ng/L	P433679	
		Tau-Fluvalinate	0.27	U	ng/L	P433679	
		Tetramethrin	0.81	U	ng/L	P433679	
		Trans-Nonachlor	0.22	U	ng/L	P433679	
		Triclosan Methyl	0.16	U	ng/L	P433679	
		Trifluralin	0.22	U	ng/L	P433679	
	EPA 8276	Chlordane	2.2	U	ng/L	P433679	
	Toxaphene	16	U	ng/L	P433679		
2430113	EPA 8270E	Oxybenzone**	11	U	ng/L	P433648	
		Acetochlor	1.2		ng/L	P433648	
		Octinoxate**	160	U	ng/L	P433648	
		Alachlor	0.43	U	ng/L	P433648	
		Avobenzone**	110	U	ng/L	P433648	
		Ametryn	1.2	U	ng/L	P433648	
		Atrazine	10		ng/L	P433648	
		PBDE-47**	4.3	U	ng/L	P433648	
		Atrazine Desethyl	2.7	I	ng/L	P433648	
		PBDE-99**	5.4	U	ng/L	P433648	
		Azinphos Methyl	3.3	U	ng/L	P433648	
		Tri-o-cresyl Phosphate**	6.5	U	ng/L	P433648	
		Azoxystrobin	2.6	J	ng/L	P433648	
		Bromacil	2.1	I	ng/L	P433648	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P433648	
		Butylate	0.22	U	ng/L	P433648	
		Dechlorane Plus**	33	U	ng/L	P433648	
		Caffeine**	25	I	ng/L	P433648	
		Dechlorane 602**	5.4	U	ng/L	P433648	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430113	EPA 8270E	Carbophenothion	0.54	U	ng/L	P433648	
		Dechlorane 603**	4.3	U	ng/L	P433648	
		Carfentrazone Ethyl	0.16	U	ng/L	P433648	
		Hexabromobenzene**	6.5	U	ng/L	P433648	
		Chlorfenapyr	0.33	U	ng/L	P433648	
		PBB-153**	8.7	U	ng/L	P433648	
		Chlorpyrifos Ethyl	0.33	U	ng/L	P433648	
		Pentabromotoluene**	3.3	U	ng/L	P433648	
		Chlorpyrifos Methyl	0.11	U	ng/L	P433648	
		Tris(2-chloroethyl) phosphate (TCEP)**	76	U	ng/L	P433648	
		Coumaphos	1.1	U	ng/L	P433648	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	21	I	ng/L	P433648	
		Cyanazine	5.4	U	ng/L	P433648	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	U	ng/L	P433648	
		Cyprodinil	0.22	U	ng/L	P433648	
		Tetradecachloro-m-terphenyl**	8.1	U	ng/L	P433648	
		Demeton	3.8	U	ng/L	P433648	
		Diazinon	0.14	U	ng/L	P433648	
		Difenoconazole	0.65	U	ng/L	P433648	
		Dimethenamid	0.23	I	ng/L	P433648	
		Dimethomorph	0.33	UJ	ng/L	P433648	LCS, MS
		Disulfoton	0.65	U	ng/L	P433648	
		Dithiopyr	1.1	U	ng/L	P433648	
		EPTC	0.54	U	ng/L	P433648	
		Ethion	0.33	U	ng/L	P433648	
		Ethoprop	0.14	U	ng/L	P433648	
		Etridiazole	0.11	U	ng/L	P433648	
		Fenamiphos	0.49	U	ng/L	P433648	
		Fenbuconazole	0.54	U	ng/L	P433648	
		Fipronil	0.22	U	ng/L	P433648	
		Fipronil Desulfinyl**	0.29	I	ng/L	P433648	
		Fipronil Sulfide	0.30	I	ng/L	P433648	
		Fipronil Sulfone	0.42	I	ng/L	P433648	
		Fluazifop-P-butyl	0.11	U	ng/L	P433648	
		Fludioxonil	0.11	U	ng/L	P433648	
		Flumioxazin	3.3	U	ng/L	P433648	
		Flutolanil	0.38	I	ng/L	P433648	
		Fluxapyroxad	0.92	I	ng/L	P433648	
		Fonofos	0.16	U	ng/L	P433648	
		Hexazinone	0.54	U	ng/L	P433648	
		Imazalil	0.70	U	ng/L	P433648	
		Iprodione	0.54	U	ng/L	P433648	
		Loratadine**	0.33	U	ng/L	P433648	
		Malathion	0.38	U	ng/L	P433648	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430113	EPA 8270E	Metalaxyl	0.54	U	ng/L	P433648	
		Metolachlor	21		ng/L	P433648	
		Metribuzin	0.56	I	ng/L	P433648	
		Mevinphos	1.1	U	ng/L	P433648	
		Molinate	0.27	U	ng/L	P433648	
		Myclobutanil	0.38	U	ng/L	P433648	
		Naled	2.7	U	ng/L	P433648	
		Napropamide	0.76	U	ng/L	P433648	
		Norflurazon	1.1	U	ng/L	P433648	
		Oxadiazon	0.38	U	ng/L	P433648	
		Oxyfluorfen	0.22	U	ng/L	P433648	
		Parathion Ethyl	0.16	U	ng/L	P433648	
		Parathion Methyl	0.22	U	ng/L	P433648	
		Pendimethalin	0.81	U	ng/L	P433648	
		Phenytol**	5.7	U	ng/L	P433648	
		Phorate	0.27	U	ng/L	P433648	
		Prodiamine	0.22	U	ng/L	P433648	
		Prometon	3.3	U	ng/L	P433648	
		Prometryn	0.38	U	ng/L	P433648	
		Pronamide	0.11	U	ng/L	P433648	
		Propanil	0.11	U	ng/L	P433648	
		Propargite	0.87	U	ng/L	P433648	
		Propiconazole	0.65	U	ng/L	P433648	
		Pyraflufen Ethyl	0.33	U	ng/L	P433648	
		Pyridaben	1.5	U	ng/L	P433648	
		Pyriproxyfen	0.27	U	ng/L	P433648	
		Simazine	0.27	U	ng/L	P433648	
		Stirophos	0.43	U	ng/L	P433648	
		Sulfentrazone	1.5	U	ng/L	P433648	
		Tebuconazole	1.5	U	ng/L	P433648	
		Terbufos	0.22	U	ng/L	P433648	
		Terbutylazine	0.22	U	ng/L	P433648	
		Thiobencarb	0.54	U	ng/L	P433648	
		Triadimefon	0.16	U	ng/L	P433648	
2430121	EPA 200.7 Rev. 4.4	Calcium	16.3		mg/L	P433806	
		Iron	740		ug/L	P433806	
		Magnesium	2.51		mg/L	P433806	
		Potassium	1.3		mg/L	P433806	
		Sodium	4.3		mg/L	P433806	
		Strontium	43.9		ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	11.3		ug/L	P433806	
		Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Aluminum	187		ug/L	P433806	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430121	EPA 200.8 Rev. 5.4	Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.57		ug/L	P433806	
		Barium	23.4		ug/L	P433806	
		Beryllium	0.023	I	ug/L	P433806	
		Boron	16.2		ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.55	I	ug/L	P433806	
		Cobalt	0.235		ug/L	P433806	
		Copper	0.40	U	ug/L	P433806	
		Lead	0.24	I	ug/L	P433806	
		Manganese	78.5		ug/L	P433806	
		Molybdenum	0.38	I	ug/L	P433806	
		Nickel	0.50	U	ug/L	P433806	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
		Thallium	0.10	U	ug/L	P433806	
	SM 2340 B-2011	Hardness	51.1		mg/L	P433806	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
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. Estimated value for azoxysrobin due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: ANDERSON MILL CREEK

Collection Date/Time: 08/09/2023 12:20

Field ID: G3NW0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430089	DEP SOP: NU-094-1	Color (true)	81		PCU	P433709	
	EPA 180.1 Rev. 2.0	Turbidity	4.5		NTU	P433716	
	EPA 300.0 Rev. 2.1	Chloride	3.3		mg Cl/L	P434077	
		Sulfate	0.51		mg SO4/L	P434080	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P433830	
	SM 2540 C-2015	TDS	22	I	mg/L	P433932	
	SM 2540 D-2015	TSS	3	I	mg/L	P433820	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P433929	
2430090	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P434069	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.31		mg N/L	P433813	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P434369	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P433770	
	SM 5310 B-2011	Organic Carbon	9.0		mg C/L	P433846	

Ref. Method and Comment:

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

Sample Location: HUCKLEBERRY CREEK

Collection Date/Time: 08/09/2023 12:35

Field ID: G3NW0135

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430105	EPA 8321B	2,4-D	0.093		ug/L	P433687	
		Acesulfame K	0.10	U	ug/L	P433724	
		2,4,5-T	0.0040	U	ug/L	P433687	
		AMPA	0.10	U	ug/L	P433724	
		Acetaminophen	0.0080	U	ug/L	P433687	
		Endothall	0.25	U	ug/L	P433724	
		Acetamiprid	0.0020	U	ug/L	P433687	MS
		Glufosinate	0.10	U	ug/L	P433724	
		Glyphosate	0.10	U	ug/L	P433724	
		Afidopyropen	0.0020	U	ug/L	P433687	
		Bentazon	0.0014	I	ug/L	P433687	
		Sucralose	0.21		ug/L	P433724	
		Benzovindiflupyr	0.0020	U	ug/L	P433687	
		Carbamazepine	8.0E-04	U	ug/L	P433687	MS
		Clothianidin	0.0020	U	ug/L	P433687	
		Dinotefuran	0.0020	U	ug/L	P433687	
		Diuron	0.0020	U	ug/L	P433687	MS
		Fenuron	0.032	U	ug/L	P433687	MS
		Fluridone	8.0E-04	U	ug/L	P433687	
		Imazapyr	0.013	I	ug/L	P433687	
		Hydrocodone	0.0020	U	ug/L	P433687	
		Ibuprofen	0.080	U	ug/L	P433687	
		Imidacloprid	0.0020	U	ug/L	P433687	
		Linuron	0.0040	U	ug/L	P433687	
		Mandestrobin	0.0020	U	ug/L	P433687	
		MCPP	0.0061	I	ug/L	P433687	
		Naproxen	0.0080	U	ug/L	P433687	
		Primidone	0.0040	U	ug/L	P433687	
		Pyraclostrobin	0.0020	U	ug/L	P433687	
		Silvex	0.0040	U	ug/L	P433687	
		Thiamethoxam	0.0020	U	ug/L	P433687	
		Tolfenpyrad	0.0020	U	ug/L	P433687	
		Triclopyr	0.0040	U	ug/L	P433687	
2430122	EPA 200.7 Rev. 4.4	Calcium	2.20		mg/L	P433806	
		Iron	1.00E+03		ug/L	P433806	
		Magnesium	0.96		mg/L	P433806	
		Potassium	0.85	I	mg/L	P433806	
		Sodium	2.0		mg/L	P433806	
		Strontium	8.0	I	ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	4.6		ug/L	P433806	
		Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Aluminum	167		ug/L	P433806	

Field ID: G3NW0135

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430122	EPA 200.8 Rev. 5.4	Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.65		ug/L	P433806	
		Barium	13.0		ug/L	P433806	
		Beryllium	0.011	I	ug/L	P433806	
		Boron	11.4		ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.40	U	ug/L	P433806	
		Cobalt	0.083		ug/L	P433806	
		Copper	0.40	U	ug/L	P433806	
		Lead	0.20	U	ug/L	P433806	
		Manganese	18.6		ug/L	P433806	
		Molybdenum	0.15	U	ug/L	P433806	
		Nickel	0.50	U	ug/L	P433806	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
	SM 2340 B-2011	Thallium	0.10	U	ug/L	P433806	
		Hardness	9.5		mg/L	P433806	

Ref. Method and Comment:
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

**Sample Location: SIKES CREEK UPSTREAM OF HARRIS
STEVENSON RD**

Collection Date/Time: 08/09/2023 11:30

Field ID: G3NW0450

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430114	EPA 8270E	Aldrin	0.70	U	ng/L	P433679	
		Alpha-BHC	0.11	U	ng/L	P433679	
		Alpha-Chlordane	0.22	U	ng/L	P433679	
		PCB-1016	2.2	U	ng/L	P433679	
		Beta-BHC	0.11	U	ng/L	P433679	
		PCB-1221	2.2	U	ng/L	P433679	
		Beta-Cyfluthrin	1.3	U	ng/L	P433679	
		PCB-1232	2.2	U	ng/L	P433679	
		Bifenthrin	0.54	U	ng/L	P433679	
		PCB-1242	2.2	U	ng/L	P433679	
		PCB-1248	2.2	U	ng/L	P433679	
		Chlorothalonil	3.9	U	ng/L	P433679	
		PCB-1254	2.2	U	ng/L	P433679	
		Cis-Nonachlor	0.22	U	ng/L	P433679	
		PCB-1260	2.2	U	ng/L	P433679	
		Cypermethrin	1.6	U	ng/L	P433679	
		Dacthal	0.16	U	ng/L	P433679	
		DDD-p,p'	0.27	U	ng/L	P433679	
		DDE-p,p'	0.22	U	ng/L	P433679	
		DDT-p,p'	0.86	U	ng/L	P433679	
		Delta-BHC	0.43	U	ng/L	P433679	
		Deltamethrin	1.3	U	ng/L	P433679	
		Dichlobenil	0.27	U	ng/L	P433679	
		Dicofol	1.3	U	ng/L	P433679	
		Dieldrin	0.43	U	ng/L	P433679	
		Endosulfan I	0.43	U	ng/L	P433679	
		Endosulfan II	0.97	U	ng/L	P433679	
		Endosulfan Sulfate	0.32	U	ng/L	P433679	
		Endrin	0.97	U	ng/L	P433679	
		Endrin Aldehyde	0.81	U	ng/L	P433679	
		Endrin Ketone	0.43	U	ng/L	P433679	
		Esfenvalerate	0.81	U	ng/L	P433679	
		Ethalfuralin	0.16	U	ng/L	P433679	
		Fenpropathrin	0.27	U	ng/L	P433679	
		Gamma-BHC	0.13	U	ng/L	P433679	
		Gamma-Chlordane	0.22	U	ng/L	P433679	
		Heptachlor	0.22	U	ng/L	P433679	
		Heptachlor Epoxide	0.27	U	ng/L	P433679	
		Hexachlorobenzene**	1.1	U	ng/L	P433679	
		Kepone	15	UJ	ng/L	P433679	CCV
		Lambda-Cyhalothrin	0.81	U	ng/L	P433679	
		Methoprene	0.81	U	ng/L	P433679	
		Methoxychlor	0.32	U	ng/L	P433679	

Field ID: G3NW0450

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2430114	EPA 8270E	MGK-264	0.22	U	ng/L	P433679	
		Mirex	0.38	U	ng/L	P433679	
		Oxychlordane	0.32	U	ng/L	P433679	
		Permethrin	1.7	U	ng/L	P433679	
		Phenothrin	0.97	U	ng/L	P433679	
		Piperonyl Butoxide	0.63	I	ng/L	P433679	
		Prallethrin	2.2	U	ng/L	P433679	
		Tau-Fluvalinate	0.27	U	ng/L	P433679	
		Tetramethrin	0.81	U	ng/L	P433679	
		Trans-Nonachlor	0.22	U	ng/L	P433679	
		Triclosan Methyl	0.16	U	ng/L	P433679	
		Trifluralin	0.22	U	ng/L	P433679	
	EPA 8276	Chlordane	2.2	U	ng/L	P433679	
		Toxaphene	16	U	ng/L	P433679	
2430123	EPA 200.7 Rev. 4.4	Calcium	18.2		mg/L	P433806	
		Iron	1.30E+03		ug/L	P433806	
		Magnesium	1.59		mg/L	P433806	
		Potassium	0.55	I	mg/L	P433806	
		Sodium	1.6	I	mg/L	P433806	
		Strontium	24.1		ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	5.7		ug/L	P433806	
		Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Aluminum	102		ug/L	P434050	
		Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.93		ug/L	P433806	
		Barium	28.1		ug/L	P433806	
		Beryllium	0.018	I	ug/L	P433806	
		Boron	8.4	Y	ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.40	U	ug/L	P433806	
		Cobalt	1.59		ug/L	P433806	
		Copper	0.40	U	ug/L	P433806	
		Lead	0.38	I	ug/L	P433806	
		Manganese	772		ug/L	P433806	
		Molybdenum	0.15	U	ug/L	P433806	
		Nickel	0.50	U	ug/L	P434050	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
		Thallium	0.10	U	ug/L	P433806	
	SM 2340 B-2011	Hardness	52.1		mg/L	P433806	

Ref. Method and Comment:

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

EPA 200.8 Rev. 5.4: The sample was preserved improperly for boron. The sample was preserved upon being received in the laboratory.

Non-Conformance Report

NCR ID: 10027

Event(s)

NW-DIST-2023-08-10-01

Job(s)

TLH-2023-08-10-17

Sample(s)

2430123

Test(s)

NCR Type: SHIPPING/RECEIVING

NCR Category: Preservation Not Intact

Observation: Sample not preserved to pH < 2.

Resolution: Sample preserved in the laboratory with nitric acid 06/10/2023 at 12:00.
HNO3 Lot# NA2126030 | Expiration Date: 06/02/2023

Authorized by/Date: Kyle Klug 8/14/2023

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433709

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433716

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

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: P433806

Component	Result	Code	Units
Aluminum	12	I	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 200.8 Rev. 5.4
Batch ID: P434050

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Nickel	0.50	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434077

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434080

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434068

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434069

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433813

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434369

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433770

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

Reference Method: EPA 8270E
Batch ID: P433648

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
Atrazine Desethyl	1.3	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
Ethion	0.30	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
Myclobutanil	0.35	U	ng/L
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	150	U	ng/L
Octinoxate	150	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
Pyriproxyfen	0.25	U	ng/L
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 8270E

Batch ID: P433679

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433679

Component	Result	Code	Units
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
DDT-p,p'	0.80	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	0.90	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin	0.90	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	14	U	ng/L
Kepone	14	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433679

Component	Result	Code	Units
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P433679

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P433621

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: P433683

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

Reference Method: EPA 8321B

Batch ID: P433687

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P433687

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P433724

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: SM 2320 B-2011
Batch ID: P433830

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

Reference Method: SM 2540 C-2015
Batch ID: P433932

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P433820

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P433929

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P433846

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: P433709

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433716

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	98.9		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	94.0		P	85 - 115
Sodium	97.3		P	85 - 115
Strontium	96.4		P	85 - 115
Tin	98.6		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433806

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	99.5		P	85 - 115
Barium	104		P	85 - 115
Beryllium	96.3		P	85 - 115
Boron	104		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.1		P	85 - 115
Cobalt	96.4		P	85 - 115
Copper	95.2		P	85 - 115
Lead	93.9		P	85 - 115
Manganese	99.4		P	85 - 115
Molybdenum	99.6		P	85 - 115
Nickel	96.0		P	85 - 115
Selenium	100		P	85 - 115
Silver	111		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Nickel	98.6		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434077

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434080

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434068

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434069

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433813

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434369

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: P433770

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P433648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	103		P	42 - 162
Acetochlor	87.2		P	69 - 123
Alachlor	101		P	65 - 118
Ametryn	123		P	58 - 141
Atrazine	91.2		P	73 - 118
Atrazine Desethyl	77.4		P	32 - 125
Avobenzone	131		P	40 - 203
Azinphos Methyl	140		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	104		P	48 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P433648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	62.0		P	27 - 85.0
Caffeine	96.1		P	40 - 137
Carbophenothion	102		P	54 - 132
Carfentrazone Ethyl	129		P	60 - 142
Chlorfenapyr	96.8		P	53 - 117
Chlorpyrifos Ethyl	84.6		P	59 - 116
Chlorpyrifos Methyl	102		P	66 - 119
Coumaphos	158		P	11 - 234
Cyanazine	129		P	61 - 248
Cyprodinil	103		P	50 - 147
Dechlorane 602	94.6		P	50 - 150
Dechlorane 603	113		P	50 - 150
Dechlorane Plus	121		P	47 - 182
Demeton	74.8		P	30 - 138
Diazinon	99.2		P	67 - 126
Difenoconazole	179		P	38 - 205
Dimethenamid	93.0		P	57 - 111
Dimethomorph	214		F	16 - 212
Disulfoton	96.5		P	46 - 126
Dithiopyr	93.6		P	62 - 115
EPTC	64.5		P	28 - 80.0
Ethion	79.4		P	24 - 122
Ethoprop	97.9		P	62 - 113
Etridiazole	66.5		P	28 - 92.0
Fenamiphos	92.8		P	57 - 128
Fenbuconazole	108		P	52 - 155
Fipronil	96.5		P	63 - 130
Fipronil Desulfinyl	99.8		P	61 - 130
Fipronil Sulfide	101		P	56 - 117
Fipronil Sulfone	103		P	52 - 118
Fluazifop-P-butyl	103		P	61 - 128
Fludioxonil	95.9		P	59 - 129
Flumioxazin	179		P	30 - 250
Flutolanil	89.2		P	53 - 127
Fluxapyroxad	101		P	42 - 132
Fonofos	103		P	61 - 110
Hexabromobenzene	110		P	50 - 150
Hexazinone	91.9		P	46 - 139
Imazalil	86.0		P	40 - 139
Iprodione	82.4		P	40 - 146
Loratadine	174		P	10 - 224
Malathion	102		P	61 - 135
Metalaxyl	86.9		P	58 - 121
Metolachlor	103		P	64 - 118
Metribuzin	94.9		P	45 - 245
Mevinphos	101		P	49 - 118
Molinate	54.7		P	42 - 92.0
Myclobutanil	98.4		P	55 - 127
Naled	51.7		P	10 - 114
Napropamide	89.8		P	39 - 121
Norflurazon	99.9		P	55 - 129
Octinoxate	121		P	26 - 166

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	84.4		P	54 - 115
Oxybenzone	115		P	49 - 135
Oxyfluorfen	109		P	64 - 139
Parathion Ethyl	93.4		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	112		P	50 - 150
PBDE-47	102		P	41 - 148
PBDE-99	101		P	38 - 147
Pendimethalin	103		P	52 - 118
Pentabromotoluene	103		P	50 - 150
Phenytoin	50.4		P	10 - 162
Phorate	110		P	40 - 122
Prodiamine	39.7		P	26 - 141
Prometon	97.9		P	54 - 122
Prometryn	113		P	61 - 128
Pronamide	111		P	72 - 121
Propanil	101		P	45 - 144
Propargite	86.5		P	10 - 199
Propiconazole	91.5		P	56 - 127
Pyraflufen Ethyl	109		P	56 - 140
Pyridaben	137		P	26 - 211
Pyriproxyfen	97.2		P	33 - 194
Simazine	92.1		P	67 - 121
Stiophos	69.0		P	20 - 142
Sulfentrazone	68.9		P	21 - 144
Tebuconazole	70.0		P	10 - 122
Terbufos	107		P	60 - 129
Terbutylazine	87.8		P	69 - 113
Tetradecachloro-m-terphenyl	123		P	70 - 200
Thiobencarb	96.2		P	51 - 120
Tri-o-cresyl Phosphate	117		P	49 - 150
Triadimefon	94.1		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	117		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	117		P	70 - 180

Reference Method: EPA 8270E

Batch ID: P433679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	65.6		P	30 - 96.0
Alpha-BHC	102		P	70 - 109
Alpha-Chlordane	63.8		P	45 - 107
Beta-BHC	83.8		P	64 - 138
Beta-Cyfluthrin	95.7		P	17 - 141
Bifenthrin	68.7		P	10 - 113
Chlorothalonil	61.4		P	26 - 180
Cis-Nonachlor	57.7		P	37 - 102
Cypermethrin	111		P	20 - 133
Dacthal	87.7		P	69 - 114
DDD-p,p'	64.2		P	42 - 105
DDE-p,p'	68.6		P	42 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDT-p,p'	61.9		P	42 - 107
Delta-BHC	85.6		P	67 - 144
Deltamethrin	106		P	15 - 149
Dichlobenil	60.7		P	46 - 117
Dicofol	68.6		P	34 - 114
Dieldrin	65.4		P	50 - 108
Endosulfan I	76.8		P	55 - 104
Endosulfan II	69.4		P	51 - 111
Endosulfan Sulfate	70.2		P	56 - 121
Endrin	71.8		P	10 - 106
Endrin Aldehyde	62.0		P	34 - 114
Endrin Ketone	85.0		P	63 - 177
Esfenvalerate	107		P	29 - 143
Ethalfuralin	88.4		P	46 - 96.0
Fenpropathrin	75.8		P	28 - 115
Gamma-BHC	73.3		P	65 - 121
Gamma-Chlordane	71.1		P	39 - 103
Heptachlor	61.8		P	39 - 94.0
Heptachlor Epoxide	79.4		P	54 - 104
Hexachlorobenzene	55.1		P	36 - 100
Kepone	81.6		P	10 - 225
Lambda-Cyhalothrin	82.1		P	10 - 135
Methoprene	75.9		P	10 - 109
Methoxychlor	111		P	52 - 112
MGK-264	76.6		P	44 - 117
Mirex	67.0		P	20 - 90.0
Oxychlordane	82.9		P	44 - 102
PCB-1016	64.4		P	45 - 107
PCB-1260	81.5		P	40 - 118
Permethrin	83.4		P	18 - 135
Phenothrin	73.7		P	10 - 102
Piperonyl Butoxide	149		P	28 - 156
Prallethrin	80.8		P	28 - 113
Tau-Fluvalinate	111		P	10 - 123
Tetramethrin	106		P	18 - 158
Trans-Nonachlor	89.9		P	39 - 104
Triclosan Methyl	98.1		P	54 - 108
Trifluralin	86.5		P	46 - 97.0

Reference Method: EPA 8276

Batch ID: P433679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.8		P	52 - 117
Toxaphene	96.0		P	44 - 125

Reference Method: EPA 8321B

Batch ID: P433621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	81.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P433621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endothall	103		P	40 - 150
Glufosinate	98.0		P	40 - 150
Glyphosate	114		P	40 - 150
Sucralose	93.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.4		P	40 - 150
Aldicarb	65.2		P	30 - 150
Aldicarb Sulfone	81.0		P	40 - 150
Aldicarb Sulfoxide	86.8		P	40 - 150
Carbaryl	87.9		P	40 - 150
Carbofuran	65.1		P	40 - 150
Methiocarb	65.1		P	40 - 150
Methomyl	77.3		P	40 - 150
Oxamyl	80.2		P	40 - 150
Propoxur	68.0		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433687

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	71.5		P	40 - 150
2,4,5-T	70.0		P	40 - 150
Acetaminophen	73.7		P	30 - 150
Acetamiprid	76.5		P	40 - 150
Afidopyropen	46.7		P	30 - 150
Bentazon	146		P	30 - 150
Benzovindiflupyr	63.5		P	40 - 150
Carbamazepine	53.7		P	40 - 150
Clothianidin	96.0		P	40 - 150
Dinotefuran	140		P	40 - 150
Diuron	54.7		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	107		P	40 - 150
Hydrocodone	92.2		P	40 - 150
Ibuprofen	60.5		P	40 - 150
Imazapyr	96.2		P	40 - 150
Imidacloprid	78.3		P	40 - 150
Linuron	92.0		P	40 - 150
Mandestrobin	83.7		P	40 - 150
MCPP	84.7		P	40 - 150
Naproxen	54.8		P	40 - 150
Primidone	97.6		P	40 - 150
Pyraclostrobin	64.4		P	40 - 150
Silvex	81.1		P	40 - 150
Thiamethoxam	90.8		P	40 - 150
Tolfenpyrad	50.5		P	30 - 150
Triclopyr	70.2		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P433724

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	110		P	40 - 150
AMPA	81.8		P	40 - 150
Endothall	97.7		P	40 - 150
Glufosinate	101		P	40 - 150
Glyphosate	120		P	40 - 150
Sucralose	92.4		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P433830

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P433932

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.6		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P433820

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.1		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P433929

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.2		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P433846

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429374	Calcium	102		P	80 - 120
2429374	Iron	102	103	P/P	80 - 120
2429374	Magnesium	101	103	P/P	80 - 120
2429374	Potassium	91.4	93.0	P/P	80 - 120
2429374	Sodium	98.2		P	80 - 120
2429374	Strontium	94.8	95.5	P/P	80 - 120
2429374	Tin	97.6	95.9	P/P	80 - 120
2429374	Titanium	102	100	P/P	80 - 120
2429374	Vanadium	102	99.9	P/P	80 - 120
2429374	Zinc	101	98.9	P/P	80 - 120
2429871	Calcium	104		P	75 - 125
2429871	Iron	104		P	75 - 125
2429871	Magnesium	102		P	75 - 125
2429871	Potassium	98.3		P	75 - 125
2429871	Sodium	102		P	75 - 125
2429871	Strontium	101		P	75 - 125
2429871	Tin	99.1		P	75 - 125
2429871	Titanium	103		P	75 - 125
2429871	Vanadium	104		P	75 - 125
2429871	Zinc	99.9		P	75 - 125

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429374	Aluminum	98.8	97.7	P/P	80 - 120
2429374	Antimony	105	105	P/P	80 - 120
2429374	Arsenic	98.3	99.5	P/P	80 - 120
2429374	Barium	106	105	P/P	80 - 120
2429374	Beryllium	96.2	98.0	P/P	80 - 120
2429374	Boron	102	101	P/P	80 - 120
2429374	Cadmium	103	104	P/P	80 - 120
2429374	Chromium	97.4	97.4	P/P	80 - 120
2429374	Cobalt	93.8	93.6	P/P	80 - 120
2429374	Copper	94.0	94.1	P/P	80 - 120
2429374	Lead	94.2	94.5	P/P	80 - 120
2429374	Manganese	97.2	100	P/P	80 - 120
2429374	Molybdenum	101	101	P/P	80 - 120
2429374	Nickel	91.7	92.0	P/P	80 - 120
2429374	Selenium	98.4	98.5	P/P	80 - 120
2429374	Silver	110	109	P/P	80 - 120
2429374	Thallium	105	105	P/P	80 - 120
2429871	Aluminum	98.5		P	80 - 120
2429871	Antimony	106		P	80 - 120
2429871	Arsenic	99.3		P	80 - 120
2429871	Barium	106		P	80 - 120
2429871	Beryllium	98.4		P	80 - 120
2429871	Boron	104		P	80 - 120
2429871	Cadmium	103		P	80 - 120
2429871	Chromium	98.0		P	80 - 120
2429871	Cobalt	91.5		P	80 - 120
2429871	Copper	89.0		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429871	Lead	93.0		P	80 - 120
2429871	Manganese	99.2		P	80 - 120
2429871	Molybdenum	103		P	80 - 120
2429871	Nickel	89.8		P	80 - 120
2429871	Selenium	97.0		P	80 - 120
2429871	Silver	110		P	80 - 120
2429871	Thallium	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431836	Aluminum	99.6	100	P/P	80 - 120
2431836	Nickel	99.7	98.7	P/P	80 - 120
2431916	Aluminum	99.0		P	80 - 120
2431916	Nickel	95.6		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434077

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430010	Chloride	98.9		P	90 - 110
2430089	Chloride	98.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434080

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430010	Sulfate	97.3		P	90 - 110
2430089	Sulfate	95.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429969	Ammonia-N	98.0	99.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430090	Ammonia-N	99.2	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433813

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430109	Kjeldahl Nitrogen	107	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P434369

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429833	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P433770

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430090	Total-P	107	106	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	92.4	91.1	P/P	26 - 165
2429511	Acetochlor	98.5	91.7	P/P	67 - 124
2429511	Alachlor	101	88.9	P/P	60 - 120
2429511	Ametryn	144	139	P/P	54 - 216
2429511	Atrazine Desethyl	72.2	65.5	P/P	15 - 122
2429511	Avobenzene	132	126	P/P	37 - 178
2429511	Azinphos Methyl	141	124	P/P	40 - 292
2429511	Azoxystrobin	138	125	P/P	35 - 220
2429511	Bromacil	98.8	98.7	P/P	45 - 127
2429511	Butylate	59.1	55.0	P/P	20 - 83.0
2429511	Caffeine	99.9	102	P/P	10 - 194
2429511	Carbophenothion	100	101	P/P	57 - 127
2429511	Carfentrazone Ethyl	116	114	P/P	51 - 141
2429511	Chlorfenapyr	84.3	79.9	P/P	46 - 111
2429511	Chlorpyrifos Ethyl	89.6	83.7	P/P	52 - 120
2429511	Chlorpyrifos Methyl	97.6	87.8	P/P	63 - 119
2429511	Coumaphos	149	135	P/P	10 - 228
2429511	Cyanazine	134	131	P/P	59 - 241
2429511	Cyprodinil	89.4	84.4	P/P	47 - 146
2429511	Dechlorane 602	77.7	65.3	P/P	50 - 150
2429511	Dechlorane 603	117	115	P/P	50 - 150
2429511	Dechlorane Plus	98.0	101	P/P	50 - 150
2429511	Demeton	85.3	81.6	P/P	40 - 136
2429511	Diazinon	114	110	P/P	69 - 132
2429511	Difenoconazole	160	129	P/P	57 - 258
2429511	Dimethenamid	88.5	83.8	P/P	54 - 110
2429511	Dimethomorph	252	233	F/F	28 - 210
2429511	Disulfoton	107	105	P/P	43 - 133
2429511	Dithiopyr	97.5	97.5	P/P	39 - 116
2429511	EPTC	58.3	53.9	P/P	20 - 78.0
2429511	Ethion	67.8	61.4	P/P	17 - 119
2429511	Ethoprop	107	101	P/P	66 - 120
2429511	Etridiazole	65.9	64.0	P/P	28 - 96.0
2429511	Fenamiphos	99.3	97.4	P/P	41 - 126
2429511	Fenbuconazole	97.3	88.9	P/P	42 - 169
2429511	Fipronil	98.9	95.0	P/P	61 - 132
2429511	Fipronil Desulfinyl	97.0	89.3	P/P	56 - 132
2429511	Fipronil Sulfide	95.6	102	P/P	48 - 119
2429511	Fipronil Sulfone	99.2	93.0	P/P	42 - 131
2429511	Fluazifop-P-butyl	99.4	92.2	P/P	53 - 131

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	Fludioxonil	87.1	74.4	P/P	56 - 127
2429511	Flumioxazin	171	136	P/P	19 - 300
2429511	Flutolanil	71.3	77.4	P/P	41 - 127
2429511	Fluxapyroxad	93.9	85.4	P/P	42 - 172
2429511	Fonofos	97.6	95.5	P/P	59 - 113
2429511	Hexabromobenzene	114	113	P/P	50 - 150
2429511	Hexazinone	103	92.9	P/P	66 - 122
2429511	Imazalil	96.6	95.5	P/P	21 - 283
2429511	Iprodione	83.6	73.6	P/P	43 - 150
2429511	Loratadine	185	162	P/P	23 - 201
2429511	Malathion	90.3	87.9	P/P	58 - 136
2429511	Metaxyl	105	104	P/P	55 - 120
2429511	Metolachlor	117	90.9	P/P	57 - 121
2429511	Metribuzin	105	94.3	P/P	58 - 294
2429511	Mevinphos	108	106	P/P	50 - 126
2429511	Molinate	60.0	52.7	P/P	42 - 93.0
2429511	Myclobutanil	98.2	93.9	P/P	55 - 125
2429511	Naled	52.8	54.7	P/P	18 - 200
2429511	Napropamide	80.8	78.6	P/P	39 - 110
2429511	Norflurazon	93.2	84.9	P/P	48 - 128
2429511	Octinoxate	129	122	P/P	21 - 159
2429511	Oxadiazon	94.7	89.3	P/P	43 - 112
2429511	Oxybenzone	133	122	P/P	41 - 142
2429511	Oxyfluorfen	126	120	P/P	64 - 153
2429511	Parathion Ethyl	102	96.9	P/P	69 - 114
2429511	Parathion Methyl	106	100	P/P	79 - 139
2429511	PBB-153	113	113	P/P	50 - 150
2429511	PBDE-47	98.4	93.5	P/P	27 - 144
2429511	PBDE-99	87.3	81.4	P/P	18 - 150
2429511	Pendimethalin	104	100	P/P	50 - 139
2429511	Pentabromotoluene	110	104	P/P	50 - 150
2429511	Phenytoin	62.8	56.8	P/P	10 - 146
2429511	Phorate	111	110	P/P	54 - 161
2429511	Prodiamine	37.0	39.4	P/P	30 - 161
2429511	Prometon	117	113	P/P	45 - 134
2429511	Prometryn	130	114	P/P	45 - 137
2429511	Pronamide	125	117	P/P	65 - 133
2429511	Propanil	105	101	P/P	49 - 142
2429511	Propargite	69.7	68.4	P/P	10 - 203
2429511	Propiconazole	96.9	86.7	P/P	38 - 146
2429511	Pyraflufen Ethyl	104	92.4	P/P	34 - 153
2429511	Pyridaben	135	101	P/P	12 - 192
2429511	Pyriproxyfen	96.5	88.9	P/P	33 - 180
2429511	Simazine	89.8	86.3	P/P	51 - 157
2429511	Stiropfos	54.0	48.7	P/P	10 - 128
2429511	Sulfentrazone	91.6	89.1	P/P	53 - 186
2429511	Tebuconazole	64.3	56.1	P/P	10 - 133
2429511	Terbufos	123	124	P/P	65 - 139
2429511	Terbutylazine	89.3	85.3	P/P	66 - 117
2429511	Tetradecachloro-m-terphenyl	106	126	P/P	70 - 200
2429511	Thiobencarb	94.4	88.3	P/P	51 - 119
2429511	Tri-o-cresyl Phosphate	123	116	P/P	31 - 144

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	Triadimefon	94.6	93.5	P/P	48 - 119
2429511	Tris(1-chloro-2-propyl) phosphate (TCPP)	126	111	P/P	50 - 150
2429511	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	119	111	P/P	50 - 150
2429511	Tris(2-chloroethyl) phosphate (TCEP)	118	111	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429555	Aldrin	32.3	37.6	P/P	24 - 81.0
2429555	Alpha-BHC	81.1	89.6	P/P	65 - 110
2429555	Alpha-Chlordane	45.1	44.7	P/P	43 - 119
2429555	Beta-BHC	78.2	85.6	P/P	54 - 165
2429555	Beta-Cyfluthrin	60.9	61.7	P/P	27 - 165
2429555	Bifenthrin	49.0	50.4	P/P	17 - 117
2429555	Chlorothalonil	72.1	83.2	P/P	10 - 255
2429555	Cis-Nonachlor	41.5	41.6	P/P	34 - 98.0
2429555	Cypermethrin	72.9	72.9	P/P	25 - 143
2429555	Dacthal	61.9	71.2	P/P	55 - 139
2429555	DDD-p,p'	51.3	50.0	P/P	30 - 109
2429555	DDE-p,p'	51.2	53.5	P/P	35 - 106
2429555	DDT-p,p'	44.9	45.3	P/P	41 - 101
2429555	Delta-BHC	91.5	99.5	P/P	58 - 165
2429555	Deltamethrin	77.8	69.3	P/P	10 - 194
2429555	Dichlobenil	49.9	54.0	P/P	22 - 114
2429555	Dicofol	45.4	44.9	P/P	17 - 133
2429555	Dieldrin	45.3	49.2	P/P	45 - 129
2429555	Endosulfan I	52.7	52.3	P/P	49 - 104
2429555	Endosulfan II	59.5	61.0	P/P	37 - 117
2429555	Endosulfan Sulfate	54.6	52.4	P/P	38 - 128
2429555	Endrin	49.5	53.2	P/P	35 - 116
2429555	Endrin Aldehyde	58.3	44.1	P/P	19 - 108
2429555	Endrin Ketone	85.3	73.9	P/P	44 - 134
2429555	Esfenvalerate	73.5	85.9	P/P	27 - 176
2429555	Ethalfuralin	54.7	59.6	P/P	49 - 100
2429555	Fenpropathrin	45.7	48.0	P/P	34 - 117
2429555	Gamma-BHC	70.1	79.0	P/P	59 - 129
2429555	Gamma-Chlordane	46.6	48.0	P/P	33 - 107
2429555	Heptachlor	38.4	41.9	P/P	37 - 94.0
2429555	Heptachlor Epoxide	52.5	53.4	P/P	38 - 118
2429555	Hexachlorobenzene	37.7	40.7	P/P	35 - 97.0
2429555	Kepone	68.4	66.6	P/P	10 - 221
2429555	Lambda-Cyhalothrin	56.2	62.3	P/P	23 - 190
2429555	Methoprene	50.2	51.2	P/P	21 - 109
2429555	Methoxychlor	77.2	69.8	P/P	46 - 118
2429555	MGK-264	71.3	68.8	P/P	39 - 122
2429555	Mirex	41.8	44.6	P/P	25 - 90.0
2429555	Oxychlordane	51.4	52.3	P/P	42 - 100
2429555	Permethrin	60.6	84.9	P/P	33 - 181
2429555	Phenothrin	55.1	58.4	P/P	12 - 125
2429555	Piperonyl Butoxide	147	141	P/P	10 - 178
2429555	Prallethrin	58.7	69.9	P/P	24 - 122

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429555	Tau-Fluvalinate	73.7	97.8	P/P	13 - 151
2429555	Tetramethrin	80.1	97.7	P/P	16 - 172
2429555	Trans-Nonachlor	53.8	57.4	P/P	39 - 100
2429555	Triclosan Methyl	61.7	55.4	P/P	43 - 110
2429555	Trifluralin	48.1	48.6	P/P	45 - 94.0
2430112	PCB-1016	53.6	57.8	P/P	45 - 107
2430112	PCB-1260	66.5	66.3	P/P	40 - 112

Reference Method: EPA 8276
Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430112	Chlordane	78.1	75.0	P/P	43 - 123
2430112	Toxaphene	92.4	93.6	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P433621

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429139	Acesulfame K	155	157	F/F	40 - 150
2429139	AMPA	49.0	51.3	P/P	40 - 150
2429139	Endothall	109	103	P/P	40 - 150
2429139	Glufosinate	88.1	86.4	P/P	40 - 150
2429139	Glyphosate	95.8	121	P/P	40 - 150
2429139	Sucralose	95.0	102	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429553	3-Hydroxycarbofuran	88.4	92.2	P/P	40 - 150
2429553	Aldicarb	60.9	58.3	P/P	30 - 150
2429553	Aldicarb Sulfone	91.6	98.8	P/P	40 - 150
2429553	Aldicarb Sulfoxide	32.0	36.6	F/F	40 - 150
2429553	Carbaryl	70.2	92.5	P/P	40 - 150
2429553	Carbofuran	57.1	56.0	P/P	40 - 150
2429553	Methiocarb	65.5	85.7	P/P	40 - 150
2429553	Methomyl	81.8	82.2	P/P	40 - 150
2429553	Oxamyl	84.7	96.0	P/P	40 - 150
2429553	Propoxur	68.8	75.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430006	2,4-D	88.5	97.5	P/P	40 - 150
2430006	2,4,5-T	113	109	P/P	40 - 150
2430006	Acetaminophen	62.7	64.4	P/P	30 - 150
2430006	Acetamiprid	29.0	38.9	F/F	40 - 150
2430006	Afidopyropen	50.0	65.0	P/P	30 - 150
2430006	Benzovindiflupyr	61.7	51.1	P/P	40 - 150
2430006	Carbamazepine	34.1	37.4	F/F	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P433687

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430006	Clothianidin	61.0	57.3	P/P	40 - 150
2430006	Dinotefuran	48.1	53.3	P/P	40 - 150
2430006	Diuron	34.3	32.4	F/F	40 - 150
2430006	Fenuron	41.0	38.6	P/F	40 - 150
2430006	Hydrocodone	44.5	44.4	P/P	40 - 150
2430006	Ibuprofen	59.5	73.8	P/P	40 - 150
2430006	Imazapyr	104	97.6	P/P	40 - 150
2430006	Imidacloprid	80.1	86.8	P/P	40 - 150
2430006	Linuron	59.5	57.4	P/P	40 - 150
2430006	Mandestrobin	92.2	80.6	P/P	40 - 150
2430006	MCPP	115	105	P/P	40 - 150
2430006	Naproxen	73.0	55.3	P/P	40 - 150
2430006	Primidone	64.1	64.0	P/P	40 - 150
2430006	Pyraclostrobin	62.1	65.7	P/P	40 - 150
2430006	Silvex	105	107	P/P	40 - 150
2430006	Thiamethoxam	58.3	55.8	P/P	40 - 150
2430006	Tolfenpyrad	64.8	54.8	P/P	30 - 150
2430006	Triclopyr	101	98.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430105	Acesulfame K	117	119	P/P	40 - 150
2430105	AMPA	95.8	106	P/P	40 - 150
2430105	Endothall	110	97.5	P/P	40 - 150
2430105	Glufosinate	96.1	95.3	P/P	40 - 150
2430105	Glyphosate	99.0	99.5	P/P	40 - 150
2430105	Sucralose	89.0	90.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P433929

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430284	Fluoride	99.9	101	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P433846

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430088	Organic Carbon	95.4	96.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430134	Color (true)	3.38	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433716

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430009	Turbidity	6.25	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429374	Calcium	1.21	Spike	P	0 - 20
2429374	Iron	1.24	Spike	P	0 - 20
2429374	Magnesium	1.35	Spike	P	0 - 20
2429374	Potassium	1.26	Spike	P	0 - 20
2429374	Sodium	0.0302	Spike	P	0 - 20
2429374	Strontium	0.713	Spike	P	0 - 20
2429374	Tin	1.69	Spike	P	0 - 20
2429374	Titanium	2.08	Spike	P	0 - 20
2429374	Vanadium	2.05	Spike	P	0 - 20
2429374	Zinc	1.91	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429374	Aluminum	1.14	Spike	P	0 - 20
2429374	Antimony	0.407	Spike	P	0 - 20
2429374	Arsenic	1.16	Spike	P	0 - 20
2429374	Barium	1.13	Spike	P	0 - 20
2429374	Beryllium	1.89	Spike	P	0 - 20
2429374	Boron	0.628	Spike	P	0 - 20
2429374	Cadmium	1.04	Spike	P	0 - 20
2429374	Chromium	0.0312	Spike	P	0 - 20
2429374	Cobalt	0.120	Spike	P	0 - 20
2429374	Copper	0.0690	Spike	P	0 - 20
2429374	Lead	0.344	Spike	P	0 - 20
2429374	Manganese	2.49	Spike	P	0 - 20
2429374	Molybdenum	0.522	Spike	P	0 - 20
2429374	Nickel	0.306	Spike	P	0 - 20
2429374	Selenium	0.112	Spike	P	0 - 20
2429374	Silver	1.30	Spike	P	0 - 20
2429374	Thallium	0.170	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431836	Aluminum	0.703	Spike	P	0 - 20
2431836	Nickel	0.946	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434077

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430010	Chloride	0.868	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P434080

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430010	Sulfate	3.15	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429969	Ammonia-N	1.62	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P434069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430090	Ammonia-N	2.08	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433813

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430109	Kjeldahl Nitrogen	1.13	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P434369

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429833	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433770

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430090	Total-P	0.825	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P433648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429511	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.36	Spike	P	0 - 37
2429511	Acetochlor	7.14	Spike	P	0 - 28
2429511	Alachlor	12.5	Spike	P	0 - 30
2429511	Ametryn	3.61	Spike	P	0 - 32
2429511	Atrazine	4.10	Spike	P	0 - 41
2429511	Atrazine Desethyl	7.82	Spike	P	0 - 36
2429511	Avobenzone	4.88	Spike	P	0 - 36
2429511	Azinphos Methyl	13.0	Spike	P	0 - 75
2429511	Azoxystrobin	9.90	Spike	P	0 - 39
2429511	Bromacil	0.111	Spike	P	0 - 33
2429511	Butylate	7.29	Spike	P	0 - 44
2429511	Caffeine	2.00	Spike	P	0 - 74
2429511	Carbophenothion	0.689	Spike	P	0 - 25
2429511	Carfentrazone Ethyl	2.24	Spike	P	0 - 27
2429511	Chlorfenapyr	5.33	Spike	P	0 - 24
2429511	Chlorpyrifos Ethyl	6.76	Spike	P	0 - 26
2429511	Chlorpyrifos Methyl	10.6	Spike	P	0 - 26
2429511	Coumaphos	9.91	Spike	P	0 - 28
2429511	Cyanazine	2.65	Spike	P	0 - 48
2429511	Cyprodinil	5.80	Spike	P	0 - 29
2429511	Dechlorane 602	17.4	Spike	P	0 - 30
2429511	Dechlorane 603	1.84	Spike	P	0 - 30
2429511	Dechlorane Plus	3.39	Spike	P	0 - 30
2429511	Demeton	4.47	Spike	P	0 - 33
2429511	Diazinon	3.59	Spike	P	0 - 29
2429511	Difenoconazole	21.6	Spike	P	0 - 34
2429511	Dimethenamid	5.35	Spike	P	0 - 39
2429511	Dimethomorph	7.79	Spike	P	0 - 51
2429511	Disulfoton	1.89	Spike	P	0 - 30
2429511	Dithiopyr	0.00400	Spike	P	0 - 26
2429511	EPTC	7.86	Spike	P	0 - 43
2429511	Ethion	9.88	Spike	P	0 - 79
2429511	Ethoprop	5.40	Spike	P	0 - 29
2429511	Etridiazole	3.06	Spike	P	0 - 33
2429511	Fenamiphos	1.89	Spike	P	0 - 40
2429511	Fenbuconazole	8.26	Spike	P	0 - 74
2429511	Fipronil	4.09	Spike	P	0 - 29
2429511	Fipronil Desulfinyl	7.41	Spike	P	0 - 32
2429511	Fipronil Sulfide	6.22	Spike	P	0 - 30
2429511	Fipronil Sulfone	5.71	Spike	P	0 - 33
2429511	Fluazifop-P-butyl	7.46	Spike	P	0 - 38
2429511	Fludioxonil	15.7	Spike	P	0 - 29
2429511	Flumioxazin	22.6	Spike	P	0 - 51
2429511	Flutolanil	8.16	Spike	P	0 - 25
2429511	Fluxapyroxad	9.45	Spike	P	0 - 45
2429511	Fonofos	2.24	Spike	P	0 - 27
2429511	Hexabromobenzene	0.802	Spike	P	0 - 30
2429511	Hexazinone	9.83	Spike	P	0 - 30
2429511	Imazalil	1.15	Spike	P	0 - 100
2429511	Iprodione	12.7	Spike	P	0 - 33
2429511	Loratadine	13.0	Spike	P	0 - 56

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P433648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429511	Malathion	2.69	Spike	P	0 - 37
2429511	Metalaxyl	0.713	Spike	P	0 - 40
2429511	Metolachlor	21.8	Spike	P	0 - 29
2429511	Metribuzin	11.1	Spike	P	0 - 45
2429511	Mevinphos	1.69	Spike	P	0 - 29
2429511	Molinate	12.9	Spike	P	0 - 33
2429511	Myclobutanil	4.46	Spike	P	0 - 26
2429511	Naled	3.65	Spike	P	0 - 37
2429511	Napropamide	2.72	Spike	P	0 - 44
2429511	Norflurazon	7.52	Spike	P	0 - 30
2429511	Octinoxate	5.44	Spike	P	0 - 45
2429511	Oxadiazon	5.86	Spike	P	0 - 28
2429511	Oxybenzone	8.78	Spike	P	0 - 46
2429511	Oxyfluorfen	4.70	Spike	P	0 - 28
2429511	Parathion Ethyl	5.61	Spike	P	0 - 31
2429511	Parathion Methyl	5.72	Spike	P	0 - 29
2429511	PBB-153	0.153	Spike	P	0 - 30
2429511	PBDE-47	5.14	Spike	P	0 - 36
2429511	PBDE-99	6.97	Spike	P	0 - 40
2429511	Pendimethalin	3.98	Spike	P	0 - 33
2429511	Pentabromotoluene	5.63	Spike	P	0 - 30
2429511	Phenytol	9.92	Spike	P	0 - 100
2429511	Phorate	0.817	Spike	P	0 - 36
2429511	Prodiamine	6.45	Spike	P	0 - 71
2429511	Prometon	2.93	Spike	P	0 - 36
2429511	Prometryn	12.9	Spike	P	0 - 28
2429511	Pronamide	6.98	Spike	P	0 - 24
2429511	Propanil	4.25	Spike	P	0 - 28
2429511	Propargite	1.89	Spike	P	0 - 43
2429511	Propiconazole	11.2	Spike	P	0 - 33
2429511	Pyraflufen Ethyl	12.0	Spike	P	0 - 29
2429511	Pyridaben	23.9	Spike	P	0 - 30
2429511	Pyriproxyfen	8.15	Spike	P	0 - 79
2429511	Simazine	2.84	Spike	P	0 - 29
2429511	Stirophos	10.3	Spike	P	0 - 61
2429511	Sulfentrazone	2.69	Spike	P	0 - 33
2429511	Tebuconazole	13.7	Spike	P	0 - 69
2429511	Terbufos	1.35	Spike	P	0 - 29
2429511	Terbuthylazine	4.58	Spike	P	0 - 32
2429511	Tetradecachloro-m-terphenyl	17.8	Spike	P	0 - 30
2429511	Thiobencarb	6.74	Spike	P	0 - 26
2429511	Tri-o-cresyl Phosphate	5.63	Spike	P	0 - 33
2429511	Triadimefon	1.19	Spike	P	0 - 28
2429511	Tris(1-chloro-2-propyl) phosphate (TCPP)	11.3	Spike	P	0 - 30
2429511	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.68	Spike	P	0 - 30
2429511	Tris(2-chloroethyl) phosphate (TCEP)	5.70	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P433679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429555	Aldrin	14.9	Spike	P	0 - 41
2429555	Alpha-BHC	9.96	Spike	P	0 - 25
2429555	Alpha-Chlordane	0.887	Spike	P	0 - 32
2429555	Beta-BHC	9.08	Spike	P	0 - 33
2429555	Beta-Cyfluthrin	1.38	Spike	P	0 - 43
2429555	Bifenthrin	2.80	Spike	P	0 - 52
2429555	Chlorothalonil	14.3	Spike	P	0 - 82
2429555	Cis-Nonachlor	0.0414	Spike	P	0 - 33
2429555	Cypermethrin	0.00964	Spike	P	0 - 51
2429555	Dacthal	14.0	Spike	P	0 - 27
2429555	DDD-p,p'	2.50	Spike	P	0 - 39
2429555	DDE-p,p'	4.47	Spike	P	0 - 31
2429555	DDT-p,p'	0.914	Spike	P	0 - 29
2429555	Delta-BHC	8.38	Spike	P	0 - 35
2429555	Deltamethrin	11.6	Spike	P	0 - 100
2429555	Dichlobenil	7.91	Spike	P	0 - 40
2429555	Dicofol	1.21	Spike	P	0 - 37
2429555	Dieldrin	8.21	Spike	P	0 - 27
2429555	Endosulfan I	0.808	Spike	P	0 - 23
2429555	Endosulfan II	2.46	Spike	P	0 - 34
2429555	Endosulfan Sulfate	4.13	Spike	P	0 - 36
2429555	Endrin	7.22	Spike	P	0 - 45
2429555	Endrin Aldehyde	27.7	Spike	P	0 - 76
2429555	Endrin Ketone	14.3	Spike	P	0 - 43
2429555	Esfenvalerate	15.5	Spike	P	0 - 51
2429555	Ethalfuralin	8.64	Spike	P	0 - 22
2429555	Fenpropathrin	4.92	Spike	P	0 - 49
2429555	Gamma-BHC	12.0	Spike	P	0 - 28
2429555	Gamma-Chlordane	2.84	Spike	P	0 - 40
2429555	Heptachlor	8.72	Spike	P	0 - 29
2429555	Heptachlor Epoxide	1.75	Spike	P	0 - 33
2429555	Hexachlorobenzene	7.67	Spike	P	0 - 36
2429555	Kepone	2.73	Spike	P	0 - 85
2429555	Lambda-Cyhalothrin	10.4	Spike	P	0 - 55
2429555	Methoprene	2.04	Spike	P	0 - 53
2429555	Methoxychlor	9.98	Spike	P	0 - 50
2429555	MGK-264	3.50	Spike	P	0 - 43
2429555	Mirex	6.39	Spike	P	0 - 40
2429555	Oxychlordane	1.72	Spike	P	0 - 31
2429555	Permethrin	33.4	Spike	P	0 - 50
2429555	Phenothrin	5.77	Spike	P	0 - 58
2429555	Piperonyl Butoxide	3.67	Spike	P	0 - 100
2429555	Prallethrin	17.3	Spike	P	0 - 39
2429555	Tau-Fluvalinate	28.0	Spike	P	0 - 54
2429555	Tetramethrin	16.7	Spike	P	0 - 51
2429555	Trans-Nonachlor	6.54	Spike	P	0 - 39
2429555	Triclosan Methyl	10.7	Spike	P	0 - 31
2429555	Trifluralin	1.08	Spike	P	0 - 22
2430112	PCB-1016	7.57	Spike	P	0 - 25
2430112	PCB-1260	0.232	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P433679

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430112	Chlordane	4.00	Spike	P	0 - 28
2430112	Toxaphene	1.36	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P433621

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429139	Acesulfame K	0.818	Spike	P	0 - 30
2429139	AMPA	3.01	Spike	P	0 - 30
2429139	Endothall	5.59	Spike	P	0 - 30
2429139	Glufosinate	1.94	Spike	P	0 - 30
2429139	Glyphosate	6.79	Spike	P	0 - 30
2429139	Sucralose	6.38	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433683

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429553	3-Hydroxycarbofuran	4.16	Spike	P	0 - 30
2429553	Aldicarb	4.32	Spike	P	0 - 30
2429553	Aldicarb Sulfone	7.52	Spike	P	0 - 30
2429553	Aldicarb Sulfoxide	13.5	Spike	P	0 - 30
2429553	Carbaryl	27.4	Spike	P	0 - 30
2429553	Carbofuran	1.89	Spike	P	0 - 30
2429553	Methiocarb	26.7	Spike	P	0 - 30
2429553	Methomyl	0.428	Spike	P	0 - 30
2429553	Oxamyl	12.6	Spike	P	0 - 30
2429553	Propoxur	8.70	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433687

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430006	2,4-D	8.76	Spike	P	0 - 30
2430006	2,4,5-T	3.58	Spike	P	0 - 30
2430006	Acetaminophen	2.78	Spike	P	0 - 30
2430006	Acetamiprid	29.1	Spike	P	0 - 30
2430006	Afidopyropen	26.1	Spike	P	0 - 30
2430006	Bentazon	4.45	Spike	P	0 - 30
2430006	Benzovindiflupyr	18.9	Spike	P	0 - 30
2430006	Carbamazepine	7.87	Spike	P	0 - 30
2430006	Clothianidin	6.20	Spike	P	0 - 30
2430006	Dinotefuran	10.4	Spike	P	0 - 30
2430006	Diuron	5.87	Spike	P	0 - 30
2430006	Fenuron	6.09	Spike	P	0 - 30
2430006	Fluridone	27.2	Spike	P	0 - 30
2430006	Hydrocodone	0.235	Spike	P	0 - 30
2430006	Ibuprofen	21.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P433687

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430006	Imazapyr	4.61	Spike	P	0 - 30
2430006	Imidacloprid	7.98	Spike	P	0 - 30
2430006	Linuron	3.64	Spike	P	0 - 30
2430006	Mandestrobin	13.4	Spike	P	0 - 30
2430006	MCPPP	8.32	Spike	P	0 - 30
2430006	Naproxen	27.6	Spike	P	0 - 30
2430006	Primidone	0.0428	Spike	P	0 - 30
2430006	Pyraclostrobin	5.58	Spike	P	0 - 30
2430006	Silvex	2.28	Spike	P	0 - 30
2430006	Thiamethoxam	4.32	Spike	P	0 - 30
2430006	Tolfenpyrad	16.7	Spike	P	0 - 30
2430006	Triclopyr	2.75	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P433724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430105	Acesulfame K	1.82	Spike	P	0 - 30
2430105	AMPA	10.2	Spike	P	0 - 30
2430105	Endothall	11.8	Spike	P	0 - 30
2430105	Glufosinate	0.823	Spike	P	0 - 30
2430105	Glyphosate	0.463	Spike	P	0 - 30
2430105	Sucralose	1.65	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P433830

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429631	Total Alkalinity	3.31	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015

Batch ID: P433932

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2426956	TDS	1.11	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011

Batch ID: P433929

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430284	Fluoride	0.994	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011

Batch ID: P433846

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

Reference Method: SM 5310 B-2011
Batch ID: P433846

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430088	Organic Carbon	1.24	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2430103
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	64.6	P	30 - 160

Lab Sample ID: 2430104
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	86.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.8	P	30 - 160
EPA 8321B	Diuron-d6	43.0	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.2	P	30 - 160
EPA 8321B	Primidone-d5	71.8	P	30 - 160
EPA 8321B	Sucralose-d6	103	P	30 - 160

Lab Sample ID: 2430105
Field Sample ID: G3NW0135

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	152	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	47.4	P	30 - 160
EPA 8321B	Diuron-d6	62.3	P	30 - 160
EPA 8321B	Endothall-d6	109	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	90.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.7	P	30 - 160
EPA 8321B	Primidone-d5	72.7	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2430112
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.4	P	37 - 129
EPA 8270E	Decachlorobiphenyl	69.3	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	34.3	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	74.3	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	54.8	P	28 - 102
EPA 8276	PCNB	68.1	P	49 - 115

Lab Sample ID: 2430113
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	91.4	P	20 - 200
EPA 8270E	Simazine-d10	90.5	P	62 - 142
EPA 8270E	Terbufos-d10	107	P	58 - 132
EPA 8270E	Terphenyl-d14	90.9	P	52 - 137

Quality Assurance Report Surrogates

Lab Sample ID: 2430114
Field Sample ID: G3NW0450

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	98.3	P	37 - 129
EPA 8270E	Decachlorobiphenyl	63.0	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	46.6	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	54.7	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	62.2	P	28 - 102
EPA 8276	PCNB	81.8	P	49 - 115

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A120968

Included Lab Sample IDs: 2430087, 2430089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.1	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120971

Included Lab Sample IDs: 2430087, 2430089

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

Reference Method: EPA 8321B

Run ID: A121009

Included Lab Sample IDs: 2430104, 2430105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	74.1	74.7	P/P	60 - 160
AMPA	86.4	71.9	P/P	60 - 160
Endothall	93.6	87.4	P/P	60 - 160
Endothall	96.4	112	P/P	60 - 160
Glufosinate	90.6	88.6	P/P	60 - 160
Glufosinate	93.1	84.5	P/P	60 - 160
Glyphosate	102	99.5	P/P	60 - 160
Glyphosate	107	97.5	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A121019

Included Lab Sample IDs: 2430088, 2430090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.5	P/P	90 - 110
Total-P	98.5	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A121022

Included Lab Sample IDs: 2430104, 2430105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	109	125	P/P	60 - 160
Sucralose	96.6	94.8	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A121026

Included Lab Sample IDs: 2430087, 2430089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.9	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A121033

Included Lab Sample IDs: 2430088, 2430090

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

Reference Method: SM 5310 B-2011

Run ID: A121033

Included Lab Sample IDs: 2430088, 2430090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.3	94.4	P/P	90 - 110
Organic Carbon	95.6	95.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A121038

Included Lab Sample IDs: 2430104

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	95.8	96.3	P/P	50 - 150
2,4,5-T	90.0	85.0	P/P	50 - 150
3-Hydroxycarbofuran	112	94.8	P/P	60 - 150
Acetaminophen	82.0	85.3	P/P	60 - 160
Acetamiprid	109	91.7	P/P	50 - 150
Afidopyropen	74.5	60.5	P/P	50 - 150
Aldicarb	110	93.0	P/P	60 - 150
Aldicarb Sulfone	109	89.9	P/P	50 - 150
Aldicarb Sulfoxide	104	86.1	P/P	50 - 150
Bentazon	116	92.4	P/P	50 - 160
Benzovindiflupyr	84.4	65.6	P/P	50 - 150
Carbamazepine	96.2	72.9	P/P	60 - 150
Carbaryl	106	133	P/P	60 - 150
Carbofuran	85.6	105	P/P	50 - 150
Clothianidin	93.6	94.1	P/P	60 - 150
Dinotefuran	127	86.9	P/P	50 - 150
Diuron	84.9	60.1	P/P	60 - 160
Fenuron	104	96.7	P/P	60 - 150
Fluridone	98.3	89.8	P/P	60 - 160
Hydrocodone	115	113	P/P	60 - 150
Ibuprofen	109	127	P/P	50 - 160
Imazapyr	112	89.9	P/P	50 - 150
Imidacloprid	99.2	81.0	P/P	60 - 150
Linuron	115	107	P/P	60 - 150
Mandestrobin	84.8	116	P/P	50 - 150
MCPP	102	86.1	P/P	50 - 150
Methiocarb	94.6	80.2	P/P	50 - 150
Methomyl	105	96.5	P/P	50 - 150
Naproxen	88.0	61.5	P/P	50 - 160
Oxamyl	105	100	P/P	50 - 150
Primidone	99.1	90.3	P/P	60 - 150
Propoxur	116	110	P/P	50 - 150
Pyraclostrobin	102	89.9	P/P	60 - 150
Silvex	98.3	90.4	P/P	50 - 150
Thiamethoxam	108	90.9	P/P	50 - 150
Tolfenpyrad	127	82.2	P/P	60 - 150
Triclopyr	99.0	88.2	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A121041

Included Lab Sample IDs: 2430112, 2430114

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

Reference Method: EPA 8270E

Run ID: A121041

Included Lab Sample IDs: 2430112, 2430114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.0		P	80 - 120
PCB-1260	112		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121046

Included Lab Sample IDs: 2430088, 2430090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	96.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A121050

Included Lab Sample IDs: 2430121, 2430122, 2430123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	102	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	100	P/P	90 - 110
Potassium	96.8	97.1	P/P	90 - 110
Sodium	99.0	99.7	P/P	90 - 110
Strontium	98.0	99.3	P/P	90 - 110
Tin	102	102	P/P	90 - 110
Titanium	102	102	P/P	90 - 110
Vanadium	101	101	P/P	90 - 110
Zinc	102	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121054

Included Lab Sample IDs: 2430121, 2430122, 2430123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	100	P/P	90 - 110
Antimony	101	101	P/P	90 - 110
Arsenic	97.5	98.0	P/P	90 - 110
Barium	101	102	P/P	90 - 110
Beryllium	96.9	95.9	P/P	90 - 110
Boron	99.6	103	P/P	90 - 110
Cadmium	102	101	P/P	90 - 110
Chromium	100	102	P/P	90 - 110
Cobalt	93.2	93.9	P/P	90 - 110
Copper	92.1	93.2	P/P	90 - 110
Lead	93.3	92.9	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Molybdenum	98.4	98.9	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Silver	97.0	96.9	P/P	90 - 110
Thallium	99.0	98.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121056
Included Lab Sample IDs: 2430105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	108	87.8	P/P	50 - 150
2,4,5-T	75.9	96.7	P/P	50 - 150
Acetaminophen	82.1	99.4	P/P	60 - 160
Acetamiprid	98.7	112	P/P	50 - 150
Afidopyropen	118	106	P/P	50 - 150
Bentazon	109	114	P/P	50 - 160
Benzovindiflupyr	93.5	115	P/P	50 - 150
Carbamazepine	131	125	P/P	60 - 150
Clothianidin	123	97.0	P/P	60 - 150
Dinotefuran	116	96.8	P/P	50 - 150
Diuron	81.7	101	P/P	60 - 160
Fenuron	123	129	P/P	60 - 150
Fluridone	143	87.1	P/P	60 - 160
Hydrocodone	115	110	P/P	60 - 150
Ibuprofen	89.0	103	P/P	50 - 160
Imazapyr	99.0	94.2	P/P	50 - 150
Imidacloprid	107	85.9	P/P	60 - 150
Linuron	97.0	64.6	P/P	60 - 150
Mandestrobin	85.3	91.5	P/P	50 - 150
MCPP	88.8	97.8	P/P	50 - 150
Naproxen	61.9	79.0	P/P	50 - 160
Primidone	107	96.5	P/P	60 - 150
Pyraclostrobin	109	102	P/P	60 - 150
Silvex	108	96.8	P/P	50 - 150
Thiamethoxam	106	88.5	P/P	50 - 150
Tolfenpyrad	91.8	96.7	P/P	60 - 150
Triclopyr	112	99.8	P/P	50 - 150

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A121057
Included Lab Sample IDs: 2430087, 2430089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.8	97.5	P/P	90 - 110
Chloride	97.5	97.4	P/P	90 - 110
Sulfate	96.6	97.6	P/P	90 - 110
Sulfate	97.6	97.4	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A121067
Included Lab Sample IDs: 2430087, 2430089

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	103	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A121077
Included Lab Sample IDs: 2430112, 2430114

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A121077

Included Lab Sample IDs: 2430112, 2430114

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121080

Included Lab Sample IDs: 2430121, 2430122, 2430123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Manganese	97.0	98.4	P/P	90 - 110
Nickel	94.1	94.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121088

Included Lab Sample IDs: 2430112, 2430114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	105		P	80 - 120
Alpha-BHC	111		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	104		P	80 - 120
Beta-Cyfluthrin	96.0		P	80 - 120
Bifenthrin	99.4		P	80 - 120
Chlorothalonil	94.6		P	80 - 120
Cis-Nonachlor	89.1		P	80 - 120
Cypermethrin	95.9		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	107		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	106		P	80 - 120
Deltamethrin	102		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	91.5		P	80 - 120
Dieldrin	96.5		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	86.6		P	80 - 120
Endrin	97.9		P	80 - 120
Endrin Aldehyde	87.9		P	80 - 120
Endrin Ketone	107		P	80 - 120
Esfenvalerate	106		P	80 - 120
Ethalfuralin	83.0		P	80 - 120
Fenpropathrin	97.8		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	98.2		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Kepone	56.8*		F	80 - 120
Lambda-Cyhalothrin	105		P	80 - 120
Methoprene	116		P	80 - 120
Methoxychlor	98.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A121088

Included Lab Sample IDs: 2430112, 2430114

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
MGK-264	97.7		P	80 - 120
Mirex	111		P	80 - 120
Oxychlordane	109		P	80 - 120
Permethrin	97.9		P	80 - 120
Phenothrin	102		P	80 - 120
Piperonyl Butoxide	110		P	80 - 120
Prallethrin	103		P	80 - 120
Tau-Fluvalinate	107		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	96.9		P	80 - 120
Triclosan Methyl	93.3		P	80 - 120
Trifluralin	111		P	80 - 120

Reference Method: EPA 8270E

Run ID: A121110

Included Lab Sample IDs: 2430113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	91.7		P	80 - 120
Avobenzone	90.6		P	80 - 120
Dechlorane 602	97.7		P	80 - 120
Dechlorane 603	91.7		P	80 - 120
Dechlorane Plus	90.1		P	80 - 120
Hexabromobenzene	94.4		P	80 - 120
Octinoxate	96.4		P	80 - 120
Oxybenzone	101		P	80 - 120
PBB-153	90.6		P	80 - 120
PBDE-47	95.4		P	80 - 120
PBDE-99	94.9		P	80 - 120
Pentabromotoluene	98.9		P	80 - 120
Tetradecachloro-m-terphenyl	82.3		P	80 - 120
Tri-o-cresyl Phosphate	96.9		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	97.5		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	97.4		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	102		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121131

Included Lab Sample IDs: 2430088, 2430090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	99.1	P/P	90 - 110
Ammonia-N	99.1	98.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121158

Included Lab Sample IDs: 2430123

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.5	99.6	P/P	90 - 110
Nickel	97.4	95.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121169
Included Lab Sample IDs: 2430113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.0		P	80 - 120
Alachlor	91.1		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	90.8		P	80 - 120
Azinphos Methyl	93.4		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	97.7		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	88.0		P	80 - 120
Chlorpyrifos Ethyl	86.5		P	80 - 120
Chlorpyrifos Methyl	96.5		P	80 - 120
Coumaphos	95.3		P	80 - 120
Cyanazine	99.8		P	80 - 120
Cyprodinil	112		P	80 - 120
Demeton	101		P	80 - 120
Diazinon	99.7		P	80 - 120
Difenoconazole	94.7		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	84.0		P	80 - 120
Disulfoton	98.3		P	80 - 120
Dithiopyr	99.8		P	80 - 120
EPTC	100		P	80 - 120
Ethion	88.8		P	80 - 120
Ethoprop	90.9		P	80 - 120
Etridiazole	98.0		P	80 - 120
Fenamiphos	85.5		P	80 - 120
Fenbuconazole	86.2		P	80 - 120
Fipronil	85.5		P	80 - 120
Fipronil Desulfinyl	98.4		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	114		P	80 - 120
Flumioxazin	93.5		P	80 - 120
Flutolanil	98.9		P	80 - 120
Fluxapyroxad	93.5		P	80 - 120
Fonofos	96.9		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	92.4		P	80 - 120
Iprodione	83.5		P	80 - 120
Loratadine	87.6		P	80 - 120
Malathion	85.7		P	80 - 120
Metalaxyl	88.6		P	80 - 120
Metolachlor	99.6		P	80 - 120
Metribuzin	97.3		P	80 - 120
Mevinphos	87.4		P	80 - 120
Molinate	84.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121169
Included Lab Sample IDs: 2430113

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	87.7		P	80 - 120
Naled	110		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	96.2		P	80 - 120
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	99.3		P	80 - 120
Parathion Methyl	89.2		P	80 - 120
Pendimethalin	98.9		P	80 - 120
Phenytol	96.4		P	80 - 120
Phorate	98.7		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	99.3		P	80 - 120
Propargite	97.2		P	80 - 120
Propiconazole	84.4		P	80 - 120
Pyraflufen Ethyl	98.1		P	80 - 120
Pyridaben	96.7		P	80 - 120
Pyriproxyfen	98.9		P	80 - 120
Simazine	97.5		P	80 - 120
Stiophos	89.8		P	80 - 120
Sulfentrazone	98.3		P	80 - 120
Tebuconazole	97.9		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbutylazine	89.1		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	99.2		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A121245
Included Lab Sample IDs: 2430088, 2430090

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	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)	101					3.38	
EPA 180.1 Rev. 2.0	Turbidity	98.9					6.25	
EPA 200.7 Rev. 4.4	Calcium	102	102	104				1.21
	Iron	104	102	103	104			1.24
	Magnesium	104	101	103	102			1.35
	Potassium	94.0	91.4	93.0	98.3			1.26
	Sodium	97.3	98.2	102				0.0302
	Strontium	96.4	94.8	95.5	101			0.713
	Tin	98.6	99.1	97.6	95.9			1.69
	Titanium	101	102	100	103			2.08
	Vanadium	100	102	99.9	104			2.05
	Zinc	101	101	98.9	99.9			1.91
EPA 200.8 Rev. 5.4	Aluminum	101	98.8	97.7	98.5			1.14
	Aluminum	100	99.6	100	99.0			0.703
	Antimony	103	105	105	106			0.407
	Arsenic	99.5	98.3	99.5	99.3			1.16
	Barium	104	106	105	106			1.13
	Beryllium	96.3	96.2	98.0	98.4			1.89
	Boron	104	102	101	104			0.628
	Cadmium	101	103	104	103			1.04
	Chromium	99.1	97.4	97.4	98.0			0.0312
	Cobalt	96.4	93.8	93.6	91.5			0.120
	Copper	95.2	94.0	94.1	89.0			0.0690
	Lead	93.9	94.2	94.5	93.0			0.344
	Manganese	99.4	97.2	100	99.2			2.49
	Molybdenum	99.6	101	101	103			0.522
	Nickel	96.0	91.7	92.0	89.8			0.306
	Nickel	98.6	99.7	98.7	95.6			0.946
	Selenium	100	98.4	98.5	97.0			0.112
	Silver	111	110	109	110			1.30
	Thallium	101	105	105	104			0.170
EPA 300.0 Rev. 2.1	Chloride	98.3	98.9	98.1			0.868	
	Sulfate	96.4	97.3	95.8			3.15	
EPA 350.1 Rev. 2.0	Ammonia-N	94.6	98.0	99.8				1.62
	Ammonia-N	96.0	99.2	102				2.08
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	106	107	105				1.13
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	100	100				0.0
EPA 365.1 Rev. 2.0	Total-P	99.7	107	106				0.825
EPA 8270E	2-Ethylhexyl	103	92.4	91.1				1.36
	2,3,4,5-tetrabromobenzoate (EHTBB)							
	Acetochlor	87.2	91.7	98.5				7.14
	Alachlor	101	88.9	101				12.5
	Aldrin	65.6	32.3	37.6				14.9
	Alpha-BHC	102	81.1	89.6				9.96
	Alpha-Chlordane	63.8	45.1	44.7				0.887
	Ametryn	123	139	144				3.61
	Atrazine	91.2						4.10
	Atrazine Desethyl	77.4	65.5	72.2				7.82
	Avobenzone	131	132	126				4.88
	Azinphos Methyl	140	141	124				13.0
	Azoxystrobin	104	125	138				9.90
	Beta-BHC	83.8	78.2	85.6				9.08
	Beta-Cyfluthrin	95.7	60.9	61.7				1.38

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Bifenthrin	68.7	49.0	50.4			2.80
	Bromacil	104	98.7	98.8			0.111
	Butylate	62.0	55.0	59.1			7.29
	Caffeine	96.1	102	99.9			2.00
	Carbophenothion	102	101	100			0.689
	Carfentrazone Ethyl	129	114	116			2.24
	Chlorfenapyr	96.8	79.9	84.3			5.33
	Chlorothalonil	61.4	72.1	83.2			14.3
	Chlorpyrifos Ethyl	84.6	83.7	89.6			6.76
	Chlorpyrifos Methyl	102	87.8	97.6			10.6
	Cis-Nonachlor	57.7	41.5	41.6			0.0414
	Coumaphos	158	135	149			9.91
	Cyanazine	129	131	134			2.65
	Cypermethrin	111	72.9	72.9			0.0096
	Cyprodinil	103	84.4	89.4			5.80
	Dacthal	87.7	61.9	71.2			14.0
	DDD-p,p'	64.2	51.3	50.0			2.50
	DDE-p,p'	68.6	51.2	53.5			4.47
	DDT-p,p'	61.9	44.9	45.3			0.914
	Dechlorane 602	94.6	77.7	65.3			17.4
	Dechlorane 603	113	117	115			1.84
	Dechlorane Plus	121	98.0	101			3.39
	Delta-BHC	85.6	91.5	99.5			8.38
	Deltamethrin	106	77.8	69.3			11.6
	Demeton	74.8	81.6	85.3			4.47
	Diazinon	99.2	110	114			3.59
	Dichlobenil	60.7	49.9	54.0			7.91
	Dicofol	68.6	45.4	44.9			1.21
	Dieldrin	65.4	45.3	49.2			8.21
	Difenoconazole	179	129	160			21.6
	Dimethenamid	93.0	83.8	88.5			5.35
	Dimethomorph	214	233	252			7.79
	Disulfoton	96.5	105	107			1.89
	Dithiopyr	93.6	97.5	97.5			0.0040
	Endosulfan I	76.8	52.7	52.3			0.808
	Endosulfan II	69.4	59.5	61.0			2.46
	Endosulfan Sulfate	70.2	54.6	52.4			4.13
	Endrin	71.8	49.5	53.2			7.22
	Endrin Aldehyde	62.0	58.3	44.1			27.7
	Endrin Ketone	85.0	85.3	73.9			14.3
	EPTC	64.5	53.9	58.3			7.86
	Esfenvalerate	107	73.5	85.9			15.5
	Ethalfuralin	88.4	54.7	59.6			8.64
	Ethion	79.4	61.4	67.8			9.88
	Ethoprop	97.9	101	107			5.40
	Etridiazole	66.5	64.0	65.9			3.06
	Fenamiphos	92.8	97.4	99.3			1.89
	Fenbuconazole	108	88.9	97.3			8.26
	Fenpropathrin	75.8	45.7	48.0			4.92
	Fipronil	96.5	95.0	98.9			4.09
	Fipronil Desulfinyl	99.8	89.3	97.0			7.41
	Fipronil Sulfide	101	102	95.6			6.22
	Fipronil Sulfone	103	93.0	99.2			5.71
	Fluazifop-P-butyl	103	92.2	99.4			7.46

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fludioxonil	95.9	74.4	87.1			15.7
	Flumioxazin	179	136	171			22.6
	Flutolanil	89.2	77.4	71.3			8.16
	Fluxapyroxad	101	85.4	93.9			9.45
	Fonofos	103	97.6	95.5			2.24
	Gamma-BHC	73.3	70.1	79.0			12.0
	Gamma-Chlordane	71.1	46.6	48.0			2.84
	Heptachlor	61.8	38.4	41.9			8.72
	Heptachlor Epoxide	79.4	52.5	53.4			1.75
	Hexabromobenzene	110	114	113			0.802
	Hexachlorobenzene	55.1	37.7	40.7			7.67
	Hexazinone	91.9	103	92.9			9.83
	Imazalil	86.0	96.6	95.5			1.15
	Iprodione	82.4	83.6	73.6			12.7
	Kepone	81.6	68.4	66.6			2.73
	Lambda-Cyhalothrin	82.1	56.2	62.3			10.4
	Loratadine	174	185	162			13.0
	Malathion	102	90.3	87.9			2.69
	Metalaxyl	86.9	105	104			0.713
	Methoprene	75.9	50.2	51.2			2.04
	Methoxychlor	111	77.2	69.8			9.98
	Metolachlor	103	117	90.9			21.8
	Metribuzin	94.9	105	94.3			11.1
	Mevinphos	101	108	106			1.69
	MGK-264	76.6	71.3	68.8			3.50
	Mirex	67.0	41.8	44.6			6.39
	Molinate	54.7	60.0	52.7			12.9
	Myclobutanil	98.4	98.2	93.9			4.46
	Naled	51.7	52.8	54.7			3.65
	Napropamide	89.8	80.8	78.6			2.72
	Norflurazon	99.9	93.2	84.9			7.52
	Octinoxate	121	129	122			5.44
	Oxadiazon	84.4	94.7	89.3			5.86
	Oxybenzone	115	133	122			8.78
	Oxychlordane	82.9	51.4	52.3			1.72
	Oxyfluorfen	109	126	120			4.70
	Parathion Ethyl	93.4	102	96.9			5.61
	Parathion Methyl	104	106	100			5.72
	PBB-153	112	113	113			0.153
	PBDE-47	102	98.4	93.5			5.14
	PBDE-99	101	87.3	81.4			6.97
	PCB-1016	64.4	53.6	57.8			7.57
	PCB-1260	81.5	66.5	66.3			0.232
	Pendimethalin	103	104	100			3.98
	Pentabromotoluene	103	110	104			5.63
	Permethrin	83.4	60.6	84.9			33.4
	Phenothrin	73.7	55.1	58.4			5.77
	Phenytoin	50.4	62.8	56.8			9.92
	Phorate	110	111	110			0.817
	Piperonyl Butoxide	149	147	141			3.67
	Prallethrin	80.8	58.7	69.9			17.3
	Prodiamine	39.7	37.0	39.4			6.45
	Prometon	97.9	117	113			2.93
	Prometryn	113	130	114			12.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pronamide	111	125	117		6.98
	Propanil	101	105	101		4.25
	Propargite	86.5	69.7	68.4		1.89
	Propiconazole	91.5	96.9	86.7		11.2
	Pyraflufen Ethyl	109	104	92.4		12.0
	Pyridaben	137	135	101		23.9
	Pyriproxyfen	97.2	96.5	88.9		8.15
	Simazine	92.1	89.8	86.3		2.84
	Stirophos	69.0	54.0	48.7		10.3
	Sulfentrazone	68.9	91.6	89.1		2.69
	Tau-Fluvalinate	111	73.7	97.8		28.0
	Tebuconazole	70.0	64.3	56.1		13.7
	Terbufos	107	123	124		1.35
	Terbutylazine	87.8	89.3	85.3		4.58
	Tetradecachloro-m-terphenyl	123	106	126		17.8
	Tetramethrin	106	80.1	97.7		16.7
	Thiobencarb	96.2	94.4	88.3		6.74
	Trans-Nonachlor	89.9	53.8	57.4		6.54
	Tri-o-cresyl Phosphate	117	123	116		5.63
	Triadimefon	94.1	94.6	93.5		1.19
	Triclosan Methyl	98.1	61.7	55.4		10.7
	Trifluralin	86.5	48.1	48.6		1.08
	Tris(1-chloro-2-propyl) phosphate (TCPP)	117	126	111		11.3
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118	119	111		6.68
	Tris(2-chloroethyl) phosphate (TCEP)	117	118	111		5.70
EPA 8276	Chlordane	83.8	78.1	75.0		4.00
	Toxaphene	96.0	92.4	93.6		1.36
EPA 8321B	2,4-D	71.5	88.5	97.5		8.76
	2,4,5-T	70.0	113	109		3.58
	3-Hydroxycarbofuran	90.4	88.4	92.2		4.16
	Acesulfame K	101	155	157		0.818
	Acesulfame K	110	117	119		1.82
	Acetaminophen	73.7	62.7	64.4		2.78
	Acetamiprid	76.5	29.0	38.9		29.1
	Afidopyropen	46.7	50.0	65.0		26.1
	Aldicarb	65.2	60.9	58.3		4.32
	Aldicarb Sulfone	81.0	91.6	98.8		7.52
	Aldicarb Sulfoxide	86.8	32.0	36.6		13.5
	AMPA	81.6	49.0	51.3		3.01
	AMPA	81.8	95.8	106		10.2
	Bentazon	146				4.45
	Benzovindiflupyr	63.5	61.7	51.1		18.9
	Carbamazepine	53.7	34.1	37.4		7.87
	Carbaryl	87.9	70.2	92.5		27.4
	Carbofuran	65.1	57.1	56.0		1.89
	Clothianidin	96.0	61.0	57.3		6.20
	Dinotefuran	140	48.1	53.3		10.4
	Diuron	54.7	34.3	32.4		5.87
	Endothall	103	109	103		5.59
	Endothall	97.7	110	97.5		11.8
	Fenuron	103	41.0	38.6		6.09

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fluridone	107				27.2
	Glufosinate	98.0	88.1	86.4		1.94
	Glufosinate	101	96.1	95.3		0.823
	Glyphosate	114	95.8	121		6.79
	Glyphosate	120	99.0	99.5		0.463
	Hydrocodone	92.2	44.5	44.4		0.235
	Ibuprofen	60.5	59.5	73.8		21.5
	Imazapyr	96.2	104	97.6		4.61
	Imidacloprid	78.3	80.1	86.8		7.98
	Linuron	92.0	59.5	57.4		3.64
	Mandestrobin	83.7	92.2	80.6		13.4
	MCPP	84.7	115	105		8.32
	Methiocarb	65.1	65.5	85.7		26.7
	Methomyl	77.3	81.8	82.2		0.428
	Naproxen	54.8	73.0	55.3		27.6
	Oxamyl	80.2	84.7	96.0		12.6
	Primidone	97.6	64.1	64.0		0.0428
	Propoxur	68.0	68.8	75.0		8.70
	Pyraclostrobin	64.4	62.1	65.7		5.58
	Silvex	81.1	105	107		2.28
	Sucralose	93.2	95.0	102		6.38
	Sucralose	92.4	89.0	90.6		1.65
	Thiamethoxam	90.8	58.3	55.8		4.32
	Tolfenpyrad	50.5	64.8	54.8		16.7
	Triclopyr	70.2	101	98.5		2.75
SM 2320 B-2011	Total Alkalinity	98.2			3.31	
SM 2540 C-2015	TDS	93.6			1.11	
SM 2540 D-2015	TSS	93.1				
SM 4500-F- C-2011	Fluoride	97.2	99.9	101		0.994
SM 5310 B-2011	Organic Carbon	95.2	95.4	96.7		1.24

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2430087, 2430089
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2430087, 2430089
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2430121, 2430122, 2430123
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2430121, 2430122, 2430123
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2430087, 2430089
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2430087, 2430089
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2430088, 2430090
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2430088, 2430090
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2430088, 2430090
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2430088, 2430090
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2430113
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2430112, 2430114
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2430113
EPA 8270E	PCBs in water matrices by GC/MS/MS	2430112, 2430114
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2430112, 2430114
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2430103

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2430104, 2430105
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2430087, 2430089
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2430121, 2430122, 2430123
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2430087, 2430089
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2430087, 2430089
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2430087, 2430089
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2430088, 2430090

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	08/10/2023			08/10/2023 14:10	Samantha L Bates	2430087
	08/10/2023			08/10/2023 14:11	Samantha L Bates	2430089
EPA 180.1 Rev. 2.0	08/10/2023			08/10/2023 13:19	Alexis Price	2430087
	08/10/2023			08/10/2023 13:20	Alexis Price	2430089
EPA 200.7 Rev. 4.4	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 18:55	Chase Roberts	2430121
	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 19:01	Chase Roberts	2430122
EPA 200.8 Rev. 5.4	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 19:06	Chase Roberts	2430123
	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 18:25	Emily M Philpot	2430121
	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 18:35	Emily M Philpot	2430122
	08/10/2023	08/14/2023 14:30	George D Taylor	08/15/2023 18:44	Emily M Philpot	2430123
	08/10/2023	08/14/2023 14:30	George D Taylor	08/16/2023 15:56	Emily M Philpot	2430121
	08/10/2023	08/14/2023 14:30	George D Taylor	08/16/2023 16:03	Emily M Philpot	2430122
	08/10/2023	08/14/2023 14:30	George D Taylor	08/16/2023 16:10	Emily M Philpot	2430123
EPA 300.0 Rev. 2.1	08/10/2023	08/18/2023 13:25	George D Taylor	08/21/2023 17:07	Conrad Hartmann	2430123
	08/10/2023			08/18/2023 22:18	James L Waggeberby	2430089
	08/10/2023			08/19/2023 02:56	James L Waggeberby	2430087
EPA 350.1 Rev. 2.0	08/10/2023			08/18/2023 15:51	Khloe J Berg	2430088
	08/10/2023			08/18/2023 16:03	Khloe J Berg	2430090
EPA 351.2 Rev. 2.0	08/10/2023	08/14/2023 12:37	Ping Hua	08/15/2023 14:12	Ping Hua	2430088
	08/10/2023	08/14/2023 12:37	Ping Hua	08/15/2023 14:13	Ping Hua	2430090
EPA 353.2 Rev. 2.0	08/10/2023			08/25/2023 10:06	Beverly Y. Sanders	2430088
	08/10/2023			08/25/2023 10:07	Beverly Y. Sanders	2430090
EPA 365.1 Rev. 2.0	08/10/2023	08/11/2023 14:24	Alexis Price	08/14/2023 13:22	Simonne.V. Calhoun	2430088
	08/10/2023	08/11/2023 14:24	Alexis Price	08/14/2023 13:30	Simonne.V. Calhoun	2430090
EPA 8270E	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/14/2023 22:14	Julie Wi	2430112
	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/14/2023 22:43	Julie Wi	2430114
	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/14/2023 23:34	Julie Wi	2430112
	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/15/2023 00:34	Julie Wi	2430114
	08/10/2023	08/14/2023 08:30	Rasheda Ghaffari	08/16/2023 22:55	Vandana T. Nagar	2430113
EPA 8276	08/10/2023	08/14/2023 08:30	Rasheda Ghaffari	08/17/2023 21:15	Arthur Maknenko	2430113
	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/15/2023 05:14	Arthur Maknenko	2430112
	08/10/2023	08/11/2023 08:00	Fe-Val Siddell	08/15/2023 07:05	Arthur Maknenko	2430114
EPA 8321B	08/10/2023	08/10/2023 11:00	Hana Lee	08/10/2023 16:35	Tae K Lee	2430104
	08/10/2023	08/10/2023 11:00	Hana Lee	08/12/2023 00:05	Tae K Lee	2430104
	08/10/2023	08/11/2023 09:00	Hana Lee	08/11/2023 10:47	Tae K Lee	2430105
	08/10/2023	08/11/2023 09:00	Hana Lee	08/12/2023 01:15	Tae K Lee	2430105
	08/10/2023	08/11/2023 09:00	Hoor Shaik	08/15/2023 11:13	Juyoung Kim	2430104
SM 2320 B-2011	08/10/2023	08/11/2023 09:00	Hoor Shaik	08/15/2023 19:41	Juyoung Kim	2430105
	08/10/2023	08/14/2023 09:00	Hoor Shaik	08/14/2023 23:00	Juyoung Kim	2430103
	08/10/2023			08/15/2023 03:34	Chandler E Cox	2430087

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	08/10/2023			08/15/2023 03:41	Chandler E Cox	2430089
SM 2340 B-2011	08/10/2023			08/15/2023 18:55	Chase Roberts	2430121
	08/10/2023			08/15/2023 19:01	Chase Roberts	2430122
	08/10/2023			08/15/2023 19:06	Chase Roberts	2430123
SM 2540 C-2015	08/10/2023			08/11/2023 14:45	Dana G. Hughes	2430087, 2430089
SM 2540 D-2015	08/10/2023			08/11/2023 14:45	Dana G. Hughes	2430087, 2430089
SM 4500-F- C-2011	08/10/2023			08/15/2023 20:17	Dale L. Simmons	2430087
	08/10/2023			08/15/2023 20:23	Dale L. Simmons	2430089
SM 5310 B-2011	08/10/2023			08/14/2023 16:41	Elise M. Gillis	2430088
	08/10/2023			08/14/2023 19:01	Elise M. Gillis	2430090