

Chemical Analysis Report

SO-DIST-2023-12-01-01

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

Event Description: **2023 SMP: SARASOTA + BIOLOGY**
Request ID: **RQ-2023-11-27-63**
Customer: **SO-DIST**
Project ID: **SMP**

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FLDEP South District Office
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 03-JAN-2024 15:31

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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: Matheny Creek at Beneva Rd

Collection Date/Time: 11/30/2023 09:20

Field ID: G3SD0092

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2454000	EPA 8321B	2,4-D	0.027		ug/L	P438413	
		Acesulfame K	0.26	I	ug/L	P438435	
		2,4,5-T	0.0040	U	ug/L	P438413	
		AMPA	0.85		ug/L	P438435	
		Acetaminophen	0.0080	U	ug/L	P438413	
		Acetamiprid	0.0020	U	ug/L	P438413	
		Endothall	0.25	U	ug/L	P438435	
		Glufosinate	0.10	U	ug/L	P438435	
		Glyphosate	2.9		ug/L	P438435	
		Afidopyropen	0.0020	U	ug/L	P438413	
		Bentazon	0.0059		ug/L	P438413	
		Sucralose	0.18		ug/L	P438435	
		Benzovindiflupyr	0.0020	U	ug/L	P438413	
		Carbamazepine	8.0E-04	U	ug/L	P438413	
		Clothianidin	0.0020	U	ug/L	P438413	
		Dinotefuran	0.0020	U	ug/L	P438413	
		Diuron	0.0020	U	ug/L	P438413	
		Fenuron	0.032	U	ug/L	P438413	
		Fluridone	0.052		ug/L	P438413	
		Imazapyr	3.6		ug/L	P438413	
		Hydrocodone	0.0020	U	ug/L	P438413	
		Ibuprofen	0.080	U	ug/L	P438413	
		Imidacloprid	0.014		ug/L	P438413	
		Linuron	0.0040	U	ug/L	P438413	
		Mandestrobin	0.0020	U	ug/L	P438413	
		MCPP	0.0020	U	ug/L	P438413	
		Naproxen	0.0080	U	ug/L	P438413	
		Primidone	0.0040	U	ug/L	P438413	
		Pyraclostrobin	0.0020	U	ug/L	P438413	
		Silvex	0.0040	U	ug/L	P438413	
		Thiamethoxam	0.0020	U	ug/L	P438413	
		Tolfenpyrad	0.0020	U	ug/L	P438413	
		Triclopyr	0.0040	U	ug/L	P438413	

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: North Creek (tidal) at US 41

Collection Date/Time: 11/30/2023 09:35

Field ID: G3SD0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2454001	EPA 8321B	2,4-D	0.044		ug/L	P438413	
		Acesulfame K	0.10	U	ug/L	P438435	
		2,4,5-T	0.0040	U	ug/L	P438413	
		AMPA	1.0	U	ug/L	P438435	
		Acetaminophen	0.0080	U	ug/L	P438413	
		Acetamiprid	0.0020	U	ug/L	P438413	
		Endothall	0.25	U	ug/L	P438435	
		Glufosinate	1.0	U	ug/L	P438435	
		Glyphosate	1.3	I	ug/L	P438435	
		Afidopyropen	0.0020	U	ug/L	P438413	
		Bentazon	0.011		ug/L	P438413	
		Sucralose	0.52		ug/L	P438435	
		Benzovindiflupyr	0.0020	U	ug/L	P438413	
		Carbamazepine	8.0E-04	U	ug/L	P438413	
		Clothianidin	0.0033	I	ug/L	P438413	
		Dinotefuran	0.0029	I	ug/L	P438413	
		Diuron	0.076		ug/L	P438413	
		Fenuron	0.032	U	ug/L	P438413	
		Fluridone	0.052		ug/L	P438413	
		Imazapyr	0.22		ug/L	P438413	
		Hydrocodone	0.0020	U	ug/L	P438413	
		Ibuprofen	0.080	U	ug/L	P438413	
		Imidacloprid	0.0057	I	ug/L	P438413	
		Linuron	0.0040	U	ug/L	P438413	
		Mandestrobin	0.0020	U	ug/L	P438413	
		MCPP	0.0020	U	ug/L	P438413	
		Naproxen	0.0080	U	ug/L	P438413	
		Primidone	0.0084	I	ug/L	P438413	
		Pyraclostrobin	0.0020	U	ug/L	P438413	
		Silvex	0.0040	U	ug/L	P438413	
		Thiamethoxam	0.0020	U	ug/L	P438413	
		Tolfenpyrad	0.0020	U	ug/L	P438413	
		Triclopyr	0.0040	U	ug/L	P438413	

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.

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

Sample Location: South Creek near Legacy

Collection Date/Time: 11/30/2023 09:55

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2453988	EPA 8270E	Aldrin	0.67	U	ng/L	P438751	
		Alpha-BHC	0.10	U	ng/L	P438751	
		Alpha-Chlordane	0.21	U	ng/L	P438751	
		PCB-1016	2.1	U	ng/L	P438751	
		Beta-BHC	0.10	U	ng/L	P438751	
		PCB-1221	2.1	U	ng/L	P438751	
		Beta-Cyfluthrin	1.3	U	ng/L	P438751	
		PCB-1232	2.1	U	ng/L	P438751	
		Bifenthrin	0.52	U	ng/L	P438751	
		PCB-1242	2.1	U	ng/L	P438751	
		Carbophenothion	0.93	U	ng/L	P438751	MS
		PCB-1248	2.1	U	ng/L	P438751	
		Chlorothalonil	3.7	U	ng/L	P438751	
		PCB-1254	2.1	U	ng/L	P438751	
		Cis-Nonachlor	0.21	U	ng/L	P438751	
		PCB-1260	2.1	U	ng/L	P438751	
		Cypermethrin	1.6	U	ng/L	P438751	MS
		Dacthal	0.16	U	ng/L	P438751	
		DDD-p,p'	0.26	U	ng/L	P438751	
		DDE-p,p'	0.21	U	ng/L	P438751	
		DDT-p,p'	0.83	U	ng/L	P438751	
		Delta-BHC	0.41	U	ng/L	P438751	
		Deltamethrin	1.3	U	ng/L	P438751	
		Dichlobenil	0.26	U	ng/L	P438751	
		Dicofol	1.3	U	ng/L	P438751	
		Dieldrin	0.41	U	ng/L	P438751	
		Endosulfan I	0.41	U	ng/L	P438751	
		Endosulfan II	0.93	U	ng/L	P438751	
		Endosulfan Sulfate	0.31	U	ng/L	P438751	
		Endrin	0.93	U	ng/L	P438751	
		Endrin Aldehyde	0.78	U	ng/L	P438751	
		Endrin Ketone	0.41	U	ng/L	P438751	
		Esfenvalerate	0.78	U	ng/L	P438751	
		Ethalfuralin	0.16	U	ng/L	P438751	
		Fenpropathrin	0.26	U	ng/L	P438751	
		Gamma-BHC	0.13	U	ng/L	P438751	
		Gamma-Chlordane	0.21	U	ng/L	P438751	
		Heptachlor	0.21	U	ng/L	P438751	
		Heptachlor Epoxide	0.26	U	ng/L	P438751	
		Hexachlorobenzene**	1.0	U	ng/L	P438751	
		Kepone	14	U	ng/L	P438751	
		Lambda-Cyhalothrin	0.78	U	ng/L	P438751	
		Methoprene	0.78	U	ng/L	P438751	
		Methoxychlor	0.31	U	ng/L	P438751	

Field ID: G3SD0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2453988	EPA 8270E	MGK-264	0.21	U	ng/L	P438751	
		Mirex	0.36	U	ng/L	P438751	
		Oxychlordane	0.31	U	ng/L	P438751	
		Permethrin	1.7	U	ng/L	P438751	
		Phenothrin	0.93	U	ng/L	P438751	
		Piperonyl Butoxide	0.16	U	ng/L	P438751	
		Prallethrin	2.1	U	ng/L	P438751	
		Tau-Fluvalinate	0.26	U	ng/L	P438751	
		Tetramethrin	0.78	U	ng/L	P438751	
		Trans-Nonachlor	0.21	U	ng/L	P438751	MS
		Triclosan Methyl	0.16	U	ng/L	P438751	
		Trifluralin	0.21	U	ng/L	P438751	RPD
	EPA 8276	Chlordane	2.1	U	ng/L	P438751	
		Toxaphene	16	U	ng/L	P438751	

Sample Location: North Creek by Oaks Creek Ct

Collection Date/Time: 11/30/2023 10:25

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2453972	DEP SOP: NU-094-1	Color (true)	50	A	PCU	P438414	
	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P438423	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P438738	
		Sulfate	540		mg SO4/L	P438741	
	SM 2320 B-2011	Total Alkalinity	329		mg CaCO3/L	P438548	
	SM 2540 C-2015	TDS	1.35E+03		mg/L	P438847	
	SM 2540 D-2015	TSS	5	I	mg/L	P438774	
	SM 4500-F- C-2011	Fluoride	0.52		mg F/L	P438551	
2453973	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P438505	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P438521	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.38		mg N/L	P438892	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P438836	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P438532	
2453974	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.071		mg P/L	P438419	
2453989	EPA 8270E	Oxybenzone**	10	U	ng/L	P438257	
		Acetochlor	0.21	U	ng/L	P438257	
		Octinoxate**	150	U	ng/L	P438257	RPD
		Alachlor	0.41	U	ng/L	P438257	
		Avobenzone**	100	U	ng/L	P438257	
		Ametryn	2.6	I	ng/L	P438257	
		Atrazine	2.8		ng/L	P438257	
		PBDE-47**	4.1	U	ng/L	P438257	
		Atrazine Desethyl	2.7	I	ng/L	P438257	
		PBDE-99**	5.1	U	ng/L	P438257	
		Azinphos Methyl	3.1	UJ	ng/L	P438257	CCV
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P438257	
		Azoxystrobin	0.41	U	ng/L	P438257	
		Bromacil	0.62	U	ng/L	P438257	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P438257	
		Butylate	0.46	U	ng/L	P438257	
		Dechlorane Plus**	31	U	ng/L	P438257	
		Caffeine**	7.7	U	ng/L	P438257	
		Dechlorane 602**	5.1	U	ng/L	P438257	
		Carbophenothion	0.51	U	ng/L	P438257	
		Dechlorane 603**	4.1	U	ng/L	P438257	
		Carfentrazone Ethyl	0.15	U	ng/L	P438257	
		Hexabromobenzene**	6.2	U	ng/L	P438257	
		Chlorfenapyr	0.31	U	ng/L	P438257	
		PBB-153**	6.2	U	ng/L	P438257	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P438257	
		Pentabromotoluene**	3.1	U	ng/L	P438257	RPD
		Chlorpyrifos Methyl	0.10	U	ng/L	P438257	MS, RPD
		Tris(2-chloroethyl) phosphate (TCEP)**	56	U	ng/L	P438257	

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2453989	EPA 8270E	Coumaphos	1.1	U	ng/L	P438257	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	26	U	ng/L	P438257	
		Cyanazine	5.1	U	ng/L	P438257	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P438257	
		Cyprodinil	0.21	U	ng/L	P438257	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P438257	
		Demeton	3.6	U	ng/L	P438257	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	62	U	ng/L	P438257	
		Diazinon	0.13	U	ng/L	P438257	
		Difenoconazole	0.62	U	ng/L	P438257	
		Dimethenamid	0.10	U	ng/L	P438257	
		Dimethomorph	0.31	U	ng/L	P438257	
		Disulfoton	0.62	U	ng/L	P438257	
		Dithiopyr	1.0	U	ng/L	P438257	
		EPTC	0.51	U	ng/L	P438257	
		Ethion	0.31	U	ng/L	P438257	
		Ethoprop	0.13	U	ng/L	P438257	
		Etridiazole	0.10	U	ng/L	P438257	
		Fenamiphos	0.46	U	ng/L	P438257	
		Fenbuconazole	0.51	U	ng/L	P438257	
		Fipronil	0.21	U	ng/L	P438257	
		Fipronil Desulfinyl**	0.39	I	ng/L	P438257	
		Fipronil Sulfide	0.62		ng/L	P438257	
		Fipronil Sulfone	2.1		ng/L	P438257	RPD
		Fluazifop-P-butyl	0.10	U	ng/L	P438257	
		Fludioxonil	0.10	U	ng/L	P438257	
		Flumioxazin	3.1	U	ng/L	P438257	
		Flutolanil	15		ng/L	P438257	
		Fluxapyroxad	19	J	ng/L	P438257	
		Fonofos	0.15	U	ng/L	P438257	
		Hexazinone	0.51	U	ng/L	P438257	
		Imazalil	0.67	U	ng/L	P438257	
		Iprodione	0.51	U	ng/L	P438257	
		Loratadine**	0.31	U	ng/L	P438257	
		Malathion	0.36	U	ng/L	P438257	
		Metaxyl	0.51	U	ng/L	P438257	
		Metolachlor	0.77	U	ng/L	P438257	
		Metribuzin	0.41	U	ng/L	P438257	
		Mevinphos	1.0	U	ng/L	P438257	
		Molinate	0.26	U	ng/L	P438257	
		Myclobutanil	0.86	I	ng/L	P438257	
		Naled	2.6	U	ng/L	P438257	
		Napropamide	0.72	U	ng/L	P438257	
		Norflurazon	1.0	U	ng/L	P438257	

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2453989	EPA 8270E	Oxadiazon	14		ng/L	P438257	
		Oxyfluorfen	0.21	U	ng/L	P438257	
		Parathion Ethyl	0.15	U	ng/L	P438257	
		Parathion Methyl	0.21	U	ng/L	P438257	
		Pendimethalin	1.7	UJ	ng/L	P438257	LCS, MS
		Phenytain**	5.4	U	ng/L	P438257	
		Phorate	0.26	U	ng/L	P438257	
		Prodiamine	0.21	U	ng/L	P438257	
		Prometon	3.1	U	ng/L	P438257	
		Prometryn	0.36	U	ng/L	P438257	
		Pronamide	0.10	U	ng/L	P438257	
		Propanil	0.10	U	ng/L	P438257	
		Propargite	0.82	U	ng/L	P438257	
		Propiconazole	0.62	U	ng/L	P438257	
		Pyraflufen Ethyl	0.31	U	ng/L	P438257	
		Pyridaben	1.4	U	ng/L	P438257	
		Pyriproxyfen	0.26	UJ	ng/L	P438257	CCV
		Simazine	0.26	U	ng/L	P438257	
		Stirophos	0.41	U	ng/L	P438257	
		Sulfentrazone	46		ng/L	P438257	
		Tebuconazole	18		ng/L	P438257	
		Terbufos	0.21	U	ng/L	P438257	
		Terbutylazine	0.21	U	ng/L	P438257	
		Thiobencarb	0.51	U	ng/L	P438257	
		Triadimefon	0.15	U	ng/L	P438257	
2454002	EPA 8321B	2,4-D	0.0056	I	ug/L	P438413	
		Acesulfame K	0.10	U	ug/L	P438435	
		2,4,5-T	0.0040	U	ug/L	P438413	
		AMPA	0.38	I	ug/L	P438435	
		Acetaminophen	0.0080	U	ug/L	P438413	
		Acetamiprid	0.0020	U	ug/L	P438413	
		Endothall	0.25	U	ug/L	P438435	
		Glufosinate	0.10	U	ug/L	P438435	
		Glyphosate	1.3		ug/L	P438435	
		Afidopyropen	0.0020	U	ug/L	P438413	
		Bentazon	0.031		ug/L	P438413	
		Sucralose	0.25		ug/L	P438435	
		Benzovindiflupyr	0.0020	U	ug/L	P438413	
		Carbamazepine	8.0E-04	U	ug/L	P438413	
		Clothianidin	0.0030	I	ug/L	P438413	
		Dinotefuran	0.0020	U	ug/L	P438413	
		Diuron	0.0020	U	ug/L	P438413	
		Fenuron	0.032	U	ug/L	P438413	
		Fluridone	0.017		ug/L	P438413	
		Imazapyr	0.10		ug/L	P438413	

Field ID: G3SD0064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2454002	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P438413	
		Ibuprofen	0.080	U	ug/L	P438413	
		Imidacloprid	0.0026	I	ug/L	P438413	
		Linuron	0.0040	U	ug/L	P438413	
		Mandestrobin	0.0020	U	ug/L	P438413	
		MCPD	0.0020	U	ug/L	P438413	
		Naproxen	0.0080	U	ug/L	P438413	
		Primidone	0.0047	I	ug/L	P438413	
		Pyraclostrobin	0.0020	U	ug/L	P438413	
		Silvex	0.0040	U	ug/L	P438413	
		Thiamethoxam	0.0020	U	ug/L	P438413	
		Tolfenpyrad	0.0020	U	ug/L	P438413	
		Triclopyr	0.0040	U	ug/L	P438413	
2454005	EPA 200.7 Rev. 4.4	Calcium	253		mg/L	P438453	
		Iron	360		ug/L	P438453	
		Magnesium	58.3		mg/L	P438453	
		Potassium	8.0		mg/L	P438453	
		Sodium	78.0		mg/L	P438453	
		Strontium	2.76E+03		ug/L	P438453	
		Tin	30	U	ug/L	P438453	
		Titanium	0.75	U	ug/L	P438453	
		Vanadium	2.4	I	ug/L	P438453	
		Zinc	5.0	U	ug/L	P438453	
	EPA 200.8 Rev. 5.4	Aluminum	18	I	ug/L	P438453	
		Antimony	0.11	I	ug/L	P438453	
		Arsenic	3.04		ug/L	P438453	
		Barium	90.0		ug/L	P438453	
		Beryllium	0.010	U	ug/L	P438453	
		Boron	84.8		ug/L	P438453	
		Cadmium	0.020	U	ug/L	P438453	
		Chromium	0.47	I	ug/L	P438453	
		Cobalt	0.082		ug/L	P438453	
		Copper	0.60	I	ug/L	P438453	
		Lead	0.20	U	ug/L	P438453	
		Manganese	20.8		ug/L	P438453	
		Molybdenum	6.75		ug/L	P438453	
		Nickel	0.69	I	ug/L	P438453	
		Selenium	0.20	U	ug/L	P438453	
	SM 2340 B-2011	Silver	0.010	U	ug/L	P438453	
		Thallium	0.10	U	ug/L	P438453	
		Hardness	872		mg/L	P438453	

Ref. Method and Comment:

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

EPA 8270E: Estimation for fluxaproxad due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

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

EPA 200.7 Rev. 4.4: The sample required dilution for tin due to matrix interference.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P438414

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438423

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438453

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: P438453

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438738

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438741

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438505

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438892

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438836

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438419

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

Reference Method: EPA 8270E
Batch ID: P438257

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438257

Component	Result	Code	Units
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438257

Component	Result	Code	Units
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8270E

Batch ID: P438751

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438751

Component	Result	Code	Units
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P438751

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

Reference Method: EPA 8321B

Batch ID: P438413

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P438413

Component	Result	Code	Units
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P438435

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: P438548

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015

Batch ID: P438847

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2015
Batch ID: P438774

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P438532

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: P438414

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.2		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438423

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438453

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	101		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	99.4		P	85 - 115
Sodium	95.3		P	85 - 115
Strontium	95.2		P	85 - 115
Tin	96.6		P	85 - 115
Titanium	95.3		P	85 - 115
Vanadium	95.4		P	85 - 115
Zinc	94.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438453

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.4		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	101		P	85 - 115
Barium	102		P	85 - 115
Beryllium	95.6		P	85 - 115
Boron	101		P	85 - 115
Cadmium	99.8		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	98.0		P	85 - 115
Copper	98.9		P	85 - 115
Lead	95.7		P	85 - 115
Manganese	99.7		P	85 - 115
Molybdenum	99.5		P	85 - 115
Nickel	98.5		P	85 - 115
Selenium	102		P	85 - 115
Silver	102		P	85 - 115
Thallium	97.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438738

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438741

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438505

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438892

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438836

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438419

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

Reference Method: EPA 8270E
Batch ID: P438257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	77.3		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.8		P	37 - 154
Acetochlor	113		P	64 - 124
Alachlor	111		P	61 - 118
Ametryn	138		P	47 - 158
Atrazine	106		P	68 - 121
Atrazine Desethyl	111		P	30 - 119
Avobenzone	133		P	48 - 193
Azinphos Methyl	73.0		P	30 - 194
Azoxystrobin	120		P	58 - 154
Bromacil	110		P	47 - 126
Butylate	62.8		P	31 - 83.0
Caffeine	91.7		P	10 - 180
Carbophenothion	114		P	59 - 133
Carfentrazone Ethyl	126		P	59 - 147
Chlorfenapyr	108		P	52 - 118

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Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P438257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	113		P	59 - 119
Chlorpyrifos Methyl	121		P	65 - 123
Coumaphos	178		P	11 - 223
Cyanazine	170		P	63 - 250
Cyprodinil	140		P	52 - 143
Dechlorane 602	82.2		P	23 - 142
Dechlorane 603	92.4		P	51 - 171
Dechlorane Plus	89.7		P	46 - 161
Demeton	88.5		P	42 - 119
Diazinon	115		P	67 - 132
Difenoconazole	142		P	12 - 204
Dimethenamid	110		P	53 - 113
Dimethomorph	203		P	13 - 238
Disulfoton	98.7		P	56 - 126
Dithiopyr	93.3		P	58 - 127
EPTC	59.2		P	31 - 78.0
Ethion	93.1		P	24 - 127
Ethoprop	98.9		P	60 - 118
Etridiazole	75.5		P	32 - 91.0
Fenamiphos	109		P	54 - 129
Fenbuconazole	121		P	31 - 162
Fipronil	100		P	56 - 131
Fipronil Desulfinyl	110		P	58 - 132
Fipronil Sulfide	103		P	51 - 123
Fipronil Sulfone	95.6		P	50 - 125
Fluazifop-P-butyl	128		P	52 - 132
Fludioxonil	105		P	52 - 129
Flumioxazin	165		P	34 - 250
Flutolanil	124		P	45 - 128
Fluxapyroxad	113		P	31 - 150
Fonofos	101		P	60 - 116
Hexabromobenzene	87.2		P	52 - 165
Hexazinone	112		P	59 - 120
Imazalil	124		P	39 - 134
Iprodione	127		P	39 - 243
Loratadine	168		P	10 - 240
Malathion	113		P	53 - 145
Metalaxyl	109		P	59 - 120
Metolachlor	108		P	64 - 122
Metribuzin	125		P	33 - 128
Mevinphos	97.6		P	48 - 119
Molinate	60.0		P	42 - 89.0
Myclobutanil	128		P	54 - 129
Naled	45.3		P	10 - 138
Napropamide	112		P	40 - 122
Norflurazon	123		P	49 - 132
Octinoxate	101		P	29 - 176
Oxadiazon	106		P	50 - 115
Oxybenzone	91.3		P	45 - 145
Oxyfluorfen	142		P	62 - 149
Parathion Ethyl	111		P	68 - 119
Parathion Methyl	136		P	68 - 147

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBB-153	86.3		P	42 - 179
PBDE-47	85.5		P	44 - 141
PBDE-99	92.2		P	36 - 141
Pendimethalin	179		F	59 - 158
Pentabromotoluene	81.3		P	58 - 148
Phenytoin	67.8		P	10 - 151
Phorate	94.9		P	44 - 124
Prodiamine	59.9		P	10 - 136
Prometon	123		P	45 - 131
Prometryn	137		P	52 - 140
Pronamide	113		P	70 - 129
Propanil	126		P	54 - 144
Propargite	140		P	10 - 191
Propiconazole	96.0		P	49 - 128
Pyraflufen Ethyl	134		P	46 - 141
Pyridaben	149		P	29 - 198
Pyriproxyfen	125		P	33 - 221
Simazine	114		P	62 - 119
Stirophos	117		P	13 - 144
Sulfentrazone	87.9		P	12 - 152
Tebuconazole	112		P	10 - 135
Terbufos	103		P	67 - 136
Terbuthylazine	99.6		P	66 - 113
Tetradecachloro-m-terphenyl	119		P	30 - 235
Thiobencarb	115		P	51 - 125
Tri-o-cresyl Phosphate	104		P	50 - 150
Triadimefon	103		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	94.1		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.0		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	102		P	59 - 166

Reference Method: EPA 8270E

Batch ID: P438751

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	56.2		P	30 - 96.0
Alpha-BHC	88.3		P	70 - 109
Alpha-Chlordane	76.3		P	45 - 107
Beta-BHC	109		P	64 - 138
Beta-Cyfluthrin	51.8		P	17 - 141
Bifenthrin	39.4		P	10 - 113
Carbophenothion	83.3		P	24 - 91.0
Chlorothalonil	76.3		P	26 - 180
Cis-Nonachlor	61.4		P	37 - 102
Cypermethrin	68.8		P	20 - 133
Dacthal	90.3		P	69 - 114
DDD-p,p'	72.6		P	42 - 105
DDE-p,p'	77.1		P	42 - 106
DDT-p,p'	73.3		P	42 - 107
Delta-BHC	108		P	67 - 144
Deltamethrin	71.2		P	15 - 149
Dichlobenil	81.5		P	46 - 117

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P438751

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dicofol	71.7		P	34 - 114
Dieldrin	86.1		P	50 - 108
Endosulfan I	90.9		P	55 - 104
Endosulfan II	91.8		P	51 - 111
Endosulfan Sulfate	81.1		P	56 - 121
Endrin	74.7		P	10 - 106
Endrin Aldehyde	91.8		P	34 - 114
Endrin Ketone	86.8		P	63 - 177
Esfenvalerate	62.2		P	29 - 143
Ethalfuralin	69.4		P	46 - 96.0
Fenpropathrin	61.9		P	28 - 115
Gamma-BHC	90.3		P	65 - 121
Gamma-Chlordane	75.7		P	39 - 103
Heptachlor	86.1		P	39 - 94.0
Heptachlor Epoxide	91.0		P	54 - 104
Hexachlorobenzene	59.0		P	36 - 100
Kepone	142		P	10 - 225
Lambda-Cyhalothrin	45.1		P	10 - 135
Methoprene	46.0		P	10 - 109
Methoxychlor	78.9		P	52 - 112
MGK-264	82.4		P	44 - 117
Mirex	50.6		P	20 - 90.0
Oxychlordane	81.6		P	44 - 102
PCB-1016	77.6		P	45 - 107
PCB-1260	98.8		P	40 - 118
Permethrin	52.9		P	18 - 135
Phenothrin	42.2		P	10 - 102
Piperonyl Butoxide	91.2		P	28 - 156
Prallethrin	70.9		P	28 - 113
Tau-Fluvalinate	51.5		P	10 - 123
Tetramethrin	87.2		P	18 - 158
Trans-Nonachlor	85.5		P	39 - 104
Triclosan Methyl	85.3		P	54 - 108
Trifluralin	68.8		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P438751

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.4		P	52 - 117
Toxaphene	94.3		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P438413

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.5		P	40 - 150
2,4,5-T	110		P	40 - 150
Acetaminophen	88.9		P	30 - 150
Acetamiprid	90.0		P	40 - 150
Afidopyropen	83.0		P	30 - 150
Bentazon	68.3		P	30 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P438413

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Benzovindiflupyr	87.3		P	40 - 150
Carbamazepine	81.0		P	40 - 150
Clothianidin	88.3		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	66.3		P	40 - 150
Fenuron	99.8		P	40 - 150
Fluridone	89.9		P	40 - 150
Hydrocodone	90.0		P	40 - 150
Ibuprofen	69.6		P	40 - 150
Imazapyr	90.0		P	40 - 150
Imidacloprid	86.1		P	40 - 150
Linuron	81.7		P	40 - 150
Mandestrobin	89.3		P	40 - 150
MCPP	92.5		P	40 - 150
Naproxen	67.6		P	40 - 150
Primidone	85.0		P	40 - 150
Pyraclostrobin	79.0		P	40 - 150
Silvex	91.3		P	40 - 150
Thiamethoxam	92.5		P	40 - 150
Tolfenpyrad	46.7		P	30 - 150
Triclopyr	114		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438435

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	134		P	40 - 150
AMPA	73.8		P	40 - 160
Endothall	114		P	40 - 160
Glufosinate	90.5		P	40 - 160
Glyphosate	87.9		P	40 - 160
Sucralose	101		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P438548

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.7		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P438847

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	93.6		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P438774

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

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

Reference Method: SM 5310 B-2011
Batch ID: P438532

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P438453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454047	Calcium	98.2	98.9	P/P	80 - 120
2454047	Iron	98.9	95.9	P/P	80 - 120
2454047	Magnesium	101	97.7	P/P	80 - 120
2454047	Potassium	94.4	95.3	P/P	80 - 120
2454047	Sodium	93.6		P	80 - 120
2454047	Strontium	93.4	94.3	P/P	80 - 120
2454047	Tin	95.7	95.9	P/P	80 - 120
2454047	Titanium	93.5	93.9	P/P	80 - 120
2454047	Vanadium	94.7	95.1	P/P	80 - 120
2454047	Zinc	93.1	92.6	P/P	80 - 120
2454148	Calcium	96.9		P	80 - 120
2454148	Iron	98.2		P	80 - 120
2454148	Magnesium	97.8		P	80 - 120
2454148	Potassium	95.6		P	80 - 120
2454148	Sodium	85.2		P	80 - 120
2454148	Strontium	92.2		P	80 - 120
2454148	Tin	94.0		P	80 - 120
2454148	Titanium	92.7		P	80 - 120
2454148	Vanadium	92.4		P	80 - 120
2454148	Zinc	92.2		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P438453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454047	Aluminum	99.3	98.7	P/P	80 - 120
2454047	Antimony	103	104	P/P	80 - 120
2454047	Arsenic	98.2	97.9	P/P	80 - 120
2454047	Barium	102	102	P/P	80 - 120
2454047	Beryllium	91.1	95.6	P/P	80 - 120
2454047	Boron	103	102	P/P	80 - 120
2454047	Cadmium	100	103	P/P	80 - 120
2454047	Chromium	101	102	P/P	80 - 120
2454047	Cobalt	96.4	96.3	P/P	80 - 120
2454047	Copper	96.3	96.3	P/P	80 - 120
2454047	Lead	96.1	96.3	P/P	80 - 120
2454047	Manganese	102	103	P/P	80 - 120
2454047	Molybdenum	98.6	98.4	P/P	80 - 120
2454047	Nickel	96.7	96.1	P/P	80 - 120
2454047	Selenium	95.4	97.1	P/P	80 - 120
2454047	Silver	102	102	P/P	80 - 120
2454047	Thallium	98.9	99.7	P/P	80 - 120
2454148	Aluminum	97.6		P	80 - 120
2454148	Antimony	102		P	80 - 120
2454148	Arsenic	98.7		P	80 - 120
2454148	Barium	99.8		P	80 - 120
2454148	Beryllium	91.5		P	80 - 120
2454148	Boron	106		P	80 - 120
2454148	Cadmium	99.3		P	80 - 120
2454148	Chromium	102		P	80 - 120
2454148	Cobalt	95.2		P	80 - 120
2454148	Copper	94.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438453

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454148	Lead	94.9		P	80 - 120
2454148	Manganese	102		P	80 - 120
2454148	Molybdenum	98.4		P	80 - 120
2454148	Nickel	95.6		P	80 - 120
2454148	Selenium	98.9		P	80 - 120
2454148	Silver	102		P	80 - 120
2454148	Thallium	97.4		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438738

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453793	Chloride	102		P	90 - 110
2453940	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438741

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453793	Sulfate	99.8		P	90 - 110
2453940	Sulfate	104		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452603	Ammonia-N	97.2	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454056	Kjeldahl Nitrogen	108	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2455704	NO2NO3-N	96.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438836

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454729	Total-P	108	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438419

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453946	O-Phosphate-P	96.0	96.2	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454160	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	79.4	72.4	P/P	50 - 150
2454160	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	99.6	102	P/P	29 - 155
2454160	Acetochlor	101	123	P/P	60 - 124
2454160	Alachlor	99.8	102	P/P	54 - 122
2454160	Ametryn	136	153	P/P	51 - 208
2454160	Atrazine	93.2	105	P/P	57 - 131
2454160	Atrazine Desethyl	105	107	P/P	13 - 124
2454160	Avobenzone	126	152	P/P	35 - 187
2454160	Azinphos Methyl	77.5	84.4	P/P	43 - 276
2454160	Azoxystrobin	113	127	P/P	52 - 300
2454160	Bromacil	107	116	P/P	44 - 134
2454160	Butylate	50.9	71.5	P/P	23 - 82.0
2454160	Caffeine	211	117	P/P	10 - 277
2454160	Carbophenothion	104	108	P/P	47 - 135
2454160	Carfentrazone Ethyl	125	113	P/P	46 - 147
2454160	Chlorfenapyr	78.1	87.8	P/P	43 - 114
2454160	Chlorpyrifos Ethyl	102	112	P/P	47 - 124
2454160	Chlorpyrifos Methyl	111	159	P/F	60 - 135
2454160	Coumaphos	176	187	P/P	10 - 222
2454160	Cyanazine	149	166	P/P	10 - 257
2454160	Cyprodinil	123	142	P/P	42 - 148
2454160	Dechlorane 602	78.4	65.5	P/P	14 - 133
2454160	Dechlorane 603	93.5	88.8	P/P	18 - 191
2454160	Dechlorane Plus	89.2	77.3	P/P	23 - 154
2454160	Demeton	94.2	109	P/P	41 - 137
2454160	Diazinon	110	122	P/P	64 - 139
2454160	Difenoconazole	116	58.6	P/P	46 - 254
2454160	Dimethenamid	101	106	P/P	47 - 117
2454160	Dimethomorph	211	212	P/P	14 - 255
2454160	Disulfoton	89.6	107	P/P	52 - 130
2454160	Dithiopyr	95.6	110	P/P	40 - 121
2454160	EPTC	53.8	67.4	P/P	19 - 78.0
2454160	Ethion	103	69.8	P/P	12 - 124
2454160	Ethoprop	88.4	108	P/P	68 - 144
2454160	Etridiazole	64.8	81.8	P/P	26 - 96.0
2454160	Fenamiphos	97.0	107	P/P	41 - 129
2454160	Fenbuconazole	117	100	P/P	26 - 169
2454160	Fipronil	127	89.4	P/P	46 - 145
2454160	Fipronil Desulfinyl	109	123	P/P	47 - 136
2454160	Fipronil Sulfide	104	87.7	P/P	41 - 127
2454160	Fipronil Sulfone	94.7	49.6	P/P	35 - 133
2454160	Fluazifop-P-butyl	97.6	109	P/P	46 - 131
2454160	Fludioxonil	110	103	P/P	51 - 124
2454160	Flumioxazin	170	164	P/P	10 - 289
2454160	Flutolanil	112	114	P/P	34 - 130
2454160	Fluxapyroxad	106	79.3	P/P	10 - 197
2454160	Fonofos	93.4	111	P/P	42 - 131
2454160	Hexabromobenzene	83.4	95.6	P/P	47 - 178
2454160	Hexazinone	107	105	P/P	64 - 125
2454160	Imazalil	108	108	P/P	37 - 252
2454160	Iprodione	126	98.8	P/P	34 - 265
2454160	Loratadine	172	169	P/P	20 - 231

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P438257

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454160	Malathion	111	113	P/P	34 - 164
2454160	Metalaxyl	104	118	P/P	49 - 125
2454160	Metolachlor	105	99.4	P/P	54 - 125
2454160	Metribuzin	130	138	P/P	51 - 139
2454160	Mevinphos	93.9	115	P/P	46 - 130
2454160	Molinate	51.6	67.4	P/P	39 - 93.0
2454160	Myclobutanil	117	123	P/P	50 - 130
2454160	Naled	43.4	47.0	P/P	10 - 150
2454160	Napropamide	90.5	80.5	P/P	10 - 109
2454160	Norflurazon	124	122	P/P	36 - 134
2454160	Octinoxate	90.4	129	P/P	18 - 170
2454160	Oxadiazon	95.1	96.6	P/P	43 - 112
2454160	Oxybenzone	84.0	113	P/P	33 - 154
2454160	Oxyfluorfen	119	138	P/P	62 - 154
2454160	Parathion Ethyl	94.9	104	P/P	65 - 120
2454160	Parathion Methyl	151	180	P/P	77 - 185
2454160	PBB-153	97.2	104	P/P	23 - 193
2454160	PBDE-47	74.4	86.6	P/P	31 - 139
2454160	PBDE-99	93.5	93.3	P/P	24 - 138
2454160	Pendimethalin	156	161	F/F	50 - 146
2454160	Pentabromotoluene	77.7	98.2	P/P	54 - 152
2454160	Phenytoin	98.6	112	P/P	10 - 157
2454160	Phorate	80.5	113	P/P	54 - 161
2454160	Prodiamine	61.5	73.0	P/P	29 - 160
2454160	Prometon	119	120	P/P	38 - 145
2454160	Prometryn	126	126	P/P	32 - 151
2454160	Pronamide	108	104	P/P	61 - 140
2454160	Propanil	130	132	P/P	50 - 147
2454160	Propargite	134	94.8	P/P	10 - 190
2454160	Propiconazole	104	103	P/P	30 - 146
2454160	Pyraflufen Ethyl	140	122	P/P	30 - 147
2454160	Pyridaben	159	121	P/P	15 - 195
2454160	Pyriproxyfen	112	102	P/P	31 - 218
2454160	Simazine	114	123	P/P	45 - 139
2454160	Stirophos	111	80.5	P/P	10 - 134
2454160	Sulfentrazone	115	91.3	P/P	53 - 186
2454160	Tebuconazole	124	87.8	P/P	10 - 133
2454160	Terbufos	93.7	118	P/P	65 - 151
2454160	Terbutylazine	85.3	102	P/P	62 - 117
2454160	Tetradecachloro-m-terphenyl	137	136	P/P	10 - 260
2454160	Thiobencarb	104	98.7	P/P	48 - 122
2454160	Tri-o-cresyl Phosphate	99.3	113	P/P	32 - 151
2454160	Triadimefon	86.9	96.7	P/P	46 - 124
2454160	Tris(1-chloro-2-propyl) phosphate (TCPP)	107	89.4	P/P	51 - 154
2454160	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118	102	P/P	59 - 147
2454160	Tris(2-chloroethyl) phosphate (TCEP)	118	103	P/P	65 - 156

Reference Method: EPA 8270E
Batch ID: P438751

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454003	PCB-1016	67.0	82.2	P/P	45 - 107

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438751

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454003	PCB-1260	104	107	P/P	40 - 112
2454159	Aldrin	61.6	48.5	P/P	24 - 81.0
2454159	Alpha-BHC	93.0	89.7	P/P	65 - 110
2454159	Alpha-Chlordane	72.4	81.9	P/P	43 - 119
2454159	Beta-BHC	96.3	106	P/P	54 - 165
2454159	Beta-Cyfluthrin	103	94.1	P/P	27 - 165
2454159	Bifenthrin	80.7	66.0	P/P	17 - 117
2454159	Carbophenothion	110	111	F/F	21 - 108
2454159	Chlorothalonil	138	133	P/P	10 - 255
2454159	Cis-Nonachlor	60.5	43.7	P/P	34 - 98.0
2454159	Cypermethrin	133	143	P/F	25 - 143
2454159	Dacthal	82.7	68.9	P/P	55 - 139
2454159	DDD-p,p'	69.6	61.1	P/P	30 - 109
2454159	DDE-p,p'	77.7	70.0	P/P	35 - 106
2454159	DDT-p,p'	89.1	87.4	P/P	41 - 101
2454159	Delta-BHC	115	117	P/P	58 - 165
2454159	Deltamethrin	115	94.5	P/P	10 - 194
2454159	Dichlobenil	58.1	44.5	P/P	22 - 114
2454159	Dicofol	75.6	69.6	P/P	17 - 133
2454159	Dieldrin	88.1	78.7	P/P	45 - 129
2454159	Endosulfan I	86.1	92.2	P/P	49 - 104
2454159	Endosulfan II	90.5	83.5	P/P	37 - 117
2454159	Endosulfan Sulfate	87.4	62.2	P/P	38 - 128
2454159	Endrin	73.7	71.0	P/P	35 - 116
2454159	Endrin Aldehyde	80.1	66.8	P/P	19 - 108
2454159	Endrin Ketone	88.3	71.4	P/P	44 - 134
2454159	Esfenvalerate	126	111	P/P	27 - 176
2454159	Ethalfuralin	86.9	72.6	P/P	49 - 100
2454159	Fenpropathrin	81.8	68.9	P/P	34 - 117
2454159	Gamma-BHC	83.3	90.1	P/P	59 - 129
2454159	Gamma-Chlordane	71.6	52.0	P/P	33 - 107
2454159	Heptachlor	92.3	86.1	P/P	37 - 94.0
2454159	Heptachlor Epoxide	92.0	111	P/P	38 - 118
2454159	Hexachlorobenzene	54.5	43.1	P/P	35 - 97.0
2454159	Kepone	155	140	P/P	10 - 221
2454159	Lambda-Cyhalothrin	85.8	62.3	P/P	23 - 190
2454159	Methoprene	63.2	52.5	P/P	21 - 109
2454159	Methoxychlor	85.5	66.6	P/P	46 - 118
2454159	MGK-264	90.7	97.4	P/P	39 - 122
2454159	Mirex	58.8	45.9	P/P	25 - 90.0
2454159	Oxychlordane	86.5	81.5	P/P	42 - 100
2454159	Permethrin	89.9	87.6	P/P	33 - 181
2454159	Phenothrin	85.8	87.7	P/P	12 - 125
2454159	Piperonyl Butoxide	96.8	105	P/P	10 - 178
2454159	Prallethrin	72.3	64.5	P/P	24 - 122
2454159	Tau-Fluvalinate	117	107	P/P	13 - 151
2454159	Tetramethrin	111	94.3	P/P	16 - 172
2454159	Trans-Nonachlor	90.0	114	P/F	39 - 100
2454159	Triclosan Methyl	69.1	64.8	P/P	43 - 110
2454159	Trifluralin	78.1	62.3	P/P	45 - 94.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P438751

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2454003	Chlordane	91.7	95.3	P/P	43 - 123
2454003	Toxaphene	113	112	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P438413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453787	2,4-D	105	80.3	P/P	40 - 150
2453787	2,4,5-T	94.1	79.0	P/P	40 - 150
2453787	Acetaminophen	106	91.7	P/P	30 - 150
2453787	Acetamiprid	77.4	67.6	P/P	40 - 150
2453787	Afidopyropen	81.6	73.4	P/P	30 - 150
2453787	Benzovindiflupyr	98.0	82.0	P/P	40 - 150
2453787	Carbamazepine	81.9	72.5	P/P	40 - 150
2453787	Clothianidin	113	98.1	P/P	40 - 150
2453787	Dinotefuran	112	95.3	P/P	40 - 150
2453787	Diuron	75.0	65.4	P/P	40 - 150
2453787	Fenuron	86.4	79.7	P/P	40 - 150
2453787	Fluridone	94.5	81.1	P/P	40 - 150
2453787	Hydrocodone	90.5	79.4	P/P	40 - 150
2453787	Ibuprofen	70.9	58.7	P/P	40 - 150
2453787	Imidacloprid	141	120	P/P	40 - 150
2453787	Linuron	82.4	68.2	P/P	40 - 150
2453787	Mandestrobin	98.8	84.8	P/P	40 - 150
2453787	MCPP	103	86.8	P/P	40 - 150
2453787	Naproxen	90.0	69.1	P/P	40 - 150
2453787	Primidone	109	94.2	P/P	40 - 150
2453787	Pyraclostrobin	91.3	79.9	P/P	40 - 150
2453787	Silvex	101	81.7	P/P	40 - 150
2453787	Thiamethoxam	101	89.0	P/P	40 - 150
2453787	Tolfenpyrad	64.4	55.4	P/P	30 - 150
2453787	Triclopyr	100	84.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453829	Acesulfame K	127	129	P/P	40 - 150
2453829	AMPA	75.3	82.9	P/P	40 - 160
2453829	Endothall	127	126	P/P	40 - 160
2453829	Glufosinate	82.1	81.9	P/P	40 - 160
2453829	Glyphosate	86.3	92.1	P/P	40 - 160
2453829	Sucralose	54.8	70.4	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453938	Fluoride	102	102	P/P	94 - 106

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P438532

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2453721	Organic Carbon	96.6	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P438414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453972	Color (true)	0.429	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438423

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453994	Turbidity	0.631	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454047	Calcium	0.453	Spike	P	0 - 20
2454047	Iron	2.21	Spike	P	0 - 20
2454047	Magnesium	2.54	Spike	P	0 - 20
2454047	Potassium	0.614	Spike	P	0 - 20
2454047	Sodium	0.0429	Spike	P	0 - 20
2454047	Strontium	0.935	Spike	P	0 - 20
2454047	Tin	0.196	Spike	P	0 - 20
2454047	Titanium	0.345	Spike	P	0 - 20
2454047	Vanadium	0.450	Spike	P	0 - 20
2454047	Zinc	0.566	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438453

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454047	Aluminum	0.477	Spike	P	0 - 20
2454047	Antimony	0.910	Spike	P	0 - 20
2454047	Arsenic	0.304	Spike	P	0 - 20
2454047	Barium	0.0809	Spike	P	0 - 20
2454047	Beryllium	4.48	Spike	P	0 - 20
2454047	Boron	0.762	Spike	P	0 - 20
2454047	Cadmium	2.17	Spike	P	0 - 20
2454047	Chromium	0.374	Spike	P	0 - 20
2454047	Cobalt	0.0864	Spike	P	0 - 20
2454047	Copper	0.0117	Spike	P	0 - 20
2454047	Lead	0.183	Spike	P	0 - 20
2454047	Manganese	1.01	Spike	P	0 - 20
2454047	Molybdenum	0.216	Spike	P	0 - 20
2454047	Nickel	0.571	Spike	P	0 - 20
2454047	Selenium	1.71	Spike	P	0 - 20
2454047	Silver	0.135	Spike	P	0 - 20
2454047	Thallium	0.867	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438738

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453793	Chloride	0.661	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438741

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453793	Sulfate	0.756	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452603	Ammonia-N	0.864	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454056	Kjeldahl Nitrogen	1.27	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2455704	NO2NO3-N	0.517	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438836

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454729	Total-P	3.56	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438419

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453946	O-Phosphate-P	0.155	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P438257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454160	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	9.19	Spike	P	0 - 30
2454160	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	2.63	Spike	P	0 - 35

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P438257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454160	Acetochlor	19.7	Spike	P	0 - 28
2454160	Alachlor	2.43	Spike	P	0 - 30
2454160	Ametryn	12.0	Spike	P	0 - 32
2454160	Atrazine	11.2	Spike	P	0 - 33
2454160	Atrazine Desethyl	1.81	Spike	P	0 - 36
2454160	Avobenzone	18.6	Spike	P	0 - 35
2454160	Azinphos Methyl	8.55	Spike	P	0 - 62
2454160	Azoxystrobin	11.3	Spike	P	0 - 39
2454160	Bromacil	7.90	Spike	P	0 - 33
2454160	Butylate	33.7	Spike	P	0 - 51
2454160	Caffeine	57.0	Spike	P	0 - 100
2454160	Carbophenothion	4.18	Spike	P	0 - 34
2454160	Carfentrazone Ethyl	9.51	Spike	P	0 - 33
2454160	Chlorfenapyr	11.7	Spike	P	0 - 28
2454160	Chlorpyrifos Ethyl	9.30	Spike	P	0 - 31
2454160	Chlorpyrifos Methyl	35.4	Spike	F	0 - 27
2454160	Coumaphos	5.98	Spike	P	0 - 62
2454160	Cyanazine	10.9	Spike	P	0 - 48
2454160	Cyprodinil	13.7	Spike	P	0 - 29
2454160	Dechlorane 602	18.0	Spike	P	0 - 60
2454160	Dechlorane 603	5.05	Spike	P	0 - 40
2454160	Dechlorane Plus	14.3	Spike	P	0 - 38
2454160	Demeton	14.9	Spike	P	0 - 33
2454160	Diazinon	10.6	Spike	P	0 - 32
2454160	Difenoconazole	65.7	Spike	P	0 - 71
2454160	Dimethenamid	5.04	Spike	P	0 - 60
2454160	Dimethomorph	0.395	Spike	P	0 - 61
2454160	Disulfoton	17.6	Spike	P	0 - 30
2454160	Dithiopyr	14.1	Spike	P	0 - 28
2454160	EPTC	22.5	Spike	P	0 - 56
2454160	Ethion	38.2	Spike	P	0 - 79
2454160	Ethoprop	19.9	Spike	P	0 - 31
2454160	Etridiazole	23.1	Spike	P	0 - 43
2454160	Fenamiphos	9.65	Spike	P	0 - 43
2454160	Fenbuconazole	15.7	Spike	P	0 - 79
2454160	Fipronil	34.7	Spike	P	0 - 46
2454160	Fipronil Desulfinyl	11.8	Spike	P	0 - 36
2454160	Fipronil Sulfide	16.6	Spike	P	0 - 34
2454160	Fipronil Sulfone	58.9	Spike	F	0 - 47
2454160	Fluazifop-P-butyl	10.6	Spike	P	0 - 38
2454160	Fludioxonil	5.98	Spike	P	0 - 29
2454160	Flumioxazin	3.44	Spike	P	0 - 63
2454160	Flutolanil	1.55	Spike	P	0 - 36
2454160	Fluxapyroxad	29.1	Spike	P	0 - 65
2454160	Fonofos	17.3	Spike	P	0 - 35
2454160	Hexabromobenzene	13.6	Spike	P	0 - 41
2454160	Hexazinone	1.83	Spike	P	0 - 31
2454160	Imazalil	0.179	Spike	P	0 - 52
2454160	Iprodione	24.1	Spike	P	0 - 49
2454160	Loratadine	1.63	Spike	P	0 - 59
2454160	Malathion	1.59	Spike	P	0 - 77

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P438257

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454160	Metalaxyl	12.1	Spike	P	0 - 76
2454160	Metolachlor	5.34	Spike	P	0 - 29
2454160	Metribuzin	5.71	Spike	P	0 - 51
2454160	Mevinphos	20.3	Spike	P	0 - 31
2454160	Molinate	26.5	Spike	P	0 - 39
2454160	Myclobutanil	5.65	Spike	P	0 - 34
2454160	Naled	7.86	Spike	P	0 - 37
2454160	Napropamide	11.8	Spike	P	0 - 100
2454160	Norflurazon	2.01	Spike	P	0 - 54
2454160	Octinoxate	35.0	Spike	F	0 - 35
2454160	Oxadiazon	1.55	Spike	P	0 - 34
2454160	Oxybenzone	29.6	Spike	P	0 - 35
2454160	Oxyfluorfen	14.5	Spike	P	0 - 28
2454160	Parathion Ethyl	8.83	Spike	P	0 - 31
2454160	Parathion Methyl	17.3	Spike	P	0 - 29
2454160	PBB-153	7.23	Spike	P	0 - 49
2454160	PBDE-47	15.2	Spike	P	0 - 36
2454160	PBDE-99	0.248	Spike	P	0 - 46
2454160	Pendimethalin	2.89	Spike	P	0 - 31
2454160	Pentabromotoluene	23.3	Spike	F	0 - 16
2454160	Phenytoin	13.1	Spike	P	0 - 100
2454160	Phorate	33.3	Spike	P	0 - 36
2454160	Prodiamine	17.2	Spike	P	0 - 68
2454160	Prometon	0.939	Spike	P	0 - 35
2454160	Prometryn	0.157	Spike	P	0 - 33
2454160	Pronamide	3.83	Spike	P	0 - 24
2454160	Propanil	1.34	Spike	P	0 - 28
2454160	Propargite	34.3	Spike	P	0 - 53
2454160	Propiconazole	1.20	Spike	P	0 - 44
2454160	Pyraflufen Ethyl	13.9	Spike	P	0 - 61
2454160	Pyridaben	27.0	Spike	P	0 - 43
2454160	Pyriproxyfen	9.30	Spike	P	0 - 82
2454160	Simazine	7.13	Spike	P	0 - 29
2454160	Stirophos	31.5	Spike	P	0 - 100
2454160	Sulfentrazone	22.7	Spike	P	0 - 64
2454160	Tebuconazole	34.2	Spike	P	0 - 76
2454160	Terbufos	22.7	Spike	P	0 - 29
2454160	Terbuthylazine	18.0	Spike	P	0 - 28
2454160	Tetradecachloro-m-terphenyl	0.223	Spike	P	0 - 42
2454160	Thiobencarb	5.15	Spike	P	0 - 26
2454160	Tri-o-cresyl Phosphate	13.0	Spike	P	0 - 24
2454160	Triadimefon	10.6	Spike	P	0 - 40
2454160	Tris(1-chloro-2-propyl) phosphate (TCPP)	18.1	Spike	P	0 - 30
2454160	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	15.0	Spike	P	0 - 22
2454160	Tris(2-chloroethyl) phosphate (TCEP)	14.2	Spike	P	0 - 15

Reference Method: EPA 8270E

Batch ID: P438751

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

Reference Method: EPA 8270E

Batch ID: P438751

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454003	PCB-1016	20.3	Spike	P	0 - 25
2454003	PCB-1260	2.87	Spike	P	0 - 30
2454159	Aldrin	23.8	Spike	P	0 - 41
2454159	Alpha-BHC	3.63	Spike	P	0 - 25
2454159	Alpha-Chlordane	12.4	Spike	P	0 - 32
2454159	Beta-BHC	9.57	Spike	P	0 - 33
2454159	Beta-Cyfluthrin	9.38	Spike	P	0 - 43
2454159	Bifenthrin	20.0	Spike	P	0 - 52
2454159	Carbophenothion	0.589	Spike	P	0 - 30
2454159	Chlorothalonil	3.45	Spike	P	0 - 82
2454159	Cis-Nonachlor	32.2	Spike	P	0 - 33
2454159	Cypermethrin	7.17	Spike	P	0 - 51
2454159	Dacthal	18.2	Spike	P	0 - 27
2454159	DDD-p,p'	13.1	Spike	P	0 - 39
2454159	DDE-p,p'	10.4	Spike	P	0 - 31
2454159	DDT-p,p'	1.88	Spike	P	0 - 29
2454159	Delta-BHC	1.58	Spike	P	0 - 35
2454159	Deltamethrin	19.2	Spike	P	0 - 100
2454159	Dichlobenil	26.5	Spike	P	0 - 40
2454159	Dicofol	8.30	Spike	P	0 - 37
2454159	Dieldrin	11.2	Spike	P	0 - 27
2454159	Endosulfan I	6.77	Spike	P	0 - 23
2454159	Endosulfan II	8.01	Spike	P	0 - 34
2454159	Endosulfan Sulfate	33.7	Spike	P	0 - 36
2454159	Endrin	3.63	Spike	P	0 - 45
2454159	Endrin Aldehyde	18.1	Spike	P	0 - 76
2454159	Endrin Ketone	21.2	Spike	P	0 - 43
2454159	Esfenvalerate	12.9	Spike	P	0 - 51
2454159	Ethalfuralin	18.0	Spike	P	0 - 22
2454159	Fenpropathrin	17.1	Spike	P	0 - 49
2454159	Gamma-BHC	7.93	Spike	P	0 - 28
2454159	Gamma-Chlordane	31.7	Spike	P	0 - 40
2454159	Heptachlor	6.91	Spike	P	0 - 29
2454159	Heptachlor Epoxide	19.0	Spike	P	0 - 33
2454159	Hexachlorobenzene	23.2	Spike	P	0 - 36
2454159	Kepone	9.70	Spike	P	0 - 85
2454159	Lambda-Cyhalothrin	31.7	Spike	P	0 - 55
2454159	Methoprene	18.5	Spike	P	0 - 53
2454159	Methoxychlor	24.8	Spike	P	0 - 50
2454159	MGK-264	7.15	Spike	P	0 - 43
2454159	Mirex	24.7	Spike	P	0 - 40
2454159	Oxychlordane	5.90	Spike	P	0 - 31
2454159	Permethrin	2.52	Spike	P	0 - 50
2454159	Phenothrin	2.21	Spike	P	0 - 58
2454159	Piperonyl Butoxide	7.28	Spike	P	0 - 100
2454159	Prallethrin	11.5	Spike	P	0 - 39
2454159	Tau-Fluvalinate	8.43	Spike	P	0 - 54
2454159	Tetramethrin	16.5	Spike	P	0 - 51
2454159	Trans-Nonachlor	23.4	Spike	P	0 - 39
2454159	Triclosan Methyl	6.48	Spike	P	0 - 31
2454159	Trifluralin	22.6	Spike	F	0 - 22

Quality Assurance Report Precision

Reference Method: EPA 8276

Batch ID: P438751

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2454003	Chlordane	3.53	Spike	P	0 - 28
2454003	Toxaphene	0.493	Spike	P	0 - 27

Reference Method: EPA 8321B

Batch ID: P438413

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453787	2,4-D	18.8	Spike	P	0 - 30
2453787	2,4,5-T	17.4	Spike	P	0 - 30
2453787	Acetaminophen	14.6	Spike	P	0 - 30
2453787	Acetamiprid	13.5	Spike	P	0 - 30
2453787	Afidopyropen	10.7	Spike	P	0 - 30
2453787	Bentazon	13.8	Spike	P	0 - 30
2453787	Benzovindiflupyr	17.7	Spike	P	0 - 30
2453787	Carbamazepine	10.2	Spike	P	0 - 30
2453787	Clothianidin	12.1	Spike	P	0 - 30
2453787	Dinotefuran	15.9	Spike	P	0 - 30
2453787	Diuron	13.6	Spike	P	0 - 30
2453787	Fenuron	8.07	Spike	P	0 - 30
2453787	Fluridone	9.31	Spike	P	0 - 30
2453787	Hydrocodone	13.0	Spike	P	0 - 30
2453787	Ibuprofen	18.9	Spike	P	0 - 30
2453787	Imazapyr	17.3	Spike	P	0 - 30
2453787	Imidacloprid	14.4	Spike	P	0 - 30
2453787	Linuron	18.8	Spike	P	0 - 30
2453787	Mandestrobin	15.2	Spike	P	0 - 30
2453787	MCP	16.4	Spike	P	0 - 30
2453787	Naproxen	26.2	Spike	P	0 - 30
2453787	Primidone	13.6	Spike	P	0 - 30
2453787	Pyraclostrobin	13.4	Spike	P	0 - 30
2453787	Silvex	21.6	Spike	P	0 - 30
2453787	Thiamethoxam	12.7	Spike	P	0 - 30
2453787	Tolfenpyrad	15.0	Spike	P	0 - 30
2453787	Triclopyr	17.4	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P438435

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453829	Acesulfame K	1.79	Spike	P	0 - 30
2453829	AMPA	9.72	Spike	P	0 - 30
2453829	Endothall	1.16	Spike	P	0 - 30
2453829	Glufosinate	0.333	Spike	P	0 - 30
2453829	Glyphosate	6.48	Spike	P	0 - 30
2453829	Sucralose	25.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P438548

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453938	Total Alkalinity	2.51	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438847

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453694	TDS	4.48	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P438551

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453938	Fluoride	0.490	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P438532

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2453721	Organic Carbon	0.817	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2453988
Field Sample ID: G3SD0183

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.3	P	37 - 129
EPA 8270E	Decachlorobiphenyl	59.0	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	48.6	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	53.6	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	65.9	P	28 - 102
EPA 8276	PCNB	90.4	P	49 - 115

Lab Sample ID: 2453989
Field Sample ID: G3SD0064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	108	P	20 - 200
EPA 8270E	Simazine-d10	105	P	58 - 137
EPA 8270E	Terbufos-d10	88.0	P	50 - 134
EPA 8270E	Terphenyl-d14	98.9	P	44 - 134

Lab Sample ID: 2454000
Field Sample ID: G3SD0092

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	82.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	52.9	P	30 - 160
EPA 8321B	Diuron-d6	48.4	P	30 - 160
EPA 8321B	Endothall-d6	99.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.5	P	30 - 160
EPA 8321B	Primidone-d5	82.9	P	30 - 160
EPA 8321B	Sucralose-d6	59.3	P	30 - 160

Lab Sample ID: 2454001
Field Sample ID: G3SD0089

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	80.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.6	P	30 - 160
EPA 8321B	Diuron-d6	51.0	P	30 - 160
EPA 8321B	Endothall-d6	97.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	68.0	P	30 - 160
EPA 8321B	Primidone-d5	78.8	P	30 - 160
EPA 8321B	Sucralose-d6	35.4	P	30 - 160

Lab Sample ID: 2454002
Field Sample ID: G3SD0064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	59.3	P	30 - 160
EPA 8321B	Diuron-d6	51.7	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2454002
Field Sample ID: G3SD0064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Endothall-d6	87.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	85.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.0	P	30 - 160
EPA 8321B	Primidone-d5	83.4	P	30 - 160
EPA 8321B	Sucralose-d6	47.3	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A122980

Included Lab Sample IDs: 2453972

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122983

Included Lab Sample IDs: 2453974

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.9	98.7	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122985

Included Lab Sample IDs: 2453972

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.0	98.0	P/P	95 - 105

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A123027

Included Lab Sample IDs: 2453973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.6	99.9	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A123034

Included Lab Sample IDs: 2453973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.5	98.4	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A123035

Included Lab Sample IDs: 2454000, 2454001, 2454002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	142	160	P/P	60 - 160
Acesulfame K	160	156	P/P	60 - 160
Sucralose	102	119	P/P	60 - 160
Sucralose	119	116	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A123037

Included Lab Sample IDs: 2454000, 2454001, 2454002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	81.1	90.7	P/P	60 - 160
AMPA	85.8	88.3	P/P	60 - 160
AMPA	90.7	85.8	P/P	60 - 160
Endothall	104	120	P/P	60 - 160
Endothall	120	103	P/P	60 - 160
Glufosinate	84.3	86.9	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A123037

Included Lab Sample IDs: 2454000, 2454001, 2454002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glufosinate	84.9	88.6	P/P	60 - 160
Glufosinate	86.9	84.9	P/P	60 - 160
Glyphosate	89.5	95.7	P/P	60 - 160
Glyphosate	91.9	95.3	P/P	60 - 160
Glyphosate	95.7	91.9	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A123042

Included Lab Sample IDs: 2454005

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.1	99.6	P/P	90 - 110
Antimony	102	103	P/P	90 - 110
Arsenic	98.0	99.4	P/P	90 - 110
Barium	100	100	P/P	90 - 110
Beryllium	96.7	96.5	P/P	90 - 110
Boron	100	100	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Chromium	102	102	P/P	90 - 110
Cobalt	96.7	96.6	P/P	90 - 110
Copper	94.8	95.7	P/P	90 - 110
Lead	95.2	96.0	P/P	90 - 110
Manganese	102	102	P/P	90 - 110
Molybdenum	99.4	100	P/P	90 - 110
Nickel	97.0	96.7	P/P	90 - 110
Selenium	101	100	P/P	90 - 110
Silver	99.1	99.3	P/P	90 - 110
Thallium	96.6	97.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A123047

Included Lab Sample IDs: 2453972

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	98.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A123047

Included Lab Sample IDs: 2453972

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

Reference Method: EPA 8321B

Run ID: A123073

Included Lab Sample IDs: 2454000, 2454001, 2454002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	96.2	P/P	50 - 150
2,4,5-T	94.3	89.5	P/P	50 - 150
Acetaminophen	105	105	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A123073

Included Lab Sample IDs: 2454000, 2454001, 2454002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetamiprid	106	107	P/P	50 - 150
Afidopyropen	98.9	99.7	P/P	50 - 150
Bentazon	92.0	89.7	P/P	50 - 160
Benzovindiflupyr	105	107	P/P	50 - 150
Carbamazepine	108	109	P/P	60 - 150
Clothianidin	103	105	P/P	60 - 150
Dinotefuran	113	112	P/P	50 - 150
Diuron	103	105	P/P	60 - 160
Fenuron	103	105	P/P	60 - 150
Fluridone	105	112	P/P	60 - 160
Hydrocodone	108	109	P/P	60 - 150
Ibuprofen	93.8	95.9	P/P	50 - 160
Imazapyr	88.9	86.3	P/P	50 - 150
Imazapyr	89.4	87.8	P/P	50 - 150
Imidacloprid	99.1	96.0	P/P	60 - 150
Linuron	102	100	P/P	60 - 150
Mandestrobin	105	108	P/P	50 - 150
MCPP	97.0	102	P/P	50 - 150
Naproxen	103	125	P/P	50 - 160
Primidone	99.6	97.7	P/P	60 - 150
Pyraclostrobin	103	102	P/P	60 - 150
Silvex	104	107	P/P	50 - 150
Thiamethoxam	113	112	P/P	50 - 150
Tolfenpyrad	95.6	98.3	P/P	60 - 150
Triclopyr	92.7	95.2	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A123101

Included Lab Sample IDs: 2453973

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.4	109	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A123118

Included Lab Sample IDs: 2453972

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	104	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A123145

Included Lab Sample IDs: 2453988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.3		P	80 - 120
PCB-1260	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A123155

Included Lab Sample IDs: 2454005

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	96.7	96.7	P/P	90 - 110
Iron	97.2	96.9	P/P	90 - 110
Magnesium	97.6	96.7	P/P	90 - 110
Potassium	96.3	97.1	P/P	90 - 110
Sodium	94.9	95.0	P/P	90 - 110
Strontium	98.8	102	P/P	90 - 110
Tin	99.8	101	P/P	90 - 110
Titanium	99.9	101	P/P	90 - 110
Vanadium	99.0	99.3	P/P	90 - 110
Zinc	98.0	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A123188

Included Lab Sample IDs: 2453973

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A123196

Included Lab Sample IDs: 2453973

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

Reference Method: EPA 8270E

Run ID: A123313

Included Lab Sample IDs: 2453988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	111		P	80 - 120
Alpha-BHC	91.0		P	80 - 120
Alpha-Chlordane	87.0		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	101		P	80 - 120
Bifenthrin	102		P	80 - 120
Carbophenothion	96.4		P	80 - 120
Chlorothalonil	109		P	80 - 120
Cis-Nonachlor	96.7		P	80 - 120
Cypermethrin	102		P	80 - 120
Dacthal	112		P	80 - 120
DDD-p,p'	104		P	80 - 120
DDE-p,p'	88.1		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	98.3		P	80 - 120
Deltamethrin	100		P	80 - 120
Dichlobenil	108		P	80 - 120
Dicofol	98.7		P	80 - 120
Dieldrin	96.2		P	80 - 120
Endosulfan I	97.5		P	80 - 120
Endosulfan II	96.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123313
Included Lab Sample IDs: 2453988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan Sulfate	105		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	98.7		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	100		P	80 - 120
Ethalfuralin	107		P	80 - 120
Fenpropathrin	97.7		P	80 - 120
Gamma-BHC	98.4		P	80 - 120
Gamma-Chlordane	97.5		P	80 - 120
Heptachlor	118		P	80 - 120
Heptachlor Epoxide	106		P	80 - 120
Hexachlorobenzene	96.9		P	80 - 120
Kepone	87.5		P	80 - 120
Lambda-Cyhalothrin	100		P	80 - 120
Methoprene	90.1		P	80 - 120
Methoxychlor	103		P	80 - 120
MGK-264	85.1		P	80 - 120
Mirex	99.1		P	80 - 120
Oxychlordane	92.0		P	80 - 120
Permethrin	96.9		P	80 - 120
Phenothrin	101		P	80 - 120
Piperonyl Butoxide	97.1		P	80 - 120
Prallethrin	105		P	80 - 120
Tau-Fluvalinate	106		P	80 - 120
Tetramethrin	99.8		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	100		P	80 - 120
Trifluralin	102		P	80 - 120

Reference Method: EPA 8276
Run ID: A123319
Included Lab Sample IDs: 2453988

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	105		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123331
Included Lab Sample IDs: 2453989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	84.5		P	80 - 120
Alachlor	83.6		P	80 - 120
Ametryn	92.3		P	80 - 120
Atrazine	82.7		P	80 - 120
Atrazine Desethyl	85.7		P	80 - 120
Azinphos Methyl	169*		F	80 - 120
Azoxystrobin	96.0		P	80 - 120
Bromacil	93.1		P	80 - 120
Butylate	98.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A123331
 Included Lab Sample IDs: 2453989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Caffeine	83.8		P	80 - 120
Carbophenothion	92.6		P	80 - 120
Carfentrazone Ethyl	95.6		P	80 - 120
Chlorfenapyr	81.1		P	80 - 120
Chlorpyrifos Ethyl	89.2		P	80 - 120
Chlorpyrifos Methyl	93.5		P	80 - 120
Coumaphos	95.0		P	80 - 120
Cyanazine	85.1		P	80 - 120
Cyprodinil	84.3		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	98.3		P	80 - 120
Difenoconazole	92.1		P	80 - 120
Dimethenamid	97.1		P	80 - 120
Dimethomorph	91.4		P	80 - 120
Disulfoton	98.5		P	80 - 120
Dithiopyr	91.8		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	80.6		P	80 - 120
Ethoprop	96.7		P	80 - 120
Etridiazole	93.2		P	80 - 120
Fenamiphos	89.0		P	80 - 120
Fenbuconazole	86.9		P	80 - 120
Fipronil	82.0		P	80 - 120
Fipronil Desulfinyl	85.4		P	80 - 120
Fipronil Sulfide	94.4		P	80 - 120
Fipronil Sulfone	88.8		P	80 - 120
Fluazifop-P-butyl	92.4		P	80 - 120
Fludioxonil	109		P	80 - 120
Flumioxazin	89.6		P	80 - 120
Flutolanil	101		P	80 - 120
Fluxapyroxad	97.1		P	80 - 120
Fonofos	97.0		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	109		P	80 - 120
Iprodione	84.7		P	80 - 120
Loratadine	88.2		P	80 - 120
Malathion	83.9		P	80 - 120
Metalaxyl	85.8		P	80 - 120
Metolachlor	96.5		P	80 - 120
Metribuzin	97.3		P	80 - 120
Mevinphos	98.7		P	80 - 120
Molinate	86.8		P	80 - 120
Myclobutanil	83.4		P	80 - 120
Naled	105		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	92.9		P	80 - 120
Oxadiazon	98.4		P	80 - 120
Oxyfluorfen	97.9		P	80 - 120
Parathion Ethyl	105		P	80 - 120
Parathion Methyl	80.9		P	80 - 120
Pendimethalin	94.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123331
Included Lab Sample IDs: 2453989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenytoin	96.9		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	82.7		P	80 - 120
Prometon	89.4		P	80 - 120
Prometryn	90.4		P	80 - 120
Pronamide	95.4		P	80 - 120
Propanil	107		P	80 - 120
Propargite	95.4		P	80 - 120
Propiconazole	90.1		P	80 - 120
Pyraflufen Ethyl	97.0		P	80 - 120
Pyridaben	96.6		P	80 - 120
Pyriproxyfen	240*		F	80 - 120
Simazine	87.7		P	80 - 120
Stiropfos	83.3		P	80 - 120
Sulfentrazone	99.0		P	80 - 120
Tebuconazole	93.2		P	80 - 120
Terbufos	96.2		P	80 - 120
Terbutylazine	83.0		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	97.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123453
Included Lab Sample IDs: 2453989

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	103		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzone	105		P	80 - 120
Dechlorane 602	106		P	80 - 120
Dechlorane 603	100		P	80 - 120
Dechlorane Plus	103		P	80 - 120
Hexabromobenzene	105		P	80 - 120
Octinoxate	105		P	80 - 120
Oxybenzone	106		P	80 - 120
PBB-153	96.1		P	80 - 120
PBDE-47	106		P	80 - 120
PBDE-99	106		P	80 - 120
Pentabromotoluene	98.7		P	80 - 120
Tetradecachloro-m-terphenyl	94.4		P	80 - 120
Tri-o-cresyl Phosphate	107		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	103		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	98.8		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	99.2					0.429	
EPA 180.1 Rev. 2.0	Turbidity	103					0.631	
EPA 200.7 Rev. 4.4	Calcium	102	98.2	98.9	96.9			0.453
	Iron	101	98.9	95.9	98.2			2.21
	Magnesium	103	101	97.7	97.8			2.54
	Potassium	99.4	94.4	95.3	95.6			0.614
	Sodium	95.3	93.6	85.2				0.0429
	Strontium	95.2	93.4	94.3	92.2			0.935
	Tin	96.6	95.7	95.9	94.0			0.196
	Titanium	95.3	93.5	93.9	92.7			0.345
	Vanadium	95.4	94.7	95.1	92.4			0.450
	Zinc	94.8	93.1	92.6	92.2			0.566
EPA 200.8 Rev. 5.4	Aluminum	99.4	99.3	98.7	97.6			0.477
	Antimony	102	103	104	102			0.910
	Arsenic	101	98.2	97.9	98.7			0.304
	Barium	102	102	102	99.8			0.0809
	Beryllium	95.6	91.1	95.6	91.5			4.48
	Boron	101	103	102	106			0.762
	Cadmium	99.8	100	103	99.3			2.17
	Chromium	102	101	102	102			0.374
	Cobalt	98.0	96.4	96.3	95.2			0.0864
	Copper	98.9	96.3	96.3	94.3			0.0117
	Lead	95.7	96.1	96.3	94.9			0.183
	Manganese	99.7	102	103	102			1.01
	Molybdenum	99.5	98.6	98.4	98.4			0.216
	Nickel	98.5	96.7	96.1	95.6			0.571
	Selenium	102	95.4	97.1	98.9			1.71
	Silver	102	102	102	102			0.135
	Thallium	97.9	98.9	99.7	97.4			0.867
EPA 300.0 Rev. 2.1	Chloride	101	102	105			0.661	
	Sulfate	101	99.8	104			0.756	
EPA 350.1 Rev. 2.0	Ammonia-N	95.0	97.2	98.2				0.864
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	110	108	109				1.27
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	96.5	97.0				0.517
EPA 365.1 Rev. 2.0	Total-P	106	108	104				3.56
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8	96.0	96.2				0.155
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpe ntylphenol (UV-328)	77.3	79.4	72.4				9.19
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.8	99.6	102				2.63
	Acetochlor	113	101	123				19.7
	Alachlor	111	99.8	102				2.43
	Aldrin	56.2	61.6	48.5				23.8
	Alpha-BHC	88.3	93.0	89.7				3.63
	Alpha-Chlordane	76.3	72.4	81.9				12.4
	Ametryn	138	136	153				12.0
	Atrazine	106	93.2	105				11.2
	Atrazine Desethyl	111	105	107				1.81
	Avobenzone	133	126	152				18.6
	Azinphos Methyl	73.0	77.5	84.4				8.55
	Azoxystrobin	120	113	127				11.3
	Beta-BHC	109	96.3	106				9.57
	Beta-Cyfluthrin	51.8	103	94.1				9.38

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Bifenthrin	39.4	80.7	66.0			20.0
	Bromacil	110	107	116			7.90
	Butylate	62.8	50.9	71.5			33.7
	Caffeine	91.7	211	117			57.0
	Carbophenothion	114	104	108			4.18
	Carbophenothion	83.3	110	111			0.589
	Carfentrazone Ethyl	126	125	113			9.51
	Chlorfenapyr	108	78.1	87.8			11.7
	Chlorothalonil	76.3	138	133			3.45
	Chlorpyrifos Ethyl	113	102	112			9.30
	Chlorpyrifos Methyl	121	111	159			35.4
	Cis-Nonachlor	61.4	60.5	43.7			32.2
	Coumaphos	178	176	187			5.98
	Cyanazine	170	149	166			10.9
	Cypermethrin	68.8	133	143			7.17
	Cyprodinil	140	123	142			13.7
	Dacthal	90.3	82.7	68.9			18.2
	DDD-p,p'	72.6	69.6	61.1			13.1
	DDE-p,p'	77.1	77.7	70.0			10.4
	DDT-p,p'	73.3	89.1	87.4			1.88
	Dechlorane 602	82.2	78.4	65.5			18.0
	Dechlorane 603	92.4	93.5	88.8			5.05
	Dechlorane Plus	89.7	89.2	77.3			14.3
	Delta-BHC	108	115	117			1.58
	Deltamethrin	71.2	115	94.5			19.2
	Demeton	88.5	94.2	109			14.9
	Diazinon	115	110	122			10.6
	Dichlobenil	81.5	58.1	44.5			26.5
	Dicofol	71.7	75.6	69.6			8.30
	Dieldrin	86.1	88.1	78.7			11.2
	Difenoconazole	142	116	58.6			65.7
	Dimethenamid	110	101	106			5.04
	Dimethomorph	203	211	212			0.395
	Disulfoton	98.7	89.6	107			17.6
	Dithiopyr	93.3	95.6	110			14.1
	Endosulfan I	90.9	86.1	92.2			6.77
	Endosulfan II	91.8	90.5	83.5			8.01
	Endosulfan Sulfate	81.1	87.4	62.2			33.7
	Endrin	74.7	73.7	71.0			3.63
	Endrin Aldehyde	91.8	80.1	66.8			18.1
	Endrin Ketone	86.8	88.3	71.4			21.2
	EPTC	59.2	53.8	67.4			22.5
	Esfenvalerate	62.2	126	111			12.9
	Ethalfuralin	69.4	86.9	72.6			18.0
	Ethion	93.1	103	69.8			38.2
	Ethoprop	98.9	88.4	108			19.9
	Etridiazole	75.5	64.8	81.8			23.1
	Fenamiphos	109	97.0	107			9.65
	Fenbuconazole	121	117	100			15.7
	Fenpropathrin	61.9	68.9	81.8			17.1
	Fipronil	100	127	89.4			34.7
	Fipronil Desulfinyl	110	109	123			11.8
	Fipronil Sulfide	103	104	87.7			16.6
	Fipronil Sulfone	95.6	94.7	49.6			58.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fluazifop-P-butyl	128	97.6	109			10.6
	Fludioxonil	105	110	103			5.98
	Flumioxazin	165	170	164			3.44
	Flutolanil	124	112	114			1.55
	Fluxapyroxad	113	106	79.3			29.1
	Fonofos	101	93.4	111			17.3
	Gamma-BHC	90.3	90.1	83.3			7.93
	Gamma-Chlordane	75.7	52.0	71.6			31.7
	Heptachlor	86.1	86.1	92.3			6.91
	Heptachlor Epoxide	91.0	111	92.0			19.0
	Hexabromobenzene	87.2	83.4	95.6			13.6
	Hexachlorobenzene	59.0	43.1	54.5			23.2
	Hexazinone	112	107	105			1.83
	Imazalil	124	108	108			0.179
	Iprodione	127	126	98.8			24.1
	Kepone	142	140	155			9.70
	Lambda-Cyhalothrin	45.1	62.3	85.8			31.7
	Loratadine	168	172	169			1.63
	Malathion	113	111	113			1.59
	Metalaxyl	109	104	118			12.1
	Methoprene	46.0	52.5	63.2			18.5
	Methoxychlor	78.9	66.6	85.5			24.8
	Metolachlor	108	105	99.4			5.34
	Metribuzin	125	130	138			5.71
	Mevinphos	97.6	93.9	115			20.3
	MGK-264	82.4	97.4	90.7			7.15
	Mirex	50.6	45.9	58.8			24.7
	Molinate	60.0	51.6	67.4			26.5
	Myclobutanil	128	117	123			5.65
	Naled	45.3	43.4	47.0			7.86
	Napropamide	112	90.5	80.5			11.8
	Norflurazon	123	124	122			2.01
	Octinoxate	101	90.4	129			35.0
	Oxadiazon	106	95.1	96.6			1.55
	Oxybenzone	91.3	84.0	113			29.6
	Oxychlordane	81.6	81.5	86.5			5.90
	Oxyfluorfen	142	119	138			14.5
	Parathion Ethyl	111	94.9	104			8.83
	Parathion Methyl	136	151	180			17.3
	PBB-153	86.3	97.2	104			7.23
	PBDE-47	85.5	74.4	86.6			15.2
	PBDE-99	92.2	93.5	93.3			0.248
	PCB-1016	77.6	67.0	82.2			20.3
	PCB-1260	98.8	104	107			2.87
	Pendimethalin	179	156	161			2.89
	Pentabromotoluene	81.3	77.7	98.2			23.3
	Permethrin	52.9	87.6	89.9			2.52
	Phenothrin	42.2	87.7	85.8			2.21
	Phenytoln	67.8	98.6	112			13.1
	Phorate	94.9	80.5	113			33.3
	Piperonyl Butoxide	91.2	105	96.8			7.28
	Prallethrin	70.9	64.5	72.3			11.5
	Prodimamine	59.9	61.5	73.0			17.2
	Prometon	123	119	120			0.939

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Prometryn	137	126	126		0.157
	Pronamide	113	108	104		3.83
	Propanil	126	130	132		1.34
	Propargite	140	134	94.8		34.3
	Propiconazole	96.0	104	103		1.20
	Pyraflufen Ethyl	134	140	122		13.9
	Pyridaben	149	159	121		27.0
	Pyriproxyfen	125	112	102		9.30
	Simazine	114	114	123		7.13
	Stirophos	117	111	80.5		31.5
	Sulfentrazone	87.9	115	91.3		22.7
	Tau-Fluvalinate	51.5	107	117		8.43
	Tebuconazole	112	124	87.8		34.2
	Terbufos	103	93.7	118		22.7
	Terbutylazine	99.6	85.3	102		18.0
	Tetradecachloro-m-terphenyl	119	137	136		0.223
	Tetramethrin	87.2	94.3	111		16.5
	Thiobencarb	115	104	98.7		5.15
	Trans-Nonachlor	85.5	114	90.0		23.4
	Tri-o-cresyl Phosphate	104	99.3	113		13.0
	Triadimefon	103	86.9	96.7		10.6
	Triclosan Methyl	85.3	64.8	69.1		6.48
	Trifluralin	68.8	62.3	78.1		22.6
	Tris(1-chloro-2-propyl) phosphate (TCPP)	94.1	107	89.4		18.1
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.0	118	102		15.0
	Tris(2-chloroethyl) phosphate (TCEP)	102	118	103		14.2
EPA 8276	Chlordane	82.4	91.7	95.3		3.53
	Toxaphene	94.3	113	112		0.493
EPA 8321B	2,4-D	98.5	105	80.3		18.8
	2,4,5-T	110	94.1	79.0		17.4
	Acesulfame K	134	127	129		1.79
	Acetaminophen	88.9	91.7	106		14.6
	Acetamiprid	90.0	77.4	67.6		13.5
	Afidopyropen	83.0	81.6	73.4		10.7
	AMPA	73.8	75.3	82.9		9.72
	Bentazon	68.3				13.8
	Benzovindiflupyr	87.3	98.0	82.0		17.7
	Carbamazepine	81.0	81.9	72.5		10.2
	Clothianidin	88.3	113	98.1		12.1
	Dinotefuran	101	95.3	112		15.9
	Diuron	66.3	75.0	65.4		13.6
	Endothall	114	127	126		1.16
	Fenuron	99.8	86.4	79.7		8.07
	Fluridone	89.9	94.5	81.1		9.31
	Glufosinate	90.5	82.1	81.9		0.333
	Glyphosate	87.9	86.3	92.1		6.48
	Hydrocodone	90.0	79.4	90.5		13.0
	Ibuprofen	69.6	70.9	58.7		18.9
	Imazapyr	90.0				17.3
	Imidacloprid	86.1	141	120		14.4
	Linuron	81.7	82.4	68.2		18.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Mandestrobin	89.3	98.8	84.8		15.2
	MCCP	92.5	103	86.8		16.4
	Naproxen	67.6	90.0	69.1		26.2
	Primidone	85.0	94.2	109		13.6
	Pyraclostrobin	79.0	91.3	79.9		13.4
	Silvex	91.3	101	81.7		21.6
	Sucralose	101	54.8	70.4		25.0
	Thiamethoxam	92.5	89.0	101		12.7
	Tolfenpyrad	46.7	64.4	55.4		15.0
	Triclopyr	114	100	84.0		17.4
SM 2320 B-2011	Total Alkalinity	95.7			2.51	
SM 2540 C-2015	TDS	93.6			4.48	
SM 2540 D-2015	TSS	97.6				
SM 4500-F- C-2011	Fluoride	101	102	102		0.490
SM 5310 B-2011	Organic Carbon	95.6	96.6	95.6		0.817

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2453972
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2453972
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2454005
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2454005
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2453972
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2453972
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2453973
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2453973
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2453973
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2453973
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2453974
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2453989
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2453988
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2453989
EPA 8270E	PCBs in water matrices by GC/MS/MS	2453988
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2453988
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2454000, 2454001, 2454002
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2453972
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2454005
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2453972
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2453972
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2453972
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2453973

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	12/01/2023			12/01/2023 12:13	Blanca Fach	2453972
EPA 180.1 Rev. 2.0	12/01/2023			12/01/2023 11:37	Anna M. Plaviak	2453972
EPA 200.7 Rev. 4.4	12/01/2023	12/04/2023 13:55	George D Taylor	12/12/2023 04:42	McKinley C Carter	2454005
	12/01/2023	12/04/2023 13:55	George D Taylor	12/12/2023 04:50	McKinley C Carter	2454005
EPA 200.8 Rev. 5.4	12/01/2023	12/04/2023 13:55	George D Taylor	12/05/2023 17:35	Emily M Philpot	2454005
EPA 300.0 Rev. 2.1	12/01/2023			12/08/2023 04:09	James L Waggeberby	2453972
EPA 350.1 Rev. 2.0	12/01/2023			12/05/2023 14:57	Ping Hua	2453973
EPA 351.2 Rev. 2.0	12/01/2023	12/06/2023 11:57	Simonne.V. Calhoun	12/07/2023 16:31	Ping Hua	2453973
EPA 353.2 Rev. 2.0	12/01/2023			12/12/2023 14:30	Fadila Guebre	2453973
EPA 365.1 Rev. 2.0	12/01/2023	12/12/2023 14:15	Adam P Silver	12/13/2023 13:39	Simonne.V. Calhoun	2453973
EPA 365.1 Rev. 2.0 dissolved	12/01/2023			12/01/2023 13:52	Elise M. Gillis	2453974
EPA 8270E	12/01/2023	12/03/2023 08:30	Rasheda Ghaffari	12/12/2023 22:53	Vandana T. Nagar	2453989
	12/01/2023	12/03/2023 08:30	Rasheda Ghaffari	12/28/2023 20:31	Arthur Maknenko	2453989
	12/01/2023	12/06/2023 08:30	Rasheda Ghaffari	12/11/2023 20:58	Lipi Saha	2453988
	12/01/2023	12/06/2023 08:30	Rasheda Ghaffari	12/15/2023 21:38	Julie Wi	2453988
EPA 8276	12/01/2023	12/06/2023 08:30	Rasheda Ghaffari	12/19/2023 05:51	Arthur Maknenko	2453988
EPA 8321B	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 11:35	Hana Lee	2454000
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 11:49	Hana Lee	2454001
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 12:16	Hana Lee	2454002
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 14:20	Hana Lee	2454000
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 14:34	Hana Lee	2454001
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 15:02	Hana Lee	2454002
	12/01/2023	12/05/2023 08:30	Tae K Lee	12/05/2023 15:15	Hana Lee	2454001
	12/01/2023	12/05/2023 09:00	Hoor Shaik	12/06/2023 17:32	Juyoung Kim	2454000
	12/01/2023	12/05/2023 09:00	Hoor Shaik	12/06/2023 17:50	Juyoung Kim	2454001
	12/01/2023	12/05/2023 09:00	Hoor Shaik	12/06/2023 18:07	Juyoung Kim	2454002
	12/01/2023	12/05/2023 09:00	Hoor Shaik	12/07/2023 11:27	Juyoung Kim	2454000
SM 2320 B-2011	12/01/2023			12/05/2023 21:20	Chandler E Cox	2453972
SM 2340 B-2011	12/01/2023			12/12/2023 04:50	McKinley C Carter	2454005
SM 2540 C-2015	12/01/2023			12/05/2023 16:11	Yijie Li	2453972
SM 2540 D-2015	12/01/2023			12/05/2023 16:11	Yijie Li	2453972
SM 4500-F- C-2011	12/01/2023			12/05/2023 21:20	Chandler E Cox	2453972
SM 5310 B-2011	12/01/2023			12/05/2023 19:39	Kenneth H Lee	2453973