

Chemical Analysis Report

SW-DIST-2023-03-17-01

Florida DEP Laboratory
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DOH Accreditation E31780

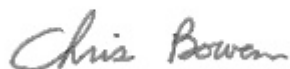
Event Description: **Run 1**
Request ID: **RQ-2023-04-03-36**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
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13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Chris Bowen, Environmental Administrator

Date Certified: 05-APR-2023 14:20



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: 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: Gilley Creek downstream

Collection Date/Time: 03/16/2023 10:15

Field ID: G2SW0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394654	DEP SOP: NU-094-1	Color (true)	41		PCU	P427308	
	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P427313	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P427729	
	SM 2320 B-2011	Total Alkalinity	39		mg CaCO3/L	P427557	
	SM 2540 C-2015	TDS	145		mg/L	P427922	
	SM 2540 D-2015	TSS	2	U	mg/L	P427592	
	SM 4500-F- C-2011	Fluoride	0.26		mg F/L	P427559	MS
2394655	EPA 350.1 Rev. 2.0	Ammonia-N	0.024		mg N/L	P427498	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P427465	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.7		mg N/L	P427468	
	EPA 365.1 Rev. 2.0	Total-P	0.23		mg P/L	P427337	
	SM 5310 B-2011	Organic Carbon	6.6		mg C/L	P427683	
2394660	EPA 8270E	Oxybenzone**	11	U	ng/L	P427316	
		Acetochlor	0.21	U	ng/L	P427316	
		Octinoxate**	21	U	ng/L	P427316	
		Alachlor	0.42	U	ng/L	P427316	
		Avobenzone**	110	U	ng/L	P427316	
		Ametryn	1.2	U	ng/L	P427316	
		Atrazine	0.53	I	ng/L	P427316	MS
		PBDE-47**	4.2	U	ng/L	P427316	
		Atrazine Desethyl	1.4	U	ng/L	P427316	
		PBDE-99**	5.3	U	ng/L	P427316	
		Azinphos Methyl	3.2	U	ng/L	P427316	
		Tri-o-cresyl Phosphate**	6.4	U	ng/L	P427316	
		Azoxystrobin	0.42	U	ng/L	P427316	
		Bromacil	24		ng/L	P427316	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P427316	
		Butylate	0.21	U	ng/L	P427316	
		Dechlorane Plus**	32	U	ng/L	P427316	MS
		Caffeine**	13	I	ng/L	P427316	
		Dechlorane 602**	5.3	U	ng/L	P427316	
		Carbophenothion	0.53	U	ng/L	P427316	
		Dechlorane 603**	4.2	U	ng/L	P427316	
		Carfentrazone Ethyl	0.16	U	ng/L	P427316	
		Hexabromobenzene**	6.4	U	ng/L	P427316	
		Chlorfenapyr	0.32	U	ng/L	P427316	MS
		PBB-153**	8.5	U	ng/L	P427316	
		Chlorpyrifos Ethyl	0.32	U	ng/L	P427316	
		Pentabromotoluene**	3.2	U	ng/L	P427316	
		Chlorpyrifos Methyl	0.11	U	ng/L	P427316	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	74	U	ng/L	P427316	
		Coumaphos	1.1	U	ng/L	P427316	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	16	U	ng/L	P427316	

Field ID: G2SW0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394660	EPA 8270E	Cyanazine	5.3	U	ng/L	P427316	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	U	ng/L	P427316	
		Cyprodinil	0.34	I	ng/L	P427316	
		Tetradecachloro-m-terphenyl**	8.0	U	ng/L	P427316	MS
		Demeton	3.7	U	ng/L	P427316	
		Diazinon	0.13	U	ng/L	P427316	
		Difenoconazole	0.64	U	ng/L	P427316	
		Dimethenamid	0.11	U	ng/L	P427316	
		Dimethomorph	0.32	U	ng/L	P427316	
		Disulfoton	0.64	U	ng/L	P427316	
		Dithiopyr	1.1	U	ng/L	P427316	
		EPTC	0.53	U	ng/L	P427316	
		Ethion	0.32	U	ng/L	P427316	
		Ethoprop	0.13	UJ	ng/L	P427316	LCS, MS
		Etridiazole	0.11	U	ng/L	P427316	
		Fenamiphos	0.48	U	ng/L	P427316	
		Fenbuconazole	0.53	U	ng/L	P427316	
		Fipronil	0.21	U	ng/L	P427316	
		Fipronil Desulfinyl**	0.11	U	ng/L	P427316	MS
		Fipronil Sulfide	0.11	U	ng/L	P427316	
		Fipronil Sulfone	0.11	U	ng/L	P427316	
		Fluazifop-P-butyl	0.11	U	ng/L	P427316	
		Fludioxonil	0.41	I	ng/L	P427316	
		Flumioxazin	3.2	U	ng/L	P427316	
		Flutolanil	0.28	I	ng/L	P427316	
		Fluxapyroxad	0.27	U	ng/L	P427316	
		Fonofos	0.16	U	ng/L	P427316	
		Hexazinone	0.53	U	ng/L	P427316	
		Imazalil	0.69	U	ng/L	P427316	
		Iprodione	0.53	U	ng/L	P427316	
		Loratadine**	0.32	U	ng/L	P427316	
		Malathion	0.37	U	ng/L	P427316	
		Metalaxyl	0.53	U	ng/L	P427316	
		Metolachlor	1.6	I	ng/L	P427316	
		Metribuzin	0.42	U	ng/L	P427316	
		Mevinphos	1.1	U	ng/L	P427316	
		Molinate	0.27	U	ng/L	P427316	
		Myclobutanil	0.37	U	ng/L	P427316	
		Naled	2.7	U	ng/L	P427316	
		Napropamide	0.74	U	ng/L	P427316	
		Norflurazon	390		ng/L	P427316	
		Oxadiazon	0.37	U	ng/L	P427316	
		Oxyfluorfen	0.21	U	ng/L	P427316	
		Parathion Ethyl	0.16	U	ng/L	P427316	MS

Field ID: G2SW0039

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2394660	EPA 8270E	Parathion Methyl	0.21	U	ng/L	P427316	MS
		Pendimethalin	0.80	U	ng/L	P427316	
		Phenytain**	5.6	U	ng/L	P427316	
		Phorate	0.27	U	ng/L	P427316	
		Prodiamine	0.21	U	ng/L	P427316	
		Prometon	3.2	U	ng/L	P427316	
		Prometryn	0.37	U	ng/L	P427316	
		Pronamide	0.11	U	ng/L	P427316	
		Propanil	0.11	U	ng/L	P427316	
		Propargite	0.85	U	ng/L	P427316	
		Propiconazole	0.64	U	ng/L	P427316	
		Pyraflufen Ethyl	0.32	U	ng/L	P427316	
		Pyridaben	1.5	U	ng/L	P427316	
		Pyriproxyfen	0.27	U	ng/L	P427316	
		Simazine	0.27	U	ng/L	P427316	
		Stiropfos	0.42	U	ng/L	P427316	
		Sulfentrazone	1.5	U	ng/L	P427316	
		Tebuconazole	1.5	U	ng/L	P427316	
		Terbufos	0.21	U	ng/L	P427316	
		Terbutylazine	0.21	U	ng/L	P427316	
		Thiobencarb	0.53	U	ng/L	P427316	
		Triadimefon	0.16	U	ng/L	P427316	

Ref. Method and Comment:

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

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P427308

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427313

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427729

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427498

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427465

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427468

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427337

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

Reference Method: EPA 8270E
Batch ID: P427316

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: P427316

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: P427316

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: P427316

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	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P427316

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: SM 2320 B-2011

Batch ID: P427557

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

Reference Method: SM 2540 C-2015

Batch ID: P427922

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P427592

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P427559

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P427683

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: P427308

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427313

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427729

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427498

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427465

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427468

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: P427337

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

Reference Method: EPA 8270E
Batch ID: P427316

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	118		P	42 - 162
Acetochlor	118		P	69 - 123
Alachlor	102		P	65 - 118
Ametryn	74.4		P	58 - 141
Atrazine	86.7		P	73 - 118
Atrazine Desethyl	86.1		P	32 - 125
Avobenzone	153		P	40 - 203
Azinphos Methyl	78.9		P	36 - 197
Azoxystrobin	88.9		P	58 - 226
Bromacil	107		P	48 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P427316

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	29.5		P	27 - 85.0
Caffeine	90.1		P	40 - 137
Carbophenothion	92.1		P	54 - 132
Carfentrazone Ethyl	115		P	60 - 142
Chlorfenapyr	59.4		P	53 - 117
Chlorpyrifos Ethyl	72.9		P	59 - 116
Chlorpyrifos Methyl	86.4		P	66 - 119
Coumaphos	130		P	11 - 234
Cyanazine	165		P	61 - 248
Cyprodinil	71.7		P	50 - 147
Dechlorane 602	111		P	50 - 150
Dechlorane 603	111		P	50 - 150
Dechlorane Plus	92.1		P	47 - 182
Demeton	45.2		P	30 - 138
Diazinon	126		P	67 - 126
Difenoconazole	71.1		P	38 - 205
Dimethenamid	107		P	57 - 111
Dimethomorph	97.8		P	16 - 212
Disulfoton	94.6		P	46 - 126
Dithiopyr	96.6		P	62 - 115
EPTC	30.6		P	28 - 80.0
Ethion	67.2		P	24 - 122
Ethoprop	143		F	62 - 113
Etridiazole	43.9		P	28 - 92.0
Fenamiphos	79.6		P	57 - 128
Fenbuconazole	86.7		P	52 - 155
Fipronil	93.5		P	63 - 130
Fipronil Desulfinyl	77.9		P	61 - 130
Fipronil Sulfide	74.2		P	56 - 117
Fipronil Sulfone	99.8		P	52 - 118
Fluazifop-P-butyl	98.2		P	61 - 128
Fludioxonil	125		P	59 - 129
Flumioxazin	183		P	30 - 250
Flutolanil	87.5		P	53 - 127
Fluxapyroxad	54.3		P	42 - 132
Fonofos	80.1		P	61 - 110
Hexabromobenzene	127		P	50 - 150
Hexazinone	99.5		P	46 - 139
Imazalil	72.1		P	40 - 139
Iprodione	75.8		P	40 - 146
Loratadine	53.7		P	10 - 224
Malathion	95.2		P	61 - 135
Metalaxyl	98.1		P	58 - 121
Metolachlor	103		P	64 - 118
Metribuzin	88.4		P	45 - 245
Mevinphos	104		P	49 - 118
Molinate	47.4		P	42 - 92.0
Myclobutanil	126		P	55 - 127
Naled	47.3		P	10 - 114
Napropamide	74.8		P	39 - 121
Norflurazon	99.0		P	55 - 129
Octinoxate	107		P	26 - 166

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P427316

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxadiazon	97.6		P	54 - 115
Oxybenzone	121		P	49 - 135
Oxyfluorfen	95.6		P	64 - 139
Parathion Ethyl	96.8		P	70 - 111
Parathion Methyl	109		P	76 - 136
PBB-153	131		P	50 - 150
PBDE-47	123		P	41 - 148
PBDE-99	126		P	38 - 147
Pendimethalin	113		P	52 - 118
Pentabromotoluene	110		P	50 - 150
Phenytoin	107		P	10 - 162
Phorate	78.0		P	40 - 122
Prodiamine	70.2		P	26 - 141
Prometon	89.9		P	54 - 122
Prometryn	93.3		P	61 - 128
Pronamide	110		P	72 - 121
Propanil	96.5		P	45 - 144
Propargite	64.3		P	10 - 199
Propiconazole	86.8		P	56 - 127
Pyraflufen Ethyl	88.6		P	56 - 140
Pyridaben	144		P	26 - 211
Pyriproxyfen	46.6		P	33 - 194
Simazine	90.8		P	67 - 121
Stiophos	27.8		P	20 - 142
Sulfentrazone	124		P	21 - 144
Tebuconazole	79.2		P	10 - 122
Terbufos	96.3		P	60 - 129
Terbutylazine	81.7		P	69 - 113
Tetradecachloro-m-terphenyl	108		P	70 - 200
Thiobencarb	95.6		P	51 - 120
Tri-o-cresyl Phosphate	123		P	49 - 150
Triadimefon	82.2		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	139		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	116		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	129		P	70 - 180

Reference Method: SM 2320 B-2011

Batch ID: P427557

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.8		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P427922

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

Reference Method: SM 2540 D-2015

Batch ID: P427592

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

Laboratory Control Sample Accuracy

Reference Method: SM 2540 D-2015
Batch ID: P427592

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.4		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P427559

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P427683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.9		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427729

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394640	Chloride	100		P	90 - 110
2394641	Chloride	98.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427498

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394559	Ammonia-N	98.2	97.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427465

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394642	Kjeldahl Nitrogen	97.6	106	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394643	NO2NO3-N	93.8		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427337

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394665	Total-P	107	107	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P427316

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394346	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	72.4	74.5	P/P	26 - 165
2394346	Acetochlor	82.2	86.0	P/P	67 - 124
2394346	Alachlor	73.5	70.2	P/P	60 - 120
2394346	Ametryn	64.8	63.0	P/P	54 - 216
2394346	Atrazine	63.8	57.0	F/F	66 - 128
2394346	Atrazine Desethyl	60.9	65.5	P/P	15 - 122
2394346	Avobenzone	86.4	102	P/P	37 - 178
2394346	Azinphos Methyl	74.3	60.2	P/P	40 - 292
2394346	Azoxystrobin	70.1	68.3	P/P	35 - 220
2394346	Bromacil	72.9	84.7	P/P	45 - 127
2394346	Butylate	27.9	28.7	P/P	20 - 83.0
2394346	Caffeine	57.1	110	P/P	10 - 194
2394346	Carbophenothion	61.2	57.7	P/P	57 - 127
2394346	Carfentrazone Ethyl	68.9	63.0	P/P	51 - 141
2394346	Chlorfenapyr	43.2	42.0	F/F	46 - 111
2394346	Chlorpyrifos Ethyl	52.8	52.8	P/P	52 - 120
2394346	Chlorpyrifos Methyl	59.0	61.4	F/F	63 - 119
2394346	Coumaphos	75.3	80.4	P/P	10 - 228
2394346	Cyanazine	140	130	P/P	59 - 241
2394346	Cyprodinil	61.2	50.0	P/P	47 - 146
2394346	Dechlorane 602	64.0	64.3	P/P	50 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P427316

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394346	Dechlorane 603	64.2	65.2	P/P	50 - 150
2394346	Dechlorane Plus	49.6	48.8	F/F	50 - 150
2394346	Demeton	43.4	42.4	P/P	40 - 136
2394346	Diazinon	99.9	92.0	P/P	69 - 132
2394346	Difenoconazole	71.8	73.2	P/P	57 - 258
2394346	Dimethenamid	74.3	87.9	P/P	54 - 110
2394346	Dimethomorph	119	99.1	P/P	28 - 210
2394346	Disulfoton	84.4	77.4	P/P	43 - 133
2394346	Dithiopyr	62.3	70.1	P/P	39 - 116
2394346	EPTC	24.7	33.6	P/P	20 - 78.0
2394346	Ethion	40.9	40.2	P/P	17 - 119
2394346	Ethoprop	129	119	F/P	66 - 120
2394346	Etridiazole	38.2	42.7	P/P	28 - 96.0
2394346	Fenamiphos	59.6	70.4	P/P	41 - 126
2394346	Fenbuconazole	64.1	45.9	P/P	42 - 169
2394346	Fipronil	73.5	72.4	P/P	61 - 132
2394346	Fipronil Desulfinyl	54.6	60.1	F/P	56 - 132
2394346	Fipronil Sulfide	57.7	55.8	P/P	48 - 119
2394346	Fipronil Sulfone	59.0	70.4	P/P	42 - 131
2394346	Fluazifop-P-butyl	61.7	79.1	P/P	53 - 131
2394346	Fludioxonil	87.2	90.1	P/P	56 - 127
2394346	Flumioxazin	130	124	P/P	19 - 300
2394346	Flutolanil	52.5	60.6	P/P	41 - 127
2394346	Fluxapyroxad	56.2	49.6	P/P	42 - 172
2394346	Fonofos	64.4	66.0	P/P	59 - 113
2394346	Hexabromobenzene	92.6	85.8	P/P	50 - 150
2394346	Hexazinone	83.9	80.0	P/P	66 - 122
2394346	Imazalil	63.9	83.1	P/P	21 - 283
2394346	Iprodione	82.6	73.1	P/P	43 - 150
2394346	Loratadine	77.5	54.5	P/P	23 - 201
2394346	Malathion	65.9	71.2	P/P	58 - 136
2394346	Metalaxyl	55.9	69.0	P/P	55 - 120
2394346	Metolachlor	57.6	57.1	P/P	57 - 121
2394346	Metribuzin	69.2	68.5	P/P	58 - 294
2394346	Mevinphos	97.5	92.8	P/P	50 - 126
2394346	Molinate	43.6	46.4	P/P	42 - 93.0
2394346	Myclobutanil	88.5	89.2	P/P	55 - 125
2394346	Naled	39.7	46.7	P/P	18 - 200
2394346	Napropamide	46.9	50.7	P/P	39 - 110
2394346	Norflurazon	64.1	63.1	P/P	48 - 128
2394346	Octinoxate	84.5	78.9	P/P	21 - 159
2394346	Oxadiazon	71.1	70.9	P/P	43 - 112
2394346	Oxybenzone	90.6	81.8	P/P	41 - 142
2394346	Oxyfluorfen	77.9	74.3	P/P	64 - 153
2394346	Parathion Ethyl	72.0	65.5	P/F	69 - 114
2394346	Parathion Methyl	80.6	82.2	P/P	79 - 139
2394346	PBB-153	68.9	72.1	P/P	50 - 150
2394346	PBDE-47	82.4	82.4	P/P	27 - 144
2394346	PBDE-99	72.5	78.0	P/P	18 - 150
2394346	Pendimethalin	108	104	P/P	50 - 139
2394346	Pentabromotoluene	85.0	81.1	P/P	50 - 150
2394346	Phenytol	42.8	53.3	P/P	10 - 146

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P427316

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394346	Phorate	141	115	P/P	54 - 161
2394346	Prodiamine	56.6	51.2	P/P	30 - 161
2394346	Prometon	76.9	68.1	P/P	45 - 134
2394346	Prometryn	69.5	82.4	P/P	45 - 137
2394346	Pronamide	96.9	103	P/P	65 - 133
2394346	Propanil	67.0	76.9	P/P	49 - 142
2394346	Propargite	33.4	41.9	P/P	10 - 203
2394346	Propiconazole	60.9	56.5	P/P	38 - 146
2394346	Pyraflufen Ethyl	62.2	50.4	P/P	34 - 153
2394346	Pyridaben	97.7	114	P/P	12 - 192
2394346	Pyriproxyfen	31.3	31.0	F/F	33 - 180
2394346	Simazine	73.2	76.1	P/P	51 - 157
2394346	Stirophos	27.3	33.2	P/P	10 - 128
2394346	Sulfentrazone	68.6	62.3	P/P	53 - 186
2394346	Tebuconazole	47.4	50.6	P/P	10 - 133
2394346	Terbufos	97.9	82.6	P/P	65 - 139
2394346	Terbuthylazine	74.7	77.3	P/P	66 - 117
2394346	Tetradecachloro-m-terphenyl	63.7	59.8	F/F	70 - 200
2394346	Thiobencarb	63.5	70.3	P/P	51 - 119
2394346	Tri-o-cresyl Phosphate	82.5	82.7	P/P	31 - 144
2394346	Triadimefon	61.9	56.4	P/P	48 - 119
2394346	Tris(1-chloro-2-propyl) phosphate (TCPP)	106	92.4	P/P	50 - 150
2394346	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	86.3	87.5	P/P	50 - 150
2394346	Tris(2-chloroethyl) phosphate (TCEP)	93.8	83.3	P/P	70 - 180

Reference Method: SM 4500-F- C-2011

Batch ID: P427559

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394809	Fluoride	105	103	F/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P427683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2394674	Organic Carbon	93.1	94.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P427308

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394640	Color (true)	0.743	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P427313

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394596	Turbidity	6.34	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P427729

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394640	Chloride	1.60	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P427498

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394559	Ammonia-N	0.408	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P427465

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394642	Kjeldahl Nitrogen	5.17	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P427468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394643	NO2NO3-N	0.207	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P427337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394665	Total-P	0.453	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P427316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394346	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	2.83	Spike	P	0 - 37
2394346	Acetochlor	4.45	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P427316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394346	Alachlor	4.57	Spike	P	0 - 30
2394346	Ametryn	2.71	Spike	P	0 - 32
2394346	Atrazine	7.51	Spike	P	0 - 41
2394346	Atrazine Desethyl	7.20	Spike	P	0 - 36
2394346	Avobenzone	16.9	Spike	P	0 - 36
2394346	Azinphos Methyl	20.9	Spike	P	0 - 75
2394346	Azoxystrobin	2.60	Spike	P	0 - 39
2394346	Bromacil	14.9	Spike	P	0 - 33
2394346	Butylate	2.96	Spike	P	0 - 44
2394346	Caffeine	53.1	Spike	P	0 - 74
2394346	Carbophenothion	5.95	Spike	P	0 - 25
2394346	Carfentrazone Ethyl	8.95	Spike	P	0 - 27
2394346	Chlorfenapyr	2.96	Spike	P	0 - 24
2394346	Chlorpyrifos Ethyl	0.0163	Spike	P	0 - 26
2394346	Chlorpyrifos Methyl	3.94	Spike	P	0 - 26
2394346	Coumaphos	6.57	Spike	P	0 - 28
2394346	Cyanazine	7.12	Spike	P	0 - 48
2394346	Cyprodinil	20.1	Spike	P	0 - 29
2394346	Dechlorane 602	0.426	Spike	P	0 - 30
2394346	Dechlorane 603	1.50	Spike	P	0 - 30
2394346	Dechlorane Plus	1.53	Spike	P	0 - 30
2394346	Demeton	2.25	Spike	P	0 - 33
2394346	Diazinon	7.47	Spike	P	0 - 29
2394346	Difenoconazole	1.91	Spike	P	0 - 34
2394346	Dimethenamid	16.8	Spike	P	0 - 39
2394346	Dimethomorph	17.9	Spike	P	0 - 51
2394346	Disulfoton	8.73	Spike	P	0 - 30
2394346	Dithiopyr	11.7	Spike	P	0 - 26
2394346	EPTC	30.5	Spike	P	0 - 43
2394346	Ethion	1.84	Spike	P	0 - 79
2394346	Ethoprop	8.16	Spike	P	0 - 29
2394346	Etridiazole	11.0	Spike	P	0 - 33
2394346	Fenamiphos	16.7	Spike	P	0 - 40
2394346	Fenbuconazole	24.9	Spike	P	0 - 74
2394346	Fipronil	1.48	Spike	P	0 - 29
2394346	Fipronil Desulfinyl	9.58	Spike	P	0 - 32
2394346	Fipronil Sulfide	3.45	Spike	P	0 - 30
2394346	Fipronil Sulfone	17.5	Spike	P	0 - 33
2394346	Fluazifop-P-butyl	24.7	Spike	P	0 - 38
2394346	Fludioxonil	3.22	Spike	P	0 - 29
2394346	Flumioxazin	4.55	Spike	P	0 - 51
2394346	Flutolanil	12.8	Spike	P	0 - 25
2394346	Fluxapyroxad	12.5	Spike	P	0 - 45
2394346	Fonofos	2.41	Spike	P	0 - 27
2394346	Hexabromobenzene	7.66	Spike	P	0 - 30
2394346	Hexazinone	4.77	Spike	P	0 - 30
2394346	Imazalil	26.1	Spike	P	0 - 100
2394346	Iprodione	12.2	Spike	P	0 - 33
2394346	Loratadine	34.9	Spike	P	0 - 56
2394346	Malathion	7.66	Spike	P	0 - 37
2394346	Metalaxyl	21.1	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P427316

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394346	Metolachlor	0.510	Spike	P	0 - 29
2394346	Metribuzin	1.09	Spike	P	0 - 45
2394346	Mevinphos	4.99	Spike	P	0 - 29
2394346	Molinate	6.16	Spike	P	0 - 33
2394346	Myclobutanil	0.738	Spike	P	0 - 26
2394346	Naled	16.2	Spike	P	0 - 37
2394346	Napropamide	7.80	Spike	P	0 - 44
2394346	Norflurazon	1.53	Spike	P	0 - 30
2394346	Octinoxate	6.87	Spike	P	0 - 45
2394346	Oxadiazon	0.282	Spike	P	0 - 28
2394346	Oxybenzone	10.3	Spike	P	0 - 46
2394346	Oxyfluorfen	4.72	Spike	P	0 - 28
2394346	Parathion Ethyl	9.40	Spike	P	0 - 31
2394346	Parathion Methyl	2.03	Spike	P	0 - 29
2394346	PBB-153	4.63	Spike	P	0 - 30
2394346	PBDE-47	0.0798	Spike	P	0 - 36
2394346	PBDE-99	7.37	Spike	P	0 - 40
2394346	Pendimethalin	4.45	Spike	P	0 - 33
2394346	Pentabromotoluene	4.80	Spike	P	0 - 30
2394346	Phenytoin	21.9	Spike	P	0 - 100
2394346	Phorate	20.5	Spike	P	0 - 36
2394346	Prodiamine	9.99	Spike	P	0 - 71
2394346	Prometon	12.1	Spike	P	0 - 36
2394346	Prometryn	17.0	Spike	P	0 - 28
2394346	Pronamide	6.28	Spike	P	0 - 24
2394346	Propanil	13.7	Spike	P	0 - 28
2394346	Propargite	22.5	Spike	P	0 - 43
2394346	Propiconazole	7.42	Spike	P	0 - 33
2394346	Pyraflufen Ethyl	20.9	Spike	P	0 - 29
2394346	Pyridaben	15.8	Spike	P	0 - 30
2394346	Pyriproxyfen	0.857	Spike	P	0 - 79
2394346	Simazine	3.89	Spike	P	0 - 29
2394346	Stirophos	19.5	Spike	P	0 - 61
2394346	Sulfentrazone	9.54	Spike	P	0 - 33
2394346	Tebuconazole	6.69	Spike	P	0 - 69
2394346	Terbufos	17.0	Spike	P	0 - 29
2394346	Terbuthylazine	3.53	Spike	P	0 - 32
2394346	Tetradecachloro-m-terphenyl	6.40	Spike	P	0 - 30
2394346	Thiobencarb	10.2	Spike	P	0 - 26
2394346	Tri-o-cresyl Phosphate	0.280	Spike	P	0 - 33
2394346	Triadimefon	9.31	Spike	P	0 - 28
2394346	Tris(1-chloro-2-propyl) phosphate (TCPP)	11.9	Spike	P	0 - 30
2394346	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	1.40	Spike	P	0 - 30
2394346	Tris(2-chloroethyl) phosphate (TCEP)	11.9	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P427557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394809	Total Alkalinity	1.65	Sample	P	0 - 3.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-2015
Batch ID: P427922

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394298	TDS	1.25	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P427559

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394809	Fluoride	0.992	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P427683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2394674	Organic Carbon	0.693	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2394660
Field Sample ID: G2SW0039

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	80.9	P	20 - 200
EPA 8270E	Simazine-d10	89.2	P	62 - 142
EPA 8270E	Terbufos-d10	108	P	58 - 132
EPA 8270E	Terphenyl-d14	106	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A118058
Included Lab Sample IDs: 2394654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	99.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A118062
Included Lab Sample IDs: 2394654

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A118094
Included Lab Sample IDs: 2394655

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A118124
Included Lab Sample IDs: 2394654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	96.1	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A118130
Included Lab Sample IDs: 2394655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	97.0	97.5	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A118136
Included Lab Sample IDs: 2394655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.8	98.6	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A118161
Included Lab Sample IDs: 2394654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.7	93.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A118161
Included Lab Sample IDs: 2394654

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118174
Included Lab Sample IDs: 2394660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.4		P	80 - 120
Avobenzene	92.2		P	80 - 120
Dechlorane 602	97.1		P	80 - 120
Dechlorane 603	94.1		P	80 - 120
Dechlorane Plus	94.8		P	80 - 120
Hexabromobenzene	93.6		P	80 - 120
Octinoxate	92.7		P	80 - 120
Oxybenzone	97.5		P	80 - 120
PBB-153	91.3		P	80 - 120
PBDE-47	91.9		P	80 - 120
PBDE-99	99.6		P	80 - 120
Pentabromotoluene	96.4		P	80 - 120
Tetradecachloro-m-terphenyl	87.0		P	80 - 120
Tri-o-cresyl Phosphate	95.3		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	95.2		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.4		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	93.9		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A118205
Included Lab Sample IDs: 2394655

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A118246
Included Lab Sample IDs: 2394655

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.6	92.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A118257
Included Lab Sample IDs: 2394660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	111		P	80 - 120
Alachlor	109		P	80 - 120
Ametryn	115		P	80 - 120
Atrazine	98.2		P	80 - 120
Atrazine Desethyl	107		P	80 - 120
Azinphos Methyl	117		P	80 - 120
Azoxystrobin	101		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	99.2		P	80 - 120
Caffeine	114		P	80 - 120
Carbophenothion	89.9		P	80 - 120
Carfentrazone Ethyl	85.1		P	80 - 120
Chlorfenapyr	110		P	80 - 120
Chlorpyrifos Ethyl	114		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118257
Included Lab Sample IDs: 2394660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	111		P	80 - 120
Coumaphos	98.7		P	80 - 120
Cyanazine	106		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	99.2		P	80 - 120
Diazinon	88.8		P	80 - 120
Difenoconazole	110		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	115		P	80 - 120
Disulfoton	105		P	80 - 120
Dithiopyr	102		P	80 - 120
EPTC	102		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	112		P	80 - 120
Etridiazole	107		P	80 - 120
Fenamiphos	104		P	80 - 120
Fenbuconazole	113		P	80 - 120
Fipronil	92.4		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	93.2		P	80 - 120
Fipronil Sulfone	89.9		P	80 - 120
Fluazifop-P-butyl	94.6		P	80 - 120
Fludioxonil	102		P	80 - 120
Flumioxazin	86.6		P	80 - 120
Flutolanil	97.0		P	80 - 120
Fluxapyroxad	117		P	80 - 120
Fonofos	81.4		P	80 - 120
Hexazinone	105		P	80 - 120
Imazalil	111		P	80 - 120
Iprodione	118		P	80 - 120
Loratadine	115		P	80 - 120
Malathion	118		P	80 - 120
Metaxyl	89.6		P	80 - 120
Metolachlor	94.0		P	80 - 120
Metribuzin	102		P	80 - 120
Mevinphos	92.2		P	80 - 120
Molinate	91.8		P	80 - 120
Myclobutanil	117		P	80 - 120
Naled	109		P	80 - 120
Napropamide	100		P	80 - 120
Oxadiazon	98.0		P	80 - 120
Oxyfluorfen	120		P	80 - 120
Parathion Ethyl	96.4		P	80 - 120
Parathion Methyl	84.8		P	80 - 120
Pendimethalin	97.9		P	80 - 120
Phenytoin	107		P	80 - 120
Phorate	94.0		P	80 - 120
Proclamate	118		P	80 - 120
Prometon	106		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	94.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118257
Included Lab Sample IDs: 2394660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Propanil	99.4		P	80 - 120
Propargite	86.5		P	80 - 120
Propiconazole	90.3		P	80 - 120
Pyraflufen Ethyl	94.3		P	80 - 120
Pyridaben	93.9		P	80 - 120
Pyriproxyfen	110		P	80 - 120
Simazine	88.7		P	80 - 120
Stirophos	101		P	80 - 120
Sulfentrazone	84.5		P	80 - 120
Tebuconazole	111		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	103		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: EPA 8270E
Run ID: A118285
Included Lab Sample IDs: 2394660

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Norflurazon	97.6		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	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	102				0.743	
EPA 180.1 Rev. 2.0	Turbidity	101				6.34	
EPA 300.0 Rev. 2.1	Chloride	98.7	100	98.2		1.60	
EPA 350.1 Rev. 2.0	Ammonia-N	94.8	98.2	97.8			0.408
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	97.6	106			5.17
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	99.0	93.8				0.207
EPA 365.1 Rev. 2.0	Total-P	102	107	107			0.453
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	118	72.4	74.5			2.83
	Acetochlor	118	82.2	86.0			4.45
	Alachlor	102	73.5	70.2			4.57
	Ametryn	74.4	64.8	63.0			2.71
	Atrazine	86.7	63.8	57.0			7.51
	Atrazine Desethyl	86.1	60.9	65.5			7.20
	Avobenzone	153	86.4	102			16.9
	Azinphos Methyl	78.9	74.3	60.2			20.9
	Azoxystrobin	88.9	70.1	68.3			2.60
	Bromacil	107	72.9	84.7			14.9
	Butylate	29.5	27.9	28.7			2.96
	Caffeine	90.1	57.1	110			53.1
	Carbophenothion	92.1	61.2	57.7			5.95
	Carfentrazone Ethyl	115	68.9	63.0			8.95
	Chlorfenapyr	59.4	43.2	42.0			2.96
	Chlorpyrifos Ethyl	72.9	52.8	52.8			0.0163
	Chlorpyrifos Methyl	86.4	59.0	61.4			3.94
	Coumaphos	130	75.3	80.4			6.57
	Cyanazine	165	140	130			7.12
	Cyprodinil	71.7	61.2	50.0			20.1
	Dechlorane 602	111	64.0	64.3			0.426
	Dechlorane 603	111	64.2	65.2			1.50
	Dechlorane Plus	92.1	49.6	48.8			1.53
	Demeton	45.2	43.4	42.4			2.25
	Diazinon	126	99.9	92.0			7.47
	Difenoconazole	71.1	71.8	73.2			1.91
	Dimethenamid	107	74.3	87.9			16.8
	Dimethomorph	97.8	119	99.1			17.9
	Disulfoton	94.6	84.4	77.4			8.73
	Dithiopyr	96.6	62.3	70.1			11.7
	EPTC	30.6	24.7	33.6			30.5
	Ethion	67.2	40.9	40.2			1.84
	Ethoprop	143	129	119			8.16
	Etridiazole	43.9	38.2	42.7			11.0
	Fenamiphos	79.6	59.6	70.4			16.7
	Fenbuconazole	86.7	64.1	45.9			24.9
	Fipronil	93.5	73.5	72.4			1.48
	Fipronil Desulfinyl	77.9	54.6	60.1			9.58
	Fipronil Sulfide	74.2	57.7	55.8			3.45
	Fipronil Sulfone	99.8	59.0	70.4			17.5
	Fluazifop-P-butyl	98.2	61.7	79.1			24.7
	Fludioxonil	125	87.2	90.1			3.22
	Flumioxazin	183	130	124			4.55
	Flutolanil	87.5	52.5	60.6			12.8
	Fluxapyroxad	54.3	56.2	49.6			12.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Fonofos	80.1	64.4	66.0		2.41
	Hexabromobenzene	127	92.6	85.8		7.66
	Hexazinone	99.5	83.9	80.0		4.77
	Imazalil	72.1	63.9	83.1		26.1
	Iprodione	75.8	82.6	73.1		12.2
	Loratadine	53.7	77.5	54.5		34.9
	Malathion	95.2	65.9	71.2		7.66
	Metalaxyl	98.1	55.9	69.0		21.1
	Metolachlor	103	57.6	57.1		0.510
	Metribuzin	88.4	69.2	68.5		1.09
	Mevinphos	104	97.5	92.8		4.99
	Molinate	47.4	43.6	46.4		6.16
	Myclobutanil	126	88.5	89.2		0.738
	Naled	47.3	39.7	46.7		16.2
	Napropamide	74.8	46.9	50.7		7.80
	Norflurazon	99.0	64.1	63.1		1.53
	Octinoxate	107	84.5	78.9		6.87
	Oxadiazon	97.6	71.1	70.9		0.282
	Oxybenzone	121	90.6	81.8		10.3
	Oxyfluorfen	95.6	77.9	74.3		4.72
	Parathion Ethyl	96.8	72.0	65.5		9.40
	Parathion Methyl	109	80.6	82.2		2.03
	PBB-153	131	68.9	72.1		4.63
	PBDE-47	123	82.4	82.4		0.0798
	PBDE-99	126	72.5	78.0		7.37
	Pendimethalin	113	108	104		4.45
	Pentabromotoluene	110	85.0	81.1		4.80
	Phenytoin	107	42.8	53.3		21.9
	Phorate	78.0	141	115		20.5
	Prodiamine	70.2	56.6	51.2		9.99
	Prometon	89.9	76.9	68.1		12.1
	Prometryn	93.3	69.5	82.4		17.0
	Pronamide	110	96.9	103		6.28
	Propanil	96.5	67.0	76.9		13.7
	Propargite	64.3	33.4	41.9		22.5
	Propiconazole	86.8	60.9	56.5		7.42
	Pyraflufen Ethyl	88.6	62.2	50.4		20.9
	Pyridaben	144	97.7	114		15.8
	Pyriproxyfen	46.6	31.3	31.0		0.857
	Simazine	90.8	73.2	76.1		3.89
	Stiropfos	27.8	27.3	33.2		19.5
	Sulfentrazone	124	68.6	62.3		9.54
	Tebuconazole	79.2	47.4	50.6		6.69
	Terbufos	96.3	97.9	82.6		17.0
	Terbuthylazine	81.7	74.7	77.3		3.53
	Tetradecachloro-m-terphenyl	108	59.8	63.7		6.40
	Thiobencarb	95.6	63.5	70.3		10.2
	Tri-o-cresyl Phosphate	123	82.5	82.7		0.280
	Triadimefon	82.2	61.9	56.4		9.31
	Tris(1-chloro-2-propyl) phosphate (TCPP)	139	106	92.4		11.9
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	116	87.5	86.3		1.40

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Tris(2-chloroethyl) phosphate (TCEP)	129	93.8	83.3			11.9
SM 2320 B-2011	Total Alkalinity	94.8				1.65	
SM 2540 C-2015	TDS	97.1				1.25	
SM 2540 D-2015	TSS	96.4					
SM 4500-F- C-2011	Fluoride	103	105	103			0.992
SM 5310 B-2011	Organic Carbon	94.9	93.1	94.1			0.693

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2394654
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2394654
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2394654
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2394655
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2394655
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2394655
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2394655
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2394660
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2394660
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2394654
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2394654
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2394654
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2394654
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2394655

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	03/17/2023			03/17/2023 14:03	Alexis Price	2394654
EPA 180.1 Rev. 2.0	03/17/2023			03/17/2023 13:40	Anna M. Plaviak	2394654
EPA 300.0 Rev. 2.1	03/17/2023			03/24/2023 07:50	Judith K. Clark	2394654
EPA 350.1 Rev. 2.0	03/17/2023			03/22/2023 14:19	Khloe J Berg	2394655
EPA 351.2 Rev. 2.0	03/17/2023	03/23/2023 12:00	Simonne.V. Calhoun	03/28/2023 14:52	Judith K. Clark	2394655
EPA 353.2 Rev. 2.0	03/17/2023			03/22/2023 10:38	Beverly Y. Sanders	2394655
EPA 365.1 Rev. 2.0	03/17/2023	03/20/2023 14:58	Adam P Silver	03/21/2023 11:02	James L Waggerby	2394655
EPA 8270E	03/17/2023	03/21/2023 08:30	Rasheda Ghaffari	03/23/2023 18:27	Arthur Maknenko	2394660
	03/17/2023	03/21/2023 08:30	Rasheda Ghaffari	03/23/2023 21:38	Michael Poppell	2394660
	03/17/2023	03/21/2023 08:30	Rasheda Ghaffari	03/29/2023 23:35	Michael Poppell	2394660
SM 2320 B-2011	03/17/2023			03/22/2023 18:38	Dale L. Simmons	2394654
SM 2540 C-2015	03/17/2023			03/21/2023 16:04	Yijie Li	2394654
SM 2540 D-2015	03/17/2023			03/21/2023 16:04	Yijie Li	2394654
SM 4500-F- C-2011	03/17/2023			03/22/2023 18:38	Dale L. Simmons	2394654
SM 5310 B-2011	03/17/2023			03/25/2023 07:45	Khloe J Berg	2394655