

Chemical Analysis Report

SW-DIST-2020-08-05-01

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **Run 7 Whitaker Creek**
Request ID: **RQ-2020-07-27-05**
Customer: **SW-DIST**
Project ID: **SMP**

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

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Date Certified: 26-AUG-2020 12:35



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: Whitaker Bayou @ Ringling College of Art

Collection Date/Time: 08/04/2020 13:30

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188415	EPA 180.1 Rev. 2.0	Turbidity	2.7	A	NTU	P385689	
	EPA 300.0 Rev. 2.1	Bromide	15		mg Br/L	P386266	
	SM 2320 B-2011	Total Alkalinity	153		mg CaCO3/L	P385771	
	SM 2540 D-2011	TSS	4	IA	mg/L	P386007	
	SM 4500 F-C-2011	Fluoride	0.69		mg F/L	P385838	
2188416	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P385801	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P385734	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P385864	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P385780	
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P385777	
2188417	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.22		mg P/L	P385694	
2188421	EPA 8321B	Aldicarb	0.020	U	ug/L	P385828	
		Aldicarb Sulfone	0.0020	U	ug/L	P385828	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P385828	
		Carbaryl	0.0020	U	ug/L	P385828	
		Carbofuran	0.0020	U	ug/L	P385828	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P385828	
		Methiocarb	0.0020	U	ug/L	P385828	
		Methomyl	0.0020	U	ug/L	P385828	
		Oxamyl	0.0020	U	ug/L	P385828	
		Propoxur	0.0020	U	ug/L	P385828	
		2,4-D	0.071		ug/L	P385679	
		Acesulfame K**	0.10	UJ	ug/L	P385636	SUR
		AMPA**	1.1	I	ug/L	P385636	
2188422		Sucralose**	0.76		ug/L	P385636	
		Acetaminophen**	0.0080	U	ug/L	P385679	
		Acetamiprid**	0.0020	U	ug/L	P385679	
		Endothall**	0.25	UJ	ug/L	P385636	SUR
		Glufosinate**	1.0	U	ug/L	P385636	
		Glyphosate**	1.9	I	ug/L	P385636	
		Afidopyropen**	0.0021	I	ug/L	P385679	
		Bentazon	0.0056		ug/L	P385679	
		Benzovindiflupyr**	0.0020	U	ug/L	P385679	
		Carbamazepine**	0.0014	I	ug/L	P385679	
		Clothianidin**	0.0020	U	ug/L	P385679	
		Dinotefuran**	0.0029	I	ug/L	P385679	
		Diuron	0.0052	I	ug/L	P385679	
		Fenuron	0.016	U	ug/L	P385679	
		Fluridone**	0.015		ug/L	P385679	
		Imazapyr**	0.22		ug/L	P385679	
		Hydrocodone**	0.0020	U	ug/L	P385679	
		Ibuprofen**	0.020	U	ug/L	P385679	
		Imidacloprid	0.012		ug/L	P385679	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188422	EPA 8321B	Linuron	0.0040	U	ug/L	P385679	
		Mandestrobin**	0.0020	U	ug/L	P385679	
		MCP	0.0020	I	ug/L	P385679	
		Naproxen**	0.0080	U	ug/L	P385679	
		Primidone**	0.0040	U	ug/L	P385679	
		Pyraclostrobin**	0.0020	U	ug/L	P385679	
		Thiamethoxam**	0.0022	I	ug/L	P385679	
		Tolfenpyrad**	0.0020	U	ug/L	P385679	
		Triclopyr**	0.0040	U	ug/L	P385679	
2188423	EPA 8270E	Aldrin	4.2	U	ng/L	P385657	
		Alpha-BHC	2.1	U	ng/L	P385657	
		Alpha-Chlordane	1.1	U	ng/L	P385657	
		Beta-BHC	8.5	U	ng/L	P385657	
		Beta-Cyfluthrin**	16	U	ng/L	P385657	
		Bifenthrin**	4.2	U	ng/L	P385657	
		Delta-BHC	8.5	U	ng/L	P385657	
		Gamma-BHC	8.5	U	ng/L	P385657	
		Chlorothalonil	2.1	U	ng/L	P385657	RPD
		Cis-Nonachlor**	1.1	U	ng/L	P385657	
		Cypermethrin	21	U	ng/L	P385657	
		Dacthal**	1.1	U	ng/L	P385657	
		DDD-p,p'	5.3	U	ng/L	P385657	
		DDE-p,p'	5.3	U	ng/L	P385657	
		DDT-p,p'	6.4	U	ng/L	P385657	
		Dicofol	32	U	ng/L	P385657	
		Dieldrin	4.2	U	ng/L	P385657	
		Endosulfan I	4.2	U	ng/L	P385657	
		Endosulfan II	4.2	U	ng/L	P385657	
		Endosulfan Sulfate	2.1	U	ng/L	P385657	
		Endrin	2.1	U	ng/L	P385657	
		Endrin Aldehyde	2.1	U	ng/L	P385657	MS, RPD
		Endrin Ketone	2.1	U	ng/L	P385657	
		Ethalfuralin**	3.2	U	ng/L	P385657	
		Deltamethrin**	21	U	ng/L	P385657	
		Gamma-Chlordane	1.1	U	ng/L	P385657	
		Heptachlor	1.6	U	ng/L	P385657	
		Heptachlor Epoxide	2.1	U	ng/L	P385657	
		Hexachlorobenzene	2.1	U	ng/L	P385657	
		Lambda-Cyhalothrin**	16	U	ng/L	P385657	
		Methoxychlor	4.2	U	ng/L	P385657	
		Mirex	2.1	U	ng/L	P385657	
		Permethrin	23	I	ng/L	P385657	
		Phenothrin**	32	U	ng/L	P385657	
		Prallethrin**	26	U	ng/L	P385657	
		Trans-Nonachlor**	1.1	U	ng/L	P385657	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188423	EPA 8270E	Trifluralin	2.6	U	ng/L	P385657	
	EPA 8276	Chlordane	5.3	U	ng/L	P385657	
		Toxaphene	32	U	ng/L	P385657	
2188424	EPA 8270E	Acetochlor	0.27	U	ng/L	P385760	
		Alachlor	0.27	U	ng/L	P385760	
		Ametryn	1.2	I	ng/L	P385760	
		Atrazine	9.8		ng/L	P385760	
		Atrazine Desethyl	2.7	I	ng/L	P385760	
		Azinphos Methyl	2.1	UJ	ng/L	P385760	LCS
		Bromacil	0.53	U	ng/L	P385760	
		Butylate	0.43	U	ng/L	P385760	
		Carbophenothion	0.53	U	ng/L	P385760	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P385760	
		Chlorpyrifos Methyl	0.053	U	ng/L	P385760	
		Cyanazine	3.5	U	ng/L	P385760	
		Demeton	1.6	U	ng/L	P385760	
		Diazinon	0.13	U	ng/L	P385760	
		Dimethenamid**	0.11	U	ng/L	P385760	
		Disulfoton	0.53	U	ng/L	P385760	
		Dithiopyr**	0.38	I	ng/L	P385760	
		EPTC	1.3	U	ng/L	P385760	
		Ethion	0.16	U	ng/L	P385760	
		Ethoprop	0.11	UJ	ng/L	P385760	LCS, MS
		Fenamiphos	0.53	U	ng/L	P385760	
		Fipronil	2.0		ng/L	P385760	
		Fipronil Desulfinyl**	3.3		ng/L	P385760	
		Fipronil Sulfide	1.5		ng/L	P385760	
		Fipronil Sulfone	2.8		ng/L	P385760	
		Flumioxazin**	1.9	UJ	ng/L	P385760	MS
		Fonofos	0.21	U	ng/L	P385760	
		Hexazinone	1.5	I	ng/L	P385760	
		Imazalil**	0.80	U	ng/L	P385760	
		Malathion	0.37	U	ng/L	P385760	
		Metalaxyl	1.2	I	ng/L	P385760	
		Metolachlor	3.2		ng/L	P385760	
		Metribuzin	3.5	U	ng/L	P385760	
		Mevinphos	0.53	U	ng/L	P385760	
		Molinate	0.32	U	ng/L	P385760	
		Naled**	1.6	U	ng/L	P385760	
		Norflurazon	0.53	U	ng/L	P385760	
		Oxadiazon	19		ng/L	P385760	
		Parathion Ethyl	0.27	U	ng/L	P385760	
		Parathion Methyl	0.58	U	ng/L	P385760	
		Pendimethalin	1.1	U	ng/L	P385760	
		Phorate	0.27	U	ng/L	P385760	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2188424	EPA 8270E	Prodiamine**	0.19	U	ng/L	P385760	
		Prometon	1.0	I	ng/L	P385760	
		Prometryn	0.21	U	ng/L	P385760	
		Pronamide**	0.16	U	ng/L	P385760	
		Propiconazole**	5.2		ng/L	P385760	
		Simazine	1.2	I	ng/L	P385760	
		Sulfentrazone**	2.4	J	ng/L	P385760	LCS
		Tebuconazole**	3.8	J	ng/L	P385760	MS
		Terbufos	0.11	UJ	ng/L	P385760	MS
		Terbuthylazine	0.45	U	ng/L	P385760	
2188425	EPA 200.7 Rev. 4.4	Chromium	4.7	I	ug/L	P385951	
		Iron	210	I	ug/L	P385951	
		Manganese	20		ug/L	P385951	
		Zinc	20	U	ug/L	P385951	
	EPA 200.8 Rev. 5.4	Aluminum	50	U	ug/L	P385951	
		Antimony	0.44	I	ug/L	P385951	
		Arsenic	3.45		ug/L	P385951	
		Cadmium	0.080	U	ug/L	P385951	
		Copper	1.6	U	ug/L	P385951	
		Lead	0.80	U	ug/L	P385951	
		Nickel	2.0	U	ug/L	P385951	
		Selenium	2.0	U	ug/L	P385951	
		Silver	0.040	U	ug/L	P385951	
		Thallium	0.40	U	ug/L	P385951	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 8321B: Results confirmed in sample duplicate. MDL for some parameters elevated due to matrix interference. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes. MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385689

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P385951

Component	Result	Code	Units
Chromium	1.0	U	ug/L
Iron	30	U	ug/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P385951

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	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: P386266

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385801

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385734

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385864

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385780

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385694

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

Reference Method: EPA 8270E
Batch ID: P385657

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	8.0	U	ng/L
Beta-Cyfluthrin	15	U	ng/L
Bifenthrin	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
Dacthal	1.0	U	ng/L
DDD-p,p'	5.0	U	ng/L
DDE-p,p'	5.0	U	ng/L
DDT-p,p'	6.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Deltamethrin	20	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Lambda-Cyhalothrin	15	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Phenothrin	30	U	ng/L
Prallethrin	25	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
 Batch ID: P385760

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Carbophenothion	0.50	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Flumioxazin	1.8	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	3.2	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Naled	1.5	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Propiconazole	0.50	U	ng/L
Simazine	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276
Batch ID: P385657

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P385636

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P385679

Component	Result	Code	Units
2,4-D	0.0020	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	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	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
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P385828

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P385828

Component	Result	Code	Units
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P385771

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

Reference Method: SM 2540 D-2011
Batch ID: P386007

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P385838

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P385777

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P385951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chromium	98.5		P	85 - 115
Iron	101		P	85 - 115
Manganese	99.3		P	85 - 115
Zinc	97.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P385951

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	107		P	85 - 115
Arsenic	102		P	85 - 115
Cadmium	103		P	85 - 115
Copper	99.8		P	85 - 115
Lead	108		P	85 - 115
Nickel	98.0		P	85 - 115
Selenium	99.3		P	85 - 115
Silver	105		P	85 - 115
Thallium	108		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386266

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385801

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385734

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385864

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385780

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P385694

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

Reference Method: EPA 8270E
 Batch ID: P385657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.2	52.4	P/P	20 - 87.0
Alpha-BHC	86.4	87.2	P/P	65 - 142
Alpha-Chlordane	90.6	86.9	P/P	58 - 106
Beta-BHC	96.3	99.0	P/P	65 - 179
Beta-Cyfluthrin	88.8	84.5	P/P	39 - 153
Bifenthrin	87.4	88.2	P/P	38 - 128
Chlorothalonil	73.5	55.7	P/P	20 - 214
Cis-Nonachlor	92.3	88.7	P/P	56 - 113
Cypermethrin	85.6	86.0	P/P	37 - 130
Dacthal	99.8	94.1	P/P	75 - 109
DDD-p,p'	101	95.7	P/P	66 - 119
DDE-p,p'	90.3	85.1	P/P	53 - 108
DDT-p,p'	96.7	97.5	P/P	57 - 133
Delta-BHC	115	114	P/P	68 - 187
Deltamethrin	100	100	P/P	50 - 200
Dicofol	98.3	99.2	P/P	66 - 123
Dieldrin	96.4	90.9	P/P	65 - 111
Endosulfan I	100	92.7	P/P	65 - 115
Endosulfan II	117	114	P/P	68 - 133
Endosulfan Sulfate	91.7	90.8	P/P	62 - 127
Endrin	98.3	91.9	P/P	64 - 122
Endrin Aldehyde	92.7	88.0	P/P	61 - 132
Endrin Ketone	110	108	P/P	66 - 120
Ethalfuralin	80.9	77.4	P/P	57 - 127
Gamma-BHC	89.9	92.6	P/P	71 - 158
Gamma-Chlordane	88.8	84.7	P/P	53 - 106
Heptachlor	71.1	68.0	P/P	45 - 96.0
Heptachlor Epoxide	91.5	87.2	P/P	64 - 109
Hexachlorobenzene	68.3	69.8	P/P	46 - 103
Lambda-Cyhalothrin	85.8	86.9	P/P	38 - 145
Methoxychlor	98.6	100	P/P	69 - 149
Mirex	76.8	74.2	P/P	31 - 90.0
Permethrin	80.8	79.4	P/P	41 - 108
Phenothrin	60.9	57.0	P/P	22 - 91.0
Prallethrin	70.3	61.1	P/P	32 - 92.0
Trans-Nonachlor	89.0	84.9	P/P	50 - 107
Trifluralin	79.9	77.8	P/P	58 - 119

Reference Method: EPA 8270E
 Batch ID: P385760

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	116	109	P/P	71 - 122
Alachlor	113	104	P/P	70 - 121
Ametryn	116	103	P/P	49 - 137
Atrazine	117	110	P/P	76 - 125

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P385760

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	97.1	88.5	P/P	31 - 144
Azinphos Methyl	136	153	P/F	67 - 150
Bromacil	116	115	P/P	36 - 121
Butylate	75.7	72.8	P/P	33 - 88.0
Carbophenothion	96.3	88.5	P/P	50 - 150
Chlorpyrifos Ethyl	101	93.7	P/P	73 - 117
Chlorpyrifos Methyl	109	102	P/P	68 - 121
Cyanazine	148	137	P/P	20 - 250
Demeton	81.1	73.5	P/P	30 - 123
Diazinon	127	120	P/P	70 - 128
Dimethenamid	110	104	P/P	66 - 122
Disulfoton	103	90.6	P/P	46 - 124
Dithiopyr	108	98.9	P/P	69 - 122
EPTC	74.4	71.2	P/P	31 - 90.0
Ethion	51.9	48.6	P/P	45 - 135
Ethoprop	119	112	F/P	59 - 118
Fenamiphos	81.8	70.0	P/P	30 - 136
Fipronil	117	110	P/P	57 - 127
Fipronil Desulfinyl	117	109	P/P	51 - 122
Fipronil Sulfide	91.7	84.3	P/P	57 - 119
Fipronil Sulfone	86.0	77.3	P/P	51 - 119
Flumioxazin	161	149	P/P	70 - 200
Fonofos	112	105	P/P	60 - 120
Hexazinone	117	106	P/P	57 - 142
Imazalil	102	92.7	P/P	50 - 150
Malathion	126	116	P/P	67 - 128
Metalaxyl	111	102	P/P	21 - 148
Metolachlor	97.8	92.9	P/P	70 - 120
Metribuzin	143	134	P/P	20 - 253
Mevinphos	103	99.9	P/P	47 - 116
Molinate	85.1	82.9	P/P	41 - 99.0
Naled	68.6	64.4	P/P	40 - 130
Norflurazon	107	102	P/P	54 - 127
Oxadiazon	98.9	91.5	P/P	65 - 122
Parathion Ethyl	108	102	P/P	71 - 113
Parathion Methyl	126	117	P/P	73 - 129
Pendimethalin	89.1	84.0	P/P	63 - 130
Phorate	92.2	91.8	P/P	48 - 118
Prodiamine	36.1	32.2	P/P	20 - 144
Prometon	108	95.7	P/P	53 - 120
Prometryn	114	103	P/P	63 - 119
Pronamide	113	115	P/P	50 - 150
Propiconazole	100	92.1	P/P	50 - 150
Simazine	118	116	P/P	77 - 129
Sulfentrazone	46.6	42.1	F/F	50 - 150
Tebuconazole	25.4	24.2	P/P	20 - 118
Terbufos	116	112	P/P	61 - 119
Terbuthylazine	110	99.8	P/P	75 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P385657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	103	95.6	P/P	47 - 119
Toxaphene	64.4	62.8	P/P	41 - 112

Reference Method: EPA 8321B
Batch ID: P385636

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	106		P	40 - 150
AMPA	102		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	97.5		P	40 - 150
Glyphosate	95.0		P	40 - 140
Sucralose	95.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P385679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	30 - 160
Acetaminophen	77.9		P	30 - 160
Acetamiprid	78.1		P	30 - 160
Afidopyropen	61.1		P	30 - 160
Bentazon	49.7		P	30 - 160
Benzovindiflupyr	73.2		P	30 - 160
Carbamazepine	58.5		P	30 - 160
Clothianidin	80.5		P	30 - 160
Dinotefuran	93.4		P	30 - 160
Diuron	51.1		P	30 - 160
Fenuron	96.7		P	30 - 160
Fluridone	82.1		P	30 - 160
Hydrocodone	85.4		P	30 - 160
Ibuprofen	76.5		P	30 - 160
Imazapyr	88.0		P	30 - 160
Imidacloprid	103		P	30 - 160
Linuron	70.4		P	30 - 160
Mandestrobin	83.5		P	30 - 160
MCPP	120		P	30 - 160
Naproxen	78.6		P	30 - 160
Primidone	73.2		P	30 - 160
Pyraclostrobin	76.6		P	30 - 160
Thiamethoxam	71.4		P	30 - 160
Tolfenpyrad	56.2		P	30 - 160
Triclopyr	86.6		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P385828

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	86.2		P	30 - 160
Aldicarb	63.7		P	30 - 160
Aldicarb Sulfone	91.8		P	30 - 160
Aldicarb Sulfoxide	98.5		P	30 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P385828

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbaryl	45.4		P	30 - 160
Carbofuran	47.6		P	30 - 160
Methiocarb	49.4		P	30 - 160
Methomyl	97.2		P	30 - 160
Oxamyl	88.6		P	30 - 160
Propoxur	42.5		P	30 - 160

Reference Method: SM 2320 B-2011
Batch ID: P385771

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	93 - 104

Reference Method: SM 4500 F-C-2011
Batch ID: P385838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.4		P	90 - 106

Reference Method: SM 5310 B-2011
Batch ID: P385777

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	101		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P385951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188766	Chromium	99.6	97.0	P/P	70 - 130
2188766	Iron	101	99.6	P/P	70 - 130
2188766	Manganese	98.6	96.4	P/P	70 - 130
2188766	Zinc	100	98.4	P/P	70 - 130
2189752	Chromium	102		P	70 - 130
2189752	Iron	101		P	70 - 130
2189752	Manganese	99.5		P	70 - 130
2189752	Zinc	102		P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P385951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188766	Aluminum	103	106	P/P	70 - 130
2188766	Antimony	109	116	P/P	70 - 130
2188766	Arsenic	107	113	P/P	70 - 130
2188766	Cadmium	96.3	114	P/P	70 - 130
2188766	Copper	112	119	P/P	70 - 130
2188766	Lead	112	119	P/P	70 - 130
2188766	Nickel	89.7	103	P/P	70 - 130
2188766	Selenium	108	108	P/P	70 - 130
2188766	Silver	95.8	111	P/P	70 - 130
2188766	Thallium	108	115	P/P	70 - 130
2189752	Aluminum	102		P	70 - 130
2189752	Antimony	109		P	70 - 130
2189752	Arsenic	107		P	70 - 130
2189752	Cadmium	99.5		P	70 - 130
2189752	Copper	112		P	70 - 130
2189752	Lead	109		P	70 - 130
2189752	Nickel	90.5		P	70 - 130
2189752	Selenium	110		P	70 - 130
2189752	Silver	98.0		P	70 - 130
2189752	Thallium	107		P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2187687	Bromide	97.4	94.6	P/P	90 - 110
2188922	Bromide	96.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385801

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188507	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385734

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188089	Kjeldahl Nitrogen	103	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385864

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188583	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385780

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188087	Total-P	94.6	92.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385694

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188508	O-Phosphate-P	99.5	99.6	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P385657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188145	Aldrin	61.7	54.9	P/P	32 - 82.0
2188145	Alpha-BHC	86.8	79.7	P/P	68 - 157
2188145	Alpha-Chlordane	79.4	67.9	P/P	54 - 108
2188145	Beta-BHC	103	82.6	P/P	54 - 200
2188145	Beta-Cyfluthrin	87.5	80.1	P/P	50 - 154
2188145	Bifenthrin	74.6	67.6	P/P	49 - 124
2188145	Chlorothalonil	48.8	67.8	P/P	10 - 289
2188145	Cis-Nonachlor	78.6	66.8	P/P	53 - 112
2188145	Cypermethrin	70.0	60.5	P/P	43 - 141
2188145	Dacthal	93.8	82.5	P/P	75 - 112
2188145	DDD-p,p'	85.1	72.2	P/P	58 - 125
2188145	DDE-p,p'	77.7	63.9	P/P	50 - 108
2188145	DDT-p,p'	84.9	78.8	P/P	52 - 140
2188145	Delta-BHC	127	105	P/P	61 - 228
2188145	Deltamethrin	58.6	53.3	P/P	50 - 200
2188145	Dicofol	80.4	82.6	P/P	59 - 130
2188145	Dieldrin	87.9	73.5	P/P	57 - 121
2188145	Endosulfan I	95.7	84.9	P/P	62 - 123
2188145	Endosulfan II	97.5	83.7	P/P	48 - 163
2188145	Endosulfan Sulfate	85.3	80.3	P/P	63 - 132
2188145	Endrin	92.5	73.4	P/P	58 - 128
2188145	Endrin Aldehyde	55.5	39.6	P/F	44 - 126
2188145	Endrin Ketone	105	90.1	P/P	68 - 127
2188145	Ethalfuralin	85.5	76.9	P/P	55 - 131
2188145	Gamma-BHC	103	93.7	P/P	54 - 206
2188145	Gamma-Chlordane	77.8	66.3	P/P	52 - 105
2188145	Heptachlor	61.9	57.7	P/P	47 - 94.0
2188145	Heptachlor Epoxide	84.7	73.6	P/P	61 - 113
2188145	Hexachlorobenzene	56.9	51.8	P/P	45 - 100
2188145	Lambda-Cyhalothrin	76.0	68.3	P/P	37 - 165
2188145	Methoxychlor	89.3	80.3	P/P	63 - 153
2188145	Mirex	64.8	56.7	P/P	38 - 90.0
2188145	Permethrin	65.9	57.3	P/P	45 - 112
2188145	Phenothrin	64.9	56.0	P/P	22 - 118

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P385657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188145	Prallethrin	73.1	58.5	P/P	21 - 114
2188145	Trans-Nonachlor	76.3	60.1	P/P	50 - 103
2188145	Trifluralin	82.3	72.0	P/P	57 - 122

Reference Method: EPA 8270E
 Batch ID: P385760

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188424	Acetochlor	104	95.7	P/P	68 - 126
2188424	Alachlor	96.0	86.6	P/P	66 - 125
2188424	Ametryn	96.4	98.1	P/P	31 - 182
2188424	Atrazine Desethyl	85.4	84.7	P/P	13 - 161
2188424	Azinphos Methyl	81.0	78.8	P/P	54 - 162
2188424	Bromacil	123	109	P/P	34 - 144
2188424	Butylate	73.2	65.9	P/P	16 - 92.0
2188424	Carbophenothion	68.2	63.7	P/P	50 - 150
2188424	Chlorpyrifos Ethyl	87.7	88.1	P/P	63 - 124
2188424	Chlorpyrifos Methyl	89.6	81.9	P/P	64 - 125
2188424	Cyanazine	65.8	61.2	P/P	13 - 245
2188424	Demeton	109	98.6	P/P	20 - 154
2188424	Diazinon	126	114	P/P	66 - 141
2188424	Dimethenamid	68.3	64.6	P/P	50 - 130
2188424	Disulfoton	91.6	87.7	P/P	55 - 130
2188424	Dithiopyr	92.8	82.1	P/P	66 - 122
2188424	EPTC	70.5	64.2	P/P	15 - 93.0
2188424	Ethion	17.4	16.7	P/P	15 - 148
2188424	Ethoprop	134	125	F/P	59 - 126
2188424	Fenamiphos	46.7	55.9	P/P	39 - 137
2188424	Fipronil	90.3	82.2	P/P	47 - 131
2188424	Fipronil Desulfinyl	99.6	81.6	P/P	43 - 121
2188424	Fipronil Sulfide	67.7	58.3	P/P	29 - 134
2188424	Flumioxazin	233	219	F/F	70 - 200
2188424	Fonofos	117	103	P/P	62 - 128
2188424	Hexazinone	143	124	P/P	58 - 154
2188424	Imazalil	134	129	P/P	50 - 150
2188424	Malathion	115	103	P/P	54 - 135
2188424	Metalaxyl	98.0	85.8	P/P	46 - 136
2188424	Metolachlor	79.4	71.4	P/P	62 - 126
2188424	Metribuzin	115	108	P/P	44 - 277
2188424	Mevinphos	128	120	P/P	44 - 135
2188424	Molinate	87.1	79.1	P/P	31 - 104
2188424	Naled	63.4	58.6	P/P	40 - 130
2188424	Norflurazon	83.4	78.1	P/P	32 - 134
2188424	Parathion Ethyl	112	103	P/P	67 - 120
2188424	Parathion Methyl	138	138	P/P	70 - 140
2188424	Pendimethalin	102	94.1	P/P	59 - 145
2188424	Phorate	124	111	P/P	52 - 127
2188424	Prodiamine	41.8	38.3	P/P	11 - 157
2188424	Prometon	98.1	85.9	P/P	55 - 130
2188424	Prometryn	109	97.9	P/P	55 - 127
2188424	Pronamide	132	119	P/P	50 - 150
2188424	Simazine	134	106	P/P	58 - 159

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P385760

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188424	Sulfentrazone	62.9	59.2	P/P	50 - 150
2188424	Tebuconazole	3.07	2.31	F/F	10 - 122
2188424	Terbufos	141	125	F/P	65 - 131
2188424	Terbutylazine	118	106	P/P	63 - 131

Reference Method: EPA 8276
Batch ID: P385657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2189285	Chlordane	93.3	98.7	P/P	34 - 129
2189285	Toxaphene	57.3	52.7	P/P	26 - 123

Reference Method: EPA 8321B
Batch ID: P385636

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188150	Acesulfame K	48.4	49.2	P/P	40 - 150
2188150	AMPA	108	111	P/P	40 - 150
2188150	Endothall	106	108	P/P	40 - 150
2188150	Glufosinate	86.4	92.2	P/P	40 - 150
2188150	Glyphosate	77.2	82.2	P/P	40 - 140
2188150	Sucralose	41.0	46.0	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P385679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188520	2,4-D	105	116	P/P	30 - 160
2188520	Acetaminophen	64.0	65.2	P/P	30 - 160
2188520	Acetamiprid	56.6	64.0	P/P	30 - 160
2188520	Afidopyropen	53.5	55.6	P/P	30 - 160
2188520	Benzovindiflupyr	60.4	58.7	P/P	30 - 160
2188520	Carbamazepine	41.7	43.2	P/P	30 - 160
2188520	Clothianidin	53.7	51.9	P/P	30 - 160
2188520	Dinotefuran	69.7	70.9	P/P	30 - 160
2188520	Diuron	38.2	40.3	P/P	30 - 160
2188520	Fenuron	67.2	71.1	P/P	30 - 160
2188520	Fluridone	52.0	63.6	P/P	30 - 160
2188520	Hydrocodone	58.1	62.3	P/P	30 - 160
2188520	Ibuprofen	69.3	62.5	P/P	30 - 160
2188520	Imidacloprid	90.7	87.7	P/P	30 - 160
2188520	Linuron	51.3	58.5	P/P	30 - 160
2188520	Mandestrobin	72.6	75.3	P/P	30 - 160
2188520	MCP	101	98.4	P/P	30 - 160
2188520	Naproxen	61.3	71.5	P/P	30 - 160
2188520	Primidone	61.5	64.1	P/P	30 - 160
2188520	Pyraclostrobin	72.1	71.5	P/P	30 - 160
2188520	Thiamethoxam	56.7	59.5	P/P	30 - 160
2188520	Tolfenpyrad	52.7	55.5	P/P	30 - 160
2188520	Triclopyr	89.1	95.2	P/P	30 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P385828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188553	3-Hydroxycarbofuran	54.0	58.9	P/P	30 - 160
2188553	Aldicarb	39.7	37.5	P/P	30 - 160
2188553	Aldicarb Sulfone	55.6	64.8	P/P	30 - 160
2188553	Aldicarb Sulfoxide	34.3	35.6	P/P	30 - 160
2188553	Carbaryl	34.3	33.9	P/P	30 - 160
2188553	Carbofuran	36.2	35.9	P/P	30 - 160
2188553	Methiocarb	39.5	45.9	P/P	30 - 160
2188553	Methomyl	70.6	73.5	P/P	30 - 160
2188553	Oxamyl	67.0	66.6	P/P	30 - 160
2188553	Propoxur	32.0	32.2	P/P	30 - 160

Reference Method: SM 4500 F-C-2011

Batch ID: P385838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188758	Fluoride	100	101	P/P	94 - 107

Reference Method: SM 5310 B-2011

Batch ID: P385777

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2188647	Organic Carbon	100	102	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P385689

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188415	Turbidity	7.38	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P385951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188766	Chromium	2.58	Spike	P	0 - 20
2188766	Iron	1.45	Spike	P	0 - 20
2188766	Manganese	1.87	Spike	P	0 - 20
2188766	Zinc	1.75	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P385951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188766	Aluminum	2.30	Spike	P	0 - 20
2188766	Antimony	6.06	Spike	P	0 - 20
2188766	Arsenic	5.34	Spike	P	0 - 20
2188766	Cadmium	17.0	Spike	P	0 - 20
2188766	Copper	6.05	Spike	P	0 - 20
2188766	Lead	6.06	Spike	P	0 - 20
2188766	Nickel	14.2	Spike	P	0 - 20
2188766	Selenium	0.218	Spike	P	0 - 20
2188766	Silver	14.4	Spike	P	0 - 20
2188766	Thallium	6.13	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P386266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2187687	Bromide	2.43	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P385801

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188507	Ammonia-N	0.544	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P385734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188089	Kjeldahl Nitrogen	0.913	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P385864

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188583	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P385780

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188087	Total-P	2.17	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P385694

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188508	O-Phosphate-P	0.0868	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P385657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188145	Aldrin	11.5	Spike	P	0 - 30
2188145	Alpha-BHC	8.53	Spike	P	0 - 30
2188145	Alpha-Chlordane	15.7	Spike	P	0 - 30
2188145	Beta-BHC	21.6	Spike	P	0 - 30
2188145	Beta-Cyfluthrin	8.86	Spike	P	0 - 30
2188145	Bifenthrin	9.77	Spike	P	0 - 30
2188145	Chlorothalonil	32.7	Spike	F	0 - 30
2188145	Cis-Nonachlor	16.1	Spike	P	0 - 30
2188145	Cypermethrin	14.5	Spike	P	0 - 30
2188145	Dacthal	12.8	Spike	P	0 - 30
2188145	DDD-p,p'	16.4	Spike	P	0 - 30
2188145	DDE-p,p'	19.5	Spike	P	0 - 30
2188145	DDT-p,p'	7.40	Spike	P	0 - 30
2188145	Delta-BHC	19.6	Spike	P	0 - 30
2188145	Deltamethrin	9.49	Spike	P	0 - 30
2188145	Dicofol	2.75	Spike	P	0 - 30
2188145	Dieldrin	17.8	Spike	P	0 - 30
2188145	Endosulfan I	11.9	Spike	P	0 - 30
2188145	Endosulfan II	15.2	Spike	P	0 - 30
2188145	Endosulfan Sulfate	6.06	Spike	P	0 - 30
2188145	Endrin	23.0	Spike	P	0 - 30
2188145	Endrin Aldehyde	33.3	Spike	F	0 - 30
2188145	Endrin Ketone	15.6	Spike	P	0 - 30
2188145	Ethalfuralin	10.7	Spike	P	0 - 30
2188145	Gamma-BHC	9.40	Spike	P	0 - 30
2188145	Gamma-Chlordane	16.0	Spike	P	0 - 30
2188145	Heptachlor	7.00	Spike	P	0 - 30
2188145	Heptachlor Epoxide	14.0	Spike	P	0 - 30
2188145	Hexachlorobenzene	9.36	Spike	P	0 - 30
2188145	Lambda-Cyhalothrin	10.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P385657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188145	Methoxychlor	10.5	Spike	P	0 - 30
2188145	Mirex	13.3	Spike	P	0 - 30
2188145	Permethrin	13.9	Spike	P	0 - 30
2188145	Phenothrin	14.8	Spike	P	0 - 30
2188145	Prallethrin	22.2	Spike	P	0 - 30
2188145	Trans-Nonachlor	23.9	Spike	P	0 - 30
2188145	Trifluralin	13.3	Spike	P	0 - 30
LFB	Aldrin	8.71	LCS	P	0 - 30
LFB	Alpha-BHC	0.873	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.22	LCS	P	0 - 30
LFB	Beta-BHC	2.86	LCS	P	0 - 30
LFB	Beta-Cyfluthrin	4.96	LCS	P	0 - 30
LFB	Bifenthrin	0.969	LCS	P	0 - 30
LFB	Chlorothalonil	27.5	LCS	P	0 - 30
LFB	Cis-Nonachlor	4.02	LCS	P	0 - 30
LFB	Cypermethrin	0.437	LCS	P	0 - 30
LFB	Dacthal	5.92	LCS	P	0 - 30
LFB	DDD-p,p'	5.88	LCS	P	0 - 30
LFB	DDE-p,p'	5.93	LCS	P	0 - 30
LFB	DDT-p,p'	0.850	LCS	P	0 - 30
LFB	Delta-BHC	1.24	LCS	P	0 - 30
LFB	Deltamethrin	0.409	LCS	P	0 - 30
LFB	Dicofol	0.877	LCS	P	0 - 30
LFB	Dieldrin	5.89	LCS	P	0 - 30
LFB	Endosulfan I	7.75	LCS	P	0 - 30
LFB	Endosulfan II	2.77	LCS	P	0 - 30
LFB	Endosulfan Sulfate	0.971	LCS	P	0 - 30
LFB	Endrin	6.68	LCS	P	0 - 30
LFB	Endrin Aldehyde	5.22	LCS	P	0 - 30
LFB	Endrin Ketone	1.22	LCS	P	0 - 30
LFB	Ethalfuralin	4.44	LCS	P	0 - 30
LFB	Gamma-BHC	2.96	LCS	P	0 - 30
LFB	Gamma-Chlordane	4.75	LCS	P	0 - 30
LFB	Heptachlor	4.42	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.85	LCS	P	0 - 30
LFB	Hexachlorobenzene	2.18	LCS	P	0 - 30
LFB	Lambda-Cyhalothrin	1.28	LCS	P	0 - 30
LFB	Methoxychlor	1.79	LCS	P	0 - 30
LFB	Mirex	3.40	LCS	P	0 - 30
LFB	Permethrin	1.71	LCS	P	0 - 30
LFB	Phenothrin	6.66	LCS	P	0 - 30
LFB	Prallethrin	14.1	LCS	P	0 - 30
LFB	Trans-Nonachlor	4.77	LCS	P	0 - 30
LFB	Trifluralin	2.70	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P385760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188424	Acetochlor	8.37	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P385760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188424	Alachlor	10.3	Spike	P	0 - 30
2188424	Ametryn	1.35	Spike	P	0 - 30
2188424	Atrazine	8.62	Spike	P	0 - 30
2188424	Atrazine Desethyl	0.701	Spike	P	0 - 30
2188424	Azinphos Methyl	2.82	Spike	P	0 - 30
2188424	Bromacil	12.2	Spike	P	0 - 30
2188424	Butylate	10.4	Spike	P	0 - 30
2188424	Carbophenothion	6.86	Spike	P	0 - 30
2188424	Chlorpyrifos Ethyl	0.440	Spike	P	0 - 30
2188424	Chlorpyrifos Methyl	9.00	Spike	P	0 - 30
2188424	Cyanazine	7.19	Spike	P	0 - 30
2188424	Demeton	10.1	Spike	P	0 - 30
2188424	Diazinon	9.82	Spike	P	0 - 30
2188424	Dimethenamid	5.51	Spike	P	0 - 30
2188424	Disulfoton	4.31	Spike	P	0 - 30
2188424	Dithiopyr	11.1	Spike	P	0 - 30
2188424	EPTC	9.30	Spike	P	0 - 30
2188424	Ethion	3.88	Spike	P	0 - 30
2188424	Ethoprop	7.54	Spike	P	0 - 30
2188424	Fenamiphos	17.8	Spike	P	0 - 30
2188424	Fipronil	6.11	Spike	P	0 - 30
2188424	Fipronil Desulfinyl	10.7	Spike	P	0 - 30
2188424	Fipronil Sulfide	7.05	Spike	P	0 - 30
2188424	Fipronil Sulfone	5.45	Spike	P	0 - 30
2188424	Flumioxazin	6.09	Spike	P	0 - 30
2188424	Fonofos	13.0	Spike	P	0 - 30
2188424	Hexazinone	13.1	Spike	P	0 - 30
2188424	Imazalil	3.16	Spike	P	0 - 30
2188424	Malathion	11.1	Spike	P	0 - 30
2188424	Metalaxyl	12.4	Spike	P	0 - 30
2188424	Metolachlor	7.99	Spike	P	0 - 30
2188424	Metribuzin	5.95	Spike	P	0 - 30
2188424	Mevinphos	6.58	Spike	P	0 - 30
2188424	Molinate	9.70	Spike	P	0 - 30
2188424	Naled	7.86	Spike	P	0 - 30
2188424	Norflurazon	6.64	Spike	P	0 - 30
2188424	Oxadiazon	4.44	Spike	P	0 - 30
2188424	Parathion Ethyl	8.21	Spike	P	0 - 30
2188424	Parathion Methyl	0.214	Spike	P	0 - 30
2188424	Pendimethalin	7.61	Spike	P	0 - 30
2188424	Phorate	10.8	Spike	P	0 - 30
2188424	Prodiamine	8.87	Spike	P	0 - 30
2188424	Prometon	11.7	Spike	P	0 - 30
2188424	Prometryn	10.5	Spike	P	0 - 30
2188424	Pronamide	10.5	Spike	P	0 - 30
2188424	Propiconazole	9.96	Spike	P	0 - 30
2188424	Simazine	18.6	Spike	P	0 - 30
2188424	Sulfentrazone	4.13	Spike	P	0 - 30
2188424	Tebuconazole	3.00	Spike	P	0 - 30
2188424	Terbufos	12.0	Spike	P	0 - 30
2188424	Terbutylazine	10.9	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P385760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	6.88	LCS	P	0 - 30
LFB	Alachlor	8.32	LCS	P	0 - 30
LFB	Ametryn	12.3	LCS	P	0 - 30
LFB	Atrazine	5.47	LCS	P	0 - 30
LFB	Atrazine Desethyl	9.36	LCS	P	0 - 30
LFB	Azinphos Methyl	11.6	LCS	P	0 - 30
LFB	Bromacil	0.790	LCS	P	0 - 30
LFB	Butylate	3.84	LCS	P	0 - 30
LFB	Carbophenothion	8.38	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	7.19	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	6.80	LCS	P	0 - 30
LFB	Cyanazine	7.69	LCS	P	0 - 30
LFB	Demeton	9.82	LCS	P	0 - 30
LFB	Diazinon	5.74	LCS	P	0 - 30
LFB	Dimethenamid	5.87	LCS	P	0 - 30
LFB	Disulfoton	12.9	LCS	P	0 - 30
LFB	Dithiopyr	8.64	LCS	P	0 - 30
LFB	EPTC	4.47	LCS	P	0 - 30
LFB	Ethion	6.49	LCS	P	0 - 30
LFB	Ethoprop	5.50	LCS	P	0 - 30
LFB	Fenamiphos	15.5	LCS	P	0 - 30
LFB	Fipronil	6.93	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.76	LCS	P	0 - 30
LFB	Fipronil Sulfide	8.48	LCS	P	0 - 30
LFB	Fipronil Sulfone	10.6	LCS	P	0 - 30
LFB	Flumioxazin	7.43	LCS	P	0 - 30
LFB	Fonofos	6.21	LCS	P	0 - 30
LFB	Hexazinone	9.85	LCS	P	0 - 30
LFB	Imazalil	9.64	LCS	P	0 - 30
LFB	Malathion	8.30	LCS	P	0 - 30
LFB	Metalaxyl	8.89	LCS	P	0 - 30
LFB	Metolachlor	5.12	LCS	P	0 - 30
LFB	Metribuzin	6.73	LCS	P	0 - 30
LFB	Mevinphos	3.20	LCS	P	0 - 30
LFB	Molinate	2.61	LCS	P	0 - 30
LFB	Naled	6.34	LCS	P	0 - 30
LFB	Norflurazon	5.15	LCS	P	0 - 30
LFB	Oxadiazon	7.81	LCS	P	0 - 30
LFB	Parathion Ethyl	6.07	LCS	P	0 - 30
LFB	Parathion Methyl	7.41	LCS	P	0 - 30
LFB	Pendimethalin	5.91	LCS	P	0 - 30
LFB	Phorate	0.440	LCS	P	0 - 30
LFB	Prodiamine	11.6	LCS	P	0 - 30
LFB	Prometon	12.0	LCS	P	0 - 30
LFB	Prometryn	10.4	LCS	P	0 - 30
LFB	Pronamide	1.66	LCS	P	0 - 30
LFB	Propiconazole	8.19	LCS	P	0 - 30
LFB	Simazine	1.85	LCS	P	0 - 30
LFB	Sulfentrazone	10.2	LCS	P	0 - 30
LFB	Tebuconazole	4.89	LCS	P	0 - 30
LFB	Terbufos	3.97	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P385760

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Terbutylazine	9.54	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P385657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2189285	Chlordane	5.63	Spike	P	0 - 30
2189285	Toxaphene	8.39	Spike	P	0 - 30
LFB	Chlordane	7.02	LCS	P	0 - 30
LFB	Toxaphene	2.47	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P385636

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188150	Acesulfame K	1.70	Spike	P	0 - 30
2188150	AMPA	2.00	Spike	P	0 - 30
2188150	Endothall	2.37	Spike	P	0 - 30
2188150	Glufosinate	6.51	Spike	P	0 - 30
2188150	Glyphosate	6.21	Spike	P	0 - 30
2188150	Sucralose	8.78	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P385679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188520	2,4-D	7.57	Spike	P	0 - 30
2188520	Acetaminophen	1.84	Spike	P	0 - 30
2188520	Acetamiprid	12.2	Spike	P	0 - 30
2188520	Afidopyropen	3.60	Spike	P	0 - 30
2188520	Bentazon	2.70	Spike	P	0 - 30
2188520	Benzovindiflupyr	2.99	Spike	P	0 - 30
2188520	Carbamazepine	2.94	Spike	P	0 - 30
2188520	Clothianidin	3.03	Spike	P	0 - 30
2188520	Dinotefuran	1.71	Spike	P	0 - 30
2188520	Diuron	4.74	Spike	P	0 - 30
2188520	Fenuron	5.65	Spike	P	0 - 30
2188520	Fluridone	9.19	Spike	P	0 - 30
2188520	Hydrocodone	7.06	Spike	P	0 - 30
2188520	Ibuprofen	10.3	Spike	P	0 - 30
2188520	Imazapyr	9.25	Spike	P	0 - 30
2188520	Imidacloprid	2.07	Spike	P	0 - 30
2188520	Linuron	13.1	Spike	P	0 - 30
2188520	Mandestrobin	3.64	Spike	P	0 - 30
2188520	MCP	2.76	Spike	P	0 - 30
2188520	Naproxen	15.5	Spike	P	0 - 30
2188520	Primidone	3.65	Spike	P	0 - 30
2188520	Pyraclostrobin	0.835	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P385679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188520	Thiamethoxam	4.70	Spike	P	0 - 30
2188520	Tolfenpyrad	5.22	Spike	P	0 - 30
2188520	Triclopyr	6.55	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P385828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188553	3-Hydroxycarbofuran	8.60	Spike	P	0 - 30
2188553	Aldicarb	5.66	Spike	P	0 - 30
2188553	Aldicarb Sulfone	15.4	Spike	P	0 - 30
2188553	Aldicarb Sulfoxide	3.87	Spike	P	0 - 30
2188553	Carbaryl	1.06	Spike	P	0 - 30
2188553	Carbofuran	0.920	Spike	P	0 - 30
2188553	Methiocarb	15.2	Spike	P	0 - 30
2188553	Methomyl	4.02	Spike	P	0 - 30
2188553	Oxamyl	0.604	Spike	P	0 - 30
2188553	Propoxur	0.664	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P385771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188430	Total Alkalinity	0.500	Sample	P	0 - 8.1

Reference Method: SM 4500 F-C-2011
Batch ID: P385838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188758	Fluoride	0.464	Spike	P	0 - 2.8

Reference Method: SM 5310 B-2011
Batch ID: P385777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2188647	Organic Carbon	1.30	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2188421
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	30.9	P	30 - 160

Lab Sample ID: 2188422
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	99.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	61.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	39.2	P	30 - 160
EPA 8321B	Diuron-d6	41.6	P	30 - 160
EPA 8321B	Endothall-d6	400	F	30 - 160
EPA 8321B	Endothall-d6	400	F	30 - 160
EPA 8321B	Glyphosate 13C 15N	55.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	55.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	65.3	P	30 - 160
EPA 8321B	Primidone-d5	65.4	P	30 - 160
EPA 8321B	Sucralose-d6	81.9	P	30 - 160
EPA 8321B	Sucralose-d6	81.9	P	30 - 160

Lab Sample ID: 2188423
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	70.5	P	44 - 112
EPA 8270E	Tetrachloro-m-xylene	45.3	P	34 - 106
EPA 8276	Decachlorobiphenyl	37.0	P	26 - 97.0
EPA 8276	PCNB	74.4	P	38 - 141

Lab Sample ID: 2188424
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	119	P	72 - 135
EPA 8270E	Terbufos-d10	116	P	57 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A100297

Included Lab Sample IDs: 2188415

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A100298

Included Lab Sample IDs: 2188417

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

Reference Method: EPA 8321B

Run ID: A100315

Included Lab Sample IDs: 2188422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	102	96.0	P/P	60 - 160
Endothall	101	102	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A100341

Included Lab Sample IDs: 2188415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	99.5	98.3	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A100342

Included Lab Sample IDs: 2188416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	103	99.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A100344

Included Lab Sample IDs: 2188416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	98.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A100352

Included Lab Sample IDs: 2188416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A100369

Included Lab Sample IDs: 2188416

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

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-2011

Run ID: A100371

Included Lab Sample IDs: 2188415

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A100382

Included Lab Sample IDs: 2188416

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

Reference Method: EPA 8321B

Run ID: A100390

Included Lab Sample IDs: 2188422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	104	97.2	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A100391

Included Lab Sample IDs: 2188422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	103	99.7	P/P	60 - 160
Glufosinate	94.4	90.5	P/P	60 - 160
Glyphosate	90.0	99.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A100407

Included Lab Sample IDs: 2188421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	108	115	P/P	60 - 150
Aldicarb	92.3	110	P/P	60 - 150
Aldicarb Sulfone	106	103	P/P	50 - 150
Aldicarb Sulfoxide	102	94.6	P/P	50 - 150
Carbaryl	121	113	P/P	60 - 150
Carbofuran	120	115	P/P	50 - 150
Methiocarb	123	117	P/P	50 - 150
Methomyl	98.7	102	P/P	50 - 150
Oxamyl	106	102	P/P	50 - 150
Propoxur	103	104	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A100410

Included Lab Sample IDs: 2188422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	120	P/P	50 - 150
Acetaminophen	113	111	P/P	60 - 160
Acetamiprid	119	120	P/P	50 - 150
Afidopyropen	110	115	P/P	50 - 150
Bentazon	95.1	105	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A100410
Included Lab Sample IDs: 2188422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Benzovindiflupyr	114	106	P/P	50 - 150
Carbamazepine	129	125	P/P	60 - 150
Clothianidin	111	121	P/P	60 - 150
Dinotefuran	107	101	P/P	50 - 150
Diuron	120	117	P/P	60 - 160
Fenuron	114	118	P/P	60 - 150
Fluridone	118	124	P/P	60 - 160
Hydrocodone	111	113	P/P	60 - 150
Ibuprofen	100	104	P/P	50 - 160
Imazapyr	113	101	P/P	50 - 150
Imidacloprid	121	110	P/P	60 - 150
Linuron	124	133	P/P	60 - 150
Mandestrobin	118	118	P/P	50 - 150
MCPP	119	119	P/P	50 - 150
Naproxen	143	117	P/P	50 - 160
Primidone	108	107	P/P	60 - 150
Pyraclostrobin	134	139	P/P	60 - 150
Thiamethoxam	112	115	P/P	50 - 150
Tolfenpyrad	136	131	P/P	60 - 150
Triclopyr	120	111	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A100411
Included Lab Sample IDs: 2188423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	95.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A100455
Included Lab Sample IDs: 2188425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	101	102	P/P	95 - 105
Iron	101	100	P/P	95 - 105
Manganese	103	103	P/P	95 - 105
Zinc	98.5	99.2	P/P	95 - 105

Reference Method: EPA 8270E
Run ID: A100457
Included Lab Sample IDs: 2188423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	102		P	80 - 120
Alpha-BHC	96.5		P	80 - 120
Alpha-Chlordane	98.2		P	80 - 120
Beta-BHC	90.0		P	80 - 120
Beta-Cyfluthrin	91.8		P	80 - 120
Bifenthrin	98.3		P	80 - 120
Chlorothalonil	117		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A100457
Included Lab Sample IDs: 2188423

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cis-Nonachlor	95.2		P	80 - 120
Cypermethrin	96.6		P	80 - 120
Dacthal	98.8		P	80 - 120
DDD-p,p'	95.5		P	80 - 120
DDE-p,p'	99.2		P	80 - 120
DDT-p,p'	111		P	80 - 120
Delta-BHC	90.8		P	80 - 120
Deltamethrin	105		P	80 - 120
Dicofol	94.0		P	80 - 120
Dieldrin	102		P	80 - 120
Endosulfan I	102		P	80 - 120
Endosulfan II	100		P	80 - 120
Endosulfan Sulfate	95.5		P	80 - 120
Endrin	97.8		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	94.2		P	80 - 120
Ethalfuralin	98.7		P	80 - 120
Gamma-BHC	93.4		P	80 - 120
Gamma-Chlordane	97.8		P	80 - 120
Heptachlor	105		P	80 - 120
Heptachlor Epoxide	97.3		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Lambda-Cyhalothrin	96.1		P	80 - 120
Methoxychlor	108		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	88.8		P	80 - 120
Phenothrin	89.4		P	80 - 120
Prallethrin	88.5		P	80 - 120
Trans-Nonachlor	97.5		P	80 - 120
Trifluralin	98.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A100501
Included Lab Sample IDs: 2188425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	101	102	P/P	90 - 110
Nickel	97.6	96.3	P/P	90 - 110
Selenium	100	102	P/P	90 - 110
Silver	105	105	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A100505
Included Lab Sample IDs: 2188424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	98.2		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	83.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A100505
Included Lab Sample IDs: 2188424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azinphos Methyl	96.1		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	97.0		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	103		P	80 - 120
Cyanazine	88.5		P	80 - 120
Demeton	96.4		P	80 - 120
Diazinon	109		P	80 - 120
Dimethenamid	103		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	107		P	80 - 120
EPTC	101		P	80 - 120
Ethion	98.6		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	93.4		P	80 - 120
Fipronil	94.8		P	80 - 120
Fipronil Desulfinyl	95.0		P	80 - 120
Fipronil Sulfide	88.3		P	80 - 120
Fipronil Sulfone	88.9		P	80 - 120
Flumioxazin	84.3		P	80 - 120
Fonofos	104		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	101		P	80 - 120
Malathion	98.5		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	97.9		P	80 - 120
Metribuzin	98.9		P	80 - 120
Mevinphos	89.2		P	80 - 120
Molinate	99.9		P	80 - 120
Naled	102		P	80 - 120
Norflurazon	97.1		P	80 - 120
Oxadiazon	108		P	80 - 120
Parathion Ethyl	97.1		P	80 - 120
Parathion Methyl	94.3		P	80 - 120
Pendimethalin	102		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	95.3		P	80 - 120
Prometon	99.0		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	101		P	80 - 120
Propiconazole	103		P	80 - 120
Simazine	105		P	80 - 120
Sulfentrazone	87.5		P	80 - 120
Tebuconazole	98.3		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A100521

Included Lab Sample IDs: 2188425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Antimony	107	110	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Copper	100	103	P/P	90 - 110
Lead	102	101	P/P	90 - 110
Thallium	98.2	96.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A100541

Included Lab Sample IDs: 2188415

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromide	101	104	P/P	90 - 110

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							7.38	
EPA 200.7 Rev. 4.4	Chromium	98.5		99.6	97.0	102			2.58
	Iron	101		101	99.6	101			1.45
	Manganese	99.3		98.6	96.4	99.5			1.87
	Zinc	97.2		100	98.4	102			1.75
EPA 200.8 Rev. 5.4	Aluminum	101		103	106	102			2.30
	Antimony	107		109	116	109			6.06
	Arsenic	102		107	113	107			5.34
	Cadmium	103		96.3	114	99.5			17.0
	Copper	99.8		112	119	112			6.05
	Lead	108		112	119	109			6.06
	Nickel	98.0		89.7	103	90.5			14.2
	Selenium	99.3		108	108	110			0.218
	Silver	105		95.8	111	98.0			14.4
	Thallium	108		108	115	107			6.13
EPA 300.0 Rev. 2.1	Bromide	103		97.4	94.6	96.7			2.43
EPA 350.1 Rev. 2.0	Ammonia-N	95.8		102	102				0.544
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104		103	102				0.913
EPA 353.2 Rev. 2.0	NO2NO3-N	102		100	100				0.0
EPA 365.1 Rev. 2.0	Total-P	102		94.6	92.5				2.17
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		99.5	99.6				0.0868
EPA 8270E	Acetochlor	116	109	104	95.7		6.88		8.37
	Alachlor	113	104	96.0	86.6		8.32		10.3
	Aldrin	57.2	52.4	61.7	54.9		8.71		11.5
	Alpha-BHC	86.4	87.2	86.8	79.7		0.873		8.53
	Alpha-Chlordane	90.6	86.9	79.4	67.9		4.22		15.7
	Ametryn	116	103	96.4	98.1		12.3		1.35
	Atrazine	117	110				5.47		8.62
	Atrazine Desethyl	97.1	88.5	85.4	84.7		9.36		0.701
	Azinphos Methyl	136	153	81.0	78.8		11.6		2.82
	Beta-BHC	96.3	99.0	103	82.6		2.86		21.6
	Beta-Cyfluthrin	88.8	84.5	87.5	80.1		4.96		8.86
	Bifenthrin	87.4	88.2	74.6	67.6		0.969		9.77
	Bromacil	115	116	123	109		0.790		12.2
	Butylate	72.8	75.7	73.2	65.9		3.84		10.4
	Carbophenothion	88.5	96.3	68.2	63.7		8.38		6.86
	Chlorothalonil	73.5	55.7	48.8	67.8		27.5		32.7
	Chlorpyrifos Ethyl	101	93.7	87.7	88.1		7.19		0.440
	Chlorpyrifos Methyl	109	102	89.6	81.9		6.80		9.00
	Cis-Nonachlor	92.3	88.7	78.6	66.8		4.02		16.1
	Cyanazine	148	137	65.8	61.2		7.69		7.19
	Cypermethrin	85.6	86.0	70.0	60.5		0.437		14.5
	Dacthal	99.8	94.1	93.8	82.5		5.92		12.8
	DDD-p,p'	101	95.7	85.1	72.2		5.88		16.4
	DDE-p,p'	90.3	85.1	77.7	63.9		5.93		19.5
	DDT-p,p'	96.7	97.5	84.9	78.8		0.850		7.40
	Delta-BHC	115	114	127	105		1.24		19.6
	Deltamethrin	100	100	58.6	53.3		0.409		9.49
	Demeton	81.1	73.5	109	98.6		9.82		10.1
	Diazinon	127	120	126	114		5.74		9.82
	Dicofol	98.3	99.2	80.4	82.6		0.877		2.75
	Dieldrin	96.4	90.9	87.9	73.5		5.89		17.8
	Dimethenamid	110	104	68.3	64.6		5.87		5.51
	Disulfoton	103	90.6	91.6	87.7		12.9		4.31

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Dithiopyr	108	98.9	92.8	82.1	8.64	11.1
	Endosulfan I	100	92.7	95.7	84.9	7.75	11.9
	Endosulfan II	117	114	97.5	83.7	2.77	15.2
	Endosulfan Sulfate	91.7	90.8	85.3	80.3	0.971	6.06
	Endrin	98.3	91.9	92.5	73.4	6.68	23.0
	Endrin Aldehyde	92.7	88.0	55.5	39.6	5.22	33.3
	Endrin Ketone	110	108	105	90.1	1.22	15.6
	EPTC	74.4	71.2	70.5	64.2	4.47	9.30
	Ethalfuralin	80.9	77.4	85.5	76.9	4.44	10.7
	Ethion	51.9	48.6	17.4	16.7	6.49	3.88
	Ethoprop	119	112	134	125	5.50	7.54
	Fenamiphos	81.8	70.0	46.7	55.9	15.5	17.8
	Fipronil	117	110	90.3	82.2	6.93	6.11
	Fipronil Desulfinyl	117	109	99.6	81.6	6.76	10.7
	Fipronil Sulfide	91.7	84.3	67.7	58.3	8.48	7.05
	Fipronil Sulfone	86.0	77.3			10.6	5.45
	Flumioxazin	161	149	233	219	7.43	6.09
	Fonofos	112	105	117	103	6.21	13.0
	Gamma-BHC	89.9	92.6	103	93.7	2.96	9.40
	Gamma-Chlordane	88.8	84.7	77.8	66.3	4.75	16.0
	Heptachlor	71.1	68.0	61.9	57.7	4.42	7.00
	Heptachlor Epoxide	91.5	87.2	84.7	73.6	4.85	14.0
	Hexachlorobenzene	68.3	69.8	56.9	51.8	2.18	9.36
	Hexazinone	117	106	143	124	9.85	13.1
	Imazalil	102	92.7	134	129	9.64	3.16
	Lambda-Cyhalothrin	85.8	86.9	76.0	68.3	1.28	10.7
	Malathion	126	116	115	103	8.30	11.1
	Metalaxyl	111	102	98.0	85.8	8.89	12.4
	Methoxychlor	98.6	100	89.3	80.3	1.79	10.5
	Metolachlor	97.8	92.9	79.4	71.4	5.12	7.99
	Metribuzin	143	134	115	108	6.73	5.95
	Mevinphos	103	99.9	128	120	3.20	6.58
	Mirex	76.8	74.2	64.8	56.7	3.40	13.3
	Molinate	85.1	82.9	87.1	79.1	2.61	9.70
	Naled	68.6	64.4	63.4	58.6	6.34	7.86
	Norflurazon	107	102	83.4	78.1	5.15	6.64
	Oxadiazon	98.9	91.5			7.81	4.44
	Parathion Ethyl	108	102	112	103	6.07	8.21
	Parathion Methyl	126	117	138	138	7.41	0.214
	Pendimethalin	89.1	84.0	102	94.1	5.91	7.61
	Permethrin	80.8	79.4	65.9	57.3	1.71	13.9
	Phenothrin	60.9	57.0	64.9	56.0	6.66	14.8
	Phorate	92.2	91.8	124	111	0.440	10.8
	Prallethrin	70.3	61.1	73.1	58.5	14.1	22.2
	Prodiamine	36.1	32.2	41.8	38.3	11.6	8.87
	Prometon	108	95.7	98.1	85.9	12.0	11.7
	Prometryn	114	103	109	97.9	10.4	10.5
	Pronamide	113	115	132	119	1.66	10.5
	Propiconazole	100	92.1			8.19	9.96
	Simazine	118	116	134	106	1.85	18.6
	Sulfentrazone	46.6	42.1	62.9	59.2	10.2	4.13
	Tebuconazole	25.4	24.2	3.07	2.31	4.89	3.00
	Terbufos	116	112	141	125	3.97	12.0
	Terbuthylazine	110	99.8	118	106	9.54	10.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Trans-Nonachlor	89.0	84.9	76.3	60.1	4.77	23.9
	Trifluralin	79.9	77.8	82.3	72.0	2.70	13.3
EPA 8276	Chlordane	103	95.6	93.3	98.7	7.02	5.63
	Toxaphene	64.4	62.8	57.3	52.7	2.47	8.39
EPA 8321B	2,4-D	120		105	116		7.57
	3-Hydroxycarbofuran	86.2		54.0	58.9		8.60
	Acesulfame K	106		48.4	49.2		1.70
	Acetaminophen	77.9		64.0	65.2		1.84
	Acetamiprid	78.1		56.6	64.0		12.2
	Afidopyropen	61.1		53.5	55.6		3.60
	Aldicarb	63.7		39.7	37.5		5.66
	Aldicarb Sulfone	91.8		55.6	64.8		15.4
	Aldicarb Sulfoxide	98.5		34.3	35.6		3.87
	AMPA	102		108	111		2.00
	Bentazon	49.7					2.70
	Benzovindiflupyr	73.2		60.4	58.7		2.99
	Carbamazepine	58.5		41.7	43.2		2.94
	Carbaryl	45.4		34.3	33.9		1.06
	Carbofuran	47.6		36.2	35.9		0.920
	Clothianidin	80.5		53.7	51.9		3.03
	Dinotefuran	93.4		69.7	70.9		1.71
	Diuron	51.1		38.2	40.3		4.74
	Endothall	101		106	108		2.37
	Fenuron	96.7		67.2	71.1		5.65
	Fluridone	82.1		52.0	63.6		9.19
	Glufosinate	97.5		86.4	92.2		6.51
	Glyphosate	95.0		77.2	82.2		6.21
	Hydrocodone	85.4		58.1	62.3		7.06
	Ibuprofen	76.5		69.3	62.5		10.3
	Imazapyr	88.0					9.25
	Imidacloprid	103		90.7	87.7		2.07
	Linuron	70.4		51.3	58.5		13.1
	Mandestrobin	83.5		72.6	75.3		3.64
	MCPP	120		101	98.4		2.76
	Methiocarb	49.4		39.5	45.9		15.2
	Methomyl	97.2		70.6	73.5		4.02
	Naproxen	78.6		61.3	71.5		15.5
	Oxamyl	88.6		67.0	66.6		0.604
	Primidone	73.2		61.5	64.1		3.65
	Propoxur	42.5		32.0	32.2		0.664
	Pyraclostrobin	76.6		72.1	71.5		0.835
	Sucralose	95.1		41.0	46.0		8.78
	Thiamethoxam	71.4		56.7	59.5		4.70
	Tolfenpyrad	56.2		52.7	55.5		5.22
	Triclopyr	86.6		89.1	95.2		6.55
SM 2320 B-2011	Total Alkalinity	99.1				0.500	
SM 4500 F-C-2011	Fluoride	98.4		100	101		0.464
SM 5310 B-2011	Organic Carbon	101		100	102		1.30

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2188415

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2188425
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2188425
EPA 300.0 Rev. 2.1	Bromide in aqueous matrices	2188415
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2188416
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2188416
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2188416
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2188416
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2188417
EPA 8270E	Organochlorine pesticides in water matrices by GC/MS-SIM	2188423
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2188424
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2188423
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2188421
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2188422
EPA 8321B	Water soluble organic compounds by HPLC/MS/MS	2188422
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2188415
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2188415
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2188415
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2188416

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	08/05/2020			08/05/2020 15:58	Blanca Fach	2188415
EPA 200.7 Rev. 4.4	08/05/2020	08/12/2020 15:00	Elliott D. Healy	08/13/2020 13:56	Betina Topolski	2188425
EPA 200.8 Rev. 5.4	08/05/2020	08/12/2020 15:00	Elliott D. Healy	08/17/2020 18:09	Alexander Thompson	2188425
	08/05/2020	08/12/2020 15:00	Elliott D. Healy	08/17/2020 20:19	Alexander Thompson	2188425
	08/05/2020	08/12/2020 15:00	Elliott D. Healy	08/18/2020 12:46	Alexander Thompson	2188425
	08/05/2020	08/12/2020 15:00	Elliott D. Healy	08/18/2020 14:34	Alexander Thompson	2188425
EPA 300.0 Rev. 2.1	08/05/2020			08/15/2020 12:23	Julia Storbeck	2188415
EPA 350.1 Rev. 2.0	08/05/2020			08/08/2020 13:24	Ping Hua	2188416
EPA 351.2 Rev. 2.0	08/05/2020	08/06/2020 10:06	Sima Feizi	08/07/2020 14:03	Jhamieka S. Greenwood	2188416
EPA 353.2 Rev. 2.0	08/05/2020			08/11/2020 08:57	Beverly Y. Sanders	2188416
EPA 365.1 Rev. 2.0	08/05/2020	08/07/2020 13:00	Shengyu Wang	08/10/2020 10:39	Benjamin T. Nordmann	2188416
EPA 365.1 Rev. 2.0 dissolved	08/05/2020			08/05/2020 16:14	Virginia P. Brown	2188417
EPA 8270E	08/05/2020	08/10/2020 08:00	Fe-Val Siddell	08/11/2020 19:37	Michael Poppell	2188423
	08/05/2020	08/10/2020 08:30	Rasheda Ghaffari	08/11/2020 20:29	Vandana T. Nagar	2188424
EPA 8276	08/05/2020	08/10/2020 08:00	Fe-Val Siddell	08/12/2020 02:37	Arthur Maknenko	2188423
EPA 8321B	08/05/2020	08/05/2020 13:45	Rebecca Ware	08/05/2020 13:59	Rebecca Ware	2188422
	08/05/2020	08/05/2020 13:45	Rebecca Ware	08/06/2020 12:06	Rebecca Ware	2188422
	08/05/2020	08/05/2020 13:45	Rebecca Ware	08/11/2020 02:28	Rebecca Ware	2188422
	08/05/2020	08/06/2020 13:00	Hoor Shaik	08/09/2020 01:58	Juyoung Kim	2188422
	08/05/2020	08/11/2020 09:00	Hoor Shaik	08/12/2020 07:31	Juyoung Kim	2188421
SM 2320 B-2011	08/05/2020			08/07/2020 00:17	Dale L. Simmons	2188415
SM 2540 D-2011	08/05/2020			08/10/2020 13:50	Yijie Li	2188415
SM 4500 F-C-2011	08/05/2020			08/07/2020 23:15	Dale L. Simmons	2188415
SM 5310 B-2011	08/05/2020			08/07/2020 03:24	David Boose	2188416