

Chemical Analysis Report

NE-DIST-2019-12-06-01

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

Event Description: **ICW Boat**
Request ID: **RQ-2019-12-02-26**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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Certified by: Colin Wright, Program Administrator

Date Certified: 10-JAN-2020 09:15

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

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: Open creek 200 meters above mouth

Collection Date/Time: 12/05/2019 09:55

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141476	EPA 180.1 Rev. 2.0	Turbidity	4.0		NTU	P375364	
	EPA 300.0	Bromide	27		mg Br/L	P375748	
	SM 2320 B-97	Total Alkalinity	103		mg CaCO3/L	P375504	
	SM 2540 D-97	TSS	5	I	mg/L	P376064	
	SM 4500 F-C-97	Fluoride	0.53		mg F/L	P375506	
2141477	EPA 350.1 Rev. 2.0	Ammonia-N	0.069		mg N/L	P375782	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.55		mg N/L	P375691	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.084		mg N/L	P376045	
	EPA 365.1 Rev. 2.0	Total-P	0.059		mg P/L	P375616	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P375518	
2141478	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.038		mg P/L	P375415	
2141487	EPA 8321B	Aldicarb	0.020	U	ug/L	P375428	
		Aldicarb Sulfone	0.0020	U	ug/L	P375428	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P375428	
		Carbaryl	0.0020	U	ug/L	P375428	
		Carbofuran	0.0020	U	ug/L	P375428	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P375428	
		Methiocarb	0.0020	U	ug/L	P375428	
		Methomyl	0.0020	U	ug/L	P375428	
		Oxamyl	0.0020	U	ug/L	P375428	
		Propoxur	0.0020	U	ug/L	P375428	
2141488		2,4-D	0.0060	I	ug/L	P375428	
		Acesulfame K**	0.10	U	ug/L	P375521	MS
		AMPA**	1.0	U	ug/L	P375521	
		Sucralose**	0.37		ug/L	P375521	
		Acetaminophen**	0.0080	U	ug/L	P375428	
		Acetamiprid**	0.0020	U	ug/L	P375428	
		Endothal**	0.25	U	ug/L	P375521	
		Glufosinate**	1.0	U	ug/L	P375521	
		Glyphosate**	1.0	U	ug/L	P375521	
		Afidopyropen**	0.0020	UJ	ug/L	P375428	
		Bentazon	0.019		ug/L	P375428	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P375428	
		Carbamazepine**	8.0E-04	U	ug/L	P375428	
		Clothianidin**	0.0020	U	ug/L	P375428	
		Dinotefuran**	0.0020	U	ug/L	P375428	
		Diuron	0.020		ug/L	P375428	
		Fenuron	0.016	U	ug/L	P375428	
		Fluridone**	0.019		ug/L	P375428	
		Imazapyr**	0.13		ug/L	P375428	
		Hydrocodone**	0.0020	U	ug/L	P375428	
		Ibuprofen**	0.020	U	ug/L	P375428	
		Imidacloprid	0.0063	I J	ug/L	P375428	MS

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141488	EPA 8321B	Linuron	0.0040	U	ug/L	P375428	
		Mandestrobin**	0.0020	UJ	ug/L	P375428	
		MCPP	0.0020	U	ug/L	P375428	
		Naproxen**	0.0080	U	ug/L	P375428	
		Primidone**	0.0040	U	ug/L	P375428	
		Pyraclostrobin**	0.0020	U	ug/L	P375428	
		Thiamethoxam**	0.0020	U	ug/L	P375428	
		Tolfenpyrad**	0.0020	U	ug/L	P375428	
		Triclopyr**	0.0040	U	ug/L	P375428	
2141491	EPA 8270E	Aldrin	4.1	U	ng/L	P375416	
		Alpha-BHC	2.0	U	ng/L	P375416	
		Alpha-Chlordane	1.0	U	ng/L	P375416	
		Beta-BHC	10	U	ng/L	P375416	
		Bifenthrin**	4.1	U	ng/L	P375416	
		Delta-BHC	8.1	U	ng/L	P375416	
		Gamma-BHC	8.1	U	ng/L	P375416	
		Carbophenothion	10	U	ng/L	P375416	
		Chlorothalonil	2.0	U	ng/L	P375416	
		Cis-Nonachlor**	1.0	U	ng/L	P375416	
		Cypermethrin	20	U	ng/L	P375416	
		DDD-p,p'	6.1	U	ng/L	P375416	
		DDE-p,p'	6.1	U	ng/L	P375416	
		DDT-p,p'	7.1	U	ng/L	P375416	
		Dicofol	30	U	ng/L	P375416	
		Dieldrin	4.1	U	ng/L	P375416	
		Endosulfan I	4.1	U	ng/L	P375416	
		Endosulfan II	4.1	U	ng/L	P375416	
		Endosulfan Sulfate	2.0	U	ng/L	P375416	
		Endrin	2.0	U	ng/L	P375416	
		Endrin Aldehyde	2.0	U	ng/L	P375416	
		Endrin Ketone	2.0	U	ng/L	P375416	
		Ethalfuralin**	3.0	U	ng/L	P375416	
		Gamma-Chlordane	1.0	U	ng/L	P375416	
		Heptachlor	1.5	U	ng/L	P375416	
		Heptachlor Epoxide	2.0	U	ng/L	P375416	
		Hexachlorobenzene	2.0	U	ng/L	P375416	
		Methoxychlor	4.1	U	ng/L	P375416	
		Mirex	2.0	U	ng/L	P375416	
		Permethrin	10	U	ng/L	P375416	
		Trans-Nonachlor**	1.0	U	ng/L	P375416	
		Trifluralin	2.5	U	ng/L	P375416	
	EPA 8276	Chlordane	7.0	I	ng/L	P375416	
		Toxaphene	30	U	ng/L	P375416	
2141492	EPA 8270E	Acetochlor	0.23	U	ng/L	P375309	
		Alachlor	0.23	U	ng/L	P375309	

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141492	EPA 8270E	Ametryn	0.56	U	ng/L	P375309	
		Atrazine	20		ng/L	P375309	
		Atrazine Desethyl	1.4	U	ng/L	P375309	
		Azinphos Methyl	4.7	U	ng/L	P375309	
		Bromacil	0.47	U	ng/L	P375309	MS
		Butylate	0.37	U	ng/L	P375309	
		Chlorpyrifos Ethyl	0.23	U	ng/L	P375309	
		Chlorpyrifos Methyl	0.093	U	ng/L	P375309	
		Cyanazine	3.0	U	ng/L	P375309	
		Demeton	6.5	U	ng/L	P375309	MS
		Diazinon	0.12	U	ng/L	P375309	
		Dimethenamid**	0.093	U	ng/L	P375309	
		Disulfoton	0.47	U	ng/L	P375309	
		Dithiopyr**	0.44		ng/L	P375309	
		EPTC	1.2	U	ng/L	P375309	
		Ethion	0.14	U	ng/L	P375309	
		Ethoprop	0.093	U	ng/L	P375309	
		Fenamiphos	0.47	U	ng/L	P375309	
		Fipronil	0.23	U	ng/L	P375309	
		Fipronil Desulfinyl**	0.14	I	ng/L	P375309	
		Fipronil Sulfide	0.15	I	ng/L	P375309	
		Fipronil Sulfone	0.65		ng/L	P375309	
		Fonofos	0.19	U	ng/L	P375309	
		Hexazinone	0.80	I	ng/L	P375309	
		Malathion	0.33	U	ng/L	P375309	
		Metalaxyl	0.28	U	ng/L	P375309	
		Metolachlor	1.0	I	ng/L	P375309	
		Metribuzin	15		ng/L	P375309	
		Mevinphos	0.47	U	ng/L	P375309	
		Molinate	0.28	U	ng/L	P375309	
		Norflurazon	0.47	U	ng/L	P375309	
		Oxadiazon**	7.8		ng/L	P375309	
		Parathion Ethyl	0.23	U	ng/L	P375309	
		Parathion Methyl	0.51	U	ng/L	P375309	
		Pendimethalin	0.93	U	ng/L	P375309	
		Phorate	0.23	U	ng/L	P375309	
		Prodiamine**	0.16	U	ng/L	P375309	MS
		Prometon	0.84	U	ng/L	P375309	
		Prometryn	0.19	U	ng/L	P375309	
		Simazine	12		ng/L	P375309	
		Tebuconazole**	1.0	I	ng/L	P375309	
		Terbufos	0.093	U	ng/L	P375309	
		Terbutylazine	0.40	U	ng/L	P375309	
2141495	EPA 200.7 Rev. 4.4	Iron	120	I	ug/L	P375735	
		Manganese	15		ug/L	P375735	

Field ID: G2NE1178

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141495	EPA 200.7 Rev. 4.4	Zinc	15	U	ug/L	P375735	
	EPA 200.8 Rev. 5.4	Aluminum	120	I	ug/L	P376494	
		Antimony	0.50	U	ug/L	P376494	
		Arsenic	2.4		ug/L	P376494	
		Cadmium	0.080	U	ug/L	P376494	
		Chromium	4.0	U	ug/L	P376494	
		Copper	1.6	U	ug/L	P376494	
		Lead	2.0	U	ug/L	P376494	
		Nickel	2.0	U	ug/L	P376494	
		Selenium	2.0	U	ug/L	P376494	
		Silver	0.10	U	ug/L	P376494	
		Thallium	1.0	U	ug/L	P376494	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MDL for some parameters elevated due to matrix interference. MS accuracy for glyphosate could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Puncheon above Point Meadows Dr

Collection Date/Time: 12/05/2019 11:40

Field ID: G2NE1181

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2141479	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P375364	
	EPA 300.0 Rev. 2.1	Chloride	43		mg Cl/L	P375657	
		Sulfate	56		mg SO4/L	P375660	
	SM 2120 B	Color (true)	55		PCU	P375450	
	SM 2320 B-97	Total Alkalinity	70		mg CaCO3/L	P375503	
	SM 2540 C-97	TDS	255		mg/L	P376056	
	SM 2540 D-97	TSS	2	I	mg/L	P376061	
	SM 4500 F-C-97	Fluoride	0.066	I	mg F/L	P375505	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P375864	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P375601	
2141480	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P375464	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P375614	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P375517	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.039		mg P/L	P375382	
	dissolved						

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch matrix spike recoveries for one of two spiked samples are unavailable because of high analyte concentration in the QC sample.

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375364

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375735

Component	Result	Code	Units
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: P376494

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
Chromium	0.40	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
Batch ID: P375748

Component	Result	Code	Units
Bromide	0.013	U	mg Br/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375782

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375864

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375601

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375691

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375464

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376045

Component	Result	Code	Units
NO ₂ NO ₃ -N	0.004	U	mg N/L

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375614

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375616

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375382

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375415

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P375309

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	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	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
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	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
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P375416

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P375416

Component	Result	Code	Units
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	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
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8276
Batch ID: P375416

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

Reference Method: EPA 8321B
Batch ID: P375428

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	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
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P375428

Component	Result	Code	Units
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	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
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	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: P375521

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

Reference Method: SM 2120 B
Batch ID: P375450

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P375503

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

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P375504

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

Reference Method: SM 2540 C-97
Batch ID: P376056

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376061

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P376064

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P375505

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P375506

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P375517

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

Reference Method: SM 5310 B-00
Batch ID: P375518

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: P375735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	104		P	85 - 115
Manganese	102		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376494

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	106		P	85 - 115
Arsenic	101		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	102		P	85 - 115
Copper	102		P	85 - 115
Lead	106		P	85 - 115
Nickel	103		P	85 - 115
Selenium	94.3		P	85 - 115
Silver	99.2		P	85 - 115
Thallium	111		P	85 - 115

Reference Method: EPA 300.0
Batch ID: P375748

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375782

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375864

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375601

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375691

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	101		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376045

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375614

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375616

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375382

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	96.1		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375415

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

Reference Method: EPA 8270E
Batch ID: P375309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	105	99.6	P/P	69 - 122
Alachlor	105	102	P/P	71 - 120
Ametryn	84.4	96.9	P/P	47 - 138
Atrazine	101	99.8	P/P	74 - 124

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P375309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	86.1	75.9	P/P	38 - 138
Azinphos Methyl	95.5	94.9	P/P	69 - 154
Bromacil	83.3	94.3	P/P	39 - 121
Butylate	53.7	50.1	P/P	27 - 87.0
Chlorpyrifos Ethyl	102	97.2	P/P	69 - 118
Chlorpyrifos Methyl	94.7	92.3	P/P	70 - 120
Cyanazine	94.5	99.8	P/P	20 - 250
Demeton	76.9	74.7	P/P	39 - 118
Diazinon	102	102	P/P	68 - 127
Dimethenamid	98.9	96.3	P/P	66 - 125
Disulfoton	89.0	89.4	P/P	52 - 126
Dithiopyr	106	103	P/P	67 - 127
EPTC	50.8	45.2	P/P	24 - 88.0
Ethion	107	91.8	P/P	51 - 132
Ethoprop	78.8	75.2	P/P	58 - 117
Fenamiphos	96.8	97.2	P/P	38 - 139
Fipronil	105	104	P/P	61 - 124
Fipronil Desulfinyl	110	104	P/P	47 - 120
Fipronil Sulfide	95.3	84.9	P/P	56 - 119
Fipronil Sulfone	95.8	88.5	P/P	50 - 117
Fonofos	85.6	82.9	P/P	60 - 121
Hexazinone	110	107	P/P	55 - 137
Malathion	107	99.5	P/P	66 - 126
Metaxyl	87.2	102	P/P	33 - 140
Metolachlor	108	101	P/P	69 - 119
Metribuzin	106	101	P/P	31 - 238
Mevinphos	79.7	71.2	P/P	42 - 113
Molinate	63.6	57.1	P/P	32 - 96.0
Norflurazon	99.6	90.3	P/P	54 - 123
Oxadiazon	94.9	92.4	P/P	63 - 128
Parathion Ethyl	104	89.9	P/P	72 - 111
Parathion Methyl	95.5	93.0	P/P	74 - 126
Pendimethalin	95.5	87.1	P/P	61 - 131
Phorate	96.5	89.8	P/P	51 - 115
Prodiamine	102	78.1	P/P	38 - 144
Prometon	96.5	91.6	P/P	54 - 119
Prometryn	105	105	P/P	63 - 120
Simazine	103	115	P/P	75 - 126
Tebuconazole	97.3	90.1	P/P	20 - 119
Terbufos	90.9	89.9	P/P	64 - 116
Terbutylazine	101	94.5	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P375416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.3	40.9	P/P	20 - 93.0
Alpha-BHC	76.9	76.4	P/P	55 - 133
Alpha-Chlordane	63.8	67.9	P/P	58 - 112
Beta-BHC	77.2	85.5	P/P	54 - 168
Bifenthrin	70.0	71.1	P/P	30 - 134
Carbophenothion	90.8	95.9	P/P	26 - 147

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P375416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorothalonil	100	98.4	P/P	20 - 155
Cis-Nonachlor	63.0	66.8	P/P	54 - 115
Cypermethrin	79.4	74.2	P/P	40 - 137
DDD-p,p'	71.5	76.4	P/P	65 - 129
DDE-p,p'	59.3	65.0	P/P	57 - 116
DDT-p,p'	69.6	70.7	P/P	53 - 133
Delta-BHC	90.4	98.7	P/P	59 - 178
Dicofol	87.5	87.9	P/P	24 - 138
Dieldrin	72.0	73.7	P/P	60 - 120
Endosulfan I	77.0	79.5	P/P	64 - 118
Endosulfan II	87.0	86.4	P/P	58 - 142
Endosulfan Sulfate	87.3	89.5	P/P	60 - 127
Endrin	73.8	76.0	P/P	59 - 122
Endrin Aldehyde	83.2	88.4	P/P	49 - 132
Endrin Ketone	83.8	85.6	P/P	64 - 121
Ethalfuralin	66.7	68.5	P/P	60 - 126
Gamma-BHC	82.0	83.3	P/P	57 - 154
Gamma-Chlordane	59.9	63.9	P/P	56 - 110
Heptachlor	57.6	58.5	P/P	46 - 96.0
Heptachlor Epoxide	70.6	74.0	P/P	61 - 112
Hexachlorobenzene	54.7	61.3	P/P	44 - 98.0
Methoxychlor	87.4	89.3	P/P	63 - 134
Mirex	50.2	51.8	P/P	45 - 100
Permethrin	71.5	70.2	P/P	53 - 115
Trans-Nonachlor	58.7	62.2	P/P	47 - 110
Trifluralin	65.9	68.8	P/P	39 - 142

Reference Method: EPA 8276
Batch ID: P375416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	78.1	78.8	P/P	43 - 128
Toxaphene	74.0	74.4	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P375428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	158		P	30 - 160
3-Hydroxycarbofuran	88.5		P	40 - 160
Acetaminophen	103		P	30 - 150
Acetamiprid	104		P	30 - 160
Afidopyropen	101		P	30 - 160
Aldicarb	88.2		P	30 - 160
Aldicarb Sulfone	93.0		P	40 - 160
Aldicarb Sulfoxide	98.2		P	40 - 160
Bentazon	98.5		P	30 - 150
Benzovindiflupyr	100		P	30 - 160
Carbamazepine	112		P	30 - 160
Carbaryl	78.1		P	40 - 160
Carbofuran	82.2		P	40 - 160
Clothianidin	102		P	30 - 160

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P375428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dinotefuran	107		P	30 - 160
Diuron	90.6		P	30 - 160
Fenuron	108		P	30 - 160
Fluridone	106		P	30 - 160
Hydrocodone	102		P	30 - 160
Ibuprofen	96.0		P	30 - 160
Imazapyr	110		P	30 - 160
Imidacloprid	114		P	30 - 160
Linuron	77.6		P	30 - 160
Mandestrobin	91.1		P	30 - 160
MCPP	159		P	30 - 160
Methiocarb	71.4		P	40 - 160
Methomyl	81.7		P	40 - 160
Naproxen	97.7		P	30 - 160
Oxamyl	100		P	40 - 160
Primidone	99.5		P	30 - 160
Propoxur	74.9		P	40 - 160
Pyraclostrobin	88.9		P	30 - 160
Thiamethoxam	108		P	30 - 160
Tolfenpyrad	56.6		P	30 - 160
Triclopyr	136		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P375521

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	117		P	40 - 150
AMPA	82.1		P	40 - 150
Endothall	78.5		P	40 - 150
Glufosinate	80.5		P	40 - 150
Glyphosate	108		P	40 - 140
Sucralose	88.5		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P375450

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	100		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P375503

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P375504

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P375505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.3		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P375506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	95.8		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P375517

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P375518

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141773	Iron	96.9	101	P/P	80 - 120
2141773	Manganese	95.8	97.6	P/P	80 - 120
2141773	Zinc	99.9	101	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376494

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2145329	Aluminum	119	119	P/P	70 - 130
2145329	Antimony	112	110	P/P	70 - 130
2145329	Arsenic	110	110	P/P	70 - 130
2145329	Cadmium	97.4	94.6	P/P	70 - 130
2145329	Chromium	75.2	73.1	P/P	70 - 130
2145329	Copper	91.9	92.3	P/P	70 - 130
2145329	Lead	110	109	P/P	70 - 130
2145329	Nickel	92.5	91.8	P/P	70 - 130
2145329	Selenium	96.9	97.2	P/P	70 - 130
2145329	Silver	103	104	P/P	70 - 130
2145329	Thallium	116	115	P/P	70 - 130
2145907	Aluminum	111		P	70 - 130
2145907	Antimony	111		P	70 - 130
2145907	Arsenic	108		P	70 - 130
2145907	Cadmium	100		P	70 - 130
2145907	Chromium	82.0		P	70 - 130
2145907	Copper	94.8		P	70 - 130
2145907	Lead	107		P	70 - 130
2145907	Nickel	90.7		P	70 - 130
2145907	Selenium	106		P	70 - 130
2145907	Silver	106		P	70 - 130
2145907	Thallium	109		P	70 - 130

Reference Method: EPA 300.0
Batch ID: P375748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2140869	Bromide	96.8	97.0	P/P	90 - 110
2141313	Bromide	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141313	Chloride	106		P	90 - 110
2141479	Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141313	Sulfate	102		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P375782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141470	Ammonia-N	99.6	95.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P375864

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141350	Ammonia-N	97.9	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P375601

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141647	Kjeldahl Nitrogen	102	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P375691

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141847	Kjeldahl Nitrogen	104	96.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P375464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141480	NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P376045

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141404	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P375616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141470	Total-P	97.0	94.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P375382

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141481	O-Phosphate-P	94.5	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P375415

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141472	O-Phosphate-P	98.0	98.0	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P375309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141174	Acetochlor	88.5	93.0	P/P	63 - 129
2141174	Alachlor	76.4	93.1	P/P	65 - 127
2141174	Ametryn	117	124	P/P	40 - 164
2141174	Atrazine	96.5	104	P/P	66 - 135
2141174	Atrazine Desethyl	108	119	P/P	14 - 157
2141174	Azinphos Methyl	80.3	87.0	P/P	49 - 180
2141174	Bromacil	195	210	F/F	48 - 130
2141174	Butylate	44.1	48.1	P/P	10 - 94.0
2141174	Chlorpyrifos Ethyl	88.5	74.1	P/P	58 - 123
2141174	Chlorpyrifos Methyl	90.2	91.8	P/P	58 - 125
2141174	Cyanazine	115	125	P/P	24 - 253
2141174	Demeton	187	172	F/F	25 - 149
2141174	Diazinon	105	109	P/P	59 - 144
2141174	Dimethenamid	92.2	94.9	P/P	46 - 139
2141174	Disulfoton	101	102	P/P	54 - 132
2141174	Dithiopyr	88.4	94.6	P/P	64 - 130
2141174	EPTC	47.4	54.5	P/P	10 - 92.0
2141174	Ethion	71.2	70.6	P/P	30 - 148
2141174	Ethoprop	76.8	79.9	P/P	50 - 130
2141174	Fenamiphos	58.6	74.3	P/P	49 - 142
2141174	Fipronil	93.4	98.1	P/P	46 - 140
2141174	Fipronil Desulfinyl	84.7	90.9	P/P	30 - 121
2141174	Fipronil Sulfide	80.4	84.6	P/P	31 - 136
2141174	Fipronil Sulfone	70.3	71.9	P/P	16 - 136
2141174	Fonofos	102	98.5	P/P	55 - 129
2141174	Hexazinone	117	118	P/P	56 - 141
2141174	Malathion	78.8	86.5	P/P	56 - 135
2141174	Metalaxyl	95.7	97.4	P/P	54 - 135
2141174	Metolachlor	84.9	89.6	P/P	51 - 140
2141174	Metribuzin	195	221	P/P	45 - 254
2141174	Mevinphos	109	110	P/P	33 - 131
2141174	Molinate	69.6	77.3	P/P	14 - 98.0
2141174	Norflurazon	78.9	80.0	P/P	34 - 136
2141174	Oxadiazon	73.5	81.3	P/P	67 - 116
2141174	Parathion Ethyl	92.8	95.0	P/P	66 - 118
2141174	Parathion Methyl	111	110	P/P	64 - 136
2141174	Pendimethalin	88.7	90.2	P/P	59 - 144
2141174	Phorate	95.6	96.8	P/P	42 - 130
2141174	Prodiamine	36.0	39.6	F/F	42 - 148
2141174	Prometon	83.5	94.1	P/P	59 - 134
2141174	Prometryn	80.0	91.8	P/P	54 - 135
2141174	Simazine	128	125	P/P	53 - 156
2141174	Tebuconazole	53.1	49.0	P/P	10 - 131
2141174	Terbufos	102	102	P/P	57 - 131
2141174	Terbutylazine	91.7	94.4	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P375416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141427	Aldrin	52.0	51.8	P/P	25 - 92.0
2141427	Alpha-BHC	78.4	87.6	P/P	48 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P375416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141427	Alpha-Chlordane	70.0	71.2	P/P	50 - 115
2141427	Beta-BHC	93.6	90.6	P/P	39 - 184
2141427	Bifenthrin	82.6	82.7	P/P	46 - 116
2141427	Carbophenothion	122	126	P/P	27 - 180
2141427	Chlorothalonil	98.5	105	P/P	10 - 216
2141427	Cis-Nonachlor	67.3	68.2	P/P	55 - 112
2141427	Cypermethrin	91.9	102	P/P	40 - 153
2141427	DDD-p,p'	73.3	74.8	P/P	53 - 128
2141427	DDE-p,p'	66.3	64.5	P/P	48 - 116
2141427	DDT-p,p'	74.4	74.1	P/P	47 - 128
2141427	Delta-BHC	131	121	P/P	48 - 221
2141427	Dicofol	89.4	90.0	P/P	10 - 147
2141427	Dieldrin	88.8	88.7	P/P	48 - 128
2141427	Endosulfan I	84.8	86.0	P/P	58 - 126
2141427	Endosulfan II	94.3	95.5	P/P	50 - 150
2141427	Endosulfan Sulfate	94.2	102	P/P	56 - 130
2141427	Endrin	77.7	80.4	P/P	50 - 126
2141427	Endrin Aldehyde	78.4	74.6	P/P	12 - 145
2141427	Endrin Ketone	93.8	97.3	P/P	59 - 132
2141427	Ethalfuralin	71.3	73.0	P/P	65 - 122
2141427	Gamma-BHC	104	118	P/P	40 - 190
2141427	Gamma-Chlordane	66.5	67.5	P/P	50 - 112
2141427	Heptachlor	64.8	68.0	P/P	41 - 98.0
2141427	Heptachlor Epoxide	78.7	80.0	P/P	55 - 117
2141427	Hexachlorobenzene	58.6	61.4	P/P	47 - 91.0
2141427	Methoxychlor	94.9	93.3	P/P	55 - 133
2141427	Mirex	58.7	61.2	P/P	44 - 101
2141427	Permethrin	83.7	88.3	P/P	52 - 124
2141427	Trans-Nonachlor	64.3	65.0	P/P	53 - 99.0
2141427	Trifluralin	72.4	75.3	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P375416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141502	Chlordane	91.4	79.9	P/P	34 - 136
2141502	Toxaphene	79.6	72.8	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P375428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141079	3-Hydroxycarbofuran	69.2	86.2	P/P	40 - 160
2141079	Aldicarb	78.1	67.4	P/P	30 - 160
2141079	Aldicarb Sulfone	97.7	95.9	P/P	40 - 160
2141079	Aldicarb Sulfoxide	53.0	56.2	P/P	40 - 160
2141079	Carbaryl	65.8	69.0	P/P	40 - 160
2141079	Carbofuran	64.0	70.9	P/P	40 - 160
2141079	Methiocarb	64.6	68.9	P/P	40 - 160
2141079	Methomyl	82.8	68.2	P/P	40 - 160
2141079	Oxamyl	86.5	92.0	P/P	40 - 160
2141079	Propoxur	62.0	70.2	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P375428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141488	2,4-D	137	126	P/P	30 - 160
2141488	Acetaminophen	106	102	P/P	30 - 150
2141488	Acetamiprid	120	115	P/P	30 - 160
2141488	Afidopyropen	102	96.7	P/P	30 - 160
2141488	Bentazon	84.4	69.3	P/P	30 - 150
2141488	Benzovindiflupyr	100	94.9	P/P	30 - 160
2141488	Carbamazepine	94.8	93.2	P/P	30 - 160
2141488	Clothianidin	109	99.0	P/P	30 - 160
2141488	Dinotefuran	128	127	P/P	30 - 160
2141488	Diuron	77.6	78.5	P/P	30 - 160
2141488	Fenuron	90.8	86.5	P/P	30 - 160
2141488	Fluridone	105	104	P/P	30 - 160
2141488	Hydrocodone	111	103	P/P	30 - 160
2141488	Ibuprofen	80.6	74.2	P/P	30 - 160
2141488	Imazapyr	139	129	P/P	30 - 160
2141488	Imidacloprid	185	170	F/F	30 - 160
2141488	Linuron	75.1	69.9	P/P	30 - 160
2141488	Mandestrobin	90.6	87.9	P/P	30 - 160
2141488	MCP	156	139	P/P	30 - 160
2141488	Naproxen	103	86.0	P/P	30 - 160
2141488	Primidone	106	102	P/P	30 - 160
2141488	Pyraclostrobin	87.8	83.3	P/P	30 - 160
2141488	Thiamethoxam	153	150	P/P	30 - 160
2141488	Tolfenpyrad	59.9	52.3	P/P	30 - 160
2141488	Triclopyr	140	124	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P375521

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141365	Acesulfame K	149	151	P/F	40 - 150
2141365	AMPA	62.2	66.9	P/P	40 - 150
2141365	Endothall	114	108	P/P	40 - 150
2141365	Glufosinate	85.3	85.0	P/P	40 - 150
2141365	Sucralose	73.6	85.8	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P375505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141336	Fluoride	95.9	94.4	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P375506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2140938	Fluoride	91.5	93.5	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P375517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P375517

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141180	Organic Carbon	98.4	98.9	P/P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P375518

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2141470	Organic Carbon	98.3	96.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P375364

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141469	Turbidity	5.30	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P375735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141773	Iron	2.66	Spike	P	0 - 20
2141773	Manganese	1.72	Spike	P	0 - 20
2141773	Zinc	1.55	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P376494

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2145329	Aluminum	0.453	Spike	P	0 - 20
2145329	Antimony	1.98	Spike	P	0 - 20
2145329	Arsenic	0.549	Spike	P	0 - 20
2145329	Cadmium	2.91	Spike	P	0 - 20
2145329	Chromium	2.91	Spike	P	0 - 20
2145329	Copper	0.524	Spike	P	0 - 20
2145329	Lead	0.941	Spike	P	0 - 20
2145329	Nickel	0.698	Spike	P	0 - 20
2145329	Selenium	0.226	Spike	P	0 - 20
2145329	Silver	0.663	Spike	P	0 - 20
2145329	Thallium	1.27	Spike	P	0 - 20

Reference Method: EPA 300.0
Batch ID: P375748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140869	Bromide	0.238	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141313	Chloride	0.759	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P375660

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141313	Sulfate	0.938	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141470	Ammonia-N	3.17	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P375864

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141350	Ammonia-N	1.99	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375601

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141647	Kjeldahl Nitrogen	3.10	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P375691

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141847	Kjeldahl Nitrogen	6.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P375464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141480	NO2NO3-N	0.319	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P376045

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141404	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375614

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141353	Total-P	1.78	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P375616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141470	Total-P	2.21	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375382

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141481	O-Phosphate-P	1.41	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P375415

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141472	O-Phosphate-P	0.0	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P375309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141174	Acetochlor	4.93	Spike	P	0 - 30
2141174	Alachlor	19.7	Spike	P	0 - 30
2141174	Ametryn	5.80	Spike	P	0 - 30
2141174	Atrazine	4.83	Spike	P	0 - 30
2141174	Atrazine Desethyl	9.14	Spike	P	0 - 30
2141174	Azinphos Methyl	7.98	Spike	P	0 - 30
2141174	Bromacil	5.08	Spike	P	0 - 30
2141174	Butylate	8.73	Spike	P	0 - 30
2141174	Chlorpyrifos Ethyl	17.7	Spike	P	0 - 30
2141174	Chlorpyrifos Methyl	1.74	Spike	P	0 - 30
2141174	Cyanazine	7.83	Spike	P	0 - 30
2141174	Demeton	8.37	Spike	P	0 - 30
2141174	Diazinon	3.92	Spike	P	0 - 30
2141174	Dimethenamid	2.86	Spike	P	0 - 30
2141174	Disulfoton	1.34	Spike	P	0 - 30
2141174	Dithiopyr	6.80	Spike	P	0 - 30
2141174	EPTC	13.9	Spike	P	0 - 30
2141174	Ethion	0.903	Spike	P	0 - 30
2141174	Ethoprop	3.95	Spike	P	0 - 30
2141174	Fenamiphos	23.6	Spike	P	0 - 30
2141174	Fipronil	4.85	Spike	P	0 - 30
2141174	Fipronil Desulfinyl	7.03	Spike	P	0 - 30
2141174	Fipronil Sulfide	5.09	Spike	P	0 - 30
2141174	Fipronil Sulfone	2.30	Spike	P	0 - 30
2141174	Fonofos	3.53	Spike	P	0 - 30
2141174	Hexazinone	0.118	Spike	P	0 - 30
2141174	Malathion	9.32	Spike	P	0 - 30
2141174	Metalaxyl	1.55	Spike	P	0 - 30
2141174	Metolachlor	5.09	Spike	P	0 - 30
2141174	Metribuzin	12.1	Spike	P	0 - 30
2141174	Mevinphos	1.56	Spike	P	0 - 30
2141174	Molinate	10.4	Spike	P	0 - 30
2141174	Norflurazon	1.38	Spike	P	0 - 30
2141174	Oxadiazon	9.99	Spike	P	0 - 30
2141174	Parathion Ethyl	2.29	Spike	P	0 - 30
2141174	Parathion Methyl	0.868	Spike	P	0 - 30
2141174	Pendimethalin	1.65	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P375309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141174	Phorate	1.20	Spike	P	0 - 30
2141174	Prodiamine	9.55	Spike	P	0 - 30
2141174	Prometon	11.9	Spike	P	0 - 30
2141174	Prometryn	13.7	Spike	P	0 - 30
2141174	Simazine	2.06	Spike	P	0 - 30
2141174	Tebuconazole	8.00	Spike	P	0 - 30
2141174	Terbufos	0.00244	Spike	P	0 - 30
2141174	Terbuthylazine	2.96	Spike	P	0 - 30
LFB	Acetochlor	5.66	LCS	P	0 - 30
LFB	Alachlor	2.68	LCS	P	0 - 30
LFB	Ametryn	13.7	LCS	P	0 - 30
LFB	Atrazine	1.44	LCS	P	0 - 30
LFB	Atrazine Desethyl	12.6	LCS	P	0 - 30
LFB	Azinphos Methyl	0.597	LCS	P	0 - 30
LFB	Bromacil	12.4	LCS	P	0 - 30
LFB	Butylate	6.87	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.95	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	2.54	LCS	P	0 - 30
LFB	Cyanazine	5.46	LCS	P	0 - 30
LFB	Demeton	2.96	LCS	P	0 - 30
LFB	Diazinon	0.226	LCS	P	0 - 30
LFB	Dimethenamid	2.62	LCS	P	0 - 30
LFB	Disulfoton	0.478	LCS	P	0 - 30
LFB	Dithiopyr	2.62	LCS	P	0 - 30
LFB	EPTC	11.6	LCS	P	0 - 30
LFB	Ethion	15.4	LCS	P	0 - 30
LFB	Ethoprop	4.62	LCS	P	0 - 30
LFB	Fenamiphos	0.333	LCS	P	0 - 30
LFB	Fipronil	0.650	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.36	LCS	P	0 - 30
LFB	Fipronil Sulfide	11.5	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.98	LCS	P	0 - 30
LFB	Fonofos	3.22	LCS	P	0 - 30
LFB	Hexazinone	2.79	LCS	P	0 - 30
LFB	Malathion	7.16	LCS	P	0 - 30
LFB	Metalaxyl	15.6	LCS	P	0 - 30
LFB	Metolachlor	6.43	LCS	P	0 - 30
LFB	Metribuzin	5.35	LCS	P	0 - 30
LFB	Mevinphos	11.2	LCS	P	0 - 30
LFB	Molinate	10.7	LCS	P	0 - 30
LFB	Norflurazon	9.78	LCS	P	0 - 30
LFB	Oxadiazon	2.67	LCS	P	0 - 30
LFB	Parathion Ethyl	15.0	LCS	P	0 - 30
LFB	Parathion Methyl	2.65	LCS	P	0 - 30
LFB	Pendimethalin	9.16	LCS	P	0 - 30
LFB	Phorate	7.20	LCS	P	0 - 30
LFB	Prodiamine	26.6	LCS	P	0 - 30
LFB	Prometon	5.26	LCS	P	0 - 30
LFB	Prometryn	0.124	LCS	P	0 - 30
LFB	Simazine	10.9	LCS	P	0 - 30
LFB	Tebuconazole	7.75	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P375309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Terbufos	1.07	LCS	P	0 - 30
LFB	Terbutylazine	7.10	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P375416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141427	Aldrin	0.397	Spike	P	0 - 30
2141427	Alpha-BHC	11.0	Spike	P	0 - 30
2141427	Alpha-Chlordane	1.62	Spike	P	0 - 30
2141427	Beta-BHC	3.27	Spike	P	0 - 30
2141427	Bifenthrin	0.119	Spike	P	0 - 30
2141427	Carbophenothion	3.59	Spike	P	0 - 30
2141427	Chlorothalonil	6.04	Spike	P	0 - 30
2141427	Cis-Nonachlor	1.31	Spike	P	0 - 30
2141427	Cypermethrin	10.1	Spike	P	0 - 30
2141427	DDD-p,p'	2.03	Spike	P	0 - 30
2141427	DDE-p,p'	2.76	Spike	P	0 - 30
2141427	DDT-p,p'	0.378	Spike	P	0 - 30
2141427	Delta-BHC	8.02	Spike	P	0 - 30
2141427	Dicofol	0.650	Spike	P	0 - 30
2141427	Dieldrin	0.0406	Spike	P	0 - 30
2141427	Endosulfan I	1.40	Spike	P	0 - 30
2141427	Endosulfan II	1.30	Spike	P	0 - 30
2141427	Endosulfan Sulfate	7.60	Spike	P	0 - 30
2141427	Endrin	3.48	Spike	P	0 - 30
2141427	Endrin Aldehyde	5.03	Spike	P	0 - 30
2141427	Endrin Ketone	3.74	Spike	P	0 - 30
2141427	Ethalfuralin	2.37	Spike	P	0 - 30
2141427	Gamma-BHC	12.5	Spike	P	0 - 30
2141427	Gamma-Chlordane	1.60	Spike	P	0 - 30
2141427	Heptachlor	4.80	Spike	P	0 - 30
2141427	Heptachlor Epoxide	1.58	Spike	P	0 - 30
2141427	Hexachlorobenzene	4.66	Spike	P	0 - 30
2141427	Methoxychlor	1.62	Spike	P	0 - 30
2141427	Mirex	4.17	Spike	P	0 - 30
2141427	Permethrin	5.30	Spike	P	0 - 30
2141427	Trans-Nonachlor	1.08	Spike	P	0 - 30
2141427	Trifluralin	4.01	Spike	P	0 - 30
LFB	Aldrin	7.92	LCS	P	0 - 30
LFB	Alpha-BHC	0.597	LCS	P	0 - 30
LFB	Alpha-Chlordane	6.22	LCS	P	0 - 30
LFB	Beta-BHC	10.2	LCS	P	0 - 30
LFB	Bifenthrin	1.49	LCS	P	0 - 30
LFB	Carbophenothion	5.50	LCS	P	0 - 30
LFB	Chlorothalonil	2.08	LCS	P	0 - 30
LFB	Cis-Nonachlor	5.78	LCS	P	0 - 30
LFB	Cypermethrin	6.79	LCS	P	0 - 30
LFB	DDD-p,p'	6.74	LCS	P	0 - 30
LFB	DDE-p,p'	9.10	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P375416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	DDT-p,p'	1.64	LCS	P	0 - 30
LFB	Delta-BHC	8.76	LCS	P	0 - 30
LFB	Dicofol	0.368	LCS	P	0 - 30
LFB	Dieldrin	2.40	LCS	P	0 - 30
LFB	Endosulfan I	3.18	LCS	P	0 - 30
LFB	Endosulfan II	0.692	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.49	LCS	P	0 - 30
LFB	Endrin	2.91	LCS	P	0 - 30
LFB	Endrin Aldehyde	6.04	LCS	P	0 - 30
LFB	Endrin Ketone	2.12	LCS	P	0 - 30
LFB	Ethalfuralin	2.73	LCS	P	0 - 30
LFB	Gamma-BHC	1.60	LCS	P	0 - 30
LFB	Gamma-Chlordane	6.47	LCS	P	0 - 30
LFB	Heptachlor	1.51	LCS	P	0 - 30
LFB	Heptachlor Epoxide	4.69	LCS	P	0 - 30
LFB	Hexachlorobenzene	11.4	LCS	P	0 - 30
LFB	Methoxychlor	2.22	LCS	P	0 - 30
LFB	Mirex	3.24	LCS	P	0 - 30
LFB	Permethrin	1.80	LCS	P	0 - 30
LFB	Trans-Nonachlor	5.71	LCS	P	0 - 30
LFB	Trifluralin	4.33	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P375416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141502	Chlordane	13.5	Spike	P	0 - 30
2141502	Toxaphene	8.94	Spike	P	0 - 30
LFB	Chlordane	0.943	LCS	P	0 - 30
LFB	Toxaphene	0.547	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P375428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141079	3-Hydroxycarbofuran	21.9	Spike	P	0 - 30
2141079	Aldicarb	14.6	Spike	P	0 - 30
2141079	Aldicarb Sulfone	1.87	Spike	P	0 - 30
2141079	Aldicarb Sulfoxide	5.85	Spike	P	0 - 30
2141079	Carbaryl	4.69	Spike	P	0 - 30
2141079	Carbofuran	10.1	Spike	P	0 - 30
2141079	Methiocarb	6.40	Spike	P	0 - 30
2141079	Methomyl	19.4	Spike	P	0 - 30
2141079	Oxamyl	6.24	Spike	P	0 - 30
2141079	Propoxur	12.5	Spike	P	0 - 30
2141488	2,4-D	8.27	Spike	P	0 - 30
2141488	Acetaminophen	4.45	Spike	P	0 - 30
2141488	Acetamiprid	4.30	Spike	P	0 - 30
2141488	Afidopyropen	5.10	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P375428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141488	Bentazon	8.70	Spike	P	0 - 30
2141488	Benzovindiflupyr	5.50	Spike	P	0 - 30
2141488	Carbamazepine	1.68	Spike	P	0 - 30
2141488	Clothianidin	9.47	Spike	P	0 - 30
2141488	Dinotefuran	0.742	Spike	P	0 - 30
2141488	Diuron	0.818	Spike	P	0 - 30
2141488	Fenuron	4.81	Spike	P	0 - 30
2141488	Fluridone	0.335	Spike	P	0 - 30
2141488	Hydrocodone	8.01	Spike	P	0 - 30
2141488	Ibuprofen	8.29	Spike	P	0 - 30
2141488	Imazapyr	3.38	Spike	P	0 - 30
2141488	Imidacloprid	7.99	Spike	P	0 - 30
2141488	Linuron	7.18	Spike	P	0 - 30
2141488	Mandestrobin	3.08	Spike	P	0 - 30
2141488	MCP	11.8	Spike	P	0 - 30
2141488	Naproxen	17.7	Spike	P	0 - 30
2141488	Primidone	3.88	Spike	P	0 - 30
2141488	Pyraclostrobin	5.25	Spike	P	0 - 30
2141488	Thiamethoxam	1.97	Spike	P	0 - 30
2141488	Tolfenpyrad	13.5	Spike	P	0 - 30
2141488	Triclopyr	12.0	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P375521

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141365	Acesulfame K	1.26	Spike	P	0 - 30
2141365	AMPA	2.68	Spike	P	0 - 30
2141365	Endothall	5.93	Spike	P	0 - 30
2141365	Glufosinate	0.444	Spike	P	0 - 30
2141365	Glyphosate	28.7	Spike	P	0 - 30
2141365	Sucralose	5.84	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P375450

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141346	Color (true)	3.55	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P375503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141336	Total Alkalinity	0.261	Sample	P	0 - 2.8

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
 Batch ID: P375504

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140938	Total Alkalinity	0.0943	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P376056

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141349	TDS	7.33	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P375505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141336	Fluoride	1.43	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
 Batch ID: P375506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2140938	Fluoride	1.42	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P375517

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141180	Organic Carbon	0.336	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P375518

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2141470	Organic Carbon	1.46	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2141487
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	60.7	P	30 - 160

Lab Sample ID: 2141488
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	118	P	30 - 160
EPA 8321B	Acetaminophen-d4	91.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.2	P	30 - 160
EPA 8321B	Diuron-d6	73.0	P	30 - 160
EPA 8321B	Endothall-d6	52.9	P	30 - 160
EPA 8321B	Endothall-d6	52.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	64.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.1	P	30 - 160
EPA 8321B	Primidone-d5	87.5	P	30 - 160
EPA 8321B	Sucralose-d6	85.7	P	30 - 160
EPA 8321B	Sucralose-d6	85.7	P	30 - 160

Lab Sample ID: 2141491
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	67.5	P	43 - 111
EPA 8270E	Tetrachloro-m-xylene	44.2	P	35 - 106
EPA 8276	Decachlorobiphenyl	53.6	P	30 - 103
EPA 8276	PCNB	86.2	P	37 - 143

Lab Sample ID: 2141492
Field Sample ID: G2NE1178

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	126	P	68 - 130
EPA 8270E	Terbufos-d10	107	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A96167

Included Lab Sample IDs: 2141476, 2141479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96172

Included Lab Sample IDs: 2141481

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	95.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A96174

Included Lab Sample IDs: 2141478

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.1	96.5	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A96200

Included Lab Sample IDs: 2141479

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.3	101	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A96201

Included Lab Sample IDs: 2141480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	102	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A96205

Included Lab Sample IDs: 2141479

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

Reference Method: EPA 300.0

Run ID: A96206

Included Lab Sample IDs: 2141476

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

Reference Method: SM 2320 B-97

Run ID: A96216

Included Lab Sample IDs: 2141476, 2141479

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

Quality Assurance Report Calibration Verification

Reference Method: SM 2320 B-97

Run ID: A96216

Included Lab Sample IDs: 2141476, 2141479

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

Reference Method: SM 4500 F-C-97

Run ID: A96216

Included Lab Sample IDs: 2141476, 2141479

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

Reference Method: SM 5310 B-00

Run ID: A96224

Included Lab Sample IDs: 2141477, 2141480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	102	P/P	90 - 110
Organic Carbon	94.8	98.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A96272

Included Lab Sample IDs: 2141488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	77.5	86.2	P/P	60 - 160
Glufosinate	82.7	86.7	P/P	60 - 160
Glyphosate	93.8	94.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A96277

Included Lab Sample IDs: 2141488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	127	118	P/P	60 - 160
Endothall	83.1	86.0	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96285

Included Lab Sample IDs: 2141480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	105	99.6	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A96302

Included Lab Sample IDs: 2141492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	107		P	80 - 120
Alachlor	109		P	80 - 120
Ametryn	107		P	80 - 120
Atrazine	97.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A96302
Included Lab Sample IDs: 2141492

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine Desethyl	105		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Bromacil	99.2		P	80 - 120
Butylate	107		P	80 - 120
Chlorpyrifos Ethyl	90.2		P	80 - 120
Chlorpyrifos Methyl	99.7		P	80 - 120
Cyanazine	82.9		P	80 - 120
Demeton	93.3		P	80 - 120
Diazinon	104		P	80 - 120
Dimethenamid	107		P	80 - 120
Disulfoton	99.3		P	80 - 120
Dithiopyr	107		P	80 - 120
EPTC	100		P	80 - 120
Ethion	95.3		P	80 - 120
Ethoprop	102		P	80 - 120
Fenamiphos	98.5		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Desulfinyl	109		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	99.7		P	80 - 120
Fonofos	96.7		P	80 - 120
Hexazinone	102		P	80 - 120
Malathion	103		P	80 - 120
Metalaxyl	107		P	80 - 120
Metolachlor	113		P	80 - 120
Metribuzin	90.1		P	80 - 120
Mevinphos	110		P	80 - 120
Molinate	102		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	105		P	80 - 120
Parathion Ethyl	94.5		P	80 - 120
Parathion Methyl	96.5		P	80 - 120
Pendimethalin	93.7		P	80 - 120
Phorate	97.2		P	80 - 120
Prodiamine	93.4		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	107		P	80 - 120
Simazine	100		P	80 - 120
Tebuconazole	106		P	80 - 120
Terbufos	99.7		P	80 - 120
Terbutylazine	102		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A96313
Included Lab Sample IDs: 2141477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.5	95.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A96314

Included Lab Sample IDs: 2141480

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A96327

Included Lab Sample IDs: 2141477

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A96335

Included Lab Sample IDs: 2141495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	102	100	P/P	95 - 105
Manganese	101	101	P/P	95 - 105
Zinc	98.4	98.9	P/P	95 - 105

Reference Method: EPA 8270E

Run ID: A96337

Included Lab Sample IDs: 2141491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	91.8		P	80 - 120
Alpha-BHC	98.7		P	80 - 120
Alpha-Chlordane	91.8		P	80 - 120
Beta-BHC	88.5		P	80 - 120
Bifenthrin	97.2		P	80 - 120
Carbophenothion	113		P	80 - 120
Chlorothalonil	99.8		P	80 - 120
Cis-Nonachlor	91.0		P	80 - 120
Cypermethrin	96.2		P	80 - 120
DDD-p,p'	92.5		P	80 - 120
DDE-p,p'	91.1		P	80 - 120
DDT-p,p'	99.9		P	80 - 120
Delta-BHC	98.7		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	91.4		P	80 - 120
Endosulfan I	93.9		P	80 - 120
Endosulfan II	100		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	92.5		P	80 - 120
Endrin Aldehyde	90.8		P	80 - 120
Endrin Ketone	97.7		P	80 - 120
Ethalfuralin	100		P	80 - 120
Gamma-BHC	96.5		P	80 - 120
Gamma-Chlordane	91.0		P	80 - 120
Heptachlor	93.5		P	80 - 120
Heptachlor Epoxide	91.1		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Methoxychlor	99.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A96337
 Included Lab Sample IDs: 2141491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mirex	97.2		P	80 - 120
Permethrin	94.2		P	80 - 120
Trans-Nonachlor	91.2		P	80 - 120
Trifluralin	100		P	80 - 120

Reference Method: EPA 8321B
 Run ID: A96340
 Included Lab Sample IDs: 2141487

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	108	104	P/P	60 - 150
Aldicarb	92.4	82.1	P/P	60 - 150
Aldicarb Sulfone	101	92.3	P/P	50 - 150
Aldicarb Sulfoxide	102	97.5	P/P	50 - 150
Carbaryl	105	108	P/P	60 - 150
Carbofuran	106	98.8	P/P	50 - 150
Methiocarb	104	100	P/P	50 - 150
Methomyl	125	92.6	P/P	50 - 150
Oxamyl	109	103	P/P	50 - 150
Propoxur	100	100	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
 Run ID: A96342
 Included Lab Sample IDs: 2141477

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.0	96.0	P/P	90 - 110

Reference Method: EPA 8276
 Run ID: A96349
 Included Lab Sample IDs: 2141491

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	96.1		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
 Run ID: A96351
 Included Lab Sample IDs: 2141480

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Run ID: A96419
 Included Lab Sample IDs: 2141477

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A96420
Included Lab Sample IDs: 2141488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	97.3	98.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A96566
Included Lab Sample IDs: 2141488

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.7	79.9	P/P	50 - 150
Acetaminophen	108	106	P/P	60 - 160
Acetamiprid	103	102	P/P	60 - 160
Afidopyropen	108	106	P/P	50 - 150
Bentazon	98.7	98.0	P/P	50 - 160
Benzovindiflupyr	106	111	P/P	60 - 150
Carbamazepine	99.7	99.1	P/P	60 - 150
Clothianidin	110	104	P/P	50 - 150
Dinotefuran	107	107	P/P	50 - 150
Diuron	101	97.2	P/P	60 - 150
Fenuron	103	103	P/P	60 - 150
Fluridone	112	110	P/P	60 - 160
Hydrocodone	105	103	P/P	60 - 150
Ibuprofen	93.4	86.3	P/P	50 - 160
Imazapyr	102	101	P/P	50 - 150
Imidacloprid	95.0	98.2	P/P	60 - 150
Linuron	93.2	97.0	P/P	60 - 150
Mandestrobin	105	102	P/P	50 - 150
MCPP	92.0	91.4	P/P	50 - 150
Naproxen	117	145	P/P	50 - 160
Primidone	100	99.1	P/P	60 - 150
Pyraclostrobin	102	102	P/P	60 - 150
Thiamethoxam	106	108	P/P	60 - 150
Tolfenpyrad	97.2	99.3	P/P	50 - 150
Triclopyr	88.7	108	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A96661
Included Lab Sample IDs: 2141495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	106	107	P/P	90 - 110
Cadmium	106	108	P/P	90 - 110
Copper	107	105	P/P	90 - 110
Lead	106	107	P/P	90 - 110
Nickel	105	104	P/P	90 - 110
Thallium	104	105	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A96686
Included Lab Sample IDs: 2141495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	105	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96686

Included Lab Sample IDs: 2141495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	108	103	P/P	90 - 110
Chromium	108	96.5	P/P	90 - 110
Selenium	105	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A96742

Included Lab Sample IDs: 2141495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	101	99.2	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						5.30	
EPA 200.7 Rev. 4.4	Iron	104		96.9	101			2.66
	Manganese	102		95.8	97.6			1.72
	Zinc	100		99.9	101			1.55
EPA 200.8 Rev. 5.4	Aluminum	103		119	119	111		0.453
	Antimony	106		112	110	111		1.98
	Arsenic	101		110	110	108		0.549
	Cadmium	102		97.4	94.6	100		2.91
	Chromium	102		75.2	73.1	82.0		2.91
	Copper	102		91.9	92.3	94.8		0.524
	Lead	106		110	109	107		0.941
	Nickel	103		92.5	91.8	90.7		0.698
	Selenium	94.3		96.9	97.2	106		0.226
	Silver	99.2		103	104	106		0.663
	Thallium	111		116	115	109		1.27
EPA 300.0	Bromide	99.5		96.8	97.0	101		0.238
EPA 300.0 Rev. 2.1	Chloride	105		106	107		0.759	
	Sulfate	101		102			0.938	
EPA 350.1 Rev. 2.0	Ammonia-N	99.1		99.6	95.3			3.17
	Ammonia-N	98.7		97.9	101			1.99
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	96.6		102	106			3.10
	Kjeldahl Nitrogen	103		104	96.4			6.21
EPA 353.2 Rev. 2.0	NO2NO3-N	101		99.0	99.5			0.319
	NO2NO3-N	100		100	100			0.0
EPA 365.1 Rev. 2.0	Total-P	104						1.78
	Total-P	105		97.0	94.8			2.21
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.1		94.5	96.4			1.41
	O-Phosphate-P	97.1		98.0	98.0			0.0
EPA 8270E	Acetochlor	105	99.6	88.5	93.0	5.66		4.93
	Alachlor	105	102	76.4	93.1	2.68		19.7
	Aldrin	44.3	40.9	52.0	51.8	7.92		0.397
	Alpha-BHC	76.9	76.4	78.4	87.6	0.597		11.0
	Alpha-Chlordane	63.8	67.9	70.0	71.2	6.22		1.62
	Ametryn	84.4	96.9	117	124	13.7		5.80
	Atrazine	101	99.8	96.5	104	1.44		4.83
	Atrazine Desethyl	86.1	75.9	108	119	12.6		9.14
	Azinphos Methyl	95.5	94.9	80.3	87.0	0.597		7.98
	Beta-BHC	77.2	85.5	93.6	90.6	10.2		3.27
	Bifenthrin	70.0	71.1	82.6	82.7	1.49		0.119
	Bromacil	83.3	94.3	195	210	12.4		5.08
	Butylate	53.7	50.1	44.1	48.1	6.87		8.73
	Carbophenothion	90.8	95.9	122	126	5.50		3.59
	Chlorothalonil	100	98.4	98.5	105	2.08		6.04
	Chlorpyrifos Ethyl	102	97.2	88.5	74.1	4.95		17.7
	Chlorpyrifos Methyl	94.7	92.3	90.2	91.8	2.54		1.74
	Cis-Nonachlor	63.0	66.8	67.3	68.2	5.78		1.31
	Cyanazine	94.5	99.8	115	125	5.46		7.83
	Cypermethrin	79.4	74.2	91.9	102	6.79		10.1
	DDD-p,p'	71.5	76.4	73.3	74.8	6.74		2.03
	DDE-p,p'	59.3	65.0	66.3	64.5	9.10		2.76
	DDT-p,p'	69.6	70.7	74.4	74.1	1.64		0.378
	Delta-BHC	90.4	98.7	131	121	8.76		8.02
	Demeton	76.9	74.7	187	172	2.96		8.37
	Diazinon	102	102	105	109	0.226		3.92

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Dicofol	87.5	87.9	89.4	90.0	0.368	0.650
	Dieldrin	72.0	73.7	88.8	88.7	2.40	0.0406
	Dimethenamid	98.9	96.3	92.2	94.9	2.62	2.86
	Disulfoton	89.0	89.4	101	102	0.478	1.34
	Dithiopyr	106	103	88.4	94.6	2.62	6.80
	Endosulfan I	77.0	79.5	84.8	86.0	3.18	1.40
	Endosulfan II	87.0	86.4	94.3	95.5	0.692	1.30
	Endosulfan Sulfate	87.3	89.5	94.2	102	2.49	7.60
	Endrin	73.8	76.0	77.7	80.4	2.91	3.48
	Endrin Aldehyde	83.2	88.4	78.4	74.6	6.04	5.03
	Endrin Ketone	83.8	85.6	93.8	97.3	2.12	3.74
	EPTC	50.8	45.2	47.4	54.5	11.6	13.9
	Ethalfuralin	66.7	68.5	71.3	73.0	2.73	2.37
	Ethion	107	91.8	71.2	70.6	15.4	0.903
	Ethoprop	78.8	75.2	76.8	79.9	4.62	3.95
	Fenamiphos	96.8	97.2	58.6	74.3	0.333	23.6
	Fipronil	105	104	93.4	98.1	0.650	4.85
	Fipronil Desulfinyl	110	104	84.7	90.9	5.36	7.03
	Fipronil Sulfide	95.3	84.9	80.4	84.6	11.5	5.09
	Fipronil Sulfone	95.8	88.5	70.3	71.9	7.98	2.30
	Fonofos	85.6	82.9	102	98.5	3.22	3.53
	Gamma-BHC	82.0	83.3	104	118	1.60	12.5
	Gamma-Chlordane	59.9	63.9	66.5	67.5	6.47	1.60
	Heptachlor	57.6	58.5	64.8	68.0	1.51	4.80
	Heptachlor Epoxide	70.6	74.0	78.7	80.0	4.69	1.58
	Hexachlorobenzene	54.7	61.3	58.6	61.4	11.4	4.66
	Hexazinone	110	107	117	118	2.79	0.118
	Malathion	107	99.5	78.8	86.5	7.16	9.32
	Metalaxyl	87.2	102	95.7	97.4	15.6	1.55
	Methoxychlor	87.4	89.3	94.9	93.3	2.22	1.62
	Metolachlor	108	101	84.9	89.6	6.43	5.09
	Metribuzin	106	101	195	221	5.35	12.1
	Mevinphos	79.7	71.2	109	110	11.2	1.56
	Mirex	50.2	51.8	58.7	61.2	3.24	4.17
	Molinate	63.6	57.1	69.6	77.3	10.7	10.4
	Norflurazon	99.6	90.3	78.9	80.0	9.78	1.38
	Oxadiazon	94.9	92.4	73.5	81.3	2.67	9.99
	Parathion Ethyl	104	89.9	92.8	95.0	15.0	2.29
	Parathion Methyl	95.5	93.0	111	110	2.65	0.868
	Pendimethalin	95.5	87.1	88.7	90.2	9.16	1.65
	Permethrin	71.5	70.2	83.7	88.3	1.80	5.30
	Phorate	96.5	89.8	95.6	96.8	7.20	1.20
	Prodiamine	102	78.1	36.0	39.6	26.6	9.55
	Prometon	96.5	91.6	83.5	94.1	5.26	11.9
	Prometryn	105	105	80.0	91.8	0.124	13.7
	Simazine	103	115	128	125	10.9	2.06
	Tebuconazole	97.3	90.1	53.1	49.0	7.75	8.00
	Terbufos	90.9	89.9	102	102	1.07	0.0024
	Terbutylazine	101	94.5	91.7	94.4	7.10	2.96
	Trans-Nonachlor	58.7	62.2	64.3	65.0	5.71	1.08
	Trifluralin	65.9	68.8	72.4	75.3	4.33	4.01
EPA 8276	Chlordane	78.1	78.8	91.4	79.9	0.943	13.5
	Toxaphene	74.0	74.4	79.6	72.8	0.547	8.94
EPA 8321B	2,4-D	158		137	126		8.27

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8321B	3-Hydroxycarbofuran	88.5	69.2	86.2			21.9
	Acesulfame K	117	149	151			1.26
	Acetaminophen	103	106	102			4.45
	Acetamiprid	104	120	115			4.30
	Afidopyropen	101	102	96.7			5.10
	Aldicarb	88.2	78.1	67.4			14.6
	Aldicarb Sulfone	93.0	97.7	95.9			1.87
	Aldicarb Sulfoxide	98.2	53.0	56.2			5.85
	AMPA	82.1	62.2	66.9			2.68
	Bentazon	98.5	84.4	69.3			8.70
	Benzovindiflupyr	100	100	94.9			5.50
	Carbamazepine	112	94.8	93.2			1.68
	Carbaryl	78.1	65.8	69.0			4.69
	Carbofuran	82.2	64.0	70.9			10.1
	Clothianidin	102	109	99.0			9.47
	Dinotefuran	107	128	127			0.742
	Diuron	90.6	77.6	78.5			0.818
	Endothall	78.5	114	108			5.93
	Fenuron	108	90.8	86.5			4.81
	Fluridone	106	105	104			0.335
	Glufosinate	80.5	85.3	85.0			0.444
	Glyphosate	108					28.7
	Hydrocodone	102	111	103			8.01
	Ibuprofen	96.0	80.6	74.2			8.29
	Imazapyr	110	139	129			3.38
	Imidacloprid	114	185	170			7.99
	Linuron	77.6	75.1	69.9			7.18
	Mandestrobin	91.1	90.6	87.9			3.08
	MCPP	159	156	139			11.8
	Methiocarb	71.4	64.6	68.9			6.40
	Methomyl	81.7	82.8	68.2			19.4
	Naproxen	97.7	103	86.0			17.7
	Oxamyl	100	86.5	92.0			6.24
	Primidone	99.5	106	102			3.88
	Propoxur	74.9	62.0	70.2			12.5
	Pyraclostrobin	88.9	87.8	83.3			5.25
	Sucralose	88.5	73.6	85.8			5.84
	Thiamethoxam	108	153	150			1.97
	Tolfenpyrad	56.6	59.9	52.3			13.5
	Triclopyr	136	140	124			12.0
SM 2120 B	Color (true)	100				3.55	
SM 2320 B-97	Total Alkalinity	102				0.261	
	Total Alkalinity	103				0.0943	
SM 2540 C-97	TDS					7.33	
SM 4500 F-C-97	Fluoride	95.3	95.9	94.4			1.43
	Fluoride	95.8	91.5	93.5			1.42
SM 5310 B-00	Organic Carbon	99.0	98.4	98.9			0.336
	Organic Carbon	100	98.3	96.7			1.46

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
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Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2141476, 2141479
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2141495
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2141495
EPA 300.0 / E31780	Bromide in aqueous matrices	2141476
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2141479
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2141479
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2141477, 2141480
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2141477, 2141480
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2141477, 2141480
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2141477, 2141480
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2141478, 2141481
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2141491
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2141492
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2141491
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2141487
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2141488
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2141488
SM 2120 B / E31780	True Color measured at 450 nm	2141479
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2141476, 2141479
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2141479
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2141476, 2141479
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2141476, 2141479
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2141477, 2141480

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	12/06/2019			12/06/2019 16:23	Samantha Davila	2141476, 2141479
EPA 200.7 Rev. 4.4	12/06/2019	12/12/2019 16:30	Elliott D. Healy	12/13/2019 13:09	Betina Topolski	2141495
EPA 200.8 Rev. 5.4	12/06/2019	12/27/2019 15:40	Elliott D. Healy	01/02/2020 16:51	Alexander Thompson	2141495
	12/06/2019	12/27/2019 15:40	Elliott D. Healy	01/02/2020 21:06	Alexander Thompson	2141495
	12/06/2019	12/27/2019 15:40	Elliott D. Healy	01/03/2020 13:47	Alexander Thompson	2141495
	12/06/2019	12/27/2019 15:40	Elliott D. Healy	01/07/2020 15:45	Alexander Thompson	2141495
EPA 300.0	12/06/2019			12/11/2019 19:04	Lipi Saha	2141476
EPA 300.0 Rev. 2.1	12/06/2019			12/12/2019 04:01	Lipi Saha	2141479
EPA 350.1 Rev. 2.0	12/06/2019			12/12/2019 14:01	Ping Hua	2141477
	12/06/2019			12/13/2019 10:49	Ping Hua	2141480
EPA 351.2 Rev. 2.0	12/06/2019	12/11/2019 12:14	Sima Feizi	12/12/2019 12:42	Jhamieka S. Greenwood	2141480
	12/06/2019	12/12/2019 12:25	Sima Feizi	12/13/2019 15:27	Jhamieka S. Greenwood	2141477
EPA 353.2 Rev. 2.0	12/06/2019			12/09/2019 11:24	Beverly Y. Sanders	2141480
	12/06/2019			12/18/2019 09:58	Beverly Y. Sanders	2141477
EPA 365.1 Rev. 2.0	12/06/2019	12/11/2019 10:23	Yen Ta	12/12/2019 17:02	Benjamin T. Nordmann	2141480
	12/06/2019	12/11/2019 10:23	Yen Ta	12/13/2019 16:44	Benjamin T. Nordmann	2141477
EPA 365.1 Rev. 2.0 dissolved	12/06/2019			12/06/2019 16:08	Virginia P. Brown	2141481
	12/06/2019			12/07/2019 07:08	Virginia P. Brown	2141478
EPA 8270E	12/06/2019	12/09/2019 08:00	Fe-Val Siddell	12/10/2019 22:22	Vandana T. Nagar	2141492
	12/06/2019	12/11/2019 09:00	Fe-Val Siddell	12/13/2019 22:43	Arthur Maknenko	2141491
EPA 8276	12/06/2019	12/11/2019 09:00	Fe-Val Siddell	12/14/2019 06:29	Michael Poppell	2141491
EPA 8321B	12/06/2019	12/10/2019 14:30	Rebecca Ware	12/10/2019 19:00	Rebecca Ware	2141488
	12/06/2019	12/10/2019 14:30	Rebecca Ware	12/11/2019 16:04	Rebecca Ware	2141488
	12/06/2019	12/10/2019 14:30	Rebecca Ware	12/17/2019 21:39	Mohammad Ghaffari	2141488
	12/06/2019	12/11/2019 10:00	Hoor Shaik	12/13/2019 09:30	Juyoung Kim	2141487
	12/06/2019	12/11/2019 10:00	Hoor Shaik	12/20/2019 23:43	Juyoung Kim	2141488
SM 2120 B	12/06/2019			12/06/2019 17:45	Madeline Funaro	2141479
SM 2320 B-97	12/06/2019			12/09/2019 21:12	Dale L. Simmons	2141479
	12/06/2019			12/10/2019 02:00	Dale L. Simmons	2141476
SM 2540 C-97	12/06/2019			12/11/2019 15:32	Yijie Li	2141479
SM 2540 D-97	12/06/2019			12/11/2019 15:32	Yijie Li	2141476, 2141479
SM 4500 F-C-97	12/06/2019			12/09/2019 21:12	Dale L. Simmons	2141479
	12/06/2019			12/09/2019 23:26	Dale L. Simmons	2141476
SM 5310 B-00	12/06/2019			12/10/2019 06:39	Madeline Funaro	2141480
	12/06/2019			12/10/2019 10:36	Madeline Funaro	2141477