

Chemical Analysis Report

TLH-ROC-2019-10-21-01

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

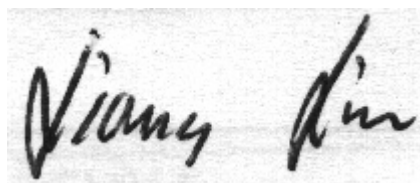
Event Description: **WBID 758**
Request ID: **RQ-2019-10-07-19**
Customer: **TLH-ROC**
Project ID: **SMP**

Send Reports to:
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2600 Blair Stone Rd
Tallahassee, FL 32399
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Certified by: Liang Lin, Environmental Administrator

Date Certified: 14-NOV-2019 09:46

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored 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: Lexington Creek @ Timberlane Rd

Collection Date/Time: 10/21/2019 09:55

Field ID: G1TLHR0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129905	EPA 180.1 Rev. 2.0	Turbidity	4.6	A	NTU	P372955	
	EPA 300.0 Rev. 2.1	Chloride	7.9		mg Cl/L	P373557	
		Sulfate	2.0		mg SO4/L	P373562	
	SM 2120 B	Color (true)	33		PCU	P372940	
	SM 2320 B-97	Total Alkalinity	33		mg CaCO3/L	P373040	
	SM 2540 C-97	TDS	47		mg/L	P373318	
	SM 2540 D-97	TSS	3	I	mg/L	P373289	
	SM 4500 F-C-97	Fluoride	0.080	I	mg F/L	P373043	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.01		mg N/L	P373185	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P373080	
2129906	EPA 353.2 Rev. 2.0	NO2NO3-N	0.098		mg N/L	P373067	
	EPA 365.1 Rev. 2.0	Total-P	0.18		mg P/L	P373004	
	SM 5310 B-00	Organic Carbon	3.2		mg C/L	P373050	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.13		mg P/L	P372950	
	dissolved						
2129919	EPA 8321B	Aldicarb	0.020	U	ug/L	P372737	
		Aldicarb Sulfone	0.0020	U	ug/L	P372737	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P372737	
		Carbaryl	0.0020	U	ug/L	P372737	
		Carbofuran	0.0020	U	ug/L	P372737	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P372737	
		Methiocarb	0.0020	U	ug/L	P372737	
		Methomyl	0.0020	U	ug/L	P372737	
		Oxamyl	0.0020	U	ug/L	P372737	
		Propoxur	0.0020	U	ug/L	P372737	
2129920		2,4-D	0.0020	U	ug/L	P372798	
		Acesulfame K**	0.10	U	ug/L	P372848	
		AMPA**	0.13	I	ug/L	P372848	MS
		Sucralose**	0.17		ug/L	P372848	
		Acetaminophen**	0.031	I	ug/L	P372798	
		Acetamiprid**	0.0020	U	ug/L	P372798	
		Endothall**	0.25	U	ug/L	P372848	
		Glufosinate**	0.10	U	ug/L	P372848	
		Glyphosate**	0.18	I	ug/L	P372848	
		Afidopyropen**	0.0020	UJ	ug/L	P372798	
		Bentazon	0.0014	I	ug/L	P372798	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P372798	
		Carbamazepine**	8.0E-04	U	ug/L	P372798	
		Clothianidin**	0.0020	U	ug/L	P372798	
		Dinotefuran**	0.0020	U	ug/L	P372798	
		Diuron	0.0020	U	ug/L	P372798	
		Fenuron	0.016	U	ug/L	P372798	
		Fluridone**	0.0031	I	ug/L	P372798	
		Imazapyr**	0.0092	I	ug/L	P372798	

Field ID: G1TLHR0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129920	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P372798	
		Ibuprofen**	0.020	U	ug/L	P372798	
		Imidacloprid	0.077		ug/L	P372798	
		Linuron	0.0040	U	ug/L	P372798	
		Mandestrobin**	0.0020	UJ	ug/L	P372798	
		MCP	0.0020	U	ug/L	P372798	
		Naproxen**	0.0080	U	ug/L	P372798	
		Primidone**	0.0040	U	ug/L	P372798	
		Pyraclostrobin**	0.0020	U	ug/L	P372798	
		Thiamethoxam**	0.0045	I	ug/L	P372798	
		Tolfenpyrad**	0.0020	U	ug/L	P372798	
		Triclopyr**	0.0040	U	ug/L	P372798	
2129923	EPA 8270E	Aldrin	4.6	U	ng/L	P373112	MS
		Alpha-BHC	2.3	U	ng/L	P373112	
		Alpha-Chlordane	1.1	U	ng/L	P373112	
		Beta-BHC	11	U	ng/L	P373112	
		Bifenthrin**	4.6	U	ng/L	P373112	
		Delta-BHC	9.1	U	ng/L	P373112	
		Gamma-BHC	9.1	U	ng/L	P373112	
		Carbophenothion	11	U	ng/L	P373112	
		Chlorothalonil	2.3	U	ng/L	P373112	
		Cis-Nonachlor**	1.1	U	ng/L	P373112	
		Cypermethrin	23	U	ng/L	P373112	
		DDD-p,p'	6.8	U	ng/L	P373112	
		DDE-p,p'	6.8	U	ng/L	P373112	
		DDT-p,p'	8.0	U	ng/L	P373112	
		Dicofol	34	U	ng/L	P373112	
		Dieldrin	4.6	U	ng/L	P373112	
		Endosulfan I	4.6	U	ng/L	P373112	
		Endosulfan II	4.6	U	ng/L	P373112	
		Endosulfan Sulfate	2.3	U	ng/L	P373112	
		Endrin	2.3	U	ng/L	P373112	
		Endrin Aldehyde	2.3	U	ng/L	P373112	
		Endrin Ketone	2.3	U	ng/L	P373112	
		Ethalfuralin**	3.4	U	ng/L	P373112	
		Gamma-Chlordane	1.1	U	ng/L	P373112	
		Heptachlor	1.7	U	ng/L	P373112	
		Heptachlor Epoxide	2.3	U	ng/L	P373112	
		Hexachlorobenzene	2.3	U	ng/L	P373112	
		Methoxychlor	4.6	U	ng/L	P373112	
		Mirex	2.3	U	ng/L	P373112	
		Permethrin	11	U	ng/L	P373112	
		Trans-Nonachlor**	1.1	U	ng/L	P373112	
		Trifluralin	2.8	U	ng/L	P373112	
		Chlordane	5.7	U	ng/L	P373112	
	EPA 8276						

Field ID: G1TLHR0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129923	EPA 8276	Toxaphene	34	U	ng/L	P373112	
2129924	EPA 8270E	Acetochlor	0.27	U	ng/L	P372856	
		Alachlor	0.27	U	ng/L	P372856	
		Ametryn	0.64	U	ng/L	P372856	
		Atrazine	11		ng/L	P372856	
		Atrazine Desethyl	1.6	U	ng/L	P372856	
		Azinphos Methyl	5.4	U	ng/L	P372856	
		Bromacil	0.54	U	ng/L	P372856	
		Butylate	0.43	U	ng/L	P372856	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P372856	
		Chlorpyrifos Methyl	0.11	U	ng/L	P372856	
		Cyanazine	3.5	U	ng/L	P372856	
		Demeton	7.5	U	ng/L	P372856	
		Diazinon	0.13	U	ng/L	P372856	
		Dimethenamid**	0.11	U	ng/L	P372856	
		Disulfoton	0.54	U	ng/L	P372856	
		Dithiopyr**	0.27	I	ng/L	P372856	
		EPTC	1.3	U	ng/L	P372856	
		Ethion	0.16	U	ng/L	P372856	RPD
		Ethoprop	0.11	U	ng/L	P372856	
		Fenamiphos	0.54	U	ng/L	P372856	RPD
		Fipronil	1.1		ng/L	P372856	
		Fipronil Desulfinyl**	0.20	I	ng/L	P372856	
		Fipronil Sulfide	0.57	I	ng/L	P372856	
		Fipronil Sulfone	3.1		ng/L	P372856	
		Fonofos	0.21	U	ng/L	P372856	
		Hexazinone	0.54	U	ng/L	P372856	
		Malathion	0.37	U	ng/L	P372856	
		Metalaxyl	0.32	U	ng/L	P372856	
		Metolachlor	0.54	U	ng/L	P372856	
		Metribuzin	0.80	U	ng/L	P372856	
		Mevinphos	0.54	U	ng/L	P372856	
		Molinate	0.32	U	ng/L	P372856	
		Norflurazon	0.54	U	ng/L	P372856	
		Oxadiazon**	0.11	U	ng/L	P372856	
		Parathion Ethyl	0.27	U	ng/L	P372856	
		Parathion Methyl	0.59	U	ng/L	P372856	
		Pendimethalin	1.1	U	ng/L	P372856	
		Phorate	0.27	U	ng/L	P372856	
		Prodiamine**	0.19	U	ng/L	P372856	RPD
		Prometon	0.96	U	ng/L	P372856	
		Prometryn	0.21	U	ng/L	P372856	
		Simazine	0.94	I	ng/L	P372856	
		Tebuconazole**	1.1	I	ng/L	P372856	
		Terbufos	0.11	U	ng/L	P372856	

Field ID: G1TLHR0088

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129924	EPA 8270E	Terbutylazine	0.46	U	ng/L	P372856	MS
2129926	EPA 200.7 Rev. 4.4	Barium	8.5		ug/L	P372926	
		Calcium	9.63		mg/L	P372926	
		Iron	700		ug/L	P372926	
		Magnesium	3.12		mg/L	P372926	
		Potassium	0.91	I	mg/L	P372926	
		Sodium	4.3		mg/L	P372926	
		Zinc	5.0	U	ug/L	P372926	
	EPA 200.8 Rev. 5.4	Aluminum	160		ug/L	P372926	
		Antimony	0.077	I	ug/L	P372926	
		Arsenic	0.57		ug/L	P372926	
		Boron**	17.8		ug/L	P372926	
		Cadmium	0.020	U	ug/L	P372926	
		Chromium	0.48	I	ug/L	P372926	
		Lead	0.20	U	ug/L	P372926	
		Nickel	0.50	U	ug/L	P372926	
		Selenium	0.20	U	ug/L	P372926	
		Silver	0.010	U	ug/L	P372926	
		Thallium	0.10	U	ug/L	P372926	

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 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for acetaminophen and imidacloprid could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Sample Location: Lexington Creek 100m downstream N Meridian Rd **Collection Date/Time: 10/21/2019 10:30**

Field ID: G1TLHR0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129908	EPA 180.1 Rev. 2.0	Turbidity	5.5	A	NTU	P372956	
	EPA 300.0 Rev. 2.1	Chloride	8.0		mg Cl/L	P373557	
		Sulfate	1.8		mg SO4/L	P373562	
	SM 2120 B	Color (true)	31		PCU	P372940	
	SM 2320 B-97	Total Alkalinity	32		mg CaCO3/L	P373040	
	SM 2540 C-97	TDS	60		mg/L	P373318	
	SM 2540 D-97	TSS	3	I	mg/L	P373289	
	SM 4500 F-C-97	Fluoride	0.083	I	mg F/L	P373043	
2129909	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P373185	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.18	I	mg N/L	P373080	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P373067	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P373004	
	SM 5310 B-00	Organic Carbon	2.8		mg C/L	P373050	
2129910	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.12		mg P/L	P372950	
2129921	EPA 8321B	Aldicarb	0.020	U	ug/L	P372737	
		Aldicarb Sulfone	0.0020	U	ug/L	P372737	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P372737	
		Carbaryl	0.0020	U	ug/L	P372737	
		Carbofuran	0.0020	U	ug/L	P372737	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P372737	
		Methiocarb	0.0020	U	ug/L	P372737	
		Methomyl	0.0020	U	ug/L	P372737	
		Oxamyl	0.0020	U	ug/L	P372737	
		Propoxur	0.0020	U	ug/L	P372737	
2129922		2,4-D	0.0020	U	ug/L	P372798	
		Acesulfame K**	0.10	U	ug/L	P372848	
		AMPA**	0.10	U	ug/L	P372848	MS
		Sucralose**	0.18		ug/L	P372848	
		Acetaminophen**	0.0080	U	ug/L	P372798	
		Acetamiprid**	0.0020	U	ug/L	P372798	
		Endothal**	0.25	U	ug/L	P372848	
		Glufosinate**	0.10	U	ug/L	P372848	
		Glyphosate**	0.15	I	ug/L	P372848	
		Afidopyropen**	0.0020	UJ	ug/L	P372798	
		Bentazon	0.0015	I	ug/L	P372798	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P372798	
		Carbamazepine**	8.0E-04	U	ug/L	P372798	
		Clothianidin**	0.0020	U	ug/L	P372798	
		Dinotefuran**	0.0020	U	ug/L	P372798	
		Diuron	0.0020	U	ug/L	P372798	
		Fenuron	0.016	U	ug/L	P372798	
		Fluridone**	0.0032	I	ug/L	P372798	

Field ID: G1TLHR0109

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2129922	EPA 8321B	Imazapyr**	0.0082	I	ug/L	P372798	
		Hydrocodone**	0.0020	U	ug/L	P372798	
		Ibuprofen**	0.020	U	ug/L	P372798	
		Imidacloprid	0.071		ug/L	P372798	
		Linuron	0.0040	U	ug/L	P372798	
		Mandestrobin**	0.0020	UJ	ug/L	P372798	
		MCP	0.0020	U	ug/L	P372798	
		Naproxen**	0.0080	U	ug/L	P372798	
		Primidone**	0.0040	U	ug/L	P372798	
		Pyraclostrobin**	0.0020	U	ug/L	P372798	
		Thiamethoxam**	0.0036	I	ug/L	P372798	
		Tolfenpyrad**	0.0020	U	ug/L	P372798	
		Triclopyr**	0.0040	U	ug/L	P372798	
2129925	EPA 8276	Chlordane	5.6	U	ng/L	P373112	
		Toxaphene	33	U	ng/L	P373112	

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 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for acetaminophen and imidacloprid could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372955

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372956

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372926

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372926

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	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: P373557

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373562

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373185

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P373185

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P373080

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P373067

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P373004

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P372950

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

Reference Method: EPA 8270E
 Batch ID: P372856

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P372856

Component	Result	Code	Units
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
Metalaxyl	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: P373112

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	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P373112

Component	Result	Code	Units
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: P373112

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

Reference Method: EPA 8321B
Batch ID: P372737

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

Reference Method: EPA 8321B
Batch ID: P372798

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P372798

Component	Result	Code	Units
Mandestrobin	0.0020	U	ug/L
MCP	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: P372848

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: P372940

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P373040

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

Reference Method: SM 2540 C-97
Batch ID: P373318

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P373289

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P373043

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P373050

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: P372926

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	103		P	85 - 115
Calcium	109		P	85 - 115
Iron	106		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	104		P	85 - 115
Sodium	105		P	85 - 115
Zinc	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372926

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.2		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	98.4		P	85 - 115
Boron	95.9		P	85 - 115
Cadmium	97.1		P	85 - 115
Chromium	97.4		P	85 - 115
Lead	97.2		P	85 - 115
Nickel	98.8		P	85 - 115
Selenium	96.4		P	85 - 115
Silver	101		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373557

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373562

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373185

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373080

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373067

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

Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373067

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: P373004

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P372950

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

Reference Method: EPA 8270E
Batch ID: P372856

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	95.8	88.8	P/P	69 - 122
Alachlor	94.2	86.6	P/P	71 - 120
Ametryn	91.6	80.6	P/P	47 - 138
Atrazine	91.5	92.1	P/P	74 - 124
Atrazine Desethyl	78.6	73.5	P/P	38 - 138
Azinphos Methyl	130	126	P/P	69 - 154
Bromacil	86.6	79.6	P/P	39 - 121
Butylate	58.4	67.1	P/P	27 - 87.0
Chlorpyrifos Ethyl	104	98.1	P/P	69 - 118
Chlorpyrifos Methyl	101	96.7	P/P	70 - 120
Cyanazine	97.4	96.5	P/P	20 - 250
Demeton	90.4	92.7	P/P	39 - 118
Diazinon	90.3	84.5	P/P	68 - 127
Dimethenamid	88.9	87.9	P/P	66 - 125
Disulfoton	85.7	85.1	P/P	52 - 126
Dithiopyr	88.1	81.5	P/P	67 - 127
EPTC	59.7	64.6	P/P	24 - 88.0
Ethion	78.4	81.3	P/P	51 - 132
Ethoprop	96.1	93.2	P/P	58 - 117
Fenamiphos	91.1	90.0	P/P	38 - 139
Fipronil	92.9	86.7	P/P	61 - 124
Fipronil Desulfinyl	80.1	74.9	P/P	47 - 120
Fipronil Sulfide	107	87.5	P/P	56 - 119
Fipronil Sulfone	90.6	91.4	P/P	50 - 117
Fonofos	89.9	84.7	P/P	60 - 121
Hexazinone	106	101	P/P	55 - 137
Malathion	117	111	P/P	66 - 126
Metalaxyl	98.4	91.5	P/P	33 - 140
Metolachlor	93.1	88.3	P/P	69 - 119
Metribuzin	140	128	P/P	31 - 238
Mevinphos	107	105	P/P	42 - 113
Molinate	75.1	78.9	P/P	32 - 96.0
Norflurazon	100	92.1	P/P	54 - 123
Oxadiazon	86.0	77.7	P/P	63 - 128

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P372856

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	89.3	90.1	P/P	72 - 111
Parathion Methyl	104	102	P/P	74 - 126
Pendimethalin	81.1	76.7	P/P	61 - 131
Phorate	98.6	95.0	P/P	51 - 115
Prodiamine	56.7	51.5	P/P	38 - 144
Prometon	76.6	77.4	P/P	54 - 119
Prometryn	84.2	80.0	P/P	63 - 120
Simazine	111	100	P/P	75 - 126
Tebuconazole	59.7	60.8	P/P	20 - 119
Terbufos	97.3	92.6	P/P	64 - 116
Terbuthylazine	91.3	91.3	P/P	73 - 117

Reference Method: EPA 8270E

Batch ID: P373112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	22.7	21.8	P/P	20 - 93.0
Alpha-BHC	101	98.3	P/P	55 - 133
Alpha-Chlordane	82.2	81.6	P/P	58 - 112
Beta-BHC	110	113	P/P	54 - 168
Bifenthrin	96.3	92.7	P/P	30 - 134
Carbophenothion	73.5	73.3	P/P	26 - 147
Chlorothalonil	102	99.4	P/P	20 - 155
Cis-Nonachlor	86.5	86.2	P/P	54 - 115
Cypermethrin	100	98.8	P/P	40 - 137
DDD-p,p'	91.3	93.3	P/P	65 - 129
DDE-p,p'	78.0	76.4	P/P	57 - 116
DDT-p,p'	83.2	84.0	P/P	53 - 133
Delta-BHC	117	117	P/P	59 - 178
Dicofol	97.3	98.5	P/P	24 - 138
Dieldrin	92.8	90.9	P/P	60 - 120
Endosulfan I	96.8	94.1	P/P	64 - 118
Endosulfan II	102	100	P/P	58 - 142
Endosulfan Sulfate	104	108	P/P	60 - 127
Endrin	96.9	91.2	P/P	59 - 122
Endrin Aldehyde	112	112	P/P	49 - 132
Endrin Ketone	105	108	P/P	64 - 121
Ethalfuralin	93.7	93.9	P/P	60 - 126
Gamma-BHC	109	109	P/P	57 - 154
Gamma-Chlordane	79.0	78.4	P/P	56 - 110
Heptachlor	74.0	74.0	P/P	46 - 96.0
Heptachlor Epoxide	90.2	89.3	P/P	61 - 112
Hexachlorobenzene	78.5	82.3	P/P	44 - 98.0
Methoxychlor	102	102	P/P	63 - 134
Mirex	64.2	62.7	P/P	45 - 100
Permethrin	81.1	79.1	P/P	53 - 115
Trans-Nonachlor	80.7	79.6	P/P	47 - 110
Trifluralin	91.2	91.1	P/P	39 - 142

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P373112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.4	85.4	P/P	43 - 128
Toxaphene	84.7	81.1	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P372737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.9		P	40 - 160
Aldicarb	88.4		P	30 - 160
Aldicarb Sulfone	87.0		P	40 - 160
Aldicarb Sulfoxide	81.6		P	40 - 160
Carbaryl	65.9		P	40 - 160
Carbofuran	79.6		P	40 - 160
Methiocarb	76.5		P	40 - 160
Methomyl	80.3		P	40 - 160
Oxamyl	84.8		P	40 - 160
Propoxur	77.9		P	40 - 160

Reference Method: EPA 8321B
Batch ID: P372798

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	127		P	40 - 160
Acetaminophen	67.3		P	30 - 160
Acetamiprid	82.9		P	40 - 160
Afidopyropen	75.4		P	40 - 160
Bentazon	70.7		P	30 - 160
Benzovindiflupyr	86.6		P	40 - 160
Carbamazepine	94.3		P	40 - 160
Clothianidin	77.1		P	40 - 160
Dinotefuran	77.4		P	40 - 160
Diuron	87.2		P	40 - 160
Fenuron	93.8		P	40 - 160
Fluridone	85.4		P	40 - 160
Hydrocodone	90.8		P	40 - 160
Ibuprofen	83.0		P	30 - 160
Imazapyr	86.7		P	40 - 160
Imidacloprid	95.4		P	40 - 160
Linuron	64.6		P	40 - 160
Mandestrobin	81.6		P	40 - 160
MCPP	95.6		P	40 - 160
Naproxen	71.8		P	40 - 160
Primidone	88.4		P	40 - 160
Pyraclostrobin	81.4		P	30 - 160
Thiamethoxam	90.3		P	40 - 160
Tolfenpyrad	51.0		P	40 - 160
Triclopyr	93.9		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P372848

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

Reference Method: EPA 8321B
Batch ID: P372848

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	89.4		P	40 - 150
AMPA	125		P	40 - 150
Endothall	84.8		P	40 - 150
Glufosinate	87.8		P	40 - 150
Glyphosate	106		P	40 - 140
Sucralose	95.9		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P372940

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	91.1		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P373040

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P373043

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P373050

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372926

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129903	Barium	99.4		P	80 - 120
2129903	Calcium	103		P	80 - 120
2129903	Iron	101		P	80 - 120
2129903	Magnesium	103		P	80 - 120
2129903	Potassium	99.7		P	80 - 120
2129903	Sodium	97.4		P	80 - 120
2129903	Zinc	96.7		P	80 - 120
2130003	Barium	104	105	P/P	80 - 120
2130003	Calcium	109	110	P/P	80 - 120
2130003	Iron	105	107	P/P	80 - 120
2130003	Magnesium	109	111	P/P	80 - 120
2130003	Potassium	107	108	P/P	80 - 120
2130003	Sodium	105	106	P/P	80 - 120
2130003	Zinc	102	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372926

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129903	Aluminum	97.9		P	80 - 120
2129903	Antimony	101		P	80 - 120
2129903	Arsenic	100		P	80 - 120
2129903	Boron	96.3		P	80 - 120
2129903	Cadmium	96.0		P	80 - 120
2129903	Chromium	99.3		P	80 - 120
2129903	Lead	99.6		P	80 - 120
2129903	Nickel	101		P	80 - 120
2129903	Selenium	95.5		P	80 - 120
2129903	Silver	101		P	80 - 120
2129903	Thallium	103		P	80 - 120
2130003	Aluminum	97.4	98.2	P/P	80 - 120
2130003	Antimony	102	102	P/P	80 - 120
2130003	Arsenic	100	102	P/P	80 - 120
2130003	Boron	95.8	96.0	P/P	80 - 120
2130003	Cadmium	98.5	99.7	P/P	80 - 120
2130003	Chromium	101	103	P/P	80 - 120
2130003	Lead	99.0	100	P/P	80 - 120
2130003	Nickel	101	102	P/P	80 - 120
2130003	Selenium	97.4	98.2	P/P	80 - 120
2130003	Silver	103	104	P/P	80 - 120
2130003	Thallium	103	107	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129517	Chloride	102		P	90 - 110
2129726	Chloride	102		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P373562

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129517	Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P373185

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129899	Ammonia-N	100	97.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P373080

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129062	Kjeldahl Nitrogen	105	109	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P373067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129773	NO2NO3-N	100	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P373004

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129899	Total-P	98.2	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P372950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2130113	O-Phosphate-P	98.2	100	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P372856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129616	Acetochlor	93.5	86.4	P/P	63 - 129
2129616	Alachlor	103	87.8	P/P	65 - 127
2129616	Ametryn	74.0	74.8	P/P	40 - 164
2129616	Atrazine Desethyl	84.7	71.2	P/P	14 - 157
2129616	Azinphos Methyl	125	114	P/P	49 - 180
2129616	Bromacil	89.5	80.7	P/P	48 - 130
2129616	Butylate	59.5	51.0	P/P	10 - 94.0
2129616	Chlorpyrifos Ethyl	99.0	97.5	P/P	58 - 123
2129616	Chlorpyrifos Methyl	101	93.7	P/P	58 - 125
2129616	Cyanazine	94.8	92.3	P/P	24 - 253
2129616	Demeton	109	92.9	P/P	25 - 149
2129616	Diazinon	91.9	86.1	P/P	59 - 144
2129616	Dimethenamid	81.0	85.4	P/P	46 - 139
2129616	Disulfoton	92.0	86.4	P/P	54 - 132
2129616	Dithiopyr	85.9	83.0	P/P	64 - 130
2129616	EPTC	61.2	46.1	P/P	10 - 92.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P372856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129616	Ethion	52.1	75.1	P/P	30 - 148
2129616	Ethoprop	104	92.8	P/P	50 - 130
2129616	Fenamiphos	117	79.6	P/P	49 - 142
2129616	Fipronil	98.0	94.5	P/P	46 - 140
2129616	Fipronil Desulfinyl	80.3	81.5	P/P	30 - 121
2129616	Fipronil Sulfide	96.7	93.7	P/P	31 - 136
2129616	Fipronil Sulfone	109	94.7	P/P	16 - 136
2129616	Fonofos	92.6	78.0	P/P	55 - 129
2129616	Hexazinone	102	101	P/P	56 - 141
2129616	Malathion	118	114	P/P	56 - 135
2129616	Metalaxyl	96.5	90.0	P/P	54 - 135
2129616	Metolachlor	93.6	86.8	P/P	51 - 140
2129616	Metribuzin	151	152	P/P	45 - 254
2129616	Mevinphos	114	96.1	P/P	33 - 131
2129616	Molinate	82.0	68.7	P/P	14 - 98.0
2129616	Norflurazon	102	93.7	P/P	34 - 136
2129616	Oxadiazon	79.8	80.6	P/P	67 - 116
2129616	Parathion Ethyl	96.4	86.9	P/P	66 - 118
2129616	Parathion Methyl	106	95.1	P/P	64 - 136
2129616	Pendimethalin	83.6	74.4	P/P	59 - 144
2129616	Phorate	96.9	89.7	P/P	42 - 130
2129616	Prodiamine	75.4	55.6	P/P	42 - 148
2129616	Prometon	86.6	85.1	P/P	59 - 134
2129616	Prometryn	83.4	81.0	P/P	54 - 135
2129616	Simazine	107	104	P/P	53 - 156
2129616	Tebuconazole	52.4	65.7	P/P	10 - 131
2129616	Terbufos	101	92.3	P/P	57 - 131
2129616	Terbutylazine	66.5	64.9	F/F	68 - 125

Reference Method: EPA 8270E
Batch ID: P373112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131560	Aldrin	24.9	25.2	F/P	25 - 92.0
2131560	Alpha-BHC	101	99.6	P/P	48 - 150
2131560	Alpha-Chlordane	83.3	75.4	P/P	50 - 115
2131560	Beta-BHC	108	113	P/P	39 - 184
2131560	Bifenthrin	105	96.9	P/P	46 - 116
2131560	Carbophenothion	77.5	80.1	P/P	27 - 180
2131560	Chlorothalonil	98.0	80.2	P/P	10 - 216
2131560	Cis-Nonachlor	86.6	78.9	P/P	55 - 112
2131560	Cypermethrin	116	104	P/P	40 - 153
2131560	DDD-p,p'	92.0	86.8	P/P	53 - 128
2131560	DDE-p,p'	80.7	73.7	P/P	48 - 116
2131560	DDT-p,p'	82.8	83.1	P/P	47 - 128
2131560	Delta-BHC	107	119	P/P	48 - 221
2131560	Dicofol	93.7	92.8	P/P	10 - 147
2131560	Dieldrin	91.0	81.6	P/P	48 - 128
2131560	Endosulfan I	94.6	82.8	P/P	58 - 126
2131560	Endosulfan II	99.1	91.0	P/P	50 - 150
2131560	Endosulfan Sulfate	101	103	P/P	56 - 130
2131560	Endrin	97.1	83.5	P/P	50 - 126

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P373112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131560	Endrin Aldehyde	107	97.0	P/P	12 - 145
2131560	Endrin Ketone	103	101	P/P	59 - 132
2131560	Ethalfuralin	94.7	95.2	P/P	65 - 122
2131560	Gamma-BHC	105	109	P/P	40 - 190
2131560	Gamma-Chlordane	80.5	73.7	P/P	50 - 112
2131560	Heptachlor	79.4	71.8	P/P	41 - 98.0
2131560	Heptachlor Epoxide	89.6	81.7	P/P	55 - 117
2131560	Hexachlorobenzene	81.3	84.5	P/P	47 - 91.0
2131560	Methoxychlor	100	96.3	P/P	55 - 133
2131560	Mirex	66.4	67.1	P/P	44 - 101
2131560	Permethrin	87.8	82.7	P/P	52 - 124
2131560	Trans-Nonachlor	80.3	73.4	P/P	53 - 99.0
2131560	Trifluralin	93.2	92.0	P/P	10 - 201

Reference Method: EPA 8276
Batch ID: P373112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2130850	Chlordane	87.9	90.6	P/P	34 - 136
2130850	Toxaphene	88.0	84.2	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P372737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2127962	3-Hydroxycarbofuran	103	96.4	P/P	40 - 160
2127962	Aldicarb	84.1	86.0	P/P	30 - 160
2127962	Aldicarb Sulfone	120	110	P/P	40 - 160
2127962	Aldicarb Sulfoxide	55.9	52.6	P/P	40 - 160
2127962	Carbaryl	59.9	58.1	P/P	40 - 160
2127962	Carbofuran	72.7	70.1	P/P	40 - 160
2127962	Methiocarb	73.8	66.6	P/P	40 - 160
2127962	Methomyl	76.9	72.4	P/P	40 - 160
2127962	Oxamyl	95.3	89.4	P/P	40 - 160
2127962	Propoxur	74.3	68.5	P/P	40 - 160

Reference Method: EPA 8321B
Batch ID: P372798

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129299	2,4-D	106	108	P/P	40 - 160
2129299	Acetamiprid	107	104	P/P	40 - 160
2129299	Afidopyropen	84.1	87.2	P/P	40 - 160
2129299	Bentazon	50.7	55.8	P/P	30 - 160
2129299	Benzovindiflupyr	88.4	87.5	P/P	40 - 160
2129299	Carbamazepine	87.6	85.3	P/P	40 - 160
2129299	Clothianidin	88.7	87.3	P/P	40 - 160
2129299	Dinotefuran	96.0	98.7	P/P	40 - 160
2129299	Diuron	74.9	74.6	P/P	40 - 160
2129299	Fenuron	90.6	91.9	P/P	40 - 160
2129299	Fluridone	84.0	83.2	P/P	40 - 160
2129299	Hydrocodone	107	102	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P372798

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129299	Ibuprofen	75.3	72.4	P/P	30 - 160
2129299	Imazapyr	88.9	95.6	P/P	40 - 160
2129299	Linuron	62.8	59.9	P/P	40 - 160
2129299	Mandestrobin	94.6	91.5	P/P	40 - 160
2129299	MCPP	96.1	93.3	P/P	40 - 160
2129299	Naproxen	68.6	73.2	P/P	40 - 160
2129299	Primidone	85.4	95.3	P/P	40 - 160
2129299	Pyraclostrobin	93.8	89.3	P/P	30 - 160
2129299	Thiamethoxam	144	145	P/P	40 - 160
2129299	Tolfenpyrad	59.3	55.3	P/P	40 - 160
2129299	Triclopyr	97.7	84.9	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P372848

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129670	Acesulfame K	51.2	54.2	P/P	40 - 150
2129670	AMPA	40.2	38.6	P/F	40 - 150
2129670	Endothall	64.5	64.4	P/P	40 - 150
2129670	Glufosinate	58.0	56.1	P/P	40 - 150
2129670	Glyphosate	79.9	64.2	P/P	40 - 140
2129670	Sucralose	91.5	95.5	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P373043

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129518	Fluoride	97.4	96.8	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P373050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2129722	Organic Carbon	98.9	98.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372955

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129905	Turbidity	3.02	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P372956

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129908	Turbidity	2.56	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P372926

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2130003	Barium	0.310	Spike	P	0 - 20
2130003	Calcium	1.19	Spike	P	0 - 20
2130003	Iron	1.91	Spike	P	0 - 20
2130003	Magnesium	1.78	Spike	P	0 - 20
2130003	Potassium	0.840	Spike	P	0 - 20
2130003	Sodium	0.613	Spike	P	0 - 20
2130003	Zinc	0.341	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P372926

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2130003	Aluminum	0.750	Spike	P	0 - 20
2130003	Antimony	0.552	Spike	P	0 - 20
2130003	Arsenic	1.88	Spike	P	0 - 20
2130003	Boron	0.242	Spike	P	0 - 20
2130003	Cadmium	1.28	Spike	P	0 - 20
2130003	Chromium	1.69	Spike	P	0 - 20
2130003	Lead	1.31	Spike	P	0 - 20
2130003	Nickel	1.73	Spike	P	0 - 20
2130003	Selenium	0.879	Spike	P	0 - 20
2130003	Silver	1.04	Spike	P	0 - 20
2130003	Thallium	4.11	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129517	Chloride	0.398	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373562

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

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P373562

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129517	Sulfate	0.396	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P373185

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129899	Ammonia-N	2.38	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P373080

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129062	Kjeldahl Nitrogen	1.94	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P373067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129773	NO2NO3-N	0.499	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P373004

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129899	Total-P	0.649	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P372950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2130113	O-Phosphate-P	2.02	Spike	P	0 - 20

Reference Method: EPA 8270E
 Batch ID: P372856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129616	Acetochlor	7.81	Spike	P	0 - 30
2129616	Alachlor	16.1	Spike	P	0 - 30
2129616	Ametryn	0.774	Spike	P	0 - 30
2129616	Atrazine	7.97	Spike	P	0 - 30
2129616	Atrazine Desethyl	11.8	Spike	P	0 - 30
2129616	Azinphos Methyl	9.58	Spike	P	0 - 30
2129616	Bromacil	10.4	Spike	P	0 - 30
2129616	Butylate	15.3	Spike	P	0 - 30
2129616	Chlorpyrifos Ethyl	1.52	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P372856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129616	Chlorpyrifos Methyl	7.22	Spike	P	0 - 30
2129616	Cyanazine	2.68	Spike	P	0 - 30
2129616	Demeton	15.7	Spike	P	0 - 30
2129616	Diazinon	6.46	Spike	P	0 - 30
2129616	Dimethenamid	5.30	Spike	P	0 - 30
2129616	Disulfoton	6.28	Spike	P	0 - 30
2129616	Dithiopyr	3.29	Spike	P	0 - 30
2129616	EPTC	28.1	Spike	P	0 - 30
2129616	Ethion	36.2	Spike	F	0 - 30
2129616	Ethoprop	11.7	Spike	P	0 - 30
2129616	Fenamiphos	38.2	Spike	F	0 - 30
2129616	Fipronil	3.62	Spike	P	0 - 30
2129616	Fipronil Desulfinyl	1.45	Spike	P	0 - 30
2129616	Fipronil Sulfide	2.74	Spike	P	0 - 30
2129616	Fipronil Sulfone	9.43	Spike	P	0 - 30
2129616	Fonofos	17.2	Spike	P	0 - 30
2129616	Hexazinone	0.678	Spike	P	0 - 30
2129616	Malathion	3.89	Spike	P	0 - 30
2129616	Metalaxyl	5.91	Spike	P	0 - 30
2129616	Metolachlor	7.55	Spike	P	0 - 30
2129616	Metribuzin	0.862	Spike	P	0 - 30
2129616	Mevinphos	17.1	Spike	P	0 - 30
2129616	Molinate	17.7	Spike	P	0 - 30
2129616	Norflurazon	8.71	Spike	P	0 - 30
2129616	Oxadiazon	0.954	Spike	P	0 - 30
2129616	Parathion Ethyl	10.3	Spike	P	0 - 30
2129616	Parathion Methyl	10.9	Spike	P	0 - 30
2129616	Pendimethalin	11.7	Spike	P	0 - 30
2129616	Phorate	7.65	Spike	P	0 - 30
2129616	Prodiamine	30.3	Spike	F	0 - 30
2129616	Prometon	1.78	Spike	P	0 - 30
2129616	Prometryn	2.99	Spike	P	0 - 30
2129616	Simazine	2.58	Spike	P	0 - 30
2129616	Tebuconazole	18.5	Spike	P	0 - 30
2129616	Terbufos	9.29	Spike	P	0 - 30
2129616	Terbuthylazine	1.78	Spike	P	0 - 30
LFB	Acetochlor	7.63	LCS	P	0 - 30
LFB	Alachlor	8.37	LCS	P	0 - 30
LFB	Ametryn	12.8	LCS	P	0 - 30
LFB	Atrazine	0.648	LCS	P	0 - 30
LFB	Atrazine Desethyl	6.73	LCS	P	0 - 30
LFB	Azinphos Methyl	2.67	LCS	P	0 - 30
LFB	Bromacil	8.39	LCS	P	0 - 30
LFB	Butylate	13.9	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	6.06	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.59	LCS	P	0 - 30
LFB	Cyanazine	0.902	LCS	P	0 - 30
LFB	Demeton	2.59	LCS	P	0 - 30
LFB	Diazinon	6.67	LCS	P	0 - 30
LFB	Dimethenamid	1.07	LCS	P	0 - 30
LFB	Disulfoton	0.641	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P372856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dithiopyr	7.84	LCS	P	0 - 30
LFB	EPTC	7.77	LCS	P	0 - 30
LFB	Ethion	3.68	LCS	P	0 - 30
LFB	Ethoprop	3.07	LCS	P	0 - 30
LFB	Fenamiphos	1.15	LCS	P	0 - 30
LFB	Fipronil	6.92	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	6.75	LCS	P	0 - 30
LFB	Fipronil Sulfide	20.2	LCS	P	0 - 30
LFB	Fipronil Sulfone	0.878	LCS	P	0 - 30
LFB	Fonofos	5.96	LCS	P	0 - 30
LFB	Hexazinone	5.33	LCS	P	0 - 30
LFB	Malathion	5.44	LCS	P	0 - 30
LFB	Metaxyl	7.30	LCS	P	0 - 30
LFB	Metolachlor	5.28	LCS	P	0 - 30
LFB	Metribuzin	8.78	LCS	P	0 - 30
LFB	Mevinphos	2.49	LCS	P	0 - 30
LFB	Molinate	4.94	LCS	P	0 - 30
LFB	Norflurazon	8.44	LCS	P	0 - 30
LFB	Oxadiazon	10.1	LCS	P	0 - 30
LFB	Parathion Ethyl	0.913	LCS	P	0 - 30
LFB	Parathion Methyl	1.43	LCS	P	0 - 30
LFB	Pendimethalin	5.49	LCS	P	0 - 30
LFB	Phorate	3.72	LCS	P	0 - 30
LFB	Prodiamine	9.69	LCS	P	0 - 30
LFB	Prometon	1.05	LCS	P	0 - 30
LFB	Prometryn	5.11	LCS	P	0 - 30
LFB	Simazine	10.7	LCS	P	0 - 30
LFB	Tebuconazole	1.75	LCS	P	0 - 30
LFB	Terbufos	4.90	LCS	P	0 - 30
LFB	Terbutylazine	0.0602	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P373112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131560	Aldrin	1.31	Spike	P	0 - 30
2131560	Alpha-BHC	1.76	Spike	P	0 - 30
2131560	Alpha-Chlordane	9.95	Spike	P	0 - 30
2131560	Beta-BHC	5.07	Spike	P	0 - 30
2131560	Bifenthrin	7.91	Spike	P	0 - 30
2131560	Carbophenothion	3.29	Spike	P	0 - 30
2131560	Chlorothalonil	20.0	Spike	P	0 - 30
2131560	Cis-Nonachlor	9.36	Spike	P	0 - 30
2131560	Cypermethrin	10.9	Spike	P	0 - 30
2131560	DDD-p,p'	5.85	Spike	P	0 - 30
2131560	DDE-p,p'	8.95	Spike	P	0 - 30
2131560	DDT-p,p'	0.376	Spike	P	0 - 30
2131560	Delta-BHC	10.5	Spike	P	0 - 30
2131560	Dicofol	0.932	Spike	P	0 - 30
2131560	Dieldrin	10.9	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P373112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131560	Endosulfan I	13.4	Spike	P	0 - 30
2131560	Endosulfan II	8.58	Spike	P	0 - 30
2131560	Endosulfan Sulfate	2.23	Spike	P	0 - 30
2131560	Endrin	15.1	Spike	P	0 - 30
2131560	Endrin Aldehyde	10.2	Spike	P	0 - 30
2131560	Endrin Ketone	2.38	Spike	P	0 - 30
2131560	Ethalfuralin	0.518	Spike	P	0 - 30
2131560	Gamma-BHC	3.26	Spike	P	0 - 30
2131560	Gamma-Chlordane	8.83	Spike	P	0 - 30
2131560	Heptachlor	10.1	Spike	P	0 - 30
2131560	Heptachlor Epoxide	9.20	Spike	P	0 - 30
2131560	Hexachlorobenzene	3.89	Spike	P	0 - 30
2131560	Methoxychlor	4.25	Spike	P	0 - 30
2131560	Mirex	0.982	Spike	P	0 - 30
2131560	Permethrin	5.96	Spike	P	0 - 30
2131560	Trans-Nonachlor	9.00	Spike	P	0 - 30
2131560	Trifluralin	1.25	Spike	P	0 - 30
LFB	Aldrin	3.89	LCS	P	0 - 30
LFB	Alpha-BHC	3.14	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.733	LCS	P	0 - 30
LFB	Beta-BHC	2.56	LCS	P	0 - 30
LFB	Bifenthrin	3.82	LCS	P	0 - 30
LFB	Carbophenothion	0.208	LCS	P	0 - 30
LFB	Chlorothalonil	2.30	LCS	P	0 - 30
LFB	Cis-Nonachlor	0.416	LCS	P	0 - 30
LFB	Cypermethrin	1.46	LCS	P	0 - 30
LFB	DDD-p,p'	2.18	LCS	P	0 - 30
LFB	DDE-p,p'	2.08	LCS	P	0 - 30
LFB	DDT-p,p'	0.974	LCS	P	0 - 30
LFB	Delta-BHC	0.403	LCS	P	0 - 30
LFB	Dicofol	1.16	LCS	P	0 - 30
LFB	Dieldrin	2.11	LCS	P	0 - 30
LFB	Endosulfan I	2.84	LCS	P	0 - 30
LFB	Endosulfan II	1.62	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.75	LCS	P	0 - 30
LFB	Endrin	6.02	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.356	LCS	P	0 - 30
LFB	Endrin Ketone	3.45	LCS	P	0 - 30
LFB	Ethalfuralin	0.222	LCS	P	0 - 30
LFB	Gamma-BHC	0.0460	LCS	P	0 - 30
LFB	Gamma-Chlordane	0.759	LCS	P	0 - 30
LFB	Heptachlor	0.0804	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.08	LCS	P	0 - 30
LFB	Hexachlorobenzene	4.77	LCS	P	0 - 30
LFB	Methoxychlor	0.204	LCS	P	0 - 30
LFB	Mirex	2.31	LCS	P	0 - 30
LFB	Permethrin	2.57	LCS	P	0 - 30
LFB	Trans-Nonachlor	1.35	LCS	P	0 - 30
LFB	Trifluralin	0.0768	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
Batch ID: P373112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2130850	Chlordane	3.08	Spike	P	0 - 30
2130850	Toxaphene	4.46	Spike	P	0 - 30
LFB	Chlordane	3.58	LCS	P	0 - 30
LFB	Toxaphene	4.35	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2127962	3-Hydroxycarbofuran	6.44	Spike	P	0 - 30
2127962	Aldicarb	2.20	Spike	P	0 - 30
2127962	Aldicarb Sulfone	9.35	Spike	P	0 - 30
2127962	Aldicarb Sulfoxide	6.11	Spike	P	0 - 30
2127962	Carbaryl	3.10	Spike	P	0 - 30
2127962	Carbofuran	3.53	Spike	P	0 - 30
2127962	Methiocarb	10.3	Spike	P	0 - 30
2127962	Methomyl	5.94	Spike	P	0 - 30
2127962	Oxamyl	6.45	Spike	P	0 - 30
2127962	Propoxur	8.09	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P372798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129299	2,4-D	2.26	Spike	P	0 - 30
2129299	Acetaminophen	1.63	Spike	P	0 - 30
2129299	Acetamiprid	2.65	Spike	P	0 - 30
2129299	Afidopyropen	3.58	Spike	P	0 - 30
2129299	Bentazon	4.06	Spike	P	0 - 30
2129299	Benzovindiflupyr	0.983	Spike	P	0 - 30
2129299	Carbamazepine	2.55	Spike	P	0 - 30
2129299	Clothianidin	1.57	Spike	P	0 - 30
2129299	Dinotefuran	2.72	Spike	P	0 - 30
2129299	Diuron	0.325	Spike	P	0 - 30
2129299	Fenuron	1.43	Spike	P	0 - 30
2129299	Fluridone	0.916	Spike	P	0 - 30
2129299	Hydrocodone	4.91	Spike	P	0 - 30
2129299	Ibuprofen	4.00	Spike	P	0 - 30
2129299	Imazapyr	5.57	Spike	P	0 - 30
2129299	Imidacloprid	1.85	Spike	P	0 - 30
2129299	Linuron	4.71	Spike	P	0 - 30
2129299	Mandestrobin	3.25	Spike	P	0 - 30
2129299	MCCP	2.99	Spike	P	0 - 30
2129299	Naproxen	6.52	Spike	P	0 - 30
2129299	Primidone	11.0	Spike	P	0 - 30
2129299	Pyraclostrobin	4.98	Spike	P	0 - 30
2129299	Thiamethoxam	1.12	Spike	P	0 - 30
2129299	Tolfenpyrad	6.93	Spike	P	0 - 30
2129299	Triclopyr	14.0	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P372848

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129670	Acesulfame K	5.67	Spike	P	0 - 30
2129670	AMPA	4.23	Spike	P	0 - 30
2129670	Endothall	0.0993	Spike	P	0 - 30
2129670	Glufosinate	3.37	Spike	P	0 - 30
2129670	Glyphosate	21.7	Spike	P	0 - 30
2129670	Sucralose	3.97	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P372940

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129962	Color (true)	8.08	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P373040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129518	Total Alkalinity	0.751	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P373318

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129721	TDS	5.83	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P373043

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129518	Fluoride	0.482	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P373050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2129722	Organic Carbon	0.549	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2129919
Field Sample ID: G1TLHR0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	96.0	P	30 - 160

Lab Sample ID: 2129920
Field Sample ID: G1TLHR0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	132	P	30 - 160
EPA 8321B	Acetaminophen-d4	75.8	P	30 - 160
EPA 8321B	Bentazon-d7	81.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	96.3	P	30 - 160
EPA 8321B	Diuron-d6	78.9	P	30 - 160
EPA 8321B	Endothall-d6	96.9	P	30 - 160
EPA 8321B	Endothall-d6	96.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	101	P	30 - 160
EPA 8321B	Ibuprofen-d3	76.7	P	30 - 160
EPA 8321B	Primidone-d5	81.7	P	30 - 160
EPA 8321B	Sucralose-d6	78.1	P	30 - 160
EPA 8321B	Sucralose-d6	78.1	P	30 - 160

Lab Sample ID: 2129921
Field Sample ID: G1TLHR0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	89.2	P	30 - 160

Lab Sample ID: 2129922
Field Sample ID: G1TLHR0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	122	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.0	P	30 - 160
EPA 8321B	Bentazon-d7	82.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.4	P	30 - 160
EPA 8321B	Diuron-d6	76.8	P	30 - 160
EPA 8321B	Endothall-d6	99.2	P	30 - 160
EPA 8321B	Endothall-d6	99.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	124	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	124	P	30 - 160
EPA 8321B	Ibuprofen-d3	77.5	P	30 - 160
EPA 8321B	Primidone-d5	85.3	P	30 - 160
EPA 8321B	Sucralose-d6	70.3	P	30 - 160
EPA 8321B	Sucralose-d6	70.3	P	30 - 160

Lab Sample ID: 2129923
Field Sample ID: G1TLHR0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	83.5	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	79.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	58.9	P	30 - 103
EPA 8276	PCNB	81.5	P	37 - 143

Quality Assurance Report Surrogates

Lab Sample ID: 2129924
Field Sample ID: G1TLHR0088

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	96.5	P	68 - 130
EPA 8270E	Terbufos-d10	94.5	P	61 - 136

Lab Sample ID: 2129925
Field Sample ID: G1TLHR0109

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	66.2	P	30 - 103
EPA 8276	PCNB	98.9	P	37 - 143

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95110

Included Lab Sample IDs: 2129919, 2129921

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	102	P/P	60 - 150
Aldicarb	110	96.8	P/P	60 - 150
Aldicarb Sulfone	106	109	P/P	50 - 150
Aldicarb Sulfoxide	99.8	97.2	P/P	50 - 150
Carbaryl	99.9	99.6	P/P	60 - 150
Carbofuran	101	104	P/P	50 - 150
Methiocarb	109	108	P/P	50 - 150
Methomyl	104	98.6	P/P	50 - 150
Oxamyl	100	95.6	P/P	50 - 150
Propoxur	101	99.1	P/P	50 - 150

Reference Method: SM 2120 B

Run ID: A95155

Included Lab Sample IDs: 2129905, 2129908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.7	98.5	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A95157

Included Lab Sample IDs: 2129907, 2129910

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A95160

Included Lab Sample IDs: 2129905, 2129908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.5	P/P	95 - 105
Turbidity	99.0	98.0	P/P	95 - 105

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A95190

Included Lab Sample IDs: 2129926

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	103	P/P	90 - 110
Calcium	102	99.9	P/P	90 - 110
Iron	103	101	P/P	90 - 110
Magnesium	103	102	P/P	90 - 110
Potassium	102	101	P/P	90 - 110
Sodium	100	98.8	P/P	90 - 110
Zinc	99.8	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A95197

Included Lab Sample IDs: 2129905, 2129908

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

Reference Method: SM 2320 B-97

Run ID: A95197

Included Lab Sample IDs: 2129905, 2129908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	104	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A95197

Included Lab Sample IDs: 2129905, 2129908

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

Reference Method: SM 5310 B-00

Run ID: A95204

Included Lab Sample IDs: 2129906, 2129909

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95207

Included Lab Sample IDs: 2129906, 2129909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	103	P/P	90 - 110
Total-P	103	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A95211

Included Lab Sample IDs: 2129906, 2129909

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

Reference Method: EPA 8321B

Run ID: A95212

Included Lab Sample IDs: 2129920, 2129922

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	84.3	89.6	P/P	60 - 160
Endothall	89.3	88.3	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95214

Included Lab Sample IDs: 2129920, 2129922

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.3	97.4	P/P	60 - 160
Glufosinate	85.3	92.7	P/P	60 - 160
Glyphosate	101	111	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95233

Included Lab Sample IDs: 2129920, 2129922

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.1	93.1	P/P	50 - 150
Acetaminophen	97.7	66.1	P/P	60 - 160
Acetamiprid	104	97.2	P/P	50 - 150
Afidopyropen	97.8	95.9	P/P	50 - 150
Bentazon	100	97.5	P/P	50 - 160
Benzovindiflupyr	103	100	P/P	50 - 150
Carbamazepine	99.9	103	P/P	60 - 150
Clothianidin	98.0	92.1	P/P	60 - 150
Dinotefuran	84.6	83.7	P/P	50 - 150
Diuron	107	105	P/P	60 - 150
Fenuron	101	97.8	P/P	60 - 150
Fluridone	108	105	P/P	60 - 160
Hydrocodone	103	103	P/P	60 - 150
Ibuprofen	79.4	78.3	P/P	50 - 160
Imazapyr	96.9	95.6	P/P	50 - 150
Imidacloprid	92.0	98.5	P/P	60 - 150
Linuron	103	103	P/P	60 - 150
Mandestrobin	105	107	P/P	50 - 150
MCPP	86.1	96.6	P/P	50 - 150
Naproxen	86.1	114	P/P	50 - 160
Primidone	106	98.9	P/P	60 - 150
Pyraclostrobin	101	103	P/P	60 - 150
Thiamethoxam	97.3	98.8	P/P	50 - 150
Tolfenpyrad	97.4	99.7	P/P	60 - 150
Triclopyr	102	101	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95266

Included Lab Sample IDs: 2129906, 2129909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A95287

Included Lab Sample IDs: 2129906, 2129909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.6	93.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95307

Included Lab Sample IDs: 2129905, 2129908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	102	P/P	90 - 110
Chloride	102	101	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95380

Included Lab Sample IDs: 2129920, 2129922

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	106	111	P/P	60 - 160

Reference Method: EPA 8276

Run ID: A95481

Included Lab Sample IDs: 2129923, 2129925

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	99.8		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A95493

Included Lab Sample IDs: 2129926

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	99.6	P/P	90 - 110
Antimony	102	103	P/P	90 - 110
Arsenic	104	104	P/P	90 - 110
Boron	99.8	97.5	P/P	90 - 110
Cadmium	102	103	P/P	90 - 110
Chromium	104	107	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Nickel	105	106	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Silver	104	104	P/P	90 - 110
Thallium	98.7	99.4	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A95507

Included Lab Sample IDs: 2129923

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	103		P	80 - 120
Alpha-BHC	109		P	80 - 120
Alpha-Chlordane	108		P	80 - 120
Beta-BHC	110		P	80 - 120
Bifenthrin	110		P	80 - 120
Carbophenothion	113		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	108		P	80 - 120
Cypermethrin	115		P	80 - 120
DDD-p,p'	109		P	80 - 120
DDE-p,p'	106		P	80 - 120
DDT-p,p'	108		P	80 - 120
Delta-BHC	111		P	80 - 120
Dicofol	112		P	80 - 120
Dieldrin	109		P	80 - 120
Endosulfan I	109		P	80 - 120
Endosulfan II	107		P	80 - 120
Endosulfan Sulfate	115		P	80 - 120
Endrin	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A95507

Included Lab Sample IDs: 2129923

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Aldehyde	113		P	80 - 120
Endrin Ketone	113		P	80 - 120
Ethalfuralin	114		P	80 - 120
Gamma-BHC	110		P	80 - 120
Gamma-Chlordane	110		P	80 - 120
Heptachlor	110		P	80 - 120
Heptachlor Epoxide	109		P	80 - 120
Hexachlorobenzene	113		P	80 - 120
Methoxychlor	108		P	80 - 120
Mirex	109		P	80 - 120
Permethrin	107		P	80 - 120
Trans-Nonachlor	108		P	80 - 120
Trifluralin	112		P	80 - 120

Reference Method: EPA 8270E

Run ID: A95577

Included Lab Sample IDs: 2129924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.6		P	80 - 120
Alachlor	99.5		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	97.0		P	80 - 120
Atrazine Desethyl	97.6		P	80 - 120
Azinphos Methyl	100		P	80 - 120
Bromacil	108		P	80 - 120
Butylate	102		P	80 - 120
Chlorpyrifos Ethyl	99.3		P	80 - 120
Chlorpyrifos Methyl	96.6		P	80 - 120
Cyanazine	96.5		P	80 - 120
Demeton	95.1		P	80 - 120
Diazinon	99.6		P	80 - 120
Dimethenamid	98.9		P	80 - 120
Disulfoton	91.2		P	80 - 120
Dithiopyr	98.2		P	80 - 120
EPTC	99.4		P	80 - 120
Ethion	96.5		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	91.8		P	80 - 120
Fipronil	98.3		P	80 - 120
Fipronil Desulfinyl	98.6		P	80 - 120
Fipronil Sulfide	98.0		P	80 - 120
Fipronil Sulfone	99.7		P	80 - 120
Fonofos	93.4		P	80 - 120
Hexazinone	111		P	80 - 120
Malathion	91.6		P	80 - 120
Metalaxyl	98.0		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	107		P	80 - 120
Mevinphos	99.8		P	80 - 120
Molinate	99.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A95577

Included Lab Sample IDs: 2129924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Norflurazon	99.7		P	80 - 120
Oxadiazon	102		P	80 - 120
Parathion Ethyl	94.6		P	80 - 120
Parathion Methyl	96.2		P	80 - 120
Pendimethalin	99.9		P	80 - 120
Phorate	93.8		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	96.4		P	80 - 120
Prometryn	97.9		P	80 - 120
Simazine	102		P	80 - 120
Tebuconazole	98.6		P	80 - 120
Terbufos	94.4		P	80 - 120
Terbutylazine	100		P	80 - 120

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							3.02	
	Turbidity							2.56	
EPA 200.7 Rev. 4.4	Barium	103		99.4	104	105			0.310
	Calcium	109		103	109	110			1.19
	Iron	106		101	105	107			1.91
	Magnesium	110		103	109	111			1.78
	Potassium	104		99.7	107	108			0.840
	Sodium	105		97.4	105	106			0.613
	Zinc	100		96.7	102	102			0.341
EPA 200.8 Rev. 5.4	Aluminum	98.2		97.9	97.4	98.2			0.750
	Antimony	101		101	102	102			0.552
	Arsenic	98.4		100	100	102			1.88
	Boron	95.9		96.3	95.8	96.0			0.242
	Cadmium	97.1		96.0	98.5	99.7			1.28
	Chromium	97.4		99.3	101	103			1.69
	Lead	97.2		99.6	99.0	100			1.31
	Nickel	98.8		101	101	102			1.73
	Selenium	96.4		95.5	97.4	98.2			0.879
	Silver	101		101	103	104			1.04
	Thallium	101		103	103	107			4.11
EPA 300.0 Rev. 2.1	Chloride	102		102	102			0.398	
	Sulfate	100		99.9				0.396	
EPA 350.1 Rev. 2.0	Ammonia-N	98.3		100	97.4				2.38
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		105	109				1.94
EPA 353.2 Rev. 2.0	NO2NO3-N	100		100	100				0.499
EPA 365.1 Rev. 2.0	Total-P	99.3		98.2	98.8				0.649
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1		98.2	100				2.02
EPA 8270E	Acetochlor	95.8	88.8	93.5	86.4		7.63		7.81
	Alachlor	94.2	86.6	103	87.8		8.37		16.1
	Aldrin	22.7	21.8	24.9	25.2		3.89		1.31
	Alpha-BHC	101	98.3	99.6	101		3.14		1.76
	Alpha-Chlordane	82.2	81.6	83.3	75.4		0.733		9.95
	Ametryn	91.6	80.6	74.0	74.8		12.8		0.774
	Atrazine	91.5	92.1				0.648		7.97
	Atrazine Desethyl	78.6	73.5	84.7	71.2		6.73		11.8
	Azinphos Methyl	130	126	125	114		2.67		9.58
	Beta-BHC	110	113	108	113		2.56		5.07
	Bifenthrin	96.3	92.7	105	96.9		3.82		7.91
	Bromacil	86.6	79.6	89.5	80.7		8.39		10.4
	Butylate	58.4	67.1	59.5	51.0		13.9		15.3
	Carbophenothion	73.5	73.3	77.5	80.1		0.208		3.29
	Chlorothalonil	102	99.4	98.0	80.2		2.30		20.0
	Chlorpyrifos Ethyl	104	98.1	99.0	97.5		6.06		1.52
	Chlorpyrifos Methyl	101	96.7	101	93.7		4.59		7.22
	Cis-Nonachlor	86.5	86.2	78.9	86.6		0.416		9.36
	Cyanazine	97.4	96.5	94.8	92.3		0.902		2.68
	Cypermethrin	100	98.8	104	116		1.46		10.9
	DDD-p,p'	91.3	93.3	86.8	92.0		2.18		5.85
	DDE-p,p'	78.0	76.4	73.7	80.7		2.08		8.95
	DDT-p,p'	83.2	84.0	83.1	82.8		0.974		0.376
	Delta-BHC	117	117	107	119		0.403		10.5
	Demeton	90.4	92.7	109	92.9		2.59		15.7
	Diazinon	90.3	84.5	91.9	86.1		6.67		6.46
	Dicofol	97.3	98.5	92.8	93.7		1.16		0.932

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270E	Dieldrin	92.8	90.9	81.6	91.0	2.11	10.9
	Dimethenamid	88.9	87.9	81.0	85.4	1.07	5.30
	Disulfoton	85.7	85.1	92.0	86.4	0.641	6.28
	Dithiopyr	88.1	81.5	85.9	83.0	7.84	3.29
	Endosulfan I	96.8	94.1	82.8	94.6	2.84	13.4
	Endosulfan II	102	100	91.0	99.1	1.62	8.58
	Endosulfan Sulfate	104	108	103	101	3.75	2.23
	Endrin	96.9	91.2	83.5	97.1	6.02	15.1
	Endrin Aldehyde	112	112	97.0	107	0.356	10.2
	Endrin Ketone	105	108	101	103	3.45	2.38
	EPTC	59.7	64.6	61.2	46.1	7.77	28.1
	Ethalfuralin	93.7	93.9	95.2	94.7	0.222	0.518
	Ethion	78.4	81.3	52.1	75.1	3.68	36.2
	Ethoprop	96.1	93.2	104	92.8	3.07	11.7
	Fenamiphos	91.1	90.0	117	79.6	1.15	38.2
	Fipronil	92.9	86.7	98.0	94.5	6.92	3.62
	Fipronil Desulfinyl	80.1	74.9	80.3	81.5	6.75	1.45
	Fipronil Sulfide	107	87.5	96.7	93.7	20.2	2.74
	Fipronil Sulfone	90.6	91.4	109	94.7	0.878	9.43
	Fonofos	89.9	84.7	92.6	78.0	5.96	17.2
	Gamma-BHC	109	109	105	109	0.0460	3.26
	Gamma-Chlordane	79.0	78.4	73.7	80.5	0.759	8.83
	Heptachlor	74.0	74.0	71.8	79.4	0.0804	10.1
	Heptachlor Epoxide	90.2	89.3	81.7	89.6	1.08	9.20
	Hexachlorobenzene	78.5	82.3	84.5	81.3	4.77	3.89
	Hexazinone	106	101	102	101	5.33	0.678
	Malathion	117	111	118	114	5.44	3.89
	Metalaxyl	98.4	91.5	96.5	90.0	7.30	5.91
	Methoxychlor	102	102	96.3	100	0.204	4.25
	Metolachlor	93.1	88.3	93.6	86.8	5.28	7.55
	Metribuzin	140	128	151	152	8.78	0.862
	Mevinphos	107	105	114	96.1	2.49	17.1
	Mirex	64.2	62.7	66.4	67.1	2.31	0.982
	Molinate	75.1	78.9	82.0	68.7	4.94	17.7
	Norflurazon	100	92.1	102	93.7	8.44	8.71
	Oxadiazon	86.0	77.7	79.8	80.6	10.1	0.954
	Parathion Ethyl	89.3	90.1	96.4	86.9	0.913	10.3
	Parathion Methyl	104	102	106	95.1	1.43	10.9
	Pendimethalin	81.1	76.7	83.6	74.4	5.49	11.7
	Permethrin	81.1	79.1	87.8	82.7	2.57	5.96
	Phorate	98.6	95.0	96.9	89.7	3.72	7.65
	Prodiamine	56.7	51.5	75.4	55.6	9.69	30.3
	Prometon	76.6	77.4	86.6	85.1	1.05	1.78
	Prometryn	84.2	80.0	83.4	81.0	5.11	2.99
	Simazine	111	100	107	104	10.7	2.58
	Tebuconazole	59.7	60.8	52.4	65.7	1.75	18.5
	Terbufos	97.3	92.6	101	92.3	4.90	9.29
	Terbuthylazine	91.3	91.3	66.5	64.9	0.0602	1.78
	Trans-Nonachlor	80.7	79.6	80.3	73.4	1.35	9.00
	Trifluralin	91.2	91.1	93.2	92.0	0.0768	1.25
EPA 8276	Chlordane	82.4	85.4	87.9	90.6	3.58	3.08
	Toxaphene	84.7	81.1	88.0	84.2	4.35	4.46
EPA 8321B	2,4-D	127		106	108		2.26
	3-Hydroxycarbofuran	90.9		103	96.4		6.44

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Acesulfame K	89.4	51.2	54.2			5.67
	Acetaminophen	67.3					1.63
	Acetamiprid	82.9	104	107			2.65
	Afidopyropen	75.4	84.1	87.2			3.58
	Aldicarb	88.4	84.1	86.0			2.20
	Aldicarb Sulfone	87.0	120	110			9.35
	Aldicarb Sulfoxide	81.6	55.9	52.6			6.11
	AMPA	125	40.2	38.6			4.23
	Bentazon	70.7	50.7	55.8			4.06
	Benzovindiflupyr	86.6	88.4	87.5			0.983
	Carbamazepine	94.3	85.3	87.6			2.55
	Carbaryl	65.9	59.9	58.1			3.10
	Carbofuran	79.6	72.7	70.1			3.53
	Clothianidin	77.1	87.3	88.7			1.57
	Dinotefuran	77.4	98.7	96.0			2.72
	Diuron	87.2	74.9	74.6			0.325
	Endothall	84.8	64.5	64.4			0.0993
	Fenuron	93.8	91.9	90.6			1.43
	Fluridone	85.4	84.0	83.2			0.916
	Glufosinate	87.8	58.0	56.1			3.37
	Glyphosate	106	79.9	64.2			21.7
	Hydrocodone	90.8	102	107			4.91
	Ibuprofen	83.0	75.3	72.4			4.00
	Imazapyr	86.7	88.9	95.6			5.57
	Imidacloprid	95.4					1.85
	Linuron	64.6	62.8	59.9			4.71
	Mandestrobin	81.6	94.6	91.5			3.25
	MCPP	95.6	96.1	93.3			2.99
	Methiocarb	76.5	73.8	66.6			10.3
	Methomyl	80.3	76.9	72.4			5.94
	Naproxen	71.8	68.6	73.2			6.52
	Oxamyl	84.8	95.3	89.4			6.45
	Primidone	88.4	95.3	85.4			11.0
	Propoxur	77.9	74.3	68.5			8.09
	Pyraclostrobin	81.4	93.8	89.3			4.98
	Sucralose	95.9	91.5	95.5			3.97
	Thiamethoxam	90.3	145	144			1.12
	Tolfenpyrad	51.0	59.3	55.3			6.93
	Triclopyr	93.9	97.7	84.9			14.0
SM 2120 B	Color (true)	91.1				8.08	
SM 2320 B-97	Total Alkalinity	104				0.751	
SM 2540 C-97	TDS					5.83	
SM 4500 F-C-97	Fluoride	96.9	97.4	96.8			0.482
SM 5310 B-00	Organic Carbon	98.9	98.9	98.2			0.549

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2129905, 2129908
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2129926

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2129926
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2129905, 2129908
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2129905, 2129908
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2129906, 2129909
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2129906, 2129909
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2129906, 2129909
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2129906, 2129909
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2129907, 2129910
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2129923
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2129924
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2129923, 2129925
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2129919, 2129921
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2129920, 2129922
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2129920, 2129922
SM 2120 B / E31780	True Color measured at 450 nm	2129905, 2129908
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2129905, 2129908
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2129905, 2129908
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2129905, 2129908
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2129905, 2129908
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2129906, 2129909

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	10/21/2019			10/22/2019 17:00	Rosalyn Ballman	2129905, 2129908
EPA 200.7 Rev. 4.4	10/21/2019	10/22/2019 17:30	Elliott D. Healy	10/23/2019 23:14	Alexander Thompson	2129926
EPA 200.8 Rev. 5.4	10/21/2019	10/22/2019 17:30	Elliott D. Healy	11/06/2019 01:56	Robert K Palmer	2129926
EPA 300.0 Rev. 2.1	10/21/2019			10/31/2019 09:48	Julia Storbeck	2129905
	10/21/2019			10/31/2019 10:24	Julia Storbeck	2129908
EPA 350.1 Rev. 2.0	10/21/2019			10/24/2019 11:49	Ping Hua	2129906
	10/21/2019			10/24/2019 11:51	Ping Hua	2129909
EPA 351.2 Rev. 2.0	10/21/2019	10/24/2019 13:16	Sima Feizi	10/28/2019 17:16	Jhamieka S. Greenwood	2129906
	10/21/2019	10/24/2019 13:16	Sima Feizi	10/28/2019 17:18	Jhamieka S. Greenwood	2129909
EPA 353.2 Rev. 2.0	10/21/2019			10/24/2019 11:33	Beverly Y. Sanders	2129906
	10/21/2019			10/24/2019 11:34	Beverly Y. Sanders	2129909
EPA 365.1 Rev. 2.0	10/21/2019	10/23/2019 14:30	Lipi Saha	10/24/2019 11:35	Lipi Saha	2129906
	10/21/2019	10/23/2019 14:30	Lipi Saha	10/24/2019 11:38	Lipi Saha	2129909
EPA 365.1 Rev. 2.0 dissolved	10/21/2019			10/22/2019 15:16	Virginia P. Brown	2129907
	10/21/2019			10/22/2019 15:17	Virginia P. Brown	2129910
EPA 8270E	10/21/2019	10/23/2019 09:00	Julie Wi	10/25/2019 22:52	Vandana T. Nagar	2129924
	10/21/2019	10/28/2019 08:43	Rasheda Ghaffari	11/06/2019 01:07	Arthur Maknenko	2129923
EPA 8276	10/21/2019	10/28/2019 08:43	Rasheda Ghaffari	11/01/2019 23:57	Michael Poppell	2129923
	10/21/2019	10/28/2019 08:43	Rasheda Ghaffari	11/02/2019 00:52	Michael Poppell	2129925
EPA 8321B	10/21/2019	10/21/2019 12:30	Hoor Shaik	10/22/2019 01:01	Juyoung Kim	2129919
	10/21/2019	10/21/2019 12:30	Hoor Shaik	10/22/2019 01:35	Juyoung Kim	2129921
	10/21/2019	10/22/2019 09:00	Hoor Shaik	10/23/2019 17:55	Juyoung Kim	2129920
	10/21/2019	10/22/2019 09:00	Hoor Shaik	10/23/2019 18:30	Juyoung Kim	2129922
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/22/2019 18:16	Rebecca Ware	2129920
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/22/2019 18:27	Rebecca Ware	2129922
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/23/2019 15:18	Rebecca Ware	2129920
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/23/2019 15:32	Rebecca Ware	2129922
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/31/2019 09:53	Rebecca Ware	2129920
	10/21/2019	10/22/2019 11:00	Rebecca Ware	10/31/2019 10:05	Rebecca Ware	2129922
SM 2120 B	10/21/2019			10/22/2019 17:45	Madeline Funaro	2129905
	10/21/2019			10/22/2019 17:46	Madeline Funaro	2129908
SM 2320 B-97	10/21/2019			10/24/2019 08:15	Dale L. Simmons	2129905
	10/21/2019			10/24/2019 08:27	Dale L. Simmons	2129908
SM 2540 C-97	10/21/2019			10/23/2019 14:58	Yijie Li	2129905, 2129908
SM 2540 D-97	10/21/2019			10/23/2019 14:58	Yijie Li	2129905, 2129908
SM 4500 F-C-97	10/21/2019			10/24/2019 08:15	Dale L. Simmons	2129905
	10/21/2019			10/24/2019 08:27	Dale L. Simmons	2129908
SM 5310 B-00	10/21/2019			10/24/2019 02:43	Madeline Funaro	2129906
	10/21/2019			10/24/2019 02:58	Madeline Funaro	2129909