

Chemical Analysis Report

SW-DIST-2023-10-31-01

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

Event Description: **Run 12**
Request ID: **RQ-2023-09-25-14**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 27-NOV-2023 13:11

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

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals 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: EAST CANAL AT KNIGHTS GRIFFEN RD

Collection Date/Time: 10/30/2023 09:50

Field ID: G2SW0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447908	EPA 200.7 Rev. 4.4	Calcium	77.5		mg/L	P437169	
		Iron	190		ug/L	P437169	
		Magnesium	11.2		mg/L	P437169	
		Potassium	27.7		mg/L	P437169	
		Sodium	102		mg/L	P437169	
		Strontium	339		ug/L	P437169	
		Tin	3.0	U	ug/L	P437169	
		Titanium	0.96	I	ug/L	P437169	
		Vanadium	3.3	I	ug/L	P437169	
	EPA 200.8 Rev. 5.4	Zinc	17	I	ug/L	P437169	
		Aluminum	21		ug/L	P437169	
		Antimony	0.44		ug/L	P437169	
		Arsenic	0.49		ug/L	P437169	
		Barium	12.6		ug/L	P437169	
		Beryllium	0.010	U	ug/L	P437169	
		Boron	271		ug/L	P437169	
		Cadmium	0.020	U	ug/L	P437169	
		Chromium	0.91	I	ug/L	P437169	
		Cobalt	0.499		ug/L	P437169	
		Copper	0.52	I	ug/L	P437169	
		Lead	0.20	U	ug/L	P437169	
		Manganese	11.6		ug/L	P437169	
		Molybdenum	23.7		ug/L	P437169	
		Nickel	0.80	I	ug/L	P437169	
		Selenium	0.20	U	ug/L	P437169	
		Silver	0.010	U	ug/L	P437169	
		Thallium	0.10	U	ug/L	P437169	
		Hardness	239		mg/L	P437169	
	SM 2340 B-2011						

Sample Location: ENGLISH CREEK AT S COUNTY LINE

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

Field ID: G2SW0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447907	EPA 8321B	2,4-D	0.0023	I	ug/L	P437260	
		Acesulfame K	0.10	U	ug/L	P437132	
		2,4,5-T	0.0040	U	ug/L	P437260	
		AMPA	0.91		ug/L	P437132	
		Acetaminophen	0.0080	U	ug/L	P437260	
		Acetamiprid	0.0020	U	ug/L	P437260	
		Endothall	0.25	U	ug/L	P437132	
		Glufosinate	0.10	U	ug/L	P437132	
		Glyphosate	0.32	I	ug/L	P437132	
		Afidopyropen	0.0020	U	ug/L	P437260	
		Bentazon	0.0015	I	ug/L	P437260	
		Sucralose	0.34		ug/L	P437132	
		Benzovindiflupyr	0.0020	U	ug/L	P437260	
		Carbamazepine	9.7E-04	I	ug/L	P437260	
		Clothianidin	0.031		ug/L	P437260	
		Dinotefuran	0.0029	I	ug/L	P437260	
		Diuron	0.0022	I	ug/L	P437260	
		Fenuron	0.032	U	ug/L	P437260	
		Fluridone	0.0013	I	ug/L	P437260	
		Imazapyr	0.13		ug/L	P437260	
		Hydrocodone	0.0020	U	ug/L	P437260	
		Ibuprofen	0.080	U	ug/L	P437260	
		Imidacloprid	0.020		ug/L	P437260	
		Linuron	0.0040	U	ug/L	P437260	
		Mandestrobin	0.0020	U	ug/L	P437260	
		MCPP	0.0020	U	ug/L	P437260	
		Naproxen	0.0080	U	ug/L	P437260	
		Primidone	0.0040	U	ug/L	P437260	
		Pyraclostrobin	0.0020	U	ug/L	P437260	
		Silvex	0.0040	U	ug/L	P437260	
		Thiamethoxam	0.028		ug/L	P437260	
		Tolfenpyrad	0.0020	U	ug/L	P437260	
		Triclopyr	0.0040	U	ug/L	P437260	

Ref. Method and Comment:

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

Sample Location: HOWELL BRANCH IN BEALSVILLE PARK

Collection Date/Time: 10/30/2023 10:50

Field ID: G2SW0115

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447910	EPA 8270E	Oxybenzone**	11	U	ng/L	P437288	
		Acetochlor	0.22	U	ng/L	P437288	
		Octinoxate**	160	U	ng/L	P437288	
		Alachlor	0.44	U	ng/L	P437288	
		Avobenzone**	110	U	ng/L	P437288	
		Ametryn	1.2	U	ng/L	P437288	
		Atrazine	0.72	I	ng/L	P437288	
		PBDE-47**	4.4	U	ng/L	P437288	
		Atrazine Desethyl	1.4	U	ng/L	P437288	
		PBDE-99**	5.5	U	ng/L	P437288	
		Azinphos Methyl	3.3	UJ	ng/L	P437288	CCV
		Tri-o-cresyl Phosphate**	6.6	U	ng/L	P437288	
		Azoxystrobin	330	J	ng/L	P437288	
		Bromacil	69		ng/L	P437288	
		2-Ethylhexyl	13	U	ng/L	P437288	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.49	U	ng/L	P437288	
		Dechlorane Plus**	33	U	ng/L	P437288	
		Caffeine**	8.2	U	ng/L	P437288	
		Dechlorane 602**	5.5	U	ng/L	P437288	
		Carbophenothion	0.55	U	ng/L	P437288	
		Dechlorane 603**	4.4	U	ng/L	P437288	
		Carfentrazone Ethyl	0.16	U	ng/L	P437288	
		Hexabromobenzene**	6.6	U	ng/L	P437288	
		Chlorfenapyr	0.33	UJ	ng/L	P437288	CCV
		PBB-153**	6.6	U	ng/L	P437288	
		Chlorpyrifos Ethyl	0.33	UJ	ng/L	P437288	LCS
		Pentabromotoluene**	3.3	U	ng/L	P437288	
		Chlorpyrifos Methyl	0.11	UJ	ng/L	P437288	LCS
		Tris(2-chloroethyl) phosphate (TCEP)**	60	U	ng/L	P437288	
		Coumaphos	1.2	U	ng/L	P437288	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	27	U	ng/L	P437288	
		Cyanazine	5.5	U	ng/L	P437288	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	UJ	ng/L	P437288	LCS
		Cyprodinil	7.4	J	ng/L	P437288	MS
		Tetradecachloro-m-terphenyl**	8.2	U	ng/L	P437288	
		Demeton	3.8	U	ng/L	P437288	
		Diazinon	22	J	ng/L	P437288	MS
		Difenoconazole	3.6		ng/L	P437288	
		Dimethenamid	0.11	U	ng/L	P437288	
		Dimethomorph	0.33	U	ng/L	P437288	
		Disulfoton	0.66	U	ng/L	P437288	
		Dithiopyr	1.1	UJ	ng/L	P437288	MS, RPD

Field ID: G2SW0115

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447910	EPA 8270E	EPTC	0.55	U	ng/L	P437288	
		Ethion	0.33	U	ng/L	P437288	
		Ethoprop	0.14	U	ng/L	P437288	
		Etridiazole	0.11	U	ng/L	P437288	
		Fenamiphos	0.49	U	ng/L	P437288	
		Fenbuconazole	0.55	U	ng/L	P437288	
		Fipronil	0.31	I	ng/L	P437288	
		Fipronil Desulfinyl**	2.5		ng/L	P437288	
		Fipronil Sulfide	3.4	J	ng/L	P437288	MS
		Fipronil Sulfone	2.9		ng/L	P437288	
		Fluazifop-P-butyl	0.11	UJ	ng/L	P437288	RPD
		Fludioxonil	20		ng/L	P437288	
		Flumioxazin	3.3	U	ng/L	P437288	
		Flutolanil	1.3		ng/L	P437288	
		Fluxapyroxad	54	J	ng/L	P437288	RPD
		Fonofos	0.16	U	ng/L	P437288	
		Hexazinone	0.55	U	ng/L	P437288	
		Imazalil	0.71	U	ng/L	P437288	
		Iprodione	0.55	U	ng/L	P437288	
		Loratadine**	0.33	U	ng/L	P437288	
		Malathion	0.38	U	ng/L	P437288	
		Metalaxyl	2.3	I	ng/L	P437288	
		Metolachlor	0.82	U	ng/L	P437288	
		Metribuzin	0.44	U	ng/L	P437288	
		Mevinphos	1.1	U	ng/L	P437288	
		Molinate	0.27	U	ng/L	P437288	
		Myclobutanil	19		ng/L	P437288	
		Naled	2.7	U	ng/L	P437288	
		Napropamide	0.77	UJ	ng/L	P437288	MS
		Norflurazon	1.4	I	ng/L	P437288	
		Oxadiazon	0.38	U	ng/L	P437288	
		Oxyfluorfen	1.7	J	ng/L	P437288	MS
		Parathion Ethyl	0.16	UJ	ng/L	P437288	MS
		Parathion Methyl	0.22	UJ	ng/L	P437288	LCS, MS
		Pendimethalin	1.9	UJ	ng/L	P437288	LCS, MS
		Phenytol**	5.8	U	ng/L	P437288	
		Phorate	0.27	U	ng/L	P437288	
		Prodiamine	1.3		ng/L	P437288	
		Prometon	3.3	U	ng/L	P437288	
		Prometryn	0.38	U	ng/L	P437288	
		Pronamide	0.11	U	ng/L	P437288	
		Propanil	0.11	U	ng/L	P437288	
		Propargite	0.88	U	ng/L	P437288	
		Propiconazole	0.66	UJ	ng/L	P437288	MS
		Pyraflufen Ethyl	0.33	U	ng/L	P437288	

Field ID: G2SW0115

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447910	EPA 8270E	Pyridaben	1.5	U	ng/L	P437288	
		Pyriproxyfen	0.27	UJ	ng/L	P437288	CCV
		Simazine	0.27	U	ng/L	P437288	
		Stirophos	0.44	U	ng/L	P437288	
		Sulfentrazone	57	J	ng/L	P437288	RPD
		Tebuconazole	1.5	U	ng/L	P437288	
		Terbufos	0.22	U	ng/L	P437288	
		Terbuthylazine	0.22	U	ng/L	P437288	
		Thiobencarb	0.55	UJ	ng/L	P437288	RPD
		Triadimefon	0.16	U	ng/L	P437288	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Estimation for azoxystrobin due to internal standard recovery exceeding control limits. MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: SEFFNER CANAL S OF MLK

Collection Date/Time: 10/30/2023 11:35

Field ID: G2SW0087

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447909	EPA 200.7 Rev. 4.4	Calcium	52.5		mg/L	P437169	
		Iron	160		ug/L	P437169	
		Magnesium	11.4		mg/L	P437169	
		Potassium	9.5		mg/L	P437169	
		Sodium	12.0		mg/L	P437169	
		Strontium	86.7		ug/L	P437169	
		Tin	3.0	U	ug/L	P437169	
		Titanium	6.3		ug/L	P437169	
		Vanadium	6.5	I	ug/L	P437169	
		Zinc	5.0	U	ug/L	P437169	
	EPA 200.8 Rev. 5.4	Aluminum	225		ug/L	P437169	
		Antimony	0.22		ug/L	P437169	
		Arsenic	0.97		ug/L	P437169	
		Barium	5.69		ug/L	P437169	
		Beryllium	0.010	U	ug/L	P437169	
		Boron	69.1		ug/L	P437169	
		Cadmium	0.208		ug/L	P437169	
		Chromium	0.85	I	ug/L	P437169	
		Cobalt	0.140		ug/L	P437169	
		Copper	2.67		ug/L	P437169	
		Lead	0.37	I	ug/L	P437169	
		Manganese	19.0		ug/L	P437169	
		Molybdenum	7.74		ug/L	P437169	
		Nickel	0.85	I	ug/L	P437169	
		Selenium	0.25	I	ug/L	P437169	
		Silver	0.010	U	ug/L	P437169	
		Thallium	0.10	U	ug/L	P437169	
	SM 2340 B-2011	Hardness	178		mg/L	P437169	

Quality Assurance Report

Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437169

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437169

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

Reference Method: EPA 8270E

Batch ID: P437288

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437288

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437288

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

Reference Method: EPA 8321B

Batch ID: P437132

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

Reference Method: EPA 8321B

Batch ID: P437260

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P437260

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	111		P	85 - 115
Iron	110		P	85 - 115
Magnesium	111		P	85 - 115
Potassium	103		P	85 - 115
Sodium	108		P	85 - 115
Strontium	101		P	85 - 115
Tin	98.6		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	98.1		P	85 - 115
Zinc	96.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.5		P	85 - 115
Antimony	98.1		P	85 - 115
Arsenic	96.6		P	85 - 115
Barium	101		P	85 - 115
Beryllium	93.5		P	85 - 115
Boron	104		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	101		P	85 - 115
Cobalt	94.7		P	85 - 115
Copper	92.4		P	85 - 115
Lead	93.0		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	95.3		P	85 - 115
Nickel	93.4		P	85 - 115
Selenium	96.7		P	85 - 115
Silver	104		P	85 - 115
Thallium	98.0		P	85 - 115

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4		P	37 - 154
Acetochlor	89.4		P	64 - 124
Alachlor	86.7		P	61 - 118
Ametryn	116		P	47 - 158
Atrazine	104		P	68 - 121
Atrazine Desethyl	101		P	30 - 119
Avobenzone	124		P	48 - 193
Azinphos Methyl	49.4		P	30 - 194
Azoxystrobin	65.2		P	58 - 154
Bromacil	105		P	47 - 126
Butylate	60.3		P	31 - 83.0
Caffeine	88.3		P	10 - 180
Carbophenothion	93.8		P	59 - 133
Carfentrazone Ethyl	98.5		P	59 - 147
Chlorfenapyr	78.3		P	52 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	126		F	59 - 119
Chlorpyrifos Methyl	123		F	65 - 123
Coumaphos	66.8		P	11 - 223
Cyanazine	145		P	63 - 250
Cyprodinil	125		P	52 - 143
Dechlorane 602	110		P	23 - 142
Dechlorane 603	119		P	51 - 171
Dechlorane Plus	153		P	46 - 161
Demeton	85.3		P	42 - 119
Diazinon	112		P	67 - 132
Difenoconazole	53.4		P	12 - 204
Dimethenamid	93.2		P	53 - 113
Dimethomorph	101		P	13 - 238
Disulfoton	99.7		P	56 - 126
Dithiopyr	92.4		P	58 - 127
EPTC	52.7		P	31 - 78.0
Ethion	79.8		P	24 - 127
Ethoprop	98.2		P	60 - 118
Etridiazole	63.9		P	32 - 91.0
Fenamiphos	92.1		P	54 - 129
Fenbuconazole	37.1		P	31 - 162
Fipronil	89.7		P	56 - 131
Fipronil Desulfinyl	101		P	58 - 132
Fipronil Sulfide	101		P	51 - 123
Fipronil Sulfone	85.0		P	50 - 125
Fluazifop-P-butyl	101		P	52 - 132
Fludioxonil	79.0		P	52 - 129
Flumioxazin	59.1		P	34 - 250
Flutolanil	99.7		P	45 - 128
Fluxapyroxad	78.3		P	31 - 150
Fonofos	98.2		P	60 - 116
Hexabromobenzene	104		P	52 - 165
Hexazinone	108		P	59 - 120
Imazalil	103		P	39 - 134
Iprodione	101		P	39 - 243
Loratadine	117		P	10 - 240
Malathion	107		P	53 - 145
Metalaxyl	87.3		P	59 - 120
Metolachlor	106		P	64 - 122
Metribuzin	104		P	33 - 128
Mevinphos	81.5		P	48 - 119
Molinate	60.9		P	42 - 89.0
Myclobutanil	91.0		P	54 - 129
Naled	40.2		P	10 - 138
Napropamide	89.0		P	40 - 122
Norflurazon	70.5		P	49 - 132
Octinoxate	124		P	29 - 176
Oxadiazon	85.4		P	50 - 115
Oxybenzone	121		P	45 - 145
Oxyfluorfen	129		P	62 - 149
Parathion Ethyl	105		P	68 - 119
Parathion Methyl	180		F	68 - 147

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBB-153	102		P	42 - 179
PBDE-47	115		P	44 - 141
PBDE-99	107		P	36 - 141
Pendimethalin	159		F	59 - 158
Pentabromotoluene	107		P	58 - 148
Phenytoin	71.2		P	10 - 151
Phorate	96.7		P	44 - 124
Prodiamine	59.0		P	10 - 136
Prometon	111		P	45 - 131
Prometryn	123		P	52 - 140
Pronamide	118		P	70 - 129
Propanil	105		P	54 - 144
Propargite	86.8		P	10 - 191
Propiconazole	58.0		P	49 - 128
Pyraflufen Ethyl	86.5		P	46 - 141
Pyridaben	48.4		P	29 - 198
Pyriproxyfen	54.9		P	33 - 221
Simazine	91.4		P	62 - 119
Stirophos	81.3		P	13 - 144
Sulfentrazone	79.7		P	12 - 152
Tebuconazole	68.3		P	10 - 135
Terbufos	104		P	67 - 136
Terbuthylazine	92.0		P	66 - 113
Tetradecachloro-m-terphenyl	180		P	30 - 235
Thiobencarb	100		P	51 - 125
Tri-o-cresyl Phosphate	130		P	50 - 150
Triadimefon	105		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	159		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142		F	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	159		P	59 - 166

Reference Method: EPA 8321B

Batch ID: P437132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	84.3		P	40 - 150
Endothall	98.2		P	40 - 150
Glufosinate	99.9		P	40 - 150
Glyphosate	93.3		P	40 - 150
Sucralose	96.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	69.7		P	40 - 150
2,4,5-T	77.3		P	40 - 150
Acetaminophen	86.5		P	30 - 150
Acetamiprid	77.3		P	40 - 150
Afidopyropen	59.1		P	30 - 150
Bentazon	74.8		P	30 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P437260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Benzovindiflupyr	80.4		P	40 - 150
Carbamazepine	75.1		P	40 - 150
Clothianidin	87.6		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	85.6		P	40 - 150
Fenuron	89.2		P	40 - 150
Fluridone	78.4		P	40 - 150
Hydrocodone	89.3		P	40 - 150
Ibuprofen	65.4		P	40 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	81.6		P	40 - 150
Linuron	81.3		P	40 - 150
Mandestrobin	79.3		P	40 - 150
MCPP	73.4		P	40 - 150
Naproxen	61.0		P	40 - 150
Primidone	84.3		P	40 - 150
Pyraclostrobin	75.6		P	40 - 150
Silvex	68.8		P	40 - 150
Thiamethoxam	86.8		P	40 - 150
Tolfenpyrad	51.7		P	30 - 150
Triclopyr	82.8		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447288	Calcium	112	112	P/P	80 - 120
2447288	Iron	109	110	P/P	80 - 120
2447288	Magnesium	112	112	P/P	80 - 120
2447288	Potassium	109	109	P/P	80 - 120
2447288	Sodium	109	108	P/P	80 - 120
2447288	Strontium	100	101	P/P	80 - 120
2447288	Tin	99.9	100	P/P	80 - 120
2447288	Titanium	103	103	P/P	80 - 120
2447288	Vanadium	98.6	99.2	P/P	80 - 120
2447288	Zinc	96.2	96.9	P/P	80 - 120
2447826	Calcium	112		P	80 - 120
2447826	Iron	108		P	80 - 120
2447826	Magnesium	111		P	80 - 120
2447826	Potassium	103		P	80 - 120
2447826	Sodium	104		P	80 - 120
2447826	Strontium	99.5		P	80 - 120
2447826	Tin	98.1		P	80 - 120
2447826	Titanium	101		P	80 - 120
2447826	Vanadium	98.8		P	80 - 120
2447826	Zinc	96.5		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447288	Aluminum	98.5	97.7	P/P	80 - 120
2447288	Antimony	99.7	98.9	P/P	80 - 120
2447288	Arsenic	95.2	96.0	P/P	80 - 120
2447288	Barium	102	102	P/P	80 - 120
2447288	Beryllium	95.3	95.1	P/P	80 - 120
2447288	Boron	103	103	P/P	80 - 120
2447288	Cadmium	101	99.7	P/P	80 - 120
2447288	Chromium	100	100	P/P	80 - 120
2447288	Cobalt	93.6	94.1	P/P	80 - 120
2447288	Copper	92.8	93.7	P/P	80 - 120
2447288	Lead	94.9	93.8	P/P	80 - 120
2447288	Manganese	100	100	P/P	80 - 120
2447288	Molybdenum	96.8	97.5	P/P	80 - 120
2447288	Nickel	92.1	92.0	P/P	80 - 120
2447288	Selenium	94.7	96.0	P/P	80 - 120
2447288	Silver	105	104	P/P	80 - 120
2447288	Thallium	101	101	P/P	80 - 120
2447826	Aluminum	97.1		P	80 - 120
2447826	Antimony	99.3		P	80 - 120
2447826	Arsenic	95.2		P	80 - 120
2447826	Barium	100		P	80 - 120
2447826	Beryllium	93.7		P	80 - 120
2447826	Boron	102		P	80 - 120
2447826	Cadmium	99.8		P	80 - 120
2447826	Chromium	100		P	80 - 120
2447826	Cobalt	93.3		P	80 - 120
2447826	Copper	93.3		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447826	Lead	93.8		P	80 - 120
2447826	Manganese	101		P	80 - 120
2447826	Molybdenum	97.6		P	80 - 120
2447826	Nickel	92.1		P	80 - 120
2447826	Selenium	95.7		P	80 - 120
2447826	Silver	104		P	80 - 120
2447826	Thallium	99.4		P	80 - 120

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	93.1	P/P	29 - 155
2447910	Acetochlor	106	86.8	P/P	60 - 124
2447910	Alachlor	105	84.0	P/P	54 - 122
2447910	Ametryn	133	119	P/P	51 - 208
2447910	Atrazine	112	100	P/P	57 - 131
2447910	Atrazine Desethyl	118	116	P/P	13 - 124
2447910	Avobenzene	136	149	P/P	35 - 187
2447910	Azinphos Methyl	159	186	P/P	43 - 276
2447910	Butylate	50.8	60.9	P/P	23 - 82.0
2447910	Caffeine	145	123	P/P	10 - 277
2447910	Carbophenothion	94.7	95.1	P/P	47 - 135
2447910	Carfentrazone Ethyl	117	104	P/P	46 - 147
2447910	Chlorfenapyr	72.4	80.1	P/P	43 - 114
2447910	Chlorpyrifos Ethyl	99.0	117	P/P	47 - 124
2447910	Chlorpyrifos Methyl	121	128	P/P	60 - 135
2447910	Coumaphos	167	118	P/P	10 - 222
2447910	Cyanazine	163	156	P/P	10 - 257
2447910	Cyprodinil	120	176	P/F	42 - 148
2447910	Dechlorane 602	94.9	102	P/P	14 - 133
2447910	Dechlorane 603	158	157	P/P	18 - 191
2447910	Dechlorane Plus	126	123	P/P	23 - 154
2447910	Demeton	80.4	95.9	P/P	41 - 137
2447910	Diazinon	-2.33	61.9	F/F	64 - 139
2447910	Difenoconazole	131	122	P/P	46 - 254
2447910	Dimethenamid	95.4	96.9	P/P	47 - 117
2447910	Dimethomorph	203	225	P/P	14 - 255
2447910	Disulfoton	129	99.6	P/P	52 - 130
2447910	Dithiopyr	122	87.8	F/P	40 - 121
2447910	EPTC	40.8	52.8	P/P	19 - 78.0
2447910	Ethion	88.9	66.0	P/P	12 - 124
2447910	Ethoprop	96.0	92.6	P/P	68 - 144
2447910	Etridiazole	64.5	60.3	P/P	26 - 96.0
2447910	Fenamiphos	94.2	94.9	P/P	41 - 129
2447910	Fenbuconazole	96.9	86.0	P/P	26 - 169
2447910	Fipronil	104	83.9	P/P	46 - 145
2447910	Fipronil Desulfinyl	119	119	P/P	47 - 136
2447910	Fipronil Sulfide	133	75.6	F/P	41 - 127
2447910	Fipronil Sulfone	61.7	89.6	P/P	35 - 133
2447910	Fluazifop-P-butyl	87.5	129	P/P	46 - 131
2447910	Flumioxazin	142	149	P/P	10 - 289

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	Flutolanil	78.4	112	P/P	34 - 130
2447910	Fonofos	79.3	99.7	P/P	42 - 131
2447910	Hexabromobenzene	128	106	P/P	47 - 178
2447910	Hexazinone	102	103	P/P	64 - 125
2447910	Imazalil	109	98.8	P/P	37 - 252
2447910	Iprodione	112	98.6	P/P	34 - 265
2447910	Loratadine	162	195	P/P	20 - 231
2447910	Malathion	99.6	125	P/P	34 - 164
2447910	Metalaxyl	108	90.0	P/P	49 - 125
2447910	Metolachlor	101	113	P/P	54 - 125
2447910	Metribuzin	97.7	92.5	P/P	51 - 139
2447910	Mevinphos	85.3	88.0	P/P	46 - 130
2447910	Molinate	53.9	68.5	P/P	39 - 93.0
2447910	Naled	31.7	29.6	P/P	10 - 150
2447910	Napropamide	111	80.5	F/P	10 - 109
2447910	Norflurazon	42.2	70.1	P/P	36 - 134
2447910	Octinoxate	135	135	P/P	18 - 170
2447910	Oxadiazon	106	85.7	P/P	43 - 112
2447910	Oxybenzone	134	142	P/P	33 - 154
2447910	Oxyfluorfen	163	122	F/P	62 - 154
2447910	Parathion Ethyl	120	112	F/P	65 - 120
2447910	Parathion Methyl	204	163	F/P	77 - 185
2447910	PBB-153	147	117	P/P	23 - 193
2447910	PBDE-47	134	127	P/P	31 - 139
2447910	PBDE-99	106	97.0	P/P	24 - 138
2447910	Pendimethalin	208	168	F/F	50 - 146
2447910	Pentabromotoluene	119	112	P/P	54 - 152
2447910	Phenytoin	80.1	51.2	P/P	10 - 157
2447910	Phorate	99.9	115	P/P	54 - 161
2447910	Prodiamine	46.3	72.4	P/P	29 - 160
2447910	Prometon	128	102	P/P	38 - 145
2447910	Prometryn	139	150	P/P	32 - 151
2447910	Pronamide	123	103	P/P	61 - 140
2447910	Propanil	109	93.8	P/P	50 - 147
2447910	Propargite	90.3	70.6	P/P	10 - 190
2447910	Propiconazole	237	290	F/F	30 - 146
2447910	Pyraflufen Ethyl	68.0	76.4	P/P	30 - 147
2447910	Pyridaben	111	119	P/P	15 - 195
2447910	Pyriproxyfen	122	199	P/P	31 - 218
2447910	Simazine	94.9	95.7	P/P	45 - 139
2447910	Stirophos	72.0	63.8	P/P	10 - 134
2447910	Tebuconazole	68.6	63.5	P/P	10 - 133
2447910	Terbufos	89.8	101	P/P	65 - 151
2447910	Terbutylazine	91.4	85.2	P/P	62 - 117
2447910	Tetradecachloro-m-terphenyl	148	121	P/P	10 - 260
2447910	Thiobencarb	110	83.8	P/P	48 - 122
2447910	Tri-o-cresyl Phosphate	137	131	P/P	32 - 151
2447910	Triadimefon	103	89.7	P/P	46 - 124
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	118	118	P/P	51 - 154
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	108	P/P	59 - 147
2447910	Tris(2-chloroethyl) phosphate (TCEP)	113	118	P/P	65 - 156

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P437132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	Acesulfame K	118	123	P/P	40 - 150
2447822	AMPA	79.5	90.2	P/P	40 - 150
2447822	Endothall	102	103	P/P	40 - 150
2447822	Glufosinate	92.1	87.3	P/P	40 - 150
2447822	Glyphosate	67.0	64.8	P/P	40 - 150
2447822	Sucralose	90.6	93.3	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	2,4-D	80.4	79.2	P/P	40 - 150
2447822	2,4,5-T	76.0	74.6	P/P	40 - 150
2447822	Acetaminophen	85.2	82.1	P/P	30 - 150
2447822	Acetamiprid	54.7	58.5	P/P	40 - 150
2447822	Afidopyropen	63.0	59.6	P/P	30 - 150
2447822	Bentazon	46.5	43.8	P/P	30 - 150
2447822	Benzovindiflupyr	82.9	78.2	P/P	40 - 150
2447822	Carbamazepine	56.9	54.8	P/P	40 - 150
2447822	Clothianidin	67.5	65.9	P/P	40 - 150
2447822	Dinotefuran	60.2	58.5	P/P	40 - 150
2447822	Fluridone	65.4	57.5	P/P	40 - 150
2447822	Hydrocodone	54.4	53.2	P/P	40 - 150
2447822	Ibuprofen	48.7	57.7	P/P	40 - 150
2447822	Imazapyr	87.4	82.6	P/P	40 - 150
2447822	Imidacloprid	89.8	91.7	P/P	40 - 150
2447822	Linuron	66.4	60.4	P/P	40 - 150
2447822	Mandestrobin	73.6	73.3	P/P	40 - 150
2447822	MCP	84.4	80.4	P/P	40 - 150
2447822	Naproxen	65.2	77.9	P/P	40 - 150
2447822	Primidone	72.9	71.5	P/P	40 - 150
2447822	Pyraclostrobin	77.6	79.2	P/P	40 - 150
2447822	Silvex	74.6	69.9	P/P	40 - 150
2447822	Thiamethoxam	61.3	61.9	P/P	40 - 150
2447822	Tolfenpyrad	57.4	53.2	P/P	30 - 150
2447822	Triclopyr	77.2	80.4	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447288	Calcium	0.479	Spike	P	0 - 20
2447288	Iron	0.972	Spike	P	0 - 20
2447288	Magnesium	0.423	Spike	P	0 - 20
2447288	Potassium	0.203	Spike	P	0 - 20
2447288	Sodium	0.380	Spike	P	0 - 20
2447288	Strontium	0.782	Spike	P	0 - 20
2447288	Tin	0.322	Spike	P	0 - 20
2447288	Titanium	0.245	Spike	P	0 - 20
2447288	Vanadium	0.599	Spike	P	0 - 20
2447288	Zinc	0.749	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447288	Aluminum	0.717	Spike	P	0 - 20
2447288	Antimony	0.779	Spike	P	0 - 20
2447288	Arsenic	0.858	Spike	P	0 - 20
2447288	Barium	0.702	Spike	P	0 - 20
2447288	Beryllium	0.212	Spike	P	0 - 20
2447288	Boron	0.300	Spike	P	0 - 20
2447288	Cadmium	0.982	Spike	P	0 - 20
2447288	Chromium	0.374	Spike	P	0 - 20
2447288	Cobalt	0.439	Spike	P	0 - 20
2447288	Copper	0.997	Spike	P	0 - 20
2447288	Lead	1.18	Spike	P	0 - 20
2447288	Manganese	0.348	Spike	P	0 - 20
2447288	Molybdenum	0.798	Spike	P	0 - 20
2447288	Nickel	0.155	Spike	P	0 - 20
2447288	Selenium	1.37	Spike	P	0 - 20
2447288	Silver	0.373	Spike	P	0 - 20
2447288	Thallium	0.103	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	10.8	Spike	P	0 - 35
2447910	Acetochlor	19.8	Spike	P	0 - 28
2447910	Alachlor	22.2	Spike	P	0 - 30
2447910	Ametryn	10.9	Spike	P	0 - 32
2447910	Atrazine	9.98	Spike	P	0 - 33
2447910	Atrazine Desethyl	1.67	Spike	P	0 - 36
2447910	Avobenzone	9.49	Spike	P	0 - 35
2447910	Azinphos Methyl	15.5	Spike	P	0 - 62
2447910	Azoxystrobin	6.56	Spike	P	0 - 39
2447910	Bromacil	16.9	Spike	P	0 - 33
2447910	Butylate	18.0	Spike	P	0 - 51
2447910	Caffeine	16.0	Spike	P	0 - 100

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	Carbophenothion	0.453	Spike	P	0 - 34
2447910	Carfentrazone Ethyl	11.2	Spike	P	0 - 33
2447910	Chlorfenapyr	10.1	Spike	P	0 - 28
2447910	Chlorpyrifos Ethyl	17.0	Spike	P	0 - 31
2447910	Chlorpyrifos Methyl	5.29	Spike	P	0 - 27
2447910	Coumaphos	33.9	Spike	P	0 - 62
2447910	Cyanazine	4.73	Spike	P	0 - 48
2447910	Cyprodinil	15.7	Spike	P	0 - 29
2447910	Dechlorane 602	7.33	Spike	P	0 - 60
2447910	Dechlorane 603	0.395	Spike	P	0 - 40
2447910	Dechlorane Plus	2.14	Spike	P	0 - 38
2447910	Demeton	17.6	Spike	P	0 - 33
2447910	Diazinon	9.95	Spike	P	0 - 32
2447910	Difenoconazole	5.96	Spike	P	0 - 71
2447910	Dimethenamid	1.51	Spike	P	0 - 60
2447910	Dimethomorph	10.3	Spike	P	0 - 61
2447910	Disulfoton	25.7	Spike	P	0 - 30
2447910	Dithiopyr	32.9	Spike	F	0 - 28
2447910	EPTC	25.6	Spike	P	0 - 56
2447910	Ethion	29.6	Spike	P	0 - 79
2447910	Ethoprop	3.58	Spike	P	0 - 31
2447910	Etridiazole	6.60	Spike	P	0 - 43
2447910	Fenamiphos	0.811	Spike	P	0 - 43
2447910	Fenbuconazole	11.9	Spike	P	0 - 79
2447910	Fipronil	20.8	Spike	P	0 - 46
2447910	Fipronil Desulfanyl	0.368	Spike	P	0 - 36
2447910	Fipronil Sulfide	28.5	Spike	P	0 - 34
2447910	Fipronil Sulfone	17.7	Spike	P	0 - 47
2447910	Fluazifop-P-butyl	38.2	Spike	F	0 - 38
2447910	Fludioxonil	5.02	Spike	P	0 - 29
2447910	Flumioxazin	5.15	Spike	P	0 - 63
2447910	Flutolanil	25.4	Spike	P	0 - 36
2447910	Fluxapyroxad	102	Spike	F	0 - 65
2447910	Fonofos	22.7	Spike	P	0 - 35
2447910	Hexabromobenzene	18.7	Spike	P	0 - 41
2447910	Hexazinone	0.794	Spike	P	0 - 31
2447910	Imazalil	9.38	Spike	P	0 - 52
2447910	Iprodione	12.8	Spike	P	0 - 49
2447910	Loratadine	18.8	Spike	P	0 - 59
2447910	Malathion	22.3	Spike	P	0 - 77
2447910	Metalaxyl	13.5	Spike	P	0 - 76
2447910	Metolachlor	11.5	Spike	P	0 - 29
2447910	Metribuzin	5.40	Spike	P	0 - 51
2447910	Mevinphos	3.16	Spike	P	0 - 31
2447910	Molinate	23.9	Spike	P	0 - 39
2447910	Myclobutanil	22.9	Spike	P	0 - 34
2447910	Naled	6.81	Spike	P	0 - 37
2447910	Napropamide	31.9	Spike	P	0 - 100
2447910	Norflurazon	42.2	Spike	P	0 - 54
2447910	Octinoxate	0.325	Spike	P	0 - 35
2447910	Oxadiazon	21.4	Spike	P	0 - 34

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	Oxybenzone	5.75	Spike	P	0 - 35
2447910	Oxyfluorfen	21.1	Spike	P	0 - 28
2447910	Parathion Ethyl	6.83	Spike	P	0 - 31
2447910	Parathion Methyl	22.3	Spike	P	0 - 29
2447910	PBB-153	22.6	Spike	P	0 - 49
2447910	PBDE-47	5.37	Spike	P	0 - 36
2447910	PBDE-99	8.79	Spike	P	0 - 46
2447910	Pendimethalin	21.3	Spike	P	0 - 31
2447910	Pentabromotoluene	5.87	Spike	P	0 - 16
2447910	Phenytoin	44.1	Spike	P	0 - 100
2447910	Phorate	13.8	Spike	P	0 - 36
2447910	Prodiamine	26.8	Spike	P	0 - 68
2447910	Prometon	22.6	Spike	P	0 - 35
2447910	Prometryn	7.84	Spike	P	0 - 33
2447910	Pronamide	17.8	Spike	P	0 - 24
2447910	Propanil	15.0	Spike	P	0 - 28
2447910	Propargite	24.5	Spike	P	0 - 53
2447910	Propiconazole	20.3	Spike	P	0 - 44
2447910	Pyraflufen Ethyl	11.6	Spike	P	0 - 61
2447910	Pyridaben	7.29	Spike	P	0 - 43
2447910	Pyriproxyfen	47.5	Spike	P	0 - 82
2447910	Simazine	0.860	Spike	P	0 - 29
2447910	Stirophos	12.1	Spike	P	0 - 100
2447910	Sulfentrazone	105	Spike	F	0 - 64
2447910	Tebuconazole	7.66	Spike	P	0 - 76
2447910	Terbufos	12.0	Spike	P	0 - 29
2447910	Terbuthylazine	7.08	Spike	P	0 - 28
2447910	Tetradecachloro-m-terphenyl	20.5	Spike	P	0 - 42
2447910	Thiobencarb	26.9	Spike	F	0 - 26
2447910	Tri-o-cresyl Phosphate	4.20	Spike	P	0 - 24
2447910	Triadimefon	14.0	Spike	P	0 - 40
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.305	Spike	P	0 - 30
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.521	Spike	P	0 - 22
2447910	Tris(2-chloroethyl) phosphate (TCEP)	4.60	Spike	P	0 - 15

Reference Method: EPA 8321B

Batch ID: P437132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	Acesulfame K	4.01	Spike	P	0 - 30
2447822	AMPA	12.6	Spike	P	0 - 30
2447822	Endothall	1.38	Spike	P	0 - 30
2447822	Glufosinate	5.37	Spike	P	0 - 30
2447822	Glyphosate	3.37	Spike	P	0 - 30
2447822	Sucralose	2.83	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P437260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	2,4-D	1.47	Spike	P	0 - 30
2447822	2,4,5-T	1.94	Spike	P	0 - 30
2447822	Acetaminophen	3.64	Spike	P	0 - 30
2447822	Acetamiprid	6.62	Spike	P	0 - 30
2447822	Afidopyropen	5.67	Spike	P	0 - 30
2447822	Bentazon	5.99	Spike	P	0 - 30
2447822	Benzovindiflupyr	5.87	Spike	P	0 - 30
2447822	Carbamazepine	3.64	Spike	P	0 - 30
2447822	Clothianidin	2.46	Spike	P	0 - 30
2447822	Dinotefuran	2.81	Spike	P	0 - 30
2447822	Diuron	1.55	Spike	P	0 - 30
2447822	Fenuron	2.49	Spike	P	0 - 30
2447822	Fluridone	7.99	Spike	P	0 - 30
2447822	Hydrocodone	2.06	Spike	P	0 - 30
2447822	Ibuprofen	16.9	Spike	P	0 - 30
2447822	Imazapyr	5.74	Spike	P	0 - 30
2447822	Imidacloprid	2.05	Spike	P	0 - 30
2447822	Linuron	9.57	Spike	P	0 - 30
2447822	Mandestrobin	0.371	Spike	P	0 - 30
2447822	MCPP	4.90	Spike	P	0 - 30
2447822	Naproxen	17.8	Spike	P	0 - 30
2447822	Primidone	1.96	Spike	P	0 - 30
2447822	Pyraclostrobin	2.01	Spike	P	0 - 30
2447822	Silvex	6.55	Spike	P	0 - 30
2447822	Thiamethoxam	0.921	Spike	P	0 - 30
2447822	Tolfenpyrad	7.48	Spike	P	0 - 30
2447822	Triclopyr	4.06	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2447907
Field Sample ID: G2SW0169

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	109	P	30 - 160
EPA 8321B	Carbamazepine-d10	77.2	P	30 - 160
EPA 8321B	Diuron-d6	68.0	P	30 - 160
EPA 8321B	Endothall-d6	126	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.6	P	30 - 160
EPA 8321B	Primidone-d5	82.2	P	30 - 160
EPA 8321B	Sucralose-d6	94.7	P	30 - 160

Lab Sample ID: 2447910
Field Sample ID: G2SW0115

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	84.7	P	20 - 200
EPA 8270E	Simazine-d10	89.6	P	58 - 137
EPA 8270E	Terbufos-d10	76.6	P	50 - 134
EPA 8270E	Terphenyl-d14	90.8	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122498

Included Lab Sample IDs: 2447908, 2447909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	99.2	P/P	90 - 110
Antimony	98.4	99.7	P/P	90 - 110
Arsenic	96.4	96.9	P/P	90 - 110
Barium	101	101	P/P	90 - 110
Beryllium	97.9	98.2	P/P	90 - 110
Boron	102	99.3	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	103	103	P/P	90 - 110
Cobalt	95.2	94.5	P/P	90 - 110
Copper	93.7	92.4	P/P	90 - 110
Lead	95.2	94.2	P/P	90 - 110
Manganese	103	103	P/P	90 - 110
Molybdenum	98.1	98.4	P/P	90 - 110
Nickel	94.5	92.9	P/P	90 - 110
Selenium	99.1	99.8	P/P	90 - 110
Silver	99.7	100	P/P	90 - 110
Thallium	99.2	98.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122535

Included Lab Sample IDs: 2447907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	107	128	P/P	60 - 160
Sucralose	101	86.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A122542

Included Lab Sample IDs: 2447907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.3	99.3	P/P	60 - 160
Endothall	83.5	109	P/P	60 - 160
Glufosinate	101	98.6	P/P	60 - 160
Glyphosate	97.6	95.5	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122583

Included Lab Sample IDs: 2447908, 2447909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	103	P/P	90 - 110
Calcium	102	102	P/P	90 - 110
Iron	101	102	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Magnesium	101	102	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	101	101	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	99.7	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122583

Included Lab Sample IDs: 2447908, 2447909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	99.7	99.7	P/P	90 - 110
Tin	100	100	P/P	90 - 110
Tin	101	100	P/P	90 - 110
Titanium	99.9	100	P/P	90 - 110
Titanium	100	99.8	P/P	90 - 110
Vanadium	99.8	100	P/P	90 - 110
Vanadium	100	99.7	P/P	90 - 110
Zinc	101	101	P/P	90 - 110
Zinc	101	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122596

Included Lab Sample IDs: 2447907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	80.5	85.3	P/P	50 - 150
2,4,5-T	86.0	95.6	P/P	50 - 150
Acetaminophen	110	111	P/P	60 - 160
Acetamiprid	104	105	P/P	50 - 150
Afidopyropen	93.7	102	P/P	50 - 150
Bentazon	95.2	96.5	P/P	50 - 160
Benzovindiflupyr	101	102	P/P	50 - 150
Carbamazepine	102	101	P/P	60 - 150
Clothianidin	103	108	P/P	60 - 150
Dinotefuran	113	112	P/P	50 - 150
Diuron	113	115	P/P	60 - 160
Fenuron	104	106	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	112	113	P/P	60 - 150
Ibuprofen	66.3	88.1	P/P	50 - 160
Imazapyr	93.3	89.4	P/P	50 - 150
Imidacloprid	99.6	96.7	P/P	60 - 150
Linuron	92.9	98.4	P/P	60 - 150
Mandestrobin	98.9	98.3	P/P	50 - 150
MCPP	96.8	85.6	P/P	50 - 150
Naproxen	73.4	109	P/P	50 - 160
Primidone	104	101	P/P	60 - 150
Pyraclostrobin	104	103	P/P	60 - 150
Silvex	88.6	98.0	P/P	50 - 150
Thiamethoxam	109	113	P/P	50 - 150
Tolfenpyrad	96.1	100	P/P	60 - 150
Triclopyr	83.3	84.1	P/P	50 - 150

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122677

Included Lab Sample IDs: 2447908

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	98.9	98.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122789
Included Lab Sample IDs: 2447910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.5		P	80 - 120
Alachlor	91.8		P	80 - 120
Ametryn	96.9		P	80 - 120
Atrazine	99.4		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	145*		F	80 - 120
Bromacil	101		P	80 - 120
Butylate	96.8		P	80 - 120
Caffeine	95.8		P	80 - 120
Carbophenothion	99.2		P	80 - 120
Carfentrazone Ethyl	104		P	80 - 120
Chlorfenapyr	68.2*		F	80 - 120
Chlorpyrifos Ethyl	89.7		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	114		P	80 - 120
Cyanazine	109		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	94.9		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	111		P	80 - 120
Dimethenamid	96.1		P	80 - 120
Dimethomorph	114		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	95.4		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	86.3		P	80 - 120
Ethoprop	96.1		P	80 - 120
Etridiazole	99.2		P	80 - 120
Fenamiphos	98.1		P	80 - 120
Fenbuconazole	95.0		P	80 - 120
Fipronil	81.4		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	98.9		P	80 - 120
Fludioxonil	98.7		P	80 - 120
Flumioxazin	114		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	95.9		P	80 - 120
Fonofos	94.3		P	80 - 120
Hexazinone	98.0		P	80 - 120
Imazalil	110		P	80 - 120
Iprodione	113		P	80 - 120
Loratadine	116		P	80 - 120
Malathion	87.7		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	95.2		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	92.0		P	80 - 120
Myclobutanil	92.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122789
Included Lab Sample IDs: 2447910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naled	103		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	97.1		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	119		P	80 - 120
Parathion Ethyl	98.3		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	115		P	80 - 120
Phenytol	97.6		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	90.6		P	80 - 120
Prometryn	111		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	97.4		P	80 - 120
Propargite	103		P	80 - 120
Propiconazole	87.4		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	104		P	80 - 120
Pyriproxyfen	264*		F	80 - 120
Simazine	90.1		P	80 - 120
Stirophos	88.3		P	80 - 120
Sulfentrazone	81.3		P	80 - 120
Tebuconazole	93.7		P	80 - 120
Terbufos	95.2		P	80 - 120
Terbuthylazine	85.2		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	107		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122796
Included Lab Sample IDs: 2447910

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

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.2		P	80 - 120
Avobenzone	92.3		P	80 - 120
Dechlorane 602	95.2		P	80 - 120
Dechlorane 603	95.6		P	80 - 120
Dechlorane Plus	93.2		P	80 - 120
Hexabromobenzene	92.6		P	80 - 120
Octinoxate	92.6		P	80 - 120
Oxybenzone	90.5		P	80 - 120
PBB-153	95.9		P	80 - 120
PBDE-47	91.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBDE-99	91.3		P	80 - 120
Pentabromotoluene	95.6		P	80 - 120
Tetradecachloro-m-terphenyl	91.3		P	80 - 120
Tri-o-cresyl Phosphate	94.8		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	89.9		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	89.5		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	86.1		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			Precision SMP	MS
			LCS				
EPA 200.7 Rev. 4.4	Calcium	111	112	112	112		0.479
	Iron	110	109	110	108		0.972
	Magnesium	111	112	112	111		0.423
	Potassium	103	109	109	103		0.203
	Sodium	108	109	108	104		0.380
	Strontium	101	100	101	99.5		0.782
	Tin	98.6	99.9	100	98.1		0.322
	Titanium	101	103	103	101		0.245
	Vanadium	98.1	98.6	99.2	98.8		0.599
	Zinc	96.4	96.2	96.9	96.5		0.749
EPA 200.8 Rev. 5.4	Aluminum	98.5	98.5	97.7	97.1		0.717
	Antimony	98.1	99.7	98.9	99.3		0.779
	Arsenic	96.6	95.2	96.0	95.2		0.858
	Barium	101	102	102	100		0.702
	Beryllium	93.5	95.3	95.1	93.7		0.212
	Boron	104	103	103	102		0.300
	Cadmium	101	101	99.7	99.8		0.982
	Chromium	101	100	100	100		0.374
	Cobalt	94.7	93.6	94.1	93.3		0.439
	Copper	92.4	92.8	93.7	93.3		0.997
	Lead	93.0	94.9	93.8	93.8		1.18
	Manganese	101	100	100	101		0.348
	Molybdenum	95.3	96.8	97.5	97.6		0.798
	Nickel	93.4	92.1	92.0	92.1		0.155
	Selenium	96.7	94.7	96.0	95.7		1.37
	Silver	104	105	104	104		0.373
	Thallium	98.0	101	101	99.4		0.103
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4	104	93.1			10.8
	Acetochlor	89.4	106	86.8			19.8
EPA 8270E	Alachlor	86.7	105	84.0			22.2
	Ametryn	116	133	119			10.9
	Atrazine	104	112	100			9.98
	Atrazine Desethyl	101	118	116			1.67
	Avobenzone	124	136	149			9.49
	Azinphos Methyl	49.4	159	186			15.5
	Azoxystrobin	65.2					6.56
	Bromacil	105					16.9
	Butylate	60.3	50.8	60.9			18.0
	Caffeine	88.3	145	123			16.0
	Carbophenothion	93.8	94.7	95.1			0.453
	Carfentrazone Ethyl	98.5	117	104			11.2
	Chlorfenapyr	78.3	72.4	80.1			10.1
	Chlorpyrifos Ethyl	126	99.0	117			17.0
	Chlorpyrifos Methyl	123	121	128			5.29
	Coumaphos	66.8	167	118			33.9
	Cyanazine	145	163	156			4.73
	Cyprodinil	125	120	176			15.7
	Dechlorane 602	110	94.9	102			7.33
	Dechlorane 603	119	158	157			0.395
	Dechlorane Plus	153	126	123			2.14
	Demeton	85.3	80.4	95.9			17.6
	Diazinon	112	-2.33	61.9			9.95

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Difenoconazole	53.4	131	122		5.96
	Dimethenamid	93.2	95.4	96.9		1.51
	Dimethomorph	101	203	225		10.3
	Disulfoton	99.7	129	99.6		25.7
	Dithiopyr	92.4	122	87.8		32.9
	EPTC	52.7	40.8	52.8		25.6
	Ethion	79.8	88.9	66.0		29.6
	Ethoprop	98.2	96.0	92.6		3.58
	Etridiazole	63.9	64.5	60.3		6.60
	Fenamiphos	92.1	94.2	94.9		0.811
	Fenbuconazole	37.1	96.9	86.0		11.9
	Fipronil	89.7	104	83.9		20.8
	Fipronil Desulfinyl	101	119	119		0.368
	Fipronil Sulfide	101	133	75.6		28.5
	Fipronil Sulfone	85.0	61.7	89.6		17.7
	Fluazifop-P-butyl	101	87.5	129		38.2
	Fludioxonil	79.0				5.02
	Flumioxazin	59.1	142	149		5.15
	Flutolanil	99.7	78.4	112		25.4
	Fluxapyroxad	78.3				102
	Fonofos	98.2	79.3	99.7		22.7
	Hexabromobenzene	104	128	106		18.7
	Hexazinone	108	102	103		0.794
	Imazalil	103	109	98.8		9.38
	Iprodione	101	112	98.6		12.8
	Loratadine	117	162	195		18.8
	Malathion	107	99.6	125		22.3
	Metalaxyl	87.3	108	90.0		13.5
	Metolachlor	106	101	113		11.5
	Metribuzin	104	97.7	92.5		5.40
	Mevinphos	81.5	85.3	88.0		3.16
	Molinate	60.9	53.9	68.5		23.9
	Myclobutanil	91.0				22.9
	Naled	40.2	31.7	29.6		6.81
	Napropamide	89.0	111	80.5		31.9
	Norflurazon	70.5	42.2	70.1		42.2
	Octinoxate	124	135	135		0.325
	Oxadiazon	85.4	106	85.7		21.4
	Oxybenzone	121	134	142		5.75
	Oxyfluorfen	129	163	122		21.1
	Parathion Ethyl	105	120	112		6.83
	Parathion Methyl	180	204	163		22.3
	PBB-153	102	147	117		22.6
	PBDE-47	115	134	127		5.37
	PBDE-99	107	106	97.0		8.79
	Pendimethalin	159	208	168		21.3
	Pentabromotoluene	107	119	112		5.87
	Phenytoin	71.2	80.1	51.2		44.1
	Phorate	96.7	99.9	115		13.8
	Prodiamine	59.0	46.3	72.4		26.8
	Prometon	111	128	102		22.6
	Prometryn	123	139	150		7.84
	Pronamide	118	123	103		17.8
	Propanil	105	109	93.8		15.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Propargite	86.8	90.3	70.6			24.5
	Propiconazole	58.0	237	290			20.3
	Pyraflufen Ethyl	86.5	68.0	76.4			11.6
	Pyridaben	48.4	111	119			7.29
	Pyriproxyfen	54.9	122	199			47.5
	Simazine	91.4	94.9	95.7			0.860
	Stirophos	81.3	72.0	63.8			12.1
	Sulfentrazone	79.7					105
	Tebuconazole	68.3	68.6	63.5			7.66
	Terbufos	104	89.8	101			12.0
	Terbutylazine	92.0	91.4	85.2			7.08
	Tetradecachloro-m-terphenyl	180	148	121			20.5
	Thiobencarb	100	110	83.8			26.9
	Tri-o-cresyl Phosphate	130	137	131			4.20
	Triadimefon	105	103	89.7			14.0
	Tris(1-chloro-2-propyl) phosphate (TCPP)	159	118	118			0.305
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142	107	108			0.521
	Tris(2-chloroethyl) phosphate (TCEP)	159	113	118			4.60
EPA 8321B	2,4-D	69.7	80.4	79.2			1.47
	2,4,5-T	77.3	76.0	74.6			1.94
	Acesulfame K	108	118	123			4.01
	Acetaminophen	86.5	85.2	82.1			3.64
	Acetamiprid	77.3	54.7	58.5			6.62
	Afidopyropen	59.1	63.0	59.6			5.67
	AMPA	84.3	79.5	90.2			12.6
	Bentazon	74.8	46.5	43.8			5.99
	Benzovindiflupyr	80.4	82.9	78.2			5.87
	Carbamazepine	75.1	56.9	54.8			3.64
	Clothianidin	87.6	67.5	65.9			2.46
	Dinotefuran	102	60.2	58.5			2.81
	Diuron	85.6					1.55
	Endothall	98.2	102	103			1.38
	Fenuron	89.2					2.49
	Fluridone	78.4	65.4	57.5			7.99
	Glufosinate	99.9	92.1	87.3			5.37
	Glyphosate	93.3	67.0	64.8			3.37
	Hydrocodone	89.3	54.4	53.2			2.06
	Ibuprofen	65.4	48.7	57.7			16.9
	Imazapyr	75.3	87.4	82.6			5.74
	Imidacloprid	81.6	89.8	91.7			2.05
	Linuron	81.3	66.4	60.4			9.57
	Mandestrobin	79.3	73.6	73.3			0.371
	MCPP	73.4	84.4	80.4			4.90
	Naproxen	61.0	65.2	77.9			17.8
	Primidone	84.3	72.9	71.5			1.96
	Pyraclostrobin	75.6	77.6	79.2			2.01
	Silvex	68.8	74.6	69.9			6.55
	Sucralose	96.4	90.6	93.3			2.83
	Thiamethoxam	86.8	61.3	61.9			0.921
	Tolfenpyrad	51.7	57.4	53.2			7.48
	Triclopyr	82.8	77.2	80.4			4.06

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2447908, 2447909
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2447908, 2447909
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2447910
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2447910
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2447907
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2447908, 2447909

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	10/31/2023	10/31/2023 11:50	George D Taylor	11/06/2023 22:08	Chase Roberts	2447908
	10/31/2023	10/31/2023 11:50	George D Taylor	11/06/2023 22:42	Chase Roberts	2447909
	10/31/2023	10/31/2023 11:50	George D Taylor	11/09/2023 19:33	Chase Roberts	2447908
EPA 200.8 Rev. 5.4	10/31/2023	10/31/2023 11:50	George D Taylor	11/01/2023 23:28	Conrad Hartmann	2447908
	10/31/2023	10/31/2023 11:50	George D Taylor	11/01/2023 23:37	Conrad Hartmann	2447909
EPA 8270E	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/09/2023 16:04	Vandana T. Nagar	2447910
	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/09/2023 22:00	Arthur Maknenko	2447910
	10/31/2023	11/06/2023 08:30	Rasheda Ghaffari	11/16/2023 15:44	Vandana T. Nagar	2447910
EPA 8321B	10/31/2023	11/02/2023 14:00	Tae K Lee	11/02/2023 20:54	Hana Lee	2447907
	10/31/2023	11/02/2023 14:00	Tae K Lee	11/03/2023 06:36	Hana Lee	2447907
	10/31/2023	11/03/2023 14:30	Hoor Shaik	11/03/2023 17:03	Juyoung Kim	2447907
SM 2340 B-2011	10/31/2023			11/06/2023 22:08	Chase Roberts	2447908
	10/31/2023			11/06/2023 22:42	Chase Roberts	2447909