Chemical Analysis Report

CEN-DIST-2023-06-13-01

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

Event Description: **Run 20**
Request ID: **RQ-2023-06-12-27**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
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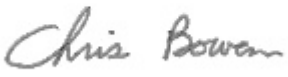
Certified by: Chris Bowen, Environmental Administrator

Date Certified: 29-JUN-2023 09:02



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: SMITH CANAL 40M S OF ST JOHNS PKWY **Collection Date/Time: 06/12/2023 10:37**

Field ID: G2CE0241 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416649	EPA 8321B	2,4-D	0.17		ug/L	P431246	
		Acesulfame K	0.16	I	ug/L	P431182	
		2,4,5-T	0.0040	U	ug/L	P431246	
		AMPA	0.56		ug/L	P431182	
		Acetaminophen	0.010	I	ug/L	P431246	
		Acetamiprid	0.0020	U	ug/L	P431246	
		Endothall	0.25	U	ug/L	P431182	
		Glufosinate	0.10	U	ug/L	P431182	
		Glyphosate	1.7		ug/L	P431182	
		Afidopyropen	0.0020	U	ug/L	P431246	
		Bentazon	0.14		ug/L	P431246	
		Sucralose	1.3		ug/L	P431182	
		Benzovindiflupyr	0.0020	U	ug/L	P431246	
		Carbamazepine	0.0012	I	ug/L	P431246	
		Clothianidin	0.047		ug/L	P431246	
		Dinotefuran	0.0020	U	ug/L	P431246	
		Diuron	0.072		ug/L	P431246	
		Fenuron	0.032	U	ug/L	P431246	
		Fluridone	0.0045		ug/L	P431246	
		Imazapyr	0.13		ug/L	P431246	
		Hydrocodone	0.0020	U	ug/L	P431246	
		Ibuprofen	0.080	U	ug/L	P431246	
		Imidacloprid	0.026		ug/L	P431246	
		Linuron	0.0040	U	ug/L	P431246	
		Mandestrobin	0.0020	U	ug/L	P431246	
		MCPP	0.037		ug/L	P431246	
		Naproxen	0.0080	U	ug/L	P431246	
		Primidone	0.0040	U	ug/L	P431246	
		Pyraclostrobin	0.0020	U	ug/L	P431246	
		Silvex	0.0040	U	ug/L	P431246	
		Thiamethoxam	0.0020	U	ug/L	P431246	
		Tolfenpyrad	0.0020	U	ug/L	P431246	
		Triclopyr	0.0040	U	ug/L	P431246	
2416655	EPA 200.7 Rev. 4.4	Calcium	22.6		mg/L	P431295	
		Iron	410		ug/L	P431295	
		Magnesium	2.63		mg/L	P431295	
		Potassium	2.4		mg/L	P431295	
		Sodium	14.1		mg/L	P431295	
		Strontium	98.2		ug/L	P431295	
		Tin	3.0	U	ug/L	P431295	
		Titanium	7.9		ug/L	P431295	
		Vanadium	2.0	U	ug/L	P431295	
		Zinc	5.9	I	ug/L	P431295	
	EPA 200.8 Rev. 5.4	Aluminum	202		ug/L	P431295	

Field ID: G2CE0241 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416655	EPA 200.8 Rev. 5.4	Antimony	0.25		ug/L	P431295	
		Arsenic	1.25		ug/L	P431295	
		Barium	13.8		ug/L	P431295	
		Beryllium	0.012	I	ug/L	P431295	
		Boron	47.6		ug/L	P431295	
		Cadmium	0.020	U	ug/L	P431295	
		Chromium	0.50	I	ug/L	P431295	
		Cobalt	0.086		ug/L	P431295	
		Copper	3.09		ug/L	P431295	
		Lead	0.34	I	ug/L	P431295	
		Manganese	9.02		ug/L	P431295	
		Molybdenum	1.56		ug/L	P431295	
		Nickel	0.50	U	ug/L	P431295	
		Selenium	0.20	U	ug/L	P431295	
		Silver	0.012	I	ug/L	P431295	
		Thallium	0.10	U	ug/L	P431295	
	SM 2340 B-2011	Hardness	67.2		mg/L	P431295	

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

Sample Location: MILLS CREEK AT PARK **Collection Date/Time: 06/12/2023 11:00**

Field ID: G2CE0233 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416650	EPA 8321B	2,4-D	0.52		ug/L	P431246	
		Acesulfame K	0.11	I	ug/L	P431182	
		2,4,5-T	0.0040	U	ug/L	P431246	
		AMPA	0.89		ug/L	P431182	
		Acetaminophen	0.011	I	ug/L	P431246	
		Acetamiprid	0.0020	U	ug/L	P431246	
		Endothall	0.25	U	ug/L	P431182	
		Glufosinate	0.10	U	ug/L	P431182	
		Glyphosate	5.0		ug/L	P431182	
		Afidopyropen	0.0020	U	ug/L	P431246	
		Bentazon	0.071		ug/L	P431246	
		Sucralose	13		ug/L	P431182	
		Benzovindiflupyr	0.0020	U	ug/L	P431246	
		Carbamazepine	0.016		ug/L	P431246	
		Clothianidin	0.013		ug/L	P431246	
		Dinotefuran	0.011		ug/L	P431246	
		Diuron	0.052		ug/L	P431246	
		Fenuron	0.032	U	ug/L	P431246	
		Fluridone	0.029		ug/L	P431246	
		Imazapyr	0.20		ug/L	P431246	
		Hydrocodone	0.0020	U	ug/L	P431246	
		Ibuprofen	0.080	U	ug/L	P431246	
		Imidacloprid	0.0071	I	ug/L	P431246	
		Linuron	0.0043	I	ug/L	P431246	
		Mandestrobin	0.0020	U	ug/L	P431246	
		MCPP	0.0032	I	ug/L	P431246	
		Naproxen	0.0080	U	ug/L	P431246	
		Primidone	0.031		ug/L	P431246	
		Pyraclostrobin	0.0020	U	ug/L	P431246	
		Silvex	0.0040	U	ug/L	P431246	
		Thiamethoxam	0.0020	U	ug/L	P431246	
		Tolfenpyrad	0.0020	U	ug/L	P431246	
		Triclopyr	0.0040	U	ug/L	P431246	
2416656	EPA 200.7 Rev. 4.4	Calcium	43.3		mg/L	P431295	
		Iron	370		ug/L	P431295	
		Magnesium	6.28		mg/L	P431295	
		Potassium	6.0		mg/L	P431295	
		Sodium	47.1		mg/L	P431295	
		Strontium	233		ug/L	P431295	
		Tin	3.3	I	ug/L	P431295	
		Titanium	5.9		ug/L	P431295	
		Vanadium	3.1	I	ug/L	P431295	
		Zinc	6.3	I	ug/L	P431295	
	EPA 200.8 Rev. 5.4	Aluminum	197		ug/L	P431295	

Field ID: G2CE0233 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416656	EPA 200.8 Rev. 5.4	Antimony	0.43		ug/L	P431295	
		Arsenic	2.17		ug/L	P431295	
		Barium	21.1		ug/L	P431295	
		Beryllium	0.013	I	ug/L	P431295	
		Boron	112		ug/L	P431295	
		Cadmium	0.020	U	ug/L	P431295	
		Chromium	0.52	I	ug/L	P431295	
		Cobalt	0.103		ug/L	P431295	
		Copper	2.63		ug/L	P431295	
		Lead	0.66		ug/L	P431295	
		Manganese	10.5		ug/L	P431295	
		Molybdenum	3.49		ug/L	P431295	
		Nickel	0.99	I	ug/L	P431295	
		Selenium	0.20	U	ug/L	P431295	
		Silver	0.010	U	ug/L	P431295	
		Thallium	0.10	U	ug/L	P431295	
	SM 2340 B-2011	Hardness	134		mg/L	P431295	

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

Sample Location: CHUB CREEK AT CAMERON AVE **Collection Date/Time: 06/12/2023 11:45**

Field ID: G2CE0270 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416658	EPA 200.7 Rev. 4.4	Calcium	82.7		mg/L	P431295	
		Iron	470		ug/L	P431295	
		Magnesium	32.2		mg/L	P431295	
		Potassium	9.1		mg/L	P431295	
		Sodium	308		mg/L	P431295	
		Strontium	934		ug/L	P431295	
		Tin	3.0	U	ug/L	P431295	
		Titanium	3.8		ug/L	P431295	
		Vanadium	2.0	U	ug/L	P431295	
		Zinc	5.0	U	ug/L	P431295	
	EPA 200.8 Rev. 5.4	Aluminum	85		ug/L	P431295	
		Antimony	0.15	I	ug/L	P431295	
		Arsenic	4.13		ug/L	P431295	
		Barium	66.8		ug/L	P431295	
		Beryllium	0.010	U	ug/L	P431295	
		Boron	109		ug/L	P431295	
		Cadmium	0.020	U	ug/L	P431295	
		Chromium	0.66	I	ug/L	P431295	
		Cobalt	0.101		ug/L	P431295	
		Copper	2.42		ug/L	P431295	
		Lead	0.23	I	ug/L	P431295	
		Manganese	62.1		ug/L	P431295	
		Molybdenum	0.47	I	ug/L	P431295	
		Nickel	0.60	I	ug/L	P431295	
		Selenium	0.20	U	ug/L	P431295	
		Silver	0.010	U	ug/L	P431295	
		Thallium	0.10	U	ug/L	P431295	
	SM 2340 B-2011	Hardness	339		mg/L	P431295	

Sample Location: PHELPS CREEK 85M N OF LAKE MARY BLVD **Collection Date/Time: 06/12/2023 12:11**

Field ID: G2CE0247 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416648	EPA 8321B	2,4-D	0.0053	I	ug/L	P431246	
		Acesulfame K	0.12	I	ug/L	P431182	
		2,4,5-T	0.0040	U	ug/L	P431246	
		AMPA	0.10	U	ug/L	P431182	
		Acetaminophen	0.0080	U	ug/L	P431246	
		Acetamiprid	0.0020	U	ug/L	P431246	
		Endothall	0.25	U	ug/L	P431182	
		Glufosinate	0.10	U	ug/L	P431182	
		Glyphosate	0.10	U	ug/L	P431182	
		Afidopyropen	0.0020	U	ug/L	P431246	
		Bentazon	0.034		ug/L	P431246	
		Sucralose	0.14		ug/L	P431182	
		Benzovindiflupyr	0.0020	U	ug/L	P431246	
		Carbamazepine	8.0E-04	U	ug/L	P431246	
		Clothianidin	0.0020	U	ug/L	P431246	
		Dinotefuran	0.0020	U	ug/L	P431246	
		Diuron	0.0037	I	ug/L	P431246	
		Fenuron	0.032	U	ug/L	P431246	
		Fluridone	8.0E-04	U	ug/L	P431246	
		Imazapyr	0.023		ug/L	P431246	
		Hydrocodone	0.0020	U	ug/L	P431246	
		Ibuprofen	0.080	U	ug/L	P431246	
		Imidacloprid	0.0020	U	ug/L	P431246	
		Linuron	0.0040	U	ug/L	P431246	
		Mandestrobin	0.0020	U	ug/L	P431246	
		MCPP	0.0020	U	ug/L	P431246	
		Naproxen	0.0080	U	ug/L	P431246	
		Primidone	0.0040	U	ug/L	P431246	
		Pyraclostrobin	0.0020	U	ug/L	P431246	
		Silvex	0.0040	U	ug/L	P431246	
		Thiamethoxam	0.0020	U	ug/L	P431246	
		Tolfenpyrad	0.0020	U	ug/L	P431246	
		Triclopyr	0.0040	U	ug/L	P431246	

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

Sample Location: ELDER SPRINGS RUN AT US OF MYRTLE ST **Collection Date/Time: 06/12/2023 12:44**

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416651	EPA 8321B	Aldicarb	0.020	U	ug/L	P430994	
		Aldicarb Sulfone	0.0020	U	ug/L	P430994	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P430994	MS
		Carbaryl	0.0020	U	ug/L	P430994	
		Carbofuran	0.0020	U	ug/L	P430994	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P430994	
		Methiocarb	0.0020	U	ug/L	P430994	
		Methomyl	0.0020	U	ug/L	P430994	
		Oxamyl	0.0020	U	ug/L	P430994	
		Propoxur	0.0020	U	ug/L	P430994	
2416652		2,4-D	0.015		ug/L	P431246	
		Acesulfame K	0.10	I	ug/L	P431182	
		2,4,5-T	0.0040	U	ug/L	P431246	
		AMPA	0.29	I	ug/L	P431182	
		Acetaminophen	0.0080	U	ug/L	P431246	
		Acetamiprid	0.0020	U	ug/L	P431246	
		Endothall	0.25	U	ug/L	P431182	
		Glufosinate	0.10	U	ug/L	P431182	
		Glyphosate	0.41		ug/L	P431182	
		Afidopyropen	0.0020	U	ug/L	P431246	
		Bentazon	0.032		ug/L	P431246	
		Sucralose	0.31		ug/L	P431182	
		Benzovindiflupyr	0.0020	U	ug/L	P431246	
		Carbamazepine	8.0E-04	U	ug/L	P431246	
		Clothianidin	0.0020	U	ug/L	P431246	
		Dinotefuran	0.0082		ug/L	P431246	
		Diuron	0.0020	U	ug/L	P431246	
		Fenuron	0.032	U	ug/L	P431246	
		Fluridone	0.0025	I	ug/L	P431246	
		Imazapyr	0.15		ug/L	P431246	
		Hydrocodone	0.0020	U	ug/L	P431246	
		Ibuprofen	0.080	U	ug/L	P431246	
		Imidacloprid	0.016		ug/L	P431246	
		Linuron	0.0040	U	ug/L	P431246	
		Mandestrobin	0.0020	U	ug/L	P431246	
		MCPP	0.0046	I	ug/L	P431246	
		Naproxen	0.0080	U	ug/L	P431246	
		Primidone	0.0040	U	ug/L	P431246	
		Pyraclostrobin	0.0020	U	ug/L	P431246	
		Silvex	0.0040	U	ug/L	P431246	
		Thiamethoxam	0.0020	U	ug/L	P431246	
		Tolfenpyrad	0.0020	U	ug/L	P431246	
		Triclopyr	0.0040	U	ug/L	P431246	
2416653	EPA 8270E	Aldrin	0.67	U	ng/L	P431247	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416653	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P431247	
		Alpha-Chlordane	0.29	I	ng/L	P431247	
		PCB-1016	2.1	U	ng/L	P431247	
		Beta-BHC	0.10	U	ng/L	P431247	
		PCB-1221	2.1	U	ng/L	P431247	
		Beta-Cyfluthrin	1.3	U	ng/L	P431247	
		PCB-1232	2.1	U	ng/L	P431247	
		Bifenthrin	0.51	U	ng/L	P431247	
		PCB-1242	2.1	U	ng/L	P431247	
		PCB-1248	2.1	U	ng/L	P431247	
		Chlorothalonil	3.7	U	ng/L	P431247	
		PCB-1254	2.1	U	ng/L	P431247	
		Cis-Nonachlor	0.21	U	ng/L	P431247	
		PCB-1260	2.1	U	ng/L	P431247	
		Cypermethrin	1.5	U	ng/L	P431247	
		Dacthal	0.15	UJ	ng/L	P431247	LCS
		DDD-p,p'	0.26	U	ng/L	P431247	
		DDE-p,p'	0.21	U	ng/L	P431247	
		DDT-p,p'	0.43	I	ng/L	P431247	
		Delta-BHC	0.41	U	ng/L	P431247	
		Deltamethrin	1.3	U	ng/L	P431247	
		Dichlobenil	0.26	U	ng/L	P431247	
		Dicofol	1.3	U	ng/L	P431247	
		Dieldrin	0.55	I	ng/L	P431247	
		Endosulfan I	0.41	U	ng/L	P431247	
		Endosulfan II	0.41	U	ng/L	P431247	
		Endosulfan Sulfate	0.31	U	ng/L	P431247	
		Endrin	0.41	U	ng/L	P431247	
		Endrin Aldehyde	0.77	U	ng/L	P431247	
		Endrin Ketone	0.41	U	ng/L	P431247	
		Esfenvalerate	0.77	U	ng/L	P431247	
		Ethalfluralin	0.15	U	ng/L	P431247	
		Fenpropathrin	0.26	U	ng/L	P431247	
		Gamma-BHC	0.13	U	ng/L	P431247	RPD
		Gamma-Chlordane	0.29	I	ng/L	P431247	
		Heptachlor	0.21	U	ng/L	P431247	
		Heptachlor Epoxide	0.26	U	ng/L	P431247	
		Hexachlorobenzene**	1.0	U	ng/L	P431247	
		Kepone	5.1	U	ng/L	P431247	
		Lambda-Cyhalothrin	0.77	U	ng/L	P431247	
		Methoprene	0.77	U	ng/L	P431247	
		Methoxychlor	0.31	U	ng/L	P431247	
		MGK-264	0.21	U	ng/L	P431247	
		Mirex	0.36	U	ng/L	P431247	
		Oxychlordane	0.31	U	ng/L	P431247	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416653	EPA 8270E	Permethrin	1.6	U	ng/L	P431247	
		Phenothrin	0.92	U	ng/L	P431247	
		Piperonyl Butoxide	0.19	I	ng/L	P431247	
		Prallethrin	2.1	U	ng/L	P431247	
		Tau-Fluvalinate	0.26	U	ng/L	P431247	
		Tetramethrin	0.77	U	ng/L	P431247	
		Trans-Nonachlor	0.21	U	ng/L	P431247	RPD
		Triclosan Methyl	0.15	U	ng/L	P431247	
		Trifluralin	0.21	U	ng/L	P431247	
	EPA 8276	Chlordane	2.1	UJ	ng/L	P431247	LCS, MS
		Toxaphene	15	U	ng/L	P431247	
2416654	EPA 8270E	Oxybenzone**	10	U	ng/L	P431169	
		Acetochlor	0.20	U	ng/L	P431169	
		Octinoxate**	64	VJ	ng/L	P431169	LCS
		Alachlor	0.41	U	ng/L	P431169	
		Avobenzone**	100	U	ng/L	P431169	
		Ametryn	1.1	U	ng/L	P431169	
		Atrazine	16		ng/L	P431169	
		PBDE-47**	4.1	U	ng/L	P431169	
		Atrazine Desethyl	1.3	U	ng/L	P431169	
		PBDE-99**	5.1	U	ng/L	P431169	
		Azinphos Methyl	3.1	U	ng/L	P431169	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P431169	
		Azoxystrobin	0.41	U	ng/L	P431169	
		Bromacil	0.61	U	ng/L	P431169	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P431169	
		Butylate	0.20	U	ng/L	P431169	
		Dechlorane Plus**	31	U	ng/L	P431169	
		Caffeine**	34	I	ng/L	P431169	
		Dechlorane 602**	5.1	U	ng/L	P431169	
		Carbophenothion	0.51	U	ng/L	P431169	
		Dechlorane 603**	4.1	U	ng/L	P431169	
		Carfentrazone Ethyl	0.15	U	ng/L	P431169	
		Hexabromobenzene**	6.1	U	ng/L	P431169	
		Chlorfenapyr	0.31	U	ng/L	P431169	
		PBB-153**	8.2	U	ng/L	P431169	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P431169	
		Pentabromotoluene**	3.1	U	ng/L	P431169	
		Chlorpyrifos Methyl	0.10	U	ng/L	P431169	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P431169	
		Coumaphos	1.1	U	ng/L	P431169	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	200		ng/L	P431169	
		Cyanazine	5.1	U	ng/L	P431169	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	12		ng/L	P431169	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416654	EPA 8270E	Cyprodinil	0.20	U	ng/L	P431169	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P431169	
		Demeton	3.6	U	ng/L	P431169	
		Diazinon	0.13	U	ng/L	P431169	
		Difenoconazole	0.61	U	ng/L	P431169	
		Dimethenamid	0.10	U	ng/L	P431169	
		Dimethomorph	0.31	U	ng/L	P431169	
		Disulfoton	0.61	U	ng/L	P431169	
		Dithiopyr	1.0	U	ng/L	P431169	
		EPTC	0.51	U	ng/L	P431169	
		Ethion	0.31	U	ng/L	P431169	
		Ethoprop	0.13	U	ng/L	P431169	
		Etridiazole	0.10	U	ng/L	P431169	
		Fenamiphos	0.46	U	ng/L	P431169	
		Fenbuconazole	0.51	U	ng/L	P431169	
		Fipronil	0.79	I	ng/L	P431169	
		Fipronil Desulfinyl**	0.88		ng/L	P431169	
		Fipronil Sulfide	0.84		ng/L	P431169	
		Fipronil Sulfone	1.2		ng/L	P431169	
		Fluazifop-P-butyl	0.10	U	ng/L	P431169	
		Fludioxonil	0.10	U	ng/L	P431169	
		Flumioxazin	3.1	U	ng/L	P431169	
		Flutolanil	0.10	U	ng/L	P431169	
		Fluxapyroxad	0.26	U	ng/L	P431169	
		Fonofos	0.15	U	ng/L	P431169	
		Hexazinone	0.51	U	ng/L	P431169	
		Imazalil	0.66	U	ng/L	P431169	
		Iprodione	0.51	U	ng/L	P431169	
		Loratadine**	0.31	U	ng/L	P431169	
		Malathion	0.36	U	ng/L	P431169	
		Metalaxyl	0.51	U	ng/L	P431169	
		Metolachlor	0.77	U	ng/L	P431169	
		Metribuzin	0.41	U	ng/L	P431169	
		Mevinphos	1.0	U	ng/L	P431169	
		Molinate	0.26	U	ng/L	P431169	
		Myclobutanil	0.36	U	ng/L	P431169	
		Naled	2.6	U	ng/L	P431169	
		Napropamide	0.71	U	ng/L	P431169	
		Norflurazon	1.0	U	ng/L	P431169	
		Oxadiazon	1.1	I	ng/L	P431169	
		Oxyfluorfen	0.20	U	ng/L	P431169	
		Parathion Ethyl	0.15	U	ng/L	P431169	
		Parathion Methyl	0.20	U	ng/L	P431169	
		Pendimethalin	0.77	UJ	ng/L	P431169	LCS, MS
		Phenytoin**	5.4	U	ng/L	P431169	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416654	EPA 8270E	Phorate	0.26	U	ng/L	P431169	
		Prodiamine	0.20	U	ng/L	P431169	
		Prometon	3.1	U	ng/L	P431169	
		Prometryn	0.36	U	ng/L	P431169	
		Pronamide	0.10	U	ng/L	P431169	
		Propanil	0.10	U	ng/L	P431169	
		Propargite	0.82	U	ng/L	P431169	
		Propiconazole	0.61	U	ng/L	P431169	
		Pyraflufen Ethyl	0.31	U	ng/L	P431169	
		Pyridaben	1.4	U	ng/L	P431169	
		Pyriproxyfen	0.26	U	ng/L	P431169	
		Simazine	0.26	U	ng/L	P431169	
		Stirophos	0.41	U	ng/L	P431169	
		Sulfentrazone	3.9	I	ng/L	P431169	
		Tebuconazole	1.4	U	ng/L	P431169	
		Terbufos	0.20	U	ng/L	P431169	
		Terbuthylazine	0.20	U	ng/L	P431169	
		Thiobencarb	0.51	U	ng/L	P431169	
		Triadimefon	0.15	U	ng/L	P431169	
2416657	EPA 200.7 Rev. 4.4	Calcium	41.5		mg/L	P431295	
		Iron	2.91E+03		ug/L	P431295	
		Magnesium	5.83		mg/L	P431295	
		Potassium	3.0		mg/L	P431295	
		Sodium	30.9		mg/L	P431295	
		Strontium	251		ug/L	P431295	
		Tin	3.0	U	ug/L	P431295	
		Titanium	336		ug/L	P431295	
		Vanadium	15.8		ug/L	P431295	
		Zinc	18	I	ug/L	P431295	
	EPA 200.8 Rev. 5.4	Aluminum	5.45E+03		ug/L	P431295	
		Antimony	0.31		ug/L	P431295	
		Arsenic	2.81		ug/L	P431295	
		Barium	48.9		ug/L	P431295	
		Beryllium	0.195		ug/L	P431295	
		Boron	45.5		ug/L	P431295	
		Cadmium	0.060	I	ug/L	P431295	
		Chromium	9.5		ug/L	P431295	
		Cobalt	0.522		ug/L	P431295	
		Copper	5.06		ug/L	P431295	
		Lead	10.5		ug/L	P431295	
		Manganese	16.3		ug/L	P431295	
		Molybdenum	2.03		ug/L	P431295	
		Nickel	2.3		ug/L	P431295	
		Selenium	0.20	U	ug/L	P431295	
		Silver	0.016	I	ug/L	P431295	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2416657	EPA 200.8 Rev. 5.4	Thallium	0.10	U	ug/L	P431295	
	SM 2340 B-2011	Hardness	128		mg/L	P431295	

Ref. Method and Comment:
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: V - Due to the presence of Octinoxate in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The beryllium and lead result was confirmed on 06/22/2023.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431295

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: P431295

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: P431169

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	120	I	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431169

Component	Result	Code	Units
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431169

Component	Result	Code	Units
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431169

Component	Result	Code	Units
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	110		ng/L
Octinoxate	200		ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431169

Component	Result	Code	Units
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8270E
Batch ID: P431247

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431247

Component	Result	Code	Units
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P431247

Component	Result	Code	Units
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P431247

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B
Batch ID: P430994

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P430994

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

Reference Method: EPA 8321B
Batch ID: P431182

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: P431246

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
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: P431295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.0		P	85 - 115
Iron	101		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	99.3		P	85 - 115
Sodium	96.0		P	85 - 115
Strontium	99.2		P	85 - 115
Tin	102		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	98.7		P	85 - 115
Zinc	99.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	103		P	85 - 115
Barium	105		P	85 - 115
Beryllium	98.8		P	85 - 115
Boron	105		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	97.3		P	85 - 115
Cobalt	103		P	85 - 115
Copper	102		P	85 - 115
Lead	98.4		P	85 - 115
Manganese	97.7		P	85 - 115
Molybdenum	102		P	85 - 115
Nickel	102		P	85 - 115
Selenium	103		P	85 - 115
Silver	108		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 8270E
Batch ID: P431169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	128		P	42 - 162
Acetochlor	79.5		P	69 - 123
Alachlor	75.7		P	65 - 118
Ametryn	111		P	58 - 141
Atrazine	93.1		P	73 - 118
Atrazine Desethyl	76.6		P	32 - 125
Avobenzone	130		P	40 - 203
Azinphos Methyl	112		P	36 - 197
Azoxystrobin	98.2		P	58 - 226
Bromacil	112		P	48 - 120
Butylate	67.2		P	27 - 85.0
Caffeine	86.8		P	40 - 137
Carbophenothion	109		P	54 - 132
Carfentrazone Ethyl	113		P	60 - 142
Chlorfenapyr	78.7		P	53 - 117

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P431169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	87.8		P	59 - 116
Chlorpyrifos Methyl	100		P	66 - 119
Coumaphos	133		P	11 - 234
Cyanazine	137		P	61 - 248
Cyprodinil	94.2		P	50 - 147
Dechlorane 602	109		P	50 - 150
Dechlorane 603	140		P	50 - 150
Dechlorane Plus	113		P	47 - 182
Demeton	75.6		P	30 - 138
Diazinon	114		P	67 - 126
Difenoconazole	105		P	38 - 205
Dimethenamid	90.6		P	57 - 111
Dimethomorph	93.9		P	16 - 212
Disulfoton	101		P	46 - 126
Dithiopyr	105		P	62 - 115
EPTC	61.2		P	28 - 80.0
Ethion	100		P	24 - 122
Ethoprop	96.0		P	62 - 113
Etridiazole	73.9		P	28 - 92.0
Fenamiphos	80.0		P	57 - 128
Fenbuconazole	73.1		P	52 - 155
Fipronil	80.9		P	63 - 130
Fipronil Desulfinyl	99.5		P	61 - 130
Fipronil Sulfide	86.8		P	56 - 117
Fipronil Sulfone	83.5		P	52 - 118
Fluazifop-P-butyl	68.8		P	61 - 128
Fludioxonil	79.3		P	59 - 129
Flumioxazin	160		P	30 - 250
Flutolanil	83.9		P	53 - 127
Fluxapyroxad	91.1		P	42 - 132
Fonofos	87.4		P	61 - 110
Hexabromobenzene	134		P	50 - 150
Hexazinone	98.6		P	46 - 139
Imazalil	64.7		P	40 - 139
Iprodione	88.2		P	40 - 146
Loratadine	146		P	10 - 224
Malathion	103		P	61 - 135
Metalaxyl	102		P	58 - 121
Metolachlor	89.1		P	64 - 118
Metribuzin	99.6		P	45 - 245
Mevinphos	84.3		P	49 - 118
Molinate	65.2		P	42 - 92.0
Myclobutanil	107		P	55 - 127
Naled	37.1		P	10 - 114
Napropamide	77.5		P	39 - 121
Norflurazon	98.6		P	55 - 129
Octinoxate	171		F	26 - 166
Oxadiazon	86.3		P	54 - 115
Oxybenzone	115		P	49 - 135
Oxyfluorfen	110		P	64 - 139
Parathion Ethyl	92.7		P	70 - 111
Parathion Methyl	96.7		P	76 - 136

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P431169

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBB-153	143		P	50 - 150
PBDE-47	119		P	41 - 148
PBDE-99	117		P	38 - 147
Pendimethalin	151		F	52 - 118
Pentabromotoluene	115		P	50 - 150
Phenytoin	147		P	10 - 162
Phorate	107		P	40 - 122
Prodiamine	78.8		P	26 - 141
Prometon	104		P	54 - 122
Prometryn	97.2		P	61 - 128
Pronamide	117		P	72 - 121
Propanil	113		P	45 - 144
Propargite	95.3		P	10 - 199
Propiconazole	78.0		P	56 - 127
Pyraflufen Ethyl	61.0		P	56 - 140
Pyridaben	85.1		P	26 - 211
Pyriproxyfen	80.1		P	33 - 194
Simazine	93.2		P	67 - 121
Stirophos	96.3		P	20 - 142
Sulfentrazone	54.8		P	21 - 144
Tebuconazole	87.2		P	10 - 122
Terbufos	107		P	60 - 129
Terbuthylazine	88.3		P	69 - 113
Tetradecachloro-m-terphenyl	180		P	70 - 200
Thiobencarb	114		P	51 - 120
Tri-o-cresyl Phosphate	122		P	49 - 150
Triadimefon	101		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	99.6		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	119		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	116		P	70 - 180

Reference Method: EPA 8270E
Batch ID: P431247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	44.0		P	10 - 92.0
Alpha-BHC	75.4		P	75 - 107
Alpha-Chlordane	60.4		P	50 - 108
Beta-BHC	82.7		P	36 - 138
Beta-Cyfluthrin	66.9		P	20 - 161
Bifenthrin	62.4		P	10 - 119
Chlorothalonil	91.0		P	26 - 186
Cis-Nonachlor	50.6		P	42 - 119
Cypermethrin	66.2		P	22 - 150
Dacthal	70.3		F	72 - 119
DDD-p,p'	62.5		P	45 - 107
DDE-p,p'	60.8		P	48 - 106
DDT-p,p'	61.4		P	48 - 110
Delta-BHC	96.8		P	54 - 140
Deltamethrin	82.8		P	22 - 189
Dichlobenil	73.5		P	36 - 117
Dicofol	62.5		P	46 - 155

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P431247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	57.1		P	54 - 110
Endosulfan I	62.8		P	59 - 105
Endosulfan II	55.3		P	51 - 118
Endosulfan Sulfate	57.7		P	57 - 121
Endrin	57.6		P	10 - 120
Endrin Aldehyde	59.3		P	34 - 118
Endrin Ketone	77.3		P	69 - 177
Esfenvalerate	91.8		P	23 - 168
Ethalfluralin	59.6		P	49 - 99.0
Fenpropathrin	61.3		P	34 - 117
Gamma-BHC	80.4		P	72 - 117
Gamma-Chlordane	63.0		P	43 - 106
Heptachlor	53.4		P	41 - 98.0
Heptachlor Epoxide	77.2		P	57 - 106
Hexachlorobenzene	51.9		P	36 - 99.0
Kepone	53.5		P	16 - 215
Lambda-Cyhalothrin	79.9		P	21 - 177
Methoprene	42.6		P	10 - 119
Methoxychlor	69.5		P	60 - 112
MGK-264	49.2		P	26 - 122
Mirex	59.2		P	10 - 169
Oxychlordane	53.2		P	43 - 105
PCB-1016	71.3		P	48 - 112
PCB-1260	65.5		P	44 - 118
Permethrin	60.2		P	24 - 148
Phenothrin	79.0		P	10 - 106
Piperonyl Butoxide	75.7		P	10 - 139
Prallethrin	52.9		P	17 - 109
Tau-Fluvalinate	76.3		P	13 - 131
Tetramethrin	67.7		P	10 - 132
Trans-Nonachlor	56.2		P	44 - 106
Triclosan Methyl	69.8		P	59 - 109
Trifluralin	66.4		P	44 - 101

Reference Method: EPA 8276
Batch ID: P431247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	59.2		F	61 - 116
Toxaphene	64.1		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P430994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	60.0		P	40 - 150
Aldicarb	43.3		P	30 - 150
Aldicarb Sulfone	87.6		P	40 - 150
Aldicarb Sulfoxide	76.4		P	40 - 150
Carbaryl	93.2		P	40 - 150
Carbofuran	75.7		P	40 - 150
Methiocarb	65.4		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P430994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Methomyl	74.2		P	40 - 150
Oxamyl	83.7		P	40 - 150
Propoxur	70.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431182

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.0		P	40 - 150
AMPA	106		P	40 - 150
Endothall	102		P	40 - 150
Glufosinate	92.7		P	40 - 150
Glyphosate	87.1		P	40 - 150
Sucralose	82.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	88.8		P	40 - 150
2,4,5-T	86.2		P	40 - 150
Acetaminophen	55.2		P	30 - 150
Acetamiprid	77.9		P	40 - 150
Afidopyropen	70.3		P	30 - 150
Bentazon	106		P	30 - 150
Benzovindiflupyr	77.6		P	40 - 150
Carbamazepine	71.7		P	40 - 150
Clothianidin	82.1		P	40 - 150
Dinotefuran	84.2		P	40 - 150
Diuron	74.8		P	40 - 150
Fenuron	73.5		P	40 - 150
Fluridone	83.7		P	40 - 150
Hydrocodone	81.9		P	40 - 150
Ibuprofen	66.4		P	40 - 150
Imazapyr	81.1		P	40 - 150
Imidacloprid	76.8		P	40 - 150
Linuron	49.8		P	40 - 150
Mandestrobin	77.3		P	40 - 150
MCPP	90.9		P	40 - 150
Naproxen	48.8		P	40 - 150
Primidone	74.7		P	40 - 150
Pyraclostrobin	65.5		P	40 - 150
Silvex	99.6		P	40 - 150
Thiamethoxam	78.6		P	40 - 150
Tolfenpyrad	50.9		P	30 - 150
Triclopyr	85.3		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416983	Calcium	91.9		P	80 - 120
2416983	Iron	99.2	98.9	P/P	80 - 120
2416983	Magnesium	97.9	97.2	P/P	80 - 120
2416983	Potassium	98.7	99.2	P/P	80 - 120
2416983	Sodium	97.2	98.1	P/P	80 - 120
2416983	Strontium	98.5	99.3	P/P	80 - 120
2416983	Tin	101	99.0	P/P	80 - 120
2416983	Titanium	98.1	99.1	P/P	80 - 120
2416983	Vanadium	94.2	95.2	P/P	80 - 120
2416983	Zinc	88.1	87.8	P/P	80 - 120
2416988	Calcium	98.0		P	80 - 120
2416988	Iron	103		P	80 - 120
2416988	Magnesium	101		P	80 - 120
2416988	Potassium	101		P	80 - 120
2416988	Sodium	97.8		P	80 - 120
2416988	Strontium	103		P	80 - 120
2416988	Tin	104		P	80 - 120
2416988	Titanium	103		P	80 - 120
2416988	Vanadium	99.0		P	80 - 120
2416988	Zinc	94.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416983	Aluminum	100	103	P/P	80 - 120
2416983	Antimony	106	108	P/P	80 - 120
2416983	Arsenic	103	105	P/P	80 - 120
2416983	Barium	106	109	P/P	80 - 120
2416983	Beryllium	94.7	95.5	P/P	80 - 120
2416983	Boron	106	106	P/P	80 - 120
2416983	Cadmium	105	107	P/P	80 - 120
2416983	Chromium	94.9	97.4	P/P	80 - 120
2416983	Cobalt	100	103	P/P	80 - 120
2416983	Copper	97.2	99.6	P/P	80 - 120
2416983	Lead	98.2	100	P/P	80 - 120
2416983	Manganese	95.7	99.3	P/P	80 - 120
2416983	Molybdenum	104	107	P/P	80 - 120
2416983	Nickel	98.5	102	P/P	80 - 120
2416983	Selenium	103	106	P/P	80 - 120
2416983	Silver	108	110	P/P	80 - 120
2416983	Thallium	104	107	P/P	80 - 120
2416988	Aluminum	102		P	80 - 120
2416988	Antimony	107		P	80 - 120
2416988	Arsenic	104		P	80 - 120
2416988	Barium	106		P	80 - 120
2416988	Beryllium	96.5		P	80 - 120
2416988	Boron	103		P	80 - 120
2416988	Cadmium	104		P	80 - 120
2416988	Chromium	95.8		P	80 - 120
2416988	Cobalt	100		P	80 - 120
2416988	Copper	99.2		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416988	Lead	98.1		P	80 - 120
2416988	Manganese	97.4		P	80 - 120
2416988	Molybdenum	104		P	80 - 120
2416988	Nickel	100		P	80 - 120
2416988	Selenium	104		P	80 - 120
2416988	Silver	107		P	80 - 120
2416988	Thallium	104		P	80 - 120

Reference Method: EPA 8270E
Batch ID: P431169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416029	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114	120	P/P	26 - 165
2416029	Acetochlor	79.4	85.0	P/P	67 - 124
2416029	Alachlor	80.5	76.8	P/P	60 - 120
2416029	Ametryn	113	131	P/P	54 - 216
2416029	Atrazine Desethyl	95.1	109	P/P	15 - 122
2416029	Avobenzone	139	123	P/P	37 - 178
2416029	Azinphos Methyl	107	116	P/P	40 - 292
2416029	Azoxystrobin	133	139	P/P	35 - 220
2416029	Bromacil	104	91.9	P/P	45 - 127
2416029	Butylate	61.7	54.0	P/P	20 - 83.0
2416029	Caffeine	111	99.0	P/P	10 - 194
2416029	Carbophenothion	106	111	P/P	57 - 127
2416029	Carfentrazone Ethyl	110	117	P/P	51 - 141
2416029	Chlorfenapyr	87.2	87.7	P/P	46 - 111
2416029	Chlorpyrifos Ethyl	113	96.5	P/P	52 - 120
2416029	Chlorpyrifos Methyl	104	108	P/P	63 - 119
2416029	Coumaphos	111	136	P/P	10 - 228
2416029	Cyanazine	170	148	P/P	59 - 241
2416029	Cyprodinil	101	88.2	P/P	47 - 146
2416029	Dechlorane 602	78.6	85.7	P/P	50 - 150
2416029	Dechlorane 603	136	135	P/P	50 - 150
2416029	Dechlorane Plus	93.6	93.0	P/P	50 - 150
2416029	Demeton	86.1	83.5	P/P	40 - 136
2416029	Diazinon	112	114	P/P	69 - 132
2416029	Difenoconazole	87.4	103	P/P	57 - 258
2416029	Dimethenamid	90.8	97.7	P/P	54 - 110
2416029	Dimethomorph	193	161	P/P	28 - 210
2416029	Disulfoton	110	106	P/P	43 - 133
2416029	Dithiopyr	110	113	P/P	39 - 116
2416029	EPTC	58.3	48.1	P/P	20 - 78.0
2416029	Ethion	112	96.7	P/P	17 - 119
2416029	Ethoprop	103	98.8	P/P	66 - 120
2416029	Etridiazole	67.8	62.0	P/P	28 - 96.0
2416029	Fenamiphos	92.3	89.3	P/P	41 - 126
2416029	Fenbuconazole	76.8	80.6	P/P	42 - 169
2416029	Fipronil	79.4	80.3	P/P	61 - 132
2416029	Fipronil Desulfinyl	94.3	97.4	P/P	56 - 132
2416029	Fipronil Sulfide	91.7	87.8	P/P	48 - 119
2416029	Fipronil Sulfone	69.7	85.7	P/P	42 - 131
2416029	Fluazifop-P-butyl	71.7	71.6	P/P	53 - 131

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P431169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416029	Fludioxonil	90.1	91.5	P/P	56 - 127
2416029	Flumioxazin	127	142	P/P	19 - 300
2416029	Flutolanil	81.3	83.6	P/P	41 - 127
2416029	Fluxapyroxad	79.8	93.4	P/P	42 - 172
2416029	Fonofos	96.7	89.2	P/P	59 - 113
2416029	Hexabromobenzene	138	129	P/P	50 - 150
2416029	Hexazinone	103	111	P/P	66 - 122
2416029	Imazalil	49.1	78.8	P/P	21 - 283
2416029	Iprodione	89.9	99.1	P/P	43 - 150
2416029	Loratadine	141	151	P/P	23 - 201
2416029	Malathion	99.7	101	P/P	58 - 136
2416029	Metalaxyl	93.3	95.3	P/P	55 - 120
2416029	Metolachlor	109	113	P/P	57 - 121
2416029	Metribuzin	107	110	P/P	58 - 294
2416029	Mevinphos	96.4	90.7	P/P	50 - 126
2416029	Molinate	64.1	59.4	P/P	42 - 93.0
2416029	Myclobutanil	110	108	P/P	55 - 125
2416029	Naled	35.9	38.5	P/P	18 - 200
2416029	Napropamide	70.3	77.9	P/P	39 - 110
2416029	Norflurazon	95.5	98.3	P/P	48 - 128
2416029	Octinoxate	142	104	P/P	21 - 159
2416029	Oxadiazon	92.1	96.3	P/P	43 - 112
2416029	Oxybenzone	128	121	P/P	41 - 142
2416029	Oxyfluorfen	121	114	P/P	64 - 153
2416029	Parathion Ethyl	109	101	P/P	69 - 114
2416029	Parathion Methyl	110	111	P/P	79 - 139
2416029	PBB-153	149	147	P/P	50 - 150
2416029	PBDE-47	97.1	100	P/P	27 - 144
2416029	PBDE-99	92.4	96.0	P/P	18 - 150
2416029	Pendimethalin	172	150	F/F	50 - 139
2416029	Pentabromotoluene	123	111	P/P	50 - 150
2416029	Phenytoin	109	94.9	P/P	10 - 146
2416029	Phorate	137	113	P/P	54 - 161
2416029	Prodiamine	75.3	70.6	P/P	30 - 161
2416029	Prometon	95.3	96.1	P/P	45 - 134
2416029	Prometryn	95.8	109	P/P	45 - 137
2416029	Pronamide	118	109	P/P	65 - 133
2416029	Propanil	114	116	P/P	49 - 142
2416029	Propargite	65.4	82.2	P/P	10 - 203
2416029	Propiconazole	81.9	86.9	P/P	38 - 146
2416029	Pyraflufen Ethyl	69.9	62.0	P/P	34 - 153
2416029	Pyridaben	91.9	106	P/P	12 - 192
2416029	Pyriproxyfen	89.9	94.5	P/P	33 - 180
2416029	Simazine	111	99.0	P/P	51 - 157
2416029	Stirophos	76.2	72.1	P/P	10 - 128
2416029	Sulfentrazone	89.4	101	P/P	53 - 186
2416029	Tebuconazole	65.0	76.3	P/P	10 - 133
2416029	Terbufos	115	106	P/P	65 - 139
2416029	Terbuthylazine	91.1	91.1	P/P	66 - 117
2416029	Tetradecachloro-m-terphenyl	180	169	P/P	70 - 200
2416029	Thiobencarb	108	101	P/P	51 - 119
2416029	Tri-o-cresyl Phosphate	134	121	P/P	31 - 144

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P431169

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416029	Triadimefon	117	111	P/P	48 - 119
2416029	Tris(1-chloro-2-propyl) phosphate (TCPP)	115	90.0	P/P	50 - 150
2416029	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	125	114	P/P	50 - 150
2416029	Tris(2-chloroethyl) phosphate (TCEP)	126	114	P/P	70 - 180

Reference Method: EPA 8270E
Batch ID: P431247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416653	PCB-1016	92.2	104	P/P	46 - 111
2416653	PCB-1260	83.8	106	P/P	45 - 114
2417276	Aldrin	53.3	51.3	P/P	20 - 82.0
2417276	Alpha-BHC	97.0	87.4	P/P	71 - 109
2417276	Alpha-Chlordane	75.0	53.6	P/P	42 - 106
2417276	Beta-BHC	103	92.2	P/P	69 - 180
2417276	Beta-Cyfluthrin	79.7	66.2	P/P	18 - 175
2417276	Bifenthrin	108	80.4	P/P	21 - 128
2417276	Chlorothalonil	193	132	P/P	10 - 300
2417276	Cis-Nonachlor	72.1	66.3	P/P	34 - 106
2417276	Cypermethrin	83.1	66.0	P/P	22 - 158
2417276	Dacthal	116	90.7	P/P	54 - 116
2417276	DDD-p,p'	106	85.6	P/P	34 - 107
2417276	DDE-p,p'	102	75.1	P/P	33 - 110
2417276	DDT-p,p'	70.4	60.0	P/P	50 - 122
2417276	Delta-BHC	143	105	P/P	77 - 193
2417276	Deltamethrin	110	103	P/P	10 - 195
2417276	Dichlobenil	39.1	45.6	P/P	25 - 113
2417276	Dicofol	84.2	73.9	P/P	38 - 247
2417276	Dieldrin	75.8	67.2	P/P	45 - 118
2417276	Endosulfan I	80.5	72.8	P/P	51 - 106
2417276	Endosulfan II	61.1	59.6	P/P	37 - 122
2417276	Endosulfan Sulfate	77.2	59.9	P/P	43 - 132
2417276	Endrin	66.9	64.9	P/P	29 - 101
2417276	Endrin Aldehyde	87.5	64.6	P/P	19 - 110
2417276	Endrin Ketone	77.9	68.5	P/P	60 - 140
2417276	Esfenvalerate	118	128	P/P	26 - 199
2417276	Ethalfluralin	62.8	62.9	P/P	45 - 99.0
2417276	Fenpropathrin	74.0	65.4	P/P	35 - 120
2417276	Gamma-BHC	115	91.4	P/P	63 - 128
2417276	Gamma-Chlordane	64.3	46.1	P/P	40 - 104
2417276	Heptachlor	56.9	56.4	P/P	36 - 97.0
2417276	Heptachlor Epoxide	76.9	67.8	P/P	49 - 184
2417276	Hexachlorobenzene	81.0	57.8	P/P	39 - 96.0
2417276	Kepone	93.4	54.8	P/P	10 - 217
2417276	Lambda-Cyhalothrin	190	155	P/P	21 - 193
2417276	Methoprene	47.4	41.9	P/P	20 - 106
2417276	Methoxychlor	83.0	75.2	P/P	53 - 118
2417276	MGK-264	57.9	55.7	P/P	40 - 118
2417276	Mirex	86.7	68.8	P/P	26 - 92.0
2417276	Oxychlordane	47.8	47.4	P/P	44 - 99.0
2417276	Permethrin	75.7	79.4	P/P	33 - 182
2417276	Phenothrin	115	107	P/P	10 - 129

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P431247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2417276	Piperonyl Butoxide	113	105	P/P	10 - 211
2417276	Prallethrin	45.2	44.4	P/P	24 - 113
2417276	Tau-Fluvalinate	148	138	P/P	14 - 149
2417276	Tetramethrin	83.3	72.4	P/P	17 - 151
2417276	Trans-Nonachlor	71.5	45.6	P/P	42 - 102
2417276	Triclosan Methyl	81.1	69.3	P/P	48 - 108
2417276	Trifluralin	54.2	56.2	P/P	47 - 96.0

Reference Method: EPA 8276
Batch ID: P431247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416653	Chlordane	47.4	42.8	F/F	53 - 126
2416653	Toxaphene	58.9	59.9	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P430994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416025	3-Hydroxycarbofuran	86.7	88.9	P/P	40 - 150
2416025	Aldicarb	64.7	62.5	P/P	30 - 150
2416025	Aldicarb Sulfone	86.3	84.2	P/P	40 - 150
2416025	Aldicarb Sulfoxide	33.1	28.6	F/F	40 - 150
2416025	Carbaryl	86.8	78.6	P/P	40 - 150
2416025	Carbofuran	74.9	62.3	P/P	40 - 150
2416025	Methiocarb	92.0	71.9	P/P	40 - 150
2416025	Methomyl	75.5	75.6	P/P	40 - 150
2416025	Oxamyl	94.1	109	P/P	40 - 150
2416025	Propoxur	60.8	69.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431182

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416648	Acesulfame K	104	107	P/P	40 - 150
2416648	AMPA	72.8	70.7	P/P	40 - 150
2416648	Endothall	101	106	P/P	40 - 150
2416648	Glufosinate	79.5	84.7	P/P	40 - 150
2416648	Glyphosate	65.9	70.8	P/P	40 - 150
2416648	Sucralose	87.9	68.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P431246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416425	2,4-D	92.9	97.8	P/P	40 - 150
2416425	2,4,5-T	98.6	98.5	P/P	40 - 150
2416425	Acetaminophen	58.9	62.4	P/P	30 - 150
2416425	Acetamiprid	63.8	64.1	P/P	40 - 150
2416425	Afidopyropen	49.2	65.5	P/P	30 - 150
2416425	Benzovindiflupyr	79.6	86.2	P/P	40 - 150
2416425	Carbamazepine	57.5	71.7	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P431246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2416425	Clothianidin	95.8	99.1	P/P	40 - 150
2416425	Dinotefuran	74.4	77.3	P/P	40 - 150
2416425	Diuron	73.1	67.0	P/P	40 - 150
2416425	Fenuron	59.4	63.2	P/P	40 - 150
2416425	Fluridone	72.6	72.1	P/P	40 - 150
2416425	Hydrocodone	71.5	72.2	P/P	40 - 150
2416425	Ibuprofen	67.4	87.4	P/P	40 - 150
2416425	Imazapyr	90.5	96.0	P/P	40 - 150
2416425	Imidacloprid	125	126	P/P	40 - 150
2416425	Linuron	69.2	65.9	P/P	40 - 150
2416425	Mandestrobin	81.7	86.6	P/P	40 - 150
2416425	MCPP	103	102	P/P	40 - 150
2416425	Naproxen	116	109	P/P	40 - 150
2416425	Primidone	71.2	66.3	P/P	40 - 150
2416425	Pyraclostrobin	76.2	94.5	P/P	40 - 150
2416425	Silvex	81.5	83.4	P/P	40 - 150
2416425	Thiamethoxam	115	94.5	P/P	40 - 150
2416425	Tolfenpyrad	55.7	59.8	P/P	30 - 150
2416425	Triclopyr	107	101	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P431295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416983	Calcium	0.374	Spike	P	0 - 20
2416983	Iron	0.373	Spike	P	0 - 20
2416983	Magnesium	0.493	Spike	P	0 - 20
2416983	Potassium	0.422	Spike	P	0 - 20
2416983	Sodium	0.613	Spike	P	0 - 20
2416983	Strontium	0.720	Spike	P	0 - 20
2416983	Tin	1.56	Spike	P	0 - 20
2416983	Titanium	1.03	Spike	P	0 - 20
2416983	Vanadium	1.09	Spike	P	0 - 20
2416983	Zinc	0.384	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P431295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416983	Aluminum	2.05	Spike	P	0 - 20
2416983	Antimony	2.51	Spike	P	0 - 20
2416983	Arsenic	2.19	Spike	P	0 - 20
2416983	Barium	2.19	Spike	P	0 - 20
2416983	Beryllium	0.844	Spike	P	0 - 20
2416983	Boron	0.533	Spike	P	0 - 20
2416983	Cadmium	1.97	Spike	P	0 - 20
2416983	Chromium	2.36	Spike	P	0 - 20
2416983	Cobalt	2.33	Spike	P	0 - 20
2416983	Copper	2.51	Spike	P	0 - 20
2416983	Lead	2.04	Spike	P	0 - 20
2416983	Manganese	3.63	Spike	P	0 - 20
2416983	Molybdenum	2.12	Spike	P	0 - 20
2416983	Nickel	3.03	Spike	P	0 - 20
2416983	Selenium	2.84	Spike	P	0 - 20
2416983	Silver	1.64	Spike	P	0 - 20
2416983	Thallium	2.91	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P431169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416029	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	5.32	Spike	P	0 - 37
2416029	Acetochlor	6.00	Spike	P	0 - 28
2416029	Alachlor	4.66	Spike	P	0 - 30
2416029	Ametryn	14.7	Spike	P	0 - 32
2416029	Atrazine	9.00	Spike	P	0 - 41
2416029	Atrazine Desethyl	13.3	Spike	P	0 - 36
2416029	Avobenzone	12.2	Spike	P	0 - 36
2416029	Azinphos Methyl	8.26	Spike	P	0 - 75
2416029	Azoxystrobin	4.57	Spike	P	0 - 39
2416029	Bromacil	10.6	Spike	P	0 - 33
2416029	Butylate	13.3	Spike	P	0 - 44
2416029	Caffeine	8.72	Spike	P	0 - 74

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P431169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416029	Carbophenothion	5.00	Spike	P	0 - 25
2416029	Carfentrazone Ethyl	6.07	Spike	P	0 - 27
2416029	Chlorfenapyr	0.508	Spike	P	0 - 24
2416029	Chlorpyrifos Ethyl	15.5	Spike	P	0 - 26
2416029	Chlorpyrifos Methyl	3.66	Spike	P	0 - 26
2416029	Coumaphos	19.6	Spike	P	0 - 28
2416029	Cyanazine	13.7	Spike	P	0 - 48
2416029	Cyprodinil	13.7	Spike	P	0 - 29
2416029	Dechlorane 602	8.70	Spike	P	0 - 30
2416029	Dechlorane 603	1.01	Spike	P	0 - 30
2416029	Dechlorane Plus	0.701	Spike	P	0 - 30
2416029	Demeton	3.06	Spike	P	0 - 33
2416029	Diazinon	1.39	Spike	P	0 - 29
2416029	Difenoconazole	15.9	Spike	P	0 - 34
2416029	Dimethenamid	6.46	Spike	P	0 - 39
2416029	Dimethomorph	18.5	Spike	P	0 - 51
2416029	Disulfoton	3.61	Spike	P	0 - 30
2416029	Dithiopyr	2.16	Spike	P	0 - 26
2416029	EPTC	19.2	Spike	P	0 - 43
2416029	Ethion	14.9	Spike	P	0 - 79
2416029	Ethoprop	4.12	Spike	P	0 - 29
2416029	Etridiazole	8.93	Spike	P	0 - 33
2416029	Fenamiphos	3.34	Spike	P	0 - 40
2416029	Fenbuconazole	4.86	Spike	P	0 - 74
2416029	Fipronil	0.913	Spike	P	0 - 29
2416029	Fipronil Desulfinyl	2.84	Spike	P	0 - 32
2416029	Fipronil Sulfide	4.06	Spike	P	0 - 30
2416029	Fipronil Sulfone	18.9	Spike	P	0 - 33
2416029	Fluazifop-P-butyl	0.0938	Spike	P	0 - 38
2416029	Fludioxonil	1.47	Spike	P	0 - 29
2416029	Flumioxazin	11.2	Spike	P	0 - 51
2416029	Flutolanil	2.84	Spike	P	0 - 25
2416029	Fluxapyroxad	13.7	Spike	P	0 - 45
2416029	Fonofos	8.08	Spike	P	0 - 27
2416029	Hexabromobenzene	6.45	Spike	P	0 - 30
2416029	Hexazinone	7.28	Spike	P	0 - 30
2416029	Imazalil	46.5	Spike	P	0 - 100
2416029	Iprodione	9.74	Spike	P	0 - 33
2416029	Loratadine	6.92	Spike	P	0 - 56
2416029	Malathion	1.11	Spike	P	0 - 37
2416029	Metalaxyl	1.80	Spike	P	0 - 40
2416029	Metolachlor	2.40	Spike	P	0 - 29
2416029	Metribuzin	2.75	Spike	P	0 - 45
2416029	Mevinphos	6.04	Spike	P	0 - 29
2416029	Molinate	7.53	Spike	P	0 - 33
2416029	Myclobutanil	1.72	Spike	P	0 - 26
2416029	Naled	7.06	Spike	P	0 - 37
2416029	Napropamide	10.2	Spike	P	0 - 44
2416029	Norflurazon	2.92	Spike	P	0 - 30
2416029	Octinoxate	24.3	Spike	P	0 - 45
2416029	Oxadiazon	4.45	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P431169

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416029	Oxybenzone	5.41	Spike	P	0 - 46
2416029	Oxyfluorfen	5.39	Spike	P	0 - 28
2416029	Parathion Ethyl	7.43	Spike	P	0 - 31
2416029	Parathion Methyl	1.12	Spike	P	0 - 29
2416029	PBB-153	1.21	Spike	P	0 - 30
2416029	PBDE-47	3.11	Spike	P	0 - 36
2416029	PBDE-99	3.82	Spike	P	0 - 40
2416029	Pendimethalin	13.4	Spike	P	0 - 33
2416029	Pentabromotoluene	10.2	Spike	P	0 - 30
2416029	Phenytoin	14.1	Spike	P	0 - 100
2416029	Phorate	19.0	Spike	P	0 - 36
2416029	Prodiamine	6.54	Spike	P	0 - 71
2416029	Prometon	0.791	Spike	P	0 - 36
2416029	Prometryn	12.7	Spike	P	0 - 28
2416029	Pronamide	8.00	Spike	P	0 - 24
2416029	Propanil	1.18	Spike	P	0 - 28
2416029	Propargite	22.7	Spike	P	0 - 43
2416029	Propiconazole	5.94	Spike	P	0 - 33
2416029	Pyraflufen Ethyl	12.0	Spike	P	0 - 29
2416029	Pyridaben	14.4	Spike	P	0 - 30
2416029	Pyriproxyfen	4.97	Spike	P	0 - 79
2416029	Simazine	11.5	Spike	P	0 - 29
2416029	Stirophos	5.57	Spike	P	0 - 61
2416029	Sulfentrazone	10.6	Spike	P	0 - 33
2416029	Tebuconazole	16.0	Spike	P	0 - 69
2416029	Terbufos	8.27	Spike	P	0 - 29
2416029	Terbuthylazine	0.0232	Spike	P	0 - 32
2416029	Tetradecachloro-m-terphenyl	6.41	Spike	P	0 - 30
2416029	Thiobencarb	6.28	Spike	P	0 - 26
2416029	Tri-o-cresyl Phosphate	10.0	Spike	P	0 - 33
2416029	Triadimefon	4.66	Spike	P	0 - 28
2416029	Tris(1-chloro-2-propyl) phosphate (TCPP)	24.5	Spike	P	0 - 30
2416029	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	8.99	Spike	P	0 - 30
2416029	Tris(2-chloroethyl) phosphate (TCEP)	9.89	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P431247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416653	PCB-1016	11.7	Spike	P	0 - 32
2416653	PCB-1260	23.7	Spike	P	0 - 31
2417276	Aldrin	3.82	Spike	P	0 - 41
2417276	Alpha-BHC	10.4	Spike	P	0 - 25
2417276	Alpha-Chlordane	30.2	Spike	P	0 - 33
2417276	Beta-BHC	11.4	Spike	P	0 - 36
2417276	Beta-Cyfluthrin	18.6	Spike	P	0 - 42
2417276	Bifenthrin	29.2	Spike	P	0 - 53
2417276	Chlorothalonil	37.7	Spike	P	0 - 71
2417276	Cis-Nonachlor	8.40	Spike	P	0 - 29
2417276	Cypermethrin	23.0	Spike	P	0 - 40

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P431247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2417276	Dacthal	24.3	Spike	P	0 - 26
2417276	DDD-p,p'	20.9	Spike	P	0 - 39
2417276	DDE-p,p'	30.3	Spike	P	0 - 33
2417276	DDT-p,p'	16.0	Spike	P	0 - 40
2417276	Delta-BHC	31.3	Spike	P	0 - 37
2417276	Deltamethrin	6.79	Spike	P	0 - 100
2417276	Dichlobenil	15.2	Spike	P	0 - 40
2417276	Dicofol	13.1	Spike	P	0 - 31
2417276	Dieldrin	12.1	Spike	P	0 - 27
2417276	Endosulfan I	10.1	Spike	P	0 - 23
2417276	Endosulfan II	2.46	Spike	P	0 - 28
2417276	Endosulfan Sulfate	25.2	Spike	P	0 - 38
2417276	Endrin	3.06	Spike	P	0 - 63
2417276	Endrin Aldehyde	30.1	Spike	P	0 - 60
2417276	Endrin Ketone	12.9	Spike	P	0 - 37
2417276	Esfenvalerate	8.39	Spike	P	0 - 52
2417276	Ethalfluralin	0.0547	Spike	P	0 - 23
2417276	Fenpropathrin	12.3	Spike	P	0 - 32
2417276	Gamma-BHC	23.0	Spike	F	0 - 17
2417276	Gamma-Chlordane	29.6	Spike	P	0 - 40
2417276	Heptachlor	0.808	Spike	P	0 - 29
2417276	Heptachlor Epoxide	12.6	Spike	P	0 - 25
2417276	Hexachlorobenzene	33.6	Spike	P	0 - 36
2417276	Kepone	52.1	Spike	P	0 - 93
2417276	Lambda-Cyhalothrin	20.4	Spike	P	0 - 55
2417276	Methoprene	12.4	Spike	P	0 - 53
2417276	Methoxychlor	9.94	Spike	P	0 - 29
2417276	MGK-264	3.83	Spike	P	0 - 35
2417276	Mirex	23.0	Spike	P	0 - 46
2417276	Oxychlordane	0.863	Spike	P	0 - 29
2417276	Permethrin	4.69	Spike	P	0 - 44
2417276	Phenothrin	6.97	Spike	P	0 - 56
2417276	Piperonyl Butoxide	7.22	Spike	P	0 - 100
2417276	Prallethrin	1.67	Spike	P	0 - 42
2417276	Tau-Fluvalinate	6.75	Spike	P	0 - 54
2417276	Tetramethrin	13.9	Spike	P	0 - 51
2417276	Trans-Nonachlor	44.3	Spike	F	0 - 37
2417276	Triclosan Methyl	15.7	Spike	P	0 - 31
2417276	Trifluralin	3.71	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P431247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416653	Chlordane	10.3	Spike	P	0 - 25
2416653	Toxaphene	1.57	Spike	P	0 - 26

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P430994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416025	3-Hydroxycarbofuran	2.42	Spike	P	0 - 30
2416025	Aldicarb	3.46	Spike	P	0 - 30
2416025	Aldicarb Sulfone	2.43	Spike	P	0 - 30
2416025	Aldicarb Sulfoxide	14.5	Spike	P	0 - 30
2416025	Carbaryl	9.97	Spike	P	0 - 30
2416025	Carbofuran	18.5	Spike	P	0 - 30
2416025	Methiocarb	24.5	Spike	P	0 - 30
2416025	Methomyl	0.233	Spike	P	0 - 30
2416025	Oxamyl	14.8	Spike	P	0 - 30
2416025	Propoxur	13.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P431182

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416648	Acesulfame K	2.24	Spike	P	0 - 30
2416648	AMPA	2.93	Spike	P	0 - 30
2416648	Endothall	4.96	Spike	P	0 - 30
2416648	Glufosinate	6.39	Spike	P	0 - 30
2416648	Glyphosate	7.15	Spike	P	0 - 30
2416648	Sucralose	23.3	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P431246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416425	2,4-D	4.45	Spike	P	0 - 30
2416425	2,4,5-T	0.0362	Spike	P	0 - 30
2416425	Acetaminophen	5.70	Spike	P	0 - 30
2416425	Acetamiprid	0.611	Spike	P	0 - 30
2416425	Afidopyropen	28.4	Spike	P	0 - 30
2416425	Bentazon	0.895	Spike	P	0 - 30
2416425	Benzovindiflupyr	8.04	Spike	P	0 - 30
2416425	Carbamazepine	22.1	Spike	P	0 - 30
2416425	Clothianidin	3.47	Spike	P	0 - 30
2416425	Dinotefuran	3.86	Spike	P	0 - 30
2416425	Diuron	8.76	Spike	P	0 - 30
2416425	Fenuron	6.08	Spike	P	0 - 30
2416425	Fluridone	0.567	Spike	P	0 - 30
2416425	Hydrocodone	0.955	Spike	P	0 - 30
2416425	Ibuprofen	25.7	Spike	P	0 - 30
2416425	Imazapyr	4.36	Spike	P	0 - 30
2416425	Imidacloprid	0.820	Spike	P	0 - 30
2416425	Linuron	4.94	Spike	P	0 - 30
2416425	Mandestrobin	5.88	Spike	P	0 - 30
2416425	MCPP	1.47	Spike	P	0 - 30
2416425	Naproxen	6.48	Spike	P	0 - 30
2416425	Primidone	7.13	Spike	P	0 - 30
2416425	Pyraclostrobin	21.5	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P431246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2416425	Silvex	2.30	Spike	P	0 - 30
2416425	Thiamethoxam	19.3	Spike	P	0 - 30
2416425	Tolfenpyrad	7.18	Spike	P	0 - 30
2416425	Triclopyr	6.02	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2416648
Field Sample ID: G2CE0247

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	100	P	30 - 160
EPA 8321B	Acetaminophen-d4	60.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.6	P	30 - 160
EPA 8321B	Diuron-d6	59.1	P	30 - 160
EPA 8321B	Endothall-d6	99.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	78.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.3	P	30 - 160
EPA 8321B	Primidone-d5	79.4	P	30 - 160
EPA 8321B	Sucralose-d6	64.0	P	30 - 160

Lab Sample ID: 2416649
Field Sample ID: G2CE0241

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	93.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	55.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	51.5	P	30 - 160
EPA 8321B	Diuron-d6	53.8	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	76.1	P	30 - 160
EPA 8321B	Primidone-d5	73.4	P	30 - 160
EPA 8321B	Sucralose-d6	81.4	P	30 - 160

Lab Sample ID: 2416650
Field Sample ID: G2CE0233

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	109	P	30 - 160
EPA 8321B	Acetaminophen-d4	56.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.9	P	30 - 160
EPA 8321B	Diuron-d6	65.0	P	30 - 160
EPA 8321B	Endothall-d6	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	98.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.4	P	30 - 160
EPA 8321B	Primidone-d5	78.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.0	P	30 - 160

Lab Sample ID: 2416651
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	64.3	P	30 - 160

Lab Sample ID: 2416652
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	83.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	59.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.1	P	30 - 160
EPA 8321B	Diuron-d6	47.4	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2416652
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Endothall-d6	106	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	83.7	P	30 - 160
EPA 8321B	Primidone-d5	74.7	P	30 - 160
EPA 8321B	Sucralose-d6	91.7	P	30 - 160

Lab Sample ID: 2416653
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	130	P	29 - 130
EPA 8270E	Decachlorobiphenyl	82.9	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	85.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	82.3	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	62.6	P	30 - 101
EPA 8276	PCNB	118	P	48 - 121

Lab Sample ID: 2416654
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	66.2	P	20 - 200
EPA 8270E	Simazine-d10	76.2	P	62 - 142
EPA 8270E	Terbufos-d10	75.2	P	58 - 132
EPA 8270E	Terphenyl-d14	79.3	P	52 - 137

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A119858
Included Lab Sample IDs: 2416648, 2416649, 2416650, 2416652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	83.2	126	P/P	60 - 160
Sucralose	75.3	93.2	P/P	60 - 160
Sucralose	93.2	72.0	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A119859
Included Lab Sample IDs: 2416648, 2416649, 2416650, 2416652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	106	83.6	P/P	60 - 160
Endothall	97.4	91.9	P/P	60 - 160
Glufosinate	98.7	85.6	P/P	60 - 160
Glyphosate	82.5	80.9	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A119874
Included Lab Sample IDs: 2416655, 2416656, 2416657, 2416658

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	104	P/P	90 - 110
Aluminum	104	103	P/P	90 - 110
Antimony	102	102	P/P	90 - 110
Antimony	102	104	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Arsenic	103	102	P/P	90 - 110
Barium	102	104	P/P	90 - 110
Barium	102	102	P/P	90 - 110
Beryllium	96.7	96.7	P/P	90 - 110
Beryllium	96.7	96.9	P/P	90 - 110
Boron	103	101	P/P	90 - 110
Boron	97.8	103	P/P	90 - 110
Cadmium	101	102	P/P	90 - 110
Cadmium	102	104	P/P	90 - 110
Chromium	98.3	99.4	P/P	90 - 110
Chromium	99.4	99.6	P/P	90 - 110
Cobalt	102	102	P/P	90 - 110
Cobalt	104	102	P/P	90 - 110
Copper	101	98.9	P/P	90 - 110
Copper	101	101	P/P	90 - 110
Lead	97.2	97.3	P/P	90 - 110
Lead	97.3	97.9	P/P	90 - 110
Manganese	98.9	99.4	P/P	90 - 110
Manganese	99.4	101	P/P	90 - 110
Molybdenum	101	101	P/P	90 - 110
Molybdenum	101	102	P/P	90 - 110
Nickel	101	99.5	P/P	90 - 110
Nickel	102	101	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Selenium	99.2	101	P/P	90 - 110
Silver	105	106	P/P	90 - 110
Silver	106	106	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A119874
Included Lab Sample IDs: 2416655, 2416656, 2416657, 2416658

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

Reference Method: EPA 8270E
Run ID: A119885
Included Lab Sample IDs: 2416654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.2		P	80 - 120
Avobenzone	98.1		P	80 - 120
Dechlorane 602	98.7		P	80 - 120
Dechlorane 603	96.4		P	80 - 120
Dechlorane Plus	92.5		P	80 - 120
Hexabromobenzene	97.1		P	80 - 120
Octinoxate	94.9		P	80 - 120
Oxybenzone	93.4		P	80 - 120
PBB-153	96.2		P	80 - 120
PBDE-47	96.4		P	80 - 120
PBDE-99	96.0		P	80 - 120
Pentabromotoluene	98.4		P	80 - 120
Tetradecachloro-m-terphenyl	93.3		P	80 - 120
Tri-o-cresyl Phosphate	97.5		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	91.3		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.1		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	91.6		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A119899
Included Lab Sample IDs: 2416657, 2416658

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.7	98.7	P/P	90 - 110
Boron	101	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A119900
Included Lab Sample IDs: 2416648, 2416649, 2416650, 2416652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	93.7	P/P	50 - 150
2,4-D	84.0	101	P/P	50 - 150
2,4,5-T	89.4	98.1	P/P	50 - 150
2,4,5-T	98.1	85.7	P/P	50 - 150
3-Hydroxycarbofuran	95.1	118	P/P	60 - 150
Acetaminophen	77.4	76.8	P/P	60 - 160
Acetaminophen	78.4	77.4	P/P	60 - 160
Acetamiprid	107	95.5	P/P	50 - 150
Acetamiprid	95.5	98.3	P/P	50 - 150
Afidopyropen	101	96.1	P/P	50 - 150
Afidopyropen	99.3	101	P/P	50 - 150
Aldicarb	96.6	101	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A119900
Included Lab Sample IDs: 2416651

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldicarb Sulfone	96.0	96.7	P/P	50 - 150
Aldicarb Sulfoxide	102	107	P/P	50 - 150
Bentazon	132	125	P/P	50 - 160
Bentazon	135	132	P/P	50 - 160
Bentazon	141	135	P/P	50 - 160
Benzovindiflupyr	122	86.3	P/P	50 - 150
Benzovindiflupyr	86.3	99.9	P/P	50 - 150
Carbamazepine	82.6	96.5	P/P	60 - 150
Carbamazepine	98.2	82.6	P/P	60 - 150
Carbaryl	99.7	104	P/P	60 - 150
Carbofuran	93.8	102	P/P	50 - 150
Clothianidin	110	144	P/P	60 - 150
Clothianidin	120	110	P/P	60 - 150
Dinotefuran	101	107	P/P	50 - 150
Dinotefuran	107	107	P/P	50 - 150
Diuron	114	135	P/P	60 - 160
Diuron	130	114	P/P	60 - 160
Fenuron	95.1	102	P/P	60 - 150
Fenuron	95.5	95.1	P/P	60 - 150
Fluridone	108	102	P/P	60 - 160
Fluridone	98.2	108	P/P	60 - 160
Hydrocodone	117	117	P/P	60 - 150
Hydrocodone	120	117	P/P	60 - 150
Ibuprofen	101	134	P/P	50 - 160
Ibuprofen	91.3	101	P/P	50 - 160
Imazapyr	103	104	P/P	50 - 150
Imazapyr	104	94.6	P/P	50 - 150
Imidacloprid	82.3	97.0	P/P	60 - 150
Imidacloprid	97.0	92.5	P/P	60 - 150
Linuron	103	96.6	P/P	60 - 150
Linuron	96.6	83.2	P/P	60 - 150
Mandestrobin	102	112	P/P	50 - 150
Mandestrobin	112	98.5	P/P	50 - 150
MCPP	100	106	P/P	50 - 150
MCPP	106	93.2	P/P	50 - 150
Methiocarb	132	91.8	P/P	50 - 150
Methomyl	97.5	99.6	P/P	50 - 150
Naproxen	104	91.7	P/P	50 - 160
Naproxen	91.7	69.4	P/P	50 - 160
Oxamyl	118	98.0	P/P	50 - 150
Primidone	93.2	94.9	P/P	60 - 150
Primidone	94.9	92.9	P/P	60 - 150
Propoxur	91.2	112	P/P	50 - 150
Pyraclostrobin	104	119	P/P	60 - 150
Pyraclostrobin	121	104	P/P	60 - 150
Silvex	102	115	P/P	50 - 150
Silvex	115	93.3	P/P	50 - 150
Thiamethoxam	113	110	P/P	50 - 150
Thiamethoxam	136	113	P/P	50 - 150
Tolfenpyrad	102	109	P/P	60 - 150
Tolfenpyrad	109	97.8	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A119900
Included Lab Sample IDs: 2416648, 2416649, 2416650, 2416652

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Triclopyr	91.2	101	P/P	50 - 150
Triclopyr	91.8	91.2	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A119934
Included Lab Sample IDs: 2416654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	90.2		P	80 - 120
Alachlor	86.5		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	89.3		P	80 - 120
Atrazine Desethyl	81.7		P	80 - 120
Azinphos Methyl	96.3		P	80 - 120
Azoxystrobin	97.6		P	80 - 120
Bromacil	99.5		P	80 - 120
Butylate	99.9		P	80 - 120
Caffeine	114		P	80 - 120
Carbophenothion	93.4		P	80 - 120
Carfentrazone Ethyl	92.8		P	80 - 120
Chlorfenapyr	82.3		P	80 - 120
Chlorpyrifos Ethyl	87.9		P	80 - 120
Chlorpyrifos Methyl	104		P	80 - 120
Coumaphos	101		P	80 - 120
Cyanazine	82.6		P	80 - 120
Cyprodinil	97.6		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	98.0		P	80 - 120
Dimethenamid	107		P	80 - 120
Dimethomorph	93.5		P	80 - 120
Disulfoton	98.7		P	80 - 120
Dithiopyr	99.6		P	80 - 120
EPTC	99.4		P	80 - 120
Ethion	84.2		P	80 - 120
Ethoprop	105		P	80 - 120
Etridiazole	97.6		P	80 - 120
Fenamiphos	87.5		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	91.3		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	103		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	93.7		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	97.7		P	80 - 120
Flutolanil	101		P	80 - 120
Fluxapyroxad	99.4		P	80 - 120
Fonofos	97.4		P	80 - 120
Hexazinone	98.3		P	80 - 120
Imazalil	95.2		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A119934
Included Lab Sample IDs: 2416654

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iprodione	91.6		P	80 - 120
Loratadine	85.6		P	80 - 120
Malathion	89.2		P	80 - 120
Metalaxyl	95.2		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	89.7		P	80 - 120
Myclobutanil	87.9		P	80 - 120
Naled	94.0		P	80 - 120
Napropamide	97.0		P	80 - 120
Norflurazon	92.0		P	80 - 120
Oxadiazon	97.2		P	80 - 120
Oxyfluorfen	94.0		P	80 - 120
Parathion Ethyl	96.9		P	80 - 120
Parathion Methyl	90.7		P	80 - 120
Pendimethalin	101		P	80 - 120
Phenytoin	101		P	80 - 120
Phorate	102		P	80 - 120
Prodiamine	99.4		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	105		P	80 - 120
Pronamide	103		P	80 - 120
Propanil	101		P	80 - 120
Propargite	90.1		P	80 - 120
Propiconazole	85.3		P	80 - 120
Pyraflufen Ethyl	102		P	80 - 120
Pyridaben	103		P	80 - 120
Pyriproxyfen	96.1		P	80 - 120
Simazine	92.0		P	80 - 120
Stirophos	86.5		P	80 - 120
Sulfentrazone	97.3		P	80 - 120
Tebuconazole	97.3		P	80 - 120
Terbufos	98.5		P	80 - 120
Terbuthylazine	84.0		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	98.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119936
Included Lab Sample IDs: 2416653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	89.8		P	80 - 120
PCB-1260	105		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A119987
Included Lab Sample IDs: 2416655, 2416656, 2416657, 2416658

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A119987
Included Lab Sample IDs: 2416655, 2416656, 2416657, 2416658

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	98.1	P/P	90 - 110
Iron	105	101	P/P	90 - 110
Magnesium	104	100	P/P	90 - 110
Potassium	104	101	P/P	90 - 110
Sodium	98.8	96.8	P/P	90 - 110
Strontium	98.6	96.3	P/P	90 - 110
Tin	99.3	96.8	P/P	90 - 110
Titanium	97.7	94.5	P/P	90 - 110
Vanadium	97.9	94.6	P/P	90 - 110
Zinc	95.9	91.1	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A120017
Included Lab Sample IDs: 2416658

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

Reference Method: EPA 8276
Run ID: A120020
Included Lab Sample IDs: 2416653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	98.5		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A120024
Included Lab Sample IDs: 2416653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	103		P	80 - 120
Alpha-BHC	108		P	80 - 120
Alpha-Chlordane	112		P	80 - 120
Beta-BHC	116		P	80 - 120
Beta-Cyfluthrin	88.9		P	80 - 120
Bifenthrin	97.9		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cis-Nonachlor	115		P	80 - 120
Cypermethrin	98.9		P	80 - 120
Dacthal	96.7		P	80 - 120
DDD-p,p'	107		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	97.6		P	80 - 120
Delta-BHC	110		P	80 - 120
Deltamethrin	90.7		P	80 - 120
Dichlobenil	109		P	80 - 120
Dicofol	93.0		P	80 - 120
Dieldrin	97.6		P	80 - 120
Endosulfan I	105		P	80 - 120
Endosulfan II	108		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A120024
Included Lab Sample IDs: 2416653

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan Sulfate	98.5		P	80 - 120
Endrin	108		P	80 - 120
Endrin Aldehyde	116		P	80 - 120
Endrin Ketone	108		P	80 - 120
Esfenvalerate	93.4		P	80 - 120
Ethalfluralin	97.5		P	80 - 120
Fenpropathrin	97.7		P	80 - 120
Gamma-BHC	106		P	80 - 120
Gamma-Chlordane	113		P	80 - 120
Heptachlor	99.6		P	80 - 120
Heptachlor Epoxide	120		P	80 - 120
Hexachlorobenzene	111		P	80 - 120
Kepone	93.3		P	80 - 120
Lambda-Cyhalothrin	114		P	80 - 120
Methoprene	102		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	94.1		P	80 - 120
Mirex	114		P	80 - 120
Oxychlordane	102		P	80 - 120
Permethrin	94.6		P	80 - 120
Phenothrin	103		P	80 - 120
Piperonyl Butoxide	94.2		P	80 - 120
Prallethrin	111		P	80 - 120
Tau-Fluvalinate	83.9		P	80 - 120
Tetramethrin	99.4		P	80 - 120
Trans-Nonachlor	107		P	80 - 120
Triclosan Methyl	118		P	80 - 120
Trifluralin	97.5		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		
						LCS	SMP	MS
EPA 200.7 Rev. 4.4	Calcium	98.0	91.9	98.0				0.374
	Iron	101	99.2	98.9	103			0.373
	Magnesium	100	97.9	97.2	101			0.493
	Potassium	99.3	98.7	99.2	101			0.422
	Sodium	96.0	97.2	98.1	97.8			0.613
	Strontium	99.2	98.5	99.3	103			0.720
	Tin	102	101	99.0	104			1.56
	Titanium	100	98.1	99.1	103			1.03
	Vanadium	98.7	94.2	95.2	99.0			1.09
	Zinc	99.0	88.1	87.8	94.7			0.384
EPA 200.8 Rev. 5.4	Aluminum	102	100	103	102			2.05
	Antimony	103	106	108	107			2.51
	Arsenic	103	103	105	104			2.19
	Barium	105	106	109	106			2.19
	Beryllium	98.8	94.7	95.5	96.5			0.844
	Boron	105	106	106	103			0.533
	Cadmium	103	105	107	104			1.97
	Chromium	97.3	94.9	97.4	95.8			2.36
	Cobalt	103	100	103	100			2.33
	Copper	102	97.2	99.6	99.2			2.51
	Lead	98.4	98.2	100	98.1			2.04
	Manganese	97.7	95.7	99.3	97.4			3.63
	Molybdenum	102	104	107	104			2.12
	Nickel	102	98.5	102	100			3.03
	Selenium	103	103	106	104			2.84
	Silver	108	108	110	107			1.64
	Thallium	101	104	107	104			2.91
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	128	114	120				5.32
	Acetochlor	79.5	79.4	85.0				6.00
	Alachlor	75.7	80.5	76.8				4.66
	Aldrin	44.0	53.3	51.3				3.82
	Alpha-BHC	75.4	97.0	87.4				10.4
	Alpha-Chlordane	60.4	75.0	53.6				30.2
	Ametryn	111	113	131				14.7
	Atrazine	93.1						9.00
	Atrazine Desethyl	76.6	95.1	109				13.3
	Avobenzone	130	139	123				12.2
	Azinphos Methyl	112	107	116				8.26
	Azoxystrobin	98.2	133	139				4.57
	Beta-BHC	82.7	103	92.2				11.4
	Beta-Cyfluthrin	66.9	79.7	66.2				18.6
	Bifenthrin	62.4	108	80.4				29.2
	Bromacil	112	104	91.9				10.6
	Butylate	67.2	61.7	54.0				13.3
	Caffeine	86.8	111	99.0				8.72
	Carbophenothion	109	106	111				5.00
	Carfentrazone Ethyl	113	110	117				6.07
	Chlorfenapyr	78.7	87.2	87.7				0.508
	Chlorothalonil	91.0	193	132				37.7
	Chlorpyrifos Ethyl	87.8	113	96.5				15.5
	Chlorpyrifos Methyl	100	104	108				3.66
	Cis-Nonachlor	50.6	72.1	66.3				8.40

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Coumaphos	133	111	136			19.6
	Cyanazine	137	170	148			13.7
	Cypermethrin	66.2	83.1	66.0			23.0
	Cyprodinil	94.2	101	88.2			13.7
	Dacthal	70.3	116	90.7			24.3
	DDD-p,p'	62.5	106	85.6			20.9
	DDE-p,p'	60.8	102	75.1			30.3
	DDT-p,p'	61.4	70.4	60.0			16.0
	Dechlorane 602	109	78.6	85.7			8.70
	Dechlorane 603	140	136	135			1.01
	Dechlorane Plus	113	93.6	93.0			0.701
	Delta-BHC	96.8	143	105			31.3
	Deltamethrin	82.8	110	103			6.79
	Demeton	75.6	86.1	83.5			3.06
	Diazinon	114	112	114			1.39
	Dichlobenil	73.5	39.1	45.6			15.2
	Dicofol	62.5	84.2	73.9			13.1
	Dieldrin	57.1	75.8	67.2			12.1
	Difenoconazole	105	87.4	103			15.9
	Dimethenamid	90.6	90.8	97.7			6.46
	Dimethomorph	93.9	193	161			18.5
	Disulfoton	101	110	106			3.61
	Dithiopyr	105	110	113			2.16
	Endosulfan I	62.8	80.5	72.8			10.1
	Endosulfan II	55.3	61.1	59.6			2.46
	Endosulfan Sulfate	57.7	77.2	59.9			25.2
	Endrin	57.6	66.9	64.9			3.06
	Endrin Aldehyde	59.3	87.5	64.6			30.1
	Endrin Ketone	77.3	77.9	68.5			12.9
	EPTC	61.2	58.3	48.1			19.2
	Esfenvalerate	91.8	118	128			8.39
	Ethalfluralin	59.6	62.8	62.9			0.0547
	Ethion	100	112	96.7			14.9
	Ethoprop	96.0	103	98.8			4.12
	Etridiazole	73.9	67.8	62.0			8.93
	Fenamiphos	80.0	92.3	89.3			3.34
	Fenbuconazole	73.1	76.8	80.6			4.86
	Fenpropathrin	61.3	74.0	65.4			12.3
	Fipronil	80.9	79.4	80.3			0.913
	Fipronil Desulfinyl	99.5	94.3	97.4			2.84
	Fipronil Sulfide	86.8	91.7	87.8			4.06
	Fipronil Sulfone	83.5	69.7	85.7			18.9
	Fluazifop-P-butyl	68.8	71.7	71.6			0.0938
	Fludioxonil	79.3	90.1	91.5			1.47
	Flumioxazin	160	127	142			11.2
	Flutolanil	83.9	81.3	83.6			2.84
	Fluxapyroxad	91.1	79.8	93.4			13.7
	Fonofos	87.4	96.7	89.2			8.08
	Gamma-BHC	80.4	115	91.4			23.0
	Gamma-Chlordane	63.0	64.3	46.1			29.6
	Heptachlor	53.4	56.9	56.4			0.808
	Heptachlor Epoxide	77.2	76.9	67.8			12.6
	Hexabromobenzene	134	138	129			6.45
	Hexachlorobenzene	51.9	81.0	57.8			33.6

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Hexazinone	98.6	103	111			7.28
	Imazalil	64.7	49.1	78.8			46.5
	Iprodione	88.2	89.9	99.1			9.74
	Kepone	53.5	93.4	54.8			52.1
	Lambda-Cyhalothrin	79.9	190	155			20.4
	Loratadine	146	141	151			6.92
	Malathion	103	99.7	101			1.11
	Metalaxyl	102	93.3	95.3			1.80
	Methoprene	42.6	47.4	41.9			12.4
	Methoxychlor	69.5	83.0	75.2			9.94
	Metolachlor	89.1	109	113			2.40
	Metribuzin	99.6	107	110			2.75
	Mevinphos	84.3	96.4	90.7			6.04
	MGK-264	49.2	57.9	55.7			3.83
	Mirex	59.2	86.7	68.8			23.0
	Molinate	65.2	64.1	59.4			7.53
	Myclobutanil	107	110	108			1.72
	Naled	37.1	35.9	38.5			7.06
	Napropamide	77.5	70.3	77.9			10.2
	Norflurazon	98.6	95.5	98.3			2.92
	Octinoxate	171	142	104			24.3
	Oxadiazon	86.3	92.1	96.3			4.45
	Oxybenzone	115	128	121			5.41
	Oxychlordane	53.2	47.8	47.4			0.863
	Oxyfluorfen	110	121	114			5.39
	Parathion Ethyl	92.7	109	101			7.43
	Parathion Methyl	96.7	110	111			1.12
	PBB-153	143	149	147			1.21
	PBDE-47	119	97.1	100			3.11
	PBDE-99	117	92.4	96.0			3.82
	PCB-1016	71.3	92.2	104			11.7
	PCB-1260	65.5	83.8	106			23.7
	Pendimethalin	151	172	150			13.4
	Pentabromotoluene	115	123	111			10.2
	Permethrin	60.2	75.7	79.4			4.69
	Phenothrin	79.0	115	107			6.97
	Phenytoin	147	109	94.9			14.1
	Phorate	107	137	113			19.0
	Piperonyl Butoxide	75.7	113	105			7.22
	Prallethrin	52.9	45.2	44.4			1.67
	Prodiamine	78.8	75.3	70.6			6.54
	Prometon	104	95.3	96.1			0.791
	Prometryn	97.2	95.8	109			12.7
	Pronamide	117	118	109			8.00
	Propanil	113	114	116			1.18
	Propargite	95.3	65.4	82.2			22.7
	Propiconazole	78.0	81.9	86.9			5.94
	Pyraflufen Ethyl	61.0	69.9	62.0			12.0
	Pyridaben	85.1	91.9	106			14.4
	Pyriproxyfen	80.1	89.9	94.5			4.97
	Simazine	93.2	111	99.0			11.5
	Stirophos	96.3	76.2	72.1			5.57
	Sulfentrazone	54.8	89.4	101			10.6
	Tau-Fluvalinate	76.3	148	138			6.75

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Tebuconazole	87.2	65.0	76.3			16.0
	Terbufos	107	115	106			8.27
	Terbuthylazine	88.3	91.1	91.1			0.0232
	Tetradecachloro-m-terphenyl	180	180	169			6.41
	Tetramethrin	67.7	83.3	72.4			13.9
	Thiobencarb	114	108	101			6.28
	Trans-Nonachlor	56.2	71.5	45.6			44.3
	Tri-o-cresyl Phosphate	122	134	121			10.0
	Triadimefon	101	117	111			4.66
	Triclosan Methyl	69.8	81.1	69.3			15.7
	Trifluralin	66.4	54.2	56.2			3.71
	Tris(1-chloro-2-propyl) phosphate (TCPP)	99.6	115	90.0			24.5
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	119	125	114			8.99
	Tris(2-chloroethyl) phosphate (TCEP)	116	126	114			9.89
EPA 8276	Chlordane	59.2	47.4	42.8			10.3
	Toxaphene	64.1	58.9	59.9			1.57
EPA 8321B	2,4-D	88.8	92.9	97.8			4.45
	2,4,5-T	86.2	98.6	98.5			0.0362
	3-Hydroxycarbofuran	60.0	86.7	88.9			2.42
	Acesulfame K	93.0	104	107			2.24
	Acetaminophen	55.2	58.9	62.4			5.70
	Acetamiprid	77.9	63.8	64.1			0.611
	Afidopyropen	70.3	49.2	65.5			28.4
	Aldicarb	43.3	64.7	62.5			3.46
	Aldicarb Sulfone	87.6	86.3	84.2			2.43
	Aldicarb Sulfoxide	76.4	33.1	28.6			14.5
	AMPA	106	72.8	70.7			2.93
	Bentazon	106					0.895
	Benzovindiflupyr	77.6	79.6	86.2			8.04
	Carbamazepine	71.7	57.5	71.7			22.1
	Carbaryl	93.2	86.8	78.6			9.97
	Carbofuran	75.7	74.9	62.3			18.5
	Clothianidin	82.1	95.8	99.1			3.47
	Dinotefuran	84.2	74.4	77.3			3.86
	Diuron	74.8	73.1	67.0			8.76
	Endothall	102	101	106			4.96
	Fenuron	73.5	59.4	63.2			6.08
	Fluridone	83.7	72.6	72.1			0.567
	Glufosinate	92.7	79.5	84.7			6.39
	Glyphosate	87.1	65.9	70.8			7.15
	Hydrocodone	81.9	71.5	72.2			0.955
	Ibuprofen	66.4	67.4	87.4			25.7
	Imazapyr	81.1	90.5	96.0			4.36
	Imidacloprid	76.8	125	126			0.820
	Linuron	49.8	69.2	65.9			4.94
	Mandestrobin	77.3	81.7	86.6			5.88
	MCPP	90.9	103	102			1.47
	Methiocarb	65.4	92.0	71.9			24.5
	Methomyl	74.2	75.5	75.6			0.233
	Naproxen	48.8	116	109			6.48
	Oxamyl	83.7	94.1	109			14.8

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Primidone	74.7	71.2	66.3			7.13
	Propoxur	70.5	60.8	69.6			13.5
	Pyraclostrobin	65.5	76.2	94.5			21.5
	Silvex	99.6	81.5	83.4			2.30
	Sucralose	82.6	87.9	68.4			23.3
	Thiamethoxam	78.6	115	94.5			19.3
	Tolfenpyrad	50.9	55.7	59.8			7.18
	Triclopyr	85.3	107	101			6.02

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2416655, 2416656, 2416657, 2416658
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2416655, 2416656, 2416657, 2416658
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2416654
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2416653
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2416654
EPA 8270E	PCBs in water matrices by GC/MS/MS	2416653
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2416653
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2416651
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2416648, 2416649, 2416650, 2416652
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2416655, 2416656, 2416657, 2416658

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	06/13/2023	06/15/2023 11:30	George D Taylor	06/22/2023 17:53	McKinley C Carter	2416655
	06/13/2023	06/15/2023 11:30	George D Taylor	06/22/2023 18:00	McKinley C Carter	2416656
	06/13/2023	06/15/2023 11:30	George D Taylor	06/22/2023 18:08	McKinley C Carter	2416657
	06/13/2023	06/15/2023 11:30	George D Taylor	06/22/2023 18:16	McKinley C Carter	2416658
	06/13/2023	06/15/2023 11:30	George D Taylor	06/23/2023 14:58	McKinley C Carter	2416658
EPA 200.8 Rev. 5.4	06/13/2023	06/15/2023 11:30	George D Taylor	06/16/2023 14:54	Emily M Philpot	2416655
	06/13/2023	06/15/2023 11:30	George D Taylor	06/16/2023 16:01	Emily M Philpot	2416656
	06/13/2023	06/15/2023 11:30	George D Taylor	06/16/2023 16:11	Emily M Philpot	2416657
	06/13/2023	06/15/2023 11:30	George D Taylor	06/16/2023 16:20	Emily M Philpot	2416658
	06/13/2023	06/15/2023 11:30	George D Taylor	06/19/2023 23:19	Emily M Philpot	2416657
	06/13/2023	06/15/2023 11:30	George D Taylor	06/19/2023 23:29	Emily M Philpot	2416658
EPA 8270E	06/13/2023	06/14/2023 08:30	Rasheda Ghaffari	06/16/2023 18:19	Vandana T. Nagar	2416654
	06/13/2023	06/14/2023 08:30	Rasheda Ghaffari	06/16/2023 20:07	Arthur Maknenko	2416654
	06/13/2023	06/16/2023 08:00	Fe-Val Siddell	06/20/2023 21:30	Michael Poppell	2416653
	06/13/2023	06/16/2023 08:00	Fe-Val Siddell	06/20/2023 21:48	Lipi Saha	2416653
EPA 8276	06/13/2023	06/16/2023 08:00	Fe-Val Siddell	06/22/2023 05:26	Lipi Saha	2416653
EPA 8321B	06/13/2023	06/13/2023 14:00	Hoor Shaik	06/19/2023 18:10	Juyoung Kim	2416651
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/14/2023 13:09	Touraj Touran	2416648
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/14/2023 13:22	Touraj Touran	2416649
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/14/2023 13:35	Touraj Touran	2416650
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/14/2023 13:48	Touraj Touran	2416652
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/15/2023 06:59	Touraj Touran	2416648
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/15/2023 07:13	Touraj Touran	2416649
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/15/2023 07:27	Touraj Touran	2416650
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/15/2023 07:41	Touraj Touran	2416652
	06/13/2023	06/14/2023 13:00	Touraj Touran	06/15/2023 10:29	Touraj Touran	2416650
	06/13/2023	06/15/2023 09:00	Hoor Shaik	06/20/2023 05:08	Juyoung Kim	2416648
	06/13/2023	06/15/2023 09:00	Hoor Shaik	06/20/2023 05:27	Juyoung Kim	2416649
	06/13/2023	06/15/2023 09:00	Hoor Shaik	06/20/2023 06:05	Juyoung Kim	2416650
	06/13/2023	06/15/2023 09:00	Hoor Shaik	06/20/2023 06:23	Juyoung Kim	2416652
	06/13/2023	06/15/2023 09:00	Hoor Shaik	06/20/2023 11:43	Juyoung Kim	2416649
SM 2340 B-2011	06/13/2023			06/22/2023 17:53	McKinley C Carter	2416655
	06/13/2023			06/22/2023 18:00	McKinley C Carter	2416656
	06/13/2023			06/22/2023 18:08	McKinley C Carter	2416657
	06/13/2023			06/22/2023 18:16	McKinley C Carter	2416658