

Chemical Analysis Report

SW-DIST-2022-05-10-02

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

Event Description: **Run 19 Sarasota**
Request ID: **RQ-2022-05-02-34**
Customer: **SW-DIST**
Project ID: **SMP**

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

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Certified by: Liang Lin, Environmental Administrator

Date Certified: 01-JUN-2022 15:59

A handwritten signature in black ink, appearing to read "Liang Lin", is shown on a light-colored background.

Case Narrative

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

Results for the following analytical groups are included in this report: Metals 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: Indian Creek @ Fruitville Rd

Collection Date/Time: 05/09/2022 11:00

Field ID: G3SW0057

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326010	EPA 8321B	Aldicarb	0.020	U	ug/L	P413774	
		Aldicarb Sulfone	0.0020	U	ug/L	P413774	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P413774	
		Carbaryl	0.0020	U	ug/L	P413774	
		Carbofuran	0.0020	U	ug/L	P413774	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P413774	
		Methiocarb	0.0020	U	ug/L	P413774	
		Methomyl	0.0020	U	ug/L	P413774	
		Oxamyl	0.0020	U	ug/L	P413774	
		Propoxur	0.0020	U	ug/L	P413774	
2326011		Acesulfame K	0.10	U	ug/L	P413677	
		2,4-D	0.0025	I	ug/L	P413773	
		AMPA	0.10	U	ug/L	P413677	
		2,4,5-T	0.0040	U	ug/L	P413773	
		Acetaminophen	0.0080	U	ug/L	P413773	
		Endothall	1.2	U	ug/L	P413677	
		Acetamiprid	0.0020	U	ug/L	P413773	
		Glufosinate	0.10	U	ug/L	P413677	
		Glyphosate	0.17	I	ug/L	P413677	
		Afidopyropen	0.0020	U	ug/L	P413773	
		Sucralose	0.016	I	ug/L	P413677	
		Bentazon	0.0017	I	ug/L	P413773	
		Benzovindiflupyr	0.0020	U	ug/L	P413773	MS
		Carbamazepine	8.0E-04	U	ug/L	P413773	
		Clothianidin	0.0020	U	ug/L	P413773	
		Dinotefuran	0.0020	U	ug/L	P413773	
		Diuron	0.0020	U	ug/L	P413773	
		Fenuron	0.032	U	ug/L	P413773	
		Fluridone	8.0E-04	U	ug/L	P413773	
		Imazapyr	0.0040	U	ug/L	P413773	
		Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.014		ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS
		Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326015	EPA 8270E	Aldrin	0.66	U	ng/L	P413527	

Field ID: G3SW0057

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326015	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P413527	
		Alpha-Chlordane	0.20	U	ng/L	P413527	
		PCB-1016	2.0	U	ng/L	P413527	
		Beta-BHC	0.44	I	ng/L	P413527	
		PCB-1221	2.0	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.3	U	ng/L	P413527	
		PCB-1232	2.0	U	ng/L	P413527	
		Bifenthrin**	0.51	U	ng/L	P413527	
		PCB-1242	2.0	U	ng/L	P413527	
		Carbophenothion	0.92	U	ng/L	P413527	
		PCB-1248	2.0	U	ng/L	P413527	
		Chlorothalonil	1.3	U	ng/L	P413527	RPD
		PCB-1254	2.0	U	ng/L	P413527	
		Cis-Nonachlor**	0.20	U	ng/L	P413527	
		PCB-1260	2.0	U	ng/L	P413527	
		Cypermethrin	1.5	U	ng/L	P413527	
		Dacthal**	0.15	U	ng/L	P413527	
		DDD-p,p'	0.26	U	ng/L	P413527	
		DDE-p,p'	0.20	U	ng/L	P413527	
		DDT-p,p'	0.26	U	ng/L	P413527	
		Delta-BHC	0.41	U	ng/L	P413527	
		Deltamethrin**	1.3	U	ng/L	P413527	
		Dichlobenil**	0.26	U	ng/L	P413527	
		Dicofol	1.3	U	ng/L	P413527	
		Dieldrin	0.41	U	ng/L	P413527	
		Endosulfan I	0.41	U	ng/L	P413527	
		Endosulfan II	0.41	U	ng/L	P413527	
		Endosulfan Sulfate	0.31	U	ng/L	P413527	
		Endrin	0.41	U	ng/L	P413527	
		Endrin Aldehyde	0.77	U	ng/L	P413527	
		Endrin Ketone	0.41	U	ng/L	P413527	
		Esfenvalerate**	0.77	U	ng/L	P413527	
		Ethalfuralin**	0.15	U	ng/L	P413527	
		Fenpropathrin**	0.26	U	ng/L	P413527	
		Gamma-BHC	0.13	U	ng/L	P413527	
		Gamma-Chlordane	0.20	U	ng/L	P413527	
		Heptachlor	0.20	U	ng/L	P413527	
		Heptachlor Epoxide	0.26	U	ng/L	P413527	
		Hexachlorobenzene**	1.0	U	ng/L	P413527	
		Kepone**	5.1	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.77	U	ng/L	P413527	
		Methoprene**	0.77	U	ng/L	P413527	
		Methoxychlor	0.31	U	ng/L	P413527	
		MGK-264**	0.51	I	ng/L	P413527	
		Mirex	0.71	U	ng/L	P413527	

Field ID: G3SW0057

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326015	EPA 8270E	Oxychlordane**	0.31	U	ng/L	P413527	
		Permethrin	1.6	U	ng/L	P413527	
		Phenothrin**	0.92	U	ng/L	P413527	
		Piperonyl Butoxide**	0.64	I	ng/L	P413527	
		Prallethrin**	2.0	U	ng/L	P413527	
		Tau-Fluvalinate**	0.26	U	ng/L	P413527	
		Tetramethrin**	0.77	U	ng/L	P413527	
		Trans-Nonachlor**	0.20	U	ng/L	P413527	
		Triclosan Methyl**	0.15	U	ng/L	P413527	
		Trifluralin	0.20	U	ng/L	P413527	
	EPA 8276	Chlordane	2.6	U	ng/L	P413527	MS
		Toxaphene	15	U	ng/L	P413527	
2326016	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P414025	
		Acetochlor	0.24	U	ng/L	P414025	
		Octinoxate**	19	U	ng/L	P414025	
		Alachlor	0.24	U	ng/L	P414025	
		Avobenzone**	95	U	ng/L	P414025	
		Ametryn	0.57	U	ng/L	P414025	
		Atrazine	18		ng/L	P414025	
		Atrazine Desethyl	1.4	U	ng/L	P414025	
		Azinphos Methyl	1.9	U	ng/L	P414025	
		Azoxystrobin**	0.47	U	ng/L	P414025	
		Bromacil	0.47	U	ng/L	P414025	
		Butylate	0.38	U	ng/L	P414025	
		Caffeine**	25	I	ng/L	P414025	
		Carbophenothion	0.19	U	ng/L	P414025	
		Carfentrazone Ethyl**	0.095	U	ng/L	P414025	
		Chlorfenapyr**	0.17	U	ng/L	P414025	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P414025	
		Chlorpyrifos Methyl	0.047	U	ng/L	P414025	
		Coumaphos**	0.47	U	ng/L	P414025	
		Cyanazine	3.1	U	ng/L	P414025	
		Cyprodinil**	0.095	U	ng/L	P414025	
		Demeton	1.4	U	ng/L	P414025	
		Diazinon	0.12	U	ng/L	P414025	
		Difenoconazole**	0.57	U	ng/L	P414025	
		Dimethenamid**	0.095	U	ng/L	P414025	
		Dimethomorph**	0.17	U	ng/L	P414025	
		Disulfoton	0.47	U	ng/L	P414025	
		Dithiopyr**	0.17	U	ng/L	P414025	MS
		EPTC	1.2	UJ	ng/L	P414025	RPD
		Ethion	0.14	U	ng/L	P414025	
		Ethoprop	0.095	U	ng/L	P414025	
		Etridiazole**	0.14	UJ	ng/L	P414025	MS, RPD
		Fenamiphos	0.47	U	ng/L	P414025	

Field ID: G3SW0057

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326016	EPA 8270E	Fenbuconazole**	0.12	U	ng/L	P414025	
		Fipronil	0.24	U	ng/L	P414025	
		Fipronil Desulfinyl**	0.12	U	ng/L	P414025	
		Fipronil Sulfide	0.14	U	ng/L	P414025	
		Fipronil Sulfone	0.14	U	ng/L	P414025	
		Fluazifop-P-butyl**	0.095	U	ng/L	P414025	
		Fludioxonil**	0.12	U	ng/L	P414025	
		Flumioxazin**	1.7	U	ng/L	P414025	
		Flutolanil**	0.095	U	ng/L	P414025	
		Fluxapyroxad**	0.16	I	ng/L	P414025	
		Fonofos	0.19	U	ng/L	P414025	
		Hexazinone	0.47	U	ng/L	P414025	
		Imazalil**	0.71	U	ng/L	P414025	
		Iprodione**	0.57	U	ng/L	P414025	
		Loratadine**	0.095	U	ng/L	P414025	
		Malathion	0.33	U	ng/L	P414025	
		Metalaxyl	0.79	I	ng/L	P414025	
		Metolachlor	6.1		ng/L	P414025	
		Metribuzin	2.4	U	ng/L	P414025	
		Mevinphos	1.0	U	ng/L	P414025	
		Molinate	0.28	U	ng/L	P414025	
		Myclobutanil**	0.24	U	ng/L	P414025	
		Naled**	1.4	U	ng/L	P414025	
		Napropamide**	0.38	U	ng/L	P414025	
		Norflurazon	0.47	U	ng/L	P414025	
		Oxadiazon	0.42	I	ng/L	P414025	
		Oxyfluorfen**	0.14	U	ng/L	P414025	
		Parathion Ethyl	0.24	U	ng/L	P414025	
		Parathion Methyl	0.52	U	ng/L	P414025	
		Pendimethalin	0.95	U	ng/L	P414025	
		Phenytol**	3.3	U	ng/L	P414025	MS
		Phorate	0.50	U	ng/L	P414025	
		Prodiamine**	0.17	U	ng/L	P414025	
		Prometon	0.85	U	ng/L	P414025	
		Prometryn	0.19	U	ng/L	P414025	MS
		Pronamide**	0.14	U	ng/L	P414025	
		Propanil**	0.12	U	ng/L	P414025	
		Propargite**	1.4	U	ng/L	P414025	MS
		Propiconazole**	0.47	U	ng/L	P414025	
		Pyraflufen Ethyl**	0.24	U	ng/L	P414025	
		Pyridaben**	0.43	U	ng/L	P414025	
		Pyriproxyfen**	0.12	U	ng/L	P414025	
		Simazine	0.47	U	ng/L	P414025	
		Stirophos**	0.12	U	ng/L	P414025	MS
		Sulfentrazone**	0.47	U	ng/L	P414025	

Field ID: G3SW0057

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326016	EPA 8270E	Tebuconazole**	0.47	U	ng/L	P414025	
		Terbufos	0.095	U	ng/L	P414025	
		Terbuthylazine	0.40	U	ng/L	P414025	
		Thiobencarb**	0.57	U	ng/L	P414025	
		Triadimefon**	0.24	U	ng/L	P414025	
2326022	EPA 200.7 Rev. 4.4	Calcium	22.2		mg/L	P413783	
		Iron	1.93E+03		ug/L	P413783	
		Magnesium	9.51		mg/L	P413783	
		Potassium	4.7		mg/L	P413783	
		Sodium	11.6		mg/L	P413783	
		Strontium	388		ug/L	P413783	
		Tin	3.0	U	ug/L	P413783	
		Titanium	2.2	I	ug/L	P413783	
		Vanadium	2.0	U	ug/L	P413783	
		Zinc	9.6	I	ug/L	P413783	
	EPA 200.8 Rev. 5.4	Aluminum	249		ug/L	P413783	
		Antimony	0.13	I	ug/L	P413783	
		Arsenic	4.30		ug/L	P413783	
		Barium	6.34		ug/L	P413783	
		Beryllium	0.032	I	ug/L	P413783	
		Boron**	33.4		ug/L	P413783	
		Cadmium	0.020	U	ug/L	P413783	
		Chromium	0.86	I	ug/L	P413783	
		Cobalt	0.442		ug/L	P413783	
		Copper	2.06		ug/L	P413783	
		Lead	0.20	I	ug/L	P413783	
		Manganese	59.3		ug/L	P413783	
		Molybdenum	0.61		ug/L	P413783	
		Nickel	0.94	I	ug/L	P413783	
		Selenium	0.20	U	ug/L	P413783	
		Silver	0.010	U	ug/L	P413783	
		Thallium	0.10	U	ug/L	P413783	
	SM 2340 B-2011	Hardness	94.5		mg/L	P413783	

Ref. Method and Comment:

EPA 8321B: MDL for Endothall elevated due to matrix interference.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Insufficient sample available to perform duplicate matrix spikes.

EPA 8270E: Insufficient sample available to perform duplicate matrix spikes. MS accuracy for atrazine and simazine 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.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Indian Creek @ Murphy Property

Collection Date/Time: 05/09/2022 11:30

Field ID: G3SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326012	EPA 8321B	Aldicarb	0.020	U	ug/L	P413774	
		Aldicarb Sulfone	0.0020	U	ug/L	P413774	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P413774	
		Carbaryl	0.0020	U	ug/L	P413774	
		Carbofuran	0.0020	U	ug/L	P413774	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P413774	
		Methiocarb	0.0020	U	ug/L	P413774	
		Methomyl	0.0020	U	ug/L	P413774	
		Oxamyl	0.0020	U	ug/L	P413774	
		Propoxur	0.0020	U	ug/L	P413774	
2326013		Acesulfame K	0.10	U	ug/L	P413677	
		2,4-D	0.0023	I	ug/L	P413773	
		AMPA	0.10	U	ug/L	P413677	
		2,4,5-T	0.0040	U	ug/L	P413773	
		Acetaminophen	0.0080	U	ug/L	P413773	
		Endothall	2.5	U	ug/L	P413677	
		Acetamiprid	0.0020	U	ug/L	P413773	
		Glufosinate	0.10	U	ug/L	P413677	
		Glyphosate	0.16	I	ug/L	P413677	
		Afidopyropen	0.0020	U	ug/L	P413773	
		Sucralose	0.010	U	ug/L	P413677	
		Bentazon	0.0015	I	ug/L	P413773	
		Benzovindiflupyr	0.0020	U	ug/L	P413773	MS
		Carbamazepine	8.0E-04	U	ug/L	P413773	
		Clothianidin	0.0020	U	ug/L	P413773	
		Dinotefuran	0.0020	U	ug/L	P413773	
		Diuron	0.0020	U	ug/L	P413773	
		Fenuron	0.032	U	ug/L	P413773	
		Fluridone	8.0E-04	U	ug/L	P413773	
		Imazapyr	0.0040	U	ug/L	P413773	
		Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.015		ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS
		Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326019	EPA 8270E	Aldrin	0.68	U	ng/L	P413527	

Field ID: G3SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326019	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P413527	
		Alpha-Chlordane	0.21	U	ng/L	P413527	
		PCB-1016	2.1	U	ng/L	P413527	
		Beta-BHC	0.42	I	ng/L	P413527	
		PCB-1221	2.1	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.3	U	ng/L	P413527	
		PCB-1232	2.1	U	ng/L	P413527	
		Bifenthrin**	0.52	U	ng/L	P413527	
		PCB-1242	2.1	U	ng/L	P413527	
		Carbophenothion	0.94	U	ng/L	P413527	
		PCB-1248	2.1	U	ng/L	P413527	
		Chlorothalonil	1.3	U	ng/L	P413527	RPD
		PCB-1254	2.1	U	ng/L	P413527	
		Cis-Nonachlor**	0.21	U	ng/L	P413527	
		PCB-1260	2.1	U	ng/L	P413527	
		Cypermethrin	1.6	U	ng/L	P413527	
		Dacthal**	0.16	U	ng/L	P413527	
		DDD-p,p'	0.26	U	ng/L	P413527	
		DDE-p,p'	0.21	U	ng/L	P413527	
		DDT-p,p'	0.26	U	ng/L	P413527	
		Delta-BHC	0.42	U	ng/L	P413527	
		Deltamethrin**	1.3	U	ng/L	P413527	
		Dichlobenil**	0.26	U	ng/L	P413527	
		Dicofol	1.3	U	ng/L	P413527	
		Dieldrin	0.42	U	ng/L	P413527	
		Endosulfan I	0.42	U	ng/L	P413527	
		Endosulfan II	0.42	U	ng/L	P413527	
		Endosulfan Sulfate	0.31	U	ng/L	P413527	
		Endrin	0.42	U	ng/L	P413527	
		Endrin Aldehyde	0.78	U	ng/L	P413527	
		Endrin Ketone	0.42	U	ng/L	P413527	
		Esfenvalerate**	0.78	U	ng/L	P413527	
		Ethalfuralin**	0.16	U	ng/L	P413527	
		Fenpropathrin**	0.26	U	ng/L	P413527	
		Gamma-BHC	0.13	U	ng/L	P413527	
		Gamma-Chlordane	0.21	U	ng/L	P413527	
		Heptachlor	0.21	U	ng/L	P413527	
		Heptachlor Epoxide	0.26	U	ng/L	P413527	
		Hexachlorobenzene**	1.0	U	ng/L	P413527	
		Kepone**	5.2	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.78	U	ng/L	P413527	
		Methoprene**	0.78	U	ng/L	P413527	
		Methoxychlor	0.31	U	ng/L	P413527	
		MGK-264**	0.21	U	ng/L	P413527	
		Mirex	0.73	U	ng/L	P413527	

Field ID: G3SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326019	EPA 8270E	Oxychlordane**	0.31	U	ng/L	P413527	
		Permethrin	1.7	U	ng/L	P413527	
		Phenothrin**	0.94	U	ng/L	P413527	
		Piperonyl Butoxide**	0.29	I	ng/L	P413527	
		Prallethrin**	2.1	U	ng/L	P413527	
		Tau-Fluvalinate**	0.26	U	ng/L	P413527	
		Tetramethrin**	0.78	U	ng/L	P413527	
		Trans-Nonachlor**	0.21	U	ng/L	P413527	
		Triclosan Methyl**	0.16	U	ng/L	P413527	
		Trifluralin	0.21	U	ng/L	P413527	
	EPA 8276	Chlordane	2.6	U	ng/L	P413527	MS
		Toxaphene	16	U	ng/L	P413527	
2326020	EPA 8270E	Oxybenzone**	10	U	ng/L	P414025	
		Acetochlor	0.26	U	ng/L	P414025	
		Octinoxate**	27	I	ng/L	P414025	
		Alachlor	0.26	U	ng/L	P414025	
		Avobenzone**	100	U	ng/L	P414025	
		Ametryn	0.62	U	ng/L	P414025	
		Atrazine	21		ng/L	P414025	
		Atrazine Desethyl	1.6	U	ng/L	P414025	
		Azinphos Methyl	2.1	U	ng/L	P414025	
		Azoxystrobin**	0.52	U	ng/L	P414025	
		Bromacil	0.52	U	ng/L	P414025	
		Butylate	0.41	U	ng/L	P414025	
		Caffeine**	7.8	U	ng/L	P414025	
		Carbophenothion	0.21	U	ng/L	P414025	
		Carfentrazone Ethyl**	0.10	U	ng/L	P414025	
		Chlorfenapyr**	0.18	U	ng/L	P414025	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P414025	
		Chlorpyrifos Methyl	0.052	U	ng/L	P414025	
		Coumaphos**	0.52	U	ng/L	P414025	
		Cyanazine	3.4	U	ng/L	P414025	
		Cyprodinil**	0.10	U	ng/L	P414025	
		Demeton	1.6	U	ng/L	P414025	
		Diazinon	0.13	U	ng/L	P414025	
		Difenoconazole**	0.62	U	ng/L	P414025	
		Dimethenamid**	0.10	U	ng/L	P414025	
		Dimethomorph**	0.18	U	ng/L	P414025	
		Disulfoton	0.52	U	ng/L	P414025	
		Dithiopyr**	0.18	U	ng/L	P414025	MS
		EPTC	1.3	UJ	ng/L	P414025	RPD
		Ethion	0.16	U	ng/L	P414025	
		Ethoprop	0.10	U	ng/L	P414025	
		Etridiazole**	0.16	UJ	ng/L	P414025	MS, RPD
		Fenamiphos	0.52	U	ng/L	P414025	

Field ID: G3SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326020	EPA 8270E	Fenbuconazole**	0.13	U	ng/L	P414025	
		Fipronil	0.26	U	ng/L	P414025	
		Fipronil Desulfinyl**	0.13	U	ng/L	P414025	
		Fipronil Sulfide	0.16	U	ng/L	P414025	
		Fipronil Sulfone	0.16	U	ng/L	P414025	
		Fluazifop-P-butyl**	0.10	U	ng/L	P414025	
		Fludioxonil**	0.13	U	ng/L	P414025	
		Flumioxazin**	1.8	U	ng/L	P414025	
		Flutolanil**	0.10	U	ng/L	P414025	
		Fluxapyroxad**	0.21	I	ng/L	P414025	
		Fonofos	0.21	U	ng/L	P414025	
		Hexazinone	0.52	U	ng/L	P414025	
		Imazalil**	0.78	U	ng/L	P414025	
		Iprodione**	0.62	U	ng/L	P414025	
		Loratadine**	0.10	U	ng/L	P414025	
		Malathion	0.36	U	ng/L	P414025	
		Metalaxyl	1.2	I	ng/L	P414025	
		Metolachlor	10		ng/L	P414025	
		Metribuzin	2.6	U	ng/L	P414025	
		Mevinphos	1.1	U	ng/L	P414025	
		Molinate	0.31	U	ng/L	P414025	
		Myclobutanil**	0.26	U	ng/L	P414025	
		Naled**	1.6	U	ng/L	P414025	
		Napropamide**	0.41	U	ng/L	P414025	
		Norflurazon	0.52	U	ng/L	P414025	
		Oxadiazon	0.47	I	ng/L	P414025	
		Oxyfluorfen**	0.16	U	ng/L	P414025	
		Parathion Ethyl	0.26	U	ng/L	P414025	
		Parathion Methyl	0.57	U	ng/L	P414025	
		Pendimethalin	1.0	U	ng/L	P414025	
		Phenytoin**	3.6	U	ng/L	P414025	MS
		Phorate	0.54	U	ng/L	P414025	
		Prodiamine**	0.18	U	ng/L	P414025	
		Prometon	0.93	U	ng/L	P414025	
		Prometryn	0.21	U	ng/L	P414025	MS
		Pronamide**	0.16	U	ng/L	P414025	
		Propanil**	0.13	U	ng/L	P414025	
		Propargite**	1.6	U	ng/L	P414025	MS
		Propiconazole**	0.52	U	ng/L	P414025	
		Pyraflufen Ethyl**	0.26	U	ng/L	P414025	
		Pyridaben**	0.47	U	ng/L	P414025	
		Pyriproxyfen**	0.13	U	ng/L	P414025	
		Simazine	0.52	U	ng/L	P414025	
		Stirophos**	0.13	U	ng/L	P414025	MS
		Sulfentrazone**	0.52	U	ng/L	P414025	

Field ID: G3SW0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326020	EPA 8270E	Tebuconazole**	0.52	U	ng/L	P414025	
		Terbufos	0.10	U	ng/L	P414025	
		Terbuthylazine	0.44	U	ng/L	P414025	
		Thiobencarb**	0.62	U	ng/L	P414025	
		Triadimefon**	0.26	U	ng/L	P414025	
2326025	EPA 200.7 Rev. 4.4	Calcium	20.7		mg/L	P413783	
		Iron	1.75E+03		ug/L	P413783	
		Magnesium	8.78		mg/L	P413783	
		Strontium	369		ug/L	P413783	
		Tin	3.0	U	ug/L	P413783	
	EPA 200.8 Rev. 5.4	Titanium	1.9	I	ug/L	P413783	
		Vanadium	2.0	U	ug/L	P413783	
		Zinc	8.3	I	ug/L	P413783	
		Aluminum	219		ug/L	P413783	
		Antimony	0.14	I	ug/L	P413783	
		Arsenic	4.19		ug/L	P413783	
		Beryllium	0.028	I	ug/L	P413783	
		Cadmium	0.020	U	ug/L	P413783	
		Chromium	0.80	I	ug/L	P413783	
		Cobalt	0.407		ug/L	P413783	
		Copper	1.95		ug/L	P413783	
		Lead	0.20	U	ug/L	P413783	
		Manganese	56.0		ug/L	P413783	
		Molybdenum	0.60	I	ug/L	P413783	
		Nickel	0.95	I	ug/L	P413783	
		Selenium	0.20	U	ug/L	P413783	
		Silver	0.010	U	ug/L	P413783	
		Thallium	0.10	U	ug/L	P413783	

Ref. Method and Comment:

EPA 8321B: MDL for Endothall elevated due to matrix interference.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: Insufficient sample available to perform duplicate matrix spikes.

EPA 8270E: Insufficient sample available to perform duplicate matrix spikes. MS accuracy for atrazine and simazine 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.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Indian Creek WBID @ Tiny Ditch

Collection Date/Time: 05/09/2022 12:15

Field ID: G3SW0110

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326014	EPA 8321B	Acesulfame K	0.10	U	ug/L	P413677	
		2,4-D	0.0020	U	ug/L	P413773	
		AMPA	0.11	I	ug/L	P413677	
		2,4,5-T	0.0040	U	ug/L	P413773	
		Acetaminophen	0.016	I	ug/L	P413773	
		Endothall	2.5	U	ug/L	P413677	
		Acetamiprid	0.0020	U	ug/L	P413773	
		Glufosinate	0.10	U	ug/L	P413677	
		Glyphosate	0.15	I	ug/L	P413677	
		Afidopyropen	0.0020	U	ug/L	P413773	
		Sucralose	0.021	I	ug/L	P413677	
		Bentazon	0.0021	I	ug/L	P413773	
		Benzovindiflupyr	0.0020	U	ug/L	P413773	MS
		Carbamazepine	8.0E-04	U	ug/L	P413773	
		Clothianidin	0.0020	U	ug/L	P413773	
		Dinotefuran	0.0020	U	ug/L	P413773	
		Diuron	0.0020	U	ug/L	P413773	
		Fenuron	0.032	U	ug/L	P413773	
		Fluridone	8.0E-04	U	ug/L	P413773	
		Imazapyr	0.0040	U	ug/L	P413773	
		Hydrocodone	0.0020	U	ug/L	P413773	
		Ibuprofen	0.020	U	ug/L	P413773	
		Imidacloprid	0.0048	I	ug/L	P413773	
		Linuron	0.0040	U	ug/L	P413773	
		Mandestrobin	0.0020	U	ug/L	P413773	
		MCPP	0.0040	U	ug/L	P413773	
		Naproxen	0.0080	U	ug/L	P413773	
		Primidone	0.0040	U	ug/L	P413773	
		Pyraclostrobin	0.0020	U	ug/L	P413773	MS
		Silvex	0.0040	U	ug/L	P413773	
		Thiamethoxam	0.0020	U	ug/L	P413773	
		Tolfenpyrad	0.0020	U	ug/L	P413773	MS
		Triclopyr	0.0040	U	ug/L	P413773	
2326021	EPA 8270E	Aldrin	0.71	U	ng/L	P413527	
		Alpha-BHC	0.11	U	ng/L	P413527	
		Alpha-Chlordane	0.22	U	ng/L	P413527	
		Beta-BHC	0.11	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.4	U	ng/L	P413527	
		Bifenthrin**	0.55	U	ng/L	P413527	
		Carbophenothion	0.98	U	ng/L	P413527	
		Chlorothalonil	1.4	U	ng/L	P413527	RPD
		Cis-Nonachlor**	0.22	U	ng/L	P413527	
		Cypermethrin	1.6	U	ng/L	P413527	
		Dacthal**	0.16	U	ng/L	P413527	

Field ID: G3SW0110

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326021	EPA 8270E	DDD-p,p'	0.27	U	ng/L	P413527	
		DDE-p,p'	0.22	U	ng/L	P413527	
		DDT-p,p'	0.27	U	ng/L	P413527	
		Delta-BHC	0.44	U	ng/L	P413527	
		Deltamethrin**	1.4	U	ng/L	P413527	
		Dichlobenil**	0.27	U	ng/L	P413527	
		Dicofol	1.4	U	ng/L	P413527	
		Dieldrin	0.44	U	ng/L	P413527	
		Endosulfan I	0.44	U	ng/L	P413527	
		Endosulfan II	0.44	U	ng/L	P413527	
		Endosulfan Sulfate	0.33	U	ng/L	P413527	
		Endrin	0.44	U	ng/L	P413527	
		Endrin Aldehyde	0.82	U	ng/L	P413527	
		Endrin Ketone	0.44	U	ng/L	P413527	
		Esfenvalerate**	0.82	U	ng/L	P413527	
		Ethalfuralin**	0.16	U	ng/L	P413527	
		Fenpropathrin**	0.27	U	ng/L	P413527	
		Gamma-BHC	0.14	U	ng/L	P413527	
		Gamma-Chlordane	0.22	U	ng/L	P413527	
		Heptachlor	0.22	U	ng/L	P413527	
		Heptachlor Epoxide	0.27	U	ng/L	P413527	
		Hexachlorobenzene**	1.1	U	ng/L	P413527	
		Kepone**	5.5	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.82	U	ng/L	P413527	
		Methoprene**	0.82	U	ng/L	P413527	
		Methoxychlor	0.33	U	ng/L	P413527	
		MGK-264**	28		ng/L	P413527	
		Mirex	0.76	U	ng/L	P413527	
		Oxychlordane**	0.33	U	ng/L	P413527	
		Permethrin	16		ng/L	P413527	
		Phenothrin**	0.98	U	ng/L	P413527	
		Piperonyl Butoxide**	180		ng/L	P413527	
		Prallethrin**	2.2	U	ng/L	P413527	
		Tau-Fluvalinate**	0.27	U	ng/L	P413527	
		Tetramethrin**	0.82	U	ng/L	P413527	
		Trans-Nonachlor**	0.22	U	ng/L	P413527	
		Triclosan Methyl**	0.16	U	ng/L	P413527	
		Trifluralin	0.22	U	ng/L	P413527	
	EPA 8276	Chlordane	2.7	U	ng/L	P413527	MS
		Toxaphene	16	U	ng/L	P413527	
2326032	EPA 200.7 Rev. 4.4	Calcium	32.0		mg/L	P413783	
		Iron	1.00E+03		ug/L	P413783	
		Magnesium	10.3		mg/L	P413783	
		Strontium	207		ug/L	P413783	
		Tin	3.0	U	ug/L	P413783	

Field ID: G3SW0110

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326032	EPA 200.7 Rev. 4.4	Titanium	6.4		ug/L	P413783	
		Vanadium	2.4	I	ug/L	P413783	
		Zinc	21		ug/L	P413783	
	EPA 200.8 Rev. 5.4	Aluminum	533		ug/L	P413783	
		Antimony	0.14	I	ug/L	P413783	
		Arsenic	5.99		ug/L	P413783	
		Beryllium	0.063		ug/L	P413783	
		Cadmium	0.024	I	ug/L	P413783	
		Chromium	2.0		ug/L	P413783	
		Cobalt	0.416		ug/L	P413783	
		Copper	1.46		ug/L	P413783	
		Lead	0.35	I	ug/L	P413783	
		Manganese	40.3		ug/L	P413783	
		Molybdenum	0.66		ug/L	P413783	
		Nickel	2.3		ug/L	P413783	
		Selenium	0.27	I	ug/L	P413783	
		Silver	0.010	U	ug/L	P413783	
		Thallium	0.10	U	ug/L	P413783	

Ref. Method and Comment:

EPA 8321B: MDL for Endothall elevated due to matrix interference.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Whitaker Bayou @ Ringling College of Art

Collection Date/Time: 05/09/2022 12:50

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326017	EPA 8270E	Aldrin	0.71	U	ng/L	P413527	
		Alpha-BHC	0.11	U	ng/L	P413527	
		Alpha-Chlordane	0.22	U	ng/L	P413527	
		Beta-BHC	0.11	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.4	U	ng/L	P413527	
		Bifenthrin**	0.54	U	ng/L	P413527	
		Carbophenothion	0.98	U	ng/L	P413527	
		Chlorothalonil	1.4	U	ng/L	P413527	RPD
		Cis-Nonachlor**	0.22	U	ng/L	P413527	
		Cypermethrin	1.6	U	ng/L	P413527	
		Dacthal**	0.16	U	ng/L	P413527	
		DDD-p,p'	0.27	U	ng/L	P413527	
		DDE-p,p'	0.22	U	ng/L	P413527	
		DDT-p,p'	0.27	U	ng/L	P413527	
		Delta-BHC	0.43	U	ng/L	P413527	
		Deltamethrin**	1.4	U	ng/L	P413527	
		Dichlobenil**	0.43	I	ng/L	P413527	
		Dicofol	1.4	U	ng/L	P413527	
		Dieldrin	0.43	U	ng/L	P413527	
		Endosulfan I	0.43	U	ng/L	P413527	
		Endosulfan II	0.43	U	ng/L	P413527	
		Endosulfan Sulfate	0.33	U	ng/L	P413527	
		Endrin	0.43	U	ng/L	P413527	
		Endrin Aldehyde	0.82	U	ng/L	P413527	
		Endrin Ketone	0.43	U	ng/L	P413527	
		Esfenvalerate**	0.82	U	ng/L	P413527	
		Ethalfuralin**	0.16	U	ng/L	P413527	
		Fenpropathrin**	0.27	U	ng/L	P413527	
		Gamma-BHC	0.14	U	ng/L	P413527	
		Gamma-Chlordane	0.22	U	ng/L	P413527	
		Heptachlor	0.22	U	ng/L	P413527	
		Heptachlor Epoxide	0.27	U	ng/L	P413527	
		Hexachlorobenzene**	1.1	U	ng/L	P413527	
		Kepone**	5.4	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.82	U	ng/L	P413527	
		Methoprene**	0.82	U	ng/L	P413527	
		Methoxychlor	0.33	U	ng/L	P413527	
		MGK-264**	0.22	U	ng/L	P413527	
		Mirex	0.76	U	ng/L	P413527	
		Oxychlordane**	0.33	U	ng/L	P413527	
		Permethrin	1.7	U	ng/L	P413527	
		Phenothrin**	0.98	U	ng/L	P413527	
		Piperonyl Butoxide**	0.16	U	ng/L	P413527	
		Prallethrin**	2.2	U	ng/L	P413527	

Field ID: G3SW0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326017	EPA 8270E	Tau-Fluvalinate**	0.27	U	ng/L	P413527	
		Tetramethrin**	0.82	U	ng/L	P413527	
		Trans-Nonachlor**	0.22	U	ng/L	P413527	
		Triclosan Methyl**	0.16	U	ng/L	P413527	
		Trifluralin	0.22	U	ng/L	P413527	
	EPA 8276	Chlordane	2.7	UJ	ng/L	P413527	MS
		Toxaphene	16	U	ng/L	P413527	
2326023	EPA 200.7 Rev. 4.4	Calcium	380		mg/L	P413782	
		Iron	120	U	ug/L	P413782	
		Magnesium	1.16E+03		mg/L	P413782	
		Potassium	365		mg/L	P413782	
		Sodium	9.82E+03		mg/L	P413782	
		Strontium	7.23E+03		ug/L	P413782	
		Tin	150	U	ug/L	P413782	
		Titanium	4.4	I	ug/L	P413782	
		Vanadium	8.0	U	ug/L	P413782	
		Zinc	20	U	ug/L	P413782	
	EPA 200.8 Rev. 5.4	Aluminum	30	I	ug/L	P413782	
		Antimony	0.29	I	ug/L	P413782	
		Arsenic	3.01		ug/L	P413782	
		Barium	12.8		ug/L	P413782	
		Beryllium	0.040	U	ug/L	P413782	
		Boron**	3.86E+03		ug/L	P413782	
		Cadmium	0.080	U	ug/L	P413782	
		Chromium	1.6	U	ug/L	P413782	
		Cobalt	0.080	U	ug/L	P413782	
		Copper	1.6	U	ug/L	P413782	
		Lead	2.0	U	ug/L	P413782	
		Manganese	8.2		ug/L	P413782	
		Molybdenum	10.7		ug/L	P413782	
		Nickel	2.0	U	ug/L	P413782	
		Selenium	0.80	U	ug/L	P413782	
		Silver	0.040	U	ug/L	P413782	
		Thallium	1.0	U	ug/L	P413782	
	SM 2340 B-2011	Hardness	5.75E+03		mg/L	P413782	

Ref. Method and Comment:

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 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium, sodium and strontium are unavailable because of high analyte concentration in the QC sample. Precision data and spike recoveries for tin are unavailable because sample matrix interference necessitated a high dilution.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for boron are unavailable because of high analyte concentration in the QC sample.

Sample Location: Whitaker Bayou @ Museum Office Pier

Collection Date/Time: 05/09/2022 12:10

Field ID: G3SW0059

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326018	EPA 8270E	Aldrin	0.72	U	ng/L	P413527	
		Alpha-BHC	0.11	U	ng/L	P413527	
		Alpha-Chlordane	0.22	U	ng/L	P413527	
		Beta-BHC	0.11	U	ng/L	P413527	
		Beta-Cyfluthrin**	1.4	U	ng/L	P413527	
		Bifenthrin**	0.55	U	ng/L	P413527	
		Carbophenothion	0.99	U	ng/L	P413527	
		Chlorothalonil	1.4	U	ng/L	P413527	RPD
		Cis-Nonachlor**	0.22	U	ng/L	P413527	
		Cypermethrin	1.7	U	ng/L	P413527	
		Dacthal**	0.17	U	ng/L	P413527	
		DDD-p,p'	0.28	U	ng/L	P413527	
		DDE-p,p'	0.22	U	ng/L	P413527	
		DDT-p,p'	0.28	U	ng/L	P413527	
		Delta-BHC	0.44	U	ng/L	P413527	
		Deltamethrin**	1.4	U	ng/L	P413527	
		Dichlobenil**	0.28	U	ng/L	P413527	
		Dicofol	1.4	U	ng/L	P413527	
		Dieldrin	0.44	U	ng/L	P413527	
		Endosulfan I	0.44	U	ng/L	P413527	
		Endosulfan II	0.44	U	ng/L	P413527	
		Endosulfan Sulfate	0.33	U	ng/L	P413527	
		Endrin	0.44	U	ng/L	P413527	
		Endrin Aldehyde	0.83	U	ng/L	P413527	
		Endrin Ketone	0.44	U	ng/L	P413527	
		Esfenvalerate**	0.83	U	ng/L	P413527	
		Ethalfuralin**	0.17	U	ng/L	P413527	
		Fenpropathrin**	0.28	U	ng/L	P413527	
		Gamma-BHC	0.14	U	ng/L	P413527	
		Gamma-Chlordane	0.22	U	ng/L	P413527	
		Heptachlor	0.22	U	ng/L	P413527	
		Heptachlor Epoxide	0.28	U	ng/L	P413527	
		Hexachlorobenzene**	1.1	U	ng/L	P413527	
		Kepone**	5.5	UJ	ng/L	P413527	CCV
		Lambda-Cyhalothrin**	0.83	U	ng/L	P413527	
		Methoprene**	0.83	U	ng/L	P413527	
		Methoxychlor	0.33	U	ng/L	P413527	
		MGK-264**	0.22	U	ng/L	P413527	
		Mirex	0.77	U	ng/L	P413527	
		Oxychlordane**	0.33	U	ng/L	P413527	
		Permethrin	1.8	U	ng/L	P413527	
		Phenothrin**	0.99	U	ng/L	P413527	
		Piperonyl Butoxide**	0.17	U	ng/L	P413527	
		Prallethrin**	2.2	U	ng/L	P413527	

Field ID: G3SW0059

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2326018	EPA 8270E	Tau-Fluvalinate**	0.28	U	ng/L	P413527	
		Tetramethrin**	0.83	U	ng/L	P413527	
		Trans-Nonachlor**	0.22	U	ng/L	P413527	
		Triclosan Methyl**	0.17	U	ng/L	P413527	
		Trifluralin	0.22	U	ng/L	P413527	
	EPA 8276	Chlordane	2.8	U	ng/L	P413527	MS
		Toxaphene	17	U	ng/L	P413527	
2326024	EPA 200.7 Rev. 4.4	Calcium	393		mg/L	P413782	
		Iron	120	U	ug/L	P413782	
		Magnesium	1.21E+03		mg/L	P413782	
		Potassium	381		mg/L	P413782	
		Sodium	1.06E+04		mg/L	P413782	
		Strontium	7.52E+03		ug/L	P413782	
		Tin	150	U	ug/L	P413782	
		Titanium	4.6	I	ug/L	P413782	
		Vanadium	8.0	U	ug/L	P413782	
		Zinc	20	U	ug/L	P413782	
	EPA 200.8 Rev. 5.4	Aluminum	51	I	ug/L	P413782	
		Antimony	0.23	I	ug/L	P413782	
		Arsenic	2.86		ug/L	P413782	
		Barium	12.0		ug/L	P413782	
		Beryllium	0.040	U	ug/L	P413782	
		Boron**	4.25E+03		ug/L	P413782	
		Cadmium	0.080	U	ug/L	P413782	
		Chromium	1.6	U	ug/L	P413782	
		Cobalt	0.080	U	ug/L	P413782	
		Copper	1.9	I	ug/L	P413782	
		Lead	2.0	U	ug/L	P413782	
		Manganese	6.5		ug/L	P413782	
		Molybdenum	12.1		ug/L	P413782	
		Nickel	2.0	U	ug/L	P413782	
		Selenium	0.80	U	ug/L	P413782	
		Silver	0.040	U	ug/L	P413782	
		Thallium	1.0	U	ug/L	P413782	
	SM 2340 B-2011	Hardness	5.94E+03		mg/L	P413782	

Ref. Method and Comment:

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium, sodium and strontium are unavailable because of high analyte concentration in the QC sample. Precision data and spike recoveries for tin are unavailable because sample matrix interference necessitated a high dilution.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for boron are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P413782

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 200.7 Rev. 4.4
Batch ID: P413783

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: P413782

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 200.8 Rev. 5.4
Batch ID: P413783

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413783

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: P413527

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
Carbophenothion	0.90	U	ng/L
Carbophenothion	0.90	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413527

Component	Result	Code	Units
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
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	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	0.70	U	ng/L
Mirex	0.70	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P413527

Component	Result	Code	Units
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 8270E

Batch ID: P414025

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414025

Component	Result	Code	Units
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	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	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414025

Component	Result	Code	Units
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414025

Component	Result	Code	Units
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodimamine	0.18	U	ng/L
Prodimamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276

Batch ID: P413527

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276

Batch ID: P413527

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

Reference Method: EPA 8321B

Batch ID: P413677

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: P413773

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	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	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

Reference Method: EPA 8321B

Batch ID: P413774

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P413774

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.0		P	85 - 115
Iron	100		P	85 - 115
Magnesium	97.3		P	85 - 115
Potassium	98.3		P	85 - 115
Sodium	98.2		P	85 - 115
Strontium	99.6		P	85 - 115
Tin	97.6		P	85 - 115
Titanium	99.8		P	85 - 115
Vanadium	93.4		P	85 - 115
Zinc	96.7		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	107		P	85 - 115
Iron	108		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	106		P	85 - 115
Sodium	110		P	85 - 115
Strontium	103		P	85 - 115
Tin	106		P	85 - 115
Titanium	106		P	85 - 115
Vanadium	99.4		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.4		P	85 - 115
Antimony	99.9		P	85 - 115
Arsenic	98.5		P	85 - 115
Barium	102		P	85 - 115
Beryllium	88.4		P	85 - 115
Boron	103		P	85 - 115
Cadmium	98.3		P	85 - 115
Chromium	95.7		P	85 - 115
Cobalt	97.4		P	85 - 115
Copper	95.9		P	85 - 115
Lead	101		P	85 - 115
Manganese	97.0		P	85 - 115
Molybdenum	99.5		P	85 - 115
Nickel	97.4		P	85 - 115
Selenium	96.5		P	85 - 115
Silver	98.2		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413783

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

Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	99.3		P	85 - 115
Arsenic	98.8		P	85 - 115
Barium	103		P	85 - 115
Beryllium	94.2		P	85 - 115
Boron	102		P	85 - 115
Cadmium	97.8		P	85 - 115
Chromium	96.0		P	85 - 115
Cobalt	97.5		P	85 - 115
Copper	96.8		P	85 - 115
Lead	94.0		P	85 - 115
Manganese	98.2		P	85 - 115
Molybdenum	98.8		P	85 - 115
Nickel	98.6		P	85 - 115
Selenium	99.4		P	85 - 115
Silver	98.7		P	85 - 115
Thallium	95.3		P	85 - 115

Reference Method: EPA 8270E

Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	43.6		P	10 - 93.0
Alpha-BHC	86.2		P	75 - 106
Alpha-Chlordane	68.6		P	50 - 109
Beta-BHC	101		P	36 - 138
Beta-Cyfluthrin	86.3		P	23 - 167
Bifenthrin	52.7		P	11 - 123
Carbophenothion	43.1		P	18 - 96.0
Chlorothalonil	95.1		P	27 - 190
Cis-Nonachlor	54.9		P	40 - 111
Cypermethrin	74.6		P	25 - 155
Dacthal	89.9		P	72 - 119
DDD-p,p'	70.8		P	47 - 108
DDE-p,p'	71.1		P	48 - 107
DDT-p,p'	70.5		P	49 - 111
Delta-BHC	103		P	54 - 138
Deltamethrin	88.4		P	22 - 189
Dichlobenil	85.9		P	32 - 113
Dicofol	54.8		P	50 - 108
Dieldrin	79.1		P	56 - 110
Endosulfan I	73.3		P	60 - 105
Endosulfan II	87.0		P	50 - 120
Endosulfan Sulfate	90.5		P	55 - 121
Endrin	68.9		P	31 - 119
Endrin Aldehyde	87.3		P	36 - 116
Endrin Ketone	84.3		P	69 - 177
Esfenvalerate	86.6		P	10 - 179
Ethalfuralin	60.0		P	49 - 99.0
Fenpropathrin	68.8		P	35 - 119
Gamma-BHC	87.3		P	69 - 120
Gamma-Chlordane	65.9		P	45 - 107

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	59.0		P	41 - 100
Heptachlor Epoxide	72.1		P	58 - 106
Hexachlorobenzene	57.0		P	39 - 100
Kepone	35.9		P	10 - 191
Lambda-Cyhalothrin	75.8		P	21 - 206
Methoprene	65.6		P	10 - 129
Methoxychlor	72.5		P	61 - 111
MGK-264	85.6		P	20 - 123
Mirex	52.3		P	10 - 182
Oxychlordane	61.7		P	39 - 110
PCB-1016	83.1		P	49 - 111
PCB-1260	78.8		P	42 - 116
Permethrin	77.6		P	26 - 152
Phenothrin	54.0		P	10 - 109
Piperonyl Butoxide	112		P	19 - 147
Prallethrin	72.1		P	14 - 109
Tau-Fluvalinate	81.7		P	16 - 134
Tetramethrin	72.4		P	10 - 125
Trans-Nonachlor	58.9		P	45 - 107
Triclosan Methyl	76.4		P	60 - 110
Trifluralin	59.6		P	44 - 101

Reference Method: EPA 8270E
 Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	96.4	90.7	P/P	70 - 121
Alachlor	82.6	86.9	P/P	68 - 119
Ametryn	83.6	90.2	P/P	64 - 139
Atrazine	93.6	95.2	P/P	76 - 120
Atrazine Desethyl	67.3	69.5	P/P	44 - 126
Avobenzone	121	123	P/P	76 - 212
Azinphos Methyl	106	104	P/P	43 - 192
Azoxystrobin	109	101	P/P	36 - 224
Bromacil	71.5	74.2	P/P	52 - 121
Butylate	43.8	60.7	P/P	28 - 91.0
Caffeine	59.0	70.5	P/P	50 - 134
Carbophenothion	82.8	94.4	P/P	56 - 129
Carfentrazone Ethyl	80.9	97.0	P/P	60 - 141
Chlorfenapyr	78.9	93.5	P/P	56 - 115
Chlorpyrifos Ethyl	78.1	94.2	P/P	60 - 118
Chlorpyrifos Methyl	94.8	95.0	P/P	68 - 119
Coumaphos	84.1	111	P/P	18 - 250
Cyanazine	88.7	96.9	P/P	61 - 250
Cyprodinil	83.5	90.3	P/P	55 - 145
Demeton	71.3	69.9	P/P	30 - 159
Diazinon	92.5	89.8	P/P	70 - 123
Difenoconazole	124	131	P/P	49 - 204
Dimethenamid	73.3	75.4	P/P	64 - 115
Dimethomorph	101	86.9	P/P	12 - 219
Disulfoton	79.4	87.8	P/P	44 - 125
Dithiopyr	78.3	85.7	P/P	64 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
EPTC	29.5	50.5	P/P	28 - 86.0
Ethion	58.2	84.6	P/P	33 - 125
Ethoprop	73.7	84.5	P/P	64 - 116
Etridiazole	35.2	53.3	P/P	34 - 91.0
Fenamiphos	83.9	96.7	P/P	12 - 127
Fenbuconazole	69.7	91.6	P/P	59 - 151
Fipronil	83.8	100	P/P	67 - 129
Fipronil Desulfinyl	103	112	P/P	65 - 127
Fipronil Sulfide	82.0	103	P/P	61 - 116
Fipronil Sulfone	72.8	91.6	P/P	55 - 117
Fluazifop-P-butyl	112	113	P/P	62 - 127
Fludioxonil	92.1	95.2	P/P	62 - 128
Flumioxazin	139	130	P/P	33 - 250
Flutolanil	74.7	83.2	P/P	56 - 127
Fluxapyroxad	70.3	80.7	P/P	45 - 128
Fonofos	83.0	84.0	P/P	62 - 111
Hexazinone	79.0	87.4	P/P	46 - 139
Imazalil	66.6	74.4	P/P	38 - 142
Iprodione	80.1	89.1	P/P	47 - 135
Loratadine	89.6	69.7	P/P	10 - 244
Malathion	103	118	P/P	61 - 139
Metalaxyl	81.5	89.2	P/P	10 - 119
Metolachlor	81.5	85.3	P/P	65 - 118
Metribuzin	98.9	95.2	P/P	51 - 250
Mevinphos	83.4	99.3	P/P	53 - 121
Molinate	45.9	69.8	P/P	42 - 96.0
Myclobutanil	86.0	88.8	P/P	55 - 128
Naled	72.5	91.1	P/P	10 - 98.0
Napropamide	73.5	84.7	P/P	49 - 121
Norflurazon	108	115	P/P	61 - 126
Octinoxate	97.0	98.1	P/P	30 - 159
Oxadiazon	74.5	75.3	P/P	59 - 116
Oxybenzone	87.7	88.3	P/P	61 - 139
Oxyfluorfen	102	104	P/P	64 - 137
Parathion Ethyl	85.0	86.3	P/P	70 - 112
Parathion Methyl	108	98.7	P/P	76 - 133
Pendimethalin	82.6	73.7	P/P	52 - 117
Phenytol	27.0	35.1	P/P	10 - 199
Phorate	83.0	76.7	P/P	48 - 121
Prodiamine	49.3	40.2	P/P	26 - 142
Prometon	72.7	78.7	P/P	43 - 123
Prometryn	81.6	88.4	P/P	66 - 127
Pronamide	94.1	95.0	P/P	75 - 121
Propanil	128	135	P/P	45 - 150
Propargite	50.7	67.7	P/P	42 - 208
Propiconazole	103	119	P/P	60 - 125
Pyraflufen Ethyl	109	106	P/P	70 - 138
Pyridaben	124	138	P/P	35 - 245
Pyriproxyfen	67.7	82.9	P/P	30 - 149
Simazine	102	103	P/P	72 - 125
Stirophos	67.5	87.8	P/P	29 - 164
Sulfentrazone	53.5	59.0	P/P	21 - 139

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tebuconazole	35.5	56.6	P/P	10 - 115
Terbufos	98.6	101	P/P	60 - 123
Terbuthylazine	90.1	88.5	P/P	72 - 115
Thiobencarb	76.1	75.7	P/P	31 - 139
Triadimefon	80.4	79.5	P/P	65 - 116

Reference Method: EPA 8276
Batch ID: P413527

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.4		P	61 - 118
Toxaphene	87.2		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P413677

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	124		P	40 - 150
AMPA	88.0		P	40 - 150
Endothall	112		P	40 - 150
Glufosinate	98.6		P	40 - 150
Glyphosate	98.4		P	40 - 150
Sucralose	115		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	56.6		P	40 - 150
2,4,5-T	41.1		P	40 - 150
Acetaminophen	56.6		P	30 - 150
Acetamiprid	87.5		P	40 - 150
Afidopyropen	56.1		P	30 - 150
Bentazon	108		P	30 - 150
Benzovindiflupyr	89.8		P	40 - 150
Carbamazepine	79.4		P	40 - 150
Clothianidin	85.4		P	40 - 150
Dinotefuran	92.8		P	40 - 150
Diuron	81.6		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	73.3		P	40 - 150
Hydrocodone	86.4		P	40 - 150
Ibuprofen	60.7		P	40 - 150
Imazapyr	80.7		P	40 - 150
Imidacloprid	84.3		P	40 - 150
Linuron	67.2		P	40 - 150
Mandestrobin	73.1		P	40 - 150
MCPP	60.3		P	40 - 150
Naproxen	56.2		P	40 - 150
Primidone	90.4		P	40 - 150
Pyraclostrobin	70.2		P	40 - 150
Silvex	40.5		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P413773

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Thiamethoxam	89.5		P	40 - 150
Tolfenpyrad	45.9		P	30 - 150
Triclopyr	46.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413774

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	79.7		P	40 - 150
Aldicarb	64.1		P	30 - 150
Aldicarb Sulfone	89.3		P	40 - 150
Aldicarb Sulfoxide	88.4		P	40 - 150
Carbaryl	75.5		P	40 - 150
Carbofuran	82.5		P	40 - 150
Methiocarb	69.6		P	40 - 150
Methomyl	80.6		P	40 - 150
Oxamyl	90.6		P	40 - 150
Propoxur	87.6		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325226	Iron	100	98.5	P/P	70 - 130
2325226	Titanium	99.1	99.3	P/P	70 - 130
2325226	Vanadium	95.9	96.1	P/P	70 - 130
2325226	Zinc	90.9	90.6	P/P	70 - 130

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326127	Calcium	106		P	80 - 120
2326127	Iron	107	102	P/P	80 - 120
2326127	Magnesium	105		P	80 - 120
2326127	Potassium	112	109	P/P	80 - 120
2326127	Sodium	110	107	P/P	80 - 120
2326127	Strontium	103	101	P/P	80 - 120
2326127	Tin	101	99.6	P/P	80 - 120
2326127	Titanium	103	101	P/P	80 - 120
2326127	Vanadium	99.0	97.2	P/P	80 - 120
2326127	Zinc	99.6	98.4	P/P	80 - 120
2326343	Calcium	93.0		P	80 - 120
2326343	Iron	102		P	80 - 120
2326343	Magnesium	95.5		P	80 - 120
2326343	Potassium	92.8		P	80 - 120
2326343	Sodium	94.2		P	80 - 120
2326343	Strontium	99.3		P	80 - 120
2326343	Tin	96.0		P	80 - 120
2326343	Titanium	100		P	80 - 120
2326343	Vanadium	96.2		P	80 - 120
2326343	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325226	Aluminum	110	111	P/P	70 - 130
2325226	Antimony	99.0	100	P/P	70 - 130
2325226	Arsenic	108	109	P/P	70 - 130
2325226	Barium	104	104	P/P	70 - 130
2325226	Beryllium	102	106	P/P	70 - 130
2325226	Cadmium	90.2	88.4	P/P	70 - 130
2325226	Chromium	96.6	96.0	P/P	70 - 130
2325226	Cobalt	113	112	P/P	70 - 130
2325226	Copper	103	103	P/P	70 - 130
2325226	Lead	111	123	P/P	70 - 130
2325226	Manganese	96.8	96.6	P/P	70 - 130
2325226	Molybdenum	103	104	P/P	70 - 130
2325226	Nickel	114	115	P/P	70 - 130
2325226	Selenium	95.4	95.2	P/P	70 - 130
2325226	Silver	85.0	85.2	P/P	70 - 130
2325226	Thallium	114	126	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P413783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326127	Aluminum	100	102	P/P	80 - 120
2326127	Antimony	100	99.4	P/P	80 - 120
2326127	Arsenic	98.1	99.1	P/P	80 - 120
2326127	Barium	102	101	P/P	80 - 120
2326127	Beryllium	93.3	92.1	P/P	80 - 120
2326127	Boron	103	105	P/P	80 - 120
2326127	Cadmium	99.9	98.8	P/P	80 - 120
2326127	Chromium	97.3	98.5	P/P	80 - 120
2326127	Cobalt	96.2	96.0	P/P	80 - 120
2326127	Copper	93.3	93.0	P/P	80 - 120
2326127	Lead	94.2	93.6	P/P	80 - 120
2326127	Manganese	98.7	99.0	P/P	80 - 120
2326127	Molybdenum	101	102	P/P	80 - 120
2326127	Nickel	95.7	96.1	P/P	80 - 120
2326127	Selenium	98.4	99.2	P/P	80 - 120
2326127	Silver	97.4	97.3	P/P	80 - 120
2326127	Thallium	97.8	97.1	P/P	80 - 120
2326343	Aluminum	101		P	75 - 125
2326343	Antimony	102		P	75 - 125
2326343	Arsenic	101		P	75 - 125
2326343	Barium	104		P	75 - 125
2326343	Beryllium	92.6		P	75 - 125
2326343	Boron	103		P	75 - 125
2326343	Cadmium	102		P	75 - 125
2326343	Chromium	98.4		P	75 - 125
2326343	Cobalt	99.2		P	75 - 125
2326343	Copper	96.8		P	75 - 125
2326343	Lead	96.2		P	75 - 125
2326343	Molybdenum	103		P	75 - 125
2326343	Nickel	96.8		P	75 - 125
2326343	Selenium	101		P	75 - 125
2326343	Silver	95.3		P	75 - 125
2326343	Thallium	99.4		P	75 - 125

Reference Method: EPA 8270E
Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325112	Aldrin	58.5	64.3	P/P	10 - 89.0
2325112	Alpha-BHC	95.6	104	P/P	71 - 105
2325112	Alpha-Chlordane	80.2	71.4	P/P	43 - 107
2325112	Beta-BHC	127	124	P/P	57 - 152
2325112	Beta-Cyfluthrin	125	114	P/P	29 - 186
2325112	Bifenthrin	72.5	66.0	P/P	19 - 119
2325112	Carbophenothion	85.2	78.1	P/P	19 - 107
2325112	Chlorothalonil	98.4	53.2	P/P	10 - 245
2325112	Cis-Nonachlor	67.5	59.5	P/P	36 - 110
2325112	Cypermethrin	106	98.6	P/P	24 - 169
2325112	Dacthal	99.5	94.2	P/P	62 - 115
2325112	DDD-p,p'	78.2	68.6	P/P	36 - 109
2325112	DDE-p,p'	73.1	71.2	P/P	30 - 114
2325112	DDT-p,p'	85.4	78.6	P/P	42 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325112	Delta-BHC	141	124	P/P	60 - 164
2325112	Deltamethrin	151	108	P/P	10 - 210
2325112	Dichlobenil	60.2	73.9	P/P	23 - 108
2325112	Dicofol	66.4	72.8	P/P	44 - 109
2325112	Dieldrin	80.5	77.6	P/P	37 - 119
2325112	Endosulfan I	85.8	76.7	P/P	52 - 105
2325112	Endosulfan II	95.5	78.6	P/P	35 - 127
2325112	Endosulfan Sulfate	100	78.0	P/P	39 - 130
2325112	Endrin	79.5	69.6	P/P	30 - 116
2325112	Endrin Aldehyde	57.8	55.9	P/P	20 - 110
2325112	Endrin Ketone	103	87.4	P/P	48 - 134
2325112	Esfenvalerate	129	121	P/P	10 - 199
2325112	Ethalfuralin	73.4	81.7	P/P	48 - 95.0
2325112	Fenpropathrin	88.9	91.2	P/P	37 - 121
2325112	Gamma-BHC	104	111	P/P	61 - 126
2325112	Gamma-Chlordane	70.8	73.2	P/P	39 - 105
2325112	Heptachlor	67.4	70.0	P/P	38 - 96.0
2325112	Heptachlor Epoxide	81.4	81.1	P/P	42 - 114
2325112	Hexachlorobenzene	72.0	71.0	P/P	39 - 93.0
2325112	Kepone	39.3	26.1	P/P	10 - 215
2325112	Lambda-Cyhalothrin	112	94.0	P/P	10 - 204
2325112	Methoprene	61.5	67.6	P/P	17 - 108
2325112	Methoxychlor	83.7	79.7	P/P	56 - 115
2325112	MGK-264	103	94.8	P/P	35 - 120
2325112	Mirex	63.7	63.1	P/P	10 - 178
2325112	Oxychlordane	83.8	72.6	P/P	47 - 91.0
2325112	Permethrin	127	131	P/P	27 - 170
2325112	Phenothrin	89.2	84.8	P/P	10 - 133
2325112	Piperonyl Butoxide	123	114	P/P	23 - 150
2325112	Prallethrin	93.6	99.9	P/P	21 - 113
2325112	Tau-Fluvalinate	126	122	P/P	16 - 158
2325112	Tetramethrin	82.7	120	P/P	22 - 132
2325112	Trans-Nonachlor	69.4	67.6	P/P	43 - 102
2325112	Triclosan Methyl	81.4	76.9	P/P	49 - 109
2325112	Trifluralin	72.6	78.5	P/P	48 - 93.0
2326017	PCB-1016	72.7	66.2	P/P	46 - 110
2326017	PCB-1260	67.0	57.9	P/P	42 - 111

Reference Method: EPA 8270E

Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Acetochlor	104		P	65 - 124
2325768	Alachlor	112		P	61 - 121
2325768	Ametryn	102		P	52 - 216
2325768	Atrazine Desethyl	56.5		P	15 - 160
2325768	Avobenzone	112		P	59 - 206
2325768	Azinphos Methyl	92.5		P	40 - 292
2325768	Azoxystrobin	126		P	12 - 242
2325768	Bromacil	92.6		P	54 - 167
2325768	Butylate	33.7		P	14 - 94.0
2325768	Caffeine	68.6		P	10 - 226

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Carbophenothion	82.9		P	49 - 122
2325768	Carfentrazone Ethyl	80.9		P	53 - 138
2325768	Chlorfenapyr	63.1		P	50 - 150
2325768	Chlorpyrifos Ethyl	73.2		P	52 - 122
2325768	Chlorpyrifos Methyl	85.6		P	66 - 117
2325768	Coumaphos	88.2		P	50 - 220
2325768	Cyanazine	84.9		P	43 - 245
2325768	Cyprodinil	90.2		P	50 - 150
2325768	Demeton	80.5		P	43 - 188
2325768	Diazinon	93.9		P	69 - 131
2325768	Difenoconazole	137		P	34 - 231
2325768	Dimethenamid	76.5		P	55 - 118
2325768	Dimethomorph	121		P	50 - 150
2325768	Disulfoton	80.4		P	38 - 141
2325768	Dithiopyr	23.2		F	42 - 116
2325768	EPTC	30.4		P	18 - 85.0
2325768	Ethion	42.3		P	10 - 131
2325768	Ethoprop	85.5		P	65 - 129
2325768	Etridiazole	48.6		F	50 - 150
2325768	Fenamiphos	44.9		P	31 - 137
2325768	Fenbuconazole	88.9		P	57 - 160
2325768	Fipronil	81.8		P	62 - 132
2325768	Fipronil Desulfinyl	98.6		P	57 - 131
2325768	Fipronil Sulfide	65.0		P	15 - 138
2325768	Fipronil Sulfone	60.7		P	21 - 134
2325768	Fluazifop-P-butyl	89.8		P	54 - 133
2325768	Fludioxonil	81.0		P	58 - 127
2325768	Flumioxazin	127		P	33 - 300
2325768	Flutolanil	62.3		P	42 - 130
2325768	Fluxapyroxad	70.9		P	23 - 141
2325768	Fonofos	78.3		P	58 - 119
2325768	Hexazinone	83.9		P	68 - 172
2325768	Imazalil	77.4		P	48 - 283
2325768	Iprodione	71.2		P	38 - 140
2325768	Loratadine	103		P	50 - 150
2325768	Malathion	76.7		P	40 - 137
2325768	Metalaxyl	78.7		P	21 - 129
2325768	Metolachlor	77.7		P	55 - 122
2325768	Metribuzin	92.4		P	38 - 187
2325768	Mevinphos	90.6		P	54 - 134
2325768	Molinate	57.5		P	41 - 97.0
2325768	Myclobutanil	72.8		P	56 - 125
2325768	Naled	86.0		P	10 - 108
2325768	Napropamide	55.3		P	50 - 150
2325768	Norflurazon	67.2		P	32 - 122
2325768	Octinoxate	98.3		P	25 - 150
2325768	Oxadiazon	63.0		P	40 - 119
2325768	Oxybenzone	79.9		P	59 - 147
2325768	Oxyfluorfen	101		P	61 - 153
2325768	Parathion Ethyl	82.7		P	59 - 130
2325768	Parathion Methyl	113		P	65 - 155
2325768	Pendimethalin	93.4		P	49 - 138

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414025

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325768	Phenytoin	38.2		F	50 - 200
2325768	Phorate	78.3		P	54 - 161
2325768	Prodiamine	49.6		P	33 - 161
2325768	Prometon	69.3		P	48 - 140
2325768	Prometryn	44.2		F	55 - 134
2325768	Pronamide	93.4		P	66 - 137
2325768	Propanil	119		P	50 - 150
2325768	Propargite	45.1		F	50 - 200
2325768	Propiconazole	64.5		P	36 - 150
2325768	Pyraflufen Ethyl	67.3		P	50 - 150
2325768	Pyridaben	107		P	50 - 200
2325768	Pyriproxyfen	73.0		P	10 - 165
2325768	Stirophos	20.1		F	50 - 150
2325768	Sulfentrazone	55.9		P	34 - 140
2325768	Tebuconazole	30.0		P	10 - 127
2325768	Terbufos	95.6		P	59 - 138
2325768	Terbuthylazine	91.0		P	68 - 119
2325768	Thiobencarb	58.9		P	50 - 150
2325768	Triadimefon	58.2		P	50 - 150

Reference Method: EPA 8276
Batch ID: P413527

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326017	Chlordane	59.1	52.4	P/F	55 - 128
2326017	Toxaphene	64.7	57.6	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P413677

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326011	Acesulfame K	90.0	92.6	P/P	40 - 150
2326011	AMPA	86.7	92.8	P/P	40 - 150
2326011	Endothall	103	108	P/P	40 - 150
2326011	Glufosinate	99.4	99.4	P/P	40 - 150
2326011	Glyphosate	95.5	94.6	P/P	40 - 150
2326011	Sucralose	97.3	103	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	2,4-D	63.6	61.6	P/P	40 - 150
2325881	2,4,5-T	44.0	40.8	P/P	40 - 150
2325881	Acetaminophen	31.0	31.2	P/P	30 - 150
2325881	Acetamiprid	77.4	77.7	P/P	40 - 150
2325881	Afidopyropen	42.7	42.8	P/P	30 - 150
2325881	Bentazon	150	144	P/P	30 - 150
2325881	Benzovindiflupyr	14.7	17.5	F/F	40 - 150
2325881	Carbamazepine	50.0	50.4	P/P	40 - 150
2325881	Clothianidin	52.0	52.4	P/P	40 - 150
2325881	Dinotefuran	92.5	97.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P413773

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2325881	Diuron	47.6	46.6	P/P	40 - 150
2325881	Fenuron	87.8	74.4	P/P	40 - 150
2325881	Fluridone	49.7	51.0	P/P	40 - 150
2325881	Hydrocodone	79.6	84.3	P/P	40 - 150
2325881	Ibuprofen	51.6	44.2	P/P	40 - 150
2325881	Imazapyr	77.1	73.2	P/P	40 - 150
2325881	Imidacloprid	89.5	93.4	P/P	40 - 150
2325881	Linuron	41.9	43.0	P/P	40 - 150
2325881	Mandestrobin	50.5	50.6	P/P	40 - 150
2325881	MCPP	73.9	68.2	P/P	40 - 150
2325881	Naproxen	57.4	63.4	P/P	40 - 150
2325881	Primidone	56.0	61.8	P/P	40 - 150
2325881	Pyraclostrobin	15.4	17.0	F/F	40 - 150
2325881	Silvex	40.6	40.8	P/P	40 - 150
2325881	Thiamethoxam	81.1	83.8	P/P	40 - 150
2325881	Tolfenpyrad	1.19	0.933	F/F	30 - 150
2325881	Triclopyr	46.5	45.9	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P413774

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2326576	3-Hydroxycarbofuran	86.5	88.4	P/P	40 - 150
2326576	Aldicarb	71.3	76.9	P/P	30 - 150
2326576	Aldicarb Sulfone	98.0	101	P/P	40 - 150
2326576	Aldicarb Sulfoxide	50.3	52.2	P/P	40 - 150
2326576	Carbaryl	62.9	60.3	P/P	40 - 150
2326576	Carbofuran	75.8	76.1	P/P	40 - 150
2326576	Methiocarb	64.2	69.2	P/P	40 - 150
2326576	Methomyl	81.9	83.3	P/P	40 - 150
2326576	Oxamyl	92.4	96.4	P/P	40 - 150
2326576	Propoxur	78.7	80.5	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325226	Calcium	0.399	Spike	P	0 - 20
2325226	Iron	1.61	Spike	P	0 - 20
2325226	Magnesium	1.04	Spike	P	0 - 20
2325226	Potassium	0.245	Spike	P	0 - 20
2325226	Sodium	0.00161	Spike	P	0 - 20
2325226	Strontium	0.375	Spike	P	0 - 20
2325226	Titanium	0.197	Spike	P	0 - 20
2325226	Vanadium	0.231	Spike	P	0 - 20
2325226	Zinc	0.279	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P413783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326127	Calcium	1.76	Spike	P	0 - 20
2326127	Iron	3.75	Spike	P	0 - 20
2326127	Magnesium	3.31	Spike	P	0 - 20
2326127	Potassium	3.29	Spike	P	0 - 20
2326127	Sodium	1.29	Spike	P	0 - 20
2326127	Strontium	1.48	Spike	P	0 - 20
2326127	Tin	1.65	Spike	P	0 - 20
2326127	Titanium	2.15	Spike	P	0 - 20
2326127	Vanadium	1.84	Spike	P	0 - 20
2326127	Zinc	1.24	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325226	Aluminum	0.199	Spike	P	0 - 20
2325226	Antimony	1.14	Spike	P	0 - 20
2325226	Arsenic	1.07	Spike	P	0 - 20
2325226	Barium	0.0800	Spike	P	0 - 20
2325226	Beryllium	3.88	Spike	P	0 - 20
2325226	Boron	9.53	Spike	P	0 - 20
2325226	Cadmium	2.01	Spike	P	0 - 20
2325226	Chromium	0.614	Spike	P	0 - 20
2325226	Cobalt	1.26	Spike	P	0 - 20
2325226	Copper	0.166	Spike	P	0 - 20
2325226	Lead	10.0	Spike	P	0 - 20
2325226	Manganese	0.209	Spike	P	0 - 20
2325226	Molybdenum	0.503	Spike	P	0 - 20
2325226	Nickel	0.843	Spike	P	0 - 20
2325226	Selenium	0.260	Spike	P	0 - 20
2325226	Silver	0.200	Spike	P	0 - 20
2325226	Thallium	10.1	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P413783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326127	Aluminum	1.49	Spike	P	0 - 20
2326127	Antimony	0.901	Spike	P	0 - 20
2326127	Arsenic	1.03	Spike	P	0 - 20
2326127	Barium	0.508	Spike	P	0 - 20
2326127	Beryllium	1.35	Spike	P	0 - 20
2326127	Boron	1.88	Spike	P	0 - 20
2326127	Cadmium	1.07	Spike	P	0 - 20
2326127	Chromium	1.21	Spike	P	0 - 20
2326127	Cobalt	0.206	Spike	P	0 - 20
2326127	Copper	0.272	Spike	P	0 - 20
2326127	Lead	0.628	Spike	P	0 - 20
2326127	Manganese	0.198	Spike	P	0 - 20
2326127	Molybdenum	0.203	Spike	P	0 - 20
2326127	Nickel	0.408	Spike	P	0 - 20
2326127	Selenium	0.814	Spike	P	0 - 20
2326127	Silver	0.0748	Spike	P	0 - 20
2326127	Thallium	0.664	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325112	Aldrin	9.55	Spike	P	0 - 37
2325112	Alpha-BHC	8.74	Spike	P	0 - 16
2325112	Alpha-Chlordane	11.6	Spike	P	0 - 28
2325112	Beta-BHC	2.26	Spike	P	0 - 32
2325112	Beta-Cyfluthrin	9.30	Spike	P	0 - 41
2325112	Bifenthrin	9.49	Spike	P	0 - 36
2325112	Carbophenothion	8.70	Spike	P	0 - 30
2325112	Chlorothalonil	59.6	Spike	F	0 - 54
2325112	Cis-Nonachlor	12.7	Spike	P	0 - 33
2325112	Cypermethrin	7.07	Spike	P	0 - 38
2325112	Dacthal	5.39	Spike	P	0 - 23
2325112	DDD-p,p'	13.0	Spike	P	0 - 35
2325112	DDE-p,p'	2.63	Spike	P	0 - 27
2325112	DDT-p,p'	8.24	Spike	P	0 - 31
2325112	Delta-BHC	13.1	Spike	P	0 - 30
2325112	Deltamethrin	32.8	Spike	P	0 - 76
2325112	Dichlobenil	20.5	Spike	P	0 - 33
2325112	Dicofol	9.22	Spike	P	0 - 24
2325112	Dieldrin	3.60	Spike	P	0 - 35
2325112	Endosulfan I	11.2	Spike	P	0 - 25
2325112	Endosulfan II	19.4	Spike	P	0 - 31
2325112	Endosulfan Sulfate	24.8	Spike	P	0 - 38
2325112	Endrin	13.2	Spike	P	0 - 53
2325112	Endrin Aldehyde	3.24	Spike	P	0 - 81
2325112	Endrin Ketone	16.5	Spike	P	0 - 33
2325112	Esfenvalerate	5.83	Spike	P	0 - 46
2325112	Ethalfuralin	10.7	Spike	P	0 - 22
2325112	Fenpropathrin	2.57	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325112	Gamma-BHC	6.61	Spike	P	0 - 17
2325112	Gamma-Chlordane	3.31	Spike	P	0 - 28
2325112	Heptachlor	3.74	Spike	P	0 - 28
2325112	Heptachlor Epoxide	0.417	Spike	P	0 - 23
2325112	Hexachlorobenzene	1.32	Spike	P	0 - 22
2325112	Kepone	40.4	Spike	P	0 - 61
2325112	Lambda-Cyhalothrin	17.5	Spike	P	0 - 52
2325112	Methoprene	9.51	Spike	P	0 - 38
2325112	Methoxychlor	4.85	Spike	P	0 - 29
2325112	MGK-264	7.92	Spike	P	0 - 41
2325112	Mirex	0.966	Spike	P	0 - 39
2325112	Oxychlordane	14.3	Spike	P	0 - 33
2325112	Permethrin	3.12	Spike	P	0 - 39
2325112	Phenothrin	5.02	Spike	P	0 - 52
2325112	Piperonyl Butoxide	7.84	Spike	P	0 - 91
2325112	Prallethrin	6.50	Spike	P	0 - 34
2325112	Tau-Fluvalinate	3.04	Spike	P	0 - 41
2325112	Tetramethrin	36.8	Spike	P	0 - 43
2325112	Trans-Nonachlor	2.75	Spike	P	0 - 31
2325112	Triclosan Methyl	5.70	Spike	P	0 - 24
2325112	Trifluralin	7.89	Spike	P	0 - 23
2326017	PCB-1016	9.39	Spike	P	0 - 32
2326017	PCB-1260	14.7	Spike	P	0 - 31

Reference Method: EPA 8270E
Batch ID: P414025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Acetochlor	6.12	LCS	P	0 - 24
LFB	Alachlor	5.07	LCS	P	0 - 26
LFB	Ametryn	7.56	LCS	P	0 - 25
LFB	Atrazine	1.69	LCS	P	0 - 29
LFB	Atrazine Desethyl	3.25	LCS	P	0 - 62
LFB	Avobenzene	2.09	LCS	P	0 - 30
LFB	Azinphos Methyl	1.40	LCS	P	0 - 76
LFB	Azoxystrobin	6.94	LCS	P	0 - 47
LFB	Bromacil	3.65	LCS	P	0 - 39
LFB	Butylate	32.4	LCS	P	0 - 35
LFB	Caffeine	17.7	LCS	P	0 - 27
LFB	Carbophenothion	13.0	LCS	P	0 - 28
LFB	Carfentrazone Ethyl	18.1	LCS	P	0 - 21
LFB	Chlorfenapyr	17.0	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	18.7	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	0.209	LCS	P	0 - 30
LFB	Coumaphos	28.0	LCS	P	0 - 30
LFB	Cyanazine	8.90	LCS	P	0 - 77
LFB	Cyprodinil	7.79	LCS	P	0 - 30
LFB	Demeton	1.94	LCS	P	0 - 48
LFB	Diazinon	3.03	LCS	P	0 - 25
LFB	Difenoconazole	6.12	LCS	P	0 - 37

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P414025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Dimethenamid	2.86	LCS	P	0 - 21
LFB	Dimethomorph	15.1	LCS	P	0 - 30
LFB	Disulfoton	10.0	LCS	P	0 - 51
LFB	Dithiopyr	8.95	LCS	P	0 - 21
LFB	EPTC	52.4	LCS	F	0 - 41
LFB	Ethion	36.9	LCS	P	0 - 63
LFB	Ethoprop	13.7	LCS	P	0 - 38
LFB	Etridiazole	40.9	LCS	F	0 - 30
LFB	Fenamiphos	14.2	LCS	P	0 - 91
LFB	Fenbuconazole	27.1	LCS	P	0 - 36
LFB	Fipronil	17.8	LCS	P	0 - 32
LFB	Fipronil Desulfinyl	8.14	LCS	P	0 - 23
LFB	Fipronil Sulfide	22.5	LCS	P	0 - 31
LFB	Fipronil Sulfone	22.9	LCS	P	0 - 32
LFB	Fluazifop-P-butyl	0.426	LCS	P	0 - 23
LFB	Fludioxonil	3.30	LCS	P	0 - 23
LFB	Flumioxazin	6.69	LCS	P	0 - 39
LFB	Flutolanil	10.8	LCS	P	0 - 27
LFB	Fluxapyroxad	13.8	LCS	P	0 - 38
LFB	Fonofos	1.18	LCS	P	0 - 28
LFB	Hexazinone	10.2	LCS	P	0 - 63
LFB	Imazalil	11.2	LCS	P	0 - 58
LFB	Iprodione	10.7	LCS	P	0 - 42
LFB	Loratadine	25.0	LCS	P	0 - 30
LFB	Malathion	13.7	LCS	P	0 - 23
LFB	Metalaxyl	9.03	LCS	P	0 - 100
LFB	Metolachlor	4.53	LCS	P	0 - 27
LFB	Metribuzin	3.81	LCS	P	0 - 79
LFB	Mevinphos	17.4	LCS	P	0 - 58
LFB	Molinate	41.3	LCS	P	0 - 42
LFB	Myclobutanil	3.24	LCS	P	0 - 27
LFB	Naled	22.8	LCS	P	0 - 32
LFB	Napropamide	14.2	LCS	P	0 - 30
LFB	Norflurazon	5.98	LCS	P	0 - 25
LFB	Octinoxate	1.20	LCS	P	0 - 30
LFB	Oxadiazon	1.04	LCS	P	0 - 30
LFB	Oxybenzone	0.711	LCS	P	0 - 30
LFB	Oxyfluorfen	1.99	LCS	P	0 - 22
LFB	Parathion Ethyl	1.51	LCS	P	0 - 32
LFB	Parathion Methyl	9.10	LCS	P	0 - 30
LFB	Pendimethalin	11.4	LCS	P	0 - 39
LFB	Phenytoin	25.8	LCS	P	0 - 30
LFB	Phorate	7.84	LCS	P	0 - 41
LFB	Prodiamine	20.5	LCS	P	0 - 70
LFB	Prometon	7.89	LCS	P	0 - 47
LFB	Prometryn	8.04	LCS	P	0 - 30
LFB	Pronamide	0.911	LCS	P	0 - 25
LFB	Propanil	4.96	LCS	P	0 - 30
LFB	Propargite	28.8	LCS	P	0 - 30
LFB	Propiconazole	14.6	LCS	P	0 - 25
LFB	Pyraflufen Ethyl	2.30	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P414025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pyridaben	11.4	LCS	P	0 - 30
LFB	Pyriproxyfen	20.1	LCS	P	0 - 53
LFB	Simazine	1.22	LCS	P	0 - 25
LFB	Stirophos	26.1	LCS	P	0 - 30
LFB	Sulfentrazone	9.82	LCS	P	0 - 45
LFB	Tebuconazole	45.8	LCS	P	0 - 51
LFB	Terbufos	2.44	LCS	P	0 - 36
LFB	Terbuthylazine	1.74	LCS	P	0 - 24
LFB	Thiobencarb	0.493	LCS	P	0 - 30
LFB	Triadimefon	1.13	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P413527

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326017	Chlordane	12.1	Spike	P	0 - 25
2326017	Toxaphene	11.5	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P413677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326011	Acesulfame K	2.85	Spike	P	0 - 30
2326011	AMPA	6.81	Spike	P	0 - 30
2326011	Endothall	5.04	Spike	P	0 - 30
2326011	Glufosinate	0.0354	Spike	P	0 - 30
2326011	Glyphosate	0.875	Spike	P	0 - 30
2326011	Sucralose	5.36	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325881	2,4-D	3.19	Spike	P	0 - 30
2325881	2,4,5-T	7.43	Spike	P	0 - 30
2325881	Acetaminophen	0.586	Spike	P	0 - 30
2325881	Acetamiprid	0.398	Spike	P	0 - 30
2325881	Afidopyropen	0.306	Spike	P	0 - 30
2325881	Bentazon	3.88	Spike	P	0 - 30
2325881	Benzovindiflupyr	17.5	Spike	P	0 - 30
2325881	Carbamazepine	0.862	Spike	P	0 - 30
2325881	Clothianidin	0.751	Spike	P	0 - 30
2325881	Dinotefuran	5.61	Spike	P	0 - 30
2325881	Diuron	1.94	Spike	P	0 - 30
2325881	Fenuron	16.6	Spike	P	0 - 30
2325881	Fluridone	1.85	Spike	P	0 - 30
2325881	Hydrocodone	5.73	Spike	P	0 - 30
2325881	Ibuprofen	15.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P413773

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2325881	Imazapyr	4.85	Spike	P	0 - 30
2325881	Imidacloprid	4.25	Spike	P	0 - 30
2325881	Linuron	2.69	Spike	P	0 - 30
2325881	Mandestrobin	0.0299	Spike	P	0 - 30
2325881	MCPPP	7.97	Spike	P	0 - 30
2325881	Naproxen	9.83	Spike	P	0 - 30
2325881	Primidone	9.92	Spike	P	0 - 30
2325881	Pyraclostrobin	9.84	Spike	P	0 - 30
2325881	Silvex	0.586	Spike	P	0 - 30
2325881	Thiamethoxam	3.29	Spike	P	0 - 30
2325881	Tolfenpyrad	24.5	Spike	P	0 - 30
2325881	Triclopyr	1.16	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P413774

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2326576	3-Hydroxycarbofuran	2.19	Spike	P	0 - 30
2326576	Aldicarb	7.54	Spike	P	0 - 30
2326576	Aldicarb Sulfone	2.78	Spike	P	0 - 30
2326576	Aldicarb Sulfoxide	3.59	Spike	P	0 - 30
2326576	Carbaryl	4.19	Spike	P	0 - 30
2326576	Carbofuran	0.339	Spike	P	0 - 30
2326576	Methiocarb	7.40	Spike	P	0 - 30
2326576	Methomyl	1.73	Spike	P	0 - 30
2326576	Oxamyl	4.21	Spike	P	0 - 30
2326576	Propoxur	2.21	Spike	P	0 - 30

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

Quality Assurance Report Surrogates

Lab Sample ID: 2326010
Field Sample ID: G3SW0057

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	50.5	P	30 - 160

Lab Sample ID: 2326011
Field Sample ID: G3SW0057

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	105	P	30 - 160
EPA 8321B	Acetaminophen-d4	46.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.7	P	30 - 160
EPA 8321B	Diuron-d6	54.3	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	30 - 160
EPA 8321B	Ibuprofen-d3	63.2	P	30 - 160
EPA 8321B	Primidone-d5	69.4	P	30 - 160
EPA 8321B	Sucralose-d6	99.1	P	30 - 160

Lab Sample ID: 2326012
Field Sample ID: G3SW0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	57.5	P	30 - 160

Lab Sample ID: 2326013
Field Sample ID: G3SW0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	47.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.6	P	30 - 160
EPA 8321B	Diuron-d6	54.8	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	113	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.5	P	30 - 160
EPA 8321B	Primidone-d5	68.6	P	30 - 160
EPA 8321B	Sucralose-d6	95.6	P	30 - 160

Lab Sample ID: 2326014
Field Sample ID: G3SW0110

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	125	P	30 - 160
EPA 8321B	Acetaminophen-d4	48.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.3	P	30 - 160
EPA 8321B	Diuron-d6	51.0	P	30 - 160
EPA 8321B	Endothall-d6	101	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.7	P	30 - 160
EPA 8321B	Primidone-d5	70.4	P	30 - 160
EPA 8321B	Sucralose-d6	89.5	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2326015
Field Sample ID: G3SW0057

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	68.8	P	38 - 115
EPA 8270E	Decachlorobiphenyl	83.1	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	52.7	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	48.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	56.4	P	30 - 97.0
EPA 8276	PCNB	79.1	P	45 - 119

Lab Sample ID: 2326016
Field Sample ID: G3SW0057

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	46.3	P	20 - 200
EPA 8270E	Simazine-d10	96.2	P	71 - 140
EPA 8270E	Terbufos-d10	62.8	P	62 - 131
EPA 8270E	Terphenyl-d14	73.6	P	52 - 141

Lab Sample ID: 2326017
Field Sample ID: G3SW0060

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	87.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	54.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	67.7	P	30 - 97.0
EPA 8276	PCNB	81.2	P	45 - 119

Lab Sample ID: 2326018
Field Sample ID: G3SW0059

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	84.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	55.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	83.1	P	30 - 97.0
EPA 8276	PCNB	81.5	P	45 - 119

Lab Sample ID: 2326019
Field Sample ID: G3SW0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.5	P	38 - 115
EPA 8270E	Decachlorobiphenyl	85.8	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	67.1	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	59.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	61.0	P	30 - 97.0
EPA 8276	PCNB	76.5	P	45 - 119

Lab Sample ID: 2326020
Field Sample ID: G3SW0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	64.4	P	20 - 200
EPA 8270E	Simazine-d10	122	P	71 - 140
EPA 8270E	Terbufos-d10	78.5	P	62 - 131

Quality Assurance Report Surrogates

Lab Sample ID: 2326020
Field Sample ID: G3SW0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Terphenyl-d14	62.1	P	52 - 141

Lab Sample ID: 2326021
Field Sample ID: G3SW0110

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	98.4	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	56.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	61.9	P	30 - 97.0
EPA 8276	PCNB	73.0	P	45 - 119

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112113

Included Lab Sample IDs: 2326015, 2326017, 2326018, 2326019, 2326021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	107		P	80 - 120
Alpha-BHC	107		P	80 - 120
Alpha-Chlordane	113		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	118		P	80 - 120
Bifenthrin	105		P	80 - 120
Carbophenothion	108		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cis-Nonachlor	104		P	80 - 120
Cypermethrin	108		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	116		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	108		P	80 - 120
Deltamethrin	118		P	80 - 120
Dichlobenil	106		P	80 - 120
Dicofol	95.3		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	116		P	80 - 120
Endosulfan Sulfate	111		P	80 - 120
Endrin	114		P	80 - 120
Endrin Aldehyde	111		P	80 - 120
Endrin Ketone	104		P	80 - 120
Esfenvalerate	117		P	80 - 120
Ethalfuralin	97.0		P	80 - 120
Fenpropathrin	110		P	80 - 120
Gamma-BHC	111		P	80 - 120
Gamma-Chlordane	104		P	80 - 120
Heptachlor	113		P	80 - 120
Heptachlor Epoxide	97.7		P	80 - 120
Hexachlorobenzene	100		P	80 - 120
Kepone	78.1*		F	80 - 120
Lambda-Cyhalothrin	118		P	80 - 120
Methoprene	109		P	80 - 120
Methoxychlor	105		P	80 - 120
MGK-264	108		P	80 - 120
Mirex	117		P	80 - 120
Oxychlordane	96.3		P	80 - 120
Permethrin	119		P	80 - 120
Phenothrin	113		P	80 - 120
Piperonyl Butoxide	118		P	80 - 120
Prallethrin	105		P	80 - 120
Tau-Fluvalinate	117		P	80 - 120
Trans-Nonachlor	100		P	80 - 120
Triclosan Methyl	106		P	80 - 120
Trifluralin	103		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A112145

Included Lab Sample IDs: 2326011, 2326013, 2326014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.4	103	P/P	60 - 160
Sucralose	106	90.7	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A112149

Included Lab Sample IDs: 2326015, 2326019

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	97.9		P	80 - 120
PCB-1260	93.3		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A112151

Included Lab Sample IDs: 2326023, 2326024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	96.0	95.2	P/P	90 - 110
Iron	97.7	97.1	P/P	90 - 110
Magnesium	96.6	95.9	P/P	90 - 110
Potassium	98.8	98.8	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	102	101	P/P	90 - 110
Tin	97.5	95.8	P/P	90 - 110
Titanium	99.7	96.9	P/P	90 - 110
Vanadium	99.0	97.1	P/P	90 - 110
Zinc	97.8	95.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A112166

Included Lab Sample IDs: 2326011, 2326013, 2326014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.4	95.8	P/P	60 - 160
Glufosinate	97.6	97.8	P/P	60 - 160
Glyphosate	94.9	90.1	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A112175

Included Lab Sample IDs: 2326011, 2326013, 2326014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	105	104	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112184

Included Lab Sample IDs: 2326023, 2326024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	100	P/P	90 - 110
Antimony	97.5	101	P/P	90 - 110
Arsenic	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112184

Included Lab Sample IDs: 2326023, 2326024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	100	102	P/P	90 - 110
Beryllium	98.9	102	P/P	90 - 110
Cadmium	96.4	98.0	P/P	90 - 110
Chromium	95.8	97.0	P/P	90 - 110
Cobalt	102	99.7	P/P	90 - 110
Copper	102	99.9	P/P	90 - 110
Lead	99.9	99.0	P/P	90 - 110
Manganese	97.2	98.9	P/P	90 - 110
Molybdenum	98.8	98.7	P/P	90 - 110
Nickel	103	101	P/P	90 - 110
Selenium	98.1	100	P/P	90 - 110
Silver	98.0	98.4	P/P	90 - 110
Thallium	98.7	98.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112188

Included Lab Sample IDs: 2326022, 2326025, 2326032

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	102	P/P	90 - 110
Aluminum	102	104	P/P	90 - 110
Antimony	97.5	98.2	P/P	90 - 110
Antimony	98.2	97.6	P/P	90 - 110
Arsenic	97.6	98.2	P/P	90 - 110
Arsenic	99.7	97.6	P/P	90 - 110
Barium	99.8	99.1	P/P	90 - 110
Boron	98.5	104	P/P	90 - 110
Cadmium	97.7	98.9	P/P	90 - 110
Cadmium	98.9	98.1	P/P	90 - 110
Chromium	96.2	97.1	P/P	90 - 110
Chromium	97.1	97.1	P/P	90 - 110
Cobalt	96.7	97.7	P/P	90 - 110
Cobalt	97.5	96.7	P/P	90 - 110
Copper	97.2	97.5	P/P	90 - 110
Copper	97.5	97.2	P/P	90 - 110
Lead	96.7	96.3	P/P	90 - 110
Lead	96.8	96.7	P/P	90 - 110
Manganese	97.8	99.2	P/P	90 - 110
Manganese	99.2	99.6	P/P	90 - 110
Molybdenum	98.0	98.6	P/P	90 - 110
Molybdenum	98.6	97.9	P/P	90 - 110
Nickel	97.6	97.4	P/P	90 - 110
Nickel	98.2	97.6	P/P	90 - 110
Selenium	98.4	98.5	P/P	90 - 110
Selenium	98.5	98.1	P/P	90 - 110
Silver	98.6	98.7	P/P	90 - 110
Silver	98.7	98.8	P/P	90 - 110
Thallium	92.1	92.9	P/P	90 - 110
Thallium	92.9	91.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112191

Included Lab Sample IDs: 2326015, 2326017, 2326018, 2326019, 2326021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenothrin	96.4		P	80 - 120
Piperonyl Butoxide	80.3		P	80 - 120
Tetramethrin	83.0		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112197

Included Lab Sample IDs: 2326023, 2326024

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Boron	93.8	95.5	P/P	90 - 110
Boron	95.0	93.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112213

Included Lab Sample IDs: 2326022, 2326025, 2326032

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	99.3	98.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A112214

Included Lab Sample IDs: 2326022, 2326024, 2326025, 2326032

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	99.0	P/P	95 - 105
Calcium	99.0	101	P/P	90 - 110
Iron	102	99.0	P/P	95 - 105
Iron	99.0	101	P/P	90 - 110
Magnesium	102	98.5	P/P	95 - 105
Magnesium	98.5	100	P/P	90 - 110
Potassium	100	98.6	P/P	95 - 105
Sodium	101	101	P/P	90 - 110
Sodium	101	99.2	P/P	95 - 105
Strontium	102	102	P/P	95 - 105
Strontium	102	102	P/P	90 - 110
Tin	101	99.1	P/P	95 - 105
Tin	99.1	102	P/P	90 - 110
Titanium	103	99.6	P/P	95 - 105
Titanium	99.6	103	P/P	90 - 110
Vanadium	101	103	P/P	90 - 110
Vanadium	104	101	P/P	95 - 105
Zinc	101	103	P/P	90 - 110
Zinc	102	101	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A112222

Included Lab Sample IDs: 2326011, 2326013, 2326014

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	85.9	97.0	P/P	50 - 150
2,4,5-T	92.2	88.6	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A112222

Included Lab Sample IDs: 2326010, 2326012

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	95.8	99.3	P/P	60 - 150
Acetaminophen	100	104	P/P	60 - 160
Acetamiprid	110	114	P/P	50 - 150
Afidopyropen	92.8	98.7	P/P	50 - 150
Aldicarb	92.3	94.5	P/P	60 - 150
Aldicarb Sulfone	98.2	101	P/P	50 - 150
Aldicarb Sulfoxide	94.6	95.5	P/P	50 - 150
Bentazon	93.5	99.2	P/P	50 - 160
Benzovindiflupyr	108	111	P/P	50 - 150
Carbamazepine	103	106	P/P	60 - 150
Carbaryl	103	97.6	P/P	60 - 150
Carbofuran	96.5	97.5	P/P	50 - 150
Clothianidin	101	101	P/P	60 - 150
Dinotefuran	99.4	99.7	P/P	50 - 150
Diuron	100	97.0	P/P	60 - 160
Fenuron	94.6	96.8	P/P	60 - 150
Fluridone	103	104	P/P	60 - 160
Hydrocodone	99.0	104	P/P	60 - 150
Ibuprofen	82.7	91.0	P/P	50 - 160
Imazapyr	86.0	91.6	P/P	50 - 150
Imidacloprid	91.2	99.0	P/P	60 - 150
Linuron	91.9	98.7	P/P	60 - 150
Mandestrobin	101	101	P/P	50 - 150
MCPP	90.7	94.8	P/P	50 - 150
Methiocarb	99.5	98.9	P/P	50 - 150
Methomyl	96.7	97.0	P/P	50 - 150
Naproxen	94.2	120	P/P	50 - 160
Oxamyl	96.9	97.4	P/P	50 - 150
Primidone	109	104	P/P	60 - 150
Propoxur	104	107	P/P	50 - 150
Pyraclostrobin	101	104	P/P	60 - 150
Silvex	85.6	88.4	P/P	50 - 150
Thiamethoxam	98.1	98.0	P/P	50 - 150
Tolfenpyrad	113	111	P/P	60 - 150
Triclopyr	91.2	91.6	P/P	50 - 150

Reference Method: EPA 8276

Run ID: A112272

Included Lab Sample IDs: 2326015, 2326017, 2326018

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Chlordane	99.0		P	80 - 120
Toxaphene	107		P	80 - 120
Toxaphene	97.5		P	80 - 120

Reference Method: EPA 8276

Run ID: A112309

Included Lab Sample IDs: 2326019, 2326021

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

Reference Method: EPA 8276

Run ID: A112309

Included Lab Sample IDs: 2326019, 2326021

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.7		P	80 - 120
Toxaphene	104		P	80 - 120

Reference Method: EPA 8270E

Run ID: A112393

Included Lab Sample IDs: 2326016, 2326020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	105		P	80 - 120
Octinoxate	97.4		P	80 - 120
Oxybenzone	94.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A112410

Included Lab Sample IDs: 2326016, 2326020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	98.2		P	80 - 120
Ametryn	95.3		P	80 - 120
Atrazine	94.2		P	80 - 120
Atrazine Desethyl	111		P	80 - 120
Azinphos Methyl	113		P	80 - 120
Azoxystrobin	96.5		P	80 - 120
Bromacil	95.9		P	80 - 120
Butylate	94.4		P	80 - 120
Caffeine	92.6		P	80 - 120
Carbophenothion	108		P	80 - 120
Carfentrazone Ethyl	106		P	80 - 120
Chlorfenapyr	111		P	80 - 120
Chlorpyrifos Ethyl	108		P	80 - 120
Chlorpyrifos Methyl	107		P	80 - 120
Coumaphos	113		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	100		P	80 - 120
Demeton	112		P	80 - 120
Diazinon	99.1		P	80 - 120
Difenoconazole	116		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	95.7		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	100		P	80 - 120
EPTC	102		P	80 - 120
Ethion	114		P	80 - 120
Ethoprop	111		P	80 - 120
Etridiazole	99.0		P	80 - 120
Fenamiphos	112		P	80 - 120
Fenbuconazole	101		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Desulfinyl	108		P	80 - 120
Fipronil Sulfide	115		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A112410

Included Lab Sample IDs: 2326016, 2326020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	114		P	80 - 120
Fludioxonil	108		P	80 - 120
Flumioxazin	107		P	80 - 120
Flutolanil	97.4		P	80 - 120
Fluxapyroxad	95.4		P	80 - 120
Fonofos	110		P	80 - 120
Hexazinone	99.3		P	80 - 120
Imazalil	113		P	80 - 120
Iprodione	111		P	80 - 120
Loratadine	97.3		P	80 - 120
Malathion	109		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	97.4		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	119		P	80 - 120
Molinate	98.2		P	80 - 120
Myclobutanil	112		P	80 - 120
Naled	117		P	80 - 120
Napropamide	109		P	80 - 120
Norflurazon	98.4		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	108		P	80 - 120
Parathion Ethyl	97.9		P	80 - 120
Parathion Methyl	95.1		P	80 - 120
Pendimethalin	89.3		P	80 - 120
Phenytoin	119		P	80 - 120
Phorate	111		P	80 - 120
Prodiamine	111		P	80 - 120
Prometon	97.4		P	80 - 120
Prometryn	94.7		P	80 - 120
Pronamide	93.9		P	80 - 120
Propanil	100		P	80 - 120
Propargite	105		P	80 - 120
Propiconazole	94.7		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	113		P	80 - 120
Pyriproxyfen	97.1		P	80 - 120
Simazine	113		P	80 - 120
Stirophos	107		P	80 - 120
Sulfentrazone	109		P	80 - 120
Tebuconazole	109		P	80 - 120
Terbufos	110		P	80 - 120
Terbutylazine	101		P	80 - 120
Thiobencarb	91.2		P	80 - 120
Triadimefon	96.7		P	80 - 120

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

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
EPA 200.7 Rev. 4.4	Calcium	98.0						0.399
	Calcium	107	106	93.0				1.76
	Iron	100	100	98.5				1.61
	Iron	108	107	102	102			3.75
	Magnesium	97.3						1.04
	Magnesium	104	105	95.5				3.31
	Potassium	98.3						0.245
	Potassium	106	112	109	92.8			3.29
	Sodium	98.2						0.0016
	Sodium	110	110	107	94.2			1.29
	Strontium	99.6						0.375
	Strontium	103	103	101	99.3			1.48
	Tin	97.6						
	Tin	106	101	99.6	96.0			1.65
	Titanium	99.8	99.1	99.3				0.197
	Titanium	106	103	101	100			2.15
	Vanadium	93.4	95.9	96.1				0.231
	Vanadium	99.4	99.0	97.2	96.2			1.84
	Zinc	96.7	90.9	90.6				0.279
	Zinc	106	99.6	98.4	101			1.24
EPA 200.8 Rev. 5.4	Aluminum	98.4	110	111				0.199
	Aluminum	100	100	102	101			1.49
	Antimony	99.9	99.0	100				1.14
	Antimony	99.3	100	99.4	102			0.901
	Arsenic	98.5	108	109				1.07
	Arsenic	98.8	98.1	99.1	101			1.03
	Barium	102	104	104				0.0800
	Barium	103	102	101	104			0.508
	Beryllium	88.4	102	106				3.88
	Beryllium	94.2	93.3	92.1	92.6			1.35
	Boron	103						9.53
	Boron	102	103	105	103			1.88
	Cadmium	98.3	90.2	88.4				2.01
	Cadmium	97.8	99.9	98.8	102			1.07
	Chromium	95.7	96.6	96.0				0.614
	Chromium	96.0	97.3	98.5	98.4			1.21
	Cobalt	97.4	113	112				1.26
	Cobalt	97.5	96.2	96.0	99.2			0.206
	Copper	95.9	103	103				0.166
	Copper	96.8	93.3	93.0	96.8			0.272
	Lead	101	111	123				10.0
	Lead	94.0	94.2	93.6	96.2			0.628
	Manganese	97.0	96.8	96.6				0.209
	Manganese	98.2	98.7	99.0				0.198
	Molybdenum	99.5	103	104				0.503
	Molybdenum	98.8	101	102	103			0.203
	Nickel	97.4	114	115				0.843
	Nickel	98.6	95.7	96.1	96.8			0.408
	Selenium	96.5	95.4	95.2				0.260
	Selenium	99.4	98.4	99.2	101			0.814
	Silver	98.2	85.0	85.2				0.200
	Silver	98.7	97.4	97.3	95.3			0.0748
	Thallium	102	114	126				10.1
	Thallium	95.3	97.8	97.1	99.4			0.664

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Acetochlor	90.7	96.4	104		6.12		
	Alachlor	86.9	82.6	112		5.07		
	Aldrin	43.6		58.5	64.3			9.55
	Alpha-BHC	86.2		95.6	104			8.74
	Alpha-Chlordane	68.6		80.2	71.4			11.6
	Ametryn	90.2	83.6	102		7.56		
	Atrazine	95.2	93.6			1.69		
	Atrazine Desethyl	69.5	67.3	56.5		3.25		
	Avobenzone	121	123	112		2.09		
	Azinphos Methyl	104	106	92.5		1.40		
	Azoxystrobin	101	109	126		6.94		
	Beta-BHC	101		127	124			2.26
	Beta-Cyfluthrin	86.3		125	114			9.30
	Bifenthrin	52.7		72.5	66.0			9.49
	Bromacil	74.2	71.5	92.6		3.65		
	Butylate	43.8	60.7	33.7		32.4		
	Caffeine	59.0	70.5	68.6		17.7		
	Carbophenothion	43.1		85.2	78.1			8.70
	Carbophenothion	82.8	94.4	82.9		13.0		
	Carfentrazone Ethyl	80.9	97.0	80.9		18.1		
	Chlorfenapyr	78.9	93.5	63.1		17.0		
	Chlorothalonil	95.1		98.4	53.2			59.6
	Chlorpyrifos Ethyl	78.1	94.2	73.2		18.7		
	Chlorpyrifos Methyl	94.8	95.0	85.6		0.209		
	Cis-Nonachlor	54.9		67.5	59.5			12.7
	Coumaphos	84.1	111	88.2		28.0		
	Cyanazine	88.7	96.9	84.9		8.90		
	Cypermethrin	74.6		106	98.6			7.07
	Cyprodinil	83.5	90.3	90.2		7.79		
	Dacthal	89.9		99.5	94.2			5.39
	DDD-p,p'	70.8		78.2	68.6			13.0
	DDE-p,p'	71.1		73.1	71.2			2.63
	DDT-p,p'	70.5		85.4	78.6			8.24
	Delta-BHC	103		141	124			13.1
	Deltamethrin	88.4		151	108			32.8
	Demeton	71.3	69.9	80.5		1.94		
	Diazinon	92.5	89.8	93.9		3.03		
	Dichlobenil	85.9		60.2	73.9			20.5
	Dicofol	54.8		66.4	72.8			9.22
	Dieldrin	79.1		80.5	77.6			3.60
	Difenoconazole	124	131	137		6.12		
	Dimethenamid	73.3	75.4	76.5		2.86		
	Dimethomorph	101	86.9	121		15.1		
	Disulfoton	79.4	87.8	80.4		10.0		
	Dithiopyr	78.3	85.7	23.2		8.95		
	Endosulfan I	73.3		85.8	76.7			11.2
	Endosulfan II	87.0		95.5	78.6			19.4
	Endosulfan Sulfate	90.5		100	78.0			24.8
	Endrin	68.9		79.5	69.6			13.2
	Endrin Aldehyde	87.3		57.8	55.9			3.24
	Endrin Ketone	84.3		103	87.4			16.5
	EPTC	29.5	50.5	30.4		52.4		
	Esfenvalerate	86.6		129	121			5.83
	Ethalfuralin	60.0		73.4	81.7			10.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Ethion	58.2	84.6	42.3		36.9		
	Ethoprop	73.7	84.5	85.5		13.7		
	Etridiazole	35.2	53.3	48.6		40.9		
	Fenamiphos	83.9	96.7	44.9		14.2		
	Fenbuconazole	69.7	91.6	88.9		27.1		
	Fenpropathrin	68.8		88.9	91.2			2.57
	Fipronil	83.8	100	81.8		17.8		
	Fipronil Desulfinyl	103	112	98.6		8.14		
	Fipronil Sulfide	82.0	103	65.0		22.5		
	Fipronil Sulfone	72.8	91.6	60.7		22.9		
	Fluazifop-P-butyl	112	113	89.8		0.426		
	Fludioxonil	92.1	95.2	81.0		3.30		
	Flumioxazin	139	130	127		6.69		
	Flutolanil	74.7	83.2	62.3		10.8		
	Fluxapyroxad	70.3	80.7	70.9		13.8		
	Fonofos	83.0	84.0	78.3		1.18		
	Gamma-BHC	87.3		104	111			6.61
	Gamma-Chlordane	65.9		70.8	73.2			3.31
	Heptachlor	59.0		67.4	70.0			3.74
	Heptachlor Epoxide	72.1		81.4	81.1			0.417
	Hexachlorobenzene	57.0		72.0	71.0			1.32
	Hexazinone	79.0	87.4	83.9		10.2		
	Imazalil	66.6	74.4	77.4		11.2		
	Iprodione	80.1	89.1	71.2		10.7		
	Kepone	35.9		39.3	26.1			40.4
	Lambda-Cyhalothrin	75.8		112	94.0			17.5
	Loratadine	89.6	69.7	103		25.0		
	Malathion	103	118	76.7		13.7		
	Metalaxyl	81.5	89.2	78.7		9.03		
	Methoprene	65.6		61.5	67.6			9.51
	Methoxychlor	72.5		83.7	79.7			4.85
	Metolachlor	81.5	85.3	77.7		4.53		
	Metribuzin	98.9	95.2	92.4		3.81		
	Mevinphos	83.4	99.3	90.6		17.4		
	MGK-264	85.6		103	94.8			7.92
	Mirex	52.3		63.7	63.1			0.966
	Molinate	45.9	69.8	57.5		41.3		
	Myclobutanil	86.0	88.8	72.8		3.24		
	Naled	72.5	91.1	86.0		22.8		
	Napropamide	73.5	84.7	55.3		14.2		
	Norflurazon	108	115	67.2		5.98		
	Octinoxate	97.0	98.1	98.3		1.20		
	Oxadiazon	74.5	75.3	63.0		1.04		
	Oxybenzone	87.7	88.3	79.9		0.711		
	Oxychlordane	61.7		83.8	72.6			14.3
	Oxyfluorfen	102	104	101		1.99		
	Parathion Ethyl	85.0	86.3	82.7		1.51		
	Parathion Methyl	108	98.7	113		9.10		
	PCB-1016	83.1		72.7	66.2			9.39
	PCB-1260	78.8		67.0	57.9			14.7
	Pendimethalin	82.6	73.7	93.4		11.4		
	Permethrin	77.6		127	131			3.12
	Phenothrin	54.0		89.2	84.8			5.02
	Phenytol	27.0	35.1	38.2		25.8		

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Phorate	83.0	76.7	78.3		7.84		
	Piperonyl Butoxide	112		123	114			7.84
	Prallethrin	72.1		93.6	99.9			6.50
	Prodiamine	49.3	40.2	49.6		20.5		
	Prometon	72.7	78.7	69.3		7.89		
	Prometryn	81.6	88.4	44.2		8.04		
	Pronamide	94.1	95.0	93.4		0.911		
	Propanil	128	135	119		4.96		
	Propargite	50.7	67.7	45.1		28.8		
	Propiconazole	103	119	64.5		14.6		
	Pyraflufen Ethyl	109	106	67.3		2.30		
	Pyridaben	124	138	107		11.4		
	Pyriproxyfen	67.7	82.9	73.0		20.1		
	Simazine	102	103			1.22		
	Stiropfos	67.5	87.8	20.1		26.1		
	Sulfentrazone	53.5	59.0	55.9		9.82		
	Tau-Fluvalinate	81.7		126	122			3.04
	Tebuconazole	35.5	56.6	30.0		45.8		
	Terbufos	98.6	101	95.6		2.44		
	Terbutylazine	90.1	88.5	91.0		1.74		
	Tetramethrin	72.4		82.7	120			36.8
	Thiobencarb	76.1	75.7	58.9		0.493		
	Trans-Nonachlor	58.9		69.4	67.6			2.75
	Triadimefon	80.4	79.5	58.2		1.13		
	Triclosan Methyl	76.4		81.4	76.9			5.70
	Trifluralin	59.6		72.6	78.5			7.89
EPA 8276	Chlordane	79.4		59.1	52.4			12.1
	Toxaphene	87.2		64.7	57.6			11.5
EPA 8321B	2,4-D	56.6		63.6	61.6			3.19
	2,4,5-T	41.1		44.0	40.8			7.43
	3-Hydroxycarbofuran	79.7		86.5	88.4			2.19
	Acesulfame K	124		90.0	92.6			2.85
	Acetaminophen	56.6		31.0	31.2			0.586
	Acetamiprid	87.5		77.4	77.7			0.398
	Afidopyropen	56.1		42.7	42.8			0.306
	Aldicarb	64.1		71.3	76.9			7.54
	Aldicarb Sulfone	89.3		98.0	101			2.78
	Aldicarb Sulfoxide	88.4		50.3	52.2			3.59
	AMPA	88.0		86.7	92.8			6.81
	Bentazon	108		150	144			3.88
	Benzovindiflupyr	89.8		14.7	17.5			17.5
	Carbamazepine	79.4		50.0	50.4			0.862
	Carbaryl	75.5		62.9	60.3			4.19
	Carbofuran	82.5		75.8	76.1			0.339
	Clothianidin	85.4		52.0	52.4			0.751
	Dinotefuran	92.8		92.5	97.8			5.61
	Diuron	81.6		47.6	46.6			1.94
	Endothall	112		103	108			5.04
	Fenuron	101		87.8	74.4			16.6
	Fluridone	73.3		49.7	51.0			1.85
	Glufosinate	98.6		99.4	99.4			0.0354
	Glyphosate	98.4		95.5	94.6			0.875
	Hydrocodone	86.4		79.6	84.3			5.73
	Ibuprofen	60.7		51.6	44.2			15.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8321B	Imazapyr	80.7	77.1	73.2		4.85
	Imidacloprid	84.3	89.5	93.4		4.25
	Linuron	67.2	41.9	43.0		2.69
	Mandestrobin	73.1	50.5	50.6		0.0299
	MCPP	60.3	73.9	68.2		7.97
	Methiocarb	69.6	64.2	69.2		7.40
	Methomyl	80.6	81.9	83.3		1.73
	Naproxen	56.2	57.4	63.4		9.83
	Oxamyl	90.6	92.4	96.4		4.21
	Primidone	90.4	56.0	61.8		9.92
	Propoxur	87.6	78.7	80.5		2.21
	Pyraclostrobin	70.2	15.4	17.0		9.84
	Silvex	40.5	40.6	40.8		0.586
	Sucralose	115	97.3	103		5.36
	Thiamethoxam	89.5	81.1	83.8		3.29
	Tolfenpyrad	45.9	1.19	0.933		24.5
	Triclopyr	46.6	46.5	45.9		1.16

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	2326022, 2326023, 2326024, 2326025, 2326032
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2326022, 2326023, 2326024, 2326025, 2326032
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2326016, 2326020
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2326015, 2326017, 2326018, 2326019, 2326021
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2326016, 2326020
EPA 8270E	PCBs in water matrices by GC/MS/MS	2326015, 2326019
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2326015, 2326017, 2326018, 2326019, 2326021
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2326010, 2326012
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2326011, 2326013, 2326014
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2326022, 2326023, 2326024

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	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/14/2022 00:00	McKinley C Carter	2326023
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/14/2022 00:08	McKinley C Carter	2326023
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/14/2022 00:16	McKinley C Carter	2326024
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/14/2022 00:25	McKinley C Carter	2326024
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/18/2022 02:30	McKinley C Carter	2326024
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 16:46	McKinley C Carter	2326022
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 16:54	McKinley C Carter	2326025
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 17:33	McKinley C Carter	2326032
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/16/2022 19:08	Alexander Thompson	2326023
EPA 200.8 Rev. 5.4	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/16/2022 19:18	Alexander Thompson	2326024
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/16/2022 20:45	Alexander Thompson	2326023
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/16/2022 20:54	Alexander Thompson	2326024
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/17/2022 11:20	Alexander Thompson	2326023
	05/10/2022	05/13/2022 09:55	Megan Whitefoot	05/17/2022 12:33	Alexander Thompson	2326024
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/16/2022 15:42	Emily M Philpot	2326022
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/16/2022 16:46	Emily M Philpot	2326025
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/16/2022 16:55	Emily M Philpot	2326032
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 14:59	Alexander Thompson	2326022
EPA 8270E	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 15:05	Alexander Thompson	2326025
	05/10/2022	05/13/2022 10:25	Megan Whitefoot	05/17/2022 15:11	Alexander Thompson	2326032
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/12/2022 22:43	Michael Poppell	2326015
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/12/2022 23:13	Michael Poppell	2326017
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/12/2022 23:43	Michael Poppell	2326018
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/13/2022 00:13	Michael Poppell	2326019
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/13/2022 00:43	Michael Poppell	2326021
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/14/2022 00:10	Arthur Maknenko	2326015
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/14/2022 00:40	Arthur Maknenko	2326019
EPA 8276	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 00:37	Michael Poppell	2326015
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 01:06	Michael Poppell	2326017
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 01:35	Michael Poppell	2326018
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 02:04	Michael Poppell	2326019
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 03:31	Michael Poppell	2326021
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 04:00	Michael Poppell	2326021
	05/10/2022	05/16/2022 08:00	Rasheda Ghaffari	05/19/2022 19:11	Vandana T. Nagar	2326016
	05/10/2022	05/16/2022 08:00	Rasheda Ghaffari	05/19/2022 19:37	Vandana T. Nagar	2326020
	05/10/2022	05/16/2022 08:00	Rasheda Ghaffari	05/24/2022 23:12	Arthur Maknenko	2326016
EPA 8276	05/10/2022	05/16/2022 08:00	Rasheda Ghaffari	05/24/2022 23:36	Arthur Maknenko	2326020
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 04:25	Julie Wi	2326017
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 10:08	Julie Wi	2326015
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/17/2022 11:06	Julie Wi	2326018

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8276	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/20/2022 21:13	Julie Wi	2326019
	05/10/2022	05/11/2022 08:00	Fe-Val Siddell	05/20/2022 22:08	Julie Wi	2326021
EPA 8321B	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 16:28	Manjita Shrestha	2326011
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 16:41	Manjita Shrestha	2326013
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/13/2022 16:54	Manjita Shrestha	2326014
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 12:28	Manjita Shrestha	2326011
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 12:43	Manjita Shrestha	2326013
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/14/2022 12:58	Manjita Shrestha	2326014
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/16/2022 09:15	Manjita Shrestha	2326011
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/16/2022 09:28	Manjita Shrestha	2326013
	05/10/2022	05/13/2022 09:00	Manjita Shrestha	05/16/2022 09:41	Manjita Shrestha	2326014
	05/10/2022	05/13/2022 09:30	June Rhew	05/18/2022 03:11	Juyoung Kim	2326011
	05/10/2022	05/13/2022 09:30	June Rhew	05/18/2022 03:46	Juyoung Kim	2326013
	05/10/2022	05/13/2022 09:30	June Rhew	05/18/2022 04:21	Juyoung Kim	2326014
	05/10/2022	05/16/2022 09:00	June Rhew	05/18/2022 21:10	Juyoung Kim	2326010
	05/10/2022	05/16/2022 09:00	June Rhew	05/18/2022 21:45	Juyoung Kim	2326012
SM 2340 B-2011	05/10/2022			05/14/2022 00:08	McKinley C Carter	2326023
	05/10/2022			05/14/2022 00:25	McKinley C Carter	2326024
	05/10/2022			05/17/2022 16:46	McKinley C Carter	2326022