

Chemical Analysis Report

SE-DIST-2021-12-03-01

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

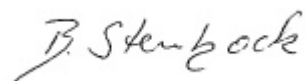
Event Description: **SMP - Boat Finale**
Request ID: **RQ-2021-11-29-37**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 27-DEC-2021 13:55



Case Narrative

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

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: South IRL outside Bob Summers Park

Collection Date/Time: 12/02/2021 11:40

Field ID: G5SE0088

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292820	EPA 200.7 Rev. 4.4	Calcium	306		mg/L	P407273	
		Iron	120	I	ug/L	P407273	
		Magnesium	939		mg/L	P407273	
		Strontium	6.07E+03		ug/L	P407273	
		Tin	150	U	ug/L	P407273	
		Titanium	4.1	I	ug/L	P407273	
		Vanadium	6.0	U	ug/L	P407273	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P407273	
		Aluminum	127		ug/L	P407273	
		Antimony	0.20	U	ug/L	P407273	
		Arsenic	2.02		ug/L	P407273	
		Beryllium	0.040	U	ug/L	P407273	
		Cadmium	0.080	U	ug/L	P407273	
		Chromium	1.6	U	ug/L	P407273	
		Cobalt	0.080	U	ug/L	P407273	
		Copper	2.0	I	ug/L	P407273	
		Lead	0.80	U	ug/L	P407273	
		Manganese	7.2		ug/L	P407273	
		Molybdenum	8.7		ug/L	P407273	
		Nickel	2.0	U	ug/L	P407273	
		Selenium	0.80	U	ug/L	P407273	
		Silver	0.040	U	ug/L	P407273	
		Thallium	0.40	U	ug/L	P407273	

Ref. Method and Comment:

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

Sample Location: South IRL outside Vero Beach Yacht Club

Collection Date/Time: 12/02/2021 12:00

Field ID: G5SE0089

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292821	EPA 200.7 Rev. 4.4	Calcium	294		mg/L	P407273	
		Iron	110	I	ug/L	P407273	
		Magnesium	862		mg/L	P407273	
		Strontium	5.86E+03		ug/L	P407273	
		Tin	150	U	ug/L	P407273	
		Titanium	4.5	I	ug/L	P407273	
		Vanadium	6.0	U	ug/L	P407273	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P407273	
		Aluminum	106		ug/L	P407273	
		Antimony	0.20	U	ug/L	P407273	
		Arsenic	1.92		ug/L	P407273	
		Beryllium	0.040	U	ug/L	P407273	
		Cadmium	0.080	U	ug/L	P407273	
		Chromium	1.6	U	ug/L	P407273	
		Cobalt	0.080	U	ug/L	P407273	
		Copper	1.6	I	ug/L	P407273	
		Lead	0.80	U	ug/L	P407273	
		Manganese	6.6		ug/L	P407273	
		Molybdenum	8.3		ug/L	P407273	
		Nickel	2.0	U	ug/L	P407273	
		Selenium	0.80	U	ug/L	P407273	
		Silver	0.040	U	ug/L	P407273	
		Thallium	0.40	U	ug/L	P407273	

Ref. Method and Comment:

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

Sample Location: South Fork Saint Lucie near Veterans Memorial Bridge **Collection Date/Time: 12/02/2021 14:10**

Field ID: G2SE0060

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292822	EPA 200.7 Rev. 4.4	Calcium	88.2		mg/L	P407197	
		Iron	180		ug/L	P407197	
		Magnesium	105		mg/L	P407197	
		Manganese	9.1		ug/L	P407197	
		Zinc	5.0	U	ug/L	P407197	
	EPA 200.8 Rev. 5.4	Aluminum	96		ug/L	P407197	
		Antimony	0.10	I	ug/L	P407197	
		Arsenic	1.61		ug/L	P407197	
		Beryllium	0.010	U	ug/L	P407197	
		Cadmium	0.020	U	ug/L	P407197	
		Chromium	0.40	U	ug/L	P407197	
		Copper	1.73		ug/L	P407197	
		Lead	0.21	I	ug/L	P407197	
		Nickel	0.51	I	ug/L	P407197	
		Selenium	0.23	I	ug/L	P407197	
		Silver	0.010	U	ug/L	P407197	
		Thallium	0.10	U	ug/L	P407197	

Sample Location: North Fork Saint Lucie near Floridian GC

Collection Date/Time: 12/02/2021 14:20

Field ID: G2SE0062

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292823	EPA 200.7 Rev. 4.4	Calcium	124		mg/L	P407273	
		Iron	170	I	ug/L	P407273	
		Magnesium	254		mg/L	P407273	
		Manganese	10	I	ug/L	P407273	
	EPA 200.8 Rev. 5.4	Zinc	15	U	ug/L	P407273	
		Aluminum	57	I	ug/L	P407273	
		Antimony	0.20	U	ug/L	P407273	
		Arsenic	1.58		ug/L	P407273	
		Beryllium	0.10	U	ug/L	P407273	
		Cadmium	0.080	U	ug/L	P407273	
		Chromium	1.6	U	ug/L	P407273	
		Copper	2.5	I	ug/L	P407273	
		Lead	0.80	U	ug/L	P407273	
		Nickel	2.0	U	ug/L	P407273	
		Selenium	0.80	U	ug/L	P407273	
		Silver	0.040	U	ug/L	P407273	
		Thallium	0.40	U	ug/L	P407273	

Ref. Method and Comment:

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium and magnesium are unavailable because of high analyte concentration in the QC sample.

EPA 200.8 Rev. 5.4: The MDL for beryllium was elevated because of matrix interference.

Sample Location: Upper North Saint Lucie Estuary

Collection Date/Time: 12/02/2021 15:00

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292781	EPA 180.1 Rev. 2.0	Turbidity	3.0	A	NTU	P407019	
	EPA 300.0 Rev. 2.1	Chloride	3.5E+03		mg Cl/L	P407362	
		Sulfate	490		mg SO4/L	P407365	
	SM 2120 B-2011	Color (true)	66	A	PCU	P407016	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P407162	
	SM 2540 C-2011	TDS	5.88E+03		mg/L	P407487	
	SM 2540 D-2011	TSS	2	I	mg/L	P407496	
	SM 4500 F-C-2011	Fluoride	0.36		mg F/L	P407166	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.071		mg N/L	P407629	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.68		mg N/L	P407460	
2292782	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P407095	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P407047	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P407413	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.13		mg P/L	P407012	
	dissolved						
2292792	EPA 8321B	Aldicarb	0.020	U	ug/L	P406985	
		Aldicarb Sulfone	0.0020	U	ug/L	P406985	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P406985	
		Carbaryl	0.0020	U	ug/L	P406985	
		Carbofuran	0.0020	U	ug/L	P406985	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P406985	
		Methiocarb	0.0020	U	ug/L	P406985	
		Methomyl	0.0020	U	ug/L	P406985	
		Oxamyl	0.014		ug/L	P406985	
		Propoxur	0.0020	U	ug/L	P406985	
2292793		Acesulfame K	0.10	U	ug/L	P406989	
		2,4-D	0.12		ug/L	P406988	
		AMPA	1.0	U	ug/L	P406989	
		2,4,5-T	0.0040	U	ug/L	P406988	
		Acetaminophen	0.0080	U	ug/L	P406988	
		Endothall	0.25	U	ug/L	P406989	
		Acetamiprid	0.0020	U	ug/L	P406988	
		Glufosinate	1.0	U	ug/L	P406989	
		Glyphosate	1.0	U	ug/L	P406989	
		Afidopyropen	0.0020	U	ug/L	P406988	
		Sucralose	0.20		ug/L	P406989	
		Bentazon	0.019		ug/L	P406988	
		Benzovindiflupyr	0.0020	U	ug/L	P406988	
		Carbamazepine	0.0012	I	ug/L	P406988	
		Clothianidin	0.0071	I	ug/L	P406988	
		Dinotefuran	0.0086		ug/L	P406988	
		Diuron	0.056		ug/L	P406988	
		Fenuron	0.016	U	ug/L	P406988	
		Fluridone	0.0093		ug/L	P406988	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292793	EPA 8321B	Imazapyr	0.27		ug/L	P406988	
		Hydrocodone	0.0020	U	ug/L	P406988	
		Ibuprofen	0.020	U	ug/L	P406988	
		Imidacloprid	0.075		ug/L	P406988	
		Linuron	0.0040	U	ug/L	P406988	RPD
		Mandestrobin	0.0020	U	ug/L	P406988	
		MCP	0.0040	U	ug/L	P406988	
		Naproxen	0.0080	U	ug/L	P406988	
		Primidone	0.0040	U	ug/L	P406988	
		Pyraclostrobin	0.0020	U	ug/L	P406988	
		Silvex	0.0040	U	ug/L	P406988	
		Thiamethoxam	0.019		ug/L	P406988	
		Tolfenpyrad	0.0020	U	ug/L	P406988	
		Triclopyr	0.0040	U	ug/L	P406988	
2292818	EPA 8270E	Aldrin	0.68	UJ	ng/L	P407105	LCS
		Alpha-BHC	0.11	U	ng/L	P407105	
		Alpha-Chlordane	0.21	U	ng/L	P407105	
		Beta-BHC	0.11	U	ng/L	P407105	
		Beta-Cyfluthrin**	1.3	U	ng/L	P407105	
		Bifenthrin**	0.53	U	ng/L	P407105	
		Chlorothalonil	0.53	UJ	ng/L	P407105	RPD
		Cis-Nonachlor**	0.21	U	ng/L	P407105	
		Cypermethrin	1.6	U	ng/L	P407105	
		Dacthal**	0.16	U	ng/L	P407105	
		DDD-p,p'	0.26	U	ng/L	P407105	
		DDE-p,p'	0.21	U	ng/L	P407105	
		DDT-p,p'	0.26	U	ng/L	P407105	
		Delta-BHC	0.42	U	ng/L	P407105	
		Deltamethrin**	1.3	U	ng/L	P407105	
		Dichlobenil**	0.11	UJ	ng/L	P407105	LCS
		Dicofol	1.3	U	ng/L	P407105	
		Dieldrin	0.42	U	ng/L	P407105	
		Endosulfan I	0.42	U	ng/L	P407105	
		Endosulfan II	0.42	U	ng/L	P407105	
		Endosulfan Sulfate	0.32	U	ng/L	P407105	
		Endrin	0.42	U	ng/L	P407105	
		Endrin Aldehyde	0.79	U	ng/L	P407105	
		Endrin Ketone	0.42	U	ng/L	P407105	
		Esfenvalerate**	0.79	U	ng/L	P407105	
		Ethalfuralin**	0.16	U	ng/L	P407105	
		Fenpropathrin**	0.26	U	ng/L	P407105	
		Gamma-BHC	0.13	U	ng/L	P407105	
		Gamma-Chlordane	0.21	U	ng/L	P407105	
		Heptachlor	0.21	U	ng/L	P407105	
		Heptachlor Epoxide	0.26	U	ng/L	P407105	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292818	EPA 8270E	Hexachlorobenzene	1.1	U	ng/L	P407105	
		Kepone**	5.3	U	ng/L	P407105	
		Lambda-Cyhalothrin**	0.79	U	ng/L	P407105	
		Methoprene**	0.79	U	ng/L	P407105	
		Methoxychlor	0.32	U	ng/L	P407105	
		MGK-264**	0.21	U	ng/L	P407105	
		Mirex	0.74	U	ng/L	P407105	
		Oxychlorthane**	0.32	U	ng/L	P407105	
		Permethrin	1.7	U	ng/L	P407105	
		Phenothrin**	0.95	U	ng/L	P407105	
		Piperonyl Butoxide**	3.8		ng/L	P407105	
		Prallethrin**	2.1	U	ng/L	P407105	
		Tau-Fluvalinate**	0.26	U	ng/L	P407105	
		Tetramethrin**	0.79	U	ng/L	P407105	
		Trans-Nonachlor**	0.21	U	ng/L	P407105	
		Triclosan Methyl**	0.16	U	ng/L	P407105	
		Trifluralin	0.21	U	ng/L	P407105	
	EPA 8276	Chlordane	2.6	U	ng/L	P407105	
		Toxaphene	16	U	ng/L	P407105	
2292819	EPA 8270E	Acetochlor	0.24	U	ng/L	P406865	
		Alachlor	0.24	U	ng/L	P406865	
		Ametryn	0.58	U	ng/L	P406865	
		Atrazine	240		ng/L	P406865	
		Atrazine Desethyl	15		ng/L	P406865	
		Azinphos Methyl	1.9	U	ng/L	P406865	
		Azoxystrobin**	3.1		ng/L	P406865	
		Bromacil	7.0		ng/L	P406865	
		Butylate	0.39	U	ng/L	P406865	
		Caffeine**	8.3	I	ng/L	P406865	
		Carbophenothion	0.48	U	ng/L	P406865	
		Carfentrazone Ethyl**	0.097	U	ng/L	P406865	
		Chlorfenapyr**	0.17	U	ng/L	P406865	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P406865	
		Chlorpyrifos Methyl	0.048	U	ng/L	P406865	
		Coumaphos**	0.48	U	ng/L	P406865	
		Cyanazine	3.1	UJ	ng/L	P406865	LCS, MS
		Cyprodinil**	0.097	U	ng/L	P406865	
		Demeton	1.5	U	ng/L	P406865	
		Diazinon	0.12	U	ng/L	P406865	
		Difenoconazole**	0.58	U	ng/L	P406865	
		Dimethenamid**	0.097	U	ng/L	P406865	
		Dimethomorph**	13		ng/L	P406865	MS
		Disulfoton	0.48	U	ng/L	P406865	
		Dithiopyr**	0.17	I	ng/L	P406865	
		EPTC	1.2	U	ng/L	P406865	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292819	EPA 8270E	Ethion	0.15	U	ng/L	P406865	
		Ethoprop	0.097	U	ng/L	P406865	
		Etridiazole**	0.15	U	ng/L	P406865	
		Fenamiphos	0.48	U	ng/L	P406865	
		Fenbuconazole**	1.3		ng/L	P406865	
		Fipronil	0.70	I	ng/L	P406865	
		Fipronil Desulfinyll**	0.58		ng/L	P406865	
		Fipronil Sulfide	0.32	I	ng/L	P406865	
		Fipronil Sulfone	0.80		ng/L	P406865	
		Fluazifop-P-butyl**	0.097	U	ng/L	P406865	
		Fludioxonil**	0.14	I	ng/L	P406865	
		Flumioxazin**	1.7	U	ng/L	P406865	
		Flutolanil**	0.94		ng/L	P406865	
		Fluxapyroxad**	1.3		ng/L	P406865	
		Fonofos	0.19	U	ng/L	P406865	
		Hexazinone	180		ng/L	P406865	
		Imazalil**	0.73	U	ng/L	P406865	
		Iprodione**	0.58	U	ng/L	P406865	
		Loratadine**	0.097	U	ng/L	P406865	
		Malathion	0.34	U	ng/L	P406865	
		Metalaxyl	15		ng/L	P406865	
		Metolachlor	42		ng/L	P406865	
		Metribuzin	3.1	U	ng/L	P406865	
		Mevinphos	1.0	U	ng/L	P406865	
		Molinate	0.29	U	ng/L	P406865	
		Myclobutanil**	0.24	U	ng/L	P406865	
		Naled**	1.5	UJ	ng/L	P406865	LCS
		Napropamide**	0.39	U	ng/L	P406865	
		Norflurazon	34		ng/L	P406865	
		Oxadiazon	11		ng/L	P406865	
		Oxyfluorfen**	0.15	U	ng/L	P406865	
		Parathion Ethyl	0.24	U	ng/L	P406865	
		Parathion Methyl	0.53	U	ng/L	P406865	
		Pendimethalin	0.97	U	ng/L	P406865	
		Phenytol**	3.4	U	ng/L	P406865	MS
		Phorate	0.51	U	ng/L	P406865	
		Prodiamine**	0.29	U	ng/L	P406865	
		Prometon	0.87	U	ng/L	P406865	
		Prometryn	0.19	U	ng/L	P406865	
		Pronamide**	0.15	U	ng/L	P406865	
		Propanil**	0.12	U	ng/L	P406865	
		Propargite**	1.5	U	ng/L	P406865	
		Propiconazole**	0.48	U	ng/L	P406865	
		Pyraflufen Ethyl**	0.24	U	ng/L	P406865	
		Pyridaben**	0.44	U	ng/L	P406865	

Field ID: G2SE0061

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2292819	EPA 8270E	Pyriproxyfen**	0.12	U	ng/L	P406865	
		Simazine	19		ng/L	P406865	
		Stirophos**	0.12	U	ng/L	P406865	
		Sulfentrazone**	9.2		ng/L	P406865	
		Tebuconazole**	0.94	I	ng/L	P406865	
		Terbufos	0.097	U	ng/L	P406865	
		Terbuthylazine	0.41	U	ng/L	P406865	
		Thiobencarb**	0.58	U	ng/L	P406865	
		Triadimefon**	0.24	I	ng/L	P406865	
2292824	EPA 200.7 Rev. 4.4	Calcium	115		mg/L	P407273	
		Iron	260	I	ug/L	P407273	
		Magnesium	218		mg/L	P407273	
		Manganese	12		ug/L	P407273	
		Zinc	15	U	ug/L	P407273	
	EPA 200.8 Rev. 5.4	Aluminum	105		ug/L	P407273	
		Antimony	0.20	U	ug/L	P407273	
		Arsenic	1.60		ug/L	P407273	
		Beryllium	0.040	U	ug/L	P407273	
		Cadmium	0.080	U	ug/L	P407273	
		Chromium	1.6	U	ug/L	P407273	
		Copper	2.8	I	ug/L	P407273	
		Lead	0.80	U	ug/L	P407273	
		Nickel	2.0	U	ug/L	P407273	
		Selenium	0.80	U	ug/L	P407273	
		Silver	0.040	U	ug/L	P407273	
		Thallium	0.40	U	ug/L	P407273	

Ref. Method and Comment:

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

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

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

EPA 8270E: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium and magnesium are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P407019

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407197

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P407273

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Manganese	1.0	U	ug/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: P407197

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407273

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Beryllium	0.010	U	ug/L
Cadmium	0.020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407273

Component	Result	Code	Units
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 300.0 Rev. 2.1
Batch ID: P407362

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407365

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407629

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407460

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407095

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407047

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407012

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

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
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
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	0.50	U	ng/L
Carbophenothion	0.50	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
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
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	3.2	U	ng/L
Metribuzin	3.2	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
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
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
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
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.30	U	ng/L
Prodiamine	0.30	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
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P406865

Component	Result	Code	Units
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 8270E

Batch ID: P407105

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	0.50	U	ng/L
Chlorothalonil	0.50	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
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.10	U	ng/L
Dichlobenil	0.10	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407105

Component	Result	Code	Units
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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P407105

Component	Result	Code	Units
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276

Batch ID: P407105

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: EPA 8321B

Batch ID: P406985

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

Reference Method: EPA 8321B

Batch ID: P406988

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	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P406988

Component	Result	Code	Units
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: P406989

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

Reference Method: SM 2120 B-2011
Batch ID: P407016

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-2011
Batch ID: P407162

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

Reference Method: SM 2540 C-2011
Batch ID: P407487

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P407496

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P407166

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P407413

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407197

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	102		P	85 - 115
Magnesium	105		P	85 - 115
Manganese	95.6		P	85 - 115
Zinc	96.5		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407273

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	109		P	85 - 115
Magnesium	103		P	85 - 115
Manganese	105		P	85 - 115
Strontium	99.2		P	85 - 115
Tin	104		P	85 - 115
Titanium	104		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407197

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	104		P	85 - 115
Arsenic	99.8		P	85 - 115
Beryllium	99.4		P	85 - 115
Cadmium	102		P	85 - 115
Chromium	104		P	85 - 115
Copper	98.7		P	85 - 115
Lead	98.9		P	85 - 115
Nickel	99.1		P	85 - 115
Selenium	99.6		P	85 - 115
Silver	101		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407273

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	99.0		P	85 - 115
Beryllium	96.6		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	103		P	85 - 115
Cobalt	101		P	85 - 115
Copper	100		P	85 - 115
Lead	98.2		P	85 - 115
Manganese	103		P	85 - 115
Molybdenum	101		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P407273

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	100		P	85 - 115
Selenium	98.7		P	85 - 115
Silver	99.5		P	85 - 115
Thallium	105		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407362

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P407365

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P407629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	99.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P407460

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P407095

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P407047

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P407012

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.7		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P406865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	111	107	P/P	70 - 121

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P406865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alachlor	106	108	P/P	70 - 119
Ametryn	109	109	P/P	61 - 135
Atrazine	102	102	P/P	76 - 123
Atrazine Desethyl	106	106	P/P	35 - 140
Azinphos Methyl	145	142	P/P	57 - 163
Azoxystrobin	103	107	P/P	43 - 231
Bromacil	94.9	119	P/P	42 - 123
Butylate	55.1	45.3	P/P	34 - 92.0
Caffeine	75.4	89.5	P/P	70 - 130
Carbophenothion	102	97.7	P/P	61 - 121
Carfentrazone Ethyl	115	115	P/P	62 - 139
Chlorfenapyr	95.4	87.3	P/P	50 - 150
Chlorpyrifos Ethyl	94.2	89.0	P/P	67 - 121
Chlorpyrifos Methyl	95.9	91.4	P/P	67 - 120
Coumaphos	113	107	P/P	50 - 220
Cyanazine	240	252	F/F	20 - 226
Cyprodinil	125	119	P/P	50 - 150
Demeton	91.0	89.9	P/P	35 - 125
Diazinon	114	118	P/P	70 - 122
Difenoconazole	167	163	P/P	56 - 186
Dimethenamid	92.0	93.0	P/P	67 - 119
Dimethomorph	126	139	P/P	50 - 150
Disulfoton	98.1	93.4	P/P	47 - 120
Dithiopyr	106	110	P/P	67 - 118
EPTC	58.8	47.1	P/P	33 - 90.0
Ethion	84.7	81.5	P/P	40 - 133
Ethoprop	93.0	93.6	P/P	61 - 121
Etridiazole	70.2	64.0	P/P	50 - 150
Fenamiphos	94.9	91.4	P/P	31 - 139
Fenbuconazole	112	107	P/P	66 - 141
Fipronil	119	118	P/P	62 - 129
Fipronil Desulfinyl	123	115	P/P	59 - 126
Fipronil Sulfide	94.8	86.7	P/P	63 - 117
Fipronil Sulfone	92.3	88.1	P/P	57 - 117
Fluazifop-P-butyl	104	107	P/P	63 - 124
Fludioxonil	106	106	P/P	63 - 123
Flumioxazin	157	152	P/P	34 - 245
Flutolanil	112	112	P/P	56 - 131
Fluxapyroxad	97.4	99.1	P/P	57 - 117
Fonofos	89.0	93.3	P/P	61 - 116
Hexazinone	103	101	P/P	55 - 138
Imazalil	104	83.4	P/P	33 - 143
Iprodione	114	106	P/P	59 - 118
Loratadine	100	115	P/P	50 - 150
Malathion	91.6	86.2	P/P	62 - 138
Metalaxyl	107	110	P/P	24 - 147
Metolachlor	104	106	P/P	68 - 118
Metribuzin	103	99.9	P/P	20 - 239
Mevinphos	86.4	81.9	P/P	46 - 124
Molinate	67.3	61.7	P/P	46 - 100
Myclobutanil	106	107	P/P	32 - 149
Naled	108	91.0	F/P	32 - 95.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P406865

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Napropamide	104	103	P/P	50 - 150
Norflurazon	107	99.0	P/P	57 - 127
Oxadiazon	92.6	92.5	P/P	63 - 118
Oxyfluorfen	103	111	P/P	69 - 137
Parathion Ethyl	89.8	92.8	P/P	70 - 113
Parathion Methyl	109	107	P/P	71 - 130
Pendimethalin	94.5	96.8	P/P	55 - 118
Phenytoin	68.3	65.5	P/P	50 - 200
Phorate	82.8	85.1	P/P	46 - 125
Prodiamine	36.0	34.1	P/P	20 - 141
Prometon	110	108	P/P	54 - 122
Prometryn	102	100	P/P	66 - 124
Pronamide	106	102	P/P	79 - 122
Propanil	102	97.3	P/P	50 - 150
Propargite	94.5	101	P/P	50 - 200
Propiconazole	106	104	P/P	61 - 126
Pyraflufen Ethyl	105	103	P/P	50 - 150
Pyridaben	115	107	P/P	50 - 200
Pyriproxyfen	104	103	P/P	52 - 131
Simazine	94.2	93.0	P/P	75 - 128
Stirophos	86.5	82.5	P/P	50 - 150
Sulfentrazone	109	99.7	P/P	20 - 132
Tebuconazole	89.4	85.7	P/P	20 - 116
Terbufos	108	111	P/P	61 - 117
Terbuthylazine	99.4	95.8	P/P	74 - 116
Thiobencarb	103	103	P/P	50 - 150
Triadimefon	102	100	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P407105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	79.5	92.5	P/F	20 - 83.0
Alpha-BHC	82.2	93.4	P/P	74 - 108
Alpha-Chlordane	95.5	94.8	P/P	53 - 109
Beta-BHC	95.1	97.1	P/P	64 - 139
Beta-Cyfluthrin	102	97.6	P/P	27 - 171
Bifenthrin	87.6	92.8	P/P	20 - 124
Chlorothalonil	63.9	93.6	P/P	20 - 182
Cis-Nonachlor	102	104	P/P	46 - 110
Cypermethrin	83.3	96.3	P/P	35 - 160
Dacthal	99.6	98.1	P/P	70 - 115
DDD-p,p'	88.4	92.0	P/P	51 - 108
DDE-p,p'	99.4	99.3	P/P	51 - 104
DDT-p,p'	99.8	97.6	P/P	52 - 107
Delta-BHC	97.0	90.4	P/P	73 - 146
Deltamethrin	81.3	90.6	P/P	20 - 190
Dichlobenil	112	98.9	F/P	30 - 100
Dicofol	74.6	84.5	P/P	52 - 110
Dieldrin	103	99.2	P/P	57 - 111
Endosulfan I	95.8	95.8	P/P	61 - 106
Endosulfan II	87.7	93.2	P/P	57 - 122

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P407105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endosulfan Sulfate	95.6	90.3	P/P	58 - 122
Endrin	82.1	90.8	P/P	34 - 125
Endrin Aldehyde	105	82.6	P/P	40 - 120
Endrin Ketone	91.8	95.8	P/P	51 - 138
Esfenvalerate	84.1	92.6	P/P	20 - 193
Ethalfuralin	85.5	93.9	P/P	51 - 99.0
Fenpropathrin	89.4	91.2	P/P	40 - 116
Gamma-BHC	88.2	94.2	P/P	74 - 116
Gamma-Chlordane	99.5	96.3	P/P	49 - 105
Heptachlor	71.9	93.5	P/P	45 - 98.0
Heptachlor Epoxide	96.6	99.3	P/P	61 - 106
Hexachlorobenzene	94.6	95.9	P/P	41 - 96.0
Kepone	30.5	33.3	P/P	27 - 179
Lambda-Cyhalothrin	82.4	92.4	P/P	20 - 199
Methoprene	93.1	98.9	P/P	20 - 134
Methoxychlor	83.5	93.9	P/P	61 - 111
MGK-264	104	98.5	P/P	20 - 124
Mirex	78.6	89.0	P/P	20 - 199
Oxychlordane	92.6	99.0	P/P	39 - 112
Permethrin	87.6	94.5	P/P	31 - 155
Phenothrin	84.5	92.3	P/P	20 - 100
Piperonyl Butoxide	88.2	90.2	P/P	20 - 144
Prallethrin	99.0	92.1	P/P	20 - 103
Tau-Fluvalinate	93.8	94.3	P/P	24 - 133
Tetramethrin	74.2	92.0	P/P	20 - 116
Trans-Nonachlor	101	98.8	P/P	49 - 105
Triclosan Methyl	101	99.9	P/P	60 - 111
Trifluralin	78.7	89.3	P/P	53 - 97.0

Reference Method: EPA 8276

Batch ID: P407105

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	107	88.0	P/P	56 - 117
Toxaphene	116	87.6	P/P	45 - 116

Reference Method: EPA 8321B

Batch ID: P406985

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	47.1		P	40 - 150
Aldicarb	68.1		P	30 - 150
Aldicarb Sulfone	87.1		P	40 - 150
Aldicarb Sulfoxide	100		P	40 - 150
Carbaryl	70.4		P	40 - 150
Carbofuran	91.5		P	40 - 150
Methiocarb	62.6		P	40 - 150
Methomyl	85.5		P	40 - 150
Oxamyl	78.5		P	40 - 150
Propoxur	84.2		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P406988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.1		P	40 - 150
2,4,5-T	109		P	40 - 150
Acetaminophen	100		P	30 - 150
Acetamiprid	96.1		P	40 - 150
Afidopyropen	70.4		P	40 - 150
Bentazon	95.1		P	30 - 150
Benzovindiflupyr	75.6		P	40 - 150
Carbamazepine	86.7		P	40 - 150
Clothianidin	112		P	40 - 150
Dinotefuran	89.9		P	40 - 150
Diuron	103		P	40 - 150
Fenuron	94.3		P	40 - 150
Fluridone	91.8		P	40 - 150
Hydrocodone	92.9		P	40 - 150
Ibuprofen	57.7		P	40 - 150
Imazapyr	120		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	107		P	40 - 150
Mandestrobin	86.2		P	40 - 150
MCPP	104		P	40 - 150
Naproxen	140		P	40 - 150
Primidone	91.4		P	40 - 150
Pyraclostrobin	83.7		P	40 - 150
Silvex	106		P	40 - 150
Thiamethoxam	105		P	40 - 150
Tolfenpyrad	36.4		P	30 - 150
Triclopyr	129		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	68.7		P	40 - 150
AMPA	92.7		P	40 - 160
Endothall	77.6		P	40 - 150
Glufosinate	95.5		P	40 - 160
Glyphosate	94.3		P	40 - 160
Sucralose	75.4		P	40 - 150

Reference Method: SM 2120 B-2011

Batch ID: P407016

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2320 B-2011

Batch ID: P407162

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.1		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P407166

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P407413

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407197

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292157	Calcium	107	99.4	P/P	80 - 120
2292157	Iron	108	103	P/P	80 - 120
2292157	Magnesium	111	106	P/P	80 - 120
2292157	Manganese	101	95.7	P/P	80 - 120
2292157	Zinc	103	97.7	P/P	80 - 120
2292401	Calcium	99.6		P	80 - 120
2292401	Iron	101		P	80 - 120
2292401	Magnesium	98.4		P	80 - 120
2292401	Manganese	95.3		P	80 - 120
2292401	Zinc	97.1		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407273

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292820	Iron	104	102	P/P	70 - 130
2292820	Manganese	98.4	98.1	P/P	70 - 130
2292820	Titanium	102	101	P/P	70 - 130
2292820	Vanadium	107	106	P/P	70 - 130
2292820	Zinc	100	101	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407197

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292157	Aluminum	99.4	100	P/P	80 - 120
2292157	Antimony	101	102	P/P	80 - 120
2292157	Arsenic	98.6	97.8	P/P	80 - 120
2292157	Beryllium	101	100	P/P	80 - 120
2292157	Cadmium	101	100	P/P	80 - 120
2292157	Chromium	101	101	P/P	80 - 120
2292157	Copper	99.1	98.8	P/P	80 - 120
2292157	Lead	97.7	97.5	P/P	80 - 120
2292157	Nickel	99.3	99.1	P/P	80 - 120
2292157	Selenium	95.4	94.8	P/P	80 - 120
2292157	Silver	99.5	99.8	P/P	80 - 120
2292157	Thallium	101	103	P/P	80 - 120
2292401	Aluminum	99.7		P	80 - 120
2292401	Antimony	102		P	80 - 120
2292401	Arsenic	98.0		P	80 - 120
2292401	Beryllium	104		P	80 - 120
2292401	Cadmium	101		P	80 - 120
2292401	Chromium	99.2		P	80 - 120
2292401	Copper	96.9		P	80 - 120
2292401	Lead	97.2		P	80 - 120
2292401	Nickel	97.8		P	80 - 120
2292401	Selenium	97.3		P	80 - 120
2292401	Silver	97.7		P	80 - 120
2292401	Thallium	101		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407273

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292820	Aluminum	119	115	P/P	70 - 130
2292820	Antimony	101	101	P/P	70 - 130
2292820	Arsenic	108	106	P/P	70 - 130
2292820	Beryllium	103	102	P/P	70 - 130
2292820	Cadmium	93.2	91.5	P/P	70 - 130
2292820	Chromium	96.6	95.8	P/P	70 - 130
2292820	Cobalt	117	115	P/P	70 - 130
2292820	Copper	108	105	P/P	70 - 130
2292820	Lead	110	108	P/P	70 - 130
2292820	Manganese	96.0	94.3	P/P	70 - 130
2292820	Molybdenum	120	121	P/P	70 - 130
2292820	Nickel	115	114	P/P	70 - 130
2292820	Selenium	95.2	95.1	P/P	70 - 130
2292820	Silver	89.0	88.9	P/P	70 - 130
2292820	Thallium	117	116	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407362

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292967	Chloride	102		P	90 - 110
2293205	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407365

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292967	Sulfate	98.5		P	90 - 110
2293205	Sulfate	97.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293031	Ammonia-N	106	108	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P407460

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292701	Kjeldahl Nitrogen	98.1	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P407095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292702	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407047

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2292759	Total-P	96.8	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P407012

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293033	O-Phosphate-P	99.2	97.8	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P406865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291903	Acetochlor	102	99.7	P/P	66 - 122
2291903	Alachlor	97.0	96.2	P/P	65 - 122
2291903	Ametryn	107	99.0	P/P	45 - 173
2291903	Atrazine Desethyl	92.5	88.5	P/P	25 - 150
2291903	Azinphos Methyl	124	126	P/P	44 - 174
2291903	Azoxystrobin	97.2	106	P/P	10 - 268
2291903	Bromacil	105	110	P/P	31 - 145
2291903	Butylate	57.7	51.5	P/P	15 - 97.0
2291903	Caffeine	89.5	88.1	P/P	70 - 130
2291903	Carbophenothion	89.0	88.7	P/P	42 - 129
2291903	Carfentrazone Ethyl	99.7	99.2	P/P	62 - 145
2291903	Chlorfenapyr	85.3	88.4	P/P	50 - 150
2291903	Chlorpyrifos Ethyl	76.0	77.5	P/P	60 - 124
2291903	Chlorpyrifos Methyl	91.2	88.3	P/P	66 - 119
2291903	Coumaphos	94.3	90.3	P/P	50 - 220
2291903	Cyanazine	241	237	F/F	17 - 225
2291903	Cyprodinil	110	98.2	P/P	50 - 150
2291903	Demeton	97.7	106	P/P	36 - 142
2291903	Diazinon	112	115	P/P	70 - 128
2291903	Difenoconazole	148	149	P/P	33 - 222
2291903	Dimethenamid	82.6	81.3	P/P	54 - 125
2291903	Dimethomorph	142	156	P/F	50 - 150
2291903	Disulfoton	102	131	P/P	49 - 133
2291903	Dithiopyr	99.5	91.5	P/P	55 - 123
2291903	EPTC	66.7	57.2	P/P	19 - 91.0
2291903	Ethion	75.3	68.7	P/P	13 - 143
2291903	Ethoprop	102	108	P/P	49 - 144
2291903	Etridiazole	82.9	79.0	P/P	50 - 150
2291903	Fenamiphos	85.2	72.0	P/P	32 - 136
2291903	Fenbuconazole	96.5	96.6	P/P	73 - 148
2291903	Fipronil	109	108	P/P	57 - 129
2291903	Fipronil Desulfinyl	111	117	P/P	49 - 127
2291903	Fipronil Sulfide	90.7	84.5	P/P	44 - 127
2291903	Fipronil Sulfone	73.4	72.8	P/P	35 - 126
2291903	Fluazifop-P-butyl	94.9	95.4	P/P	67 - 129
2291903	Fludioxonil	97.1	93.5	P/P	61 - 126
2291903	Flumioxazin	147	141	P/P	38 - 279
2291903	Flutolanil	98.2	88.5	P/P	55 - 136
2291903	Fluxapyroxad	82.8	85.5	P/P	33 - 140
2291903	Fonofos	98.6	95.9	P/P	58 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P406865

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291903	Hexazinone	91.2	91.8	P/P	57 - 148
2291903	Imazalil	117	113	P/P	10 - 221
2291903	Iprodione	89.3	84.8	P/P	32 - 140
2291903	Loratadine	124	137	P/P	50 - 150
2291903	Malathion	82.9	64.6	P/P	52 - 138
2291903	Metalaxyl	106	98.8	P/P	46 - 134
2291903	Metolachlor	93.6	91.4	P/P	58 - 122
2291903	Metribuzin	85.1	94.3	P/P	16 - 272
2291903	Mevinphos	98.7	100	P/P	45 - 140
2291903	Molinate	72.6	70.9	P/P	41 - 103
2291903	Myclobutanil	97.2	98.2	P/P	60 - 134
2291903	Naled	105	104	P/P	20 - 113
2291903	Napropamide	92.1	87.1	P/P	50 - 150
2291903	Norflurazon	87.9	85.9	P/P	51 - 123
2291903	Oxadiazon	81.1	76.3	P/P	44 - 125
2291903	Oxyfluorfen	107	108	P/P	66 - 176
2291903	Parathion Ethyl	98.8	93.7	P/P	57 - 132
2291903	Parathion Methyl	109	114	P/P	59 - 156
2291903	Pendimethalin	104	101	P/P	59 - 129
2291903	Phenytoin	51.7	42.4	P/F	50 - 200
2291903	Phorate	98.2	95.7	P/P	47 - 136
2291903	Prodiamine	39.7	39.7	P/P	10 - 159
2291903	Prometon	113	117	P/P	59 - 127
2291903	Prometryn	92.2	94.6	P/P	59 - 129
2291903	Pronamide	95.9	106	P/P	65 - 145
2291903	Propanil	92.8	90.8	P/P	50 - 150
2291903	Propargite	75.4	74.7	P/P	50 - 200
2291903	Propiconazole	100	97.5	P/P	28 - 165
2291903	Pyraflufen Ethyl	97.0	80.5	P/P	50 - 150
2291903	Pyridaben	112	96.5	P/P	50 - 200
2291903	Pyriproxyfen	89.3	85.4	P/P	21 - 180
2291903	Simazine	91.5	93.3	P/P	63 - 147
2291903	Stiropfos	77.6	68.6	P/P	50 - 150
2291903	Sulfentrazone	80.5	84.6	P/P	32 - 136
2291903	Tebuconazole	63.4	56.9	P/P	10 - 117
2291903	Terbufos	120	118	P/P	61 - 131
2291903	Terbuthylazine	92.0	96.4	P/P	62 - 126
2291903	Thiobencarb	81.0	74.8	P/P	50 - 150
2291903	Triadimefon	95.3	84.6	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P407105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293214	Aldrin	63.6	64.1	P/P	10 - 94.0
2293214	Alpha-BHC	89.5	89.3	P/P	71 - 108
2293214	Alpha-Chlordane	78.2	73.6	P/P	42 - 115
2293214	Beta-BHC	115	112	P/P	56 - 161
2293214	Beta-Cyfluthrin	85.8	76.4	P/P	46 - 190
2293214	Bifenthrin	72.9	67.4	P/P	19 - 126
2293214	Chlorothalonil	110	100	P/P	10 - 262
2293214	Cis-Nonachlor	76.2	68.5	P/P	44 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P407105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293214	Cypermethrin	77.6	73.3	P/P	40 - 178
2293214	Dacthal	95.3	92.6	P/P	60 - 119
2293214	DDD-p,p'	83.3	78.8	P/P	40 - 114
2293214	DDE-p,p'	77.3	73.6	P/P	22 - 125
2293214	DDT-p,p'	70.2	70.1	P/P	39 - 110
2293214	Delta-BHC	117	111	P/P	64 - 174
2293214	Deltamethrin	87.4	84.8	P/P	10 - 227
2293214	Dichlobenil	93.5	89.1	P/P	20 - 99.0
2293214	Dicofol	72.9	73.4	P/P	43 - 115
2293214	Dieldrin	85.4	82.4	P/P	31 - 131
2293214	Endosulfan I	83.3	80.0	P/P	52 - 110
2293214	Endosulfan II	96.2	91.6	P/P	53 - 127
2293214	Endosulfan Sulfate	102	97.9	P/P	44 - 135
2293214	Endrin	87.2	83.7	P/P	36 - 122
2293214	Endrin Aldehyde	86.1	85.1	P/P	23 - 115
2293214	Endrin Ketone	67.3	64.9	P/P	46 - 147
2293214	Esfenvalerate	79.2	73.2	P/P	25 - 217
2293214	Ethalfuralin	74.8	73.9	P/P	46 - 99.0
2293214	Fenpropathrin	79.3	76.7	P/P	42 - 121
2293214	Gamma-BHC	95.7	96.3	P/P	63 - 131
2293214	Gamma-Chlordane	77.7	73.9	P/P	40 - 108
2293214	Heptachlor	70.5	69.0	P/P	38 - 98.0
2293214	Heptachlor Epoxide	84.8	83.4	P/P	39 - 124
2293214	Hexachlorobenzene	73.8	72.0	P/P	37 - 96.0
2293214	Kepone	133	122	P/P	10 - 216
2293214	Lambda-Cyhalothrin	77.5	73.7	P/P	21 - 220
2293214	Methoprene	66.9	64.8	P/P	19 - 112
2293214	Methoxychlor	86.1	88.2	P/P	56 - 118
2293214	MGK-264	96.5	91.1	P/P	28 - 125
2293214	Mirex	56.6	54.1	P/P	10 - 203
2293214	Oxychlordane	75.4	74.9	P/P	46 - 92.0
2293214	Permethrin	77.3	72.8	P/P	42 - 173
2293214	Phenothrin	70.3	67.5	P/P	10 - 140
2293214	Piperonyl Butoxide	99.9	94.1	P/P	10 - 158
2293214	Prallethrin	84.7	83.5	P/P	19 - 119
2293214	Tau-Fluvalinate	76.8	71.6	P/P	27 - 164
2293214	Tetramethrin	129	114	P/P	16 - 130
2293214	Trans-Nonachlor	74.8	70.4	P/P	43 - 105
2293214	Triclosan Methyl	84.8	83.7	P/P	50 - 113
2293214	Trifluralin	73.5	72.5	P/P	48 - 98.0

Reference Method: EPA 8276
Batch ID: P407105

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293039	Chlordane	52.2	60.0	P/P	47 - 128
2293039	Toxaphene	70.8	73.3	P/P	11 - 163

Reference Method: EPA 8321B
Batch ID: P406985

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

Reference Method: EPA 8321B

Batch ID: P406985

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291411	3-Hydroxycarbofuran	78.0	82.3	P/P	40 - 150
2291411	Aldicarb	66.8	57.9	P/P	30 - 150
2291411	Aldicarb Sulfone	93.9	94.2	P/P	40 - 150
2291411	Aldicarb Sulfoxide	63.6	62.2	P/P	40 - 150
2291411	Carbaryl	82.3	78.7	P/P	40 - 150
2291411	Carbofuran	89.2	83.8	P/P	40 - 150
2291411	Methiocarb	86.1	76.2	P/P	40 - 150
2291411	Methomyl	82.8	85.1	P/P	40 - 150
2291411	Oxamyl	93.5	91.9	P/P	40 - 150
2291411	Propoxur	92.2	82.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406988

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2291477	2,4,5-T	141	108	P/P	40 - 150
2291477	Acetaminophen	88.9	114	P/P	30 - 150
2291477	Acetamiprid	92.1	94.8	P/P	40 - 150
2291477	Afidopyropen	82.6	82.8	P/P	40 - 150
2291477	Benzovindiflupyr	80.3	87.3	P/P	40 - 150
2291477	Carbamazepine	82.8	94.2	P/P	40 - 150
2291477	Clothianidin	118	109	P/P	40 - 150
2291477	Dinotefuran	107	120	P/P	40 - 150
2291477	Diuron	80.8	76.5	P/P	40 - 150
2291477	Fenuron	81.6	84.0	P/P	40 - 150
2291477	Hydrocodone	101	103	P/P	40 - 150
2291477	Ibuprofen	68.2	61.1	P/P	40 - 150
2291477	Imazapyr	98.1	125	P/P	40 - 150
2291477	Imidacloprid	128	130	P/P	40 - 150
2291477	Linuron	102	69.9	P/P	40 - 150
2291477	Mandestrobin	78.1	87.6	P/P	40 - 150
2291477	MCPP	97.0	95.3	P/P	40 - 150
2291477	Naproxen	59.6	78.6	P/P	40 - 150
2291477	Primidone	102	103	P/P	40 - 150
2291477	Pyraclostrobin	76.2	85.4	P/P	40 - 150
2291477	Silvex	87.9	92.7	P/P	40 - 150
2291477	Thiamethoxam	132	146	P/P	40 - 150
2291477	Tolfenpyrad	44.8	57.0	P/P	30 - 150
2291477	Triclopyr	110	82.5	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P406989

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293213	Acesulfame K	62.5	59.3	P/P	40 - 150
2293213	AMPA	92.4	99.1	P/P	40 - 160
2293213	Endothall	103	95.9	P/P	40 - 150
2293213	Glufosinate	93.3	109	P/P	40 - 160
2293213	Glyphosate	89.9	99.9	P/P	40 - 160
2293213	Sucralose	103	87.3	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500 F-C-2011
Batch ID: P407166

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293021	Fluoride	98.2	99.6	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P407413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2293022	Organic Carbon	92.8	93.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P407019

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292781	Turbidity	5.32	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407197

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292157	Calcium	5.89	Spike	P	0 - 20
2292157	Iron	4.71	Spike	P	0 - 20
2292157	Magnesium	4.39	Spike	P	0 - 20
2292157	Manganese	5.11	Spike	P	0 - 20
2292157	Zinc	5.18	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P407273

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292820	Calcium	2.36	Spike	P	0 - 20
2292820	Iron	2.44	Spike	P	0 - 20
2292820	Magnesium	2.23	Spike	P	0 - 20
2292820	Manganese	0.370	Spike	P	0 - 20
2292820	Strontium	2.41	Spike	P	0 - 20
2292820	Titanium	0.672	Spike	P	0 - 20
2292820	Vanadium	1.44	Spike	P	0 - 20
2292820	Zinc	0.757	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407197

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292157	Aluminum	0.869	Spike	P	0 - 20
2292157	Antimony	0.418	Spike	P	0 - 20
2292157	Arsenic	0.827	Spike	P	0 - 20
2292157	Beryllium	0.796	Spike	P	0 - 20
2292157	Cadmium	0.430	Spike	P	0 - 20
2292157	Chromium	0.181	Spike	P	0 - 20
2292157	Copper	0.199	Spike	P	0 - 20
2292157	Lead	0.221	Spike	P	0 - 20
2292157	Nickel	0.200	Spike	P	0 - 20
2292157	Selenium	0.685	Spike	P	0 - 20
2292157	Silver	0.305	Spike	P	0 - 20
2292157	Thallium	1.09	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407273

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292820	Aluminum	3.30	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P407273

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292820	Antimony	0.270	Spike	P	0 - 20
2292820	Arsenic	1.66	Spike	P	0 - 20
2292820	Beryllium	0.326	Spike	P	0 - 20
2292820	Cadmium	1.83	Spike	P	0 - 20
2292820	Chromium	0.760	Spike	P	0 - 20
2292820	Cobalt	2.04	Spike	P	0 - 20
2292820	Copper	2.65	Spike	P	0 - 20
2292820	Lead	1.19	Spike	P	0 - 20
2292820	Manganese	1.70	Spike	P	0 - 20
2292820	Molybdenum	0.0997	Spike	P	0 - 20
2292820	Nickel	0.357	Spike	P	0 - 20
2292820	Selenium	0.159	Spike	P	0 - 20
2292820	Silver	0.192	Spike	P	0 - 20
2292820	Thallium	0.547	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292967	Chloride	0.722	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P407365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292967	Sulfate	0.922	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P407629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293031	Ammonia-N	0.923	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P407460

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292701	Kjeldahl Nitrogen	3.66	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P407095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292702	NO2NO3-N	0.271	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P407047

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292759	Total-P	0.755	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P407012

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293033	O-Phosphate-P	1.31	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P406865

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291903	Acetochlor	1.87	Spike	P	0 - 24
2291903	Alachlor	0.753	Spike	P	0 - 24
2291903	Ametryn	7.68	Spike	P	0 - 27
2291903	Atrazine	5.38	Spike	P	0 - 29
2291903	Atrazine Desethyl	3.92	Spike	P	0 - 30
2291903	Azinphos Methyl	1.18	Spike	P	0 - 50
2291903	Azoxystrobin	6.80	Spike	P	0 - 32
2291903	Bromacil	4.33	Spike	P	0 - 30
2291903	Butylate	11.3	Spike	P	0 - 47
2291903	Caffeine	1.50	Spike	P	0 - 60
2291903	Carbophenothion	0.342	Spike	P	0 - 24
2291903	Carfentrazone Ethyl	0.482	Spike	P	0 - 26
2291903	Chlorfenapyr	3.52	Spike	P	0 - 30
2291903	Chlorpyrifos Ethyl	1.90	Spike	P	0 - 27
2291903	Chlorpyrifos Methyl	3.23	Spike	P	0 - 22
2291903	Coumaphos	4.32	Spike	P	0 - 30
2291903	Cyanazine	1.55	Spike	P	0 - 32
2291903	Cyprodinil	11.0	Spike	P	0 - 30
2291903	Demeton	7.75	Spike	P	0 - 25
2291903	Diazinon	2.56	Spike	P	0 - 24
2291903	Difenoconazole	0.778	Spike	P	0 - 25
2291903	Dimethenamid	1.55	Spike	P	0 - 30
2291903	Dimethomorph	9.45	Spike	P	0 - 30
2291903	Disulfoton	24.6	Spike	P	0 - 26
2291903	Dithiopyr	8.42	Spike	P	0 - 22
2291903	EPTC	15.3	Spike	P	0 - 38
2291903	Ethion	9.21	Spike	P	0 - 47
2291903	Ethoprop	5.21	Spike	P	0 - 23
2291903	Etridiazole	4.90	Spike	P	0 - 30
2291903	Fenamiphos	16.8	Spike	P	0 - 34
2291903	Fenbuconazole	0.124	Spike	P	0 - 37
2291903	Fipronil	0.601	Spike	P	0 - 23
2291903	Fipronil Desulfinyl	5.04	Spike	P	0 - 26
2291903	Fipronil Sulfide	7.09	Spike	P	0 - 23
2291903	Fipronil Sulfone	0.733	Spike	P	0 - 24
2291903	Fluazifop-P-butyl	0.545	Spike	P	0 - 24
2291903	Fludioxonil	3.70	Spike	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291903	Flumioxazin	4.08	Spike	P	0 - 37
2291903	Flutolanil	9.96	Spike	P	0 - 26
2291903	Fluxapyroxad	3.21	Spike	P	0 - 34
2291903	Fonofos	2.73	Spike	P	0 - 22
2291903	Hexazinone	0.726	Spike	P	0 - 21
2291903	Imazalil	3.83	Spike	P	0 - 65
2291903	Iprodione	5.20	Spike	P	0 - 33
2291903	Loratadine	10.1	Spike	P	0 - 30
2291903	Malathion	24.8	Spike	P	0 - 26
2291903	Metalaxyl	7.32	Spike	P	0 - 38
2291903	Metolachlor	2.41	Spike	P	0 - 36
2291903	Metribuzin	10.3	Spike	P	0 - 29
2291903	Mevinphos	1.44	Spike	P	0 - 26
2291903	Molinate	2.30	Spike	P	0 - 27
2291903	Myclobutanil	0.983	Spike	P	0 - 21
2291903	Naled	0.972	Spike	P	0 - 26
2291903	Napropamide	5.53	Spike	P	0 - 30
2291903	Norflurazon	2.29	Spike	P	0 - 24
2291903	Oxadiazon	5.15	Spike	P	0 - 23
2291903	Oxyfluorfen	0.593	Spike	P	0 - 24
2291903	Parathion Ethyl	5.27	Spike	P	0 - 23
2291903	Parathion Methyl	4.38	Spike	P	0 - 23
2291903	Pendimethalin	2.13	Spike	P	0 - 31
2291903	Phenytoin	19.8	Spike	P	0 - 30
2291903	Phorate	2.57	Spike	P	0 - 27
2291903	Prodiamine	0.139	Spike	P	0 - 52
2291903	Prometon	3.68	Spike	P	0 - 31
2291903	Prometryn	2.50	Spike	P	0 - 24
2291903	Pronamide	9.64	Spike	P	0 - 26
2291903	Propanil	2.19	Spike	P	0 - 30
2291903	Propargite	0.942	Spike	P	0 - 30
2291903	Propiconazole	2.75	Spike	P	0 - 31
2291903	Pyraflufen Ethyl	18.6	Spike	P	0 - 30
2291903	Pyridaben	14.5	Spike	P	0 - 30
2291903	Pyriproxyfen	4.56	Spike	P	0 - 50
2291903	Simazine	1.99	Spike	P	0 - 25
2291903	Stirophos	12.3	Spike	P	0 - 30
2291903	Sulfentrazone	3.50	Spike	P	0 - 33
2291903	Tebuconazole	10.7	Spike	P	0 - 43
2291903	Terbufos	1.94	Spike	P	0 - 22
2291903	Terbuthylazine	4.74	Spike	P	0 - 24
2291903	Thiobencarb	7.96	Spike	P	0 - 30
2291903	Triadimefon	11.9	Spike	P	0 - 30
LFB	Acetochlor	3.56	LCS	P	0 - 22
LFB	Alachlor	1.67	LCS	P	0 - 20
LFB	Ametryn	0.289	LCS	P	0 - 25
LFB	Atrazine	0.0116	LCS	P	0 - 20
LFB	Atrazine Desethyl	0.333	LCS	P	0 - 33
LFB	Azinphos Methyl	2.17	LCS	P	0 - 51
LFB	Azoxystrobin	3.69	LCS	P	0 - 47
LFB	Bromacil	22.3	LCS	P	0 - 26

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Butylate	19.6	LCS	P	0 - 35
LFB	Caffeine	17.1	LCS	P	0 - 27
LFB	Carbophenothion	4.30	LCS	P	0 - 22
LFB	Carfentrazone Ethyl	0.614	LCS	P	0 - 21
LFB	Chlorfenapyr	8.80	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.69	LCS	P	0 - 23
LFB	Chlorpyrifos Methyl	4.78	LCS	P	0 - 24
LFB	Coumaphos	6.22	LCS	P	0 - 30
LFB	Cyanazine	5.01	LCS	P	0 - 37
LFB	Cyprodinil	5.19	LCS	P	0 - 30
LFB	Demeton	1.17	LCS	P	0 - 32
LFB	Diazinon	4.21	LCS	P	0 - 21
LFB	Difenoconazole	2.96	LCS	P	0 - 37
LFB	Dimethenamid	0.990	LCS	P	0 - 21
LFB	Dimethomorph	10.2	LCS	P	0 - 30
LFB	Disulfoton	4.85	LCS	P	0 - 31
LFB	Dithiopyr	3.33	LCS	P	0 - 21
LFB	EPTC	22.2	LCS	P	0 - 41
LFB	Ethion	3.82	LCS	P	0 - 45
LFB	Ethoprop	0.612	LCS	P	0 - 28
LFB	Etridiazole	9.28	LCS	P	0 - 30
LFB	Fenamiphos	3.78	LCS	P	0 - 28
LFB	Fenbuconazole	4.53	LCS	P	0 - 36
LFB	Fipronil	1.09	LCS	P	0 - 23
LFB	Fipronil Desulfinyl	6.20	LCS	P	0 - 22
LFB	Fipronil Sulfide	8.95	LCS	P	0 - 24
LFB	Fipronil Sulfone	4.67	LCS	P	0 - 24
LFB	Fluazifop-P-butyl	3.55	LCS	P	0 - 23
LFB	Fludioxonil	0.408	LCS	P	0 - 23
LFB	Flumioxazin	3.21	LCS	P	0 - 39
LFB	Flutolanil	0.748	LCS	P	0 - 27
LFB	Fluxapyroxad	1.79	LCS	P	0 - 38
LFB	Fonofos	4.75	LCS	P	0 - 28
LFB	Hexazinone	2.09	LCS	P	0 - 27
LFB	Imazalil	22.4	LCS	P	0 - 45
LFB	Iprodione	7.21	LCS	P	0 - 42
LFB	Loratadine	13.2	LCS	P	0 - 30
LFB	Malathion	6.13	LCS	P	0 - 23
LFB	Metalaxyl	2.93	LCS	P	0 - 41
LFB	Metolachlor	1.76	LCS	P	0 - 21
LFB	Metribuzin	2.85	LCS	P	0 - 31
LFB	Mevinphos	5.31	LCS	P	0 - 32
LFB	Molinate	8.77	LCS	P	0 - 31
LFB	Myclobutanil	1.18	LCS	P	0 - 27
LFB	Naled	16.9	LCS	P	0 - 32
LFB	Napropamide	0.775	LCS	P	0 - 30
LFB	Norflurazon	7.64	LCS	P	0 - 25
LFB	Oxadiazon	0.0527	LCS	P	0 - 25
LFB	Oxyfluorfen	7.44	LCS	P	0 - 22
LFB	Parathion Ethyl	3.38	LCS	P	0 - 32
LFB	Parathion Methyl	1.79	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P406865

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pendimethalin	2.43	LCS	P	0 - 39
LFB	Phenytoin	4.10	LCS	P	0 - 30
LFB	Phorate	2.72	LCS	P	0 - 36
LFB	Prodiamine	5.41	LCS	P	0 - 71
LFB	Prometon	1.23	LCS	P	0 - 23
LFB	Prometryn	1.61	LCS	P	0 - 22
LFB	Pronamide	4.42	LCS	P	0 - 21
LFB	Propanil	4.98	LCS	P	0 - 30
LFB	Propargite	6.21	LCS	P	0 - 30
LFB	Propiconazole	1.42	LCS	P	0 - 23
LFB	Pyraflufen Ethyl	1.08	LCS	P	0 - 30
LFB	Pyridaben	7.21	LCS	P	0 - 30
LFB	Pyriproxyfen	0.477	LCS	P	0 - 53
LFB	Simazine	1.33	LCS	P	0 - 22
LFB	Stirophos	4.75	LCS	P	0 - 30
LFB	Sulfentrazone	8.80	LCS	P	0 - 45
LFB	Tebuconazole	4.21	LCS	P	0 - 52
LFB	Terbufos	3.35	LCS	P	0 - 27
LFB	Terbutylazine	3.76	LCS	P	0 - 21
LFB	Thiobencarb	0.545	LCS	P	0 - 30
LFB	Triadimefon	1.67	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P407105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293214	Aldrin	0.889	Spike	P	0 - 37
2293214	Alpha-BHC	0.215	Spike	P	0 - 16
2293214	Alpha-Chlordane	6.13	Spike	P	0 - 28
2293214	Beta-BHC	2.64	Spike	P	0 - 32
2293214	Beta-Cyfluthrin	11.7	Spike	P	0 - 41
2293214	Bifenthrin	7.88	Spike	P	0 - 36
2293214	Chlorothalonil	9.26	Spike	P	0 - 54
2293214	Cis-Nonachlor	10.7	Spike	P	0 - 33
2293214	Cypermethrin	5.68	Spike	P	0 - 38
2293214	Dacthal	2.90	Spike	P	0 - 23
2293214	DDD-p,p'	5.59	Spike	P	0 - 35
2293214	DDE-p,p'	4.95	Spike	P	0 - 27
2293214	DDT-p,p'	0.0590	Spike	P	0 - 31
2293214	Delta-BHC	5.50	Spike	P	0 - 30
2293214	Deltamethrin	3.00	Spike	P	0 - 76
2293214	Dichlobenil	4.81	Spike	P	0 - 33
2293214	Dicofol	0.691	Spike	P	0 - 24
2293214	Dieldrin	3.54	Spike	P	0 - 35
2293214	Endosulfan I	4.08	Spike	P	0 - 25
2293214	Endosulfan II	4.84	Spike	P	0 - 31
2293214	Endosulfan Sulfate	3.90	Spike	P	0 - 38
2293214	Endrin	4.15	Spike	P	0 - 53
2293214	Endrin Aldehyde	1.09	Spike	P	0 - 81
2293214	Endrin Ketone	3.63	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P407105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293214	Esfenvalerate	7.86	Spike	P	0 - 46
2293214	Ethalfuralin	1.23	Spike	P	0 - 22
2293214	Fenpropathrin	3.38	Spike	P	0 - 29
2293214	Gamma-BHC	0.661	Spike	P	0 - 17
2293214	Gamma-Chlordane	5.10	Spike	P	0 - 28
2293214	Heptachlor	2.24	Spike	P	0 - 28
2293214	Heptachlor Epoxide	1.64	Spike	P	0 - 23
2293214	Hexachlorobenzene	2.34	Spike	P	0 - 22
2293214	Kepone	8.58	Spike	P	0 - 61
2293214	Lambda-Cyhalothrin	5.05	Spike	P	0 - 52
2293214	Methoprene	3.19	Spike	P	0 - 38
2293214	Methoxychlor	2.40	Spike	P	0 - 29
2293214	MGK-264	5.73	Spike	P	0 - 41
2293214	Mirex	4.58	Spike	P	0 - 39
2293214	Oxychlordane	0.611	Spike	P	0 - 33
2293214	Permethrin	5.99	Spike	P	0 - 39
2293214	Phenothrin	4.10	Spike	P	0 - 52
2293214	Piperonyl Butoxide	5.98	Spike	P	0 - 91
2293214	Prallethrin	1.47	Spike	P	0 - 34
2293214	Tau-Fluvalinate	7.00	Spike	P	0 - 41
2293214	Tetramethrin	12.3	Spike	P	0 - 43
2293214	Trans-Nonachlor	6.03	Spike	P	0 - 31
2293214	Triclosan Methyl	1.29	Spike	P	0 - 24
2293214	Trifluralin	1.34	Spike	P	0 - 23
LFB	Aldrin	15.1	LCS	P	0 - 61
LFB	Alpha-BHC	12.7	LCS	P	0 - 15
LFB	Alpha-Chlordane	0.801	LCS	P	0 - 23
LFB	Beta-BHC	2.01	LCS	P	0 - 24
LFB	Beta-Cyfluthrin	4.57	LCS	P	0 - 39
LFB	Bifenthrin	5.76	LCS	P	0 - 48
LFB	Chlorothalonil	37.7	LCS	F	0 - 32
LFB	Cis-Nonachlor	1.91	LCS	P	0 - 32
LFB	Cypermethrin	14.5	LCS	P	0 - 34
LFB	Dacthal	1.55	LCS	P	0 - 19
LFB	DDD-p,p'	3.97	LCS	P	0 - 28
LFB	DDE-p,p'	0.0598	LCS	P	0 - 24
LFB	DDT-p,p'	2.24	LCS	P	0 - 22
LFB	Delta-BHC	6.97	LCS	P	0 - 20
LFB	Deltamethrin	10.8	LCS	P	0 - 47
LFB	Dichlobenil	12.4	LCS	P	0 - 22
LFB	Dicofol	12.4	LCS	P	0 - 21
LFB	Dieldrin	3.34	LCS	P	0 - 21
LFB	Endosulfan I	0.0901	LCS	P	0 - 20
LFB	Endosulfan II	6.05	LCS	P	0 - 22
LFB	Endosulfan Sulfate	5.76	LCS	P	0 - 25
LFB	Endrin	10.1	LCS	P	0 - 20
LFB	Endrin Aldehyde	23.7	LCS	P	0 - 33
LFB	Endrin Ketone	4.32	LCS	P	0 - 20
LFB	Esfenvalerate	9.53	LCS	P	0 - 42
LFB	Ethalfuralin	9.43	LCS	P	0 - 20
LFB	Fenpropathrin	2.07	LCS	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P407105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Gamma-BHC	6.64	LCS	P	0 - 16
LFB	Gamma-Chlordane	3.22	LCS	P	0 - 23
LFB	Heptachlor	26.2	LCS	P	0 - 27
LFB	Heptachlor Epoxide	2.73	LCS	P	0 - 20
LFB	Hexachlorobenzene	1.43	LCS	P	0 - 24
LFB	Kepone	8.57	LCS	P	0 - 80
LFB	Lambda-Cyhalothrin	11.5	LCS	P	0 - 42
LFB	Methoprene	6.06	LCS	P	0 - 48
LFB	Methoxychlor	11.7	LCS	P	0 - 22
LFB	MGK-264	5.00	LCS	P	0 - 54
LFB	Mirex	12.4	LCS	P	0 - 32
LFB	Oxychlordane	6.68	LCS	P	0 - 21
LFB	Permethrin	7.62	LCS	P	0 - 36
LFB	Phenothrin	8.81	LCS	P	0 - 60
LFB	Piperonyl Butoxide	2.29	LCS	P	0 - 36
LFB	Prallethrin	7.27	LCS	P	0 - 41
LFB	Tau-Fluvalinate	0.495	LCS	P	0 - 40
LFB	Tetramethrin	21.4	LCS	P	0 - 66
LFB	Trans-Nonachlor	2.17	LCS	P	0 - 25
LFB	Triclosan Methyl	1.47	LCS	P	0 - 19
LFB	Trifluralin	12.6	LCS	P	0 - 21

Reference Method: EPA 8276
Batch ID: P407105

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293039	Chlordane	14.0	Spike	P	0 - 30
2293039	Toxaphene	3.45	Spike	P	0 - 30
LFB	Chlordane	19.9	LCS	P	0 - 30
LFB	Toxaphene	27.7	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406985

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291411	3-Hydroxycarbofuran	5.33	Spike	P	0 - 30
2291411	Aldicarb	14.2	Spike	P	0 - 30
2291411	Aldicarb Sulfone	0.301	Spike	P	0 - 30
2291411	Aldicarb Sulfoxide	2.14	Spike	P	0 - 30
2291411	Carbaryl	4.51	Spike	P	0 - 30
2291411	Carbofuran	6.22	Spike	P	0 - 30
2291411	Methiocarb	12.3	Spike	P	0 - 30
2291411	Methomyl	2.80	Spike	P	0 - 30
2291411	Oxamyl	1.67	Spike	P	0 - 30
2291411	Propoxur	11.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P406988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2291477	2,4-D	20.9	Spike	P	0 - 30
2291477	2,4,5-T	26.4	Spike	P	0 - 30
2291477	Acetaminophen	24.6	Spike	P	0 - 30
2291477	Acetamiprid	2.92	Spike	P	0 - 30
2291477	Afidopyropen	0.164	Spike	P	0 - 30
2291477	Bentazon	27.0	Spike	P	0 - 30
2291477	Benzovindiflupyr	8.39	Spike	P	0 - 30
2291477	Carbamazepine	12.3	Spike	P	0 - 30
2291477	Clothianidin	8.05	Spike	P	0 - 30
2291477	Dinotefuran	11.0	Spike	P	0 - 30
2291477	Diuron	4.69	Spike	P	0 - 30
2291477	Fenuron	2.92	Spike	P	0 - 30
2291477	Fluridone	2.80	Spike	P	0 - 30
2291477	Hydrocodone	2.54	Spike	P	0 - 30
2291477	Ibuprofen	11.0	Spike	P	0 - 30
2291477	Imazapyr	24.3	Spike	P	0 - 30
2291477	Imidacloprid	1.74	Spike	P	0 - 30
2291477	Linuron	37.2	Spike	F	0 - 30
2291477	Mandestrobin	11.5	Spike	P	0 - 30
2291477	MCP	1.86	Spike	P	0 - 30
2291477	Naproxen	27.6	Spike	P	0 - 30
2291477	Primidone	1.01	Spike	P	0 - 30
2291477	Pyraclostrobin	11.4	Spike	P	0 - 30
2291477	Silvex	5.28	Spike	P	0 - 30
2291477	Thiamethoxam	9.57	Spike	P	0 - 30
2291477	Tolfenpyrad	24.0	Spike	P	0 - 30
2291477	Triclopyr	28.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P406989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293213	Acesulfame K	5.37	Spike	P	0 - 30
2293213	AMPA	6.94	Spike	P	0 - 30
2293213	Endothall	6.63	Spike	P	0 - 30
2293213	Glufosinate	15.9	Spike	P	0 - 30
2293213	Glyphosate	10.5	Spike	P	0 - 30
2293213	Sucralose	16.6	Spike	P	0 - 30

Reference Method: SM 2120 B-2011
Batch ID: P407016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292781	Color (true)	0.471	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P407162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293021	Total Alkalinity	0.867	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P407487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292694	TDS	2.53	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P407496

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2292694	TSS	4.65	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P407166

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293021	Fluoride	1.01	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P407413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2293022	Organic Carbon	0.123	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2292792
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	80.9	P	30 - 160

Lab Sample ID: 2292793
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	142	P	30 - 160
EPA 8321B	Acetaminophen-d4	105	P	30 - 160
EPA 8321B	Carbamazepine-d10	117	P	30 - 160
EPA 8321B	Diuron-d6	81.1	P	30 - 160
EPA 8321B	Endothall-d6	85.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.3	P	30 - 160
EPA 8321B	Primidone-d5	89.2	P	30 - 160
EPA 8321B	Sucralose-d6	105	P	30 - 160

Lab Sample ID: 2292818
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	69.0	P	29 - 123
EPA 8270E	Tetrachloro-m-xylene	63.7	P	24 - 97.0
EPA 8276	Decachlorobiphenyl	57.8	P	29 - 92.0
EPA 8276	PCNB	74.7	P	43 - 134

Lab Sample ID: 2292819
Field Sample ID: G2SE0061

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	66.5	P	20 - 200
EPA 8270E	Simazine-d10	116	P	73 - 135
EPA 8270E	Terbufos-d10	104	P	58 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A109196

Included Lab Sample IDs: 2292783

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	98.8	P/P	90 - 110

Reference Method: SM 2120 B-2011

Run ID: A109198

Included Lab Sample IDs: 2292781

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.9	100	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A109199

Included Lab Sample IDs: 2292781

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.5	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A109233

Included Lab Sample IDs: 2292782

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

Reference Method: SM 2320 B-2011

Run ID: A109252

Included Lab Sample IDs: 2292781

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.8	99.0	P/P	90 - 110

Reference Method: SM 4500 F-C-2011

Run ID: A109252

Included Lab Sample IDs: 2292781

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A109256

Included Lab Sample IDs: 2292781

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	104	P/P	90 - 110
Sulfate	98.2	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A109271

Included Lab Sample IDs: 2292782

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A109287
Included Lab Sample IDs: 2292793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	63.7	91.2	P/P	60 - 160
Endothall	83.3	79.8	P/P	60 - 160
Sucralose	80.3	84.4	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A109303
Included Lab Sample IDs: 2292822

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.5	99.8	P/P	90 - 110
Antimony	94.7	95.4	P/P	90 - 110
Arsenic	96.1	94.9	P/P	90 - 110
Beryllium	100	94.8	P/P	90 - 110
Cadmium	98.9	99.0	P/P	90 - 110
Chromium	97.2	98.2	P/P	90 - 110
Copper	94.4	92.6	P/P	90 - 110
Lead	92.7	93.2	P/P	90 - 110
Nickel	94.4	92.8	P/P	90 - 110
Selenium	95.7	96.8	P/P	90 - 110
Silver	95.5	96.5	P/P	90 - 110
Thallium	94.4	93.7	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A109311
Included Lab Sample IDs: 2292819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	96.8		P	80 - 120
Azoxystrobin	98.2		P	80 - 120
Bromacil	107		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	98.1		P	80 - 120
Carbophenothion	99.3		P	80 - 120
Carfentrazone Ethyl	95.8		P	80 - 120
Chlorfenapyr	99.1		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	100		P	80 - 120
Coumaphos	98.6		P	80 - 120
Cyanazine	104		P	80 - 120
Cyprodinil	104		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	94.4		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	101		P	80 - 120
Disulfoton	98.3		P	80 - 120
Dithiopyr	103		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A109311
Included Lab Sample IDs: 2292819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
EPTC	105		P	80 - 120
Ethion	93.5		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	99.4		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	96.4		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	99.2		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	99.3		P	80 - 120
Fludioxonil	98.1		P	80 - 120
Flumioxazin	92.4		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	94.3		P	80 - 120
Fonofos	103		P	80 - 120
Imazalil	99.6		P	80 - 120
Iprodione	95.2		P	80 - 120
Loratadine	106		P	80 - 120
Malathion	99.9		P	80 - 120
Metalaxyl	105		P	80 - 120
Metolachlor	99.1		P	80 - 120
Metribuzin	99.8		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	105		P	80 - 120
Myclobutanil	103		P	80 - 120
Naled	102		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	94.5		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	99.3		P	80 - 120
Parathion Ethyl	104		P	80 - 120
Parathion Methyl	101		P	80 - 120
Pendimethalin	108		P	80 - 120
Phenytol	97.4		P	80 - 120
Phorate	111		P	80 - 120
Prodiamine	96.1		P	80 - 120
Prometon	104		P	80 - 120
Prometryn	100		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	93.0		P	80 - 120
Propargite	94.5		P	80 - 120
Propiconazole	99.1		P	80 - 120
Pyraflufen Ethyl	103		P	80 - 120
Pyridaben	92.7		P	80 - 120
Pyriproxyfen	101		P	80 - 120
Simazine	105		P	80 - 120
Stirophos	103		P	80 - 120
Sulfentrazone	91.7		P	80 - 120
Tebuconazole	103		P	80 - 120
Terbufos	99.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A109311
 Included Lab Sample IDs: 2292819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	102		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	104		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
 Run ID: A109327
 Included Lab Sample IDs: 2292822

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	95.5	98.0	P/P	90 - 110
Iron	96.7	99.3	P/P	90 - 110
Magnesium	96.8	99.5	P/P	90 - 110
Manganese	93.9	96.4	P/P	90 - 110
Zinc	93.0	95.7	P/P	90 - 110

Reference Method: EPA 8276
 Run ID: A109341
 Included Lab Sample IDs: 2292818

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.3		P	80 - 120
Toxaphene	112		P	80 - 120

Reference Method: EPA 8321B
 Run ID: A109350
 Included Lab Sample IDs: 2292793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	69.6	85.2	P/P	50 - 150
2,4,5-T	94.5	104	P/P	50 - 150
3-Hydroxycarbofuran	98.7	94.6	P/P	60 - 150
Acetaminophen	91.9	92.4	P/P	60 - 160
Acetamiprid	96.1	99.5	P/P	50 - 150
Afidopyropen	102	93.9	P/P	50 - 150
Aldicarb	107	87.8	P/P	60 - 150
Aldicarb Sulfone	107	102	P/P	50 - 150
Aldicarb Sulfoxide	106	99.6	P/P	50 - 150
Bentazon	111	99.5	P/P	50 - 160
Benzovindiflupyr	118	104	P/P	50 - 150
Carbamazepine	96.2	101	P/P	60 - 150
Carbaryl	103	90.8	P/P	60 - 150
Carbofuran	102	104	P/P	50 - 150
Clothianidin	115	121	P/P	60 - 150
Dinotefuran	93.1	99.0	P/P	50 - 150
Diuron	109	116	P/P	60 - 160
Fenuron	102	105	P/P	60 - 150
Fluridone	111	121	P/P	60 - 160
Hydrocodone	98.4	107	P/P	60 - 150
Ibuprofen	69.9	93.1	P/P	50 - 160
Imazapyr	85.4	85.0	P/P	50 - 150
Imidacloprid	94.6	89.7	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A109350
Included Lab Sample IDs: 2292793

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Linuron	84.6	99.9	P/P	60 - 150
Mandestrobin	111	113	P/P	50 - 150
MCPPP	110	104	P/P	50 - 150
Methiocarb	121	110	P/P	50 - 150
Methomyl	93.2	103	P/P	50 - 150
Naproxen	92.8	91.2	P/P	50 - 160
Oxamyl	97.5	100	P/P	50 - 150
Primidone	83.0	76.2	P/P	60 - 150
Propoxur	101	103	P/P	50 - 150
Pyraclostrobin	108	113	P/P	60 - 150
Silvex	97.9	104	P/P	50 - 150
Thiamethoxam	113	107	P/P	50 - 150
Tolfenpyrad	61.8	102	P/P	60 - 150
Triclopyr	87.3	91.4	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A109355
Included Lab Sample IDs: 2292820, 2292821, 2292823, 2292824

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.5	99.8	P/P	90 - 110
Antimony	92.6	92.9	P/P	90 - 110
Arsenic	98.6	96.5	P/P	90 - 110
Beryllium	98.3	98.6	P/P	90 - 110
Beryllium	98.6	98.6	P/P	90 - 110
Cadmium	95.2	95.7	P/P	90 - 110
Chromium	95.6	95.1	P/P	90 - 110
Cobalt	97.0	95.3	P/P	90 - 110
Copper	98.0	95.7	P/P	90 - 110
Lead	92.1	92.4	P/P	90 - 110
Manganese	95.6	96.2	P/P	90 - 110
Molybdenum	96.5	96.3	P/P	90 - 110
Nickel	98.6	96.2	P/P	90 - 110
Selenium	94.9	95.0	P/P	90 - 110
Silver	94.7	94.5	P/P	90 - 110
Thallium	95.9	94.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A109356
Included Lab Sample IDs: 2292820, 2292821, 2292823, 2292824

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	90 - 110
Calcium	102	101	P/P	90 - 110
Iron	102	103	P/P	90 - 110
Iron	103	102	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Magnesium	102	101	P/P	90 - 110
Manganese	101	102	P/P	90 - 110
Strontium	98.9	98.3	P/P	90 - 110
Tin	101	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A109356

Included Lab Sample IDs: 2292820, 2292821, 2292823, 2292824

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Titanium	97.6	98.6	P/P	90 - 110
Vanadium	97.1	96.1	P/P	90 - 110
Zinc	97.9	97.6	P/P	90 - 110
Zinc	98.2	97.9	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A109361

Included Lab Sample IDs: 2292818

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.0		P	80 - 120
Alpha-BHC	99.0		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	95.8		P	80 - 120
Bifenthrin	97.8		P	80 - 120
Chlorothalonil	97.4		P	80 - 120
Cis-Nonachlor	102		P	80 - 120
Cypermethrin	88.8		P	80 - 120
Dacthal	100		P	80 - 120
DDD-p,p'	95.8		P	80 - 120
DDE-p,p'	103		P	80 - 120
DDT-p,p'	99.9		P	80 - 120
Delta-BHC	99.5		P	80 - 120
Deltamethrin	88.8		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	97.5		P	80 - 120
Dieldrin	103		P	80 - 120
Endosulfan I	100		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	105		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	93.8		P	80 - 120
Endrin Ketone	97.1		P	80 - 120
Esfenvalerate	94.3		P	80 - 120
Ethalfuralin	98.9		P	80 - 120
Fenpropathrin	103		P	80 - 120
Gamma-BHC	102		P	80 - 120
Gamma-Chlordane	99.3		P	80 - 120
Heptachlor	102		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Hexachlorobenzene	103		P	80 - 120
Kepone	104		P	80 - 120
Lambda-Cyhalothrin	96.0		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	98.5		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	100		P	80 - 120
Permethrin	97.0		P	80 - 120
Phenothrin	95.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A109361
Included Lab Sample IDs: 2292818

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Piperonyl Butoxide	95.6		P	80 - 120
Prallethrin	98.6		P	80 - 120
Tau-Fluvalinate	94.8		P	80 - 120
Tetramethrin	99.1		P	80 - 120
Trans-Nonachlor	102		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	96.2		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A109369
Included Lab Sample IDs: 2292782

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.2	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A109392
Included Lab Sample IDs: 2292819

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	102		P	80 - 120
Hexazinone	101		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A109450
Included Lab Sample IDs: 2292782

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.7	97.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A109464
Included Lab Sample IDs: 2292782

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.6	P/P	90 - 110

* Pass/Fail determinations are made for each bracketing calibration verification check.
Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.
Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							5.32	
EPA 200.7 Rev. 4.4	Calcium	103		107	99.4	99.6			5.89
	Calcium	104							2.36
	Iron	102		108	103	101			4.71
	Iron	109		104	102				2.44
	Magnesium	105		111	106	98.4			4.39
	Magnesium	103							2.23
	Manganese	95.6		101	95.7	95.3			5.11
	Manganese	105		98.4	98.1				0.370
	Strontium	99.2							2.41
	Tin	104							
	Titanium	104		102	101				0.672
	Vanadium	102		107	106				1.44
	Zinc	96.5		103	97.7	97.1			5.18
	Zinc	101		100	101				0.757
EPA 200.8 Rev. 5.4	Aluminum	102		99.4	100	99.7			0.869
	Aluminum	103		119	115				3.30
	Antimony	104		101	102	102			0.418
	Antimony	101		101	101				0.270
	Arsenic	99.8		98.6	97.8	98.0			0.827
	Arsenic	99.0		108	106				1.66
	Beryllium	99.4		101	100	104			0.796
	Beryllium	96.6		103	102				0.326
	Cadmium	102		101	100	101			0.430
	Cadmium	101		93.2	91.5				1.83
	Chromium	104		101	101	99.2			0.181
	Chromium	103		96.6	95.8				0.760
	Cobalt	101		117	115				2.04
	Copper	98.7		99.1	98.8	96.9			0.199
	Copper	100		108	105				2.65
	Lead	98.9		97.7	97.5	97.2			0.221
	Lead	98.2		110	108				1.19
	Manganese	103		96.0	94.3				1.70
	Molybdenum	101		120	121				0.0997
	Nickel	99.1		99.3	99.1	97.8			0.200
	Nickel	100		115	114				0.357
	Selenium	99.6		95.4	94.8	97.3			0.685
	Selenium	98.7		95.2	95.1				0.159
	Silver	101		99.5	99.8	97.7			0.305
	Silver	99.5		89.0	88.9				0.192
	Thallium	102		101	103	101			1.09
	Thallium	105		117	116				0.547
EPA 300.0 Rev. 2.1	Chloride	101		102	100			0.722	
	Sulfate	97.0		98.5	97.0			0.922	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4		106	108				0.923
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100		98.1	103				3.66
EPA 353.2 Rev. 2.0	NO2NO3-N	100		101	100				0.271
EPA 365.1 Rev. 2.0	Total-P	105		96.8	96.1				0.755
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.7		99.2	97.8				1.31
EPA 8270E	Acetochlor	111	107	102	99.7		3.56		1.87
	Alachlor	106	108	97.0	96.2		1.67		0.753
	Aldrin	79.5	92.5	63.6	64.1		15.1		0.889
	Alpha-BHC	82.2	93.4	89.5	89.3		12.7		0.215
	Alpha-Chlordane	95.5	94.8	78.2	73.6		0.801		6.13

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Ametryn	109	109	107	99.0	0.289		7.68
	Atrazine	102	102			0.0116		5.38
	Atrazine Desethyl	106	106	92.5	88.5	0.333		3.92
	Azinphos Methyl	145	142	124	126	2.17		1.18
	Azoxystrobin	103	107	97.2	106	3.69		6.80
	Beta-BHC	95.1	97.1	115	112	2.01		2.64
	Beta-Cyfluthrin	102	97.6	85.8	76.4	4.57		11.7
	Bifenthrin	87.6	92.8	72.9	67.4	5.76		7.88
	Bromacil	94.9	119	105	110	22.3		4.33
	Butylate	55.1	45.3	57.7	51.5	19.6		11.3
	Caffeine	75.4	89.5	89.5	88.1	17.1		1.50
	Carbophenothion	102	97.7	89.0	88.7	4.30		0.342
	Carfentrazone Ethyl	115	115	99.7	99.2	0.614		0.482
	Chlorfenapyr	95.4	87.3	85.3	88.4	8.80		3.52
	Chlorothalonil	63.9	93.6	110	100	37.7		9.26
	Chlorpyrifos Ethyl	94.2	89.0	76.0	77.5	5.69		1.90
	Chlorpyrifos Methyl	95.9	91.4	91.2	88.3	4.78		3.23
	Cis-Nonachlor	102	104	76.2	68.5	1.91		10.7
	Coumaphos	113	107	94.3	90.3	6.22		4.32
	Cyanazine	240	252	241	237	5.01		1.55
	Cypermethrin	83.3	96.3	77.6	73.3	14.5		5.68
	Cyprodinil	125	119	110	98.2	5.19		11.0
	Dacthal	99.6	98.1	95.3	92.6	1.55		2.90
	DDD-p,p'	88.4	92.0	83.3	78.8	3.97		5.59
	DDE-p,p'	99.4	99.3	77.3	73.6	0.0598		4.95
	DDT-p,p'	99.8	97.6	70.2	70.1	2.24		0.0590
	Delta-BHC	97.0	90.4	117	111	6.97		5.50
	Deltamethrin	81.3	90.6	87.4	84.8	10.8		3.00
	Demeton	91.0	89.9	97.7	106	1.17		7.75
	Diazinon	114	118	112	115	4.21		2.56
	Dichlobenil	112	98.9	93.5	89.1	12.4		4.81
	Dicofol	74.6	84.5	72.9	73.4	12.4		0.691
	Dieldrin	103	99.2	85.4	82.4	3.34		3.54
	Difenoconazole	167	163	148	149	2.96		0.778
	Dimethenamid	92.0	93.0	82.6	81.3	0.990		1.55
	Dimethomorph	126	139	142	156	10.2		9.45
	Disulfoton	98.1	93.4	102	131	4.85		24.6
	Dithiopyr	106	110	99.5	91.5	3.33		8.42
	Endosulfan I	95.8	95.8	83.3	80.0	0.0901		4.08
	Endosulfan II	87.7	93.2	96.2	91.6	6.05		4.84
	Endosulfan Sulfate	95.6	90.3	102	97.9	5.76		3.90
	Endrin	82.1	90.8	87.2	83.7	10.1		4.15
	Endrin Aldehyde	105	82.6	86.1	85.1	23.7		1.09
	Endrin Ketone	91.8	95.8	67.3	64.9	4.32		3.63
	EPTC	58.8	47.1	66.7	57.2	22.2		15.3
	Esfenvalerate	84.1	92.6	79.2	73.2	9.53		7.86
	Ethalfuralin	85.5	93.9	74.8	73.9	9.43		1.23
	Ethion	84.7	81.5	75.3	68.7	3.82		9.21
	Ethoprop	93.0	93.6	102	108	0.612		5.21
	Etridiazole	70.2	64.0	82.9	79.0	9.28		4.90
	Fenamiphos	94.9	91.4	85.2	72.0	3.78		16.8
	Fenbuconazole	112	107	96.5	96.6	4.53		0.124
	Fenpropathrin	89.4	91.2	79.3	76.7	2.07		3.38
	Fipronil	119	118	109	108	1.09		0.601

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	SMP
EPA 8270E	Fipronil Desulfinyl	123	115	111	117	6.20	5.04
	Fipronil Sulfide	94.8	86.7	90.7	84.5	8.95	7.09
	Fipronil Sulfone	92.3	88.1	73.4	72.8	4.67	0.733
	Fluazifop-P-butyl	104	107	94.9	95.4	3.55	0.545
	Fludioxonil	106	106	97.1	93.5	0.408	3.70
	Flumioxazin	157	152	147	141	3.21	4.08
	Flutolanil	112	112	98.2	88.5	0.748	9.96
	Fluxapyroxad	97.4	99.1	82.8	85.5	1.79	3.21
	Fonofos	89.0	93.3	98.6	95.9	4.75	2.73
	Gamma-BHC	88.2	94.2	95.7	96.3	6.64	0.661
	Gamma-Chlordane	99.5	96.3	77.7	73.9	3.22	5.10
	Heptachlor	71.9	93.5	70.5	69.0	26.2	2.24
	Heptachlor Epoxide	96.6	99.3	84.8	83.4	2.73	1.64
	Hexachlorobenzene	94.6	95.9	73.8	72.0	1.43	2.34
	Hexazinone	103	101	91.2	91.8	2.09	0.726
	Imazalil	104	83.4	117	113	22.4	3.83
	Iprodione	114	106	89.3	84.8	7.21	5.20
	Kepone	30.5	33.3	133	122	8.57	8.58
	Lambda-Cyhalothrin	82.4	92.4	77.5	73.7	11.5	5.05
	Loratadine	100	115	124	137	13.2	10.1
	Malathion	91.6	86.2	82.9	64.6	6.13	24.8
	Metalaxyl	107	110	106	98.8	2.93	7.32
	Methoprene	93.1	98.9	66.9	64.8	6.06	3.19
	Methoxychlor	83.5	93.9	86.1	88.2	11.7	2.40
	Metolachlor	104	106	93.6	91.4	1.76	2.41
	Metribuzin	103	99.9	85.1	94.3	2.85	10.3
	Mevinphos	86.4	81.9	98.7	100	5.31	1.44
	MGK-264	104	98.5	96.5	91.1	5.00	5.73
	Mirex	78.6	89.0	56.6	54.1	12.4	4.58
	Molinate	67.3	61.7	72.6	70.9	8.77	2.30
	Myclobutanil	106	107	97.2	98.2	1.18	0.983
	Naled	108	91.0	105	104	16.9	0.972
	Napropamide	104	103	92.1	87.1	0.775	5.53
	Norflurazon	107	99.0	87.9	85.9	7.64	2.29
	Oxadiazon	92.6	92.5	81.1	76.3	0.0527	5.15
	Oxychlordane	92.6	99.0	75.4	74.9	6.68	0.611
	Oxyfluorfen	103	111	107	108	7.44	0.593
	Parathion Ethyl	89.8	92.8	98.8	93.7	3.38	5.27
	Parathion Methyl	109	107	109	114	1.79	4.38
	Pendimethalin	94.5	96.8	104	101	2.43	2.13
	Permethrin	87.6	94.5	77.3	72.8	7.62	5.99
	Phenothrin	84.5	92.3	70.3	67.5	8.81	4.10
	Phenytoin	68.3	65.5	51.7	42.4	4.10	19.8
	Phorate	82.8	85.1	98.2	95.7	2.72	2.57
	Piperonyl Butoxide	88.2	90.2	99.9	94.1	2.29	5.98
	Prallethrin	99.0	92.1	84.7	83.5	7.27	1.47
	Prodiamine	36.0	34.1	39.7	39.7	5.41	0.139
	Prometon	110	108	113	117	1.23	3.68
	Prometryn	102	100	92.2	94.6	1.61	2.50
	Pronamide	106	102	95.9	106	4.42	9.64
	Propanil	102	97.3	92.8	90.8	4.98	2.19
	Propargite	94.5	101	75.4	74.7	6.21	0.942
	Propiconazole	106	104	100	97.5	1.42	2.75
	Pyraflufen Ethyl	105	103	80.5	97.0	1.08	18.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Pyridaben	115	107	96.5	112	7.21		14.5
	Pyriproxyfen	104	103	85.4	89.3	0.477		4.56
	Simazine	94.2	93.0	93.3	91.5	1.33		1.99
	Stirophos	86.5	82.5	68.6	77.6	4.75		12.3
	Sulfentrazone	109	99.7	84.6	80.5	8.80		3.50
	Tau-Fluvalinate	93.8	94.3	76.8	71.6	0.495		7.00
	Tebuconazole	89.4	85.7	56.9	63.4	4.21		10.7
	Terbufos	108	111	120	118	3.35		1.94
	Terbutylazine	99.4	95.8	92.0	96.4	3.76		4.74
	Tetramethrin	74.2	92.0	129	114	21.4		12.3
	Thiobencarb	103	103	81.0	74.8	0.545		7.96
	Trans-Nonachlor	101	98.8	74.8	70.4	2.17		6.03
	Triadimefon	102	100	95.3	84.6	1.67		11.9
	Triclosan Methyl	101	99.9	84.8	83.7	1.47		1.29
	Trifluralin	78.7	89.3	73.5	72.5	12.6		1.34
EPA 8276	Chlordane	107	88.0	52.2	60.0	19.9		14.0
	Toxaphene	116	87.6	70.8	73.3	27.7		3.45
EPA 8321B	2,4-D	99.1						20.9
	2,4,5-T	109		141	108			26.4
	3-Hydroxycarbofuran	47.1		78.0	82.3			5.33
	Acesulfame K	68.7		62.5	59.3			5.37
	Acetaminophen	100		88.9	114			24.6
	Acetamiprid	96.1		92.1	94.8			2.92
	Afidopyropen	70.4		82.6	82.8			0.164
	Aldicarb	68.1		66.8	57.9			14.2
	Aldicarb Sulfone	87.1		93.9	94.2			0.301
	Aldicarb Sulfoxide	100		63.6	62.2			2.14
	AMPA	92.7		92.4	99.1			6.94
	Bentazon	95.1						27.0
	Benzovindiflupyr	75.6		80.3	87.3			8.39
	Carbamazepine	86.7		82.8	94.2			12.3
	Carbaryl	70.4		82.3	78.7			4.51
	Carbofuran	91.5		89.2	83.8			6.22
	Clothianidin	112		118	109			8.05
	Dinotefuran	89.9		107	120			11.0
	Diuron	103		80.8	76.5			4.69
	Endothall	77.6		103	95.9			6.63
	Fenuron	94.3		81.6	84.0			2.92
	Fluridone	91.8						2.80
	Glufosinate	95.5		93.3	109			15.9
	Glyphosate	94.3		89.9	99.9			10.5
	Hydrocodone	92.9		101	103			2.54
	Ibuprofen	57.7		68.2	61.1			11.0
	Imazapyr	120		98.1	125			24.3
	Imidacloprid	103		128	130			1.74
	Linuron	107		102	69.9			37.2
	Mandestrobin	86.2		78.1	87.6			11.5
	MCPP	104		97.0	95.3			1.86
	Methiocarb	62.6		86.1	76.2			12.3
	Methomyl	85.5		82.8	85.1			2.80
	Naproxen	140		59.6	78.6			27.6
	Oxamyl	78.5		93.5	91.9			1.67
	Primidone	91.4		102	103			1.01
	Propoxur	84.2		92.2	82.0			11.7

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Pyraclostrobin	83.7	76.2	85.4		11.4
	Silvex	106	87.9	92.7		5.28
	Sucralose	75.4	103	87.3		16.6
	Thiamethoxam	105	132	146		9.57
	Tolfenpyrad	36.4	44.8	57.0		24.0
	Triclopyr	129	110	82.5		28.5
SM 2120 B-2011	Color (true)	101			0.471	
SM 2320 B-2011	Total Alkalinity	97.1			0.867	
SM 2540 C-2011	TDS				2.53	
SM 2540 D-2011	TSS				4.65	
SM 4500 F-C-2011	Fluoride	100	98.2	99.6		1.01
SM 5310 B-2011	Organic Carbon	94.4	92.8	93.0		0.123

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2292781
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2292820, 2292821, 2292822, 2292823, 2292824
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2292820, 2292821, 2292822, 2292823, 2292824
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2292781
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2292781
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2292782
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2292782
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2292782
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2292782
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2292783
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2292818
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2292819
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2292818
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2292792
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2292793
SM 2120 B-2011	True Color measured at 450 nm (not valid for NPDES monitoring)	2292781
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2292781
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2292781
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2292781
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2292781
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2292782

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	12/03/2021			12/03/2021 14:14	Khloe J Berg	2292781
EPA 200.7 Rev. 4.4	12/03/2021	12/08/2021 10:30	Vijayalakshmi Reddy	12/10/2021 18:04	Josef B Mick	2292822
	12/03/2021	12/08/2021 10:30	Vijayalakshmi Reddy	12/10/2021 18:12	Josef B Mick	2292822
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 18:45	Josef B Mick	2292820
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:18	Josef B Mick	2292820
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:49	Josef B Mick	2292821
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:57	Josef B Mick	2292821
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 20:37	Josef B Mick	2292823
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 20:53	Josef B Mick	2292824
EPA 200.8 Rev. 5.4	12/03/2021	12/08/2021 10:30	Vijayalakshmi Reddy	12/09/2021 21:49	Alexander Thompson	2292822
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 17:21	Alexander Thompson	2292823
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:07	Alexander Thompson	2292821
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:16	Alexander Thompson	2292823
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:26	Alexander Thompson	2292824
	12/03/2021	12/10/2021 10:00	Vijayalakshmi Reddy	12/13/2021 19:35	Alexander Thompson	2292820
EPA 300.0 Rev. 2.1	12/03/2021			12/10/2021 14:14	Roberta Tatti	2292781
EPA 350.1 Rev. 2.0	12/03/2021			12/17/2021 12:50	Ping Hua	2292782
EPA 351.2 Rev. 2.0	12/03/2021	12/15/2021 10:04	Alexandra J Mattheus	12/16/2021 13:54	Alexandra J Mattheus	2292782
EPA 353.2 Rev. 2.0	12/03/2021			12/07/2021 10:04	Beverly Y. Sanders	2292782
EPA 365.1 Rev. 2.0	12/03/2021	12/07/2021 16:30	Simonne.V. Calhoun	12/08/2021 13:19	Shengyu Ding	2292782
EPA 365.1 Rev. 2.0 dissolved	12/03/2021			12/03/2021 14:45	James L Waggeberby	2292783
EPA 8270E	12/03/2021	12/06/2021 08:00	Rasheda Ghaffari	12/09/2021 00:25	Michael Poppell	2292819
	12/03/2021	12/06/2021 08:00	Rasheda Ghaffari	12/14/2021 16:46	Michael Poppell	2292819
	12/03/2021	12/08/2021 08:00	Rasheda Ghaffari	12/10/2021 22:54	Vandana T. Nagar	2292818
EPA 8276	12/03/2021	12/08/2021 08:00	Rasheda Ghaffari	12/11/2021 13:52	Arthur Maknenko	2292818
EPA 8321B	12/03/2021	12/06/2021 09:00	Hoor Shaik	12/11/2021 00:22	Juyoung Kim	2292792
	12/03/2021	12/06/2021 09:00	Hoor Shaik	12/11/2021 15:56	Juyoung Kim	2292793
	12/03/2021	12/08/2021 10:40	Juyoung Kim	12/08/2021 12:57	Juyoung Kim	2292793
	12/03/2021	12/08/2021 10:40	Juyoung Kim	12/08/2021 21:11	Manjita Shrestha	2292793
SM 2120 B-2011	12/03/2021			12/03/2021 15:50	Samantha L Bates	2292781
SM 2320 B-2011	12/03/2021			12/08/2021 02:54	Dale L. Simmons	2292781
SM 2540 C-2011	12/03/2021			12/07/2021 11:11	Yijie Li	2292781
SM 2540 D-2011	12/03/2021			12/07/2021 11:11	Yijie Li	2292781
SM 4500 F-C-2011	12/03/2021			12/07/2021 23:16	Dale L. Simmons	2292781
SM 5310 B-2011	12/03/2021			12/13/2021 21:27	Khloe J Berg	2292782