Chemical Analysis Report

SE-DIST-2022-07-01-02

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

Event Description: **BHP and Blank**
Request ID: **RQ-2022-06-27-43**
Customer: **SE-DIST**
Project ID: **SMP**

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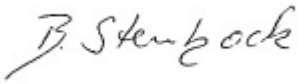
Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 26-JUL-2022 15:21



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: ICWW South of Hillsboro Blvd. **Collection Date/Time: 06/30/2022 11:10**

Field ID: G4SE0147 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338620	SM 2320 B-2011	Total Alkalinity	142		mg CaCO3/L	P416333	
	SM 2540 D-2011	TSS	6	I	mg/L	P416414	
	SM 4500-F- C-2011	Fluoride	0.95		mg F/L	P416334	
2338621	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P416264	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51		mg N/L	P416121	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P416416	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P416183	
	SM 5310 B-2011	Organic Carbon	5.4		mg C/L	P416469	
2338666	EPA 8270E	Oxybenzone**	9.9	U	ng/L	P416303	
		Acetochlor	0.25	U	ng/L	P416303	
		Octinoxate**	20	U	ng/L	P416303	
		Alachlor	0.25	U	ng/L	P416303	
		Avobenzone**	99	U	ng/L	P416303	
		Ametryn	0.67	I	ng/L	P416303	
		Atrazine	13	J	ng/L	P416303	
		PBDE-47**	4.0	U	ng/L	P416303	
		Atrazine Desethyl	3.6	I	ng/L	P416303	
		PBDE-99**	4.9	U	ng/L	P416303	
		Azinphos Methyl	2.0	U	ng/L	P416303	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P416303	
		Azoxystrobin	0.49	U	ng/L	P416303	
		Bromacil	0.49	U	ng/L	P416303	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416303	
		Butylate	0.40	U	ng/L	P416303	
		Caffeine**	8.2	I	ng/L	P416303	
		Carbophenothion	2.5	U	ng/L	P416303	
		Carfentrazone Ethyl	0.099	U	ng/L	P416303	
		Chlorfenapyr	0.17	U	ng/L	P416303	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P416303	
		Chlorpyrifos Methyl	0.049	U	ng/L	P416303	
		Coumaphos	0.49	U	ng/L	P416303	
		Cyanazine	3.2	U	ng/L	P416303	
		Cyprodinil	0.099	U	ng/L	P416303	
		Demeton	1.5	U	ng/L	P416303	
		Diazinon	0.12	U	ng/L	P416303	
		Difenoconazole	0.59	U	ng/L	P416303	
		Dimethenamid	0.099	U	ng/L	P416303	
		Dimethomorph	0.17	U	ng/L	P416303	RPD
		Disulfoton	0.49	U	ng/L	P416303	
		Dithiopyr	0.87	V	ng/L	P416303	MS
		EPTC	1.2	U	ng/L	P416303	
		Ethion	0.15	U	ng/L	P416303	
		Ethoprop	0.099	U	ng/L	P416303	

Field ID: G4SE0147 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338666	EPA 8270E	Etridiazole	0.15	U	ng/L	P416303	
		Fenamiphos	0.49	U	ng/L	P416303	
		Fenbuconazole	0.12	U	ng/L	P416303	
		Fipronil	0.25	U	ng/L	P416303	
		Fipronil Desulfinyl**	0.24	I	ng/L	P416303	
		Fipronil Sulfide	0.22	I	ng/L	P416303	
		Fipronil Sulfone	0.41	I	ng/L	P416303	
		Fluazifop-P-butyl	0.099	U	ng/L	P416303	
		Fludioxonil	0.12	U	ng/L	P416303	
		Flumioxazin	1.7	U	ng/L	P416303	
		Flutolanil	0.94		ng/L	P416303	
		Fluxapyroxad	0.88		ng/L	P416303	
		Fonofos	0.20	U	ng/L	P416303	
		Hexazinone	1.3	I	ng/L	P416303	
		Imazalil	0.74	U	ng/L	P416303	
		Iprodione	0.59	U	ng/L	P416303	
		Loratadine**	0.099	U	ng/L	P416303	
		Malathion	0.35	U	ng/L	P416303	
		Metalaxyl	0.74	U	ng/L	P416303	
		Metolachlor	0.71	I	ng/L	P416303	
		Metribuzin	2.5	U	ng/L	P416303	
		Mevinphos	1.0	U	ng/L	P416303	
		Molinate	0.30	U	ng/L	P416303	
		Myclobutanil	0.25	U	ng/L	P416303	
		Naled	1.5	U	ng/L	P416303	
		Napropamide	0.40	U	ng/L	P416303	
		Norflurazon	0.49	U	ng/L	P416303	
		Oxadiazon	6.5		ng/L	P416303	
		Oxyfluorfen	0.15	U	ng/L	P416303	
		Parathion Ethyl	0.25	U	ng/L	P416303	
		Parathion Methyl	0.54	U	ng/L	P416303	
		Pendimethalin	0.99	U	ng/L	P416303	
		Phenytoin**	3.5	U	ng/L	P416303	MS
		Phorate	0.52	U	ng/L	P416303	
		Prodiamine	0.30	U	ng/L	P416303	
		Prometon	0.89	U	ng/L	P416303	
		Prometryn	0.20	U	ng/L	P416303	
		Pronamide	0.15	U	ng/L	P416303	
		Propanil	0.12	U	ng/L	P416303	
		Propargite	1.5	U	ng/L	P416303	
		Propiconazole	0.77	I	ng/L	P416303	
		Pyraflufen Ethyl	0.25	U	ng/L	P416303	
		Pyridaben	0.44	U	ng/L	P416303	
		Pyriproxyfen	0.12	U	ng/L	P416303	
		Simazine	0.49	U	ng/L	P416303	

Field ID: G4SE0147 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338666	EPA 8270E	Stirophos	0.12	U	ng/L	P416303	MS
		Sulfentrazone	29		ng/L	P416303	
		Tebuconazole	0.62	I	ng/L	P416303	
		Terbufos	0.099	U	ng/L	P416303	
		Terbuthylazine	0.42	U	ng/L	P416303	
		Thiobencarb	0.59	U	ng/L	P416303	
		Triadimefon	0.25	U	ng/L	P416303	
2338669	EPA 200.7 Rev. 4.4	Calcium	287		mg/L	P416456	
		Iron	90	U	ug/L	P416456	
		Magnesium	844		mg/L	P416456	
		Strontium	5.51E+03		ug/L	P416456	
		Tin	150	U	ug/L	P416456	
		Titanium	3.4	I	ug/L	P416456	
		Vanadium	6.0	U	ug/L	P416456	
		Zinc	15	U	ug/L	P416456	
	EPA 200.8 Rev. 5.4	Aluminum	25	I	ug/L	P416456	
		Antimony	0.27	I	ug/L	P416456	
		Arsenic	2.28		ug/L	P416456	
		Beryllium	0.040	U	ug/L	P416456	
		Cadmium	0.080	U	ug/L	P416456	
		Chromium	1.6	U	ug/L	P416456	
		Cobalt	0.080	U	ug/L	P416456	
		Copper	4.9		ug/L	P416456	
		Lead	0.80	U	ug/L	P416456	
		Manganese	8.5		ug/L	P416456	
		Molybdenum	8.4		ug/L	P416456	
		Nickel	2.0	U	ug/L	P416456	
		Selenium	0.80	U	ug/L	P416456	
		Silver	0.040	U	ug/L	P416456	
		Thallium	0.40	U	ug/L	P416456	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample. Estimated value for atrazine due to internal standard recovery exceeding control limits.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium and strontium are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 07/14/2022.

Sample Location: Hillsboro Canal @ Pioneer Park **Collection Date/Time: 06/30/2022 11:30**

Field ID: G3SE0028 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338660	EPA 8321B	2,4-D	0.21		ug/L	P416117	
		Acesulfame K	0.10	U	ug/L	P415969	
		2,4,5-T	0.0040	U	ug/L	P416117	
		AMPA	1.0	U	ug/L	P415969	MS
		Acetaminophen	0.0080	U	ug/L	P416117	
		Acetamiprid	0.0020	U	ug/L	P416117	
		Endothall	0.25	U	ug/L	P415969	
		Glufosinate	1.0	U	ug/L	P415969	MS
		Glyphosate	1.0	U	ug/L	P415969	MS
		Afidopyropen	0.0020	U	ug/L	P416117	
		Bentazon	0.043		ug/L	P416117	
		Sucralose	0.24		ug/L	P415969	
		Benzovindiflupyr	0.0020	U	ug/L	P416117	
		Carbamazepine	8.0E-04	U	ug/L	P416117	
		Clothianidin	0.0081		ug/L	P416117	
		Dinotefuran	0.0070	I	ug/L	P416117	
		Diuron	0.013		ug/L	P416117	
		Fenuron	0.032	U	ug/L	P416117	
		Fluridone	0.080		ug/L	P416117	
		Imazapyr	0.14		ug/L	P416117	
		Hydrocodone	0.0020	U	ug/L	P416117	
		Ibuprofen	0.080	U	ug/L	P416117	
		Imidacloprid	0.023	J	ug/L	P416117	LCS, MS
		Linuron	0.0040	U	ug/L	P416117	
		Mandestrobin	0.0020	U	ug/L	P416117	
		MCPP	0.0040	U	ug/L	P416117	
		Naproxen	0.0080	U	ug/L	P416117	
		Primidone	0.0040	U	ug/L	P416117	
		Pyraclostrobin	0.0020	U	ug/L	P416117	
		Silvex	0.0040	U	ug/L	P416117	
		Thiamethoxam	0.0047	I	ug/L	P416117	
		Tolfenpyrad	0.0020	U	ug/L	P416117	
		Triclopyr	0.0040	U	ug/L	P416117	
2338664	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P416303	
		Acetochlor	0.24	U	ng/L	P416303	
		Octinoxate**	19	U	ng/L	P416303	
		Alachlor	0.24	U	ng/L	P416303	
		Avobenzone**	97	U	ng/L	P416303	
		Ametryn	2.4		ng/L	P416303	
		Atrazine	37		ng/L	P416303	
		PBDE-47**	3.9	U	ng/L	P416303	
		Atrazine Desethyl	7.5		ng/L	P416303	
		PBDE-99**	4.8	U	ng/L	P416303	
		Azinphos Methyl	1.9	U	ng/L	P416303	

Field ID: G3SE0028 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338664	EPA 8270E	Tri-o-cresyl Phosphate**	5.8	U	ng/L	P416303	
		Azoxystrobin	1.3	I	ng/L	P416303	
		Bromacil	0.48	U	ng/L	P416303	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416303	
		Butylate	0.39	U	ng/L	P416303	
		Caffeine**	11	I	ng/L	P416303	
		Carbophenothion	2.4	U	ng/L	P416303	
		Carfentrazone Ethyl	0.097	U	ng/L	P416303	
		Chlorfenapyr	0.17	U	ng/L	P416303	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416303	
		Chlorpyrifos Methyl	0.048	U	ng/L	P416303	
		Coumaphos	0.48	U	ng/L	P416303	
		Cyanazine	3.1	U	ng/L	P416303	
		Cyprodinil	0.097	U	ng/L	P416303	
		Demeton	1.5	U	ng/L	P416303	
		Diazinon	0.12	U	ng/L	P416303	
		Difenoconazole	0.58	U	ng/L	P416303	
		Dimethenamid	0.097	U	ng/L	P416303	
		Dimethomorph	0.17	U	ng/L	P416303	RPD
		Disulfoton	0.48	U	ng/L	P416303	
		Dithiopyr	0.87	V	ng/L	P416303	MS
		EPTC	1.2	U	ng/L	P416303	
		Ethion	0.15	U	ng/L	P416303	
		Ethoprop	0.097	U	ng/L	P416303	
		Etridiazole	0.15	U	ng/L	P416303	
		Fenamiphos	0.48	U	ng/L	P416303	
		Fenbuconazole	0.12	U	ng/L	P416303	
		Fipronil	0.24	U	ng/L	P416303	
		Fipronil Desulfinyl**	0.45	I	ng/L	P416303	
		Fipronil Sulfide	0.49	I	ng/L	P416303	
		Fipronil Sulfone	0.87		ng/L	P416303	
		Fluazifop-P-butyl	0.097	U	ng/L	P416303	
		Fludioxonil	0.12	U	ng/L	P416303	
		Flumioxazin	1.7	U	ng/L	P416303	
		Flutolanil	3.1		ng/L	P416303	
		Fluxapyroxad	1.6		ng/L	P416303	
		Fonofos	0.19	U	ng/L	P416303	
		Hexazinone	3.2		ng/L	P416303	
		Imazalil	0.73	U	ng/L	P416303	
		Iprodione	0.58	U	ng/L	P416303	
		Loratadine**	0.097	U	ng/L	P416303	
		Malathion	0.34	U	ng/L	P416303	
		Metalaxyl	0.73	U	ng/L	P416303	
		Metolachlor	2.6		ng/L	P416303	

Field ID: G3SE0028 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338664	EPA 8270E	Metribuzin	2.4	U	ng/L	P416303	
		Mevinphos	1.0	U	ng/L	P416303	
		Molinate	0.29	U	ng/L	P416303	
		Myclobutanil	0.45	I	ng/L	P416303	
		Naled	1.5	U	ng/L	P416303	
		Napropamide	0.39	U	ng/L	P416303	
		Norflurazon	0.48	U	ng/L	P416303	
		Oxadiazon	19		ng/L	P416303	
		Oxyfluorfen	0.15	U	ng/L	P416303	
		Parathion Ethyl	0.24	U	ng/L	P416303	
		Parathion Methyl	0.53	U	ng/L	P416303	
		Pendimethalin	0.97	U	ng/L	P416303	
		Phenytoin**	3.4	U	ng/L	P416303	MS
		Phorate	0.51	U	ng/L	P416303	
		Prodiamine	0.29	U	ng/L	P416303	
		Prometon	0.87	U	ng/L	P416303	
		Prometryn	0.19	U	ng/L	P416303	
		Pronamide	0.15	I	ng/L	P416303	
		Propanil	0.12	U	ng/L	P416303	
		Propargite	1.5	U	ng/L	P416303	
		Propiconazole	1.5	I	ng/L	P416303	
		Pyraflufen Ethyl	0.24	U	ng/L	P416303	
		Pyridaben	0.44	U	ng/L	P416303	
		Pyriproxyfen	0.12	U	ng/L	P416303	
		Simazine	0.48	U	ng/L	P416303	
		Stirophos	0.12	U	ng/L	P416303	MS
		Sulfentrazone	63		ng/L	P416303	
		Tebuconazole	1.2	I	ng/L	P416303	
		Terbufos	0.097	U	ng/L	P416303	
		Terbuthylazine	0.41	U	ng/L	P416303	
		Thiobencarb	0.58	U	ng/L	P416303	
		Triadimefon	0.24	U	ng/L	P416303	

Ref. Method and Comment:
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample.

Sample Location: E-4 @ Clint Moore **Collection Date/Time: 06/30/2022 12:00**

Field ID: G3SE0019 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338659	EPA 8321B	2,4-D	0.0091		ug/L	P416117	
		Acesulfame K	0.10	U	ug/L	P415969	
		2,4,5-T	0.0040	U	ug/L	P416117	
		AMPA	1.8		ug/L	P415969	MS
		Acetaminophen	0.0080	U	ug/L	P416117	
		Acetamiprid	0.0020	U	ug/L	P416117	
		Endothall	0.25	U	ug/L	P415969	
		Glufosinate	0.10	U	ug/L	P415969	MS
		Glyphosate	71		ug/L	P415969	MS
		Afidopyropen	0.0020	U	ug/L	P416117	
		Bentazon	0.18		ug/L	P416117	
		Sucralose	0.12		ug/L	P415969	
		Benzovindiflupyr	0.0020	U	ug/L	P416117	
		Carbamazepine	8.0E-04	U	ug/L	P416117	
		Clothianidin	0.040		ug/L	P416117	
		Dinotefuran	0.0032	I	ug/L	P416117	
		Diuron	0.019		ug/L	P416117	
		Fenuron	0.043	I	ug/L	P416117	
		Fluridone	0.16		ug/L	P416117	
		Imazapyr	0.12		ug/L	P416117	
		Hydrocodone	0.0020	U	ug/L	P416117	
		Ibuprofen	0.080	U	ug/L	P416117	
		Imidacloprid	0.017	J	ug/L	P416117	LCS, MS
		Linuron	0.0040	U	ug/L	P416117	
		Mandestrobin	0.0020	U	ug/L	P416117	
		MCPP	0.0040	U	ug/L	P416117	
		Naproxen	0.0080	U	ug/L	P416117	
		Primidone	0.0040	U	ug/L	P416117	
		Pyraclostrobin	0.0020	U	ug/L	P416117	
		Silvex	0.0040	U	ug/L	P416117	
		Thiamethoxam	0.0020	U	ug/L	P416117	
		Tolfenpyrad	0.0020	U	ug/L	P416117	
		Triclopyr	0.0040	U	ug/L	P416117	

Ref. Method and Comment:
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Boynton Canal @ Lyons **Collection Date/Time: 06/30/2022 12:45**

Field ID: G3SE0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338657	EPA 8321B	Aldicarb	0.020	U	ug/L	P416027	
		Aldicarb Sulfone	0.0020	U	ug/L	P416027	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P416027	
		Carbaryl	0.0020	U	ug/L	P416027	
		Carbofuran	0.0020	U	ug/L	P416027	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P416027	
		Methiocarb	0.0020	U	ug/L	P416027	
		Methomyl	0.0020	U	ug/L	P416027	
		Oxamyl	0.0020	U	ug/L	P416027	
		Propoxur	0.0020	U	ug/L	P416027	
2338658		2,4-D	0.035		ug/L	P416117	
		Acesulfame K	0.10	U	ug/L	P415969	
		2,4,5-T	0.0040	U	ug/L	P416117	
		AMPA	4.8		ug/L	P415969	MS
		Acetaminophen	0.0080	U	ug/L	P416117	
		Acetamiprid	0.0020	U	ug/L	P416117	
		Endothall	0.25	U	ug/L	P415969	
		Glufosinate	0.10	U	ug/L	P415969	MS
		Glyphosate	17		ug/L	P415969	MS
		Afidopyropen	0.0020	U	ug/L	P416117	
		Bentazon	0.047		ug/L	P416117	
		Sucralose	0.17		ug/L	P415969	
		Benzovindiflupyr	0.0020	U	ug/L	P416117	
		Carbamazepine	8.0E-04	U	ug/L	P416117	
		Clothianidin	0.0020	U	ug/L	P416117	
		Dinotefuran	0.14		ug/L	P416117	
		Diuron	0.24		ug/L	P416117	
		Fenuron	0.033	I	ug/L	P416117	
		Fluridone	0.052		ug/L	P416117	
		Imazapyr	0.25		ug/L	P416117	
		Hydrocodone	0.0020	U	ug/L	P416117	
		Ibuprofen	0.080	U	ug/L	P416117	
		Imidacloprid	0.17	J	ug/L	P416117	LCS, MS
		Linuron	0.0040	U	ug/L	P416117	
		Mandestrobin	0.0020	U	ug/L	P416117	
		MCPP	0.0040	U	ug/L	P416117	
		Naproxen	0.0080	U	ug/L	P416117	
		Primidone	0.0040	U	ug/L	P416117	
		Pyraclostrobin	0.0020	U	ug/L	P416117	
		Silvex	0.0040	U	ug/L	P416117	
		Thiamethoxam	0.012		ug/L	P416117	
		Tolfenpyrad	0.0020	U	ug/L	P416117	
		Triclopyr	0.0040	U	ug/L	P416117	
2338662	EPA 8270E	Aldrin	0.66	U	ng/L	P416118	

Field ID: G3SE0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338662	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P416118	
		Alpha-Chlordane	0.20	U	ng/L	P416118	
		PCB-1016	2.0	U	ng/L	P416118	
		Beta-BHC	0.10	U	ng/L	P416118	
		PCB-1221	2.0	U	ng/L	P416118	
		Beta-Cyfluthrin	1.3	U	ng/L	P416118	
		PCB-1232	2.0	U	ng/L	P416118	
		Bifenthrin	0.51	U	ng/L	P416118	
		PCB-1242	2.0	U	ng/L	P416118	
		PCB-1248	2.0	U	ng/L	P416118	
		Chlorothalonil	1.3	U	ng/L	P416118	
		PCB-1254	2.0	U	ng/L	P416118	
		Cis-Nonachlor	0.20	U	ng/L	P416118	
		PCB-1260	2.0	U	ng/L	P416118	
		Cypermethrin	1.5	U	ng/L	P416118	
		Dacthal	0.15	U	ng/L	P416118	
		DDD-p,p'	0.26	U	ng/L	P416118	
		DDE-p,p'	0.20	U	ng/L	P416118	
		DDT-p,p'	0.26	U	ng/L	P416118	
		Delta-BHC	0.41	U	ng/L	P416118	
		Deltamethrin	1.3	U	ng/L	P416118	
		Dichlobenil	0.26	U	ng/L	P416118	
		Dicofol	1.3	U	ng/L	P416118	
		Dieldrin	0.41	U	ng/L	P416118	
		Endosulfan I	0.41	U	ng/L	P416118	
		Endosulfan II	0.41	U	ng/L	P416118	
		Endosulfan Sulfate	0.31	U	ng/L	P416118	
		Endrin	0.41	U	ng/L	P416118	
		Endrin Aldehyde	0.77	U	ng/L	P416118	
		Endrin Ketone	0.41	U	ng/L	P416118	
		Esfenvalerate	0.77	U	ng/L	P416118	
		Ethalfluralin	0.15	U	ng/L	P416118	
		Fenpropathrin	0.26	U	ng/L	P416118	
		Gamma-BHC	0.13	U	ng/L	P416118	
		Gamma-Chlordane	0.20	U	ng/L	P416118	
		Heptachlor	0.20	U	ng/L	P416118	
		Heptachlor Epoxide	0.26	U	ng/L	P416118	
		Hexachlorobenzene**	1.0	U	ng/L	P416118	
		Kepone	5.1	U	ng/L	P416118	
		Lambda-Cyhalothrin	0.77	U	ng/L	P416118	
		Methoprene	0.77	U	ng/L	P416118	
		Methoxychlor	0.31	U	ng/L	P416118	
		MGK-264	0.20	U	ng/L	P416118	
		Mirex	0.72	U	ng/L	P416118	
		Oxychlordane	0.31	U	ng/L	P416118	

Field ID: G3SE0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338662	EPA 8270E	Permethrin	1.6	U	ng/L	P416118	
		Phenothrin	0.92	U	ng/L	P416118	
		Piperonyl Butoxide	0.59	I	ng/L	P416118	
		Prallethrin	2.0	U	ng/L	P416118	
		Tau-Fluvalinate	0.26	U	ng/L	P416118	
		Tetramethrin	0.77	U	ng/L	P416118	
		Trans-Nonachlor	0.20	U	ng/L	P416118	
		Triclosan Methyl	0.15	U	ng/L	P416118	
		Trifluralin	0.20	U	ng/L	P416118	
	EPA 8276	Chlordane	2.6	U	ng/L	P416118	
		Toxaphene	15	U	ng/L	P416118	
2338663	EPA 8270E	Oxybenzone**	9.8	U	ng/L	P416303	
		Acetochlor	0.24	U	ng/L	P416303	
		Octinoxate**	20	U	ng/L	P416303	
		Alachlor	0.24	U	ng/L	P416303	
		Avobenzone**	98	U	ng/L	P416303	
		Ametryn	3.3		ng/L	P416303	
		Atrazine	74		ng/L	P416303	
		PBDE-47**	3.9	U	ng/L	P416303	
		Atrazine Desethyl	8.7		ng/L	P416303	
		PBDE-99**	4.9	U	ng/L	P416303	
		Azinphos Methyl	2.0	U	ng/L	P416303	
		Tri-o-cresyl Phosphate**	5.9	U	ng/L	P416303	
		Azoxystrobin	13		ng/L	P416303	
		Bromacil	0.49	U	ng/L	P416303	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416303	
		Butylate	0.47	I	ng/L	P416303	
		Caffeine**	9.8	I	ng/L	P416303	
		Carbophenothion	2.4	U	ng/L	P416303	
		Carfentrazone Ethyl	0.098	U	ng/L	P416303	
		Chlorfenapyr	0.17	U	ng/L	P416303	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416303	
		Chlorpyrifos Methyl	0.049	U	ng/L	P416303	
		Coumaphos	0.49	U	ng/L	P416303	
		Cyanazine	3.2	U	ng/L	P416303	
		Cyprodinil	0.37	I	ng/L	P416303	
		Demeton	1.5	U	ng/L	P416303	
		Diazinon	0.12	U	ng/L	P416303	
		Difenoconazole	0.59	U	ng/L	P416303	
		Dimethenamid	7.0		ng/L	P416303	
		Dimethomorph	0.24	I J	ng/L	P416303	RPD
		Disulfoton	0.49	U	ng/L	P416303	
		Dithiopyr	0.55	I V J	ng/L	P416303	MS
		EPTC	1.2	U	ng/L	P416303	

Field ID: G3SE0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338663	EPA 8270E	Ethion	0.15	U	ng/L	P416303	
		Ethoprop	0.098	U	ng/L	P416303	
		Etridiazole	0.15	U	ng/L	P416303	
		Fenamiphos	0.49	U	ng/L	P416303	
		Fenbuconazole	0.12	U	ng/L	P416303	
		Fipronil	0.24	U	ng/L	P416303	
		Fipronil Desulfinyl**	0.34	I	ng/L	P416303	
		Fipronil Sulfide	0.15	U	ng/L	P416303	
		Fipronil Sulfone	0.42	I	ng/L	P416303	
		Fluazifop-P-butyl	0.098	U	ng/L	P416303	
		Fludioxonil	0.80		ng/L	P416303	
		Flumioxazin	1.7	U	ng/L	P416303	
		Flutolanil	4.5		ng/L	P416303	
		Fluxapyroxad	21		ng/L	P416303	
		Fonofos	0.20	U	ng/L	P416303	
		Hexazinone	9.3		ng/L	P416303	
		Imazalil	0.73	U	ng/L	P416303	
		Iprodione	0.59	U	ng/L	P416303	
		Loratadine**	0.098	U	ng/L	P416303	
		Malathion	0.34	U	ng/L	P416303	
		Metalaxyl	1.8	I	ng/L	P416303	
		Metolachlor	43		ng/L	P416303	
		Metribuzin	2.4	U	ng/L	P416303	
		Mevinphos	1.0	U	ng/L	P416303	
		Molinate	0.29	U	ng/L	P416303	
		Myclobutanil	0.77	I	ng/L	P416303	
		Naled	1.5	U	ng/L	P416303	
		Napropamide	2.0		ng/L	P416303	
		Norflurazon	0.49	U	ng/L	P416303	
		Oxadiazon	7.0		ng/L	P416303	
		Oxyfluorfen	0.15	U	ng/L	P416303	
		Parathion Ethyl	0.24	U	ng/L	P416303	
		Parathion Methyl	0.54	U	ng/L	P416303	
		Pendimethalin	0.98	U	ng/L	P416303	
		Phenytoin**	3.4	UJ	ng/L	P416303	MS
		Phorate	0.51	U	ng/L	P416303	
		Prodiamine	0.29	U	ng/L	P416303	
		Prometon	0.88	U	ng/L	P416303	
		Prometryn	0.20	U	ng/L	P416303	
		Pronamide	0.15	U	ng/L	P416303	
		Propanil	0.12	U	ng/L	P416303	
		Propargite	1.5	U	ng/L	P416303	
		Propiconazole	4.6		ng/L	P416303	
		Pyraflufen Ethyl	0.24	U	ng/L	P416303	
		Pyridaben	0.44	U	ng/L	P416303	

Field ID: G3SE0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338663	EPA 8270E	Pyriproxyfen	0.12	U	ng/L	P416303	
		Simazine	0.49	U	ng/L	P416303	
		Stirophos	0.12	UJ	ng/L	P416303	MS
		Sulfentrazone	4.6		ng/L	P416303	
		Tebuconazole	1.5	I	ng/L	P416303	
		Terbufos	0.098	U	ng/L	P416303	
		Terbuthylazine	0.42	U	ng/L	P416303	
		Thiobencarb	0.59	U	ng/L	P416303	
		Triadimefon	0.24	U	ng/L	P416303	

Ref. Method and Comment:
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: ICWW @ Alsdorf Public Park **Collection Date/Time: 06/30/2022 10:40**

Field ID: G4SE0148 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338622	SM 2320 B-2011	Total Alkalinity	135		mg CaCO3/L	P416333	
	SM 2540 D-2011	TSS	6	I	mg/L	P416414	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P416334	
2338623	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P416350	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.37	I	mg N/L	P416121	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.01	I	mg N/L	P416416	
	EPA 365.1 Rev. 2.0	Total-P	0.029		mg P/L	P416319	
	SM 5310 B-2011	Organic Carbon	4.3		mg C/L	P416469	
2338667	EPA 8270E	Oxybenzone**	9.6	U	ng/L	P416303	
		Acetochlor	0.24	U	ng/L	P416303	
		Octinoxate**	19	U	ng/L	P416303	
		Alachlor	0.24	U	ng/L	P416303	
		Avobenzone**	96	U	ng/L	P416303	
		Ametryn	0.58	U	ng/L	P416303	
		Atrazine	12	J	ng/L	P416303	
		PBDE-47**	3.8	U	ng/L	P416303	
		Atrazine Desethyl	2.4	I	ng/L	P416303	
		PBDE-99**	4.8	U	ng/L	P416303	
		Azinphos Methyl	1.9	U	ng/L	P416303	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P416303	
		Azoxystrobin	0.48	U	ng/L	P416303	
		Bromacil	0.48	U	ng/L	P416303	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416303	
		Butylate	0.38	U	ng/L	P416303	
		Caffeine**	13	I	ng/L	P416303	
		Carbophenothion	2.4	U	ng/L	P416303	
		Carfentrazone Ethyl	0.096	U	ng/L	P416303	
		Chlorfenapyr	0.17	U	ng/L	P416303	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416303	
		Chlorpyrifos Methyl	0.048	U	ng/L	P416303	
		Coumaphos	0.48	U	ng/L	P416303	
		Cyanazine	3.1	U	ng/L	P416303	
		Cyprodinil	0.096	U	ng/L	P416303	
		Demeton	1.4	U	ng/L	P416303	
		Diazinon	0.12	U	ng/L	P416303	
		Difenoconazole	0.58	U	ng/L	P416303	
		Dimethenamid	0.096	U	ng/L	P416303	
		Dimethomorph	0.17	U	ng/L	P416303	RPD
		Disulfoton	0.48	U	ng/L	P416303	
		Dithiopyr	0.58	I V	ng/L	P416303	MS
		EPTC	1.2	U	ng/L	P416303	
		Ethion	0.14	U	ng/L	P416303	
		Ethoprop	0.096	U	ng/L	P416303	

Field ID: G4SE0148 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338667	EPA 8270E	Etridiazole	0.14	U	ng/L	P416303	
		Fenamiphos	0.48	U	ng/L	P416303	
		Fenbuconazole	0.12	U	ng/L	P416303	
		Fipronil	0.24	U	ng/L	P416303	
		Fipronil Desulfinyl**	0.27	I	ng/L	P416303	
		Fipronil Sulfide	0.19	I	ng/L	P416303	
		Fipronil Sulfone	0.49	I	ng/L	P416303	
		Fluazifop-P-butyl	0.096	U	ng/L	P416303	
		Fludioxonil	0.12	U	ng/L	P416303	
		Flumioxazin	1.7	U	ng/L	P416303	
		Flutolanil	0.59		ng/L	P416303	
		Fluxapyroxad	0.92		ng/L	P416303	
		Fonofos	0.19	U	ng/L	P416303	
		Hexazinone	1.7	I	ng/L	P416303	
		Imazalil	0.72	U	ng/L	P416303	
		Iprodione	0.58	U	ng/L	P416303	
		Loratadine**	0.096	U	ng/L	P416303	
		Malathion	0.34	U	ng/L	P416303	
		Metalaxyl	0.72	U	ng/L	P416303	
		Metolachlor	0.34	U	ng/L	P416303	
		Metribuzin	2.4	U	ng/L	P416303	
		Mevinphos	1.0	U	ng/L	P416303	
		Molinate	0.29	U	ng/L	P416303	
		Myclobutanil	0.24	I	ng/L	P416303	
		Naled	1.4	U	ng/L	P416303	
		Napropamide	0.38	U	ng/L	P416303	
		Norflurazon	0.48	U	ng/L	P416303	
		Oxadiazon	2.1		ng/L	P416303	
		Oxyfluorfen	0.14	U	ng/L	P416303	
		Parathion Ethyl	0.24	U	ng/L	P416303	
		Parathion Methyl	0.53	U	ng/L	P416303	
		Pendimethalin	0.96	U	ng/L	P416303	
		Phenytoin**	3.4	U	ng/L	P416303	MS
		Phorate	0.50	U	ng/L	P416303	
		Prodiamine	0.29	U	ng/L	P416303	
		Prometon	0.86	U	ng/L	P416303	
		Prometryn	0.19	U	ng/L	P416303	
		Pronamide	0.14	U	ng/L	P416303	
		Propanil	0.12	U	ng/L	P416303	
		Propargite	1.4	U	ng/L	P416303	
		Propiconazole	1.9	I	ng/L	P416303	
		Pyraflufen Ethyl	0.24	U	ng/L	P416303	
		Pyridaben	0.43	U	ng/L	P416303	
		Pyriproxyfen	0.12	U	ng/L	P416303	
		Simazine	0.48	U	ng/L	P416303	

Field ID: G4SE0148 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338667	EPA 8270E	Stirophos	0.12	U	ng/L	P416303	MS
		Sulfentrazone	19		ng/L	P416303	
		Tebuconazole	1.2	I	ng/L	P416303	
		Terbufos	0.096	U	ng/L	P416303	
		Terbuthylazine	0.41	U	ng/L	P416303	
		Thiobencarb	0.58	U	ng/L	P416303	
		Triadimefon	0.24	U	ng/L	P416303	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample. Estimated value for atrazine due to internal standard recovery exceeding control limits.

Sample Location: Dania Cutoff @ Griffin Marine Park **Collection Date/Time: 06/30/2022 08:40**

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338618	SM 2320 B-2011	Total Alkalinity	214		mg CaCO3/L	P416387	
	SM 2540 D-2011	TSS	2	I	mg/L	P416413	
	SM 4500-F- C-2011	Fluoride	0.34		mg F/L	P416404	
2338619	EPA 350.1 Rev. 2.0	Ammonia-N	0.20		mg N/L	P416264	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P416121	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P416591	
	EPA 365.1 Rev. 2.0	Total-P	0.037		mg P/L	P416319	
	SM 5310 B-2011	Organic Carbon	12		mg C/L	P416317	
2338661	EPA 8321B	2,4-D	0.17		ug/L	P416117	
		Acesulfame K	0.12	I	ug/L	P415969	
		2,4,5-T	0.0040	U	ug/L	P416117	
		AMPA	1.0	U	ug/L	P415969	MS
		Acetaminophen	0.0080	U	ug/L	P416117	
		Acetamiprid	0.0020	U	ug/L	P416117	
		Endothall	0.25	U	ug/L	P415969	
		Glufosinate	1.0	U	ug/L	P415969	MS
		Glyphosate	1.0	U	ug/L	P415969	MS
		Afidopyropen	0.0020	U	ug/L	P416117	
		Bentazon	0.028		ug/L	P416117	
		Sucralose	0.30		ug/L	P415969	
		Benzovindiflupyr	0.0020	U	ug/L	P416117	
		Carbamazepine	0.0020	I	ug/L	P416117	
		Clothianidin	0.0020	U	ug/L	P416117	
		Dinotefuran	0.0020	U	ug/L	P416117	
		Diuron	0.0063	I	ug/L	P416117	
		Fenuron	0.032	U	ug/L	P416117	
		Fluridone	0.034		ug/L	P416117	
		Imazapyr	0.20		ug/L	P416117	
		Hydrocodone	0.0020	U	ug/L	P416117	
		Ibuprofen	0.080	U	ug/L	P416117	
		Imidacloprid	0.011	J	ug/L	P416117	LCS, MS
		Linuron	0.0040	U	ug/L	P416117	
		Mandestrobin	0.0020	U	ug/L	P416117	
		MCPP	0.0040	U	ug/L	P416117	
		Naproxen	0.0080	U	ug/L	P416117	
		Primidone	0.0040	U	ug/L	P416117	
		Pyraclostrobin	0.0020	U	ug/L	P416117	
		Silvex	0.0040	U	ug/L	P416117	
		Thiamethoxam	0.0020	U	ug/L	P416117	
		Tolfenpyrad	0.0020	U	ug/L	P416117	
		Triclopyr	0.0040	U	ug/L	P416117	
2338665	EPA 8270E	Oxybenzone**	9.7	U	ng/L	P416303	
		Acetochlor	0.24	U	ng/L	P416303	
		Octinoxate**	19	U	ng/L	P416303	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338665	EPA 8270E	Alachlor	0.24	U	ng/L	P416303	
		Avobenzone**	97	U	ng/L	P416303	
		Ametryn	0.80	I	ng/L	P416303	
		Atrazine	20	J	ng/L	P416303	
		PBDE-47**	3.9	U	ng/L	P416303	
		Atrazine Desethyl	3.0	I	ng/L	P416303	
		PBDE-99**	4.8	U	ng/L	P416303	
		Azinphos Methyl	1.9	U	ng/L	P416303	
		Tri-o-cresyl Phosphate**	5.8	U	ng/L	P416303	
		Azoxystrobin	0.48	U	ng/L	P416303	
		Bromacil	0.74	I	ng/L	P416303	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P416303	
		Butylate	0.39	U	ng/L	P416303	
		Caffeine**	14	I	ng/L	P416303	
		Carbophenothion	2.4	U	ng/L	P416303	
		Carfentrazone Ethyl	0.097	U	ng/L	P416303	
		Chlorfenapyr	0.17	U	ng/L	P416303	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P416303	
		Chlorpyrifos Methyl	0.048	U	ng/L	P416303	
		Coumaphos	0.48	U	ng/L	P416303	
		Cyanazine	3.1	U	ng/L	P416303	
		Cyprodinil	0.097	U	ng/L	P416303	
		Demeton	1.5	U	ng/L	P416303	
		Diazinon	0.12	U	ng/L	P416303	
		Difenoconazole	0.58	U	ng/L	P416303	
		Dimethenamid	0.097	U	ng/L	P416303	
		Dimethomorph	0.17	U	ng/L	P416303	RPD
		Disulfoton	0.48	U	ng/L	P416303	
		Dithiopyr	0.64	I V	ng/L	P416303	MS
		EPTC	1.2	U	ng/L	P416303	
		Ethion	0.15	U	ng/L	P416303	
		Ethoprop	0.097	U	ng/L	P416303	
		Etridiazole	0.15	U	ng/L	P416303	
		Fenamiphos	0.48	U	ng/L	P416303	
		Fenbuconazole	0.12	U	ng/L	P416303	
		Fipronil	0.27	I	ng/L	P416303	
		Fipronil Desulfinyl**	0.26	I	ng/L	P416303	
		Fipronil Sulfide	0.29	I	ng/L	P416303	
		Fipronil Sulfone	0.47	I	ng/L	P416303	
		Fluazifop-P-butyl	0.097	U	ng/L	P416303	
		Fludioxonil	0.12	U	ng/L	P416303	
		Flumioxazin	1.7	U	ng/L	P416303	
		Flutolanil	0.53		ng/L	P416303	
		Fluxapyroxad	0.89		ng/L	P416303	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338665	EPA 8270E	Fonofos	0.19	U	ng/L	P416303	
		Hexazinone	3.5		ng/L	P416303	
		Imazalil	0.73	U	ng/L	P416303	
		Iprodione	0.58	U	ng/L	P416303	
		Loratadine**	0.097	U	ng/L	P416303	
		Malathion	0.34	U	ng/L	P416303	
		Metalaxyl	0.73	U	ng/L	P416303	
		Metolachlor	0.34	U	ng/L	P416303	
		Metribuzin	2.4	U	ng/L	P416303	
		Mevinphos	1.0	U	ng/L	P416303	
		Molinate	0.29	U	ng/L	P416303	
		Myclobutanil	0.24	U	ng/L	P416303	
		Naled	1.5	U	ng/L	P416303	
		Napropamide	0.39	U	ng/L	P416303	
		Norflurazon	0.48	U	ng/L	P416303	
		Oxadiazon	1.8		ng/L	P416303	
		Oxyfluorfen	0.15	U	ng/L	P416303	
		Parathion Ethyl	0.24	U	ng/L	P416303	
		Parathion Methyl	0.53	U	ng/L	P416303	
		Pendimethalin	0.97	U	ng/L	P416303	
		Phenytoin**	3.4	U	ng/L	P416303	MS
		Phorate	0.51	U	ng/L	P416303	
		Prodiamine	0.29	U	ng/L	P416303	
		Prometon	0.87	U	ng/L	P416303	
		Prometryn	0.19	U	ng/L	P416303	
		Pronamide	0.15	U	ng/L	P416303	
		Propanil	0.12	U	ng/L	P416303	
		Propargite	1.5	U	ng/L	P416303	
		Propiconazole	1.1	I	ng/L	P416303	
		Pyraflufen Ethyl	0.24	U	ng/L	P416303	
		Pyridaben	0.44	U	ng/L	P416303	
		Pyriproxyfen	0.12	U	ng/L	P416303	
		Simazine	0.48	U	ng/L	P416303	
		Stirophos	0.12	U	ng/L	P416303	MS
		Sulfentrazone	29		ng/L	P416303	
		Tebuconazole	1.2	I	ng/L	P416303	
		Terbufos	0.097	U	ng/L	P416303	
		Terbuthylazine	0.41	U	ng/L	P416303	
		Thiobencarb	0.58	U	ng/L	P416303	
		Triadimefon	0.24	U	ng/L	P416303	
2338668	EPA 200.7 Rev. 4.4	Calcium	106		mg/L	P416115	
		Iron	230		ug/L	P416115	
		Magnesium	111		mg/L	P416115	
		Strontium	1.42E+03		ug/L	P416115	
		Tin	15	U	ug/L	P416115	

Field ID: G4SE0146 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338668	EPA 200.7 Rev. 4.4	Titanium	1.4	I	ug/L	P416115	
		Vanadium	2.0	U	ug/L	P416115	
		Zinc	5.3	I	ug/L	P416115	
	EPA 200.8 Rev. 5.4	Aluminum	8.1	I	ug/L	P416115	
		Antimony	0.11	I	ug/L	P416115	
		Arsenic	1.68		ug/L	P416115	
		Beryllium	0.010	U	ug/L	P416115	
		Cadmium	0.020	U	ug/L	P416115	
		Chromium	0.40	U	ug/L	P416115	
		Cobalt	0.054	I	ug/L	P416115	
		Copper	2.82		ug/L	P416115	
		Lead	0.20	U	ug/L	P416115	
		Manganese	14.5		ug/L	P416115	
		Molybdenum	1.79		ug/L	P416115	
		Nickel	0.50	U	ug/L	P416115	
		Selenium	0.20	U	ug/L	P416115	
		Silver	0.010	U	ug/L	P416115	
		Thallium	0.10	U	ug/L	P416115	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample. Estimated value for atrazine due to internal standard recovery exceeding control limits.

Sample Location: FB **Collection Date/Time: 06/30/2022 08:45**

Field ID: FB_06302022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2338624	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P416387	
	SM 2540 D-2011	TSS	2	U	mg/L	P416413	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P416404	
2338625	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P416347	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P416384	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P416482	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P416187	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P416317	
2338670	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P416115	
		Iron	30	U	ug/L	P416115	
		Magnesium	0.040	U	mg/L	P416115	
		Strontium	2.0	U	ug/L	P416115	
		Tin	3.0	U	ug/L	P416115	
		Titanium	0.75	U	ug/L	P416115	
		Vanadium	2.0	U	ug/L	P416115	
		Zinc	5.0	U	ug/L	P416115	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P416115	
		Antimony	0.050	U	ug/L	P416115	
		Arsenic	0.050	U	ug/L	P416115	
		Beryllium	0.010	U	ug/L	P416115	
		Cadmium	0.020	U	ug/L	P416115	
		Chromium	0.40	U	ug/L	P416115	
		Cobalt	0.020	U	ug/L	P416115	
		Copper	1.55		ug/L	P416115	
		Lead	0.20	U	ug/L	P416115	
		Manganese	0.10	U	ug/L	P416115	
		Molybdenum	0.15	U	ug/L	P416115	
		Nickel	0.50	U	ug/L	P416115	
		Selenium	0.20	U	ug/L	P416115	
		Silver	0.010	U	ug/L	P416115	
		Thallium	0.10	U	ug/L	P416115	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 07/06/2022.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416115

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416456

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416115

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
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Component	Result	Code	Units
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 350.1 Rev. 2.0
Batch ID: P416264

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416347

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416350

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416121

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416384

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416416

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416482

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416591

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416183

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416187

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416319

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

Reference Method: EPA 8270E
Batch ID: P416118

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	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416118

Component	Result	Code	Units
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416118

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

Reference Method: EPA 8270E
Batch ID: P416303

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416303

Component	Result	Code	Units
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	2.5	U	ng/L
Carbophenothion	2.5	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	0.54	I	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416303

Component	Result	Code	Units
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	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416303

Component	Result	Code	Units
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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	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
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P416303

Component	Result	Code	Units
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276
Batch ID: P416118

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: P415969

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

Reference Method: EPA 8321B
Batch ID: P416027

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: P416117

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P416117

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

Reference Method: SM 2320 B-2011
Batch ID: P416333

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

Reference Method: SM 2320 B-2011
Batch ID: P416387

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

Reference Method: SM 2540 D-2011
Batch ID: P416413

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P416414

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P416334

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P416404

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P416317

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

Reference Method: SM 5310 B-2011
Batch ID: P416469

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: P416115

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	92.2		P	85 - 115
Magnesium	94.4		P	85 - 115
Strontium	103		P	85 - 115
Tin	106		P	85 - 115
Titanium	106		P	85 - 115
Vanadium	104		P	85 - 115
Zinc	103		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416456

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.1		P	85 - 115
Iron	100		P	85 - 115
Magnesium	95.7		P	85 - 115
Strontium	106		P	85 - 115
Tin	99.5		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	95.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416115

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.6		P	85 - 115
Antimony	99.1		P	85 - 115
Arsenic	98.3		P	85 - 115
Beryllium	91.8		P	85 - 115
Cadmium	95.5		P	85 - 115
Chromium	93.8		P	85 - 115
Cobalt	94.8		P	85 - 115
Copper	94.4		P	85 - 115
Lead	94.8		P	85 - 115
Manganese	94.1		P	85 - 115
Molybdenum	97.9		P	85 - 115
Nickel	96.1		P	85 - 115
Selenium	94.1		P	85 - 115
Silver	97.2		P	85 - 115
Thallium	95.0		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.3		P	85 - 115
Antimony	99.1		P	85 - 115
Arsenic	97.9		P	85 - 115
Beryllium	85.2		P	85 - 115
Cadmium	95.0		P	85 - 115
Chromium	93.6		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Cobalt	98.5		P	85 - 115
Copper	93.8		P	85 - 115
Lead	95.8		P	85 - 115
Manganese	97.3		P	85 - 115
Molybdenum	95.9		P	85 - 115
Nickel	97.0		P	85 - 115
Selenium	94.2		P	85 - 115
Silver	99.5		P	85 - 115
Thallium	98.6		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416264

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	95.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416350

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416121

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416384

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416416

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416482

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	99.0		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416591

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416183

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416187

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416319

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

Reference Method: EPA 8270E
Batch ID: P416118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.1		P	10 - 93.0
Alpha-BHC	97.9		P	75 - 106
Alpha-Chlordane	91.2		P	50 - 109
Beta-BHC	121		P	36 - 138
Beta-Cyfluthrin	80.1		P	23 - 167
Bifenthrin	54.0		P	11 - 123
Chlorothalonil	94.0		P	27 - 190
Cis-Nonachlor	67.2		P	40 - 111
Cypermethrin	77.0		P	25 - 155
Dacthal	112		P	72 - 119
DDD-p,p'	65.9		P	47 - 108
DDE-p,p'	85.4		P	48 - 107
DDT-p,p'	76.0		P	49 - 111
Delta-BHC	133		P	54 - 138
Deltamethrin	83.0		P	22 - 189
Dichlobenil	101		P	32 - 113
Dicofol	78.8		P	50 - 108
Dieldrin	94.0		P	56 - 110
Endosulfan I	98.9		P	60 - 105
Endosulfan II	76.4		P	50 - 120
Endosulfan Sulfate	102		P	55 - 121
Endrin	73.6		P	31 - 119
Endrin Aldehyde	100		P	36 - 116
Endrin Ketone	98.5		P	69 - 177
Esfenvalerate	73.8		P	10 - 179
Ethalfluralin	78.6		P	49 - 99.0
Fenpropathrin	75.6		P	35 - 119
Gamma-BHC	112		P	69 - 120

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P416118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-Chlordane	84.7		P	45 - 107
Heptachlor	72.7		P	41 - 100
Heptachlor Epoxide	93.3		P	58 - 106
Hexachlorobenzene	72.4		P	39 - 100
Kepone	76.7		P	10 - 191
Lambda-Cyhalothrin	62.3		P	21 - 206
Methoprene	68.9		P	10 - 129
Methoxychlor	88.5		P	61 - 111
MGK-264	104		P	20 - 123
Mirex	53.4		P	10 - 182
Oxychlordane	86.6		P	39 - 110
PCB-1016	81.4		P	48 - 112
PCB-1260	87.8		P	44 - 118
Permethrin	71.8		P	26 - 152
Phenothrin	61.6		P	10 - 109
Piperonyl Butoxide	139		P	19 - 147
Prallethrin	106		P	14 - 109
Tau-Fluvalinate	71.6		P	16 - 134
Tetramethrin	100		P	10 - 125
Trans-Nonachlor	86.9		P	45 - 107
Triclosan Methyl	101		P	60 - 110
Trifluralin	75.5		P	44 - 101

Reference Method: EPA 8270E
Batch ID: P416303

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.4		P	50 - 150
Acetochlor	92.9		P	70 - 121
Alachlor	81.1		P	68 - 119
Ametryn	84.2		P	64 - 139
Atrazine	91.7		P	76 - 120
Atrazine Desethyl	94.1		P	44 - 126
Avobenzone	95.5		P	76 - 212
Azinphos Methyl	129		P	43 - 192
Azoxystrobin	113		P	36 - 224
Bromacil	81.4		P	52 - 121
Butylate	49.0		P	28 - 91.0
Caffeine	78.7		P	50 - 134
Carbophenothion	82.4		P	56 - 129
Carfentrazone Ethyl	95.7		P	60 - 141
Chlorfenapyr	75.6		P	56 - 115
Chlorpyrifos Ethyl	77.5		P	60 - 118
Chlorpyrifos Methyl	93.7		P	68 - 119
Coumaphos	86.7		P	18 - 250
Cyanazine	97.3		P	61 - 250
Cyprodinil	90.7		P	55 - 145
Demeton	96.3		P	30 - 159
Diazinon	90.8		P	70 - 123
Difenoconazole	110		P	49 - 204
Dimethenamid	76.7		P	64 - 115
Dimethomorph	112		P	12 - 219

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P416303

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Disulfoton	79.3		P	44 - 125
Dithiopyr	84.9		P	64 - 115
EPTC	46.8		P	28 - 86.0
Ethion	66.6		P	33 - 125
Ethoprop	88.2		P	64 - 116
Etridiazole	50.9		P	34 - 91.0
Fenamiphos	80.0		P	12 - 127
Fenbuconazole	83.1		P	59 - 151
Fipronil	88.3		P	67 - 129
Fipronil Desulfinyl	92.8		P	65 - 127
Fipronil Sulfide	84.9		P	61 - 116
Fipronil Sulfone	71.1		P	55 - 117
Fluazifop-P-butyl	97.8		P	62 - 127
Fludioxonil	87.4		P	62 - 128
Flumioxazin	112		P	33 - 250
Flutolanil	111		P	56 - 127
Fluxapyroxad	92.0		P	45 - 128
Fonofos	80.3		P	62 - 111
Hexazinone	89.6		P	46 - 139
Imazalil	64.8		P	38 - 142
Iprodione	88.6		P	47 - 135
Loratadine	115		P	10 - 244
Malathion	81.8		P	61 - 139
Metalaxyl	85.8		P	10 - 119
Metolachlor	93.0		P	65 - 118
Metribuzin	101		P	51 - 250
Mevinphos	93.4		P	53 - 121
Molinate	64.2		P	42 - 96.0
Myclobutanil	86.6		P	55 - 128
Naled	75.6		P	10 - 98.0
Napropamide	75.9		P	49 - 121
Norflurazon	99.4		P	61 - 126
Octinoxate	83.5		P	30 - 159
Oxadiazon	83.7		P	59 - 116
Oxybenzone	80.0		P	61 - 139
Oxyfluorfen	103		P	64 - 137
Parathion Ethyl	89.1		P	70 - 112
Parathion Methyl	129		P	76 - 133
PBDE-47	85.4		P	50 - 150
PBDE-99	85.8		P	50 - 150
Pendimethalin	90.1		P	52 - 117
Phenytoin	40.8		P	10 - 199
Phorate	69.0		P	48 - 121
Prodiamine	33.7		P	26 - 142
Prometon	75.8		P	43 - 123
Prometryn	90.3		P	66 - 127
Pronamide	96.0		P	75 - 121
Propanil	126		P	45 - 150
Propargite	73.2		P	42 - 208
Propiconazole	103		P	60 - 125
Pyraflufen Ethyl	81.0		P	70 - 138
Pyridaben	79.6		P	35 - 245

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P416303

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyriproxyfen	88.6		P	30 - 149
Simazine	99.5		P	72 - 125
Stirophos	71.3		P	29 - 164
Sulfentrazone	101		P	21 - 139
Tebuconazole	73.0		P	10 - 115
Terbufos	98.0		P	60 - 123
Terbuthylazine	85.5		P	72 - 115
Thiobencarb	81.6		P	31 - 139
Tri-o-cresyl Phosphate	89.2		P	50 - 150
Triadimefon	81.4		P	65 - 116

Reference Method: EPA 8276
Batch ID: P416118

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	99.0		P	61 - 116
Toxaphene	86.2		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P415969

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	90.0		P	40 - 150
AMPA	91.3		P	40 - 150
Endothall	96.3		P	40 - 150
Glufosinate	82.5		P	40 - 150
Glyphosate	91.0		P	40 - 150
Sucralose	90.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416027

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.6		P	40 - 150
Aldicarb	59.0		P	30 - 150
Aldicarb Sulfone	91.1		P	40 - 150
Aldicarb Sulfoxide	90.3		P	40 - 150
Carbaryl	61.0		P	40 - 150
Carbofuran	63.6		P	40 - 150
Methiocarb	72.7		P	40 - 150
Methomyl	80.9		P	40 - 150
Oxamyl	86.5		P	40 - 150
Propoxur	60.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416117

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	82.6		P	40 - 150
2,4,5-T	50.0		P	40 - 150
Acetaminophen	93.8		P	30 - 150
Acetamiprid	109		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P416117

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Afidopyropen	59.1		P	30 - 150
Bentazon	54.3		P	30 - 150
Benzovindiflupyr	87.6		P	40 - 150
Carbamazepine	84.8		P	40 - 150
Clothianidin	90.4		P	40 - 150
Dinotefuran	108		P	40 - 150
Diuron	63.5		P	40 - 150
Fenuron	99.0		P	40 - 150
Fluridone	82.0		P	40 - 150
Hydrocodone	94.8		P	40 - 150
Ibuprofen	66.9		P	40 - 150
Imazapyr	114		P	40 - 150
Imidacloprid	158		F	40 - 150
Linuron	63.0		P	40 - 150
Mandestrobin	82.6		P	40 - 150
MCPP	80.4		P	40 - 150
Naproxen	59.7		P	40 - 150
Primidone	99.8		P	40 - 150
Pyraclostrobin	83.5		P	40 - 150
Silvex	58.2		P	40 - 150
Thiamethoxam	106		P	40 - 150
Tolfenpyrad	39.0		P	30 - 150
Triclopyr	60.5		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P416333

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	94 - 106

Reference Method: SM 2320 B-2011
Batch ID: P416387

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P416334

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P416404

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P416317

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P416317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.1		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P416469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338497	Calcium	101		P	80 - 120
2338497	Iron	99.8		P	80 - 120
2338497	Magnesium	101		P	80 - 120
2338497	Strontium	105		P	80 - 120
2338497	Tin	108		P	80 - 120
2338497	Titanium	96.3		P	80 - 120
2338497	Vanadium	107		P	80 - 120
2338497	Zinc	107		P	80 - 120
2338614	Calcium	100	101	P/P	80 - 120
2338614	Iron	102	102	P/P	80 - 120
2338614	Magnesium	102	101	P/P	80 - 120
2338614	Strontium	105	105	P/P	80 - 120
2338614	Tin	107	104	P/P	80 - 120
2338614	Titanium	107	107	P/P	80 - 120
2338614	Vanadium	106	106	P/P	80 - 120
2338614	Zinc	106	103	P/P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416456

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2340158	Iron	97.8	101	P/P	80 - 120
2340158	Tin	97.2	95.1	P/P	80 - 120
2340158	Titanium	109	108	P/P	80 - 120
2340158	Vanadium	101	103	P/P	80 - 120
2340158	Zinc	92.4	94.1	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338497	Aluminum	99.7		P	80 - 120
2338497	Antimony	99.9		P	80 - 120
2338497	Arsenic	99.6		P	80 - 120
2338497	Beryllium	87.9		P	80 - 120
2338497	Cadmium	99.6		P	80 - 120
2338497	Chromium	96.7		P	80 - 120
2338497	Cobalt	96.4		P	80 - 120
2338497	Copper	97.5		P	80 - 120
2338497	Lead	96.3		P	80 - 120
2338497	Manganese	97.2		P	80 - 120
2338497	Molybdenum	97.9		P	80 - 120
2338497	Nickel	97.2		P	80 - 120
2338497	Selenium	93.3		P	80 - 120
2338497	Silver	96.2		P	80 - 120
2338497	Thallium	98.7		P	80 - 120
2338614	Aluminum	99.3	99.2	P/P	80 - 120
2338614	Antimony	101	101	P/P	80 - 120
2338614	Arsenic	99.0	99.7	P/P	80 - 120
2338614	Beryllium	94.3	95.2	P/P	80 - 120
2338614	Cadmium	96.8	97.3	P/P	80 - 120
2338614	Chromium	96.9	96.1	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416115

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338614	Cobalt	96.4	96.1	P/P	80 - 120
2338614	Copper	96.6	96.1	P/P	80 - 120
2338614	Lead	95.9	96.3	P/P	80 - 120
2338614	Manganese	96.1	95.1	P/P	80 - 120
2338614	Molybdenum	98.5	99.1	P/P	80 - 120
2338614	Nickel	97.0	95.4	P/P	80 - 120
2338614	Selenium	95.8	95.5	P/P	80 - 120
2338614	Silver	95.8	95.6	P/P	80 - 120
2338614	Thallium	97.1	99.5	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2340158	Aluminum	107	106	P/P	70 - 130
2340158	Antimony	95.4	96.2	P/P	70 - 130
2340158	Arsenic	102	103	P/P	70 - 130
2340158	Beryllium	90.0	90.5	P/P	70 - 130
2340158	Cadmium	88.7	88.9	P/P	70 - 130
2340158	Chromium	87.3	84.6	P/P	70 - 130
2340158	Cobalt	101	105	P/P	70 - 130
2340158	Copper	104	108	P/P	70 - 130
2340158	Lead	92.9	94.6	P/P	70 - 130
2340158	Manganese	83.7	88.8	P/P	70 - 130
2340158	Molybdenum	98.8	101	P/P	70 - 130
2340158	Nickel	99.6	103	P/P	70 - 130
2340158	Selenium	99.8	101	P/P	70 - 130
2340158	Silver	88.3	88.6	P/P	70 - 130
2340158	Thallium	95.4	99.3	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416264

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2337891	Ammonia-N	99.2	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416347

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338596	Ammonia-N	96.4	96.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416350

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2339345	Ammonia-N	97.8	99.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338621	Kjeldahl Nitrogen	98.2	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416384

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338707	Kjeldahl Nitrogen	100	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416416

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338401	NO2NO3-N	101	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416482

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338606	NO2NO3-N	98.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338619	NO2NO3-N	99.0	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416183

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338211	Total-P	92.2	92.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338756	Total-P	103	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416319

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2339097	Total-P	100	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P416118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338795	Aldrin	53.5	54.9	P/P	10 - 89.0
2338795	Alpha-BHC	91.0	94.3	P/P	71 - 105
2338795	Alpha-Chlordane	76.7	78.2	P/P	43 - 107
2338795	Beta-BHC	113	109	P/P	57 - 152

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P416118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338795	Beta-Cyfluthrin	72.1	64.1	P/P	29 - 186
2338795	Bifenthrin	50.0	37.9	P/P	19 - 119
2338795	Chlorothalonil	118	125	P/P	10 - 245
2338795	Cis-Nonachlor	61.8	56.2	P/P	36 - 110
2338795	Cypermethrin	70.1	63.4	P/P	24 - 169
2338795	Dacthal	99.0	102	P/P	62 - 115
2338795	DDD-p,p'	59.0	55.2	P/P	36 - 109
2338795	DDE-p,p'	74.6	77.3	P/P	30 - 114
2338795	DDT-p,p'	74.3	70.0	P/P	42 - 108
2338795	Delta-BHC	121	123	P/P	60 - 164
2338795	Deltamethrin	79.6	69.1	P/P	10 - 210
2338795	Dichlobenil	86.2	88.4	P/P	23 - 108
2338795	Dicofol	74.1	74.2	P/P	44 - 109
2338795	Dieldrin	80.2	82.9	P/P	37 - 119
2338795	Endosulfan I	88.5	87.8	P/P	52 - 105
2338795	Endosulfan II	68.3	65.2	P/P	35 - 127
2338795	Endosulfan Sulfate	85.3	86.4	P/P	39 - 130
2338795	Endrin	72.7	66.3	P/P	30 - 116
2338795	Endrin Aldehyde	66.1	68.8	P/P	20 - 110
2338795	Endrin Ketone	92.7	89.6	P/P	48 - 134
2338795	Esfenvalerate	73.7	60.8	P/P	10 - 199
2338795	Ethalfluralin	75.2	73.2	P/P	48 - 95.0
2338795	Fenpropathrin	63.3	60.7	P/P	37 - 121
2338795	Gamma-BHC	105	108	P/P	61 - 126
2338795	Gamma-Chlordane	75.5	75.6	P/P	39 - 105
2338795	Heptachlor	69.1	69.1	P/P	38 - 96.0
2338795	Heptachlor Epoxide	84.0	87.3	P/P	42 - 114
2338795	Hexachlorobenzene	72.5	68.6	P/P	39 - 93.0
2338795	Kepone	64.6	70.3	P/P	10 - 215
2338795	Lambda-Cyhalothrin	56.4	48.0	P/P	10 - 204
2338795	Methoprene	52.8	46.5	P/P	17 - 108
2338795	Methoxychlor	81.9	81.5	P/P	56 - 115
2338795	MGK-264	81.4	91.1	P/P	35 - 120
2338795	Mirex	48.0	46.4	P/P	10 - 178
2338795	Oxychlordane	77.5	82.2	P/P	47 - 91.0
2338795	Permethrin	69.1	59.0	P/P	27 - 170
2338795	Phenothrin	56.0	44.7	P/P	10 - 133
2338795	Piperonyl Butoxide	123	131	P/P	23 - 150
2338795	Prallethrin	79.2	84.6	P/P	21 - 113
2338795	Tau-Fluvalinate	74.4	58.7	P/P	16 - 158
2338795	Tetramethrin	83.7	83.2	P/P	22 - 132
2338795	Trans-Nonachlor	72.4	75.7	P/P	43 - 102
2338795	Triclosan Methyl	88.1	88.3	P/P	49 - 109
2338795	Trifluralin	73.0	70.5	P/P	48 - 93.0
2339052	PCB-1016	89.8	95.4	P/P	46 - 111
2339052	PCB-1260	86.1	89.5	P/P	45 - 114

Reference Method: EPA 8270E
Batch ID: P416303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338663	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	87.2	89.1	P/P	50 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P416303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338663	Acetochlor	89.5	86.8	P/P	65 - 124
2338663	Alachlor	76.6	71.2	P/P	61 - 121
2338663	Ametryn	63.6	70.1	P/P	52 - 216
2338663	Atrazine Desethyl	78.2	76.9	P/P	15 - 160
2338663	Avobenzone	91.7	100	P/P	59 - 206
2338663	Azinphos Methyl	111	113	P/P	40 - 292
2338663	Bromacil	80.9	75.5	P/P	54 - 167
2338663	Butylate	41.2	57.2	P/P	14 - 94.0
2338663	Caffeine	93.8	85.7	P/P	10 - 226
2338663	Carbophenothion	72.4	68.8	P/P	49 - 122
2338663	Carfentrazone Ethyl	82.0	73.4	P/P	53 - 138
2338663	Chlorfenapyr	62.7	66.9	P/P	50 - 150
2338663	Chlorpyrifos Ethyl	67.6	67.4	P/P	52 - 122
2338663	Chlorpyrifos Methyl	86.1	84.6	P/P	66 - 117
2338663	Coumaphos	69.0	66.6	P/P	50 - 220
2338663	Cyanazine	80.6	83.2	P/P	43 - 245
2338663	Cyprodinil	86.4	83.1	P/P	50 - 150
2338663	Demeton	98.7	99.4	P/P	43 - 188
2338663	Diazinon	92.5	93.6	P/P	69 - 131
2338663	Difenoconazole	117	106	P/P	34 - 231
2338663	Dimethomorph	97.8	137	P/P	50 - 150
2338663	Disulfoton	92.9	80.8	P/P	38 - 141
2338663	Dithiopyr	41.4	44.3	F/P	42 - 116
2338663	EPTC	68.0	84.1	P/P	18 - 85.0
2338663	Ethion	64.9	51.8	P/P	10 - 131
2338663	Ethoprop	102	99.9	P/P	65 - 129
2338663	Etridiazole	51.4	52.5	P/P	50 - 150
2338663	Fenamiphos	63.4	70.9	P/P	31 - 137
2338663	Fenbuconazole	73.2	71.0	P/P	57 - 160
2338663	Fipronil	84.0	83.9	P/P	62 - 132
2338663	Fipronil Desulfinyl	75.9	80.4	P/P	57 - 131
2338663	Fipronil Sulfide	87.9	88.6	P/P	15 - 138
2338663	Fipronil Sulfone	62.3	58.7	P/P	21 - 134
2338663	Fluazifop-P-butyl	84.0	88.8	P/P	54 - 133
2338663	Fludioxonil	78.0	77.0	P/P	58 - 127
2338663	Flumioxazin	121	112	P/P	33 - 300
2338663	Fonofos	91.3	86.0	P/P	58 - 119
2338663	Hexazinone	102	86.7	P/P	68 - 172
2338663	Imazalil	144	152	P/P	48 - 283
2338663	Iprodione	79.4	75.5	P/P	38 - 140
2338663	Loratadine	115	109	P/P	50 - 150
2338663	Malathion	74.7	73.9	P/P	40 - 137
2338663	Metalaxyl	65.9	67.5	P/P	21 - 129
2338663	Metribuzin	109	113	P/P	38 - 187
2338663	Mevinphos	103	106	P/P	54 - 134
2338663	Molinate	60.7	67.3	P/P	41 - 97.0
2338663	Myclobutanil	82.7	79.7	P/P	56 - 125
2338663	Naled	69.1	77.9	P/P	10 - 108
2338663	Napropamide	70.7	61.9	P/P	50 - 150
2338663	Norflurazon	83.3	86.9	P/P	32 - 122
2338663	Octinoxate	79.6	83.6	P/P	25 - 150
2338663	Oxybenzone	70.6	79.8	P/P	59 - 147

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P416303

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338663	Oxyfluorfen	99.5	94.5	P/P	61 - 153
2338663	Parathion Ethyl	80.7	83.3	P/P	59 - 130
2338663	Parathion Methyl	136	125	P/P	65 - 155
2338663	PBDE-47	81.4	83.5	P/P	50 - 150
2338663	PBDE-99	77.3	79.2	P/P	50 - 150
2338663	Pendimethalin	113	110	P/P	49 - 138
2338663	Phenytoin	38.4	30.0	F/F	50 - 200
2338663	Phorate	79.8	74.7	P/P	54 - 161
2338663	Prodiamine	50.4	49.0	P/P	33 - 161
2338663	Prometon	74.4	73.7	P/P	48 - 140
2338663	Prometryn	55.4	58.7	P/P	55 - 134
2338663	Pronamide	85.8	83.6	P/P	66 - 137
2338663	Propanil	121	139	P/P	50 - 150
2338663	Propargite	72.9	63.9	P/P	50 - 200
2338663	Pyraflufen Ethyl	72.6	71.7	P/P	50 - 150
2338663	Pyridaben	92.2	71.9	P/P	50 - 200
2338663	Pyriproxyfen	85.3	66.6	P/P	10 - 165
2338663	Simazine	83.9	91.7	P/P	57 - 145
2338663	Stirophos	21.4	20.5	F/F	50 - 150
2338663	Sulfentrazone	89.6	76.7	P/P	34 - 140
2338663	Tebuconazole	70.9	57.6	P/P	10 - 127
2338663	Terbufos	102	104	P/P	59 - 138
2338663	Terbuthylazine	80.4	82.8	P/P	68 - 119
2338663	Thiobencarb	66.5	68.9	P/P	50 - 150
2338663	Tri-o-cresyl Phosphate	76.5	80.2	P/P	50 - 150
2338663	Triadimefon	74.2	71.0	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P416118

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2339052	Chlordane	87.4	101	P/P	53 - 126
2339052	Toxaphene	103	107	P/P	56 - 211

Reference Method: EPA 8321B
Batch ID: P415969

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2337995	Acesulfame K	70.7	74.9	P/P	40 - 150
2337995	AMPA	37.3	43.6	F/P	40 - 150
2337995	Endothall	117	121	P/P	40 - 150
2337995	Glufosinate	25.5	20.7	F/F	40 - 150
2337995	Glyphosate	39.8	45.5	F/P	40 - 150
2337995	Sucralose	81.6	90.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2337583	3-Hydroxycarbofuran	91.6	84.1	P/P	40 - 150
2337583	Aldicarb	50.1	46.9	P/P	30 - 150
2337583	Aldicarb Sulfone	103	104	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P416027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2337583	Aldicarb Sulfoxide	49.4	48.8	P/P	40 - 150
2337583	Carbaryl	49.0	46.0	P/P	40 - 150
2337583	Carbofuran	53.1	54.4	P/P	40 - 150
2337583	Methiocarb	58.1	63.5	P/P	40 - 150
2337583	Methomyl	74.6	73.4	P/P	40 - 150
2337583	Oxamyl	82.1	80.9	P/P	40 - 150
2337583	Propoxur	52.4	53.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416117

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338388	2,4-D	79.1	96.3	P/P	40 - 150
2338388	2,4,5-T	56.8	58.6	P/P	40 - 150
2338388	Acetaminophen	92.5	92.6	P/P	30 - 150
2338388	Acetamiprid	92.7	100	P/P	40 - 150
2338388	Afidopyropen	65.7	68.2	P/P	30 - 150
2338388	Bentazon	51.8	55.5	P/P	30 - 150
2338388	Benzovindiflupyr	89.5	102	P/P	40 - 150
2338388	Carbamazepine	82.7	88.4	P/P	40 - 150
2338388	Clothianidin	99.9	111	P/P	40 - 150
2338388	Dinotefuran	128	132	P/P	40 - 150
2338388	Diuron	66.7	65.1	P/P	40 - 150
2338388	Fenuron	97.3	105	P/P	40 - 150
2338388	Fluridone	81.8	90.2	P/P	40 - 150
2338388	Hydrocodone	101	107	P/P	40 - 150
2338388	Ibuprofen	71.8	87.8	P/P	40 - 150
2338388	Imazapyr	95.0	112	P/P	40 - 150
2338388	Imidacloprid	164	175	F/F	40 - 150
2338388	Linuron	76.4	76.2	P/P	40 - 150
2338388	Mandestrobin	87.0	95.0	P/P	40 - 150
2338388	MCPP	86.1	91.6	P/P	40 - 150
2338388	Naproxen	74.4	67.9	P/P	40 - 150
2338388	Primidone	121	111	P/P	40 - 150
2338388	Pyraclostrobin	91.0	95.4	P/P	40 - 150
2338388	Silvex	51.0	63.0	P/P	40 - 150
2338388	Thiamethoxam	116	126	P/P	40 - 150
2338388	Tolfenpyrad	50.8	55.3	P/P	30 - 150
2338388	Triclopyr	65.0	68.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P416334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338588	Fluoride	97.2	98.9	P/P	94 - 104

Reference Method: SM 4500-F- C-2011
Batch ID: P416404

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2339553	Fluoride	104	103	P/P	94 - 104

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P416317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2338564	Organic Carbon	97.6	98.4	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P416469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2340140	Organic Carbon	87.5	88.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338614	Calcium	0.454	Spike	P	0 - 20
2338614	Iron	0.339	Spike	P	0 - 20
2338614	Magnesium	0.815	Spike	P	0 - 20
2338614	Strontium	0.207	Spike	P	0 - 20
2338614	Tin	3.39	Spike	P	0 - 20
2338614	Titanium	0.261	Spike	P	0 - 20
2338614	Vanadium	0.225	Spike	P	0 - 20
2338614	Zinc	2.95	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340158	Calcium	1.93	Spike	P	0 - 20
2340158	Iron	3.47	Spike	P	0 - 20
2340158	Magnesium	1.13	Spike	P	0 - 20
2340158	Strontium	3.75	Spike	P	0 - 20
2340158	Tin	2.26	Spike	P	0 - 20
2340158	Titanium	0.297	Spike	P	0 - 20
2340158	Vanadium	2.28	Spike	P	0 - 20
2340158	Zinc	1.79	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416115

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338614	Aluminum	0.114	Spike	P	0 - 20
2338614	Antimony	0.366	Spike	P	0 - 20
2338614	Arsenic	0.718	Spike	P	0 - 20
2338614	Beryllium	0.870	Spike	P	0 - 20
2338614	Cadmium	0.483	Spike	P	0 - 20
2338614	Chromium	0.796	Spike	P	0 - 20
2338614	Cobalt	0.345	Spike	P	0 - 20
2338614	Copper	0.533	Spike	P	0 - 20
2338614	Lead	0.348	Spike	P	0 - 20
2338614	Manganese	0.919	Spike	P	0 - 20
2338614	Molybdenum	0.532	Spike	P	0 - 20
2338614	Nickel	1.61	Spike	P	0 - 20
2338614	Selenium	0.316	Spike	P	0 - 20
2338614	Silver	0.236	Spike	P	0 - 20
2338614	Thallium	2.45	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340158	Aluminum	0.982	Spike	P	0 - 20
2340158	Antimony	0.873	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416456

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340158	Arsenic	1.06	Spike	P	0 - 20
2340158	Beryllium	0.587	Spike	P	0 - 20
2340158	Cadmium	0.168	Spike	P	0 - 20
2340158	Chromium	3.12	Spike	P	0 - 20
2340158	Cobalt	3.58	Spike	P	0 - 20
2340158	Copper	3.79	Spike	P	0 - 20
2340158	Lead	1.83	Spike	P	0 - 20
2340158	Manganese	3.16	Spike	P	0 - 20
2340158	Molybdenum	1.96	Spike	P	0 - 20
2340158	Nickel	3.05	Spike	P	0 - 20
2340158	Selenium	1.18	Spike	P	0 - 20
2340158	Silver	0.272	Spike	P	0 - 20
2340158	Thallium	3.94	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416264

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2337891	Ammonia-N	2.12	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338596	Ammonia-N	0.399	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P416350

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2339345	Ammonia-N	1.82	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338621	Kjeldahl Nitrogen	4.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416384

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338707	Kjeldahl Nitrogen	0.751	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416416

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338401	NO2NO3-N	0.922	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416482

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338606	NO2NO3-N	2.02	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338619	NO2NO3-N	1.37	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416183

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338211	Total-P	0.100	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338756	Total-P	2.39	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416319

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2339097	Total-P	0.297	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P416118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338795	Aldrin	2.54	Spike	P	0 - 37
2338795	Alpha-BHC	3.59	Spike	P	0 - 16
2338795	Alpha-Chlordane	1.83	Spike	P	0 - 28
2338795	Beta-BHC	3.28	Spike	P	0 - 32
2338795	Beta-Cyfluthrin	11.8	Spike	P	0 - 41
2338795	Bifenthrin	27.3	Spike	P	0 - 36
2338795	Chlorothalonil	5.47	Spike	P	0 - 54
2338795	Cis-Nonachlor	9.40	Spike	P	0 - 33
2338795	Cypermethrin	10.0	Spike	P	0 - 38

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P416118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338795	Dacthal	3.04	Spike	P	0 - 23
2338795	DDD-p,p'	6.60	Spike	P	0 - 35
2338795	DDE-p,p'	3.52	Spike	P	0 - 27
2338795	DDT-p,p'	5.97	Spike	P	0 - 31
2338795	Delta-BHC	1.47	Spike	P	0 - 30
2338795	Deltamethrin	14.1	Spike	P	0 - 76
2338795	Dichlobenil	2.62	Spike	P	0 - 33
2338795	Dicofol	0.0659	Spike	P	0 - 24
2338795	Dieldrin	3.25	Spike	P	0 - 35
2338795	Endosulfan I	0.774	Spike	P	0 - 25
2338795	Endosulfan II	4.75	Spike	P	0 - 31
2338795	Endosulfan Sulfate	1.33	Spike	P	0 - 38
2338795	Endrin	9.14	Spike	P	0 - 53
2338795	Endrin Aldehyde	4.00	Spike	P	0 - 81
2338795	Endrin Ketone	3.45	Spike	P	0 - 33
2338795	Esfenvalerate	19.1	Spike	P	0 - 46
2338795	Ethalfluralin	2.64	Spike	P	0 - 22
2338795	Fenpropathrin	4.09	Spike	P	0 - 29
2338795	Gamma-BHC	2.74	Spike	P	0 - 17
2338795	Gamma-Chlordane	0.201	Spike	P	0 - 28
2338795	Heptachlor	0.0384	Spike	P	0 - 28
2338795	Heptachlor Epoxide	3.83	Spike	P	0 - 23
2338795	Hexachlorobenzene	5.51	Spike	P	0 - 22
2338795	Kepone	8.37	Spike	P	0 - 61
2338795	Lambda-Cyhalothrin	16.1	Spike	P	0 - 52
2338795	Methoprene	12.7	Spike	P	0 - 38
2338795	Methoxychlor	0.482	Spike	P	0 - 29
2338795	MGK-264	11.3	Spike	P	0 - 41
2338795	Mirex	3.24	Spike	P	0 - 39
2338795	Oxychlordane	5.97	Spike	P	0 - 33
2338795	Permethrin	15.8	Spike	P	0 - 39
2338795	Phenothrin	22.5	Spike	P	0 - 52
2338795	Piperonyl Butoxide	6.43	Spike	P	0 - 91
2338795	Prallethrin	6.50	Spike	P	0 - 34
2338795	Tau-Fluvalinate	23.6	Spike	P	0 - 41
2338795	Tetramethrin	0.620	Spike	P	0 - 43
2338795	Trans-Nonachlor	4.34	Spike	P	0 - 31
2338795	Triclosan Methyl	0.188	Spike	P	0 - 24
2338795	Trifluralin	3.48	Spike	P	0 - 23
2339052	PCB-1016	6.09	Spike	P	0 - 32
2339052	PCB-1260	3.82	Spike	P	0 - 31

Reference Method: EPA 8270E
Batch ID: P416303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338663	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	2.15	Spike	P	0 - 30
2338663	Acetochlor	3.11	Spike	P	0 - 27
2338663	Alachlor	7.27	Spike	P	0 - 27
2338663	Ametryn	4.28	Spike	P	0 - 34

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P416303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338663	Atrazine	2.98	Spike	P	0 - 41
2338663	Atrazine Desethyl	0.941	Spike	P	0 - 38
2338663	Avobenzone	8.94	Spike	P	0 - 30
2338663	Azinphos Methyl	1.40	Spike	P	0 - 62
2338663	Azoxystrobin	9.77	Spike	P	0 - 32
2338663	Bromacil	6.96	Spike	P	0 - 30
2338663	Butylate	26.0	Spike	P	0 - 59
2338663	Caffeine	8.78	Spike	P	0 - 60
2338663	Carbophenothion	5.12	Spike	P	0 - 25
2338663	Carfentrazone Ethyl	11.1	Spike	P	0 - 26
2338663	Chlorfenapyr	6.45	Spike	P	0 - 30
2338663	Chlorpyrifos Ethyl	0.302	Spike	P	0 - 27
2338663	Chlorpyrifos Methyl	1.71	Spike	P	0 - 26
2338663	Coumaphos	3.50	Spike	P	0 - 30
2338663	Cyanazine	3.19	Spike	P	0 - 58
2338663	Cyprodinil	3.13	Spike	P	0 - 30
2338663	Demeton	0.768	Spike	P	0 - 25
2338663	Diazinon	1.17	Spike	P	0 - 29
2338663	Difenoconazole	10.2	Spike	P	0 - 25
2338663	Dimethenamid	7.59	Spike	P	0 - 30
2338663	Dimethomorph	31.8	Spike	F	0 - 30
2338663	Disulfoton	13.9	Spike	P	0 - 33
2338663	Dithiopyr	5.11	Spike	P	0 - 22
2338663	EPTC	21.2	Spike	P	0 - 38
2338663	Ethion	22.5	Spike	P	0 - 79
2338663	Ethoprop	2.31	Spike	P	0 - 23
2338663	Etridiazole	2.14	Spike	P	0 - 30
2338663	Fenamiphos	11.2	Spike	P	0 - 58
2338663	Fenbuconazole	3.15	Spike	P	0 - 37
2338663	Fipronil	0.0365	Spike	P	0 - 33
2338663	Fipronil Desulfinyl	5.07	Spike	P	0 - 26
2338663	Fipronil Sulfide	0.891	Spike	P	0 - 37
2338663	Fipronil Sulfone	4.38	Spike	P	0 - 50
2338663	Fluazifop-P-butyl	5.62	Spike	P	0 - 24
2338663	Fludioxonil	1.04	Spike	P	0 - 26
2338663	Flumioxazin	7.83	Spike	P	0 - 37
2338663	Flutolanil	1.43	Spike	P	0 - 26
2338663	Fluxapyroxad	4.99	Spike	P	0 - 34
2338663	Fonofos	5.91	Spike	P	0 - 27
2338663	Hexazinone	8.96	Spike	P	0 - 36
2338663	Imazalil	5.75	Spike	P	0 - 65
2338663	Iprodione	4.92	Spike	P	0 - 33
2338663	Loratadine	5.04	Spike	P	0 - 30
2338663	Malathion	1.15	Spike	P	0 - 44
2338663	Metalaxyl	2.08	Spike	P	0 - 38
2338663	Metolachlor	0.759	Spike	P	0 - 36
2338663	Metribuzin	3.37	Spike	P	0 - 63
2338663	Mevinphos	2.91	Spike	P	0 - 26
2338663	Molinate	10.3	Spike	P	0 - 40
2338663	Myclobutanil	2.99	Spike	P	0 - 21
2338663	Naled	12.0	Spike	P	0 - 26

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P416303

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338663	Napropamide	11.1	Spike	P	0 - 30
2338663	Norflurazon	4.23	Spike	P	0 - 24
2338663	Octinoxate	4.85	Spike	P	0 - 30
2338663	Oxadiazon	0.201	Spike	P	0 - 27
2338663	Oxybenzone	12.1	Spike	P	0 - 30
2338663	Oxyfluorfen	5.20	Spike	P	0 - 24
2338663	Parathion Ethyl	3.26	Spike	P	0 - 28
2338663	Parathion Methyl	8.32	Spike	P	0 - 27
2338663	PBDE-47	2.59	Spike	P	0 - 30
2338663	PBDE-99	2.43	Spike	P	0 - 30
2338663	Pendimethalin	2.58	Spike	P	0 - 31
2338663	Phenytoin	24.5	Spike	P	0 - 30
2338663	Phorate	6.61	Spike	P	0 - 27
2338663	Prodiamine	2.81	Spike	P	0 - 52
2338663	Prometon	1.04	Spike	P	0 - 31
2338663	Prometryn	5.65	Spike	P	0 - 28
2338663	Pronamide	2.58	Spike	P	0 - 26
2338663	Propanil	14.4	Spike	P	0 - 30
2338663	Propargite	13.1	Spike	P	0 - 30
2338663	Propiconazole	1.56	Spike	P	0 - 31
2338663	Pyraflufen Ethyl	1.15	Spike	P	0 - 30
2338663	Pyridaben	24.7	Spike	P	0 - 30
2338663	Pyriproxyfen	24.6	Spike	P	0 - 50
2338663	Simazine	8.85	Spike	P	0 - 29
2338663	Stirophos	4.21	Spike	P	0 - 30
2338663	Sulfentrazone	9.01	Spike	P	0 - 33
2338663	Tebuconazole	17.2	Spike	P	0 - 44
2338663	Terbufos	1.47	Spike	P	0 - 29
2338663	Terbuthylazine	3.00	Spike	P	0 - 27
2338663	Thiobencarb	3.51	Spike	P	0 - 30
2338663	Tri-o-cresyl Phosphate	4.74	Spike	P	0 - 30
2338663	Triadimefon	4.49	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P416118

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2339052	Chlordane	14.4	Spike	P	0 - 25
2339052	Toxaphene	4.27	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P415969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2337995	Acesulfame K	5.65	Spike	P	0 - 30
2337995	AMPA	6.52	Spike	P	0 - 30
2337995	Endothall	3.24	Spike	P	0 - 30
2337995	Glufosinate	20.7	Spike	P	0 - 30
2337995	Glyphosate	4.33	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P415969

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2337995	Sucralose	9.99	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P416027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2337583	3-Hydroxycarbofuran	8.50	Spike	P	0 - 30
2337583	Aldicarb	6.48	Spike	P	0 - 30
2337583	Aldicarb Sulfone	1.61	Spike	P	0 - 30
2337583	Aldicarb Sulfoxide	1.32	Spike	P	0 - 30
2337583	Carbaryl	6.27	Spike	P	0 - 30
2337583	Carbofuran	2.46	Spike	P	0 - 30
2337583	Methiocarb	8.90	Spike	P	0 - 30
2337583	Methomyl	1.57	Spike	P	0 - 30
2337583	Oxamyl	1.50	Spike	P	0 - 30
2337583	Propoxur	2.85	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P416117

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338388	2,4-D	19.6	Spike	P	0 - 30
2338388	2,4,5-T	3.02	Spike	P	0 - 30
2338388	Acetaminophen	0.113	Spike	P	0 - 30
2338388	Acetamiprid	7.82	Spike	P	0 - 30
2338388	Afidopyropen	3.78	Spike	P	0 - 30
2338388	Bentazon	6.96	Spike	P	0 - 30
2338388	Benzovindiflupyr	13.1	Spike	P	0 - 30
2338388	Carbamazepine	6.64	Spike	P	0 - 30
2338388	Clothianidin	10.1	Spike	P	0 - 30
2338388	Dinotefuran	3.21	Spike	P	0 - 30
2338388	Diuron	2.48	Spike	P	0 - 30
2338388	Fenuron	7.92	Spike	P	0 - 30
2338388	Fluridone	9.84	Spike	P	0 - 30
2338388	Hydrocodone	5.86	Spike	P	0 - 30
2338388	Ibuprofen	20.0	Spike	P	0 - 30
2338388	Imazapyr	16.9	Spike	P	0 - 30
2338388	Imidacloprid	6.43	Spike	P	0 - 30
2338388	Linuron	0.160	Spike	P	0 - 30
2338388	Mandestrobin	8.76	Spike	P	0 - 30
2338388	MCPP	6.21	Spike	P	0 - 30
2338388	Naproxen	9.06	Spike	P	0 - 30
2338388	Primidone	8.28	Spike	P	0 - 30
2338388	Pyraclostrobin	4.72	Spike	P	0 - 30
2338388	Silvex	21.1	Spike	P	0 - 30
2338388	Thiamethoxam	7.56	Spike	P	0 - 30
2338388	Tolfenpyrad	8.52	Spike	P	0 - 30
2338388	Triclopyr	4.57	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P416333

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338588	Total Alkalinity	0.862	Sample	P	0 - 3.8

Reference Method: SM 2320 B-2011
Batch ID: P416387

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2339553	Total Alkalinity	0.0629	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011
Batch ID: P416334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338588	Fluoride	0.999	Spike	P	0 - 1.6

Reference Method: SM 4500-F- C-2011
Batch ID: P416404

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2339553	Fluoride	0.480	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P416317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2338564	Organic Carbon	0.518	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P416469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340140	Organic Carbon	0.759	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2338657
Field Sample ID: G3SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	41.4	P	30 - 160

Lab Sample ID: 2338658
Field Sample ID: G3SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	79.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	69.5	P	30 - 160
EPA 8321B	Diuron-d6	51.3	P	30 - 160
EPA 8321B	Endothall-d6	133	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	76.4	P	30 - 160
EPA 8321B	Ibuprofen-d3	57.1	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	30 - 160

Lab Sample ID: 2338659
Field Sample ID: G3SE0019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	76.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	96.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.8	P	30 - 160
EPA 8321B	Diuron-d6	49.1	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	77.3	P	30 - 160
EPA 8321B	Primidone-d5	140	P	30 - 160
EPA 8321B	Sucralose-d6	96.8	P	30 - 160

Lab Sample ID: 2338660
Field Sample ID: G3SE0028

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	110	P	30 - 160
EPA 8321B	Carbamazepine-d10	89.5	P	30 - 160
EPA 8321B	Diuron-d6	60.8	P	30 - 160
EPA 8321B	Endothall-d6	73.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.7	P	30 - 160
EPA 8321B	Primidone-d5	139	P	30 - 160
EPA 8321B	Sucralose-d6	89.1	P	30 - 160

Lab Sample ID: 2338661
Field Sample ID: G4SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	104	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.9	P	30 - 160
EPA 8321B	Diuron-d6	62.1	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2338661
Field Sample ID: G4SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Endothall-d6	76.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	76.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.9	P	30 - 160
EPA 8321B	Primidone-d5	130	P	30 - 160
EPA 8321B	Sucralose-d6	95.0	P	30 - 160

Lab Sample ID: 2338662
Field Sample ID: G3SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	96.4	P	29 - 130
EPA 8270E	Decachlorobiphenyl	52.8	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	62.8	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	59.9	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	76.0	P	30 - 101
EPA 8276	PCNB	105	P	48 - 121

Lab Sample ID: 2338663
Field Sample ID: G3SE0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	65.0	P	20 - 200
EPA 8270E	Simazine-d10	96.2	P	71 - 140
EPA 8270E	Terbufos-d10	97.9	P	62 - 131
EPA 8270E	Terphenyl-d14	101	P	52 - 141

Lab Sample ID: 2338664
Field Sample ID: G3SE0028

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.0	P	20 - 200
EPA 8270E	Simazine-d10	98.4	P	71 - 140
EPA 8270E	Terbufos-d10	108	P	62 - 131
EPA 8270E	Terphenyl-d14	86.6	P	52 - 141

Lab Sample ID: 2338665
Field Sample ID: G4SE0146

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	52.8	P	20 - 200
EPA 8270E	Simazine-d10	95.2	P	71 - 140
EPA 8270E	Terbufos-d10	100	P	62 - 131
EPA 8270E	Terphenyl-d14	86.0	P	52 - 141

Lab Sample ID: 2338666
Field Sample ID: G4SE0147

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	75.0	P	20 - 200
EPA 8270E	Simazine-d10	124	P	71 - 140
EPA 8270E	Terbufos-d10	115	P	62 - 131
EPA 8270E	Terphenyl-d14	87.5	P	52 - 141

Quality Assurance Report
Surrogates

Lab Sample ID: 2338667
Field Sample ID: G4SE0148

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	69.2	P	20 - 200
EPA 8270E	Simazine-d10	90.8	P	71 - 140
EPA 8270E	Terbufos-d10	106	P	62 - 131
EPA 8270E	Terphenyl-d14	97.3	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A113256
Included Lab Sample IDs: 2338657

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	98.5	P/P	60 - 150
Aldicarb	94.2	108	P/P	60 - 150
Aldicarb Sulfone	100	104	P/P	50 - 150
Aldicarb Sulfoxide	102	106	P/P	50 - 150
Carbaryl	107	98.6	P/P	60 - 150
Carbofuran	101	107	P/P	50 - 150
Methiocarb	107	102	P/P	50 - 150
Methomyl	99.3	101	P/P	50 - 150
Oxamyl	102	104	P/P	50 - 150
Propoxur	103	97.9	P/P	50 - 150

Reference Method: EPA 8321B
Run ID: A113263
Included Lab Sample IDs: 2338658, 2338659, 2338660, 2338661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	103	102	P/P	60 - 160
Sucralose	98.3	96.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A113269
Included Lab Sample IDs: 2338658, 2338659, 2338660, 2338661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.6	99.9	P/P	60 - 160
AMPA	97.4	94.6	P/P	60 - 160
Endothall	85.7	85.8	P/P	60 - 160
Glufosinate	63.8	68.3	P/P	60 - 160
Glufosinate	67.9	63.8	P/P	60 - 160
Glyphosate	88.0	90.6	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A113284
Included Lab Sample IDs: 2338668, 2338670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	96.2	96.8	P/P	95 - 105
Calcium	98.0	97.8	P/P	90 - 110
Iron	96.4	100	P/P	90 - 110
Iron	97.2	90.8	P/P	95 - 105
Magnesium	96.5	93.3	P/P	95 - 105
Magnesium	96.8	99.2	P/P	90 - 110
Strontium	103	104	P/P	95 - 105
Strontium	103	103	P/P	90 - 110
Tin	102	104	P/P	95 - 105
Titanium	101	102	P/P	95 - 105
Titanium	104	103	P/P	90 - 110
Vanadium	101	104	P/P	95 - 105
Vanadium	104	105	P/P	90 - 110
Zinc	101	103	P/P	95 - 105
Zinc	105	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A113301
Included Lab Sample IDs: 2338658, 2338659, 2338660, 2338661

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	106	P/P	50 - 150
2,4,5-T	110	115	P/P	50 - 150
Acetaminophen	106	105	P/P	60 - 160
Acetamiprid	109	114	P/P	50 - 150
Afidopyropen	107	108	P/P	50 - 150
Bentazon	109	100	P/P	50 - 160
Bentazon	99.8	101	P/P	50 - 160
Benzovindiflupyr	106	99.5	P/P	50 - 150
Carbamazepine	108	108	P/P	60 - 150
Clothianidin	111	94.5	P/P	60 - 150
Dinotefuran	105	113	P/P	50 - 150
Diuron	112	122	P/P	60 - 160
Fenuron	105	106	P/P	60 - 150
Fluridone	110	113	P/P	60 - 160
Hydrocodone	103	104	P/P	60 - 150
Ibuprofen	96.5	127	P/P	50 - 160
Imazapyr	110	99.1	P/P	50 - 150
Imidacloprid	99.1	94.7	P/P	60 - 150
Linuron	109	95.1	P/P	60 - 150
Mandestrobin	108	109	P/P	50 - 150
MCPP	112	111	P/P	50 - 150
Naproxen	124	109	P/P	50 - 160
Primidone	106	99.9	P/P	60 - 150
Pyraclostrobin	108	109	P/P	60 - 150
Silvex	87.2	100	P/P	50 - 150
Thiamethoxam	104	109	P/P	50 - 150
Tolfenpyrad	91.5	92.2	P/P	60 - 150
Triclopyr	99.6	97.9	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A113322
Included Lab Sample IDs: 2338668, 2338670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.7	99.9	P/P	90 - 110
Aluminum	98.2	98.2	P/P	90 - 110
Antimony	102	101	P/P	90 - 110
Antimony	97.0	99.2	P/P	90 - 110
Arsenic	100	101	P/P	90 - 110
Arsenic	99.4	101	P/P	90 - 110
Beryllium	92.7	94.1	P/P	90 - 110
Beryllium	96.4	95.6	P/P	90 - 110
Cadmium	102	100	P/P	90 - 110
Cadmium	98.3	99.7	P/P	90 - 110
Chromium	93.5	96.8	P/P	90 - 110
Chromium	96.9	99.5	P/P	90 - 110
Cobalt	95.7	97.5	P/P	90 - 110
Cobalt	98.0	99.7	P/P	90 - 110
Copper	96.4	97.8	P/P	90 - 110
Copper	98.1	101	P/P	90 - 110
Lead	94.4	95.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A113322
Included Lab Sample IDs: 2338668, 2338670

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	96.0	95.5	P/P	90 - 110
Manganese	92.9	96.6	P/P	90 - 110
Manganese	98.1	101	P/P	90 - 110
Molybdenum	98.5	98.0	P/P	90 - 110
Molybdenum	99.3	99.5	P/P	90 - 110
Nickel	95.7	97.2	P/P	90 - 110
Nickel	98.2	100	P/P	90 - 110
Selenium	96.3	97.9	P/P	90 - 110
Selenium	98.6	99.7	P/P	90 - 110
Silver	98.4	98.5	P/P	90 - 110
Silver	99.0	98.0	P/P	90 - 110
Thallium	95.4	96.5	P/P	90 - 110
Thallium	96.4	93.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A113332
Included Lab Sample IDs: 2338619, 2338621

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.7	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A113336
Included Lab Sample IDs: 2338619, 2338621, 2338623

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A113349
Included Lab Sample IDs: 2338668

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tin	97.6	97.1	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A113363
Included Lab Sample IDs: 2338619, 2338625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.6	98.8	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A113368
Included Lab Sample IDs: 2338620, 2338622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.8	100	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: SM 4500-F- C-2011
Run ID: A113368
Included Lab Sample IDs: 2338620, 2338622

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	105	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A113377
Included Lab Sample IDs: 2338623, 2338625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.4	97.8	P/P	90 - 110
Ammonia-N	99.3	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A113381
Included Lab Sample IDs: 2338621, 2338625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	104	P/P	90 - 110
Total-P	102	102	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A113396
Included Lab Sample IDs: 2338662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	104		P	80 - 120
PCB-1260	98.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A113402
Included Lab Sample IDs: 2338662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.8		P	80 - 120
Alpha-BHC	97.0		P	80 - 120
Alpha-Chlordane	99.5		P	80 - 120
Beta-BHC	98.6		P	80 - 120
Beta-Cyfluthrin	106		P	80 - 120
Bifenthrin	92.3		P	80 - 120
Chlorothalonil	99.9		P	80 - 120
Cis-Nonachlor	96.7		P	80 - 120
Cypermethrin	97.6		P	80 - 120
Dacthal	99.2		P	80 - 120
DDD-p,p'	94.4		P	80 - 120
DDE-p,p'	97.5		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	95.6		P	80 - 120
Deltamethrin	102		P	80 - 120
Dichlobenil	86.9		P	80 - 120
Dicofol	99.7		P	80 - 120
Dieldrin	97.7		P	80 - 120
Endosulfan I	101		P	80 - 120
Endosulfan II	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A113402
Included Lab Sample IDs: 2338662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endosulfan Sulfate	105		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	110		P	80 - 120
Endrin Ketone	98.8		P	80 - 120
Esfenvalerate	107		P	80 - 120
Ethalfluralin	103		P	80 - 120
Fenpropathrin	102		P	80 - 120
Gamma-BHC	103		P	80 - 120
Gamma-Chlordane	99.9		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	95.0		P	80 - 120
Hexachlorobenzene	95.8		P	80 - 120
Kepone	115		P	80 - 120
Lambda-Cyhalothrin	98.0		P	80 - 120
Methoprene	102		P	80 - 120
Methoxychlor	93.7		P	80 - 120
MGK-264	92.9		P	80 - 120
Mirex	97.0		P	80 - 120
Oxychlordane	97.2		P	80 - 120
Permethrin	98.4		P	80 - 120
Phenothrin	99.2		P	80 - 120
Piperonyl Butoxide	86.9		P	80 - 120
Prallethrin	103		P	80 - 120
Tau-Fluvalinate	107		P	80 - 120
Tetramethrin	92.2		P	80 - 120
Trans-Nonachlor	99.7		P	80 - 120
Triclosan Methyl	101		P	80 - 120
Trifluralin	92.6		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A113406
Included Lab Sample IDs: 2338618, 2338624

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.3	101	P/P	90 - 110
Total Alkalinity	99.1	98.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A113406
Included Lab Sample IDs: 2338618, 2338624

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A113414
Included Lab Sample IDs: 2338621, 2338623

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	99.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A113422
Included Lab Sample IDs: 2338619, 2338623

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

Reference Method: SM 5310 B-2011
Run ID: A113430
Included Lab Sample IDs: 2338621, 2338623

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.8	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A113433
Included Lab Sample IDs: 2338625

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A113451
Included Lab Sample IDs: 2338669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	101	P/P	90 - 110
Antimony	98.9	97.9	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Beryllium	96.8	94.7	P/P	90 - 110
Cadmium	98.6	97.3	P/P	90 - 110
Cobalt	105	105	P/P	90 - 110
Copper	102	103	P/P	90 - 110
Lead	96.5	95.4	P/P	90 - 110
Manganese	101	101	P/P	90 - 110
Molybdenum	98.3	97.2	P/P	90 - 110
Nickel	103	103	P/P	90 - 110
Selenium	99.6	100	P/P	90 - 110
Silver	102	101	P/P	90 - 110
Thallium	98.0	96.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A113473
Included Lab Sample IDs: 2338619

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A113483
Included Lab Sample IDs: 2338663, 2338664, 2338665, 2338666, 2338667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.5		P	80 - 120
Alachlor	88.7		P	80 - 120
Ametryn	99.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A113483
Included Lab Sample IDs: 2338663, 2338664, 2338665, 2338666, 2338667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	104		P	80 - 120
Atrazine Desethyl	88.6		P	80 - 120
Azinphos Methyl	104		P	80 - 120
Bromacil	92.6		P	80 - 120
Butylate	94.4		P	80 - 120
Caffeine	112		P	80 - 120
Carbophenothion	103		P	80 - 120
Carfentrazone Ethyl	92.7		P	80 - 120
Chlorfenapyr	102		P	80 - 120
Chlorpyrifos Ethyl	106		P	80 - 120
Chlorpyrifos Methyl	109		P	80 - 120
Coumaphos	102		P	80 - 120
Cyanazine	89.3		P	80 - 120
Cyprodinil	94.6		P	80 - 120
Demeton	99.9		P	80 - 120
Diazinon	92.5		P	80 - 120
Difenoconazole	90.5		P	80 - 120
Dimethenamid	98.0		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	94.8		P	80 - 120
EPTC	98.1		P	80 - 120
Ethion	106		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	89.6		P	80 - 120
Fenamiphos	105		P	80 - 120
Fenbuconazole	91.1		P	80 - 120
Fipronil	94.3		P	80 - 120
Fipronil Desulfinyl	91.0		P	80 - 120
Fipronil Sulfide	81.5		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	101		P	80 - 120
Fludioxonil	99.7		P	80 - 120
Flumioxazin	85.6		P	80 - 120
Flutolanil	103		P	80 - 120
Fluxapyroxad	96.6		P	80 - 120
Fonofos	105		P	80 - 120
Hexazinone	107		P	80 - 120
Imazalil	91.6		P	80 - 120
Iprodione	92.9		P	80 - 120
Loratadine	91.3		P	80 - 120
Malathion	104		P	80 - 120
Metalaxyl	96.3		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	106		P	80 - 120
Mevinphos	106		P	80 - 120
Molinate	97.6		P	80 - 120
Myclobutanil	99.0		P	80 - 120
Naled	99.6		P	80 - 120
Napropamide	95.2		P	80 - 120
Norflurazon	98.3		P	80 - 120
Oxadiazon	100		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A113483
Included Lab Sample IDs: 2338663, 2338664, 2338665, 2338666, 2338667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxyfluorfen	91.0		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	107		P	80 - 120
Pendimethalin	105		P	80 - 120
Phenytoin	92.4		P	80 - 120
Phorate	106		P	80 - 120
Prodiamine	92.8		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	93.3		P	80 - 120
Pronamide	101		P	80 - 120
Propanil	111		P	80 - 120
Propargite	92.3		P	80 - 120
Propiconazole	101		P	80 - 120
Pyraflufen Ethyl	91.5		P	80 - 120
Pyridaben	98.0		P	80 - 120
Pyriproxyfen	94.3		P	80 - 120
Simazine	105		P	80 - 120
Stirophos	106		P	80 - 120
Sulfentrazone	96.0		P	80 - 120
Tebuconazole	100		P	80 - 120
Terbufos	106		P	80 - 120
Terbuthylazine	100		P	80 - 120
Thiobencarb	95.0		P	80 - 120
Triadimefon	93.4		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A113493
Included Lab Sample IDs: 2338625

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A113496
Included Lab Sample IDs: 2338669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	99.3	95.0	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A113500
Included Lab Sample IDs: 2338662

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.8		P	80 - 120
Toxaphene	99.9		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A113506
Included Lab Sample IDs: 2338663, 2338664, 2338665, 2338666, 2338667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	96.2		P	80 - 120
Avobenzone	101		P	80 - 120
Octinoxate	96.6		P	80 - 120
Oxybenzone	101		P	80 - 120
PBDE-47	98.9		P	80 - 120
PBDE-99	101		P	80 - 120
Tri-o-cresyl Phosphate	99.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A113523
Included Lab Sample IDs: 2338663

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	99.4		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A113542
Included Lab Sample IDs: 2338669

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	97.3	95.3	P/P	90 - 110
Iron	100	97.8	P/P	90 - 110
Magnesium	99.1	95.9	P/P	90 - 110
Strontium	105	107	P/P	90 - 110
Tin	98.0	99.2	P/P	90 - 110
Titanium	100	102	P/P	90 - 110
Vanadium	99.1	102	P/P	90 - 110
Zinc	96.5	96.4	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A113543
Included Lab Sample IDs: 2338663, 2338664, 2338665, 2338666, 2338667

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azoxystrobin	100		P	80 - 120
Dimethomorph	95.9		P	80 - 120

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision		
						LCS	SMP	MS
EPA 200.7 Rev. 4.4	Calcium	102	101	100	101			0.454
	Calcium	98.1						1.93
	Iron	92.2	99.8	102	102			0.339
	Iron	100	97.8	101				3.47
	Magnesium	94.4	101	102	101			0.815
	Magnesium	95.7						1.13
	Strontium	103	105	105	105			0.207
	Strontium	106						3.75
	Tin	106	108	107	104			3.39
	Tin	99.5	97.2	95.1				2.26
	Titanium	106	96.3	107	107			0.261
	Titanium	102	109	108				0.297
	Vanadium	104	107	106	106			0.225
	Vanadium	101	101	103				2.28
	Zinc	103	107	106	103			2.95
	Zinc	95.2	92.4	94.1				1.79
EPA 200.8 Rev. 5.4	Aluminum	97.6	99.3	99.2	99.7			0.114
	Aluminum	98.3	107	106				0.982
	Antimony	99.1	101	101	99.9			0.366
	Antimony	99.1	95.4	96.2				0.873
	Arsenic	98.3	99.0	99.7	99.6			0.718
	Arsenic	97.9	102	103				1.06
	Beryllium	91.8	94.3	87.9	95.2			0.870
	Beryllium	85.2	90.0	90.5				0.587
	Cadmium	95.5	96.8	97.3	99.6			0.483
	Cadmium	95.0	88.7	88.9				0.168
	Chromium	93.8	96.9	96.1	96.7			0.796
	Chromium	93.6	87.3	84.6				3.12
	Cobalt	94.8	96.4	96.1	96.4			0.345
	Cobalt	98.5	101	105				3.58
	Copper	94.4	96.6	96.1	97.5			0.533
	Copper	93.8	104	108				3.79
	Lead	94.8	95.9	96.3	96.3			0.348
	Lead	95.8	92.9	94.6				1.83
	Manganese	94.1	96.1	95.1	97.2			0.919
	Manganese	97.3	83.7	88.8				3.16
	Molybdenum	97.9	98.5	99.1	97.9			0.532
	Molybdenum	95.9	98.8	101				1.96
	Nickel	96.1	97.0	95.4	97.2			1.61
	Nickel	97.0	99.6	103				3.05
	Selenium	94.1	95.8	95.5	93.3			0.316
	Selenium	94.2	99.8	101				1.18
	Silver	97.2	95.8	95.6	96.2			0.236
	Silver	99.5	88.3	88.6				0.272
	Thallium	95.0	97.1	99.5	98.7			2.45
	Thallium	98.6	95.4	99.3				3.94
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	99.2	97.0				2.12
	Ammonia-N	95.2	96.4	96.0				0.399
	Ammonia-N	96.0	97.8	99.6				1.82
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	98.2	103				4.12
	Kjeldahl Nitrogen	102	100	102				0.751
EPA 353.2 Rev. 2.0	NO2NO3-N	100	101	100				0.922
	NO2NO3-N	99.0	98.0	100				2.02
	NO2NO3-N	104	99.0	102				1.37

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 365.1 Rev. 2.0	Total-P	102	92.2	92.1			0.100
	Total-P	101	103	105			2.39
	Total-P	103	100	101			0.297
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.4	89.1	87.2			2.15
	Acetochlor	92.9	89.5	86.8			3.11
	Alachlor	81.1	76.6	71.2			7.27
	Aldrin	62.1	53.5	54.9			2.54
	Alpha-BHC	97.9	91.0	94.3			3.59
	Alpha-Chlordane	91.2	76.7	78.2			1.83
	Ametryn	84.2	63.6	70.1			4.28
	Atrazine	91.7					2.98
	Atrazine Desethyl	94.1	78.2	76.9			0.941
	Avobenzone	95.5	91.7	100			8.94
	Azinphos Methyl	129	111	113			1.40
	Azoxystrobin	113					9.77
	Beta-BHC	121	113	109			3.28
	Beta-Cyfluthrin	80.1	72.1	64.1			11.8
	Bifenthrin	54.0	50.0	37.9			27.3
	Bromacil	81.4	80.9	75.5			6.96
	Butylate	49.0	41.2	57.2			26.0
	Caffeine	78.7	93.8	85.7			8.78
	Carbophenothion	82.4	72.4	68.8			5.12
	Carfentrazone Ethyl	95.7	82.0	73.4			11.1
	Chlorfenapyr	75.6	62.7	66.9			6.45
	Chlorothalonil	94.0	118	125			5.47
	Chlorpyrifos Ethyl	77.5	67.6	67.4			0.302
	Chlorpyrifos Methyl	93.7	86.1	84.6			1.71
	Cis-Nonachlor	67.2	61.8	56.2			9.40
	Coumaphos	86.7	69.0	66.6			3.50
	Cyanazine	97.3	80.6	83.2			3.19
	Cypermethrin	77.0	70.1	63.4			10.0
	Cyprodinil	90.7	86.4	83.1			3.13
	Dacthal	112	99.0	102			3.04
	DDD-p,p'	65.9	59.0	55.2			6.60
	DDE-p,p'	85.4	74.6	77.3			3.52
	DDT-p,p'	76.0	74.3	70.0			5.97
	Delta-BHC	133	121	123			1.47
	Deltamethrin	83.0	79.6	69.1			14.1
	Demeton	96.3	98.7	99.4			0.768
	Diazinon	90.8	92.5	93.6			1.17
	Dichlobenil	101	86.2	88.4			2.62
	Dicofol	78.8	74.1	74.2			0.0659
	Dieldrin	94.0	80.2	82.9			3.25
	Difenoconazole	110	117	106			10.2
	Dimethenamid	76.7					7.59
	Dimethomorph	112	97.8	137			31.8
	Disulfoton	79.3	92.9	80.8			13.9
	Dithiopyr	84.9	41.4	44.3			5.11
	Endosulfan I	98.9	88.5	87.8			0.774
	Endosulfan II	76.4	68.3	65.2			4.75
	Endosulfan Sulfate	102	85.3	86.4			1.33
	Endrin	73.6	72.7	66.3			9.14

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Endrin Aldehyde	100	66.1	68.8			4.00
	Endrin Ketone	98.5	92.7	89.6			3.45
	EPTC	46.8	68.0	84.1			21.2
	Esfenvalerate	73.8	73.7	60.8			19.1
	Ethalfluralin	78.6	75.2	73.2			2.64
	Ethion	66.6	64.9	51.8			22.5
	Ethoprop	88.2	102	99.9			2.31
	Etridiazole	50.9	51.4	52.5			2.14
	Fenamiphos	80.0	63.4	70.9			11.2
	Fenbuconazole	83.1	73.2	71.0			3.15
	Fenpropathrin	75.6	63.3	60.7			4.09
	Fipronil	88.3	84.0	83.9			0.0365
	Fipronil Desulfinyl	92.8	75.9	80.4			5.07
	Fipronil Sulfide	84.9	87.9	88.6			0.891
	Fipronil Sulfone	71.1	62.3	58.7			4.38
	Fluazifop-P-butyl	97.8	84.0	88.8			5.62
	Fludioxonil	87.4	78.0	77.0			1.04
	Flumioxazin	112	121	112			7.83
	Flutolanil	111					1.43
	Fluxapyroxad	92.0					4.99
	Fonofos	80.3	91.3	86.0			5.91
	Gamma-BHC	112	105	108			2.74
	Gamma-Chlordane	84.7	75.5	75.6			0.201
	Heptachlor	72.7	69.1	69.1			0.0384
	Heptachlor Epoxide	93.3	84.0	87.3			3.83
	Hexachlorobenzene	72.4	72.5	68.6			5.51
	Hexazinone	89.6	102	86.7			8.96
	Imazalil	64.8	144	152			5.75
	Iprodione	88.6	79.4	75.5			4.92
	Kepone	76.7	64.6	70.3			8.37
	Lambda-Cyhalothrin	62.3	56.4	48.0			16.1
	Loratadine	115	115	109			5.04
	Malathion	81.8	74.7	73.9			1.15
	Metalaxyl	85.8	65.9	67.5			2.08
	Methoprene	68.9	52.8	46.5			12.7
	Methoxychlor	88.5	81.9	81.5			0.482
	Metolachlor	93.0					0.759
	Metribuzin	101	109	113			3.37
	Mevinphos	93.4	103	106			2.91
	MGK-264	104	81.4	91.1			11.3
	Mirex	53.4	48.0	46.4			3.24
	Molinate	64.2	60.7	67.3			10.3
	Myclobutanil	86.6	82.7	79.7			2.99
	Naled	75.6	69.1	77.9			12.0
	Napropamide	75.9	70.7	61.9			11.1
	Norflurazon	99.4	83.3	86.9			4.23
	Octinoxate	83.5	79.6	83.6			4.85
	Oxadiazon	83.7					0.201
	Oxybenzone	80.0	70.6	79.8			12.1
	Oxychlordane	86.6	77.5	82.2			5.97
	Oxyfluorfen	103	99.5	94.5			5.20
	Parathion Ethyl	89.1	80.7	83.3			3.26
	Parathion Methyl	129	136	125			8.32
	PBDE-47	85.4	81.4	83.5			2.59

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	PBDE-99	85.8	79.2	77.3			2.43
	PCB-1016	81.4	89.8	95.4			6.09
	PCB-1260	87.8	86.1	89.5			3.82
	Pendimethalin	90.1	113	110			2.58
	Permethrin	71.8	69.1	59.0			15.8
	Phenothrin	61.6	56.0	44.7			22.5
	Phenytoin	40.8	38.4	30.0			24.5
	Phorate	69.0	79.8	74.7			6.61
	Piperonyl Butoxide	139	123	131			6.43
	Prallethrin	106	79.2	84.6			6.50
	Prodiamine	33.7	50.4	49.0			2.81
	Prometon	75.8	74.4	73.7			1.04
	Prometryn	90.3	55.4	58.7			5.65
	Pronamide	96.0	85.8	83.6			2.58
	Propanil	126	121	139			14.4
	Propargite	73.2	72.9	63.9			13.1
	Propiconazole	103					1.56
	Pyraflufen Ethyl	81.0	72.6	71.7			1.15
	Pyridaben	79.6	92.2	71.9			24.7
	Pyriproxyfen	88.6	85.3	66.6			24.6
	Simazine	99.5	83.9	91.7			8.85
	Stirophos	71.3	21.4	20.5			4.21
	Sulfentrazone	101	89.6	76.7			9.01
	Tau-Fluvalinate	71.6	74.4	58.7			23.6
	Tebuconazole	73.0	70.9	57.6			17.2
	Terbufos	98.0	102	104			1.47
	Terbuthylazine	85.5	80.4	82.8			3.00
	Tetramethrin	100	83.7	83.2			0.620
	Thiobencarb	81.6	66.5	68.9			3.51
	Trans-Nonachlor	86.9	72.4	75.7			4.34
	Tri-o-cresyl Phosphate	89.2	80.2	76.5			4.74
	Triadimefon	81.4	74.2	71.0			4.49
	Triclosan Methyl	101	88.1	88.3			0.188
	Trifluralin	75.5	73.0	70.5			3.48
EPA 8276	Chlordane	99.0	87.4	101			14.4
	Toxaphene	86.2	103	107			4.27
EPA 8321B	2,4-D	82.6	79.1	96.3			19.6
	2,4,5-T	50.0	56.8	58.6			3.02
	3-Hydroxycarbofuran	75.6	91.6	84.1			8.50
	Acesulfame K	90.0	70.7	74.9			5.65
	Acetaminophen	93.8	92.5	92.6			0.113
	Acetamiprid	109	92.7	100			7.82
	Afidopyropen	59.1	65.7	68.2			3.78
	Aldicarb	59.0	50.1	46.9			6.48
	Aldicarb Sulfone	91.1	103	104			1.61
	Aldicarb Sulfoxide	90.3	49.4	48.8			1.32
	AMPA	91.3	37.3	43.6			6.52
	Bentazon	54.3	51.8	55.5			6.96
	Benzovindiflupyr	87.6	89.5	102			13.1
	Carbamazepine	84.8	82.7	88.4			6.64
	Carbaryl	61.0	49.0	46.0			6.27
	Carbofuran	63.6	53.1	54.4			2.46
	Clothianidin	90.4	99.9	111			10.1
	Dinotefuran	108	128	132			3.21

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Diuron	63.5	66.7	65.1			2.48
	Endothall	96.3	117	121			3.24
	Fenuron	99.0	97.3	105			7.92
	Fluridone	82.0	81.8	90.2			9.84
	Glufosinate	82.5	25.5	20.7			20.7
	Glyphosate	91.0	39.8	45.5			4.33
	Hydrocodone	94.8	101	107			5.86
	Ibuprofen	66.9	71.8	87.8			20.0
	Imazapyr	114	95.0	112			16.9
	Imidacloprid	158	164	175			6.43
	Linuron	63.0	76.4	76.2			0.160
	Mandestrobin	82.6	87.0	95.0			8.76
	MCPP	80.4	86.1	91.6			6.21
	Methiocarb	72.7	58.1	63.5			8.90
	Methomyl	80.9	74.6	73.4			1.57
	Naproxen	59.7	74.4	67.9			9.06
	Oxamyl	86.5	82.1	80.9			1.50
	Primidone	99.8	121	111			8.28
	Propoxur	60.6	52.4	53.9			2.85
	Pyraclostrobin	83.5	91.0	95.4			4.72
	Silvex	58.2	51.0	63.0			21.1
	Sucralose	90.3	81.6	90.6			9.99
	Thiamethoxam	106	116	126			7.56
	Tolfenpyrad	39.0	50.8	55.3			8.52
	Triclopyr	60.5	65.0	68.0			4.57
SM 2320 B-2011	Total Alkalinity	99.4				0.862	
	Total Alkalinity	101				0.0629	
SM 4500-F- C-2011	Fluoride	101	97.2	98.9			0.999
	Fluoride	102	104	103			0.480
SM 5310 B-2011	Organic Carbon	95.1	97.6	98.4			0.518
	Organic Carbon	98.4	87.5	88.4			0.759

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2338668, 2338669, 2338670
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2338668, 2338669, 2338670
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2338619, 2338621, 2338623, 2338625
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2338619, 2338621, 2338623, 2338625
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2338619, 2338621, 2338623, 2338625
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2338619, 2338621, 2338623, 2338625
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2338663, 2338664, 2338665, 2338666, 2338667
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2338662
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2338663, 2338664, 2338665, 2338666, 2338667
EPA 8270E	PCBs in water matrices by GC/MS/MS	2338662
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2338662
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2338657
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2338658, 2338659, 2338660, 2338661
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2338618, 2338620, 2338622, 2338624

Reference Method Descriptions

Method	Description	Associated Samples
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2338618, 2338620, 2338622, 2338624
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2338618, 2338620, 2338622, 2338624
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2338619, 2338621, 2338623, 2338625

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/05/2022 15:34	McKinley C Carter	2338670
	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/05/2022 20:20	McKinley C Carter	2338668
	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/05/2022 20:28	McKinley C Carter	2338668
	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/07/2022 21:33	McKinley C Carter	2338668
	07/01/2022	07/12/2022 09:24	Mackenzie Hunt	07/16/2022 01:14	McKinley C Carter	2338669
	07/01/2022	07/12/2022 09:24	Mackenzie Hunt	07/16/2022 01:26	McKinley C Carter	2338669
EPA 200.8 Rev. 5.4	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/06/2022 17:25	Emily M Philpot	2338670
	07/01/2022	07/05/2022 09:16	Mackenzie Hunt	07/06/2022 21:37	Emily M Philpot	2338668
	07/01/2022	07/12/2022 09:24	Mackenzie Hunt	07/12/2022 23:43	Emily M Philpot	2338669
	07/01/2022	07/12/2022 09:24	Mackenzie Hunt	07/13/2022 12:50	Alexander Thompson	2338669
EPA 350.1 Rev. 2.0	07/01/2022			07/07/2022 12:46	Ping Hua	2338619
	07/01/2022			07/07/2022 12:48	Ping Hua	2338621
	07/01/2022			07/08/2022 11:21	Ping Hua	2338625
	07/01/2022			07/08/2022 12:29	Ping Hua	2338623
EPA 351.2 Rev. 2.0	07/01/2022	07/06/2022 09:21	Simonne.V. Calhoun	07/07/2022 13:25	Alexandra J Mattheus	2338619
	07/01/2022	07/06/2022 09:21	Simonne.V. Calhoun	07/07/2022 13:27	Alexandra J Mattheus	2338621
	07/01/2022	07/06/2022 09:21	Simonne.V. Calhoun	07/07/2022 13:35	Alexandra J Mattheus	2338623
	07/01/2022	07/12/2022 14:00	Simonne.V. Calhoun	07/13/2022 15:47	Alexandra J Mattheus	2338625
EPA 353.2 Rev. 2.0	07/01/2022			07/11/2022 09:48	Beverly Y. Sanders	2338621
	07/01/2022			07/11/2022 09:49	Beverly Y. Sanders	2338623
	07/01/2022			07/12/2022 11:08	Judith K. Clark	2338625
	07/01/2022			07/13/2022 12:32	Judith K. Clark	2338619
EPA 365.1 Rev. 2.0	07/01/2022	07/07/2022 16:00	Simonne.V. Calhoun	07/08/2022 13:17	Simonne.V. Calhoun	2338621
	07/01/2022	07/07/2022 16:00	Simonne.V. Calhoun	07/08/2022 13:47	Simonne.V. Calhoun	2338625
	07/01/2022	07/08/2022 17:39	Adam P Silver	07/11/2022 16:32	Simonne.V. Calhoun	2338619
	07/01/2022	07/08/2022 17:39	Adam P Silver	07/11/2022 16:33	Simonne.V. Calhoun	2338623
EPA 8270E	07/01/2022	07/07/2022 08:00	Fe-Val Siddell	07/09/2022 04:24	Arthur Maknenko	2338662
	07/01/2022	07/07/2022 08:00	Fe-Val Siddell	07/10/2022 03:41	Michael Poppell	2338662
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/09/2022 19:43	Michael Poppell	2338663
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/09/2022 21:02	Michael Poppell	2338664
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/09/2022 21:29	Michael Poppell	2338665
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/09/2022 21:55	Michael Poppell	2338666
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/09/2022 22:22	Michael Poppell	2338667
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/12/2022 16:38	Lipi Saha	2338663
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/12/2022 17:36	Lipi Saha	2338664
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/12/2022 17:55	Lipi Saha	2338665
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/12/2022 18:15	Lipi Saha	2338666
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/12/2022 18:34	Lipi Saha	2338667
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/14/2022 14:30	Michael Poppell	2338663
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/15/2022 16:49	Michael Poppell	2338663

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/15/2022 18:08	Michael Poppell	2338664
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/15/2022 18:34	Michael Poppell	2338665
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/15/2022 19:00	Michael Poppell	2338666
	07/01/2022	07/07/2022 08:00	Rasheda Ghaffari	07/15/2022 19:26	Michael Poppell	2338667
EPA 8276	07/01/2022	07/07/2022 08:00	Fe-Val Siddell	07/13/2022 14:09	Julie Wi	2338662
EPA 8321B	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 14:44	Umesh Chiluwal	2338658
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 14:59	Umesh Chiluwal	2338659
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 15:14	Umesh Chiluwal	2338660
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 15:29	Umesh Chiluwal	2338661
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 23:11	Umesh Chiluwal	2338658
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 23:24	Umesh Chiluwal	2338659
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 23:37	Umesh Chiluwal	2338660
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/01/2022 23:50	Umesh Chiluwal	2338661
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/02/2022 00:42	Umesh Chiluwal	2338660
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/02/2022 00:55	Umesh Chiluwal	2338661
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/02/2022 02:00	Umesh Chiluwal	2338658
	07/01/2022	07/01/2022 13:00	Umesh Chiluwal	07/02/2022 02:13	Umesh Chiluwal	2338659
	07/01/2022	07/01/2022 13:30	June Rhew	07/01/2022 19:14	Juyoung Kim	2338657
	07/01/2022	07/05/2022 09:00	June Rhew	07/05/2022 21:39	Juyoung Kim	2338658
	07/01/2022	07/05/2022 09:00	June Rhew	07/05/2022 21:59	Juyoung Kim	2338659
	07/01/2022	07/05/2022 09:00	June Rhew	07/05/2022 22:20	Juyoung Kim	2338660
	07/01/2022	07/05/2022 09:00	June Rhew	07/05/2022 22:41	Juyoung Kim	2338661
	07/01/2022	07/05/2022 09:00	June Rhew	07/06/2022 10:55	Juyoung Kim	2338659
SM 2320 B-2011	07/01/2022			07/07/2022 21:46	Dale L. Simmons	2338620
	07/01/2022			07/07/2022 22:00	Dale L. Simmons	2338622
	07/01/2022			07/09/2022 08:31	Dale L. Simmons	2338624
	07/01/2022			07/09/2022 12:33	Dale L. Simmons	2338618
SM 2540 D-2011	07/01/2022			07/05/2022 16:02	Yijie Li	2338618, 2338620, 2338622, 2338624
SM 4500-F- C-2011	07/01/2022			07/07/2022 20:07	Dale L. Simmons	2338620
	07/01/2022			07/07/2022 20:12	Dale L. Simmons	2338622
	07/01/2022			07/09/2022 08:31	Dale L. Simmons	2338624
	07/01/2022			07/09/2022 12:33	Dale L. Simmons	2338618
SM 5310 B-2011	07/01/2022			07/07/2022 19:22	Khloe J Berg	2338619
	07/01/2022			07/07/2022 19:36	Khloe J Berg	2338625
	07/01/2022			07/12/2022 00:27	Khloe J Berg	2338621
	07/01/2022			07/12/2022 00:42	Khloe J Berg	2338623