

Chemical Analysis Report

NE-DIST-2022-07-14-01

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

Event Description: **Moses Creek 2022**
Request ID: **RQ-2022-07-11-16**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant

Date Certified: 05-AUG-2022 09:39



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: Moses Creek at Preserve Dock

Collection Date/Time: 07/13/2022 09:45

Field ID: G5NE0004

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341571	EPA 180.1 Rev. 2.0	Turbidity	11		NTU	P416681	
	SM 2320 B-2011	Total Alkalinity	115		mg CaCO3/L	P417217	
	SM 2540 D-2011	TSS	17		mg/L	P417130	
	SM 4500-F- C-2011	Fluoride	0.91		mg F/L	P417220	
2341572	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P417321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P416824	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	I	mg N/L	P416859	
	EPA 365.1 Rev. 2.0	Total-P	0.099		mg P/L	P416884	
	SM 5310 B-2011	Organic Carbon	7.1		mg C/L	P417158	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: MOSES CR AT US 1

Collection Date/Time: 07/13/2022 13:10

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341582	EPA 8321B	Aldicarb	0.020	U	ug/L	P416888	
		Aldicarb Sulfone	0.0020	U	ug/L	P416888	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P416888	
		Carbaryl	0.0020	U	ug/L	P416888	
		Carbofuran	0.0020	U	ug/L	P416888	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P416888	
		Methiocarb	0.0020	U	ug/L	P416888	
		Methomyl	0.0020	U	ug/L	P416888	
		Oxamyl	0.0020	U	ug/L	P416888	
		Propoxur	0.0020	U	ug/L	P416888	
2341583		2,4-D	0.0091		ug/L	P416789	
		Acesulfame K	0.10	U	ug/L	P416590	
		2,4,5-T	0.0040	U	ug/L	P416789	
		AMPA	1.1		ug/L	P416590	
		Acetaminophen	0.0080	U	ug/L	P416789	
		Acetamiprid	0.0020	U	ug/L	P416789	
		Endothall	0.25	U	ug/L	P416590	
		Glufosinate	0.10	UJ	ug/L	P416590	LCS
		Glyphosate	0.56		ug/L	P416590	
		Afidopyropen	0.0020	U	ug/L	P416789	
		Bentazon	0.29		ug/L	P416789	
		Sucralose	0.036	I	ug/L	P416590	
		Benzovindiflupyr	0.0020	U	ug/L	P416789	
		Carbamazepine	8.0E-04	U	ug/L	P416789	
		Clothianidin	0.036		ug/L	P416789	
		Dinotefuran	0.0020	U	ug/L	P416789	
		Diuron	0.0020	U	ug/L	P416789	
		Fenuron	0.032	U	ug/L	P416789	
		Fluridone	0.0080		ug/L	P416789	
		Imazapyr	0.064		ug/L	P416789	
		Hydrocodone	0.0020	U	ug/L	P416789	
		Ibuprofen	0.080	U	ug/L	P416789	
		Imidacloprid	0.026		ug/L	P416789	MS
		Linuron	0.0040	U	ug/L	P416789	
		Mandestrobin	0.0020	U	ug/L	P416789	
		MCPP	0.0040	U	ug/L	P416789	
		Naproxen	0.0080	U	ug/L	P416789	
		Primidone	0.0040	U	ug/L	P416789	
		Pyraclostrobin	0.0020	U	ug/L	P416789	
		Silvex	0.0040	U	ug/L	P416789	
		Thiamethoxam	0.0020	U	ug/L	P416789	
		Tolfenpyrad	0.0020	U	ug/L	P416789	
		Triclopyr	0.0040	U	ug/L	P416789	
2341584	EPA 8270E	Aldrin	0.71	U	ng/L	P416790	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341584	EPA 8270E	Alpha-BHC	0.11	U	ng/L	P416790	
		Alpha-Chlordane	0.22	U	ng/L	P416790	
		PCB-1016	2.2	U	ng/L	P416790	
		Beta-BHC	0.11	U	ng/L	P416790	
		PCB-1221	2.2	U	ng/L	P416790	
		Beta-Cyfluthrin	1.4	U	ng/L	P416790	
		PCB-1232	2.2	U	ng/L	P416790	
		Bifenthrin	0.55	U	ng/L	P416790	
		PCB-1242	2.2	U	ng/L	P416790	
		PCB-1248	2.2	U	ng/L	P416790	
		Chlorothalonil	1.4	U	ng/L	P416790	
		PCB-1254	2.2	U	ng/L	P416790	
		Cis-Nonachlor	0.22	U	ng/L	P416790	
		PCB-1260	2.2	U	ng/L	P416790	
		Cypermethrin	1.6	U	ng/L	P416790	
		Dacthal	0.16	U	ng/L	P416790	
		DDD-p,p'	0.27	U	ng/L	P416790	
		DDE-p,p'	0.22	U	ng/L	P416790	
		DDT-p,p'	0.27	U	ng/L	P416790	
		Delta-BHC	0.44	U	ng/L	P416790	
		Deltamethrin	1.4	U	ng/L	P416790	
		Dichlobenil	0.27	U	ng/L	P416790	
		Dicofol	1.4	U	ng/L	P416790	
		Dieldrin	0.44	U	ng/L	P416790	
		Endosulfan I	0.44	U	ng/L	P416790	
		Endosulfan II	0.44	U	ng/L	P416790	
		Endosulfan Sulfate	0.33	U	ng/L	P416790	
		Endrin	0.44	U	ng/L	P416790	
		Endrin Aldehyde	0.82	U	ng/L	P416790	
		Endrin Ketone	0.44	U	ng/L	P416790	
		Esfenvalerate	0.82	U	ng/L	P416790	
		Ethalfuralin	0.16	U	ng/L	P416790	
		Fenpropathrin	0.27	U	ng/L	P416790	MS
		Gamma-BHC	0.14	U	ng/L	P416790	
		Gamma-Chlordane	0.22	U	ng/L	P416790	
		Heptachlor	0.22	U	ng/L	P416790	
		Heptachlor Epoxide	0.27	U	ng/L	P416790	
		Hexachlorobenzene**	1.1	U	ng/L	P416790	
		Kepone	5.5	UJ	ng/L	P416790	CCV
		Lambda-Cyhalothrin	0.82	U	ng/L	P416790	
		Methoprene	0.82	U	ng/L	P416790	
		Methoxychlor	0.33	U	ng/L	P416790	
		MGK-264	0.22	U	ng/L	P416790	
		Mirex	0.38	U	ng/L	P416790	
		Oxychlordane	0.33	U	ng/L	P416790	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341584	EPA 8270E	Permethrin	1.8	U	ng/L	P416790	
		Phenothrin	0.99	U	ng/L	P416790	
		Piperonyl Butoxide	0.16	U	ng/L	P416790	
		Prallethrin	2.2	U	ng/L	P416790	MS
		Tau-Fluvalinate	0.27	U	ng/L	P416790	MS
		Tetramethrin	0.82	U	ng/L	P416790	MS
		Trans-Nonachlor	0.22	U	ng/L	P416790	
		Triclosan Methyl	0.16	U	ng/L	P416790	
		Trifluralin	0.22	U	ng/L	P416790	
		Chlordane	2.7	U	ng/L	P416790	
2341585	EPA 8270E	Toxaphene	16	U	ng/L	P416790	
		Oxybenzone**	11	U	ng/L	P416814	
		Acetochlor	0.26	U	ng/L	P416814	
		Octinoxate**	21	U	ng/L	P416814	
		Alachlor	0.26	U	ng/L	P416814	
		Avobenzone**	110	U	ng/L	P416814	
		Ametryn	4.7		ng/L	P416814	
		Atrazine	200		ng/L	P416814	
		PBDE-47**	4.2	U	ng/L	P416814	
		Atrazine Desethyl	28		ng/L	P416814	
		PBDE-99**	5.3	U	ng/L	P416814	
		Azinphos Methyl	2.1	U	ng/L	P416814	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P416814	
		Azoxystrobin	1.8	I	ng/L	P416814	
		Bromacil	0.53	U	ng/L	P416814	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P416814	
		Butylate	0.42	U	ng/L	P416814	
		Caffeine**	21	I	ng/L	P416814	
		Carbophenothion	0.21	U	ng/L	P416814	
		Carfentrazone Ethyl	0.11	U	ng/L	P416814	
		Chlorfenapyr	0.18	U	ng/L	P416814	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P416814	
		Chlorpyrifos Methyl	0.053	U	ng/L	P416814	
		Coumaphos	0.53	U	ng/L	P416814	
		Cyanazine	3.4	U	ng/L	P416814	
		Cyprodinil	0.11	U	ng/L	P416814	
		Demeton	1.6	U	ng/L	P416814	
		Diazinon	0.13	U	ng/L	P416814	
		Difenoconazole	0.63	U	ng/L	P416814	
		Dimethenamid	0.11	U	ng/L	P416814	
		Dimethomorph	0.18	U	ng/L	P416814	
		Disulfoton	0.53	U	ng/L	P416814	
		Dithiopyr	0.50	I	ng/L	P416814	
		EPTC	1.3	U	ng/L	P416814	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341585	EPA 8270E	Ethion	0.16	U	ng/L	P416814	
		Ethoprop	0.11	U	ng/L	P416814	
		Etridiazole	0.16	U	ng/L	P416814	
		Fenamiphos	0.53	U	ng/L	P416814	
		Fenbuconazole	0.13	U	ng/L	P416814	
		Fipronil	0.46	I	ng/L	P416814	
		Fipronil DesulfinyI**	0.66		ng/L	P416814	
		Fipronil Sulfide	0.70		ng/L	P416814	
		Fipronil Sulfone	0.95		ng/L	P416814	
		Fluazifop-P-butyl	0.11	U	ng/L	P416814	
		Fludioxonil	0.13	U	ng/L	P416814	
		Flumioxazin	1.8	U	ng/L	P416814	
		Flutolanil	0.11	U	ng/L	P416814	
		Fluxapyroxad	0.11	U	ng/L	P416814	
		Fonofos	0.21	U	ng/L	P416814	
		Hexazinone	1.3	I	ng/L	P416814	
		Imazalil	0.79	U	ng/L	P416814	
		Iprodione	0.63	U	ng/L	P416814	
		Loratadine**	0.11	U	ng/L	P416814	
		Malathion	0.37	U	ng/L	P416814	
		Metalaxyl	4.1		ng/L	P416814	
		Metolachlor	2.7		ng/L	P416814	
		Metribuzin	2.6	U	ng/L	P416814	
		Mevinphos	1.1	U	ng/L	P416814	
		Molinate	0.32	U	ng/L	P416814	
		Myclobutanil	0.26	U	ng/L	P416814	
		Naled	1.6	U	ng/L	P416814	
		Napropamide	0.42	U	ng/L	P416814	
		Norflurazon	0.53	U	ng/L	P416814	
		Oxadiazon	0.57	I	ng/L	P416814	
		Oxyfluorfen	0.16	U	ng/L	P416814	
		Parathion Ethyl	0.26	U	ng/L	P416814	
		Parathion Methyl	0.58	U	ng/L	P416814	
		Pendimethalin	1.1	U	ng/L	P416814	
		Phenytol**	3.7	U	ng/L	P416814	MS
		Phorate	0.55	U	ng/L	P416814	
		Prodiamine	0.18	U	ng/L	P416814	
		Prometon	0.95	U	ng/L	P416814	
		Prometryn	0.21	U	ng/L	P416814	
		Pronamide	0.16	U	ng/L	P416814	
		Propanil	0.13	U	ng/L	P416814	
		Propargite	1.6	U	ng/L	P416814	
		Propiconazole	2.4		ng/L	P416814	
		Pyraflufen Ethyl	0.26	U	ng/L	P416814	
		Pyridaben	2.2	I	ng/L	P416814	

Field ID: 27010050

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341585	EPA 8270E	Pyriproxyfen	0.13	U	ng/L	P416814	
		Simazine	15		ng/L	P416814	
		Stirophos	0.13	U	ng/L	P416814	MS
		Sulfentrazone	3.0		ng/L	P416814	
		Tebuconazole	0.53	U	ng/L	P416814	
		Terbufos	0.11	U	ng/L	P416814	
		Terbuthylazine	0.45	U	ng/L	P416814	
		Thiobencarb	0.63	U	ng/L	P416814	
		Triadimefon	0.26	U	ng/L	P416814	

Ref. Method and Comment:

EPA 8321B: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

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

EPA 8270E: 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.

Sample Location: MOULTRIE CR @ US 1

Collection Date/Time: 07/13/2022 13:30

Field ID: 27010055

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2341573	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P416681	
	SM 2320 B-2011	Total Alkalinity	121		mg CaCO3/L	P417217	
	SM 2540 D-2011	TSS	20		mg/L	P417130	
	SM 4500-F- C-2011	Fluoride	0.90		mg F/L	P417220	
2341574	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P417321	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.70		mg N/L	P416894	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P416859	
	EPA 365.1 Rev. 2.0	Total-P	0.093		mg P/L	P416884	
	SM 5310 B-2011	Organic Carbon	6.5		mg C/L	P417158	
2341586	EPA 200.7 Rev. 4.4	Calcium	291		mg/L	P416947	
		Iron	300	I	ug/L	P416947	
		Magnesium	865		mg/L	P416947	
		Strontium	5.33E+03		ug/L	P416947	
		Tin	300	U	ug/L	P416947	
		Titanium	10.1		ug/L	P416947	
		Vanadium	6.0	U	ug/L	P416947	
		Zinc	15	U	ug/L	P416947	
	EPA 200.8 Rev. 5.4	Aluminum	270		ug/L	P416947	
		Antimony	0.20	U	ug/L	P416947	
		Arsenic	2.83		ug/L	P416947	
		Beryllium	0.040	U	ug/L	P416947	
		Cadmium	0.080	U	ug/L	P416947	
		Chromium	1.6	U	ug/L	P416947	
		Cobalt	0.25	I	ug/L	P416947	
		Copper	5.6		ug/L	P416947	
		Lead	0.80	U	ug/L	P416947	
		Manganese	35.8		ug/L	P416947	
		Molybdenum	7.3		ug/L	P416947	
		Nickel	2.0	U	ug/L	P416947	
		Selenium	0.80	U	ug/L	P416947	
		Silver	0.040	U	ug/L	P416947	
		Thallium	0.40	U	ug/L	P416947	

Ref. Method and Comment:

SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 07/26/2022.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P416681

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416947

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: P416947

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 350.1 Rev. 2.0
Batch ID: P417321

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416824

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416894

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

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Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P416859

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

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P416884

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

Reference Method: EPA 8270E

Batch ID: P416790

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
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

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Reference Method: EPA 8270E

Batch ID: P416790

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	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
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P416790

Component	Result	Code	Units
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: P416814

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
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P416814

Component	Result	Code	Units
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
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

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Reference Method: EPA 8270E
Batch ID: P416814

Component	Result	Code	Units
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
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
Phenytol	3.5	U	ng/L

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Method Blank Results

Reference Method: EPA 8270E

Batch ID: P416814

Component	Result	Code	Units
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276

Batch ID: P416790

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

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Reference Method: EPA 8321B

Batch ID: P416590

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: P416789

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P416888

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

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Reference Method: EPA 8321B
Batch ID: P416888

Component	Result	Code	Units
Propoxur	0.0020	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P417217

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

Reference Method: SM 2540 D-2011
Batch ID: P417130

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P417220

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P417158

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P416681

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	97.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	104		P	85 - 115
Magnesium	101		P	85 - 115
Strontium	106		P	85 - 115
Tin	102		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416947

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.0		P	85 - 115
Antimony	96.8		P	85 - 115
Arsenic	97.0		P	85 - 115
Beryllium	88.3		P	85 - 115
Cadmium	95.3		P	85 - 115
Chromium	95.7		P	85 - 115
Cobalt	98.6		P	85 - 115
Copper	96.0		P	85 - 115
Lead	99.9		P	85 - 115
Manganese	97.1		P	85 - 115
Molybdenum	95.9		P	85 - 115
Nickel	97.6		P	85 - 115
Selenium	94.6		P	85 - 115
Silver	100		P	85 - 115
Thallium	99.1		P	85 - 115

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417321

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416824

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416894

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P416859

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P416884

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

Reference Method: EPA 8270E

Batch ID: P416790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	51.5		P	10 - 92.0
Alpha-BHC	83.9		P	75 - 107
Alpha-Chlordane	75.5		P	50 - 108
Beta-BHC	94.0		P	36 - 138
Beta-Cyfluthrin	77.9		P	20 - 161
Bifenthrin	51.6		P	10 - 119
Chlorothalonil	93.9		P	26 - 186
Cis-Nonachlor	66.6		P	42 - 119
Cypermethrin	70.4		P	22 - 150
Dacthal	85.9		P	72 - 119
DDD-p,p'	69.0		P	45 - 107
DDE-p,p'	76.4		P	48 - 106
DDT-p,p'	73.0		P	48 - 110
Delta-BHC	103		P	54 - 140
Deltamethrin	84.3		P	22 - 189
Dichlobenil	79.6		P	36 - 117
Dicofol	84.3		P	46 - 155
Dieldrin	77.3		P	54 - 110
Endosulfan I	83.2		P	59 - 105
Endosulfan II	79.1		P	51 - 118
Endosulfan Sulfate	82.6		P	57 - 121
Endrin	72.6		P	10 - 120
Endrin Aldehyde	77.1		P	34 - 118
Endrin Ketone	86.4		P	69 - 177
Esfenvalerate	69.9		P	23 - 168
Ethalfuralin	73.0		P	49 - 99.0
Fenpropathrin	66.6		P	34 - 117
Gamma-BHC	88.4		P	72 - 117
Gamma-Chlordane	72.7		P	43 - 106
Heptachlor	68.2		P	41 - 98.0
Heptachlor Epoxide	82.2		P	57 - 106
Hexachlorobenzene	66.6		P	36 - 99.0
Kepone	73.4		P	16 - 215
Lambda-Cyhalothrin	63.4		P	21 - 177
Methoprene	48.1		P	10 - 119
Methoxychlor	84.2		P	60 - 112
MGK-264	79.6		P	26 - 122
Mirex	59.1		P	10 - 169
Oxychlordane	71.2		P	43 - 105
PCB-1016	78.8		P	48 - 112

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Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P416790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1260	82.7		P	44 - 118
Permethrin	72.2		P	24 - 148
Phenothrin	55.3		P	10 - 106
Piperonyl Butoxide	120		P	10 - 139
Prallethrin	75.3		P	17 - 109
Tau-Fluvalinate	69.6		P	13 - 131
Tetramethrin	92.8		P	10 - 132
Trans-Nonachlor	75.7		P	44 - 106
Triclosan Methyl	82.9		P	59 - 109
Trifluralin	68.3		P	44 - 101

Reference Method: EPA 8270E

Batch ID: P416814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104		P	50 - 150
Acetochlor	101		P	70 - 121
Alachlor	84.1		P	68 - 119
Ametryn	67.1		P	64 - 139
Atrazine	97.6		P	76 - 120
Atrazine Desethyl	65.1		P	44 - 126
Avobenzone	101		P	76 - 212
Azinphos Methyl	102		P	43 - 192
Azoxystrobin	110		P	36 - 224
Bromacil	84.6		P	52 - 121
Butylate	57.6		P	28 - 91.0
Caffeine	64.9		P	50 - 134
Carbophenothion	88.3		P	56 - 129
Carfentrazone Ethyl	83.1		P	60 - 141
Chlorfenapyr	81.2		P	56 - 115
Chlorpyrifos Ethyl	86.0		P	60 - 118
Chlorpyrifos Methyl	98.9		P	68 - 119
Coumaphos	94.9		P	18 - 250
Cyanazine	110		P	61 - 250
Cyprodinil	78.0		P	55 - 145
Demeton	81.6		P	30 - 159
Diazinon	91.5		P	70 - 123
Difenoconazole	129		P	49 - 204
Dimethenamid	89.4		P	64 - 115
Dimethomorph	112		P	12 - 219
Disulfoton	87.8		P	44 - 125
Dithiopyr	83.2		P	64 - 115
EPTC	42.3		P	28 - 86.0
Ethion	84.0		P	33 - 125
Ethoprop	92.9		P	64 - 116
Etridiazole	53.4		P	34 - 91.0
Fenamiphos	84.6		P	12 - 127
Fenbuconazole	91.0		P	59 - 151
Fipronil	88.2		P	67 - 129
Fipronil Desulfinyl	87.3		P	65 - 127
Fipronil Sulfide	85.3		P	61 - 116
Fipronil Sulfone	83.2		P	55 - 117

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P416814

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluazifop-P-butyl	96.7		P	62 - 127
Fludioxonil	100		P	62 - 128
Flumioxazin	136		P	33 - 250
Flutolanil	88.5		P	56 - 127
Fluxapyroxad	87.6		P	45 - 128
Fonofos	94.3		P	62 - 111
Hexazinone	97.9		P	46 - 139
Imazalil	92.0		P	38 - 142
Iprodione	100		P	47 - 135
Loratadine	95.9		P	10 - 244
Malathion	87.4		P	61 - 139
Metalaxyl	79.1		P	10 - 119
Metolachlor	82.3		P	65 - 118
Metribuzin	83.7		P	51 - 250
Mevinphos	89.3		P	53 - 121
Molinate	77.3		P	42 - 96.0
Myclobutanil	83.8		P	55 - 128
Naled	85.0		P	10 - 98.0
Napropamide	80.5		P	49 - 121
Norflurazon	82.3		P	61 - 126
Octinoxate	99.0		P	30 - 159
Oxadiazon	77.2		P	59 - 116
Oxybenzone	80.4		P	61 - 139
Oxyfluorfen	116		P	64 - 137
Parathion Ethyl	88.7		P	70 - 112
Parathion Methyl	119		P	76 - 133
PBDE-47	90.0		P	50 - 150
PBDE-99	91.4		P	50 - 150
Pendimethalin	98.4		P	52 - 117
Phenytoin	25.8		P	10 - 199
Phorate	93.2		P	48 - 121
Prodiamine	37.6		P	26 - 142
Prometon	81.3		P	43 - 123
Prometryn	86.9		P	66 - 127
Pronamide	93.0		P	75 - 121
Propanil	115		P	45 - 150
Propargite	57.4		P	42 - 208
Propiconazole	77.8		P	60 - 125
Pyraflufen Ethyl	83.4		P	70 - 138
Pyridaben	80.3		P	35 - 245
Pyriproxyfen	82.0		P	30 - 149
Simazine	87.8		P	72 - 125
Stirophos	69.1		P	29 - 164
Sulfentrazone	113		P	21 - 139
Tebuconazole	53.6		P	10 - 115
Terbufos	103		P	60 - 123
Terbutylazine	88.0		P	72 - 115
Thiobencarb	72.0		P	31 - 139
Tri-o-cresyl Phosphate	96.8		P	50 - 150
Triadimefon	79.6		P	65 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P416790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.6		P	61 - 116
Toxaphene	86.9		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P416590

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	81.4		P	40 - 150
AMPA	118		P	40 - 150
Endothall	123		P	40 - 150
Glufosinate	155		F	40 - 150
Glyphosate	113		P	40 - 150
Sucralose	93.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	111		P	40 - 150
2,4,5-T	94.6		P	40 - 150
Acetaminophen	95.0		P	30 - 150
Acetamiprid	103		P	40 - 150
Afidopyropen	73.9		P	30 - 150
Bentazon	116		P	30 - 150
Benzovindiflupyr	96.4		P	40 - 150
Carbamazepine	95.8		P	40 - 150
Clothianidin	102		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	88.1		P	40 - 150
Fenuron	108		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	98.4		P	40 - 150
Ibuprofen	89.9		P	40 - 150
Imazapyr	103		P	40 - 150
Imidacloprid	141		P	40 - 150
Linuron	96.5		P	40 - 150
Mandestrobin	95.9		P	40 - 150
MCPP	110		P	40 - 150
Naproxen	72.7		P	40 - 150
Primidone	106		P	40 - 150
Pyraclostrobin	86.4		P	40 - 150
Silvex	88.4		P	40 - 150
Thiamethoxam	98.5		P	40 - 150
Tolfenpyrad	57.9		P	30 - 150
Triclopyr	105		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P416888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	87.7		P	40 - 150
Aldicarb	68.1		P	30 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P416888

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfone	91.6		P	40 - 150
Aldicarb Sulfoxide	94.6		P	40 - 150
Carbaryl	70.4		P	40 - 150
Carbofuran	80.9		P	40 - 150
Methiocarb	90.7		P	40 - 150
Methomyl	90.3		P	40 - 150
Oxamyl	84.8		P	40 - 150
Propoxur	73.1		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P417217

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	100		P	94 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P417220

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

Reference Method: SM 5310 B-2011

Batch ID: P417158

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.1		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P416947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341586	Iron	105	109	P/P	70 - 130
2341586	Titanium	112	116	P/P	70 - 130
2341586	Vanadium	110	111	P/P	70 - 130
2341586	Zinc	99.9	100	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P416947

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341586	Aluminum	117	129	P/P	70 - 130
2341586	Antimony	89.4	88.2	P/P	70 - 130
2341586	Arsenic	99.9	99.9	P/P	70 - 130
2341586	Beryllium	101	106	P/P	70 - 130
2341586	Cadmium	82.3	83.1	P/P	70 - 130
2341586	Chromium	97.2	96.7	P/P	70 - 130
2341586	Cobalt	108	108	P/P	70 - 130
2341586	Copper	99.1	99.1	P/P	70 - 130
2341586	Lead	105	104	P/P	70 - 130
2341586	Manganese	93.5	92.8	P/P	70 - 130
2341586	Molybdenum	109	110	P/P	70 - 130
2341586	Nickel	111	109	P/P	70 - 130
2341586	Selenium	85.8	85.3	P/P	70 - 130
2341586	Silver	83.8	82.9	P/P	70 - 130
2341586	Thallium	103	102	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P417321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341572	Ammonia-N	96.6	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341112	Kjeldahl Nitrogen	99.3	99.1	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P416894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341459	Kjeldahl Nitrogen	102	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P416859

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341487	NO2NO3-N	104	105	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P416884

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341527	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P416790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2340741	Aldrin	71.5	68.4	P/P	20 - 82.0
2340741	Alpha-BHC	94.6	89.3	P/P	71 - 109
2340741	Alpha-Chlordane	76.4	72.1	P/P	42 - 106
2340741	Beta-BHC	105	96.3	P/P	69 - 180
2340741	Beta-Cyfluthrin	165	132	P/P	18 - 175
2340741	Bifenthrin	120	110	P/P	21 - 128
2340741	Chlorothalonil	240	174	P/P	10 - 300
2340741	Cis-Nonachlor	80.4	74.8	P/P	34 - 106
2340741	Cypermethrin	142	120	P/P	22 - 158
2340741	Dacthal	98.0	94.7	P/P	54 - 116
2340741	DDD-p,p'	83.1	75.0	P/P	34 - 107
2340741	DDE-p,p'	79.2	75.8	P/P	33 - 110
2340741	DDT-p,p'	86.8	77.3	P/P	50 - 122
2340741	Delta-BHC	144	123	P/P	77 - 193
2340741	Deltamethrin	183	126	P/P	10 - 195
2340741	Dichlobenil	69.8	57.3	P/P	25 - 113
2340741	Dicofol	120	110	P/P	38 - 247
2340741	Dieldrin	82.5	76.5	P/P	45 - 118
2340741	Endosulfan I	92.6	85.6	P/P	51 - 106
2340741	Endosulfan II	106	99.8	P/P	37 - 122
2340741	Endosulfan Sulfate	104	74.0	P/P	43 - 132
2340741	Endrin	88.7	84.9	P/P	29 - 101
2340741	Endrin Aldehyde	56.2	35.0	P/P	19 - 110
2340741	Endrin Ketone	113	95.8	P/P	60 - 140
2340741	Esfenvalerate	171	134	P/P	26 - 199
2340741	Ethalfuralin	82.9	78.1	P/P	45 - 99.0
2340741	Fenpropathrin	128	105	F/P	35 - 120
2340741	Gamma-BHC	105	95.1	P/P	63 - 128
2340741	Gamma-Chlordane	76.8	75.6	P/P	40 - 104
2340741	Heptachlor	77.9	73.1	P/P	36 - 97.0
2340741	Heptachlor Epoxide	86.4	86.4	P/P	49 - 184
2340741	Hexachlorobenzene	82.4	75.3	P/P	39 - 96.0
2340741	Kepone	62.8	53.1	P/P	10 - 217
2340741	Lambda-Cyhalothrin	186	156	P/P	21 - 193
2340741	Methoprene	93.6	79.0	P/P	20 - 106
2340741	Methoxychlor	98.2	107	P/P	53 - 118
2340741	MGK-264	103	93.2	P/P	40 - 118
2340741	Mirex	83.6	75.7	P/P	26 - 92.0
2340741	Oxychlordane	74.2	73.2	P/P	44 - 99.0
2340741	Permethrin	137	115	P/P	33 - 182
2340741	Phenothrin	119	117	P/P	10 - 129
2340741	Piperonyl Butoxide	178	141	P/P	10 - 211
2340741	Prallethrin	148	139	F/F	24 - 113
2340741	Tau-Fluvalinate	188	148	F/P	14 - 149
2340741	Tetramethrin	206	177	F/F	17 - 151
2340741	Trans-Nonachlor	76.3	73.4	P/P	42 - 102

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P416790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2340741	Triclosan Methyl	79.1	75.3	P/P	48 - 108
2340741	Trifluralin	80.2	74.0	P/P	47 - 96.0
2341584	PCB-1016	89.0	91.6	P/P	46 - 111
2341584	PCB-1260	99.8	98.1	P/P	45 - 114

Reference Method: EPA 8270E

Batch ID: P416814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341420	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	94.0	95.7	P/P	50 - 150
2341420	Acetochlor	104	106	P/P	65 - 124
2341420	Alachlor	94.7	114	P/P	61 - 121
2341420	Ametryn	176	128	P/P	52 - 216
2341420	Atrazine	96.7	101	P/P	68 - 133
2341420	Atrazine Desethyl	33.0	19.8	P/P	15 - 160
2341420	Avobenzone	89.5	91.5	P/P	59 - 206
2341420	Azinphos Methyl	99.9	121	P/P	40 - 292
2341420	Azoxystrobin	133	140	P/P	12 - 242
2341420	Bromacil	80.9	113	P/P	54 - 167
2341420	Butylate	61.1	62.7	P/P	14 - 94.0
2341420	Caffeine	78.5	71.3	P/P	10 - 226
2341420	Carbophenothion	83.7	83.7	P/P	49 - 122
2341420	Carfentrazone Ethyl	110	101	P/P	53 - 138
2341420	Chlorfenapyr	73.1	69.1	P/P	50 - 150
2341420	Chlorpyrifos Ethyl	83.2	99.9	P/P	52 - 122
2341420	Chlorpyrifos Methyl	106	107	P/P	66 - 117
2341420	Coumaphos	80.5	83.1	P/P	50 - 220
2341420	Cyanazine	105	126	P/P	43 - 245
2341420	Cyprodinil	75.7	101	P/P	50 - 150
2341420	Demeton	84.8	102	P/P	43 - 188
2341420	Diazinon	108	102	P/P	69 - 131
2341420	Difenoconazole	116	118	P/P	34 - 231
2341420	Dimethenamid	89.4	92.5	P/P	55 - 118
2341420	Dimethomorph	131	144	P/P	50 - 150
2341420	Disulfoton	92.6	96.1	P/P	38 - 141
2341420	Dithiopyr	64.5	77.9	P/P	42 - 116
2341420	EPTC	33.6	36.3	P/P	18 - 85.0
2341420	Ethion	77.2	114	P/P	10 - 131
2341420	Ethoprop	108	114	P/P	65 - 129
2341420	Etridiazole	61.4	65.0	P/P	50 - 150
2341420	Fenamiphos	95.7	78.0	P/P	31 - 137
2341420	Fenbuconazole	82.1	110	P/P	57 - 160
2341420	Fipronil	79.3	121	P/P	62 - 132
2341420	Fipronil Desulfinyl	101	119	P/P	57 - 131
2341420	Fluazifop-P-butyl	106	103	P/P	54 - 133
2341420	Fludioxonil	82.2	102	P/P	58 - 127
2341420	Flumioxazin	126	121	P/P	33 - 300
2341420	Flutolanil	72.0	81.7	P/P	42 - 130
2341420	Fluxapyroxad	95.3	93.4	P/P	23 - 141
2341420	Fonofos	103	107	P/P	58 - 119
2341420	Hexazinone	121	119	P/P	68 - 172
2341420	Imazalil	95.0	87.5	P/P	48 - 283

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P416814

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341420	Iprodione	74.4	100	P/P	38 - 140
2341420	Loratadine	113	128	P/P	50 - 150
2341420	Malathion	81.1	109	P/P	40 - 137
2341420	Metalaxyl	111	121	P/P	21 - 129
2341420	Metolachlor	85.6	98.0	P/P	55 - 122
2341420	Metribuzin	73.9	74.3	P/P	38 - 187
2341420	Mevinphos	101	115	P/P	54 - 134
2341420	Molinate	85.9	83.1	P/P	41 - 97.0
2341420	Myclobutanil	86.3	101	P/P	56 - 125
2341420	Naled	68.7	78.3	P/P	10 - 108
2341420	Napropamide	74.5	86.1	P/P	50 - 150
2341420	Norflurazon	72.6	89.9	P/P	32 - 122
2341420	Octinoxate	80.8	86.5	P/P	25 - 150
2341420	Oxadiazon	63.7	77.8	P/P	40 - 119
2341420	Oxybenzone	83.2	80.1	P/P	59 - 147
2341420	Oxyfluorfen	121	126	P/P	61 - 153
2341420	Parathion Ethyl	96.0	91.5	P/P	59 - 130
2341420	Parathion Methyl	137	120	P/P	65 - 155
2341420	PBDE-47	87.1	83.0	P/P	50 - 150
2341420	PBDE-99	85.0	80.8	P/P	50 - 150
2341420	Pendimethalin	120	122	P/P	49 - 138
2341420	Phenytoin	24.3	27.2	F/F	50 - 200
2341420	Phorate	104	126	P/P	54 - 161
2341420	Prodiamine	61.0	66.5	P/P	33 - 161
2341420	Prometon	80.8	101	P/P	48 - 140
2341420	Prometryn	67.9	75.1	P/P	55 - 134
2341420	Pronamide	96.4	91.6	P/P	66 - 137
2341420	Propanil	116	113	P/P	50 - 150
2341420	Propargite	61.0	66.7	P/P	50 - 200
2341420	Propiconazole	50.9	80.0	P/P	36 - 150
2341420	Pyraflufen Ethyl	87.5	86.8	P/P	50 - 150
2341420	Pyridaben	80.6	91.5	P/P	50 - 200
2341420	Pyriproxyfen	69.0	78.4	P/P	10 - 165
2341420	Simazine	89.1	88.4	P/P	57 - 145
2341420	Stirophos	27.3	29.8	F/F	50 - 150
2341420	Tebuconazole	23.0	50.8	P/P	10 - 127
2341420	Terbufos	121	125	P/P	59 - 138
2341420	Terbutylazine	107	108	P/P	68 - 119
2341420	Thiobencarb	69.1	74.2	P/P	50 - 150
2341420	Tri-o-cresyl Phosphate	91.2	85.0	P/P	50 - 150
2341420	Triadimefon	76.7	87.5	P/P	50 - 150

Reference Method: EPA 8276
Batch ID: P416790

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341584	Chlordane	92.5	91.5	P/P	53 - 126
2341584	Toxaphene	97.1	92.5	P/P	56 - 211

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P416590

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341960	Acesulfame K	84.3	84.3	P/P	40 - 150
2341960	AMPA	101	101	P/P	40 - 150
2341960	Endothall	122	121	P/P	40 - 150
2341960	Glufosinate	86.5	92.8	P/P	40 - 150
2341960	Glyphosate	86.1	87.6	P/P	40 - 150
2341960	Sucralose	92.1	91.7	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P416789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341960	2,4,5-T	94.1	77.6	P/P	40 - 150
2341960	Acetaminophen	116	110	P/P	30 - 150
2341960	Acetamiprid	89.2	83.7	P/P	40 - 150
2341960	Afidopyropen	85.7	83.8	P/P	30 - 150
2341960	Bentazon	105	92.6	P/P	30 - 150
2341960	Benzovindiflupyr	93.6	87.0	P/P	40 - 150
2341960	Carbamazepine	99.7	92.9	P/P	40 - 150
2341960	Clothianidin	121	110	P/P	40 - 150
2341960	Dinotefuran	137	136	P/P	40 - 150
2341960	Diuron	77.3	69.4	P/P	40 - 150
2341960	Fenuron	97.3	89.4	P/P	40 - 150
2341960	Fluridone	102	104	P/P	40 - 150
2341960	Hydrocodone	104	104	P/P	40 - 150
2341960	Ibuprofen	84.4	82.3	P/P	40 - 150
2341960	Imazapyr	103	94.7	P/P	40 - 150
2341960	Imidacloprid	150	141	F/P	40 - 150
2341960	Linuron	86.5	88.8	P/P	40 - 150
2341960	Mandestrobin	90.1	85.5	P/P	40 - 150
2341960	MCPP	110	103	P/P	40 - 150
2341960	Naproxen	86.7	78.6	P/P	40 - 150
2341960	Primidone	120	115	P/P	40 - 150
2341960	Pyraclostrobin	87.1	84.5	P/P	40 - 150
2341960	Silvex	91.9	80.7	P/P	40 - 150
2341960	Thiamethoxam	133	126	P/P	40 - 150
2341960	Tolfenpyrad	58.2	57.2	P/P	30 - 150
2341960	Triclopyr	96.7	89.0	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P416888

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341582	3-Hydroxycarbofuran	91.7	98.3	P/P	40 - 150
2341582	Aldicarb	51.6	64.1	P/P	30 - 150
2341582	Aldicarb Sulfone	108	109	P/P	40 - 150
2341582	Aldicarb Sulfoxide	45.3	47.2	P/P	40 - 150
2341582	Carbaryl	58.5	63.5	P/P	40 - 150
2341582	Carbofuran	65.6	64.4	P/P	40 - 150
2341582	Methiocarb	74.4	69.9	P/P	40 - 150
2341582	Methomyl	75.9	81.9	P/P	40 - 150
2341582	Oxamyl	76.1	80.9	P/P	40 - 150
2341582	Propoxur	56.2	62.3	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P417220

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2343211	Fluoride	99.4	98.6	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P417158

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2341796	Organic Carbon	91.1	90.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P416681

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341554	Turbidity	5.22	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P416947

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341586	Calcium	2.30	Spike	P	0 - 20
2341586	Iron	3.51	Spike	P	0 - 20
2341586	Magnesium	1.99	Spike	P	0 - 20
2341586	Strontium	1.30	Spike	P	0 - 20
2341586	Titanium	2.96	Spike	P	0 - 20
2341586	Vanadium	0.853	Spike	P	0 - 20
2341586	Zinc	0.349	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P416947

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341586	Aluminum	8.27	Spike	P	0 - 20
2341586	Antimony	1.36	Spike	P	0 - 20
2341586	Arsenic	0.00642	Spike	P	0 - 20
2341586	Beryllium	4.75	Spike	P	0 - 20
2341586	Cadmium	1.04	Spike	P	0 - 20
2341586	Chromium	0.563	Spike	P	0 - 20
2341586	Cobalt	0.379	Spike	P	0 - 20
2341586	Copper	0.0647	Spike	P	0 - 20
2341586	Lead	0.760	Spike	P	0 - 20
2341586	Manganese	0.517	Spike	P	0 - 20
2341586	Molybdenum	0.835	Spike	P	0 - 20
2341586	Nickel	1.34	Spike	P	0 - 20
2341586	Selenium	0.504	Spike	P	0 - 20
2341586	Silver	1.07	Spike	P	0 - 20
2341586	Thallium	1.17	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P417321

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341572	Ammonia-N	2.53	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P416824

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341112	Kjeldahl Nitrogen	0.162	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P416894

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341459	Kjeldahl Nitrogen	1.19	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P416859

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341487	NO2NO3-N	0.687	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P416884

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341527	Total-P	0.111	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P416790

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340741	Aldrin	4.38	Spike	P	0 - 41
2340741	Alpha-BHC	5.82	Spike	P	0 - 25
2340741	Alpha-Chlordane	5.69	Spike	P	0 - 33
2340741	Beta-BHC	8.98	Spike	P	0 - 36
2340741	Beta-Cyfluthrin	22.1	Spike	P	0 - 42
2340741	Bifenthrin	8.51	Spike	P	0 - 53
2340741	Chlorothalonil	32.1	Spike	P	0 - 71
2340741	Cis-Nonachlor	7.12	Spike	P	0 - 29
2340741	Cypermethrin	16.8	Spike	P	0 - 40
2340741	Dacthal	3.36	Spike	P	0 - 26
2340741	DDD-p,p'	10.3	Spike	P	0 - 39
2340741	DDE-p,p'	4.35	Spike	P	0 - 33
2340741	DDT-p,p'	11.6	Spike	P	0 - 40
2340741	Delta-BHC	15.7	Spike	P	0 - 37
2340741	Deltamethrin	36.7	Spike	P	0 - 100
2340741	Dichlobenil	19.6	Spike	P	0 - 40
2340741	Dicofol	8.73	Spike	P	0 - 31
2340741	Dieldrin	7.57	Spike	P	0 - 27
2340741	Endosulfan I	7.83	Spike	P	0 - 23
2340741	Endosulfan II	6.10	Spike	P	0 - 28
2340741	Endosulfan Sulfate	33.7	Spike	P	0 - 38
2340741	Endrin	4.39	Spike	P	0 - 63
2340741	Endrin Aldehyde	46.6	Spike	P	0 - 60
2340741	Endrin Ketone	16.3	Spike	P	0 - 37
2340741	Esfenvalerate	24.2	Spike	P	0 - 52
2340741	Ethalfuralin	5.98	Spike	P	0 - 23
2340741	Fenpropathrin	19.9	Spike	P	0 - 32
2340741	Gamma-BHC	9.69	Spike	P	0 - 17
2340741	Gamma-Chlordane	1.62	Spike	P	0 - 40
2340741	Heptachlor	6.42	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P416790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2340741	Heptachlor Epoxide	0.0326	Spike	P	0 - 25
2340741	Hexachlorobenzene	8.95	Spike	P	0 - 36
2340741	Kepone	16.6	Spike	P	0 - 93
2340741	Lambda-Cyhalothrin	17.6	Spike	P	0 - 55
2340741	Methoprene	17.0	Spike	P	0 - 53
2340741	Methoxychlor	8.49	Spike	P	0 - 29
2340741	MGK-264	9.80	Spike	P	0 - 35
2340741	Mirex	9.92	Spike	P	0 - 46
2340741	Oxychlordane	1.33	Spike	P	0 - 29
2340741	Permethrin	17.1	Spike	P	0 - 44
2340741	Phenothrin	2.04	Spike	P	0 - 56
2340741	Piperonyl Butoxide	23.3	Spike	P	0 - 100
2340741	Prallethrin	5.92	Spike	P	0 - 42
2340741	Tau-Fluvalinate	23.8	Spike	P	0 - 54
2340741	Tetramethrin	14.9	Spike	P	0 - 51
2340741	Trans-Nonachlor	3.86	Spike	P	0 - 37
2340741	Triclosan Methyl	4.95	Spike	P	0 - 31
2340741	Trifluralin	8.05	Spike	P	0 - 30
2341584	PCB-1016	2.89	Spike	P	0 - 32
2341584	PCB-1260	1.74	Spike	P	0 - 31

Reference Method: EPA 8270E
Batch ID: P416814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341420	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.76	Spike	P	0 - 30
2341420	Acetochlor	2.13	Spike	P	0 - 27
2341420	Alachlor	18.9	Spike	P	0 - 27
2341420	Ametryn	31.4	Spike	P	0 - 34
2341420	Atrazine	2.64	Spike	P	0 - 41
2341420	Atrazine Desethyl	22.8	Spike	P	0 - 38
2341420	Avobenzene	2.14	Spike	P	0 - 30
2341420	Azinphos Methyl	18.8	Spike	P	0 - 62
2341420	Azoxystrobin	5.25	Spike	P	0 - 32
2341420	Bromacil	22.4	Spike	P	0 - 30
2341420	Butylate	2.53	Spike	P	0 - 59
2341420	Caffeine	8.70	Spike	P	0 - 60
2341420	Carbophenothion	0.0385	Spike	P	0 - 25
2341420	Carfentrazone Ethyl	8.55	Spike	P	0 - 26
2341420	Chlorfenapyr	5.55	Spike	P	0 - 30
2341420	Chlorpyrifos Ethyl	18.3	Spike	P	0 - 27
2341420	Chlorpyrifos Methyl	0.687	Spike	P	0 - 26
2341420	Coumaphos	3.26	Spike	P	0 - 30
2341420	Cyanazine	17.8	Spike	P	0 - 58
2341420	Cyprodinil	28.9	Spike	P	0 - 30
2341420	Demeton	18.8	Spike	P	0 - 25
2341420	Diazinon	5.10	Spike	P	0 - 29
2341420	Difenoconazole	1.78	Spike	P	0 - 25
2341420	Dimethenamid	3.40	Spike	P	0 - 30
2341420	Dimethomorph	9.22	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P416814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341420	Disulfoton	3.74	Spike	P	0 - 33
2341420	Dithiopyr	16.8	Spike	P	0 - 22
2341420	EPTC	7.47	Spike	P	0 - 38
2341420	Ethion	38.7	Spike	P	0 - 79
2341420	Ethoprop	5.41	Spike	P	0 - 23
2341420	Etridiazole	5.77	Spike	P	0 - 30
2341420	Fenamiphos	20.4	Spike	P	0 - 58
2341420	Fenbuconazole	29.0	Spike	P	0 - 37
2341420	Fipronil	29.4	Spike	P	0 - 33
2341420	Fipronil Desulfinyl	15.6	Spike	P	0 - 26
2341420	Fipronil Sulfide	33.9	Spike	P	0 - 37
2341420	Fipronil Sulfone	24.0	Spike	P	0 - 50
2341420	Fluazifop-P-butyl	2.95	Spike	P	0 - 24
2341420	Fludioxonil	21.8	Spike	P	0 - 26
2341420	Flumioxazin	3.66	Spike	P	0 - 37
2341420	Flutolanil	12.7	Spike	P	0 - 26
2341420	Fluxapyroxad	2.10	Spike	P	0 - 34
2341420	Fonofos	4.44	Spike	P	0 - 27
2341420	Hexazinone	1.54	Spike	P	0 - 36
2341420	Imazalil	8.19	Spike	P	0 - 65
2341420	Iprodione	29.9	Spike	P	0 - 33
2341420	Loratadine	12.7	Spike	P	0 - 30
2341420	Malathion	29.2	Spike	P	0 - 44
2341420	Metalaxyl	8.27	Spike	P	0 - 38
2341420	Metolachlor	13.5	Spike	P	0 - 36
2341420	Metribuzin	0.464	Spike	P	0 - 63
2341420	Mevinphos	13.7	Spike	P	0 - 26
2341420	Molinate	3.28	Spike	P	0 - 40
2341420	Myclobutanil	15.5	Spike	P	0 - 21
2341420	Naled	13.0	Spike	P	0 - 26
2341420	Napropamide	14.4	Spike	P	0 - 30
2341420	Norflurazon	21.3	Spike	P	0 - 24
2341420	Octinoxate	5.48	Spike	P	0 - 30
2341420	Oxadiazon	20.0	Spike	P	0 - 27
2341420	Oxybenzone	3.83	Spike	P	0 - 30
2341420	Oxyfluorfen	3.60	Spike	P	0 - 24
2341420	Parathion Ethyl	4.87	Spike	P	0 - 28
2341420	Parathion Methyl	13.3	Spike	P	0 - 27
2341420	PBDE-47	4.89	Spike	P	0 - 30
2341420	PBDE-99	5.05	Spike	P	0 - 30
2341420	Pendimethalin	1.32	Spike	P	0 - 31
2341420	Phenytoin	11.4	Spike	P	0 - 30
2341420	Phorate	18.6	Spike	P	0 - 27
2341420	Prodiamine	8.55	Spike	P	0 - 52
2341420	Prometon	22.1	Spike	P	0 - 31
2341420	Prometryn	10.1	Spike	P	0 - 28
2341420	Pronamide	5.13	Spike	P	0 - 26
2341420	Propanil	2.53	Spike	P	0 - 30
2341420	Propargite	8.97	Spike	P	0 - 30
2341420	Propiconazole	25.3	Spike	P	0 - 31
2341420	Pyraflufen Ethyl	0.794	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P416814

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341420	Pyridaben	12.6	Spike	P	0 - 30
2341420	Pyriproxyfen	12.8	Spike	P	0 - 50
2341420	Simazine	0.752	Spike	P	0 - 29
2341420	Stirophos	8.76	Spike	P	0 - 30
2341420	Sulfentrazone	25.9	Spike	P	0 - 33
2341420	Tebuconazole	36.0	Spike	P	0 - 44
2341420	Terbufos	3.52	Spike	P	0 - 29
2341420	Terbuthylazine	0.176	Spike	P	0 - 27
2341420	Thiobencarb	7.14	Spike	P	0 - 30
2341420	Tri-o-cresyl Phosphate	6.93	Spike	P	0 - 30
2341420	Triadimefon	13.1	Spike	P	0 - 30

Reference Method: EPA 8276

Batch ID: P416790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341584	Chlordane	1.14	Spike	P	0 - 25
2341584	Toxaphene	4.82	Spike	P	0 - 26

Reference Method: EPA 8321B

Batch ID: P416590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341960	Acesulfame K	0.0195	Spike	P	0 - 30
2341960	AMPA	0.312	Spike	P	0 - 30
2341960	Endothall	1.50	Spike	P	0 - 30
2341960	Glufosinate	7.05	Spike	P	0 - 30
2341960	Glyphosate	1.72	Spike	P	0 - 30
2341960	Sucralose	0.321	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P416789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341960	2,4-D	9.74	Spike	P	0 - 30
2341960	2,4,5-T	19.2	Spike	P	0 - 30
2341960	Acetaminophen	5.68	Spike	P	0 - 30
2341960	Acetamiprid	6.36	Spike	P	0 - 30
2341960	Afidopyropen	2.21	Spike	P	0 - 30
2341960	Bentazon	9.87	Spike	P	0 - 30
2341960	Benzovindiflupyr	7.34	Spike	P	0 - 30
2341960	Carbamazepine	7.03	Spike	P	0 - 30
2341960	Clothianidin	9.52	Spike	P	0 - 30
2341960	Dinotefuran	1.19	Spike	P	0 - 30
2341960	Diuron	10.8	Spike	P	0 - 30
2341960	Fenuron	8.47	Spike	P	0 - 30
2341960	Fluridone	1.05	Spike	P	0 - 30
2341960	Hydrocodone	0.319	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B

Batch ID: P416789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341960	Ibuprofen	2.57	Spike	P	0 - 30
2341960	Imazapyr	7.78	Spike	P	0 - 30
2341960	Imidacloprid	6.37	Spike	P	0 - 30
2341960	Linuron	2.69	Spike	P	0 - 30
2341960	Mandestrobin	5.27	Spike	P	0 - 30
2341960	MCCP	6.98	Spike	P	0 - 30
2341960	Naproxen	9.78	Spike	P	0 - 30
2341960	Primidone	4.39	Spike	P	0 - 30
2341960	Pyraclostrobin	3.07	Spike	P	0 - 30
2341960	Silvex	13.1	Spike	P	0 - 30
2341960	Thiamethoxam	5.47	Spike	P	0 - 30
2341960	Tolfenpyrad	1.80	Spike	P	0 - 30
2341960	Triclopyr	8.32	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P416888

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341582	3-Hydroxycarbofuran	6.98	Spike	P	0 - 30
2341582	Aldicarb	21.5	Spike	P	0 - 30
2341582	Aldicarb Sulfone	0.685	Spike	P	0 - 30
2341582	Aldicarb Sulfoxide	4.15	Spike	P	0 - 30
2341582	Carbaryl	8.19	Spike	P	0 - 30
2341582	Carbofuran	1.79	Spike	P	0 - 30
2341582	Methiocarb	6.32	Spike	P	0 - 30
2341582	Methomyl	7.64	Spike	P	0 - 30
2341582	Oxamyl	6.13	Spike	P	0 - 30
2341582	Propoxur	10.2	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P417217

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343211	Total Alkalinity	0.165	Sample	P	0 - 3.8

Reference Method: SM 4500-F- C-2011

Batch ID: P417220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2343211	Fluoride	0.483	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011

Batch ID: P417158

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2341796	Organic Carbon	0.767	Spike	P	0 - 20

Quality Assurance Report Precision

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

Quality Assurance Report Surrogates

Lab Sample ID: 2341582
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	77.1	P	30 - 160

Lab Sample ID: 2341583
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	97.4	P	30 - 160
EPA 8321B	Diuron-d6	78.4	P	30 - 160
EPA 8321B	Endothall-d6	41.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	53.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	70.8	P	30 - 160
EPA 8321B	Primidone-d5	118	P	30 - 160
EPA 8321B	Sucralose-d6	63.5	P	30 - 160

Lab Sample ID: 2341584
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	90.7	P	29 - 130
EPA 8270E	Decachlorobiphenyl	50.7	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	75.7	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	63.8	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	91.9	P	30 - 101
EPA 8276	PCNB	97.2	P	48 - 121

Lab Sample ID: 2341585
Field Sample ID: 27010050

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	79.5	P	20 - 200
EPA 8270E	Simazine-d10	106	P	71 - 140
EPA 8270E	Terbufos-d10	110	P	62 - 131
EPA 8270E	Terphenyl-d14	80.9	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A113511

Included Lab Sample IDs: 2341571, 2341573

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

Reference Method: EPA 8321B

Run ID: A113571

Included Lab Sample IDs: 2341583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.8	105	P/P	60 - 160
Endothall	65.0	63.5	P/P	60 - 160
Glufosinate	75.5	78.0	P/P	60 - 160
Glyphosate	98.6	98.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A113572

Included Lab Sample IDs: 2341583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	87.8	88.1	P/P	60 - 160
Sucralose	94.2	97.0	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A113585

Included Lab Sample IDs: 2341572, 2341574

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A113628

Included Lab Sample IDs: 2341584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.3		P	80 - 120
PCB-1260	98.1		P	80 - 120

Reference Method: EPA 8270E

Run ID: A113638

Included Lab Sample IDs: 2341584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	99.7		P	80 - 120
Alpha-BHC	99.8		P	80 - 120
Alpha-Chlordane	105		P	80 - 120
Beta-BHC	98.4		P	80 - 120
Beta-Cyfluthrin	95.7		P	80 - 120
Bifenthrin	90.6		P	80 - 120
Chlorothalonil	104		P	80 - 120
Cis-Nonachlor	101		P	80 - 120
Cypermethrin	85.6		P	80 - 120
Dacthal	97.2		P	80 - 120
DDD-p,p'	98.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A113638
Included Lab Sample IDs: 2341584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDE-p,p'	99.6		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	99.9		P	80 - 120
Deltamethrin	94.5		P	80 - 120
Dichlobenil	94.3		P	80 - 120
Dicofol	99.4		P	80 - 120
Dieldrin	94.3		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	101		P	80 - 120
Endosulfan Sulfate	83.4		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	97.9		P	80 - 120
Endrin Ketone	99.0		P	80 - 120
Esfenvalerate	90.3		P	80 - 120
Ethalfuralin	107		P	80 - 120
Fenpropathrin	87.1		P	80 - 120
Gamma-BHC	95.5		P	80 - 120
Gamma-Chlordane	97.2		P	80 - 120
Heptachlor	96.3		P	80 - 120
Heptachlor Epoxide	104		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	54.2*		F	80 - 120
Lambda-Cyhalothrin	94.9		P	80 - 120
Methoprene	88.9		P	80 - 120
Methoxychlor	101		P	80 - 120
MGK-264	92.6		P	80 - 120
Mirex	94.2		P	80 - 120
Oxychlordane	101		P	80 - 120
Permethrin	90.2		P	80 - 120
Phenothrin	89.9		P	80 - 120
Piperonyl Butoxide	87.4		P	80 - 120
Prallethrin	94.7		P	80 - 120
Tau-Fluvalinate	93.4		P	80 - 120
Tetramethrin	86.8		P	80 - 120
Trans-Nonachlor	97.2		P	80 - 120
Triclosan Methyl	106		P	80 - 120
Trifluralin	98.2		P	80 - 120

Reference Method: EPA 8276
Run ID: A113646
Included Lab Sample IDs: 2341584

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	100		P	80 - 120
Toxaphene	94.4		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A113648
Included Lab Sample IDs: 2341572

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113648

Included Lab Sample IDs: 2341572

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	105	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A113656

Included Lab Sample IDs: 2341583

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	89.9	90.7	P/P	50 - 150
2,4,5-T	94.2	98.5	P/P	50 - 150
3-Hydroxycarbofuran	95.6	98.8	P/P	60 - 150
Acetaminophen	98.5	96.0	P/P	60 - 160
Acetamiprid	96.0	96.8	P/P	50 - 150
Afidopyropen	110	84.7	P/P	50 - 150
Aldicarb	98.6	97.4	P/P	60 - 150
Aldicarb Sulfone	96.1	94.2	P/P	50 - 150
Aldicarb Sulfoxide	103	104	P/P	50 - 150
Bentazon	98.8	116	P/P	50 - 160
Benzovindiflupyr	109	102	P/P	50 - 150
Carbamazepine	97.3	94.1	P/P	60 - 150
Carbaryl	95.5	91.4	P/P	60 - 150
Carbofuran	93.7	96.2	P/P	50 - 150
Clothianidin	93.3	104	P/P	60 - 150
Dinotefuran	100	96.3	P/P	50 - 150
Diuron	108	86.3	P/P	60 - 160
Fenuron	93.0	97.0	P/P	60 - 150
Fluridone	113	107	P/P	60 - 160
Hydrocodone	102	98.1	P/P	60 - 150
Ibuprofen	79.8	78.2	P/P	50 - 160
Imazapyr	94.5	86.8	P/P	50 - 150
Imidacloprid	92.0	93.8	P/P	60 - 150
Linuron	108	88.4	P/P	60 - 150
Mandestrobin	98.3	101	P/P	50 - 150
MCPP	98.8	88.0	P/P	50 - 150
Methiocarb	109	116	P/P	50 - 150
Methomyl	100	100	P/P	50 - 150
Naproxen	108	121	P/P	50 - 160
Oxamyl	96.4	101	P/P	50 - 150
Primidone	95.8	97.2	P/P	60 - 150
Propoxur	106	104	P/P	50 - 150
Pyraclostrobin	97.5	97.1	P/P	60 - 150
Silvex	88.1	79.4	P/P	50 - 150
Thiamethoxam	97.2	102	P/P	50 - 150
Tolfenpyrad	101	95.5	P/P	60 - 150
Triclopyr	94.2	94.9	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A113693

Included Lab Sample IDs: 2341572, 2341574

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A113697

Included Lab Sample IDs: 2341586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	91.9	94.4	P/P	90 - 110
Arsenic	94.7	97.2	P/P	90 - 110
Beryllium	92.7	96.0	P/P	90 - 110
Cadmium	94.4	95.4	P/P	90 - 110
Chromium	93.3	96.2	P/P	90 - 110
Cobalt	96.0	103	P/P	90 - 110
Copper	95.5	102	P/P	90 - 110
Lead	96.5	96.3	P/P	90 - 110
Manganese	95.0	99.9	P/P	90 - 110
Molybdenum	93.6	94.9	P/P	90 - 110
Nickel	95.2	103	P/P	90 - 110
Selenium	92.5	95.6	P/P	90 - 110
Silver	99.7	99.5	P/P	90 - 110
Thallium	94.0	94.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A113699

Included Lab Sample IDs: 2341574

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

Reference Method: SM 5310 B-2011

Run ID: A113703

Included Lab Sample IDs: 2341572, 2341574

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	91.2	93.4	P/P	90 - 110
Organic Carbon	97.8	91.2	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A113717

Included Lab Sample IDs: 2341586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	103	103	P/P	90 - 110
Iron	101	99.6	P/P	90 - 110
Magnesium	100	98.0	P/P	90 - 110
Strontium	108	107	P/P	90 - 110
Tin	105	105	P/P	90 - 110
Titanium	107	105	P/P	90 - 110
Vanadium	106	106	P/P	90 - 110
Zinc	107	104	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A113723

Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	98.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A113723
Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Octinoxate	97.1		P	80 - 120
Oxybenzone	103		P	80 - 120
PBDE-47	97.8		P	80 - 120
PBDE-99	97.8		P	80 - 120
Tri-o-cresyl Phosphate	99.0		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A113724
Included Lab Sample IDs: 2341571, 2341573

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.1	99.4	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A113724
Included Lab Sample IDs: 2341571, 2341573

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A113745
Included Lab Sample IDs: 2341586

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.1	99.1	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A113765
Included Lab Sample IDs: 2341572, 2341574

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

Reference Method: EPA 8270E
Run ID: A113779
Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	106		P	80 - 120
Alachlor	97.6		P	80 - 120
Ametryn	110		P	80 - 120
Atrazine Desethyl	89.0		P	80 - 120
Azinphos Methyl	94.7		P	80 - 120
Azoxystrobin	95.5		P	80 - 120
Bromacil	109		P	80 - 120
Caffeine	94.6		P	80 - 120
Carbophenothion	99.0		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorfenapyr	114		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A113779
Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	111		P	80 - 120
Coumaphos	110		P	80 - 120
Cyanazine	95.9		P	80 - 120
Cyprodinil	104		P	80 - 120
Demeton	94.7		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	114		P	80 - 120
Dimethenamid	107		P	80 - 120
Dimethomorph	107		P	80 - 120
Disulfoton	98.6		P	80 - 120
Dithiopyr	110		P	80 - 120
EPTC	101		P	80 - 120
Ethion	108		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	96.7		P	80 - 120
Fenamiphos	108		P	80 - 120
Fenbuconazole	103		P	80 - 120
Fipronil	100		P	80 - 120
Fipronil Desulfinyl	114		P	80 - 120
Fipronil Sulfide	108		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	115		P	80 - 120
Fludioxonil	105		P	80 - 120
Flumioxazin	99.2		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	96.4		P	80 - 120
Fonofos	92.0		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	106		P	80 - 120
Iprodione	110		P	80 - 120
Loratadine	93.1		P	80 - 120
Malathion	104		P	80 - 120
Metaxyl	105		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	110		P	80 - 120
Molinate	107		P	80 - 120
Myclobutanil	96.3		P	80 - 120
Naled	114		P	80 - 120
Napropamide	116		P	80 - 120
Norflurazon	98.8		P	80 - 120
Oxadiazon	99.0		P	80 - 120
Oxyfluorfen	96.9		P	80 - 120
Parathion Ethyl	89.3		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	97.7		P	80 - 120
Phenytol	102		P	80 - 120
Phorate	98.5		P	80 - 120
Prodiamine	94.7		P	80 - 120
Prometon	118		P	80 - 120
Prometryn	114		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A113779
Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pronamide	98.3		P	80 - 120
Propanil	118		P	80 - 120
Propargite	96.0		P	80 - 120
Propiconazole	98.6		P	80 - 120
Pyraflufen Ethyl	119		P	80 - 120
Pyridaben	97.5		P	80 - 120
Pyriproxyfen	91.7		P	80 - 120
Simazine	94.6		P	80 - 120
Stirophos	119		P	80 - 120
Sulfentrazone	100		P	80 - 120
Tebuconazole	99.7		P	80 - 120
Terbufos	112		P	80 - 120
Terbuthylazine	113		P	80 - 120
Thiobencarb	104		P	80 - 120
Triadimefon	103		P	80 - 120

Reference Method: EPA 8270E
Run ID: A113781
Included Lab Sample IDs: 2341585

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	94.5		P	80 - 120
Butylate	99.9		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		LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity	97.2				5.22	
EPA 200.7 Rev. 4.4	Calcium	103					2.30
	Iron	104	105	109			3.51
	Magnesium	101					1.99
	Strontium	106					1.30
	Tin	102					
	Titanium	103	112	116			2.96
	Vanadium	103	110	111			0.853
	Zinc	102	99.9	100			0.349
EPA 200.8 Rev. 5.4	Aluminum	98.0	117	129			8.27
	Antimony	96.8	89.4	88.2			1.36
	Arsenic	97.0	99.9	99.9			0.0064
	Beryllium	88.3	101	106			4.75
	Cadmium	95.3	82.3	83.1			1.04
	Chromium	95.7	97.2	96.7			0.563
	Cobalt	98.6	108	108			0.379
	Copper	96.0	99.1	99.1			0.0647
	Lead	99.9	105	104			0.760
	Manganese	97.1	93.5	92.8			0.517
	Molybdenum	95.9	109	110			0.835
	Nickel	97.6	111	109			1.34
	Selenium	94.6	85.8	85.3			0.504
	Silver	100	83.8	82.9			1.07
	Thallium	99.1	103	102			1.17
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	96.6	99.4			2.53
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	99.3	99.1			0.162
	Kjeldahl Nitrogen	105	102	100			1.19
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	106	104	105			0.687
EPA 365.1 Rev. 2.0	Total-P	100	102	102			0.111
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	94.0	95.7			1.76
	Acetochlor	101	104	106			2.13
	Alachlor	84.1	94.7	114			18.9
	Aldrin	51.5	71.5	68.4			4.38
	Alpha-BHC	83.9	94.6	89.3			5.82
	Alpha-Chlordane	75.5	76.4	72.1			5.69
	Ametryn	67.1	176	128			31.4
	Atrazine	97.6	96.7	101			2.64
	Atrazine Desethyl	65.1	33.0	19.8			22.8
	Avobenzone	101	89.5	91.5			2.14
	Azinphos Methyl	102	99.9	121			18.8
	Azoxystrobin	110	133	140			5.25
	Beta-BHC	94.0	105	96.3			8.98
	Beta-Cyfluthrin	77.9	165	132			22.1
	Bifenthrin	51.6	120	110			8.51
	Bromacil	84.6	80.9	113			22.4
	Butylate	57.6	61.1	62.7			2.53
	Caffeine	64.9	78.5	71.3			8.70
	Carbophenothion	88.3	83.7	83.7			0.0385
	Carfentrazone Ethyl	83.1	110	101			8.55
	Chlorfenapyr	81.2	73.1	69.1			5.55
	Chlorothalonil	93.9	240	174			32.1
	Chlorpyrifos Ethyl	86.0	83.2	99.9			18.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	98.9	106	107			0.687
	Cis-Nonachlor	66.6	80.4	74.8			7.12
	Coumaphos	94.9	80.5	83.1			3.26
	Cyanazine	110	105	126			17.8
	Cypermethrin	70.4	142	120			16.8
	Cyprodinil	78.0	75.7	101			28.9
	Dacthal	85.9	98.0	94.7			3.36
	DDD-p,p'	69.0	83.1	75.0			10.3
	DDE-p,p'	76.4	79.2	75.8			4.35
	DDT-p,p'	73.0	86.8	77.3			11.6
	Delta-BHC	103	144	123			15.7
	Deltamethrin	84.3	183	126			36.7
	Demeton	81.6	84.8	102			18.8
	Diazinon	91.5	108	102			5.10
	Dichlobenil	79.6	69.8	57.3			19.6
	Dicofol	84.3	120	110			8.73
	Dieldrin	77.3	82.5	76.5			7.57
	Difenoconazole	129	116	118			1.78
	Dimethenamid	89.4	89.4	92.5			3.40
	Dimethomorph	112	131	144			9.22
	Disulfoton	87.8	92.6	96.1			3.74
	Dithiopyr	83.2	64.5	77.9			16.8
	Endosulfan I	83.2	92.6	85.6			7.83
	Endosulfan II	79.1	106	99.8			6.10
	Endosulfan Sulfate	82.6	104	74.0			33.7
	Endrin	72.6	88.7	84.9			4.39
	Endrin Aldehyde	77.1	56.2	35.0			46.6
	Endrin Ketone	86.4	113	95.8			16.3
	EPTC	42.3	33.6	36.3			7.47
	Esfenvalerate	69.9	171	134			24.2
	Ethalfuralin	73.0	82.9	78.1			5.98
	Ethion	84.0	77.2	114			38.7
	Ethoprop	92.9	108	114			5.41
	Etridiazole	53.4	61.4	65.0			5.77
	Fenamiphos	84.6	95.7	78.0			20.4
	Fenbuconazole	91.0	82.1	110			29.0
	Fenpropathrin	66.6	128	105			19.9
	Fipronil	88.2	79.3	121			29.4
	Fipronil Desulfinyl	87.3	101	119			15.6
	Fipronil Sulfide	85.3					33.9
	Fipronil Sulfone	83.2					24.0
	Fluazifop-P-butyl	96.7	106	103			2.95
	Fludioxonil	100	82.2	102			21.8
	Flumioxazin	136	126	121			3.66
	Flutolanil	88.5	72.0	81.7			12.7
	Fluxapyroxad	87.6	95.3	93.4			2.10
	Fonofos	94.3	103	107			4.44
	Gamma-BHC	88.4	105	95.1			9.69
	Gamma-Chlordane	72.7	76.8	75.6			1.62
	Heptachlor	68.2	77.9	73.1			6.42
	Heptachlor Epoxide	82.2	86.4	86.4			0.0326
	Hexachlorobenzene	66.6	82.4	75.3			8.95
	Hexazinone	97.9	121	119			1.54
	Imazalil	92.0	95.0	87.5			8.19

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Iprodione	100	74.4	100		29.9
	Kepone	73.4	62.8	53.1		16.6
	Lambda-Cyhalothrin	63.4	186	156		17.6
	Loratadine	95.9	113	128		12.7
	Malathion	87.4	81.1	109		29.2
	Metalaxyl	79.1	111	121		8.27
	Methoprene	48.1	93.6	79.0		17.0
	Methoxychlor	84.2	98.2	107		8.49
	Metolachlor	82.3	85.6	98.0		13.5
	Metribuzin	83.7	73.9	74.3		0.464
	Mevinphos	89.3	101	115		13.7
	MGK-264	79.6	103	93.2		9.80
	Mirex	59.1	83.6	75.7		9.92
	Molinate	77.3	85.9	83.1		3.28
	Myclobutanil	83.8	86.3	101		15.5
	Naled	85.0	68.7	78.3		13.0
	Napropamide	80.5	74.5	86.1		14.4
	Norflurazon	82.3	72.6	89.9		21.3
	Octinoxate	99.0	80.8	86.5		5.48
	Oxadiazon	77.2	63.7	77.8		20.0
	Oxybenzone	80.4	83.2	80.1		3.83
	Oxychlordane	71.2	74.2	73.2		1.33
	Oxyfluorfen	116	121	126		3.60
	Parathion Ethyl	88.7	96.0	91.5		4.87
	Parathion Methyl	119	137	120		13.3
	PBDE-47	90.0	87.1	83.0		4.89
	PBDE-99	91.4	85.0	80.8		5.05
	PCB-1016	78.8	89.0	91.6		2.89
	PCB-1260	82.7	99.8	98.1		1.74
	Pendimethalin	98.4	120	122		1.32
	Permethrin	72.2	137	115		17.1
	Phenothrin	55.3	119	117		2.04
	Phenytoin	25.8	24.3	27.2		11.4
	Phorate	93.2	104	126		18.6
	Piperonyl Butoxide	120	178	141		23.3
	Prallethrin	75.3	148	139		5.92
	Prodiamine	37.6	61.0	66.5		8.55
	Prometon	81.3	80.8	101		22.1
	Prometryn	86.9	67.9	75.1		10.1
	Pronamide	93.0	96.4	91.6		5.13
	Propanil	115	116	113		2.53
	Propargite	57.4	61.0	66.7		8.97
	Propiconazole	77.8	50.9	80.0		25.3
	Pyraflufen Ethyl	83.4	87.5	86.8		0.794
	Pyridaben	80.3	80.6	91.5		12.6
	Pyriproxyfen	82.0	69.0	78.4		12.8
	Simazine	87.8	89.1	88.4		0.752
	Stirophos	69.1	27.3	29.8		8.76
	Sulfentrazone	113				25.9
	Tau-Fluvalinate	69.6	188	148		23.8
	Tebuconazole	53.6	23.0	50.8		36.0
	Terbufos	103	121	125		3.52
	Terbuthylazine	88.0	107	108		0.176
	Tetramethrin	92.8	206	177		14.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Thiobencarb	72.0	69.1	74.2			7.14
	Trans-Nonachlor	75.7	76.3	73.4			3.86
	Tri-o-cresyl Phosphate	96.8	91.2	85.0			6.93
	Triadimefon	79.6	76.7	87.5			13.1
	Triclosan Methyl	82.9	79.1	75.3			4.95
	Trifluralin	68.3	80.2	74.0			8.05
EPA 8276	Chlordane	88.6	92.5	91.5			1.14
	Toxaphene	86.9	97.1	92.5			4.82
EPA 8321B	2,4-D	111					9.74
	2,4,5-T	94.6	94.1	77.6			19.2
	3-Hydroxycarbofuran	87.7	91.7	98.3			6.98
	Acesulfame K	81.4	84.3	84.3			0.0195
	Acetaminophen	95.0	116	110			5.68
	Acetamiprid	103	89.2	83.7			6.36
	Afidopyropen	73.9	85.7	83.8			2.21
	Aldicarb	68.1	51.6	64.1			21.5
	Aldicarb Sulfone	91.6	108	109			0.685
	Aldicarb Sulfoxide	94.6	45.3	47.2			4.15
	AMPA	118	101	101			0.312
	Bentazon	116	105	92.6			9.87
	Benzovindiflupyr	96.4	93.6	87.0			7.34
	Carbamazepine	95.8	99.7	92.9			7.03
	Carbaryl	70.4	58.5	63.5			8.19
	Carbofuran	80.9	65.6	64.4			1.79
	Clothianidin	102	121	110			9.52
	Dinotefuran	101	137	136			1.19
	Diuron	88.1	77.3	69.4			10.8
	Endothall	123	122	121			1.50
	Fenuron	108	97.3	89.4			8.47
	Fluridone	102	102	104			1.05
	Glufosinate	155	86.5	92.8			7.05
	Glyphosate	113	86.1	87.6			1.72
	Hydrocodone	98.4	104	104			0.319
	Ibuprofen	89.9	84.4	82.3			2.57
	Imazapyr	103	103	94.7			7.78
	Imidacloprid	141	150	141			6.37
	Linuron	96.5	86.5	88.8			2.69
	Mandestrobin	95.9	90.1	85.5			5.27
	MCPP	110	110	103			6.98
	Methiocarb	90.7	74.4	69.9			6.32
	Methomyl	90.3	75.9	81.9			7.64
	Naproxen	72.7	86.7	78.6			9.78
	Oxamyl	84.8	76.1	80.9			6.13
	Primidone	106	120	115			4.39
	Propoxur	73.1	56.2	62.3			10.2
	Pyraclostrobin	86.4	87.1	84.5			3.07
	Silvex	88.4	91.9	80.7			13.1
	Sucralose	93.6	92.1	91.7			0.321
	Thiamethoxam	98.5	133	126			5.47
	Tolfenpyrad	57.9	58.2	57.2			1.80
	Triclopyr	105	96.7	89.0			8.32
SM 2320 B-2011	Total Alkalinity	100				0.165	
SM 4500-F- C-2011	Fluoride	101	99.4	98.6			0.483
SM 5310 B-2011	Organic Carbon	97.1	91.1	90.3			0.767

Reference Method Descriptions

Method	Description	Associated Samples
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2341571, 2341573
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2341586
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2341586
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2341572, 2341574
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2341572, 2341574
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2341572, 2341574
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2341572, 2341574
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2341585
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2341584
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2341585
EPA 8270E	PCBs in water matrices by GC/MS/MS	2341584
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2341584
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2341582
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2341583
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2341571, 2341573
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2341571, 2341573
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2341571, 2341573
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2341572, 2341574

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	07/14/2022			07/14/2022 14:42	Khloe J Berg	2341571
	07/14/2022			07/14/2022 14:44	Khloe J Berg	2341573
EPA 200.7 Rev. 4.4	07/14/2022	07/21/2022 10:03	Megan Whitefoot	07/27/2022 05:25	McKinley C Carter	2341586
	07/14/2022	07/21/2022 10:03	Megan Whitefoot	07/27/2022 06:25	McKinley C Carter	2341586
EPA 200.8 Rev. 5.4	07/14/2022	07/21/2022 10:03	Megan Whitefoot	07/25/2022 23:14	Alexander Thompson	2341586
	07/14/2022	07/21/2022 10:03	Megan Whitefoot	07/27/2022 21:18	Alexander Thompson	2341586
EPA 350.1 Rev. 2.0	07/14/2022			07/28/2022 11:33	Judith K. Clark	2341572
	07/14/2022			07/28/2022 11:48	Judith K. Clark	2341574
EPA 351.2 Rev. 2.0	07/14/2022	07/20/2022 11:06	Samantha L Bates	07/21/2022 12:29	Alexandra J Mattheus	2341572
	07/14/2022	07/21/2022 10:28	Samantha L Bates	07/25/2022 14:53	Samantha L Bates	2341574
EPA 353.2 Rev. 2.0	07/14/2022			07/19/2022 15:12	Judith K. Clark	2341572
	07/14/2022			07/19/2022 15:14	Judith K. Clark	2341574
EPA 365.1 Rev. 2.0	07/14/2022	07/21/2022 15:53	Adam P Silver	07/25/2022 13:46	James L Waggeberby	2341572
	07/14/2022	07/21/2022 15:53	Adam P Silver	07/25/2022 13:47	James L Waggeberby	2341574
EPA 8270E	07/14/2022	07/18/2022 08:15	Rasheda Ghaffari	07/20/2022 23:33	Arthur Maknenko	2341584
	07/14/2022	07/18/2022 08:15	Rasheda Ghaffari	07/21/2022 01:30	Michael Poppell	2341584
	07/14/2022	07/20/2022 08:15	Rasheda Ghaffari	07/24/2022 21:14	Michael Poppell	2341585
	07/14/2022	07/20/2022 08:15	Rasheda Ghaffari	07/26/2022 15:57	Lipi Saha	2341585
	07/14/2022	07/20/2022 08:15	Rasheda Ghaffari	07/28/2022 19:12	Michael Poppell	2341585
	07/14/2022	07/20/2022 08:15	Rasheda Ghaffari	07/28/2022 19:38	Michael Poppell	2341585
EPA 8276	07/14/2022	07/18/2022 08:15	Rasheda Ghaffari	07/21/2022 04:07	Arthur Maknenko	2341584
EPA 8321B	07/14/2022	07/18/2022 10:10	Umesh Chiluwal	07/18/2022 14:51	Umesh Chiluwal	2341583
	07/14/2022	07/18/2022 10:10	Umesh Chiluwal	07/19/2022 07:16	Umesh Chiluwal	2341583
	07/14/2022	07/19/2022 09:00	June Rhew	07/22/2022 01:53	Juyoung Kim	2341583
	07/14/2022	07/19/2022 09:00	June Rhew	07/22/2022 10:08	Juyoung Kim	2341583
	07/14/2022	07/20/2022 09:00	June Rhew	07/21/2022 17:55	Juyoung Kim	2341582
SM 2320 B-2011	07/14/2022			07/27/2022 04:09	Dale L. Simmons	2341571
	07/14/2022			07/27/2022 04:23	Dale L. Simmons	2341573
SM 2540 D-2011	07/14/2022			07/19/2022 15:12	Yijie Li	2341571, 2341573
SM 4500-F- C-2011	07/14/2022			07/27/2022 00:12	Dale L. Simmons	2341571
	07/14/2022			07/27/2022 00:18	Dale L. Simmons	2341573
SM 5310 B-2011	07/14/2022			07/23/2022 06:36	Touraj Touran	2341572
	07/14/2022			07/23/2022 07:26	Touraj Touran	2341574