Chemical Analysis Report

NE-DIST-2024-04-09-01

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

Event Description: **LSJR NorthEast 2**
Request ID: **RQ-2024-04-08-17**
Customer: **NE-DIST**
Project ID: **SMP**

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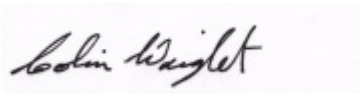
Certified by: Colin Wright, Program Administrator

Date Certified: 07-MAY-2024 10:16



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: BIG POTTSBURG CR HOGAN RD BR **Collection Date/Time: 04/08/2024 09:25**

Field ID: 20030067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480799	EPA 200.7 Rev. 4.4	Calcium	33.7		mg/L	P444046	
		Iron	470		ug/L	P444046	
		Magnesium	10.5		mg/L	P444046	
		Potassium	3.0		mg/L	P444046	
		Sodium	49.0		mg/L	P444046	
		Strontium	325		ug/L	P444046	
		Tin	3.0	U	ug/L	P444046	
		Titanium	1.0	I	ug/L	P444046	
		Vanadium	2.0	U	ug/L	P444046	
		Zinc	17	I	ug/L	P444046	
	EPA 200.8 Rev. 5.4	Aluminum	99		ug/L	P444046	
		Antimony	0.20	I	ug/L	P444046	
		Arsenic	1.06		ug/L	P444046	
		Barium	24.5		ug/L	P444046	
		Beryllium	0.010	U	ug/L	P444046	
		Boron	54.6		ug/L	P444046	
		Cadmium	0.020	U	ug/L	P444046	
		Chromium	0.47	I	ug/L	P444046	
		Cobalt	0.087		ug/L	P444046	
		Copper	1.42		ug/L	P444046	
		Lead	0.67		ug/L	P444046	
		Manganese	24.4		ug/L	P444046	
		Molybdenum	0.57	I	ug/L	P444046	
		Nickel	0.97	I	ug/L	P444046	
		Selenium	0.20	U	ug/L	P444046	
		Silver	0.010	U	ug/L	P444046	
		Thallium	0.10	U	ug/L	P444046	
	SM 2340 B-2011	Hardness	127		mg/L	P444046	

Sample Location: RED BAY BRANCH AT LONE STAR ROAD **Collection Date/Time: 04/08/2024 09:55**

Field ID: 20030674 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480800	EPA 200.7 Rev. 4.4	Calcium	33.5		mg/L	P444046	
		Iron	170		ug/L	P444046	
		Magnesium	9.01		mg/L	P444046	
		Potassium	2.2		mg/L	P444046	
		Sodium	21.6		mg/L	P444046	
		Strontium	371		ug/L	P444046	
		Tin	3.0	U	ug/L	P444046	
		Titanium	0.75	U	ug/L	P444046	
		Vanadium	2.0	U	ug/L	P444046	
		Zinc	15	I	ug/L	P444046	
	EPA 200.8 Rev. 5.4	Aluminum	98		ug/L	P444046	
		Antimony	0.12	I	ug/L	P444046	
		Arsenic	0.25		ug/L	P444046	
		Barium	42.6		ug/L	P444046	
		Beryllium	0.010	U	ug/L	P444046	
		Boron	62.3		ug/L	P444046	
		Cadmium	0.033	I	ug/L	P444046	
		Chromium	0.40	U	ug/L	P444046	
		Cobalt	0.112		ug/L	P444046	
		Copper	0.57	I	ug/L	P444046	
		Lead	1.04		ug/L	P444046	
		Manganese	20.4		ug/L	P444046	
		Molybdenum	0.26	I	ug/L	P444046	
		Nickel	0.50	U	ug/L	P444046	
		Selenium	0.20	U	ug/L	P444046	
		Silver	0.010	U	ug/L	P444046	
		Thallium	0.10	U	ug/L	P444046	
	SM 2340 B-2011	Hardness	121		mg/L	P444046	

Sample Location: LITTLE POTTSBURG CREEK AT ATLANTIC BLVD **Collection Date/Time: 04/08/2024 10:45**

Field ID: 20030679 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480785	DEP SOP: NU-094-1	Color (true)	95		PCU	P444011	
	EPA 180.1 Rev. 2.0	Turbidity	7.2		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	4.4E+03		mg Cl/L	P444325	
		Sulfate	630		mg SO4/L	P444328	
	SM 2320 B-2011	Total Alkalinity	75		mg CaCO3/L	P444095	
	SM 2540 C-2015	TDS	7.63E+03		mg/L	P444536	
	SM 2540 D-2015	TSS	19		mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.33		mg F/L	P444102	
2480786	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P444060	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P444144	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.21		mg N/L	P444298	
	EPA 365.1 Rev. 2.0	Total-P	0.086		mg P/L	P444164	
	SM 5310 B-2014	Organic Carbon	13		mg C/L	P444173	
2480795	EPA 8321B	Aldicarb	0.020	U	ug/L	P443928	
		Aldicarb Sulfone	0.0020	U	ug/L	P443928	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P443928	MS
		Carbaryl	0.0020	U	ug/L	P443928	
		Carbofuran	0.0020	U	ug/L	P443928	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P443928	
		Methiocarb	0.0020	U	ug/L	P443928	
		Methomyl	0.0020	U	ug/L	P443928	
		Oxamyl	0.0020	U	ug/L	P443928	
		Propoxur	0.0020	U	ug/L	P443928	
2480796		Acesulfame K	0.10	U	ug/L	P443967	
		2,4-D	0.016		ug/L	P443976	MS
		2,4,5-T	0.0040	U	ug/L	P443976	
		AMPA	1.0	U	ug/L	P443967	
		Acetaminophen	0.0080	U	ug/L	P443976	
		Acetamiprid	0.0020	U	ug/L	P443976	
		Endothall	0.25	U	ug/L	P443967	
		Glufosinate	1.0	U	ug/L	P443967	
		Glyphosate	1.0	U	ug/L	P443967	
		Afidopyropen	0.0020	U	ug/L	P443976	
		Bentazon	0.014		ug/L	P443976	
		Sucralose	0.43		ug/L	P443967	
		Benzovindiflupyr	0.0020	U	ug/L	P443976	
		Carbamazepine	1.0E-03	I	ug/L	P443976	
		Clothianidin	0.0020	U	ug/L	P443976	
		Dinotefuran	0.0020	U	ug/L	P443976	
		Diuron	0.016		ug/L	P443976	
		Fenuron	0.032	U	ug/L	P443976	
		Fluridone	0.0023	I	ug/L	P443976	
		Imazapyr	0.13		ug/L	P443976	

Field ID: 20030679 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480796	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P443976	
		Ibuprofen	0.080	U	ug/L	P443976	
		Imidacloprid	0.017		ug/L	P443976	
		Linuron	0.0040	U	ug/L	P443976	
		Mandestrobin	0.0020	U	ug/L	P443976	
		MCPP	0.0020	U	ug/L	P443976	
		Naproxen	0.0080	U	ug/L	P443976	
		Primidone	0.0040	U	ug/L	P443976	
		Pyraclostrobin	0.0020	U	ug/L	P443976	
		Silvex	0.0040	U	ug/L	P443976	
		Thiamethoxam	0.0020	U	ug/L	P443976	
		Tolfenpyrad	0.0020	U	ug/L	P443976	
		Triclopyr	0.0040	U	ug/L	P443976	
2480797	EPA 8270E	Aldrin	0.66	U	ng/L	P444034	
		Alpha-BHC	0.10	U	ng/L	P444034	
		Alpha-Chlordane	0.21	I	ng/L	P444034	
		PCB-1016	2.0	U	ng/L	P444034	
		Beta-BHC	0.10	U	ng/L	P444034	
		PCB-1221	2.0	U	ng/L	P444034	
		Beta-Cyfluthrin	1.3	U	ng/L	P444034	
		PCB-1232	2.0	U	ng/L	P444034	
		Bifenthrin	0.51	U	ng/L	P444034	
		PCB-1242	2.0	U	ng/L	P444034	
		PCB-1248	2.0	U	ng/L	P444034	
		Chlorothalonil	3.7	U	ng/L	P444034	
		PCB-1254	2.0	U	ng/L	P444034	
		Cis-Nonachlor	0.20	U	ng/L	P444034	
		PCB-1260	2.0	U	ng/L	P444034	
		Cypermethrin	1.5	U	ng/L	P444034	
		Dacthal	0.15	U	ng/L	P444034	
		DDD-p,p'	0.25	U	ng/L	P444034	
		DDE-p,p'	0.20	U	ng/L	P444034	
		DDT-p,p'	0.81	U	ng/L	P444034	
		Delta-BHC	0.41	U	ng/L	P444034	
		Deltamethrin	1.3	U	ng/L	P444034	
		Dichlobenil	0.25	U	ng/L	P444034	
		Dicofol	1.3	U	ng/L	P444034	
		Dieldrin	0.41	U	ng/L	P444034	
		Endosulfan I	0.41	U	ng/L	P444034	
		Endosulfan II	0.91	U	ng/L	P444034	
		Endosulfan Sulfate	0.30	U	ng/L	P444034	
		Endrin	0.91	U	ng/L	P444034	
		Endrin Aldehyde	0.76	U	ng/L	P444034	
		Endrin Ketone	0.41	U	ng/L	P444034	
		Esfenvalerate	0.76	U	ng/L	P444034	

Field ID: 20030679 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480797	EPA 8270E	Ethalfluralin	0.15	U	ng/L	P444034	
		Fenpropathrin	0.25	U	ng/L	P444034	
		Gamma-BHC	0.13	U	ng/L	P444034	
		Gamma-Chlordane	0.29	I	ng/L	P444034	
		Heptachlor	0.20	U	ng/L	P444034	
		Heptachlor Epoxide	0.25	U	ng/L	P444034	
		Hexachlorobenzene**	1.0	U	ng/L	P444034	
		Kepone	14	UJ	ng/L	P444034	CCV
		Lambda-Cyhalothrin	0.76	U	ng/L	P444034	
		Methoprene	0.76	U	ng/L	P444034	
		Methoxychlor	0.30	U	ng/L	P444034	
		MGK-264	0.20	U	ng/L	P444034	
		Mirex	0.36	U	ng/L	P444034	
		Oxychlordane	0.30	U	ng/L	P444034	
		Permethrin	1.6	U	ng/L	P444034	
		Phenothrin	0.91	U	ng/L	P444034	
		Piperonyl Butoxide	0.15	U	ng/L	P444034	
		Prallethrin	2.0	U	ng/L	P444034	
		Tau-Fluvalinate	0.25	U	ng/L	P444034	
		Tetramethrin	0.76	U	ng/L	P444034	
		Trans-Nonachlor	0.20	U	ng/L	P444034	
		Triclosan Methyl	0.15	U	ng/L	P444034	
		Trifluralin	0.20	U	ng/L	P444034	
	EPA 8276	Chlordane	2.0	U	ng/L	P444034	
		Toxaphene	15	U	ng/L	P444034	
2480798	EPA 8270E	Oxybenzone**	10	U	ng/L	P444018	RPD
		Acetochlor	0.20	U	ng/L	P444018	
		Octinoxate**	150	U	ng/L	P444018	
		Alachlor	0.41	U	ng/L	P444018	
		Avobenzone**	100	U	ng/L	P444018	
		Ametryn	1.1	U	ng/L	P444018	
		Atrazine	36		ng/L	P444018	
		PBDE-47**	4.1	U	ng/L	P444018	
		Atrazine Desethyl	1.3	U	ng/L	P444018	
		PBDE-99**	5.1	U	ng/L	P444018	RPD
		Azinphos Methyl	3.0	U	ng/L	P444018	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P444018	
		Azoxystrobin	4.2	J	ng/L	P444018	
		Bromacil	0.61	U	ng/L	P444018	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P444018	RPD
		Butylate	0.46	U	ng/L	P444018	
		Dechlorane Plus**	30	U	ng/L	P444018	
		Caffeine**	14	I	ng/L	P444018	
		Dechlorane 602**	5.1	U	ng/L	P444018	RPD

Field ID: 20030679 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480798	EPA 8270E	Carbophenothion	0.51	U	ng/L	P444018	
		Dechlorane 603**	4.1	U	ng/L	P444018	
		Carfentrazone Ethyl	0.15	U	ng/L	P444018	
		Hexabromobenzene**	6.1	U	ng/L	P444018	MS
		Chlorfenapyr	0.30	U	ng/L	P444018	MS
		PBB-153**	6.1	U	ng/L	P444018	
		Chlorpyrifos Ethyl	0.30	U	ng/L	P444018	
		Pentabromotoluene**	3.0	U	ng/L	P444018	
		Chlorpyrifos Methyl	0.10	U	ng/L	P444018	
		Tris(2-chloroethyl) phosphate (TCEP)**	56	U	ng/L	P444018	MS, RPD
		Coumaphos	1.1	U	ng/L	P444018	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	61	I	ng/L	P444018	RPD
		Cyanazine	5.1	U	ng/L	P444018	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	4.9	I	ng/L	P444018	MS, RPD
		Cyprodinil	0.20	U	ng/L	P444018	
		Tetradecachloro-m-terphenyl**	7.6	U	ng/L	P444018	
		Demeton	3.6	U	ng/L	P444018	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	61	U	ng/L	P444018	MS, RPD
		Diazinon	0.13	U	ng/L	P444018	
		Difenoconazole	0.61	U	ng/L	P444018	
		Dimethenamid	0.10	U	ng/L	P444018	
		Dimethomorph	0.30	U	ng/L	P444018	
		Disulfoton	0.61	U	ng/L	P444018	
		Dithiopyr	1.0	U	ng/L	P444018	
		EPTC	0.51	U	ng/L	P444018	
		Ethion	0.30	U	ng/L	P444018	RPD
		Ethoprop	0.27	I	ng/L	P444018	
		Etridiazole	0.10	U	ng/L	P444018	
		Fenamiphos	0.46	U	ng/L	P444018	
		Fenbuconazole	0.51	U	ng/L	P444018	
		Fipronil	0.61	I	ng/L	P444018	
		Fipronil Desulfinyl**	0.32	I	ng/L	P444018	
		Fipronil Sulfide	0.40	I	ng/L	P444018	
		Fipronil Sulfone	0.72		ng/L	P444018	
		Fluazifop-P-butyl	0.10	U	ng/L	P444018	
		Fludioxonil	0.50	I	ng/L	P444018	
		Flumioxazin	3.0	U	ng/L	P444018	
		Flutolanil	0.10	U	ng/L	P444018	MS
		Fluxapyroxad	0.25	U	ng/L	P444018	
		Fonofos	0.15	U	ng/L	P444018	
		Hexazinone	0.51	U	ng/L	P444018	
		Imazalil	0.66	U	ng/L	P444018	
		Iprodione	0.51	U	ng/L	P444018	
		Loratadine**	0.30	U	ng/L	P444018	

Field ID: 20030679 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480798	EPA 8270E	Malathion	0.36	U	ng/L	P444018	
		Metalaxyl	1.3	I	ng/L	P444018	
		Metolachlor	57		ng/L	P444018	
		Metribuzin	100		ng/L	P444018	
		Mevinphos	1.0	U	ng/L	P444018	
		Molinate	0.25	U	ng/L	P444018	
		Myclobutanil	0.56	I	ng/L	P444018	
		Naled	2.5	U	ng/L	P444018	
		Napropamide	0.71	U	ng/L	P444018	
		Norflurazon	1.0	U	ng/L	P444018	
		Oxadiazon	6.2		ng/L	P444018	
		Oxyfluorfen	0.20	U	ng/L	P444018	
		Parathion Ethyl	0.15	U	ng/L	P444018	
		Parathion Methyl	0.20	U	ng/L	P444018	
		Pendimethalin	1.7	U	ng/L	P444018	
		Phenytoin**	5.4	U	ng/L	P444018	
		Phorate	0.25	U	ng/L	P444018	
		Prodiamine	1.0		ng/L	P444018	MS, RPD
		Prometon	3.0	U	ng/L	P444018	
		Prometryn	0.36	U	ng/L	P444018	
		Pronamide	0.10	U	ng/L	P444018	
		Propanil	0.10	U	ng/L	P444018	
		Propargite	0.81	U	ng/L	P444018	
		Propiconazole	0.61	U	ng/L	P444018	
		Pyraflufen Ethyl	0.30	U	ng/L	P444018	
		Pyridaben	1.4	U	ng/L	P444018	
		Pyriproxyfen	0.25	U	ng/L	P444018	
		Simazine	3.8		ng/L	P444018	
		Stirophos	0.41	U	ng/L	P444018	
		Sulfentrazone	2.2	I	ng/L	P444018	RPD
		Tebuconazole	1.5	I	ng/L	P444018	
		Terbufos	0.20	U	ng/L	P444018	
		Terbuthylazine	0.20	U	ng/L	P444018	
		Thiobencarb	0.51	U	ng/L	P444018	
		Triadimefon	0.15	U	ng/L	P444018	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: MS accuracy for kepone not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Estimation for azoxystrobin due to internal standard recovery exceeding control limits.

Sample Location: CHRISTOPHER CR AT SAN JOSE BLVD SR 13 **Collection Date/Time: 04/08/2024 11:55**

Field ID: 20030863 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2480787	DEP SOP: NU-094-1	Color (true)	120		PCU	P444012	
	EPA 180.1 Rev. 2.0	Turbidity	6.4		NTU	P444016	
	EPA 300.0 Rev. 2.1	Chloride	1.1E+03		mg Cl/L	P444325	
		Sulfate	180		mg SO4/L	P444328	
	SM 2320 B-2011	Total Alkalinity	67		mg CaCO3/L	P444228	
	SM 2540 C-2015	TDS	2.14E+03		mg/L	P444536	
	SM 2540 D-2015	TSS	13		mg/L	P444433	
	SM 4500-F- C-2011	Fluoride	0.16		mg F/L	P444232	
2480788	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P444196	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.69		mg N/L	P443994	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P444215	
	EPA 365.1 Rev. 2.0	Total-P	0.071		mg P/L	P444241	
	SM 5310 B-2014	Organic Carbon	15		mg C/L	P444173	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P444012

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P444046

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Cobalt	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444325

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444328

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444060

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P444144

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444298

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444164

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

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

Reference Method: EPA 8270E
Batch ID: P444018

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P444018

Component	Result	Code	Units
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P444034

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P444034

Component	Result	Code	Units
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P444034

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

Reference Method: EPA 8321B
Batch ID: P443928

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: P443967

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: P443976

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: P443976

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	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P444095

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

Reference Method: SM 2320 B-2011
Batch ID: P444228

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

Reference Method: SM 2540 C-2015
Batch ID: P444536

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P444433

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2014
Batch ID: P444173

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.5		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P444012

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.7		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P444046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	94.2		P	80 - 120
Iron	94.9		P	80 - 120
Magnesium	93.5		P	80 - 120
Potassium	94.5		P	80 - 120
Sodium	92.0		P	80 - 120
Strontium	94.4		P	85 - 115
Tin	97.5		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	99.9		P	85 - 115
Zinc	95.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.9		P	85 - 115
Antimony	99.9		P	85 - 115
Arsenic	99.3		P	85 - 115
Barium	101		P	85 - 115
Beryllium	99.6		P	85 - 115
Boron	101		P	85 - 115
Cadmium	97.1		P	85 - 115
Chromium	97.5		P	85 - 115
Cobalt	96.2		P	85 - 115
Copper	97.2		P	85 - 115
Lead	96.3		P	85 - 115
Manganese	98.8		P	85 - 115
Molybdenum	96.9		P	85 - 115
Nickel	97.1		P	85 - 115
Selenium	100		P	85 - 115
Silver	96.4		P	85 - 115
Thallium	95.6		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444325

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444328

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	92.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

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: P443994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.5		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P444144

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	94.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444298

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444164

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

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

Reference Method: EPA 8270E
Batch ID: P444018

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	64.0		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	57.5		P	37 - 154
Acetochlor	84.9		P	64 - 124
Alachlor	90.8		P	61 - 118
Ametryn	94.0		P	47 - 158
Atrazine	83.9		P	68 - 121
Atrazine Desethyl	84.1		P	30 - 119
Avobenzone	147		P	48 - 193
Azinphos Methyl	104		P	30 - 194
Azoxystrobin	95.1		P	58 - 154
Bromacil	92.7		P	47 - 126
Butylate	62.3		P	31 - 83.0
Caffeine	87.2		P	10 - 180
Carbophenothion	88.5		P	59 - 133
Carfentrazone Ethyl	93.0		P	59 - 147
Chlorfenapyr	88.9		P	52 - 118
Chlorpyrifos Ethyl	102		P	59 - 119
Chlorpyrifos Methyl	118		P	65 - 123
Coumaphos	63.9		P	11 - 223
Cyanazine	117		P	63 - 250
Cyprodinil	98.0		P	52 - 143
Dechlorane 602	76.6		P	23 - 142
Dechlorane 603	97.6		P	51 - 171
Dechlorane Plus	108		P	46 - 161
Demeton	80.4		P	42 - 119
Diazinon	107		P	67 - 132
Difenoconazole	81.9		P	12 - 204
Dimethenamid	94.6		P	53 - 113
Dimethomorph	157		P	13 - 238
Disulfoton	99.2		P	56 - 126
Dithiopyr	115		P	58 - 127
EPTC	56.0		P	31 - 78.0
Ethion	70.7		P	24 - 127
Ethoprop	95.1		P	60 - 118
Etridiazole	69.4		P	32 - 91.0
Fenamiphos	80.6		P	54 - 129
Fenbuconazole	66.1		P	31 - 162
Fipronil	92.2		P	56 - 131
Fipronil Desulfinyl	102		P	58 - 132
Fipronil Sulfide	87.2		P	51 - 123
Fipronil Sulfone	104		P	50 - 125
Fluazifop-P-butyl	115		P	52 - 132
Fludioxonil	97.9		P	52 - 129
Flumioxazin	102		P	34 - 250
Flutolanil	84.2		P	45 - 128
Fluxapyroxad	97.1		P	31 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P444018

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fonofos	93.8		P	60 - 116
Hexabromobenzene	56.7		P	52 - 165
Hexazinone	81.2		P	59 - 120
Imazalil	85.0		P	39 - 134
Iprodione	78.9		P	39 - 243
Loratadine	140		P	10 - 240
Malathion	102		P	53 - 145
Metalaxyl	81.3		P	59 - 120
Metolachlor	98.7		P	64 - 122
Metribuzin	110		P	33 - 128
Mevinphos	91.4		P	48 - 119
Molinate	62.8		P	42 - 89.0
Myclobutanil	85.4		P	54 - 129
Naled	43.3		P	10 - 138
Napropamide	83.3		P	40 - 122
Norflurazon	78.1		P	49 - 132
Octinoxate	140		P	29 - 176
Oxadiazon	79.8		P	50 - 115
Oxybenzone	80.8		P	45 - 145
Oxyfluorfen	111		P	62 - 149
Parathion Ethyl	96.7		P	68 - 119
Parathion Methyl	88.5		P	68 - 147
PBB-153	61.0		P	42 - 179
PBDE-47	55.8		P	44 - 141
PBDE-99	62.6		P	36 - 141
Pendimethalin	134		P	59 - 158
Pentabromotoluene	115		P	58 - 148
Phenytoin	52.4		P	10 - 151
Phorate	82.0		P	44 - 124
Prodiamine	59.4		P	10 - 136
Prometon	94.0		P	45 - 131
Prometryn	117		P	52 - 140
Pronamide	106		P	70 - 129
Propanil	64.8		P	54 - 144
Propargite	53.4		P	10 - 191
Propiconazole	85.2		P	49 - 128
Pyraflufen Ethyl	87.1		P	46 - 141
Pyridaben	95.0		P	29 - 198
Pyriproxyfen	93.7		P	33 - 221
Simazine	105		P	62 - 119
Stirophos	85.7		P	13 - 144
Sulfentrazone	87.4		P	12 - 152
Tebuconazole	61.2		P	10 - 135
Terbufos	93.5		P	67 - 136
Terbuthylazine	82.8		P	66 - 113
Tetradecachloro-m-terphenyl	182		P	30 - 235
Thiobencarb	92.1		P	51 - 125
Tri-o-cresyl Phosphate	144		P	50 - 150
Triadimefon	84.9		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	77.8		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	74.0		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	96.6		P	59 - 166

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P444034

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	59.6		P	30 - 96.0
Alpha-BHC	82.4		P	70 - 109
Alpha-Chlordane	80.6		P	45 - 107
Beta-BHC	101		P	64 - 138
Beta-Cyfluthrin	75.2		P	17 - 141
Bifenthrin	66.2		P	10 - 113
Chlorothalonil	98.5		P	26 - 180
Cis-Nonachlor	65.0		P	37 - 102
Cypermethrin	72.9		P	20 - 133
Dacthal	89.1		P	69 - 114
DDD-p,p'	66.8		P	42 - 105
DDE-p,p'	75.8		P	42 - 106
DDT-p,p'	64.6		P	42 - 107
Delta-BHC	108		P	67 - 144
Deltamethrin	81.2		P	15 - 149
Dichlobenil	58.8		P	46 - 117
Dicofol	60.9		P	34 - 114
Dieldrin	85.7		P	50 - 108
Endosulfan I	77.4		P	55 - 104
Endosulfan II	73.1		P	51 - 111
Endosulfan Sulfate	84.9		P	56 - 121
Endrin	80.9		P	10 - 106
Endrin Aldehyde	63.6		P	34 - 114
Endrin Ketone	76.6		P	63 - 177
Esfenvalerate	83.8		P	29 - 143
Ethalfluralin	62.5		P	46 - 96.0
Fenpropathrin	69.6		P	28 - 115
Gamma-BHC	82.5		P	65 - 121
Gamma-Chlordane	79.3		P	39 - 103
Heptachlor	65.9		P	39 - 94.0
Heptachlor Epoxide	77.5		P	54 - 104
Hexachlorobenzene	63.2		P	36 - 100
Kepone	116		P	10 - 225
Lambda-Cyhalothrin	83.3		P	10 - 135
Methoprene	70.7		P	10 - 109
Methoxychlor	73.2		P	52 - 112
MGK-264	72.4		P	44 - 117
Mirex	67.4		P	20 - 90.0
Oxychlordane	60.9		P	44 - 102
PCB-1016	81.2		P	45 - 107
PCB-1260	78.7		P	40 - 118
Permethrin	72.1		P	18 - 135
Phenothrin	63.2		P	10 - 102
Piperonyl Butoxide	122		P	28 - 156
Prallethrin	72.6		P	28 - 113
Tau-Fluvalinate	71.7		P	10 - 123
Tetramethrin	77.3		P	18 - 158
Trans-Nonachlor	72.6		P	39 - 104
Triclosan Methyl	82.2		P	54 - 108
Trifluralin	70.6		P	46 - 97.0

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P444034

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.0		P	52 - 117
Toxaphene	91.0		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P443928

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	101		P	40 - 150
Aldicarb	93.0		P	30 - 150
Aldicarb Sulfone	102		P	40 - 150
Aldicarb Sulfoxide	114		P	40 - 150
Carbaryl	84.4		P	40 - 150
Carbofuran	88.9		P	40 - 150
Methiocarb	89.1		P	40 - 150
Methomyl	99.5		P	40 - 150
Oxamyl	103		P	40 - 150
Propoxur	94.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443967

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	96.8		P	40 - 150
AMPA	106		P	40 - 150
Endothall	93.6		P	40 - 150
Glufosinate	92.2		P	40 - 150
Glyphosate	80.3		P	40 - 150
Sucralose	98.8		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	123		P	40 - 150
2,4,5-T	110		P	40 - 150
Acetaminophen	85.6		P	30 - 150
Acetamiprid	91.2		P	40 - 150
Afidopyropen	78.5		P	30 - 150
Bentazon	94.4		P	30 - 150
Benzovindiflupyr	90.8		P	40 - 150
Carbamazepine	80.8		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	103		P	40 - 150
Diuron	74.3		P	40 - 150
Fenuron	99.7		P	40 - 150
Fluridone	101		P	40 - 150
Hydrocodone	101		P	40 - 150
Ibuprofen	79.4		P	40 - 150
Imazapyr	104		P	40 - 150
Imidacloprid	103		P	40 - 150
Linuron	83.8		P	40 - 150
Mandestrobin	96.5		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P443976

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCPP	133		P	40 - 150
Naproxen	84.3		P	40 - 150
Primidone	87.9		P	40 - 150
Pyraclostrobin	87.7		P	40 - 150
Silvex	98.7		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	57.2		P	30 - 150
Triclopyr	107		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P444095

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.4		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P444228

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.4		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P444536

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

Reference Method: SM 2540 D-2015
Batch ID: P444433

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.8		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

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

Reference Method: SM 5310 B-2014
Batch ID: P444173

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P444046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480345	Calcium	91.4		P	80 - 120
2480345	Iron	93.4	94.4	P/P	80 - 120
2480345	Magnesium	89.6		P	80 - 120
2480345	Potassium	92.0	92.9	P/P	80 - 120
2480345	Sodium	88.5		P	80 - 120
2480345	Strontium	92.1	93.9	P/P	80 - 120
2480345	Tin	90.4	91.2	P/P	80 - 120
2480345	Titanium	97.0	96.9	P/P	80 - 120
2480345	Vanadium	97.7	98.0	P/P	80 - 120
2480345	Zinc	92.2	92.4	P/P	80 - 120
2480563	Calcium	90.6		P	80 - 120
2480563	Iron	94.8		P	80 - 120
2480563	Magnesium	95.4		P	80 - 120
2480563	Potassium	89.4		P	80 - 120
2480563	Sodium	89.4		P	80 - 120
2480563	Strontium	95.1		P	80 - 120
2480563	Tin	94.0		P	80 - 120
2480563	Titanium	100		P	80 - 120
2480563	Vanadium	99.8		P	80 - 120
2480563	Zinc	94.4		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480345	Aluminum	98.2	99.3	P/P	80 - 120
2480345	Antimony	98.3	98.2	P/P	80 - 120
2480345	Arsenic	99.2	98.9	P/P	80 - 120
2480345	Barium	102	103	P/P	80 - 120
2480345	Beryllium	96.0	97.7	P/P	80 - 120
2480345	Boron	99.9	103	P/P	80 - 120
2480345	Cadmium	101	99.7	P/P	80 - 120
2480345	Chromium	96.7	96.1	P/P	80 - 120
2480345	Cobalt	95.6	95.5	P/P	80 - 120
2480345	Copper	96.4	95.3	P/P	80 - 120
2480345	Lead	97.9	98.2	P/P	80 - 120
2480345	Manganese	99.0	100	P/P	80 - 120
2480345	Molybdenum	100	99.3	P/P	80 - 120
2480345	Nickel	95.2	94.8	P/P	80 - 120
2480345	Selenium	100	99.1	P/P	80 - 120
2480345	Silver	95.9	95.0	P/P	80 - 120
2480345	Thallium	98.7	99.3	P/P	80 - 120
2480563	Aluminum	98.7		P	80 - 120
2480563	Antimony	98.7		P	80 - 120
2480563	Arsenic	95.6		P	80 - 120
2480563	Barium	102		P	80 - 120
2480563	Beryllium	96.1		P	80 - 120
2480563	Boron	103		P	80 - 120
2480563	Cadmium	98.1		P	80 - 120
2480563	Chromium	95.8		P	80 - 120
2480563	Cobalt	93.9		P	80 - 120
2480563	Copper	93.0		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480563	Lead	96.8		P	80 - 120
2480563	Manganese	97.7		P	80 - 120
2480563	Molybdenum	95.8		P	80 - 120
2480563	Nickel	92.2		P	80 - 120
2480563	Selenium	95.5		P	80 - 120
2480563	Silver	94.7		P	80 - 120
2480563	Thallium	98.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444325

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480871	Chloride	103		P	90 - 110
2480909	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444328

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480871	Sulfate	103		P	90 - 110
2480909	Sulfate	105		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480525	Ammonia-N	102	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480675	Ammonia-N	97.6	99.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480677	Kjeldahl Nitrogen	105	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P444144

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480655	Kjeldahl Nitrogen	90.2	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480667	NO2NO3-N	96.5	98.5	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444298

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480780	NO2NO3-N	91.1	90.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444164

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480893	Total-P	95.6	96.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480820	Total-P	101	99.0	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P444018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2481011	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	47.0	27.8	F/F	50 - 150
2481011	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	68.1	43.8	P/P	29 - 155
2481011	Acetochlor	93.4	79.0	P/P	60 - 124
2481011	Alachlor	104	81.0	P/P	54 - 122
2481011	Ametryn	111	99.5	P/P	51 - 208
2481011	Atrazine Desethyl	70.0	95.7	P/P	13 - 124
2481011	Avobenzone	105	99.7	P/P	35 - 187
2481011	Azinphos Methyl	104	94.8	P/P	43 - 276
2481011	Bromacil	119	105	P/P	44 - 134
2481011	Butylate	60.3	57.9	P/P	23 - 82.0
2481011	Caffeine	95.1	93.6	P/P	10 - 277
2481011	Carbophenothion	77.5	95.6	P/P	47 - 135
2481011	Carfentrazone Ethyl	83.2	99.3	P/P	46 - 147
2481011	Chlorfenapyr	138	114	F/P	43 - 114
2481011	Chlorpyrifos Ethyl	93.8	88.7	P/P	47 - 124
2481011	Chlorpyrifos Methyl	112	103	P/P	60 - 135
2481011	Coumaphos	103	105	P/P	10 - 222
2481011	Cyanazine	127	110	P/P	10 - 257
2481011	Cyprodinil	114	100	P/P	42 - 148
2481011	Dechlorane 602	57.1	17.4	P/P	14 - 133
2481011	Dechlorane 603	77.5	67.9	P/P	18 - 191
2481011	Dechlorane Plus	76.3	53.5	P/P	23 - 154
2481011	Demeton	85.3	82.9	P/P	41 - 137
2481011	Diazinon	107	101	P/P	64 - 139
2481011	Difenoconazole	128	95.6	P/P	46 - 254
2481011	Dimethomorph	139	199	P/P	14 - 255
2481011	Disulfoton	102	96.9	P/P	52 - 130
2481011	Dithiopyr	102	93.5	P/P	40 - 121
2481011	EPTC	57.5	49.7	P/P	19 - 78.0
2481011	Ethion	78.2	32.5	P/P	12 - 124
2481011	Ethoprop	103	93.0	P/P	68 - 144
2481011	Etridiazole	70.6	55.1	P/P	26 - 96.0
2481011	Fenamiphos	90.7	99.8	P/P	41 - 129
2481011	Fenbuconazole	83.3	81.0	P/P	26 - 169

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P444018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2481011	Fipronil	104	82.7	P/P	46 - 145
2481011	Fipronil Desulfinyl	114	87.0	P/P	47 - 136
2481011	Fipronil Sulfide	108	85.5	P/P	41 - 127
2481011	Fipronil Sulfone	106	78.7	P/P	35 - 133
2481011	Fluazifop-P-butyl	112	83.9	P/P	46 - 131
2481011	Fludioxonil	83.5	81.2	P/P	51 - 124
2481011	Flumioxazin	122	121	P/P	10 - 289
2481011	Flutolanil	136	102	F/P	34 - 130
2481011	Fonofos	105	94.1	P/P	42 - 131
2481011	Hexabromobenzene	43.7	41.0	F/F	47 - 178
2481011	Hexazinone	88.1	85.3	P/P	64 - 125
2481011	Imazalil	90.6	81.3	P/P	37 - 252
2481011	Iprodione	66.7	88.6	P/P	34 - 265
2481011	Loratadine	181	188	P/P	20 - 231
2481011	Malathion	104	94.1	P/P	34 - 164
2481011	Metalaxyl	118	78.5	P/P	49 - 125
2481011	Metolachlor	105	102	P/P	54 - 125
2481011	Metribuzin	103	110	P/P	51 - 139
2481011	Mevinphos	97.4	90.3	P/P	46 - 130
2481011	Molinate	64.3	56.0	P/P	39 - 93.0
2481011	Myclobutanil	126	90.0	P/P	50 - 130
2481011	Naled	50.5	51.2	P/P	10 - 150
2481011	Napropamide	93.2	40.6	P/P	10 - 109
2481011	Norflurazon	74.6	75.1	P/P	36 - 134
2481011	Octinoxate	89.2	80.9	P/P	18 - 170
2481011	Oxybenzone	54.4	84.9	P/P	33 - 154
2481011	Oxyfluorfen	123	102	P/P	62 - 154
2481011	Parathion Ethyl	103	85.3	P/P	65 - 120
2481011	Parathion Methyl	84.1	79.3	P/P	77 - 185
2481011	PBB-153	72.0	69.8	P/P	23 - 193
2481011	PBDE-47	34.7	31.0	P/P	31 - 139
2481011	PBDE-99	55.5	30.0	P/P	24 - 138
2481011	Pentabromotoluene	75.4	69.0	P/P	54 - 152
2481011	Phenytoin	49.3	58.7	P/P	10 - 157
2481011	Phorate	85.6	74.7	P/P	54 - 161
2481011	Prodiamine	271	89.8	F/P	29 - 160
2481011	Prometon	95.8	91.9	P/P	38 - 145
2481011	Prometryn	129	118	P/P	32 - 151
2481011	Pronamide	108	94.5	P/P	61 - 140
2481011	Propanil	78.2	65.3	P/P	50 - 147
2481011	Propargite	57.5	43.8	P/P	10 - 190
2481011	Pyraflufen Ethyl	74.4	83.2	P/P	30 - 147
2481011	Pyridaben	109	112	P/P	15 - 195
2481011	Pyriproxyfen	92.3	71.3	P/P	31 - 218
2481011	Stirophos	99.1	45.5	P/P	10 - 134
2481011	Sulfentrazone	56.5	146	P/P	53 - 186
2481011	Tebuconazole	57.9	45.8	P/P	10 - 133
2481011	Terbufos	105	93.9	P/P	65 - 151
2481011	Terbuthylazine	93.8	81.2	P/P	62 - 117
2481011	Tetradecachloro-m-terphenyl	125	139	P/P	10 - 260
2481011	Thiobencarb	102	86.0	P/P	48 - 122
2481011	Tri-o-cresyl Phosphate	99.9	96.4	P/P	32 - 151

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P444018

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2481011	Triadimefon	93.3	81.2	P/P	46 - 124
2481011	Tris(1-chloro-2-propyl) phosphate (TCPP)	52.9	75.4	P/P	51 - 154
2481011	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	52.0	73.0	F/P	59 - 147
2481011	Tris(2-chloroethyl) phosphate (TCEP)	62.8	85.3	F/P	65 - 156

Reference Method: EPA 8270E
Batch ID: P444034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2482105	PCB-1016	84.6	80.2	P/P	45 - 107
2482105	PCB-1260	71.0	70.6	P/P	40 - 112
2482140	Aldrin	54.5	62.5	P/P	24 - 81.0
2482140	Alpha-BHC	74.7	90.5	P/P	65 - 110
2482140	Alpha-Chlordane	70.8	91.1	P/P	43 - 119
2482140	Beta-BHC	94.3	120	P/P	54 - 165
2482140	Beta-Cyfluthrin	75.5	88.3	P/P	27 - 165
2482140	Bifenthrin	64.4	73.8	P/P	17 - 117
2482140	Chlorothalonil	101	114	P/P	10 - 255
2482140	Cis-Nonachlor	57.7	69.8	P/P	34 - 98.0
2482140	Cypermethrin	72.0	83.3	P/P	25 - 143
2482140	Dacthal	79.2	97.9	P/P	55 - 139
2482140	DDD-p,p'	59.8	72.2	P/P	30 - 109
2482140	DDE-p,p'	67.9	82.4	P/P	35 - 106
2482140	DDT-p,p'	62.7	70.6	P/P	41 - 101
2482140	Delta-BHC	98.0	123	P/P	58 - 165
2482140	Deltamethrin	84.2	99.7	P/P	10 - 194
2482140	Dichlobenil	57.8	62.9	P/P	22 - 114
2482140	Dicofol	58.1	71.1	P/P	17 - 133
2482140	Dieldrin	73.1	93.3	P/P	45 - 129
2482140	Endosulfan I	67.9	82.7	P/P	49 - 104
2482140	Endosulfan II	65.7	81.8	P/P	37 - 117
2482140	Endosulfan Sulfate	79.8	96.1	P/P	38 - 128
2482140	Endrin	70.2	86.5	P/P	35 - 116
2482140	Endrin Aldehyde	54.6	77.1	P/P	19 - 108
2482140	Endrin Ketone	75.2	91.1	P/P	44 - 134
2482140	Esfenvalerate	84.0	97.3	P/P	27 - 176
2482140	Ethalfluralin	56.0	68.5	P/P	49 - 100
2482140	Fenpropathrin	65.7	77.3	P/P	34 - 117
2482140	Gamma-BHC	75.6	89.6	P/P	59 - 129
2482140	Gamma-Chlordane	69.3	87.3	P/P	33 - 107
2482140	Heptachlor	59.0	68.8	P/P	37 - 94.0
2482140	Heptachlor Epoxide	68.0	82.6	P/P	38 - 118
2482140	Hexachlorobenzene	58.8	69.5	P/P	35 - 97.0
2482140	Lambda-Cyhalothrin	80.2	95.2	P/P	23 - 190
2482140	Methoprene	63.5	76.2	P/P	21 - 109
2482140	Methoxychlor	69.0	84.2	P/P	46 - 118
2482140	MGK-264	67.6	83.6	P/P	39 - 122
2482140	Mirex	63.5	72.4	P/P	25 - 90.0
2482140	Oxychlordane	57.0	73.5	P/P	42 - 100
2482140	Permethrin	69.2	80.5	P/P	33 - 181
2482140	Phenothrin	63.3	75.0	P/P	12 - 125
2482140	Piperonyl Butoxide	101	135	P/P	10 - 178

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P444034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2482140	Prallethrin	63.7	75.8	P/P	24 - 122
2482140	Tau-Fluvalinate	73.9	84.5	P/P	13 - 151
2482140	Tetramethrin	72.3	89.6	P/P	16 - 172
2482140	Trans-Nonachlor	65.0	78.4	P/P	39 - 100
2482140	Triclosan Methyl	74.2	92.0	P/P	43 - 110
2482140	Trifluralin	63.6	76.4	P/P	45 - 94.0

Reference Method: EPA 8276
Batch ID: P444034

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2482105	Chlordane	67.4	69.5	P/P	43 - 123
2482105	Toxaphene	60.8	68.3	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P443928

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2479696	3-Hydroxycarbofuran	81.9	96.0	P/P	40 - 150
2479696	Aldicarb	83.4	71.3	P/P	30 - 150
2479696	Aldicarb Sulfone	94.4	97.5	P/P	40 - 150
2479696	Aldicarb Sulfoxide	34.2	38.4	F/F	40 - 150
2479696	Carbaryl	74.0	84.4	P/P	40 - 150
2479696	Carbofuran	73.0	78.1	P/P	40 - 150
2479696	Methiocarb	81.7	87.8	P/P	40 - 150
2479696	Methomyl	84.2	89.5	P/P	40 - 150
2479696	Oxamyl	87.6	91.0	P/P	40 - 150
2479696	Propoxur	71.9	75.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443967

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480734	Acesulfame K	85.7	82.6	P/P	40 - 150
2480734	AMPA	84.5	79.3	P/P	40 - 150
2480734	Endothall	116	117	P/P	40 - 150
2480734	Glufosinate	77.5	78.6	P/P	40 - 150
2480734	Glyphosate	72.4	63.2	P/P	40 - 150
2480734	Sucralose	111	101	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P443976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480731	2,4-D	157	147	F/P	40 - 150
2480731	2,4,5-T	114	95.4	P/P	40 - 150
2480731	Acetaminophen	108	95.5	P/P	30 - 150
2480731	Acetamiprid	85.6	79.3	P/P	40 - 150
2480731	Afidopyropen	72.4	64.5	P/P	30 - 150
2480731	Benzovindiflupyr	86.1	81.2	P/P	40 - 150
2480731	Carbamazepine	61.2	51.6	P/P	40 - 150
2480731	Clothianidin	93.3	90.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P443976

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480731	Dinotefuran	109	97.5	P/P	40 - 150
2480731	Diuron	50.1	45.9	P/P	40 - 150
2480731	Fenuron	79.9	74.0	P/P	40 - 150
2480731	Hydrocodone	94.1	84.4	P/P	40 - 150
2480731	Ibuprofen	89.7	76.0	P/P	40 - 150
2480731	Imazapyr	143	123	P/P	40 - 150
2480731	Imidacloprid	142	130	P/P	40 - 150
2480731	Linuron	76.2	64.2	P/P	40 - 150
2480731	Mandestrobin	93.4	82.7	P/P	40 - 150
2480731	MCPP	150	145	P/P	40 - 150
2480731	Naproxen	84.9	81.2	P/P	40 - 150
2480731	Primidone	108	94.6	P/P	40 - 150
2480731	Pyraclostrobin	88.7	83.1	P/P	40 - 150
2480731	Silvex	99.2	102	P/P	40 - 150
2480731	Thiamethoxam	92.1	85.0	P/P	40 - 150
2480731	Tolfenpyrad	73.4	58.8	P/P	30 - 150
2480731	Triclopyr	115	99.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2478055	Fluoride	101	103	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480668	Fluoride	102	103	P/P	94 - 106

Reference Method: SM 5310 B-2014
Batch ID: P444173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2480671	Organic Carbon	99.5	102	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P444011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480672	Color (true)	0.788	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P444012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480833	Color (true)	0.677	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P444016

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480666	Turbidity	7.78	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P444046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480345	Calcium	1.43	Spike	P	0 - 20
2480345	Iron	0.909	Spike	P	0 - 20
2480345	Magnesium	1.40	Spike	P	0 - 20
2480345	Potassium	0.629	Spike	P	0 - 20
2480345	Sodium	0.782	Spike	P	0 - 20
2480345	Strontium	1.63	Spike	P	0 - 20
2480345	Tin	0.807	Spike	P	0 - 20
2480345	Titanium	0.111	Spike	P	0 - 20
2480345	Vanadium	0.284	Spike	P	0 - 20
2480345	Zinc	0.246	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480345	Aluminum	0.802	Spike	P	0 - 20
2480345	Antimony	0.115	Spike	P	0 - 20
2480345	Arsenic	0.318	Spike	P	0 - 20
2480345	Barium	0.437	Spike	P	0 - 20
2480345	Beryllium	1.74	Spike	P	0 - 20
2480345	Boron	2.49	Spike	P	0 - 20
2480345	Cadmium	1.25	Spike	P	0 - 20
2480345	Chromium	0.579	Spike	P	0 - 20
2480345	Cobalt	0.139	Spike	P	0 - 20
2480345	Copper	1.14	Spike	P	0 - 20
2480345	Lead	0.301	Spike	P	0 - 20
2480345	Manganese	0.691	Spike	P	0 - 20
2480345	Molybdenum	0.889	Spike	P	0 - 20
2480345	Nickel	0.431	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P444046

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480345	Selenium	0.926	Spike	P	0 - 20
2480345	Silver	0.888	Spike	P	0 - 20
2480345	Thallium	0.664	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444325

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480871	Chloride	0.125	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P444328

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480871	Sulfate	0.696	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480525	Ammonia-N	0.784	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P444196

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480675	Ammonia-N	1.14	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P443994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480677	Kjeldahl Nitrogen	2.57	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P444144

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480655	Kjeldahl Nitrogen	7.12	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444215

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480667	NO2NO3-N	1.08	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P444298

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480780	NO2NO3-N	0.550	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444164

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480893	Total-P	0.859	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P444241

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480820	Total-P	1.96	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P444018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2481011	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	51.2	Spike	F	0 - 30
2481011	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	43.3	Spike	F	0 - 35
2481011	Acetochlor	16.7	Spike	P	0 - 28
2481011	Alachlor	24.5	Spike	P	0 - 30
2481011	Ametryn	11.0	Spike	P	0 - 32
2481011	Atrazine	13.1	Spike	P	0 - 33
2481011	Atrazine Desethyl	20.9	Spike	P	0 - 36
2481011	Avobenzone	5.59	Spike	P	0 - 35
2481011	Azinphos Methyl	9.68	Spike	P	0 - 62
2481011	Azoxystrobin	11.7	Spike	P	0 - 39
2481011	Bromacil	12.4	Spike	P	0 - 33
2481011	Butylate	4.08	Spike	P	0 - 51
2481011	Caffeine	1.57	Spike	P	0 - 100
2481011	Carbophenothion	20.9	Spike	P	0 - 34
2481011	Carfentrazone Ethyl	17.6	Spike	P	0 - 33
2481011	Chlorfenapyr	19.5	Spike	P	0 - 28
2481011	Chlorpyrifos Ethyl	5.64	Spike	P	0 - 31
2481011	Chlorpyrifos Methyl	8.99	Spike	P	0 - 27
2481011	Coumaphos	1.91	Spike	P	0 - 62
2481011	Cyanazine	14.9	Spike	P	0 - 48
2481011	Cyprodinil	12.8	Spike	P	0 - 29
2481011	Dechlorane 602	107	Spike	F	0 - 60
2481011	Dechlorane 603	13.2	Spike	P	0 - 40

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P444018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2481011	Dechlorane Plus	35.1	Spike	P	0 - 38
2481011	Demeton	2.79	Spike	P	0 - 33
2481011	Diazinon	5.58	Spike	P	0 - 32
2481011	Difenoconazole	29.1	Spike	P	0 - 71
2481011	Dimethenamid	9.32	Spike	P	0 - 60
2481011	Dimethomorph	35.3	Spike	P	0 - 61
2481011	Disulfoton	5.01	Spike	P	0 - 30
2481011	Dithiopyr	5.29	Spike	P	0 - 28
2481011	EPTC	14.7	Spike	P	0 - 56
2481011	Ethion	82.6	Spike	F	0 - 79
2481011	Ethoprop	10.2	Spike	P	0 - 31
2481011	Etridiazole	24.5	Spike	P	0 - 43
2481011	Fenamiphos	9.48	Spike	P	0 - 43
2481011	Fenbuconazole	2.77	Spike	P	0 - 79
2481011	Fipronil	22.3	Spike	P	0 - 46
2481011	Fipronil Desulfinyl	26.5	Spike	P	0 - 36
2481011	Fipronil Sulfide	23.5	Spike	P	0 - 34
2481011	Fipronil Sulfone	29.8	Spike	P	0 - 47
2481011	Fluazifop-P-butyl	29.1	Spike	P	0 - 38
2481011	Fludioxonil	1.88	Spike	P	0 - 29
2481011	Flumioxazin	0.424	Spike	P	0 - 63
2481011	Flutolanil	14.0	Spike	P	0 - 36
2481011	Fluxapyroxad	3.04	Spike	P	0 - 65
2481011	Fonofos	10.6	Spike	P	0 - 35
2481011	Hexabromobenzene	6.43	Spike	P	0 - 41
2481011	Hexazinone	3.16	Spike	P	0 - 31
2481011	Imazalil	10.8	Spike	P	0 - 52
2481011	Iprodione	19.0	Spike	P	0 - 49
2481011	Loratadine	3.70	Spike	P	0 - 59
2481011	Malathion	9.95	Spike	P	0 - 77
2481011	Metalaxyl	15.4	Spike	P	0 - 76
2481011	Metolachlor	2.69	Spike	P	0 - 29
2481011	Metribuzin	6.91	Spike	P	0 - 51
2481011	Mevinphos	7.55	Spike	P	0 - 31
2481011	Molinate	13.7	Spike	P	0 - 39
2481011	Myclobutanil	28.8	Spike	P	0 - 34
2481011	Naled	1.44	Spike	P	0 - 37
2481011	Napropamide	78.5	Spike	P	0 - 100
2481011	Norflurazon	0.700	Spike	P	0 - 54
2481011	Octinoxate	9.82	Spike	P	0 - 35
2481011	Oxadiazon	17.0	Spike	P	0 - 34
2481011	Oxybenzone	43.8	Spike	F	0 - 35
2481011	Oxyfluorfen	18.8	Spike	P	0 - 28
2481011	Parathion Ethyl	18.4	Spike	P	0 - 31
2481011	Parathion Methyl	5.81	Spike	P	0 - 29
2481011	PBB-153	3.18	Spike	P	0 - 49
2481011	PBDE-47	11.1	Spike	P	0 - 36
2481011	PBDE-99	59.5	Spike	F	0 - 46
2481011	Pendimethalin	3.86	Spike	P	0 - 31
2481011	Pentabromotoluene	8.89	Spike	P	0 - 16
2481011	Phenytoin	17.4	Spike	P	0 - 100

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P444018

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2481011	Phorate	13.7	Spike	P	0 - 36
2481011	Prodiamine	71.7	Spike	F	0 - 68
2481011	Prometon	4.14	Spike	P	0 - 35
2481011	Prometryn	8.96	Spike	P	0 - 33
2481011	Pronamide	13.3	Spike	P	0 - 24
2481011	Propanil	17.9	Spike	P	0 - 28
2481011	Propargite	27.2	Spike	P	0 - 53
2481011	Propiconazole	0.771	Spike	P	0 - 44
2481011	Pyraflufen Ethyl	11.2	Spike	P	0 - 61
2481011	Pyridaben	2.42	Spike	P	0 - 43
2481011	Pyriproxyfen	25.6	Spike	P	0 - 82
2481011	Simazine	6.16	Spike	P	0 - 29
2481011	Stirophos	74.2	Spike	P	0 - 100
2481011	Sulfentrazone	69.9	Spike	F	0 - 64
2481011	Tebuconazole	23.3	Spike	P	0 - 76
2481011	Terbufos	11.5	Spike	P	0 - 29
2481011	Terbuthylazine	14.4	Spike	P	0 - 28
2481011	Tetradecachloro-m-terphenyl	10.7	Spike	P	0 - 42
2481011	Thiobencarb	16.9	Spike	P	0 - 26
2481011	Tri-o-cresyl Phosphate	3.56	Spike	P	0 - 24
2481011	Triadimefon	13.9	Spike	P	0 - 40
2481011	Tris(1-chloro-2-propyl) phosphate (TCPP)	35.0	Spike	F	0 - 30
2481011	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	33.7	Spike	F	0 - 22
2481011	Tris(2-chloroethyl) phosphate (TCEP)	30.5	Spike	F	0 - 15

Reference Method: EPA 8270E
Batch ID: P444034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2482105	PCB-1016	5.37	Spike	P	0 - 25
2482105	PCB-1260	0.496	Spike	P	0 - 30
2482140	Aldrin	13.7	Spike	P	0 - 41
2482140	Alpha-BHC	19.2	Spike	P	0 - 25
2482140	Alpha-Chlordane	25.1	Spike	P	0 - 32
2482140	Beta-BHC	24.1	Spike	P	0 - 33
2482140	Beta-Cyfluthrin	15.6	Spike	P	0 - 43
2482140	Bifenthrin	13.6	Spike	P	0 - 52
2482140	Chlorothalonil	11.5	Spike	P	0 - 82
2482140	Cis-Nonachlor	19.0	Spike	P	0 - 33
2482140	Cypermethrin	14.7	Spike	P	0 - 51
2482140	Dacthal	21.1	Spike	P	0 - 27
2482140	DDD-p,p'	18.9	Spike	P	0 - 39
2482140	DDE-p,p'	19.4	Spike	P	0 - 31
2482140	DDT-p,p'	11.9	Spike	P	0 - 29
2482140	Delta-BHC	23.1	Spike	P	0 - 35
2482140	Deltamethrin	16.9	Spike	P	0 - 100
2482140	Dichlobenil	8.47	Spike	P	0 - 40
2482140	Dicofol	20.2	Spike	P	0 - 37
2482140	Dieldrin	24.3	Spike	P	0 - 27
2482140	Endosulfan I	19.7	Spike	P	0 - 23

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P444034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2482140	Endosulfan II	21.8	Spike	P	0 - 34
2482140	Endosulfan Sulfate	18.6	Spike	P	0 - 36
2482140	Endrin	20.7	Spike	P	0 - 45
2482140	Endrin Aldehyde	34.1	Spike	P	0 - 76
2482140	Endrin Ketone	19.1	Spike	P	0 - 43
2482140	Esfenvalerate	14.6	Spike	P	0 - 51
2482140	Ethalfluralin	20.0	Spike	P	0 - 22
2482140	Fenpropathrin	16.3	Spike	P	0 - 49
2482140	Gamma-BHC	17.0	Spike	P	0 - 28
2482140	Gamma-Chlordane	23.1	Spike	P	0 - 40
2482140	Heptachlor	15.3	Spike	P	0 - 29
2482140	Heptachlor Epoxide	19.3	Spike	P	0 - 33
2482140	Hexachlorobenzene	16.7	Spike	P	0 - 36
2482140	Kepone	15.9	Spike	P	0 - 85
2482140	Lambda-Cyhalothrin	17.1	Spike	P	0 - 55
2482140	Methoprene	18.2	Spike	P	0 - 53
2482140	Methoxychlor	19.8	Spike	P	0 - 50
2482140	MGK-264	21.3	Spike	P	0 - 43
2482140	Mirex	13.1	Spike	P	0 - 40
2482140	Oxychlordane	25.3	Spike	P	0 - 31
2482140	Permethrin	15.1	Spike	P	0 - 50
2482140	Phenothrin	17.0	Spike	P	0 - 58
2482140	Piperonyl Butoxide	29.0	Spike	P	0 - 100
2482140	Prallethrin	17.4	Spike	P	0 - 39
2482140	Tau-Fluvalinate	13.4	Spike	P	0 - 54
2482140	Tetramethrin	21.3	Spike	P	0 - 51
2482140	Trans-Nonachlor	18.8	Spike	P	0 - 39
2482140	Triclosan Methyl	21.4	Spike	P	0 - 31
2482140	Trifluralin	18.2	Spike	P	0 - 22

Reference Method: EPA 8276
Batch ID: P444034

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2482105	Chlordane	3.16	Spike	P	0 - 28
2482105	Toxaphene	11.6	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P443928

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2479696	3-Hydroxycarbofuran	15.9	Spike	P	0 - 30
2479696	Aldicarb	15.7	Spike	P	0 - 30
2479696	Aldicarb Sulfone	3.21	Spike	P	0 - 30
2479696	Aldicarb Sulfoxide	11.5	Spike	P	0 - 30
2479696	Carbaryl	13.1	Spike	P	0 - 30
2479696	Carbofuran	6.68	Spike	P	0 - 30
2479696	Methiocarb	7.16	Spike	P	0 - 30
2479696	Methomyl	6.13	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P443928

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2479696	Oxamyl	3.82	Spike	P	0 - 30
2479696	Propoxur	5.43	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P443967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480734	Acesulfame K	3.62	Spike	P	0 - 30
2480734	AMPA	6.33	Spike	P	0 - 30
2480734	Endothall	0.434	Spike	P	0 - 30
2480734	Glufosinate	1.43	Spike	P	0 - 30
2480734	Glyphosate	13.5	Spike	P	0 - 30
2480734	Sucralose	6.38	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P443976

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480731	2,4-D	6.11	Spike	P	0 - 30
2480731	2,4,5-T	17.9	Spike	P	0 - 30
2480731	Acetaminophen	12.5	Spike	P	0 - 30
2480731	Acetamiprid	7.73	Spike	P	0 - 30
2480731	Afidopyropen	11.6	Spike	P	0 - 30
2480731	Bentazon	1.66	Spike	P	0 - 30
2480731	Benzovindiflupyr	5.91	Spike	P	0 - 30
2480731	Carbamazepine	12.3	Spike	P	0 - 30
2480731	Clothianidin	3.54	Spike	P	0 - 30
2480731	Dinotefuran	11.5	Spike	P	0 - 30
2480731	Diuron	8.68	Spike	P	0 - 30
2480731	Fenuron	7.61	Spike	P	0 - 30
2480731	Fluridone	10.4	Spike	P	0 - 30
2480731	Hydrocodone	10.8	Spike	P	0 - 30
2480731	Ibuprofen	16.4	Spike	P	0 - 30
2480731	Imazapyr	9.95	Spike	P	0 - 30
2480731	Imidacloprid	8.82	Spike	P	0 - 30
2480731	Linuron	17.1	Spike	P	0 - 30
2480731	Mandestrobin	12.1	Spike	P	0 - 30
2480731	MCPP	3.34	Spike	P	0 - 30
2480731	Naproxen	4.50	Spike	P	0 - 30
2480731	Primidone	12.0	Spike	P	0 - 30
2480731	Pyraclostrobin	6.49	Spike	P	0 - 30
2480731	Silvex	3.19	Spike	P	0 - 30
2480731	Thiamethoxam	7.96	Spike	P	0 - 30
2480731	Tolfenpyrad	22.1	Spike	P	0 - 30
2480731	Triclopyr	14.9	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P444095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480654	Total Alkalinity	0.0380	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P444228

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480668	Total Alkalinity	1.16	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P444536

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480522	TDS	0.775	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P444102

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2478055	Fluoride	0.967	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P444232

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480668	Fluoride	0.480	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P444173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2480671	Organic Carbon	1.98	Spike	P	0 - 15

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2480795
Field Sample ID: 20030679

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	84.0	P	30 - 160

Lab Sample ID: 2480796
Field Sample ID: 20030679

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	61.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	72.4	P	30 - 160
EPA 8321B	Diuron-d6	57.9	P	30 - 160
EPA 8321B	Endothall-d6	116	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	149	P	30 - 160
EPA 8321B	Ibuprofen-d3	96.2	P	30 - 160
EPA 8321B	Primidone-d5	99.4	P	30 - 160
EPA 8321B	Sucralose-d6	45.4	P	30 - 160

Lab Sample ID: 2480797
Field Sample ID: 20030679

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.5	P	37 - 129
EPA 8270E	Decachlorobiphenyl	89.8	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	64.5	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	47.6	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	73.4	P	23 - 110
EPA 8276	PCNB	93.1	P	51 - 130

Lab Sample ID: 2480798
Field Sample ID: 20030679

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	71.0	P	20 - 200
EPA 8270E	Simazine-d10	93.1	P	58 - 137
EPA 8270E	Terbufos-d10	103	P	50 - 134
EPA 8270E	Terphenyl-d14	97.4	P	44 - 134

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A125240
Included Lab Sample IDs: 2480785, 2480787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.6	99.5	P/P	90 - 110
Color (true)	99.5	98.5	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A125242
Included Lab Sample IDs: 2480785, 2480787

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

Reference Method: EPA 8321B
Run ID: A125258
Included Lab Sample IDs: 2480795

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	112	103	P/P	60 - 150
Aldicarb	109	119	P/P	60 - 150
Aldicarb Sulfone	103	103	P/P	50 - 150
Aldicarb Sulfoxide	107	108	P/P	50 - 150
Carbaryl	106	108	P/P	60 - 150
Carbofuran	101	103	P/P	50 - 150
Methiocarb	105	96.3	P/P	50 - 150
Methomyl	99.1	107	P/P	50 - 150
Oxamyl	109	105	P/P	50 - 150
Propoxur	110	109	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A125261
Included Lab Sample IDs: 2480786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.8	97.3	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A125278
Included Lab Sample IDs: 2480785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.0	95.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A125278
Included Lab Sample IDs: 2480785

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	97.4	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A125286
Included Lab Sample IDs: 2480788

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

Reference Method: SM 5310 B-2014
Run ID: A125303
Included Lab Sample IDs: 2480786, 2480788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	109	98.4	P/P	70 - 130

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A125310
Included Lab Sample IDs: 2480788

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	101	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A125312
Included Lab Sample IDs: 2480796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	116	117	P/P	60 - 160
Sucralose	98.4	88.6	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A125315
Included Lab Sample IDs: 2480786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.8	99.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A125317
Included Lab Sample IDs: 2480799, 2480800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	96.4	98.2	P/P	90 - 110
Arsenic	94.9	95.9	P/P	90 - 110
Barium	98.2	99.8	P/P	90 - 110
Beryllium	95.4	96.0	P/P	90 - 110
Boron	99.3	98.5	P/P	90 - 110
Cadmium	96.9	99.4	P/P	90 - 110
Chromium	92.2	93.4	P/P	90 - 110
Cobalt	92.4	93.4	P/P	90 - 110
Copper	92.1	93.6	P/P	90 - 110
Lead	94.8	96.9	P/P	90 - 110
Manganese	93.9	95.4	P/P	90 - 110
Molybdenum	94.4	96.0	P/P	90 - 110
Nickel	92.0	93.2	P/P	90 - 110
Selenium	97.0	98.8	P/P	90 - 110
Silver	94.8	96.3	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A125317
Included Lab Sample IDs: 2480799, 2480800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thallium	95.9	97.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A125318
Included Lab Sample IDs: 2480788

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A125319
Included Lab Sample IDs: 2480799, 2480800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	93.4	93.8	P/P	90 - 110
Calcium	93.6	93.4	P/P	90 - 110
Iron	91.5	92.6	P/P	90 - 110
Iron	92.1	91.5	P/P	90 - 110
Magnesium	91.7	92.4	P/P	90 - 110
Magnesium	92.0	91.7	P/P	90 - 110
Potassium	94.1	94.6	P/P	90 - 110
Potassium	94.3	94.1	P/P	90 - 110
Sodium	90.3	91.3	P/P	90 - 110
Sodium	90.7	90.3	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A125320
Included Lab Sample IDs: 2480787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.7	97.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A125320
Included Lab Sample IDs: 2480787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	98.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A125325
Included Lab Sample IDs: 2480786

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.4	95.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A125329
Included Lab Sample IDs: 2480799, 2480800

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A125329
Included Lab Sample IDs: 2480799, 2480800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	95.0	93.9	P/P	90 - 110
Tin	98.5	99.9	P/P	90 - 110
Titanium	99.7	101	P/P	90 - 110
Vanadium	97.7	98.7	P/P	90 - 110
Zinc	94.8	96.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A125330
Included Lab Sample IDs: 2480799, 2480800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	97.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A125334
Included Lab Sample IDs: 2480788

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A125335
Included Lab Sample IDs: 2480786

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A125342
Included Lab Sample IDs: 2480785, 2480787

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.9	100	P/P	90 - 110
Sulfate	101	102	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A125347
Included Lab Sample IDs: 2480796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	108	118	P/P	50 - 150
2,4,5-T	91.2	115	P/P	50 - 150
Acetaminophen	106	115	P/P	60 - 160
Acetamiprid	104	114	P/P	50 - 150
Afidopyropen	101	106	P/P	50 - 150
Bentazon	98.0	114	P/P	50 - 160
Benzovindiflupyr	107	111	P/P	50 - 150
Carbamazepine	108	107	P/P	60 - 150
Clothianidin	110	108	P/P	60 - 150
Dinotefuran	107	108	P/P	50 - 150
Diuron	105	111	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A125347
Included Lab Sample IDs: 2480796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	103	104	P/P	60 - 150
Fluridone	114	117	P/P	60 - 160
Hydrocodone	109	106	P/P	60 - 150
Ibuprofen	90.3	136	P/P	50 - 160
Imazapyr	96.8	101	P/P	50 - 150
Imidacloprid	109	110	P/P	60 - 150
Linuron	114	102	P/P	60 - 150
Mandestrobin	109	114	P/P	50 - 150
MCPP	106	125	P/P	50 - 150
Naproxen	147	140	P/P	50 - 160
Primidone	112	97.5	P/P	60 - 150
Pyraclostrobin	107	114	P/P	60 - 150
Silvex	95.7	109	P/P	50 - 150
Thiamethoxam	113	109	P/P	50 - 150
Tolfenpyrad	104	106	P/P	60 - 150
Triclopyr	104	111	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A125359
Included Lab Sample IDs: 2480797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	101		P	80 - 120
Beta-Cyfluthrin	98.0		P	80 - 120
Bifenthrin	95.8		P	80 - 120
Chlorothalonil	90.6		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	97.9		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	102		P	80 - 120
DDT-p,p'	95.7		P	80 - 120
Delta-BHC	94.9		P	80 - 120
Deltamethrin	90.4		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	94.3		P	80 - 120
Dieldrin	98.9		P	80 - 120
Endosulfan I	98.2		P	80 - 120
Endosulfan II	103		P	80 - 120
Endosulfan Sulfate	101		P	80 - 120
Endrin	101		P	80 - 120
Endrin Aldehyde	99.6		P	80 - 120
Endrin Ketone	99.7		P	80 - 120
Esfenvalerate	86.4		P	80 - 120
Ethalfluralin	105		P	80 - 120
Fenpropathrin	96.7		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	99.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A125359
Included Lab Sample IDs: 2480797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Heptachlor	101		P	80 - 120
Heptachlor Epoxide	101		P	80 - 120
Hexachlorobenzene	101		P	80 - 120
Kepone	78.0*		F	80 - 120
Lambda-Cyhalothrin	96.1		P	80 - 120
Methoprene	100		P	80 - 120
Methoxychlor	98.0		P	80 - 120
MGK-264	102		P	80 - 120
Mirex	101		P	80 - 120
Oxychlordane	100		P	80 - 120
Permethrin	98.5		P	80 - 120
Phenothrin	97.4		P	80 - 120
Piperonyl Butoxide	103		P	80 - 120
Prallethrin	103		P	80 - 120
Tau-Fluvalinate	96.8		P	80 - 120
Tetramethrin	99.5		P	80 - 120
Trans-Nonachlor	99.8		P	80 - 120
Triclosan Methyl	102		P	80 - 120
Trifluralin	101		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125409
Included Lab Sample IDs: 2480797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	101		P	80 - 120
PCB-1260	100		P	80 - 120

Reference Method: EPA 8276
Run ID: A125410
Included Lab Sample IDs: 2480797

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.3		P	80 - 120
Toxaphene	94.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125431
Included Lab Sample IDs: 2480798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	97.2		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.2		P	80 - 120
Avobenzone	100		P	80 - 120
Dechlorane 602	98.4		P	80 - 120
Dechlorane 603	97.9		P	80 - 120
Dechlorane Plus	96.4		P	80 - 120
Hexabromobenzene	94.3		P	80 - 120
Octinoxate	96.7		P	80 - 120
Oxybenzone	94.0		P	80 - 120
PBB-153	90.5		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A125431
Included Lab Sample IDs: 2480798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PBDE-47	93.9		P	80 - 120
PBDE-99	93.6		P	80 - 120
Pentabromotoluene	96.8		P	80 - 120
Tetradecachloro-m-terphenyl	104		P	80 - 120
Tri-o-cresyl Phosphate	100		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.0		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.1		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	100		P	80 - 120

Reference Method: EPA 8321B
Run ID: A125448
Included Lab Sample IDs: 2480796

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	79.1	75.6	P/P	60 - 160
Endothall	95.0	105	P/P	60 - 160
Glufosinate	92.4	87.9	P/P	60 - 160
Glyphosate	79.9	76.6	P/P	60 - 160

Reference Method: EPA 8270E
Run ID: A125480
Included Lab Sample IDs: 2480798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.5		P	80 - 120
Alachlor	92.0		P	80 - 120
Ametryn	104		P	80 - 120
Atrazine	97.7		P	80 - 120
Atrazine Desethyl	99.0		P	80 - 120
Azinphos Methyl	98.1		P	80 - 120
Azoxystrobin	93.7		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	99.1		P	80 - 120
Caffeine	98.5		P	80 - 120
Carbophenothion	93.1		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	92.0		P	80 - 120
Chlorpyrifos Ethyl	85.5		P	80 - 120
Chlorpyrifos Methyl	108		P	80 - 120
Coumaphos	94.9		P	80 - 120
Cyanazine	101		P	80 - 120
Cyprodinil	101		P	80 - 120
Demeton	103		P	80 - 120
Diazinon	108		P	80 - 120
Difenoconazole	95.8		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	99.4		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	101		P	80 - 120
Ethion	83.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A125480
Included Lab Sample IDs: 2480798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ethoprop	101		P	80 - 120
Etridiazole	106		P	80 - 120
Fenamiphos	93.8		P	80 - 120
Fenbuconazole	90.4		P	80 - 120
Fipronil	93.2		P	80 - 120
Fipronil Desulfinyl	100		P	80 - 120
Fipronil Sulfide	98.7		P	80 - 120
Fipronil Sulfone	97.9		P	80 - 120
Fluazifop-P-butyl	109		P	80 - 120
Fludioxonil	109		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	98.9		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	97.3		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	91.4		P	80 - 120
Loratadine	96.4		P	80 - 120
Malathion	86.1		P	80 - 120
Metalaxyl	97.8		P	80 - 120
Metolachlor	99.5		P	80 - 120
Metribuzin	111		P	80 - 120
Mevinphos	98.9		P	80 - 120
Molinate	86.8		P	80 - 120
Myclobutanil	94.1		P	80 - 120
Naled	105		P	80 - 120
Napropamide	103		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	108		P	80 - 120
Parathion Ethyl	104		P	80 - 120
Parathion Methyl	98.3		P	80 - 120
Pendimethalin	95.1		P	80 - 120
Phenytoin	97.5		P	80 - 120
Phorate	92.6		P	80 - 120
Prodiamine	83.3		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	108		P	80 - 120
Pronamide	99.2		P	80 - 120
Propanil	108		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	94.1		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	96.0		P	80 - 120
Pyriproxyfen	97.1		P	80 - 120
Simazine	95.1		P	80 - 120
Stirophos	88.6		P	80 - 120
Sulfentrazone	100		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	97.2		P	80 - 120
Terbuthylazine	86.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A125480
Included Lab Sample IDs: 2480798

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thiobencarb	101		P	80 - 120
Triadimefon	109		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
DEP SOP: NU-094-1	Color (true)	96.5					0.788	
	Color (true)	96.7					0.677	
EPA 180.1 Rev. 2.0	Turbidity	103					7.78	
EPA 200.7 Rev. 4.4	Calcium	94.2	91.4	90.6				1.43
	Iron	94.9	93.4	94.4	94.8			0.909
	Magnesium	93.5	89.6	95.4				1.40
	Potassium	94.5	92.0	92.9	89.4			0.629
	Sodium	92.0	88.5	89.4				0.782
	Strontium	94.4	92.1	93.9	95.1			1.63
	Tin	97.5	90.4	91.2	94.0			0.807
	Titanium	102	97.0	96.9	100			0.111
	Vanadium	99.9	97.7	98.0	99.8			0.284
	Zinc	95.4	92.2	92.4	94.4			0.246
EPA 200.8 Rev. 5.4	Aluminum	97.9	98.2	99.3	98.7			0.802
	Antimony	99.9	98.3	98.2	98.7			0.115
	Arsenic	99.3	99.2	98.9	95.6			0.318
	Barium	101	102	103	102			0.437
	Beryllium	99.6	96.0	97.7	96.1			1.74
	Boron	101	99.9	103	103			2.49
	Cadmium	97.1	101	99.7	98.1			1.25
	Chromium	97.5	96.7	96.1	95.8			0.579
	Cobalt	96.2	95.6	95.5	93.9			0.139
	Copper	97.2	96.4	95.3	93.0			1.14
	Lead	96.3	97.9	98.2	96.8			0.301
	Manganese	98.8	99.0	100	97.7			0.691
	Molybdenum	96.9	100	99.3	95.8			0.889
	Nickel	97.1	95.2	94.8	92.2			0.431
	Selenium	100	100	99.1	95.5			0.926
	Silver	96.4	95.9	95.0	94.7			0.888
	Thallium	95.6	98.7	99.3	98.2			0.664
EPA 300.0 Rev. 2.1	Chloride	103	103	105			0.125	
	Sulfate	105	103	105			0.696	
EPA 350.1 Rev. 2.0	Ammonia-N	92.6	102	102				0.784
	Ammonia-N	97.0	97.6	99.2				1.14
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.5	105	101				2.57
	Kjeldahl Nitrogen	94.5	90.2	97.5				7.12
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	96.5	98.5				1.08
	NO2NO3-N	100	91.1	90.6				0.550
EPA 365.1 Rev. 2.0	Total-P	102	95.6	96.4				0.859
	Total-P	101	101	99.0				1.96
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	64.0	47.0	27.8				51.2
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	57.5	68.1	43.8				43.3
	Acetochlor	84.9	93.4	79.0				16.7
	Alachlor	90.8	104	81.0				24.5
	Aldrin	59.6	54.5	62.5				13.7
	Alpha-BHC	82.4	74.7	90.5				19.2
	Alpha-Chlordane	80.6	70.8	91.1				25.1
	Ametryn	94.0	111	99.5				11.0
	Atrazine	83.9						13.1
	Atrazine Desethyl	84.1	70.0	95.7				20.9
	Avobenzone	147	105	99.7				5.59

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Azinphos Methyl	104	104	94.8			9.68
	Azoxystrobin	95.1					11.7
	Beta-BHC	101	94.3	120			24.1
	Beta-Cyfluthrin	75.2	75.5	88.3			15.6
	Bifenthrin	66.2	64.4	73.8			13.6
	Bromacil	92.7	119	105			12.4
	Butylate	62.3	60.3	57.9			4.08
	Caffeine	87.2	95.1	93.6			1.57
	Carbophenothion	88.5	77.5	95.6			20.9
	Carfentrazone Ethyl	93.0	83.2	99.3			17.6
	Chlorfenapyr	88.9	138	114			19.5
	Chlorothalonil	98.5	101	114			11.5
	Chlorpyrifos Ethyl	102	93.8	88.7			5.64
	Chlorpyrifos Methyl	118	112	103			8.99
	Cis-Nonachlor	65.0	57.7	69.8			19.0
	Coumaphos	63.9	103	105			1.91
	Cyanazine	117	127	110			14.9
	Cypermethrin	72.9	72.0	83.3			14.7
	Cyprodinil	98.0	114	100			12.8
	Dacthal	89.1	79.2	97.9			21.1
	DDD-p,p'	66.8	59.8	72.2			18.9
	DDE-p,p'	75.8	67.9	82.4			19.4
	DDT-p,p'	64.6	62.7	70.6			11.9
	Dechlorane 602	76.6	57.1	17.4			107
	Dechlorane 603	97.6	77.5	67.9			13.2
	Dechlorane Plus	108	76.3	53.5			35.1
	Delta-BHC	108	98.0	123			23.1
	Deltamethrin	81.2	84.2	99.7			16.9
	Demeton	80.4	85.3	82.9			2.79
	Diazinon	107	107	101			5.58
	Dichlobenil	58.8	57.8	62.9			8.47
	Dicofol	60.9	58.1	71.1			20.2
	Dieldrin	85.7	73.1	93.3			24.3
	Difenoconazole	81.9	128	95.6			29.1
	Dimethenamid	94.6					9.32
	Dimethomorph	157	139	199			35.3
	Disulfoton	99.2	102	96.9			5.01
	Dithiopyr	115	102	93.5			5.29
	Endosulfan I	77.4	67.9	82.7			19.7
	Endosulfan II	73.1	65.7	81.8			21.8
	Endosulfan Sulfate	84.9	79.8	96.1			18.6
	Endrin	80.9	70.2	86.5			20.7
	Endrin Aldehyde	63.6	54.6	77.1			34.1
	Endrin Ketone	76.6	75.2	91.1			19.1
	EPTC	56.0	57.5	49.7			14.7
	Esfenvalerate	83.8	84.0	97.3			14.6
	Ethalfluralin	62.5	56.0	68.5			20.0
	Ethion	70.7	78.2	32.5			82.6
	Ethoprop	95.1	103	93.0			10.2
	Etridiazole	69.4	70.6	55.1			24.5
	Fenamiphos	80.6	90.7	99.8			9.48
	Fenbuconazole	66.1	83.3	81.0			2.77
	Fenpropathrin	69.6	65.7	77.3			16.3
	Fipronil	92.2	104	82.7			22.3

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Fipronil Desulfinyl	102	114	87.0			26.5
	Fipronil Sulfide	87.2	108	85.5			23.5
	Fipronil Sulfone	104	106	78.7			29.8
	Fluazifop-P-butyl	115	112	83.9			29.1
	Fludioxonil	97.9	83.5	81.2			1.88
	Flumioxazin	102	122	121			0.424
	Flutolanil	84.2	136	102			14.0
	Fluxapyroxad	97.1					3.04
	Fonofos	93.8	105	94.1			10.6
	Gamma-BHC	82.5	75.6	89.6			17.0
	Gamma-Chlordane	79.3	69.3	87.3			23.1
	Heptachlor	65.9	59.0	68.8			15.3
	Heptachlor Epoxide	77.5	68.0	82.6			19.3
	Hexabromobenzene	56.7	43.7	41.0			6.43
	Hexachlorobenzene	63.2	58.8	69.5			16.7
	Hexazinone	81.2	88.1	85.3			3.16
	Imazalil	85.0	90.6	81.3			10.8
	Iprodione	78.9	66.7	88.6			19.0
	Kepone	116					15.9
	Lambda-Cyhalothrin	83.3	80.2	95.2			17.1
	Loratadine	140	181	188			3.70
	Malathion	102	104	94.1			9.95
	Metalaxyl	81.3	118	78.5			15.4
	Methoprene	70.7	63.5	76.2			18.2
	Methoxychlor	73.2	69.0	84.2			19.8
	Metolachlor	98.7	105	102			2.69
	Metribuzin	110	103	110			6.91
	Mevinphos	91.4	97.4	90.3			7.55
	MGK-264	72.4	67.6	83.6			21.3
	Mirex	67.4	63.5	72.4			13.1
	Molinate	62.8	64.3	56.0			13.7
	Myclobutanil	85.4	126	90.0			28.8
	Naled	43.3	50.5	51.2			1.44
	Napropamide	83.3	93.2	40.6			78.5
	Norflurazon	78.1	74.6	75.1			0.700
	Octinoxate	140	89.2	80.9			9.82
	Oxadiazon	79.8					17.0
	Oxybenzone	80.8	54.4	84.9			43.8
	Oxychlordane	60.9	57.0	73.5			25.3
	Oxyfluorfen	111	123	102			18.8
	Parathion Ethyl	96.7	103	85.3			18.4
	Parathion Methyl	88.5	84.1	79.3			5.81
	PBB-153	61.0	72.0	69.8			3.18
	PBDE-47	55.8	34.7	31.0			11.1
	PBDE-99	62.6	55.5	30.0			59.5
	PCB-1016	81.2	84.6	80.2			5.37
	PCB-1260	78.7	71.0	70.6			0.496
	Pendimethalin	134					3.86
	Pentabromotoluene	115	75.4	69.0			8.89
	Permethrin	72.1	69.2	80.5			15.1
	Phenothrin	63.2	63.3	75.0			17.0
	Phenytoin	52.4	49.3	58.7			17.4
	Phorate	82.0	85.6	74.7			13.7
	Piperonyl Butoxide	122	101	135			29.0

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Prallethrin	72.6	63.7	75.8			17.4
	Prodiamine	59.4	271	89.8			71.7
	Prometon	94.0	95.8	91.9			4.14
	Prometryn	117	129	118			8.96
	Pronamide	106	108	94.5			13.3
	Propanil	64.8	78.2	65.3			17.9
	Propargite	53.4	57.5	43.8			27.2
	Propiconazole	85.2					0.771
	Pyraflufen Ethyl	87.1	74.4	83.2			11.2
	Pyridaben	95.0	109	112			2.42
	Pyriproxyfen	93.7	92.3	71.3			25.6
	Simazine	105					6.16
	Stirophos	85.7	99.1	45.5			74.2
	Sulfentrazone	87.4	56.5	146			69.9
	Tau-Fluvalinate	71.7	73.9	84.5			13.4
	Tebuconazole	61.2	57.9	45.8			23.3
	Terbufos	93.5	105	93.9			11.5
	Terbuthylazine	82.8	93.8	81.2			14.4
	Tetradecachloro-m-terphenyl	182	125	139			10.7
	Tetramethrin	77.3	72.3	89.6			21.3
	Thiobencarb	92.1	102	86.0			16.9
	Trans-Nonachlor	72.6	65.0	78.4			18.8
	Tri-o-cresyl Phosphate	144	99.9	96.4			3.56
	Triadimefon	84.9	93.3	81.2			13.9
	Triclosan Methyl	82.2	74.2	92.0			21.4
	Trifluralin	70.6	63.6	76.4			18.2
	Tris(1-chloro-2-propyl) phosphate (TCPP)	77.8	52.9	75.4			35.0
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	74.0	52.0	73.0			33.7
	Tris(2-chloroethyl) phosphate (TCEP)	96.6	62.8	85.3			30.5
EPA 8276	Chlordane	85.0	67.4	69.5			3.16
	Toxaphene	91.0	60.8	68.3			11.6
EPA 8321B	2,4-D	123	157	147			6.11
	2,4,5-T	110	114	95.4			17.9
	3-Hydroxycarbofuran	101	81.9	96.0			15.9
	Acesulfame K	96.8	85.7	82.6			3.62
	Acetaminophen	85.6	108	95.5			12.5
	Acetamiprid	91.2	85.6	79.3			7.73
	Afidopyropen	78.5	72.4	64.5			11.6
	Aldicarb	93.0	83.4	71.3			15.7
	Aldicarb Sulfone	102	94.4	97.5			3.21
	Aldicarb Sulfoxide	114	34.2	38.4			11.5
	AMPA	106	84.5	79.3			6.33
	Bentazon	94.4					1.66
	Benzovindiflupyr	90.8	86.1	81.2			5.91
	Carbamazepine	80.8	61.2	51.6			12.3
	Carbaryl	84.4	74.0	84.4			13.1
	Carbofuran	88.9	73.0	78.1			6.68
	Clothianidin	100	93.3	90.0			3.54
	Dinotefuran	103	109	97.5			11.5
	Diuron	74.3	50.1	45.9			8.68
	Endothall	93.6	116	117			0.434

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Fenuron	99.7	79.9	74.0			7.61
	Fluridone	101					10.4
	Glufosinate	92.2	77.5	78.6			1.43
	Glyphosate	80.3	72.4	63.2			13.5
	Hydrocodone	101	94.1	84.4			10.8
	Ibuprofen	79.4	89.7	76.0			16.4
	Imazapyr	104	143	123			9.95
	Imidacloprid	103	142	130			8.82
	Linuron	83.8	76.2	64.2			17.1
	Mandestrobin	96.5	93.4	82.7			12.1
	MCPP	133	150	145			3.34
	Methiocarb	89.1	81.7	87.8			7.16
	Methomyl	99.5	84.2	89.5			6.13
	Naproxen	84.3	84.9	81.2			4.50
	Oxamyl	103	87.6	91.0			3.82
	Primidone	87.9	108	94.6			12.0
	Propoxur	94.6	71.9	75.9			5.43
	Pyraclostrobin	87.7	88.7	83.1			6.49
	Silvex	98.7	99.2	102			3.19
	Sucralose	98.8	111	101			6.38
	Thiamethoxam	101	92.1	85.0			7.96
	Tolfenpyrad	57.2	73.4	58.8			22.1
	Triclopyr	107	115	99.0			14.9
SM 2320 B-2011	Total Alkalinity	99.4				0.0380	
	Total Alkalinity	98.4				1.16	
SM 2540 C-2015	TDS	94.4				0.775	
SM 2540 D-2015	TSS	96.8					
SM 4500-F- C-2011	Fluoride	97.3	101	103			0.967
	Fluoride	100	102	103			0.480
SM 5310 B-2014	Organic Carbon	98.1	99.5	102			1.98

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2480785, 2480787
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2480785, 2480787
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2480799, 2480800
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2480799, 2480800
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2480785, 2480787
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2480785, 2480787
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2480786, 2480788
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2480786, 2480788
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2480786, 2480788
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2480786, 2480788
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2480798
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2480797
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2480798
EPA 8270E	PCBs in water matrices by GC/MS/MS	2480797
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2480797
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2480795

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2480796
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2480785, 2480787
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2480799, 2480800
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2480785, 2480787
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2480785, 2480787
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2480785, 2480787
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2480786, 2480788

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	04/09/2024			04/09/2024 14:39	Samantha L Bates	2480785
	04/09/2024			04/09/2024 14:42	Samantha L Bates	2480787
EPA 180.1 Rev. 2.0	04/09/2024			04/09/2024 15:05	Khloe J Berg	2480785
	04/09/2024			04/09/2024 15:06	Khloe J Berg	2480787
EPA 200.7 Rev. 4.4	04/09/2024	04/10/2024 12:35	George D Taylor	04/12/2024 19:55	Chase Roberts	2480799
	04/09/2024	04/10/2024 12:35	George D Taylor	04/12/2024 20:29	Chase Roberts	2480800
	04/09/2024	04/10/2024 12:35	George D Taylor	04/15/2024 21:09	Conrad Hartmann	2480799
	04/09/2024	04/10/2024 12:35	George D Taylor	04/15/2024 21:16	Conrad Hartmann	2480800
EPA 200.8 Rev. 5.4	04/09/2024	04/10/2024 12:35	George D Taylor	04/12/2024 19:12	Emily M Philpot	2480799
	04/09/2024	04/10/2024 12:35	George D Taylor	04/12/2024 19:21	Emily M Philpot	2480800
	04/09/2024	04/10/2024 12:35	George D Taylor	04/15/2024 17:19	Emily M Philpot	2480799
	04/09/2024	04/10/2024 12:35	George D Taylor	04/15/2024 17:28	Emily M Philpot	2480800
EPA 300.0 Rev. 2.1	04/09/2024			04/16/2024 09:33	James L Waggerby	2480785
	04/09/2024			04/16/2024 09:48	James L Waggerby	2480787
EPA 350.1 Rev. 2.0	04/09/2024			04/10/2024 12:46	Khloe J Berg	2480786
	04/09/2024			04/12/2024 13:33	Kenneth H Lee	2480788
EPA 351.2 Rev. 2.0	04/09/2024	04/10/2024 11:08	Robyn Blevins	04/11/2024 14:18	Robyn Blevins	2480788
	04/09/2024	04/12/2024 07:57	Simonne.V. Calhoun	04/15/2024 12:58	Robyn Blevins	2480786
EPA 353.2 Rev. 2.0	04/09/2024			04/12/2024 14:01	Fadila Guebre	2480788
	04/09/2024			04/15/2024 14:22	Fadila Guebre	2480786
EPA 365.1 Rev. 2.0	04/09/2024	04/12/2024 13:45	Josephine W Gitau	04/13/2024 14:02	James L Waggerby	2480786
	04/09/2024	04/15/2024 12:54	Adam P Silver	04/16/2024 11:08	Chandler E Cox	2480788
EPA 8270E	04/09/2024	04/12/2024 08:00	Fe-Val Siddell	04/17/2024 22:36	Arthur Maknenko	2480798
	04/09/2024	04/12/2024 08:00	Fe-Val Siddell	04/23/2024 00:37	Julie Wi	2480798
	04/09/2024	04/15/2024 08:00	Fe-Val Siddell	04/16/2024 23:55	Kenedi Mills	2480797
	04/09/2024	04/15/2024 08:00	Fe-Val Siddell	04/18/2024 02:51	Lipi Saha	2480797
EPA 8276	04/09/2024	04/15/2024 08:00	Fe-Val Siddell	04/18/2024 10:33	Arthur Maknenko	2480797
EPA 8321B	04/09/2024	04/09/2024 13:00	Hoor Shaik	04/10/2024 14:43	Juyoung Kim	2480795
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/12/2024 13:39	Tae K Lee	2480796
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/14/2024 00:40	Tae K Lee	2480796
	04/09/2024	04/12/2024 08:00	Tae K Lee	04/14/2024 02:38	Tae K Lee	2480796
	04/09/2024	04/12/2024 09:00	Hoor Shaik	04/16/2024 19:17	Juyoung Kim	2480796
SM 2320 B-2011	04/09/2024			04/11/2024 02:03	Dale L. Simmons	2480785
	04/09/2024			04/13/2024 13:18	Dale L. Simmons	2480787
SM 2340 B-2011	04/09/2024			04/12/2024 19:55	Chase Roberts	2480799
	04/09/2024			04/12/2024 20:29	Chase Roberts	2480800
SM 2540 C-2015	04/09/2024			04/12/2024 16:19	Yijie Li	2480785, 2480787
SM 2540 D-2015	04/09/2024			04/12/2024 16:19	Yijie Li	2480785, 2480787
SM 4500-F- C-2011	04/09/2024			04/10/2024 23:02	Dale L. Simmons	2480785
	04/09/2024			04/13/2024 13:18	Dale L. Simmons	2480787

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-2014	04/09/2024			04/11/2024 17:08	Khloe J Berg	2480786
	04/09/2024			04/11/2024 17:24	Khloe J Berg	2480788