Chemical Analysis Report

SO-DIST-2022-03-01-01

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

Event Description: **2022 SMP : Okee Canals**
Request ID: **RQ-2022-02-28-29**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: William Mullen

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Certified by: Colin Wright, Program Administrator

Date Certified: 25-MAR-2022 11:58

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: Indian Prairie Canal @ SR 70 **Collection Date/Time: 02/28/2022 09:55**

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308713	DEP SOP: NU-094-1	Color (true)**	130		PCU	P410509	
	EPA 180.1 Rev. 2.0	Turbidity	7.9		NTU	P410514	
	EPA 300.0 Rev. 2.1	Chloride	49	A	mg Cl/L	P410852	
		Sulfate	29	A	mg SO4/L	P410856	
	SM 2320 B-2011	Total Alkalinity	31		mg CaCO3/L	P410710	
	SM 2540 C-2011	TDS	207		mg/L	P410755	
	SM 2540 D-2011	TSS	14		mg/L	P410898	
	SM 4500 F-C-2011	Fluoride	0.088	I	mg F/L	P410714	
2308714	EPA 350.1 Rev. 2.0	Ammonia-N	0.007		mg N/L	P410684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.7		mg N/L	P410479	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P410785	
	EPA 365.1 Rev. 2.0	Total-P	0.14		mg P/L	P410934	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P410673	
2308715	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.033		mg P/L	P410506	
2308728	EPA 8321B	Aldicarb	0.020	U	ug/L	P410466	
		Aldicarb Sulfone	0.0020	U	ug/L	P410466	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P410466	
		Carbaryl	0.0020	U	ug/L	P410466	
		Carbofuran	0.0020	U	ug/L	P410466	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P410466	
		Methiocarb	0.0020	U	ug/L	P410466	
		Methomyl	0.0020	U	ug/L	P410466	
		Oxamyl	0.0020	U	ug/L	P410466	
		Propoxur	0.0020	U	ug/L	P410466	
2308729		2,4-D	0.025		ug/L	P410466	
		Acesulfame K	0.10	U	ug/L	P410426	
		2,4,5-T	0.0040	U	ug/L	P410466	
		AMPA	1.0		ug/L	P410426	
		Acetaminophen	0.0080	U	ug/L	P410466	
		Acetamiprid	0.0020	U	ug/L	P410466	
		Endothall	0.25	U	ug/L	P410426	
		Glufosinate	0.10	U	ug/L	P410426	
		Glyphosate	1.7		ug/L	P410426	
		Afidopyropen	0.0020	U	ug/L	P410466	
		Bentazon	0.0080		ug/L	P410466	
		Sucralose	0.23		ug/L	P410426	
		Benzovindiflupyr	0.0020	U	ug/L	P410466	
		Carbamazepine	8.0E-04	U	ug/L	P410466	
		Clothianidin	0.0036	I	ug/L	P410466	
		Dinotefuran	0.0020	U	ug/L	P410466	MS
		Diuron	0.0020	U	ug/L	P410466	
		Fenuron	0.016	U	ug/L	P410466	
		Fluridone	0.0065		ug/L	P410466	

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308729	EPA 8321B	Imazapyr	0.48		ug/L	P410466	
		Hydrocodone	0.0020	U	ug/L	P410466	
		Ibuprofen	0.020	U	ug/L	P410466	
		Imidacloprid	0.027		ug/L	P410466	MS
		Linuron	0.0040	U	ug/L	P410466	
		Mandestrobin	0.0020	U	ug/L	P410466	
		MCPP	0.0040	U	ug/L	P410466	
		Naproxen	0.0080	U	ug/L	P410466	
		Primidone	0.0040	U	ug/L	P410466	
		Pyraclostrobin	0.0020	U	ug/L	P410466	
		Silvex	0.0040	U	ug/L	P410466	
		Thiamethoxam	0.0039	I	ug/L	P410466	
		Tolfenpyrad	0.0020	U	ug/L	P410466	
		Triclopyr	0.0040	U	ug/L	P410466	
2308732	EPA 8270E	Aldrin	0.67	U	ng/L	P410328	
		Alpha-BHC	0.10	U	ng/L	P410328	
		Alpha-Chlordane	0.21	U	ng/L	P410328	
		Beta-BHC	0.10	U	ng/L	P410328	
		Beta-Cyfluthrin**	1.3	U	ng/L	P410328	
		Bifenthrin**	0.52	U	ng/L	P410328	
		Chlorothalonil	1.3	U	ng/L	P410328	
		Cis-Nonachlor**	0.21	U	ng/L	P410328	
		Cypermethrin	1.5	U	ng/L	P410328	
		Dacthal**	0.15	U	ng/L	P410328	
		DDD-p,p'	0.26	U	ng/L	P410328	
		DDE-p,p'	0.21	U	ng/L	P410328	
		DDT-p,p'	0.26	U	ng/L	P410328	
		Delta-BHC	0.41	U	ng/L	P410328	
		Deltamethrin**	1.3	U	ng/L	P410328	
		Dichlobenil**	0.26	U	ng/L	P410328	
		Dicofol	1.3	U	ng/L	P410328	
		Dieldrin	0.41	U	ng/L	P410328	
		Endosulfan I	0.41	U	ng/L	P410328	
		Endosulfan II	0.41	U	ng/L	P410328	
		Endosulfan Sulfate	0.31	U	ng/L	P410328	
		Endrin	0.41	UQ	ng/L	P411150	
		Endrin Aldehyde	0.77	U	ng/L	P410328	
		Endrin Ketone	0.41	UJ	ng/L	P410328	LCS, MS
		Esfenvalerate**	0.77	U	ng/L	P410328	
		Ethalfluralin**	0.15	U	ng/L	P410328	
		Fenpropathrin**	0.26	U	ng/L	P410328	
		Gamma-BHC	0.13	U	ng/L	P410328	
		Gamma-Chlordane	0.21	U	ng/L	P410328	
		Heptachlor	0.21	U	ng/L	P410328	
		Heptachlor Epoxide	0.26	U	ng/L	P410328	

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308732	EPA 8270E	Hexachlorobenzene	1.0	U	ng/L	P410328	
		Kepone**	5.2	UJ	ng/L	P410328	CCV
		Lambda-Cyhalothrin**	0.77	U	ng/L	P410328	
		Methoprene**	0.77	UQ	ng/L	P411150	
		Methoxychlor	0.31	U	ng/L	P410328	
		MGK-264**	0.21	U	ng/L	P410328	
		Mirex	0.72	U	ng/L	P410328	
		Oxychlordane**	0.31	U	ng/L	P410328	
		Permethrin	1.6	U	ng/L	P410328	
		Phenothrin**	0.93	U	ng/L	P410328	
		Piperonyl Butoxide**	0.15	UQ	ng/L	P411150	
		Prallethrin**	2.1	U	ng/L	P410328	
		Tau-Fluvalinate**	0.26	U	ng/L	P410328	
		Tetramethrin**	0.77	U	ng/L	P410328	
		Trans-Nonachlor**	0.21	U	ng/L	P410328	
		Triclosan Methyl**	0.15	U	ng/L	P410328	
		Trifluralin	0.21	U	ng/L	P410328	
	EPA 8276	Chlordane	2.6	U	ng/L	P410328	RPD
		Toxaphene	15	U	ng/L	P410328	RPD
2308733	EPA 8270E	Acetochlor	0.24	U	ng/L	P410737	
		Alachlor	0.24	U	ng/L	P410737	
		Ametryn	4.9		ng/L	P410737	
		Atrazine	150		ng/L	P410737	
		Atrazine Desethyl	4.2	I	ng/L	P410737	
		Azinphos Methyl	1.9	U	ng/L	P410737	
		Azoxystrobin**	3.7		ng/L	P410737	
		Bromacil	13		ng/L	P410737	
		Butylate	0.39	U	ng/L	P410737	
		Caffeine**	7.2	U	ng/L	P410737	
		Carbophenothion	0.19	U	ng/L	P410737	
		Carfentrazone Ethyl**	0.096	U	ng/L	P410737	
		Chlorfenapyr**	0.17	U	ng/L	P410737	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P410737	
		Chlorpyrifos Methyl	0.048	U	ng/L	P410737	
		Coumaphos**	0.48	U	ng/L	P410737	
		Cyanazine	3.1	U	ng/L	P410737	
		Cyprodinil**	0.096	U	ng/L	P410737	
		Demeton	1.4	U	ng/L	P410737	
		Diazinon	0.12	U	ng/L	P410737	
		Difenoconazole**	0.58	U	ng/L	P410737	
		Dimethenamid**	2.5		ng/L	P410737	
		Dimethomorph**	0.17	UJ	ng/L	P410737	RPD
		Disulfoton	0.48	U	ng/L	P410737	
		Dithiopyr**	1.1		ng/L	P410737	
		EPTC	1.2	U	ng/L	P410737	

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308733	EPA 8270E	Ethion	0.14	U	ng/L	P410737	
		Ethoprop	0.096	UJ	ng/L	P410737	LCS
		Etridiazole**	0.14	UJ	ng/L	P410737	LCS
		Fenamiphos	0.48	U	ng/L	P410737	
		Fenbuconazole**	0.16	I	ng/L	P410737	
		Fipronil	0.24	U	ng/L	P410737	
		Fipronil Desulfinyl**	0.12	U	ng/L	P410737	
		Fipronil Sulfide	0.14	U	ng/L	P410737	
		Fipronil Sulfone	0.14	U	ng/L	P410737	
		Fluazifop-P-butyl**	0.096	U	ng/L	P410737	
		Fludioxonil**	0.12	U	ng/L	P410737	
		Flumioxazin**	2.1	I	ng/L	P410737	
		Flutolanil**	0.096	U	ng/L	P410737	
		Fluxapyroxad**	0.19	I	ng/L	P410737	
		Fonofos	0.19	U	ng/L	P410737	
		Hexazinone	5.0		ng/L	P410737	
		Imazalil**	0.72	U	ng/L	P410737	
		Iprodione**	0.58	U	ng/L	P410737	
		Loratadine**	0.096	UJ	ng/L	P410737	RPD
		Malathion	0.34	U	ng/L	P410737	
		Metalaxyl	7.0		ng/L	P410737	
		Metolachlor	72		ng/L	P410737	
		Metribuzin	2.4	U	ng/L	P410737	
		Mevinphos	1.0	U	ng/L	P410737	
		Molinate	0.29	UJ	ng/L	P410737	LCS
		Myclobutanil**	0.24	U	ng/L	P410737	
		Naled**	1.4	U	ng/L	P410737	
		Napropamide**	0.39	U	ng/L	P410737	
		Norflurazon	32		ng/L	P410737	
		Oxadiazon	1.0	I	ng/L	P410737	
		Oxyfluorfen**	0.14	U	ng/L	P410737	
		Parathion Ethyl	0.24	U	ng/L	P410737	
		Parathion Methyl	0.53	U	ng/L	P410737	
		Pendimethalin	12	J	ng/L	P410737	
		Phenytoin**	3.4	U	ng/L	P410737	
		Phorate	0.51	U	ng/L	P410737	
		Prodiamine**	0.17	U	ng/L	P410737	
		Prometon	0.87	U	ng/L	P410737	
		Prometryn	1.3		ng/L	P410737	
		Pronamide**	0.40	I	ng/L	P410737	
		Propanil**	0.12	U	ng/L	P410737	
		Propargite**	1.4	U	ng/L	P410737	
		Propiconazole**	2.6		ng/L	P410737	
		Pyraflufen Ethyl**	0.24	U	ng/L	P410737	
		Pyridaben**	0.43	U	ng/L	P410737	

Field ID: G4SD0174 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308733	EPA 8270E	Pyriproxyfen**	0.12	U	ng/L	P410737	
		Simazine	9.2		ng/L	P410737	
		Stirophos**	0.12	U	ng/L	P410737	
		Sulfentrazone**	1.5	I	ng/L	P410737	
		Tebuconazole**	0.48	U	ng/L	P410737	
		Terbufos	0.096	U	ng/L	P410737	
		Terbuthylazine	0.41	U	ng/L	P410737	
		Thiobencarb**	0.58	U	ng/L	P410737	
		Triadimefon**	0.24	U	ng/L	P410737	

Ref. Method and Comment:
SM 2320 B-2011: Batch relative percent difference is unavailable because of analytical difficulties.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-2011: Batch relative percent difference and matrix spike recoveries are unavailable because of analytical difficulties.
EPA 8270E: Sample expired for preparation for some analytes due to need for re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. Estimated value for Pendimethalin due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: L-49 **Collection Date/Time: 02/28/2022 10:55**

Field ID: G4SD0190 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308707	DEP SOP: NU-094-1	Color (true)**	67		PCU	P410509	
	EPA 180.1 Rev. 2.0	Turbidity	2.2		NTU	P410514	
	EPA 300.0 Rev. 2.1	Chloride	100		mg Cl/L	P410852	
		Sulfate	48		mg SO4/L	P410856	
	SM 2320 B-2011	Total Alkalinity	221		mg CaCO3/L	P410710	
	SM 2540 C-2011	TDS	480		mg/L	P410755	
	SM 2540 D-2011	TSS	2	I	mg/L	P410898	
	SM 4500 F-C-2011	Fluoride	0.21		mg F/L	P410714	
2308708	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P410683	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P410481	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P410785	
	EPA 365.1 Rev. 2.0	Total-P	0.027		mg P/L	P410934	
	SM 5310 B-2011	Organic Carbon	19		mg C/L	P410643	
2308709	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P410505	
2308727	EPA 8321B	2,4-D	0.028		ug/L	P410466	
		Acesulfame K	0.10	U	ug/L	P410426	
		2,4,5-T	0.0040	U	ug/L	P410466	
		AMPA	0.10	U	ug/L	P410426	
		Acetaminophen	0.0080	U	ug/L	P410466	
		Acetamiprid	0.0020	U	ug/L	P410466	
		Endothall	0.25	U	ug/L	P410426	
		Glufosinate	0.10	U	ug/L	P410426	
		Glyphosate	0.28	I	ug/L	P410426	
		Afidopyropen	0.0020	U	ug/L	P410466	
		Bentazon	0.040		ug/L	P410466	
		Sucralose	0.11		ug/L	P410426	
		Benzovindiflupyr	0.0020	U	ug/L	P410466	
		Carbamazepine	0.0016	I	ug/L	P410466	
		Clothianidin	0.0027	I	ug/L	P410466	
		Dinotefuran	0.0020	U	ug/L	P410466	MS
		Diuron	0.0020	U	ug/L	P410466	
		Fenuron	0.016	U	ug/L	P410466	
		Fluridone	0.0055		ug/L	P410466	
		Imazapyr	0.24		ug/L	P410466	
		Hydrocodone	0.0020	U	ug/L	P410466	
		Ibuprofen	0.020	U	ug/L	P410466	
		Imidacloprid	0.0028	I	ug/L	P410466	MS
		Linuron	0.0040	U	ug/L	P410466	
		Mandestrobin	0.0020	U	ug/L	P410466	
		MCPP	0.0040	U	ug/L	P410466	
		Naproxen	0.0080	U	ug/L	P410466	
		Primidone	0.0040	U	ug/L	P410466	
		Pyraclostrobin	0.0020	U	ug/L	P410466	

Field ID: G4SD0190 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308727	EPA 8321B	Silvex	0.0040	U	ug/L	P410466	
		Thiamethoxam	0.0092		ug/L	P410466	
		Tolfenpyrad	0.0020	U	ug/L	P410466	
		Triclopyr	0.0040	U	ug/L	P410466	

Ref. Method and Comment:
SM 2320 B-2011: Batch relative percent difference is unavailable because of analytical difficulties.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-2011: Batch relative percent difference and matrix spike recoveries are unavailable because of analytical difficulties.

Sample Location: L-61W at Old LakeportRd **Collection Date/Time: 02/28/2022 11:30**

Field ID: G4SD0217 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308736	EPA 200.7 Rev. 4.4	Calcium	37.7		mg/L	P410533	
		Iron	280		ug/L	P410533	
		Magnesium	10.8		mg/L	P410533	
		Potassium	12.3		mg/L	P410533	
		Sodium	22.5		mg/L	P410533	
		Strontium	1.60E+03		ug/L	P410533	
		Tin	3.0	U	ug/L	P410533	
		Titanium	1.0	I	ug/L	P410533	
		Vanadium	2.0	U	ug/L	P410533	
		Zinc	5.0	U	ug/L	P410533	
	EPA 200.8 Rev. 5.4	Aluminum	49		ug/L	P410533	
		Antimony	0.063	I	ug/L	P410533	
		Arsenic	0.94		ug/L	P410533	
		Barium	33.2		ug/L	P410533	
		Beryllium	0.010	U	ug/L	P410533	
		Boron**	56.4		ug/L	P410533	
		Cadmium	0.020	U	ug/L	P410533	
		Chromium	0.40	U	ug/L	P410533	
		Cobalt	0.083		ug/L	P410533	
		Copper	0.43	I	ug/L	P410533	
		Lead	0.20	U	ug/L	P410533	
		Manganese	33.2		ug/L	P410533	
		Molybdenum	0.58	I	ug/L	P410533	
		Nickel	0.50	U	ug/L	P410533	
		Selenium	0.20	U	ug/L	P410533	
		Silver	0.010	U	ug/L	P410533	
		Thallium	0.10	U	ug/L	P410533	
	SM 2340B	Hardness	139		mg/L	P410533	

Sample Location: L-61W **Collection Date/Time: 02/28/2022 11:45**

Field ID: G4SD0194 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308710	DEP SOP: NU-094-1	Color (true)**	92		PCU	P410509	
	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P410514	
	EPA 300.0 Rev. 2.1	Chloride	49		mg Cl/L	P410852	
		Sulfate	46		mg SO4/L	P410856	
	SM 2320 B-2011	Total Alkalinity	76		mg CaCO3/L	P410710	
	SM 2540 C-2011	TDS	277		mg/L	P410755	
	SM 2540 D-2011	TSS	4	I	mg/L	P410898	
	SM 4500 F-C-2011	Fluoride	0.11		mg F/L	P410714	
2308711	EPA 350.1 Rev. 2.0	Ammonia-N	0.071		mg N/L	P410683	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P410481	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.26		mg N/L	P410785	
	EPA 365.1 Rev. 2.0	Total-P	0.095		mg P/L	P410934	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P410643	
2308712	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.034		mg P/L	P410505	

Ref. Method and Comment:
SM 2320 B-2011: Batch relative percent difference is unavailable because of analytical difficulties.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-2011: Batch relative percent difference and matrix spike recoveries are unavailable because of analytical difficulties.

Sample Location: C-19 Canal **Collection Date/Time: 02/28/2022 13:05**

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308716	DEP SOP: NU-094-1	Color (true)**	58		PCU	P410510	
	EPA 180.1 Rev. 2.0	Turbidity	9.3		NTU	P410514	
	EPA 300.0 Rev. 2.1	Chloride	47		mg Cl/L	P410852	
		Sulfate	17		mg SO4/L	P410856	
	SM 2320 B-2011	Total Alkalinity	98		mg CaCO3/L	P410710	
	SM 2540 C-2011	TDS	248		mg/L	P410755	
	SM 2540 D-2011	TSS	15		mg/L	P410898	
	SM 4500 F-C-2011	Fluoride	0.15		mg F/L	P410714	
2308717	EPA 350.1 Rev. 2.0	Ammonia-N	0.051		mg N/L	P410684	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P410667	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.020		mg N/L	P410785	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P410934	
	SM 5310 B-2011	Organic Carbon	16		mg C/L	P410643	
2308718	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P410506	
2308730	EPA 8321B	Aldicarb	0.020	U	ug/L	P410466	
		Aldicarb Sulfone	0.0020	U	ug/L	P410466	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P410466	
		Carbaryl	0.0020	U	ug/L	P410466	
		Carbofuran	0.0020	U	ug/L	P410466	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P410466	
		Methiocarb	0.0020	U	ug/L	P410466	
		Methomyl	0.0020	U	ug/L	P410466	
		Oxamyl	0.0020	U	ug/L	P410466	
		Propoxur	0.0020	U	ug/L	P410466	
2308731		2,4-D	0.0038	I	ug/L	P410466	
		Acesulfame K	0.10	U	ug/L	P410426	
		2,4,5-T	0.0040	U	ug/L	P410466	
		AMPA	0.10	U	ug/L	P410426	
		Acetaminophen	0.0080	U	ug/L	P410466	
		Acetamiprid	0.0020	U	ug/L	P410466	
		Endothall	0.25	U	ug/L	P410426	
		Glufosinate	0.10	U	ug/L	P410426	
		Glyphosate	0.18	I	ug/L	P410426	
		Afidopyropen	0.0020	U	ug/L	P410466	
		Bentazon	0.0037		ug/L	P410466	
		Sucralose	0.17		ug/L	P410426	
		Benzovindiflupyr	0.0020	U	ug/L	P410466	
		Carbamazepine	8.0E-04	U	ug/L	P410466	
		Clothianidin	0.0028	I	ug/L	P410466	
		Dinotefuran	0.0020	U	ug/L	P410466	MS
		Diuron	0.0020	U	ug/L	P410466	
		Fenuron	0.016	U	ug/L	P410466	
		Fluridone	0.0034		ug/L	P410466	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308731	EPA 8321B	Imazapyr	0.033		ug/L	P410466	
		Hydrocodone	0.0020	U	ug/L	P410466	
		Ibuprofen	0.020	U	ug/L	P410466	
		Imidacloprid	0.0020	U	ug/L	P410466	MS
		Linuron	0.0040	U	ug/L	P410466	
		Mandestrobin	0.0020	U	ug/L	P410466	
		MCPP	0.0040	U	ug/L	P410466	
		Naproxen	0.0080	U	ug/L	P410466	
		Primidone	0.0040	U	ug/L	P410466	
		Pyraclostrobin	0.0020	U	ug/L	P410466	
		Silvex	0.0040	U	ug/L	P410466	
		Thiamethoxam	0.0036	I	ug/L	P410466	
		Tolfenpyrad	0.0020	U	ug/L	P410466	
		Triclopyr	0.0040	U	ug/L	P410466	
2308734	EPA 8270E	Aldrin	0.67	U	ng/L	P410328	
		Alpha-BHC	0.10	U	ng/L	P410328	
		Alpha-Chlordane	0.20	U	ng/L	P410328	
		Beta-BHC	0.10	U	ng/L	P410328	
		Beta-Cyfluthrin**	1.3	U	ng/L	P410328	
		Bifenthrin**	0.51	U	ng/L	P410328	
		Chlorothalonil	1.3	U	ng/L	P410328	
		Cis-Nonachlor**	0.20	U	ng/L	P410328	
		Cypermethrin	1.5	U	ng/L	P410328	
		Dacthal**	0.15	U	ng/L	P410328	
		DDD-p,p'	0.26	U	ng/L	P410328	
		DDE-p,p'	0.20	U	ng/L	P410328	
		DDT-p,p'	0.26	U	ng/L	P410328	
		Delta-BHC	0.41	U	ng/L	P410328	
		Deltamethrin**	1.3	U	ng/L	P410328	
		Dichlobenil**	0.26	U	ng/L	P410328	
		Dicofol	1.3	U	ng/L	P410328	
		Dieldrin	0.41	U	ng/L	P410328	
		Endosulfan I	0.41	U	ng/L	P410328	
		Endosulfan II	0.41	U	ng/L	P410328	
		Endosulfan Sulfate	0.31	U	ng/L	P410328	
		Endrin	0.41	UQ	ng/L	P411150	
		Endrin Aldehyde	0.77	U	ng/L	P410328	
		Endrin Ketone	0.41	UJ	ng/L	P410328	LCS, MS
		Esfenvalerate**	0.77	U	ng/L	P410328	
		Ethalfluralin**	0.15	U	ng/L	P410328	
		Fenpropathrin**	0.26	U	ng/L	P410328	
		Gamma-BHC	0.13	U	ng/L	P410328	
		Gamma-Chlordane	0.20	U	ng/L	P410328	
		Heptachlor	0.20	U	ng/L	P410328	
		Heptachlor Epoxide	0.26	U	ng/L	P410328	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308734	EPA 8270E	Hexachlorobenzene	1.0	U	ng/L	P410328	
		Kepone**	5.1	UJ	ng/L	P410328	CCV
		Lambda-Cyhalothrin**	0.77	U	ng/L	P410328	
		Methoprene**	0.77	UQ	ng/L	P411150	
		Methoxychlor	0.31	U	ng/L	P410328	
		MGK-264**	0.20	U	ng/L	P410328	
		Mirex	0.72	U	ng/L	P410328	
		Oxychlordane**	0.31	U	ng/L	P410328	
		Permethrin	1.6	U	ng/L	P410328	
		Phenothrin**	0.92	U	ng/L	P410328	
		Piperonyl Butoxide**	0.15	UQ	ng/L	P411150	
		Prallethrin**	2.0	U	ng/L	P410328	
		Tau-Fluvalinate**	0.26	U	ng/L	P410328	
		Tetramethrin**	0.77	U	ng/L	P410328	
		Trans-Nonachlor**	0.20	U	ng/L	P410328	
		Triclosan Methyl**	0.15	U	ng/L	P410328	
		Trifluralin	0.20	U	ng/L	P410328	
	EPA 8276	Chlordane	2.6	U	ng/L	P410328	RPD
		Toxaphene	15	U	ng/L	P410328	RPD
2308735	EPA 8270E	Acetochlor	0.24	U	ng/L	P410737	
		Alachlor	0.24	U	ng/L	P410737	
		Ametryn	6.1		ng/L	P410737	
		Atrazine	88		ng/L	P410737	
		Atrazine Desethyl	17		ng/L	P410737	
		Azinphos Methyl	1.9	U	ng/L	P410737	
		Azoxystrobin**	0.67	I	ng/L	P410737	
		Bromacil	1.9	I	ng/L	P410737	
		Butylate	0.39	U	ng/L	P410737	
		Caffeine**	7.2	U	ng/L	P410737	
		Carbophenothion	0.19	U	ng/L	P410737	
		Carfentrazone Ethyl**	0.096	U	ng/L	P410737	
		Chlorfenapyr**	0.17	U	ng/L	P410737	
		Chlorpyrifos Ethyl	0.48	I	ng/L	P410737	
		Chlorpyrifos Methyl	0.048	U	ng/L	P410737	
		Coumaphos**	0.48	U	ng/L	P410737	
		Cyanazine	3.1	U	ng/L	P410737	
		Cyprodinil**	0.096	U	ng/L	P410737	
		Demeton	1.4	U	ng/L	P410737	
		Diazinon	0.12	U	ng/L	P410737	
		Difenoconazole**	0.58	U	ng/L	P410737	
		Dimethenamid**	0.096	U	ng/L	P410737	
		Dimethomorph**	0.17	U	ng/L	P410737	RPD
		Disulfoton	0.48	U	ng/L	P410737	
		Dithiopyr**	0.17	U	ng/L	P410737	
		EPTC	1.2	U	ng/L	P410737	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308735	EPA 8270E	Ethion	0.14	U	ng/L	P410737	
		Ethoprop	0.096	UJ	ng/L	P410737	LCS
		Etridiazole**	0.14	UJ	ng/L	P410737	LCS
		Fenamiphos	0.48	U	ng/L	P410737	
		Fenbuconazole**	0.12	U	ng/L	P410737	
		Fipronil	0.24	U	ng/L	P410737	
		Fipronil Desulfinyl**	0.12	U	ng/L	P410737	
		Fipronil Sulfide	0.14	U	ng/L	P410737	
		Fipronil Sulfone	0.14	U	ng/L	P410737	
		Fluazifop-P-butyl**	0.096	U	ng/L	P410737	
		Fludioxonil**	0.12	U	ng/L	P410737	
		Flumioxazin**	1.7	U	ng/L	P410737	
		Flutolanil**	0.096	U	ng/L	P410737	
		Fluxapyroxad**	0.84		ng/L	P410737	
		Fonofos	0.19	U	ng/L	P410737	
		Hexazinone	27		ng/L	P410737	
		Imazalil**	0.72	U	ng/L	P410737	
		Iprodione**	0.58	U	ng/L	P410737	
		Loratadine**	0.096	U	ng/L	P410737	RPD
		Malathion	0.34	U	ng/L	P410737	
		Metalaxyl	1.1	I	ng/L	P410737	
		Metolachlor	7.3		ng/L	P410737	
		Metribuzin	2.4	U	ng/L	P410737	
		Mevinphos	1.0	U	ng/L	P410737	
		Molinate	0.29	UJ	ng/L	P410737	LCS
		Myclobutanil**	0.24	U	ng/L	P410737	
		Naled**	1.4	U	ng/L	P410737	
		Napropamide**	0.39	U	ng/L	P410737	
		Norflurazon	3.2		ng/L	P410737	
		Oxadiazon	0.29	U	ng/L	P410737	
		Oxyfluorfen**	0.14	U	ng/L	P410737	
		Parathion Ethyl	0.24	U	ng/L	P410737	
		Parathion Methyl	0.53	U	ng/L	P410737	
		Pendimethalin	0.96	U	ng/L	P410737	
		Phenytoin**	3.4	U	ng/L	P410737	
		Phorate	0.51	U	ng/L	P410737	
		Prodiamine**	0.17	U	ng/L	P410737	
		Prometon	0.87	U	ng/L	P410737	
		Prometryn	0.19	U	ng/L	P410737	
		Pronamide**	0.14	U	ng/L	P410737	
		Propanil**	0.12	U	ng/L	P410737	
		Propargite**	1.4	U	ng/L	P410737	
		Propiconazole**	1.4	I	ng/L	P410737	
		Pyraflufen Ethyl**	0.24	U	ng/L	P410737	
		Pyridaben**	0.43	U	ng/L	P410737	

Field ID: G3SD0162 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2308735	EPA 8270E	Pyriproxyfen**	0.12	U	ng/L	P410737	
		Simazine	4.0		ng/L	P410737	
		Stirophos**	0.12	U	ng/L	P410737	
		Sulfentrazone**	0.48	U	ng/L	P410737	
		Tebuconazole**	0.48	U	ng/L	P410737	
		Terbufos	0.096	U	ng/L	P410737	
		Terbuthylazine	0.41	U	ng/L	P410737	
		Thiobencarb**	0.58	U	ng/L	P410737	
		Triadimefon**	0.24	U	ng/L	P410737	

Ref. Method and Comment:
SM 2320 B-2011: Batch relative percent difference is unavailable because of analytical difficulties.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500 F-C-2011: Batch relative percent difference and matrix spike recoveries are unavailable because of analytical difficulties.
EPA 8270E: Sample expired for preparation for some analytes due to need for re-extraction. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P410509

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P410510

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410514

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410533

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: P410533

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: P410852

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410856

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410683

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410684

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410479

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410481

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410667

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410785

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P410934

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 dissolved
Batch ID: P410505

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410506

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

Reference Method: EPA 8270E
Batch ID: P410328

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P410328

Component	Result	Code	Units
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P410737

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P410737

Component	Result	Code	Units
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P410737

Component	Result	Code	Units
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P410737

Component	Result	Code	Units
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E
Batch ID: P411150

Component	Result	Code	Units
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L

Reference Method: EPA 8276
Batch ID: P410328

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

Reference Method: EPA 8321B
Batch ID: P410426

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: P410466

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	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
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P410466

Component	Result	Code	Units
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	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: P410710

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

Reference Method: SM 2540 C-2011
Batch ID: P410755

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P410898

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P410714

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 5310 B-2011
Batch ID: P410643

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

Reference Method: SM 5310 B-2011
Batch ID: P410673

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: P410509

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P410510

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410514

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	104		P	85 - 115
Iron	106		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	102		P	85 - 115
Sodium	105		P	85 - 115
Strontium	102		P	85 - 115
Tin	102		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	94.0		P	85 - 115
Zinc	98.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	99.3		P	85 - 115
Arsenic	97.1		P	85 - 115
Barium	100		P	85 - 115
Beryllium	92.8		P	85 - 115
Boron	104		P	85 - 115
Cadmium	97.5		P	85 - 115
Chromium	93.2		P	85 - 115
Cobalt	96.5		P	85 - 115
Copper	94.6		P	85 - 115
Lead	93.6		P	85 - 115
Manganese	94.3		P	85 - 115
Molybdenum	96.6		P	85 - 115
Nickel	97.4		P	85 - 115
Selenium	97.2		P	85 - 115
Silver	95.8		P	85 - 115
Thallium	97.0		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410852

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410856

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410683

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410684

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410479

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410481

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410667

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410785

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P410934

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 dissolved
Batch ID: P410505

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.6		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410506

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

Reference Method: EPA 8270E
Batch ID: P410328

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.9		P	10 - 93.0
Alpha-BHC	96.4		P	75 - 106
Alpha-Chlordane	86.8		P	50 - 109
Beta-BHC	110		P	65 - 135
Beta-Cyfluthrin	105		P	23 - 167
Bifenthrin	93.5		P	11 - 123
Chlorothalonil	54.3		P	26 - 182
Cis-Nonachlor	79.6		P	40 - 111
Cypermethrin	114		P	25 - 155
Dacthal	98.2		P	73 - 112
DDD-p,p'	82.2		P	47 - 108
DDE-p,p'	82.9		P	48 - 107
DDT-p,p'	87.3		P	49 - 111
Delta-BHC	117		P	68 - 143
Deltamethrin	71.3		P	16 - 176
Dichlobenil	93.6		P	32 - 113
Dicofol	92.7		P	50 - 108
Dieldrin	76.9		P	56 - 110
Endosulfan I	85.3		P	60 - 105
Endosulfan II	88.5		P	50 - 120
Endosulfan Sulfate	101		P	55 - 121
Endrin Aldehyde	62.1		P	36 - 116
Endrin Ketone	177		F	56 - 130
Esfenvalerate	106		P	10 - 179
Ethalfluralin	81.5		P	49 - 99.0
Fenpropathrin	74.4		P	35 - 119
Gamma-BHC	99.9		P	72 - 115
Gamma-Chlordane	85.0		P	45 - 107
Heptachlor	78.9		P	41 - 100
Heptachlor Epoxide	95.9		P	58 - 106
Hexachlorobenzene	83.9		P	39 - 100
Kepone	155		P	10 - 191
Lambda-Cyhalothrin	102		P	10 - 186
Methoxychlor	108		P	61 - 111
MGK-264	77.9		P	20 - 123
Mirex	68.4		P	10 - 182
Oxychlordane	81.7		P	39 - 110
Permethrin	105		P	26 - 152
Phenothrin	49.8		P	10 - 109
Prallethrin	40.2		P	14 - 109

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P410328

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tau-Fluvalinate	94.0		P	16 - 134
Tetramethrin	18.2		P	10 - 125
Trans-Nonachlor	85.1		P	45 - 107
Triclosan Methyl	87.6		P	60 - 110
Trifluralin	82.4		P	49 - 98.0

Reference Method: EPA 8270E
Batch ID: P410737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	83.2		P	70 - 121
Alachlor	81.0		P	68 - 119
Ametryn	116		P	64 - 139
Atrazine	83.9		P	76 - 120
Atrazine Desethyl	61.4		P	44 - 126
Azinphos Methyl	73.2		P	43 - 192
Azoxystrobin	89.3		P	36 - 224
Bromacil	84.2		P	52 - 121
Butylate	28.6		P	28 - 91.0
Caffeine	79.3		P	50 - 134
Carbophenothion	79.8		P	56 - 129
Carfentrazone Ethyl	87.2		P	60 - 141
Chlorfenapyr	73.9		P	56 - 115
Chlorpyrifos Ethyl	78.4		P	60 - 118
Chlorpyrifos Methyl	72.3		P	68 - 119
Coumaphos	104		P	18 - 250
Cyanazine	105		P	61 - 250
Cyprodinil	99.6		P	55 - 145
Demeton	52.8		P	30 - 159
Diazinon	78.5		P	70 - 123
Difenoconazole	76.9		P	49 - 204
Dimethenamid	66.7		P	64 - 115
Dimethomorph	92.1		P	12 - 219
Disulfoton	67.6		P	44 - 125
Dithiopyr	82.9		P	64 - 115
EPTC	28.1		P	28 - 86.0
Ethion	78.4		P	33 - 125
Ethoprop	59.4		F	64 - 116
Etridiazole	33.9		F	34 - 91.0
Fenamiphos	77.2		P	12 - 127
Fenbuconazole	103		P	59 - 151
Fipronil	83.7		P	67 - 129
Fipronil Desulfinyl	90.6		P	65 - 127
Fipronil Sulfide	67.4		P	61 - 116
Fipronil Sulfone	71.1		P	55 - 117
Fluazifop-P-butyl	81.3		P	62 - 127
Fludioxonil	83.5		P	62 - 128
Flumioxazin	147		P	33 - 250
Flutolanil	77.8		P	56 - 127
Fluxapyroxad	92.6		P	45 - 128
Fonofos	67.4		P	62 - 111
Hexazinone	88.2		P	46 - 139

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P410737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazalil	79.1		P	38 - 142
Iprodione	66.2		P	47 - 135
Loratadine	93.4		P	10 - 244
Malathion	84.3		P	61 - 139
Metalaxyl	79.3		P	10 - 119
Metolachlor	83.7		P	65 - 118
Metribuzin	87.2		P	51 - 250
Mevinphos	63.0		P	53 - 121
Molinate	38.0		F	42 - 96.0
Myclobutanil	76.7		P	55 - 128
Naled	55.4		P	10 - 98.0
Napropamide	79.1		P	49 - 121
Norflurazon	85.9		P	61 - 126
Oxadiazon	80.2		P	59 - 116
Oxyfluorfen	95.1		P	64 - 137
Parathion Ethyl	84.4		P	70 - 112
Parathion Methyl	84.2		P	76 - 133
Pendimethalin	84.6		P	52 - 117
Phenytoin	81.7		P	10 - 199
Phorate	58.7		P	48 - 121
Prodiamine	117		P	26 - 142
Prometon	104		P	43 - 123
Prometryn	100		P	66 - 127
Pronamide	85.2		P	75 - 121
Propanil	81.9		P	45 - 150
Propargite	111		P	42 - 208
Propiconazole	82.7		P	60 - 125
Pyraflufen Ethyl	86.6		P	70 - 138
Pyridaben	110		P	35 - 245
Pyriproxyfen	61.6		P	30 - 149
Simazine	82.6		P	72 - 125
Stirophos	79.0		P	29 - 164
Sulfentrazone	87.5		P	21 - 139
Tebuconazole	90.9		P	10 - 115
Terbufos	71.7		P	60 - 123
Terbuthylazine	80.3		P	72 - 115
Thiobencarb	80.5		P	31 - 139
Triadimefon	82.5		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P411150

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endrin	57.8		P	31 - 119
Methoprene	23.9		P	10 - 129
Piperonyl Butoxide	80.4		P	27 - 142

Reference Method: EPA 8276
Batch ID: P410328

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	93.2		P	61 - 118

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P410328

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Toxaphene	81.2		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P410426

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	99.8		P	40 - 150
AMPA	105		P	40 - 150
Endothall	92.3		P	40 - 150
Glufosinate	111		P	40 - 150
Glyphosate	98.3		P	40 - 150
Sucralose	126		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P410466

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	116		P	40 - 150
2,4,5-T	90.7		P	40 - 150
3-Hydroxycarbofuran	100		P	40 - 150
Acetaminophen	106		P	30 - 150
Acetamiprid	120		P	40 - 150
Afidopyropen	93.0		P	40 - 150
Aldicarb	92.0		P	30 - 150
Aldicarb Sulfone	117		P	40 - 150
Aldicarb Sulfoxide	137		P	40 - 150
Bentazon	109		P	30 - 150
Benzovindiflupyr	124		P	40 - 150
Carbamazepine	138		P	40 - 150
Carbaryl	93.5		P	40 - 150
Carbofuran	127		P	40 - 150
Clothianidin	93.4		P	40 - 150
Dinotefuran	115		P	40 - 150
Diuron	104		P	40 - 150
Fenuron	111		P	40 - 150
Fluridone	102		P	40 - 150
Hydrocodone	104		P	40 - 150
Ibuprofen	106		P	40 - 150
Imazapyr	104		P	40 - 150
Imidacloprid	113		P	40 - 150
Linuron	98.8		P	40 - 150
Mandestrobin	125		P	40 - 150
MCPP	110		P	40 - 150
Methiocarb	82.5		P	40 - 150
Methomyl	105		P	40 - 150
Naproxen	73.1		P	40 - 150
Oxamyl	114		P	40 - 150
Primidone	117		P	40 - 150
Propoxur	108		P	40 - 150
Pyraclostrobin	96.1		P	40 - 150
Silvex	83.9		P	40 - 150
Thiamethoxam	113		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P410466

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Tolfenpyrad	43.0		P	30 - 150
Triclopyr	85.8		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P410710

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.8		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P410714

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.7		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P410643

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P410673

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.3		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307826	Calcium	100		P	80 - 120
2307826	Iron	107	106	P/P	80 - 120
2307826	Magnesium	106	106	P/P	80 - 120
2307826	Potassium	103	102	P/P	80 - 120
2307826	Sodium	104	103	P/P	80 - 120
2307826	Strontium	101	101	P/P	80 - 120
2307826	Tin	99.8	99.8	P/P	80 - 120
2307826	Titanium	102	102	P/P	80 - 120
2307826	Vanadium	95.9	95.4	P/P	80 - 120
2307826	Zinc	97.6	98.1	P/P	80 - 120
2307827	Calcium	98.3		P	80 - 120
2307827	Iron	101		P	80 - 120
2307827	Magnesium	96.7		P	80 - 120
2307827	Potassium	97.9		P	80 - 120
2307827	Sodium	102		P	80 - 120
2307827	Strontium	95.6		P	80 - 120
2307827	Tin	94.0		P	80 - 120
2307827	Titanium	97.6		P	80 - 120
2307827	Vanadium	91.3		P	80 - 120
2307827	Zinc	91.0		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307826	Aluminum	99.8	99.5	P/P	80 - 120
2307826	Antimony	102	102	P/P	80 - 120
2307826	Arsenic	98.5	97.4	P/P	80 - 120
2307826	Barium	102	101	P/P	80 - 120
2307826	Beryllium	91.4	91.5	P/P	80 - 120
2307826	Boron	105	105	P/P	80 - 120
2307826	Cadmium	101	97.9	P/P	80 - 120
2307826	Chromium	96.2	95.8	P/P	80 - 120
2307826	Cobalt	95.2	94.7	P/P	80 - 120
2307826	Copper	93.1	91.6	P/P	80 - 120
2307826	Lead	94.2	94.9	P/P	80 - 120
2307826	Manganese	96.4	95.4	P/P	80 - 120
2307826	Molybdenum	100	99.4	P/P	80 - 120
2307826	Nickel	95.8	94.8	P/P	80 - 120
2307826	Selenium	95.6	98.0	P/P	80 - 120
2307826	Silver	96.1	95.6	P/P	80 - 120
2307826	Thallium	99.4	101	P/P	80 - 120
2307827	Aluminum	99.0		P	80 - 120
2307827	Antimony	105		P	80 - 120
2307827	Arsenic	98.3		P	80 - 120
2307827	Barium	103		P	80 - 120
2307827	Beryllium	91.4		P	80 - 120
2307827	Boron	106		P	80 - 120
2307827	Cadmium	101		P	80 - 120
2307827	Chromium	99.1		P	80 - 120
2307827	Cobalt	95.5		P	80 - 120
2307827	Copper	92.0		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307827	Lead	95.4		P	80 - 120
2307827	Manganese	98.7		P	80 - 120
2307827	Molybdenum	101		P	80 - 120
2307827	Nickel	94.6		P	80 - 120
2307827	Selenium	97.5		P	80 - 120
2307827	Silver	97.6		P	80 - 120
2307827	Thallium	100		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410852

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308713	Chloride	98.5		P	90 - 110
2308775	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308713	Sulfate	100		P	90 - 110
2308775	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308657	Ammonia-N	99.0	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308714	Ammonia-N	96.2	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410479

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308342	Kjeldahl Nitrogen	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410481

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308651	Kjeldahl Nitrogen	109	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410667

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308336	Kjeldahl Nitrogen	91.4	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410785

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308708	NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P410934

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308708	Total-P	103	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308655	O-Phosphate-P	98.6	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410506

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308903	O-Phosphate-P	98.9	99.5	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P410328

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307892	Aldrin	47.3	44.4	P/P	10 - 89.0
2307892	Alpha-BHC	87.0	82.3	P/P	71 - 105
2307892	Alpha-Chlordane	74.8	69.6	P/P	43 - 107
2307892	Beta-BHC	101	96.2	P/P	57 - 152
2307892	Beta-Cyfluthrin	104	101	P/P	29 - 186
2307892	Bifenthrin	81.2	81.4	P/P	19 - 119
2307892	Chlorothalonil	154	159	P/P	10 - 245
2307892	Cis-Nonachlor	65.5	56.8	P/P	36 - 110
2307892	Cypermethrin	115	102	P/P	24 - 169
2307892	Dacthal	83.9	81.9	P/P	62 - 115
2307892	DDD-p,p'	68.1	65.8	P/P	36 - 109
2307892	DDE-p,p'	66.3	64.0	P/P	30 - 114
2307892	DDT-p,p'	73.3	70.4	P/P	42 - 108
2307892	Delta-BHC	112	105	P/P	60 - 164
2307892	Deltamethrin	56.0	62.1	P/P	10 - 210
2307892	Dichlobenil	74.9	75.3	P/P	23 - 108
2307892	Dicofol	78.7	72.6	P/P	44 - 109
2307892	Dieldrin	69.6	61.0	P/P	37 - 119
2307892	Endosulfan I	70.9	65.9	P/P	52 - 105
2307892	Endosulfan II	75.2	70.4	P/P	35 - 127
2307892	Endosulfan Sulfate	83.0	71.1	P/P	39 - 130
2307892	Endrin Aldehyde	22.9	34.0	P/P	20 - 110
2307892	Endrin Ketone	126	139	P/F	48 - 134
2307892	Esfenvalerate	97.1	94.2	P/P	10 - 199
2307892	Ethalfluralin	68.2	66.0	P/P	48 - 95.0
2307892	Fenpropathrin	75.9	74.7	P/P	37 - 121
2307892	Gamma-BHC	89.8	87.0	P/P	61 - 126
2307892	Gamma-Chlordane	73.0	71.3	P/P	39 - 105

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P410328

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307892	Heptachlor	68.7	64.2	P/P	38 - 96.0
2307892	Heptachlor Epoxide	96.4	76.9	P/P	42 - 114
2307892	Hexachlorobenzene	72.6	69.5	P/P	39 - 93.0
2307892	Kepone	142	135	P/P	10 - 215
2307892	Lambda-Cyhalothrin	104	117	P/P	10 - 204
2307892	Methoxychlor	100	91.5	P/P	56 - 115
2307892	MGK-264	65.4	65.5	P/P	35 - 120
2307892	Mirex	64.3	60.0	P/P	10 - 178
2307892	Oxychlordane	65.2	68.5	P/P	47 - 91.0
2307892	Permethrin	99.9	94.0	P/P	27 - 170
2307892	Phenothrin	60.6	53.8	P/P	10 - 133
2307892	Prallethrin	44.7	46.2	P/P	21 - 113
2307892	Tau-Fluvalinate	99.7	96.5	P/P	16 - 158
2307892	Tetramethrin	37.5	42.7	P/P	22 - 132
2307892	Trans-Nonachlor	68.0	67.0	P/P	43 - 102
2307892	Triclosan Methyl	69.2	65.5	P/P	49 - 109
2307892	Trifluralin	71.0	67.4	P/P	48 - 93.0

Reference Method: EPA 8270E
Batch ID: P410737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308733	Acetochlor	89.5	106	P/P	65 - 124
2308733	Alachlor	76.7	97.8	P/P	61 - 121
2308733	Atrazine Desethyl	44.3	56.9	P/P	15 - 160
2308733	Azinphos Methyl	69.4	100	P/P	40 - 292
2308733	Azoxystrobin	98.3	135	P/P	12 - 242
2308733	Butylate	44.7	43.5	P/P	14 - 94.0
2308733	Caffeine	127	104	P/P	10 - 226
2308733	Carbophenothion	80.2	94.7	P/P	49 - 122
2308733	Carfentrazone Ethyl	95.3	114	P/P	53 - 138
2308733	Chlorfenapyr	61.1	72.6	P/P	50 - 150
2308733	Chlorpyrifos Ethyl	75.6	89.0	P/P	52 - 122
2308733	Chlorpyrifos Methyl	76.7	89.4	P/P	66 - 117
2308733	Coumaphos	133	146	P/P	50 - 220
2308733	Cyanazine	115	148	P/P	43 - 245
2308733	Cyprodinil	90.9	116	P/P	50 - 150
2308733	Demeton	67.7	79.1	P/P	43 - 188
2308733	Diazinon	95.2	110	P/P	69 - 131
2308733	Difenoconazole	72.0	89.9	P/P	34 - 231
2308733	Dimethenamid	62.0	111	P/P	55 - 118
2308733	Dimethomorph	81.9	117	P/P	50 - 150
2308733	Disulfoton	74.8	85.7	P/P	38 - 141
2308733	Dithiopyr	83.2	101	P/P	42 - 116
2308733	EPTC	44.7	42.2	P/P	18 - 85.0
2308733	Ethion	68.1	75.0	P/P	10 - 131
2308733	Ethoprop	89.6	104	P/P	65 - 129
2308733	Etridiazole	59.4	62.6	P/P	50 - 150
2308733	Fenamiphos	73.6	88.8	P/P	31 - 137
2308733	Fenbuconazole	114	133	P/P	57 - 160
2308733	Fipronil	88.3	106	P/P	62 - 132
2308733	Fipronil Desulfinyl	85.6	106	P/P	57 - 131

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P410737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308733	Fipronil Sulfide	65.7	73.0	P/P	15 - 138
2308733	Fipronil Sulfone	71.9	77.7	P/P	21 - 134
2308733	Fluazifop-P-butyl	78.7	82.0	P/P	54 - 133
2308733	Fludioxonil	80.9	93.9	P/P	58 - 127
2308733	Flumioxazin	226	261	P/P	33 - 300
2308733	Flutolanil	75.6	90.6	P/P	42 - 130
2308733	Fluxapyroxad	55.9	70.4	P/P	23 - 141
2308733	Fonofos	72.1	79.6	P/P	58 - 119
2308733	Hexazinone	86.4	98.5	P/P	68 - 172
2308733	Imazalil	77.5	92.2	P/P	48 - 283
2308733	Iprodione	58.2	80.8	P/P	38 - 140
2308733	Loratadine	68.2	94.6	P/P	50 - 150
2308733	Malathion	83.6	97.5	P/P	40 - 137
2308733	Metalaxyl	66.1	96.6	P/P	21 - 129
2308733	Metribuzin	94.6	96.3	P/P	38 - 187
2308733	Mevinphos	88.1	106	P/P	54 - 134
2308733	Molinate	62.6	69.9	P/P	41 - 97.0
2308733	Myclobutanil	86.5	100	P/P	56 - 125
2308733	Naled	56.6	67.6	P/P	10 - 108
2308733	Napropamide	69.3	83.8	P/P	50 - 150
2308733	Oxadiazon	69.3	87.1	P/P	40 - 119
2308733	Oxyfluorfen	106	126	P/P	61 - 153
2308733	Parathion Ethyl	84.6	99.8	P/P	59 - 130
2308733	Parathion Methyl	111	130	P/P	65 - 155
2308733	Phenytoin	92.4	96.8	P/P	50 - 200
2308733	Phorate	63.7	73.8	P/P	54 - 161
2308733	Prodiamine	131	160	P/P	33 - 161
2308733	Prometon	116	128	P/P	48 - 140
2308733	Prometryn	87.8	127	P/P	55 - 134
2308733	Pronamide	85.0	111	P/P	66 - 137
2308733	Propanil	76.6	95.2	P/P	50 - 150
2308733	Propargite	136	170	P/P	50 - 200
2308733	Propiconazole	80.6	126	P/P	36 - 150
2308733	Pyraflufen Ethyl	106	126	P/P	50 - 150
2308733	Pyridaben	56.3	72.9	P/P	50 - 200
2308733	Pyriproxyfen	66.5	73.4	P/P	10 - 165
2308733	Stirophos	62.2	69.0	P/P	50 - 150
2308733	Sulfentrazone	94.3	139	P/P	34 - 140
2308733	Tebuconazole	44.0	45.5	P/P	10 - 127
2308733	Terbufos	91.6	111	P/P	59 - 138
2308733	Terbuthylazine	78.4	92.9	P/P	68 - 119
2308733	Thiobencarb	81.0	94.8	P/P	50 - 150
2308733	Triadimefon	81.1	97.9	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P411150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308510	Endrin	79.0	68.2	P/P	30 - 116
2308510	Methoprene	63.7	64.9	P/P	17 - 108
2308510	Piperonyl Butoxide	84.6	69.5	P/P	23 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P410328

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307902	Chlordane	85.2	64.9	P/P	55 - 128
2307902	Toxaphene	88.5	64.5	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P410426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307763	Acesulfame K	101	101	P/P	40 - 150
2307763	AMPA	119	126	P/P	40 - 150
2307763	Endothall	93.8	93.7	P/P	40 - 150
2307763	Glufosinate	103	114	P/P	40 - 150
2307763	Glyphosate	92.6	99.0	P/P	40 - 150
2307763	Sucralose	114	121	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P410466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308369	2,4-D	79.5	87.9	P/P	40 - 150
2308369	2,4,5-T	69.8	78.4	P/P	40 - 150
2308369	Acetaminophen	106	97.6	P/P	30 - 150
2308369	Acetamiprid	90.0	96.5	P/P	40 - 150
2308369	Afidopyropen	87.8	85.0	P/P	40 - 150
2308369	Bentazon	60.8	65.4	P/P	30 - 150
2308369	Benzovindiflupyr	87.4	96.3	P/P	40 - 150
2308369	Carbamazepine	105	111	P/P	40 - 150
2308369	Clothianidin	95.3	93.7	P/P	40 - 150
2308369	Dinotefuran	154	123	F/P	40 - 150
2308369	Diuron	70.9	65.7	P/P	40 - 150
2308369	Fenuron	53.1	47.4	P/P	40 - 150
2308369	Fluridone	104	91.1	P/P	40 - 150
2308369	Hydrocodone	75.9	65.1	P/P	40 - 150
2308369	Ibuprofen	113	85.2	P/P	40 - 150
2308369	Imazapyr	142	112	P/P	40 - 150
2308369	Imidacloprid	147	155	P/F	40 - 150
2308369	Linuron	120	88.7	P/P	40 - 150
2308369	Mandestrobin	107	105	P/P	40 - 150
2308369	MCPP	99.9	96.7	P/P	40 - 150
2308369	Naproxen	62.8	67.6	P/P	40 - 150
2308369	Primidone	89.6	106	P/P	40 - 150
2308369	Pyraclostrobin	101	94.6	P/P	40 - 150
2308369	Silvex	76.2	78.0	P/P	40 - 150
2308369	Thiamethoxam	150	144	P/P	40 - 150
2308369	Tolfenpyrad	50.4	48.4	P/P	30 - 150
2308369	Triclopyr	66.2	71.8	P/P	40 - 150
2308508	3-Hydroxycarbofuran	115	109	P/P	40 - 150
2308508	Aldicarb	74.0	77.7	P/P	30 - 150
2308508	Aldicarb Sulfone	107	112	P/P	40 - 150
2308508	Aldicarb Sulfoxide	64.0	71.7	P/P	40 - 150
2308508	Carbaryl	82.0	79.8	P/P	40 - 150
2308508	Carbofuran	104	111	P/P	40 - 150
2308508	Methiocarb	90.2	83.7	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P410466

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308508	Methomyl	92.5	88.3	P/P	40 - 150
2308508	Oxamyl	102	98.3	P/P	40 - 150
2308508	Propoxur	103	101	P/P	40 - 150

Reference Method: SM 5310 B-2011
Batch ID: P410643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2308902	Organic Carbon	97.8	97.1	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P410673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2307775	Organic Carbon	87.9	90.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P410509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308650	Color (true)	5.73	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P410510

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308773	Color (true)	1.91	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P410514

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308650	Turbidity	3.33	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P410533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307826	Calcium	0.970	Spike	P	0 - 20
2307826	Iron	1.29	Spike	P	0 - 20
2307826	Magnesium	0.0172	Spike	P	0 - 20
2307826	Potassium	0.887	Spike	P	0 - 20
2307826	Sodium	0.921	Spike	P	0 - 20
2307826	Strontium	0.466	Spike	P	0 - 20
2307826	Tin	0.00665	Spike	P	0 - 20
2307826	Titanium	0.176	Spike	P	0 - 20
2307826	Vanadium	0.553	Spike	P	0 - 20
2307826	Zinc	0.450	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307826	Aluminum	0.364	Spike	P	0 - 20
2307826	Antimony	0.189	Spike	P	0 - 20
2307826	Arsenic	1.17	Spike	P	0 - 20
2307826	Barium	0.586	Spike	P	0 - 20
2307826	Beryllium	0.153	Spike	P	0 - 20
2307826	Boron	0.368	Spike	P	0 - 20
2307826	Cadmium	3.52	Spike	P	0 - 20
2307826	Chromium	0.475	Spike	P	0 - 20
2307826	Cobalt	0.453	Spike	P	0 - 20
2307826	Copper	1.36	Spike	P	0 - 20
2307826	Lead	0.708	Spike	P	0 - 20
2307826	Manganese	0.655	Spike	P	0 - 20
2307826	Molybdenum	0.821	Spike	P	0 - 20
2307826	Nickel	1.08	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P410533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307826	Selenium	2.44	Spike	P	0 - 20
2307826	Silver	0.490	Spike	P	0 - 20
2307826	Thallium	2.09	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410852

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308713	Chloride	0.288	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P410856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308713	Sulfate	0.453	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308657	Ammonia-N	0.890	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P410684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308714	Ammonia-N	0.540	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410479

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308342	Kjeldahl Nitrogen	1.00	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410481

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308651	Kjeldahl Nitrogen	2.50	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410667

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

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P410667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308336	Kjeldahl Nitrogen	8.03	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P410785

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308708	NO2NO3-N	0.504	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P410934

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308708	Total-P	1.28	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308655	O-Phosphate-P	2.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P410506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308903	O-Phosphate-P	0.464	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P410328

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307892	Aldrin	6.38	Spike	P	0 - 37
2307892	Alpha-BHC	5.52	Spike	P	0 - 16
2307892	Alpha-Chlordane	7.13	Spike	P	0 - 28
2307892	Beta-BHC	4.64	Spike	P	0 - 32
2307892	Beta-Cyfluthrin	2.64	Spike	P	0 - 41
2307892	Bifenthrin	0.265	Spike	P	0 - 36
2307892	Chlorothalonil	3.02	Spike	P	0 - 54
2307892	Cis-Nonachlor	14.1	Spike	P	0 - 33
2307892	Cypermethrin	12.3	Spike	P	0 - 38
2307892	Dacthal	2.43	Spike	P	0 - 23
2307892	DDD-p,p'	3.49	Spike	P	0 - 35
2307892	DDE-p,p'	3.49	Spike	P	0 - 27
2307892	DDT-p,p'	4.04	Spike	P	0 - 31
2307892	Delta-BHC	6.02	Spike	P	0 - 30
2307892	Deltamethrin	10.4	Spike	P	0 - 76
2307892	Dichlobenil	0.531	Spike	P	0 - 33

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P410328

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307892	Dicofol	8.11	Spike	P	0 - 24
2307892	Dieldrin	12.1	Spike	P	0 - 35
2307892	Endosulfan I	7.31	Spike	P	0 - 25
2307892	Endosulfan II	6.66	Spike	P	0 - 31
2307892	Endosulfan Sulfate	15.5	Spike	P	0 - 38
2307892	Endrin Aldehyde	39.2	Spike	P	0 - 81
2307892	Endrin Ketone	10.2	Spike	P	0 - 33
2307892	Esfenvalerate	2.95	Spike	P	0 - 46
2307892	Ethalfluralin	3.29	Spike	P	0 - 22
2307892	Fenpropathrin	1.59	Spike	P	0 - 29
2307892	Gamma-BHC	3.14	Spike	P	0 - 17
2307892	Gamma-Chlordane	2.32	Spike	P	0 - 28
2307892	Heptachlor	6.71	Spike	P	0 - 28
2307892	Heptachlor Epoxide	22.6	Spike	P	0 - 23
2307892	Hexachlorobenzene	4.35	Spike	P	0 - 22
2307892	Kepone	4.95	Spike	P	0 - 61
2307892	Lambda-Cyhalothrin	12.1	Spike	P	0 - 52
2307892	Methoxychlor	9.11	Spike	P	0 - 29
2307892	MGK-264	0.193	Spike	P	0 - 41
2307892	Mirex	6.97	Spike	P	0 - 39
2307892	Oxychlordane	4.99	Spike	P	0 - 33
2307892	Permethrin	6.05	Spike	P	0 - 39
2307892	Phenothrin	12.0	Spike	P	0 - 52
2307892	Prallethrin	3.21	Spike	P	0 - 34
2307892	Tau-Fluvalinate	3.22	Spike	P	0 - 41
2307892	Tetramethrin	13.1	Spike	P	0 - 43
2307892	Trans-Nonachlor	1.57	Spike	P	0 - 31
2307892	Triclosan Methyl	5.56	Spike	P	0 - 24
2307892	Trifluralin	5.18	Spike	P	0 - 23

Reference Method: EPA 8270E
Batch ID: P410737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308733	Acetochlor	16.4	Spike	P	0 - 27
2308733	Alachlor	24.2	Spike	P	0 - 27
2308733	Ametryn	15.2	Spike	P	0 - 34
2308733	Atrazine	11.8	Spike	P	0 - 41
2308733	Atrazine Desethyl	16.2	Spike	P	0 - 38
2308733	Azinphos Methyl	36.4	Spike	P	0 - 62
2308733	Azoxystrobin	17.2	Spike	P	0 - 32
2308733	Bromacil	17.4	Spike	P	0 - 30
2308733	Butylate	2.67	Spike	P	0 - 59
2308733	Caffeine	20.4	Spike	P	0 - 60
2308733	Carbophenothion	16.6	Spike	P	0 - 25
2308733	Carfentrazone Ethyl	17.6	Spike	P	0 - 26
2308733	Chlorfenapyr	17.2	Spike	P	0 - 30
2308733	Chlorpyrifos Ethyl	16.3	Spike	P	0 - 27
2308733	Chlorpyrifos Methyl	15.4	Spike	P	0 - 26
2308733	Coumaphos	9.16	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P410737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308733	Cyanazine	25.0	Spike	P	0 - 58
2308733	Cyprodinil	24.5	Spike	P	0 - 30
2308733	Demeton	15.5	Spike	P	0 - 25
2308733	Diazinon	14.2	Spike	P	0 - 29
2308733	Difenoconazole	22.1	Spike	P	0 - 25
2308733	Dimethenamid	22.7	Spike	P	0 - 30
2308733	Dimethomorph	35.3	Spike	F	0 - 30
2308733	Disulfoton	13.6	Spike	P	0 - 33
2308733	Dithiopyr	14.7	Spike	P	0 - 22
2308733	EPTC	5.57	Spike	P	0 - 38
2308733	Ethion	9.57	Spike	P	0 - 79
2308733	Ethoprop	14.6	Spike	P	0 - 23
2308733	Etridiazole	5.19	Spike	P	0 - 30
2308733	Fenamiphos	18.7	Spike	P	0 - 58
2308733	Fenbuconazole	15.1	Spike	P	0 - 37
2308733	Fipronil	17.9	Spike	P	0 - 33
2308733	Fipronil Desulfinyl	21.6	Spike	P	0 - 26
2308733	Fipronil Sulfide	10.6	Spike	P	0 - 37
2308733	Fipronil Sulfone	7.85	Spike	P	0 - 50
2308733	Fluazifop-P-butyl	4.13	Spike	P	0 - 24
2308733	Fludioxonil	14.9	Spike	P	0 - 26
2308733	Flumioxazin	13.1	Spike	P	0 - 37
2308733	Flutolanil	18.1	Spike	P	0 - 26
2308733	Fluxapyroxad	21.2	Spike	P	0 - 34
2308733	Fonofos	9.77	Spike	P	0 - 27
2308733	Hexazinone	8.95	Spike	P	0 - 36
2308733	Imazalil	17.3	Spike	P	0 - 65
2308733	Iprodione	32.6	Spike	P	0 - 33
2308733	Loratadine	32.4	Spike	F	0 - 30
2308733	Malathion	15.3	Spike	P	0 - 44
2308733	Metalaxyl	24.1	Spike	P	0 - 38
2308733	Metolachlor	18.5	Spike	P	0 - 36
2308733	Metribuzin	1.85	Spike	P	0 - 63
2308733	Mevinphos	18.9	Spike	P	0 - 26
2308733	Molinate	11.0	Spike	P	0 - 40
2308733	Myclobutanil	15.0	Spike	P	0 - 21
2308733	Naled	17.7	Spike	P	0 - 26
2308733	Napropamide	18.9	Spike	P	0 - 30
2308733	Norflurazon	23.0	Spike	P	0 - 24
2308733	Oxadiazon	16.9	Spike	P	0 - 27
2308733	Oxyfluorfen	17.5	Spike	P	0 - 24
2308733	Parathion Ethyl	16.5	Spike	P	0 - 28
2308733	Parathion Methyl	15.3	Spike	P	0 - 27
2308733	Pendimethalin	1.35	Spike	P	0 - 31
2308733	Phenytoin	4.65	Spike	P	0 - 30
2308733	Phorate	14.6	Spike	P	0 - 27
2308733	Prodiamine	19.5	Spike	P	0 - 52
2308733	Prometon	10.2	Spike	P	0 - 31
2308733	Prometryn	27.7	Spike	P	0 - 28
2308733	Pronamide	22.3	Spike	P	0 - 26
2308733	Propanil	21.6	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P410737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308733	Propargite	22.1	Spike	P	0 - 30
2308733	Propiconazole	26.2	Spike	P	0 - 31
2308733	Pyraflufen Ethyl	17.3	Spike	P	0 - 30
2308733	Pyridaben	25.6	Spike	P	0 - 30
2308733	Pyriproxyfen	9.87	Spike	P	0 - 50
2308733	Simazine	11.9	Spike	P	0 - 29
2308733	Stirophos	10.5	Spike	P	0 - 30
2308733	Sulfentrazone	32.8	Spike	P	0 - 33
2308733	Tebuconazole	3.36	Spike	P	0 - 44
2308733	Terbufos	19.0	Spike	P	0 - 29
2308733	Terbuthylazine	17.0	Spike	P	0 - 27
2308733	Thiobencarb	15.7	Spike	P	0 - 30
2308733	Triadimefon	18.8	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P411150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308510	Endrin	14.7	Spike	P	0 - 53
2308510	Methoprene	1.86	Spike	P	0 - 38
2308510	Piperonyl Butoxide	15.5	Spike	P	0 - 91

Reference Method: EPA 8276
Batch ID: P410328

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307902	Chlordane	27.0	Spike	F	0 - 25
2307902	Toxaphene	31.3	Spike	F	0 - 24

Reference Method: EPA 8321B
Batch ID: P410426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307763	Acesulfame K	0.540	Spike	P	0 - 30
2307763	AMPA	5.45	Spike	P	0 - 30
2307763	Endothall	0.107	Spike	P	0 - 30
2307763	Glufosinate	10.2	Spike	P	0 - 30
2307763	Glyphosate	6.70	Spike	P	0 - 30
2307763	Sucralose	5.34	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P410466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308369	2,4-D	9.96	Spike	P	0 - 30
2308369	2,4,5-T	11.5	Spike	P	0 - 30
2308369	Acetaminophen	7.99	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P410466

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308369	Acetamiprid	6.92	Spike	P	0 - 30
2308369	Afidopyropen	3.18	Spike	P	0 - 30
2308369	Bentazon	3.70	Spike	P	0 - 30
2308369	Benzovindiflupyr	9.65	Spike	P	0 - 30
2308369	Carbamazepine	4.86	Spike	P	0 - 30
2308369	Clothianidin	1.74	Spike	P	0 - 30
2308369	Dinotefuran	22.3	Spike	P	0 - 30
2308369	Diuron	6.67	Spike	P	0 - 30
2308369	Fenuron	7.35	Spike	P	0 - 30
2308369	Fluridone	11.6	Spike	P	0 - 30
2308369	Hydrocodone	15.3	Spike	P	0 - 30
2308369	Ibuprofen	28.0	Spike	P	0 - 30
2308369	Imazapyr	15.1	Spike	P	0 - 30
2308369	Imidacloprid	4.80	Spike	P	0 - 30
2308369	Linuron	29.8	Spike	P	0 - 30
2308369	Mandestrobin	2.30	Spike	P	0 - 30
2308369	MCPP	3.32	Spike	P	0 - 30
2308369	Naproxen	7.40	Spike	P	0 - 30
2308369	Primidone	17.1	Spike	P	0 - 30
2308369	Pyraclostrobin	6.77	Spike	P	0 - 30
2308369	Silvex	2.22	Spike	P	0 - 30
2308369	Thiamethoxam	3.94	Spike	P	0 - 30
2308369	Tolfenpyrad	4.07	Spike	P	0 - 30
2308369	Triclopyr	8.13	Spike	P	0 - 30
2308508	3-Hydroxycarbofuran	4.54	Spike	P	0 - 30
2308508	Aldicarb	4.92	Spike	P	0 - 30
2308508	Aldicarb Sulfone	4.47	Spike	P	0 - 30
2308508	Aldicarb Sulfoxide	11.3	Spike	P	0 - 30
2308508	Carbaryl	2.70	Spike	P	0 - 30
2308508	Carbofuran	7.02	Spike	P	0 - 30
2308508	Methiocarb	7.53	Spike	P	0 - 30
2308508	Methomyl	4.66	Spike	P	0 - 30
2308508	Oxamyl	3.86	Spike	P	0 - 30
2308508	Propoxur	2.73	Spike	P	0 - 30

Reference Method: SM 2540 C-2011
Batch ID: P410755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308686	TDS	7.13	Sample	P	0 - 10

Reference Method: SM 5310 B-2011
Batch ID: P410643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2308902	Organic Carbon	0.504	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P410673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2307775	Organic Carbon	2.23	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2308727
Field Sample ID: G4SD0190

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	115	P	30 - 160
EPA 8321B	Carbamazepine-d10	113	P	30 - 160
EPA 8321B	Diuron-d6	65.9	P	30 - 160
EPA 8321B	Endothall-d6	96.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	73.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.7	P	30 - 160
EPA 8321B	Primidone-d5	120	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160

Lab Sample ID: 2308728
Field Sample ID: G4SD0174

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	47.0	P	30 - 160

Lab Sample ID: 2308729
Field Sample ID: G4SD0174

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	132	P	30 - 160
EPA 8321B	Carbamazepine-d10	124	P	30 - 160
EPA 8321B	Diuron-d6	69.5	P	30 - 160
EPA 8321B	Endothall-d6	80.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	66.5	P	30 - 160
EPA 8321B	Primidone-d5	100	P	30 - 160
EPA 8321B	Sucralose-d6	142	P	30 - 160

Lab Sample ID: 2308730
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	65.4	P	30 - 160

Lab Sample ID: 2308731
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	106	P	30 - 160
EPA 8321B	Carbamazepine-d10	128	P	30 - 160
EPA 8321B	Diuron-d6	87.9	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.6	P	30 - 160
EPA 8321B	Primidone-d5	126	P	30 - 160
EPA 8321B	Sucralose-d6	131	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2308732
Field Sample ID: G4SD0174

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	95.7	P	31 - 118
EPA 8270E	Decachlorobiphenyl	57.1	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	78.8	P	28 - 96.0
EPA 8270E	Tetrachloro-m-xylene	53.5	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	74.5	P	30 - 97.0
EPA 8276	PCNB	82.1	P	45 - 119

Lab Sample ID: 2308733
Field Sample ID: G4SD0174

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	63.6	P	20 - 200
EPA 8270E	Simazine-d10	94.1	P	71 - 140
EPA 8270E	Terbufos-d10	83.0	P	62 - 131

Lab Sample ID: 2308734
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	77.2	P	31 - 118
EPA 8270E	Decachlorobiphenyl	52.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	75.3	P	28 - 96.0
EPA 8270E	Tetrachloro-m-xylene	53.2	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	65.9	P	30 - 97.0
EPA 8276	PCNB	74.1	P	45 - 119

Lab Sample ID: 2308735
Field Sample ID: G3SD0162

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	59.8	P	20 - 200
EPA 8270E	Simazine-d10	91.7	P	71 - 140
EPA 8270E	Terbufos-d10	80.8	P	62 - 131

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A110689
Included Lab Sample IDs: 2308709, 2308712, 2308715, 2308718

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	101	99.6	P/P	90 - 110
O-Phosphate-P	99.6	101	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A110690
Included Lab Sample IDs: 2308707, 2308710, 2308713, 2308716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	85 - 115
Color (true)	102	102	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A110692
Included Lab Sample IDs: 2308707, 2308710, 2308713, 2308716

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

Reference Method: EPA 8321B
Run ID: A110698
Included Lab Sample IDs: 2308727, 2308729, 2308731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	101	104	P/P	60 - 160
Glufosinate	97.3	102	P/P	60 - 160
Glyphosate	88.7	94.4	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A110702
Included Lab Sample IDs: 2308727, 2308729, 2308731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	93.7	91.8	P/P	60 - 160
Endothall	99.0	93.0	P/P	60 - 160
Sucralose	129	114	P/P	60 - 160

Reference Method: SM 5310 B-2011
Run ID: A110740
Included Lab Sample IDs: 2308708, 2308711, 2308717

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.6	98.2	P/P	90 - 110
Organic Carbon	98.2	98.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110746
Included Lab Sample IDs: 2308736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.7	98.3	P/P	90 - 110
Antimony	97.9	98.7	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110746
Included Lab Sample IDs: 2308736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	93.7	93.2	P/P	90 - 110
Barium	97.4	97.7	P/P	90 - 110
Beryllium	91.6	91.4	P/P	90 - 110
Boron	99.5	98.0	P/P	90 - 110
Cadmium	98.7	99.1	P/P	90 - 110
Chromium	95.6	96.9	P/P	90 - 110
Cobalt	91.8	90.5	P/P	90 - 110
Lead	91.7	90.8	P/P	90 - 110
Manganese	95.0	96.6	P/P	90 - 110
Molybdenum	95.2	94.6	P/P	90 - 110
Nickel	92.4	90.9	P/P	90 - 110
Selenium	97.2	97.9	P/P	90 - 110
Silver	92.5	92.6	P/P	90 - 110
Thallium	96.5	93.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110754
Included Lab Sample IDs: 2308708, 2308711, 2308714

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.8	97.3	P/P	90 - 110
Kjeldahl Nitrogen	97.0	95.6	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A110758
Included Lab Sample IDs: 2308714

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	90.2	94.7	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A110761
Included Lab Sample IDs: 2308708, 2308711, 2308714, 2308717

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	100	98.6	P/P	90 - 110
Ammonia-N	98.6	98.3	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A110770
Included Lab Sample IDs: 2308736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	99.7	P/P	90 - 110
Iron	102	100	P/P	90 - 110
Magnesium	99.3	97.7	P/P	90 - 110
Potassium	98.3	97.7	P/P	90 - 110
Sodium	100	101	P/P	90 - 110
Strontium	94.0	92.5	P/P	90 - 110
Tin	96.0	93.1	P/P	90 - 110
Titanium	96.7	94.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A110770
Included Lab Sample IDs: 2308736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Vanadium	95.3	92.6	P/P	90 - 110
Zinc	95.0	91.6	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110775
Included Lab Sample IDs: 2308736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	94.0	94.5	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A110777
Included Lab Sample IDs: 2308707, 2308710, 2308713, 2308716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.1	97.2	P/P	90 - 110
Total Alkalinity	97.2	97.1	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A110777
Included Lab Sample IDs: 2308707, 2308710, 2308713, 2308716

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	100	P/P	90 - 110
Fluoride	99.0	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A110779
Included Lab Sample IDs: 2308727, 2308729, 2308731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.8	84.3	P/P	50 - 150
2,4,5-T	96.7	95.4	P/P	50 - 150
3-Hydroxycarbofuran	114	95.1	P/P	60 - 150
Acetaminophen	91.8	113	P/P	60 - 160
Acetamiprid	103	102	P/P	50 - 150
Afidopyropen	102	109	P/P	50 - 150
Aldicarb	91.4	85.2	P/P	60 - 150
Aldicarb Sulfone	107	94.2	P/P	50 - 150
Aldicarb Sulfoxide	125	114	P/P	50 - 150
Bentazon	98.5	108	P/P	50 - 160
Benzovindiflupyr	120	103	P/P	50 - 150
Carbamazepine	109	104	P/P	60 - 150
Carbaryl	94.3	107	P/P	60 - 150
Carbofuran	112	110	P/P	50 - 150
Clothianidin	105	108	P/P	60 - 150
Dinotefuran	103	100	P/P	50 - 150
Diuron	82.7	82.1	P/P	60 - 160
Fenuron	68.8	75.8	P/P	60 - 150
Fluridone	110	108	P/P	60 - 160
Hydrocodone	86.8	100	P/P	60 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A110779
Included Lab Sample IDs: 2308727, 2308729, 2308731

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	87.6	150	P/P	50 - 160
Imazapyr	84.5	96.5	P/P	50 - 150
Imidacloprid	89.1	93.6	P/P	60 - 150
Linuron	113	103	P/P	60 - 150
Mandestrobin	118	105	P/P	50 - 150
MCPP	100	85.8	P/P	50 - 150
Methiocarb	101	110	P/P	50 - 150
Methomyl	107	88.4	P/P	50 - 150
Naproxen	88.8	98.5	P/P	50 - 160
Oxamyl	110	91.6	P/P	50 - 150
Primidone	120	126	P/P	60 - 150
Propoxur	116	126	P/P	50 - 150
Pyraclostrobin	112	121	P/P	60 - 150
Silvex	94.3	123	P/P	50 - 150
Thiamethoxam	99.7	95.4	P/P	50 - 150
Tolfenpyrad	142	102	P/P	60 - 150
Triclopyr	104	103	P/P	50 - 150

Reference Method: EPA 8276
Run ID: A110787
Included Lab Sample IDs: 2308732, 2308734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	96.3		P	80 - 120
Toxaphene	95.9		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A110807
Included Lab Sample IDs: 2308708, 2308711, 2308714, 2308717

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110811
Included Lab Sample IDs: 2308717

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.1	94.7	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A110831
Included Lab Sample IDs: 2308707, 2308710, 2308713, 2308716

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A110899
Included Lab Sample IDs: 2308711, 2308714, 2308717

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	96.6	96.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A110930
Included Lab Sample IDs: 2308708

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

Reference Method: EPA 8270E
Run ID: A110957
Included Lab Sample IDs: 2308732, 2308734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin	105		P	80 - 120
Methoprene	102		P	80 - 120
Piperonyl Butoxide	96.6		P	80 - 120

Reference Method: EPA 8270E
Run ID: A110972
Included Lab Sample IDs: 2308732, 2308734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	97.4		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	97.2		P	80 - 120
Beta-Cyfluthrin	105		P	80 - 120
Bifenthrin	101		P	80 - 120
Chlorothalonil	94.9		P	80 - 120
Cis-Nonachlor	96.6		P	80 - 120
Cypermethrin	102		P	80 - 120
Dacthal	103		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	105		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	98.5		P	80 - 120
Deltamethrin	93.4		P	80 - 120
Dichlobenil	98.3		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	105		P	80 - 120
Endosulfan I	98.7		P	80 - 120
Endosulfan II	102		P	80 - 120
Endosulfan Sulfate	93.8		P	80 - 120
Endrin Aldehyde	99.6		P	80 - 120
Endrin Ketone	91.1		P	80 - 120
Esfenvalerate	103		P	80 - 120
Ethalfluralin	99.5		P	80 - 120
Fenpropathrin	106		P	80 - 120
Gamma-BHC	99.8		P	80 - 120
Gamma-Chlordane	101		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A110972
Included Lab Sample IDs: 2308732, 2308734

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Heptachlor	99.6		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	99.7		P	80 - 120
Kepone	76.8*		F	80 - 120
Lambda-Cyhalothrin	104		P	80 - 120
Methoxychlor	99.4		P	80 - 120
MGK-264	101		P	80 - 120
Mirex	104		P	80 - 120
Oxychlordane	99.0		P	80 - 120
Permethrin	101		P	80 - 120
Phenothrin	105		P	80 - 120
Prallethrin	98.3		P	80 - 120
Tau-Fluvalinate	104		P	80 - 120
Tetramethrin	102		P	80 - 120
Trans-Nonachlor	105		P	80 - 120
Triclosan Methyl	105		P	80 - 120
Trifluralin	98.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A111071
Included Lab Sample IDs: 2308733, 2308735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	103		P	80 - 120
Alachlor	104		P	80 - 120
Ametryn	89.5		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	112		P	80 - 120
Azoxystrobin	104		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	97.7		P	80 - 120
Carbophenothion	96.0		P	80 - 120
Carfentrazone Ethyl	99.2		P	80 - 120
Chlorfenapyr	99.1		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Coumaphos	90.5		P	80 - 120
Cyanazine	108		P	80 - 120
Cyprodinil	98.4		P	80 - 120
Demeton	89.0		P	80 - 120
Diazinon	99.4		P	80 - 120
Difenoconazole	104		P	80 - 120
Dimethenamid	103		P	80 - 120
Dimethomorph	103		P	80 - 120
Disulfoton	102		P	80 - 120
Dithiopyr	103		P	80 - 120
EPTC	102		P	80 - 120
Ethion	99.6		P	80 - 120
Ethoprop	88.3		P	80 - 120
Etridiazole	97.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111071
Included Lab Sample IDs: 2308733, 2308735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenamiphos	99.2		P	80 - 120
Fenbuconazole	94.8		P	80 - 120
Fipronil	99.1		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fipronil Sulfide	99.6		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fluazifop-P-butyl	102		P	80 - 120
Fludioxonil	102		P	80 - 120
Flumioxazin	91.7		P	80 - 120
Flutolanil	96.6		P	80 - 120
Fluxapyroxad	97.4		P	80 - 120
Fonofos	99.4		P	80 - 120
Hexazinone	103		P	80 - 120
Imazalil	101		P	80 - 120
Iprodione	102		P	80 - 120
Loratadine	108		P	80 - 120
Malathion	98.0		P	80 - 120
Metalaxyl	99.3		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	108		P	80 - 120
Molinate	102		P	80 - 120
Myclobutanil	104		P	80 - 120
Naled	101		P	80 - 120
Napropamide	97.1		P	80 - 120
Norflurazon	99.8		P	80 - 120
Oxadiazon	105		P	80 - 120
Oxyfluorfen	100		P	80 - 120
Parathion Ethyl	108		P	80 - 120
Parathion Methyl	99.5		P	80 - 120
Pendimethalin	106		P	80 - 120
Phenytoin	104		P	80 - 120
Phorate	82.4		P	80 - 120
Prodiamine	96.4		P	80 - 120
Prometon	101		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	100		P	80 - 120
Propanil	97.6		P	80 - 120
Propargite	105		P	80 - 120
Propiconazole	97.7		P	80 - 120
Pyraflufen Ethyl	92.4		P	80 - 120
Pyriproxyfen	115		P	80 - 120
Simazine	98.5		P	80 - 120
Stirophos	96.2		P	80 - 120
Sulfentrazone	97.4		P	80 - 120
Tebuconazole	97.8		P	80 - 120
Terbufos	95.3		P	80 - 120
Terbuthylazine	98.6		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	99.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A111080
Included Lab Sample IDs: 2308733, 2308735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	114		P	80 - 120
Atrazine	102		P	80 - 120
Azoxystrobin	110		P	80 - 120
Fluxapyroxad	81.5		P	80 - 120
Mevinphos	102		P	80 - 120
Oxyfluorfen	107		P	80 - 120
Parathion Methyl	104		P	80 - 120
Pyridaben	82.2		P	80 - 120
Tebuconazole	87.3		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)	100					5.73	
	Color (true)	101					1.91	
EPA 180.1 Rev. 2.0	Turbidity	97.2					3.33	
EPA 200.7 Rev. 4.4	Calcium	104	100	98.3				0.970
	Iron	106	107	106	101			1.29
	Magnesium	106	106	106	96.7			0.0172
	Potassium	102	103	102	97.9			0.887
	Sodium	105	104	103	102			0.921
	Strontium	102	101	101	95.6			0.466
	Tin	102	99.8	99.8	94.0			0.0066
	Titanium	101	102	102	97.6			0.176
	Vanadium	94.0	95.9	95.4	91.3			0.553
	Zinc	98.4	97.6	98.1	91.0			0.450
EPA 200.8 Rev. 5.4	Aluminum	100	99.8	99.5	99.0			0.364
	Antimony	99.3	102	102	105			0.189
	Arsenic	97.1	98.5	97.4	98.3			1.17
	Barium	100	102	101	103			0.586
	Beryllium	92.8	91.4	91.5	91.4			0.153
	Boron	104	105	105	106			0.368
	Cadmium	97.5	101	97.9	101			3.52
	Chromium	93.2	96.2	95.8	99.1			0.475
	Cobalt	96.5	95.2	94.7	95.5			0.453
	Copper	94.6	93.1	91.6	92.0			1.36
	Lead	93.6	94.2	94.9	95.4			0.708
	Manganese	94.3	96.4	95.4	98.7			0.655
	Molybdenum	96.6	100	99.4	101			0.821
	Nickel	97.4	95.8	94.8	94.6			1.08
	Selenium	97.2	95.6	98.0	97.5			2.44
	Silver	95.8	96.1	95.6	97.6			0.490
	Thallium	97.0	99.4	101	100			2.09
EPA 300.0 Rev. 2.1	Chloride	101	98.5	99.5			0.288	
	Sulfate	101	100	101			0.453	
EPA 350.1 Rev. 2.0	Ammonia-N	99.4	99.0	100				0.890
	Ammonia-N	98.0	96.2	96.8				0.540
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	100	101	100				1.00
	Kjeldahl Nitrogen	102	109	106				2.50
	Kjeldahl Nitrogen	95.4	91.4	101				8.03
EPA 353.2 Rev. 2.0	NO2NO3-N	101	99.0	99.5				0.504
EPA 365.1 Rev. 2.0	Total-P	102	103	102				1.28
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.6	98.6	101				2.31
	O-Phosphate-P	101	98.9	99.5				0.464
EPA 8270E	Acetochlor	83.2	89.5	106				16.4
	Alachlor	81.0	76.7	97.8				24.2
	Aldrin	57.9	47.3	44.4				6.38
	Alpha-BHC	96.4	87.0	82.3				5.52
	Alpha-Chlordane	86.8	74.8	69.6				7.13
	Ametryn	116						15.2
	Atrazine	83.9						11.8
	Atrazine Desethyl	61.4	44.3	56.9				16.2
	Azinphos Methyl	73.2	69.4	100				36.4
	Azoxystrobin	89.3	98.3	135				17.2
	Beta-BHC	110	101	96.2				4.64
	Beta-Cyfluthrin	105	104	101				2.64
	Bifenthrin	93.5	81.2	81.4				0.265

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Bromacil	84.2					17.4
	Butylate	28.6	44.7	43.5			2.67
	Caffeine	79.3	127	104			20.4
	Carbophenothion	79.8	80.2	94.7			16.6
	Carfentrazone Ethyl	87.2	95.3	114			17.6
	Chlorfenapyr	73.9	61.1	72.6			17.2
	Chlorothalonil	54.3	154	159			3.02
	Chlorpyrifos Ethyl	78.4	75.6	89.0			16.3
	Chlorpyrifos Methyl	72.3	76.7	89.4			15.4
	Cis-Nonachlor	79.6	65.5	56.8			14.1
	Coumaphos	104	133	146			9.16
	Cyanazine	105	115	148			25.0
	Cypermethrin	114	115	102			12.3
	Cyprodinil	99.6	90.9	116			24.5
	Dacthal	98.2	83.9	81.9			2.43
	DDD-p,p'	82.2	68.1	65.8			3.49
	DDE-p,p'	82.9	66.3	64.0			3.49
	DDT-p,p'	87.3	73.3	70.4			4.04
	Delta-BHC	117	112	105			6.02
	Deltamethrin	71.3	56.0	62.1			10.4
	Demeton	52.8	67.7	79.1			15.5
	Diazinon	78.5	95.2	110			14.2
	Dichlobenil	93.6	74.9	75.3			0.531
	Dicofol	92.7	78.7	72.6			8.11
	Dieldrin	76.9	69.6	61.0			12.1
	Difenoconazole	76.9	72.0	89.9			22.1
	Dimethenamid	66.7	62.0	111			22.7
	Dimethomorph	92.1	81.9	117			35.3
	Disulfoton	67.6	85.7	74.8			13.6
	Dithiopyr	82.9	83.2	101			14.7
	Endosulfan I	85.3	70.9	65.9			7.31
	Endosulfan II	88.5	75.2	70.4			6.66
	Endosulfan Sulfate	101	83.0	71.1			15.5
	Endrin	57.8	79.0	68.2			14.7
	Endrin Aldehyde	62.1	22.9	34.0			39.2
	Endrin Ketone	177	126	139			10.2
	EPTC	28.1	44.7	42.2			5.57
	Esfenvalerate	106	97.1	94.2			2.95
	Ethalfluralin	81.5	68.2	66.0			3.29
	Ethion	78.4	68.1	75.0			9.57
	Ethoprop	59.4	89.6	104			14.6
	Etridiazole	33.9	59.4	62.6			5.19
	Fenamiphos	77.2	73.6	88.8			18.7
	Fenbuconazole	103	114	133			15.1
	Fenpropathrin	74.4	75.9	74.7			1.59
	Fipronil	83.7	88.3	106			17.9
	Fipronil Desulfinyl	90.6	85.6	106			21.6
	Fipronil Sulfide	67.4	65.7	73.0			10.6
	Fipronil Sulfone	71.1	71.9	77.7			7.85
	Fluazifop-P-butyl	81.3	78.7	82.0			4.13
	Fludioxonil	83.5	80.9	93.9			14.9
	Flumioxazin	147	226	261			13.1
	Flutolanil	77.8	75.6	90.6			18.1
	Fluxapyroxad	92.6	55.9	70.4			21.2

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Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Fonofos	67.4	72.1	79.6			9.77
	Gamma-BHC	99.9	89.8	87.0			3.14
	Gamma-Chlordane	85.0	73.0	71.3			2.32
	Heptachlor	78.9	68.7	64.2			6.71
	Heptachlor Epoxide	95.9	96.4	76.9			22.6
	Hexachlorobenzene	83.9	72.6	69.5			4.35
	Hexazinone	88.2	86.4	98.5			8.95
	Imazalil	79.1	77.5	92.2			17.3
	Iprodione	66.2	58.2	80.8			32.6
	Kepone	155	142	135			4.95
	Lambda-Cyhalothrin	102	104	117			12.1
	Loratadine	93.4	68.2	94.6			32.4
	Malathion	84.3	83.6	97.5			15.3
	Metalaxyl	79.3	66.1	96.6			24.1
	Methoprene	23.9	63.7	64.9			1.86
	Methoxychlor	108	100	91.5			9.11
	Metolachlor	83.7					18.5
	Metribuzin	87.2	94.6	96.3			1.85
	Mevinphos	63.0	88.1	106			18.9
	MGK-264	77.9	65.4	65.5			0.193
	Mirex	68.4	64.3	60.0			6.97
	Molinate	38.0	62.6	69.9			11.0
	Myclobutanil	76.7	86.5	100			15.0
	Naled	55.4	56.6	67.6			17.7
	Napropamide	79.1	69.3	83.8			18.9
	Norflurazon	85.9					23.0
	Oxadiazon	80.2	69.3	87.1			16.9
	Oxychlordane	81.7	65.2	68.5			4.99
	Oxyfluorfen	95.1	106	126			17.5
	Parathion Ethyl	84.4	84.6	99.8			16.5
	Parathion Methyl	84.2	111	130			15.3
	Pendimethalin	84.6					1.35
	Permethrin	105	99.9	94.0			6.05
	Phenothrin	49.8	60.6	53.8			12.0
	Phenytoin	81.7	92.4	96.8			4.65
	Phorate	58.7	63.7	73.8			14.6
	Piperonyl Butoxide	80.4	84.6	69.5			15.5
	Prallethrin	40.2	44.7	46.2			3.21
	Prodiamine	117	131	160			19.5
	Prometon	104	116	128			10.2
	Prometryn	100	87.8	127			27.7
	Pronamide	85.2	85.0	111			22.3
	Propanil	81.9	76.6	95.2			21.6
	Propargite	111	136	170			22.1
	Propiconazole	82.7	80.6	126			26.2
	Pyraflufen Ethyl	86.6	106	126			17.3
	Pyridaben	110	56.3	72.9			25.6
	Pyriproxyfen	61.6	66.5	73.4			9.87
	Simazine	82.6					11.9
	Stirophos	79.0	62.2	69.0			10.5
	Sulfentrazone	87.5	94.3	139			32.8
	Tau-Fluvalinate	94.0	99.7	96.5			3.22
	Tebuconazole	90.9	44.0	45.5			3.36
	Terbufos	71.7	91.6	111			19.0

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Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Terbuthylazine	80.3	78.4	92.9			17.0
	Tetramethrin	18.2	37.5	42.7			13.1
	Thiobencarb	80.5	81.0	94.8			15.7
	Trans-Nonachlor	85.1	68.0	67.0			1.57
	Triadimefon	82.5	81.1	97.9			18.8
	Triclosan Methyl	87.6	69.2	65.5			5.56
	Trifluralin	82.4	71.0	67.4			5.18
EPA 8276	Chlordane	93.2	85.2	64.9			27.0
	Toxaphene	81.2	88.5	64.5			31.3
EPA 8321B	2,4-D	116	79.5	87.9			9.96
	2,4,5-T	90.7	69.8	78.4			11.5
	3-Hydroxycarbofuran	100	115	109			4.54
	Acesulfame K	99.8	101	101			0.540
	Acetaminophen	106	106	97.6			7.99
	Acetamiprid	120	90.0	96.5			6.92
	Afidopyropen	93.0	87.8	85.0			3.18
	Aldicarb	92.0	74.0	77.7			4.92
	Aldicarb Sulfone	117	107	112			4.47
	Aldicarb Sulfoxide	137	64.0	71.7			11.3
	AMPA	105	119	126			5.45
	Bentazon	109	60.8	65.4			3.70
	Benzovindiflupyr	124	87.4	96.3			9.65
	Carbamazepine	138	105	111			4.86
	Carbaryl	93.5	82.0	79.8			2.70
	Carbofuran	127	104	111			7.02
	Clothianidin	93.4	95.3	93.7			1.74
	Dinotefuran	115	154	123			22.3
	Diuron	104	70.9	65.7			6.67
	Endothall	92.3	93.8	93.7			0.107
	Fenuron	111	53.1	47.4			7.35
	Fluridone	102	104	91.1			11.6
	Glufosinate	111	103	114			10.2
	Glyphosate	98.3	92.6	99.0			6.70
	Hydrocodone	104	75.9	65.1			15.3
	Ibuprofen	106	113	85.2			28.0
	Imazapyr	104	142	112			15.1
	Imidacloprid	113	147	155			4.80
	Linuron	98.8	120	88.7			29.8
	Mandestrobin	125	107	105			2.30
	MCPP	110	99.9	96.7			3.32
	Methiocarb	82.5	90.2	83.7			7.53
	Methomyl	105	92.5	88.3			4.66
	Naproxen	73.1	62.8	67.6			7.40
	Oxamyl	114	102	98.3			3.86
	Primidone	117	89.6	106			17.1
	Propoxur	108	103	101			2.73
	Pyraclostrobin	96.1	101	94.6			6.77
	Silvex	83.9	76.2	78.0			2.22
	Sucralose	126	114	121			5.34
	Thiamethoxam	113	150	144			3.94
	Tolfenpyrad	43.0	50.4	48.4			4.07
	Triclopyr	85.8	66.2	71.8			8.13
SM 2320 B-2011	Total Alkalinity	97.8					
SM 2540 C-2011	TDS					7.13	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 4500 F-C-2011	Fluoride	99.7					
SM 5310 B-2011	Organic Carbon	93.8	97.8	97.1			0.504
	Organic Carbon	96.3	87.9	90.0			2.23

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2308707, 2308710, 2308713, 2308716
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2308707, 2308710, 2308713, 2308716
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2308736
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2308736
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2308707, 2308710, 2308713, 2308716
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2308707, 2308710, 2308713, 2308716
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2308708, 2308711, 2308714, 2308717
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2308708, 2308711, 2308714, 2308717
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2308708, 2308711, 2308714, 2308717
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2308708, 2308711, 2308714, 2308717
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2308709, 2308712, 2308715, 2308718
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2308732, 2308734
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2308733, 2308735
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2308732, 2308734
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2308728, 2308730
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2308727, 2308729, 2308731
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2308707, 2308710, 2308713, 2308716
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2308736
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2308707, 2308710, 2308713, 2308716
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2308707, 2308710, 2308713, 2308716
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2308707, 2308710, 2308713, 2308716
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2308708, 2308711, 2308714, 2308717

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	03/01/2022			03/01/2022 15:24	Samantha L Bates	2308707
	03/01/2022			03/01/2022 15:25	Samantha L Bates	2308710
	03/01/2022			03/01/2022 15:26	Samantha L Bates	2308713
	03/01/2022			03/01/2022 15:30	Samantha L Bates	2308716
EPA 180.1 Rev. 2.0	03/01/2022			03/01/2022 15:19	Khloe J Berg	2308707
	03/01/2022			03/01/2022 15:21	Khloe J Berg	2308710
	03/01/2022			03/01/2022 15:22	Khloe J Berg	2308713
	03/01/2022			03/01/2022 15:27	Khloe J Berg	2308716
EPA 200.7 Rev. 4.4	03/01/2022	03/02/2022 10:10	Megan Whitefoot	03/04/2022 22:49	Josef B Mick	2308736
EPA 200.8 Rev. 5.4	03/01/2022	03/02/2022 10:10	Megan Whitefoot	03/03/2022 17:15	Alexander Thompson	2308736
	03/01/2022	03/02/2022 10:10	Megan Whitefoot	03/04/2022 18:54	Alexander Thompson	2308736
EPA 300.0 Rev. 2.1	03/01/2022			03/07/2022 23:41	James L Waggerby	2308713
	03/01/2022			03/08/2022 00:30	James L Waggerby	2308707
	03/01/2022			03/08/2022 00:42	James L Waggerby	2308710
	03/01/2022			03/08/2022 00:54	James L Waggerby	2308716
EPA 350.1 Rev. 2.0	03/01/2022			03/04/2022 11:00	Judith K. Clark	2308708
	03/01/2022			03/04/2022 11:01	Judith K. Clark	2308711
	03/01/2022			03/04/2022 11:13	Judith K. Clark	2308714
	03/01/2022			03/04/2022 11:17	Judith K. Clark	2308717
EPA 351.2 Rev. 2.0	03/01/2022	03/02/2022 12:36	Samantha L Bates	03/03/2022 16:46	Alexandra J Mattheus	2308714
	03/01/2022	03/02/2022 12:36	Samantha L Bates	03/03/2022 17:42	Alexandra J Mattheus	2308708
	03/01/2022	03/02/2022 12:36	Samantha L Bates	03/03/2022 17:43	Alexandra J Mattheus	2308711
	03/01/2022	03/07/2022 11:17	Samantha L Bates	03/08/2022 12:38	Alexandra J Mattheus	2308717
EPA 353.2 Rev. 2.0	03/01/2022			03/08/2022 11:44	Beverly Y. Sanders	2308708
	03/01/2022			03/08/2022 11:55	Beverly Y. Sanders	2308714
	03/01/2022			03/08/2022 11:56	Beverly Y. Sanders	2308717
	03/01/2022			03/08/2022 12:14	Beverly Y. Sanders	2308711
EPA 365.1 Rev. 2.0	03/01/2022	03/11/2022 12:25	Simonne.V. Calhoun	03/11/2022 17:41	Sarah A Nixon	2308711
	03/01/2022	03/11/2022 12:25	Simonne.V. Calhoun	03/11/2022 17:42	Sarah A Nixon	2308714
	03/01/2022	03/11/2022 12:25	Simonne.V. Calhoun	03/11/2022 17:43	Sarah A Nixon	2308717
	03/01/2022	03/11/2022 12:25	Simonne.V. Calhoun	03/14/2022 14:59	James L Waggerby	2308708
EPA 365.1 Rev. 2.0 dissolved	03/01/2022			03/01/2022 14:42	James L Waggerby	2308709
	03/01/2022			03/01/2022 14:43	James L Waggerby	2308712
	03/01/2022			03/01/2022 14:49	James L Waggerby	2308715
	03/01/2022			03/01/2022 14:54	James L Waggerby	2308718
EPA 8270E	03/01/2022	03/02/2022 08:30	Rasheda Ghaffari	03/08/2022 23:03	Julie Wi	2308732
	03/01/2022	03/02/2022 08:30	Rasheda Ghaffari	03/08/2022 23:33	Julie Wi	2308734
	03/01/2022	03/07/2022 08:30	Rasheda Ghaffari	03/12/2022 19:00	Michael Poppell	2308733
	03/01/2022	03/07/2022 08:30	Rasheda Ghaffari	03/12/2022 19:25	Michael Poppell	2308735
	03/01/2022	03/07/2022 08:30	Rasheda Ghaffari	03/21/2022 16:01	Michael Poppell	2308733

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	03/01/2022	03/07/2022 08:30	Rasheda Ghaffari	03/21/2022 17:18	Michael Poppell	2308733
	03/01/2022	03/07/2022 08:30	Rasheda Ghaffari	03/21/2022 18:08	Michael Poppell	2308735
	03/01/2022	03/10/2022 08:00	Julie Wi	03/15/2022 23:54	Julie Wi	2308732
	03/01/2022	03/10/2022 08:00	Julie Wi	03/16/2022 00:23	Julie Wi	2308734
EPA 8276	03/01/2022	03/02/2022 08:30	Rasheda Ghaffari	03/05/2022 07:59	Arthur Maknenko	2308732
	03/01/2022	03/02/2022 08:30	Rasheda Ghaffari	03/05/2022 08:54	Arthur Maknenko	2308734
EPA 8321B	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 13:50	Umesh Chiluwal	2308727
	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 14:01	Umesh Chiluwal	2308729
	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 14:11	Umesh Chiluwal	2308731
	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 16:20	Umesh Chiluwal	2308727
	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 16:35	Umesh Chiluwal	2308729
	03/01/2022	03/01/2022 12:00	Umesh Chiluwal	03/01/2022 16:49	Umesh Chiluwal	2308731
	03/01/2022	03/02/2022 09:00	June Rhew	03/03/2022 01:13	Juyoung Kim	2308728
	03/01/2022	03/02/2022 09:00	June Rhew	03/03/2022 01:48	Juyoung Kim	2308730
	03/01/2022	03/02/2022 09:00	June Rhew	03/03/2022 06:59	Juyoung Kim	2308727
	03/01/2022	03/02/2022 09:00	June Rhew	03/03/2022 07:34	Juyoung Kim	2308729
	03/01/2022	03/02/2022 09:00	June Rhew	03/03/2022 08:08	Juyoung Kim	2308731
SM 2320 B-2011	03/01/2022			03/04/2022 01:09	Dale L. Simmons	2308707
	03/01/2022			03/04/2022 01:59	Dale L. Simmons	2308710
	03/01/2022			03/04/2022 02:12	Dale L. Simmons	2308713
	03/01/2022			03/04/2022 02:27	Dale L. Simmons	2308716
SM 2340B	03/01/2022			03/04/2022 22:49	Josef B Mick	2308736
SM 2540 C-2011	03/01/2022			03/02/2022 14:21	Yijie Li	2308707, 2308710, 2308713, 2308716
SM 2540 D-2011	03/01/2022			03/02/2022 14:26	Yijie Li	2308707, 2308710, 2308713, 2308716
SM 4500 F-C-2011	03/01/2022			03/04/2022 01:09	Dale L. Simmons	2308707
	03/01/2022			03/04/2022 01:59	Dale L. Simmons	2308710
	03/01/2022			03/04/2022 02:12	Dale L. Simmons	2308713
	03/01/2022			03/04/2022 02:27	Dale L. Simmons	2308716
SM 5310 B-2011	03/01/2022			03/02/2022 16:58	Khloe J Berg	2308708
	03/01/2022			03/03/2022 04:22	Nathaniel J Jones	2308714
	03/01/2022			03/03/2022 09:14	Khloe J Berg	2308711
	03/01/2022			03/03/2022 10:43	Khloe J Berg	2308717