Chemical Analysis Report

SW-DIST-2022-06-01-01

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

Event Description: **LVIs x2**
Request ID: **RQ-2022-05-30-09**
Customer: **SW-DIST**
Project ID: **SMP**

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13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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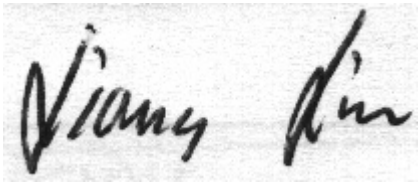
Certified by: Liang Lin, Environmental Administrator

Date Certified: 20-JUN-2022 14:02



NON-CONFORMANCE REPORT INCLUDED

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: Cato Lake South **Collection Date/Time: 05/31/2022 12:50**

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330820	DEP SOP: NU-094-1	Color (true)**	30		PCU	P414599	
	EPA 180.1 Rev. 2.0	Turbidity	2.1		NTU	P414605	
	EPA 300.0 Rev. 2.1	Chloride	18		mg Cl/L	P414982	
		Sulfate	0.20	U	mg SO4/L	P414986	
	SM 2320 B-2011	Total Alkalinity	161	A	mg CaCO3/L	P415108	
	SM 2540 C-2011	TDS	225		mg/L	P414802	
	SM 2540 D-2011	TSS	2	I	mg/L	P414768	
	SM 4500-F- C-2011	Fluoride	0.077	I	mg F/L	P415112	
2330822	EPA 350.1 Rev. 2.0	Ammonia-N	0.015		mg N/L	P415079	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.83		mg N/L	P414859	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415070	
	EPA 365.1 Rev. 2.0	Total-P	0.030		mg P/L	P414630	
	SM 5310 B-2011	Organic Carbon	10		mg C/L	P414683	
2330824	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P414593	
2330834	EPA 8321B	Aldicarb	0.020	U	ug/L	P414737	
		Aldicarb Sulfone	0.0020	U	ug/L	P414737	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P414737	
		Carbaryl	0.0020	U	ug/L	P414737	
		Carbofuran	0.0020	U	ug/L	P414737	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P414737	
		Methiocarb	0.0020	U	ug/L	P414737	
		Methomyl	0.0020	U	ug/L	P414737	
		Oxamyl	0.0020	U	ug/L	P414737	
		Propoxur	0.0020	U	ug/L	P414737	
2330836		2,4-D	0.0020	U	ug/L	P414579	
		Acesulfame K	0.11	I	ug/L	P414602	MS
		2,4,5-T	0.0040	U	ug/L	P414579	
		AMPA	0.10	U	ug/L	P414602	
		Acetaminophen	0.0080	U	ug/L	P414579	
		Acetamiprid	0.0020	U	ug/L	P414579	
		Endothall	0.25	U	ug/L	P414602	
		Glufosinate	0.10	U	ug/L	P414602	
		Glyphosate	0.10	U	ug/L	P414602	
		Afidopyropen	0.0020	U	ug/L	P414579	
		Bentazon	8.5E-04	I	ug/L	P414579	
		Sucralose	0.23		ug/L	P414602	
		Benzovindiflupyr	0.0020	U	ug/L	P414579	
		Carbamazepine	8.0E-04	U	ug/L	P414579	
		Clothianidin	0.0020	U	ug/L	P414579	
		Dinotefuran	0.0020	U	ug/L	P414579	
		Diuron	0.0020	U	ug/L	P414579	
		Fenuron	0.032	U	ug/L	P414579	
		Fluridone	8.0E-04	U	ug/L	P414579	

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330836	EPA 8321B	Imazapyr	0.0040	U	ug/L	P414579	
		Hydrocodone	0.0020	U	ug/L	P414579	
		Ibuprofen	0.020	U	ug/L	P414579	
		Imidacloprid	0.0026	I	ug/L	P414579	MS
		Linuron	0.0040	U	ug/L	P414579	
		Mandestrobin	0.0020	U	ug/L	P414579	
		MCPP	0.0040	U	ug/L	P414579	
		Naproxen	0.0080	U	ug/L	P414579	
		Primidone	0.0040	U	ug/L	P414579	
		Pyraclostrobin	0.0020	U	ug/L	P414579	
		Silvex	0.0040	U	ug/L	P414579	
		Thiamethoxam	0.0020	U	ug/L	P414579	
		Tolfenpyrad	0.0020	U	ug/L	P414579	
		Triclopyr	0.0040	U	ug/L	P414579	
2330842	EPA 8270E	Aldrin	0.73	U	ng/L	P414640	
		Alpha-BHC	0.11	U	ng/L	P414640	
		Alpha-Chlordane	0.22	U	ng/L	P414640	
		PCB-1016	2.2	U	ng/L	P414640	
		Beta-BHC	0.11	U	ng/L	P414640	
		PCB-1221	2.2	U	ng/L	P414640	
		Beta-Cyfluthrin**	1.4	U	ng/L	P414640	
		PCB-1232	2.2	U	ng/L	P414640	
		Bifenthrin**	0.56	U	ng/L	P414640	
		PCB-1242	2.2	U	ng/L	P414640	
		PCB-1248	2.2	U	ng/L	P414640	
		Chlorothalonil	1.4	U	ng/L	P414640	
		PCB-1254	2.2	U	ng/L	P414640	
		Cis-Nonachlor**	0.22	U	ng/L	P414640	
		PCB-1260	2.2	U	ng/L	P414640	
		Cypermethrin	1.7	U	ng/L	P414640	
		Dacthal**	0.17	U	ng/L	P414640	
		DDD-p,p'	0.28	U	ng/L	P414640	
		DDE-p,p'	0.22	U	ng/L	P414640	
		DDT-p,p'	0.32	I	ng/L	P414640	
		Delta-BHC	0.45	U	ng/L	P414640	
		Deltamethrin**	1.4	U	ng/L	P414640	
		Dichlobenil**	0.28	U	ng/L	P414640	
		Dicofol	1.4	UJ	ng/L	P414640	LCS, MS
		Dieldrin	0.45	U	ng/L	P414640	
		Endosulfan I	0.45	U	ng/L	P414640	
		Endosulfan II	0.45	U	ng/L	P414640	
		Endosulfan Sulfate	0.33	U	ng/L	P414640	
		Endrin	0.45	U	ng/L	P414640	
		Endrin Aldehyde	0.84	U	ng/L	P414640	
		Endrin Ketone	0.45	U	ng/L	P414640	

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330842	EPA 8270E	Esfenvalerate**	0.84	U	ng/L	P414640	
		Ethalfluralin**	0.17	U	ng/L	P414640	
		Fenpropathrin**	0.28	U	ng/L	P414640	
		Gamma-BHC	0.14	U	ng/L	P414640	
		Gamma-Chlordane	0.30	I	ng/L	P414640	
		Heptachlor	0.22	U	ng/L	P414640	
		Heptachlor Epoxide	0.28	U	ng/L	P414640	
		Hexachlorobenzene**	1.1	U	ng/L	P414640	
		Kepone**	5.6	U	ng/L	P414640	
		Lambda-Cyhalothrin**	0.84	U	ng/L	P414640	
		Methoprene**	0.84	U	ng/L	P414640	
		Methoxychlor	0.33	U	ng/L	P414640	
		MGK-264**	0.22	U	ng/L	P414640	
		Mirex	0.78	U	ng/L	P414640	
		Oxychlordane**	0.33	U	ng/L	P414640	
		Permethrin	1.8	U	ng/L	P414640	
		Phenothrin**	1.0	U	ng/L	P414640	
		Piperonyl Butoxide**	0.85		ng/L	P414640	
		Prallethrin**	2.2	U	ng/L	P414640	
		Tau-Fluvalinate**	0.28	U	ng/L	P414640	
		Tetramethrin**	0.84	U	ng/L	P414640	
		Trans-Nonachlor**	0.22	U	ng/L	P414640	
		Triclosan Methyl**	0.17	U	ng/L	P414640	
		Trifluralin	0.22	U	ng/L	P414640	
	EPA 8276	Chlordane	4.7	I	ng/L	P414640	
		Toxaphene	17	U	ng/L	P414640	
2330844	EPA 8270E	Oxybenzone**	10	U	ng/L	P414703	
		Acetochlor	0.26	U	ng/L	P414703	
		Octinoxate**	21	U	ng/L	P414703	
		Alachlor	0.26	U	ng/L	P414703	
		Avobenzone**	100	U	ng/L	P414703	
		Ametryn	0.63	U	ng/L	P414703	
		Atrazine	1.6		ng/L	P414703	
		Atrazine Desethyl	1.6	U	ng/L	P414703	
		Azinphos Methyl	2.1	U	ng/L	P414703	
		Azoxystrobin**	0.52	U	ng/L	P414703	
		Bromacil	0.52	U	ng/L	P414703	
		Butylate	0.42	U	ng/L	P414703	
		Caffeine**	7.9	U	ng/L	P414703	
		Carbophenothion	0.21	U	ng/L	P414703	
		Carfentrazone Ethyl**	0.10	U	ng/L	P414703	
		Chlorfenapyr**	0.18	U	ng/L	P414703	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P414703	
		Chlorpyrifos Methyl	0.052	U	ng/L	P414703	
		Coumaphos**	0.52	U	ng/L	P414703	

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330844	EPA 8270E	Cyanazine	3.4	U	ng/L	P414703	
		Cyprodinil**	0.10	U	ng/L	P414703	
		Demeton	1.6	U	ng/L	P414703	
		Diazinon	0.13	U	ng/L	P414703	
		Difenoconazole**	0.63	U	ng/L	P414703	
		Dimethenamid**	0.10	U	ng/L	P414703	
		Dimethomorph**	0.18	U	ng/L	P414703	
		Disulfoton	0.52	U	ng/L	P414703	
		Dithiopyr**	0.18	U	ng/L	P414703	
		EPTC	1.3	U	ng/L	P414703	
		Ethion	0.16	U	ng/L	P414703	
		Ethoprop	0.10	U	ng/L	P414703	
		Etridiazole**	0.16	U	ng/L	P414703	
		Fenamiphos	0.52	U	ng/L	P414703	
		Fenbuconazole**	0.13	U	ng/L	P414703	
		Fipronil	0.26	U	ng/L	P414703	
		Fipronil Desulfinyl**	0.13	U	ng/L	P414703	
		Fipronil Sulfide	0.16	U	ng/L	P414703	
		Fipronil Sulfone	0.16	U	ng/L	P414703	
		Fluazifop-P-butyl**	0.10	U	ng/L	P414703	
		Fludioxonil**	0.13	U	ng/L	P414703	
		Flumioxazin**	1.8	U	ng/L	P414703	
		Flutolanil**	0.10	U	ng/L	P414703	
		Fluxapyroxad**	0.10	U	ng/L	P414703	
		Fonofos	0.21	U	ng/L	P414703	
		Hexazinone	0.52	U	ng/L	P414703	
		Imazalil**	0.79	U	ng/L	P414703	
		Iprodione**	0.63	U	ng/L	P414703	
		Loratadine**	0.10	U	ng/L	P414703	
		Malathion	0.37	U	ng/L	P414703	
		Metalaxyl	0.79	U	ng/L	P414703	
		Metolachlor	0.37	U	ng/L	P414703	
		Metribuzin	2.6	U	ng/L	P414703	
		Mevinphos	1.1	U	ng/L	P414703	
		Molinate	0.31	U	ng/L	P414703	
		Myclobutanil**	0.26	U	ng/L	P414703	
		Naled**	1.6	U	ng/L	P414703	RPD
		Napropamide**	0.42	U	ng/L	P414703	
		Norflurazon	0.52	U	ng/L	P414703	
		Oxadiazon	0.31	U	ng/L	P414703	
		Oxyfluorfen**	0.16	U	ng/L	P414703	
		Parathion Ethyl	0.26	U	ng/L	P414703	
		Parathion Methyl	0.58	U	ng/L	P414703	
		Pendimethalin	1.0	U	ng/L	P414703	
		Phenytoin**	3.7	U	ng/L	P414703	MS

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330844	EPA 8270E	Phorate	0.55	U	ng/L	P414703	
		Prodiamine**	0.18	U	ng/L	P414703	
		Prometon	0.94	U	ng/L	P414703	
		Prometryn	0.21	U	ng/L	P414703	
		Pronamide**	0.16	U	ng/L	P414703	
		Propanil**	0.13	U	ng/L	P414703	
		Propargite**	1.6	U	ng/L	P414703	
		Propiconazole**	0.52	U	ng/L	P414703	
		Pyraflufen Ethyl**	0.26	U	ng/L	P414703	
		Pyridaben**	0.47	U	ng/L	P414703	
		Pyriproxyfen**	0.13	U	ng/L	P414703	
		Simazine	0.52	U	ng/L	P414703	
		Stirophos**	0.13	U	ng/L	P414703	MS
		Sulfentrazone**	0.52	U	ng/L	P414703	
		Tebuconazole**	0.52	U	ng/L	P414703	
		Terbufos	0.10	U	ng/L	P414703	
		Terbuthylazine	0.45	U	ng/L	P414703	
		Thiobencarb**	0.63	U	ng/L	P414703	
		Triadimefon**	0.26	U	ng/L	P414703	
2330854	EPA 200.7 Rev. 4.4	Calcium	65.2		mg/L	P414616	
		Iron	680		ug/L	P414616	
		Magnesium	2.27		mg/L	P414616	
		Potassium	0.32	I	mg/L	P414616	
		Sodium	9.4		mg/L	P414616	
		Strontium	94.3		ug/L	P414616	
		Tin	6.0	U	ug/L	P414616	
		Titanium	1.0	I	ug/L	P414616	
		Vanadium	2.0	U	ug/L	P414616	
		Zinc	5.0	U	ug/L	P414616	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P414616	
		Antimony	0.050	U	ug/L	P414616	
		Arsenic	0.85		ug/L	P414616	
		Barium	7.16		ug/L	P414616	
		Beryllium	0.010	U	ug/L	P414616	
		Boron**	17.8		ug/L	P414616	
		Cadmium	0.020	U	ug/L	P414616	
		Chromium	0.40	U	ug/L	P414616	
		Cobalt	0.068	I	ug/L	P414616	
		Copper	0.40	U	ug/L	P414616	
		Lead	0.20	U	ug/L	P414616	
		Manganese	96.6		ug/L	P414616	
		Molybdenum	0.15	U	ug/L	P414616	
		Nickel	0.50	U	ug/L	P414616	
		Selenium	0.20	U	ug/L	P414616	
		Silver	0.010	U	ug/L	P414616	

Field ID: G4SW0102 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330854	EPA 200.8 Rev. 5.4	Thallium	0.10	U	ug/L	P414616	
	SM 2340 B-2011	Hardness	172		mg/L	P414616	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Matrix spikes could not be assessed due to spiking error.
EPA 8276: Matrix spikes could not be assessed due to spiking error.
EPA 8270E: Regarding NCR 9403, the bottle with intact cap was used.
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Regarding NCR 9403, the bottle with intact cap was used.

Sample Location: FB **Collection Date/Time: 05/31/2022 12:30**

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330821	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P414599	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P414605	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P414982	
		Sulfate	0.20	U	mg SO4/L	P414986	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P415108	
	SM 2540 C-2011	TDS	15	U	mg/L	P414802	
	SM 2540 D-2011	TSS	2	UQ	mg/L	P414909	
	SM 4500-F- C-2011	Fluoride	0.035	U	mg F/L	P415112	
2330823	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P415172	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P414859	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415070	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P414630	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P414683	
2330825	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P414593	
2330835	EPA 8321B	Aldicarb	0.020	U	ug/L	P414737	
		Aldicarb Sulfone	0.0020	U	ug/L	P414737	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P414737	
		Carbaryl	0.0020	U	ug/L	P414737	
		Carbofuran	0.0020	U	ug/L	P414737	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P414737	
		Methiocarb	0.0020	U	ug/L	P414737	
		Methomyl	0.0020	U	ug/L	P414737	
		Oxamyl	0.0020	U	ug/L	P414737	
		Propoxur	0.0020	U	ug/L	P414737	
2330837		2,4-D	0.0020	U	ug/L	P414579	
		Acesulfame K	0.10	U	ug/L	P414602	MS
		2,4,5-T	0.0040	U	ug/L	P414579	
		AMPA	0.10	U	ug/L	P414602	
		Acetaminophen	0.0080	U	ug/L	P414579	
		Acetamiprid	0.0020	U	ug/L	P414579	
		Endothall	0.25	U	ug/L	P414602	
		Glufosinate	0.10	U	ug/L	P414602	
		Glyphosate	0.10	U	ug/L	P414602	
		Afidopyropen	0.0020	U	ug/L	P414579	
		Bentazon	8.0E-04	U	ug/L	P414579	
		Sucralose	0.010	U	ug/L	P414602	
		Benzovindiflupyr	0.0020	U	ug/L	P414579	
		Carbamazepine	8.0E-04	U	ug/L	P414579	
		Clothianidin	0.0020	U	ug/L	P414579	
		Dinotefuran	0.0020	U	ug/L	P414579	
		Diuron	0.0020	U	ug/L	P414579	
		Fenuron	0.032	U	ug/L	P414579	
		Fluridone	8.0E-04	U	ug/L	P414579	

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330837	EPA 8321B	Imazapyr	0.0040	U	ug/L	P414579	
		Hydrocodone	0.0020	U	ug/L	P414579	
		Ibuprofen	0.020	U	ug/L	P414579	
		Imidacloprid	0.0020	U	ug/L	P414579	MS
		Linuron	0.0040	U	ug/L	P414579	
		Mandestrobin	0.0020	U	ug/L	P414579	
		MCPP	0.0040	U	ug/L	P414579	
		Naproxen	0.0080	U	ug/L	P414579	
		Primidone	0.0040	U	ug/L	P414579	
		Pyraclostrobin	0.0020	U	ug/L	P414579	
		Silvex	0.0040	U	ug/L	P414579	
		Thiamethoxam	0.0020	U	ug/L	P414579	
		Tolfenpyrad	0.0020	U	ug/L	P414579	
		Triclopyr	0.0040	U	ug/L	P414579	
2330843	EPA 8270E	Aldrin	0.72	U	ng/L	P414640	
		Alpha-BHC	0.11	U	ng/L	P414640	
		Alpha-Chlordane	0.22	U	ng/L	P414640	
		PCB-1016	2.2	UJ	ng/L	P414640	SUR
		Beta-BHC	0.11	U	ng/L	P414640	
		PCB-1221	2.2	UJ	ng/L	P414640	SUR
		Beta-Cyfluthrin**	1.4	U	ng/L	P414640	
		PCB-1232	2.2	UJ	ng/L	P414640	SUR
		Bifenthrin**	0.55	U	ng/L	P414640	
		PCB-1242	2.2	UJ	ng/L	P414640	SUR
		PCB-1248	2.2	UJ	ng/L	P414640	SUR
		Chlorothalonil	1.4	U	ng/L	P414640	
		PCB-1254	2.2	UJ	ng/L	P414640	SUR
		Cis-Nonachlor**	0.22	U	ng/L	P414640	
		PCB-1260	2.2	UJ	ng/L	P414640	SUR
		Cypermethrin	1.7	U	ng/L	P414640	
		Dacthal**	0.17	U	ng/L	P414640	
		DDD-p,p'	0.28	U	ng/L	P414640	
		DDE-p,p'	0.22	U	ng/L	P414640	
		DDT-p,p'	0.28	U	ng/L	P414640	
		Delta-BHC	0.44	U	ng/L	P414640	
		Deltamethrin**	1.4	U	ng/L	P414640	
		Dichlobenil**	0.28	U	ng/L	P414640	
		Dicofol	1.4	UJ	ng/L	P414640	LCS, MS
		Dieldrin	0.44	U	ng/L	P414640	
		Endosulfan I	0.44	U	ng/L	P414640	
		Endosulfan II	0.44	U	ng/L	P414640	
		Endosulfan Sulfate	0.33	U	ng/L	P414640	
		Endrin	0.44	U	ng/L	P414640	
		Endrin Aldehyde	0.83	U	ng/L	P414640	
		Endrin Ketone	0.44	U	ng/L	P414640	

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330843	EPA 8270E	Esfenvalerate**	0.83	U	ng/L	P414640	
		Ethalfluralin**	0.17	U	ng/L	P414640	
		Fenpropathrin**	0.28	U	ng/L	P414640	
		Gamma-BHC	3.0		ng/L	P414640	
		Gamma-Chlordane	0.22	U	ng/L	P414640	
		Heptachlor	0.22	U	ng/L	P414640	
		Heptachlor Epoxide	0.28	U	ng/L	P414640	
		Hexachlorobenzene**	1.1	U	ng/L	P414640	
		Kepone**	5.5	U	ng/L	P414640	
		Lambda-Cyhalothrin**	0.83	U	ng/L	P414640	
		Methoprene**	0.83	U	ng/L	P414640	
		Methoxychlor	0.33	U	ng/L	P414640	
		MGK-264**	0.22	U	ng/L	P414640	
		Mirex	0.77	U	ng/L	P414640	
		Oxychlordane**	0.33	U	ng/L	P414640	
		Permethrin	1.8	U	ng/L	P414640	
		Phenothrin**	0.99	U	ng/L	P414640	
		Piperonyl Butoxide**	0.17	U	ng/L	P414640	
		Prallethrin**	2.2	U	ng/L	P414640	
		Tau-Fluvalinate**	0.28	U	ng/L	P414640	
		Tetramethrin**	0.83	U	ng/L	P414640	
		Trans-Nonachlor**	0.22	U	ng/L	P414640	
		Triclosan Methyl**	0.17	U	ng/L	P414640	
		Trifluralin	0.22	U	ng/L	P414640	
	EPA 8276	Chlordane	2.8	U	ng/L	P414640	
		Toxaphene	17	U	ng/L	P414640	
2330845	EPA 8270E	Oxybenzone**	10	U	ng/L	P414703	
		Acetochlor	0.25	U	ng/L	P414703	
		Octinoxate**	20	U	ng/L	P414703	
		Alachlor	0.25	U	ng/L	P414703	
		Avobenzone**	100	U	ng/L	P414703	
		Ametryn	0.60	U	ng/L	P414703	
		Atrazine	0.25	U	ng/L	P414703	
		Atrazine Desethyl	1.5	U	ng/L	P414703	
		Azinphos Methyl	2.0	U	ng/L	P414703	
		Azoxystrobin**	0.50	U	ng/L	P414703	
		Bromacil	0.50	U	ng/L	P414703	
		Butylate	0.40	U	ng/L	P414703	
		Caffeine**	7.5	U	ng/L	P414703	
		Carbophenothion	0.20	U	ng/L	P414703	
		Carfentrazone Ethyl**	0.10	U	ng/L	P414703	
		Chlorfenapyr**	0.18	U	ng/L	P414703	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P414703	
		Chlorpyrifos Methyl	0.050	U	ng/L	P414703	
		Coumaphos**	0.50	U	ng/L	P414703	

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330845	EPA 8270E	Cyanazine	3.2	U	ng/L	P414703	
		Cyprodinil**	0.10	U	ng/L	P414703	
		Demeton	1.5	U	ng/L	P414703	
		Diazinon	0.12	U	ng/L	P414703	
		Difenoconazole**	0.60	U	ng/L	P414703	
		Dimethenamid**	0.10	U	ng/L	P414703	
		Dimethomorph**	0.18	U	ng/L	P414703	
		Disulfoton	0.50	U	ng/L	P414703	
		Dithiopyr**	0.18	U	ng/L	P414703	
		EPTC	1.2	U	ng/L	P414703	
		Ethion	0.15	U	ng/L	P414703	
		Ethoprop	0.10	U	ng/L	P414703	
		Etridiazole**	0.15	U	ng/L	P414703	
		Fenamiphos	0.50	U	ng/L	P414703	
		Fenbuconazole**	0.12	U	ng/L	P414703	
		Fipronil	0.25	U	ng/L	P414703	
		Fipronil Desulfinyl**	0.12	U	ng/L	P414703	
		Fipronil Sulfide	0.15	U	ng/L	P414703	
		Fipronil Sulfone	0.15	U	ng/L	P414703	
		Fluazifop-P-butyl**	0.10	U	ng/L	P414703	
		Fludioxonil**	0.12	U	ng/L	P414703	
		Flumioxazin**	1.8	U	ng/L	P414703	
		Flutolanil**	0.10	U	ng/L	P414703	
		Fluxapyroxad**	0.10	U	ng/L	P414703	
		Fonofos	0.20	U	ng/L	P414703	
		Hexazinone	0.50	U	ng/L	P414703	
		Imazalil**	0.75	U	ng/L	P414703	
		Iprodione**	0.60	U	ng/L	P414703	
		Loratadine**	0.10	U	ng/L	P414703	
		Malathion	0.35	U	ng/L	P414703	
		Metalaxyl	0.75	U	ng/L	P414703	
		Metolachlor	0.35	U	ng/L	P414703	
		Metribuzin	2.5	U	ng/L	P414703	
		Mevinphos	1.0	U	ng/L	P414703	
		Molinate	0.30	U	ng/L	P414703	
		Myclobutanil**	0.25	U	ng/L	P414703	
		Naled**	1.5	U	ng/L	P414703	RPD
		Napropamide**	0.40	U	ng/L	P414703	
		Norflurazon	0.50	U	ng/L	P414703	
		Oxadiazon	0.30	U	ng/L	P414703	
		Oxyfluorfen**	0.15	U	ng/L	P414703	
		Parathion Ethyl	0.25	U	ng/L	P414703	
		Parathion Methyl	0.55	U	ng/L	P414703	
		Pendimethalin	1.0	U	ng/L	P414703	
		Phenytoin**	3.5	U	ng/L	P414703	MS

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330845	EPA 8270E	Phorate	0.52	U	ng/L	P414703	
		Prodiamine**	0.18	U	ng/L	P414703	
		Prometon	0.90	U	ng/L	P414703	
		Prometryn	0.20	U	ng/L	P414703	
		Pronamide**	0.15	U	ng/L	P414703	
		Propanil**	0.12	U	ng/L	P414703	
		Propargite**	1.5	U	ng/L	P414703	
		Propiconazole**	0.50	U	ng/L	P414703	
		Pyraflufen Ethyl**	0.25	U	ng/L	P414703	
		Pyridaben**	0.45	U	ng/L	P414703	
		Pyriproxyfen**	0.12	U	ng/L	P414703	
		Simazine	0.50	U	ng/L	P414703	
		Stirophos**	0.12	U	ng/L	P414703	MS
		Sulfentrazone**	0.50	U	ng/L	P414703	
		Tebuconazole**	0.50	U	ng/L	P414703	
		Terbufos	0.10	U	ng/L	P414703	
		Terbuthylazine	0.42	U	ng/L	P414703	
		Thiobencarb**	0.60	U	ng/L	P414703	
		Triadimefon**	0.25	U	ng/L	P414703	
2330855	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P414616	
		Iron	30	U	ug/L	P414616	
		Magnesium	0.040	U	mg/L	P414616	
		Potassium	0.30	U	mg/L	P414616	
		Sodium	0.50	U	mg/L	P414616	
		Strontium	2.0	U	ug/L	P414616	
		Tin	3.0	U	ug/L	P414616	
		Titanium	0.75	U	ug/L	P414616	
		Vanadium	2.0	U	ug/L	P414616	
		Zinc	5.0	U	ug/L	P414616	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P414616	
		Antimony	0.050	U	ug/L	P414616	
		Arsenic	0.050	U	ug/L	P414616	
		Barium	0.20	U	ug/L	P414616	
		Beryllium	0.010	U	ug/L	P414616	
		Boron**	2.0	U	ug/L	P414616	
		Cadmium	0.020	U	ug/L	P414616	
		Chromium	0.40	U	ug/L	P414616	
		Cobalt	0.020	U	ug/L	P414616	
		Copper	0.40	U	ug/L	P414616	
		Lead	0.20	U	ug/L	P414616	
		Manganese	0.10	U	ug/L	P414616	
		Molybdenum	0.15	U	ug/L	P414616	
		Nickel	0.50	U	ug/L	P414616	
		Selenium	0.20	U	ug/L	P414616	
		Silver	0.010	U	ug/L	P414616	

Field ID: FB_05312022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2330855	EPA 200.8 Rev. 5.4	Thallium	0.10	U	ug/L	P414616	
	SM 2340 B-2011	Hardness	0.35	U	mg/L	P414616	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample. The sample was analyzed out of holding time because of analytical difficulties.
EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: Matrix spikes could not be assessed due to spiking error. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Matrix spikes could not be assessed due to spiking error.
EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Non-Conformance Report

NCR ID: 9403

Event(s)	Job(s)	Sample(s)	Test(s)
SW-DIST-2022-06-01-01	TLH-2022-06-01-46	2330844	

NCR Type: SHIPPING/RECEIVING **NCR Category: Sample Integrity**

Observation: Sample container 1 of 2 received with broken cap, half of sample volume missing.
Field ID: G4SW0102 | Test ID: W-PSNP-TQ, W-TR-SW-R

Resolution: Cracked cap replaced, aditional container logged in.
Data will be qualified as appropriate.

Authorized by/Date: Kyle Klug 6/7/2022

The Non-Conformance Report details exceptions or problems encountered with the events/jobs/samples/test.
Please address questions to:

Chemistry	Colin Wright	(850) 245-8085
Biology	Cheryl Swanson	(850) 245-8177

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P414599

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414605

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414616

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: P414616

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414982

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414986

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415079

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415172

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414859

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415070

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414630

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414593

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

Reference Method: EPA 8270E
Batch ID: P414640

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414640

Component	Result	Code	Units
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
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414640

Component	Result	Code	Units
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414703

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
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414703

Component	Result	Code	Units
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414703

Component	Result	Code	Units
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P414703

Component	Result	Code	Units
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8276
Batch ID: P414640

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: P414579

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0040	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P414602

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: P414737

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

Reference Method: SM 2320 B-2011
Batch ID: P415108

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

Reference Method: SM 2540 C-2011
Batch ID: P414802

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P414768

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P414909

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

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: P414683

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: P414599

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414605

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414616

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	105		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	103		P	85 - 115
Sodium	104		P	85 - 115
Strontium	102		P	85 - 115
Tin	103		P	85 - 115
Titanium	104		P	85 - 115
Vanadium	97.5		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414616

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.7		P	85 - 115
Antimony	99.5		P	85 - 115
Arsenic	96.8		P	85 - 115
Barium	102		P	85 - 115
Beryllium	95.6		P	85 - 115
Boron	101		P	85 - 115
Cadmium	97.5		P	85 - 115
Chromium	97.0		P	85 - 115
Cobalt	97.1		P	85 - 115
Copper	94.2		P	85 - 115
Lead	96.4		P	85 - 115
Manganese	96.4		P	85 - 115
Molybdenum	96.9		P	85 - 115
Nickel	96.3		P	85 - 115
Selenium	95.4		P	85 - 115
Silver	99.3		P	85 - 115
Thallium	97.4		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414982

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414986

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415079

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415172

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414859

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415070

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414630

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414593

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

Reference Method: EPA 8270E
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	62.4		P	10 - 93.0
Alpha-BHC	100		P	75 - 106
Alpha-Chlordane	82.7		P	50 - 109
Beta-BHC	111		P	36 - 138
Beta-Cyfluthrin	72.9		P	23 - 167
Bifenthrin	61.3		P	11 - 123
Chlorothalonil	74.9		P	27 - 190
Cis-Nonachlor	73.4		P	40 - 111
Cypermethrin	77.3		P	25 - 155
Dacthal	98.5		P	72 - 119

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
DDD-p,p'	80.2		P	47 - 108
DDE-p,p'	80.1		P	48 - 107
DDT-p,p'	78.6		P	49 - 111
Delta-BHC	119		P	54 - 138
Deltamethrin	80.8		P	22 - 189
Dichlobenil	89.5		P	32 - 113
Dicofol	109		F	50 - 108
Dieldrin	86.6		P	56 - 110
Endosulfan I	88.4		P	60 - 105
Endosulfan II	92.5		P	50 - 120
Endosulfan Sulfate	102		P	55 - 121
Endrin	85.1		P	31 - 119
Endrin Aldehyde	75.3		P	36 - 116
Endrin Ketone	84.5		P	69 - 177
Esfenvalerate	77.3		P	10 - 179
Ethalfluralin	83.4		P	49 - 99.0
Fenpropathrin	72.9		P	35 - 119
Gamma-BHC	107		P	69 - 120
Gamma-Chlordane	79.4		P	45 - 107
Heptachlor	74.3		P	41 - 100
Heptachlor Epoxide	68.3		P	58 - 106
Hexachlorobenzene	78.4		P	39 - 100
Kepone	151		P	10 - 191
Lambda-Cyhalothrin	69.6		P	21 - 206
Methoprene	61.1		P	10 - 129
Methoxychlor	90.2		P	61 - 111
MGK-264	88.1		P	20 - 123
Mirex	66.5		P	10 - 182
Oxychlordane	79.8		P	39 - 110
PCB-1016	79.3		P	49 - 111
PCB-1260	102		P	42 - 116
Permethrin	72.2		P	26 - 152
Phenothrin	54.3		P	10 - 109
Piperonyl Butoxide	116		P	19 - 147
Prallethrin	80.2		P	14 - 109
Tau-Fluvalinate	68.5		P	16 - 134
Tetramethrin	106		P	10 - 125
Trans-Nonachlor	76.3		P	45 - 107
Triclosan Methyl	85.9		P	60 - 110
Trifluralin	78.6		P	44 - 101

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	76.7		P	70 - 121
Alachlor	69.0		P	68 - 119
Ametryn	67.4		P	64 - 139
Atrazine	77.9		P	76 - 120
Atrazine Desethyl	46.2		P	44 - 126
Avobenzone	88.1		P	76 - 212
Azinphos Methyl	108		P	43 - 192

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Azoxystrobin	95.4		P	36 - 224
Bromacil	58.1		P	52 - 121
Butylate	53.8		P	28 - 91.0
Caffeine	98.4		P	50 - 134
Carbophenothion	91.6		P	56 - 129
Carfentrazone Ethyl	83.1		P	60 - 141
Chlorfenapyr	80.2		P	56 - 115
Chlorpyrifos Ethyl	86.9		P	60 - 118
Chlorpyrifos Methyl	95.2		P	68 - 119
Coumaphos	124		P	18 - 250
Cyanazine	70.8		P	61 - 250
Cyprodinil	70.2		P	55 - 145
Demeton	70.5		P	30 - 159
Diazinon	81.3		P	70 - 123
Difenoconazole	122		P	49 - 204
Dimethenamid	68.7		P	64 - 115
Dimethomorph	87.8		P	12 - 219
Disulfoton	83.3		P	44 - 125
Dithiopyr	69.7		P	64 - 115
EPTC	44.6		P	28 - 86.0
Ethion	66.4		P	33 - 125
Ethoprop	88.3		P	64 - 116
Etridiazole	50.8		P	34 - 91.0
Fenamiphos	90.1		P	12 - 127
Fenbuconazole	95.7		P	59 - 151
Fipronil	75.9		P	67 - 129
Fipronil Desulfinyl	71.1		P	65 - 127
Fipronil Sulfide	74.2		P	61 - 116
Fipronil Sulfone	85.2		P	55 - 117
Fluazifop-P-butyl	82.4		P	62 - 127
Fludioxonil	83.1		P	62 - 128
Flumioxazin	66.5		P	33 - 250
Flutolanil	72.9		P	56 - 127
Fluxapyroxad	94.6		P	45 - 128
Fonofos	78.5		P	62 - 111
Hexazinone	85.2		P	46 - 139
Imazalil	66.4		P	38 - 142
Iprodione	76.2		P	47 - 135
Loratadine	85.4		P	10 - 244
Malathion	97.6		P	61 - 139
Metalaxyl	64.2		P	10 - 119
Metolachlor	71.9		P	65 - 118
Metribuzin	81.4		P	51 - 250
Mevinphos	90.3		P	53 - 121
Molinate	60.8		P	42 - 96.0
Myclobutanil	75.9		P	55 - 128
Naled	71.9		P	10 - 98.0
Napropamide	61.3		P	49 - 121
Norflurazon	74.5		P	61 - 126
Octinoxate	68.8		P	30 - 159
Oxadiazon	67.4		P	59 - 116
Oxybenzone	67.7		P	61 - 139

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	86.9		P	64 - 137
Parathion Ethyl	79.0		P	70 - 112
Parathion Methyl	104		P	76 - 133
Pendimethalin	70.2		P	52 - 117
Phenytoin	16.9		P	10 - 199
Phorate	72.0		P	48 - 121
Prodiamine	62.3		P	26 - 142
Prometon	70.6		P	43 - 123
Prometryn	74.4		P	66 - 127
Pronamide	81.1		P	75 - 121
Propanil	74.5		P	45 - 150
Propargite	91.5		P	42 - 208
Propiconazole	74.6		P	60 - 125
Pyraflufen Ethyl	87.2		P	70 - 138
Pyridaben	115		P	35 - 245
Pyriproxyfen	89.1		P	30 - 149
Simazine	80.7		P	72 - 125
Stirophos	73.2		P	29 - 164
Sulfentrazone	30.7		P	21 - 139
Tebuconazole	80.5		P	10 - 115
Terbufos	103		P	60 - 123
Terbuthylazine	79.0		P	72 - 115
Thiobencarb	70.1		P	31 - 139
Triadimefon	67.2		P	65 - 116

Reference Method: EPA 8276
Batch ID: P414640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	106		P	61 - 118
Toxaphene	105		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P414579

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	68.6		P	40 - 150
2,4,5-T	48.5		P	40 - 150
Acetaminophen	69.3		P	30 - 150
Acetamiprid	79.5		P	40 - 150
Afidopyropen	56.6		P	30 - 150
Bentazon	93.3		P	30 - 150
Benzovindiflupyr	87.8		P	40 - 150
Carbamazepine	94.8		P	40 - 150
Clothianidin	100		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	95.4		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	95.1		P	40 - 150
Hydrocodone	87.0		P	40 - 150
Ibuprofen	85.3		P	40 - 150
Imazapyr	90.0		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P414579

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imidacloprid	91.1		P	40 - 150
Linuron	84.7		P	40 - 150
Mandestrobin	91.1		P	40 - 150
MCPP	77.7		P	40 - 150
Naproxen	70.8		P	40 - 150
Primidone	98.9		P	40 - 150
Pyraclostrobin	83.9		P	40 - 150
Silvex	48.9		P	40 - 150
Thiamethoxam	93.9		P	40 - 150
Tolfenpyrad	44.7		P	30 - 150
Triclopyr	56.1		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	147		P	40 - 150
AMPA	91.4		P	40 - 150
Endothall	70.4		P	40 - 150
Glufosinate	98.8		P	40 - 150
Glyphosate	94.7		P	40 - 150
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414737

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	82.1		P	40 - 150
Aldicarb	69.1		P	30 - 150
Aldicarb Sulfone	103		P	40 - 150
Aldicarb Sulfoxide	101		P	40 - 150
Carbaryl	84.4		P	40 - 150
Carbofuran	96.4		P	40 - 150
Methiocarb	76.6		P	40 - 150
Methomyl	87.9		P	40 - 150
Oxamyl	102		P	40 - 150
Propoxur	91.9		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P415108

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 5310 B-2011
Batch ID: P414683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330900	Calcium	112		P	80 - 120
2330900	Iron	111		P	80 - 120
2330900	Magnesium	112		P	80 - 120
2330900	Potassium	112		P	80 - 120
2330900	Sodium	110		P	80 - 120
2330900	Strontium	106		P	80 - 120
2330900	Tin	104		P	80 - 120
2330900	Titanium	107		P	80 - 120
2330900	Vanadium	100		P	80 - 120
2330900	Zinc	103		P	80 - 120
2331183	Calcium	105		P	80 - 120
2331183	Iron	107	110	P/P	80 - 120
2331183	Magnesium	106	109	P/P	80 - 120
2331183	Potassium	106	108	P/P	80 - 120
2331183	Sodium	103	107	P/P	80 - 120
2331183	Strontium	104	106	P/P	80 - 120
2331183	Tin	103	105	P/P	80 - 120
2331183	Titanium	104	107	P/P	80 - 120
2331183	Vanadium	99.2	101	P/P	80 - 120
2331183	Zinc	101	104	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330900	Aluminum	98.3		P	80 - 120
2330900	Antimony	102		P	80 - 120
2330900	Arsenic	98.3		P	80 - 120
2330900	Barium	103		P	80 - 120
2330900	Beryllium	99.5		P	80 - 120
2330900	Boron	101		P	80 - 120
2330900	Cadmium	98.5		P	80 - 120
2330900	Chromium	99.6		P	80 - 120
2330900	Cobalt	98.9		P	80 - 120
2330900	Copper	94.7		P	80 - 120
2330900	Lead	100		P	80 - 120
2330900	Manganese	98.9		P	80 - 120
2330900	Molybdenum	99.5		P	80 - 120
2330900	Nickel	97.7		P	80 - 120
2330900	Selenium	95.6		P	80 - 120
2330900	Silver	101		P	80 - 120
2330900	Thallium	101		P	80 - 120
2331183	Aluminum	99.8	103	P/P	80 - 120
2331183	Antimony	100	100	P/P	80 - 120
2331183	Arsenic	96.9	98.6	P/P	80 - 120
2331183	Barium	102	102	P/P	80 - 120
2331183	Beryllium	95.2	96.3	P/P	80 - 120
2331183	Boron	102	101	P/P	80 - 120
2331183	Cadmium	98.6	98.3	P/P	80 - 120
2331183	Chromium	97.6	97.4	P/P	80 - 120
2331183	Cobalt	96.4	97.4	P/P	80 - 120
2331183	Copper	94.4	95.5	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331183	Lead	98.2	97.7	P/P	80 - 120
2331183	Manganese	97.6	98.6	P/P	80 - 120
2331183	Molybdenum	99.5	100	P/P	80 - 120
2331183	Nickel	95.6	96.6	P/P	80 - 120
2331183	Selenium	93.8	96.4	P/P	80 - 120
2331183	Silver	101	101	P/P	80 - 120
2331183	Thallium	99.8	99.3	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414982

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330377	Chloride	96.5		P	90 - 110
2330730	Chloride	95.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414986

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330377	Sulfate	92.8		P	90 - 110
2330730	Sulfate	96.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415079

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330467	Ammonia-N	96.4	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330766	Ammonia-N	96.6	98.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415070

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330822	NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414630

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330788	Total-P	103	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414593

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330824	O-Phosphate-P	98.4	99.7	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414640

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331486	Aldrin	59.8	61.3	P/P	10 - 89.0
2331486	Alpha-BHC	93.8	94.8	P/P	71 - 105
2331486	Alpha-Chlordane	64.0	61.0	P/P	43 - 107
2331486	Beta-BHC	90.6	84.3	P/P	57 - 152
2331486	Beta-Cyfluthrin	79.6	77.2	P/P	29 - 186
2331486	Bifenthrin	63.3	66.0	P/P	19 - 119
2331486	Chlorothalonil	72.6	79.2	P/P	10 - 245
2331486	Cis-Nonachlor	71.9	65.4	P/P	36 - 110
2331486	Cypermethrin	82.2	78.8	P/P	24 - 169
2331486	Dacthal	92.0	86.5	P/P	62 - 115
2331486	DDD-p,p'	59.2	53.6	P/P	36 - 109
2331486	DDE-p,p'	59.2	53.6	P/P	30 - 114
2331486	DDT-p,p'	68.3	68.5	P/P	42 - 108
2331486	Delta-BHC	94.7	89.1	P/P	60 - 164
2331486	Deltamethrin	86.5	84.1	P/P	10 - 210
2331486	Dichlobenil	75.4	64.6	P/P	23 - 108
2331486	Dicofol	136	125	F/F	44 - 109
2331486	Dieldrin	68.3	62.0	P/P	37 - 119
2331486	Endosulfan I	77.1	71.7	P/P	52 - 105
2331486	Endosulfan II	86.8	75.6	P/P	35 - 127
2331486	Endosulfan Sulfate	90.0	80.8	P/P	39 - 130
2331486	Endrin	75.6	69.6	P/P	30 - 116
2331486	Endrin Aldehyde	84.5	71.6	P/P	20 - 110
2331486	Endrin Ketone	88.2	75.9	P/P	48 - 134
2331486	Esfenvalerate	80.7	83.5	P/P	10 - 199
2331486	Ethalfluralin	82.2	80.9	P/P	48 - 95.0
2331486	Fenpropathrin	76.6	69.7	P/P	37 - 121
2331486	Gamma-BHC	97.2	98.0	P/P	61 - 126
2331486	Gamma-Chlordane	58.7	55.8	P/P	39 - 105
2331486	Heptachlor	71.1	71.9	P/P	38 - 96.0
2331486	Heptachlor Epoxide	78.4	68.2	P/P	42 - 114
2331486	Hexachlorobenzene	66.0	61.3	P/P	39 - 93.0
2331486	Kepone	212	175	P/P	10 - 215
2331486	Lambda-Cyhalothrin	70.8	73.1	P/P	10 - 204
2331486	Methoprene	62.9	59.8	P/P	17 - 108
2331486	Methoxychlor	90.1	89.7	P/P	56 - 115
2331486	MGK-264	87.8	80.7	P/P	35 - 120
2331486	Mirex	63.4	62.0	P/P	10 - 178
2331486	Oxychlordane	74.3	73.8	P/P	47 - 91.0
2331486	Permethrin	77.3	74.1	P/P	27 - 170
2331486	Phenothrin	63.2	60.0	P/P	10 - 133
2331486	Piperonyl Butoxide	114	105	P/P	23 - 150
2331486	Prallethrin	81.9	72.5	P/P	21 - 113
2331486	Tau-Fluvalinate	71.4	77.0	P/P	16 - 158
2331486	Tetramethrin	117	101	P/P	22 - 132
2331486	Trans-Nonachlor	75.2	71.7	P/P	43 - 102
2331486	Triclosan Methyl	81.8	73.7	P/P	49 - 109
2331486	Trifluralin	77.2	75.9	P/P	48 - 93.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Acetochlor	78.7	94.0	P/P	65 - 124
2331485	Alachlor	72.5	89.8	P/P	61 - 121
2331485	Ametryn	74.0	81.1	P/P	52 - 216
2331485	Atrazine Desethyl	33.6	33.9	P/P	15 - 160
2331485	Avobenzone	84.0	84.1	P/P	59 - 206
2331485	Azinphos Methyl	98.6	128	P/P	40 - 292
2331485	Azoxystrobin	86.2	100	P/P	12 - 242
2331485	Bromacil	54.8	58.0	P/P	54 - 167
2331485	Butylate	65.1	65.3	P/P	14 - 94.0
2331485	Caffeine	97.4	94.5	P/P	10 - 226
2331485	Carbophenothion	77.2	89.8	P/P	49 - 122
2331485	Carfentrazone Ethyl	84.4	92.3	P/P	53 - 138
2331485	Chlorfenapyr	66.8	76.4	P/P	50 - 150
2331485	Chlorpyrifos Ethyl	73.6	87.3	P/P	52 - 122
2331485	Chlorpyrifos Methyl	81.7	104	P/P	66 - 117
2331485	Coumaphos	106	125	P/P	50 - 220
2331485	Cyanazine	63.4	77.7	P/P	43 - 245
2331485	Cyprodinil	71.4	80.2	P/P	50 - 150
2331485	Demeton	80.5	76.8	P/P	43 - 188
2331485	Diazinon	88.3	98.1	P/P	69 - 131
2331485	Difenoconazole	124	134	P/P	34 - 231
2331485	Dimethenamid	64.9	74.7	P/P	55 - 118
2331485	Dimethomorph	76.8	88.4	P/P	50 - 150
2331485	Disulfoton	70.8	91.7	P/P	38 - 141
2331485	Dithiopyr	70.5	83.0	P/P	42 - 116
2331485	EPTC	47.0	57.6	P/P	18 - 85.0
2331485	Ethion	58.1	68.0	P/P	10 - 131
2331485	Ethoprop	87.9	103	P/P	65 - 129
2331485	Etridiazole	57.5	64.1	P/P	50 - 150
2331485	Fenamiphos	78.2	77.4	P/P	31 - 137
2331485	Fenbuconazole	96.9	112	P/P	57 - 160
2331485	Fipronil	80.3	91.8	P/P	62 - 132
2331485	Fipronil Desulfinyl	75.4	88.7	P/P	57 - 131
2331485	Fipronil Sulfide	70.2	80.5	P/P	15 - 138
2331485	Fipronil Sulfone	80.2	90.5	P/P	21 - 134
2331485	Fluazifop-P-butyl	86.9	95.5	P/P	54 - 133
2331485	Fludioxonil	84.5	94.8	P/P	58 - 127
2331485	Flumioxazin	118	138	P/P	33 - 300
2331485	Flutolanil	71.5	85.0	P/P	42 - 130
2331485	Fluxapyroxad	104	120	P/P	23 - 141
2331485	Fonofos	65.8	85.8	P/P	58 - 119
2331485	Hexazinone	81.0	92.4	P/P	68 - 172
2331485	Imazalil	63.0	74.0	P/P	48 - 283
2331485	Iprodione	112	129	P/P	38 - 140
2331485	Loratadine	81.5	94.3	P/P	50 - 150
2331485	Malathion	82.3	106	P/P	40 - 137
2331485	Metalaxyl	61.9	69.4	P/P	21 - 129
2331485	Metolachlor	73.6	85.0	P/P	55 - 122
2331485	Metribuzin	75.4	83.3	P/P	38 - 187
2331485	Mevinphos	78.5	94.9	P/P	54 - 134
2331485	Molinate	67.1	76.6	P/P	41 - 97.0
2331485	Myclobutanil	82.7	93.8	P/P	56 - 125

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Naled	59.8	82.5	P/P	10 - 108
2331485	Napropamide	57.1	68.8	P/P	50 - 150
2331485	Norflurazon	79.9	86.2	P/P	32 - 122
2331485	Octinoxate	69.2	61.0	P/P	25 - 150
2331485	Oxadiazon	66.0	74.7	P/P	40 - 119
2331485	Oxybenzone	72.1	65.1	P/P	59 - 147
2331485	Oxyfluorfen	101	118	P/P	61 - 153
2331485	Parathion Ethyl	80.4	98.1	P/P	59 - 130
2331485	Parathion Methyl	96.3	119	P/P	65 - 155
2331485	Pendimethalin	80.8	97.8	P/P	49 - 138
2331485	Phenytoin	39.2	47.3	F/F	50 - 200
2331485	Phorate	68.8	82.3	P/P	54 - 161
2331485	Prodiamine	73.8	88.8	P/P	33 - 161
2331485	Prometon	64.1	80.3	P/P	48 - 140
2331485	Prometryn	67.0	76.4	P/P	55 - 134
2331485	Pronamide	83.6	99.8	P/P	66 - 137
2331485	Propanil	77.1	85.4	P/P	50 - 150
2331485	Propargite	96.3	111	P/P	50 - 200
2331485	Propiconazole	86.1	93.0	P/P	36 - 150
2331485	Pyraflufen Ethyl	90.0	103	P/P	50 - 150
2331485	Pyridaben	101	113	P/P	50 - 200
2331485	Pyriproxyfen	84.5	97.2	P/P	10 - 165
2331485	Simazine	99.4	108	P/P	57 - 145
2331485	Stirophos	45.4	57.5	F/P	50 - 150
2331485	Sulfentrazone	91.7	90.5	P/P	34 - 140
2331485	Tebuconazole	86.3	99.4	P/P	10 - 127
2331485	Terbufos	95.1	112	P/P	59 - 138
2331485	Terbuthylazine	75.2	84.6	P/P	68 - 119
2331485	Thiobencarb	73.2	83.7	P/P	50 - 150
2331485	Triadimefon	62.0	64.2	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P414579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330715	2,4-D	101	81.9	P/P	40 - 150
2330715	2,4,5-T	77.2	65.9	P/P	40 - 150
2330715	Acetaminophen	113	114	P/P	30 - 150
2330715	Acetamiprid	101	85.8	P/P	40 - 150
2330715	Afidopyropen	71.1	60.9	P/P	30 - 150
2330715	Carbamazepine	113	109	P/P	40 - 150
2330715	Clothianidin	127	120	P/P	40 - 150
2330715	Diuron	86.5	76.0	P/P	40 - 150
2330715	Fenuron	93.9	92.5	P/P	40 - 150
2330715	Fluridone	92.7	89.7	P/P	40 - 150
2330715	Hydrocodone	107	101	P/P	40 - 150
2330715	Ibuprofen	85.6	84.4	P/P	40 - 150
2330715	Imazapyr	106	107	P/P	40 - 150
2330715	Imidacloprid	159	157	F/F	40 - 150
2330715	Linuron	85.4	79.3	P/P	40 - 150
2330715	Mandestrobin	90.9	87.2	P/P	40 - 150
2330715	MCPP	111	101	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P414579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330715	Naproxen	76.1	72.8	P/P	40 - 150
2330715	Primidone	112	118	P/P	40 - 150
2330715	Pyraclostrobin	96.0	91.1	P/P	40 - 150
2330715	Silvex	73.5	58.2	P/P	40 - 150
2330715	Thiamethoxam	136	138	P/P	40 - 150
2330715	Tolfenpyrad	53.7	49.9	P/P	30 - 150
2330715	Triclopyr	81.3	69.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330564	Acesulfame K	155	150	F/F	40 - 150
2330564	AMPA	88.2	91.4	P/P	40 - 150
2330564	Endothall	69.3	69.0	P/P	40 - 150
2330564	Glufosinate	95.1	99.5	P/P	40 - 150
2330564	Glyphosate	94.9	83.6	P/P	40 - 150
2330564	Sucralose	114	114	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414737

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330834	3-Hydroxycarbofuran	88.7	97.6	P/P	40 - 150
2330834	Aldicarb	76.5	77.1	P/P	30 - 150
2330834	Aldicarb Sulfone	125	117	P/P	40 - 150
2330834	Aldicarb Sulfoxide	52.7	47.5	P/P	40 - 150
2330834	Carbaryl	73.8	69.3	P/P	40 - 150
2330834	Carbofuran	82.1	77.0	P/P	40 - 150
2330834	Methiocarb	77.0	75.1	P/P	40 - 150
2330834	Methomyl	86.4	81.9	P/P	40 - 150
2330834	Oxamyl	99.8	93.3	P/P	40 - 150
2330834	Propoxur	85.3	81.7	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330820	Fluoride	100	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P414683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330379	Organic Carbon	93.4	92.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P414599

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330698	Color (true)	4.88	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414605

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330699	Turbidity	2.89	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331183	Calcium	1.43	Spike	P	0 - 20
2331183	Iron	2.11	Spike	P	0 - 20
2331183	Magnesium	2.45	Spike	P	0 - 20
2331183	Potassium	1.64	Spike	P	0 - 20
2331183	Sodium	1.73	Spike	P	0 - 20
2331183	Strontium	1.41	Spike	P	0 - 20
2331183	Tin	1.44	Spike	P	0 - 20
2331183	Titanium	2.73	Spike	P	0 - 20
2331183	Vanadium	2.17	Spike	P	0 - 20
2331183	Zinc	2.60	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331183	Aluminum	2.13	Spike	P	0 - 20
2331183	Antimony	0.0862	Spike	P	0 - 20
2331183	Arsenic	1.73	Spike	P	0 - 20
2331183	Barium	0.219	Spike	P	0 - 20
2331183	Beryllium	1.14	Spike	P	0 - 20
2331183	Boron	1.28	Spike	P	0 - 20
2331183	Cadmium	0.291	Spike	P	0 - 20
2331183	Chromium	0.210	Spike	P	0 - 20
2331183	Cobalt	0.930	Spike	P	0 - 20
2331183	Copper	1.25	Spike	P	0 - 20
2331183	Lead	0.422	Spike	P	0 - 20
2331183	Manganese	0.664	Spike	P	0 - 20
2331183	Molybdenum	0.686	Spike	P	0 - 20
2331183	Nickel	1.01	Spike	P	0 - 20
2331183	Selenium	2.75	Spike	P	0 - 20
2331183	Silver	0.179	Spike	P	0 - 20
2331183	Thallium	0.577	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414982

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330377	Chloride	0.292	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414986

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330377	Sulfate	0.316	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415079

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330467	Ammonia-N	0.562	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330766	Ammonia-N	1.53	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414859

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330805	Kjeldahl Nitrogen	3.54	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415070

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330822	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414630

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330788	Total-P	2.13	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414593

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330824	O-Phosphate-P	1.31	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331486	Aldrin	2.38	Spike	P	0 - 37
2331486	Alpha-BHC	1.16	Spike	P	0 - 16
2331486	Alpha-Chlordane	3.85	Spike	P	0 - 28
2331486	Beta-BHC	7.25	Spike	P	0 - 32
2331486	Beta-Cyfluthrin	3.02	Spike	P	0 - 41
2331486	Bifenthrin	4.29	Spike	P	0 - 36
2331486	Chlorothalonil	8.76	Spike	P	0 - 54
2331486	Cis-Nonachlor	9.45	Spike	P	0 - 33
2331486	Cypermethrin	4.21	Spike	P	0 - 38
2331486	Dacthal	6.13	Spike	P	0 - 23
2331486	DDD-p,p'	7.85	Spike	P	0 - 35
2331486	DDE-p,p'	7.62	Spike	P	0 - 27
2331486	DDT-p,p'	0.190	Spike	P	0 - 31
2331486	Delta-BHC	6.13	Spike	P	0 - 30
2331486	Deltamethrin	2.80	Spike	P	0 - 76
2331486	Dichlobenil	15.4	Spike	P	0 - 33
2331486	Dicofol	8.14	Spike	P	0 - 24
2331486	Dieldrin	8.29	Spike	P	0 - 35
2331486	Endosulfan I	6.85	Spike	P	0 - 25
2331486	Endosulfan II	13.9	Spike	P	0 - 31
2331486	Endosulfan Sulfate	10.8	Spike	P	0 - 38
2331486	Endrin	7.80	Spike	P	0 - 53
2331486	Endrin Aldehyde	16.4	Spike	P	0 - 81
2331486	Endrin Ketone	15.0	Spike	P	0 - 33
2331486	Esfenvalerate	3.39	Spike	P	0 - 46
2331486	Ethalfluralin	1.53	Spike	P	0 - 22
2331486	Fenpropathrin	9.47	Spike	P	0 - 29
2331486	Gamma-BHC	0.809	Spike	P	0 - 17
2331486	Gamma-Chlordane	3.96	Spike	P	0 - 28
2331486	Heptachlor	1.15	Spike	P	0 - 28
2331486	Heptachlor Epoxide	14.0	Spike	P	0 - 23
2331486	Hexachlorobenzene	7.28	Spike	P	0 - 22
2331486	Kepone	19.1	Spike	P	0 - 61
2331486	Lambda-Cyhalothrin	3.22	Spike	P	0 - 52
2331486	Methoprene	5.03	Spike	P	0 - 38
2331486	Methoxychlor	0.504	Spike	P	0 - 29
2331486	MGK-264	8.39	Spike	P	0 - 41
2331486	Mirex	2.20	Spike	P	0 - 39
2331486	Oxychlordane	0.673	Spike	P	0 - 33
2331486	Permethrin	4.15	Spike	P	0 - 39
2331486	Phenothrin	5.17	Spike	P	0 - 52
2331486	Piperonyl Butoxide	8.25	Spike	P	0 - 91
2331486	Prallethrin	12.1	Spike	P	0 - 34
2331486	Tau-Fluvalinate	7.58	Spike	P	0 - 41
2331486	Tetramethrin	14.6	Spike	P	0 - 43
2331486	Trans-Nonachlor	4.78	Spike	P	0 - 31
2331486	Triclosan Methyl	10.5	Spike	P	0 - 24
2331486	Trifluralin	1.70	Spike	P	0 - 23

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Acetochlor	17.6	Spike	P	0 - 27
2331485	Alachlor	21.4	Spike	P	0 - 27
2331485	Ametryn	9.16	Spike	P	0 - 34
2331485	Atrazine	3.83	Spike	P	0 - 41
2331485	Atrazine Desethyl	0.563	Spike	P	0 - 38
2331485	Avobenzone	0.0828	Spike	P	0 - 30
2331485	Azinphos Methyl	25.6	Spike	P	0 - 62
2331485	Azoxystrobin	15.0	Spike	P	0 - 32
2331485	Bromacil	5.77	Spike	P	0 - 30
2331485	Butylate	0.271	Spike	P	0 - 59
2331485	Caffeine	2.95	Spike	P	0 - 60
2331485	Carbophenothion	15.1	Spike	P	0 - 25
2331485	Carfentrazone Ethyl	8.94	Spike	P	0 - 26
2331485	Chlorfenapyr	13.4	Spike	P	0 - 30
2331485	Chlorpyrifos Ethyl	17.1	Spike	P	0 - 27
2331485	Chlorpyrifos Methyl	23.8	Spike	P	0 - 26
2331485	Coumaphos	16.9	Spike	P	0 - 30
2331485	Cyanazine	20.3	Spike	P	0 - 58
2331485	Cyprodinil	11.6	Spike	P	0 - 30
2331485	Demeton	4.66	Spike	P	0 - 25
2331485	Diazinon	10.5	Spike	P	0 - 29
2331485	Difenoconazole	7.62	Spike	P	0 - 25
2331485	Dimethenamid	14.1	Spike	P	0 - 30
2331485	Dimethomorph	14.0	Spike	P	0 - 30
2331485	Disulfoton	25.7	Spike	P	0 - 33
2331485	Dithiopyr	16.4	Spike	P	0 - 22
2331485	EPTC	20.1	Spike	P	0 - 38
2331485	Ethion	15.7	Spike	P	0 - 79
2331485	Ethoprop	15.8	Spike	P	0 - 23
2331485	Etridiazole	10.9	Spike	P	0 - 30
2331485	Fenamiphos	1.03	Spike	P	0 - 58
2331485	Fenbuconazole	14.7	Spike	P	0 - 37
2331485	Fipronil	12.2	Spike	P	0 - 33
2331485	Fipronil Desulfinyl	14.3	Spike	P	0 - 26
2331485	Fipronil Sulfide	11.1	Spike	P	0 - 37
2331485	Fipronil Sulfone	8.29	Spike	P	0 - 50
2331485	Fluazifop-P-butyl	9.44	Spike	P	0 - 24
2331485	Fludioxonil	11.5	Spike	P	0 - 26
2331485	Flumioxazin	15.7	Spike	P	0 - 37
2331485	Flutolanil	17.3	Spike	P	0 - 26
2331485	Fluxapyroxad	14.4	Spike	P	0 - 34
2331485	Fonofos	26.4	Spike	P	0 - 27
2331485	Hexazinone	13.2	Spike	P	0 - 36
2331485	Imazalil	16.2	Spike	P	0 - 65
2331485	Iprodione	13.5	Spike	P	0 - 33
2331485	Loratadine	14.5	Spike	P	0 - 30
2331485	Malathion	25.0	Spike	P	0 - 44
2331485	Metalaxyl	11.4	Spike	P	0 - 38
2331485	Metolachlor	14.3	Spike	P	0 - 36
2331485	Metribuzin	9.95	Spike	P	0 - 63
2331485	Mevinphos	18.9	Spike	P	0 - 26

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Molinate	13.2	Spike	P	0 - 40
2331485	Myclobutanil	12.6	Spike	P	0 - 21
2331485	Naled	31.9	Spike	F	0 - 26
2331485	Napropamide	18.7	Spike	P	0 - 30
2331485	Norflurazon	7.59	Spike	P	0 - 24
2331485	Octinoxate	12.5	Spike	P	0 - 30
2331485	Oxadiazon	10.6	Spike	P	0 - 27
2331485	Oxybenzone	10.2	Spike	P	0 - 30
2331485	Oxyfluorfen	14.9	Spike	P	0 - 24
2331485	Parathion Ethyl	19.9	Spike	P	0 - 28
2331485	Parathion Methyl	20.8	Spike	P	0 - 27
2331485	Pendimethalin	19.1	Spike	P	0 - 31
2331485	Phenytoin	18.7	Spike	P	0 - 30
2331485	Phorate	17.8	Spike	P	0 - 27
2331485	Prodiamine	18.4	Spike	P	0 - 52
2331485	Prometon	22.5	Spike	P	0 - 31
2331485	Prometryn	13.2	Spike	P	0 - 28
2331485	Pronamide	17.7	Spike	P	0 - 26
2331485	Propanil	10.2	Spike	P	0 - 30
2331485	Propargite	14.3	Spike	P	0 - 30
2331485	Propiconazole	7.66	Spike	P	0 - 31
2331485	Pyraflufen Ethyl	13.8	Spike	P	0 - 30
2331485	Pyridaben	11.3	Spike	P	0 - 30
2331485	Pyriproxyfen	14.0	Spike	P	0 - 50
2331485	Simazine	8.08	Spike	P	0 - 29
2331485	Stirophos	23.4	Spike	P	0 - 30
2331485	Sulfentrazone	1.28	Spike	P	0 - 33
2331485	Tebuconazole	14.2	Spike	P	0 - 44
2331485	Terbufos	16.7	Spike	P	0 - 29
2331485	Terbuthylazine	11.8	Spike	P	0 - 27
2331485	Thiobencarb	13.4	Spike	P	0 - 30
2331485	Triadimefon	3.45	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330715	2,4-D	20.2	Spike	P	0 - 30
2330715	2,4,5-T	15.7	Spike	P	0 - 30
2330715	Acetaminophen	1.05	Spike	P	0 - 30
2330715	Acetamiprid	13.0	Spike	P	0 - 30
2330715	Afidopyropen	15.5	Spike	P	0 - 30
2330715	Benzovindiflupyr	0.121	Spike	P	0 - 30
2330715	Carbamazepine	3.54	Spike	P	0 - 30
2330715	Clothianidin	4.69	Spike	P	0 - 30
2330715	Dinotefuran	0.943	Spike	P	0 - 30
2330715	Diuron	12.6	Spike	P	0 - 30
2330715	Fenuron	1.51	Spike	P	0 - 30
2330715	Fluridone	3.33	Spike	P	0 - 30
2330715	Hydrocodone	5.99	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P414579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330715	Ibuprofen	1.42	Spike	P	0 - 30
2330715	Imazapyr	0.641	Spike	P	0 - 30
2330715	Imidacloprid	0.881	Spike	P	0 - 30
2330715	Linuron	7.41	Spike	P	0 - 30
2330715	Mandestrobin	4.14	Spike	P	0 - 30
2330715	MCPP	9.52	Spike	P	0 - 30
2330715	Naproxen	4.36	Spike	P	0 - 30
2330715	Primidone	4.51	Spike	P	0 - 30
2330715	Pyraclostrobin	4.39	Spike	P	0 - 30
2330715	Silvex	23.2	Spike	P	0 - 30
2330715	Thiamethoxam	0.714	Spike	P	0 - 30
2330715	Tolfenpyrad	7.25	Spike	P	0 - 30
2330715	Triclopyr	15.6	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330564	Acesulfame K	3.00	Spike	P	0 - 30
2330564	AMPA	3.52	Spike	P	0 - 30
2330564	Endothall	0.443	Spike	P	0 - 30
2330564	Glufosinate	4.50	Spike	P	0 - 30
2330564	Glyphosate	12.6	Spike	P	0 - 30
2330564	Sucralose	0.0355	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P414737

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330834	3-Hydroxycarbofuran	9.55	Spike	P	0 - 30
2330834	Aldicarb	0.710	Spike	P	0 - 30
2330834	Aldicarb Sulfone	6.60	Spike	P	0 - 30
2330834	Aldicarb Sulfoxide	10.4	Spike	P	0 - 30
2330834	Carbaryl	6.34	Spike	P	0 - 30
2330834	Carbofuran	6.34	Spike	P	0 - 30
2330834	Methiocarb	2.55	Spike	P	0 - 30
2330834	Methomyl	5.42	Spike	P	0 - 30
2330834	Oxamyl	6.75	Spike	P	0 - 30
2330834	Propoxur	4.36	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P415108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330820	Total Alkalinity	0.250	Sample	P	0 - 3.8

Quality Assurance Report
Precision

Reference Method: SM 2540 C-2011
Batch ID: P414802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330698	TDS	2.14	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330820	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P414683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330379	Organic Carbon	0.862	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2330834
Field Sample ID: G4SW0102

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	74.3	P	30 - 160

Lab Sample ID: 2330835
Field Sample ID: FB_05312022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	91.8	P	30 - 160

Lab Sample ID: 2330836
Field Sample ID: G4SW0102

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	102	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	106	P	30 - 160
EPA 8321B	Diuron-d6	74.7	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	79.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.1	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	156	P	30 - 160

Lab Sample ID: 2330837
Field Sample ID: FB_05312022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	71.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	68.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	98.8	P	30 - 160
EPA 8321B	Diuron-d6	101	P	30 - 160
EPA 8321B	Endothall-d6	91.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.0	P	30 - 160
EPA 8321B	Primidone-d5	95.3	P	30 - 160
EPA 8321B	Sucralose-d6	152	P	30 - 160

Lab Sample ID: 2330842
Field Sample ID: G4SW0102

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	106	P	38 - 115
EPA 8270E	Decachlorobiphenyl	78.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	76.2	P	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	66.0	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	89.1	P	30 - 97.0
EPA 8276	PCNB	99.3	P	45 - 119

Lab Sample ID: 2330843
Field Sample ID: FB_05312022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	82.8	P	38 - 115

Quality Assurance Report
Surrogates

Lab Sample ID: 2330843
Field Sample ID: FB_05312022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	69.1	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	99.9	F	29 - 98.0
EPA 8270E	Tetrachloro-m-xylene	81.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	85.8	P	30 - 97.0
EPA 8276	PCNB	100	P	45 - 119

Lab Sample ID: 2330844
Field Sample ID: G4SW0102

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	48.3	P	20 - 200
EPA 8270E	Simazine-d10	80.4	P	71 - 140
EPA 8270E	Terbufos-d10	86.1	P	62 - 131
EPA 8270E	Terphenyl-d14	61.6	P	52 - 141

Lab Sample ID: 2330845
Field Sample ID: FB_05312022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	50.2	P	20 - 200
EPA 8270E	Simazine-d10	79.3	P	71 - 140
EPA 8270E	Terbufos-d10	84.5	P	62 - 131
EPA 8270E	Terphenyl-d14	75.8	P	52 - 141

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A112551
Included Lab Sample IDs: 2330824, 2330825

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	98.3	P/P	90 - 110
O-Phosphate-P	99.7	99.1	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A112553
Included Lab Sample IDs: 2330820, 2330821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.8	104	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A112555
Included Lab Sample IDs: 2330820, 2330821

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112580
Included Lab Sample IDs: 2330854, 2330855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.0	98.5	P/P	90 - 110
Aluminum	98.2	97.0	P/P	90 - 110
Antimony	98.3	99.7	P/P	90 - 110
Antimony	98.9	98.3	P/P	90 - 110
Arsenic	97.0	95.7	P/P	90 - 110
Arsenic	97.4	97.0	P/P	90 - 110
Barium	98.0	98.4	P/P	90 - 110
Barium	98.4	98.6	P/P	90 - 110
Beryllium	95.1	95.5	P/P	90 - 110
Beryllium	95.5	95.5	P/P	90 - 110
Boron	95.9	96.3	P/P	90 - 110
Boron	96.3	95.9	P/P	90 - 110
Cadmium	96.5	96.9	P/P	90 - 110
Cadmium	96.9	97.5	P/P	90 - 110
Chromium	96.7	97.0	P/P	90 - 110
Chromium	97.0	97.9	P/P	90 - 110
Cobalt	97.6	96.0	P/P	90 - 110
Cobalt	98.1	97.6	P/P	90 - 110
Copper	96.1	94.7	P/P	90 - 110
Copper	96.6	96.1	P/P	90 - 110
Lead	95.9	95.5	P/P	90 - 110
Lead	96.2	95.9	P/P	90 - 110
Manganese	96.4	96.9	P/P	90 - 110
Manganese	96.9	97.0	P/P	90 - 110
Molybdenum	97.0	96.4	P/P	90 - 110
Molybdenum	97.3	97.0	P/P	90 - 110
Nickel	96.6	95.5	P/P	90 - 110
Nickel	97.8	96.6	P/P	90 - 110
Selenium	95.6	96.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A112580
Included Lab Sample IDs: 2330854, 2330855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Selenium	96.5	96.4	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Silver	102	101	P/P	90 - 110
Thallium	94.7	94.7	P/P	90 - 110
Thallium	95.1	94.7	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A112583
Included Lab Sample IDs: 2330822, 2330823

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.9	97.6	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A112591
Included Lab Sample IDs: 2330836

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	150	152	P/P	60 - 160
Sucralose	113	118	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A112595
Included Lab Sample IDs: 2330836, 2330837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	90.1	93.9	P/P	60 - 160
AMPA	93.9	92.5	P/P	60 - 160
Endothall	69.5	71.4	P/P	60 - 160
Endothall	70.3	69.5	P/P	60 - 160
Glufosinate	101	99.5	P/P	60 - 160
Glufosinate	102	101	P/P	60 - 160
Glyphosate	88.5	90.8	P/P	60 - 160
Glyphosate	90.8	93.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A112618
Included Lab Sample IDs: 2330836, 2330837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	91.6	96.6	P/P	50 - 150
2,4,5-T	95.2	95.0	P/P	50 - 150
Acetaminophen	101	101	P/P	60 - 160
Acetamiprid	102	101	P/P	50 - 150
Afidopyropen	94.8	92.9	P/P	50 - 150
Bentazon	103	104	P/P	50 - 160
Benzovindiflupyr	107	106	P/P	50 - 150
Carbamazepine	102	101	P/P	60 - 150
Clothianidin	103	103	P/P	60 - 150
Dinotefuran	98.4	105	P/P	50 - 150
Diuron	109	93.9	P/P	60 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112618
Included Lab Sample IDs: 2330836, 2330837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenuron	102	100	P/P	60 - 150
Fluridone	108	106	P/P	60 - 160
Hydrocodone	98.2	97.9	P/P	60 - 150
Ibuprofen	119	94.0	P/P	50 - 160
Imazapyr	86.7	96.4	P/P	50 - 150
Imidacloprid	97.3	96.4	P/P	60 - 150
Linuron	114	98.5	P/P	60 - 150
Mandestrobin	105	103	P/P	50 - 150
MCPP	93.6	93.6	P/P	50 - 150
Naproxen	97.8	106	P/P	50 - 160
Primidone	103	106	P/P	60 - 150
Pyraclostrobin	105	106	P/P	60 - 150
Silvex	93.9	98.0	P/P	50 - 150
Thiamethoxam	98.5	100	P/P	50 - 150
Tolfenpyrad	96.9	101	P/P	60 - 150
Triclopyr	99.8	89.8	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A112626
Included Lab Sample IDs: 2330822, 2330823

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	97.8	99.0	P/P	90 - 110
Total-P	99.8	97.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A112640
Included Lab Sample IDs: 2330854, 2330855

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	106	99.0	P/P	90 - 110
Calcium	99.0	103	P/P	90 - 110
Iron	100	106	P/P	90 - 110
Iron	108	100	P/P	90 - 110
Magnesium	107	99.2	P/P	90 - 110
Magnesium	99.2	105	P/P	90 - 110
Potassium	100	106	P/P	90 - 110
Potassium	108	100	P/P	90 - 110
Sodium	105	97.8	P/P	90 - 110
Sodium	97.8	104	P/P	90 - 110
Strontium	104	99.2	P/P	90 - 110
Strontium	99.2	101	P/P	90 - 110
Tin	105	99.2	P/P	90 - 110
Titanium	104	96.8	P/P	90 - 110
Titanium	96.8	98.4	P/P	90 - 110
Vanadium	105	99.2	P/P	90 - 110
Vanadium	99.2	100	P/P	90 - 110
Zinc	105	97.6	P/P	90 - 110
Zinc	97.6	96.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A112660
Included Lab Sample IDs: 2330837

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	143	P/P	60 - 160
Sucralose	112	110	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A112673
Included Lab Sample IDs: 2330834, 2330835

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	99.8	103	P/P	60 - 150
Aldicarb	96.8	99.3	P/P	60 - 150
Aldicarb Sulfone	103	103	P/P	50 - 150
Aldicarb Sulfoxide	103	104	P/P	50 - 150
Carbaryl	98.9	109	P/P	60 - 150
Carbofuran	103	106	P/P	50 - 150
Methiocarb	102	101	P/P	50 - 150
Methomyl	103	100	P/P	50 - 150
Oxamyl	103	102	P/P	50 - 150
Propoxur	104	106	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A112687
Included Lab Sample IDs: 2330842, 2330843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	106		P	80 - 120
PCB-1260	96.9		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A112695
Included Lab Sample IDs: 2330854

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tin	104	99.8	P/P	95 - 105

Reference Method: EPA 8270E
Run ID: A112699
Included Lab Sample IDs: 2330842, 2330843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	97.5		P	80 - 120
Alpha-BHC	97.0		P	80 - 120
Alpha-Chlordane	98.9		P	80 - 120
Beta-BHC	106		P	80 - 120
Beta-Cyfluthrin	94.4		P	80 - 120
Bifenthrin	101		P	80 - 120
Chlorothalonil	103		P	80 - 120
Cis-Nonachlor	93.7		P	80 - 120
Cypermethrin	96.5		P	80 - 120
Dacthal	98.2		P	80 - 120
DDD-p,p'	98.7		P	80 - 120
DDE-p,p'	99.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112699
Included Lab Sample IDs: 2330842, 2330843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDT-p,p'	100		P	80 - 120
Delta-BHC	104		P	80 - 120
Deltamethrin	84.0		P	80 - 120
Dichlobenil	105		P	80 - 120
Dicofol	107		P	80 - 120
Dieldrin	98.7		P	80 - 120
Endosulfan I	99.5		P	80 - 120
Endosulfan II	95.2		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	98.8		P	80 - 120
Endrin Aldehyde	94.3		P	80 - 120
Endrin Ketone	92.9		P	80 - 120
Esfenvalerate	95.2		P	80 - 120
Ethalfluralin	96.9		P	80 - 120
Fenpropathrin	94.8		P	80 - 120
Gamma-BHC	97.2		P	80 - 120
Gamma-Chlordane	98.0		P	80 - 120
Heptachlor	97.7		P	80 - 120
Heptachlor Epoxide	96.3		P	80 - 120
Hexachlorobenzene	107		P	80 - 120
Kepone	109		P	80 - 120
Lambda-Cyhalothrin	96.4		P	80 - 120
Methoprene	98.8		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	96.9		P	80 - 120
Mirex	100		P	80 - 120
Oxychlordane	98.7		P	80 - 120
Permethrin	97.8		P	80 - 120
Phenothrin	97.4		P	80 - 120
Piperonyl Butoxide	90.1		P	80 - 120
Prallethrin	96.0		P	80 - 120
Tau-Fluvalinate	96.2		P	80 - 120
Tetramethrin	98.0		P	80 - 120
Trans-Nonachlor	101		P	80 - 120
Triclosan Methyl	98.8		P	80 - 120
Trifluralin	96.9		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A112707
Included Lab Sample IDs: 2330820, 2330821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	99.7	99.5	P/P	90 - 110
Sulfate	100	99.9	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112714
Included Lab Sample IDs: 2330844, 2330845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112714
Included Lab Sample IDs: 2330844, 2330845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alachlor	94.6		P	80 - 120
Ametryn	91.6		P	80 - 120
Atrazine	95.1		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	83.5		P	80 - 120
Azoxystrobin	98.7		P	80 - 120
Bromacil	97.9		P	80 - 120
Butylate	101		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	94.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	88.8		P	80 - 120
Cyanazine	87.6		P	80 - 120
Cyprodinil	90.9		P	80 - 120
Demeton	98.3		P	80 - 120
Diazinon	96.8		P	80 - 120
Difenoconazole	86.0		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	98.4		P	80 - 120
Disulfoton	99.4		P	80 - 120
Dithiopyr	97.3		P	80 - 120
EPTC	95.0		P	80 - 120
Ethion	95.0		P	80 - 120
Ethoprop	97.8		P	80 - 120
Etridiazole	99.5		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	90.9		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	97.8		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	108		P	80 - 120
Fludioxonil	106		P	80 - 120
Flumioxazin	82.8		P	80 - 120
Flutolanil	98.5		P	80 - 120
Fluxapyroxad	96.8		P	80 - 120
Fonofos	93.2		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	97.9		P	80 - 120
Iprodione	89.8		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	104		P	80 - 120
Metalaxyl	95.8		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	94.8		P	80 - 120
Molinate	94.2		P	80 - 120
Myclobutanil	97.8		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112714
Included Lab Sample IDs: 2330844, 2330845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Naled	104		P	80 - 120
Napropamide	95.6		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	103		P	80 - 120
Oxyfluorfen	92.0		P	80 - 120
Parathion Ethyl	97.0		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	94.6		P	80 - 120
Phenytoin	94.6		P	80 - 120
Phorate	91.3		P	80 - 120
Prodiamine	82.4		P	80 - 120
Prometon	85.4		P	80 - 120
Prometryn	88.1		P	80 - 120
Pronamide	90.8		P	80 - 120
Propanil	95.0		P	80 - 120
Propargite	91.2		P	80 - 120
Propiconazole	95.3		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	95.8		P	80 - 120
Pyriproxyfen	94.1		P	80 - 120
Simazine	102		P	80 - 120
Stirophos	97.3		P	80 - 120
Sulfentrazone	95.6		P	80 - 120
Tebuconazole	93.4		P	80 - 120
Terbufos	94.2		P	80 - 120
Terbuthylazine	99.2		P	80 - 120
Thiobencarb	96.7		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A112751
Included Lab Sample IDs: 2330822, 2330823

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A112752
Included Lab Sample IDs: 2330843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Piperonyl Butoxide	91.8		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112754
Included Lab Sample IDs: 2330822

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	97.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A112760
Included Lab Sample IDs: 2330844, 2330845

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	98.8		P	80 - 120
Octinoxate	96.2		P	80 - 120
Oxybenzone	94.8		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A112774
Included Lab Sample IDs: 2330820, 2330821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.1	P/P	90 - 110
Total Alkalinity	99.3	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A112774
Included Lab Sample IDs: 2330820, 2330821

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A112780
Included Lab Sample IDs: 2330822, 2330823

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	102	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A112799
Included Lab Sample IDs: 2330842, 2330843

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	104		P	80 - 120
Toxaphene	97.2		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A112817
Included Lab Sample IDs: 2330823

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.5	94.6	P/P	90 - 110

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision		
						LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	98.9					4.88	
EPA 180.1 Rev. 2.0	Turbidity	97.4					2.89	
EPA 200.7 Rev. 4.4	Calcium	103	112	105				1.43
	Iron	105	111	107	110			2.11
	Magnesium	105	112	106	109			2.45
	Potassium	103	112	106	108			1.64
	Sodium	104	110	103	107			1.73
	Strontium	102	106	104	106			1.41
	Tin	103	104	103	105			1.44
	Titanium	104	107	104	107			2.73
	Vanadium	97.5	100	99.2	101			2.17
	Zinc	101	103	101	104			2.60
EPA 200.8 Rev. 5.4	Aluminum	98.7	99.8	103	98.3			2.13
	Antimony	99.5	100	100	102			0.0862
	Arsenic	96.8	96.9	98.6	98.3			1.73
	Barium	102	102	102	103			0.219
	Beryllium	95.6	95.2	96.3	99.5			1.14
	Boron	101	102	101	101			1.28
	Cadmium	97.5	98.6	98.3	98.5			0.291
	Chromium	97.0	97.6	97.4	99.6			0.210
	Cobalt	97.1	96.4	97.4	98.9			0.930
	Copper	94.2	94.4	95.5	94.7			1.25
	Lead	96.4	98.2	97.7	100			0.422
	Manganese	96.4	97.6	98.6	98.9			0.664
	Molybdenum	96.9	99.5	100	99.5			0.686
	Nickel	96.3	95.6	96.6	97.7			1.01
	Selenium	95.4	93.8	96.4	95.6			2.75
	Silver	99.3	101	101	101			0.179
	Thallium	97.4	99.8	99.3	101			0.577
EPA 300.0 Rev. 2.1	Chloride	98.7	96.5	95.2			0.292	
	Sulfate	97.4	92.8	96.2			0.316	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	96.4	97.0				0.562
	Ammonia-N	95.4	96.6	98.2				1.53
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103						3.54
EPA 353.2 Rev. 2.0	NO2NO3-N	102	102	102				0.0
EPA 365.1 Rev. 2.0	Total-P	99.4	103	99.9				2.13
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.2	98.4	99.7				1.31
EPA 8270E	Acetochlor	76.7	78.7	94.0				17.6
	Alachlor	69.0	72.5	89.8				21.4
	Aldrin	62.4	59.8	61.3				2.38
	Alpha-BHC	100	93.8	94.8				1.16
	Alpha-Chlordane	82.7	64.0	61.0				3.85
	Ametryn	67.4	74.0	81.1				9.16
	Atrazine	77.9						3.83
	Atrazine Desethyl	46.2	33.6	33.9				0.563
	Avobenzone	88.1	84.0	84.1				0.0828
	Azinphos Methyl	108	98.6	128				25.6
	Azoxystrobin	95.4	86.2	100				15.0
	Beta-BHC	111	90.6	84.3				7.25
	Beta-Cyfluthrin	72.9	79.6	77.2				3.02
	Bifenthrin	61.3	63.3	66.0				4.29
	Bromacil	58.1	54.8	58.0				5.77
	Butylate	53.8	65.1	65.3				0.271
	Caffeine	98.4	97.4	94.5				2.95

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Carbophenothion	91.6	77.2	89.8			15.1
	Carfentrazone Ethyl	83.1	84.4	92.3			8.94
	Chlorfenapyr	80.2	66.8	76.4			13.4
	Chlorothalonil	74.9	72.6	79.2			8.76
	Chlorpyrifos Ethyl	86.9	73.6	87.3			17.1
	Chlorpyrifos Methyl	95.2	81.7	104			23.8
	Cis-Nonachlor	73.4	71.9	65.4			9.45
	Coumaphos	124	106	125			16.9
	Cyanazine	70.8	63.4	77.7			20.3
	Cypermethrin	77.3	82.2	78.8			4.21
	Cyprodinil	70.2	71.4	80.2			11.6
	Dacthal	98.5	92.0	86.5			6.13
	DDD-p,p'	80.2	59.2	53.6			7.85
	DDE-p,p'	80.1	59.2	53.6			7.62
	DDT-p,p'	78.6	68.3	68.5			0.190
	Delta-BHC	119	94.7	89.1			6.13
	Deltamethrin	80.8	86.5	84.1			2.80
	Demeton	70.5	80.5	76.8			4.66
	Diazinon	81.3	88.3	98.1			10.5
	Dichlobenil	89.5	75.4	64.6			15.4
	Dicofol	109	136	125			8.14
	Dieldrin	86.6	68.3	62.0			8.29
	Difenoconazole	122	124	134			7.62
	Dimethenamid	68.7	64.9	74.7			14.1
	Dimethomorph	87.8	76.8	88.4			14.0
	Disulfoton	83.3	70.8	91.7			25.7
	Dithiopyr	69.7	70.5	83.0			16.4
	Endosulfan I	88.4	77.1	71.7			6.85
	Endosulfan II	92.5	86.8	75.6			13.9
	Endosulfan Sulfate	102	90.0	80.8			10.8
	Endrin	85.1	75.6	69.6			7.80
	Endrin Aldehyde	75.3	84.5	71.6			16.4
	Endrin Ketone	84.5	88.2	75.9			15.0
	EPTC	44.6	47.0	57.6			20.1
	Esfenvalerate	77.3	80.7	83.5			3.39
	Ethalfluralin	83.4	82.2	80.9			1.53
	Ethion	66.4	58.1	68.0			15.7
	Ethoprop	88.3	87.9	103			15.8
	Etridiazole	50.8	57.5	64.1			10.9
	Fenamiphos	90.1	78.2	77.4			1.03
	Fenbuconazole	95.7	96.9	112			14.7
	Fenpropathrin	72.9	76.6	69.7			9.47
	Fipronil	75.9	80.3	91.8			12.2
	Fipronil Desulfinyl	71.1	75.4	88.7			14.3
	Fipronil Sulfide	74.2	70.2	80.5			11.1
	Fipronil Sulfone	85.2	80.2	90.5			8.29
	Fluazifop-P-butyl	82.4	86.9	95.5			9.44
	Fludioxonil	83.1	84.5	94.8			11.5
	Flumioxazin	66.5	118	138			15.7
	Flutolanil	72.9	71.5	85.0			17.3
	Fluxapyroxad	94.6	104	120			14.4
	Fonofos	78.5	65.8	85.8			26.4
	Gamma-BHC	107	97.2	98.0			0.809
	Gamma-Chlordane	79.4	58.7	55.8			3.96

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Heptachlor	74.3	71.1	71.9			1.15
	Heptachlor Epoxide	68.3	78.4	68.2			14.0
	Hexachlorobenzene	78.4	66.0	61.3			7.28
	Hexazinone	85.2	81.0	92.4			13.2
	Imazalil	66.4	63.0	74.0			16.2
	Iprodione	76.2	112	129			13.5
	Kepone	151	212	175			19.1
	Lambda-Cyhalothrin	69.6	70.8	73.1			3.22
	Loratadine	85.4	81.5	94.3			14.5
	Malathion	97.6	82.3	106			25.0
	Metalaxyl	64.2	61.9	69.4			11.4
	Methoprene	61.1	62.9	59.8			5.03
	Methoxychlor	90.2	90.1	89.7			0.504
	Metolachlor	71.9	73.6	85.0			14.3
	Metribuzin	81.4	75.4	83.3			9.95
	Mevinphos	90.3	78.5	94.9			18.9
	MGK-264	88.1	87.8	80.7			8.39
	Mirex	66.5	63.4	62.0			2.20
	Molinate	60.8	76.6	67.1			13.2
	Myclobutanil	75.9	93.8	82.7			12.6
	Naled	71.9	82.5	59.8			31.9
	Napropamide	61.3	68.8	57.1			18.7
	Norflurazon	74.5	86.2	79.9			7.59
	Octinoxate	68.8	69.2	61.0			12.5
	Oxadiazon	67.4	74.7	66.0			10.6
	Oxybenzone	67.7	72.1	65.1			10.2
	Oxychlordane	79.8	74.3	73.8			0.673
	Oxyfluorfen	86.9	118	101			14.9
	Parathion Ethyl	79.0	98.1	80.4			19.9
	Parathion Methyl	104	119	96.3			20.8
	PCB-1016	79.3					
	PCB-1260	102					
	Pendimethalin	70.2	97.8	80.8			19.1
	Permethrin	72.2	77.3	74.1			4.15
	Phenothrin	54.3	63.2	60.0			5.17
	Phenytoin	16.9	47.3	39.2			18.7
	Phorate	72.0	82.3	68.8			17.8
	Piperonyl Butoxide	116	114	105			8.25
	Prallethrin	80.2	81.9	72.5			12.1
	Prodiamine	62.3	88.8	73.8			18.4
	Prometon	70.6	80.3	64.1			22.5
	Prometryn	74.4	76.4	67.0			13.2
	Pronamide	81.1	99.8	83.6			17.7
	Propanil	74.5	85.4	77.1			10.2
	Propargite	91.5	111	96.3			14.3
	Propiconazole	74.6	93.0	86.1			7.66
	Pyraflufen Ethyl	87.2	103	90.0			13.8
	Pyridaben	115	113	101			11.3
	Pyriproxyfen	89.1	97.2	84.5			14.0
	Simazine	80.7	108	99.4			8.08
	Stirophos	73.2	57.5	45.4			23.4
	Sulfentrazone	30.7	90.5	91.7			1.28
	Tau-Fluvalinate	68.5	71.4	77.0			7.58
	Tebuconazole	80.5	99.4	86.3			14.2

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Terbufos	103	112	95.1			16.7
	Terbuthylazine	79.0	84.6	75.2			11.8
	Tetramethrin	106	117	101			14.6
	Thiobencarb	70.1	83.7	73.2			13.4
	Trans-Nonachlor	76.3	75.2	71.7			4.78
	Triadimefon	67.2	64.2	62.0			3.45
	Triclosan Methyl	85.9	81.8	73.7			10.5
	Trifluralin	78.6	77.2	75.9			1.70
EPA 8276	Chlordane	106					
	Toxaphene	105					
EPA 8321B	2,4-D	68.6	101	81.9			20.2
	2,4,5-T	48.5	77.2	65.9			15.7
	3-Hydroxycarbofuran	82.1	88.7	97.6			9.55
	Acesulfame K	147	155	150			3.00
	Acetaminophen	69.3	113	114			1.05
	Acetamiprid	79.5	101	85.8			13.0
	Afidopyropen	56.6	71.1	60.9			15.5
	Aldicarb	69.1	76.5	77.1			0.710
	Aldicarb Sulfone	103	125	117			6.60
	Aldicarb Sulfoxide	101	52.7	47.5			10.4
	AMPA	91.4	88.2	91.4			3.52
	Bentazon	93.3					
	Benzovindiflupyr	87.8					0.121
	Carbamazepine	94.8	113	109			3.54
	Carbaryl	84.4	73.8	69.3			6.34
	Carbofuran	96.4	82.1	77.0			6.34
	Clothianidin	100	127	120			4.69
	Dinotefuran	101					0.943
	Diuron	95.4	86.5	76.0			12.6
	Endothall	70.4	69.3	69.0			0.443
	Fenuron	103	93.9	92.5			1.51
	Fluridone	95.1	92.7	89.7			3.33
	Glufosinate	98.8	95.1	99.5			4.50
	Glyphosate	94.7	94.9	83.6			12.6
	Hydrocodone	87.0	107	101			5.99
	Ibuprofen	85.3	85.6	84.4			1.42
	Imazapyr	90.0	106	107			0.641
	Imidacloprid	91.1	159	157			0.881
	Linuron	84.7	85.4	79.3			7.41
	Mandestrobin	91.1	90.9	87.2			4.14
	MCPP	77.7	111	101			9.52
	Methiocarb	76.6	77.0	75.1			2.55
	Methomyl	87.9	86.4	81.9			5.42
	Naproxen	70.8	76.1	72.8			4.36
	Oxamyl	102	99.8	93.3			6.75
	Primidone	98.9	112	118			4.51
	Propoxur	91.9	85.3	81.7			4.36
	Pyraclostrobin	83.9	96.0	91.1			4.39
	Silvex	48.9	73.5	58.2			23.2
	Sucralose	110	114	114			0.0355
	Thiamethoxam	93.9	136	138			0.714
	Tolfenpyrad	44.7	53.7	49.9			7.25
	Triclopyr	56.1	81.3	69.5			15.6
SM 2320 B-2011	Total Alkalinity	102				0.250	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 2540 C-2011	TDS					2.14	
SM 4500-F- C-2011	Fluoride	100	100	100			0.0
SM 5310 B-2011	Organic Carbon	95.2	93.4	92.4			0.862

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2330820, 2330821
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2330820, 2330821
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2330854, 2330855
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2330854, 2330855
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2330820, 2330821
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2330820, 2330821
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2330822, 2330823
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2330822, 2330823
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2330822, 2330823
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2330822, 2330823
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2330824, 2330825
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2330844, 2330845
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2330842, 2330843
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2330844, 2330845
EPA 8270E	PCBs in water matrices by GC/MS/MS	2330842, 2330843
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2330842, 2330843
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2330834, 2330835
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2330836, 2330837
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2330820, 2330821
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2330854, 2330855
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2330820, 2330821
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2330820, 2330821
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2330820, 2330821
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2330822, 2330823

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	06/01/2022			06/01/2022 14:43	Samantha L Bates	2330820
	06/01/2022			06/01/2022 14:44	Samantha L Bates	2330821
EPA 180.1 Rev. 2.0	06/01/2022			06/01/2022 13:57	Khloe J Berg	2330820
	06/01/2022			06/01/2022 13:58	Khloe J Berg	2330821
EPA 200.7 Rev. 4.4	06/01/2022	06/02/2022 10:10	Emily M Philpot	06/06/2022 17:25	McKinley C Carter	2330855
	06/01/2022	06/02/2022 10:10	Emily M Philpot	06/06/2022 18:37	McKinley C Carter	2330854
	06/01/2022	06/02/2022 10:10	Emily M Philpot	06/08/2022 18:03	McKinley C Carter	2330854
EPA 200.8 Rev. 5.4	06/01/2022	06/02/2022 10:10	Emily M Philpot	06/02/2022 16:43	Alexander Thompson	2330855
	06/01/2022	06/02/2022 10:10	Emily M Philpot	06/02/2022 18:19	Alexander Thompson	2330854
EPA 300.0 Rev. 2.1	06/01/2022			06/08/2022 15:41	Anna M. Plaviak	2330820
	06/01/2022			06/08/2022 15:53	Anna M. Plaviak	2330821
EPA 350.1 Rev. 2.0	06/01/2022			06/10/2022 15:42	Ping Hua	2330822
	06/01/2022			06/14/2022 11:52	Judith K. Clark	2330823
EPA 351.2 Rev. 2.0	06/01/2022	06/09/2022 16:19	Samantha L Bates	06/13/2022 12:06	Alexandra J Mattheus	2330822
	06/01/2022	06/09/2022 16:19	Samantha L Bates	06/13/2022 12:07	Alexandra J Mattheus	2330823
EPA 353.2 Rev. 2.0	06/01/2022			06/10/2022 17:47	Nathaniel J Jones	2330823
	06/01/2022			06/10/2022 17:50	Nathaniel J Jones	2330822
EPA 365.1 Rev. 2.0	06/01/2022	06/03/2022 15:50	Adam P Silver	06/06/2022 13:55	James L Waggerby	2330823
	06/01/2022	06/03/2022 15:50	Adam P Silver	06/06/2022 14:04	James L Waggerby	2330822
EPA 365.1 Rev. 2.0 dissolved	06/01/2022			06/01/2022 13:54	James L Waggerby	2330824
	06/01/2022			06/01/2022 14:07	James L Waggerby	2330825
EPA 8270E	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/08/2022 20:47	Michael Poppell	2330842
	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/08/2022 21:17	Michael Poppell	2330843
	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/08/2022 23:40	Arthur Maknenko	2330842
	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 00:10	Arthur Maknenko	2330843
	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 19:16	Michael Poppell	2330843
	06/01/2022	06/06/2022 08:00	Fe-Val Siddell	06/09/2022 16:15	Vandana T. Nagar	2330844
	06/01/2022	06/06/2022 08:00	Fe-Val Siddell	06/09/2022 16:42	Vandana T. Nagar	2330845
	06/01/2022	06/06/2022 08:00	Fe-Val Siddell	06/10/2022 20:38	Arthur Maknenko	2330844
	06/01/2022	06/06/2022 08:00	Fe-Val Siddell	06/10/2022 20:57	Arthur Maknenko	2330845
EPA 8276	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 05:06	Julie Wi	2330842
	06/01/2022	06/03/2022 08:00	Rasheda Ghaffari	06/09/2022 06:02	Julie Wi	2330843
EPA 8321B	06/01/2022	06/02/2022 10:30	June Rhew	06/04/2022 07:29	Juyoung Kim	2330836
	06/01/2022	06/02/2022 10:30	June Rhew	06/04/2022 08:03	Juyoung Kim	2330837
	06/01/2022	06/02/2022 14:00	Umesh Chiluwal	06/02/2022 18:56	Umesh Chiluwal	2330836
	06/01/2022	06/02/2022 14:00	Umesh Chiluwal	06/03/2022 03:37	Umesh Chiluwal	2330836
	06/01/2022	06/02/2022 14:00	Umesh Chiluwal	06/03/2022 04:03	Umesh Chiluwal	2330837
	06/01/2022	06/02/2022 14:00	Umesh Chiluwal	06/07/2022 11:25	Umesh Chiluwal	2330837
	06/01/2022	06/06/2022 09:00	June Rhew	06/06/2022 16:15	Juyoung Kim	2330834
	06/01/2022	06/06/2022 09:00	June Rhew	06/06/2022 16:49	Juyoung Kim	2330835

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-2011	06/01/2022			06/12/2022 20:56	Dale L. Simmons	2330820
	06/01/2022			06/12/2022 22:05	Dale L. Simmons	2330821
SM 2340 B-2011	06/01/2022			06/06/2022 17:25	McKinley C Carter	2330855
	06/01/2022			06/06/2022 18:37	McKinley C Carter	2330854
SM 2540 C-2011	06/01/2022			06/03/2022 14:44	Ping Hua	2330820, 2330821
SM 2540 D-2011	06/01/2022			06/03/2022 14:44	Ping Hua	2330820
	06/01/2022			06/07/2022 15:26	Blanca Fach	2330821
SM 4500-F- C-2011	06/01/2022			06/12/2022 20:45	Dale L. Simmons	2330820
	06/01/2022			06/12/2022 22:05	Dale L. Simmons	2330821
SM 5310 B-2011	06/01/2022			06/03/2022 05:25	Judith K. Clark	2330822
	06/01/2022			06/03/2022 05:39	Judith K. Clark	2330823