Chemical Analysis Report

SW-DIST-2023-10-26-02

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

Event Description: **Run 8**
Request ID: **RQ-2023-10-23-38**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
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Certified by: Colin Wright, Program Administrator

Date Certified: 16-NOV-2023 08:31

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: 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: LAKE INNISBROOK **Collection Date/Time: 10/25/2023 10:00**

Field ID: G5SW0040 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447416	DEP SOP: NU-094-1	Color (true)	120		PCU	P437054	
	EPA 180.1 Rev. 2.0	Turbidity	8.2		NTU	P437060	
	EPA 300.0 Rev. 2.1	Chloride	190		mg Cl/L	P437503	
		Sulfate	43		mg SO4/L	P437507	
	SM 2320 B-2011	Total Alkalinity	179		mg CaCO3/L	P437159	
	SM 2540 C-2015	TDS	582		mg/L	P437565	
	SM 2540 D-2015	TSS	9	I	mg/L	P437416	
	SM 4500-F- C-2011	Fluoride	0.44		mg F/L	P437162	
2447417	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P437195	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.3		mg N/L	P437063	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.040		mg N/L	P437365	
	EPA 365.1 Rev. 2.0	Total-P	0.58		mg P/L	P437069	
	SM 5310 B-2011	Organic Carbon	21		mg C/L	P437266	
2447429	EPA 8321B	Aldicarb	0.020	U	ug/L	P436913	MS
		Aldicarb Sulfone	0.0020	U	ug/L	P436913	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P436913	MS
		Carbaryl	0.0020	U	ug/L	P436913	MS
		Carbofuran	0.0020	U	ug/L	P436913	MS
		3-Hydroxycarbofuran	0.0020	U	ug/L	P436913	
		Methiocarb	0.0020	U	ug/L	P436913	
		Methomyl	0.0020	U	ug/L	P436913	MS
		Oxamyl	0.0020	U	ug/L	P436913	
		Propoxur	0.0020	U	ug/L	P436913	MS
2447430		2,4-D	0.015		ug/L	P437027	
		Acesulfame K	0.10	U	ug/L	P437019	
		2,4,5-T	0.0040	U	ug/L	P437027	
		AMPA	0.34	I	ug/L	P437019	
		Acetaminophen	0.0080	U	ug/L	P437027	
		Acetamiprid	0.0020	U	ug/L	P437027	
		Endothall	0.25	U	ug/L	P437019	
		Glufosinate	0.10	U	ug/L	P437019	
		Glyphosate	1.5		ug/L	P437019	
		Afidopyropen	0.0020	U	ug/L	P437027	
		Bentazon	0.044		ug/L	P437027	
		Sucralose	45		ug/L	P437019	
		Benzovindiflupyr	0.0020	U	ug/L	P437027	
		Carbamazepine	0.019		ug/L	P437027	
		Clothianidin	0.0020	U	ug/L	P437027	
		Dinotefuran	0.0036	I	ug/L	P437027	
		Diuron	0.0020	I	ug/L	P437027	
		Fenuron	0.032	U	ug/L	P437027	
		Fluridone	8.0E-04	U	ug/L	P437027	
		Imazapyr	0.047		ug/L	P437027	
		Hydrocodone	0.0020	U	ug/L	P437027	

Field ID: G5SW0040 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447430	EPA 8321B	Ibuprofen	0.080	U	ug/L	P437027	
		Imidacloprid	0.0050	I	ug/L	P437027	
		Linuron	0.0040	U	ug/L	P437027	
		Mandestrobin	0.0020	U	ug/L	P437027	
		MCPP	0.0024	I	ug/L	P437027	
		Naproxen	0.0080	U	ug/L	P437027	
		Primidone	0.057		ug/L	P437027	
		Pyraclostrobin	0.0020	U	ug/L	P437027	
		Silvex	0.0040	U	ug/L	P437027	
		Thiamethoxam	0.0020	U	ug/L	P437027	
		Tolfenpyrad	0.0020	U	ug/L	P437027	
		Triclopyr	0.0040	U	ug/L	P437027	
2447432	EPA 8270E	Aldrin	0.67	U	ng/L	P437200	
		Alpha-BHC	0.10	U	ng/L	P437200	MS
		Alpha-Chlordane	0.21	U	ng/L	P437200	
		PCB-1016	2.1	U	ng/L	P437200	
		Beta-BHC	0.10	U	ng/L	P437200	RPD
		PCB-1221	2.1	U	ng/L	P437200	
		Beta-Cyfluthrin	1.3	U	ng/L	P437200	
		PCB-1232	2.1	U	ng/L	P437200	
		Bifenthrin	0.52	U	ng/L	P437200	
		PCB-1242	2.1	U	ng/L	P437200	
		PCB-1248	2.1	U	ng/L	P437200	
		Chlorothalonil	3.7	U	ng/L	P437200	
		PCB-1254	2.1	U	ng/L	P437200	
		Cis-Nonachlor	0.21	U	ng/L	P437200	
		PCB-1260	2.1	U	ng/L	P437200	
		Cypermethrin	1.6	U	ng/L	P437200	
		Dacthal	0.16	U	ng/L	P437200	RPD
		DDD-p,p'	0.26	U	ng/L	P437200	
		DDE-p,p'	0.21	U	ng/L	P437200	
		DDT-p,p'	0.83	U	ng/L	P437200	
		Delta-BHC	0.41	U	ng/L	P437200	
		Deltamethrin	1.3	U	ng/L	P437200	
		Dichlobenil	0.26	U	ng/L	P437200	
		Dicofol	1.3	U	ng/L	P437200	
		Dieldrin	0.41	U	ng/L	P437200	
		Endosulfan I	0.41	U	ng/L	P437200	
		Endosulfan II	0.93	U	ng/L	P437200	
		Endosulfan Sulfate	0.31	U	ng/L	P437200	
		Endrin	0.93	U	ng/L	P437200	
		Endrin Aldehyde	0.78	U	ng/L	P437200	
		Endrin Ketone	0.41	U	ng/L	P437200	RPD
		Esfenvalerate	0.78	U	ng/L	P437200	
		Ethalfluralin	0.16	U	ng/L	P437200	MS

Field ID: G5SW0040 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447432	EPA 8270E	Fenpropathrin	0.26	U	ng/L	P437200	
		Gamma-BHC	0.13	U	ng/L	P437200	
		Gamma-Chlordane	0.21	U	ng/L	P437200	
		Heptachlor	0.21	U	ng/L	P437200	
		Heptachlor Epoxide	0.26	U	ng/L	P437200	
		Hexachlorobenzene**	1.0	U	ng/L	P437200	
		Kepone	14	U	ng/L	P437200	
		Lambda-Cyhalothrin	0.78	U	ng/L	P437200	
		Methoprene	0.78	U	ng/L	P437200	
		Methoxychlor	0.31	U	ng/L	P437200	
		MGK-264	0.21	U	ng/L	P437200	
		Mirex	0.36	U	ng/L	P437200	
		Oxychlordane	0.31	U	ng/L	P437200	
		Permethrin	1.7	U	ng/L	P437200	
		Phenothrin	0.93	U	ng/L	P437200	
		Piperonyl Butoxide	0.19	I	ng/L	P437200	
		Prallethrin	2.1	U	ng/L	P437200	
		Tau-Fluvalinate	0.26	U	ng/L	P437200	
		Tetramethrin	0.78	U	ng/L	P437200	
		Trans-Nonachlor	0.21	U	ng/L	P437200	
		Triclosan Methyl	0.16	U	ng/L	P437200	
		Trifluralin	0.21	U	ng/L	P437200	
	EPA 8276	Chlordane	2.1	U	ng/L	P437200	MS
		Toxaphene	16	U	ng/L	P437200	
2447433	EPA 8270E	Oxybenzone**	10	U	ng/L	P436999	
		Acetochlor	0.21	U	ng/L	P436999	
		Octinoxate**	160	U	ng/L	P436999	
		Alachlor	0.41	U	ng/L	P436999	
		Avobenzone**	100	U	ng/L	P436999	
		Ametryn	1.1	U	ng/L	P436999	
		Atrazine	9.7		ng/L	P436999	
		PBDE-47**	4.1	U	ng/L	P436999	
		Atrazine Desethyl	1.3	U	ng/L	P436999	
		PBDE-99**	5.2	U	ng/L	P436999	
		Azinphos Methyl	3.1	U	ng/L	P436999	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P436999	
		Azoxystrobin	0.41	U	ng/L	P436999	
		Bromacil	0.62	U	ng/L	P436999	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P436999	
		Butylate	0.47	U	ng/L	P436999	
		Dechlorane Plus**	31	U	ng/L	P436999	
		Caffeine**	30	I	ng/L	P436999	
		Dechlorane 602**	5.2	U	ng/L	P436999	
		Carbophenothion	0.52	U	ng/L	P436999	

Field ID: G5SW0040 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447433	EPA 8270E	Dechlorane 603**	4.1	U	ng/L	P436999	
		Carfentrazone Ethyl	0.16	U	ng/L	P436999	MS
		Hexabromobenzene**	6.2	U	ng/L	P436999	
		Chlorfenapyr	0.31	U	ng/L	P436999	
		PBB-153**	6.2	U	ng/L	P436999	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P436999	
		Pentabromotoluene**	3.1	U	ng/L	P436999	
		Chlorpyrifos Methyl	0.10	U	ng/L	P436999	
		Tris(2-chloroethyl) phosphate (TCEP)**	57	UJ	ng/L	P436999	LCS, RPD
		Coumaphos	1.1	U	ng/L	P436999	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	150		ng/L	P436999	
		Cyanazine	5.2	U	ng/L	P436999	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	16	J	ng/L	P436999	LCS
		Cyprodinil	0.21	U	ng/L	P436999	
		Tetradecachloro-m-terphenyl**	7.8	UJ	ng/L	P436999	CCV
		Demeton	3.6	U	ng/L	P436999	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	62	U	ng/L	P436999	
		Diazinon	0.13	U	ng/L	P436999	
		Difenoconazole	0.62	U	ng/L	P436999	
		Dimethenamid	0.10	U	ng/L	P436999	
		Dimethomorph	0.31	U	ng/L	P436999	
		Disulfoton	0.62	U	ng/L	P436999	
		Dithiopyr	2.0	I J	ng/L	P436999	CCV
		EPTC	0.52	U	ng/L	P436999	
		Ethion	0.31	U	ng/L	P436999	
		Ethoprop	0.13	U	ng/L	P436999	
		Etridiazole	0.10	U	ng/L	P436999	
		Fenamiphos	0.47	U	ng/L	P436999	
		Fenbuconazole	0.52	U	ng/L	P436999	
		Fipronil	0.21	U	ng/L	P436999	
		Fipronil Desulfinyl**	0.10	U	ng/L	P436999	
		Fipronil Sulfide	0.24	I	ng/L	P436999	
		Fipronil Sulfone	1.1		ng/L	P436999	
		Fluazifop-P-butyl	0.10	U	ng/L	P436999	
		Fludioxonil	0.10	U	ng/L	P436999	
		Flumioxazin	3.1	U	ng/L	P436999	
		Flutolanil	0.92		ng/L	P436999	
		Fluxapyroxad	0.26	U	ng/L	P436999	MS
		Fonofos	0.16	U	ng/L	P436999	
		Hexazinone	0.52	U	ng/L	P436999	
		Imazalil	0.67	U	ng/L	P436999	
		Iprodione	0.52	U	ng/L	P436999	
		Loratadine**	0.31	U	ng/L	P436999	MS
		Malathion	0.36	U	ng/L	P436999	

Field ID: G5SW0040 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447433	EPA 8270E	Metalaxyl	0.52	U	ng/L	P436999	
		Metolachlor	0.78	U	ng/L	P436999	
		Metribuzin	0.41	U	ng/L	P436999	
		Mevinphos	1.0	U	ng/L	P436999	
		Molinate	0.26	U	ng/L	P436999	
		Myclobutanil	0.36	U	ng/L	P436999	
		Naled	2.6	U	ng/L	P436999	
		Napropamide	0.72	U	ng/L	P436999	
		Norflurazon	1.0	U	ng/L	P436999	
		Oxadiazon	11		ng/L	P436999	
		Oxyfluorfen	0.21	U	ng/L	P436999	
		Parathion Ethyl	0.16	U	ng/L	P436999	
		Parathion Methyl	0.21	U	ng/L	P436999	
		Pendimethalin	1.8	U	ng/L	P436999	
		Phenytoin**	5.5	U	ng/L	P436999	
		Phorate	0.26	UJ	ng/L	P436999	LCS
		Prodiamine	0.21	U	ng/L	P436999	
		Prometon	3.1	UJ	ng/L	P436999	LCS
		Prometryn	0.36	U	ng/L	P436999	
		Pronamide	0.10	U	ng/L	P436999	
		Propanil	0.10	U	ng/L	P436999	
		Propargite	0.83	U	ng/L	P436999	
		Propiconazole	0.62	U	ng/L	P436999	
		Pyraflufen Ethyl	0.31	U	ng/L	P436999	
		Pyridaben	1.4	U	ng/L	P436999	
		Pyriproxyfen	0.26	U	ng/L	P436999	
		Simazine	0.26	U	ng/L	P436999	
		Stirophos	0.41	U	ng/L	P436999	
		Sulfentrazone	32	J	ng/L	P436999	
		Tebuconazole	2.4	I	ng/L	P436999	
		Terbufos	0.21	U	ng/L	P436999	
		Terbuthylazine	0.21	U	ng/L	P436999	
		Thiobencarb	0.52	U	ng/L	P436999	
		Triadimefon	0.16	U	ng/L	P436999	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. Estimation for sulfentrazone due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: KLOSTERMAN CREEK INNISBROOK GOLF COURSE **Collection Date/Time: 10/25/2023 10:30**

Field ID: G5SW0171 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447428	EPA 8321B	2,4-D	0.058		ug/L	P437027	
		Acesulfame K	0.10	U	ug/L	P437019	
		2,4,5-T	0.0040	U	ug/L	P437027	
		AMPA	2.3		ug/L	P437019	
		Acetaminophen	0.0080	U	ug/L	P437027	
		Acetamiprid	0.0020	U	ug/L	P437027	
		Endothall	0.25	U	ug/L	P437019	
		Glufosinate	0.10	U	ug/L	P437019	
		Glyphosate	10		ug/L	P437019	
		Afidopyropen	0.0020	U	ug/L	P437027	
		Bentazon	0.070		ug/L	P437027	
		Sucralose	13		ug/L	P437019	
		Benzovindiflupyr	0.0020	U	ug/L	P437027	
		Carbamazepine	0.0084		ug/L	P437027	
		Clothianidin	0.0023	I	ug/L	P437027	
		Dinotefuran	0.0034	I	ug/L	P437027	
		Diuron	0.0020	U	ug/L	P437027	
		Fenuron	0.032	U	ug/L	P437027	
		Fluridone	0.044		ug/L	P437027	
		Imazapyr	0.12		ug/L	P437027	
		Hydrocodone	0.0020	U	ug/L	P437027	
		Ibuprofen	0.080	U	ug/L	P437027	
		Imidacloprid	0.0086		ug/L	P437027	
		Linuron	0.0040	U	ug/L	P437027	
		Mandestrobin	0.0020	U	ug/L	P437027	
		MCPP	0.0020	U	ug/L	P437027	
		Naproxen	0.0080	U	ug/L	P437027	
		Primidone	0.021		ug/L	P437027	
		Pyraclostrobin	0.0020	U	ug/L	P437027	
		Silvex	0.0040	U	ug/L	P437027	
		Thiamethoxam	0.0020	U	ug/L	P437027	
		Tolfenpyrad	0.0020	U	ug/L	P437027	
		Triclopyr	0.0040	U	ug/L	P437027	

Sample Location: BOGGY BAYOU NORTH **Collection Date/Time: 10/25/2023 11:15**

Field ID: G5SW0080 Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447418	DEP SOP: NU-094-1	Color (true)	12		PCU	P437054	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P437060	
	EPA 300.0 Rev. 2.1	Chloride	1.9E+04		mg Cl/L	P437503	
		Sulfate	2.6E+03		mg SO4/L	P437507	
	SM 2320 B-2011	Total Alkalinity	137		mg CaCO3/L	P437315	
	SM 2540 C-2015	TDS	3.18E+04		mg/L	P437566	
	SM 2540 D-2015	TSS	7	I A	mg/L	P437418	
	SM 4500-F- C-2011	Fluoride	1.2		mg F/L	P437317	
2447419	EPA 350.1 Rev. 2.0	Ammonia-N	0.034		mg N/L	P437198	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.81		mg N/L	P437234	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.032		mg N/L	P437700	
	EPA 365.1 Rev. 2.0	Total-P	0.015		mg P/L	P437174	
	SM 5310 B-2011	Organic Carbon	7.8		mg C/L	P437324	

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

Sample Location: CEDAR CRK AT PINEHURST **Collection Date/Time: 10/25/2023 13:10**

Field ID: G5SW0129 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447427	EPA 8321B	2,4-D	0.59		ug/L	P437027	
		Acesulfame K	0.10	U	ug/L	P437019	
		2,4,5-T	0.0040	U	ug/L	P437027	
		AMPA	1.0		ug/L	P437019	
		Acetaminophen	0.0080	U	ug/L	P437027	
		Acetamiprid	0.0020	U	ug/L	P437027	
		Endothall	0.25	U	ug/L	P437019	
		Glufosinate	0.10	U	ug/L	P437019	
		Glyphosate	4.1		ug/L	P437019	
		Afidopyropen	0.0020	U	ug/L	P437027	
		Bentazon	0.048		ug/L	P437027	
		Sucralose	8.2		ug/L	P437019	
		Benzovindiflupyr	0.0020	U	ug/L	P437027	
		Carbamazepine	0.0014	I	ug/L	P437027	
		Clothianidin	0.020		ug/L	P437027	
		Dinotefuran	0.0096		ug/L	P437027	
		Diuron	0.0020	U	ug/L	P437027	
		Fenuron	0.032	U	ug/L	P437027	
		Fluridone	0.0015	I	ug/L	P437027	
		Imazapyr	0.23		ug/L	P437027	
		Hydrocodone	0.0020	U	ug/L	P437027	
		Ibuprofen	0.080	U	ug/L	P437027	
		Imidacloprid	0.088		ug/L	P437027	
		Linuron	0.0040	U	ug/L	P437027	
		Mandestrobin	0.0020	U	ug/L	P437027	
		MCPP	0.0059	I	ug/L	P437027	
		Naproxen	0.0080	U	ug/L	P437027	
		Primidone	0.018		ug/L	P437027	
		Pyraclostrobin	0.0020	U	ug/L	P437027	
		Silvex	0.0040	U	ug/L	P437027	
		Thiamethoxam	0.0020	U	ug/L	P437027	
		Tolfenpyrad	0.0020	U	ug/L	P437027	
		Triclopyr	0.0040	U	ug/L	P437027	
2447431	EPA 8270E	Aldrin	0.72	U	ng/L	P437200	
		Alpha-BHC	0.11	UJ	ng/L	P437200	MS
		Alpha-Chlordane	0.22	U	ng/L	P437200	
		PCB-1016	2.2	U	ng/L	P437200	
		Beta-BHC	0.11	UJ	ng/L	P437200	RPD
		PCB-1221	2.2	U	ng/L	P437200	
		Beta-Cyfluthrin	1.4	U	ng/L	P437200	
		PCB-1232	2.2	U	ng/L	P437200	
		Bifenthrin	0.55	U	ng/L	P437200	
		PCB-1242	2.2	U	ng/L	P437200	
		PCB-1248	2.2	U	ng/L	P437200	

Field ID: G5SW0129 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447431	EPA 8270E	Chlorothalonil	4.0	U	ng/L	P437200	
		PCB-1254	2.2	U	ng/L	P437200	
		Cis-Nonachlor	0.22	U	ng/L	P437200	
		PCB-1260	2.2	U	ng/L	P437200	
		Cypermethrin	1.7	U	ng/L	P437200	
		Dacthal	0.17	UJ	ng/L	P437200	RPD
		DDD-p,p'	0.28	U	ng/L	P437200	
		DDE-p,p'	0.22	U	ng/L	P437200	
		DDT-p,p'	0.88	U	ng/L	P437200	
		Delta-BHC	0.44	U	ng/L	P437200	
		Deltamethrin	1.4	U	ng/L	P437200	
		Dichlobenil	0.28	U	ng/L	P437200	
		Dicofol	1.4	U	ng/L	P437200	
		Dieldrin	0.44	U	ng/L	P437200	
		Endosulfan I	0.44	U	ng/L	P437200	
		Endosulfan II	0.99	U	ng/L	P437200	
		Endosulfan Sulfate	0.33	U	ng/L	P437200	
		Endrin	0.99	U	ng/L	P437200	
		Endrin Aldehyde	0.83	U	ng/L	P437200	
		Endrin Ketone	0.44	UJ	ng/L	P437200	RPD
		Esfenvalerate	0.83	U	ng/L	P437200	
		Ethalfluralin	0.17	UJ	ng/L	P437200	MS
		Fenpropathrin	0.28	U	ng/L	P437200	
		Gamma-BHC	0.14	U	ng/L	P437200	
		Gamma-Chlordane	0.22	U	ng/L	P437200	
		Heptachlor	0.22	U	ng/L	P437200	
		Heptachlor Epoxide	0.45	I	ng/L	P437200	
		Hexachlorobenzene**	1.1	U	ng/L	P437200	
		Kepone	15	U	ng/L	P437200	
		Lambda-Cyhalothrin	0.83	U	ng/L	P437200	
		Methoprene	0.83	U	ng/L	P437200	
		Methoxychlor	0.33	U	ng/L	P437200	
		MGK-264	0.22	U	ng/L	P437200	
		Mirex	0.39	U	ng/L	P437200	
		Oxychlordane	0.33	U	ng/L	P437200	
		Permethrin	1.8	U	ng/L	P437200	
		Phenothrin	0.99	U	ng/L	P437200	
		Piperonyl Butoxide	0.17	U	ng/L	P437200	
		Prallethrin	2.2	U	ng/L	P437200	
		Tau-Fluvalinate	0.28	U	ng/L	P437200	
		Tetramethrin	0.83	U	ng/L	P437200	
		Trans-Nonachlor	0.22	U	ng/L	P437200	
		Triclosan Methyl	0.17	U	ng/L	P437200	
		Trifluralin	0.22	U	ng/L	P437200	
	EPA 8276	Chlordane	2.2	U	ng/L	P437200	MS

Field ID: G5SW0129 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447431	EPA 8276	Toxaphene	17	U	ng/L	P437200	

Ref. Method and Comment:
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: HARBOR LAKE AT CENTER **Collection Date/Time: 10/25/2023 13:30**

Field ID: G1SW0126 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447414	DEP SOP: NU-094-1	Color (true)	18	A	PCU	P437054	
	EPA 180.1 Rev. 2.0	Turbidity	0.80	I	NTU	P437060	
	EPA 300.0 Rev. 2.1	Chloride	45		mg Cl/L	P437503	
		Sulfate	46		mg SO4/L	P437507	
	SM 2320 B-2011	Total Alkalinity	42	A	mg CaCO3/L	P437159	
	SM 2540 C-2015	TDS	168		mg/L	P437565	
	SM 2540 D-2015	TSS	2	U	mg/L	P437416	
	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P437162	
2447415	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P437195	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P437065	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437365	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P437069	
	SM 5310 B-2011	Organic Carbon	8.0		mg C/L	P437266	

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

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P437054

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437060

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437503

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437507

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437195

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437198

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437065

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437234

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437365

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437700

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437069

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437174

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

Reference Method: EPA 8270E
Batch ID: P436999

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P436999

Component	Result	Code	Units
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P436999

Component	Result	Code	Units
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8270E
Batch ID: P437200

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P437200

Component	Result	Code	Units
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P437200

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

Reference Method: EPA 8321B
Batch ID: P436913

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P437019

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: P437027

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

Reference Method: SM 2320 B-2011
Batch ID: P437159

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

Reference Method: SM 2320 B-2011
Batch ID: P437315

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2540 C-2015
Batch ID: P437565

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-2015
Batch ID: P437566

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P437416

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P437418

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P437162

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 4500-F- C-2011
Batch ID: P437317

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P437266

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

Reference Method: SM 5310 B-2011
Batch ID: P437324

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: P437054

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437060

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437503

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437507

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437195

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437198

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437065

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437234

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437365

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437700

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437069

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437174

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

Reference Method: EPA 8270E
Batch ID: P436999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	68.9		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.3		P	37 - 154
Acetochlor	100		P	64 - 124
Alachlor	96.2		P	61 - 118
Ametryn	98.5		P	47 - 158
Atrazine	98.0		P	68 - 121
Atrazine Desethyl	81.2		P	30 - 119
Avobenzone	130		P	48 - 193
Azinphos Methyl	165		P	30 - 194
Azoxystrobin	105		P	58 - 154
Bromacil	70.6		P	47 - 126
Butylate	55.1		P	31 - 83.0
Caffeine	96.7		P	10 - 180
Carbophenothion	111		P	59 - 133
Carfentrazone Ethyl	113		P	59 - 147
Chlorfenapyr	67.6		P	52 - 118
Chlorpyrifos Ethyl	76.9		P	59 - 119
Chlorpyrifos Methyl	80.6		P	65 - 123
Coumaphos	146		P	11 - 223
Cyanazine	149		P	63 - 250
Cyprodinil	116		P	52 - 143
Dechlorane 602	49.9		P	23 - 142
Dechlorane 603	120		P	51 - 171
Dechlorane Plus	98.5		P	46 - 161
Demeton	103		P	42 - 119
Diazinon	98.4		P	67 - 132
Difenoconazole	99.8		P	12 - 204
Dimethenamid	85.5		P	53 - 113

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P436999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dimethomorph	110		P	13 - 238
Disulfoton	79.6		P	56 - 126
Dithiopyr	89.1		P	58 - 127
EPTC	60.8		P	31 - 78.0
Ethion	67.8		P	24 - 127
Ethoprop	85.9		P	60 - 118
Etridiazole	72.8		P	32 - 91.0
Fenamiphos	75.6		P	54 - 129
Fenbuconazole	77.1		P	31 - 162
Fipronil	82.7		P	56 - 131
Fipronil Desulfinyl	60.7		P	58 - 132
Fipronil Sulfide	74.5		P	51 - 123
Fipronil Sulfone	72.2		P	50 - 125
Fluazifop-P-butyl	59.7		P	52 - 132
Fludioxonil	62.7		P	52 - 129
Flumioxazin	98.0		P	34 - 250
Flutolanil	67.6		P	45 - 128
Fluxapyroxad	147		P	31 - 150
Fonofos	85.3		P	60 - 116
Hexabromobenzene	114		P	52 - 165
Hexazinone	92.0		P	59 - 120
Imazalil	66.7		P	39 - 134
Iprodione	122		P	39 - 243
Loratadine	206		P	10 - 240
Malathion	129		P	53 - 145
Metalaxyl	84.5		P	59 - 120
Metolachlor	97.3		P	64 - 122
Metribuzin	98.3		P	33 - 128
Mevinphos	84.6		P	48 - 119
Molinate	70.4		P	42 - 89.0
Myclobutanil	100		P	54 - 129
Naled	69.1		P	10 - 138
Napropamide	50.7		P	40 - 122
Norflurazon	106		P	49 - 132
Octinoxate	119		P	29 - 176
Oxadiazon	57.8		P	50 - 115
Oxybenzone	131		P	45 - 145
Oxyfluorfen	94.6		P	62 - 149
Parathion Ethyl	102		P	68 - 119
Parathion Methyl	109		P	68 - 147
PBB-153	136		P	42 - 179
PBDE-47	96.0		P	44 - 141
PBDE-99	78.2		P	36 - 141
Pendimethalin	92.6		P	59 - 158
Pentabromotoluene	102		P	58 - 148
Phenytoin	19.8		P	10 - 151
Phorate	126		F	44 - 124
Prodiamine	84.2		P	10 - 136
Prometon	144		F	45 - 131
Prometryn	120		P	52 - 140
Pronamide	116		P	70 - 129
Propanil	110		P	54 - 144

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P436999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propargite	78.3		P	10 - 191
Propiconazole	79.7		P	49 - 128
Pyraflufen Ethyl	122		P	46 - 141
Pyridaben	156		P	29 - 198
Pyriproxyfen	115		P	33 - 221
Simazine	110		P	62 - 119
Stirophos	32.0		P	13 - 144
Sulfentrazone	59.4		P	12 - 152
Tebuconazole	73.4		P	10 - 135
Terbufos	104		P	67 - 136
Terbuthylazine	108		P	66 - 113
Tetradecachloro-m-terphenyl	193		P	30 - 235
Thiobencarb	104		P	51 - 125
Tri-o-cresyl Phosphate	118		P	50 - 150
Triadimefon	84.3		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	70.8		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	53.5		F	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	53.4		F	59 - 166

Reference Method: EPA 8270E
Batch ID: P437200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	33.2		P	30 - 96.0
Alpha-BHC	75.0		P	70 - 109
Alpha-Chlordane	58.6		P	45 - 107
Beta-BHC	76.6		P	64 - 138
Beta-Cyfluthrin	42.7		P	17 - 141
Bifenthrin	32.7		P	10 - 113
Chlorothalonil	45.9		P	26 - 180
Cis-Nonachlor	44.2		P	37 - 102
Cypermethrin	44.8		P	20 - 133
Dacthal	74.9		P	69 - 114
DDD-p,p'	52.4		P	42 - 105
DDE-p,p'	55.8		P	42 - 106
DDT-p,p'	58.4		P	42 - 107
Delta-BHC	75.3		P	67 - 144
Deltamethrin	69.7		P	15 - 149
Dichlobenil	54.6		P	46 - 117
Dicofol	64.9		P	34 - 114
Dieldrin	59.3		P	50 - 108
Endosulfan I	61.8		P	55 - 104
Endosulfan II	70.9		P	51 - 111
Endosulfan Sulfate	58.0		P	56 - 121
Endrin	46.8		P	10 - 106
Endrin Aldehyde	44.2		P	34 - 114
Endrin Ketone	87.8		P	63 - 177
Esfenvalerate	46.4		P	29 - 143
Ethalfluralin	47.3		P	46 - 96.0
Fenpropathrin	35.9		P	28 - 115
Gamma-BHC	71.9		P	65 - 121
Gamma-Chlordane	56.7		P	39 - 103

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	56.3		P	39 - 94.0
Heptachlor Epoxide	70.7		P	54 - 104
Hexachlorobenzene	39.5		P	36 - 100
Kepone	31.0		P	10 - 225
Lambda-Cyhalothrin	31.2		P	10 - 135
Methoprene	23.8		P	10 - 109
Methoxychlor	57.0		P	52 - 112
MGK-264	49.8		P	44 - 117
Mirex	39.6		P	20 - 90.0
Oxychlordane	62.8		P	44 - 102
PCB-1016	86.1		P	45 - 107
PCB-1260	76.8		P	40 - 118
Permethrin	43.1		P	18 - 135
Phenothrin	32.3		P	10 - 102
Piperonyl Butoxide	67.1		P	28 - 156
Prallethrin	48.2		P	28 - 113
Tau-Fluvalinate	38.0		P	10 - 123
Tetramethrin	53.1		P	18 - 158
Trans-Nonachlor	39.2		P	39 - 104
Triclosan Methyl	59.5		P	54 - 108
Trifluralin	46.7		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P437200

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	63.1		P	52 - 117
Toxaphene	68.2		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P436913

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	75.8		P	40 - 150
Aldicarb	50.6		P	30 - 150
Aldicarb Sulfone	90.8		P	40 - 150
Aldicarb Sulfoxide	123		P	40 - 150
Carbaryl	68.5		P	40 - 150
Carbofuran	73.1		P	40 - 150
Methiocarb	65.1		P	40 - 150
Methomyl	80.7		P	40 - 150
Oxamyl	87.8		P	40 - 150
Propoxur	73.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437019

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	130		P	40 - 150
AMPA	98.6		P	40 - 160
Endothall	93.1		P	40 - 160
Glufosinate	101		P	40 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437019

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	94.6		P	40 - 160
Sucralose	117		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437027

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	72.5		P	40 - 150
2,4,5-T	82.3		P	40 - 150
Acetaminophen	88.5		P	30 - 150
Acetamiprid	79.4		P	40 - 150
Afidopyropen	69.4		P	30 - 150
Bentazon	86.1		P	30 - 150
Benzovindiflupyr	81.5		P	40 - 150
Carbamazepine	79.8		P	40 - 150
Clothianidin	88.0		P	40 - 150
Dinotefuran	99.3		P	40 - 150
Diuron	80.8		P	40 - 150
Fenuron	89.9		P	40 - 150
Fluridone	83.6		P	40 - 150
Hydrocodone	90.4		P	40 - 150
Ibuprofen	62.8		P	40 - 150
Imazapyr	83.4		P	40 - 150
Imidacloprid	83.2		P	40 - 150
Linuron	76.9		P	40 - 150
Mandestrobin	86.3		P	40 - 150
MCPP	89.4		P	40 - 150
Naproxen	65.3		P	40 - 150
Primidone	83.6		P	40 - 150
Pyraclostrobin	81.7		P	40 - 150
Silvex	72.0		P	40 - 150
Thiamethoxam	84.8		P	40 - 150
Tolfenpyrad	51.2		P	30 - 150
Triclopyr	86.2		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P437159

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.8		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P437315

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.6		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P437565

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	94.8		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P437566

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	98.8		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P437416

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	109		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P437418

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	105		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P437162

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

Reference Method: SM 4500-F- C-2011
Batch ID: P437317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.6		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437266

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

Reference Method: SM 5310 B-2011
Batch ID: P437324

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.2		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437503

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447305	Chloride	103		P	90 - 110
2447362	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447305	Sulfate	103		P	90 - 110
2447362	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437195

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447415	Ammonia-N	96.8	98.6	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437198

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447419	Ammonia-N	106	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447104	Kjeldahl Nitrogen	106	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447193	Kjeldahl Nitrogen	95.7	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437234

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447356	Kjeldahl Nitrogen	102	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437365

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447341	NO2NO3-N	94.5	94.0	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447419	NO2NO3-N	98.6	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437069

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447415	Total-P	104	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447419	Total-P	99.1	98.5	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P436999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447011	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	62.6	69.2	P/P	50 - 150
2447011	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	85.1	95.7	P/P	29 - 155
2447011	Acetochlor	111	99.5	P/P	60 - 124
2447011	Alachlor	88.6	91.8	P/P	54 - 122
2447011	Ametryn	77.1	77.0	P/P	51 - 208
2447011	Atrazine Desethyl	71.3	71.7	P/P	13 - 124
2447011	Avobenzone	117	124	P/P	35 - 187
2447011	Azinphos Methyl	176	185	P/P	43 - 276
2447011	Azoxystrobin	99.5	102	P/P	52 - 300
2447011	Bromacil	67.2	67.6	P/P	44 - 134
2447011	Butylate	63.8	54.9	P/P	23 - 82.0
2447011	Caffeine	100	93.8	P/P	10 - 277
2447011	Carbophenothion	121	131	P/P	47 - 135
2447011	Carfentrazone Ethyl	121	149	P/F	46 - 147
2447011	Chlorfenapyr	75.6	82.9	P/P	43 - 114
2447011	Chlorpyrifos Ethyl	75.4	66.9	P/P	47 - 124
2447011	Chlorpyrifos Methyl	68.8	81.1	P/P	60 - 135
2447011	Coumaphos	112	162	P/P	10 - 222
2447011	Cyanazine	168	133	P/P	10 - 257
2447011	Cyprodinil	116	115	P/P	42 - 148
2447011	Dechlorane 602	49.5	55.0	P/P	14 - 133
2447011	Dechlorane 603	88.3	101	P/P	18 - 191
2447011	Dechlorane Plus	76.6	77.1	P/P	23 - 154
2447011	Demeton	134	129	P/P	41 - 137
2447011	Diazinon	101	91.6	P/P	64 - 139
2447011	Difenoconazole	85.2	63.2	P/P	46 - 254
2447011	Dimethenamid	97.8	90.7	P/P	47 - 117
2447011	Dimethomorph	101	100	P/P	14 - 255
2447011	Disulfoton	68.0	73.4	P/P	52 - 130
2447011	Dithiopyr	99.2	87.4	P/P	40 - 121
2447011	EPTC	65.3	58.0	P/P	19 - 78.0
2447011	Ethion	96.4	106	P/P	12 - 124
2447011	Ethoprop	88.1	93.2	P/P	68 - 144
2447011	Etridiazole	92.8	75.1	P/P	26 - 96.0
2447011	Fenamiphos	76.3	82.1	P/P	41 - 129
2447011	Fenbuconazole	85.3	107	P/P	26 - 169
2447011	Fipronil	83.9	84.9	P/P	46 - 145
2447011	Fipronil Desulfinyl	49.5	47.5	P/P	47 - 136
2447011	Fipronil Sulfide	64.4	76.2	P/P	41 - 127
2447011	Fipronil Sulfone	70.3	85.8	P/P	35 - 133

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P436999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447011	Fluazifop-P-butyl	70.3	75.6	P/P	46 - 131
2447011	Fludioxonil	78.6	77.4	P/P	51 - 124
2447011	Flumioxazin	97.2	65.8	P/P	10 - 289
2447011	Flutolanil	113	121	P/P	34 - 130
2447011	Fluxapyroxad	422	465	F/F	10 - 197
2447011	Fonofos	70.5	74.5	P/P	42 - 131
2447011	Hexabromobenzene	111	119	P/P	47 - 178
2447011	Hexazinone	92.1	92.5	P/P	64 - 125
2447011	Imazalil	71.8	90.4	P/P	37 - 252
2447011	Iprodione	124	156	P/P	34 - 265
2447011	Loratadine	206	267	P/F	20 - 231
2447011	Malathion	152	128	P/P	34 - 164
2447011	Metalaxyl	92.1	96.4	P/P	49 - 125
2447011	Metolachlor	111	99.1	P/P	54 - 125
2447011	Metribuzin	100	90.6	P/P	51 - 139
2447011	Mevinphos	79.4	79.3	P/P	46 - 130
2447011	Molinate	83.7	72.1	P/P	39 - 93.0
2447011	Myclobutanil	129	111	P/P	50 - 130
2447011	Naled	78.9	72.4	P/P	10 - 150
2447011	Napropamide	59.5	58.5	P/P	10 - 109
2447011	Norflurazon	120	125	P/P	36 - 134
2447011	Octinoxate	106	108	P/P	18 - 170
2447011	Oxybenzone	107	111	P/P	33 - 154
2447011	Oxyfluorfen	135	119	P/P	62 - 154
2447011	Parathion Ethyl	113	95.3	P/P	65 - 120
2447011	Parathion Methyl	132	152	P/P	77 - 185
2447011	PBB-153	105	126	P/P	23 - 193
2447011	PBDE-47	93.9	105	P/P	31 - 139
2447011	PBDE-99	71.7	79.7	P/P	24 - 138
2447011	Pendimethalin	90.2	104	P/P	50 - 146
2447011	Pentabromotoluene	97.7	99.4	P/P	54 - 152
2447011	Phenytoin	40.1	52.3	P/P	10 - 157
2447011	Phorate	125	124	P/P	54 - 161
2447011	Prodiamine	106	105	P/P	29 - 160
2447011	Prometon	135	120	P/P	38 - 145
2447011	Prometryn	128	118	P/P	32 - 151
2447011	Pronamide	117	110	P/P	61 - 140
2447011	Propanil	111	96.3	P/P	50 - 147
2447011	Propargite	95.2	102	P/P	10 - 190
2447011	Propiconazole	84.9	97.8	P/P	30 - 146
2447011	Pyraflufen Ethyl	127	134	P/P	30 - 147
2447011	Pyridaben	140	166	P/P	15 - 195
2447011	Pyriproxyfen	127	148	P/P	31 - 218
2447011	Simazine	104	94.7	P/P	45 - 139
2447011	Stirophos	28.0	26.4	P/P	10 - 134
2447011	Tebuconazole	92.0	100	P/P	10 - 133
2447011	Terbufos	89.4	84.0	P/P	65 - 151
2447011	Terbuthylazine	106	89.4	P/P	62 - 117
2447011	Tetradecachloro-m-terphenyl	176	132	P/P	10 - 260
2447011	Thiobencarb	114	98.9	P/P	48 - 122
2447011	Tri-o-cresyl Phosphate	95.8	109	P/P	32 - 151
2447011	Triadimefon	93.3	80.5	P/P	46 - 124

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P436999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447011	Tris(1-chloro-2-propyl) phosphate (TCPP)	112	126	P/P	51 - 154
2447011	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	82.8	94.1	P/P	59 - 147
2447011	Tris(2-chloroethyl) phosphate (TCEP)	74.4	86.8	P/P	65 - 156

Reference Method: EPA 8270E
Batch ID: P437200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447326	PCB-1016	55.8	65.4	P/P	45 - 107
2447326	PCB-1260	52.0	61.6	P/P	40 - 112
2447431	Aldrin	40.6	32.7	P/P	24 - 81.0
2447431	Alpha-BHC	67.0	62.7	P/F	65 - 110
2447431	Alpha-Chlordane	59.8	48.8	P/P	43 - 119
2447431	Beta-BHC	84.7	60.5	P/P	54 - 165
2447431	Beta-Cyfluthrin	80.5	64.7	P/P	27 - 165
2447431	Bifenthrin	61.2	58.9	P/P	17 - 117
2447431	Chlorothalonil	68.3	60.0	P/P	10 - 255
2447431	Cis-Nonachlor	50.7	44.8	P/P	34 - 98.0
2447431	Cypermethrin	83.9	60.4	P/P	25 - 143
2447431	Dacthal	83.0	63.2	P/P	55 - 139
2447431	DDD-p,p'	49.5	54.7	P/P	30 - 109
2447431	DDE-p,p'	48.0	42.5	P/P	35 - 106
2447431	DDT-p,p'	67.8	65.2	P/P	41 - 101
2447431	Delta-BHC	93.1	67.9	P/P	58 - 165
2447431	Deltamethrin	133	103	P/P	10 - 194
2447431	Dichlobenil	34.6	42.9	P/P	22 - 114
2447431	Dicofol	69.0	64.1	P/P	17 - 133
2447431	Dieldrin	53.9	46.4	P/P	45 - 129
2447431	Endosulfan I	66.2	62.9	P/P	49 - 104
2447431	Endosulfan II	76.6	66.4	P/P	37 - 117
2447431	Endosulfan Sulfate	78.7	57.6	P/P	38 - 128
2447431	Endrin	52.5	46.0	P/P	35 - 116
2447431	Endrin Aldehyde	41.3	34.5	P/P	19 - 108
2447431	Endrin Ketone	94.7	56.8	P/P	44 - 134
2447431	Esfenvalerate	99.2	79.1	P/P	27 - 176
2447431	Ethalfluralin	46.1	45.9	F/F	49 - 100
2447431	Fenpropathrin	59.1	49.0	P/P	34 - 117
2447431	Gamma-BHC	77.1	60.6	P/P	59 - 129
2447431	Gamma-Chlordane	78.0	52.7	P/P	33 - 107
2447431	Heptachlor	67.8	51.2	P/P	37 - 94.0
2447431	Heptachlor Epoxide	81.4	60.4	P/P	38 - 118
2447431	Hexachlorobenzene	39.2	42.2	P/P	35 - 97.0
2447431	Kepone	31.3	15.4	P/P	10 - 221
2447431	Lambda-Cyhalothrin	70.8	52.6	P/P	23 - 190
2447431	Methoprene	49.0	44.8	P/P	21 - 109
2447431	Methoxychlor	55.8	52.3	P/P	46 - 118
2447431	MGK-264	58.4	53.3	P/P	39 - 122
2447431	Mirex	44.9	40.8	P/P	25 - 90.0
2447431	Oxychlordane	44.9	43.5	P/P	42 - 100
2447431	Permethrin	63.3	55.3	P/P	33 - 181
2447431	Phenothrin	51.2	56.0	P/P	12 - 125
2447431	Piperonyl Butoxide	97.1	70.5	P/P	10 - 178

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447431	Prallethrin	77.8	65.6	P/P	24 - 122
2447431	Tau-Fluvalinate	97.6	77.0	P/P	13 - 151
2447431	Tetramethrin	72.6	61.8	P/P	16 - 172
2447431	Trans-Nonachlor	46.3	40.3	P/P	39 - 100
2447431	Triclosan Methyl	59.1	56.6	P/P	43 - 110
2447431	Trifluralin	49.4	51.8	P/P	45 - 94.0

Reference Method: EPA 8276
Batch ID: P437200

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447326	Chlordane	31.4	34.7	F/F	43 - 123
2447326	Toxaphene	32.9	36.9	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P436913

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2446686	3-Hydroxycarbofuran	44.5	42.9	P/P	40 - 150
2446686	Aldicarb	28.9	29.4	F/F	30 - 150
2446686	Aldicarb Sulfone	53.5	54.9	P/P	40 - 150
2446686	Aldicarb Sulfoxide	21.1	22.6	F/F	40 - 150
2446686	Carbaryl	33.0	35.0	F/F	40 - 150
2446686	Carbofuran	33.8	34.7	F/F	40 - 150
2446686	Methiocarb	55.8	54.2	P/P	40 - 150
2446686	Methomyl	24.7	25.5	F/F	40 - 150
2446686	Oxamyl	41.9	40.9	P/P	40 - 150
2446686	Propoxur	32.5	32.9	F/F	40 - 150

Reference Method: EPA 8321B
Batch ID: P437019

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447226	Acesulfame K	146	147	P/P	40 - 150
2447226	AMPA	78.5	80.0	P/P	40 - 160
2447226	Endothall	88.9	86.1	P/P	40 - 160
2447226	Glufosinate	81.2	89.8	P/P	40 - 160
2447226	Glyphosate	90.5	86.7	P/P	40 - 160
2447226	Sucralose	115	117	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447187	2,4-D	84.6	69.7	P/P	40 - 150
2447187	2,4,5-T	108	96.8	P/P	40 - 150
2447187	Acetaminophen	85.4	84.3	P/P	30 - 150
2447187	Acetamiprid	75.1	70.2	P/P	40 - 150
2447187	Afidopyropen	67.1	68.3	P/P	30 - 150
2447187	Bentazon	88.5	71.2	P/P	30 - 150
2447187	Benzovindiflupyr	80.8	75.1	P/P	40 - 150
2447187	Carbamazepine	77.7	72.5	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P437027

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447187	Clothianidin	91.2	82.2	P/P	40 - 150
2447187	Dinotefuran	101	94.2	P/P	40 - 150
2447187	Diuron	70.8	67.3	P/P	40 - 150
2447187	Fenuron	81.1	75.0	P/P	40 - 150
2447187	Fluridone	72.9	79.3	P/P	40 - 150
2447187	Hydrocodone	89.1	84.3	P/P	40 - 150
2447187	Ibuprofen	61.2	63.7	P/P	40 - 150
2447187	Imazapyr	93.1	87.1	P/P	40 - 150
2447187	Imidacloprid	92.4	86.8	P/P	40 - 150
2447187	Linuron	63.5	65.4	P/P	40 - 150
2447187	Mandestrobin	84.3	78.2	P/P	40 - 150
2447187	MCPP	98.7	81.3	P/P	40 - 150
2447187	Naproxen	64.5	53.2	P/P	40 - 150
2447187	Primidone	84.0	77.1	P/P	40 - 150
2447187	Pyraclostrobin	80.6	73.4	P/P	40 - 150
2447187	Silvex	83.8	71.0	P/P	40 - 150
2447187	Thiamethoxam	81.7	80.0	P/P	40 - 150
2447187	Tolfenpyrad	55.9	53.3	P/P	30 - 150
2447187	Triclopyr	100	90.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P437162

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447414	Fluoride	103	102	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P437317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447355	Fluoride	98.6	98.6	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447283	Organic Carbon	93.7	95.6	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437324

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447356	Organic Carbon	93.1	92.4	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437054

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447414	Color (true)	0.741	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447360	Turbidity	4.35	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437503

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447305	Chloride	0.800	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447305	Sulfate	0.628	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437195

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447415	Ammonia-N	1.59	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437198

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447419	Ammonia-N	0.693	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447104	Kjeldahl Nitrogen	2.67	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447193	Kjeldahl Nitrogen	2.93	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437234

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447356	Kjeldahl Nitrogen	0.666	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437365

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447341	NO2NO3-N	0.531	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447419	NO2NO3-N	2.16	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437069

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447415	Total-P	5.43	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447419	Total-P	0.658	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P436999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447011	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	10.0	Spike	P	0 - 30
2447011	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	11.8	Spike	P	0 - 35
2447011	Acetochlor	10.7	Spike	P	0 - 28
2447011	Alachlor	3.49	Spike	P	0 - 30
2447011	Ametryn	0.0630	Spike	P	0 - 32
2447011	Atrazine	3.04	Spike	P	0 - 33
2447011	Atrazine Desethyl	0.347	Spike	P	0 - 36
2447011	Avobenzone	6.00	Spike	P	0 - 35
2447011	Azinphos Methyl	5.15	Spike	P	0 - 62
2447011	Azoxystrobin	2.80	Spike	P	0 - 39
2447011	Bromacil	0.590	Spike	P	0 - 33
2447011	Butylate	14.9	Spike	P	0 - 51
2447011	Caffeine	6.80	Spike	P	0 - 100
2447011	Carbophenothion	7.44	Spike	P	0 - 34
2447011	Carfentrazone Ethyl	20.5	Spike	P	0 - 33
2447011	Chlorfenapyr	9.19	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P436999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447011	Chlorpyrifos Ethyl	11.9	Spike	P	0 - 31
2447011	Chlorpyrifos Methyl	16.4	Spike	P	0 - 27
2447011	Coumaphos	36.5	Spike	P	0 - 62
2447011	Cyanazine	22.9	Spike	P	0 - 48
2447011	Cyprodinil	1.06	Spike	P	0 - 29
2447011	Dechlorane 602	10.5	Spike	P	0 - 60
2447011	Dechlorane 603	13.1	Spike	P	0 - 40
2447011	Dechlorane Plus	0.655	Spike	P	0 - 38
2447011	Demeton	3.80	Spike	P	0 - 33
2447011	Diazinon	10.2	Spike	P	0 - 32
2447011	Difenoconazole	29.7	Spike	P	0 - 71
2447011	Dimethenamid	7.52	Spike	P	0 - 60
2447011	Dimethomorph	0.452	Spike	P	0 - 61
2447011	Disulfoton	7.62	Spike	P	0 - 30
2447011	Dithiopyr	12.6	Spike	P	0 - 28
2447011	EPTC	11.8	Spike	P	0 - 56
2447011	Ethion	9.78	Spike	P	0 - 79
2447011	Ethoprop	5.68	Spike	P	0 - 31
2447011	Etridiazole	21.1	Spike	P	0 - 43
2447011	Fenamiphos	7.33	Spike	P	0 - 43
2447011	Fenbuconazole	22.7	Spike	P	0 - 79
2447011	Fipronil	1.25	Spike	P	0 - 46
2447011	Fipronil Desulfinyl	2.78	Spike	P	0 - 36
2447011	Fipronil Sulfide	13.9	Spike	P	0 - 34
2447011	Fipronil Sulfone	11.4	Spike	P	0 - 47
2447011	Fluazifop-P-butyl	7.16	Spike	P	0 - 38
2447011	Fludioxonil	1.66	Spike	P	0 - 29
2447011	Flumioxazin	38.5	Spike	P	0 - 63
2447011	Flutolanil	7.03	Spike	P	0 - 36
2447011	Fluxapyroxad	9.80	Spike	P	0 - 65
2447011	Fonofos	5.51	Spike	P	0 - 35
2447011	Hexabromobenzene	6.74	Spike	P	0 - 41
2447011	Hexazinone	0.355	Spike	P	0 - 31
2447011	Imazalil	22.9	Spike	P	0 - 52
2447011	Iprodione	23.1	Spike	P	0 - 49
2447011	Loratadine	25.6	Spike	P	0 - 59
2447011	Malathion	17.1	Spike	P	0 - 77
2447011	Metalaxyl	4.52	Spike	P	0 - 76
2447011	Metolachlor	10.9	Spike	P	0 - 29
2447011	Metribuzin	10.2	Spike	P	0 - 51
2447011	Mevinphos	0.0502	Spike	P	0 - 31
2447011	Molinate	15.0	Spike	P	0 - 39
2447011	Myclobutanil	14.7	Spike	P	0 - 34
2447011	Naled	8.57	Spike	P	0 - 37
2447011	Napropamide	1.66	Spike	P	0 - 100
2447011	Norflurazon	3.77	Spike	P	0 - 54
2447011	Octinoxate	1.28	Spike	P	0 - 35
2447011	Oxadiazon	4.48	Spike	P	0 - 34
2447011	Oxybenzone	3.67	Spike	P	0 - 35
2447011	Oxyfluorfen	12.4	Spike	P	0 - 28
2447011	Parathion Ethyl	16.7	Spike	P	0 - 31

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P436999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447011	Parathion Methyl	14.0	Spike	P	0 - 29
2447011	PBB-153	18.4	Spike	P	0 - 49
2447011	PBDE-47	11.1	Spike	P	0 - 36
2447011	PBDE-99	10.5	Spike	P	0 - 46
2447011	Pendimethalin	13.9	Spike	P	0 - 31
2447011	Pentabromotoluene	1.70	Spike	P	0 - 16
2447011	Phenytoin	26.5	Spike	P	0 - 100
2447011	Phorate	0.788	Spike	P	0 - 36
2447011	Prodiamine	0.405	Spike	P	0 - 68
2447011	Prometon	12.2	Spike	P	0 - 35
2447011	Prometryn	7.83	Spike	P	0 - 33
2447011	Pronamide	6.54	Spike	P	0 - 24
2447011	Propanil	14.2	Spike	P	0 - 28
2447011	Propargite	6.86	Spike	P	0 - 53
2447011	Propiconazole	14.1	Spike	P	0 - 44
2447011	Pyraflufen Ethyl	5.88	Spike	P	0 - 61
2447011	Pyridaben	16.9	Spike	P	0 - 43
2447011	Pyriproxyfen	15.4	Spike	P	0 - 82
2447011	Simazine	6.38	Spike	P	0 - 29
2447011	Stirophos	6.16	Spike	P	0 - 100
2447011	Sulfentrazone	6.80	Spike	P	0 - 64
2447011	Tebuconazole	8.33	Spike	P	0 - 76
2447011	Terbufos	6.30	Spike	P	0 - 29
2447011	Terbuthylazine	17.2	Spike	P	0 - 28
2447011	Tetradecachloro-m-terphenyl	28.1	Spike	P	0 - 42
2447011	Thiobencarb	14.0	Spike	P	0 - 26
2447011	Tri-o-cresyl Phosphate	12.7	Spike	P	0 - 24
2447011	Triadimefon	14.7	Spike	P	0 - 40
2447011	Tris(1-chloro-2-propyl) phosphate (TCPP)	8.57	Spike	P	0 - 30
2447011	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	12.8	Spike	P	0 - 22
2447011	Tris(2-chloroethyl) phosphate (TCEP)	15.4	Spike	F	0 - 15

Reference Method: EPA 8270E
Batch ID: P437200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447326	PCB-1016	15.8	Spike	P	0 - 25
2447326	PCB-1260	16.9	Spike	P	0 - 30
2447431	Aldrin	21.4	Spike	P	0 - 41
2447431	Alpha-BHC	6.72	Spike	P	0 - 25
2447431	Alpha-Chlordane	20.3	Spike	P	0 - 32
2447431	Beta-BHC	33.4	Spike	F	0 - 33
2447431	Beta-Cyfluthrin	21.8	Spike	P	0 - 43
2447431	Bifenthrin	3.89	Spike	P	0 - 52
2447431	Chlorothalonil	12.9	Spike	P	0 - 82
2447431	Cis-Nonachlor	12.2	Spike	P	0 - 33
2447431	Cypermethrin	32.5	Spike	P	0 - 51
2447431	Dacthal	27.1	Spike	F	0 - 27
2447431	DDD-p,p'	10.1	Spike	P	0 - 39
2447431	DDE-p,p'	12.1	Spike	P	0 - 31

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P437200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447431	DDT-p,p'	3.88	Spike	P	0 - 29
2447431	Delta-BHC	31.4	Spike	P	0 - 35
2447431	Deltamethrin	25.2	Spike	P	0 - 100
2447431	Dichlobenil	21.5	Spike	P	0 - 40
2447431	Dicofol	7.37	Spike	P	0 - 37
2447431	Dieldrin	15.1	Spike	P	0 - 27
2447431	Endosulfan I	4.97	Spike	P	0 - 23
2447431	Endosulfan II	14.3	Spike	P	0 - 34
2447431	Endosulfan Sulfate	31.0	Spike	P	0 - 36
2447431	Endrin	13.1	Spike	P	0 - 45
2447431	Endrin Aldehyde	17.7	Spike	P	0 - 76
2447431	Endrin Ketone	50.1	Spike	F	0 - 43
2447431	Esfenvalerate	22.5	Spike	P	0 - 51
2447431	Ethalfluralin	0.462	Spike	P	0 - 22
2447431	Fenpropathrin	18.8	Spike	P	0 - 49
2447431	Gamma-BHC	24.0	Spike	P	0 - 28
2447431	Gamma-Chlordane	38.8	Spike	P	0 - 40
2447431	Heptachlor	27.9	Spike	P	0 - 29
2447431	Heptachlor Epoxide	25.1	Spike	P	0 - 33
2447431	Hexachlorobenzene	7.46	Spike	P	0 - 36
2447431	Kepone	68.1	Spike	P	0 - 85
2447431	Lambda-Cyhalothrin	29.5	Spike	P	0 - 55
2447431	Methoprene	8.98	Spike	P	0 - 53
2447431	Methoxychlor	6.47	Spike	P	0 - 50
2447431	MGK-264	9.09	Spike	P	0 - 43
2447431	Mirex	9.56	Spike	P	0 - 40
2447431	Oxychlordane	3.31	Spike	P	0 - 31
2447431	Permethrin	13.4	Spike	P	0 - 50
2447431	Phenothrin	8.84	Spike	P	0 - 58
2447431	Piperonyl Butoxide	31.7	Spike	P	0 - 100
2447431	Prallethrin	17.1	Spike	P	0 - 39
2447431	Tau-Fluvalinate	23.6	Spike	P	0 - 54
2447431	Tetramethrin	16.1	Spike	P	0 - 51
2447431	Trans-Nonachlor	14.0	Spike	P	0 - 39
2447431	Triclosan Methyl	4.31	Spike	P	0 - 31
2447431	Trifluralin	4.72	Spike	P	0 - 22

Reference Method: EPA 8276
Batch ID: P437200

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447326	Chlordane	10.1	Spike	P	0 - 28
2447326	Toxaphene	11.3	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P436913

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2446686	3-Hydroxycarbofuran	3.70	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P436913

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2446686	Aldicarb	1.53	Spike	P	0 - 30
2446686	Aldicarb Sulfone	2.60	Spike	P	0 - 30
2446686	Aldicarb Sulfoxide	6.81	Spike	P	0 - 30
2446686	Carbaryl	5.98	Spike	P	0 - 30
2446686	Carbofuran	2.55	Spike	P	0 - 30
2446686	Methiocarb	2.83	Spike	P	0 - 30
2446686	Methomyl	3.03	Spike	P	0 - 30
2446686	Oxamyl	2.34	Spike	P	0 - 30
2446686	Propoxur	1.24	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437019

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447226	Acesulfame K	0.686	Spike	P	0 - 30
2447226	AMPA	1.90	Spike	P	0 - 30
2447226	Endothall	3.27	Spike	P	0 - 30
2447226	Glufosinate	10.0	Spike	P	0 - 30
2447226	Glyphosate	4.28	Spike	P	0 - 30
2447226	Sucralose	1.92	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447187	2,4-D	19.3	Spike	P	0 - 30
2447187	2,4,5-T	10.6	Spike	P	0 - 30
2447187	Acetaminophen	1.24	Spike	P	0 - 30
2447187	Acetamiprid	6.68	Spike	P	0 - 30
2447187	Afidopyropen	1.79	Spike	P	0 - 30
2447187	Bentazon	18.5	Spike	P	0 - 30
2447187	Benzovindiflupyr	7.25	Spike	P	0 - 30
2447187	Carbamazepine	6.92	Spike	P	0 - 30
2447187	Clothianidin	10.3	Spike	P	0 - 30
2447187	Dinotefuran	6.65	Spike	P	0 - 30
2447187	Diuron	5.09	Spike	P	0 - 30
2447187	Fenuron	7.77	Spike	P	0 - 30
2447187	Fluridone	8.35	Spike	P	0 - 30
2447187	Hydrocodone	5.44	Spike	P	0 - 30
2447187	Ibuprofen	4.05	Spike	P	0 - 30
2447187	Imazapyr	6.74	Spike	P	0 - 30
2447187	Imidacloprid	6.20	Spike	P	0 - 30
2447187	Linuron	2.85	Spike	P	0 - 30
2447187	Mandestrobin	7.51	Spike	P	0 - 30
2447187	MCPP	19.4	Spike	P	0 - 30
2447187	Naproxen	19.2	Spike	P	0 - 30
2447187	Primidone	8.64	Spike	P	0 - 30
2447187	Pyraclostrobin	9.39	Spike	P	0 - 30
2447187	Silvex	16.4	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P437027

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447187	Thiamethoxam	2.02	Spike	P	0 - 30
2447187	Tolfenpyrad	4.69	Spike	P	0 - 30
2447187	Triclopyr	10.0	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P437159

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447414	Total Alkalinity	2.91	Sample	P	0 - 3.9

Reference Method: SM 2320 B-2011
Batch ID: P437315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447355	Total Alkalinity	0.445	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P437565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447397	TDS	1.70	Sample	P	0 - 10

Reference Method: SM 2540 C-2015
Batch ID: P437566

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447605	TDS	6.00	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P437162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447414	Fluoride	0.467	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P437317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447355	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437266

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

Quality Assurance Report
Precision

Reference Method: SM 5310 B-2011
Batch ID: P437266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447283	Organic Carbon	1.86	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437324

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447356	Organic Carbon	0.542	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2447427
Field Sample ID: G5SW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	85.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.9	P	30 - 160
EPA 8321B	Diuron-d6	44.3	P	30 - 160
EPA 8321B	Endothall-d6	84.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	73.3	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.1	P	30 - 160
EPA 8321B	Primidone-d5	60.7	P	30 - 160
EPA 8321B	Sucralose-d6	122	P	30 - 160

Lab Sample ID: 2447428
Field Sample ID: G5SW0171

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	85.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	63.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	54.4	P	30 - 160
EPA 8321B	Diuron-d6	41.9	P	30 - 160
EPA 8321B	Endothall-d6	87.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	83.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	57.8	P	30 - 160
EPA 8321B	Primidone-d5	48.2	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	30 - 160

Lab Sample ID: 2447429
Field Sample ID: G5SW0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	44.1	P	30 - 160

Lab Sample ID: 2447430
Field Sample ID: G5SW0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	75.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	51.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	42.4	P	30 - 160
EPA 8321B	Diuron-d6	38.2	P	30 - 160
EPA 8321B	Endothall-d6	77.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	75.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.9	P	30 - 160
EPA 8321B	Primidone-d5	39.5	P	30 - 160
EPA 8321B	Sucralose-d6	117	P	30 - 160

Lab Sample ID: 2447431
Field Sample ID: G5SW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	46.4	P	37 - 129
EPA 8270E	Decachlorobiphenyl	87.7	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	37.8	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	55.7	P	29 - 95.0

Quality Assurance Report
Surrogates

Lab Sample ID: 2447431
Field Sample ID: G5SW0129

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	51.1	P	28 - 102
EPA 8276	PCNB	70.2	P	49 - 115

Lab Sample ID: 2447432
Field Sample ID: G5SW0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	55.1	P	37 - 129
EPA 8270E	Decachlorobiphenyl	71.6	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	46.1	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	64.7	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	63.5	P	28 - 102
EPA 8276	PCNB	84.1	P	49 - 115

Lab Sample ID: 2447433
Field Sample ID: G5SW0040

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	99.1	P	20 - 200
EPA 8270E	Simazine-d10	130	P	58 - 137
EPA 8270E	Terbufos-d10	86.1	P	50 - 134
EPA 8270E	Terphenyl-d14	90.2	P	44 - 134

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A122390
Included Lab Sample IDs: 2447414, 2447416, 2447418

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A122392
Included Lab Sample IDs: 2447414, 2447416, 2447418

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

Reference Method: EPA 8321B
Run ID: A122422
Included Lab Sample IDs: 2447427, 2447428, 2447430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	150	139	P/P	60 - 160
Acesulfame K	156	150	P/P	60 - 160
Sucralose	116	105	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122432
Included Lab Sample IDs: 2447415, 2447417

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	106	102	P/P	90 - 110
Kjeldahl Nitrogen	94.7	99.7	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122434
Included Lab Sample IDs: 2447417

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.9	97.6	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A122437
Included Lab Sample IDs: 2447429

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	99.9	106	P/P	60 - 150
Aldicarb	100	99.8	P/P	60 - 150
Aldicarb Sulfone	103	102	P/P	50 - 150
Aldicarb Sulfoxide	113	119	P/P	50 - 150
Carbaryl	99.3	109	P/P	60 - 150
Carbofuran	104	104	P/P	50 - 150
Methiocarb	101	111	P/P	50 - 150
Methomyl	97.0	105	P/P	50 - 150
Oxamyl	99.0	104	P/P	50 - 150
Propoxur	107	107	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A122440
Included Lab Sample IDs: 2447427, 2447428, 2447430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	96.9	100	P/P	60 - 160
Endothall	90.0	91.5	P/P	60 - 160
Glufosinate	94.1	89.4	P/P	60 - 160
Glyphosate	93.2	96.4	P/P	60 - 160

Reference Method: SM 2320 B-2011
Run ID: A122444
Included Lab Sample IDs: 2447414, 2447416

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.8	97.8	P/P	90 - 110
Total Alkalinity	97.8	96.0	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A122444
Included Lab Sample IDs: 2447414, 2447416

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122451
Included Lab Sample IDs: 2447415

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

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122464
Included Lab Sample IDs: 2447415, 2447417, 2447419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.8	99.3	P/P	90 - 110
Ammonia-N	99.0	99.6	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A122489
Included Lab Sample IDs: 2447427, 2447428, 2447430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.0	76.4	P/P	50 - 150
2,4,5-T	79.4	81.9	P/P	50 - 150
Acetaminophen	106	101	P/P	60 - 160
Acetamiprid	106	104	P/P	50 - 150
Afidopyropen	119	95.8	P/P	50 - 150
Bentazon	99.2	96.2	P/P	50 - 160
Benzovindiflupyr	106	107	P/P	50 - 150
Carbamazepine	97.4	97.8	P/P	60 - 150
Clothianidin	107	104	P/P	60 - 150
Dinotefuran	114	113	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A122489
Included Lab Sample IDs: 2447427, 2447428, 2447430

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	117	110	P/P	60 - 160
Fenuron	109	107	P/P	60 - 150
Fluridone	117	112	P/P	60 - 160
Hydrocodone	114	116	P/P	60 - 150
Ibuprofen	108	86.0	P/P	50 - 160
Imazapyr	98.5	88.6	P/P	50 - 150
Imidacloprid	99.8	98.6	P/P	60 - 150
Linuron	106	95.1	P/P	60 - 150
Mandestrobin	107	101	P/P	50 - 150
MCPP	89.2	84.7	P/P	50 - 150
Naproxen	89.2	77.8	P/P	50 - 160
Primidone	94.5	99.0	P/P	60 - 150
Pyraclostrobin	115	113	P/P	60 - 150
Silvex	85.2	86.5	P/P	50 - 150
Thiamethoxam	112	114	P/P	50 - 150
Tolfenpyrad	105	111	P/P	60 - 150
Triclopyr	82.6	85.1	P/P	50 - 150

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122491
Included Lab Sample IDs: 2447419

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

Reference Method: SM 5310 B-2011
Run ID: A122507
Included Lab Sample IDs: 2447415, 2447417

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

Reference Method: EPA 8270E
Run ID: A122517
Included Lab Sample IDs: 2447433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	86.4		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.4		P	80 - 120
Avobenzone	94.2		P	80 - 120
Dechlorane 602	82.7		P	80 - 120
Dechlorane 603	103		P	80 - 120
Dechlorane Plus	114		P	80 - 120
Hexabromobenzene	90.9		P	80 - 120
Octinoxate	98.5		P	80 - 120
Oxybenzone	97.6		P	80 - 120
PBB-153	106		P	80 - 120
PBDE-47	91.7		P	80 - 120
PBDE-99	89.5		P	80 - 120
Pentabromotoluene	97.5		P	80 - 120
Tetradecachloro-m-terphenyl	127*		F	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A122517
Included Lab Sample IDs: 2447433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Tri-o-cresyl Phosphate	95.6		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	96.9		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.9		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	108		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122525
Included Lab Sample IDs: 2447419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	108	100	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A122537
Included Lab Sample IDs: 2447418

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.8	99.3	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A122537
Included Lab Sample IDs: 2447418

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

Reference Method: SM 5310 B-2011
Run ID: A122540
Included Lab Sample IDs: 2447419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.9	98.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A122543
Included Lab Sample IDs: 2447433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	95.6		P	80 - 120
Alachlor	97.5		P	80 - 120
Ametryn	94.2		P	80 - 120
Atrazine	101		P	80 - 120
Atrazine Desethyl	111		P	80 - 120
Azinphos Methyl	95.7		P	80 - 120
Azoxystrobin	96.9		P	80 - 120
Bromacil	98.1		P	80 - 120
Butylate	93.0		P	80 - 120
Caffeine	98.8		P	80 - 120
Carbophenothion	87.2		P	80 - 120
Carfentrazone Ethyl	85.9		P	80 - 120
Chlorfenapyr	91.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A122543
Included Lab Sample IDs: 2447433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Ethyl	96.3		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	109		P	80 - 120
Cyanazine	107		P	80 - 120
Cyprodinil	99.7		P	80 - 120
Demeton	109		P	80 - 120
Diazinon	104		P	80 - 120
Difenoconazole	106		P	80 - 120
Dimethenamid	94.3		P	80 - 120
Dimethomorph	96.5		P	80 - 120
Disulfoton	100		P	80 - 120
Dithiopyr	121*		F	80 - 120
EPTC	98.7		P	80 - 120
Ethion	99.1		P	80 - 120
Ethoprop	97.7		P	80 - 120
Etridiazole	100		P	80 - 120
Fenamiphos	94.7		P	80 - 120
Fenbuconazole	105		P	80 - 120
Fipronil	92.9		P	80 - 120
Fipronil Desulfinyl	92.5		P	80 - 120
Fipronil Sulfide	95.6		P	80 - 120
Fipronil Sulfone	82.5		P	80 - 120
Fluazifop-P-butyl	87.4		P	80 - 120
Fludioxonil	83.1		P	80 - 120
Flumioxazin	97.9		P	80 - 120
Flutolanil	89.6		P	80 - 120
Fluxapyroxad	96.7		P	80 - 120
Fonofos	88.7		P	80 - 120
Hexazinone	99.4		P	80 - 120
Imazalil	90.4		P	80 - 120
Iprodione	82.8		P	80 - 120
Loratadine	91.5		P	80 - 120
Malathion	101		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	107		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	94.5		P	80 - 120
Molinate	103		P	80 - 120
Myclobutanil	92.8		P	80 - 120
Naled	112		P	80 - 120
Napropamide	82.7		P	80 - 120
Norflurazon	89.3		P	80 - 120
Oxadiazon	89.0		P	80 - 120
Oxyfluorfen	90.9		P	80 - 120
Parathion Ethyl	95.1		P	80 - 120
Parathion Methyl	105		P	80 - 120
Pendimethalin	92.0		P	80 - 120
Phenytoin	90.8		P	80 - 120
Phorate	115		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	94.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A122543
Included Lab Sample IDs: 2447433

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometryn	105		P	80 - 120
Pronamide	98.4		P	80 - 120
Propanil	111		P	80 - 120
Propargite	91.2		P	80 - 120
Propiconazole	89.8		P	80 - 120
Pyraflufen Ethyl	93.7		P	80 - 120
Pyridaben	109		P	80 - 120
Pyriproxyfen	100		P	80 - 120
Simazine	111		P	80 - 120
Stirophos	109		P	80 - 120
Sulfentrazone	86.6		P	80 - 120
Tebuconazole	90.7		P	80 - 120
Terbufos	106		P	80 - 120
Terbuthylazine	107		P	80 - 120
Thiobencarb	98.1		P	80 - 120
Triadimefon	108		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122558
Included Lab Sample IDs: 2447415, 2447417

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

Reference Method: EPA 8276
Run ID: A122577
Included Lab Sample IDs: 2447431, 2447432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	91.0		P	80 - 120
Toxaphene	85.0		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122610
Included Lab Sample IDs: 2447414, 2447416, 2447418

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

Reference Method: EPA 8270E
Run ID: A122676
Included Lab Sample IDs: 2447431, 2447432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	89.1		P	80 - 120
Alpha-BHC	91.1		P	80 - 120
Alpha-Chlordane	113		P	80 - 120
Beta-BHC	99.4		P	80 - 120
Beta-Cyfluthrin	93.3		P	80 - 120
Bifenthrin	99.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A122676
Included Lab Sample IDs: 2447431, 2447432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorothalonil	93.9		P	80 - 120
Cis-Nonachlor	105		P	80 - 120
Cypermethrin	90.9		P	80 - 120
Dacthal	84.5		P	80 - 120
DDD-p,p'	106		P	80 - 120
DDE-p,p'	99.9		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	103		P	80 - 120
Deltamethrin	89.0		P	80 - 120
Dichlobenil	115		P	80 - 120
Dicofol	98.5		P	80 - 120
Dieldrin	101		P	80 - 120
Endosulfan I	98.6		P	80 - 120
Endosulfan II	100		P	80 - 120
Endosulfan Sulfate	86.5		P	80 - 120
Endrin	113		P	80 - 120
Endrin Aldehyde	108		P	80 - 120
Endrin Ketone	103		P	80 - 120
Esfenvalerate	93.9		P	80 - 120
Ethalfluralin	102		P	80 - 120
Fenpropathrin	97.0		P	80 - 120
Gamma-BHC	95.7		P	80 - 120
Gamma-Chlordane	110		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	99.0		P	80 - 120
Kepone	81.5		P	80 - 120
Lambda-Cyhalothrin	94.3		P	80 - 120
Methoprene	98.9		P	80 - 120
Methoxychlor	97.6		P	80 - 120
MGK-264	103		P	80 - 120
Mirex	104		P	80 - 120
Oxychlordane	97.2		P	80 - 120
Permethrin	113		P	80 - 120
Phenothrin	95.5		P	80 - 120
Piperonyl Butoxide	99.5		P	80 - 120
Prallethrin	93.7		P	80 - 120
Tau-Fluvalinate	89.7		P	80 - 120
Tetramethrin	90.9		P	80 - 120
Trans-Nonachlor	106		P	80 - 120
Triclosan Methyl	99.8		P	80 - 120
Trifluralin	99.0		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122686
Included Lab Sample IDs: 2447431, 2447432

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	106		P	80 - 120
PCB-1260	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122696
Included Lab Sample IDs: 2447419

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	100	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)	101				0.741	
EPA 180.1 Rev. 2.0	Turbidity	104				4.35	
EPA 300.0 Rev. 2.1	Chloride	102	103	101		0.800	
	Sulfate	101	103	103		0.628	
EPA 350.1 Rev. 2.0	Ammonia-N	98.0	96.8	98.6			1.59
	Ammonia-N	97.2	106	105			0.693
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	106	101			2.67
	Kjeldahl Nitrogen	106	95.7	99.4			2.93
	Kjeldahl Nitrogen	100	102	103			0.666
EPA 353.2 Rev. 2.0	NO2NO3-N	100	94.5	94.0			0.531
	NO2NO3-N	98.5	98.6	101			2.16
EPA 365.1 Rev. 2.0	Total-P	101	104	98.3			5.43
	Total-P	102	99.1	98.5			0.658
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	68.9	62.6	69.2			10.0
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.3	85.1	95.7			11.8
	Acetochlor	100	111	99.5			10.7
	Alachlor	96.2	88.6	91.8			3.49
	Aldrin	33.2	40.6	32.7			21.4
	Alpha-BHC	75.0	67.0	62.7			6.72
	Alpha-Chlordane	58.6	59.8	48.8			20.3
	Ametryn	98.5	77.1	77.0			0.0630
	Atrazine	98.0					3.04
	Atrazine Desethyl	81.2	71.3	71.7			0.347
	Avobenzone	130	117	124			6.00
	Azinphos Methyl	165	176	185			5.15
	Azoxystrobin	105	99.5	102			2.80
	Beta-BHC	76.6	84.7	60.5			33.4
	Beta-Cyfluthrin	42.7	80.5	64.7			21.8
	Bifenthrin	32.7	61.2	58.9			3.89
	Bromacil	70.6	67.2	67.6			0.590
	Butylate	55.1	63.8	54.9			14.9
	Caffeine	96.7	100	93.8			6.80
	Carbophenothion	111	121	131			7.44
	Carfentrazone Ethyl	113	121	149			20.5
	Chlorfenapyr	67.6	75.6	82.9			9.19
	Chlorothalonil	45.9	68.3	60.0			12.9
	Chlorpyrifos Ethyl	76.9	75.4	66.9			11.9
	Chlorpyrifos Methyl	80.6	68.8	81.1			16.4
	Cis-Nonachlor	44.2	50.7	44.8			12.2
	Coumaphos	146	112	162			36.5
	Cyanazine	149	168	133			22.9
	Cypermethrin	44.8	83.9	60.4			32.5
	Cyprodinil	116	116	115			1.06
	Dacthal	74.9	83.0	63.2			27.1
	DDD-p,p'	52.4	49.5	54.7			10.1
	DDE-p,p'	55.8	48.0	42.5			12.1
	DDT-p,p'	58.4	67.8	65.2			3.88
	Dechlorane 602	49.9	49.5	55.0			10.5
	Dechlorane 603	120	88.3	101			13.1
	Dechlorane Plus	98.5	76.6	77.1			0.655
	Delta-BHC	75.3	93.1	67.9			31.4

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Deltamethrin	69.7	133	103			25.2
	Demeton	103	134	129			3.80
	Diazinon	98.4	101	91.6			10.2
	Dichlobenil	54.6	34.6	42.9			21.5
	Dicofol	64.9	69.0	64.1			7.37
	Dieldrin	59.3	53.9	46.4			15.1
	Difenoconazole	99.8	85.2	63.2			29.7
	Dimethenamid	85.5	97.8	90.7			7.52
	Dimethomorph	110	101	100			0.452
	Disulfoton	79.6	68.0	73.4			7.62
	Dithiopyr	89.1	99.2	87.4			12.6
	Endosulfan I	61.8	66.2	62.9			4.97
	Endosulfan II	70.9	76.6	66.4			14.3
	Endosulfan Sulfate	58.0	78.7	57.6			31.0
	Endrin	46.8	52.5	46.0			13.1
	Endrin Aldehyde	44.2	41.3	34.5			17.7
	Endrin Ketone	87.8	94.7	56.8			50.1
	EPTC	60.8	65.3	58.0			11.8
	Esfenvalerate	46.4	99.2	79.1			22.5
	Ethalfluralin	47.3	46.1	45.9			0.462
	Ethion	67.8	106	96.4			9.78
	Ethoprop	85.9	93.2	88.1			5.68
	Etridiazole	72.8	75.1	92.8			21.1
	Fenamiphos	75.6	82.1	76.3			7.33
	Fenbuconazole	77.1	107	85.3			22.7
	Fenpropathrin	35.9	59.1	49.0			18.8
	Fipronil	82.7	84.9	83.9			1.25
	Fipronil Desulfinyl	60.7	47.5	49.5			2.78
	Fipronil Sulfide	74.5	76.2	64.4			13.9
	Fipronil Sulfone	72.2	85.8	70.3			11.4
	Fluazifop-P-butyl	59.7	75.6	70.3			7.16
	Fludioxonil	62.7	77.4	78.6			1.66
	Flumioxazin	98.0	65.8	97.2			38.5
	Flutolanil	67.6	121	113			7.03
	Fluxapyroxad	147	465	422			9.80
	Fonofos	85.3	74.5	70.5			5.51
	Gamma-BHC	71.9	77.1	60.6			24.0
	Gamma-Chlordane	56.7	78.0	52.7			38.8
	Heptachlor	56.3	67.8	51.2			27.9
	Heptachlor Epoxide	70.7	81.4	60.4			25.1
	Hexabromobenzene	114	111	119			6.74
	Hexachlorobenzene	39.5	39.2	42.2			7.46
	Hexazinone	92.0	92.5	92.1			0.355
	Imazalil	66.7	90.4	71.8			22.9
	Iprodione	122	156	124			23.1
	Kepone	31.0	31.3	15.4			68.1
	Lambda-Cyhalothrin	31.2	70.8	52.6			29.5
	Loratadine	206	267	206			25.6
	Malathion	129	128	152			17.1
	Metalaxyl	84.5	96.4	92.1			4.52
	Methoprene	23.8	49.0	44.8			8.98
	Methoxychlor	57.0	55.8	52.3			6.47
	Metolachlor	97.3	99.1	111			10.9
	Metribuzin	98.3	90.6	100			10.2

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Mevinphos	84.6	79.3	79.4			0.0502
	MGK-264	49.8	58.4	53.3			9.09
	Mirex	39.6	44.9	40.8			9.56
	Molinate	70.4	72.1	83.7			15.0
	Myclobutanil	100	111	129			14.7
	Naled	69.1	72.4	78.9			8.57
	Napropamide	50.7	58.5	59.5			1.66
	Norflurazon	106	125	120			3.77
	Octinoxate	119	106	108			1.28
	Oxadiazon	57.8					4.48
	Oxybenzone	131	107	111			3.67
	Oxychlordane	62.8	44.9	43.5			3.31
	Oxyfluorfen	94.6	119	135			12.4
	Parathion Ethyl	102	95.3	113			16.7
	Parathion Methyl	109	152	132			14.0
	PBB-153	136	105	126			18.4
	PBDE-47	96.0	93.9	105			11.1
	PBDE-99	78.2	71.7	79.7			10.5
	PCB-1016	86.1	55.8	65.4			15.8
	PCB-1260	76.8	52.0	61.6			16.9
	Pendimethalin	92.6	104	90.2			13.9
	Pentabromotoluene	102	97.7	99.4			1.70
	Permethrin	43.1	63.3	55.3			13.4
	Phenothrin	32.3	51.2	56.0			8.84
	Phenytoin	19.8	52.3	40.1			26.5
	Phorate	126	124	125			0.788
	Piperonyl Butoxide	67.1	97.1	70.5			31.7
	Prallethrin	48.2	77.8	65.6			17.1
	Prodiamine	84.2	105	106			0.405
	Prometon	144	120	135			12.2
	Prometryn	120	118	128			7.83
	Pronamide	116	110	117			6.54
	Propanil	110	96.3	111			14.2
	Propargite	78.3	102	95.2			6.86
	Propiconazole	79.7	97.8	84.9			14.1
	Pyraflufen Ethyl	122	134	127			5.88
	Pyridaben	156	166	140			16.9
	Pyriproxyfen	115	148	127			15.4
	Simazine	110	94.7	104			6.38
	Stirophos	32.0	26.4	28.0			6.16
	Sulfentrazone	59.4					6.80
	Tau-Fluvalinate	38.0	97.6	77.0			23.6
	Tebuconazole	73.4	100	92.0			8.33
	Terbufos	104	84.0	89.4			6.30
	Terbuthylazine	108	89.4	106			17.2
	Tetradecachloro-m-terphenyl	193	176	132			28.1
	Tetramethrin	53.1	72.6	61.8			16.1
	Thiobencarb	104	98.9	114			14.0
	Trans-Nonachlor	39.2	46.3	40.3			14.0
	Tri-o-cresyl Phosphate	118	95.8	109			12.7
	Triadimefon	84.3	80.5	93.3			14.7
	Triclosan Methyl	59.5	59.1	56.6			4.31
	Trifluralin	46.7	49.4	51.8			4.72

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Tris(1-chloro-2-propyl) phosphate (TCPP)	70.8	112	126			8.57
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	53.5	82.8	94.1			12.8
	Tris(2-chloroethyl) phosphate (TCEP)	53.4	74.4	86.8			15.4
EPA 8276	Chlordane	63.1	31.4	34.7			10.1
	Toxaphene	68.2	32.9	36.9			11.3
EPA 8321B	2,4-D	72.5	84.6	69.7			19.3
	2,4,5-T	82.3	108	96.8			10.6
	3-Hydroxycarbofuran	75.8	44.5	42.9			3.70
	Acesulfame K	130	146	147			0.686
	Acetaminophen	88.5	85.4	84.3			1.24
	Acetamiprid	79.4	75.1	70.2			6.68
	Afidopyropen	69.4	67.1	68.3			1.79
	Aldicarb	50.6	28.9	29.4			1.53
	Aldicarb Sulfone	90.8	53.5	54.9			2.60
	Aldicarb Sulfoxide	123	21.1	22.6			6.81
	AMPA	98.6	78.5	80.0			1.90
	Bentazon	86.1	88.5	71.2			18.5
	Benzovindiflupyr	81.5	80.8	75.1			7.25
	Carbamazepine	79.8	77.7	72.5			6.92
	Carbaryl	68.5	33.0	35.0			5.98
	Carbofuran	73.1	33.8	34.7			2.55
	Clothianidin	88.0	91.2	82.2			10.3
	Dinotefuran	99.3	101	94.2			6.65
	Diuron	80.8	70.8	67.3			5.09
	Endothall	93.1	88.9	86.1			3.27
	Fenuron	89.9	81.1	75.0			7.77
	Fluridone	83.6	72.9	79.3			8.35
	Glufosinate	101	81.2	89.8			10.0
	Glyphosate	94.6	90.5	86.7			4.28
	Hydrocodone	90.4	89.1	84.3			5.44
	Ibuprofen	62.8	61.2	63.7			4.05
	Imazapyr	83.4	93.1	87.1			6.74
	Imidacloprid	83.2	92.4	86.8			6.20
	Linuron	76.9	63.5	65.4			2.85
	Mandestrobin	86.3	84.3	78.2			7.51
	MCPP	89.4	98.7	81.3			19.4
	Methiocarb	65.1	55.8	54.2			2.83
	Methomyl	80.7	24.7	25.5			3.03
	Naproxen	65.3	64.5	53.2			19.2
	Oxamyl	87.8	41.9	40.9			2.34
	Primidone	83.6	84.0	77.1			8.64
	Propoxur	73.3	32.5	32.9			1.24
	Pyraclostrobin	81.7	80.6	73.4			9.39
	Silvex	72.0	83.8	71.0			16.4
	Sucralose	117	115	117			1.92
	Thiamethoxam	84.8	81.7	80.0			2.02
	Tolfenpyrad	51.2	55.9	53.3			4.69
	Triclopyr	86.2	100	90.6			10.0
SM 2320 B-2011	Total Alkalinity	97.8				2.91	
	Total Alkalinity	97.6				0.445	
SM 2540 C-2015	TDS	94.8				1.70	

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
SM 2540 C-2015	TDS	98.8				6.00	
SM 2540 D-2015	TSS	109					
	TSS	105					
SM 4500-F- C-2011	Fluoride	103	103	102			0.467
	Fluoride	99.6	98.6	98.6			0.0
SM 5310 B-2011	Organic Carbon	94.4	93.7	95.6			1.86
	Organic Carbon	99.2	93.1	92.4			0.542

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2447414, 2447416, 2447418
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2447414, 2447416, 2447418
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2447414, 2447416, 2447418
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2447414, 2447416, 2447418
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2447415, 2447417, 2447419
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2447415, 2447417, 2447419
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2447415, 2447417, 2447419
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2447415, 2447417, 2447419
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2447433
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2447431, 2447432
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2447433
EPA 8270E	PCBs in water matrices by GC/MS/MS	2447431, 2447432
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2447431, 2447432
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2447429
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2447427, 2447428, 2447430
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2447414, 2447416, 2447418
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2447414, 2447416, 2447418
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2447414, 2447416, 2447418
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2447414, 2447416, 2447418
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2447415, 2447417, 2447419

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	10/26/2023			10/26/2023 15:57	Chandler E Cox	2447414
	10/26/2023			10/26/2023 15:58	Chandler E Cox	2447416
	10/26/2023			10/26/2023 15:59	Chandler E Cox	2447418
EPA 180.1 Rev. 2.0	10/26/2023			10/26/2023 14:47	Khloe J Berg	2447414
	10/26/2023			10/26/2023 14:50	Khloe J Berg	2447416
	10/26/2023			10/26/2023 14:52	Khloe J Berg	2447418
EPA 300.0 Rev. 2.1	10/26/2023			11/07/2023 10:08	James L Waggerby	2447414
	10/26/2023			11/07/2023 10:23	James L Waggerby	2447416
	10/26/2023			11/07/2023 10:39	James L Waggerby	2447418
EPA 350.1 Rev. 2.0	10/26/2023			10/31/2023 12:23	Ping Hua	2447415
	10/26/2023			10/31/2023 12:27	Ping Hua	2447417
	10/26/2023			10/31/2023 13:42	Ping Hua	2447419
EPA 351.2 Rev. 2.0	10/26/2023	10/27/2023 09:39	Samantha L Bates	10/30/2023 10:36	Samantha L Bates	2447417
	10/26/2023	10/27/2023 09:39	Samantha L Bates	10/30/2023 11:27	Samantha L Bates	2447415
	10/26/2023	11/01/2023 13:22	Simonne.V. Calhoun	11/02/2023 14:51	Ping Hua	2447419
EPA 353.2 Rev. 2.0	10/26/2023			11/02/2023 12:47	Fadila Guebre	2447415
	10/26/2023			11/02/2023 12:48	Fadila Guebre	2447417
	10/26/2023			11/13/2023 13:35	Fadila Guebre	2447419
EPA 365.1 Rev. 2.0	10/26/2023	10/27/2023 12:52	Adam P Silver	10/30/2023 11:47	Chandler E Cox	2447417
	10/26/2023	10/27/2023 12:52	Adam P Silver	10/31/2023 10:53	James L Waggerby	2447415
	10/26/2023	10/31/2023 12:07	Adam P Silver	11/01/2023 13:00	Chandler E Cox	2447419
EPA 8270E	10/26/2023	10/30/2023 07:00	Fe-Val Siddell	11/02/2023 00:41	Arthur Maknenko	2447433
	10/26/2023	10/30/2023 07:00	Fe-Val Siddell	11/03/2023 00:32	Vandana T. Nagar	2447433
	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/06/2023 02:35	Julie Wi	2447431
	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/06/2023 05:01	Julie Wi	2447432
	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/11/2023 21:49	Lipi Saha	2447431
	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/11/2023 22:19	Lipi Saha	2447432
EPA 8276	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/04/2023 16:50	Arthur Maknenko	2447431
	10/26/2023	10/31/2023 08:30	Rasheda Ghaffari	11/04/2023 17:47	Arthur Maknenko	2447432
EPA 8321B	10/26/2023	10/27/2023 13:00	Hoor Shaik	10/28/2023 04:50	Juyoung Kim	2447429
	10/26/2023	10/27/2023 14:00	Hana Lee	10/27/2023 21:17	Tae K Lee	2447430
	10/26/2023	10/27/2023 14:00	Hana Lee	10/28/2023 01:29	Tae K Lee	2447427
	10/26/2023	10/27/2023 14:00	Hana Lee	10/28/2023 01:57	Tae K Lee	2447428
	10/26/2023	10/27/2023 14:00	Hana Lee	10/28/2023 02:11	Tae K Lee	2447428
	10/26/2023	10/27/2023 14:00	Hana Lee	10/28/2023 02:25	Tae K Lee	2447430
	10/26/2023	10/27/2023 14:00	Hana Lee	10/30/2023 15:04	Tae K Lee	2447427
	10/26/2023	10/27/2023 14:00	Hana Lee	10/30/2023 15:18	Tae K Lee	2447428
	10/26/2023	10/27/2023 14:00	Hana Lee	10/30/2023 15:31	Tae K Lee	2447430
	10/26/2023	10/31/2023 09:00	Hoor Shaik	10/31/2023 22:15	Juyoung Kim	2447427
	10/26/2023	10/31/2023 09:00	Hoor Shaik	10/31/2023 22:33	Juyoung Kim	2447428

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	10/26/2023	10/31/2023 09:00	Hoor Shaik	10/31/2023 22:51	Juyoung Kim	2447430
SM 2320 B-2011	10/26/2023			10/31/2023 00:04	Adam P Silver	2447414
	10/26/2023			10/31/2023 04:48	Adam P Silver	2447416
	10/26/2023			11/03/2023 00:38	Dale L. Simmons	2447418
SM 2540 C-2015	10/26/2023			10/31/2023 14:50	Yijie Li	2447414, 2447416, 2447418
SM 2540 D-2015	10/26/2023			10/31/2023 14:50	Yijie Li	2447414, 2447416, 2447418
SM 4500-F- C-2011	10/26/2023			10/30/2023 23:55	Adam P Silver	2447414
	10/26/2023			10/31/2023 04:48	Adam P Silver	2447416
	10/26/2023			11/02/2023 23:43	Dale L. Simmons	2447418
SM 5310 B-2011	10/26/2023			11/01/2023 17:59	Elise M. Gillis	2447415
	10/26/2023			11/01/2023 18:13	Elise M. Gillis	2447417
	10/26/2023			11/03/2023 02:24	Elise M. Gillis	2447419