

Chemical Analysis Report

NW-DIST-2023-04-20-02

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

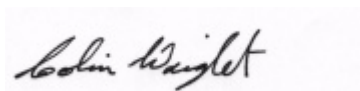
Event Description: **Holmes Run**
Request ID: **RQ-2023-04-17-28**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
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Certified by: Colin Wright, Program Administrator

Date Certified: 17-MAY-2023 08:40

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

Case Narrative

Unless otherwise noted, all samples included in this report were received in accordance with protocols referenced in Chapter 62-160, Florida Administrative Code (F.A.C.). Results published in this report pertain only to the samples as submitted to, and received by the laboratory. All times in this report are adjusted to the applicable Eastern Time Zone (EST or EDT).

Results for the following analytical groups are included in this report: Metals, Nutrients and Pesticides.

Scientific notation may be used in reporting very large or small values. Values reported using scientific notation will take the form of the following example: 1.3E+03, which is equivalent to 1.3×10^3 or 1300.

Unless otherwise noted, analytical values for soil and sediment samples are reported on a dry weight basis, and analytical values for waste and tissue samples are reported on a wet weight basis.

Results for TNI accredited tests met requirements established by The NELAC Institute. A double asterisk (**) is used to indicate an analyte/matrix/method for which the laboratory is not TNI accredited by the Florida Department of Health Environmental Laboratory Certification Program or where accreditation for that field of testing is not applicable.

Any significant anomalies or deviations from established protocols are documented in Non-Conformance Reports, which, where appropriate, are included within this analytical report. Additional comments related to specific analytical tests may be included as remarks following the analytical results for each sample. Such comments and remarks are for informational purposes only and are not intended to convey judgement about the usability of the reported data.

A quality control report on the performance of the test method for the submitted samples is included. Uncertainty associated with the analytical results contained in this report can be estimated from the reported quality assurance results and from published quality control acceptance limits for each analytical test. Matrix quality control results (matrix spike recoveries and matrix sample precision) pertain only to the matrix sample tested and do not necessarily reflect test method performance for other samples.

Typical matrix quality control (QC) measurements may include matrix spike recovery, matrix spike duplicate recovery, matrix spike precision and matrix sample precision. Not all matrix QC results may be available or reportable; where they are not an explanation is provided. Typical reasons for unavailable QC results include, but are not limited to, a) insufficient matrix sample to perform some or all QC measurements; b) analyte concentration in the sample replicated was too low for a meaningful measurement of precision and c) analyte concentration in the matrix sample spiked was too high (relative to the amount of analyte spiked) for a meaningful measurement of recovery. Where matrix QC results are unavailable, other method performance metrics (e.g., LCS recovery, LCS precision, surrogate recovery) may be used to assess performance of the method. Comments explaining any missing QC measurements are not intended to convey any adverse conclusions about the quality of the reported data.

Precision is reported as relative percent difference unless otherwise noted.

Quality Control codes as defined below may be used in this report to indicate results that are associated with one or more quality control elements which did not fall within established test method criteria. Such results may be qualified as estimates using a J qualifier as required by 62-160 F.A.C. Explanations are included in the report for any results that were reported as estimates for other reasons.

QC Codes used in this report may include:

- LCS – Recovery for the batch Laboratory Control Sample (LCS) was outside existing control limits;
- MS – Recovery for the batch matrix spike (MS) was outside existing control limits;
- CCV – Recovery for a continuing calibration verification (CCV) standard was outside existing control limits;
- SUR – Recovery of a surrogate (SUR) for associated analytes was outside existing control limits;
- RPD – The precision, measured as relative percent difference (RPD), of batch replicate measurements was outside existing control limits;
- RSD – The precision, measured as relative standard deviation (RSD), of batch replicate measurements was outside existing control limits;
- SMP – Sample - used precision derived from replicate analyses of a sample;

The following data qualifiers are used, where applicable, in this report as specified in 62-160 F.A.C.

- A - Value reported is the mean of two or more determinations.
- B - Results based on colony counts outside the acceptable range.
- I - The reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
- J - Estimated value and/or the analysis did not meet established quality control criteria.
- K - Actual value is known to be less than value given.
- L - Actual value is known to be greater than value given.
- N - Presumptive evidence of presence of material.
- O - Sampled, but analysis lost or not performed.
- Q - Sample held beyond normal holding time.
- T - Value reported is less than the criterion of detection.
- U - Material was analyzed for but not detected. The reported value is the method detection limit for the sample analyzed.
- V - Analyte was detected in both sample and method blank.
- X - Too few individuals to calculate SCI value.
- Y - The laboratory analysis was from an unpreserved or improperly preserved sample. The data may not be accurate.
- Z - Colonies were too numerous to count (TNTC).

Quality control information from overflow laboratories may not be included in this report. Please refer to the associated report from the overflow laboratory for additional information.

Sample Location: ANDERSON MILL CREEK

Collection Date/Time: 04/19/2023 13:05

Field ID: G3NW0224

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401800	DEP SOP: NU-094-1	Color (true)	70		PCU	P428785	
	EPA 180.1 Rev. 2.0	Turbidity	1.3		NTU	P428795	
	EPA 300.0 Rev. 2.1	Chloride	2.8		mg Cl/L	P429067	
		Sulfate	0.22	I	mg SO4/L	P429071	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P428869	
	SM 2540 C-2015	TDS	16	I	mg/L	P429119	
	SM 2540 D-2015	TSS	2	U	mg/L	P429121	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P429442	
2401801	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P429095	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.32		mg N/L	P428995	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P429141	
	EPA 365.1 Rev. 2.0	Total-P	0.006		mg P/L	P428835	
	SM 5310 B-2011	Organic Carbon	7.9		mg C/L	P429040	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: CHOCTAWHATCHEE RIVER UPSTREAM HWY 90 BOAT RAMP **Collection Date/Time: 04/19/2023 12:20**

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401798	DEP SOP: NU-094-1	Color (true)	26		PCU	P428787	
	EPA 180.1 Rev. 2.0	Turbidity	22		NTU	P428795	
	EPA 300.0 Rev. 2.1	Chloride	4.7		mg Cl/L	P429067	
		Sulfate	2.1		mg SO4/L	P429071	
	SM 2320 B-2011	Total Alkalinity	26		mg CaCO3/L	P428869	
	SM 2540 C-2015	TDS	66		mg/L	P429119	
	SM 2540 D-2015	TSS	23		mg/L	P429121	
	SM 4500-F- C-2011	Fluoride	0.038	I	mg F/L	P429442	
2401799	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P429011	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P428926	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.43		mg N/L	P429141	
	EPA 365.1 Rev. 2.0	Total-P	0.051		mg P/L	P428835	
	SM 5310 B-2011	Organic Carbon	4.8		mg C/L	P429040	
2401810	EPA 8321B	Aldicarb	0.020	U	ug/L	P428762	
		Aldicarb Sulfone	0.0020	U	ug/L	P428762	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P428762	MS
		Carbaryl	0.0020	U	ug/L	P428762	
		Carbofuran	0.0020	U	ug/L	P428762	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P428762	
		Methiocarb	0.0020	U	ug/L	P428762	
		Methomyl	0.0020	U	ug/L	P428762	
		Oxamyl	0.0020	U	ug/L	P428762	
		Propoxur	0.0020	U	ug/L	P428762	
2401811		2,4-D	0.027		ug/L	P428783	
		Acesulfame K	0.10	U	ug/L	P428748	
		2,4,5-T	0.0040	U	ug/L	P428783	
		AMPA	0.10	U	ug/L	P428748	
		Acetaminophen	0.0080	U	ug/L	P428783	
		Acetamiprid	0.0020	U	ug/L	P428783	
		Endothall	0.25	U	ug/L	P428748	
		Glufosinate	0.10	U	ug/L	P428748	
		Glyphosate	0.10	U	ug/L	P428748	
		Afidopyropen	0.0020	U	ug/L	P428783	
		Bentazon	0.0013	I	ug/L	P428783	
		Sucralose	0.37		ug/L	P428748	
		Benzovindiflupyr	0.0020	U	ug/L	P428783	
		Carbamazepine	8.0E-04	U	ug/L	P428783	
		Clothianidin	0.0020	U	ug/L	P428783	
		Dinotefuran	0.0020	U	ug/L	P428783	
		Diuron	0.0020	U	ug/L	P428783	
		Fenuron	0.032	U	ug/L	P428783	
		Fluridone	8.0E-04	U	ug/L	P428783	
		Imazapyr	0.0090	I	ug/L	P428783	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401811	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P428783	
		Ibuprofen	0.080	U	ug/L	P428783	
		Imidacloprid	0.0056	I	ug/L	P428783	
		Linuron	0.0040	U	ug/L	P428783	
		Mandestrobin	0.0020	U	ug/L	P428783	
		MCP	0.0020	U	ug/L	P428783	
		Naproxen	0.0080	U	ug/L	P428783	
		Primidone	0.0040	U	ug/L	P428783	
		Pyraclostrobin	0.0020	U	ug/L	P428783	
		Silvex	0.0040	U	ug/L	P428783	
		Thiamethoxam	0.0020	U	ug/L	P428783	
		Tolfenpyrad	0.0020	U	ug/L	P428783	
		Triclopyr	0.0040	U	ug/L	P428783	
2401819	EPA 8270E	Aldrin	0.68	UQ	ng/L	P429576	
		Alpha-BHC	0.10	UQ	ng/L	P429576	
		Alpha-Chlordane	0.21	UQ	ng/L	P429576	
		PCB-1016	2.0	U	ng/L	P428950	
		Beta-BHC	0.10	UQ	ng/L	P429576	
		PCB-1221	2.0	U	ng/L	P428950	
		Beta-Cyfluthrin	1.3	UQ	ng/L	P429576	
		PCB-1232	2.0	U	ng/L	P428950	
		Bifenthrin	0.52	UQ	ng/L	P429576	
		PCB-1242	2.0	U	ng/L	P428950	
		PCB-1248	2.0	U	ng/L	P428950	
		Chlorothalonil	3.7	UQ	ng/L	P429576	MS
		PCB-1254	2.0	U	ng/L	P428950	
		Cis-Nonachlor	0.21	UQ	ng/L	P429576	
		PCB-1260	2.0	U	ng/L	P428950	
		Cypermethrin	1.6	UQ	ng/L	P429576	
		Dacthal	0.16	UQ	ng/L	P429576	
		DDD-p,p'	0.26	UQ	ng/L	P429576	
		DDE-p,p'	0.21	UQ	ng/L	P429576	
		DDT-p,p'	0.26	UQ	ng/L	P429576	
		Delta-BHC	0.42	UQ	ng/L	P429576	
		Deltamethrin	1.3	UQ	ng/L	P429576	
		Dichlobenil	0.26	UQ	ng/L	P429576	
		Dicofol	1.3	UQ	ng/L	P429576	
		Dieldrin	13	Q	ng/L	P429576	
		Endosulfan I	0.42	UQ	ng/L	P429576	
		Endosulfan II	0.42	UQ	ng/L	P429576	
		Endosulfan Sulfate	0.31	UQ	ng/L	P429576	
		Endrin	0.42	UQ	ng/L	P429576	
		Endrin Aldehyde	0.78	UQ	ng/L	P429576	
		Endrin Ketone	1.0	IQJ	ng/L	P429576	CCV
		Esfenvalerate	0.78	UQ	ng/L	P429576	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401819	EPA 8270E	Ethalfuralin	0.16	UQ	ng/L	P429576	CCV
		Fenpropathrin	0.26	UQ	ng/L	P429576	
		Gamma-BHC	0.13	UQ	ng/L	P429576	
		Gamma-Chlordane	0.21	UQ	ng/L	P429576	
		Heptachlor	0.21	UQ	ng/L	P429576	
		Heptachlor Epoxide	0.26	UQ	ng/L	P429576	
		Hexachlorobenzene**	1.0	UQ	ng/L	P429576	
		Kepone	5.2	UQJ	ng/L	P429576	
		Lambda-Cyhalothrin	0.78	UQ	ng/L	P429576	
		Methoprene	0.78	UQ	ng/L	P429576	
		Methoxychlor	0.31	UQ	ng/L	P429576	
		MGK-264	0.21	UQ	ng/L	P429576	
		Mirex	0.36	UQ	ng/L	P429576	
		Oxychlordane	0.31	UQ	ng/L	P429576	
		Permethrin	1.7	UQ	ng/L	P429576	
		Phenothrin	0.94	UQ	ng/L	P429576	
		Piperonyl Butoxide	0.16	UQ	ng/L	P429576	
		Prallethrin	2.1	UQ	ng/L	P429576	
		Tau-Fluvalinate	0.26	UQ	ng/L	P429576	
		Tetramethrin	0.78	UQ	ng/L	P429576	
		Trans-Nonachlor	0.21	UQ	ng/L	P429576	
		Triclosan Methyl	0.16	UQ	ng/L	P429576	
		Trifluralin	0.21	UQ	ng/L	P429576	
	EPA 8276	Chlordane	2.1	UQ	ng/L	P429576	
		Toxaphene	16	UQ	ng/L	P429576	
2401820	EPA 8270E	Oxybenzone**	10	U	ng/L	P428829	
		Acetochlor	0.21	U	ng/L	P428829	
		Octinoxate**	21	U	ng/L	P428829	
		Alachlor	0.41	U	ng/L	P428829	
		Avobenzone**	100	U	ng/L	P428829	
		Ametryn	1.1	U	ng/L	P428829	
		Atrazine	17		ng/L	P428829	
		PBDE-47**	4.1	U	ng/L	P428829	
		Atrazine Desethyl	1.3	U	ng/L	P428829	
		PBDE-99**	5.1	U	ng/L	P428829	
		Azinphos Methyl	3.1	U	ng/L	P428829	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P428829	
		Azoxystrobin	0.90	I	ng/L	P428829	
		Bromacil	1.0	I	ng/L	P428829	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P428829	
		Butylate	0.21	U	ng/L	P428829	
		Dechlorane Plus**	31	U	ng/L	P428829	
		Caffeine**	21	I	ng/L	P428829	
		Dechlorane 602**	5.1	U	ng/L	P428829	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401820	EPA 8270E	Carbophenothion	0.51	U	ng/L	P428829	LCS, MS
		Dechlorane 603**	4.1	U	ng/L	P428829	
		Carfentrazone Ethyl	0.15	U	ng/L	P428829	
		Hexabromobenzene**	6.2	U	ng/L	P428829	
		Chlorfenapyr	0.31	U	ng/L	P428829	
		PBB-153**	8.2	U	ng/L	P428829	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P428829	
		Pentabromotoluene**	3.1	U	ng/L	P428829	
		Chlorpyrifos Methyl	0.10	U	ng/L	P428829	
		Tris(2-chloroethyl) phosphate (TCEP)**	72	U	ng/L	P428829	
		Coumaphos	1.1	U	ng/L	P428829	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	33	I	ng/L	P428829	
		Cyanazine	5.1	U	ng/L	P428829	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	3.4	I	ng/L	P428829	
		Cyprodinil	0.21	U	ng/L	P428829	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P428829	
		Demeton	3.6	U	ng/L	P428829	
		Diazinon	0.13	U	ng/L	P428829	
		Difenoconazole	0.62	U	ng/L	P428829	
		Dimethenamid	0.10	UJ	ng/L	P428829	
		Dimethomorph	0.31	U	ng/L	P428829	
		Disulfoton	0.62	U	ng/L	P428829	
		Dithiopyr	3.7	IV	ng/L	P428829	
		EPTC	0.51	U	ng/L	P428829	
		Ethion	0.31	U	ng/L	P428829	
		Ethoprop	0.13	U	ng/L	P428829	
		Etridiazole	0.10	U	ng/L	P428829	
		Fenamiphos	0.46	U	ng/L	P428829	
		Fenbuconazole	0.51	U	ng/L	P428829	
		Fipronil	0.55	I	ng/L	P428829	
		Fipronil Desulfinyl**	0.33	I	ng/L	P428829	
		Fipronil Sulfide	0.18	I	ng/L	P428829	
		Fipronil Sulfone	0.26	I	ng/L	P428829	
		Fluazifop-P-butyl	0.10	U	ng/L	P428829	
		Fludioxonil	0.10	U	ng/L	P428829	
		Flumioxazin	3.1	U	ng/L	P428829	
		Flutolanil	0.10	U	ng/L	P428829	
		Fluxapyroxad	0.64	I	ng/L	P428829	
		Fonofos	0.15	U	ng/L	P428829	
		Hexazinone	1.1	I	ng/L	P428829	
		Imazalil	0.67	U	ng/L	P428829	
		Iprodione	0.51	U	ng/L	P428829	
		Loratadine**	0.31	U	ng/L	P428829	
		Malathion	0.36	U	ng/L	P428829	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401820	EPA 8270E	Metalaxyl	0.51	U	ng/L	P428829	
		Metolachlor	3.7	I	ng/L	P428829	MS
		Metribuzin	0.41	U	ng/L	P428829	
		Mevinphos	1.0	U	ng/L	P428829	
		Molinate	0.26	U	ng/L	P428829	
		Myclobutanil	0.36	U	ng/L	P428829	
		Naled	2.6	U	ng/L	P428829	
		Napropamide	0.72	U	ng/L	P428829	
		Norflurazon	1.0	U	ng/L	P428829	
		Oxadiazon	0.36	U	ng/L	P428829	RPD
		Oxyfluorfen	0.21	U	ng/L	P428829	
		Parathion Ethyl	0.15	U	ng/L	P428829	
		Parathion Methyl	0.21	U	ng/L	P428829	
		Pendimethalin	2.1	I	ng/L	P428829	MS
		Phenytain**	5.4	U	ng/L	P428829	
		Phorate	0.26	U	ng/L	P428829	
		Prodiamine	0.21	U	ng/L	P428829	
		Prometon	3.1	U	ng/L	P428829	
		Prometryn	0.36	UJ	ng/L	P428829	LCS
		Pronamide	0.10	UJ	ng/L	P428829	LCS, MS
		Propanil	0.10	U	ng/L	P428829	
		Propargite	0.82	U	ng/L	P428829	
		Propiconazole	0.62	U	ng/L	P428829	
		Pyraflufen Ethyl	0.31	U	ng/L	P428829	
		Pyridaben	1.4	U	ng/L	P428829	
		Pyriproxyfen	0.26	U	ng/L	P428829	
		Simazine	7.7		ng/L	P428829	
		Stirophos	0.41	U	ng/L	P428829	
		Sulfentrazone	1.4	U	ng/L	P428829	
		Tebuconazole	1.4	U	ng/L	P428829	
		Terbufos	0.21	U	ng/L	P428829	
		Terbutylazine	0.21	U	ng/L	P428829	
		Thiobencarb	0.51	U	ng/L	P428829	
		Triadimefon	0.15	U	ng/L	P428829	
2401829	EPA 200.7 Rev. 4.4	Calcium	9.56		mg/L	P428825	
		Iron	2.07E+03		ug/L	P428825	
		Magnesium	1.74		mg/L	P428825	
		Potassium	1.1	I	mg/L	P428825	
		Sodium	3.3		mg/L	P428825	
		Strontium	28.2		ug/L	P428825	
		Tin	3.0	U	ug/L	P428825	
		Titanium	6.5		ug/L	P428825	
		Vanadium	2.3	I	ug/L	P428825	
		Zinc	5.0	U	ug/L	P428825	
	EPA 200.8 Rev. 5.4	Aluminum	692		ug/L	P428825	

Field ID: G3NW0052

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401829	EPA 200.8 Rev. 5.4	Antimony	0.052	I	ug/L	P428825	
		Arsenic	0.85		ug/L	P428825	
		Barium	24.4		ug/L	P428825	
		Beryllium	0.055		ug/L	P428825	
		Boron	11.8		ug/L	P428825	
		Cadmium	0.020	U	ug/L	P428825	
		Chromium	1.6	I	ug/L	P428825	
		Cobalt	0.507		ug/L	P428825	
		Copper	0.57	I	ug/L	P428825	
		Lead	0.67		ug/L	P428825	
		Manganese	85.9		ug/L	P428825	
		Molybdenum	0.16	I	ug/L	P428825	
		Nickel	0.68	I	ug/L	P428825	
		Selenium	0.20	U	ug/L	P428825	
		Silver	0.010	U	ug/L	P428825	
		Thallium	0.10	U	ug/L	P428825	
	SM 2340 B-2011	Hardness	31.0		mg/L	P428825	

Ref. Method and Comment:

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

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8270E: Sample expired for preparation due to need for re-extraction. MS precision for chlorothalonil not assessed due to no recoveries. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8276: Sample expired for preparation due to need for re-extraction.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of dithiopyr in both the Method Blank and the sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: HUCKLEBERRY CREEK

Collection Date/Time: 04/19/2023 13:50

Field ID: G3NW0135

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401812	EPA 8321B	2,4-D	0.0067	I	ug/L	P428783	
		Acesulfame K	0.10	U	ug/L	P428748	
		2,4,5-T	0.0040	U	ug/L	P428783	
		AMPA	0.10	U	ug/L	P428748	
		Acetaminophen	0.0080	U	ug/L	P428783	
		Acetamiprid	0.0020	U	ug/L	P428783	
		Endothall	0.25	U	ug/L	P428748	
		Glufosinate	0.10	U	ug/L	P428748	
		Glyphosate	0.10	U	ug/L	P428748	
		Afidopyropen	0.0020	U	ug/L	P428783	
		Bentazon	8.0E-04	U	ug/L	P428783	
		Sucralose	0.22		ug/L	P428748	
		Benzovindiflupyr	0.0020	U	ug/L	P428783	
		Carbamazepine	8.0E-04	U	ug/L	P428783	
		Clothianidin	0.0020	U	ug/L	P428783	
		Dinotefuran	0.0020	U	ug/L	P428783	
		Diuron	0.0020	U	ug/L	P428783	
		Fenuron	0.032	U	ug/L	P428783	
		Fluridone	8.0E-04	U	ug/L	P428783	
		Imazapyr	0.0063	I	ug/L	P428783	
		Hydrocodone	0.0020	U	ug/L	P428783	
		Ibuprofen	0.080	U	ug/L	P428783	
		Imidacloprid	0.0020	U	ug/L	P428783	
		Linuron	0.0040	U	ug/L	P428783	
		Mandestrobin	0.0020	U	ug/L	P428783	
		MCPP	0.0020	U	ug/L	P428783	
		Naproxen	0.0080	U	ug/L	P428783	
		Primidone	0.0040	U	ug/L	P428783	
		Pyraclostrobin	0.0020	U	ug/L	P428783	
		Silvex	0.0040	U	ug/L	P428783	
		Thiamethoxam	0.0020	U	ug/L	P428783	
		Tolfenpyrad	0.0020	U	ug/L	P428783	
		Triclopyr	0.0040	U	ug/L	P428783	
2401830	EPA 200.7 Rev. 4.4	Calcium	1.95		mg/L	P428825	
		Iron	740		ug/L	P428825	
		Magnesium	0.88		mg/L	P428825	
		Potassium	0.68	I	mg/L	P428825	
		Sodium	2.2		mg/L	P428825	
		Strontium	7.3	I	ug/L	P428825	
		Tin	3.0	U	ug/L	P428825	
		Titanium	0.75	U	ug/L	P428825	
		Vanadium	2.0	U	ug/L	P428825	
		Zinc	5.0	U	ug/L	P428825	
	EPA 200.8 Rev. 5.4	Aluminum	129		ug/L	P428825	

Field ID: G3NW0135

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401830	EPA 200.8 Rev. 5.4	Antimony	0.050	U	ug/L	P428825	
		Arsenic	0.43		ug/L	P428825	
		Barium	11.8		ug/L	P428825	
		Beryllium	0.012	I	ug/L	P428825	
		Boron	8.1		ug/L	P428825	
		Cadmium	0.020	U	ug/L	P428825	
		Chromium	0.40	U	ug/L	P428825	
		Cobalt	0.072	I	ug/L	P428825	
		Copper	0.40	U	ug/L	P428825	
		Lead	0.20	U	ug/L	P428825	
		Manganese	13.8		ug/L	P428825	
		Molybdenum	0.15	U	ug/L	P428825	
		Nickel	0.50	U	ug/L	P428825	
		Selenium	0.20	U	ug/L	P428825	
		Silver	0.010	U	ug/L	P428825	
		Thallium	0.10	U	ug/L	P428825	
	SM 2340 B-2011	Hardness	8.5		mg/L	P428825	

Ref. Method and Comment:
EPA 8321B: MS accuracy for bentazon could not be assessed due to high concentration of parameter in the spiked sample.

**Sample Location: SIKES CREEK UPSTREAM OF HARRIS
STEVENSON RD**

Collection Date/Time: 04/19/2023 11:15

Field ID: G3NW0450

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401821	EPA 8270E	Aldrin	0.67	UQ	ng/L	P429576	
		Alpha-BHC	0.10	UQ	ng/L	P429576	
		Alpha-Chlordane	0.21	UQ	ng/L	P429576	
		PCB-1016	2.1	U	ng/L	P428950	
		Beta-BHC	0.10	UQ	ng/L	P429576	
		PCB-1221	2.1	U	ng/L	P428950	
		Beta-Cyfluthrin	1.3	UQ	ng/L	P429576	
		PCB-1232	2.1	U	ng/L	P428950	
		Bifenthrin	0.52	UQ	ng/L	P429576	
		PCB-1242	2.1	U	ng/L	P428950	
		PCB-1248	2.1	U	ng/L	P428950	
		Chlorothalonil	3.7	UQ	ng/L	P429576	MS
		PCB-1254	2.1	U	ng/L	P428950	
		Cis-Nonachlor	0.21	UQ	ng/L	P429576	
		PCB-1260	2.1	U	ng/L	P428950	
		Cypermethrin	1.6	UQ	ng/L	P429576	
		Dacthal	0.16	UQ	ng/L	P429576	
		DDD-p,p'	0.26	UQ	ng/L	P429576	
		DDE-p,p'	0.21	UQ	ng/L	P429576	
		DDT-p,p'	0.26	UQ	ng/L	P429576	
		Delta-BHC	0.41	UQ	ng/L	P429576	
		Deltamethrin	1.3	UQ	ng/L	P429576	
		Dichlobenil	0.26	UQ	ng/L	P429576	
		Dicofol	1.3	UQ	ng/L	P429576	
		Dieldrin	0.53	IQ	ng/L	P429576	
		Endosulfan I	0.41	UQ	ng/L	P429576	
		Endosulfan II	0.41	UQ	ng/L	P429576	
		Endosulfan Sulfate	0.31	UQ	ng/L	P429576	
		Endrin	0.41	UQ	ng/L	P429576	
		Endrin Aldehyde	0.78	UQ	ng/L	P429576	
		Endrin Ketone	0.41	UQJ	ng/L	P429576	CCV
		Esfenvalerate	0.78	UQ	ng/L	P429576	
		Ethalfuralin	0.16	UQ	ng/L	P429576	
		Fenpropathrin	0.26	UQ	ng/L	P429576	
		Gamma-BHC	0.13	UQ	ng/L	P429576	
		Gamma-Chlordane	0.21	UQ	ng/L	P429576	
		Heptachlor	0.21	UQ	ng/L	P429576	
		Heptachlor Epoxide	0.26	UQ	ng/L	P429576	
		Hexachlorobenzene**	1.0	UQ	ng/L	P429576	
		Kepone	5.2	UQJ	ng/L	P429576	CCV
		Lambda-Cyhalothrin	0.78	UQ	ng/L	P429576	
		Methoprene	0.78	UQ	ng/L	P429576	
		Methoxychlor	0.31	UQ	ng/L	P429576	

Field ID: G3NW0450

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2401821	EPA 8270E	MGK-264	0.21	UQ	ng/L	P429576	
		Mirex	0.36	UQ	ng/L	P429576	
		Oxychlordane	0.31	UQ	ng/L	P429576	
		Permethrin	1.7	UQ	ng/L	P429576	
		Phenothrin	0.93	UQ	ng/L	P429576	
		Piperonyl Butoxide	0.16	UQ	ng/L	P429576	
		Prallethrin	2.1	UQ	ng/L	P429576	
		Tau-Fluvalinate	0.26	UQ	ng/L	P429576	
		Tetramethrin	0.78	UQ	ng/L	P429576	
		Trans-Nonachlor	0.21	UQ	ng/L	P429576	
		Triclosan Methyl	0.16	UQ	ng/L	P429576	
		Trifluralin	0.21	UQ	ng/L	P429576	
		Chlordane	2.1	UQ	ng/L	P429576	
		Toxaphene	150	JQ	ng/L	P429576	
2401831	EPA 8276	Calcium	9.60		mg/L	P428825	
		Iron	800		ug/L	P428825	
		Magnesium	0.72		mg/L	P428825	
	EPA 200.7 Rev. 4.4	Potassium	0.30	U	mg/L	P428825	
		Sodium	1.9	I	mg/L	P428825	
		Strontium	11.1		ug/L	P428825	
		Tin	3.0	U	ug/L	P428825	
		Titanium	1.1	I	ug/L	P428825	
		Vanadium	2.0	U	ug/L	P428825	
		Zinc	5.0	U	ug/L	P428825	
	EPA 200.8 Rev. 5.4	Aluminum	276		ug/L	P428825	
		Antimony	0.050	U	ug/L	P428825	
		Arsenic	0.36		ug/L	P428825	
		Barium	13.0		ug/L	P428825	
		Beryllium	0.031	I	ug/L	P428825	
		Boron	8.2		ug/L	P428825	
		Cadmium	0.020	U	ug/L	P428825	
		Chromium	0.61	I	ug/L	P428825	
		Cobalt	0.285		ug/L	P428825	
		Copper	0.40	U	ug/L	P428825	
		Lead	0.40	I	ug/L	P428825	
		Manganese	41.6		ug/L	P428825	
		Molybdenum	0.15	U	ug/L	P428825	
		Nickel	0.50	U	ug/L	P428825	
		Selenium	0.20	U	ug/L	P428825	
		Silver	0.010	U	ug/L	P428825	
		Thallium	0.10	U	ug/L	P428825	
	SM 2340 B-2011	Hardness	26.9		mg/L	P428825	

Ref. Method and Comment:

EPA 8270E: Sample expired for preparation due to need for re-extraction. MS precision for chlorothalonil not assessed due to no recoveries. Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8276: Sample expired for preparation due to need for re-extraction. Estimation for toxaphene due to PQL spike recovery exceeding control limits.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P428785

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P428787

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428795

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428825

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429067

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429071

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429011

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428926

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428995

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429141

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428835

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

Reference Method: EPA 8270E
Batch ID: P428829

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428829

Component	Result	Code	Units
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428829

Component	Result	Code	Units
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.7	I	ng/L
Dithiopyr	1.0	I	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428829

Component	Result	Code	Units
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428829

Component	Result	Code	Units
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8270E

Batch ID: P428950

Component	Result	Code	Units
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428950

Component	Result	Code	Units
PCB-1260	2.0	U	ng/L

Reference Method: EPA 8270E
Batch ID: P429576

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	1.1	I	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P429576

Component	Result	Code	Units
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
Oxychlordane	0.30	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276

Batch ID: P429576

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

Reference Method: EPA 8321B

Batch ID: P428748

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: P428762

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

Reference Method: EPA 8321B

Batch ID: P428783

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P428783

Component	Result	Code	Units
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: P428869

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

Reference Method: SM 2540 C-2015
Batch ID: P429119

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P429121

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P429040

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: P428785

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

Reference Method: DEP SOP: NU-094-1
Batch ID: P428787

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428795

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428825

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.2		P	80 - 120
Iron	98.4		P	80 - 120
Magnesium	101		P	80 - 120
Potassium	98.7		P	80 - 120
Sodium	105		P	80 - 120
Strontium	99.3		P	80 - 120
Tin	100		P	80 - 120
Titanium	98.1		P	80 - 120
Vanadium	99.8		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Antimony	103		P	85 - 115
Arsenic	101		P	85 - 115
Barium	102		P	85 - 115
Beryllium	97.3		P	85 - 115
Boron	101		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	98.1		P	85 - 115
Cobalt	103		P	85 - 115
Copper	97.8		P	85 - 115
Lead	103		P	85 - 115
Manganese	96.9		P	85 - 115
Molybdenum	97.7		P	85 - 115
Nickel	99.4		P	85 - 115
Selenium	97.4		P	85 - 115
Silver	106		P	85 - 115
Thallium	98.2		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429067

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429071

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429011

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	93.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429095

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428926

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428995

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	92.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429141

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428835

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

Reference Method: EPA 8270E
Batch ID: P428829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.8		P	42 - 162
Acetochlor	88.5		P	69 - 123
Alachlor	105		P	65 - 118
Ametryn	117		P	58 - 141

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine	104		P	73 - 118
Atrazine Desethyl	103		P	32 - 125
Avobenzone	136		P	40 - 203
Azinphos Methyl	131		P	36 - 197
Azoxystrobin	116		P	58 - 226
Bromacil	114		P	48 - 120
Butylate	62.7		P	27 - 85.0
Caffeine	104		P	40 - 137
Carbophenothion	123		P	54 - 132
Carfentrazone Ethyl	122		P	60 - 142
Chlorfenapyr	105		P	53 - 117
Chlorpyrifos Ethyl	97.6		P	59 - 116
Chlorpyrifos Methyl	111		P	66 - 119
Coumaphos	108		P	11 - 234
Cyanazine	124		P	61 - 248
Cyprodinil	105		P	50 - 147
Dechlorane 602	78.2		P	50 - 150
Dechlorane 603	105		P	50 - 150
Dechlorane Plus	97.8		P	47 - 182
Demeton	86.8		P	30 - 138
Diazinon	119		P	67 - 126
Difenoconazole	87.7		P	38 - 205
Dimethenamid	116		F	57 - 111
Dimethomorph	129		P	16 - 212
Disulfoton	118		P	46 - 126
Dithiopyr	108		P	62 - 115
EPTC	56.5		P	28 - 80.0
Ethion	94.6		P	24 - 122
Ethoprop	101		P	62 - 113
Etridiazole	68.6		P	28 - 92.0
Fenamiphos	87.9		P	57 - 128
Fenbuconazole	72.1		P	52 - 155
Fipronil	111		P	63 - 130
Fipronil Desulfinyl	113		P	61 - 130
Fipronil Sulfide	116		P	56 - 117
Fipronil Sulfone	98.3		P	52 - 118
Fluazifop-P-butyl	72.2		P	61 - 128
Fludioxonil	85.0		P	59 - 129
Flumioxazin	142		P	30 - 250
Flutolanil	90.4		P	53 - 127
Fluxapyroxad	102		P	42 - 132
Fonofos	99.6		P	61 - 110
Hexabromobenzene	115		P	50 - 150
Hexazinone	97.6		P	46 - 139
Imazalil	85.3		P	40 - 139
Iprodione	95.0		P	40 - 146
Loratadine	123		P	10 - 224
Malathion	112		P	61 - 135
Metalaxyl	98.1		P	58 - 121
Metolachlor	118		P	64 - 118
Metribuzin	102		P	45 - 245
Mevinphos	82.4		P	49 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428829

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	64.8		P	42 - 92.0
Myclobutanil	103		P	55 - 127
Naled	27.5		P	10 - 114
Napropamide	89.2		P	39 - 121
Norflurazon	104		P	55 - 129
Octinoxate	107		P	26 - 166
Oxadiazon	95.4		P	54 - 115
Oxybenzone	104		P	49 - 135
Oxyfluorfen	120		P	64 - 139
Parathion Ethyl	107		P	70 - 111
Parathion Methyl	119		P	76 - 136
PBB-153	104		P	50 - 150
PBDE-47	87.2		P	41 - 148
PBDE-99	78.5		P	38 - 147
Pendimethalin	114		P	52 - 118
Pentabromotoluene	105		P	50 - 150
Phenytoin	69.8		P	10 - 162
Phorate	111		P	40 - 122
Prodiamine	70.1		P	26 - 141
Prometon	114		P	54 - 122
Prometryn	129		F	61 - 128
Pronamide	130		F	72 - 121
Propanil	126		P	45 - 144
Propargite	84.8		P	10 - 199
Propiconazole	88.1		P	56 - 127
Pyraflufen Ethyl	69.6		P	56 - 140
Pyridaben	86.2		P	26 - 211
Pyriproxyfen	103		P	33 - 194
Simazine	96.3		P	67 - 121
Stirophos	87.8		P	20 - 142
Sulfentrazone	102		P	21 - 144
Tebuconazole	71.1		P	10 - 122
Terbufos	125		P	60 - 129
Terbutylazine	89.4		P	69 - 113
Tetradecachloro-m-terphenyl	146		P	70 - 200
Thiobencarb	112		P	51 - 120
Tri-o-cresyl Phosphate	110		P	49 - 150
Triadimefon	94.3		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	114		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	104		P	70 - 180

Reference Method: EPA 8270E
Batch ID: P428950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PCB-1016	69.3		P	48 - 112
PCB-1260	86.8		P	44 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P429576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	32.4		P	10 - 92.0
Alpha-BHC	88.7		P	75 - 107
Alpha-Chlordane	68.1		P	50 - 108
Beta-BHC	103		P	36 - 138
Beta-Cyfluthrin	37.7		P	20 - 161
Bifenthrin	26.4		P	10 - 119
Chlorothalonil	103		P	26 - 186
Cis-Nonachlor	65.1		P	42 - 119
Cypermethrin	39.7		P	22 - 150
Dacthal	99.4		P	72 - 119
DDD-p,p'	68.1		P	45 - 107
DDE-p,p'	63.0		P	48 - 106
DDT-p,p'	68.4		P	48 - 110
Delta-BHC	95.4		P	54 - 140
Deltamethrin	39.7		P	22 - 189
Dichlobenil	80.9		P	36 - 117
Dicofol	72.4		P	46 - 155
Dieldrin	75.7		P	54 - 110
Endosulfan I	76.9		P	59 - 105
Endosulfan II	83.1		P	51 - 118
Endosulfan Sulfate	80.2		P	57 - 121
Endrin	85.3		P	10 - 120
Endrin Aldehyde	70.5		P	34 - 118
Endrin Ketone	150		P	69 - 177
Esfenvalerate	31.5		P	23 - 168
Ethalfuralin	65.4		P	49 - 99.0
Fenpropathrin	52.5		P	34 - 117
Gamma-BHC	94.9		P	72 - 117
Gamma-Chlordane	62.8		P	43 - 106
Heptachlor	52.1		P	41 - 98.0
Heptachlor Epoxide	91.9		P	57 - 106
Hexachlorobenzene	52.2		P	36 - 99.0
Kepone	54.3		P	16 - 215
Lambda-Cyhalothrin	32.5		P	21 - 177
Methoprene	37.0		P	10 - 119
Methoxychlor	75.1		P	60 - 112
MGK-264	78.3		P	26 - 122
Mirex	33.5		P	10 - 169
Oxychlordane	67.2		P	43 - 105
Permethrin	39.0		P	24 - 148
Phenothrin	24.8		P	10 - 106
Piperonyl Butoxide	89.4		P	10 - 139
Prallethrin	46.2		P	17 - 109
Tau-Fluvalinate	26.8		P	13 - 131
Tetramethrin	53.3		P	10 - 132
Trans-Nonachlor	64.7		P	44 - 106
Triclosan Methyl	74.3		P	59 - 109
Trifluralin	64.4		P	44 - 101

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P429576

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	70.6		P	61 - 116
Toxaphene	87.1		P	48 - 124

Reference Method: EPA 8321B
Batch ID: P428748

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	111		P	40 - 150
AMPA	120		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	97.8		P	40 - 150
Glyphosate	127		P	40 - 150
Sucralose	97.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428762

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	88.6		P	40 - 150
Aldicarb	41.0		P	30 - 150
Aldicarb Sulfone	99.6		P	40 - 150
Aldicarb Sulfoxide	143		P	40 - 150
Carbaryl	92.1		P	40 - 150
Carbofuran	85.6		P	40 - 150
Methiocarb	77.2		P	40 - 150
Methomyl	91.4		P	40 - 150
Oxamyl	96.5		P	40 - 150
Propoxur	76.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P428783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	114		P	40 - 150
2,4,5-T	113		P	40 - 150
Acetaminophen	92.7		P	30 - 150
Acetamiprid	83.7		P	40 - 150
Afidopyropen	49.5		P	30 - 150
Bentazon	109		P	30 - 150
Benzovindiflupyr	89.3		P	40 - 150
Carbamazepine	100		P	40 - 150
Clothianidin	109		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	101		P	40 - 150
Fenuron	101		P	40 - 150
Fluridone	91.5		P	40 - 150
Hydrocodone	94.0		P	40 - 150
Ibuprofen	93.2		P	40 - 150
Imazapyr	105		P	40 - 150
Imidacloprid	88.3		P	40 - 150
Linuron	91.5		P	40 - 150
Mandestrobin	92.9		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P428783

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCP	114		P	40 - 150
Naproxen	61.6		P	40 - 150
Primidone	104		P	40 - 150
Pyraclostrobin	82.7		P	40 - 150
Silvex	97.8		P	40 - 150
Thiamethoxam	110		P	40 - 150
Tolfenpyrad	56.7		P	30 - 150
Triclopyr	114		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P428869

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.5		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P429119

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

Reference Method: SM 2540 D-2015
Batch ID: P429121

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	89.6		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

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

Reference Method: SM 5310 B-2011
Batch ID: P429040

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401747	Calcium	97.8	97.5	P/P	80 - 120
2401747	Iron	98.9	98.2	P/P	80 - 120
2401747	Magnesium	102	102	P/P	80 - 120
2401747	Potassium	100	98.4	P/P	80 - 120
2401747	Sodium	107	104	P/P	80 - 120
2401747	Strontium	100	98.6	P/P	80 - 120
2401747	Tin	96.1	99.0	P/P	80 - 120
2401747	Titanium	96.4	97.3	P/P	80 - 120
2401747	Vanadium	98.1	99.7	P/P	80 - 120
2401747	Zinc	99.3	101	P/P	80 - 120
2401925	Calcium	100		P	80 - 120
2401925	Iron	102		P	80 - 120
2401925	Magnesium	104		P	80 - 120
2401925	Potassium	101		P	80 - 120
2401925	Sodium	106		P	80 - 120
2401925	Strontium	100		P	80 - 120
2401925	Tin	97.2		P	80 - 120
2401925	Titanium	97.5		P	80 - 120
2401925	Vanadium	101		P	80 - 120
2401925	Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401747	Aluminum	100	98.7	P/P	80 - 120
2401747	Antimony	102	102	P/P	80 - 120
2401747	Arsenic	100	99.0	P/P	80 - 120
2401747	Barium	103	102	P/P	80 - 120
2401747	Beryllium	91.4	93.4	P/P	80 - 120
2401747	Boron	105	103	P/P	80 - 120
2401747	Cadmium	100	99.8	P/P	80 - 120
2401747	Chromium	99.0	99.0	P/P	80 - 120
2401747	Cobalt	103	103	P/P	80 - 120
2401747	Copper	101	99.8	P/P	80 - 120
2401747	Lead	104	103	P/P	80 - 120
2401747	Manganese	99.0	96.1	P/P	80 - 120
2401747	Molybdenum	98.4	98.6	P/P	80 - 120
2401747	Nickel	101	101	P/P	80 - 120
2401747	Selenium	98.8	97.3	P/P	80 - 120
2401747	Silver	104	104	P/P	80 - 120
2401747	Thallium	101	101	P/P	80 - 120
2401925	Aluminum	98.5		P	80 - 120
2401925	Antimony	102		P	80 - 120
2401925	Arsenic	97.8		P	80 - 120
2401925	Barium	102		P	80 - 120
2401925	Beryllium	93.2		P	80 - 120
2401925	Boron	99.5		P	80 - 120
2401925	Cadmium	99.7		P	80 - 120
2401925	Chromium	97.5		P	80 - 120
2401925	Cobalt	101		P	80 - 120
2401925	Copper	96.8		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401925	Lead	104		P	80 - 120
2401925	Manganese	97.6		P	80 - 120
2401925	Molybdenum	98.1		P	80 - 120
2401925	Nickel	98.4		P	80 - 120
2401925	Selenium	95.4		P	80 - 120
2401925	Silver	104		P	80 - 120
2401925	Thallium	101		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429067

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401609	Chloride	102		P	90 - 110
2401676	Chloride	104		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429071

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401609	Sulfate	101		P	90 - 110
2401676	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401799	Ammonia-N	97.6	97.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429095

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401673	Ammonia-N	99.2	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428926

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401765	Kjeldahl Nitrogen	104	95.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428995

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401858	Kjeldahl Nitrogen	95.7	92.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429141

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401244	NO2NO3-N	98.5	98.5	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P428829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401686	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	114	116	P/P	26 - 165
2401686	Acetochlor	84.3	89.0	P/P	67 - 124
2401686	Alachlor	92.0	110	P/P	60 - 120
2401686	Ametryn	126	139	P/P	54 - 216
2401686	Atrazine Desethyl	114	113	P/P	15 - 122
2401686	Avobenzone	168	156	P/P	37 - 178
2401686	Azinphos Methyl	127	128	P/P	40 - 292
2401686	Azoxystrobin	102	122	P/P	35 - 220
2401686	Bromacil	108	110	P/P	45 - 127
2401686	Butylate	57.0	66.4	P/P	20 - 83.0
2401686	Caffeine	103	96.8	P/P	10 - 194
2401686	Carbophenothion	111	117	P/P	57 - 127
2401686	Carfentrazone Ethyl	116	115	P/P	51 - 141
2401686	Chlorfenapyr	103	107	P/P	46 - 111
2401686	Chlorpyrifos Ethyl	76.3	84.8	P/P	52 - 120
2401686	Chlorpyrifos Methyl	107	116	P/P	63 - 119
2401686	Coumaphos	123	123	P/P	10 - 228
2401686	Cyanazine	116	118	P/P	59 - 241
2401686	Cyprodinil	100	115	P/P	47 - 146
2401686	Dechlorane 602	76.4	76.8	P/P	50 - 150
2401686	Dechlorane 603	122	101	P/P	50 - 150
2401686	Dechlorane Plus	103	85.5	P/P	50 - 150
2401686	Demeton	89.4	93.2	P/P	40 - 136
2401686	Diazinon	114	119	P/P	69 - 132
2401686	Difenoconazole	109	97.6	P/P	57 - 258
2401686	Dimethenamid	101	115	P/F	54 - 110
2401686	Dimethomorph	118	159	P/P	28 - 210
2401686	Disulfoton	106	115	P/P	43 - 133
2401686	Dithiopyr	92.2	112	P/P	39 - 116
2401686	EPTC	39.9	56.7	P/P	20 - 78.0
2401686	Ethion	89.2	91.4	P/P	17 - 119
2401686	Ethoprop	102	103	P/P	66 - 120
2401686	Etridiazole	61.6	71.8	P/P	28 - 96.0
2401686	Fenamiphos	74.3	75.6	P/P	41 - 126
2401686	Fenbuconazole	85.8	76.4	P/P	42 - 169
2401686	Fipronil	107	113	P/P	61 - 132
2401686	Fipronil Desulfinyl	104	112	P/P	56 - 132
2401686	Fipronil Sulfide	104	112	P/P	48 - 119
2401686	Fipronil Sulfone	120	124	P/P	42 - 131
2401686	Fluazifop-P-butyl	72.2	69.6	P/P	53 - 131
2401686	Fludioxonil	76.4	75.3	P/P	56 - 127
2401686	Flumioxazin	169	158	P/P	19 - 300
2401686	Flutolanil	81.4	97.3	P/P	41 - 127
2401686	Fluxapyroxad	108	119	P/P	42 - 172
2401686	Fonofos	99.0	110	P/P	59 - 113
2401686	Hexabromobenzene	130	135	P/P	50 - 150
2401686	Hexazinone	92.2	102	P/P	66 - 122
2401686	Imazalil	93.5	80.9	P/P	21 - 283
2401686	Iprodione	89.1	94.4	P/P	43 - 150
2401686	Loratadine	131	126	P/P	23 - 201
2401686	Malathion	98.1	106	P/P	58 - 136
2401686	Metalaxyl	86.0	100	P/P	55 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P428829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401686	Metolachlor	110	122	P/F	57 - 121
2401686	Metribuzin	91.5	97.1	P/P	58 - 294
2401686	Mevinphos	83.5	89.5	P/P	50 - 126
2401686	Molinate	60.4	68.5	P/P	42 - 93.0
2401686	Myclobutanil	105	115	P/P	55 - 125
2401686	Naled	29.4	31.1	P/P	18 - 200
2401686	Napropamide	88.4	94.4	P/P	39 - 110
2401686	Norflurazon	95.3	110	P/P	48 - 128
2401686	Octinoxate	117	116	P/P	21 - 159
2401686	Oxadiazon	52.3	103	P/P	43 - 112
2401686	Oxybenzone	121	114	P/P	41 - 142
2401686	Oxyfluorfen	90.8	108	P/P	64 - 153
2401686	Parathion Ethyl	104	103	P/P	69 - 114
2401686	Parathion Methyl	110	113	P/P	79 - 139
2401686	PBB-153	132	120	P/P	50 - 150
2401686	PBDE-47	89.7	97.6	P/P	27 - 144
2401686	PBDE-99	87.3	89.9	P/P	18 - 150
2401686	Pendimethalin	144	154	F/F	50 - 139
2401686	Pentabromotoluene	120	121	P/P	50 - 150
2401686	Phenytoin	67.4	79.7	P/P	10 - 146
2401686	Phorate	102	116	P/P	54 - 161
2401686	Prodiamine	69.2	75.3	P/P	30 - 161
2401686	Prometon	111	117	P/P	45 - 134
2401686	Prometryn	120	126	P/P	45 - 137
2401686	Pronamide	119	137	P/F	65 - 133
2401686	Propanil	136	131	P/P	49 - 142
2401686	Propargite	68.5	83.6	P/P	10 - 203
2401686	Propiconazole	104	102	P/P	38 - 146
2401686	Pyraflufen Ethyl	62.7	69.1	P/P	34 - 153
2401686	Pyridaben	103	95.1	P/P	12 - 192
2401686	Pyriproxyfen	92.6	101	P/P	33 - 180
2401686	Stirophos	78.1	95.1	P/P	10 - 128
2401686	Tebuconazole	64.4	79.7	P/P	10 - 133
2401686	Terbufos	115	126	P/P	65 - 139
2401686	Terbutylazine	88.4	92.6	P/P	66 - 117
2401686	Tetradecachloro-m-terphenyl	163	139	P/P	70 - 200
2401686	Thiobencarb	107	119	P/P	51 - 119
2401686	Tri-o-cresyl Phosphate	123	119	P/P	31 - 144
2401686	Triadimefon	100	106	P/P	48 - 119
2401686	Tris(1-chloro-2-propyl) phosphate (TCPP)	136	124	P/P	50 - 150
2401686	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	111	111	P/P	50 - 150
2401686	Tris(2-chloroethyl) phosphate (TCEP)	117	111	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P428950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401819	PCB-1016	67.7	63.0	P/P	46 - 111
2401819	PCB-1260	71.6	86.1	P/P	45 - 114

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P429576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402305	Aldrin	51.0	51.4	P/P	20 - 82.0
2402305	Alpha-BHC	90.4	87.0	P/P	71 - 109
2402305	Alpha-Chlordane	68.3	67.9	P/P	42 - 106
2402305	Beta-BHC	109	93.2	P/P	69 - 180
2402305	Beta-Cyfluthrin	65.2	59.0	P/P	18 - 175
2402305	Bifenthrin	55.0	57.4	P/P	21 - 128
2402305	Chlorothalonil	0.0	0.0	F/F	10 - 300
2402305	Cis-Nonachlor	62.2	58.3	P/P	34 - 106
2402305	Cypermethrin	65.1	60.6	P/P	22 - 158
2402305	Dacthal	110	102	P/P	54 - 116
2402305	DDD-p,p'	59.6	54.8	P/P	34 - 107
2402305	DDE-p,p'	68.5	63.8	P/P	33 - 110
2402305	DDT-p,p'	69.4	71.2	P/P	50 - 122
2402305	Delta-BHC	108	92.5	P/P	77 - 193
2402305	Deltamethrin	72.0	66.6	P/P	10 - 195
2402305	Dichlobenil	59.3	63.7	P/P	25 - 113
2402305	Dicofol	69.7	71.6	P/P	38 - 247
2402305	Dieldrin	77.2	71.3	P/P	45 - 118
2402305	Endosulfan I	74.2	70.2	P/P	51 - 106
2402305	Endosulfan II	70.7	60.3	P/P	37 - 122
2402305	Endosulfan Sulfate	64.8	53.9	P/P	43 - 132
2402305	Endrin	76.3	76.0	P/P	29 - 101
2402305	Endrin Aldehyde	46.5	44.1	P/P	19 - 110
2402305	Endrin Ketone	93.8	91.3	P/P	60 - 140
2402305	Esfenvalerate	57.8	55.3	P/P	26 - 199
2402305	Ethalfuralin	71.6	72.1	P/P	45 - 99.0
2402305	Fenpropathrin	83.5	80.4	P/P	35 - 120
2402305	Gamma-BHC	107	96.3	P/P	63 - 128
2402305	Gamma-Chlordane	65.0	64.7	P/P	40 - 104
2402305	Heptachlor	61.2	59.3	P/P	36 - 97.0
2402305	Heptachlor Epoxide	98.8	97.3	P/P	49 - 184
2402305	Hexachlorobenzene	61.7	63.8	P/P	39 - 96.0
2402305	Kepone	28.7	27.9	P/P	10 - 217
2402305	Lambda-Cyhalothrin	67.8	65.2	P/P	21 - 193
2402305	Methoprene	59.4	58.1	P/P	20 - 106
2402305	Methoxychlor	75.4	81.9	P/P	53 - 118
2402305	MGK-264	93.3	88.9	P/P	40 - 118
2402305	Mirex	52.8	50.8	P/P	26 - 92.0
2402305	Oxychlordane	72.7	67.4	P/P	44 - 99.0
2402305	Permethrin	62.6	58.9	P/P	33 - 182
2402305	Phenothrin	64.2	61.0	P/P	10 - 129
2402305	Piperonyl Butoxide	71.5	69.5	P/P	10 - 211
2402305	Prallethrin	56.6	59.7	P/P	24 - 113
2402305	Tau-Fluvalinate	56.4	53.2	P/P	14 - 149
2402305	Tetramethrin	86.4	82.3	P/P	17 - 151
2402305	Trans-Nonachlor	69.4	63.7	P/P	42 - 102
2402305	Triclosan Methyl	72.9	71.2	P/P	48 - 108
2402305	Trifluralin	71.1	71.2	P/P	47 - 96.0

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276

Batch ID: P429576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2402682	Chlordane	69.9	71.3	P/P	53 - 126
2402682	Toxaphene	89.0	77.6	P/P	56 - 211

Reference Method: EPA 8321B

Batch ID: P428748

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401447	Acesulfame K	107	108	P/P	40 - 150
2401447	AMPA	126	119	P/P	40 - 150
2401447	Endothall	105	110	P/P	40 - 150
2401447	Glufosinate	100	99.7	P/P	40 - 150
2401447	Glyphosate	101	105	P/P	40 - 150
2401447	Sucralose	94.6	93.1	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P428762

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401683	3-Hydroxycarbofuran	86.4	97.9	P/P	40 - 150
2401683	Aldicarb	47.9	47.5	P/P	30 - 150
2401683	Aldicarb Sulfone	94.8	95.6	P/P	40 - 150
2401683	Aldicarb Sulfoxide	39.5	40.2	F/P	40 - 150
2401683	Carbaryl	73.3	71.8	P/P	40 - 150
2401683	Carbofuran	59.0	59.7	P/P	40 - 150
2401683	Methiocarb	74.4	64.3	P/P	40 - 150
2401683	Methomyl	65.4	68.6	P/P	40 - 150
2401683	Oxamyl	84.2	87.9	P/P	40 - 150
2401683	Propoxur	55.8	53.4	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P428783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401716	2,4-D	110	104	P/P	40 - 150
2401716	2,4,5-T	129	110	P/P	40 - 150
2401716	Acetaminophen	99.9	93.3	P/P	30 - 150
2401716	Acetamiprid	84.9	82.0	P/P	40 - 150
2401716	Afidopyropen	75.9	86.7	P/P	30 - 150
2401716	Benzovindiflupyr	83.9	77.1	P/P	40 - 150
2401716	Carbamazepine	80.6	84.2	P/P	40 - 150
2401716	Clothianidin	113	110	P/P	40 - 150
2401716	Dinotefuran	81.5	79.7	P/P	40 - 150
2401716	Diuron	82.0	82.8	P/P	40 - 150
2401716	Fenuron	64.4	66.1	P/P	40 - 150
2401716	Fluridone	81.8	80.4	P/P	40 - 150
2401716	Hydrocodone	71.6	68.4	P/P	40 - 150
2401716	Ibuprofen	89.1	72.7	P/P	40 - 150
2401716	Imazapyr	107	112	P/P	40 - 150
2401716	Imidacloprid	118	109	P/P	40 - 150
2401716	Linuron	81.5	83.6	P/P	40 - 150
2401716	Mandestrobin	88.4	85.8	P/P	40 - 150
2401716	MCPP	122	123	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P428783

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401716	Naproxen	63.3	65.4	P/P	40 - 150
2401716	Primidone	105	104	P/P	40 - 150
2401716	Pyraclostrobin	79.7	76.0	P/P	40 - 150
2401716	Silvex	103	95.3	P/P	40 - 150
2401716	Thiamethoxam	105	101	P/P	40 - 150
2401716	Tolfenpyrad	49.7	49.0	P/P	30 - 150
2401716	Triclopyr	128	118	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401813	Fluoride	102	101	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P429040

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2401722	Organic Carbon	95.0	96.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428785

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401711	Color (true)	0.0498	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P428787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401693	Color (true)	18.3	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428795

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401609	Turbidity	7.35	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P428825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401747	Calcium	0.234	Spike	P	0 - 20
2401747	Iron	0.553	Spike	P	0 - 20
2401747	Magnesium	0.0865	Spike	P	0 - 20
2401747	Potassium	1.85	Spike	P	0 - 20
2401747	Sodium	1.55	Spike	P	0 - 20
2401747	Strontium	1.60	Spike	P	0 - 20
2401747	Tin	3.04	Spike	P	0 - 20
2401747	Titanium	0.893	Spike	P	0 - 20
2401747	Vanadium	1.59	Spike	P	0 - 20
2401747	Zinc	1.49	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401747	Aluminum	1.30	Spike	P	0 - 20
2401747	Antimony	0.525	Spike	P	0 - 20
2401747	Arsenic	1.32	Spike	P	0 - 20
2401747	Barium	0.892	Spike	P	0 - 20
2401747	Beryllium	1.90	Spike	P	0 - 20
2401747	Boron	2.35	Spike	P	0 - 20
2401747	Cadmium	0.198	Spike	P	0 - 20
2401747	Chromium	0.0163	Spike	P	0 - 20
2401747	Cobalt	0.0188	Spike	P	0 - 20
2401747	Copper	1.62	Spike	P	0 - 20
2401747	Lead	0.633	Spike	P	0 - 20
2401747	Manganese	1.36	Spike	P	0 - 20
2401747	Molybdenum	0.159	Spike	P	0 - 20
2401747	Nickel	0.388	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P428825

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401747	Selenium	1.55	Spike	P	0 - 20
2401747	Silver	0.0331	Spike	P	0 - 20
2401747	Thallium	0.0752	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401609	Chloride	1.93	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P429071

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401609	Sulfate	2.39	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401799	Ammonia-N	0.272	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P429095

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401673	Ammonia-N	0.881	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428926

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401765	Kjeldahl Nitrogen	6.37	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428995

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401858	Kjeldahl Nitrogen	2.03	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P429141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
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Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P429141

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401244	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P428835

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401815	Total-P	2.80	Spike	P	0 - 20

Reference Method: EPA 8270E

Batch ID: P428829

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401686	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.88	Spike	P	0 - 37
2401686	Acetochlor	5.40	Spike	P	0 - 28
2401686	Alachlor	17.9	Spike	P	0 - 30
2401686	Ametryn	9.55	Spike	P	0 - 32
2401686	Atrazine	1.39	Spike	P	0 - 41
2401686	Atrazine Desethyl	0.131	Spike	P	0 - 36
2401686	Avobenzone	7.67	Spike	P	0 - 36
2401686	Azinphos Methyl	0.879	Spike	P	0 - 75
2401686	Azoxystrobin	18.1	Spike	P	0 - 39
2401686	Bromacil	1.90	Spike	P	0 - 33
2401686	Butylate	15.3	Spike	P	0 - 44
2401686	Caffeine	5.32	Spike	P	0 - 74
2401686	Carbophenothion	6.00	Spike	P	0 - 25
2401686	Carfentrazone Ethyl	1.12	Spike	P	0 - 27
2401686	Chlorfenapyr	3.25	Spike	P	0 - 24
2401686	Chlorpyrifos Ethyl	10.6	Spike	P	0 - 26
2401686	Chlorpyrifos Methyl	7.35	Spike	P	0 - 26
2401686	Coumaphos	0.0271	Spike	P	0 - 28
2401686	Cyanazine	1.63	Spike	P	0 - 48
2401686	Cyprodinil	14.3	Spike	P	0 - 29
2401686	Dechlorane 602	0.512	Spike	P	0 - 30
2401686	Dechlorane 603	18.7	Spike	P	0 - 30
2401686	Dechlorane Plus	18.9	Spike	P	0 - 30
2401686	Demeton	4.19	Spike	P	0 - 33
2401686	Diazinon	4.84	Spike	P	0 - 29
2401686	Difenoconazole	10.9	Spike	P	0 - 34
2401686	Dimethenamid	12.2	Spike	P	0 - 39
2401686	Dimethomorph	29.2	Spike	P	0 - 51
2401686	Disulfoton	8.78	Spike	P	0 - 30
2401686	Dithiopyr	16.7	Spike	P	0 - 26
2401686	EPTC	34.8	Spike	P	0 - 43
2401686	Ethion	2.47	Spike	P	0 - 79
2401686	Ethoprop	1.47	Spike	P	0 - 29
2401686	Etridiazole	15.4	Spike	P	0 - 33
2401686	Fenamiphos	1.77	Spike	P	0 - 40
2401686	Fenbuconazole	11.5	Spike	P	0 - 74
2401686	Fipronil	5.29	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P428829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401686	Fipronil Desulfinyl	5.11	Spike	P	0 - 32
2401686	Fipronil Sulfide	6.38	Spike	P	0 - 30
2401686	Fipronil Sulfone	2.42	Spike	P	0 - 33
2401686	Fluazifop-P-butyl	3.67	Spike	P	0 - 38
2401686	Fludioxonil	1.46	Spike	P	0 - 29
2401686	Flumioxazin	6.75	Spike	P	0 - 51
2401686	Flutolanil	17.9	Spike	P	0 - 25
2401686	Fluxapyroxad	8.82	Spike	P	0 - 45
2401686	Fonofos	8.96	Spike	P	0 - 27
2401686	Hexabromobenzene	4.07	Spike	P	0 - 30
2401686	Hexazinone	10.2	Spike	P	0 - 30
2401686	Imazalil	14.4	Spike	P	0 - 100
2401686	Iprodione	5.85	Spike	P	0 - 33
2401686	Loratadine	3.46	Spike	P	0 - 56
2401686	Malathion	7.36	Spike	P	0 - 37
2401686	Metalaxyl	15.3	Spike	P	0 - 40
2401686	Metolachlor	11.0	Spike	P	0 - 29
2401686	Metribuzin	5.62	Spike	P	0 - 45
2401686	Mevinphos	6.98	Spike	P	0 - 29
2401686	Molinate	12.5	Spike	P	0 - 33
2401686	Myclobutanil	9.19	Spike	P	0 - 26
2401686	Naled	5.65	Spike	P	0 - 37
2401686	Napropamide	6.53	Spike	P	0 - 44
2401686	Norflurazon	14.0	Spike	P	0 - 30
2401686	Octinoxate	1.34	Spike	P	0 - 45
2401686	Oxadiazon	51.6	Spike	F	0 - 28
2401686	Oxybenzone	6.59	Spike	P	0 - 46
2401686	Oxyfluorfen	17.0	Spike	P	0 - 28
2401686	Parathion Ethyl	1.89	Spike	P	0 - 31
2401686	Parathion Methyl	2.91	Spike	P	0 - 29
2401686	PBB-153	9.16	Spike	P	0 - 30
2401686	PBDE-47	8.52	Spike	P	0 - 36
2401686	PBDE-99	2.93	Spike	P	0 - 40
2401686	Pendimethalin	5.89	Spike	P	0 - 33
2401686	Pentabromotoluene	1.12	Spike	P	0 - 30
2401686	Phenytoin	16.7	Spike	P	0 - 100
2401686	Phorate	13.2	Spike	P	0 - 36
2401686	Prodiamine	8.43	Spike	P	0 - 71
2401686	Prometon	5.07	Spike	P	0 - 36
2401686	Prometryn	4.57	Spike	P	0 - 28
2401686	Pronamide	14.6	Spike	P	0 - 24
2401686	Propanil	3.65	Spike	P	0 - 28
2401686	Propargite	19.9	Spike	P	0 - 43
2401686	Propiconazole	1.82	Spike	P	0 - 33
2401686	Pyraflufen Ethyl	9.67	Spike	P	0 - 29
2401686	Pyridaben	8.03	Spike	P	0 - 30
2401686	Pyriproxyfen	9.08	Spike	P	0 - 79
2401686	Simazine	2.99	Spike	P	0 - 29
2401686	Stirophos	19.7	Spike	P	0 - 61
2401686	Sulfentrazone	2.29	Spike	P	0 - 33
2401686	Tebuconazole	21.3	Spike	P	0 - 69

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P428829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401686	Terbufos	8.70	Spike	P	0 - 29
2401686	Terbutylazine	4.72	Spike	P	0 - 32
2401686	Tetradecachloro-m-terphenyl	15.8	Spike	P	0 - 30
2401686	Thiobencarb	10.2	Spike	P	0 - 26
2401686	Tri-o-cresyl Phosphate	3.92	Spike	P	0 - 33
2401686	Triadimefon	5.62	Spike	P	0 - 28
2401686	Tris(1-chloro-2-propyl) phosphate (TCPP)	7.77	Spike	P	0 - 30
2401686	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.356	Spike	P	0 - 30
2401686	Tris(2-chloroethyl) phosphate (TCEP)	5.09	Spike	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P428950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401819	PCB-1016	7.26	Spike	P	0 - 32
2401819	PCB-1260	18.4	Spike	P	0 - 31

Reference Method: EPA 8270E

Batch ID: P429576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402305	Aldrin	0.661	Spike	P	0 - 41
2402305	Alpha-BHC	3.84	Spike	P	0 - 25
2402305	Alpha-Chlordane	0.589	Spike	P	0 - 33
2402305	Beta-BHC	15.2	Spike	P	0 - 36
2402305	Beta-Cyfluthrin	9.94	Spike	P	0 - 42
2402305	Bifenthrin	4.27	Spike	P	0 - 53
2402305	Cis-Nonachlor	6.46	Spike	P	0 - 29
2402305	Cypermethrin	7.10	Spike	P	0 - 40
2402305	Dacthal	7.00	Spike	P	0 - 26
2402305	DDD-p,p'	8.24	Spike	P	0 - 39
2402305	DDE-p,p'	7.10	Spike	P	0 - 33
2402305	DDT-p,p'	2.59	Spike	P	0 - 40
2402305	Delta-BHC	15.8	Spike	P	0 - 37
2402305	Deltamethrin	7.79	Spike	P	0 - 100
2402305	Dichlobenil	7.17	Spike	P	0 - 40
2402305	Dicofol	2.57	Spike	P	0 - 31
2402305	Dieldrin	8.03	Spike	P	0 - 27
2402305	Endosulfan I	5.62	Spike	P	0 - 23
2402305	Endosulfan II	15.9	Spike	P	0 - 28
2402305	Endosulfan Sulfate	18.5	Spike	P	0 - 38
2402305	Endrin	0.359	Spike	P	0 - 63
2402305	Endrin Aldehyde	5.22	Spike	P	0 - 60
2402305	Endrin Ketone	2.72	Spike	P	0 - 37
2402305	Esfenvalerate	4.36	Spike	P	0 - 52
2402305	Ethalfuralin	0.589	Spike	P	0 - 23
2402305	Fenpropathrin	3.79	Spike	P	0 - 32
2402305	Gamma-BHC	11.0	Spike	P	0 - 17
2402305	Gamma-Chlordane	0.564	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P429576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402305	Heptachlor	2.99	Spike	P	0 - 29
2402305	Heptachlor Epoxide	1.51	Spike	P	0 - 25
2402305	Hexachlorobenzene	3.36	Spike	P	0 - 36
2402305	Kepone	3.03	Spike	P	0 - 93
2402305	Lambda-Cyhalothrin	3.88	Spike	P	0 - 55
2402305	Methoprene	2.18	Spike	P	0 - 53
2402305	Methoxychlor	8.19	Spike	P	0 - 29
2402305	MGK-264	4.87	Spike	P	0 - 35
2402305	Mirex	3.94	Spike	P	0 - 46
2402305	Oxychlordane	7.57	Spike	P	0 - 29
2402305	Permethrin	6.00	Spike	P	0 - 44
2402305	Phenothrin	5.21	Spike	P	0 - 56
2402305	Piperonyl Butoxide	2.85	Spike	P	0 - 100
2402305	Prallethrin	5.20	Spike	P	0 - 42
2402305	Tau-Fluvalinate	5.82	Spike	P	0 - 54
2402305	Tetramethrin	4.85	Spike	P	0 - 51
2402305	Trans-Nonachlor	8.55	Spike	P	0 - 37
2402305	Triclosan Methyl	2.29	Spike	P	0 - 31
2402305	Trifluralin	0.166	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P429576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2402682	Chlordane	1.90	Spike	P	0 - 25
2402682	Toxaphene	13.6	Spike	P	0 - 26

Reference Method: EPA 8321B
Batch ID: P428748

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401447	Acesulfame K	1.25	Spike	P	0 - 30
2401447	AMPA	5.72	Spike	P	0 - 30
2401447	Endothall	5.18	Spike	P	0 - 30
2401447	Glufosinate	0.488	Spike	P	0 - 30
2401447	Glyphosate	4.50	Spike	P	0 - 30
2401447	Sucralose	1.50	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P428762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401683	3-Hydroxycarbofuran	12.4	Spike	P	0 - 30
2401683	Aldicarb	0.797	Spike	P	0 - 30
2401683	Aldicarb Sulfone	0.902	Spike	P	0 - 30
2401683	Aldicarb Sulfoxide	1.76	Spike	P	0 - 30
2401683	Carbaryl	2.09	Spike	P	0 - 30
2401683	Carbofuran	1.28	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P428762

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401683	Methiocarb	14.6	Spike	P	0 - 30
2401683	Methomyl	4.83	Spike	P	0 - 30
2401683	Oxamyl	4.21	Spike	P	0 - 30
2401683	Propoxur	4.49	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P428783

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401716	2,4-D	4.47	Spike	P	0 - 30
2401716	2,4,5-T	15.7	Spike	P	0 - 30
2401716	Acetaminophen	6.84	Spike	P	0 - 30
2401716	Acetamiprid	3.48	Spike	P	0 - 30
2401716	Afidopyropen	13.3	Spike	P	0 - 30
2401716	Bentazon	10.9	Spike	P	0 - 30
2401716	Benzovindiflupyr	8.43	Spike	P	0 - 30
2401716	Carbamazepine	4.07	Spike	P	0 - 30
2401716	Clothianidin	2.61	Spike	P	0 - 30
2401716	Dinotefuran	2.20	Spike	P	0 - 30
2401716	Diuron	0.982	Spike	P	0 - 30
2401716	Fenuron	2.54	Spike	P	0 - 30
2401716	Fluridone	1.31	Spike	P	0 - 30
2401716	Hydrocodone	4.55	Spike	P	0 - 30
2401716	Ibuprofen	20.3	Spike	P	0 - 30
2401716	Imazapyr	2.40	Spike	P	0 - 30
2401716	Imidacloprid	8.29	Spike	P	0 - 30
2401716	Linuron	2.53	Spike	P	0 - 30
2401716	Mandestrobin	2.98	Spike	P	0 - 30
2401716	MCPP	1.16	Spike	P	0 - 30
2401716	Naproxen	3.31	Spike	P	0 - 30
2401716	Primidone	0.842	Spike	P	0 - 30
2401716	Pyraclostrobin	4.73	Spike	P	0 - 30
2401716	Silvex	7.95	Spike	P	0 - 30
2401716	Thiamethoxam	3.43	Spike	P	0 - 30
2401716	Tolfenpyrad	1.41	Spike	P	0 - 30
2401716	Triclopyr	7.77	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P428869

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401465	Total Alkalinity	1.23	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P429119

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401764	TDS	1.55	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P429442

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401813	Fluoride	0.483	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P429040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2401722	Organic Carbon	1.43	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2401810
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.9	P	30 - 160

Lab Sample ID: 2401811
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	124	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.8	P	30 - 160
EPA 8321B	Diuron-d6	68.9	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	115	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.4	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	100	P	30 - 160

Lab Sample ID: 2401812
Field Sample ID: G3NW0135

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	117	P	30 - 160
EPA 8321B	Acetaminophen-d4	88.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.4	P	30 - 160
EPA 8321B	Diuron-d6	66.2	P	30 - 160
EPA 8321B	Endothall-d6	98.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	30 - 160
EPA 8321B	Ibuprofen-d3	80.6	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	93.0	P	30 - 160

Lab Sample ID: 2401819
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	59.0	P	29 - 130
EPA 8270E	Decachlorobiphenyl	61.5	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	35.1	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	50.9	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	55.0	P	30 - 101
EPA 8276	PCNB	72.0	P	48 - 121

Lab Sample ID: 2401820
Field Sample ID: G3NW0052

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	93.4	P	20 - 200
EPA 8270E	Simazine-d10	85.1	P	62 - 142
EPA 8270E	Terbufos-d10	77.1	P	58 - 132
EPA 8270E	Terphenyl-d14	101	P	52 - 137

Quality Assurance Report Surrogates

Lab Sample ID: 2401821
Field Sample ID: G3NW0450

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	129	P	29 - 130
EPA 8270E	Decachlorobiphenyl	78.8	P	30 - 118
EPA 8270E	Tetrachloro-m-xylene	70.1	P	29 - 104
EPA 8270E	Tetrachloro-m-xylene	62.5	P	30 - 97.0
EPA 8276	Decachlorobiphenyl	73.3	P	30 - 101
EPA 8276	PCNB	84.0	P	48 - 121

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A118689

Included Lab Sample IDs: 2401798, 2401800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	100	P/P	90 - 110
Color (true)	99.2	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118691

Included Lab Sample IDs: 2401798, 2401800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118723

Included Lab Sample IDs: 2401799

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.1	99.0	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A118726

Included Lab Sample IDs: 2401798, 2401800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.7	94.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118736

Included Lab Sample IDs: 2401801

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	100	99.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118742

Included Lab Sample IDs: 2401829, 2401830, 2401831

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	97.6	P/P	90 - 110
Aluminum	102	101	P/P	90 - 110
Antimony	103	102	P/P	90 - 110
Antimony	104	103	P/P	90 - 110
Arsenic	100	98.2	P/P	90 - 110
Arsenic	101	100	P/P	90 - 110
Barium	100	98.8	P/P	90 - 110
Barium	101	100	P/P	90 - 110
Beryllium	97.1	95.7	P/P	90 - 110
Beryllium	97.5	97.1	P/P	90 - 110
Boron	98.8	99.0	P/P	90 - 110
Boron	99.0	98.0	P/P	90 - 110
Cadmium	100	99.4	P/P	90 - 110
Cadmium	99.4	99.4	P/P	90 - 110
Chromium	101	95.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A118742

Included Lab Sample IDs: 2401829, 2401830, 2401831

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	98.8	101	P/P	90 - 110
Cobalt	103	104	P/P	90 - 110
Cobalt	104	100	P/P	90 - 110
Copper	98.1	96.4	P/P	90 - 110
Copper	98.7	98.1	P/P	90 - 110
Lead	102	103	P/P	90 - 110
Lead	103	102	P/P	90 - 110
Manganese	101	94.9	P/P	90 - 110
Manganese	98.5	101	P/P	90 - 110
Molybdenum	98.1	96.7	P/P	90 - 110
Molybdenum	98.5	98.1	P/P	90 - 110
Nickel	99.3	99.4	P/P	90 - 110
Nickel	99.4	96.3	P/P	90 - 110
Selenium	100	99.2	P/P	90 - 110
Selenium	99.2	98.4	P/P	90 - 110
Silver	103	103	P/P	90 - 110
Silver	104	103	P/P	90 - 110
Thallium	101	100	P/P	90 - 110
Thallium	102	101	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118755

Included Lab Sample IDs: 2401798, 2401800

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.9	99.4	P/P	90 - 110
Sulfate	99.8	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A118758

Included Lab Sample IDs: 2401811, 2401812

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	113	110	P/P	60 - 160
Sucralose	97.8	99.3	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118762

Included Lab Sample IDs: 2401811, 2401812

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	115	128	P/P	60 - 160
Endothall	103	108	P/P	60 - 160
Glufosinate	93.8	102	P/P	60 - 160
Glyphosate	116	112	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A118780

Included Lab Sample IDs: 2401811, 2401812

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

Reference Method: EPA 8321B

Run ID: A118780

Included Lab Sample IDs: 2401811, 2401812

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	92.8	97.6	P/P	50 - 150
2,4,5-T	102	112	P/P	50 - 150
3-Hydroxycarbofuran	112	115	P/P	60 - 150
Acetaminophen	110	113	P/P	60 - 160
Acetamiprid	104	106	P/P	50 - 150
Afidopyropen	85.9	85.5	P/P	50 - 150
Aldicarb	90.0	108	P/P	60 - 150
Aldicarb Sulfone	109	109	P/P	50 - 150
Aldicarb Sulfoxide	98.8	101	P/P	50 - 150
Bentazon	136	141	P/P	50 - 160
Benzovindiflupyr	103	101	P/P	50 - 150
Carbamazepine	111	107	P/P	60 - 150
Carbaryl	107	99.6	P/P	60 - 150
Carbofuran	102	101	P/P	50 - 150
Clothianidin	107	110	P/P	60 - 150
Dinotefuran	104	111	P/P	50 - 150
Diuron	119	111	P/P	60 - 160
Fenuron	99.3	98.6	P/P	60 - 150
Fluridone	116	111	P/P	60 - 160
Hydrocodone	119	124	P/P	60 - 150
Ibuprofen	107	104	P/P	50 - 160
Imazapyr	113	114	P/P	50 - 150
Imidacloprid	94.8	94.1	P/P	60 - 150
Linuron	112	112	P/P	60 - 150
Mandestrobin	104	105	P/P	50 - 150
MCPP	96.0	113	P/P	50 - 150
Methiocarb	102	101	P/P	50 - 150
Methomyl	108	106	P/P	50 - 150
Naproxen	83.5	100	P/P	50 - 160
Oxamyl	109	109	P/P	50 - 150
Primidone	125	119	P/P	60 - 150
Propoxur	109	96.8	P/P	50 - 150
Pyraclostrobin	106	106	P/P	60 - 150
Silvex	90.5	99.3	P/P	50 - 150
Thiamethoxam	121	111	P/P	50 - 150
Tolfenpyrad	103	106	P/P	60 - 150
Triclopyr	107	106	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118788

Included Lab Sample IDs: 2401799

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.2	99.2	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A118808

Included Lab Sample IDs: 2401820

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	98.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A118808

Included Lab Sample IDs: 2401820

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzene	98.3		P	80 - 120
Dechlorane 602	101		P	80 - 120
Dechlorane 603	100		P	80 - 120
Dechlorane Plus	94.7		P	80 - 120
Hexabromobenzene	104		P	80 - 120
Octinoxate	92.8		P	80 - 120
Oxybenzone	94.8		P	80 - 120
PBB-153	99.7		P	80 - 120
PBDE-47	98.3		P	80 - 120
PBDE-99	100		P	80 - 120
Pentabromotoluene	101		P	80 - 120
Tetradecachloro-m-terphenyl	101		P	80 - 120
Tri-o-cresyl Phosphate	94.2		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	94.1		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	92.8		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	92.0		P	80 - 120

Reference Method: SM 5310 B-2011

Run ID: A118810

Included Lab Sample IDs: 2401799, 2401801

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.9	97.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118827

Included Lab Sample IDs: 2401801

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.9	98.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118833

Included Lab Sample IDs: 2401801

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	97.8	91.8	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118847

Included Lab Sample IDs: 2401829, 2401830, 2401831

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	101	P/P	90 - 110
Iron	102	103	P/P	90 - 110
Magnesium	102	103	P/P	90 - 110
Potassium	103	102	P/P	90 - 110
Sodium	106	106	P/P	90 - 110
Strontium	99.8	102	P/P	90 - 110
Tin	98.5	98.5	P/P	90 - 110
Titanium	98.8	98.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A118847

Included Lab Sample IDs: 2401829, 2401830, 2401831

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Vanadium	99.7	99.6	P/P	90 - 110
Zinc	100	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A118856

Included Lab Sample IDs: 2401799, 2401801

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.0	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A118861

Included Lab Sample IDs: 2401799

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

Reference Method: EPA 8270E

Run ID: A118926

Included Lab Sample IDs: 2401819, 2401821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.1		P	80 - 120
PCB-1260	113		P	80 - 120

Reference Method: SM 4500-F- C-2011

Run ID: A118968

Included Lab Sample IDs: 2401798, 2401800

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

Reference Method: EPA 8270E

Run ID: A119027

Included Lab Sample IDs: 2401820

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	85.3		P	80 - 120
Alachlor	87.9		P	80 - 120
Ametryn	97.5		P	80 - 120
Atrazine	92.2		P	80 - 120
Atrazine Desethyl	114		P	80 - 120
Azinphos Methyl	99.2		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	99.6		P	80 - 120
Caffeine	95.6		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	99.8		P	80 - 120
Chlorfenapyr	104		P	80 - 120
Chlorpyrifos Ethyl	85.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A119027
 Included Lab Sample IDs: 2401820

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	103		P	80 - 120
Coumaphos	98.4		P	80 - 120
Cyanazine	105		P	80 - 120
Cyprodinil	94.3		P	80 - 120
Demeton	97.8		P	80 - 120
Diazinon	104		P	80 - 120
Difenoconazole	95.0		P	80 - 120
Dimethenamid	98.9		P	80 - 120
Dimethomorph	87.7		P	80 - 120
Disulfoton	96.9		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	101		P	80 - 120
Ethion	92.9		P	80 - 120
Ethoprop	104		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	85.7		P	80 - 120
Fenbuconazole	87.6		P	80 - 120
Fipronil	88.4		P	80 - 120
Fipronil Desulfinyl	96.5		P	80 - 120
Fipronil Sulfide	98.8		P	80 - 120
Fipronil Sulfone	97.9		P	80 - 120
Fluazifop-P-butyl	100		P	80 - 120
Fludioxonil	93.2		P	80 - 120
Flumioxazin	101		P	80 - 120
Flutolanil	98.8		P	80 - 120
Fluxapyroxad	97.6		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	92.9		P	80 - 120
Iprodione	94.5		P	80 - 120
Loratadine	86.3		P	80 - 120
Malathion	89.8		P	80 - 120
Metaxyl	90.7		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	85.2		P	80 - 120
Molinate	86.9		P	80 - 120
Myclobutanil	88.2		P	80 - 120
Naled	93.0		P	80 - 120
Napropamide	92.2		P	80 - 120
Norflurazon	99.3		P	80 - 120
Oxadiazon	104		P	80 - 120
Oxyfluorfen	88.4		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	94.9		P	80 - 120
Pendimethalin	108		P	80 - 120
Phenytol	107		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	103		P	80 - 120
Prometryn	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A119027
Included Lab Sample IDs: 2401820

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pronamide	99.1		P	80 - 120
Propanil	115		P	80 - 120
Propargite	99.8		P	80 - 120
Propiconazole	87.4		P	80 - 120
Pyraflufen Ethyl	107		P	80 - 120
Pyridaben	100		P	80 - 120
Pyriproxyfen	100		P	80 - 120
Simazine	80.6		P	80 - 120
Stirophos	89.9		P	80 - 120
Sulfentrazone	97.4		P	80 - 120
Tebuconazole	97.9		P	80 - 120
Terbufos	99.3		P	80 - 120
Terbuthylazine	86.7		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 8276
Run ID: A119081
Included Lab Sample IDs: 2401819, 2401821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	102		P	80 - 120

Reference Method: EPA 8270E
Run ID: A119130
Included Lab Sample IDs: 2401819, 2401821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.3		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	107		P	80 - 120
Beta-Cyfluthrin	96.2		P	80 - 120
Bifenthrin	98.2		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cis-Nonachlor	100		P	80 - 120
Cypermethrin	95.3		P	80 - 120
Dacthal	105		P	80 - 120
DDD-p,p'	108		P	80 - 120
DDE-p,p'	98.8		P	80 - 120
DDT-p,p'	100		P	80 - 120
Delta-BHC	100		P	80 - 120
Deltamethrin	89.5		P	80 - 120
Dichlobenil	117		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	99.4		P	80 - 120
Endosulfan I	94.8		P	80 - 120
Endosulfan II	99.1		P	80 - 120
Endosulfan Sulfate	97.8		P	80 - 120
Endrin	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A119130

Included Lab Sample IDs: 2401819, 2401821

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endrin Aldehyde	99.6		P	80 - 120
Endrin Ketone	145*		F	80 - 120
Esfenvalerate	89.7		P	80 - 120
Ethalfuralin	97.5		P	80 - 120
Fenpropathrin	106		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	100		P	80 - 120
Heptachlor	96.5		P	80 - 120
Heptachlor Epoxide	108		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	75.4*		F	80 - 120
Lambda-Cyhalothrin	97.5		P	80 - 120
Methoprene	93.3		P	80 - 120
Methoxychlor	104		P	80 - 120
MGK-264	106		P	80 - 120
Mirex	96.1		P	80 - 120
Oxychlordane	98.3		P	80 - 120
Permethrin	92.9		P	80 - 120
Phenothrin	91.4		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	101		P	80 - 120
Tau-Fluvalinate	94.7		P	80 - 120
Tetramethrin	102		P	80 - 120
Trans-Nonachlor	103		P	80 - 120
Triclosan Methyl	98.6		P	80 - 120
Trifluralin	99.7		P	80 - 120

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	101				0.0498	
	Color (true)	96.5				18.3	
EPA 180.1 Rev. 2.0	Turbidity	100				7.35	
EPA 200.7 Rev. 4.4	Calcium	98.2	97.8	97.5	100		0.234
	Iron	98.4	98.9	98.2	102		0.553
	Magnesium	101	102	102	104		0.0865
	Potassium	98.7	100	98.4	101		1.85
	Sodium	105	107	104	106		1.55
	Strontium	99.3	100	98.6	100		1.60
	Tin	100	96.1	99.0	97.2		3.04
	Titanium	98.1	96.4	97.3	97.5		0.893
	Vanadium	99.8	98.1	99.7	101		1.59
	Zinc	102	99.3	101	102		1.49
EPA 200.8 Rev. 5.4	Aluminum	102	100	98.7	98.5		1.30
	Antimony	103	102	102	102		0.525
	Arsenic	101	100	99.0	97.8		1.32
	Barium	102	103	102	102		0.892
	Beryllium	97.3	91.4	93.4	93.2		1.90
	Boron	101	105	103	99.5		2.35
	Cadmium	101	100	99.8	99.7		0.198
	Chromium	98.1	99.0	99.0	97.5		0.0163
	Cobalt	103	103	103	101		0.0188
	Copper	97.8	96.8	101	99.8		1.62
	Lead	103	104	103	104		0.633
	Manganese	96.9	99.0	96.1	97.6		1.36
	Molybdenum	97.7	98.4	98.6	98.1		0.159
	Nickel	99.4	101	101	98.4		0.388
	Selenium	97.4	98.8	97.3	95.4		1.55
	Silver	106	104	104	104		0.0331
	Thallium	98.2	101	101	101		0.0752
EPA 300.0 Rev. 2.1	Chloride	103	102	104		1.93	
	Sulfate	103	101	103		2.39	
EPA 350.1 Rev. 2.0	Ammonia-N	93.0	97.6	97.2			0.272
	Ammonia-N	97.6	99.2	101			0.881
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	104	95.2			6.37
	Kjeldahl Nitrogen	92.7	95.7	92.4			2.03
EPA 353.2 Rev. 2.0	NO2NO3-N	102	98.5	98.5			0.0
EPA 365.1 Rev. 2.0	Total-P	102					2.80
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.8	114	116			1.88
	Acetochlor	88.5	84.3	89.0			5.40
	Alachlor	105	92.0	110			17.9
	Aldrin	32.4	51.0	51.4			0.661
	Alpha-BHC	88.7	90.4	87.0			3.84
	Alpha-Chlordane	68.1	68.3	67.9			0.589
	Ametryn	117	126	139			9.55
	Atrazine	104					1.39
	Atrazine Desethyl	103	114	113			0.131
	Avobenzone	136	168	156			7.67
	Azinphos Methyl	131	127	128			0.879
	Azoxystrobin	116	102	122			18.1
	Beta-BHC	103	109	93.2			15.2
	Beta-Cyfluthrin	37.7	65.2	59.0			9.94

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Bifenthrin	26.4	55.0	57.4		4.27
	Bromacil	114	108	110		1.90
	Butylate	62.7	57.0	66.4		15.3
	Caffeine	104	103	96.8		5.32
	Carbophenothion	123	111	117		6.00
	Carfentrazone Ethyl	122	116	115		1.12
	Chlorfenapyr	105	103	107		3.25
	Chlorothalonil	103	0.0	0.0		
	Chlorpyrifos Ethyl	97.6	76.3	84.8		10.6
	Chlorpyrifos Methyl	111	107	116		7.35
	Cis-Nonachlor	65.1	62.2	58.3		6.46
	Coumaphos	108	123	123		0.0271
	Cyanazine	124	116	118		1.63
	Cypermethrin	39.7	65.1	60.6		7.10
	Cyprodinil	105	100	115		14.3
	Dacthal	99.4	110	102		7.00
	DDD-p,p'	68.1	59.6	54.8		8.24
	DDE-p,p'	63.0	68.5	63.8		7.10
	DDT-p,p'	68.4	69.4	71.2		2.59
	Dechlorane 602	78.2	76.4	76.8		0.512
	Dechlorane 603	105	122	101		18.7
	Dechlorane Plus	97.8	103	85.5		18.9
	Delta-BHC	95.4	108	92.5		15.8
	Deltamethrin	39.7	72.0	66.6		7.79
	Demeton	86.8	89.4	93.2		4.19
	Diazinon	119	114	119		4.84
	Dichlobenil	80.9	59.3	63.7		7.17
	Dicofol	72.4	69.7	71.6		2.57
	Dieldrin	75.7	77.2	71.3		8.03
	Difenoconazole	87.7	109	97.6		10.9
	Dimethenamid	116	101	115		12.2
	Dimethomorph	129	118	159		29.2
	Disulfoton	118	106	115		8.78
	Dithiopyr	108	92.2	112		16.7
	Endosulfan I	76.9	74.2	70.2		5.62
	Endosulfan II	83.1	70.7	60.3		15.9
	Endosulfan Sulfate	80.2	64.8	53.9		18.5
	Endrin	85.3	76.3	76.0		0.359
	Endrin Aldehyde	70.5	46.5	44.1		5.22
	Endrin Ketone	150	93.8	91.3		2.72
	EPTC	56.5	39.9	56.7		34.8
	Esfenvalerate	31.5	57.8	55.3		4.36
	Ethalfuralin	65.4	71.6	72.1		0.589
	Ethion	94.6	89.2	91.4		2.47
	Ethoprop	101	102	103		1.47
	Etridiazole	68.6	61.6	71.8		15.4
	Fenamiphos	87.9	74.3	75.6		1.77
	Fenbuconazole	72.1	85.8	76.4		11.5
	Fenpropathrin	52.5	83.5	80.4		3.79
	Fipronil	111	107	113		5.29
	Fipronil Desulfinyl	113	104	112		5.11
	Fipronil Sulfide	116	104	112		6.38
	Fipronil Sulfone	98.3	120	124		2.42
	Fluazifop-P-butyl	72.2	72.2	69.6		3.67

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fludioxonil	85.0	76.4	75.3			1.46
	Flumioxazin	142	169	158			6.75
	Flutolanil	90.4	81.4	97.3			17.9
	Fluxapyroxad	102	108	119			8.82
	Fonofos	99.6	99.0	110			8.96
	Gamma-BHC	94.9	107	96.3			11.0
	Gamma-Chlordane	62.8	65.0	64.7			0.564
	Heptachlor	52.1	61.2	59.3			2.99
	Heptachlor Epoxide	91.9	98.8	97.3			1.51
	Hexabromobenzene	115	130	135			4.07
	Hexachlorobenzene	52.2	61.7	63.8			3.36
	Hexazinone	97.6	92.2	102			10.2
	Imazalil	85.3	93.5	80.9			14.4
	Iprodione	95.0	89.1	94.4			5.85
	Kepone	54.3	28.7	27.9			3.03
	Lambda-Cyhalothrin	32.5	67.8	65.2			3.88
	Loratadine	123	131	126			3.46
	Malathion	112	98.1	106			7.36
	Metalaxyl	98.1	86.0	100			15.3
	Methoprene	37.0	59.4	58.1			2.18
	Methoxychlor	75.1	75.4	81.9			8.19
	Metolachlor	118	110	122			11.0
	Metribuzin	102	91.5	97.1			5.62
	Mevinphos	82.4	83.5	89.5			6.98
	MGK-264	78.3	93.3	88.9			4.87
	Mirex	33.5	52.8	50.8			3.94
	Molinate	64.8	60.4	68.5			12.5
	Myclobutanil	103	105	115			9.19
	Naled	27.5	29.4	31.1			5.65
	Napropamide	89.2	88.4	94.4			6.53
	Norflurazon	104	95.3	110			14.0
	Octinoxate	107	117	116			1.34
	Oxadiazon	95.4	52.3	103			51.6
	Oxybenzone	104	121	114			6.59
	Oxychlordane	67.2	72.7	67.4			7.57
	Oxyfluorfen	120	90.8	108			17.0
	Parathion Ethyl	107	104	103			1.89
	Parathion Methyl	119	110	113			2.91
	PBB-153	104	132	120			9.16
	PBDE-47	87.2	89.7	97.6			8.52
	PBDE-99	78.5	87.3	89.9			2.93
	PCB-1016	69.3	67.7	63.0			7.26
	PCB-1260	86.8	71.6	86.1			18.4
	Pendimethalin	114	144	154			5.89
	Pentabromotoluene	105	120	121			1.12
	Permethrin	39.0	62.6	58.9			6.00
	Phenothrin	24.8	64.2	61.0			5.21
	Phenytol	69.8	67.4	79.7			16.7
	Phorate	111	102	116			13.2
	Piperonyl Butoxide	89.4	71.5	69.5			2.85
	Prallethrin	46.2	56.6	59.7			5.20
	Prodiamine	70.1	69.2	75.3			8.43
	Prometon	114	111	117			5.07
	Prometryn	129	120	126			4.57

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
EPA 8270E	Pronamide	130	119 137			14.6
	Propanil	126	136 131			3.65
	Propargite	84.8	68.5 83.6			19.9
	Propiconazole	88.1	104 102			1.82
	Pyraflufen Ethyl	69.6	62.7 69.1			9.67
	Pyridaben	86.2	103 95.1			8.03
	Pyriproxyfen	103	92.6 101			9.08
	Simazine	96.3				2.99
	Stirophos	87.8	78.1 95.1			19.7
	Sulfentrazone	102				2.29
	Tau-Fluvalinate	26.8	56.4 53.2			5.82
	Tebuconazole	71.1	64.4 79.7			21.3
	Terbufos	125	115 126			8.70
	Terbuthylazine	89.4	88.4 92.6			4.72
	Tetradecachloro-m-terphenyl	146	163 139			15.8
	Tetramethrin	53.3	86.4 82.3			4.85
	Thiobencarb	112	107 119			10.2
	Trans-Nonachlor	64.7	69.4 63.7			8.55
	Tri-o-cresyl Phosphate	110	123 119			3.92
	Triadimefon	94.3	100 106			5.62
	Triclosan Methyl	74.3	72.9 71.2			2.29
	Trifluralin	64.4	71.1 71.2			0.166
	Tris(1-chloro-2-propyl) phosphate (TCPP)	114	136 124			7.77
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101	111 111			0.356
	Tris(2-chloroethyl) phosphate (TCEP)	104	117 111			5.09
EPA 8276	Chlordane	70.6	69.9 71.3			1.90
	Toxaphene	87.1	89.0 77.6			13.6
EPA 8321B	2,4-D	114	110 104			4.47
	2,4,5-T	113	129 110			15.7
	3-Hydroxycarbofuran	88.6	86.4 97.9			12.4
	Acesulfame K	111	107 108			1.25
	Acetaminophen	92.7	99.9 93.3			6.84
	Acetamiprid	83.7	84.9 82.0			3.48
	Afidopyropen	49.5	75.9 86.7			13.3
	Aldicarb	41.0	47.9 47.5			0.797
	Aldicarb Sulfone	99.6	94.8 95.6			0.902
	Aldicarb Sulfoxide	143	39.5 40.2			1.76
	AMPA	120	126 119			5.72
	Bentazon	109				10.9
	Benzovindiflupyr	89.3	83.9 77.1			8.43
	Carbamazepine	100	80.6 84.2			4.07
	Carbaryl	92.1	73.3 71.8			2.09
	Carbofuran	85.6	59.0 59.7			1.28
	Clothianidin	109	113 110			2.61
	Dinotefuran	101	81.5 79.7			2.20
	Diuron	101	82.0 82.8			0.982
	Endothall	101	105 110			5.18
	Fenuron	101	64.4 66.1			2.54
	Fluridone	91.5	81.8 80.4			1.31
	Glufosinate	97.8	100 99.7			0.488
	Glyphosate	127	101 105			4.50

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Hydrocodone	94.0	71.6	68.4		4.55
	Ibuprofen	93.2	89.1	72.7		20.3
	Imazapyr	105	107	112		2.40
	Imidacloprid	88.3	118	109		8.29
	Linuron	91.5	81.5	83.6		2.53
	Mandestrobin	92.9	88.4	85.8		2.98
	MCCP	114	122	123		1.16
	Methiocarb	77.2	74.4	64.3		14.6
	Methomyl	91.4	65.4	68.6		4.83
	Naproxen	61.6	63.3	65.4		3.31
	Oxamyl	96.5	84.2	87.9		4.21
	Primidone	104	105	104		0.842
	Propoxur	76.5	55.8	53.4		4.49
	Pyraclostrobin	82.7	79.7	76.0		4.73
	Silvex	97.8	103	95.3		7.95
	Sucralose	97.4	94.6	93.1		1.50
	Thiamethoxam	110	105	101		3.43
	Tolfenpyrad	56.7	49.7	49.0		1.41
	Triclopyr	114	128	118		7.77
SM 2320 B-2011	Total Alkalinity	96.5			1.23	
SM 2540 C-2015	TDS	97.4			1.55	
SM 2540 D-2015	TSS	89.6				
SM 4500-F- C-2011	Fluoride	100	102	101		0.483
SM 5310 B-2011	Organic Carbon	98.3	95.0	96.6		1.43

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2401798, 2401800
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2401798, 2401800
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2401829, 2401830, 2401831
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2401829, 2401830, 2401831
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2401798, 2401800
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2401798, 2401800
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2401799, 2401801
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2401799, 2401801
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2401799, 2401801
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2401799, 2401801
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2401820
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2401819, 2401821
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2401820
EPA 8270E	PCBs in water matrices by GC/MS/MS	2401819, 2401821
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2401819, 2401821
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2401810
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2401811, 2401812
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2401798, 2401800
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2401829, 2401830, 2401831
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2401798, 2401800
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2401798, 2401800
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2401798, 2401800

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2401799, 2401801

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	04/20/2023			04/20/2023 14:27	Chandler E Cox	2401800
	04/20/2023			04/20/2023 14:49	Chandler E Cox	2401798
EPA 180.1 Rev. 2.0	04/20/2023			04/20/2023 14:38	Anna M. Plaviak	2401798
	04/20/2023			04/20/2023 14:40	Anna M. Plaviak	2401800
EPA 200.7 Rev. 4.4	04/20/2023	04/21/2023 11:10	George D Taylor	04/27/2023 23:34	McKinley C Carter	2401829
	04/20/2023	04/21/2023 11:10	George D Taylor	04/27/2023 23:42	McKinley C Carter	2401830
	04/20/2023	04/21/2023 11:10	George D Taylor	04/27/2023 23:47	McKinley C Carter	2401831
EPA 200.8 Rev. 5.4	04/20/2023	04/21/2023 11:10	George D Taylor	04/24/2023 18:22	Conrad Hartmann	2401829
	04/20/2023	04/21/2023 11:10	George D Taylor	04/24/2023 18:31	Conrad Hartmann	2401830
	04/20/2023	04/21/2023 11:10	George D Taylor	04/24/2023 19:25	Conrad Hartmann	2401831
EPA 300.0 Rev. 2.1	04/20/2023			04/27/2023 02:03	James L Waggeberby	2401798
	04/20/2023			04/27/2023 02:18	James L Waggeberby	2401800
EPA 350.1 Rev. 2.0	04/20/2023			04/26/2023 13:58	Ping Hua	2401799
	04/20/2023			04/27/2023 12:07	Khloe J Berg	2401801
EPA 351.2 Rev. 2.0	04/20/2023	04/25/2023 13:23	Simonne.V. Calhoun	04/28/2023 16:02	Samantha L Bates	2401799
	04/20/2023	04/26/2023 12:20	Dana G. Hughes	04/27/2023 13:09	Ping Hua	2401801
EPA 353.2 Rev. 2.0	04/20/2023			04/28/2023 10:23	Anna M. Plaviak	2401799
	04/20/2023			04/28/2023 10:24	Anna M. Plaviak	2401801
EPA 365.1 Rev. 2.0	04/20/2023	04/21/2023 14:25	Adam P Silver	04/22/2023 16:00	James L Waggeberby	2401799
	04/20/2023	04/21/2023 14:25	Adam P Silver	04/24/2023 15:18	James L Waggeberby	2401801
EPA 8270E	04/20/2023	04/25/2023 08:00	Fe-Val Siddell	04/26/2023 17:42	Vandana T. Nagar	2401820
	04/20/2023	04/25/2023 08:00	Fe-Val Siddell	04/26/2023 23:41	Arthur Maknenko	2401820
	04/20/2023	04/26/2023 08:00	Rasheda Ghaffari	05/03/2023 02:17	Julie Wi	2401819
	04/20/2023	04/26/2023 08:00	Rasheda Ghaffari	05/03/2023 04:17	Julie Wi	2401821
	04/20/2023	05/04/2023 09:00	Julie Wi	05/10/2023 19:14	Michael Poppell	2401819
	04/20/2023	05/04/2023 09:00	Julie Wi	05/10/2023 19:43	Michael Poppell	2401821
	04/20/2023	05/04/2023 09:00	Julie Wi	05/10/2023 11:59	Arthur Maknenko	2401819
	04/20/2023	05/04/2023 09:00	Julie Wi	05/10/2023 12:57	Arthur Maknenko	2401821
EPA 8276	04/20/2023	04/21/2023 13:00	Manjita Shrestha	04/21/2023 18:39	Manjita Shrestha	2401811
	04/20/2023	04/21/2023 13:00	Manjita Shrestha	04/21/2023 18:52	Manjita Shrestha	2401812
	04/20/2023	04/21/2023 13:00	Manjita Shrestha	04/22/2023 14:23	Manjita Shrestha	2401811
	04/20/2023	04/21/2023 13:00	Manjita Shrestha	04/22/2023 14:37	Manjita Shrestha	2401812
	04/20/2023	04/24/2023 09:00	Hoor Shaik	04/25/2023 22:30	Juyoung Kim	2401810
EPA 8321B	04/20/2023	04/24/2023 09:00	Hoor Shaik	04/26/2023 11:40	Juyoung Kim	2401811
	04/20/2023	04/24/2023 09:00	Hoor Shaik	04/26/2023 11:58	Juyoung Kim	2401812
	04/20/2023			04/22/2023 06:01	Dale L. Simmons	2401798
	04/20/2023			04/22/2023 06:07	Dale L. Simmons	2401800
	04/20/2023			04/27/2023 23:34	McKinley C Carter	2401829
SM 2320 B-2011	04/20/2023			04/27/2023 23:42	McKinley C Carter	2401830
	04/20/2023			04/27/2023 23:47	McKinley C Carter	2401831
SM 2340 B-2011	04/20/2023					
	04/20/2023					
	04/20/2023					

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2540 C-2015	04/20/2023			04/21/2023 13:06	Dana G. Hughes	2401798, 2401800
SM 2540 D-2015	04/20/2023			04/21/2023 13:06	Dana G. Hughes	2401798, 2401800
SM 4500-F- C-2011	04/20/2023			05/04/2023 23:43	Adam P Silver	2401798
	04/20/2023			05/04/2023 23:48	Adam P Silver	2401800
SM 5310 B-2011	04/20/2023			04/26/2023 17:40	Elise M. Gillis	2401799
	04/20/2023			04/26/2023 17:54	Elise M. Gillis	2401801