

Chemical Analysis Report

NW-DIST-2023-08-09-01

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

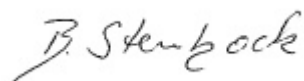
Event Description: **NW Run**
Request ID: **RQ-2023-08-07-64**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 28-AUG-2023 13:34



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: WIGGINS BRANCH BELOW HIGHWAY 29

Collection Date/Time: 08/08/2023 09:45

Field ID: G4NW0163

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429530	DEP SOP: NU-094-1	Color (true)	46		PCU	P433635	
	EPA 180.1 Rev. 2.0	Turbidity	9.6		NTU	P433640	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P433892	
		Sulfate	0.67		mg SO4/L	P433894	
	SM 2320 B-2011	Total Alkalinity	8.4		mg CaCO3/L	P433830	
	SM 2540 C-2015	TDS	26		mg/L	P434110	
	SM 2540 D-2015	TSS	9	I	mg/L	P434106	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P433927	
2429532	EPA 350.1 Rev. 2.0	Ammonia-N	0.066		mg N/L	P433853	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.39		mg N/L	P433701	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.024		mg N/L	P433787	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P433721	
	SM 5310 B-2011	Organic Carbon	2.9		mg C/L	P433754	
2429557	EPA 200.7 Rev. 4.4	Calcium	2.72		mg/L	P433806	
		Iron	4.10E+03		ug/L	P433806	
		Magnesium	0.85		mg/L	P433806	
		Potassium	0.45	I	mg/L	P433806	
		Sodium	2.1		mg/L	P433806	
		Strontium	9.6		ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	0.75	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
		Aluminum	47		ug/L	P434050	
		Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.66		ug/L	P433806	
		Barium	23.4		ug/L	P433806	
		Beryllium	0.049		ug/L	P433806	
		Boron	7.2	I	ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.40	U	ug/L	P433806	
		Cobalt	1.30		ug/L	P433806	
		Copper	0.40	U	ug/L	P433806	
		Lead	0.20	U	ug/L	P433806	
		Manganese	135		ug/L	P433806	
		Molybdenum	0.15	U	ug/L	P433806	
		Nickel	0.87	I	ug/L	P433806	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
		Thallium	0.10	U	ug/L	P433806	
	SM 2340 B-2011	Hardness	10.3		mg/L	P433806	

Field ID: G4NW0163

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 C-2015: The reported result is consistent with the conductivity measured in the laboratory, 35 umhos/cm.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 5310 B-2011: Batch matrix spike recoveries and relative percent difference are unavailable because of analytical difficulties.

Sample Location: BIG ESCAMBIA CREEK DOWNSTREAM OF FANNIE RD

Collection Date/Time: 08/08/2023 10:00

Field ID: G4NW0421

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429528	DEP SOP: NU-094-1	Color (true)	21		PCU	P433635	
	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P433640	
	EPA 300.0 Rev. 2.1	Chloride	5.1		mg Cl/L	P433891	
		Sulfate	0.88		mg SO4/L	P433893	
	SM 2320 B-2011	Total Alkalinity	4.6		mg CaCO3/L	P433830	
	SM 2540 C-2015	TDS	31		mg/L	P434110	
	SM 2540 D-2015	TSS	2	I	mg/L	P434106	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P433927	
2429529	EPA 350.1 Rev. 2.0	Ammonia-N	0.003	I	mg N/L	P433839	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.25		mg N/L	P433700	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.62		mg N/L	P433787	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P433721	
	SM 5310 B-2011	Organic Carbon	2.0		mg C/L	P433754	
2429553	EPA 8321B	Aldicarb	0.020	U	ug/L	P433683	
		Aldicarb Sulfone	0.0020	U	ug/L	P433683	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P433683	MS
		Carbaryl	0.0020	U	ug/L	P433683	
		Carbofuran	0.0020	U	ug/L	P433683	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P433683	
		Methiocarb	0.0020	U	ug/L	P433683	
		Methomyl	0.0020	U	ug/L	P433683	
		Oxamyl	0.0020	U	ug/L	P433683	
		Propoxur	0.0020	U	ug/L	P433683	
2429554		2,4-D	0.0020	U	ug/L	P433544	
		Acesulfame K	0.10	U	ug/L	P433621	MS
		2,4,5-T	0.0040	U	ug/L	P433544	
		AMPA	0.10	U	ug/L	P433621	
		Acetaminophen	0.0080	U	ug/L	P433544	
		Acetamiprid	0.0020	U	ug/L	P433544	
		Endothall	0.25	U	ug/L	P433621	
		Glufosinate	0.10	U	ug/L	P433621	
		Glyphosate	0.10	U	ug/L	P433621	
		Afidopyropen	0.0020	UJ	ug/L	P433544	CCV, RPD
		Bentazon	0.0010	I	ug/L	P433544	
		Sucralose	0.12		ug/L	P433621	
		Benzovindiflupyr	0.0020	U	ug/L	P433544	
		Carbamazepine	8.0E-04	U	ug/L	P433544	MS
		Clothianidin	0.0025	I	ug/L	P433544	
		Dinotefuran	0.0020	U	ug/L	P433544	
		Diuron	0.0020	U	ug/L	P433544	MS
		Fenuron	0.032	U	ug/L	P433544	
		Fluridone	8.0E-04	U	ug/L	P433544	
		Imazapyr	0.0050	I	ug/L	P433544	

Field ID: G4NW0421

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429554	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P433544	CCV
		Ibuprofen	0.080	U	ug/L	P433544	
		Imidacloprid	0.0039	I	ug/L	P433544	
		Linuron	0.0040	UJ	ug/L	P433544	
		Mandestrobin	0.0020	U	ug/L	P433544	
		MCP	0.0020	U	ug/L	P433544	
		Naproxen	0.0080	U	ug/L	P433544	
		Primidone	0.0040	U	ug/L	P433544	
		Pyraclostrobin	0.0020	U	ug/L	P433544	
		Silvex	0.0040	U	ug/L	P433544	
		Thiamethoxam	0.0020	U	ug/L	P433544	
		Tolfenpyrad	0.0020	U	ug/L	P433544	
		Triclopyr	0.0040	U	ug/L	P433544	
2429555	EPA 8270E	Aldrin	0.72	U	ng/L	P433679	
		Alpha-BHC	0.11	U	ng/L	P433679	
		Alpha-Chlordane	0.22	U	ng/L	P433679	
		PCB-1016	2.2	U	ng/L	P433679	
		Beta-BHC	0.11	U	ng/L	P433679	
		PCB-1221	2.2	U	ng/L	P433679	
		Beta-Cyfluthrin	1.4	U	ng/L	P433679	
		PCB-1232	2.2	U	ng/L	P433679	
		Bifenthrin	0.55	U	ng/L	P433679	
		PCB-1242	2.2	U	ng/L	P433679	
		PCB-1248	2.2	U	ng/L	P433679	
		Chlorothalonil	4.0	U	ng/L	P433679	
		PCB-1254	2.2	U	ng/L	P433679	
		Cis-Nonachlor	0.22	U	ng/L	P433679	
		PCB-1260	2.2	U	ng/L	P433679	
		Cypermethrin	1.7	U	ng/L	P433679	
		Dacthal	0.17	U	ng/L	P433679	
		DDD-p,p'	0.28	U	ng/L	P433679	
		DDE-p,p'	0.22	U	ng/L	P433679	
		DDT-p,p'	0.88	U	ng/L	P433679	
		Delta-BHC	0.44	U	ng/L	P433679	
		Deltamethrin	1.4	U	ng/L	P433679	
		Dichlobenil	0.28	U	ng/L	P433679	
		Dicofol	1.4	U	ng/L	P433679	
		Dieldrin	0.44	U	ng/L	P433679	
		Endosulfan I	0.44	U	ng/L	P433679	
		Endosulfan II	0.99	U	ng/L	P433679	
		Endosulfan Sulfate	0.33	U	ng/L	P433679	
		Endrin	0.99	U	ng/L	P433679	
		Endrin Aldehyde	0.83	U	ng/L	P433679	
		Endrin Ketone	0.44	U	ng/L	P433679	
		Esfenvalerate	0.83	U	ng/L	P433679	

Field ID: G4NW0421

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429555	EPA 8270E	Ethalfuralin	0.17	U	ng/L	P433679	CCV
		Fenpropathrin	0.28	U	ng/L	P433679	
		Gamma-BHC	0.14	U	ng/L	P433679	
		Gamma-Chlordane	0.22	U	ng/L	P433679	
		Heptachlor	0.22	U	ng/L	P433679	
		Heptachlor Epoxide	0.28	U	ng/L	P433679	
		Hexachlorobenzene**	1.1	U	ng/L	P433679	
		Kepone	15	UJ	ng/L	P433679	
		Lambda-Cyhalothrin	0.83	U	ng/L	P433679	
		Methoprene	0.83	U	ng/L	P433679	
		Methoxychlor	0.33	U	ng/L	P433679	
		MGK-264	0.22	U	ng/L	P433679	
		Mirex	0.39	U	ng/L	P433679	
		Oxychlordane	0.33	U	ng/L	P433679	
		Permethrin	1.8	U	ng/L	P433679	
		Phenothrin	0.99	U	ng/L	P433679	
		Piperonyl Butoxide	0.17	U	ng/L	P433679	
		Prallethrin	2.2	U	ng/L	P433679	
		Tau-Fluvalinate	0.28	U	ng/L	P433679	
		Tetramethrin	0.83	U	ng/L	P433679	
		Trans-Nonachlor	0.22	U	ng/L	P433679	
		Triclosan Methyl	0.17	U	ng/L	P433679	
		Trifluralin	0.22	U	ng/L	P433679	
	EPA 8276	Chlordane	2.2	U	ng/L	P433679	
		Toxaphene	17	U	ng/L	P433679	
2429556	EPA 8270E	Oxybenzone**	11	U	ng/L	P433648	
		Acetochlor	2.4		ng/L	P433648	
		Octinoxate**	160	U	ng/L	P433648	
		Alachlor	0.44	U	ng/L	P433648	
		Avobenzone**	110	U	ng/L	P433648	
		Ametryn	1.2	U	ng/L	P433648	
		Atrazine	5.4		ng/L	P433648	
		PBDE-47**	4.4	U	ng/L	P433648	
		Atrazine Desethyl	2.6	I	ng/L	P433648	
		PBDE-99**	5.5	U	ng/L	P433648	
		Azinphos Methyl	3.3	U	ng/L	P433648	
		Tri-o-cresyl Phosphate**	6.6	U	ng/L	P433648	
		Azoxystrobin	0.44	U	ng/L	P433648	
		Bromacil	0.66	U	ng/L	P433648	
		2-Ethylhexyl	13	U	ng/L	P433648	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.22	U	ng/L	P433648	
		Dechlorane Plus**	33	U	ng/L	P433648	
		Caffeine**	10	I	ng/L	P433648	
		Dechlorane 602**	5.5	U	ng/L	P433648	

Field ID: G4NW0421

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429556	EPA 8270E	Carbophenothion	0.55	U	ng/L	P433648	
		Dechlorane 603**	4.4	U	ng/L	P433648	
		Carfentrazone Ethyl	0.16	U	ng/L	P433648	
		Hexabromobenzene**	6.6	U	ng/L	P433648	
		Chlorfenapyr	0.33	U	ng/L	P433648	
		PBB-153**	8.8	U	ng/L	P433648	
		Chlorpyrifos Ethyl	0.33	U	ng/L	P433648	
		Pentabromotoluene**	3.3	U	ng/L	P433648	
		Chlorpyrifos Methyl	0.11	U	ng/L	P433648	
		Tris(2-chloroethyl) phosphate (TCEP)**	77	U	ng/L	P433648	
		Coumaphos	1.2	U	ng/L	P433648	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	24	I	ng/L	P433648	
		Cyanazine	5.5	U	ng/L	P433648	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	U	ng/L	P433648	
		Cyprodinil	0.22	U	ng/L	P433648	
		Tetradecachloro-m-terphenyl**	8.2	U	ng/L	P433648	
		Demeton	3.8	U	ng/L	P433648	
		Diazinon	0.14	U	ng/L	P433648	
		Difenoconazole	0.66	U	ng/L	P433648	
		Dimethenamid	0.11	U	ng/L	P433648	
		Dimethomorph	0.33	UJ	ng/L	P433648	LCS, MS
		Disulfoton	0.66	U	ng/L	P433648	
		Dithiopyr	1.1	U	ng/L	P433648	
		EPTC	0.55	U	ng/L	P433648	
		Ethion	0.33	U	ng/L	P433648	
		Ethoprop	0.14	U	ng/L	P433648	
		Etridiazole	0.11	U	ng/L	P433648	
		Fenamiphos	0.49	U	ng/L	P433648	
		Fenbuconazole	0.55	U	ng/L	P433648	
		Fipronil	0.22	U	ng/L	P433648	
		Fipronil Desulfinyl**	0.11	U	ng/L	P433648	
		Fipronil Sulfide	0.11	U	ng/L	P433648	
		Fipronil Sulfone	0.11	U	ng/L	P433648	
		Fluazifop-P-butyl	0.11	U	ng/L	P433648	
		Fludioxonil	0.11	U	ng/L	P433648	
		Flumioxazin	3.3	U	ng/L	P433648	
		Flutolanil	0.11	U	ng/L	P433648	
		Fluxapyroxad	0.32	I	ng/L	P433648	
		Fonofos	0.16	U	ng/L	P433648	
		Hexazinone	0.55	U	ng/L	P433648	
		Imazalil	0.71	U	ng/L	P433648	
		Iprodione	0.55	U	ng/L	P433648	
		Loratadine**	0.33	U	ng/L	P433648	
		Malathion	0.38	U	ng/L	P433648	

Field ID: G4NW0421

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429556	EPA 8270E	Metalaxyl	0.55	U	ng/L	P433648	
		Metolachlor	5.0		ng/L	P433648	
		Metribuzin	0.44	U	ng/L	P433648	
		Mevinphos	1.1	U	ng/L	P433648	
		Molinate	0.27	U	ng/L	P433648	
		Myclobutanil	0.38	U	ng/L	P433648	
		Naled	2.7	U	ng/L	P433648	
		Napropamide	0.77	U	ng/L	P433648	
		Norflurazon	1.1	U	ng/L	P433648	
		Oxadiazon	0.38	U	ng/L	P433648	
		Oxyfluorfen	0.22	U	ng/L	P433648	
		Parathion Ethyl	0.16	U	ng/L	P433648	
		Parathion Methyl	0.22	U	ng/L	P433648	
		Pendimethalin	0.82	U	ng/L	P433648	
		Phenytol**	5.8	U	ng/L	P433648	
		Phorate	0.27	U	ng/L	P433648	
		Prodiamine	0.22	U	ng/L	P433648	
		Prometon	3.3	U	ng/L	P433648	
		Prometryn	0.38	U	ng/L	P433648	
		Pronamide	0.11	U	ng/L	P433648	
		Propanil	0.11	U	ng/L	P433648	
		Propargite	0.88	U	ng/L	P433648	
		Propiconazole	0.66	U	ng/L	P433648	
		Pyraflufen Ethyl	0.33	U	ng/L	P433648	
		Pyridaben	1.5	U	ng/L	P433648	
		Pyriproxyfen	0.27	U	ng/L	P433648	
		Simazine	0.27	U	ng/L	P433648	
		Stirophos	0.44	U	ng/L	P433648	
		Sulfentrazone	1.5	U	ng/L	P433648	
		Tebuconazole	1.5	U	ng/L	P433648	
		Terbufos	0.22	U	ng/L	P433648	
		Terbutylazine	0.22	U	ng/L	P433648	
		Thiobencarb	0.55	U	ng/L	P433648	
		Triadimefon	0.16	U	ng/L	P433648	

Ref. Method and Comment:

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

SM 5310 B-2011: Batch matrix spike recoveries and relative percent difference are unavailable because of analytical difficulties.

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

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

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: LITTLE PINE BARREN CREEK ABOVE CR99

Collection Date/Time: 08/08/2023 10:58

Field ID: G4NW0420

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429531	DEP SOP: NU-094-1	Color (true)	20		PCU	P433635	
	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P433640	
	EPA 300.0 Rev. 2.1	Chloride	7.2	A	mg Cl/L	P433892	
		Sulfate	0.48	IA	mg SO4/L	P433894	
	SM 2320 B-2011	Total Alkalinity	5.6		mg CaCO3/L	P433830	
	SM 2540 C-2015	TDS	31		mg/L	P434110	
	SM 2540 D-2015	TSS	2	I	mg/L	P434106	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P433927	
2429533	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P433853	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.22		mg N/L	P433701	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.0		mg N/L	P433787	
	EPA 365.1 Rev. 2.0	Total-P	0.010		mg P/L	P433721	
	SM 5310 B-2011	Organic Carbon	1.5		mg C/L	P433754	
2429558	EPA 200.7 Rev. 4.4	Calcium	2.13		mg/L	P433806	
		Iron	1.72E+03		ug/L	P433806	
		Magnesium	2.11		mg/L	P433806	
		Potassium	0.86	I	mg/L	P433806	
		Sodium	2.7		mg/L	P433806	
		Strontium	21.6		ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	0.86	I	ug/L	P433806	
		Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Aluminum	33		ug/L	P434050	
		Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.44		ug/L	P433806	
		Barium	84.1		ug/L	P433806	
		Beryllium	0.040	I	ug/L	P433806	
		Boron	9.0		ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.40	U	ug/L	P433806	
		Cobalt	0.613		ug/L	P433806	
		Copper	0.44	I	ug/L	P433806	
		Lead	0.20	U	ug/L	P434050	
		Manganese	78.7		ug/L	P433806	
		Molybdenum	0.15	U	ug/L	P433806	
		Nickel	0.61	I	ug/L	P433806	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
		Thallium	0.10	U	ug/L	P433806	
		Hardness	14.0		mg/L	P433806	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Sulfate: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

SM 5310 B-2011: Batch matrix spike recoveries and relative percent difference are unavailable because of analytical difficulties.

**Sample Location: BRUSHY CREEK UPSTREAM OF ARTHUR
 BROWN RD**

Collection Date/Time: 08/08/2023 11:20

Field ID: G5NW0002

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2429559	EPA 200.7 Rev. 4.4	Calcium	1.96		mg/L	P433806	
		Iron	350		ug/L	P433806	
		Magnesium	0.98		mg/L	P433806	
		Potassium	0.52	I	mg/L	P433806	
		Sodium	3.1		mg/L	P433806	
		Strontium	11.5		ug/L	P433806	
		Tin	3.0	U	ug/L	P433806	
		Titanium	2.4	I	ug/L	P433806	
		Vanadium	2.0	U	ug/L	P433806	
		Zinc	5.0	U	ug/L	P433806	
	EPA 200.8 Rev. 5.4	Aluminum	63		ug/L	P434050	
		Antimony	0.050	U	ug/L	P433806	
		Arsenic	0.27		ug/L	P433806	
		Barium	29.5		ug/L	P433806	
		Beryllium	0.037	I	ug/L	P433806	
		Boron	13.3		ug/L	P433806	
		Cadmium	0.020	U	ug/L	P433806	
		Chromium	0.40	U	ug/L	P433806	
		Cobalt	0.261		ug/L	P433806	
		Copper	0.40	U	ug/L	P433806	
		Lead	0.20	U	ug/L	P433806	
		Manganese	19.6		ug/L	P433806	
		Molybdenum	0.15	U	ug/L	P433806	
		Nickel	0.50	U	ug/L	P433806	
		Selenium	0.20	U	ug/L	P433806	
		Silver	0.010	U	ug/L	P433806	
		Thallium	0.10	U	ug/L	P433806	
	SM 2340 B-2011	Hardness	8.9		mg/L	P433806	

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P433635

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433640

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

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: P433806

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Lead	0.20	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433891

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433892

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433893

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433894

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433839

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433853

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433700

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433701

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433787

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P433721

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

Reference Method: EPA 8270E

Batch ID: P433648

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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
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
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
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
Metaxyl	0.50	U	ng/L
Metaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
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	150	U	ng/L
Octinoxate	150	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
Phenytol	5.3	U	ng/L
Phenytol	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433648

Component	Result	Code	Units
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
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: P433679

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433679

Component	Result	Code	Units
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'	0.80	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433679

Component	Result	Code	Units
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	14	U	ng/L
Kepone	14	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
PCB-1016	2.0	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P433679

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

Reference Method: EPA 8276

Batch ID: P433679

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: P433544

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

Reference Method: EPA 8321B

Batch ID: P433621

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P433621

Component	Result	Code	Units
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B

Batch ID: P433683

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

Reference Method: SM 2320 B-2011

Batch ID: P433830

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

Reference Method: SM 2540 C-2015

Batch ID: P434110

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P434106

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P433927

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P433754

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: P433635

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.0		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433640

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	99.8		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	104		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	94.0		P	85 - 115
Sodium	97.3		P	85 - 115
Strontium	96.4		P	85 - 115
Tin	98.6		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433806

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Antimony	103		P	85 - 115
Arsenic	99.5		P	85 - 115
Barium	104		P	85 - 115
Beryllium	96.3		P	85 - 115
Boron	104		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	99.1		P	85 - 115
Cobalt	96.4		P	85 - 115
Copper	95.2		P	85 - 115
Lead	93.9		P	85 - 115
Manganese	99.4		P	85 - 115
Molybdenum	99.6		P	85 - 115
Nickel	96.0		P	85 - 115
Selenium	100		P	85 - 115
Silver	111		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Lead	92.5		P	85 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433891

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433892

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433893

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433894

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433839

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433853

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433700

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: P433701

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433787

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P433721

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

Reference Method: EPA 8270E

Batch ID: P433648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	103		P	42 - 162
Acetochlor	87.2		P	69 - 123
Alachlor	101		P	65 - 118
Ametryn	123		P	58 - 141
Atrazine	91.2		P	73 - 118
Atrazine Desethyl	77.4		P	32 - 125
Avobenzone	131		P	40 - 203
Azinphos Methyl	140		P	36 - 197
Azoxystrobin	104		P	58 - 226
Bromacil	104		P	48 - 120
Butylate	62.0		P	27 - 85.0
Caffeine	96.1		P	40 - 137
Carbophenothion	102		P	54 - 132
Carfentrazone Ethyl	129		P	60 - 142
Chlorfenapyr	96.8		P	53 - 117
Chlorpyrifos Ethyl	84.6		P	59 - 116
Chlorpyrifos Methyl	102		P	66 - 119
Coumaphos	158		P	11 - 234
Cyanazine	129		P	61 - 248
Cyprodinil	103		P	50 - 147
Dechlorane 602	94.6		P	50 - 150
Dechlorane 603	113		P	50 - 150
Dechlorane Plus	121		P	47 - 182
Demeton	74.8		P	30 - 138
Diazinon	99.2		P	67 - 126
Difenoconazole	179		P	38 - 205
Dimethenamid	93.0		P	57 - 111
Dimethomorph	214		F	16 - 212
Disulfoton	96.5		P	46 - 126
Dithiopyr	93.6		P	62 - 115
EPTC	64.5		P	28 - 80.0
Ethion	79.4		P	24 - 122
Ethoprop	97.9		P	62 - 113
Etridiazole	66.5		P	28 - 92.0
Fenamiphos	92.8		P	57 - 128
Fenbuconazole	108		P	52 - 155
Fipronil	96.5		P	63 - 130
Fipronil Desulfinyl	99.8		P	61 - 130
Fipronil Sulfide	101		P	56 - 117
Fipronil Sulfone	103		P	52 - 118
Fluazifop-P-butyl	103		P	61 - 128
Fludioxonil	95.9		P	59 - 129
Flumioxazin	179		P	30 - 250
Flutolanil	89.2		P	53 - 127
Fluxapyroxad	101		P	42 - 132
Fonofos	103		P	61 - 110

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexabromobenzene	110		P	50 - 150
Hexazinone	91.9		P	46 - 139
Imazalil	86.0		P	40 - 139
Iprodione	82.4		P	40 - 146
Loratadine	174		P	10 - 224
Malathion	102		P	61 - 135
Metaxyl	86.9		P	58 - 121
Metolachlor	103		P	64 - 118
Metribuzin	94.9		P	45 - 245
Mevinphos	101		P	49 - 118
Molinate	54.7		P	42 - 92.0
Myclobutanil	98.4		P	55 - 127
Naled	51.7		P	10 - 114
Napropamide	89.8		P	39 - 121
Norflurazon	99.9		P	55 - 129
Octinoxate	121		P	26 - 166
Oxadiazon	84.4		P	54 - 115
Oxybenzone	115		P	49 - 135
Oxyfluorfen	109		P	64 - 139
Parathion Ethyl	93.4		P	70 - 111
Parathion Methyl	104		P	76 - 136
PBB-153	112		P	50 - 150
PBDE-47	102		P	41 - 148
PBDE-99	101		P	38 - 147
Pendimethalin	103		P	52 - 118
Pentabromotoluene	103		P	50 - 150
Phenytoin	50.4		P	10 - 162
Phorate	110		P	40 - 122
Prodiamine	39.7		P	26 - 141
Prometon	97.9		P	54 - 122
Prometryn	113		P	61 - 128
Pronamide	111		P	72 - 121
Propanil	101		P	45 - 144
Propargite	86.5		P	10 - 199
Propiconazole	91.5		P	56 - 127
Pyraflufen Ethyl	109		P	56 - 140
Pyridaben	137		P	26 - 211
Pyriproxyfen	97.2		P	33 - 194
Simazine	92.1		P	67 - 121
Stirophos	69.0		P	20 - 142
Sulfentrazone	68.9		P	21 - 144
Tebuconazole	70.0		P	10 - 122
Terbufos	107		P	60 - 129
Terbutylazine	87.8		P	69 - 113
Tetradecachloro-m-terphenyl	123		P	70 - 200
Thiobencarb	96.2		P	51 - 120
Tri-o-cresyl Phosphate	117		P	49 - 150
Triadimefon	94.1		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	117		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	117		P	70 - 180

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P433679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	65.6		P	30 - 96.0
Alpha-BHC	102		P	70 - 109
Alpha-Chlordane	63.8		P	45 - 107
Beta-BHC	83.8		P	64 - 138
Beta-Cyfluthrin	95.7		P	17 - 141
Bifenthrin	68.7		P	10 - 113
Chlorothalonil	61.4		P	26 - 180
Cis-Nonachlor	57.7		P	37 - 102
Cypermethrin	111		P	20 - 133
Dacthal	87.7		P	69 - 114
DDD-p,p'	64.2		P	42 - 105
DDE-p,p'	68.6		P	42 - 106
DDT-p,p'	61.9		P	42 - 107
Delta-BHC	85.6		P	67 - 144
Deltamethrin	106		P	15 - 149
Dichlobenil	60.7		P	46 - 117
Dicofol	68.6		P	34 - 114
Dieldrin	65.4		P	50 - 108
Endosulfan I	76.8		P	55 - 104
Endosulfan II	69.4		P	51 - 111
Endosulfan Sulfate	70.2		P	56 - 121
Endrin	71.8		P	10 - 106
Endrin Aldehyde	62.0		P	34 - 114
Endrin Ketone	85.0		P	63 - 177
Esfenvalerate	107		P	29 - 143
Ethalfuralin	88.4		P	46 - 96.0
Fenpropathrin	75.8		P	28 - 115
Gamma-BHC	73.3		P	65 - 121
Gamma-Chlordane	71.1		P	39 - 103
Heptachlor	61.8		P	39 - 94.0
Heptachlor Epoxide	79.4		P	54 - 104
Hexachlorobenzene	55.1		P	36 - 100
Kepone	81.6		P	10 - 225
Lambda-Cyhalothrin	82.1		P	10 - 135
Methoprene	75.9		P	10 - 109
Methoxychlor	111		P	52 - 112
MGK-264	76.6		P	44 - 117
Mirex	67.0		P	20 - 90.0
Oxychlordane	82.9		P	44 - 102
PCB-1016	64.4		P	45 - 107
PCB-1260	81.5		P	40 - 118
Permethrin	83.4		P	18 - 135
Phenothrin	73.7		P	10 - 102
Piperonyl Butoxide	149		P	28 - 156
Prallethrin	80.8		P	28 - 113
Tau-Fluvalinate	111		P	10 - 123
Tetramethrin	106		P	18 - 158
Trans-Nonachlor	89.9		P	39 - 104
Triclosan Methyl	98.1		P	54 - 108
Trifluralin	86.5		P	46 - 97.0

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276

Batch ID: P433679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	83.8		P	52 - 117
Toxaphene	96.0		P	44 - 125

Reference Method: EPA 8321B

Batch ID: P433544

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	78.8		P	40 - 150
2,4,5-T	81.6		P	40 - 150
Acetaminophen	71.6		P	30 - 150
Acetamiprid	85.6		P	40 - 150
Afidopyropen	88.6		P	30 - 150
Bentazon	118		P	30 - 150
Benzovindiflupyr	61.0		P	40 - 150
Carbamazepine	67.9		P	40 - 150
Clothianidin	87.2		P	40 - 150
Dinotefuran	109		P	40 - 150
Diuron	61.8		P	40 - 150
Fenuron	95.7		P	40 - 150
Fluridone	97.4		P	40 - 150
Hydrocodone	111		P	40 - 150
Ibuprofen	69.4		P	40 - 150
Imazapyr	100		P	40 - 150
Imidacloprid	84.0		P	40 - 150
Linuron	71.9		P	40 - 150
Mandestrobin	94.6		P	40 - 150
MCPP	90.3		P	40 - 150
Naproxen	66.6		P	40 - 150
Primidone	85.4		P	40 - 150
Pyraclostrobin	75.8		P	40 - 150
Silvex	93.2		P	40 - 150
Thiamethoxam	82.7		P	40 - 150
Tolfenpyrad	74.0		P	30 - 150
Triclopyr	85.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433621

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	101		P	40 - 150
AMPA	81.6		P	40 - 150
Endothall	103		P	40 - 150
Glufosinate	98.0		P	40 - 150
Glyphosate	114		P	40 - 150
Sucralose	93.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P433683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	90.4		P	40 - 150
Aldicarb	65.2		P	30 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P433683

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldicarb Sulfone	81.0		P	40 - 150
Aldicarb Sulfoxide	86.8		P	40 - 150
Carbaryl	87.9		P	40 - 150
Carbofuran	65.1		P	40 - 150
Methiocarb	65.1		P	40 - 150
Methomyl	77.3		P	40 - 150
Oxamyl	80.2		P	40 - 150
Propoxur	68.0		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P433830

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.2		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P434110

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

Reference Method: SM 2540 D-2015
Batch ID: P434106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	91.4		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P433927

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.2		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P433754

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429374	Calcium	102		P	80 - 120
2429374	Iron	102	103	P/P	80 - 120
2429374	Magnesium	101	103	P/P	80 - 120
2429374	Potassium	91.4	93.0	P/P	80 - 120
2429374	Sodium	98.2		P	80 - 120
2429374	Strontium	94.8	95.5	P/P	80 - 120
2429374	Tin	97.6	95.9	P/P	80 - 120
2429374	Titanium	102	100	P/P	80 - 120
2429374	Vanadium	102	99.9	P/P	80 - 120
2429374	Zinc	101	98.9	P/P	80 - 120
2429871	Calcium	104		P	75 - 125
2429871	Iron	104		P	75 - 125
2429871	Magnesium	102		P	75 - 125
2429871	Potassium	98.3		P	75 - 125
2429871	Sodium	102		P	75 - 125
2429871	Strontium	101		P	75 - 125
2429871	Tin	99.1		P	75 - 125
2429871	Titanium	103		P	75 - 125
2429871	Vanadium	104		P	75 - 125
2429871	Zinc	99.9		P	75 - 125

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429374	Antimony	105	105	P/P	80 - 120
2429374	Arsenic	98.3	99.5	P/P	80 - 120
2429374	Barium	106	105	P/P	80 - 120
2429374	Beryllium	96.2	98.0	P/P	80 - 120
2429374	Boron	102	101	P/P	80 - 120
2429374	Cadmium	103	104	P/P	80 - 120
2429374	Chromium	97.4	97.4	P/P	80 - 120
2429374	Cobalt	93.8	93.6	P/P	80 - 120
2429374	Copper	94.0	94.1	P/P	80 - 120
2429374	Lead	94.2	94.5	P/P	80 - 120
2429374	Manganese	97.2	100	P/P	80 - 120
2429374	Molybdenum	101	101	P/P	80 - 120
2429374	Nickel	91.7	92.0	P/P	80 - 120
2429374	Selenium	98.4	98.5	P/P	80 - 120
2429374	Silver	110	109	P/P	80 - 120
2429374	Thallium	105	105	P/P	80 - 120
2429871	Antimony	106		P	80 - 120
2429871	Arsenic	99.3		P	80 - 120
2429871	Barium	106		P	80 - 120
2429871	Beryllium	98.4		P	80 - 120
2429871	Boron	104		P	80 - 120
2429871	Cadmium	103		P	80 - 120
2429871	Chromium	98.0		P	80 - 120
2429871	Cobalt	91.5		P	80 - 120
2429871	Copper	89.0		P	80 - 120
2429871	Lead	93.0		P	80 - 120
2429871	Manganese	99.2		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P433806

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429871	Molybdenum	103		P	80 - 120
2429871	Nickel	89.8		P	80 - 120
2429871	Selenium	97.0		P	80 - 120
2429871	Silver	110		P	80 - 120
2429871	Thallium	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P434050

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2431836	Aluminum	99.6	100	P/P	80 - 120
2431836	Lead	92.7	93.2	P/P	80 - 120
2431916	Aluminum	99.0		P	80 - 120
2431916	Lead	92.8		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P433891

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429361	Chloride	100		P	90 - 110
2429435	Chloride	99.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P433892

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429531	Chloride	102		P	90 - 110
2429806	Chloride	99.3		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P433893

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429361	Sulfate	97.2		P	90 - 110
2429435	Sulfate	95.9		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P433894

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429531	Sulfate	99.4		P	90 - 110
2429806	Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P433839

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429397	Ammonia-N	98.8	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433853

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2427797	Ammonia-N	96.2	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433700

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429441	Kjeldahl Nitrogen	110	110	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433701

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429632	Kjeldahl Nitrogen	61.4	63.8	F/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433787

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429491	NO2NO3-N	102	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429529	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	92.4	91.1	P/P	26 - 165
2429511	Acetochlor	98.5	91.7	P/P	67 - 124
2429511	Alachlor	101	88.9	P/P	60 - 120
2429511	Ametryn	144	139	P/P	54 - 216
2429511	Atrazine Desethyl	72.2	65.5	P/P	15 - 122
2429511	Avobenzone	132	126	P/P	37 - 178
2429511	Azinphos Methyl	141	124	P/P	40 - 292
2429511	Azoxystrobin	138	125	P/P	35 - 220
2429511	Bromacil	98.8	98.7	P/P	45 - 127
2429511	Butylate	59.1	55.0	P/P	20 - 83.0
2429511	Caffeine	99.9	102	P/P	10 - 194
2429511	Carbophenothion	100	101	P/P	57 - 127
2429511	Carfentrazone Ethyl	116	114	P/P	51 - 141
2429511	Chlorfenapyr	84.3	79.9	P/P	46 - 111
2429511	Chlorpyrifos Ethyl	89.6	83.7	P/P	52 - 120
2429511	Chlorpyrifos Methyl	97.6	87.8	P/P	63 - 119
2429511	Coumaphos	149	135	P/P	10 - 228
2429511	Cyanazine	134	131	P/P	59 - 241
2429511	Cyprodinil	89.4	84.4	P/P	47 - 146
2429511	Dechlorane 602	77.7	65.3	P/P	50 - 150
2429511	Dechlorane 603	117	115	P/P	50 - 150
2429511	Dechlorane Plus	98.0	101	P/P	50 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	Demeton	85.3	81.6	P/P	40 - 136
2429511	Diazinon	114	110	P/P	69 - 132
2429511	Difenoconazole	160	129	P/P	57 - 258
2429511	Dimethenamid	88.5	83.8	P/P	54 - 110
2429511	Dimethomorph	252	233	F/F	28 - 210
2429511	Disulfoton	107	105	P/P	43 - 133
2429511	Dithiopyr	97.5	97.5	P/P	39 - 116
2429511	EPTC	58.3	53.9	P/P	20 - 78.0
2429511	Ethion	67.8	61.4	P/P	17 - 119
2429511	Ethoprop	107	101	P/P	66 - 120
2429511	Etridiazole	65.9	64.0	P/P	28 - 96.0
2429511	Fenamiphos	99.3	97.4	P/P	41 - 126
2429511	Fenbuconazole	97.3	88.9	P/P	42 - 169
2429511	Fipronil	98.9	95.0	P/P	61 - 132
2429511	Fipronil Desulfinyl	97.0	89.3	P/P	56 - 132
2429511	Fipronil Sulfide	95.6	102	P/P	48 - 119
2429511	Fipronil Sulfone	99.2	93.0	P/P	42 - 131
2429511	Fluazifop-P-butyl	99.4	92.2	P/P	53 - 131
2429511	Fludioxonil	87.1	74.4	P/P	56 - 127
2429511	Flumioxazin	171	136	P/P	19 - 300
2429511	Flutolanil	71.3	77.4	P/P	41 - 127
2429511	Fluxapyroxad	93.9	85.4	P/P	42 - 172
2429511	Fonofos	97.6	95.5	P/P	59 - 113
2429511	Hexabromobenzene	114	113	P/P	50 - 150
2429511	Hexazinone	103	92.9	P/P	66 - 122
2429511	Imazalil	96.6	95.5	P/P	21 - 283
2429511	Iprodione	83.6	73.6	P/P	43 - 150
2429511	Loratadine	185	162	P/P	23 - 201
2429511	Malathion	90.3	87.9	P/P	58 - 136
2429511	Metalaxyl	105	104	P/P	55 - 120
2429511	Metolachlor	117	90.9	P/P	57 - 121
2429511	Metribuzin	105	94.3	P/P	58 - 294
2429511	Mevinphos	108	106	P/P	50 - 126
2429511	Molinate	60.0	52.7	P/P	42 - 93.0
2429511	Myclobutanil	98.2	93.9	P/P	55 - 125
2429511	Naled	52.8	54.7	P/P	18 - 200
2429511	Napropamide	80.8	78.6	P/P	39 - 110
2429511	Norflurazon	93.2	84.9	P/P	48 - 128
2429511	Octinoxate	129	122	P/P	21 - 159
2429511	Oxadiazon	94.7	89.3	P/P	43 - 112
2429511	Oxybenzone	133	122	P/P	41 - 142
2429511	Oxyfluorfen	126	120	P/P	64 - 153
2429511	Parathion Ethyl	102	96.9	P/P	69 - 114
2429511	Parathion Methyl	106	100	P/P	79 - 139
2429511	PBB-153	113	113	P/P	50 - 150
2429511	PBDE-47	98.4	93.5	P/P	27 - 144
2429511	PBDE-99	87.3	81.4	P/P	18 - 150
2429511	Pendimethalin	104	100	P/P	50 - 139
2429511	Pentabromotoluene	110	104	P/P	50 - 150
2429511	Phenytoin	62.8	56.8	P/P	10 - 146
2429511	Phorate	111	110	P/P	54 - 161
2429511	Prodiamine	37.0	39.4	P/P	30 - 161

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433648

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429511	Prometon	117	113	P/P	45 - 134
2429511	Prometryn	130	114	P/P	45 - 137
2429511	Pronamide	125	117	P/P	65 - 133
2429511	Propanil	105	101	P/P	49 - 142
2429511	Propargite	69.7	68.4	P/P	10 - 203
2429511	Propiconazole	96.9	86.7	P/P	38 - 146
2429511	Pyraflufen Ethyl	104	92.4	P/P	34 - 153
2429511	Pyridaben	135	101	P/P	12 - 192
2429511	Pyriproxyfen	96.5	88.9	P/P	33 - 180
2429511	Simazine	89.8	86.3	P/P	51 - 157
2429511	Stirophos	54.0	48.7	P/P	10 - 128
2429511	Sulfentrazone	91.6	89.1	P/P	53 - 186
2429511	Tebuconazole	64.3	56.1	P/P	10 - 133
2429511	Terbufos	123	124	P/P	65 - 139
2429511	Terbutylazine	89.3	85.3	P/P	66 - 117
2429511	Tetradecachloro-m-terphenyl	106	126	P/P	70 - 200
2429511	Thiobencarb	94.4	88.3	P/P	51 - 119
2429511	Tri-o-cresyl Phosphate	123	116	P/P	31 - 144
2429511	Triadimefon	94.6	93.5	P/P	48 - 119
2429511	Tris(1-chloro-2-propyl) phosphate (TCPP)	126	111	P/P	50 - 150
2429511	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	119	111	P/P	50 - 150
2429511	Tris(2-chloroethyl) phosphate (TCEP)	118	111	P/P	70 - 180

Reference Method: EPA 8270E

Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429555	Aldrin	32.3	37.6	P/P	24 - 81.0
2429555	Alpha-BHC	81.1	89.6	P/P	65 - 110
2429555	Alpha-Chlordane	45.1	44.7	P/P	43 - 119
2429555	Beta-BHC	78.2	85.6	P/P	54 - 165
2429555	Beta-Cyfluthrin	60.9	61.7	P/P	27 - 165
2429555	Bifenthrin	49.0	50.4	P/P	17 - 117
2429555	Chlorothalonil	72.1	83.2	P/P	10 - 255
2429555	Cis-Nonachlor	41.5	41.6	P/P	34 - 98.0
2429555	Cypermethrin	72.9	72.9	P/P	25 - 143
2429555	Dacthal	61.9	71.2	P/P	55 - 139
2429555	DDD-p,p'	51.3	50.0	P/P	30 - 109
2429555	DDE-p,p'	51.2	53.5	P/P	35 - 106
2429555	DDT-p,p'	44.9	45.3	P/P	41 - 101
2429555	Delta-BHC	91.5	99.5	P/P	58 - 165
2429555	Deltamethrin	77.8	69.3	P/P	10 - 194
2429555	Dichlobenil	49.9	54.0	P/P	22 - 114
2429555	Dicofol	45.4	44.9	P/P	17 - 133
2429555	Dieldrin	45.3	49.2	P/P	45 - 129
2429555	Endosulfan I	52.7	52.3	P/P	49 - 104
2429555	Endosulfan II	59.5	61.0	P/P	37 - 117
2429555	Endosulfan Sulfate	54.6	52.4	P/P	38 - 128
2429555	Endrin	49.5	53.2	P/P	35 - 116
2429555	Endrin Aldehyde	58.3	44.1	P/P	19 - 108
2429555	Endrin Ketone	85.3	73.9	P/P	44 - 134
2429555	Esfenvalerate	73.5	85.9	P/P	27 - 176

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429555	Ethalfuralin	54.7	59.6	P/P	49 - 100
2429555	Fenpropathrin	45.7	48.0	P/P	34 - 117
2429555	Gamma-BHC	70.1	79.0	P/P	59 - 129
2429555	Gamma-Chlordane	46.6	48.0	P/P	33 - 107
2429555	Heptachlor	38.4	41.9	P/P	37 - 94.0
2429555	Heptachlor Epoxide	52.5	53.4	P/P	38 - 118
2429555	Hexachlorobenzene	37.7	40.7	P/P	35 - 97.0
2429555	Kepone	68.4	66.6	P/P	10 - 221
2429555	Lambda-Cyhalothrin	56.2	62.3	P/P	23 - 190
2429555	Methoprene	50.2	51.2	P/P	21 - 109
2429555	Methoxychlor	77.2	69.8	P/P	46 - 118
2429555	MGK-264	71.3	68.8	P/P	39 - 122
2429555	Mirex	41.8	44.6	P/P	25 - 90.0
2429555	Oxychlordane	51.4	52.3	P/P	42 - 100
2429555	Permethrin	60.6	84.9	P/P	33 - 181
2429555	Phenothrin	55.1	58.4	P/P	12 - 125
2429555	Piperonyl Butoxide	147	141	P/P	10 - 178
2429555	Prallethrin	58.7	69.9	P/P	24 - 122
2429555	Tau-Fluvalinate	73.7	97.8	P/P	13 - 151
2429555	Tetramethrin	80.1	97.7	P/P	16 - 172
2429555	Trans-Nonachlor	53.8	57.4	P/P	39 - 100
2429555	Triclosan Methyl	61.7	55.4	P/P	43 - 110
2429555	Trifluralin	48.1	48.6	P/P	45 - 94.0
2430112	PCB-1016	53.6	57.8	P/P	45 - 107
2430112	PCB-1260	66.5	66.3	P/P	40 - 112

Reference Method: EPA 8276

Batch ID: P433679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2430112	Chlordane	78.1	75.0	P/P	43 - 123
2430112	Toxaphene	92.4	93.6	P/P	27 - 156

Reference Method: EPA 8321B

Batch ID: P433544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428665	2,4,5-T	99.8	114	P/P	40 - 150
2428665	Acetaminophen	79.6	84.5	P/P	30 - 150
2428665	Acetamiprid	40.5	44.6	P/P	40 - 150
2428665	Afidopyropen	51.9	92.8	P/P	30 - 150
2428665	Bentazon	66.0	81.7	P/P	30 - 150
2428665	Benzovindiflupyr	52.1	66.6	P/P	40 - 150
2428665	Carbamazepine	36.7	40.3	F/P	40 - 150
2428665	Dinotefuran	80.2	77.0	P/P	40 - 150
2428665	Diuron	36.9	38.7	F/F	40 - 150
2428665	Fenuron	49.5	50.3	P/P	40 - 150
2428665	Fluridone	56.7	72.9	P/P	40 - 150
2428665	Hydrocodone	56.9	57.8	P/P	40 - 150
2428665	Ibuprofen	69.4	68.2	P/P	40 - 150
2428665	Imazapyr	74.9	90.9	P/P	40 - 150
2428665	Linuron	62.6	54.5	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P433544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2428665	Mandestrobin	68.8	83.0	P/P	40 - 150
2428665	MCP	111	107	P/P	40 - 150
2428665	Naproxen	66.8	65.2	P/P	40 - 150
2428665	Primidone	72.2	74.4	P/P	40 - 150
2428665	Pyraclostrobin	55.4	67.9	P/P	40 - 150
2428665	Silvex	102	101	P/P	40 - 150
2428665	Thiamethoxam	60.6	73.9	P/P	40 - 150
2428665	Tolfenpyrad	60.6	72.2	P/P	30 - 150
2428665	Triclopyr	111	107	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433621

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429139	Acesulfame K	155	157	F/F	40 - 150
2429139	AMPA	49.0	51.3	P/P	40 - 150
2429139	Endothall	109	103	P/P	40 - 150
2429139	Glufosinate	88.1	86.4	P/P	40 - 150
2429139	Glyphosate	95.8	121	P/P	40 - 150
2429139	Sucralose	95.0	102	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P433683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429553	3-Hydroxycarbofuran	88.4	92.2	P/P	40 - 150
2429553	Aldicarb	60.9	58.3	P/P	30 - 150
2429553	Aldicarb Sulfone	91.6	98.8	P/P	40 - 150
2429553	Aldicarb Sulfoxide	32.0	36.6	F/F	40 - 150
2429553	Carbaryl	70.2	92.5	P/P	40 - 150
2429553	Carbofuran	57.1	56.0	P/P	40 - 150
2429553	Methiocarb	65.5	85.7	P/P	40 - 150
2429553	Methomyl	81.8	82.2	P/P	40 - 150
2429553	Oxamyl	84.7	96.0	P/P	40 - 150
2429553	Propoxur	68.8	75.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P433927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2429437	Fluoride	97.5	97.5	P/P	94 - 106

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P433635

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429490	Color (true)	0.156	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P433640

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429435	Turbidity	4.55	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P433806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429374	Calcium	1.21	Spike	P	0 - 20
2429374	Iron	1.24	Spike	P	0 - 20
2429374	Magnesium	1.35	Spike	P	0 - 20
2429374	Potassium	1.26	Spike	P	0 - 20
2429374	Sodium	0.0302	Spike	P	0 - 20
2429374	Strontium	0.713	Spike	P	0 - 20
2429374	Tin	1.69	Spike	P	0 - 20
2429374	Titanium	2.08	Spike	P	0 - 20
2429374	Vanadium	2.05	Spike	P	0 - 20
2429374	Zinc	1.91	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P433806

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429374	Antimony	0.407	Spike	P	0 - 20
2429374	Arsenic	1.16	Spike	P	0 - 20
2429374	Barium	1.13	Spike	P	0 - 20
2429374	Beryllium	1.89	Spike	P	0 - 20
2429374	Boron	0.628	Spike	P	0 - 20
2429374	Cadmium	1.04	Spike	P	0 - 20
2429374	Chromium	0.0312	Spike	P	0 - 20
2429374	Cobalt	0.120	Spike	P	0 - 20
2429374	Copper	0.0690	Spike	P	0 - 20
2429374	Lead	0.344	Spike	P	0 - 20
2429374	Manganese	2.49	Spike	P	0 - 20
2429374	Molybdenum	0.522	Spike	P	0 - 20
2429374	Nickel	0.306	Spike	P	0 - 20
2429374	Selenium	0.112	Spike	P	0 - 20
2429374	Silver	1.30	Spike	P	0 - 20
2429374	Thallium	0.170	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P434050

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2431836	Aluminum	0.703	Spike	P	0 - 20
2431836	Lead	0.503	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433891

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429361	Chloride	0.977	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433892

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429531	Chloride	0.791	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433893

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429361	Sulfate	0.363	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433839

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429397	Ammonia-N	1.44	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P433853

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2427797	Ammonia-N	1.23	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433700

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429441	Kjeldahl Nitrogen	0.00406	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P433701

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429632	Kjeldahl Nitrogen	2.53	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P433787

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429491	NO2NO3-N	0.976	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P433721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429529	Total-P	0.337	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P433648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429511	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	1.36	Spike	P	0 - 37
2429511	Acetochlor	7.14	Spike	P	0 - 28
2429511	Alachlor	12.5	Spike	P	0 - 30
2429511	Ametryn	3.61	Spike	P	0 - 32
2429511	Atrazine	4.10	Spike	P	0 - 41
2429511	Atrazine Desethyl	7.82	Spike	P	0 - 36
2429511	Avobenzone	4.88	Spike	P	0 - 36
2429511	Azinphos Methyl	13.0	Spike	P	0 - 75
2429511	Azoxystrobin	9.90	Spike	P	0 - 39
2429511	Bromacil	0.111	Spike	P	0 - 33
2429511	Butylate	7.29	Spike	P	0 - 44
2429511	Caffeine	2.00	Spike	P	0 - 74
2429511	Carbophenothion	0.689	Spike	P	0 - 25
2429511	Carfentrazone Ethyl	2.24	Spike	P	0 - 27
2429511	Chlorfenapyr	5.33	Spike	P	0 - 24
2429511	Chlorpyrifos Ethyl	6.76	Spike	P	0 - 26
2429511	Chlorpyrifos Methyl	10.6	Spike	P	0 - 26
2429511	Coumaphos	9.91	Spike	P	0 - 28
2429511	Cyanazine	2.65	Spike	P	0 - 48
2429511	Cyprodinil	5.80	Spike	P	0 - 29
2429511	Dechlorane 602	17.4	Spike	P	0 - 30
2429511	Dechlorane 603	1.84	Spike	P	0 - 30
2429511	Dechlorane Plus	3.39	Spike	P	0 - 30
2429511	Demeton	4.47	Spike	P	0 - 33
2429511	Diazinon	3.59	Spike	P	0 - 29
2429511	Difenoconazole	21.6	Spike	P	0 - 34
2429511	Dimethenamid	5.35	Spike	P	0 - 39
2429511	Dimethomorph	7.79	Spike	P	0 - 51
2429511	Disulfoton	1.89	Spike	P	0 - 30
2429511	Dithiopyr	0.00400	Spike	P	0 - 26
2429511	EPTC	7.86	Spike	P	0 - 43
2429511	Ethion	9.88	Spike	P	0 - 79
2429511	Ethoprop	5.40	Spike	P	0 - 29
2429511	Etridiazole	3.06	Spike	P	0 - 33
2429511	Fenamiphos	1.89	Spike	P	0 - 40
2429511	Fenbuconazole	8.26	Spike	P	0 - 74
2429511	Fipronil	4.09	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P433648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429511	Fipronil Desulfinyl	7.41	Spike	P	0 - 32
2429511	Fipronil Sulfide	6.22	Spike	P	0 - 30
2429511	Fipronil Sulfone	5.71	Spike	P	0 - 33
2429511	Fluazifop-P-butyl	7.46	Spike	P	0 - 38
2429511	Fludioxonil	15.7	Spike	P	0 - 29
2429511	Flumioxazin	22.6	Spike	P	0 - 51
2429511	Flutolanil	8.16	Spike	P	0 - 25
2429511	Fluxapyroxad	9.45	Spike	P	0 - 45
2429511	Fonofos	2.24	Spike	P	0 - 27
2429511	Hexabromobenzene	0.802	Spike	P	0 - 30
2429511	Hexazinone	9.83	Spike	P	0 - 30
2429511	Imazalil	1.15	Spike	P	0 - 100
2429511	Iprodione	12.7	Spike	P	0 - 33
2429511	Loratadine	13.0	Spike	P	0 - 56
2429511	Malathion	2.69	Spike	P	0 - 37
2429511	Metalaxyl	0.713	Spike	P	0 - 40
2429511	Metolachlor	21.8	Spike	P	0 - 29
2429511	Metribuzin	11.1	Spike	P	0 - 45
2429511	Mevinphos	1.69	Spike	P	0 - 29
2429511	Molinate	12.9	Spike	P	0 - 33
2429511	Myclobutanil	4.46	Spike	P	0 - 26
2429511	Naled	3.65	Spike	P	0 - 37
2429511	Napropamide	2.72	Spike	P	0 - 44
2429511	Norflurazon	7.52	Spike	P	0 - 30
2429511	Octinoxate	5.44	Spike	P	0 - 45
2429511	Oxadiazon	5.86	Spike	P	0 - 28
2429511	Oxybenzone	8.78	Spike	P	0 - 46
2429511	Oxyfluorfen	4.70	Spike	P	0 - 28
2429511	Parathion Ethyl	5.61	Spike	P	0 - 31
2429511	Parathion Methyl	5.72	Spike	P	0 - 29
2429511	PBB-153	0.153	Spike	P	0 - 30
2429511	PBDE-47	5.14	Spike	P	0 - 36
2429511	PBDE-99	6.97	Spike	P	0 - 40
2429511	Pendimethalin	3.98	Spike	P	0 - 33
2429511	Pentabromotoluene	5.63	Spike	P	0 - 30
2429511	Phenytoin	9.92	Spike	P	0 - 100
2429511	Phorate	0.817	Spike	P	0 - 36
2429511	Prodiamine	6.45	Spike	P	0 - 71
2429511	Prometon	2.93	Spike	P	0 - 36
2429511	Prometryn	12.9	Spike	P	0 - 28
2429511	Pronamide	6.98	Spike	P	0 - 24
2429511	Propanil	4.25	Spike	P	0 - 28
2429511	Propargite	1.89	Spike	P	0 - 43
2429511	Propiconazole	11.2	Spike	P	0 - 33
2429511	Pyraflufen Ethyl	12.0	Spike	P	0 - 29
2429511	Pyridaben	23.9	Spike	P	0 - 30
2429511	Pyriproxyfen	8.15	Spike	P	0 - 79
2429511	Simazine	2.84	Spike	P	0 - 29
2429511	Stirophos	10.3	Spike	P	0 - 61
2429511	Sulfentrazone	2.69	Spike	P	0 - 33
2429511	Tebuconazole	13.7	Spike	P	0 - 69

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P433648

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429511	Terbufos	1.35	Spike	P	0 - 29
2429511	Terbutylazine	4.58	Spike	P	0 - 32
2429511	Tetradecachloro-m-terphenyl	17.8	Spike	P	0 - 30
2429511	Thiobencarb	6.74	Spike	P	0 - 26
2429511	Tri-o-cresyl Phosphate	5.63	Spike	P	0 - 33
2429511	Triadimefon	1.19	Spike	P	0 - 28
2429511	Tris(1-chloro-2-propyl) phosphate (TCPP)	11.3	Spike	P	0 - 30
2429511	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.68	Spike	P	0 - 30
2429511	Tris(2-chloroethyl) phosphate (TCEP)	5.70	Spike	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P433679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429555	Aldrin	14.9	Spike	P	0 - 41
2429555	Alpha-BHC	9.96	Spike	P	0 - 25
2429555	Alpha-Chlordane	0.887	Spike	P	0 - 32
2429555	Beta-BHC	9.08	Spike	P	0 - 33
2429555	Beta-Cyfluthrin	1.38	Spike	P	0 - 43
2429555	Bifenthrin	2.80	Spike	P	0 - 52
2429555	Chlorothalonil	14.3	Spike	P	0 - 82
2429555	Cis-Nonachlor	0.0414	Spike	P	0 - 33
2429555	Cypermethrin	0.00964	Spike	P	0 - 51
2429555	Dacthal	14.0	Spike	P	0 - 27
2429555	DDD-p,p'	2.50	Spike	P	0 - 39
2429555	DDE-p,p'	4.47	Spike	P	0 - 31
2429555	DDT-p,p'	0.914	Spike	P	0 - 29
2429555	Delta-BHC	8.38	Spike	P	0 - 35
2429555	Deltamethrin	11.6	Spike	P	0 - 100
2429555	Dichlobenil	7.91	Spike	P	0 - 40
2429555	Dicofol	1.21	Spike	P	0 - 37
2429555	Dieldrin	8.21	Spike	P	0 - 27
2429555	Endosulfan I	0.808	Spike	P	0 - 23
2429555	Endosulfan II	2.46	Spike	P	0 - 34
2429555	Endosulfan Sulfate	4.13	Spike	P	0 - 36
2429555	Endrin	7.22	Spike	P	0 - 45
2429555	Endrin Aldehyde	27.7	Spike	P	0 - 76
2429555	Endrin Ketone	14.3	Spike	P	0 - 43
2429555	Esfenvalerate	15.5	Spike	P	0 - 51
2429555	Ethalfuralin	8.64	Spike	P	0 - 22
2429555	Fenpropathrin	4.92	Spike	P	0 - 49
2429555	Gamma-BHC	12.0	Spike	P	0 - 28
2429555	Gamma-Chlordane	2.84	Spike	P	0 - 40
2429555	Heptachlor	8.72	Spike	P	0 - 29
2429555	Heptachlor Epoxide	1.75	Spike	P	0 - 33
2429555	Hexachlorobenzene	7.67	Spike	P	0 - 36
2429555	Kepone	2.73	Spike	P	0 - 85
2429555	Lambda-Cyhalothrin	10.4	Spike	P	0 - 55
2429555	Methoprene	2.04	Spike	P	0 - 53
2429555	Methoxychlor	9.98	Spike	P	0 - 50

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P433679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429555	MGK-264	3.50	Spike	P	0 - 43
2429555	Mirex	6.39	Spike	P	0 - 40
2429555	Oxychlordane	1.72	Spike	P	0 - 31
2429555	Permethrin	33.4	Spike	P	0 - 50
2429555	Phenothrin	5.77	Spike	P	0 - 58
2429555	Piperonyl Butoxide	3.67	Spike	P	0 - 100
2429555	Prallethrin	17.3	Spike	P	0 - 39
2429555	Tau-Fluvalinate	28.0	Spike	P	0 - 54
2429555	Tetramethrin	16.7	Spike	P	0 - 51
2429555	Trans-Nonachlor	6.54	Spike	P	0 - 39
2429555	Triclosan Methyl	10.7	Spike	P	0 - 31
2429555	Trifluralin	1.08	Spike	P	0 - 22
2430112	PCB-1016	7.57	Spike	P	0 - 25
2430112	PCB-1260	0.232	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P433679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2430112	Chlordane	4.00	Spike	P	0 - 28
2430112	Toxaphene	1.36	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P433544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428665	2,4-D	9.70	Spike	P	0 - 30
2428665	2,4,5-T	12.9	Spike	P	0 - 30
2428665	Acetaminophen	5.99	Spike	P	0 - 30
2428665	Acetamiprid	9.79	Spike	P	0 - 30
2428665	Afidopyropen	56.6	Spike	F	0 - 30
2428665	Bentazon	12.7	Spike	P	0 - 30
2428665	Benzovindiflupyr	24.4	Spike	P	0 - 30
2428665	Carbamazepine	9.33	Spike	P	0 - 30
2428665	Clothianidin	2.54	Spike	P	0 - 30
2428665	Dinotefuran	4.05	Spike	P	0 - 30
2428665	Diuron	4.64	Spike	P	0 - 30
2428665	Fenuron	1.61	Spike	P	0 - 30
2428665	Fluridone	24.9	Spike	P	0 - 30
2428665	Hydrocodone	1.57	Spike	P	0 - 30
2428665	Ibuprofen	1.69	Spike	P	0 - 30
2428665	Imazapyr	12.1	Spike	P	0 - 30
2428665	Imidacloprid	14.0	Spike	P	0 - 30
2428665	Linuron	13.8	Spike	P	0 - 30
2428665	Mandestrobin	18.7	Spike	P	0 - 30
2428665	MCP	4.26	Spike	P	0 - 30
2428665	Naproxen	2.50	Spike	P	0 - 30
2428665	Primidone	3.06	Spike	P	0 - 30
2428665	Pyraclostrobin	20.1	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P433544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2428665	Silvex	0.709	Spike	P	0 - 30
2428665	Thiamethoxam	19.8	Spike	P	0 - 30
2428665	Tolfenpyrad	17.4	Spike	P	0 - 30
2428665	Triclopyr	3.93	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P433621

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429139	Acesulfame K	0.818	Spike	P	0 - 30
2429139	AMPA	3.01	Spike	P	0 - 30
2429139	Endothall	5.59	Spike	P	0 - 30
2429139	Glufosinate	1.94	Spike	P	0 - 30
2429139	Glyphosate	6.79	Spike	P	0 - 30
2429139	Sucralose	6.38	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P433683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429553	3-Hydroxycarbofuran	4.16	Spike	P	0 - 30
2429553	Aldicarb	4.32	Spike	P	0 - 30
2429553	Aldicarb Sulfone	7.52	Spike	P	0 - 30
2429553	Aldicarb Sulfoxide	13.5	Spike	P	0 - 30
2429553	Carbaryl	27.4	Spike	P	0 - 30
2429553	Carbofuran	1.89	Spike	P	0 - 30
2429553	Methiocarb	26.7	Spike	P	0 - 30
2429553	Methomyl	0.428	Spike	P	0 - 30
2429553	Oxamyl	12.6	Spike	P	0 - 30
2429553	Propoxur	8.70	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P433830

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429631	Total Alkalinity	3.31	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P434110

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429490	TDS	5.94	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P433927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2429437	Fluoride	0.0	Spike	P	0 - 1.9

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

Quality Assurance Report Surrogates

Lab Sample ID: 2429553
Field Sample ID: G4NW0421

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	61.4	P	30 - 160

Lab Sample ID: 2429554
Field Sample ID: G4NW0421

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	114	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.7	P	30 - 160
EPA 8321B	Diuron-d6	54.4	P	30 - 160
EPA 8321B	Endothall-d6	97.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.4	P	30 - 160
EPA 8321B	Primidone-d5	94.4	P	30 - 160
EPA 8321B	Sucralose-d6	99.1	P	30 - 160

Lab Sample ID: 2429555
Field Sample ID: G4NW0421

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	59.8	P	37 - 129
EPA 8270E	Decachlorobiphenyl	48.3	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	36.2	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	55.3	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	34.1	P	28 - 102
EPA 8276	PCNB	67.6	P	49 - 115

Lab Sample ID: 2429556
Field Sample ID: G4NW0421

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	78.4	P	20 - 200
EPA 8270E	Simazine-d10	70.6	P	62 - 142
EPA 8270E	Terbufos-d10	83.6	P	58 - 132
EPA 8270E	Terphenyl-d14	76.2	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A120926

Included Lab Sample IDs: 2429528, 2429530, 2429531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.1	97.1	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120929

Included Lab Sample IDs: 2429528, 2429530, 2429531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.5	P/P	95 - 105

Reference Method: SM 5310 B-2011

Run ID: A120987

Included Lab Sample IDs: 2429529, 2429532, 2429533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120992

Included Lab Sample IDs: 2429532, 2429533

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.7	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120996

Included Lab Sample IDs: 2429529, 2429532, 2429533

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A121007

Included Lab Sample IDs: 2429529, 2429532, 2429533

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

Reference Method: EPA 8321B

Run ID: A121009

Included Lab Sample IDs: 2429554

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	80.6	86.9	P/P	60 - 160
Endothall	108	103	P/P	60 - 160
Glufosinate	95.4	99.3	P/P	60 - 160
Glyphosate	103	105	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A121018

Included Lab Sample IDs: 2429529

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

Reference Method: EPA 8321B

Run ID: A121022

Included Lab Sample IDs: 2429554

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	104	108	P/P	60 - 160
Sucralose	84.5	98.6	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A121026

Included Lab Sample IDs: 2429528, 2429530, 2429531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.9	99.0	P/P	90 - 110
Total Alkalinity	98.0	96.9	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A121029

Included Lab Sample IDs: 2429529

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.9	99.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A121038

Included Lab Sample IDs: 2429554

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	93.2	96.4	P/P	50 - 150
2,4,5-T	87.5	85.9	P/P	50 - 150
3-Hydroxycarbofuran	112	94.8	P/P	60 - 150
Acetaminophen	94.9	84.8	P/P	60 - 160
Acetamiprid	111	111	P/P	50 - 150
Afidopyropen	153*	117	F/P	50 - 150
Aldicarb	110	93.0	P/P	60 - 150
Aldicarb Sulfone	109	89.9	P/P	50 - 150
Aldicarb Sulfoxide	104	86.1	P/P	50 - 150
Bentazon	123	101	P/P	50 - 160
Benzovindiflupyr	108	114	P/P	50 - 150
Carbamazepine	113	97.8	P/P	60 - 150
Carbaryl	106	133	P/P	60 - 150
Carbofuran	85.6	105	P/P	50 - 150
Clothianidin	109	102	P/P	60 - 150
Dinotefuran	141	121	P/P	50 - 150
Diuron	93.6	96.5	P/P	60 - 160
Fenuron	119	108	P/P	60 - 150
Fluridone	105	106	P/P	60 - 160
Hydrocodone	114	124	P/P	60 - 150
Ibuprofen	133	110	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A121038
Included Lab Sample IDs: 2429554

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	97.1	99.7	P/P	50 - 150
Imidacloprid	91.5	100	P/P	60 - 150
Linuron	154*	104	F/P	60 - 150
Mandestrobin	95.1	141	P/P	50 - 150
MCPP	85.3	98.1	P/P	50 - 150
Methiocarb	94.6	80.2	P/P	50 - 150
Methomyl	105	96.5	P/P	50 - 150
Naproxen	112	94.1	P/P	50 - 160
Oxamyl	105	100	P/P	50 - 150
Primidone	112	115	P/P	60 - 150
Propoxur	116	110	P/P	50 - 150
Pyraclostrobin	121	108	P/P	60 - 150
Silvex	103	86.9	P/P	50 - 150
Thiamethoxam	99.1	110	P/P	50 - 150
Tolfenpyrad	98.5	104	P/P	60 - 150
Triclopyr	87.5	80.3	P/P	50 - 150

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A121039
Included Lab Sample IDs: 2429532, 2429533

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

Reference Method: EPA 8270E
Run ID: A121041
Included Lab Sample IDs: 2429555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	98.0		P	80 - 120
PCB-1260	112		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A121050
Included Lab Sample IDs: 2429557, 2429558, 2429559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	102	P/P	90 - 110
Iron	102	101	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Potassium	96.0	96.8	P/P	90 - 110
Sodium	98.2	99.0	P/P	90 - 110
Strontium	96.8	98.0	P/P	90 - 110
Tin	102	102	P/P	90 - 110
Titanium	103	102	P/P	90 - 110
Vanadium	102	101	P/P	90 - 110
Zinc	103	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121054

Included Lab Sample IDs: 2429557, 2429558, 2429559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Antimony	102	101	P/P	90 - 110
Arsenic	99.2	97.5	P/P	90 - 110
Barium	102	101	P/P	90 - 110
Beryllium	98.1	96.9	P/P	90 - 110
Boron	98.8	99.6	P/P	90 - 110
Cadmium	103	102	P/P	90 - 110
Chromium	102	100	P/P	90 - 110
Cobalt	95.4	93.2	P/P	90 - 110
Copper	95.0	92.1	P/P	90 - 110
Lead	93.0	93.3	P/P	90 - 110
Manganese	102	101	P/P	90 - 110
Molybdenum	100	98.4	P/P	90 - 110
Selenium	102	101	P/P	90 - 110
Silver	97.2	97.0	P/P	90 - 110
Thallium	99.3	99.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A121057

Included Lab Sample IDs: 2429528, 2429530, 2429531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	98.3	P/P	90 - 110
Chloride	99.2	100	P/P	90 - 110
Sulfate	98.5	99.5	P/P	90 - 110
Sulfate	99.5	97.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A121067

Included Lab Sample IDs: 2429528, 2429530, 2429531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	103	100	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A121077

Included Lab Sample IDs: 2429555

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121080

Included Lab Sample IDs: 2429557, 2429558, 2429559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Nickel	98.2	94.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121088
Included Lab Sample IDs: 2429555

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	105		P	80 - 120
Alpha-BHC	111		P	80 - 120
Alpha-Chlordane	101		P	80 - 120
Beta-BHC	104		P	80 - 120
Beta-Cyfluthrin	96.0		P	80 - 120
Bifenthrin	99.4		P	80 - 120
Chlorothalonil	94.6		P	80 - 120
Cis-Nonachlor	89.1		P	80 - 120
Cypermethrin	95.9		P	80 - 120
Dacthal	101		P	80 - 120
DDD-p,p'	107		P	80 - 120
DDE-p,p'	101		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	106		P	80 - 120
Deltamethrin	102		P	80 - 120
Dichlobenil	103		P	80 - 120
Dicofol	91.5		P	80 - 120
Dieldrin	96.5		P	80 - 120
Endosulfan I	103		P	80 - 120
Endosulfan II	99.7		P	80 - 120
Endosulfan Sulfate	86.6		P	80 - 120
Endrin	97.9		P	80 - 120
Endrin Aldehyde	87.9		P	80 - 120
Endrin Ketone	107		P	80 - 120
Esfenvalerate	106		P	80 - 120
Ethalfuralin	83.0		P	80 - 120
Fenpropathrin	97.8		P	80 - 120
Gamma-BHC	109		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	98.2		P	80 - 120
Heptachlor Epoxide	102		P	80 - 120
Hexachlorobenzene	105		P	80 - 120
Kepone	56.8*		F	80 - 120
Lambda-Cyhalothrin	105		P	80 - 120
Methoprene	116		P	80 - 120
Methoxychlor	98.7		P	80 - 120
MGK-264	97.7		P	80 - 120
Mirex	111		P	80 - 120
Oxychlordane	109		P	80 - 120
Permethrin	97.9		P	80 - 120
Phenothrin	102		P	80 - 120
Piperonyl Butoxide	110		P	80 - 120
Prallethrin	103		P	80 - 120
Tau-Fluvalinate	107		P	80 - 120
Tetramethrin	104		P	80 - 120
Trans-Nonachlor	96.9		P	80 - 120
Triclosan Methyl	93.3		P	80 - 120
Trifluralin	111		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A121110

Included Lab Sample IDs: 2429556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	91.7		P	80 - 120
Avobenzene	90.6		P	80 - 120
Dechlorane 602	97.7		P	80 - 120
Dechlorane 603	91.7		P	80 - 120
Dechlorane Plus	90.1		P	80 - 120
Hexabromobenzene	94.4		P	80 - 120
Octinoxate	96.4		P	80 - 120
Oxybenzone	101		P	80 - 120
PBB-153	90.6		P	80 - 120
PBDE-47	95.4		P	80 - 120
PBDE-99	94.9		P	80 - 120
Pentabromotoluene	98.9		P	80 - 120
Tetradecachloro-m-terphenyl	82.3		P	80 - 120
Tri-o-cresyl Phosphate	96.9		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	97.5		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	97.4		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A121158

Included Lab Sample IDs: 2429557, 2429558, 2429559

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	98.5	99.6	P/P	90 - 110
Aluminum	99.8	98.5	P/P	90 - 110
Lead	92.0	91.2	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A121169

Included Lab Sample IDs: 2429556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.0		P	80 - 120
Alachlor	91.1		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	90.8		P	80 - 120
Azinphos Methyl	93.4		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	97.7		P	80 - 120
Caffeine	98.6		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	105		P	80 - 120
Chlorfenapyr	88.0		P	80 - 120
Chlorpyrifos Ethyl	86.5		P	80 - 120
Chlorpyrifos Methyl	96.5		P	80 - 120
Coumaphos	95.3		P	80 - 120
Cyanazine	99.8		P	80 - 120
Cyprodinil	112		P	80 - 120
Demeton	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A121169
 Included Lab Sample IDs: 2429556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diazinon	99.7		P	80 - 120
Difenoconazole	94.7		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	84.0		P	80 - 120
Disulfoton	98.3		P	80 - 120
Dithiopyr	99.8		P	80 - 120
EPTC	100		P	80 - 120
Ethion	88.8		P	80 - 120
Ethoprop	90.9		P	80 - 120
Etridiazole	98.0		P	80 - 120
Fenamiphos	85.5		P	80 - 120
Fenbuconazole	86.2		P	80 - 120
Fipronil	85.5		P	80 - 120
Fipronil Desulfinyl	98.4		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Fludioxonil	114		P	80 - 120
Flumioxazin	93.5		P	80 - 120
Flutolanil	98.9		P	80 - 120
Fluxapyroxad	93.5		P	80 - 120
Fonofos	96.9		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	92.4		P	80 - 120
Iprodione	83.5		P	80 - 120
Loratadine	87.6		P	80 - 120
Malathion	85.7		P	80 - 120
Metaxyl	88.6		P	80 - 120
Metolachlor	99.6		P	80 - 120
Metribuzin	97.3		P	80 - 120
Mevinphos	87.4		P	80 - 120
Molinate	84.8		P	80 - 120
Myclobutanil	87.7		P	80 - 120
Naled	110		P	80 - 120
Napropamide	100		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	96.2		P	80 - 120
Oxyfluorfen	103		P	80 - 120
Parathion Ethyl	99.3		P	80 - 120
Parathion Methyl	89.2		P	80 - 120
Pendimethalin	98.9		P	80 - 120
Phenytoin	96.4		P	80 - 120
Phorate	98.7		P	80 - 120
Prodiamine	104		P	80 - 120
Prometon	100		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	105		P	80 - 120
Propanil	99.3		P	80 - 120
Propargite	97.2		P	80 - 120
Propiconazole	84.4		P	80 - 120
Pyraflufen Ethyl	98.1		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A121169
Included Lab Sample IDs: 2429556

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyridaben	96.7		P	80 - 120
Pyriproxyfen	98.9		P	80 - 120
Simazine	97.5		P	80 - 120
Stirophos	89.8		P	80 - 120
Sulfentrazone	98.3		P	80 - 120
Tebuconazole	97.9		P	80 - 120
Terbufos	97.4		P	80 - 120
Terbutylazine	89.1		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	99.2		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			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	96.0					0.156	
EPA 180.1 Rev. 2.0	Turbidity	99.8					4.55	
EPA 200.7 Rev. 4.4	Calcium	102	102	104				1.21
	Iron	104	102	103	104			1.24
	Magnesium	104	101	103	102			1.35
	Potassium	94.0	91.4	93.0	98.3			1.26
	Sodium	97.3	98.2	102				0.0302
	Strontium	96.4	94.8	95.5	101			0.713
	Tin	98.6	99.1	97.6	95.9			1.69
	Titanium	101	102	100	103			2.08
	Vanadium	100	102	99.9	104			2.05
	Zinc	101	101	98.9	99.9			1.91
EPA 200.8 Rev. 5.4	Aluminum	100	99.6	100	99.0			0.703
	Antimony	103	105	105	106			0.407
	Arsenic	99.5	98.3	99.5	99.3			1.16
	Barium	104	106	105	106			1.13
	Beryllium	96.3	96.2	98.0	98.4			1.89
	Boron	104	102	101	104			0.628
	Cadmium	101	103	104	103			1.04
	Chromium	99.1	97.4	97.4	98.0			0.0312
	Cobalt	96.4	93.8	93.6	91.5			0.120
	Copper	95.2	94.0	94.1	89.0			0.0690
	Lead	93.9	94.2	94.5	93.0			0.344
	Lead	92.5	92.7	93.2	92.8			0.503
	Manganese	99.4	97.2	100	99.2			2.49
	Molybdenum	99.6	101	101	103			0.522
	Nickel	96.0	91.7	92.0	89.8			0.306
	Selenium	100	98.4	98.5	97.0			0.112
	Silver	111	110	109	110			1.30
	Thallium	101	105	105	104			0.170
EPA 300.0 Rev. 2.1	Chloride	101	100	99.5			0.977	
	Chloride	101	102	99.3			0.791	
	Sulfate	98.6	97.2	95.9			0.363	
	Sulfate	99.5	99.4	99.8				
EPA 350.1 Rev. 2.0	Ammonia-N	95.4	98.8	101				1.44
	Ammonia-N	96.6	96.2	97.6				1.23
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	110	110				0.0040
	Kjeldahl Nitrogen	101	61.4	63.8				2.53
EPA 353.2 Rev. 2.0	NO2NO3-N	104	102	103				0.976
EPA 365.1 Rev. 2.0	Total-P	104	101	101				0.337
EPA 8270E	2-Ethylhexyl	103	92.4	91.1				1.36
	2,3,4,5-tetrabromobenzoate (EHTBB)							
	Acetochlor	87.2	91.7	98.5				7.14
	Alachlor	101	88.9	101				12.5
	Aldrin	65.6	32.3	37.6				14.9
	Alpha-BHC	102	81.1	89.6				9.96
	Alpha-Chlordane	63.8	45.1	44.7				0.887
	Ametryn	123	139	144				3.61
	Atrazine	91.2						4.10
	Atrazine Desethyl	77.4	65.5	72.2				7.82
	Avobenzone	131	132	126				4.88
	Azinphos Methyl	140	141	124				13.0
	Azoxystrobin	104	125	138				9.90

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Beta-BHC	83.8	78.2	85.6		9.08
	Beta-Cyfluthrin	95.7	60.9	61.7		1.38
	Bifenthrin	68.7	49.0	50.4		2.80
	Bromacil	104	98.7	98.8		0.111
	Butylate	62.0	55.0	59.1		7.29
	Caffeine	96.1	102	99.9		2.00
	Carbophenothion	102	101	100		0.689
	Carfentrazone Ethyl	129	114	116		2.24
	Chlorfenapyr	96.8	79.9	84.3		5.33
	Chlorothalonil	61.4	72.1	83.2		14.3
	Chlorpyrifos Ethyl	84.6	83.7	89.6		6.76
	Chlorpyrifos Methyl	102	87.8	97.6		10.6
	Cis-Nonachlor	57.7	41.5	41.6		0.0414
	Coumaphos	158	135	149		9.91
	Cyanazine	129	131	134		2.65
	Cypermethrin	111	72.9	72.9		0.0096
	Cyprodinil	103	84.4	89.4		5.80
	Dacthal	87.7	61.9	71.2		14.0
	DDD-p,p'	64.2	51.3	50.0		2.50
	DDE-p,p'	68.6	51.2	53.5		4.47
	DDT-p,p'	61.9	44.9	45.3		0.914
	Dechlorane 602	94.6	77.7	65.3		17.4
	Dechlorane 603	113	117	115		1.84
	Dechlorane Plus	121	98.0	101		3.39
	Delta-BHC	85.6	91.5	99.5		8.38
	Deltamethrin	106	77.8	69.3		11.6
	Demeton	74.8	81.6	85.3		4.47
	Diazinon	99.2	110	114		3.59
	Dichlobenil	60.7	49.9	54.0		7.91
	Dicofol	68.6	45.4	44.9		1.21
	Dieldrin	65.4	45.3	49.2		8.21
	Difenoconazole	179	129	160		21.6
	Dimethenamid	93.0	83.8	88.5		5.35
	Dimethomorph	214	233	252		7.79
	Disulfoton	96.5	105	107		1.89
	Dithiopyr	93.6	97.5	97.5		0.0040
	Endosulfan I	76.8	52.7	52.3		0.808
	Endosulfan II	69.4	59.5	61.0		2.46
	Endosulfan Sulfate	70.2	54.6	52.4		4.13
	Endrin	71.8	49.5	53.2		7.22
	Endrin Aldehyde	62.0	58.3	44.1		27.7
	Endrin Ketone	85.0	85.3	73.9		14.3
	EPTC	64.5	53.9	58.3		7.86
	Esfenvalerate	107	73.5	85.9		15.5
	Ethalfuralin	88.4	54.7	59.6		8.64
	Ethion	79.4	61.4	67.8		9.88
	Ethoprop	97.9	101	107		5.40
	Etridiazole	66.5	64.0	65.9		3.06
	Fenamiphos	92.8	97.4	99.3		1.89
	Fenbuconazole	108	88.9	97.3		8.26
	Fenpropathrin	75.8	45.7	48.0		4.92
	Fipronil	96.5	95.0	98.9		4.09
	Fipronil Desulfinyl	99.8	89.3	97.0		7.41
	Fipronil Sulfide	101	102	95.6		6.22

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Fipronil Sulfone	103	93.0	99.2			5.71
	Fluazifop-P-butyl	103	92.2	99.4			7.46
	Fludioxonil	95.9	74.4	87.1			15.7
	Flumioxazin	179	136	171			22.6
	Flutolanil	89.2	77.4	71.3			8.16
	Fluxapyroxad	101	85.4	93.9			9.45
	Fonofos	103	97.6	95.5			2.24
	Gamma-BHC	73.3	70.1	79.0			12.0
	Gamma-Chlordane	71.1	46.6	48.0			2.84
	Heptachlor	61.8	38.4	41.9			8.72
	Heptachlor Epoxide	79.4	52.5	53.4			1.75
	Hexabromobenzene	110	114	113			0.802
	Hexachlorobenzene	55.1	37.7	40.7			7.67
	Hexazinone	91.9	103	92.9			9.83
	Imazalil	86.0	96.6	95.5			1.15
	Iprodione	82.4	83.6	73.6			12.7
	Kepone	81.6	68.4	66.6			2.73
	Lambda-Cyhalothrin	82.1	56.2	62.3			10.4
	Loratadine	174	185	162			13.0
	Malathion	102	90.3	87.9			2.69
	Metalaxyl	86.9	105	104			0.713
	Methoprene	75.9	50.2	51.2			2.04
	Methoxychlor	111	77.2	69.8			9.98
	Metolachlor	103	117	90.9			21.8
	Metribuzin	94.9	105	94.3			11.1
	Mevinphos	101	108	106			1.69
	MGK-264	76.6	71.3	68.8			3.50
	Mirex	67.0	41.8	44.6			6.39
	Molinate	54.7	60.0	52.7			12.9
	Myclobutanil	98.4	98.2	93.9			4.46
	Naled	51.7	52.8	54.7			3.65
	Napropamide	89.8	80.8	78.6			2.72
	Norflurazon	99.9	93.2	84.9			7.52
	Octinoxate	121	129	122			5.44
	Oxadiazon	84.4	94.7	89.3			5.86
	Oxybenzone	115	133	122			8.78
	Oxychlordane	82.9	51.4	52.3			1.72
	Oxyfluorfen	109	126	120			4.70
	Parathion Ethyl	93.4	102	96.9			5.61
	Parathion Methyl	104	106	100			5.72
	PBB-153	112	113	113			0.153
	PBDE-47	102	98.4	93.5			5.14
	PBDE-99	101	87.3	81.4			6.97
	PCB-1016	64.4	53.6	57.8			7.57
	PCB-1260	81.5	66.5	66.3			0.232
	Pendimethalin	103	104	100			3.98
	Pentabromotoluene	103	110	104			5.63
	Permethrin	83.4	60.6	84.9			33.4
	Phenothrin	73.7	55.1	58.4			5.77
	Phenytoln	50.4	62.8	56.8			9.92
	Phorate	110	111	110			0.817
	Piperonyl Butoxide	149	147	141			3.67
	Prallethrin	80.8	58.7	69.9			17.3
	Prodiamine	39.7	37.0	39.4			6.45

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Prometon	97.9	117	113			2.93
	Prometryn	113	130	114			12.9
	Pronamide	111	125	117			6.98
	Propanil	101	105	101			4.25
	Propargite	86.5	69.7	68.4			1.89
	Propiconazole	91.5	96.9	86.7			11.2
	Pyraflufen Ethyl	109	104	92.4			12.0
	Pyridaben	137	135	101			23.9
	Pyriproxyfen	97.2	96.5	88.9			8.15
	Simazine	92.1	89.8	86.3			2.84
	Stirophos	69.0	54.0	48.7			10.3
	Sulfentrazone	68.9	91.6	89.1			2.69
	Tau-Fluvalinate	111	73.7	97.8			28.0
	Tebuconazole	70.0	64.3	56.1			13.7
	Terbufos	107	123	124			1.35
	Terbutylazine	87.8	89.3	85.3			4.58
	Tetradecachloro-m-terphenyl	123	106	126			17.8
	Tetramethrin	106	80.1	97.7			16.7
	Thiobencarb	96.2	94.4	88.3			6.74
	Trans-Nonachlor	89.9	53.8	57.4			6.54
	Tri-o-cresyl Phosphate	117	123	116			5.63
	Triadimefon	94.1	94.6	93.5			1.19
	Triclosan Methyl	98.1	61.7	55.4			10.7
	Trifluralin	86.5	48.1	48.6			1.08
	Tris(1-chloro-2-propyl) phosphate (TCPP)	117	126	111			11.3
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	118	119	111			6.68
	Tris(2-chloroethyl) phosphate (TCEP)	117	118	111			5.70
EPA 8276	Chlordane	83.8	78.1	75.0			4.00
	Toxaphene	96.0	92.4	93.6			1.36
EPA 8321B	2,4-D	78.8					9.70
	2,4,5-T	81.6	114	99.8			12.9
	3-Hydroxycarbofuran	90.4	88.4	92.2			4.16
	Acesulfame K	101	155	157			0.818
	Acetaminophen	71.6	79.6	84.5			5.99
	Acetamiprid	85.6	40.5	44.6			9.79
	Afidopyropen	88.6	51.9	92.8			56.6
	Aldicarb	65.2	60.9	58.3			4.32
	Aldicarb Sulfone	81.0	91.6	98.8			7.52
	Aldicarb Sulfoxide	86.8	32.0	36.6			13.5
	AMPA	81.6	49.0	51.3			3.01
	Bentazon	118	81.7	66.0			12.7
	Benzovindiflupyr	61.0	52.1	66.6			24.4
	Carbamazepine	67.9	36.7	40.3			9.33
	Carbaryl	87.9	70.2	92.5			27.4
	Carbofuran	65.1	57.1	56.0			1.89
	Clothianidin	87.2					2.54
	Dinotefuran	109	80.2	77.0			4.05
	Diuron	61.8	36.9	38.7			4.64
	Endothall	103	109	103			5.59
	Fenuron	95.7	49.5	50.3			1.61
	Fluridone	97.4	56.7	72.9			24.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	Glufosinate	98.0	88.1	86.4		1.94
	Glyphosate	114	95.8	121		6.79
	Hydrocodone	111	56.9	57.8		1.57
	Ibuprofen	69.4	68.2	69.4		1.69
	Imazapyr	100	90.9	74.9		12.1
	Imidacloprid	84.0				14.0
	Linuron	71.9	62.6	54.5		13.8
	Mandestrobin	94.6	68.8	83.0		18.7
	MCPP	90.3	107	111		4.26
	Methiocarb	65.1	65.5	85.7		26.7
	Methomyl	77.3	81.8	82.2		0.428
	Naproxen	66.6	65.2	66.8		2.50
	Oxamyl	80.2	84.7	96.0		12.6
	Primidone	85.4	72.2	74.4		3.06
	Propoxur	68.0	68.8	75.0		8.70
	Pyraclostrobin	75.8	55.4	67.9		20.1
	Silvex	93.2	101	102		0.709
	Sucralose	93.2	95.0	102		6.38
	Thiamethoxam	82.7	60.6	73.9		19.8
	Tolfenpyrad	74.0	72.2	60.6		17.4
SM 2320 B-2011	Triclopyr	85.0	107	111		3.93
	Total Alkalinity	98.2				3.31
SM 2540 C-2015	TDS	99.1				5.94
SM 2540 D-2015	TSS	91.4				
SM 4500-F- C-2011	Fluoride	98.2	97.5	97.5		0.0
SM 5310 B-2011	Organic Carbon	94.2				

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2429528, 2429530, 2429531
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2429528, 2429530, 2429531
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2429557, 2429558, 2429559
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2429557, 2429558, 2429559
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2429528, 2429530, 2429531
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2429528, 2429530, 2429531
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2429529, 2429532, 2429533
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2429529, 2429532, 2429533
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2429529, 2429532, 2429533
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2429529, 2429532, 2429533
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2429556
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2429555
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2429556
EPA 8270E	PCBs in water matrices by GC/MS/MS	2429555
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2429555
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2429553
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2429554
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2429528, 2429530, 2429531
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2429557, 2429558, 2429559
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2429528, 2429530, 2429531

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2429528, 2429530, 2429531
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2429528, 2429530, 2429531
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2429529, 2429532, 2429533

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	08/09/2023			08/09/2023 15:04	Alexis Price	2429528
	08/09/2023			08/09/2023 15:05	Alexis Price	2429530
	08/09/2023			08/09/2023 15:06	Alexis Price	2429531
EPA 180.1 Rev. 2.0	08/09/2023			08/09/2023 13:14	Alexis Price	2429528
	08/09/2023			08/09/2023 13:15	Alexis Price	2429530
	08/09/2023			08/09/2023 13:16	Alexis Price	2429531
EPA 200.7 Rev. 4.4	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 17:30	Chase Roberts	2429557
	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 17:37	Chase Roberts	2429558
	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 17:42	Chase Roberts	2429559
EPA 200.8 Rev. 5.4	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 16:11	Emily M Philpot	2429557
	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 16:20	Emily M Philpot	2429558
	08/09/2023	08/14/2023 14:30	George D Taylor	08/15/2023 16:30	Emily M Philpot	2429559
	08/09/2023	08/14/2023 14:30	George D Taylor	08/16/2023 14:35	Emily M Philpot	2429557
	08/09/2023	08/14/2023 14:30	George D Taylor	08/16/2023 14:42	Emily M Philpot	2429558
	08/09/2023	08/14/2023 14:30	George D Taylor	08/16/2023 14:49	Emily M Philpot	2429559
	08/09/2023	08/18/2023 13:25	George D Taylor	08/21/2023 15:22	Conrad Hartmann	2429557
EPA 300.0 Rev. 2.1	08/09/2023	08/18/2023 13:25	George D Taylor	08/21/2023 15:32	Conrad Hartmann	2429558
	08/09/2023	08/18/2023 13:25	George D Taylor	08/21/2023 16:39	Conrad Hartmann	2429559
	08/09/2023			08/15/2023 10:07	James L Waggeberby	2429528
	08/09/2023			08/15/2023 11:52	James L Waggeberby	2429531
	08/09/2023			08/15/2023 12:52	James L Waggeberby	2429530
	08/09/2023			08/14/2023 14:30	Khloe J Berg	2429529
	08/09/2023			08/15/2023 10:44	Khloe J Berg	2429532
EPA 350.1 Rev. 2.0	08/09/2023			08/15/2023 10:46	Khloe J Berg	2429533
	08/09/2023	08/10/2023 12:54	Dana G. Hughes	08/11/2023 13:31	Samantha L Bates	2429532
	08/09/2023	08/10/2023 12:54	Dana G. Hughes	08/11/2023 13:33	Samantha L Bates	2429533
EPA 351.2 Rev. 2.0	08/09/2023	08/10/2023 12:54	Dana G. Hughes	08/14/2023 12:18	Samantha L Bates	2429529
	08/09/2023			08/11/2023 16:40	Anna M. Plaviak	2429529
	08/09/2023			08/11/2023 16:41	Anna M. Plaviak	2429532
EPA 353.2 Rev. 2.0	08/09/2023			08/11/2023 17:17	Anna M. Plaviak	2429533
	08/09/2023	08/10/2023 17:20	Adam P Silver	08/11/2023 14:06	James L Waggeberby	2429529
	08/09/2023	08/10/2023 17:20	Adam P Silver	08/11/2023 14:08	James L Waggeberby	2429532
EPA 365.1 Rev. 2.0	08/09/2023	08/10/2023 17:20	Adam P Silver	08/11/2023 14:09	James L Waggeberby	2429533
	08/09/2023	08/11/2023 08:00	Fe-Val Siddell	08/14/2023 21:45	Julie Wi	2429555
	08/09/2023	08/11/2023 08:00	Fe-Val Siddell	08/15/2023 00:04	Julie Wi	2429555
EPA 8270E	08/09/2023	08/14/2023 08:30	Rasheda Ghaffari	08/16/2023 22:28	Vandana T. Nagar	2429556
	08/09/2023	08/14/2023 08:30	Rasheda Ghaffari	08/17/2023 20:49	Arthur Maknenko	2429556
	08/09/2023	08/11/2023 08:00	Fe-Val Siddell	08/15/2023 06:09	Arthur Maknenko	2429555
EPA 8276	08/09/2023	08/09/2023 14:00	Hoor Shaik	08/15/2023 04:57	Juyoung Kim	2429554
EPA 8321B	08/09/2023	08/10/2023 11:00	Hana Lee	08/10/2023 13:06	Tae K Lee	2429554

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	08/09/2023	08/10/2023 11:00	Hana Lee	08/14/2023 15:19	Tae K Lee	2429554
	08/09/2023	08/14/2023 09:00	Hoor Shaik	08/14/2023 22:41	Juyoung Kim	2429553
SM 2320 B-2011	08/09/2023			08/15/2023 01:21	Chandler E Cox	2429528
	08/09/2023			08/15/2023 01:57	Chandler E Cox	2429530
	08/09/2023			08/15/2023 02:05	Chandler E Cox	2429531
SM 2340 B-2011	08/09/2023			08/15/2023 17:30	Chase Roberts	2429557
	08/09/2023			08/15/2023 17:37	Chase Roberts	2429558
	08/09/2023			08/15/2023 17:42	Chase Roberts	2429559
SM 2540 C-2015	08/09/2023			08/11/2023 15:21	Yijie Li	2429528, 2429530, 2429531
SM 2540 D-2015	08/09/2023			08/11/2023 15:21	Yijie Li	2429528, 2429530, 2429531
SM 4500-F- C-2011	08/09/2023			08/15/2023 15:38	Dale L. Simmons	2429528
	08/09/2023			08/15/2023 15:43	Dale L. Simmons	2429530
	08/09/2023			08/15/2023 15:48	Dale L. Simmons	2429531
SM 5310 B-2011	08/09/2023			08/11/2023 00:25	Elise M. Gillis	2429529
	08/09/2023			08/11/2023 00:39	Elise M. Gillis	2429532
	08/09/2023			08/11/2023 00:52	Elise M. Gillis	2429533