

Chemical Analysis Report

NE-DIST-2024-03-19-01

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

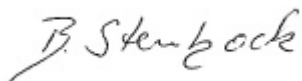
Event Description: **LSJR North 2 2024**
Request ID: **RQ-2024-03-11-09**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Suite 100
Jacksonville, FL 32256
Attn: Jeremy Parrish

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 11-APR-2024 11:10



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: MONCRIEF CR LEM TURNER RD BR
NORWOOD AVE

Collection Date/Time: 03/18/2024 09:10

Field ID: 20030114

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476261	DEP SOP: NU-094-1	Color (true)	33		PCU	P442988	
	EPA 180.1 Rev. 2.0	Turbidity	9.3		NTU	P443002	
	EPA 300.0 Rev. 2.1	Chloride	210		mg Cl/L	P443377	
		Sulfate	64		mg SO4/L	P443380	
	SM 2320 B-2011	Total Alkalinity	147		mg CaCO3/L	P443096	
	SM 2540 C-2015	TDS	628		mg/L	P443506	
	SM 2540 D-2015	TSS	11		mg/L	P443500	
	SM 4500-F- C-2011	Fluoride	0.18		mg F/L	P443099	
2476262	EPA 350.1 Rev. 2.0	Ammonia-N	0.19		mg N/L	P443206	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P442978	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.18		mg N/L	P443224	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P443139	
	SM 5310 B-2014	Organic Carbon	8.1		mg C/L	P443247	
2476284	EPA 8321B	Aldicarb	0.020	U	ug/L	P442872	
		Aldicarb Sulfone	0.0020	U	ug/L	P442872	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P442872	MS
		Carbaryl	0.0020	U	ug/L	P442872	
		Carbofuran	0.0020	U	ug/L	P442872	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P442872	
		Methiocarb	0.0020	U	ug/L	P442872	
		Methomyl	0.0020	U	ug/L	P442872	
		Oxamyl	0.0020	U	ug/L	P442872	
		Propoxur	0.0020	U	ug/L	P442872	
2476285		2,4-D	0.066		ug/L	P442960	
		Acesulfame K	1.0	U	ug/L	P442980	
		2,4,5-T	0.0040	U	ug/L	P442960	
		AMPA	0.15	I	ug/L	P442980	
		Acetaminophen	0.0080	UJ	ug/L	P442960	MS
		Endothall	0.25	U	ug/L	P442980	
		Acetamiprid	0.0020	UJ	ug/L	P442960	MS
		Glufosinate	0.10	U	ug/L	P442980	
		Glyphosate	0.26	I	ug/L	P442980	
		Afidopyropen	0.0020	UJ	ug/L	P442960	RPD
		Bentazon	0.017		ug/L	P442960	
		Sucralose	0.15	I	ug/L	P442980	
		Benzovindiflupyr	0.0020	U	ug/L	P442960	
		Carbamazepine	8.0E-04	U	ug/L	P442960	
		Clothianidin	0.0020	U	ug/L	P442960	
		Dinotefuran	0.0020	U	ug/L	P442960	
		Diuron	0.011		ug/L	P442960	
		Fenuron	0.032	U	ug/L	P442960	
		Fluridone	0.0011	I	ug/L	P442960	
		Imazapyr	0.12		ug/L	P442960	

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Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476285	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P442960	
		Ibuprofen	0.080	U	ug/L	P442960	
		Imidacloprid	0.0074	I	ug/L	P442960	
		Linuron	0.0040	U	ug/L	P442960	
		Mandestrobin	0.0020	U	ug/L	P442960	
		MCPP	0.0022	I	ug/L	P442960	
		Naproxen	0.0080	U	ug/L	P442960	
		Primidone	0.0040	U	ug/L	P442960	
		Pyraclostrobin	0.0020	U	ug/L	P442960	
		Silvex	0.0040	U	ug/L	P442960	
		Thiamethoxam	0.0020	U	ug/L	P442960	
		Tolfenpyrad	0.0020	U	ug/L	P442960	
		Triclopyr	0.0040	U	ug/L	P442960	
2476287	EPA 8270E	Aldrin	0.67	U	ng/L	P443347	
		Alpha-BHC	0.10	U	ng/L	P443347	
		Alpha-Chlordane	0.21	U	ng/L	P443347	
		PCB-1016	2.1	U	ng/L	P443347	
		Beta-BHC	0.10	U	ng/L	P443347	
		PCB-1221	2.1	U	ng/L	P443347	
		Beta-Cyfluthrin	1.3	U	ng/L	P443347	
		PCB-1232	2.1	U	ng/L	P443347	
		Bifenthrin	0.52	U	ng/L	P443347	
		PCB-1242	2.1	U	ng/L	P443347	
		PCB-1248	2.1	U	ng/L	P443347	
		Chlorothalonil	3.7	U	ng/L	P443347	
		PCB-1254	2.1	U	ng/L	P443347	
		Cis-Nonachlor	0.21	U	ng/L	P443347	
		PCB-1260	2.1	U	ng/L	P443347	
		Cypermethrin	1.6	U	ng/L	P443347	
		Dacthal	0.16	U	ng/L	P443347	
		DDD-p,p'	0.26	U	ng/L	P443347	
		DDE-p,p'	0.21	U	ng/L	P443347	
		DDT-p,p'	0.87	I	ng/L	P443347	
		Delta-BHC	0.52	I	ng/L	P443347	
		Deltamethrin	1.3	U	ng/L	P443347	
		Dichlobenil	0.26	U	ng/L	P443347	
		Dicofol	1.3	U	ng/L	P443347	
		Dieldrin	0.41	U	ng/L	P443347	
		Endosulfan I	0.41	U	ng/L	P443347	
		Endosulfan II	0.93	U	ng/L	P443347	
		Endosulfan Sulfate	0.31	U	ng/L	P443347	
		Endrin	0.93	U	ng/L	P443347	
		Endrin Aldehyde	0.78	U	ng/L	P443347	
		Endrin Ketone	0.41	U	ng/L	P443347	
		Esfenvalerate	0.78	U	ng/L	P443347	

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Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes	
2476287	EPA 8270E	Ethalfuralin	0.16	U	ng/L	P443347		
		Fenpropathrin	0.26	U	ng/L	P443347		
		Gamma-BHC	0.13	U	ng/L	P443347		
		Gamma-Chlordane	0.21	U	ng/L	P443347		
		Heptachlor	0.21	U	ng/L	P443347		
		Heptachlor Epoxide	0.26	U	ng/L	P443347		
		Hexachlorobenzene**	1.0	U	ng/L	P443347		
		Kepone	14	U	ng/L	P443347		
		Lambda-Cyhalothrin	0.78	U	ng/L	P443347		
		Methoprene	0.78	U	ng/L	P443347		
		Methoxychlor	0.31	U	ng/L	P443347		
		MGK-264	0.21	U	ng/L	P443347		
		Mirex	0.36	U	ng/L	P443347		
		Oxychlordane	0.31	U	ng/L	P443347		
		Permethrin	1.7	U	ng/L	P443347		
		Phenothrin	0.93	U	ng/L	P443347		
		Piperonyl Butoxide	0.88		ng/L	P443347		
		Prallethrin	2.1	U	ng/L	P443347		
		Tau-Fluvalinate	0.26	U	ng/L	P443347		
		Tetramethrin	0.78	U	ng/L	P443347		
		Trans-Nonachlor	0.21	U	ng/L	P443347		
		Triclosan Methyl	0.16	U	ng/L	P443347		
		Trifluralin	0.21	U	ng/L	P443347		
		EPA 8276	Chlordane	2.1	U	ng/L	P443347	
			Toxaphene	16	U	ng/L	P443347	
2476288	EPA 8270E	Oxybenzone**	10	U	ng/L	P443260	RPD	
		Acetochlor	0.21	U	ng/L	P443260		
		Octinoxate**	150	U	ng/L	P443260	RPD	
		Alachlor	0.41	U	ng/L	P443260		
		Avobenzone**	100	U	ng/L	P443260		
		Ametryn	1.1	U	ng/L	P443260		
		Atrazine	57		ng/L	P443260		
		PBDE-47**	4.1	U	ng/L	P443260		
		Atrazine Desethyl	1.3	U	ng/L	P443260		
		PBDE-99**	5.1	U	ng/L	P443260		
		Azinphos Methyl	3.1	U	ng/L	P443260	MS, RPD	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P443260	RPD	
		Azoxystrobin	1.6	I	ng/L	P443260		
		Bromacil	7.3		ng/L	P443260		
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P443260		
		Butylate	0.46	U	ng/L	P443260		
		Dechlorane Plus**	31	U	ng/L	P443260		
		Caffeine**	61	J	ng/L	P443260		
		Dechlorane 602**	5.1	U	ng/L	P443260		

Field ID: 20030114

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476288	EPA 8270E	Carbophenothion	0.51	U	ng/L	P443260	RPD
		Dechlorane 603**	4.1	U	ng/L	P443260	
		Carfentrazone Ethyl	0.15	U	ng/L	P443260	RPD
		Hexabromobenzene**	6.2	U	ng/L	P443260	
		Chlorfenapyr	0.31	U	ng/L	P443260	
		PBB-153**	6.2	U	ng/L	P443260	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P443260	MS
		Pentabromotoluene**	3.1	U	ng/L	P443260	RPD
		Chlorpyrifos Methyl	0.10	U	ng/L	P443260	
		Tris(2-chloroethyl) phosphate (TCEP)**	56	U	ng/L	P443260	RPD
		Coumaphos	1.1	U	ng/L	P443260	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	70	I	ng/L	P443260	RPD
		Cyanazine	5.1	U	ng/L	P443260	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	6.8	I	ng/L	P443260	RPD
		Cyprodinil	0.21	U	ng/L	P443260	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P443260	
		Demeton	3.6	U	ng/L	P443260	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	62	UJ	ng/L	P443260	LCS, MS
		Diazinon	0.13	U	ng/L	P443260	
		Difenoconazole	0.62	U	ng/L	P443260	
		Dimethenamid	0.10	U	ng/L	P443260	
		Dimethomorph	0.31	U	ng/L	P443260	MS
		Disulfoton	0.62	U	ng/L	P443260	
		Dithiopyr	1.0	U	ng/L	P443260	
		EPTC	0.51	U	ng/L	P443260	
		Ethion	0.31	U	ng/L	P443260	
		Ethoprop	0.13	U	ng/L	P443260	
		Etridiazole	0.10	U	ng/L	P443260	
		Fenamiphos	0.46	U	ng/L	P443260	
		Fenbuconazole	0.51	U	ng/L	P443260	
		Fipronil	0.99	I	ng/L	P443260	
		Fipronil Desulfinyl**	0.92		ng/L	P443260	
		Fipronil Sulfide	1.1		ng/L	P443260	
		Fipronil Sulfone	2.3		ng/L	P443260	
		Fluazifop-P-butyl	0.10	U	ng/L	P443260	
		Fludioxonil	0.10	U	ng/L	P443260	
		Flumioxazin	3.1	U	ng/L	P443260	
		Flutolanil	0.10	U	ng/L	P443260	RPD
		Fluxapyroxad	0.26	U	ng/L	P443260	RPD
		Fonofos	0.15	U	ng/L	P443260	
		Hexazinone	0.51	U	ng/L	P443260	
		Imazalil	0.67	U	ng/L	P443260	
		Iprodione	0.51	U	ng/L	P443260	RPD
		Loratadine**	0.31	U	ng/L	P443260	MS

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Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476288	EPA 8270E	Malathion	0.36	U	ng/L	P443260	
		Metalaxyl	0.51	U	ng/L	P443260	
		Metolachlor	1.7	I	ng/L	P443260	
		Metribuzin	0.41	U	ng/L	P443260	
		Mevinphos	1.0	U	ng/L	P443260	
		Molinate	0.26	U	ng/L	P443260	
		Myclobutanil	0.43	I	ng/L	P443260	
		Naled	2.6	U	ng/L	P443260	
		Napropamide	0.72	UJ	ng/L	P443260	LCS
		Norflurazon	1.0	U	ng/L	P443260	
		Oxadiazon	1.6	I	ng/L	P443260	
		Oxyfluorfen	0.21	U	ng/L	P443260	RPD
		Parathion Ethyl	0.15	U	ng/L	P443260	
		Parathion Methyl	0.21	U	ng/L	P443260	
		Pendimethalin	1.7	U	ng/L	P443260	
		Phenytain**	5.4	UJ	ng/L	P443260	LCS, MS
		Phorate	0.26	U	ng/L	P443260	
		Prodiamine	0.21	U	ng/L	P443260	RPD
		Prometon	3.1	U	ng/L	P443260	
		Prometryn	0.36	U	ng/L	P443260	
		Pronamide	0.10	U	ng/L	P443260	
		Propanil	0.10	U	ng/L	P443260	
		Propargite	0.82	U	ng/L	P443260	RPD
		Propiconazole	0.62	U	ng/L	P443260	MS, RPD
		Pyraflufen Ethyl	0.31	U	ng/L	P443260	RPD
		Pyridaben	1.4	U	ng/L	P443260	
		Pyriproxyfen	0.26	UJ	ng/L	P443260	LCS, RPD
		Simazine	0.26	U	ng/L	P443260	
		Stirophos	0.41	U	ng/L	P443260	
		Sulfentrazone	18		ng/L	P443260	MS, RPD
		Tebuconazole	1.4	U	ng/L	P443260	
		Terbufos	0.21	U	ng/L	P443260	
		Terbutylazine	0.21	U	ng/L	P443260	
		Thiobencarb	0.51	U	ng/L	P443260	
		Triadimefon	0.97		ng/L	P443260	
2476289	EPA 200.7 Rev. 4.4	Calcium	62.0		mg/L	P443048	
		Iron	1.08E+03		ug/L	P443048	
		Magnesium	21.7		mg/L	P443048	
		Potassium	6.6		mg/L	P443048	
		Sodium	121		mg/L	P443048	
		Strontium	465		ug/L	P443048	
		Tin	3.0	U	ug/L	P443048	
		Titanium	2.4	I	ug/L	P443048	
		Vanadium	2.0	U	ug/L	P443048	
		Zinc	30		ug/L	P443048	

Field ID: 20030114

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476289	EPA 200.8 Rev. 5.4	Aluminum	151		ug/L	P443048	
		Antimony	0.25		ug/L	P443048	
		Arsenic	1.30		ug/L	P443048	
		Barium	51.7		ug/L	P443048	
		Beryllium	0.013	I	ug/L	P443048	
		Boron	109		ug/L	P443048	
		Cadmium	0.020	U	ug/L	P443048	
		Chromium	0.70	I	ug/L	P443048	
		Cobalt	0.192		ug/L	P443048	
		Copper	1.56		ug/L	P443048	
		Lead	1.23		ug/L	P443048	
		Manganese	55.0		ug/L	P443048	
		Molybdenum	1.09		ug/L	P443048	
		Nickel	0.92	I	ug/L	P443048	
		Selenium	0.24	I	ug/L	P443048	
		Silver	0.010	U	ug/L	P443048	
		Thallium	0.10	U	ug/L	P443048	
	SM 2340 B-2011	Hardness	244		mg/L	P443048	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
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 8321B: Some MDLs are elevated due to required dilution of sample matrix.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for norflurazon not assessed due to high content of this parameter in the sample spiked. Estimation for caffeine due to low internal standard recovery. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: RIBAUTL RIVER AT HARBOR VIEW BOAT RAMP

Collection Date/Time: 03/18/2024 09:45

Field ID: G2NE1161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476267	DEP SOP: NU-094-1	Color (true)	120		PCU	P442989	
	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P443002	
	EPA 300.0 Rev. 2.1	Chloride	110		mg Cl/L	P443377	
		Sulfate	28		mg SO4/L	P443380	
	SM 2320 B-2011	Total Alkalinity	82		mg CaCO3/L	P443096	
	SM 2540 C-2015	TDS	325		mg/L	P443506	
	SM 2540 D-2015	TSS	13		mg/L	P443500	
	SM 4500-F- C-2011	Fluoride	0.12		mg F/L	P443099	
2476268	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P443206	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.72		mg N/L	P442978	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P443220	
	EPA 365.1 Rev. 2.0	Total-P	0.15		mg P/L	P443139	
	SM 5310 B-2014	Organic Carbon	15		mg C/L	P443247	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: RIBAUTL RIVER AT US 1

Collection Date/Time: 03/18/2024 10:00

Field ID: 20030133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476263	DEP SOP: NU-094-1	Color (true)	130		PCU	P442988	
	EPA 180.1 Rev. 2.0	Turbidity	8.8		NTU	P443002	
	EPA 300.0 Rev. 2.1	Chloride	22		mg Cl/L	P443377	
		Sulfate	20		mg SO4/L	P443380	
	SM 2320 B-2011	Total Alkalinity	77		mg CaCO3/L	P443096	
	SM 2540 C-2015	TDS	188	A	mg/L	P443506	
	SM 2540 D-2015	TSS	7	IA	mg/L	P443500	
2476264	SM 4500-F- C-2011	Fluoride	0.11		mg F/L	P443099	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.11		mg N/L	P443206	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.64		mg N/L	P442993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.12		mg N/L	P443220	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P443139	
2476290	SM 5310 B-2014	Organic Carbon	15		mg C/L	P443247	
	EPA 200.7 Rev. 4.4	Calcium	33.7		mg/L	P443048	
		Iron	1.21E+03		ug/L	P443048	
		Magnesium	5.54		mg/L	P443048	
		Potassium	2.2		mg/L	P443048	
		Sodium	16.3		mg/L	P443048	
		Strontium	233		ug/L	P443048	
		Tin	3.0	U	ug/L	P443048	
		Titanium	1.9	I	ug/L	P443048	
		Vanadium	2.0	U	ug/L	P443048	
		Zinc	23		ug/L	P443048	
	EPA 200.8 Rev. 5.4	Aluminum	319		ug/L	P443048	
		Antimony	0.13	I	ug/L	P443048	
		Arsenic	0.93		ug/L	P443048	
		Barium	33.9		ug/L	P443048	
		Beryllium	0.020	I	ug/L	P443048	
		Boron	48.0		ug/L	P443048	
		Cadmium	0.020	U	ug/L	P443048	
		Chromium	5.6		ug/L	P443048	
		Cobalt	0.204		ug/L	P443048	
		Copper	1.21		ug/L	P443048	
		Lead	0.80		ug/L	P443048	
		Manganese	44.3		ug/L	P443048	
		Molybdenum	0.66		ug/L	P443048	
		Nickel	2.1		ug/L	P443048	
		Selenium	0.20	U	ug/L	P443048	
		Silver	0.010	U	ug/L	P443048	
		Thallium	0.10	U	ug/L	P443048	
	SM 2340 B-2011	Hardness	107		mg/L	P443048	

Field ID: 20030133

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: LITTLE TROUT RIVER AT OLD KINGS RD

Collection Date/Time: 03/18/2024 10:40

Field ID: 20030739					Matrix: W-SURF-FRH		
Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2476265	DEP SOP: NU-094-1	Color (true)	360		PCU	P442988	
	EPA 180.1 Rev. 2.0	Turbidity	6.6		NTU	P443002	
	EPA 300.0 Rev. 2.1	Chloride	19		mg Cl/L	P443377	
		Sulfate	4.9		mg SO4/L	P443380	
	SM 2320 B-2011	Total Alkalinity	27		mg CaCO3/L	P443096	
	SM 2540 C-2015	TDS	129		mg/L	P443506	
	SM 2540 D-2015	TSS	4	I	mg/L	P443500	
	SM 4500-F- C-2011	Fluoride	0.071	I	mg F/L	P443099	
2476266	EPA 350.1 Rev. 2.0	Ammonia-N	0.056		mg N/L	P443206	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P442993	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.036		mg N/L	P443220	
	EPA 365.1 Rev. 2.0	Total-P	0.095		mg P/L	P443139	
	SM 5310 B-2014	Organic Carbon	30		mg C/L	P443247	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 4500-F- C-2011: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P442988

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P442989

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443002

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443048

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: P443048

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443377

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443380

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443206

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442978

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442993

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443220

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443224

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443139

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

Reference Method: EPA 8270E
Batch ID: P443260

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P443260

Component	Result	Code	Units
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P443260

Component	Result	Code	Units
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8270E

Batch ID: P443347

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P443347

Component	Result	Code	Units
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfuralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8276
Batch ID: P443347

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

Reference Method: EPA 8321B
Batch ID: P442872

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

Reference Method: EPA 8321B
Batch ID: P442960

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P442980

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P443096

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

Reference Method: SM 2540 C-2015
Batch ID: P443506

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P443500

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P443099

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P443247

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: P442988

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.4		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P442989

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.8		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443002

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	103		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	102		P	85 - 115
Sodium	101		P	85 - 115
Strontium	101		P	85 - 115
Tin	99.8		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443048

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.3		P	85 - 115
Antimony	102		P	85 - 115
Arsenic	102		P	85 - 115
Barium	101		P	85 - 115
Beryllium	97.7		P	85 - 115
Boron	101		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	102		P	85 - 115
Copper	99.6		P	85 - 115
Lead	95.2		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	99.2		P	85 - 115
Nickel	99.7		P	85 - 115
Selenium	101		P	85 - 115
Silver	98.2		P	85 - 115
Thallium	97.3		P	85 - 115

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443377

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443380

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443206

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442978

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442993

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	95.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443220

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443224

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443139

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

Reference Method: EPA 8270E
Batch ID: P443260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	38.9		F	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	68.8		P	37 - 154
Acetochlor	78.7		P	64 - 124
Alachlor	73.3		P	61 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
 Batch ID: P443260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ametryn	47.9		P	47 - 158
Atrazine	84.5		P	68 - 121
Atrazine Desethyl	54.3		P	30 - 119
Avobenzone	92.4		P	48 - 193
Azinphos Methyl	49.7		P	30 - 194
Azoxystrobin	99.6		P	58 - 154
Bromacil	64.1		P	47 - 126
Butylate	59.1		P	31 - 83.0
Caffeine	94.0		P	10 - 180
Carbophenothion	73.5		P	59 - 133
Carfentrazone Ethyl	70.5		P	59 - 147
Chlorfenapyr	65.0		P	52 - 118
Chlorpyrifos Ethyl	112		P	59 - 119
Chlorpyrifos Methyl	95.6		P	65 - 123
Coumaphos	97.1		P	11 - 223
Cyanazine	98.0		P	63 - 250
Cyprodinil	68.9		P	52 - 143
Dechlorane 602	38.8		P	23 - 142
Dechlorane 603	78.1		P	51 - 171
Dechlorane Plus	59.2		P	46 - 161
Demeton	90.5		P	42 - 119
Diazinon	99.1		P	67 - 132
Difenoconazole	80.9		P	12 - 204
Dimethenamid	78.9		P	53 - 113
Dimethomorph	155		P	13 - 238
Disulfoton	87.3		P	56 - 126
Dithiopyr	75.2		P	58 - 127
EPTC	49.2		P	31 - 78.0
Ethion	41.5		P	24 - 127
Ethoprop	92.5		P	60 - 118
Etridiazole	70.0		P	32 - 91.0
Fenamiphos	69.6		P	54 - 129
Fenbuconazole	90.2		P	31 - 162
Fipronil	72.0		P	56 - 131
Fipronil Desulfinyl	74.3		P	58 - 132
Fipronil Sulfide	73.7		P	51 - 123
Fipronil Sulfone	79.6		P	50 - 125
Fluazifop-P-butyl	79.9		P	52 - 132
Fludioxonil	78.6		P	52 - 129
Flumioxazin	81.7		P	34 - 250
Flutolanil	52.7		P	45 - 128
Fluxapyroxad	59.0		P	31 - 150
Fonofos	85.7		P	60 - 116
Hexabromobenzene	94.4		P	52 - 165
Hexazinone	69.3		P	59 - 120
Imazalil	64.7		P	39 - 134
Iprodione	62.4		P	39 - 243
Loratadine	159		P	10 - 240
Malathion	69.4		P	53 - 145
Metalaxyl	69.1		P	59 - 120
Metolachlor	78.8		P	64 - 122
Metribuzin	94.9		P	33 - 128

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P443260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Mevinphos	96.7		P	48 - 119
Molinate	68.8		P	42 - 89.0
Myclobutanil	77.3		P	54 - 129
Naled	78.5		P	10 - 138
Napropamide	33.0		F	40 - 122
Norflurazon	54.8		P	49 - 132
Octinoxate	96.9		P	29 - 176
Oxadiazon	66.2		P	50 - 115
Oxybenzone	102		P	45 - 145
Oxyfluorfen	79.8		P	62 - 149
Parathion Ethyl	85.5		P	68 - 119
Parathion Methyl	104		P	68 - 147
PBB-153	78.7		P	42 - 179
PBDE-47	73.6		P	44 - 141
PBDE-99	53.1		P	36 - 141
Pendimethalin	95.1		P	59 - 158
Pentabromotoluene	82.7		P	58 - 148
Phenytoin	1.97		F	10 - 151
Phorate	94.7		P	44 - 124
Prodiamine	31.4		P	10 - 136
Prometon	63.0		P	45 - 131
Prometryn	63.6		P	52 - 140
Pronamide	101		P	70 - 129
Propanil	85.0		P	54 - 144
Propargite	38.0		P	10 - 191
Propiconazole	55.8		P	49 - 128
Pyraflufen Ethyl	61.7		P	46 - 141
Pyridaben	80.9		P	29 - 198
Pyriproxyfen	27.5		F	33 - 221
Simazine	70.2		P	62 - 119
Stirophos	42.3		P	13 - 144
Sulfentrazone	28.6		P	12 - 152
Tebuconazole	29.1		P	10 - 135
Terbufos	97.0		P	67 - 136
Terbuthylazine	95.6		P	66 - 113
Tetradecachloro-m-terphenyl	104		P	30 - 235
Thiobencarb	63.6		P	51 - 125
Tri-o-cresyl Phosphate	103		P	50 - 150
Triadimefon	60.3		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.8		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	103		P	59 - 166

Reference Method: EPA 8270E
Batch ID: P443347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.3		P	30 - 96.0
Alpha-BHC	76.7		P	70 - 109
Alpha-Chlordane	69.3		P	45 - 107
Beta-BHC	99.2		P	64 - 138
Beta-Cyfluthrin	66.1		P	17 - 141

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P443347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Bifenthrin	55.4		P	10 - 113
Chlorothalonil	76.4		P	26 - 180
Cis-Nonachlor	68.2		P	37 - 102
Cypermethrin	84.9		P	20 - 133
Dacthal	82.9		P	69 - 114
DDD-p,p'	72.4		P	42 - 105
DDE-p,p'	68.9		P	42 - 106
DDT-p,p'	76.4		P	42 - 107
Delta-BHC	101		P	67 - 144
Deltamethrin	84.2		P	15 - 149
Dichlobenil	75.9		P	46 - 117
Dicofol	70.8		P	34 - 114
Dieldrin	71.1		P	50 - 108
Endosulfan I	70.3		P	55 - 104
Endosulfan II	77.9		P	51 - 111
Endosulfan Sulfate	83.3		P	56 - 121
Endrin	73.7		P	10 - 106
Endrin Aldehyde	80.0		P	34 - 114
Endrin Ketone	88.0		P	63 - 177
Esfenvalerate	72.3		P	29 - 143
Ethalfuralin	71.1		P	46 - 96.0
Fenpropathrin	76.2		P	28 - 115
Gamma-BHC	89.8		P	65 - 121
Gamma-Chlordane	69.1		P	39 - 103
Heptachlor	65.7		P	39 - 94.0
Heptachlor Epoxide	73.9		P	54 - 104
Hexachlorobenzene	59.9		P	36 - 100
Kepone	159		P	10 - 225
Lambda-Cyhalothrin	65.5		P	10 - 135
Methoprene	49.3		P	10 - 109
Methoxychlor	86.0		P	52 - 112
MGK-264	74.2		P	44 - 117
Mirex	58.0		P	20 - 90.0
Oxychlordane	69.8		P	44 - 102
PCB-1016	76.0		P	45 - 107
PCB-1260	73.3		P	40 - 118
Permethrin	70.4		P	18 - 135
Phenothrin	53.6		P	10 - 102
Piperonyl Butoxide	103		P	28 - 156
Prallethrin	70.6		P	28 - 113
Tau-Fluvalinate	60.1		P	10 - 123
Tetramethrin	87.8		P	18 - 158
Trans-Nonachlor	72.0		P	39 - 104
Triclosan Methyl	73.0		P	54 - 108
Trifluralin	69.1		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P443347

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	82.1		P	52 - 117
Toxaphene	89.3		P	44 - 125

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P442872

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	55.2		P	40 - 150
Aldicarb	47.5		P	30 - 150
Aldicarb Sulfone	80.2		P	40 - 150
Aldicarb Sulfoxide	103		P	40 - 150
Carbaryl	77.6		P	40 - 150
Carbofuran	73.7		P	40 - 150
Methiocarb	72.9		P	40 - 150
Methomyl	81.8		P	40 - 150
Oxamyl	84.5		P	40 - 150
Propoxur	60.6		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P442960

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	120		P	40 - 150
2,4,5-T	107		P	40 - 150
Acetaminophen	90.2		P	30 - 150
Acetamiprid	70.8		P	40 - 150
Afidopyropen	74.7		P	30 - 150
Bentazon	118		P	30 - 150
Benzovindiflupyr	87.5		P	40 - 150
Carbamazepine	83.7		P	40 - 150
Clothianidin	91.2		P	40 - 150
Dinotefuran	100		P	40 - 150
Diuron	86.2		P	40 - 150
Fenuron	100		P	40 - 150
Fluridone	93.6		P	40 - 150
Hydrocodone	93.9		P	40 - 150
Ibuprofen	98.9		P	40 - 150
Imazapyr	104		P	40 - 150
Imidacloprid	94.3		P	40 - 150
Linuron	83.3		P	40 - 150
Mandestrobin	97.7		P	40 - 150
MCPP	116		P	40 - 150
Naproxen	83.3		P	40 - 150
Primidone	91.3		P	40 - 150
Pyraclostrobin	83.2		P	40 - 150
Silvex	102		P	40 - 150
Thiamethoxam	86.5		P	40 - 150
Tolfenpyrad	61.8		P	30 - 150
Triclopyr	102		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P442980

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	102		P	40 - 160
Endothall	101		P	40 - 160
Glufosinate	101		P	40 - 160
Glyphosate	103		P	40 - 160

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P442980

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	98.0		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P443096

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.8		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P443506

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	101		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P443500

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	102		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P443099

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

Reference Method: SM 5310 B-2014
Batch ID: P443247

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.3		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476358	Calcium	104		P	80 - 120
2476358	Iron	102	103	P/P	80 - 120
2476358	Magnesium	110	109	P/P	80 - 120
2476358	Potassium	101	102	P/P	80 - 120
2476358	Sodium	103		P	80 - 120
2476358	Strontium	102	103	P/P	80 - 120
2476358	Tin	98.8	99.6	P/P	80 - 120
2476358	Titanium	88.5	92.2	P/P	80 - 120
2476358	Vanadium	101	104	P/P	80 - 120
2476358	Zinc	103	104	P/P	80 - 120
2476621	Calcium	104		P	80 - 120
2476621	Iron	109		P	80 - 120
2476621	Magnesium	103		P	80 - 120
2476621	Potassium	106		P	80 - 120
2476621	Sodium	107		P	80 - 120
2476621	Strontium	104		P	80 - 120
2476621	Tin	106		P	80 - 120
2476621	Titanium	103		P	80 - 120
2476621	Vanadium	105		P	80 - 120
2476621	Zinc	107		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476358	Antimony	95.0	96.2	P/P	80 - 120
2476358	Arsenic	98.1	98.4	P/P	80 - 120
2476358	Barium	100	99.9	P/P	80 - 120
2476358	Beryllium	94.6	94.4	P/P	80 - 120
2476358	Boron	103	106	P/P	80 - 120
2476358	Cadmium	102	102	P/P	80 - 120
2476358	Chromium	100	101	P/P	80 - 120
2476358	Cobalt	98.5	99.1	P/P	80 - 120
2476358	Copper	108	94.6	P/P	80 - 120
2476358	Lead	94.2	94.3	P/P	80 - 120
2476358	Manganese	100	100	P/P	80 - 120
2476358	Molybdenum	95.3	96.1	P/P	80 - 120
2476358	Nickel	95.1	95.1	P/P	80 - 120
2476358	Selenium	97.0	95.7	P/P	80 - 120
2476358	Silver	102	95.9	P/P	80 - 120
2476358	Thallium	98.5	99.4	P/P	80 - 120
2476621	Aluminum	99.1		P	80 - 120
2476621	Antimony	104		P	80 - 120
2476621	Arsenic	99.8		P	80 - 120
2476621	Barium	102		P	80 - 120
2476621	Beryllium	102		P	80 - 120
2476621	Boron	107		P	80 - 120
2476621	Cadmium	105		P	80 - 120
2476621	Chromium	104		P	80 - 120
2476621	Cobalt	99.8		P	80 - 120
2476621	Copper	94.9		P	80 - 120
2476621	Lead	96.4		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443048

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476621	Manganese	104		P	80 - 120
2476621	Molybdenum	102		P	80 - 120
2476621	Nickel	98.5		P	80 - 120
2476621	Selenium	100		P	80 - 120
2476621	Silver	99.0		P	80 - 120
2476621	Thallium	99.9		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443377

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476207	Chloride	105		P	90 - 110
2476263	Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443380

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476207	Sulfate	104		P	90 - 110
2476263	Sulfate	106		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443206

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476270	Ammonia-N	98.0	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442978

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476009	Kjeldahl Nitrogen	103	106	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442993

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476219	Kjeldahl Nitrogen	98.6	93.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443220

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476264	NO2NO3-N	95.5	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443224

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476483	NO2NO3-N	92.3	94.3	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476262	Total-P	99.8	103	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P443260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476634	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	41.1	45.7	F/F	50 - 150
2476634	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	56.1	72.1	P/P	29 - 155
2476634	Acetochlor	67.2	79.8	P/P	60 - 124
2476634	Alachlor	62.1	77.3	P/P	54 - 122
2476634	Ametryn	86.5	86.5	P/P	51 - 208
2476634	Atrazine	99.5	125	P/P	57 - 131
2476634	Atrazine Desethyl	61.4	64.6	P/P	13 - 124
2476634	Avobenzone	79.9	93.5	P/P	35 - 187
2476634	Azinphos Methyl	64.9	299	P/F	43 - 276
2476634	Azoxystrobin	87.6	98.0	P/P	52 - 300
2476634	Bromacil	54.2	60.5	P/P	44 - 134
2476634	Butylate	37.9	61.7	P/P	23 - 82.0
2476634	Caffeine	109	111	P/P	10 - 277
2476634	Carbophenothion	66.1	116	P/P	47 - 135
2476634	Carfentrazone Ethyl	67.2	119	P/P	46 - 147
2476634	Chlorfenapyr	62.2	80.1	P/P	43 - 114
2476634	Chlorpyrifos Ethyl	37.3	42.3	F/F	47 - 124
2476634	Chlorpyrifos Methyl	81.3	101	P/P	60 - 135
2476634	Coumaphos	157	188	P/P	10 - 222
2476634	Cyanazine	94.4	113	P/P	10 - 257
2476634	Cyprodinil	72.3	79.7	P/P	42 - 148
2476634	Dechlorane 602	30.1	38.8	P/P	14 - 133
2476634	Dechlorane 603	59.1	70.2	P/P	18 - 191
2476634	Dechlorane Plus	48.4	53.6	P/P	23 - 154
2476634	Demeton	73.3	88.4	P/P	41 - 137
2476634	Diazinon	85.0	92.2	P/P	64 - 139
2476634	Difenoconazole	129	185	P/P	46 - 254
2476634	Dimethenamid	71.2	85.1	P/P	47 - 117
2476634	Dimethomorph	218	259	P/F	14 - 255
2476634	Disulfoton	74.8	81.3	P/P	52 - 130
2476634	Dithiopyr	73.3	86.4	P/P	40 - 121
2476634	EPTC	27.7	43.7	P/P	19 - 78.0
2476634	Ethion	32.4	38.4	P/P	12 - 124
2476634	Ethoprop	75.1	87.7	P/P	68 - 144
2476634	Etridiazole	45.2	57.7	P/P	26 - 96.0
2476634	Fenamiphos	65.4	78.7	P/P	41 - 129
2476634	Fenbuconazole	54.2	69.1	P/P	26 - 169
2476634	Fipronil	71.1	80.3	P/P	46 - 145
2476634	Fipronil Desulfinyl	74.3	90.9	P/P	47 - 136
2476634	Fipronil Sulfide	72.6	86.5	P/P	41 - 127
2476634	Fipronil Sulfone	72.8	80.0	P/P	35 - 133
2476634	Fluazifop-P-butyl	77.0	93.1	P/P	46 - 131
2476634	Fludioxonil	67.6	87.2	P/P	51 - 124
2476634	Flumioxazin	144	178	P/P	10 - 289
2476634	Flutolanil	63.3	99.7	P/P	34 - 130
2476634	Fluxapyroxad	75.2	176	P/P	10 - 197

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P443260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476634	Fonofos	71.3	83.4	P/P	42 - 131
2476634	Hexabromobenzene	64.7	91.7	P/P	47 - 178
2476634	Hexazinone	73.8	96.0	P/P	64 - 125
2476634	Imazalil	115	117	P/P	37 - 252
2476634	Iprodione	61.4	128	P/P	34 - 265
2476634	Loratadine	199	233	P/F	20 - 231
2476634	Malathion	88.2	104	P/P	34 - 164
2476634	Metalaxyl	87.6	103	P/P	49 - 125
2476634	Metolachlor	86.3	103	P/P	54 - 125
2476634	Metribuzin	76.3	101	P/P	51 - 139
2476634	Mevinphos	71.1	79.8	P/P	46 - 130
2476634	Molinate	50.2	66.3	P/P	39 - 93.0
2476634	Myclobutanil	69.4	81.7	P/P	50 - 130
2476634	Naled	61.8	65.2	P/P	10 - 150
2476634	Napropamide	47.4	73.2	P/P	10 - 109
2476634	Octinoxate	60.7	93.3	P/P	18 - 170
2476634	Oxadiazon	67.5	84.2	P/P	43 - 112
2476634	Oxybenzone	67.9	104	P/P	33 - 154
2476634	Oxyfluorfen	68.1	99.1	P/P	62 - 154
2476634	Parathion Ethyl	75.8	91.9	P/P	65 - 120
2476634	Parathion Methyl	89.2	106	P/P	77 - 185
2476634	PBB-153	61.7	78.1	P/P	23 - 193
2476634	PBDE-47	60.5	63.4	P/P	31 - 139
2476634	PBDE-99	56.9	52.7	P/P	24 - 138
2476634	Pendimethalin	83.1	101	P/P	50 - 146
2476634	Pentabromotoluene	55.1	82.1	P/P	54 - 152
2476634	Phenytoin	7.81	20.4	F/P	10 - 157
2476634	Phorate	77.0	85.0	P/P	54 - 161
2476634	Prodiamine	33.9	71.9	P/P	29 - 160
2476634	Prometon	68.8	83.3	P/P	38 - 145
2476634	Prometryn	76.2	89.0	P/P	32 - 151
2476634	Pronamide	86.9	97.5	P/P	61 - 140
2476634	Propanil	77.4	73.7	P/P	50 - 147
2476634	Propargite	42.9	86.5	P/P	10 - 190
2476634	Propiconazole	81.5	152	P/F	30 - 146
2476634	Pyraflufen Ethyl	62.7	128	P/P	30 - 147
2476634	Pyridaben	104	136	P/P	15 - 195
2476634	Pyriproxyfen	33.8	157	P/P	31 - 218
2476634	Simazine	73.0	93.3	P/P	45 - 139
2476634	Stirophos	53.5	68.8	P/P	10 - 134
2476634	Sulfentrazone	68.6	238	P/F	53 - 186
2476634	Tebuconazole	41.5	90.2	P/P	10 - 133
2476634	Terbufos	82.4	91.7	P/P	65 - 151
2476634	Terbutylazine	84.8	92.8	P/P	62 - 117
2476634	Tetradecachloro-m-terphenyl	87.9	96.8	P/P	10 - 260
2476634	Thiobencarb	69.3	88.3	P/P	48 - 122
2476634	Tri-o-cresyl Phosphate	70.7	96.0	P/P	32 - 151
2476634	Triadimefon	57.0	81.3	P/P	46 - 124
2476634	Tris(1-chloro-2-propyl) phosphate (TCPP)	61.0	95.6	P/P	51 - 154
2476634	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	67.8	95.5	P/P	59 - 147
2476634	Tris(2-chloroethyl) phosphate (TCEP)	69.5	108	P/P	65 - 156

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P443347

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476633	Aldrin	64.9	64.2	P/P	24 - 81.0
2476633	Alpha-BHC	78.3	67.4	P/P	65 - 110
2476633	Alpha-Chlordane	72.1	70.8	P/P	43 - 119
2476633	Beta-BHC	108	98.9	P/P	54 - 165
2476633	Beta-Cyfluthrin	133	130	P/P	27 - 165
2476633	Bifenthrin	89.1	92.6	P/P	17 - 117
2476633	Chlorothalonil	135	127	P/P	10 - 255
2476633	Cis-Nonachlor	61.2	63.9	P/P	34 - 98.0
2476633	Cypermethrin	134	132	P/P	25 - 143
2476633	Dacthal	87.7	81.2	P/P	55 - 139
2476633	DDD-p,p'	66.0	67.9	P/P	30 - 109
2476633	DDE-p,p'	59.7	57.3	P/P	35 - 106
2476633	DDT-p,p'	88.2	90.5	P/P	41 - 101
2476633	Delta-BHC	137	119	P/P	58 - 165
2476633	Deltamethrin	156	172	P/P	10 - 194
2476633	Dichlobenil	33.1	44.7	P/P	22 - 114
2476633	Dicofol	81.2	79.3	P/P	17 - 133
2476633	Dieldrin	65.3	62.9	P/P	45 - 129
2476633	Endosulfan I	81.8	80.6	P/P	49 - 104
2476633	Endosulfan II	79.5	77.1	P/P	37 - 117
2476633	Endosulfan Sulfate	82.1	85.2	P/P	38 - 128
2476633	Endrin	65.8	63.9	P/P	35 - 116
2476633	Endrin Aldehyde	58.3	58.5	P/P	19 - 108
2476633	Endrin Ketone	77.8	73.6	P/P	44 - 134
2476633	Esfenvalerate	157	151	P/P	27 - 176
2476633	Ethalfuralin	71.2	73.1	P/P	49 - 100
2476633	Fenpropathrin	104	102	P/P	34 - 117
2476633	Gamma-BHC	104	91.3	P/P	59 - 129
2476633	Gamma-Chlordane	74.1	71.0	P/P	33 - 107
2476633	Heptachlor	56.3	58.2	P/P	37 - 94.0
2476633	Heptachlor Epoxide	78.8	76.8	P/P	38 - 118
2476633	Hexachlorobenzene	48.7	52.4	P/P	35 - 97.0
2476633	Kepone	155	149	P/P	10 - 221
2476633	Lambda-Cyhalothrin	129	124	P/P	23 - 190
2476633	Methoprene	62.4	64.5	P/P	21 - 109
2476633	Methoxychlor	81.4	81.0	P/P	46 - 118
2476633	MGK-264	82.8	79.4	P/P	39 - 122
2476633	Mirex	67.8	71.5	P/P	25 - 90.0
2476633	Oxychlordane	66.4	66.4	P/P	42 - 100
2476633	Permethrin	128	129	P/P	33 - 181
2476633	Phenothrin	122	124	P/P	12 - 125
2476633	Piperonyl Butoxide	114	106	P/P	10 - 178
2476633	Prallethrin	88.6	90.8	P/P	24 - 122
2476633	Tau-Fluvalinate	146	144	P/P	13 - 151
2476633	Tetramethrin	145	131	P/P	16 - 172
2476633	Trans-Nonachlor	83.5	79.6	P/P	39 - 100
2476633	Triclosan Methyl	65.0	62.9	P/P	43 - 110
2476633	Trifluralin	74.1	72.2	P/P	45 - 94.0
2476691	PCB-1016	91.2	86.8	P/P	45 - 107
2476691	PCB-1260	79.6	77.6	P/P	40 - 112

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8276
Batch ID: P443347

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476691	Chlordane	94.2	89.2	P/P	43 - 123
2476691	Toxaphene	103	97.7	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P442872

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2475338	3-Hydroxycarbofuran	68.6	60.5	P/P	40 - 150
2475338	Aldicarb	46.3	50.1	P/P	30 - 150
2475338	Aldicarb Sulfone	59.6	60.8	P/P	40 - 150
2475338	Aldicarb Sulfoxide	26.7	25.7	F/F	40 - 150
2475338	Carbaryl	65.2	58.2	P/P	40 - 150
2475338	Carbofuran	56.3	56.6	P/P	40 - 150
2475338	Methiocarb	81.8	68.7	P/P	40 - 150
2475338	Methomyl	61.7	61.5	P/P	40 - 150
2475338	Oxamyl	65.9	65.9	P/P	40 - 150
2475338	Propoxur	48.1	41.5	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P442960

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476285	2,4-D	68.9	88.9	P/P	40 - 150
2476285	2,4,5-T	83.8	95.3	P/P	40 - 150
2476285	Acetaminophen	29.4	36.8	F/P	30 - 150
2476285	Acetamiprid	39.9	53.1	F/P	40 - 150
2476285	Afidopyropen	46.3	84.2	P/P	30 - 150
2476285	Benzovindiflupyr	70.7	81.4	P/P	40 - 150
2476285	Carbamazepine	61.9	68.0	P/P	40 - 150
2476285	Clothianidin	66.9	77.5	P/P	40 - 150
2476285	Dinotefuran	45.0	52.6	P/P	40 - 150
2476285	Diuron	58.8	65.5	P/P	40 - 150
2476285	Fenuron	66.0	74.0	P/P	40 - 150
2476285	Fluridone	65.3	76.4	P/P	40 - 150
2476285	Hydrocodone	63.2	73.2	P/P	40 - 150
2476285	Ibuprofen	82.0	73.2	P/P	40 - 150
2476285	Imidacloprid	75.1	86.0	P/P	40 - 150
2476285	Linuron	63.4	70.0	P/P	40 - 150
2476285	Mandestrobin	76.2	86.0	P/P	40 - 150
2476285	MCPP	86.7	98.0	P/P	40 - 150
2476285	Naproxen	62.5	61.8	P/P	40 - 150
2476285	Primidone	77.8	88.7	P/P	40 - 150
2476285	Pyraclostrobin	70.5	80.9	P/P	40 - 150
2476285	Silvex	79.9	88.7	P/P	40 - 150
2476285	Thiamethoxam	66.9	72.6	P/P	40 - 150
2476285	Tolfenpyrad	51.8	57.0	P/P	30 - 150
2476285	Triclopyr	74.5	84.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P442980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P442980

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476291	Acesulfame K	112	114	P/P	40 - 150
2476291	AMPA	99.7	97.6	P/P	40 - 160
2476291	Endothall	108	112	P/P	40 - 160
2476291	Glufosinate	101	94.0	P/P	40 - 160
2476291	Glyphosate	95.7	97.8	P/P	40 - 160
2476291	Sucralose	99.8	95.2	P/P	40 - 150

Reference Method: SM 5310 B-2014
Batch ID: P443247

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2476262	Organic Carbon	96.9	99.3	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P442988

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476215	Color (true)	11.4	Sample	P	0 - 20

Reference Method: DEP SOP: NU-094-1
Batch ID: P442989

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476464	Color (true)	2.74	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P443002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476212	Turbidity	0.791	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P443048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476358	Calcium	0.354	Spike	P	0 - 20
2476358	Iron	0.764	Spike	P	0 - 20
2476358	Magnesium	0.383	Spike	P	0 - 20
2476358	Potassium	0.168	Spike	P	0 - 20
2476358	Sodium	0.689	Spike	P	0 - 20
2476358	Strontium	1.14	Spike	P	0 - 20
2476358	Tin	0.834	Spike	P	0 - 20
2476358	Titanium	2.30	Spike	P	0 - 20
2476358	Vanadium	2.08	Spike	P	0 - 20
2476358	Zinc	1.02	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476358	Aluminum	3.93	Spike	P	0 - 20
2476358	Antimony	1.28	Spike	P	0 - 20
2476358	Arsenic	0.279	Spike	P	0 - 20
2476358	Barium	0.103	Spike	P	0 - 20
2476358	Beryllium	0.140	Spike	P	0 - 20
2476358	Boron	2.80	Spike	P	0 - 20
2476358	Cadmium	0.130	Spike	P	0 - 20
2476358	Chromium	0.704	Spike	P	0 - 20
2476358	Cobalt	0.622	Spike	P	0 - 20
2476358	Copper	12.7	Spike	P	0 - 20
2476358	Lead	0.125	Spike	P	0 - 20
2476358	Manganese	0.165	Spike	P	0 - 20
2476358	Molybdenum	0.857	Spike	P	0 - 20
2476358	Nickel	0.0104	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P443048

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476358	Selenium	1.39	Spike	P	0 - 20
2476358	Silver	6.32	Spike	P	0 - 20
2476358	Thallium	0.921	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443377

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476207	Chloride	0.422	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P443380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476207	Sulfate	0.319	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P443206

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476270	Ammonia-N	1.42	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442978

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476009	Kjeldahl Nitrogen	1.63	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P442993

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476219	Kjeldahl Nitrogen	4.16	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443220

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476264	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443224

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P443224

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476483	NO2NO3-N	2.07	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P443139

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476262	Total-P	2.47	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P443260

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476634	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	10.6	Spike	P	0 - 30
2476634	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	25.0	Spike	P	0 - 35
2476634	Acetochlor	17.0	Spike	P	0 - 28
2476634	Alachlor	21.7	Spike	P	0 - 30
2476634	Ametryn	0.0840	Spike	P	0 - 32
2476634	Atrazine	7.19	Spike	P	0 - 33
2476634	Atrazine Desethyl	4.98	Spike	P	0 - 36
2476634	Avobenzene	15.7	Spike	P	0 - 35
2476634	Azinphos Methyl	129	Spike	F	0 - 62
2476634	Azoxystrobin	8.79	Spike	P	0 - 39
2476634	Bromacil	7.04	Spike	P	0 - 33
2476634	Butylate	47.9	Spike	P	0 - 51
2476634	Caffeine	1.62	Spike	P	0 - 100
2476634	Carbophenothion	54.7	Spike	F	0 - 34
2476634	Carfentrazone Ethyl	55.5	Spike	F	0 - 33
2476634	Chlorfenapyr	25.1	Spike	P	0 - 28
2476634	Chlorpyrifos Ethyl	12.6	Spike	P	0 - 31
2476634	Chlorpyrifos Methyl	21.9	Spike	P	0 - 27
2476634	Coumaphos	17.5	Spike	P	0 - 62
2476634	Cyanazine	18.0	Spike	P	0 - 48
2476634	Cyprodinil	9.78	Spike	P	0 - 29
2476634	Dechlorane 602	25.5	Spike	P	0 - 60
2476634	Dechlorane 603	17.1	Spike	P	0 - 40
2476634	Dechlorane Plus	10.0	Spike	P	0 - 38
2476634	Demeton	18.7	Spike	P	0 - 33
2476634	Diazinon	8.16	Spike	P	0 - 32
2476634	Difenoconazole	35.4	Spike	P	0 - 71
2476634	Dimethenamid	17.8	Spike	P	0 - 60
2476634	Dimethomorph	17.1	Spike	P	0 - 61
2476634	Disulfoton	8.37	Spike	P	0 - 30
2476634	Dithiopyr	16.3	Spike	P	0 - 28
2476634	EPTC	44.8	Spike	P	0 - 56
2476634	Ethion	17.0	Spike	P	0 - 79
2476634	Ethoprop	15.5	Spike	P	0 - 31
2476634	Etridiazole	24.4	Spike	P	0 - 43
2476634	Fenamiphos	18.4	Spike	P	0 - 43
2476634	Fenbuconazole	24.2	Spike	P	0 - 79

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P443260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476634	Fipronil	12.1	Spike	P	0 - 46
2476634	Fipronil Desulfinyl	20.0	Spike	P	0 - 36
2476634	Fipronil Sulfide	17.6	Spike	P	0 - 34
2476634	Fipronil Sulfone	9.42	Spike	P	0 - 47
2476634	Fluazifop-P-butyl	19.0	Spike	P	0 - 38
2476634	Fludioxonil	25.3	Spike	P	0 - 29
2476634	Flumioxazin	21.1	Spike	P	0 - 63
2476634	Flutolanil	44.6	Spike	F	0 - 36
2476634	Fluxapyroxad	80.2	Spike	F	0 - 65
2476634	Fonofos	15.6	Spike	P	0 - 35
2476634	Hexabromobenzene	34.5	Spike	P	0 - 41
2476634	Hexazinone	26.2	Spike	P	0 - 31
2476634	Imazalil	2.09	Spike	P	0 - 52
2476634	Iprodione	70.4	Spike	F	0 - 49
2476634	Loratadine	15.5	Spike	P	0 - 59
2476634	Malathion	16.6	Spike	P	0 - 77
2476634	Metalaxyl	11.5	Spike	P	0 - 76
2476634	Metolachlor	17.7	Spike	P	0 - 29
2476634	Metribuzin	28.0	Spike	P	0 - 51
2476634	Mevinphos	11.5	Spike	P	0 - 31
2476634	Molinate	27.7	Spike	P	0 - 39
2476634	Myclobutanil	16.2	Spike	P	0 - 34
2476634	Naled	5.30	Spike	P	0 - 37
2476634	Napropamide	42.8	Spike	P	0 - 100
2476634	Norflurazon	4.13	Spike	P	0 - 54
2476634	Octinoxate	42.3	Spike	F	0 - 35
2476634	Oxadiazon	22.0	Spike	P	0 - 34
2476634	Oxybenzone	41.8	Spike	F	0 - 35
2476634	Oxyfluorfen	37.0	Spike	F	0 - 28
2476634	Parathion Ethyl	19.3	Spike	P	0 - 31
2476634	Parathion Methyl	16.8	Spike	P	0 - 29
2476634	PBB-153	23.4	Spike	P	0 - 49
2476634	PBDE-47	4.74	Spike	P	0 - 36
2476634	PBDE-99	7.66	Spike	P	0 - 46
2476634	Pendimethalin	19.1	Spike	P	0 - 31
2476634	Pentabromotoluene	39.3	Spike	F	0 - 16
2476634	Phenytoin	89.2	Spike	P	0 - 100
2476634	Phorate	9.81	Spike	P	0 - 36
2476634	Prodiamine	71.8	Spike	F	0 - 68
2476634	Prometon	19.0	Spike	P	0 - 35
2476634	Prometryn	15.5	Spike	P	0 - 33
2476634	Pronamide	11.4	Spike	P	0 - 24
2476634	Propanil	4.88	Spike	P	0 - 28
2476634	Propargite	67.5	Spike	F	0 - 53
2476634	Propiconazole	60.2	Spike	F	0 - 44
2476634	Pyraflufen Ethyl	68.1	Spike	F	0 - 61
2476634	Pyridaben	26.4	Spike	P	0 - 43
2476634	Pyriproxyfen	129	Spike	F	0 - 82
2476634	Simazine	10.4	Spike	P	0 - 29
2476634	Stirophos	25.0	Spike	P	0 - 100
2476634	Sulfentrazone	89.1	Spike	F	0 - 64

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P443260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476634	Tebuconazole	73.9	Spike	P	0 - 76
2476634	Terbufos	10.7	Spike	P	0 - 29
2476634	Terbutylazine	9.08	Spike	P	0 - 28
2476634	Tetradecachloro-m-terphenyl	9.61	Spike	P	0 - 42
2476634	Thiobencarb	24.1	Spike	P	0 - 26
2476634	Tri-o-cresyl Phosphate	30.4	Spike	F	0 - 24
2476634	Triadimefon	35.2	Spike	P	0 - 40
2476634	Tris(1-chloro-2-propyl) phosphate (TCPP)	40.7	Spike	F	0 - 30
2476634	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	33.9	Spike	F	0 - 22
2476634	Tris(2-chloroethyl) phosphate (TCEP)	43.7	Spike	F	0 - 15

Reference Method: EPA 8270E
Batch ID: P443347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476633	Aldrin	1.08	Spike	P	0 - 41
2476633	Alpha-BHC	15.0	Spike	P	0 - 25
2476633	Alpha-Chlordane	1.76	Spike	P	0 - 32
2476633	Beta-BHC	9.23	Spike	P	0 - 33
2476633	Beta-Cyfluthrin	2.69	Spike	P	0 - 43
2476633	Bifenthrin	3.90	Spike	P	0 - 52
2476633	Chlorothalonil	5.67	Spike	P	0 - 82
2476633	Cis-Nonachlor	4.38	Spike	P	0 - 33
2476633	Cypermethrin	2.07	Spike	P	0 - 51
2476633	Dacthal	7.66	Spike	P	0 - 27
2476633	DDD-p,p'	2.87	Spike	P	0 - 39
2476633	DDE-p,p'	4.12	Spike	P	0 - 31
2476633	DDT-p,p'	2.59	Spike	P	0 - 29
2476633	Delta-BHC	13.8	Spike	P	0 - 35
2476633	Deltamethrin	9.57	Spike	P	0 - 100
2476633	Dichlobenil	29.9	Spike	P	0 - 40
2476633	Dicofol	2.32	Spike	P	0 - 37
2476633	Dieldrin	3.76	Spike	P	0 - 27
2476633	Endosulfan I	1.42	Spike	P	0 - 23
2476633	Endosulfan II	3.05	Spike	P	0 - 34
2476633	Endosulfan Sulfate	3.67	Spike	P	0 - 36
2476633	Endrin	2.93	Spike	P	0 - 45
2476633	Endrin Aldehyde	0.452	Spike	P	0 - 76
2476633	Endrin Ketone	5.53	Spike	P	0 - 43
2476633	Esfenvalerate	3.74	Spike	P	0 - 51
2476633	Ethalfuralin	2.66	Spike	P	0 - 22
2476633	Fenpropathrin	2.18	Spike	P	0 - 49
2476633	Gamma-BHC	13.2	Spike	P	0 - 28
2476633	Gamma-Chlordane	4.28	Spike	P	0 - 40
2476633	Heptachlor	3.49	Spike	P	0 - 29
2476633	Heptachlor Epoxide	2.51	Spike	P	0 - 33
2476633	Hexachlorobenzene	7.31	Spike	P	0 - 36
2476633	Kepone	4.24	Spike	P	0 - 85
2476633	Lambda-Cyhalothrin	4.17	Spike	P	0 - 55
2476633	Methoprene	3.35	Spike	P	0 - 53

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P443347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476633	Methoxychlor	0.448	Spike	P	0 - 50
2476633	MGK-264	4.28	Spike	P	0 - 43
2476633	Mirex	5.36	Spike	P	0 - 40
2476633	Oxychlordane	0.0588	Spike	P	0 - 31
2476633	Permethrin	0.646	Spike	P	0 - 50
2476633	Phenothrin	1.82	Spike	P	0 - 58
2476633	Piperonyl Butoxide	6.75	Spike	P	0 - 100
2476633	Prallethrin	2.51	Spike	P	0 - 39
2476633	Tau-Fluvalinate	1.78	Spike	P	0 - 54
2476633	Tetramethrin	10.5	Spike	P	0 - 51
2476633	Trans-Nonachlor	4.79	Spike	P	0 - 39
2476633	Triclosan Methyl	3.23	Spike	P	0 - 31
2476633	Trifluralin	2.64	Spike	P	0 - 22
2476691	PCB-1016	4.88	Spike	P	0 - 25
2476691	PCB-1260	2.53	Spike	P	0 - 30

Reference Method: EPA 8276
Batch ID: P443347

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476691	Chlordane	5.41	Spike	P	0 - 28
2476691	Toxaphene	5.00	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P442872

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2475338	3-Hydroxycarbofuran	12.4	Spike	P	0 - 30
2475338	Aldicarb	7.85	Spike	P	0 - 30
2475338	Aldicarb Sulfone	2.03	Spike	P	0 - 30
2475338	Aldicarb Sulfoxide	3.82	Spike	P	0 - 30
2475338	Carbaryl	10.6	Spike	P	0 - 30
2475338	Carbofuran	0.557	Spike	P	0 - 30
2475338	Methiocarb	17.4	Spike	P	0 - 30
2475338	Methomyl	0.184	Spike	P	0 - 30
2475338	Oxamyl	0.0519	Spike	P	0 - 30
2475338	Propoxur	14.6	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P442960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476285	2,4-D	12.4	Spike	P	0 - 30
2476285	2,4,5-T	12.9	Spike	P	0 - 30
2476285	Acetaminophen	22.4	Spike	P	0 - 30
2476285	Acetamiprid	28.4	Spike	P	0 - 30
2476285	Afidopyropen	58.0	Spike	F	0 - 30
2476285	Bentazon	2.73	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P442960

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476285	Benzovindiflupyr	14.1	Spike	P	0 - 30
2476285	Carbamazepine	9.39	Spike	P	0 - 30
2476285	Clothianidin	14.7	Spike	P	0 - 30
2476285	Dinotefuran	15.5	Spike	P	0 - 30
2476285	Diuron	8.79	Spike	P	0 - 30
2476285	Fenuron	11.3	Spike	P	0 - 30
2476285	Fluridone	14.5	Spike	P	0 - 30
2476285	Hydrocodone	14.7	Spike	P	0 - 30
2476285	Ibuprofen	11.3	Spike	P	0 - 30
2476285	Imazapyr	8.81	Spike	P	0 - 30
2476285	Imidacloprid	12.1	Spike	P	0 - 30
2476285	Linuron	9.87	Spike	P	0 - 30
2476285	Mandestrobin	12.0	Spike	P	0 - 30
2476285	MCPP	11.9	Spike	P	0 - 30
2476285	Naproxen	1.09	Spike	P	0 - 30
2476285	Primidone	13.0	Spike	P	0 - 30
2476285	Pyraclostrobin	13.7	Spike	P	0 - 30
2476285	Silvex	10.5	Spike	P	0 - 30
2476285	Thiamethoxam	8.19	Spike	P	0 - 30
2476285	Tolfenpyrad	9.65	Spike	P	0 - 30
2476285	Triclopyr	12.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P442980

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476291	Acesulfame K	1.46	Spike	P	0 - 30
2476291	AMPA	2.12	Spike	P	0 - 30
2476291	Endothall	3.96	Spike	P	0 - 30
2476291	Glufosinate	6.99	Spike	P	0 - 30
2476291	Glyphosate	2.15	Spike	P	0 - 30
2476291	Sucralose	4.73	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P443096

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476207	Total Alkalinity	0.142	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P443506

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476263	TDS	3.19	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P443099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476207	Fluoride	0.516	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P443247

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2476262	Organic Carbon	2.03	Spike	P	0 - 15

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

Quality Assurance Report

Surrogates

Lab Sample ID: 2476284

Field Sample ID: 20030114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	66.7	P	30 - 160

Lab Sample ID: 2476285

Field Sample ID: 20030114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	102	P	30 - 160
EPA 8321B	Acetaminophen-d4	35.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	74.4	P	30 - 160
EPA 8321B	Diuron-d6	74.9	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	88.0	P	30 - 160
EPA 8321B	Primidone-d5	90.6	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160

Lab Sample ID: 2476287

Field Sample ID: 20030114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.1	P	37 - 129
EPA 8270E	Decachlorobiphenyl	108	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	78.4	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	47.6	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	73.3	P	23 - 110
EPA 8276	PCNB	98.1	P	51 - 130

Lab Sample ID: 2476288

Field Sample ID: 20030114

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	35.3	P	20 - 200
EPA 8270E	Simazine-d10	74.7	P	58 - 137
EPA 8270E	Terbufos-d10	89.2	P	50 - 134
EPA 8270E	Terphenyl-d14	74.6	P	44 - 134

Quality Assurance Report
Calibration Verification

Reference Method: DEP SOP: NU-094-1
Run ID: A124833
Included Lab Sample IDs: 2476261, 2476263, 2476267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	93.2	95.0	P/P	90 - 110
Color (true)	95.0	99.0	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A124835
Included Lab Sample IDs: 2476265

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	96.3	95.3	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A124838
Included Lab Sample IDs: 2476261, 2476263, 2476265, 2476267

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

Reference Method: SM 2320 B-2011
Run ID: A124880
Included Lab Sample IDs: 2476261, 2476263, 2476265, 2476267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	94.5	98.6	P/P	90 - 110
Total Alkalinity	97.8	94.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A124880
Included Lab Sample IDs: 2476261, 2476263, 2476265, 2476267

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

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124898
Included Lab Sample IDs: 2476262, 2476268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.5	98.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124904
Included Lab Sample IDs: 2476264, 2476266

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	96.1	94.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A124910
Included Lab Sample IDs: 2476285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	105	104	P/P	60 - 160
Endothall	104	96.8	P/P	60 - 160
Glufosinate	107	102	P/P	60 - 160
Glyphosate	101	103	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A124911
Included Lab Sample IDs: 2476289, 2476290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	105	P/P	90 - 110
Iron	103	105	P/P	90 - 110
Magnesium	104	106	P/P	90 - 110
Potassium	104	106	P/P	90 - 110
Sodium	101	103	P/P	90 - 110
Strontium	105	107	P/P	90 - 110
Tin	104	107	P/P	90 - 110
Titanium	102	104	P/P	90 - 110
Vanadium	103	107	P/P	90 - 110
Zinc	104	107	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A124914
Included Lab Sample IDs: 2476284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	101	103	P/P	60 - 150
Aldicarb	101	104	P/P	60 - 150
Aldicarb Sulfone	94.3	99.0	P/P	50 - 150
Aldicarb Sulfoxide	95.0	97.7	P/P	50 - 150
Carbaryl	98.9	99.1	P/P	60 - 150
Carbofuran	100	101	P/P	50 - 150
Methiocarb	96.0	97.7	P/P	50 - 150
Methomyl	102	99.9	P/P	50 - 150
Oxamyl	99.2	95.7	P/P	50 - 150
Propoxur	101	100	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A124919
Included Lab Sample IDs: 2476289, 2476290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.4	96.8	P/P	90 - 110
Antimony	99.2	99.0	P/P	90 - 110
Arsenic	99.7	97.3	P/P	90 - 110
Barium	98.4	97.7	P/P	90 - 110
Beryllium	95.3	98.3	P/P	90 - 110
Boron	91.8	98.6	P/P	90 - 110
Cadmium	99.0	99.6	P/P	90 - 110
Chromium	97.9	97.8	P/P	90 - 110
Cobalt	98.9	95.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A124919

Included Lab Sample IDs: 2476289, 2476290

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	98.2	94.0	P/P	90 - 110
Lead	93.6	93.5	P/P	90 - 110
Manganese	96.9	97.0	P/P	90 - 110
Molybdenum	98.6	98.5	P/P	90 - 110
Nickel	98.7	94.2	P/P	90 - 110
Selenium	98.6	99.0	P/P	90 - 110
Silver	97.6	97.9	P/P	90 - 110
Thallium	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A124928

Included Lab Sample IDs: 2476262, 2476264, 2476266, 2476268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	103	102	P/P	90 - 110
Total-P	99.9	103	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A124929

Included Lab Sample IDs: 2476285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	116	121	P/P	50 - 150
2,4,5-T	119	96.4	P/P	50 - 150
Acetaminophen	111	110	P/P	60 - 160
Acetamiprid	110	104	P/P	50 - 150
Afidopyropen	93.5	89.4	P/P	50 - 150
Bentazon	100	105	P/P	50 - 160
Benzovindiflupyr	104	103	P/P	50 - 150
Carbamazepine	108	110	P/P	60 - 150
Clothianidin	107	99.6	P/P	60 - 150
Dinotefuran	105	106	P/P	50 - 150
Diuron	118	111	P/P	60 - 160
Fenuron	105	107	P/P	60 - 150
Fluridone	107	104	P/P	60 - 160
Hydrocodone	107	107	P/P	60 - 150
Ibuprofen	117	90.0	P/P	50 - 160
Imazapyr	95.0	97.1	P/P	50 - 150
Imidacloprid	102	101	P/P	60 - 150
Linuron	107	109	P/P	60 - 150
Mandestrobin	104	108	P/P	50 - 150
MCPP	117	125	P/P	50 - 150
Naproxen	65.0	82.6	P/P	50 - 160
Primidone	95.4	96.1	P/P	60 - 150
Pyraclostrobin	103	101	P/P	60 - 150
Silvex	108	116	P/P	50 - 150
Thiamethoxam	104	102	P/P	50 - 150
Tolfenpyrad	103	105	P/P	60 - 150
Triclopyr	102	102	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124932
Included Lab Sample IDs: 2476262, 2476264, 2476266, 2476268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.8	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124943
Included Lab Sample IDs: 2476262, 2476264, 2476266, 2476268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	99.0	P/P	90 - 110
NO2NO3-N	99.5	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2014
Run ID: A124956
Included Lab Sample IDs: 2476262, 2476264, 2476266, 2476268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	125	P/P	85 - 115

Reference Method: EPA 8321B
Run ID: A124971
Included Lab Sample IDs: 2476285

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	125	137	P/P	60 - 160
Sucralose	96.9	106	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A125018
Included Lab Sample IDs: 2476261, 2476263, 2476265, 2476267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	97.1	P/P	90 - 110
Chloride	98.6	101	P/P	90 - 110
Sulfate	102	98.7	P/P	90 - 110
Sulfate	99.8	102	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A125057
Included Lab Sample IDs: 2476287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.9		P	80 - 120
Toxaphene	95.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125093
Included Lab Sample IDs: 2476288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	100		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.1		P	80 - 120
Avobenzone	97.1		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A125093
Included Lab Sample IDs: 2476288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dechlorane 602	91.7		P	80 - 120
Dechlorane 603	92.1		P	80 - 120
Dechlorane Plus	94.7		P	80 - 120
Hexabromobenzene	90.3		P	80 - 120
Octinoxate	91.7		P	80 - 120
Oxybenzone	91.2		P	80 - 120
PBB-153	89.9		P	80 - 120
PBDE-47	91.0		P	80 - 120
PBDE-99	94.7		P	80 - 120
Pentabromotoluene	90.8		P	80 - 120
Tetradecachloro-m-terphenyl	96.6		P	80 - 120
Tri-o-cresyl Phosphate	95.0		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	84.4		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	90.2		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	87.1		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125099
Included Lab Sample IDs: 2476287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	102		P	80 - 120
Alpha-BHC	97.9		P	80 - 120
Alpha-Chlordane	104		P	80 - 120
Beta-BHC	95.5		P	80 - 120
Beta-Cyfluthrin	94.3		P	80 - 120
Bifenthrin	103		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cis-Nonachlor	101		P	80 - 120
Cypermethrin	94.3		P	80 - 120
Dacthal	96.7		P	80 - 120
DDD-p,p'	103		P	80 - 120
DDE-p,p'	105		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	94.0		P	80 - 120
Deltamethrin	98.6		P	80 - 120
Dichlobenil	107		P	80 - 120
Dicofol	99.6		P	80 - 120
Dieldrin	104		P	80 - 120
Endosulfan I	104		P	80 - 120
Endosulfan II	106		P	80 - 120
Endosulfan Sulfate	99.5		P	80 - 120
Endrin	105		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	101		P	80 - 120
Esfenvalerate	90.9		P	80 - 120
Ethalfuralin	100		P	80 - 120
Fenpropathrin	103		P	80 - 120
Gamma-BHC	95.8		P	80 - 120
Gamma-Chlordane	94.8		P	80 - 120
Heptachlor	111		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A125099
Included Lab Sample IDs: 2476287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Heptachlor Epoxide	109		P	80 - 120
Hexachlorobenzene	102		P	80 - 120
Kepone	83.7		P	80 - 120
Lambda-Cyhalothrin	92.6		P	80 - 120
Methoprene	108		P	80 - 120
Methoxychlor	102		P	80 - 120
MGK-264	106		P	80 - 120
Mirex	105		P	80 - 120
Oxychlordane	107		P	80 - 120
Permethrin	103		P	80 - 120
Phenothrin	103		P	80 - 120
Piperonyl Butoxide	105		P	80 - 120
Prallethrin	107		P	80 - 120
Tau-Fluvalinate	98.8		P	80 - 120
Tetramethrin	96.4		P	80 - 120
Trans-Nonachlor	88.7		P	80 - 120
Triclosan Methyl	104		P	80 - 120
Trifluralin	99.7		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125100
Included Lab Sample IDs: 2476288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	86.9		P	80 - 120
Alachlor	86.6		P	80 - 120
Ametryn	98.7		P	80 - 120
Atrazine	94.8		P	80 - 120
Atrazine Desethyl	96.3		P	80 - 120
Azinphos Methyl	89.0		P	80 - 120
Azoxystrobin	99.0		P	80 - 120
Bromacil	97.3		P	80 - 120
Butylate	95.9		P	80 - 120
Caffeine	106		P	80 - 120
Carbophenothion	95.3		P	80 - 120
Carfentrazone Ethyl	94.8		P	80 - 120
Chlorfenapyr	83.7		P	80 - 120
Chlorpyrifos Ethyl	82.8		P	80 - 120
Chlorpyrifos Methyl	96.9		P	80 - 120
Coumaphos	99.2		P	80 - 120
Cyanazine	98.4		P	80 - 120
Cyprodinil	103		P	80 - 120
Demeton	96.3		P	80 - 120
Diazinon	98.1		P	80 - 120
Difenoconazole	98.8		P	80 - 120
Dimethenamid	101		P	80 - 120
Dimethomorph	83.9		P	80 - 120
Disulfoton	97.4		P	80 - 120
Dithiopyr	99.0		P	80 - 120
EPTC	97.7		P	80 - 120
Ethion	85.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A125100
Included Lab Sample IDs: 2476288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ethoprop	97.8		P	80 - 120
Etridiazole	100		P	80 - 120
Fenamiphos	88.0		P	80 - 120
Fenbuconazole	88.1		P	80 - 120
Fipronil	87.7		P	80 - 120
Fipronil Desulfinyl	98.3		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fluazifop-P-butyl	93.8		P	80 - 120
Fludioxonil	98.6		P	80 - 120
Flumioxazin	95.1		P	80 - 120
Flutolanil	96.7		P	80 - 120
Fluxapyroxad	100		P	80 - 120
Fonofos	99.1		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	99.2		P	80 - 120
Iprodione	81.4		P	80 - 120
Loratadine	92.8		P	80 - 120
Malathion	86.6		P	80 - 120
Metalaxyl	87.6		P	80 - 120
Metolachlor	93.3		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	93.1		P	80 - 120
Molinate	97.0		P	80 - 120
Myclobutanil	96.3		P	80 - 120
Naled	99.3		P	80 - 120
Napropamide	96.6		P	80 - 120
Norflurazon	92.4		P	80 - 120
Oxadiazon	99.0		P	80 - 120
Oxyfluorfen	91.7		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	85.8		P	80 - 120
Pendimethalin	93.0		P	80 - 120
Phenytol	92.5		P	80 - 120
Phorate	94.4		P	80 - 120
Prodiamine	93.7		P	80 - 120
Prometon	98.7		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	100		P	80 - 120
Propanil	101		P	80 - 120
Propargite	96.4		P	80 - 120
Propiconazole	94.7		P	80 - 120
Pyraflufen Ethyl	96.0		P	80 - 120
Pyridaben	94.4		P	80 - 120
Pyriproxyfen	91.7		P	80 - 120
Simazine	93.6		P	80 - 120
Stirophos	90.7		P	80 - 120
Sulfentrazone	108		P	80 - 120
Tebuconazole	98.4		P	80 - 120
Terbufos	94.0		P	80 - 120
Terbutylazine	97.6		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A125100
Included Lab Sample IDs: 2476288

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thiobencarb	97.1		P	80 - 120
Triadimefon	92.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A125101
Included Lab Sample IDs: 2476287

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	102		P	80 - 120
PCB-1260	101		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	97.4				11.4	
	Color (true)	96.8				2.74	
EPA 180.1 Rev. 2.0	Turbidity	102				0.791	
EPA 200.7 Rev. 4.4	Calcium	101	104	104			0.354
	Iron	103	102	103	109		0.764
	Magnesium	106	110	109	103		0.383
	Potassium	102	101	102	106		0.168
	Sodium	101	103	107			0.689
	Strontium	101	102	103	104		1.14
	Tin	99.8	98.8	99.6	106		0.834
	Titanium	100	88.5	92.2	103		2.30
	Vanadium	102	101	104	105		2.08
	Zinc	105	103	104	107		1.02
EPA 200.8 Rev. 5.4	Aluminum	99.3	99.1				3.93
	Antimony	102	95.0	96.2	104		1.28
	Arsenic	102	98.1	98.4	99.8		0.279
	Barium	101	100	99.9	102		0.103
	Beryllium	97.7	94.6	94.4	102		0.140
	Boron	101	103	106	107		2.80
	Cadmium	103	102	102	105		0.130
	Chromium	102	100	101	104		0.704
	Cobalt	102	98.5	99.1	99.8		0.622
	Copper	99.6	108	94.6	94.9		12.7
	Lead	95.2	94.2	94.3	96.4		0.125
	Manganese	101	100	100	104		0.165
	Molybdenum	99.2	95.3	96.1	102		0.857
	Nickel	99.7	95.1	95.1	98.5		0.0104
	Selenium	101	97.0	95.7	100		1.39
	Silver	98.2	102	95.9	99.0		6.32
	Thallium	97.3	98.5	99.4	99.9		0.921
EPA 300.0 Rev. 2.1	Chloride	107	105	107		0.422	
	Sulfate	108	104	106		0.319	
EPA 350.1 Rev. 2.0	Ammonia-N	95.4	98.0	99.4			1.42
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.8	103	106			1.63
	Kjeldahl Nitrogen	95.5	98.6	93.8			4.16
EPA 353.2 Rev. 2.0	NO2NO3-N	99.0	95.5	95.5			0.0
	NO2NO3-N	98.0	92.3	94.3			2.07
EPA 365.1 Rev. 2.0	Total-P	103	99.8	103			2.47
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpe ntyphenol (UV-328)	38.9	41.1	45.7			10.6
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	68.8	56.1	72.1			25.0
	Acetochlor	78.7	67.2	79.8			17.0
	Alachlor	73.3	62.1	77.3			21.7
	Aldrin	61.3	64.9	64.2			1.08
	Alpha-BHC	76.7	78.3	67.4			15.0
	Alpha-Chlordane	69.3	72.1	70.8			1.76
	Ametryn	47.9	86.5	86.5			0.0840
	Atrazine	84.5	99.5	125			7.19
	Atrazine Desethyl	54.3	61.4	64.6			4.98
	Avobenzone	92.4	79.9	93.5			15.7
	Azinphos Methyl	49.7	64.9	299			129
	Azoxystrobin	99.6	87.6	98.0			8.79

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Beta-BHC	99.2	108	98.9			9.23
	Beta-Cyfluthrin	66.1	133	130			2.69
	Bifenthrin	55.4	89.1	92.6			3.90
	Bromacil	64.1	54.2	60.5			7.04
	Butylate	59.1	37.9	61.7			47.9
	Caffeine	94.0	109	111			1.62
	Carbophenothion	73.5	66.1	116			54.7
	Carfentrazone Ethyl	70.5	67.2	119			55.5
	Chlorfenapyr	65.0	62.2	80.1			25.1
	Chlorothalonil	76.4	135	127			5.67
	Chlorpyrifos Ethyl	112	37.3	42.3			12.6
	Chlorpyrifos Methyl	95.6	81.3	101			21.9
	Cis-Nonachlor	68.2	61.2	63.9			4.38
	Coumaphos	97.1	157	188			17.5
	Cyanazine	98.0	94.4	113			18.0
	Cypermethrin	84.9	134	132			2.07
	Cyprodinil	68.9	72.3	79.7			9.78
	Dacthal	82.9	87.7	81.2			7.66
	DDD-p,p'	72.4	66.0	67.9			2.87
	DDE-p,p'	68.9	59.7	57.3			4.12
	DDT-p,p'	76.4	88.2	90.5			2.59
	Dechlorane 602	38.8	30.1	38.8			25.5
	Dechlorane 603	78.1	59.1	70.2			17.1
	Dechlorane Plus	59.2	48.4	53.6			10.0
	Delta-BHC	101	137	119			13.8
	Deltamethrin	84.2	156	172			9.57
	Demeton	90.5	73.3	88.4			18.7
	Diazinon	99.1	85.0	92.2			8.16
	Dichlobenil	75.9	33.1	44.7			29.9
	Dicofol	70.8	81.2	79.3			2.32
	Dieldrin	71.1	65.3	62.9			3.76
	Difenoconazole	80.9	129	185			35.4
	Dimethenamid	78.9	71.2	85.1			17.8
	Dimethomorph	155	218	259			17.1
	Disulfoton	87.3	74.8	81.3			8.37
	Dithiopyr	75.2	73.3	86.4			16.3
	Endosulfan I	70.3	81.8	80.6			1.42
	Endosulfan II	77.9	79.5	77.1			3.05
	Endosulfan Sulfate	83.3	82.1	85.2			3.67
	Endrin	73.7	65.8	63.9			2.93
	Endrin Aldehyde	80.0	58.3	58.5			0.452
	Endrin Ketone	88.0	77.8	73.6			5.53
	EPTC	49.2	27.7	43.7			44.8
	Esfenvalerate	72.3	157	151			3.74
	Ethalfuralin	71.1	71.2	73.1			2.66
	Ethion	41.5	32.4	38.4			17.0
	Ethoprop	92.5	75.1	87.7			15.5
	Etridiazole	70.0	45.2	57.7			24.4
	Fenamiphos	69.6	65.4	78.7			18.4
	Fenbuconazole	90.2	54.2	69.1			24.2
	Fenpropathrin	76.2	104	102			2.18
	Fipronil	72.0	71.1	80.3			12.1
	Fipronil Desulfinyl	74.3	74.3	90.9			20.0
	Fipronil Sulfide	73.7	72.6	86.5			17.6

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Fipronil Sulfone	79.6	72.8	80.0		9.42
	Fluazifop-P-butyl	79.9	77.0	93.1		19.0
	Fludioxonil	78.6	67.6	87.2		25.3
	Flumioxazin	81.7	144	178		21.1
	Flutolanil	52.7	63.3	99.7		44.6
	Fluxapyroxad	59.0	75.2	176		80.2
	Fonofos	85.7	71.3	83.4		15.6
	Gamma-BHC	89.8	104	91.3		13.2
	Gamma-Chlordane	69.1	74.1	71.0		4.28
	Heptachlor	65.7	56.3	58.2		3.49
	Heptachlor Epoxide	73.9	78.8	76.8		2.51
	Hexabromobenzene	94.4	64.7	91.7		34.5
	Hexachlorobenzene	59.9	48.7	52.4		7.31
	Hexazinone	69.3	73.8	96.0		26.2
	Imazalil	64.7	115	117		2.09
	Iprodione	62.4	61.4	128		70.4
	Kepone	159	155	149		4.24
	Lambda-Cyhalothrin	65.5	129	124		4.17
	Loratadine	159	199	233		15.5
	Malathion	69.4	88.2	104		16.6
	Metalaxyl	69.1	87.6	103		11.5
	Methoprene	49.3	62.4	64.5		3.35
	Methoxychlor	86.0	81.4	81.0		0.448
	Metolachlor	78.8	86.3	103		17.7
	Metribuzin	94.9	76.3	101		28.0
	Mevinphos	96.7	71.1	79.8		11.5
	MGK-264	74.2	82.8	79.4		4.28
	Mirex	58.0	67.8	71.5		5.36
	Molinate	68.8	50.2	66.3		27.7
	Myclobutanil	77.3	69.4	81.7		16.2
	Naled	78.5	61.8	65.2		5.30
	Napropamide	33.0	47.4	73.2		42.8
	Norflurazon	54.8				4.13
	Octinoxate	96.9	60.7	93.3		42.3
	Oxadiazon	66.2	67.5	84.2		22.0
	Oxybenzone	102	67.9	104		41.8
	Oxychlordane	69.8	66.4	66.4		0.0588
	Oxyfluorfen	79.8	68.1	99.1		37.0
	Parathion Ethyl	85.5	75.8	91.9		19.3
	Parathion Methyl	104	89.2	106		16.8
	PBB-153	78.7	61.7	78.1		23.4
	PBDE-47	73.6	60.5	63.4		4.74
	PBDE-99	53.1	56.9	52.7		7.66
	PCB-1016	76.0	91.2	86.8		4.88
	PCB-1260	73.3	79.6	77.6		2.53
	Pendimethalin	95.1	83.1	101		19.1
	Pentabromotoluene	82.7	55.1	82.1		39.3
	Permethrin	70.4	128	129		0.646
	Phenothrin	53.6	122	124		1.82
	Phenytoin	1.97	7.81	20.4		89.2
	Phorate	94.7	77.0	85.0		9.81
	Piperonyl Butoxide	103	114	106		6.75
	Prallethrin	70.6	88.6	90.8		2.51
	Prodimamine	31.4	33.9	71.9		71.8

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Prometon	63.0	68.8	83.3		19.0
	Prometryn	63.6	76.2	89.0		15.5
	Pronamide	101	86.9	97.5		11.4
	Propanil	85.0	77.4	73.7		4.88
	Propargite	38.0	42.9	86.5		67.5
	Propiconazole	55.8	81.5	152		60.2
	Pyraflufen Ethyl	61.7	62.7	128		68.1
	Pyridaben	80.9	104	136		26.4
	Pyriproxyfen	27.5	33.8	157		129
	Simazine	70.2	73.0	93.3		10.4
	Stirophos	42.3	53.5	68.8		25.0
	Sulfentrazone	28.6	68.6	238		89.1
	Tau-Fluvalinate	60.1	146	144		1.78
	Tebuconazole	29.1	41.5	90.2		73.9
	Terbufos	97.0	82.4	91.7		10.7
	Terbutylazine	95.6	84.8	92.8		9.08
	Tetradecachloro-m-terphenyl	104	87.9	96.8		9.61
	Tetramethrin	87.8	145	131		10.5
	Thiobencarb	63.6	69.3	88.3		24.1
	Trans-Nonachlor	72.0	83.5	79.6		4.79
	Tri-o-cresyl Phosphate	103	70.7	96.0		30.4
	Triadimefon	60.3	57.0	81.3		35.2
	Triclosan Methyl	73.0	65.0	62.9		3.23
	Trifluralin	69.1	74.1	72.2		2.64
	Tris(1-chloro-2-propyl) phosphate (TCPP)	98.8	61.0	95.6		40.7
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	101	67.8	95.5		33.9
	Tris(2-chloroethyl) phosphate (TCEP)	103	69.5	108		43.7
EPA 8276	Chlordane	82.1	94.2	89.2		5.41
	Toxaphene	89.3	103	97.7		5.00
EPA 8321B	2,4-D	120	68.9	88.9		12.4
	2,4,5-T	107	83.8	95.3		12.9
	3-Hydroxycarbofuran	55.2	68.6	60.5		12.4
	Acesulfame K	108	112	114		1.46
	Acetaminophen	90.2	29.4	36.8		22.4
	Acetamiprid	70.8	39.9	53.1		28.4
	Afidopyropen	74.7	46.3	84.2		58.0
	Aldicarb	47.5	46.3	50.1		7.85
	Aldicarb Sulfone	80.2	59.6	60.8		2.03
	Aldicarb Sulfoxide	103	26.7	25.7		3.82
	AMPA	102	99.7	97.6		2.12
	Bentazon	118				2.73
	Benzovindiflupyr	87.5	70.7	81.4		14.1
	Carbamazepine	83.7	61.9	68.0		9.39
	Carbaryl	77.6	65.2	58.2		10.6
	Carbofuran	73.7	56.3	56.6		0.557
	Clothianidin	91.2	66.9	77.5		14.7
	Dinotefuran	100	45.0	52.6		15.5
	Diuron	86.2	58.8	65.5		8.79
	Endothall	101	108	112		3.96
	Fenuron	100	66.0	74.0		11.3
	Fluridone	93.6	65.3	76.4		14.5

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Glufosinate	101	101	94.0		6.99
	Glyphosate	103	95.7	97.8		2.15
	Hydrocodone	93.9	63.2	73.2		14.7
	Ibuprofen	98.9	82.0	73.2		11.3
	Imazapyr	104				8.81
	Imidacloprid	94.3	75.1	86.0		12.1
	Linuron	83.3	63.4	70.0		9.87
	Mandestrobin	97.7	76.2	86.0		12.0
	MCPP	116	86.7	98.0		11.9
	Methiocarb	72.9	81.8	68.7		17.4
	Methomyl	81.8	61.7	61.5		0.184
	Naproxen	83.3	62.5	61.8		1.09
	Oxamyl	84.5	65.9	65.9		0.0519
	Primidone	91.3	77.8	88.7		13.0
	Propoxur	60.6	48.1	41.5		14.6
	Pyraclostrobin	83.2	70.5	80.9		13.7
	Silvex	102	79.9	88.7		10.5
	Sucralose	98.0	99.8	95.2		4.73
	Thiamethoxam	86.5	66.9	72.6		8.19
	Tolfenpyrad	61.8	51.8	57.0		9.65
SM 2320 B-2011	Triclopyr	102	74.5	84.1		12.1
	Total Alkalinity	94.8			0.142	
SM 2540 C-2015	TDS	101			3.19	
SM 2540 D-2015	TSS	102				
SM 4500-F- C-2011	Fluoride	97.5				0.516
SM 5310 B-2014	Organic Carbon	99.3	96.9	99.3		2.03

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2476261, 2476263, 2476265, 2476267
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2476261, 2476263, 2476265, 2476267
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2476289, 2476290
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2476289, 2476290
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2476261, 2476263, 2476265, 2476267
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2476261, 2476263, 2476265, 2476267
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2476262, 2476264, 2476266, 2476268
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2476262, 2476264, 2476266, 2476268
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2476262, 2476264, 2476266, 2476268
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2476262, 2476264, 2476266, 2476268
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2476288
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2476287
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2476288
EPA 8270E	PCBs in water matrices by GC/MS/MS	2476287
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2476287
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2476284
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2476285
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2476261, 2476263, 2476265, 2476267
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2476289, 2476290
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2476261, 2476263, 2476265, 2476267

Reference Method Descriptions

Method	Description	Associated Samples
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2476261, 2476263, 2476265, 2476267
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2476261, 2476263, 2476265, 2476267
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2476262, 2476264, 2476266, 2476268

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	03/19/2024			03/19/2024 14:38	Jessica K Wilks	2476261
	03/19/2024			03/19/2024 14:39	Jessica K Wilks	2476263
	03/19/2024			03/19/2024 14:42	Jessica K Wilks	2476267
	03/19/2024			03/19/2024 15:10	Jessica K Wilks	2476265
EPA 180.1 Rev. 2.0	03/19/2024			03/19/2024 13:36	Khloe J Berg	2476261
	03/19/2024			03/19/2024 13:37	Khloe J Berg	2476263
	03/19/2024			03/19/2024 13:38	Khloe J Berg	2476265
	03/19/2024			03/19/2024 13:47	Khloe J Berg	2476267
EPA 200.7 Rev. 4.4	03/19/2024	03/20/2024 12:55	George D Taylor	03/21/2024 15:30	Chase Roberts	2476289
	03/19/2024	03/20/2024 12:55	George D Taylor	03/21/2024 15:45	Chase Roberts	2476290
EPA 200.8 Rev. 5.4	03/19/2024	03/20/2024 12:55	George D Taylor	03/21/2024 18:13	Emily M Philpot	2476289
	03/19/2024	03/20/2024 12:55	George D Taylor	03/21/2024 18:22	Emily M Philpot	2476290
EPA 300.0 Rev. 2.1	03/19/2024			03/26/2024 13:40	Samantha L Bates	2476263
	03/19/2024			03/26/2024 18:27	Samantha L Bates	2476261
	03/19/2024			03/26/2024 18:42	Samantha L Bates	2476265
	03/19/2024			03/26/2024 18:57	Samantha L Bates	2476267
EPA 350.1 Rev. 2.0	03/19/2024			03/22/2024 12:47	Ping Hua	2476264
	03/19/2024			03/22/2024 12:51	Ping Hua	2476262
	03/19/2024			03/22/2024 12:53	Ping Hua	2476266
	03/19/2024			03/22/2024 12:54	Ping Hua	2476268
EPA 351.2 Rev. 2.0	03/19/2024	03/20/2024 11:15	Robyn Blevins	03/21/2024 14:56	Robyn Blevins	2476264
	03/19/2024	03/20/2024 11:15	Robyn Blevins	03/21/2024 14:58	Robyn Blevins	2476266
	03/19/2024	03/20/2024 11:28	Robyn Blevins	03/21/2024 12:17	Robyn Blevins	2476262
	03/19/2024	03/20/2024 11:28	Robyn Blevins	03/21/2024 12:19	Robyn Blevins	2476268
EPA 353.2 Rev. 2.0	03/19/2024			03/22/2024 12:37	Fadila Guebre	2476264
	03/19/2024			03/22/2024 12:43	Fadila Guebre	2476266
	03/19/2024			03/22/2024 12:44	Fadila Guebre	2476268
	03/19/2024			03/22/2024 14:43	Fadila Guebre	2476262
EPA 365.1 Rev. 2.0	03/19/2024	03/21/2024 15:05	Josephine W Gitau	03/22/2024 11:54	Elise M. Gillis	2476262
	03/19/2024	03/21/2024 15:05	Josephine W Gitau	03/22/2024 12:02	Elise M. Gillis	2476264
	03/19/2024	03/21/2024 15:05	Josephine W Gitau	03/22/2024 12:03	Elise M. Gillis	2476266
	03/19/2024	03/21/2024 15:05	Josephine W Gitau	03/22/2024 12:04	Elise M. Gillis	2476268
EPA 8270E	03/19/2024	03/25/2024 08:00	Fe-Val Siddell	03/28/2024 22:22	Julie Wi	2476288
	03/19/2024	03/25/2024 08:00	Fe-Val Siddell	03/29/2024 20:47	Arthur Maknenko	2476288
	03/19/2024	03/25/2024 08:00	Rasheda Ghaffari	03/28/2024 03:18	Kenedi Mills	2476287
	03/19/2024	03/25/2024 08:00	Rasheda Ghaffari	03/29/2024 02:55	Kenedi Mills	2476287
EPA 8276	03/19/2024	03/25/2024 08:00	Rasheda Ghaffari	03/28/2024 14:21	Arthur Maknenko	2476287
EPA 8321B	03/19/2024	03/19/2024 13:00	Hoor Shaik	03/21/2024 02:20	Juyoung Kim	2476284
	03/19/2024	03/20/2024 12:00	Tae K Lee	03/20/2024 22:53	Tae K Lee	2476285
	03/19/2024	03/20/2024 12:00	Tae K Lee	03/22/2024 10:54	Tae K Lee	2476285

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	03/19/2024	03/21/2024 13:00	Hoor Shaik	03/21/2024 21:33	Juyoung Kim	2476285
SM 2320 B-2011	03/19/2024			03/20/2024 19:38	Dale L. Simmons	2476263
	03/19/2024			03/20/2024 19:50	Dale L. Simmons	2476265
	03/19/2024			03/20/2024 20:02	Dale L. Simmons	2476267
	03/19/2024			03/20/2024 21:30	Dale L. Simmons	2476261
SM 2340 B-2011	03/19/2024	03/21/2024 15:45	Chase Roberts	03/21/2024 15:30	Chase Roberts	2476289
	03/19/2024			03/21/2024 15:45	Chase Roberts	2476290
SM 2540 C-2015	03/19/2024			03/22/2024 15:49	Yijie Li	2476261, 2476263, 2476265, 2476267
SM 2540 D-2015	03/19/2024			03/22/2024 15:49	Yijie Li	2476261, 2476263, 2476265, 2476267
SM 4500-F- C-2011	03/19/2024			03/20/2024 19:38	Dale L. Simmons	2476263
	03/19/2024	03/20/2024 20:02	Dale L. Simmons	03/20/2024 19:50	Dale L. Simmons	2476265
	03/19/2024			03/20/2024 20:02	Dale L. Simmons	2476267
	03/19/2024			03/20/2024 21:30	Dale L. Simmons	2476261
SM 5310 B-2014	03/19/2024	03/22/2024 07:09	Jessica K Wilks	03/22/2024 07:09	Jessica K Wilks	2476262
	03/19/2024			03/22/2024 08:18	Jessica K Wilks	2476264
	03/19/2024			03/22/2024 08:33	Jessica K Wilks	2476266
	03/19/2024			03/22/2024 08:50	Jessica K Wilks	2476268