Chemical Analysis Report

NE-DIST-2024-01-31-02

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

Event Description: **Suwannee North 2024**
Request ID: **RQ-2024-01-29-28**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Thekkekalathil Chandrasekhar, Environmental Consultant Date Certified: 19-FEB-2024 10:55

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: Little Creek at US 441 **Collection Date/Time: 01/30/2024 12:00**

Field ID: 21010033 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464602	EPA 8321B	2,4-D	0.0020	U	ug/L	P440702	
		Acesulfame K	0.10	U	ug/L	P440694	
		2,4,5-T	0.0040	U	ug/L	P440702	
		AMPA	0.10	U	ug/L	P440694	
		Acetaminophen	0.0080	U	ug/L	P440702	
		Acetamiprid	0.0020	U	ug/L	P440702	
		Endothall	0.25	U	ug/L	P440694	
		Glufosinate	0.10	U	ug/L	P440694	
		Glyphosate	0.10	U	ug/L	P440694	
		Afidopyropen	0.0020	U	ug/L	P440702	
		Bentazon	8.0E-04	U	ug/L	P440702	
		Sucralose	0.010	U	ug/L	P440694	
		Benzovindiflupyr	0.0020	U	ug/L	P440702	
		Carbamazepine	8.0E-04	U	ug/L	P440702	
		Clothianidin	0.0020	U	ug/L	P440702	
		Dinotefuran	0.0020	U	ug/L	P440702	
		Diuron	0.0020	U	ug/L	P440702	
		Fenuron	0.032	U	ug/L	P440702	
		Fluridone	8.0E-04	U	ug/L	P440702	
		Imazapyr	0.13		ug/L	P440702	
		Hydrocodone	0.0020	U	ug/L	P440702	
		Ibuprofen	0.080	U	ug/L	P440702	RPD
		Imidacloprid	0.0020	U	ug/L	P440702	
		Linuron	0.0040	U	ug/L	P440702	
		Mandestrobin	0.0020	U	ug/L	P440702	
		MCPP	0.0020	U	ug/L	P440702	
		Naproxen	0.0080	U	ug/L	P440702	
		Primidone	0.0040	U	ug/L	P440702	
		Pyraclostrobin	0.0020	U	ug/L	P440702	
		Silvex	0.0040	U	ug/L	P440702	
		Thiamethoxam	0.0020	U	ug/L	P440702	
		Tolfenpyrad	0.0020	U	ug/L	P440702	
		Triclopyr	0.0040	U	ug/L	P440702	

Sample Location: Deep Creek at Hywy 441 **Collection Date/Time: 01/30/2024 12:40**

Field ID: 21010051 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464607	EPA 200.7 Rev. 4.4	Calcium	2.18		mg/L	P440800	
		Iron	670		ug/L	P440800	
		Magnesium	0.91		mg/L	P440800	
		Potassium	0.30	U	mg/L	P440800	
		Sodium	3.5		mg/L	P440800	
		Strontium	6.6	I	ug/L	P440800	
		Tin	3.0	U	ug/L	P440800	
		Titanium	2.2	I	ug/L	P440800	
		Vanadium	2.0	U	ug/L	P440800	
		Zinc	5.0	U	ug/L	P440800	
	EPA 200.8 Rev. 5.4	Aluminum	433		ug/L	P440800	
		Antimony	0.050	U	ug/L	P440800	
		Arsenic	0.40		ug/L	P440800	
		Barium	5.64		ug/L	P440800	
		Beryllium	0.024	I	ug/L	P440800	
		Boron	11.6		ug/L	P440800	
		Cadmium	0.020	U	ug/L	P440800	
		Chromium	0.60	I	ug/L	P440800	
		Cobalt	0.197		ug/L	P440800	
		Copper	0.40	U	ug/L	P440800	
		Lead	0.50		ug/L	P440800	
		Manganese	9.84		ug/L	P440800	
		Molybdenum	0.15	U	ug/L	P440800	
		Nickel	0.50	U	ug/L	P440800	
		Selenium	0.20	U	ug/L	P440800	
		Silver	0.010	U	ug/L	P440800	
		Thallium	0.10	U	ug/L	P440800	
	SM 2340 B-2011	Hardness	9.2		mg/L	P440800	

Ref. Method and Comment:
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable because of high analyte concentration in the QC sample.The lead result was confirmed in the undigested sample on 02/06/2024.

Sample Location: Sugar Creek Old Hwy 129 NNE of Suwannee Springs **Collection Date/Time: 01/30/2024 13:50**

Field ID: 21020018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464559	DEP SOP: NU-094-1	Color (true)	140		PCU	P440734	
	EPA 180.1 Rev. 2.0	Turbidity	7.2		NTU	P440730	
	EPA 300.0 Rev. 2.1	Chloride	7.2		mg Cl/L	P441167	
		Sulfate	7.7		mg SO4/L	P441172	
	SM 2320 B-2011	Total Alkalinity	28		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	107		mg/L	P441271	
	SM 2540 D-2015	TSS	4	I	mg/L	P441047	
	SM 4500-F- C-2011	Fluoride	0.42		mg F/L	P440911	
2464561	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P441063	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.48		mg N/L	P440802	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.35		mg N/L	P440948	
	EPA 365.1 Rev. 2.0	Total-P	0.76		mg P/L	P440864	
	SM 5310 B-2014	Organic Carbon	14		mg C/L	P440884	
2464598	EPA 8321B	Aldicarb	0.020	U	ug/L	P440845	
		Aldicarb Sulfone	0.0020	U	ug/L	P440845	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P440845	MS
		Carbaryl	0.0020	U	ug/L	P440845	
		Carbofuran	0.0020	U	ug/L	P440845	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P440845	
		Methiocarb	0.0020	U	ug/L	P440845	
		Methomyl	0.0020	U	ug/L	P440845	
		Oxamyl	0.0020	U	ug/L	P440845	
		Propoxur	0.0020	U	ug/L	P440845	
2464600		2,4-D	0.0020	U	ug/L	P440702	
		Acesulfame K	0.10	U	ug/L	P440694	
		2,4,5-T	0.0040	U	ug/L	P440702	
		AMPA	0.10	U	ug/L	P440694	
		Acetaminophen	0.0080	U	ug/L	P440702	
		Acetamiprid	0.0020	U	ug/L	P440702	
		Endothall	0.25	U	ug/L	P440694	
		Glufosinate	0.10	U	ug/L	P440694	
		Glyphosate	0.10	U	ug/L	P440694	
		Afidopyropen	0.0020	U	ug/L	P440702	
		Bentazon	8.0E-04	U	ug/L	P440702	
		Sucralose	0.022	I	ug/L	P440694	
		Benzovindiflupyr	0.0020	U	ug/L	P440702	
		Carbamazepine	8.0E-04	U	ug/L	P440702	
		Clothianidin	0.0020	U	ug/L	P440702	
		Dinotefuran	0.0048	I	ug/L	P440702	
		Diuron	0.0020	U	ug/L	P440702	
		Fenuron	0.032	U	ug/L	P440702	
		Fluridone	8.0E-04	U	ug/L	P440702	
		Imazapyr	0.0048	I	ug/L	P440702	

Field ID: 21020018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464600	EPA 8321B	Hydrocodone	0.0020	U	ug/L	P440702	
		Ibuprofen	0.080	U	ug/L	P440702	RPD
		Imidacloprid	0.0020	U	ug/L	P440702	
		Linuron	0.0040	U	ug/L	P440702	
		Mandestrobin	0.0020	U	ug/L	P440702	
		MCPP	0.0020	U	ug/L	P440702	
		Naproxen	0.0080	U	ug/L	P440702	
		Primidone	0.0040	U	ug/L	P440702	
		Pyraclostrobin	0.0020	U	ug/L	P440702	
		Silvex	0.0040	U	ug/L	P440702	
		Thiamethoxam	0.0020	U	ug/L	P440702	
		Tolfenpyrad	0.0020	U	ug/L	P440702	
		Triclopyr	0.0040	U	ug/L	P440702	
2464603	EPA 8270E	Aldrin	0.67	UJ	ng/L	P440746	SUR
		Alpha-BHC	0.10	UJ	ng/L	P440746	SUR
		Alpha-Chlordane	0.21	UJ	ng/L	P440746	SUR
		PCB-1016	2.1	U	ng/L	P440746	
		Beta-BHC	0.10	UJ	ng/L	P440746	SUR
		PCB-1221	2.1	U	ng/L	P440746	
		Beta-Cyfluthrin	1.3	UJ	ng/L	P440746	SUR
		PCB-1232	2.1	U	ng/L	P440746	
		Bifenthrin	0.51	UJ	ng/L	P440746	SUR
		PCB-1242	2.1	U	ng/L	P440746	
		PCB-1248	2.1	U	ng/L	P440746	
		Chlorothalonil	3.7	UJ	ng/L	P440746	SUR
		PCB-1254	2.1	U	ng/L	P440746	
		Cis-Nonachlor	0.21	UJ	ng/L	P440746	CCV, RPD, SUR
		PCB-1260	2.1	U	ng/L	P440746	
		Cypermethrin	1.5	UJ	ng/L	P440746	SUR
		Dacthal	0.15	UJ	ng/L	P440746	SUR
		DDD-p,p'	0.26	I J	ng/L	P440746	SUR
		DDE-p,p'	0.21	UJ	ng/L	P440746	SUR
		DDT-p,p'	0.82	UJ	ng/L	P440746	SUR
		Delta-BHC	0.41	UJ	ng/L	P440746	SUR
		Deltamethrin	1.3	UJ	ng/L	P440746	SUR
		Dichlobenil	0.26	UJ	ng/L	P440746	SUR
		Dicofol	1.3	UJ	ng/L	P440746	SUR
		Dieldrin	0.41	UJ	ng/L	P440746	SUR
		Endosulfan I	0.41	UJ	ng/L	P440746	SUR
		Endosulfan II	0.92	UJ	ng/L	P440746	SUR
		Endosulfan Sulfate	0.31	UJ	ng/L	P440746	SUR
		Endrin	0.92	UJ	ng/L	P440746	SUR
		Endrin Aldehyde	0.77	UJ	ng/L	P440746	CCV, SUR
		Endrin Ketone	0.41	UJ	ng/L	P440746	CCV, SUR

Field ID: 21020018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464603	EPA 8270E	Esfenvalerate	0.77	UJ	ng/L	P440746	SUR
		Ethalfluralin	0.15	UJ	ng/L	P440746	SUR
		Fenpropathrin	0.26	UJ	ng/L	P440746	SUR
		Gamma-BHC	0.13	UJ	ng/L	P440746	SUR
		Gamma-Chlordane	0.21	UJ	ng/L	P440746	SUR
		Heptachlor	0.21	UJ	ng/L	P440746	RPD, SUR
		Heptachlor Epoxide	0.26	UJ	ng/L	P440746	LCS, SUR
		Hexachlorobenzene**	1.0	UJ	ng/L	P440746	SUR
		Kepone	14	UJ	ng/L	P440746	SUR
		Lambda-Cyhalothrin	0.77	UJ	ng/L	P440746	SUR
		Methoprene	0.77	UJ	ng/L	P440746	SUR
		Methoxychlor	0.31	UJ	ng/L	P440746	SUR
		MGK-264	0.21	UJ	ng/L	P440746	SUR
		Mirex	0.36	UJ	ng/L	P440746	SUR
		Oxychlordane	0.31	UJ	ng/L	P440746	SUR
		Permethrin	1.6	UJ	ng/L	P440746	SUR
		Phenothrin	0.92	UJ	ng/L	P440746	SUR
		Piperonyl Butoxide	0.15	UJ	ng/L	P440746	SUR
		Prallethrin	2.1	UJ	ng/L	P440746	SUR
		Tau-Fluvalinate	0.26	UJ	ng/L	P440746	SUR
		Tetramethrin	0.77	UJ	ng/L	P440746	SUR
		Trans-Nonachlor	0.21	UJ	ng/L	P440746	SUR
		Triclosan Methyl	0.15	UJ	ng/L	P440746	SUR
		Trifluralin	0.21	UJ	ng/L	P440746	SUR
	EPA 8276	Chlordane	2.1	UJ	ng/L	P440746	SUR
		Toxaphene	15	UJ	ng/L	P440746	SUR
2464605	EPA 8270E	Oxybenzone**	11	U	ng/L	P440627	
		Acetochlor	0.21	U	ng/L	P440627	
		Octinoxate**	160	U	ng/L	P440627	
		Alachlor	0.42	U	ng/L	P440627	
		Avobenzone**	110	U	ng/L	P440627	
		Ametryn	1.2	U	ng/L	P440627	
		Atrazine	0.21	UJ	ng/L	P440627	LCS
		PBDE-47**	4.2	U	ng/L	P440627	
		Atrazine Desethyl	1.4	U	ng/L	P440627	
		PBDE-99**	5.3	U	ng/L	P440627	
		Azinphos Methyl	3.2	U	ng/L	P440627	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P440627	
		Azoxystrobin	0.42	U	ng/L	P440627	
		Bromacil	0.63	U	ng/L	P440627	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	U	ng/L	P440627	
		Butylate	0.47	U	ng/L	P440627	RPD
		Dechlorane Plus**	32	U	ng/L	P440627	
		Caffeine**	7.9	U	ng/L	P440627	

Field ID: 21020018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464605	EPA 8270E	Dechlorane 602**	5.3	U	ng/L	P440627	
		Carbophenothion	0.53	U	ng/L	P440627	
		Dechlorane 603**	4.2	U	ng/L	P440627	
		Carfentrazone Ethyl	0.16	U	ng/L	P440627	
		Hexabromobenzene**	6.3	U	ng/L	P440627	
		Chlorfenapyr	0.32	U	ng/L	P440627	
		PBB-153**	6.3	U	ng/L	P440627	
		Chlorpyrifos Ethyl	0.32	U	ng/L	P440627	
		Pentabromotoluene**	3.2	U	ng/L	P440627	
		Chlorpyrifos Methyl	0.11	U	ng/L	P440627	
		Tris(2-chloroethyl) phosphate (TCEP)**	58	U	ng/L	P440627	
		Coumaphos	1.1	U	ng/L	P440627	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	26	U	ng/L	P440627	
		Cyanazine	5.3	U	ng/L	P440627	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P440627	
		Cyprodinil	0.21	U	ng/L	P440627	
		Tetradecachloro-m-terphenyl**	7.9	U	ng/L	P440627	
		Demeton	3.7	U	ng/L	P440627	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	63	U	ng/L	P440627	
		Diazinon	0.13	U	ng/L	P440627	
		Difenoconazole	0.63	U	ng/L	P440627	
		Dimethenamid	0.11	U	ng/L	P440627	
		Dimethomorph	0.32	U	ng/L	P440627	
		Disulfoton	0.63	U	ng/L	P440627	
		Dithiopyr	1.1	U	ng/L	P440627	
		EPTC	0.53	U	ng/L	P440627	RPD
		Ethion	0.32	U	ng/L	P440627	
		Ethoprop	0.13	U	ng/L	P440627	
		Etridiazole	0.11	U	ng/L	P440627	
		Fenamiphos	0.47	U	ng/L	P440627	
		Fenbuconazole	0.53	U	ng/L	P440627	
		Fipronil	0.21	UJ	ng/L	P440627	LCS
		Fipronil Desulfinyl**	0.11	U	ng/L	P440627	
		Fipronil Sulfide	0.11	U	ng/L	P440627	
		Fipronil Sulfone	0.11	U	ng/L	P440627	
		Fluazifop-P-butyl	0.11	U	ng/L	P440627	
		Fludioxonil	0.11	U	ng/L	P440627	
		Flumioxazin	3.2	U	ng/L	P440627	
		Flutolanil	0.11	U	ng/L	P440627	
		Fluxapyroxad	0.26	U	ng/L	P440627	
		Fonofos	0.16	U	ng/L	P440627	
		Hexazinone	7.6		ng/L	P440627	
		Imazalil	0.68	U	ng/L	P440627	
		Iprodione	0.53	U	ng/L	P440627	

Field ID: 21020018 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464605	EPA 8270E	Loratadine**	0.32	U	ng/L	P440627	
		Malathion	0.37	U	ng/L	P440627	
		Metalaxyl	0.53	U	ng/L	P440627	
		Metolachlor	1.8	I	ng/L	P440627	
		Metribuzin	0.42	U	ng/L	P440627	
		Mevinphos	1.1	U	ng/L	P440627	
		Molinate	0.26	U	ng/L	P440627	
		Myclobutanil	0.37	U	ng/L	P440627	
		Naled	2.6	U	ng/L	P440627	
		Napropamide	0.74	U	ng/L	P440627	
		Norflurazon	1.1	U	ng/L	P440627	
		Oxadiazon	0.37	U	ng/L	P440627	
		Oxyfluorfen	0.21	U	ng/L	P440627	
		Parathion Ethyl	0.16	UJ	ng/L	P440627	LCS
		Parathion Methyl	0.21	U	ng/L	P440627	
		Pendimethalin	1.8	U	ng/L	P440627	
		Phenytoin**	5.6	U	ng/L	P440627	
		Phorate	0.26	U	ng/L	P440627	
		Prodiamine	0.21	U	ng/L	P440627	
		Prometon	3.2	U	ng/L	P440627	
		Prometryn	0.37	U	ng/L	P440627	
		Pronamide	0.11	U	ng/L	P440627	
		Propanil	0.11	U	ng/L	P440627	
		Propargite	0.84	U	ng/L	P440627	
		Propiconazole	0.63	U	ng/L	P440627	
		Pyraflufen Ethyl	0.32	U	ng/L	P440627	
		Pyridaben	1.5	U	ng/L	P440627	
		Pyriproxyfen	0.26	U	ng/L	P440627	
		Simazine	0.26	U	ng/L	P440627	
		Stirophos	0.42	U	ng/L	P440627	
		Sulfentrazone	1.5	U	ng/L	P440627	
		Tebuconazole	1.5	U	ng/L	P440627	
		Terbufos	0.21	U	ng/L	P440627	
		Terbuthylazine	0.21	U	ng/L	P440627	
		Thiobencarb	0.53	U	ng/L	P440627	
		Triadimefon	0.16	U	ng/L	P440627	

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 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8276: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Rose Creek at SW Walter Ave **Collection Date/Time: 01/30/2024 12:00**

Field ID: G1NE0958 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2464560	DEP SOP: NU-094-1	Color (true)	320		PCU	P440734	
	EPA 180.1 Rev. 2.0	Turbidity	2.6		NTU	P440730	
	EPA 300.0 Rev. 2.1	Chloride	11		mg Cl/L	P441167	
		Sulfate	0.36	I	mg SO4/L	P441172	
	SM 2320 B-2011	Total Alkalinity	14		mg CaCO3/L	P440908	
	SM 2540 C-2015	TDS	111		mg/L	P441271	
	SM 2540 D-2015	TSS	3	I	mg/L	P441047	
	SM 4500-F- C-2011	Fluoride	0.066	I	mg F/L	P440911	
2464562	EPA 350.1 Rev. 2.0	Ammonia-N	0.012		mg N/L	P441063	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P440802	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P441187	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P440864	
	SM 5310 B-2014	Organic Carbon	38		mg C/L	P440884	

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: P440734

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440730

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440800

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: P440800

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441167

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441172

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441063

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440802

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440948

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441187

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440864

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

Reference Method: EPA 8270E
Batch ID: P440627

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P440627

Component	Result	Code	Units
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
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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P440627

Component	Result	Code	Units
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
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: P440746

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P440746

Component	Result	Code	Units
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P440746

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

Reference Method: EPA 8321B
Batch ID: P440694

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P440694

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

Reference Method: EPA 8321B
Batch ID: P440702

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

Reference Method: EPA 8321B
Batch ID: P440845

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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P440908

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

Reference Method: SM 2540 C-2015
Batch ID: P441271

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P441047

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2014
Batch ID: P440884

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: P440734

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440730

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	114		P	85 - 115
Iron	104		P	85 - 115
Magnesium	109		P	85 - 115
Potassium	103		P	85 - 115
Sodium	111		P	85 - 115
Strontium	105		P	85 - 115
Tin	106		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	107		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440800

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	101		P	85 - 115
Arsenic	98.4		P	85 - 115
Barium	102		P	85 - 115
Beryllium	96.3		P	85 - 115
Boron	106		P	85 - 115
Cadmium	99.1		P	85 - 115
Chromium	103		P	85 - 115
Cobalt	98.7		P	85 - 115
Copper	96.8		P	85 - 115
Lead	94.1		P	85 - 115
Manganese	102		P	85 - 115
Molybdenum	97.3		P	85 - 115
Nickel	98.8		P	85 - 115
Selenium	99.8		P	85 - 115
Silver	100		P	85 - 115
Thallium	96.9		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441167

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441172

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441063

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440802

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440948

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441187

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440864

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	105		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P440627

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	68.8		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	61.1		P	37 - 154
Acetochlor	69.2		P	64 - 124
Alachlor	62.6		P	61 - 118
Ametryn	91.2		P	47 - 158
Atrazine	62.6		F	68 - 121
Atrazine Desethyl	70.9		P	30 - 119
Avobenzone	84.2		P	48 - 193
Azinphos Methyl	130		P	30 - 194
Azoxystrobin	74.4		P	58 - 154
Bromacil	74.5		P	47 - 126
Butylate	41.8		P	31 - 83.0
Caffeine	91.8		P	10 - 180
Carbophenothion	88.6		P	59 - 133
Carfentrazone Ethyl	94.0		P	59 - 147
Chlorfenapyr	63.5		P	52 - 118

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P440627

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Ethyl	75.1		P	59 - 119
Chlorpyrifos Methyl	92.3		P	65 - 123
Coumaphos	102		P	11 - 223
Cyanazine	90.6		P	63 - 250
Cyprodinil	75.4		P	52 - 143
Dechlorane 602	63.8		P	23 - 142
Dechlorane 603	62.4		P	51 - 171
Dechlorane Plus	58.2		P	46 - 161
Demeton	53.9		P	42 - 119
Diazinon	83.2		P	67 - 132
Difenoconazole	119		P	12 - 204
Dimethenamid	78.1		P	53 - 113
Dimethomorph	117		P	13 - 238
Disulfoton	76.1		P	56 - 126
Dithiopyr	73.1		P	58 - 127
EPTC	33.5		P	31 - 78.0
Ethion	60.5		P	24 - 127
Ethoprop	64.2		P	60 - 118
Etridiazole	44.7		P	32 - 91.0
Fenamiphos	68.9		P	54 - 129
Fenbuconazole	63.4		P	31 - 162
Fipronil	55.4		F	56 - 131
Fipronil Desulfinyl	86.5		P	58 - 132
Fipronil Sulfide	74.3		P	51 - 123
Fipronil Sulfone	86.4		P	50 - 125
Fluazifop-P-butyl	80.4		P	52 - 132
Fludioxonil	76.3		P	52 - 129
Flumioxazin	154		P	34 - 250
Flutolanil	79.3		P	45 - 128
Fluxapyroxad	79.3		P	31 - 150
Fonofos	75.7		P	60 - 116
Hexabromobenzene	59.9		P	52 - 165
Hexazinone	69.8		P	59 - 120
Imazalil	65.2		P	39 - 134
Iprodione	74.0		P	39 - 243
Loratadine	100		P	10 - 240
Malathion	90.3		P	53 - 145
Metalaxyl	64.4		P	59 - 120
Metolachlor	78.8		P	64 - 122
Metribuzin	67.0		P	33 - 128
Mevinphos	79.4		P	48 - 119
Molinate	44.0		P	42 - 89.0
Myclobutanil	64.5		P	54 - 129
Naled	40.4		P	10 - 138
Napropamide	60.9		P	40 - 122
Norflurazon	82.4		P	49 - 132
Octinoxate	63.9		P	29 - 176
Oxadiazon	61.8		P	50 - 115
Oxybenzone	65.9		P	45 - 145
Oxyfluorfen	97.6		P	62 - 149
Parathion Ethyl	65.6		F	68 - 119
Parathion Methyl	78.3		P	68 - 147

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P440627

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBB-153	60.1		P	42 - 179
PBDE-47	60.3		P	44 - 141
PBDE-99	64.1		P	36 - 141
Pendimethalin	102		P	59 - 158
Pentabromotoluene	60.2		P	58 - 148
Phenytoin	49.6		P	10 - 151
Phorate	69.3		P	44 - 124
Prodiamine	49.6		P	10 - 136
Prometon	80.0		P	45 - 131
Prometryn	74.3		P	52 - 140
Pronamide	82.5		P	70 - 129
Propanil	116		P	54 - 144
Propargite	40.3		P	10 - 191
Propiconazole	70.3		P	49 - 128
Pyraflufen Ethyl	83.9		P	46 - 141
Pyridaben	81.9		P	29 - 198
Pyriproxyfen	80.3		P	33 - 221
Simazine	68.4		P	62 - 119
Stirophos	69.3		P	13 - 144
Sulfentrazone	72.6		P	12 - 152
Tebuconazole	60.6		P	10 - 135
Terbufos	73.9		P	67 - 136
Terbuthylazine	68.8		P	66 - 113
Tetradecachloro-m-terphenyl	69.2		P	30 - 235
Thiobencarb	77.0		P	51 - 125
Tri-o-cresyl Phosphate	69.8		P	50 - 150
Triadimefon	62.2		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	78.9		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	74.5		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	95.1		P	59 - 166

Reference Method: EPA 8270E
Batch ID: P440746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	73.2		P	30 - 96.0
Alpha-BHC	87.9		P	70 - 109
Alpha-Chlordane	71.7		P	45 - 107
Beta-BHC	90.1		P	64 - 138
Beta-Cyfluthrin	129		P	17 - 141
Bifenthrin	70.9		P	10 - 113
Chlorothalonil	80.8		P	26 - 180
Cis-Nonachlor	74.0		P	37 - 102
Cypermethrin	92.1		P	20 - 133
Dacthal	80.7		P	69 - 114
DDD-p,p'	71.0		P	42 - 105
DDE-p,p'	80.0		P	42 - 106
DDT-p,p'	89.2		P	42 - 107
Delta-BHC	95.8		P	67 - 144
Deltamethrin	116		P	15 - 149
Dichlobenil	69.1		P	46 - 117
Dicofol	65.0		P	34 - 114

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P440746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	80.6		P	50 - 108
Endosulfan I	79.4		P	55 - 104
Endosulfan II	97.9		P	51 - 111
Endosulfan Sulfate	71.2		P	56 - 121
Endrin	79.1		P	10 - 106
Endrin Aldehyde	86.8		P	34 - 114
Endrin Ketone	101		P	63 - 177
Esfenvalerate	99.2		P	29 - 143
Ethalfluralin	73.2		P	46 - 96.0
Fenpropathrin	77.7		P	28 - 115
Gamma-BHC	111		P	65 - 121
Gamma-Chlordane	92.2		P	39 - 103
Heptachlor	88.9		P	39 - 94.0
Heptachlor Epoxide	112		F	54 - 104
Hexachlorobenzene	48.7		P	36 - 100
Kepone	76.1		P	10 - 225
Lambda-Cyhalothrin	85.1		P	10 - 135
Methoprene	104		P	10 - 109
Methoxychlor	88.7		P	52 - 112
MGK-264	81.7		P	44 - 117
Mirex	66.8		P	20 - 90.0
Oxychlordane	83.1		P	44 - 102
PCB-1016	72.8		P	45 - 107
PCB-1260	90.1		P	40 - 118
Permethrin	81.6		P	18 - 135
Phenothrin	65.4		P	10 - 102
Piperonyl Butoxide	90.9		P	28 - 156
Prallethrin	69.3		P	28 - 113
Tau-Fluvalinate	84.3		P	10 - 123
Tetramethrin	109		P	18 - 158
Trans-Nonachlor	79.2		P	39 - 104
Triclosan Methyl	101		P	54 - 108
Trifluralin	75.0		P	46 - 97.0

Reference Method: EPA 8276
Batch ID: P440746

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	112		P	52 - 117
Toxaphene	113		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P440694

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	128		P	40 - 150
AMPA	115		P	40 - 160
Endothall	102		P	40 - 160
Glufosinate	96.6		P	40 - 160
Glyphosate	113		P	40 - 160
Sucralose	86.1		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P440702

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	98.9		P	40 - 150
2,4,5-T	104		P	40 - 150
Acetaminophen	85.8		P	30 - 150
Acetamiprid	75.8		P	40 - 150
Afidopyropen	59.5		P	30 - 150
Bentazon	79.7		P	30 - 150
Benzovindiflupyr	78.3		P	40 - 150
Carbamazepine	82.5		P	40 - 150
Clothianidin	88.8		P	40 - 150
Dinotefuran	95.7		P	40 - 150
Diuron	82.9		P	40 - 150
Fenuron	88.3		P	40 - 150
Fluridone	89.2		P	40 - 150
Hydrocodone	98.1		P	40 - 150
Ibuprofen	65.5		P	40 - 150
Imazapyr	86.5		P	40 - 150
Imidacloprid	84.2		P	40 - 150
Linuron	77.3		P	40 - 150
Mandestrobin	86.6		P	40 - 150
MCPP	94.4		P	40 - 150
Naproxen	73.5		P	40 - 150
Primidone	79.7		P	40 - 150
Pyraclostrobin	86.6		P	40 - 150
Silvex	92.4		P	40 - 150
Thiamethoxam	86.7		P	40 - 150
Tolfenpyrad	49.4		P	30 - 150
Triclopyr	105		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P440845

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	67.3		P	40 - 150
Aldicarb	59.9		P	30 - 150
Aldicarb Sulfone	95.0		P	40 - 150
Aldicarb Sulfoxide	107		P	40 - 150
Carbaryl	78.8		P	40 - 150
Carbofuran	72.9		P	40 - 150
Methiocarb	67.4		P	40 - 150
Methomyl	93.7		P	40 - 150
Oxamyl	86.7		P	40 - 150
Propoxur	66.1		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P440908

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.7		P	92 - 105

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: SM 2540 C-2015
Batch ID: P441271

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	103		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P441047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.8		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

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

Reference Method: SM 5310 B-2014
Batch ID: P440884

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

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464718	Calcium	109	108	P/P	80 - 120
2464718	Iron	98.9	100	P/P	80 - 120
2464718	Magnesium	104	106	P/P	80 - 120
2464718	Potassium	101	101	P/P	80 - 120
2464718	Sodium	106	105	P/P	80 - 120
2464718	Strontium	103	104	P/P	80 - 120
2464718	Tin	100	98.3	P/P	80 - 120
2464718	Titanium	99.6	98.4	P/P	80 - 120
2464718	Vanadium	101	99.5	P/P	80 - 120
2464718	Zinc	106	107	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440800

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464718	Aluminum	99.8	98.7	P/P	80 - 120
2464718	Antimony	100	98.1	P/P	80 - 120
2464718	Arsenic	97.4	96.2	P/P	80 - 120
2464718	Barium	101	98.0	P/P	80 - 120
2464718	Beryllium	94.9	88.8	P/P	80 - 120
2464718	Boron	104	102	P/P	80 - 120
2464718	Cadmium	100	98.1	P/P	80 - 120
2464718	Chromium	102	100	P/P	80 - 120
2464718	Cobalt	97.7	96.5	P/P	80 - 120
2464718	Copper	98.8	96.9	P/P	80 - 120
2464718	Lead	93.9	94.6	P/P	80 - 120
2464718	Molybdenum	96.7	95.7	P/P	80 - 120
2464718	Nickel	98.0	96.7	P/P	80 - 120
2464718	Selenium	98.7	97.6	P/P	80 - 120
2464718	Silver	97.5	97.3	P/P	80 - 120
2464718	Thallium	98.9	98.5	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441167

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2465249	Chloride	98.3		P	90 - 110
2465264	Chloride	99.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441172

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2465249	Sulfate	99.4		P	90 - 110
2465264	Sulfate	99.2		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441063

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464534	Ammonia-N	95.2	96.6	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440802

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464561	Kjeldahl Nitrogen	104	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464538	NO2NO3-N	97.5	97.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2466118	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440864

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464536	Total-P	108	106	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P440627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2465832	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	79.2	86.8	P/P	50 - 150
2465832	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.5	78.7	P/P	29 - 155
2465832	Acetochlor	75.3	99.6	P/P	60 - 124
2465832	Alachlor	76.8	83.9	P/P	54 - 122
2465832	Ametryn	88.6	107	P/P	51 - 208
2465832	Atrazine	72.5	73.1	P/P	57 - 131
2465832	Atrazine Desethyl	87.5	104	P/P	13 - 124
2465832	Avobenzone	105	106	P/P	35 - 187
2465832	Azinphos Methyl	167	169	P/P	43 - 276
2465832	Azoxystrobin	107	113	P/P	52 - 300
2465832	Bromacil	82.5	95.7	P/P	44 - 134
2465832	Butylate	32.7	61.3	P/P	23 - 82.0
2465832	Caffeine	150	201	P/P	10 - 277
2465832	Carbophenothion	102	104	P/P	47 - 135
2465832	Carfentrazone Ethyl	108	111	P/P	46 - 147
2465832	Chlorfenapyr	86.1	88.0	P/P	43 - 114
2465832	Chlorpyrifos Ethyl	80.7	97.8	P/P	47 - 124
2465832	Chlorpyrifos Methyl	95.4	107	P/P	60 - 135
2465832	Coumaphos	117	98.6	P/P	10 - 222
2465832	Cyanazine	107	112	P/P	10 - 257
2465832	Cyprodinil	89.9	93.1	P/P	42 - 148
2465832	Dechlorane 602	71.2	77.8	P/P	14 - 133
2465832	Dechlorane 603	77.4	72.6	P/P	18 - 191
2465832	Dechlorane Plus	68.7	69.9	P/P	23 - 154
2465832	Demeton	61.7	73.0	P/P	41 - 137
2465832	Diazinon	82.7	102	P/P	64 - 139
2465832	Difenoconazole	121	105	P/P	46 - 254
2465832	Dimethenamid	84.3	93.1	P/P	47 - 117

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P440627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2465832	Dimethomorph	135	164	P/P	14 - 255
2465832	Disulfoton	90.6	114	P/P	52 - 130
2465832	Dithiopyr	88.4	92.8	P/P	40 - 121
2465832	EPTC	30.2	61.7	P/P	19 - 78.0
2465832	Ethion	53.5	75.5	P/P	12 - 124
2465832	Ethoprop	74.6	87.4	P/P	68 - 144
2465832	Etridiazole	45.8	69.5	P/P	26 - 96.0
2465832	Fenamiphos	102	108	P/P	41 - 129
2465832	Fenbuconazole	88.5	84.0	P/P	26 - 169
2465832	Fipronil	81.5	88.1	P/P	46 - 145
2465832	Fipronil Desulfinyl	94.2	101	P/P	47 - 136
2465832	Fipronil Sulfide	74.8	84.5	P/P	41 - 127
2465832	Fipronil Sulfone	95.1	94.5	P/P	35 - 133
2465832	Fluazifop-P-butyl	97.5	99.5	P/P	46 - 131
2465832	Fludioxonil	92.4	98.3	P/P	51 - 124
2465832	Flumioxazin	146	140	P/P	10 - 289
2465832	Flutolanil	74.9	84.5	P/P	34 - 130
2465832	Fluxapyroxad	79.7	79.8	P/P	10 - 197
2465832	Fonofos	80.7	98.6	P/P	42 - 131
2465832	Hexabromobenzene	79.3	76.2	P/P	47 - 178
2465832	Hexazinone	72.2	83.0	P/P	64 - 125
2465832	Imazalil	82.8	95.0	P/P	37 - 252
2465832	Iprodione	90.9	94.5	P/P	34 - 265
2465832	Loratadine	133	138	P/P	20 - 231
2465832	Malathion	88.1	107	P/P	34 - 164
2465832	Metalaxyl	65.3	73.8	P/P	49 - 125
2465832	Metolachlor	83.1	93.6	P/P	54 - 125
2465832	Metribuzin	81.7	78.2	P/P	51 - 139
2465832	Mevinphos	92.4	119	P/P	46 - 130
2465832	Molinate	43.0	60.6	P/P	39 - 93.0
2465832	Myclobutanil	80.0	91.5	P/P	50 - 130
2465832	Naled	45.3	64.3	P/P	10 - 150
2465832	Napropamide	70.1	85.9	P/P	10 - 109
2465832	Norflurazon	87.4	93.1	P/P	36 - 134
2465832	Octinoxate	75.0	80.9	P/P	18 - 170
2465832	Oxadiazon	69.6	74.5	P/P	43 - 112
2465832	Oxybenzone	80.3	86.3	P/P	33 - 154
2465832	Oxyfluorfen	99.2	110	P/P	62 - 154
2465832	Parathion Ethyl	77.6	89.6	P/P	65 - 120
2465832	Parathion Methyl	99.4	113	P/P	77 - 185
2465832	PBB-153	79.7	76.9	P/P	23 - 193
2465832	PBDE-47	58.4	66.7	P/P	31 - 139
2465832	PBDE-99	76.8	76.9	P/P	24 - 138
2465832	Pendimethalin	127	136	P/P	50 - 146
2465832	Pentabromotoluene	79.7	86.6	P/P	54 - 152
2465832	Phenytoin	52.4	66.7	P/P	10 - 157
2465832	Phorate	78.1	96.8	P/P	54 - 161
2465832	Prodiamine	60.6	57.8	P/P	29 - 160
2465832	Prometon	87.0	102	P/P	38 - 145
2465832	Prometryn	86.7	92.8	P/P	32 - 151
2465832	Pronamide	89.9	111	P/P	61 - 140
2465832	Propanil	144	132	P/P	50 - 147

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P440627

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2465832	Propargite	40.7	47.0	P/P	10 - 190
2465832	Propiconazole	76.2	67.6	P/P	30 - 146
2465832	Pyraflufen Ethyl	92.9	78.4	P/P	30 - 147
2465832	Pyridaben	116	111	P/P	15 - 195
2465832	Pyriproxyfen	83.7	89.9	P/P	31 - 218
2465832	Simazine	82.4	88.3	P/P	45 - 139
2465832	Stirophos	72.6	83.7	P/P	10 - 134
2465832	Sulfentrazone	94.3	97.6	P/P	53 - 186
2465832	Tebuconazole	52.5	56.9	P/P	10 - 133
2465832	Terbufos	80.3	96.5	P/P	65 - 151
2465832	Terbuthylazine	73.4	84.9	P/P	62 - 117
2465832	Tetradecachloro-m-terphenyl	96.7	119	P/P	10 - 260
2465832	Thiobencarb	90.2	95.0	P/P	48 - 122
2465832	Tri-o-cresyl Phosphate	84.6	88.4	P/P	32 - 151
2465832	Triadimefon	71.9	90.4	P/P	46 - 124
2465832	Tris(1-chloro-2-propyl) phosphate (TCPP)	116	113	P/P	51 - 154
2465832	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	99.7	102	P/P	59 - 147
2465832	Tris(2-chloroethyl) phosphate (TCEP)	120	127	P/P	65 - 156

Reference Method: EPA 8270E
Batch ID: P440746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464603	PCB-1016	74.9	64.7	P/P	45 - 107
2464603	PCB-1260	93.7	84.8	P/P	40 - 112
2464765	Aldrin	61.8	79.5	P/P	24 - 81.0
2464765	Alpha-BHC	81.0	96.0	P/P	65 - 110
2464765	Alpha-Chlordane	57.4	76.4	P/P	43 - 119
2464765	Beta-BHC	75.9	84.9	P/P	54 - 165
2464765	Beta-Cyfluthrin	103	114	P/P	27 - 165
2464765	Bifenthrin	63.7	76.8	P/P	17 - 117
2464765	Chlorothalonil	69.2	94.0	P/P	10 - 255
2464765	Cis-Nonachlor	47.5	73.4	P/P	34 - 98.0
2464765	Cypermethrin	79.5	88.6	P/P	25 - 143
2464765	Dacthal	76.7	83.9	P/P	55 - 139
2464765	DDD-p,p'	67.7	77.0	P/P	30 - 109
2464765	DDE-p,p'	70.5	84.0	P/P	35 - 106
2464765	DDT-p,p'	67.7	81.9	P/P	41 - 101
2464765	Delta-BHC	83.7	101	P/P	58 - 165
2464765	Deltamethrin	93.6	116	P/P	10 - 194
2464765	Dichlobenil	65.2	68.3	P/P	22 - 114
2464765	Dicofol	56.7	65.8	P/P	17 - 133
2464765	Dieldrin	59.2	72.7	P/P	45 - 129
2464765	Endosulfan I	71.1	80.5	P/P	49 - 104
2464765	Endosulfan II	101	105	P/P	37 - 117
2464765	Endosulfan Sulfate	62.3	70.7	P/P	38 - 128
2464765	Endrin	62.2	61.6	P/P	35 - 116
2464765	Endrin Aldehyde	42.1	40.2	P/P	19 - 108
2464765	Endrin Ketone	131	114	P/P	44 - 134
2464765	Esfenvalerate	77.0	102	P/P	27 - 176
2464765	Ethalfluralin	71.0	78.7	P/P	49 - 100
2464765	Fenpropathrin	64.6	78.1	P/P	34 - 117

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P440746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464765	Gamma-BHC	112	126	P/P	59 - 129
2464765	Gamma-Chlordane	68.8	81.6	P/P	33 - 107
2464765	Heptachlor	63.5	88.0	P/P	37 - 94.0
2464765	Heptachlor Epoxide	94.4	105	P/P	38 - 118
2464765	Hexachlorobenzene	40.5	54.1	P/P	35 - 97.0
2464765	Kepone	76.9	96.8	P/P	10 - 221
2464765	Lambda-Cyhalothrin	64.0	69.9	P/P	23 - 190
2464765	Methoprene	87.9	99.2	P/P	21 - 109
2464765	Methoxychlor	75.9	91.3	P/P	46 - 118
2464765	MGK-264	80.2	94.5	P/P	39 - 122
2464765	Mirex	50.1	36.1	P/P	25 - 90.0
2464765	Oxychlordane	74.9	99.2	P/P	42 - 100
2464765	Permethrin	69.8	89.8	P/P	33 - 181
2464765	Phenothrin	55.8	67.7	P/P	12 - 125
2464765	Piperonyl Butoxide	94.4	81.2	P/P	10 - 178
2464765	Prallethrin	68.3	72.4	P/P	24 - 122
2464765	Tau-Fluvalinate	63.0	78.3	P/P	13 - 151
2464765	Tetramethrin	97.4	114	P/P	16 - 172
2464765	Trans-Nonachlor	84.1	78.5	P/P	39 - 100
2464765	Triclosan Methyl	93.1	90.9	P/P	43 - 110
2464765	Trifluralin	68.9	82.1	P/P	45 - 94.0

Reference Method: EPA 8276
Batch ID: P440746

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464603	Chlordane	123	119	P/P	43 - 123
2464603	Toxaphene	142	136	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P440694

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464600	Acesulfame K	136	136	P/P	40 - 150
2464600	AMPA	119	116	P/P	40 - 160
2464600	Endothall	105	114	P/P	40 - 160
2464600	Glufosinate	99.7	97.1	P/P	40 - 160
2464600	Glyphosate	112	111	P/P	40 - 160
2464600	Sucralose	87.2	85.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P440702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464575	2,4-D	85.8	84.2	P/P	40 - 150
2464575	2,4,5-T	93.8	97.7	P/P	40 - 150
2464575	Acetaminophen	107	106	P/P	30 - 150
2464575	Acetamiprid	93.8	79.9	P/P	40 - 150
2464575	Afidopyropen	102	88.7	P/P	30 - 150
2464575	Bentazon	41.3	41.4	P/P	30 - 150
2464575	Benzovindiflupyr	101	96.1	P/P	40 - 150
2464575	Carbamazepine	80.2	82.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P440702

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464575	Clothianidin	106	105	P/P	40 - 150
2464575	Dinotefuran	111	111	P/P	40 - 150
2464575	Diuron	83.4	82.1	P/P	40 - 150
2464575	Fenuron	77.4	75.0	P/P	40 - 150
2464575	Fluridone	87.3	91.9	P/P	40 - 150
2464575	Hydrocodone	98.2	94.3	P/P	40 - 150
2464575	Ibuprofen	64.0	88.7	P/P	40 - 150
2464575	Imazapyr	112	111	P/P	40 - 150
2464575	Imidacloprid	129	127	P/P	40 - 150
2464575	Linuron	81.3	81.1	P/P	40 - 150
2464575	Mandestrobin	103	105	P/P	40 - 150
2464575	MCPP	107	101	P/P	40 - 150
2464575	Naproxen	87.1	94.7	P/P	40 - 150
2464575	Primidone	104	98.6	P/P	40 - 150
2464575	Pyraclostrobin	99.5	98.7	P/P	40 - 150
2464575	Silvex	93.1	92.8	P/P	40 - 150
2464575	Thiamethoxam	110	107	P/P	40 - 150
2464575	Tolfenpyrad	64.3	60.6	P/P	30 - 150
2464575	Triclopyr	92.4	95.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P440845

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464571	3-Hydroxycarbofuran	48.1	45.5	P/P	40 - 150
2464571	Aldicarb	47.7	43.7	P/P	30 - 150
2464571	Aldicarb Sulfone	71.7	76.3	P/P	40 - 150
2464571	Aldicarb Sulfoxide	24.6	22.6	F/F	40 - 150
2464571	Carbaryl	59.1	61.0	P/P	40 - 150
2464571	Carbofuran	52.2	51.2	P/P	40 - 150
2464571	Methiocarb	57.8	58.5	P/P	40 - 150
2464571	Methomyl	62.8	64.0	P/P	40 - 150
2464571	Oxamyl	62.7	64.8	P/P	40 - 150
2464571	Propoxur	49.5	51.0	P/P	40 - 150

Reference Method: SM 5310 B-2014
Batch ID: P440884

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2464522	Organic Carbon	100	101	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P440734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464537	Color (true)	4.47	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P440730

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464527	Turbidity	8.83	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P440800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464718	Calcium	0.638	Spike	P	0 - 20
2464718	Iron	1.05	Spike	P	0 - 20
2464718	Magnesium	0.880	Spike	P	0 - 20
2464718	Potassium	0.135	Spike	P	0 - 20
2464718	Sodium	0.637	Spike	P	0 - 20
2464718	Strontium	1.23	Spike	P	0 - 20
2464718	Tin	2.07	Spike	P	0 - 20
2464718	Titanium	1.25	Spike	P	0 - 20
2464718	Vanadium	1.04	Spike	P	0 - 20
2464718	Zinc	1.18	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P440800

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464718	Aluminum	0.764	Spike	P	0 - 20
2464718	Antimony	2.02	Spike	P	0 - 20
2464718	Arsenic	1.23	Spike	P	0 - 20
2464718	Barium	2.19	Spike	P	0 - 20
2464718	Beryllium	6.13	Spike	P	0 - 20
2464718	Boron	1.38	Spike	P	0 - 20
2464718	Cadmium	2.05	Spike	P	0 - 20
2464718	Chromium	1.14	Spike	P	0 - 20
2464718	Cobalt	1.18	Spike	P	0 - 20
2464718	Copper	1.95	Spike	P	0 - 20
2464718	Lead	0.800	Spike	P	0 - 20
2464718	Manganese	2.06	Spike	P	0 - 20
2464718	Molybdenum	1.06	Spike	P	0 - 20
2464718	Nickel	1.34	Spike	P	0 - 20
2464718	Selenium	1.11	Spike	P	0 - 20
2464718	Silver	0.206	Spike	P	0 - 20
2464718	Thallium	0.476	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441167

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2465249	Chloride	0.833	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P441172

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2465249	Sulfate	0.287	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P441063

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464534	Ammonia-N	0.773	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P440802

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464561	Kjeldahl Nitrogen	2.22	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P440948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464538	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P441187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2466118	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P440864

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464536	Total-P	1.46	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P440627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2465832	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	9.13	Spike	P	0 - 30
2465832	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	4.61	Spike	P	0 - 35

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P440627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2465832	Acetochlor	27.8	Spike	P	0 - 28
2465832	Alachlor	8.85	Spike	P	0 - 30
2465832	Ametryn	18.9	Spike	P	0 - 32
2465832	Atrazine	0.783	Spike	P	0 - 33
2465832	Atrazine Desethyl	16.8	Spike	P	0 - 36
2465832	Avobenzone	1.40	Spike	P	0 - 35
2465832	Azinphos Methyl	1.07	Spike	P	0 - 62
2465832	Azoxystrobin	5.52	Spike	P	0 - 39
2465832	Bromacil	14.8	Spike	P	0 - 33
2465832	Butylate	60.7	Spike	F	0 - 51
2465832	Caffeine	28.9	Spike	P	0 - 100
2465832	Carbophenothion	1.64	Spike	P	0 - 34
2465832	Carfentrazone Ethyl	2.61	Spike	P	0 - 33
2465832	Chlorfenapyr	2.21	Spike	P	0 - 28
2465832	Chlorpyrifos Ethyl	19.1	Spike	P	0 - 31
2465832	Chlorpyrifos Methyl	11.9	Spike	P	0 - 27
2465832	Coumaphos	17.0	Spike	P	0 - 62
2465832	Cyanazine	4.77	Spike	P	0 - 48
2465832	Cyprodinil	3.48	Spike	P	0 - 29
2465832	Dechlorane 602	8.82	Spike	P	0 - 60
2465832	Dechlorane 603	6.38	Spike	P	0 - 40
2465832	Dechlorane Plus	1.66	Spike	P	0 - 38
2465832	Demeton	16.8	Spike	P	0 - 33
2465832	Diazinon	21.0	Spike	P	0 - 32
2465832	Difenoconazole	14.0	Spike	P	0 - 71
2465832	Dimethenamid	9.94	Spike	P	0 - 60
2465832	Dimethomorph	19.5	Spike	P	0 - 61
2465832	Disulfoton	22.8	Spike	P	0 - 30
2465832	Dithiopyr	4.84	Spike	P	0 - 28
2465832	EPTC	68.5	Spike	F	0 - 56
2465832	Ethion	34.1	Spike	P	0 - 79
2465832	Ethoprop	15.8	Spike	P	0 - 31
2465832	Etridiazole	41.1	Spike	P	0 - 43
2465832	Fenamiphos	5.37	Spike	P	0 - 43
2465832	Fenbuconazole	5.27	Spike	P	0 - 79
2465832	Fipronil	7.71	Spike	P	0 - 46
2465832	Fipronil Desulfinyl	7.15	Spike	P	0 - 36
2465832	Fipronil Sulfide	12.2	Spike	P	0 - 34
2465832	Fipronil Sulfone	0.661	Spike	P	0 - 47
2465832	Fluazifop-P-butyl	2.06	Spike	P	0 - 38
2465832	Fludioxonil	6.13	Spike	P	0 - 29
2465832	Flumioxazin	4.21	Spike	P	0 - 63
2465832	Flutolanil	12.0	Spike	P	0 - 36
2465832	Fluxapyroxad	0.120	Spike	P	0 - 65
2465832	Fonofos	19.9	Spike	P	0 - 35
2465832	Hexabromobenzene	3.98	Spike	P	0 - 41
2465832	Hexazinone	14.0	Spike	P	0 - 31
2465832	Imazalil	13.8	Spike	P	0 - 52
2465832	Iprodione	3.87	Spike	P	0 - 49
2465832	Loratadine	3.44	Spike	P	0 - 59
2465832	Malathion	19.1	Spike	P	0 - 77

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P440627

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2465832	Metalaxyl	12.2	Spike	P	0 - 76
2465832	Metolachlor	11.9	Spike	P	0 - 29
2465832	Metribuzin	4.33	Spike	P	0 - 51
2465832	Mevinphos	25.2	Spike	P	0 - 31
2465832	Molinate	34.1	Spike	P	0 - 39
2465832	Myclobutanil	13.4	Spike	P	0 - 34
2465832	Naled	34.7	Spike	P	0 - 37
2465832	Napropamide	20.3	Spike	P	0 - 100
2465832	Norflurazon	6.35	Spike	P	0 - 54
2465832	Octinoxate	7.61	Spike	P	0 - 35
2465832	Oxadiazon	6.82	Spike	P	0 - 34
2465832	Oxybenzone	7.20	Spike	P	0 - 35
2465832	Oxyfluorfen	10.3	Spike	P	0 - 28
2465832	Parathion Ethyl	14.4	Spike	P	0 - 31
2465832	Parathion Methyl	12.4	Spike	P	0 - 29
2465832	PBB-153	3.65	Spike	P	0 - 49
2465832	PBDE-47	13.2	Spike	P	0 - 36
2465832	PBDE-99	0.114	Spike	P	0 - 46
2465832	Pendimethalin	7.32	Spike	P	0 - 31
2465832	Pentabromotoluene	8.30	Spike	P	0 - 16
2465832	Phenytoin	24.0	Spike	P	0 - 100
2465832	Phorate	21.3	Spike	P	0 - 36
2465832	Prodiamine	4.68	Spike	P	0 - 68
2465832	Prometon	16.0	Spike	P	0 - 35
2465832	Prometryn	6.85	Spike	P	0 - 33
2465832	Pronamide	20.9	Spike	P	0 - 24
2465832	Propanil	8.19	Spike	P	0 - 28
2465832	Propargite	14.4	Spike	P	0 - 53
2465832	Propiconazole	12.0	Spike	P	0 - 44
2465832	Pyraflufen Ethyl	16.9	Spike	P	0 - 61
2465832	Pyridaben	4.29	Spike	P	0 - 43
2465832	Pyriproxyfen	7.15	Spike	P	0 - 82
2465832	Simazine	6.96	Spike	P	0 - 29
2465832	Stirophos	14.2	Spike	P	0 - 100
2465832	Sulfentrazone	3.44	Spike	P	0 - 64
2465832	Tebuconazole	8.05	Spike	P	0 - 76
2465832	Terbufos	18.3	Spike	P	0 - 29
2465832	Terbuthylazine	14.6	Spike	P	0 - 28
2465832	Tetradecachloro-m-terphenyl	21.0	Spike	P	0 - 42
2465832	Thiobencarb	5.12	Spike	P	0 - 26
2465832	Tri-o-cresyl Phosphate	4.48	Spike	P	0 - 24
2465832	Triadimefon	22.8	Spike	P	0 - 40
2465832	Tris(1-chloro-2-propyl) phosphate (TCPP)	2.71	Spike	P	0 - 30
2465832	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.29	Spike	P	0 - 22
2465832	Tris(2-chloroethyl) phosphate (TCEP)	5.92	Spike	P	0 - 15

Reference Method: EPA 8270E
Batch ID: P440746

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

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P440746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464603	PCB-1016	14.7	Spike	P	0 - 25
2464603	PCB-1260	9.94	Spike	P	0 - 30
2464765	Aldrin	25.0	Spike	P	0 - 41
2464765	Alpha-BHC	17.0	Spike	P	0 - 25
2464765	Alpha-Chlordane	15.8	Spike	P	0 - 32
2464765	Beta-BHC	11.3	Spike	P	0 - 33
2464765	Beta-Cyfluthrin	10.2	Spike	P	0 - 43
2464765	Bifenthrin	18.6	Spike	P	0 - 52
2464765	Chlorothalonil	30.4	Spike	P	0 - 82
2464765	Cis-Nonachlor	42.8	Spike	F	0 - 33
2464765	Cypermethrin	10.9	Spike	P	0 - 51
2464765	Dacthal	8.99	Spike	P	0 - 27
2464765	DDD-p,p'	12.8	Spike	P	0 - 39
2464765	DDE-p,p'	17.6	Spike	P	0 - 31
2464765	DDT-p,p'	15.2	Spike	P	0 - 29
2464765	Delta-BHC	19.0	Spike	P	0 - 35
2464765	Deltamethrin	21.3	Spike	P	0 - 100
2464765	Dichlobenil	4.67	Spike	P	0 - 40
2464765	Dicofol	14.8	Spike	P	0 - 37
2464765	Dieldrin	15.3	Spike	P	0 - 27
2464765	Endosulfan I	12.5	Spike	P	0 - 23
2464765	Endosulfan II	4.33	Spike	P	0 - 34
2464765	Endosulfan Sulfate	12.6	Spike	P	0 - 36
2464765	Endrin	0.856	Spike	P	0 - 45
2464765	Endrin Aldehyde	4.65	Spike	P	0 - 76
2464765	Endrin Ketone	13.5	Spike	P	0 - 43
2464765	Esfenvalerate	27.6	Spike	P	0 - 51
2464765	Ethalfluralin	10.4	Spike	P	0 - 22
2464765	Fenpropathrin	19.0	Spike	P	0 - 49
2464765	Gamma-BHC	12.0	Spike	P	0 - 28
2464765	Gamma-Chlordane	11.5	Spike	P	0 - 40
2464765	Heptachlor	32.4	Spike	F	0 - 29
2464765	Heptachlor Epoxide	8.38	Spike	P	0 - 33
2464765	Hexachlorobenzene	28.8	Spike	P	0 - 36
2464765	Kepone	22.9	Spike	P	0 - 85
2464765	Lambda-Cyhalothrin	8.80	Spike	P	0 - 55
2464765	Methoprene	12.0	Spike	P	0 - 53
2464765	Methoxychlor	18.5	Spike	P	0 - 50
2464765	MGK-264	16.3	Spike	P	0 - 43
2464765	Mirex	32.6	Spike	P	0 - 40
2464765	Oxychlordane	27.9	Spike	P	0 - 31
2464765	Permethrin	25.1	Spike	P	0 - 50
2464765	Phenothrin	19.3	Spike	P	0 - 58
2464765	Piperonyl Butoxide	13.7	Spike	P	0 - 100
2464765	Prallethrin	5.89	Spike	P	0 - 39
2464765	Tau-Fluvalinate	21.6	Spike	P	0 - 54
2464765	Tetramethrin	15.7	Spike	P	0 - 51
2464765	Trans-Nonachlor	5.07	Spike	P	0 - 39
2464765	Triclosan Methyl	2.39	Spike	P	0 - 31
2464765	Trifluralin	17.4	Spike	P	0 - 22

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P440746

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464603	Chlordane	2.81	Spike	P	0 - 28
2464603	Toxaphene	3.92	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P440694

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464600	Acesulfame K	0.154	Spike	P	0 - 30
2464600	AMPA	2.26	Spike	P	0 - 30
2464600	Endothall	7.90	Spike	P	0 - 30
2464600	Glufosinate	2.62	Spike	P	0 - 30
2464600	Glyphosate	0.548	Spike	P	0 - 30
2464600	Sucralose	2.41	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P440702

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464575	2,4-D	1.67	Spike	P	0 - 30
2464575	2,4,5-T	4.05	Spike	P	0 - 30
2464575	Acetaminophen	1.23	Spike	P	0 - 30
2464575	Acetamiprid	16.0	Spike	P	0 - 30
2464575	Afidopyropen	14.2	Spike	P	0 - 30
2464575	Bentazon	0.245	Spike	P	0 - 30
2464575	Benzovindiflupyr	4.67	Spike	P	0 - 30
2464575	Carbamazepine	2.24	Spike	P	0 - 30
2464575	Clothianidin	0.784	Spike	P	0 - 30
2464575	Dinotefuran	0.0879	Spike	P	0 - 30
2464575	Diuron	1.52	Spike	P	0 - 30
2464575	Fenuron	3.14	Spike	P	0 - 30
2464575	Fluridone	5.18	Spike	P	0 - 30
2464575	Hydrocodone	4.07	Spike	P	0 - 30
2464575	Ibuprofen	32.4	Spike	F	0 - 30
2464575	Imazapyr	0.353	Spike	P	0 - 30
2464575	Imidacloprid	1.59	Spike	P	0 - 30
2464575	Linuron	0.176	Spike	P	0 - 30
2464575	Mandestrobin	1.70	Spike	P	0 - 30
2464575	MCPP	5.94	Spike	P	0 - 30
2464575	Naproxen	8.44	Spike	P	0 - 30
2464575	Primidone	5.29	Spike	P	0 - 30
2464575	Pyraclostrobin	0.864	Spike	P	0 - 30
2464575	Silvex	0.284	Spike	P	0 - 30
2464575	Thiamethoxam	3.10	Spike	P	0 - 30
2464575	Tolfenpyrad	5.91	Spike	P	0 - 30
2464575	Triclopyr	3.28	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P440845

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464571	3-Hydroxycarbofuran	5.51	Spike	P	0 - 30
2464571	Aldicarb	8.69	Spike	P	0 - 30
2464571	Aldicarb Sulfone	6.23	Spike	P	0 - 30
2464571	Aldicarb Sulfoxide	8.50	Spike	P	0 - 30
2464571	Carbaryl	3.13	Spike	P	0 - 30
2464571	Carbofuran	1.79	Spike	P	0 - 30
2464571	Methiocarb	1.27	Spike	P	0 - 30
2464571	Methomyl	1.85	Spike	P	0 - 30
2464571	Oxamyl	3.30	Spike	P	0 - 30
2464571	Propoxur	3.07	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P440908

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Total Alkalinity	0.759	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P441271

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	TDS	2.57	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P440911

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464664	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2014
Batch ID: P440884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2464522	Organic Carbon	0.147	Spike	P	0 - 15

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2464598
Field Sample ID: 21020018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	62.6	P	30 - 160

Lab Sample ID: 2464600
Field Sample ID: 21020018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.5	P	30 - 160
EPA 8321B	Acetaminophen-d4	95.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.0	P	30 - 160
EPA 8321B	Diuron-d6	72.2	P	30 - 160
EPA 8321B	Endothall-d6	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	109	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.0	P	30 - 160
EPA 8321B	Primidone-d5	87.3	P	30 - 160
EPA 8321B	Sucralose-d6	88.2	P	30 - 160

Lab Sample ID: 2464602
Field Sample ID: 21010033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	72.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	84.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	65.7	P	30 - 160
EPA 8321B	Diuron-d6	54.8	P	30 - 160
EPA 8321B	Endothall-d6	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	30 - 160
EPA 8321B	Ibuprofen-d3	82.8	P	30 - 160
EPA 8321B	Primidone-d5	72.5	P	30 - 160
EPA 8321B	Sucralose-d6	84.4	P	30 - 160

Lab Sample ID: 2464603
Field Sample ID: 21020018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	113	P	37 - 129
EPA 8270E	Decachlorobiphenyl	126	F	26 - 115
EPA 8270E	Tetrachloro-m-xylene	46.1	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	58.2	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	123	F	23 - 110
EPA 8276	PCNB	112	P	51 - 130

Lab Sample ID: 2464605
Field Sample ID: 21020018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	83.3	P	20 - 200
EPA 8270E	Simazine-d10	91.8	P	58 - 137
EPA 8270E	Terbufos-d10	73.8	P	50 - 134
EPA 8270E	Terphenyl-d14	72.3	P	44 - 134

Quality Assurance Report
Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A123922
Included Lab Sample IDs: 2464559, 2464560

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	99.0	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A123923
Included Lab Sample IDs: 2464559, 2464560

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

Reference Method: EPA 8321B
Run ID: A123935
Included Lab Sample IDs: 2464600, 2464602

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	133	142	P/P	60 - 160
Acesulfame K	142	139	P/P	60 - 160
Sucralose	86.7	88.5	P/P	60 - 160
Sucralose	88.5	87.8	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A123959
Included Lab Sample IDs: 2464600, 2464602

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	85.1	83.7	P/P	60 - 160
Endothall	80.7	75.7	P/P	60 - 160
Glufosinate	63.1	80.4	P/P	60 - 160
Glyphosate	82.5	87.6	P/P	60 - 160

Reference Method: SM 5310 B-2014
Run ID: A123981
Included Lab Sample IDs: 2464561, 2464562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	102	96.5	P/P	70 - 130

Reference Method: SM 2320 B-2011
Run ID: A123986
Included Lab Sample IDs: 2464559, 2464560

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.0	97.5	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A123986
Included Lab Sample IDs: 2464559, 2464560

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

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A123987
Included Lab Sample IDs: 2464600, 2464602

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	120	105	P/P	50 - 150
2,4,5-T	110	113	P/P	50 - 150
Acetaminophen	109	110	P/P	60 - 160
Acetamiprid	113	111	P/P	50 - 150
Afidopyropen	92.0	88.5	P/P	50 - 150
Bentazon	102	99.3	P/P	50 - 160
Benzovindiflupyr	109	106	P/P	50 - 150
Carbamazepine	111	110	P/P	60 - 150
Clothianidin	106	110	P/P	60 - 150
Dinotefuran	108	111	P/P	50 - 150
Diuron	113	115	P/P	60 - 160
Fenuron	106	106	P/P	60 - 150
Fluridone	116	109	P/P	60 - 160
Hydrocodone	117	118	P/P	60 - 150
Ibuprofen	97.3	85.1	P/P	50 - 160
Imazapyr	94.8	91.3	P/P	50 - 150
Imidacloprid	102	102	P/P	60 - 150
Linuron	117	105	P/P	60 - 150
Mandestrobin	108	107	P/P	50 - 150
MCPP	113	103	P/P	50 - 150
Naproxen	73.6	70.0	P/P	50 - 160
Primidone	97.3	100	P/P	60 - 150
Pyraclostrobin	106	107	P/P	60 - 150
Silvex	115	108	P/P	50 - 150
Thiamethoxam	108	108	P/P	50 - 150
Tolfenpyrad	101	96.6	P/P	60 - 150
Triclopyr	118	115	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A123990
Included Lab Sample IDs: 2464607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	97.4	P/P	90 - 110
Antimony	101	97.2	P/P	90 - 110
Arsenic	96.3	94.2	P/P	90 - 110
Barium	100	97.5	P/P	90 - 110
Beryllium	98.6	94.2	P/P	90 - 110
Boron	99.1	98.8	P/P	90 - 110
Cadmium	98.3	96.4	P/P	90 - 110
Chromium	97.4	95.2	P/P	90 - 110
Cobalt	95.0	92.7	P/P	90 - 110
Copper	94.4	91.9	P/P	90 - 110
Manganese	98.6	96.4	P/P	90 - 110
Molybdenum	97.4	95.5	P/P	90 - 110
Nickel	95.2	92.1	P/P	90 - 110
Selenium	98.2	97.4	P/P	90 - 110
Silver	97.8	96.8	P/P	90 - 110
Thallium	97.9	96.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A123996
Included Lab Sample IDs: 2464561, 2464562

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

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124002
Included Lab Sample IDs: 2464561

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A124008
Included Lab Sample IDs: 2464607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	94.1	93.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A124015
Included Lab Sample IDs: 2464561, 2464562

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

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A124027
Included Lab Sample IDs: 2464559, 2464560

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	99.9	P/P	90 - 110
Sulfate	101	100	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A124036
Included Lab Sample IDs: 2464598

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	94.5	93.3	P/P	60 - 150
Aldicarb	111	96.7	P/P	60 - 150
Aldicarb Sulfone	105	104	P/P	50 - 150
Aldicarb Sulfoxide	98.4	102	P/P	50 - 150
Carbaryl	93.6	113	P/P	60 - 150
Carbofuran	104	107	P/P	50 - 150
Methiocarb	107	97.6	P/P	50 - 150
Methomyl	106	108	P/P	50 - 150
Oxamyl	96.7	103	P/P	50 - 150
Propoxur	95.8	99.3	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A124042
Included Lab Sample IDs: 2464561, 2464562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.9	97.3	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A124057
Included Lab Sample IDs: 2464605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	99.3		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.8		P	80 - 120
Avobenzone	95.3		P	80 - 120
Dechlorane 602	95.9		P	80 - 120
Dechlorane 603	93.8		P	80 - 120
Dechlorane Plus	90.0		P	80 - 120
Hexabromobenzene	91.8		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	96.0		P	80 - 120
PBB-153	92.3		P	80 - 120
PBDE-47	90.6		P	80 - 120
PBDE-99	94.8		P	80 - 120
Pentabromotoluene	96.2		P	80 - 120
Tetradecachloro-m-terphenyl	114		P	80 - 120
Tri-o-cresyl Phosphate	97.2		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	98.4		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	94.7		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	101		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A124079
Included Lab Sample IDs: 2464562

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 8276
Run ID: A124108
Included Lab Sample IDs: 2464603

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

Reference Method: EPA 8270E
Run ID: A124109
Included Lab Sample IDs: 2464605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.6		P	80 - 120
Alachlor	87.6		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	87.1		P	80 - 120
Atrazine Desethyl	101		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A124109
Included Lab Sample IDs: 2464605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	97.2		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	96.4		P	80 - 120
Caffeine	104		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	115		P	80 - 120
Chlorfenapyr	87.1		P	80 - 120
Chlorpyrifos Ethyl	88.1		P	80 - 120
Chlorpyrifos Methyl	94.3		P	80 - 120
Coumaphos	93.8		P	80 - 120
Cyanazine	97.7		P	80 - 120
Cyprodinil	104		P	80 - 120
Demeton	96.8		P	80 - 120
Diazinon	96.0		P	80 - 120
Difenoconazole	99.3		P	80 - 120
Dimethenamid	94.2		P	80 - 120
Dimethomorph	106		P	80 - 120
Disulfoton	98.0		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.9		P	80 - 120
Ethion	80.0		P	80 - 120
Ethoprop	98.1		P	80 - 120
Etridiazole	108		P	80 - 120
Fenamiphos	89.5		P	80 - 120
Fenbuconazole	98.2		P	80 - 120
Fipronil	99.4		P	80 - 120
Fipronil Desulfinyl	108		P	80 - 120
Fipronil Sulfide	108		P	80 - 120
Fipronil Sulfone	116		P	80 - 120
Fluazifop-P-butyl	112		P	80 - 120
Fludioxonil	99.4		P	80 - 120
Flumioxazin	100		P	80 - 120
Flutolanil	99.9		P	80 - 120
Fluxapyroxad	104		P	80 - 120
Fonofos	90.8		P	80 - 120
Hexazinone	97.5		P	80 - 120
Imazalil	99.0		P	80 - 120
Iprodione	107		P	80 - 120
Loratadine	94.5		P	80 - 120
Malathion	81.3		P	80 - 120
Metalaxyl	93.3		P	80 - 120
Metolachlor	95.9		P	80 - 120
Metribuzin	93.4		P	80 - 120
Mevinphos	97.7		P	80 - 120
Molinate	92.4		P	80 - 120
Myclobutanil	94.9		P	80 - 120
Naled	103		P	80 - 120
Napropamide	105		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	99.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A124109
Included Lab Sample IDs: 2464605

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Oxyfluorfen	95.2		P	80 - 120
Parathion Ethyl	95.9		P	80 - 120
Parathion Methyl	83.7		P	80 - 120
Pendimethalin	93.6		P	80 - 120
Phenytoin	100		P	80 - 120
Phorate	97.9		P	80 - 120
Prodiamine	87.2		P	80 - 120
Prometon	97.8		P	80 - 120
Prometryn	87.5		P	80 - 120
Pronamide	95.1		P	80 - 120
Propanil	109		P	80 - 120
Propargite	93.9		P	80 - 120
Propiconazole	86.2		P	80 - 120
Pyraflufen Ethyl	101		P	80 - 120
Pyridaben	104		P	80 - 120
Pyriproxyfen	104		P	80 - 120
Simazine	91.3		P	80 - 120
Stirophos	82.8		P	80 - 120
Sulfentrazone	103		P	80 - 120
Tebuconazole	98.6		P	80 - 120
Terbufos	91.8		P	80 - 120
Terbuthylazine	92.8		P	80 - 120
Thiobencarb	106		P	80 - 120
Triadimefon	107		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A124111
Included Lab Sample IDs: 2464607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	107	106	P/P	90 - 110
Iron	99.6	99.2	P/P	90 - 110
Magnesium	102	102	P/P	90 - 110
Tin	105	104	P/P	90 - 110
Titanium	102	101	P/P	90 - 110
Vanadium	101	100	P/P	90 - 110

Reference Method: EPA 8270E
Run ID: A124125
Included Lab Sample IDs: 2464603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	90.0		P	80 - 120
PCB-1260	99.5		P	80 - 120

Reference Method: EPA 8270E
Run ID: A124187
Included Lab Sample IDs: 2464603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	105		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A124187
Included Lab Sample IDs: 2464603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	94.8		P	80 - 120
Beta-BHC	92.5		P	80 - 120
Beta-Cyfluthrin	108		P	80 - 120
Bifenthrin	93.6		P	80 - 120
Chlorothalonil	108		P	80 - 120
Cis-Nonachlor	131*		F	80 - 120
Cypermethrin	91.8		P	80 - 120
Dacthal	89.5		P	80 - 120
DDD-p,p'	98.6		P	80 - 120
DDE-p,p'	94.2		P	80 - 120
Delta-BHC	98.4		P	80 - 120
Deltamethrin	97.6		P	80 - 120
Dichlobenil	101		P	80 - 120
Dicofol	94.1		P	80 - 120
Dieldrin	92.1		P	80 - 120
Endosulfan I	95.4		P	80 - 120
Endosulfan II	109		P	80 - 120
Endosulfan Sulfate	92.7		P	80 - 120
Endrin	108		P	80 - 120
Endrin Aldehyde	129*		F	80 - 120
Endrin Ketone	131*		F	80 - 120
Esfenvalerate	95.7		P	80 - 120
Ethalfluralin	97.3		P	80 - 120
Fenpropathrin	87.4		P	80 - 120
Gamma-BHC	110		P	80 - 120
Gamma-Chlordane	94.4		P	80 - 120
Heptachlor	108		P	80 - 120
Heptachlor Epoxide	118		P	80 - 120
Hexachlorobenzene	92.8		P	80 - 120
Kepone	90.2		P	80 - 120
Lambda-Cyhalothrin	93.8		P	80 - 120
Methoprene	109		P	80 - 120
Methoxychlor	100		P	80 - 120
MGK-264	96.7		P	80 - 120
Mirex	87.0		P	80 - 120
Oxychlordane	99.2		P	80 - 120
Permethrin	89.9		P	80 - 120
Phenothrin	92.9		P	80 - 120
Piperonyl Butoxide	101		P	80 - 120
Prallethrin	92.8		P	80 - 120
Tau-Fluvalinate	89.1		P	80 - 120
Tetramethrin	93.9		P	80 - 120
Trans-Nonachlor	112		P	80 - 120
Triclosan Methyl	108		P	80 - 120
Trifluralin	103		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A124194
Included Lab Sample IDs: 2464603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDT-p,p'	105		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A124210
Included Lab Sample IDs: 2464607

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	99.7	98.5	P/P	90 - 110
Sodium	103	105	P/P	90 - 110
Strontium	102	104	P/P	90 - 110
Zinc	106	107	P/P	90 - 110

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	102				4.47	
EPA 180.1 Rev. 2.0	Turbidity	104				8.83	
EPA 200.7 Rev. 4.4	Calcium	114	109	108			0.638
	Iron	104	98.9	100			1.05
	Magnesium	109	104	106			0.880
	Potassium	103	101	101			0.135
	Sodium	111	106	105			0.637
	Strontium	105	103	104			1.23
	Tin	106	100	98.3			2.07
	Titanium	102	99.6	98.4			1.25
	Vanadium	103	101	99.5			1.04
	Zinc	107	106	107			1.18
EPA 200.8 Rev. 5.4	Aluminum	101	99.8	98.7			0.764
	Antimony	101	100	98.1			2.02
	Arsenic	98.4	97.4	96.2			1.23
	Barium	102	101	98.0			2.19
	Beryllium	96.3	94.9	88.8			6.13
	Boron	106	104	102			1.38
	Cadmium	99.1	100	98.1			2.05
	Chromium	103	102	100			1.14
	Cobalt	98.7	97.7	96.5			1.18
	Copper	96.8	98.8	96.9			1.95
	Lead	94.1	93.9	94.6			0.800
	Manganese	102					2.06
	Molybdenum	97.3	96.7	95.7			1.06
	Nickel	98.8	98.0	96.7			1.34
	Selenium	99.8	98.7	97.6			1.11
	Silver	100	97.5	97.3			0.206
	Thallium	96.9	98.9	98.5			0.476
EPA 300.0 Rev. 2.1	Chloride	101	98.3	99.8		0.833	
	Sulfate	101	99.4	99.2		0.287	
EPA 350.1 Rev. 2.0	Ammonia-N	96.2	95.2	96.6			0.773
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	104	107			2.22
EPA 353.2 Rev. 2.0	NO2NO3-N	100	97.5	97.5			0.0
	NO2NO3-N	103	101	101			0.0
EPA 365.1 Rev. 2.0	Total-P	105	108	106			1.46
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	68.8	79.2	86.8			9.13
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	61.1	82.5	78.7			4.61
	Acetochlor	69.2	75.3	99.6			27.8
	Alachlor	62.6	76.8	83.9			8.85
	Aldrin	73.2	61.8	79.5			25.0
	Alpha-BHC	87.9	81.0	96.0			17.0
	Alpha-Chlordane	71.7	57.4	76.4			15.8
	Ametryn	91.2	88.6	107			18.9
	Atrazine	62.6	72.5	73.1			0.783
	Atrazine Desethyl	70.9	87.5	104			16.8
	Avobenzone	84.2	105	106			1.40
	Azinphos Methyl	130	167	169			1.07
	Azoxystrobin	74.4	107	113			5.52
	Beta-BHC	90.1	75.9	84.9			11.3
	Beta-Cyfluthrin	129	103	114			10.2

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Bifenthrin	70.9	63.7	76.8			18.6
	Bromacil	74.5	82.5	95.7			14.8
	Butylate	41.8	32.7	61.3			60.7
	Caffeine	91.8	150	201			28.9
	Carbophenothion	88.6	102	104			1.64
	Carfentrazone Ethyl	94.0	108	111			2.61
	Chlorfenapyr	63.5	86.1	88.0			2.21
	Chlorothalonil	80.8	69.2	94.0			30.4
	Chlorpyrifos Ethyl	75.1	80.7	97.8			19.1
	Chlorpyrifos Methyl	92.3	95.4	107			11.9
	Cis-Nonachlor	74.0	47.5	73.4			42.8
	Coumaphos	102	117	98.6			17.0
	Cyanazine	90.6	107	112			4.77
	Cypermethrin	92.1	79.5	88.6			10.9
	Cyprodinil	75.4	89.9	93.1			3.48
	Dacthal	80.7	76.7	83.9			8.99
	DDD-p,p'	71.0	67.7	77.0			12.8
	DDE-p,p'	80.0	70.5	84.0			17.6
	DDT-p,p'	89.2	67.7	81.9			15.2
	Dechlorane 602	63.8	71.2	77.8			8.82
	Dechlorane 603	62.4	77.4	72.6			6.38
	Dechlorane Plus	58.2	68.7	69.9			1.66
	Delta-BHC	95.8	83.7	101			19.0
	Deltamethrin	116	93.6	116			21.3
	Demeton	53.9	61.7	73.0			16.8
	Diazinon	83.2	82.7	102			21.0
	Dichlobenil	69.1	65.2	68.3			4.67
	Dicofol	65.0	56.7	65.8			14.8
	Dieldrin	80.6	59.2	72.7			15.3
	Difenoconazole	119	105	121			14.0
	Dimethenamid	78.1	93.1	84.3			9.94
	Dimethomorph	117	164	135			19.5
	Disulfoton	76.1	114	90.6			22.8
	Dithiopyr	73.1	92.8	88.4			4.84
	Endosulfan I	79.4	71.1	80.5			12.5
	Endosulfan II	97.9	101	105			4.33
	Endosulfan Sulfate	71.2	62.3	70.7			12.6
	Endrin	79.1	62.2	61.6			0.856
	Endrin Aldehyde	86.8	42.1	40.2			4.65
	Endrin Ketone	101	131	114			13.5
	EPTC	33.5	61.7	30.2			68.5
	Esfenvalerate	99.2	77.0	102			27.6
	Ethalfluralin	73.2	71.0	78.7			10.4
	Ethion	60.5	75.5	53.5			34.1
	Ethoprop	64.2	87.4	74.6			15.8
	Etridiazole	44.7	69.5	45.8			41.1
	Fenamiphos	68.9	108	102			5.37
	Fenbuconazole	63.4	84.0	88.5			5.27
	Fenpropathrin	77.7	64.6	78.1			19.0
	Fipronil	55.4	88.1	81.5			7.71
	Fipronil Desulfinyl	86.5	101	94.2			7.15
	Fipronil Sulfide	74.3	84.5	74.8			12.2
	Fipronil Sulfone	86.4	94.5	95.1			0.661
	Fluazifop-P-butyl	80.4	99.5	97.5			2.06

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Fludioxonil	76.3	98.3	92.4			6.13
	Flumioxazin	154	140	146			4.21
	Flutolanil	79.3	84.5	74.9			12.0
	Fluxapyroxad	79.3	79.8	79.7			0.120
	Fonofos	75.7	98.6	80.7			19.9
	Gamma-BHC	111	112	126			12.0
	Gamma-Chlordane	92.2	68.8	81.6			11.5
	Heptachlor	88.9	63.5	88.0			32.4
	Heptachlor Epoxide	112	94.4	105			8.38
	Hexabromobenzene	59.9	79.3	76.2			3.98
	Hexachlorobenzene	48.7	40.5	54.1			28.8
	Hexazinone	69.8	83.0	72.2			14.0
	Imazalil	65.2	95.0	82.8			13.8
	Iprodione	74.0	94.5	90.9			3.87
	Kepone	76.1	76.9	96.8			22.9
	Lambda-Cyhalothrin	85.1	64.0	69.9			8.80
	Loratadine	100	138	133			3.44
	Malathion	90.3	107	88.1			19.1
	Metalaxyl	64.4	73.8	65.3			12.2
	Methoprene	104	87.9	99.2			12.0
	Methoxychlor	88.7	75.9	91.3			18.5
	Metolachlor	78.8	93.6	83.1			11.9
	Metribuzin	67.0	78.2	81.7			4.33
	Mevinphos	79.4	119	92.4			25.2
	MGK-264	81.7	80.2	94.5			16.3
	Mirex	66.8	50.1	36.1			32.6
	Molinate	44.0	60.6	43.0			34.1
	Myclobutanil	64.5	91.5	80.0			13.4
	Naled	40.4	64.3	45.3			34.7
	Napropamide	60.9	85.9	70.1			20.3
	Norflurazon	82.4	93.1	87.4			6.35
	Octinoxate	63.9	75.0	80.9			7.61
	Oxadiazon	61.8	74.5	69.6			6.82
	Oxybenzone	65.9	80.3	86.3			7.20
	Oxychlordane	83.1	74.9	99.2			27.9
	Oxyfluorfen	97.6	110	99.2			10.3
	Parathion Ethyl	65.6	89.6	77.6			14.4
	Parathion Methyl	78.3	113	99.4			12.4
	PBB-153	60.1	79.7	76.9			3.65
	PBDE-47	60.3	58.4	66.7			13.2
	PBDE-99	64.1	76.8	76.9			0.114
	PCB-1016	72.8	74.9	64.7			14.7
	PCB-1260	90.1	93.7	84.8			9.94
	Pendimethalin	102	136	127			7.32
	Pentabromotoluene	60.2	79.7	86.6			8.30
	Permethrin	81.6	69.8	89.8			25.1
	Phenothrin	65.4	55.8	67.7			19.3
	Phenytoin	49.6	66.7	52.4			24.0
	Phorate	69.3	96.8	78.1			21.3
	Piperonyl Butoxide	90.9	94.4	81.2			13.7
	Prallethrin	69.3	68.3	72.4			5.89
	Prodiamine	49.6	57.8	60.6			4.68
	Prometon	80.0	102	87.0			16.0
	Prometryn	74.3	92.8	86.7			6.85

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Pronamide	82.5	111	89.9			20.9
	Propanil	116	132	144			8.19
	Propargite	40.3	47.0	40.7			14.4
	Propiconazole	70.3	67.6	76.2			12.0
	Pyraflufen Ethyl	83.9	78.4	92.9			16.9
	Pyridaben	81.9	111	116			4.29
	Pyriproxyfen	80.3	89.9	83.7			7.15
	Simazine	68.4	88.3	82.4			6.96
	Stirophos	69.3	83.7	72.6			14.2
	Sulfentrazone	72.6	97.6	94.3			3.44
	Tau-Fluvalinate	84.3	63.0	78.3			21.6
	Tebuconazole	60.6	56.9	52.5			8.05
	Terbufos	73.9	96.5	80.3			18.3
	Terbuthylazine	68.8	84.9	73.4			14.6
	Tetradecachloro-m-terphenyl	69.2	96.7	119			21.0
	Tetramethrin	109	97.4	114			15.7
	Thiobencarb	77.0	95.0	90.2			5.12
	Trans-Nonachlor	79.2	84.1	78.5			5.07
	Tri-o-cresyl Phosphate	69.8	84.6	88.4			4.48
	Triadimefon	62.2	90.4	71.9			22.8
	Triclosan Methyl	101	93.1	90.9			2.39
	Trifluralin	75.0	68.9	82.1			17.4
	Tris(1-chloro-2-propyl) phosphate (TCPP)	78.9	116	113			2.71
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	74.5	99.7	102			2.29
	Tris(2-chloroethyl) phosphate (TCEP)	95.1	120	127			5.92
EPA 8276	Chlordane	112	123	119			2.81
	Toxaphene	113	142	136			3.92
EPA 8321B	2,4-D	98.9	85.8	84.2			1.67
	2,4,5-T	104	93.8	97.7			4.05
	3-Hydroxycarbofuran	67.3	48.1	45.5			5.51
	Acesulfame K	128	136	136			0.154
	Acetaminophen	85.8	106	107			1.23
	Acetamiprid	75.8	79.9	93.8			16.0
	Afidopyropen	59.5	102	88.7			14.2
	Aldicarb	59.9	47.7	43.7			8.69
	Aldicarb Sulfone	95.0	71.7	76.3			6.23
	Aldicarb Sulfoxide	107	24.6	22.6			8.50
	AMPA	115	119	116			2.26
	Bentazon	79.7	41.3	41.4			0.245
	Benzovindiflupyr	78.3	101	96.1			4.67
	Carbamazepine	82.5	82.0	80.2			2.24
	Carbaryl	78.8	59.1	61.0			3.13
	Carbofuran	72.9	52.2	51.2			1.79
	Clothianidin	88.8	105	106			0.784
	Dinotefuran	95.7	111	111			0.0879
	Diuron	82.9	83.4	82.1			1.52
	Endothall	102	105	114			7.90
	Fenuron	88.3	75.0	77.4			3.14
	Fluridone	89.2	87.3	91.9			5.18
	Glufosinate	96.6	99.7	97.1			2.62
	Glyphosate	113	112	111			0.548

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Hydrocodone	98.1	94.3	98.2			4.07
	Ibuprofen	65.5	64.0	88.7			32.4
	Imazapyr	86.5	112	111			0.353
	Imidacloprid	84.2	127	129			1.59
	Linuron	77.3	81.3	81.1			0.176
	Mandestrobin	86.6	103	105			1.70
	MCPP	94.4	107	101			5.94
	Methiocarb	67.4	57.8	58.5			1.27
	Methomyl	93.7	62.8	64.0			1.85
	Naproxen	73.5	87.1	94.7			8.44
	Oxamyl	86.7	62.7	64.8			3.30
	Primidone	79.7	98.6	104			5.29
	Propoxur	66.1	49.5	51.0			3.07
	Pyraclostrobin	86.6	99.5	98.7			0.864
	Silvex	92.4	93.1	92.8			0.284
	Sucralose	86.1	87.2	85.1			2.41
	Thiamethoxam	86.7	107	110			3.10
	Tolfenpyrad	49.4	64.3	60.6			5.91
	Triclopyr	105	92.4	95.4			3.28
SM 2320 B-2011	Total Alkalinity	97.7				0.759	
SM 2540 C-2015	TDS	103				2.57	
SM 2540 D-2015	TSS	96.8					
SM 4500-F- C-2011	Fluoride	102					0.0
SM 5310 B-2014	Organic Carbon	96.6	100	101			0.147

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2464559, 2464560
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2464559, 2464560
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2464607
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2464607
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2464559, 2464560
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2464559, 2464560
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2464561, 2464562
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2464561, 2464562
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2464561, 2464562
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2464561, 2464562
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2464605
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2464603
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2464605
EPA 8270E	PCBs in water matrices by GC/MS/MS	2464603
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2464603
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2464598
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2464600, 2464602
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2464559, 2464560
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2464607
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2464559, 2464560
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2464559, 2464560
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2464559, 2464560

Reference Method Descriptions

Method	Description	Associated Samples
SM 5310 B-2014	Nonpurgeable Organic Carbon in aqueous matrices	2464561, 2464562

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	01/31/2024			01/31/2024 15:45	Chandler E Cox	2464559
	01/31/2024			01/31/2024 15:46	Chandler E Cox	2464560
EPA 180.1 Rev. 2.0	01/31/2024			01/31/2024 14:15	Dipa Joshi	2464559
	01/31/2024			01/31/2024 14:16	Dipa Joshi	2464560
EPA 200.7 Rev. 4.4	01/31/2024	02/01/2024 12:55	George D Taylor	02/12/2024 22:08	McKinley C Carter	2464607
	01/31/2024	02/01/2024 12:55	George D Taylor	02/15/2024 16:33	McKinley C Carter	2464607
EPA 200.8 Rev. 5.4	01/31/2024	02/01/2024 12:55	George D Taylor	02/02/2024 20:20	Conrad Hartmann	2464607
	01/31/2024	02/01/2024 12:55	George D Taylor	02/06/2024 07:19	Conrad Hartmann	2464607
EPA 300.0 Rev. 2.1	01/31/2024			02/07/2024 15:30	James L Waggerby	2464559
	01/31/2024			02/07/2024 15:46	James L Waggerby	2464560
EPA 350.1 Rev. 2.0	01/31/2024			02/07/2024 13:19	Kenneth H Lee	2464561
	01/31/2024			02/07/2024 13:20	Kenneth H Lee	2464562
EPA 351.2 Rev. 2.0	01/31/2024	02/02/2024 12:22	Ping Hua	02/06/2024 11:32	Ping Hua	2464561
	01/31/2024	02/02/2024 12:22	Ping Hua	02/06/2024 11:37	Ping Hua	2464562
EPA 353.2 Rev. 2.0	01/31/2024			02/05/2024 14:03	Fadila Guebre	2464561
	01/31/2024			02/08/2024 14:36	Fadila Guebre	2464562
EPA 365.1 Rev. 2.0	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 11:34	Chandler E Cox	2464561
	01/31/2024	02/02/2024 13:37	Adam P Silver	02/05/2024 11:35	Chandler E Cox	2464562
EPA 8270E	01/31/2024	02/02/2024 08:00	Fe-Val Siddell	02/09/2024 23:12	Lipi Saha	2464603
	01/31/2024	02/02/2024 08:00	Fe-Val Siddell	02/09/2024 23:18	Lipi Saha	2464603
	01/31/2024	02/02/2024 08:00	Fe-Val Siddell	02/13/2024 23:16	Lipi Saha	2464603
	01/31/2024	02/05/2024 08:00	Rasheda Ghaffari	02/07/2024 21:50	Arthur Maknenko	2464605
	01/31/2024	02/05/2024 08:00	Rasheda Ghaffari	02/08/2024 21:09	Julie Wi	2464605
EPA 8276	01/31/2024	02/02/2024 08:00	Fe-Val Siddell	02/06/2024 06:46	Kenedi Mills	2464603
EPA 8321B	01/31/2024	01/31/2024 12:00	Hana Lee	01/31/2024 17:57	Hana Lee	2464600
	01/31/2024	01/31/2024 12:00	Hana Lee	01/31/2024 19:21	Hana Lee	2464602
	01/31/2024	01/31/2024 12:00	Hana Lee	02/01/2024 10:19	Hana Lee	2464600
	01/31/2024	01/31/2024 12:00	Hana Lee	02/01/2024 11:28	Hana Lee	2464602
	01/31/2024	02/02/2024 11:30	Hoor Shaik	02/02/2024 21:34	Juyoung Kim	2464600
	01/31/2024	02/02/2024 11:30	Hoor Shaik	02/02/2024 21:52	Juyoung Kim	2464602
	01/31/2024	02/06/2024 09:00	Hoor Shaik	02/06/2024 19:59	Juyoung Kim	2464598
SM 2320 B-2011	01/31/2024			02/03/2024 07:08	Dale L. Simmons	2464559
	01/31/2024			02/03/2024 07:21	Dale L. Simmons	2464560
SM 2340 B-2011	01/31/2024			02/12/2024 22:08	McKinley C Carter	2464607
SM 2540 C-2015	01/31/2024			02/02/2024 15:41	Yijie Li	2464559, 2464560
SM 2540 D-2015	01/31/2024			02/02/2024 15:41	Yijie Li	2464559, 2464560
SM 4500-F- C-2011	01/31/2024			02/03/2024 07:08	Dale L. Simmons	2464559
	01/31/2024			02/03/2024 07:21	Dale L. Simmons	2464560
SM 5310 B-2014	01/31/2024			02/02/2024 20:04	Khloe J Berg	2464561
	01/31/2024			02/02/2024 20:18	Khloe J Berg	2464562