

Chemical Analysis Report

SE-DIST-2023-11-21-01

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

Event Description: **Margate Lake**
Request ID: **RQ-2023-06-12-68**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Jordan Skaggs

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Marek Topolski, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 19-DEC-2023 15:07

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Margate Lake near center

Collection Date/Time: 11/20/2023 11:00

Field ID: G4SE0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452389	DEP SOP: NU-094-1	Color (true)	18	A	PCU	P438136	
	EPA 180.1 Rev. 2.0	Turbidity	0.60	I	NTU	P438141	
	EPA 300.0 Rev. 2.1	Chloride	37	A	mg Cl/L	P438318	
		Sulfate	16	A	mg SO4/L	P438321	
	SM 2320 B-2011	Total Alkalinity	96		mg CaCO3/L	P438221	
	SM 2540 C-2015	TDS	196		mg/L	P438381	
	SM 2540 D-2015	TSS	2	U	mg/L	P438371	
	SM 4500-F- C-2011	Fluoride	0.19		mg F/L	P438334	
2452390	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P438434	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.51		mg N/L	P438170	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P438253	
	EPA 365.1 Rev. 2.0	Total-P	0.011		mg P/L	P438209	
	SM 5310 B-2011	Organic Carbon	6.7		mg C/L	P438187	
2452391	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P438126	
2452399	EPA 8321B	2,4-D	0.30		ug/L	P437953	
		Acesulfame K	0.10	U	ug/L	P438082	
		2,4,5-T	0.0040	U	ug/L	P437953	
		AMPA	0.10	U	ug/L	P438082	
		Acetaminophen	0.0080	U	ug/L	P437953	
		Acetamiprid	0.0020	U	ug/L	P437953	
		Endothall	0.25	U	ug/L	P438082	
		Glufosinate	0.10	U	ug/L	P438082	
		Glyphosate	0.10	U	ug/L	P438082	
		Afidopyropen	0.0020	U	ug/L	P437953	
		Bentazon	0.010		ug/L	P437953	
		Sucralose	0.075		ug/L	P438082	
		Benzovindiflupyr	0.0020	U	ug/L	P437953	
		Carbamazepine	8.0E-04	U	ug/L	P437953	
		Clothianidin	0.0020	U	ug/L	P437953	
		Dinotefuran	0.0054	I	ug/L	P437953	
		Diuron	0.0034	I	ug/L	P437953	
		Fenuron	0.032	U	ug/L	P437953	
		Fluridone	0.13		ug/L	P437953	
		Imazapyr	0.057		ug/L	P437953	
		Hydrocodone	0.0020	U	ug/L	P437953	
		Ibuprofen	0.080	U	ug/L	P437953	
		Imidacloprid	0.0056	I	ug/L	P437953	
		Linuron	0.0040	U	ug/L	P437953	
		Mandestrobin	0.0020	U	ug/L	P437953	
		MCPP	0.0020	U	ug/L	P437953	
		Naproxen	0.0080	U	ug/L	P437953	
		Primidone	0.0040	U	ug/L	P437953	
		Pyraclostrobin	0.0020	U	ug/L	P437953	

Field ID: G4SE0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452399	EPA 8321B	Silvex	0.0040	U	ug/L	P437953	
		Thiamethoxam	0.0020	U	ug/L	P437953	
		Tolfenpyrad	0.0020	U	ug/L	P437953	
		Triclopyr	0.0040	U	ug/L	P437953	
2452400	EPA 200.7 Rev. 4.4	Calcium	44.6		mg/L	P438174	
		Iron	30	U	ug/L	P438174	
		Magnesium	3.68		mg/L	P438174	
		Potassium	1.5		mg/L	P438174	
		Sodium	24.3		mg/L	P438174	
		Strontium	619		ug/L	P438174	
		Tin	3.0	U	ug/L	P438174	
		Titanium	0.75	U	ug/L	P438174	
		Vanadium	2.0	U	ug/L	P438174	
		Zinc	5.0	U	ug/L	P438174	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P438174	
		Antimony	0.18	I	ug/L	P438174	
		Arsenic	0.73		ug/L	P438174	
		Barium	11.8		ug/L	P438174	
		Beryllium	0.010	U	ug/L	P438174	
		Boron	30.6		ug/L	P438174	
		Cadmium	0.020	U	ug/L	P438174	
		Chromium	0.40	U	ug/L	P438174	
		Cobalt	0.020	U	ug/L	P438174	
		Copper	2.34		ug/L	P438174	
		Lead	0.20	U	ug/L	P438174	
		Manganese	0.84		ug/L	P438174	
		Molybdenum	0.56	I	ug/L	P438174	
		Nickel	0.50	U	ug/L	P438174	
		Selenium	0.20	U	ug/L	P438174	
		Silver	0.010	U	ug/L	P438174	
		Thallium	0.10	U	ug/L	P438174	
	SM 2340 B-2011	Hardness	127		mg/L	P438174	
2452401	EPA 8270E	Oxybenzone**	10	U	ng/L	P438143	
		Acetochlor	0.21	U	ng/L	P438143	
		Octinoxate**	160	U	ng/L	P438143	
		Alachlor	0.42	U	ng/L	P438143	
		Avobenzone**	100	U	ng/L	P438143	
		Ametryn	1.1	U	ng/L	P438143	
		Atrazine	75		ng/L	P438143	
		PBDE-47**	4.2	U	ng/L	P438143	
		Atrazine Desethyl	7.2		ng/L	P438143	
		PBDE-99**	5.2	U	ng/L	P438143	
		Azinphos Methyl	3.1	U	ng/L	P438143	
		Tri-o-cresyl Phosphate**	6.3	U	ng/L	P438143	
		Azoxystrobin	0.45	I	ng/L	P438143	

Field ID: G4SE0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452401	EPA 8270E	Bromacil	0.63	U	ng/L	P438143	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	13	UJ	ng/L	P438143	LCS
		Butylate	0.47	U	ng/L	P438143	
		Dechlorane Plus**	31	U	ng/L	P438143	
		Caffeine**	22	I	ng/L	P438143	
		Dechlorane 602**	5.2	U	ng/L	P438143	
		Carbophenothion	0.52	U	ng/L	P438143	
		Dechlorane 603**	4.2	U	ng/L	P438143	
		Carfentrazone Ethyl	0.16	U	ng/L	P438143	
		Hexabromobenzene**	6.3	U	ng/L	P438143	
		Chlorfenapyr	0.31	U	ng/L	P438143	
		PBB-153**	6.3	U	ng/L	P438143	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P438143	
		Pentabromotoluene**	3.1	U	ng/L	P438143	
		Chlorpyrifos Methyl	0.10	U	ng/L	P438143	
		Tris(2-chloroethyl) phosphate (TCEP)**	57	U	ng/L	P438143	
		Coumaphos	1.1	U	ng/L	P438143	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	36	I	ng/L	P438143	
		Cyanazine	5.2	U	ng/L	P438143	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P438143	
		Cyprodinil	0.21	U	ng/L	P438143	
		Tetradecachloro-m-terphenyl**	7.8	U	ng/L	P438143	
		Demeton	3.7	U	ng/L	P438143	
		Diazinon	0.13	U	ng/L	P438143	
		Difenoconazole	0.63	U	ng/L	P438143	
		Dimethenamid	0.10	U	ng/L	P438143	
		Dimethomorph	0.31	U	ng/L	P438143	
		Disulfoton	0.63	U	ng/L	P438143	
		Dithiopyr	1.0	U	ng/L	P438143	
		EPTC	0.52	U	ng/L	P438143	
		Ethion	0.31	U	ng/L	P438143	
		Ethoprop	0.13	U	ng/L	P438143	
		Etridiazole	0.10	U	ng/L	P438143	
		Fenamiphos	0.47	U	ng/L	P438143	
		Fenbuconazole	0.52	U	ng/L	P438143	
		Fipronil	0.29	I	ng/L	P438143	
		Fipronil Desulfinyl**	0.46	I	ng/L	P438143	
		Fipronil Sulfide	0.12	I	ng/L	P438143	
		Fipronil Sulfone	0.50	I	ng/L	P438143	
		Fluazifop-P-butyl	0.10	U	ng/L	P438143	
		Fludioxonil	0.10	U	ng/L	P438143	
		Flumioxazin	4.0	I	ng/L	P438143	
		Flutolanil	0.10	U	ng/L	P438143	
		Fluxapyroxad	0.41	I	ng/L	P438143	

Field ID: G4SE0169

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452401	EPA 8270E	Fonofos	0.16	U	ng/L	P438143	
		Hexazinone	0.52	U	ng/L	P438143	
		Imazalil	0.68	U	ng/L	P438143	
		Iprodione	0.52	U	ng/L	P438143	
		Loratadine**	0.31	U	ng/L	P438143	
		Malathion	0.37	U	ng/L	P438143	
		Metalaxyl	0.52	U	ng/L	P438143	
		Metolachlor	1.2	I	ng/L	P438143	
		Metribuzin	0.42	U	ng/L	P438143	
		Mevinphos	1.0	U	ng/L	P438143	
		Molinate	0.26	U	ng/L	P438143	
		Myclobutanil	0.37	U	ng/L	P438143	
		Naled	2.6	U	ng/L	P438143	
		Napropamide	0.73	U	ng/L	P438143	
		Norflurazon	1.0	U	ng/L	P438143	
		Oxadiazon	1.9		ng/L	P438143	
		Oxyfluorfen	0.21	U	ng/L	P438143	
		Parathion Ethyl	0.16	U	ng/L	P438143	
		Parathion Methyl	0.21	U	ng/L	P438143	
		Pendimethalin	1.8	U	ng/L	P438143	
		Phenytol**	5.5	U	ng/L	P438143	
		Phorate	0.26	U	ng/L	P438143	
		Prodiamine	0.21	U	ng/L	P438143	
		Prometon	3.1	U	ng/L	P438143	
		Prometryn	0.37	U	ng/L	P438143	
		Pronamide	0.10	U	ng/L	P438143	
		Propanil	0.10	U	ng/L	P438143	
		Propargite	0.84	U	ng/L	P438143	
		Propiconazole	0.63	U	ng/L	P438143	
		Pyraflufen Ethyl	0.31	U	ng/L	P438143	
		Pyridaben	1.5	U	ng/L	P438143	
		Pyriproxyfen	0.26	U	ng/L	P438143	
		Simazine	0.26	U	ng/L	P438143	
		Stiophos	0.42	UJ	ng/L	P438143	CCV
		Sulfentrazone	1.5	U	ng/L	P438143	
		Tebuconazole	1.5	U	ng/L	P438143	
		Terbufos	0.21	U	ng/L	P438143	
		Terbuthylazine	0.21	U	ng/L	P438143	
		Thiobencarb	0.52	U	ng/L	P438143	
		Triadimefon	0.16	U	ng/L	P438143	

Ref. Method and Comment:

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

EPA 8321B: The matrix spike and LCS recoveries for afidopyropen could not be evaluated due to laboratory technical difficulties.

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

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

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P438136

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438141

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438174

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: P438174

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: P438318

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: P438321

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438434

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438170

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438253

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438209

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438126

Component	Result	Code	Units
O-Phosphate-P	0.004	U	mg P/L

Reference Method: EPA 8270E
Batch ID: P438143

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438143

Component	Result	Code	Units
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
Metaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P438143

Component	Result	Code	Units
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
Terbutylazine	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 8321B

Batch ID: P437953

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P437953

Component	Result	Code	Units
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: P438082

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: P438221

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

Reference Method: SM 2540 C-2015

Batch ID: P438381

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P438371

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P438334

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P438187

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: P438136

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438141

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	108		P	85 - 115
Iron	109		P	85 - 115
Magnesium	110		P	85 - 115
Potassium	101		P	85 - 115
Sodium	106		P	85 - 115
Strontium	97.9		P	85 - 115
Tin	96.8		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	99.5		P	85 - 115
Zinc	97.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438174

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	100		P	85 - 115
Antimony	100		P	85 - 115
Arsenic	99.2		P	85 - 115
Barium	101		P	85 - 115
Beryllium	89.9		P	85 - 115
Boron	101		P	85 - 115
Cadmium	98.5		P	85 - 115
Chromium	107		P	85 - 115
Cobalt	93.3		P	85 - 115
Copper	98.5		P	85 - 115
Lead	94.6		P	85 - 115
Manganese	100		P	85 - 115
Molybdenum	96.7		P	85 - 115
Nickel	100		P	85 - 115
Selenium	99.7		P	85 - 115
Silver	97.8		P	85 - 115
Thallium	98.6		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438318

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438321

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438434

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438170

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438253

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438209

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438126

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	93.1		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P438143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	31.7		F	37 - 154
Acetochlor	89.5		P	64 - 124
Alachlor	100		P	61 - 118
Ametryn	108		P	47 - 158
Atrazine	81.1		P	68 - 121
Atrazine Desethyl	57.8		P	30 - 119
Avobenzone	83.6		P	48 - 193
Azinphos Methyl	162		P	30 - 194
Azoxystrobin	82.7		P	58 - 154
Bromacil	51.3		P	47 - 126
Butylate	40.7		P	31 - 83.0
Caffeine	108		P	10 - 180
Carbophenothion	94.5		P	59 - 133
Carfentrazone Ethyl	101		P	59 - 147
Chlorfenapyr	75.5		P	52 - 118
Chlorpyrifos Ethyl	64.1		P	59 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P438143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	98.6		P	65 - 123
Coumaphos	94.5		P	11 - 223
Cyanazine	129		P	63 - 250
Cyprodinil	107		P	52 - 143
Dechlorane 602	78.9		P	23 - 142
Dechlorane 603	89.2		P	51 - 171
Dechlorane Plus	98.1		P	46 - 161
Demeton	84.2		P	42 - 119
Diazinon	105		P	67 - 132
Difenoconazole	70.3		P	12 - 204
Dimethenamid	78.2		P	53 - 113
Dimethomorph	126		P	13 - 238
Disulfoton	67.8		P	56 - 126
Dithiopyr	89.5		P	58 - 127
EPTC	47.5		P	31 - 78.0
Ethion	80.7		P	24 - 127
Ethoprop	71.0		P	60 - 118
Etridiazole	58.1		P	32 - 91.0
Fenamiphos	75.2		P	54 - 129
Fenbuconazole	61.3		P	31 - 162
Fipronil	98.5		P	56 - 131
Fipronil Desulfinyl	80.0		P	58 - 132
Fipronil Sulfide	79.4		P	51 - 123
Fipronil Sulfone	59.5		P	50 - 125
Fluazifop-P-butyl	112		P	52 - 132
Fludioxonil	85.5		P	52 - 129
Flumioxazin	76.9		P	34 - 250
Flutolanil	64.4		P	45 - 128
Fluxapyroxad	72.9		P	31 - 150
Fonofos	65.9		P	60 - 116
Hexabromobenzene	75.3		P	52 - 165
Hexazinone	79.8		P	59 - 120
Imazalil	50.2		P	39 - 134
Iprodione	64.2		P	39 - 243
Loratadine	99.4		P	10 - 240
Malathion	108		P	53 - 145
Metalaxyl	76.4		P	59 - 120
Metolachlor	90.1		P	64 - 122
Metribuzin	82.9		P	33 - 128
Mevinphos	54.0		P	48 - 119
Molinate	70.9		P	42 - 89.0
Myclobutanil	113		P	54 - 129
Naled	56.2		P	10 - 138
Napropamide	44.1		P	40 - 122
Norflurazon	118		P	49 - 132
Octinoxate	110		P	29 - 176
Oxadiazon	99.3		P	50 - 115
Oxybenzone	104		P	45 - 145
Oxyfluorfen	105		P	62 - 149
Parathion Ethyl	96.9		P	68 - 119
Parathion Methyl	109		P	68 - 147
PBB-153	45.1		P	42 - 179

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P438143

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	90.2		P	44 - 141
PBDE-99	53.8		P	36 - 141
Pendimethalin	98.4		P	59 - 158
Pentabromotoluene	87.2		P	58 - 148
Phenytoin	25.8		P	10 - 151
Phorate	113		P	44 - 124
Prodiamine	87.1		P	10 - 136
Prometon	104		P	45 - 131
Prometryn	113		P	52 - 140
Pronamide	108		P	70 - 129
Propanil	110		P	54 - 144
Propargite	49.6		P	10 - 191
Propiconazole	65.1		P	49 - 128
Pyraflufen Ethyl	97.1		P	46 - 141
Pyridaben	97.1		P	29 - 198
Pyriproxyfen	123		P	33 - 221
Simazine	76.3		P	62 - 119
Stirophos	28.4		P	13 - 144
Sulfentrazone	64.4		P	12 - 152
Tebuconazole	48.7		P	10 - 135
Terbufos	69.7		P	67 - 136
Terbutylazine	93.3		P	66 - 113
Tetradecachloro-m-terphenyl	78.6		P	30 - 235
Thiobencarb	94.6		P	51 - 125
Tri-o-cresyl Phosphate	115		P	50 - 150
Triadimefon	73.0		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	122		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	95.8		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	104		P	59 - 166

Reference Method: EPA 8321B

Batch ID: P437953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	75.1		P	40 - 150
2,4,5-T	61.7		P	40 - 150
Acetaminophen	82.3		P	30 - 150
Acetamiprid	61.5		P	40 - 150
Bentazon	56.7		P	30 - 150
Benzovindiflupyr	76.9		P	40 - 150
Carbamazepine	63.3		P	40 - 150
Clothianidin	80.2		P	40 - 150
Dinotefuran	66.1		P	40 - 150
Diuron	62.2		P	40 - 150
Fenuron	78.6		P	40 - 150
Fluridone	77.4		P	40 - 150
Hydrocodone	96.1		P	40 - 150
Ibuprofen	51.3		P	40 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	76.7		P	40 - 150
Linuron	60.7		P	40 - 150
Mandestrobin	79.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
MCP	66.7		P	40 - 150
Naproxen	45.3		P	40 - 150
Primidone	75.0		P	40 - 150
Pyraclostrobin	83.9		P	40 - 150
Silvex	70.0		P	40 - 150
Thiamethoxam	78.2		P	40 - 150
Tolfenpyrad	45.5		P	30 - 150
Triclopyr	67.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438082

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	95.2		P	40 - 150
AMPA	98.8		P	40 - 160
Endothall	102		P	40 - 160
Glufosinate	105		P	40 - 160
Glyphosate	103		P	40 - 160
Sucralose	99.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P438221

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.3		P	92 - 105

Reference Method: SM 2540 C-2015
Batch ID: P438381

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	97.2		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P438371

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	92.8		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P438334

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

Reference Method: SM 5310 B-2011
Batch ID: P438187

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P438174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452360	Calcium	110	109	P/P	80 - 120
2452360	Iron	110	109	P/P	80 - 120
2452360	Magnesium	111	109	P/P	80 - 120
2452360	Potassium	103	102	P/P	80 - 120
2452360	Sodium	108	108	P/P	80 - 120
2452360	Strontium	102	101	P/P	80 - 120
2452360	Tin	98.1	99.1	P/P	80 - 120
2452360	Titanium	102	102	P/P	80 - 120
2452360	Vanadium	101	101	P/P	80 - 120
2452360	Zinc	98.4	98.3	P/P	80 - 120
2452610	Calcium	106		P	80 - 120
2452610	Iron	108		P	80 - 120
2452610	Magnesium	105		P	80 - 120
2452610	Potassium	99.7		P	80 - 120
2452610	Sodium	105		P	80 - 120
2452610	Strontium	99.1		P	80 - 120
2452610	Tin	94.5		P	80 - 120
2452610	Titanium	101		P	80 - 120
2452610	Vanadium	101		P	80 - 120
2452610	Zinc	98.4		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P438174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452360	Aluminum	99.4	98.1	P/P	80 - 120
2452360	Antimony	99.2	99.8	P/P	80 - 120
2452360	Arsenic	98.2	97.7	P/P	80 - 120
2452360	Barium	100	100	P/P	80 - 120
2452360	Beryllium	89.5	87.4	P/P	80 - 120
2452360	Boron	104	103	P/P	80 - 120
2452360	Cadmium	97.9	98.2	P/P	80 - 120
2452360	Chromium	97.6	95.1	P/P	80 - 120
2452360	Cobalt	91.8	91.6	P/P	80 - 120
2452360	Copper	99.0	97.5	P/P	80 - 120
2452360	Lead	94.4	93.9	P/P	80 - 120
2452360	Manganese	100	100	P/P	80 - 120
2452360	Molybdenum	99.2	97.9	P/P	80 - 120
2452360	Nickel	95.8	95.1	P/P	80 - 120
2452360	Selenium	99.1	95.9	P/P	80 - 120
2452360	Silver	96.8	96.8	P/P	80 - 120
2452360	Thallium	99.9	98.7	P/P	80 - 120
2452610	Aluminum	99.6		P	80 - 120
2452610	Antimony	99.9		P	80 - 120
2452610	Arsenic	97.2		P	80 - 120
2452610	Barium	98.7		P	80 - 120
2452610	Beryllium	90.4		P	80 - 120
2452610	Boron	101		P	80 - 120
2452610	Cadmium	98.2		P	80 - 120
2452610	Chromium	96.2		P	80 - 120
2452610	Cobalt	89.4		P	80 - 120
2452610	Copper	98.7		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452610	Lead	94.6		P	80 - 120
2452610	Manganese	91.7		P	80 - 120
2452610	Molybdenum	99.3		P	80 - 120
2452610	Nickel	94.7		P	80 - 120
2452610	Selenium	95.3		P	80 - 120
2452610	Silver	96.2		P	80 - 120
2452610	Thallium	98.4		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438318

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452389	Chloride	104		P	90 - 110
2452437	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452389	Sulfate	105		P	90 - 110
2452437	Sulfate	107		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438434

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452313	Ammonia-N	96.2	98.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438170

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452438	Kjeldahl Nitrogen	101	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438253

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452091	NO2NO3-N	98.5	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438209

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452390	Total-P	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438126

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452391	O-Phosphate-P	97.2	98.8	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438143

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452401	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	54.4	50.8	P/P	29 - 155
2452401	Acetochlor	107	86.6	P/P	60 - 124
2452401	Alachlor	115	87.1	P/P	54 - 122
2452401	Ametryn	100	98.4	P/P	51 - 208
2452401	Atrazine Desethyl	54.2	46.6	P/P	13 - 124
2452401	Avobenzone	108	120	P/P	35 - 187
2452401	Azinphos Methyl	176	148	P/P	43 - 276
2452401	Azoxystrobin	82.3	77.2	P/P	52 - 300
2452401	Bromacil	47.3	52.4	P/P	44 - 134
2452401	Butylate	48.1	39.0	P/P	23 - 82.0
2452401	Caffeine	114	110	P/P	10 - 277
2452401	Carbophenothion	108	91.8	P/P	47 - 135
2452401	Carfentrazone Ethyl	105	92.8	P/P	46 - 147
2452401	Chlorfenapyr	92.8	76.6	P/P	43 - 114
2452401	Chlorpyrifos Ethyl	53.5	61.1	P/P	47 - 124
2452401	Chlorpyrifos Methyl	108	85.0	P/P	60 - 135
2452401	Coumaphos	94.2	118	P/P	10 - 222
2452401	Cyanazine	150	126	P/P	10 - 257
2452401	Cyprodinil	116	94.2	P/P	42 - 148
2452401	Dechlorane 602	87.9	90.6	P/P	14 - 133
2452401	Dechlorane 603	96.3	106	P/P	18 - 191
2452401	Dechlorane Plus	102	107	P/P	23 - 154
2452401	Demeton	99.9	76.9	P/P	41 - 137
2452401	Diazinon	96.3	90.8	P/P	64 - 139
2452401	Difenoconazole	66.9	63.9	P/P	46 - 254
2452401	Dimethenamid	85.0	80.5	P/P	47 - 117
2452401	Dimethomorph	134	122	P/P	14 - 255
2452401	Disulfoton	60.5	70.6	P/P	52 - 130
2452401	Dithiopyr	93.4	76.2	P/P	40 - 121
2452401	EPTC	58.5	55.8	P/P	19 - 78.0
2452401	Ethion	108	83.3	P/P	12 - 124
2452401	Ethoprop	78.2	71.0	P/P	68 - 144
2452401	Etridiazole	67.5	52.1	P/P	26 - 96.0
2452401	Fenamiphos	76.0	75.6	P/P	41 - 129
2452401	Fenbuconazole	71.1	87.9	P/P	26 - 169
2452401	Fipronil	92.5	83.7	P/P	46 - 145
2452401	Fipronil Desulfinyl	92.4	61.1	P/P	47 - 136
2452401	Fipronil Sulfide	77.9	71.0	P/P	41 - 127
2452401	Fipronil Sulfone	39.3	62.3	P/P	35 - 133
2452401	Fluazifop-P-butyl	92.1	84.8	P/P	46 - 131
2452401	Fludioxonil	81.1	78.2	P/P	51 - 124
2452401	Flumioxazin	68.3	70.3	P/P	10 - 289
2452401	Flutolanil	49.2	56.2	P/P	34 - 130
2452401	Fluxapyroxad	62.8	87.2	P/P	10 - 197
2452401	Fonofos	43.2	60.8	P/P	42 - 131
2452401	Hexabromobenzene	78.7	74.4	P/P	47 - 178
2452401	Hexazinone	93.2	85.9	P/P	64 - 125
2452401	Imazalil	50.2	57.1	P/P	37 - 252
2452401	Iprodione	51.5	59.6	P/P	34 - 265
2452401	Loratadine	99.6	100	P/P	20 - 231
2452401	Malathion	119	116	P/P	34 - 164
2452401	Metalaxyl	68.4	64.6	P/P	49 - 125

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P438143

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452401	Metolachlor	91.3	77.1	P/P	54 - 125
2452401	Metribuzin	91.1	74.2	P/P	51 - 139
2452401	Mevinphos	53.4	67.3	P/P	46 - 130
2452401	Molinate	68.8	54.9	P/P	39 - 93.0
2452401	Myclobutanil	112	95.9	P/P	50 - 130
2452401	Naled	57.0	50.0	P/P	10 - 150
2452401	Napropamide	34.8	42.7	P/P	10 - 109
2452401	Norflurazon	83.1	61.8	P/P	36 - 134
2452401	Octinoxate	106	107	P/P	18 - 170
2452401	Oxadiazon	90.3	72.7	P/P	43 - 112
2452401	Oxybenzone	95.2	103	P/P	33 - 154
2452401	Oxyfluorfen	103	106	P/P	62 - 154
2452401	Parathion Ethyl	97.7	89.6	P/P	65 - 120
2452401	Parathion Methyl	141	109	P/P	77 - 185
2452401	PBB-153	56.2	54.1	P/P	23 - 193
2452401	PBDE-47	91.3	91.8	P/P	31 - 139
2452401	PBDE-99	67.2	65.8	P/P	24 - 138
2452401	Pendimethalin	98.4	102	P/P	50 - 146
2452401	Pentabromotoluene	86.3	80.3	P/P	54 - 152
2452401	Phenytoin	23.8	22.4	P/P	10 - 157
2452401	Phorate	159	119	P/P	54 - 161
2452401	Prodiamine	67.8	90.4	P/P	29 - 160
2452401	Prometon	92.2	91.8	P/P	38 - 145
2452401	Prometryn	111	96.2	P/P	32 - 151
2452401	Pronamide	119	99.4	P/P	61 - 140
2452401	Propanil	102	84.9	P/P	50 - 147
2452401	Propargite	49.3	47.2	P/P	10 - 190
2452401	Propiconazole	77.4	79.7	P/P	30 - 146
2452401	Pyraflufen Ethyl	105	87.2	P/P	30 - 147
2452401	Pyridaben	180	190	P/P	15 - 195
2452401	Pyriproxyfen	138	127	P/P	31 - 218
2452401	Simazine	89.4	79.3	P/P	45 - 139
2452401	Stiropfos	15.7	18.5	P/P	10 - 134
2452401	Sulfentrazone	75.2	93.0	P/P	53 - 186
2452401	Tebuconazole	49.2	57.5	P/P	10 - 133
2452401	Terbufos	68.6	75.4	P/P	65 - 151
2452401	Terbuthylazine	89.6	91.8	P/P	62 - 117
2452401	Tetradecachloro-m-terphenyl	92.7	98.7	P/P	10 - 260
2452401	Thiobencarb	105	93.7	P/P	48 - 122
2452401	Tri-o-cresyl Phosphate	111	114	P/P	32 - 151
2452401	Triadimefon	74.2	55.8	P/P	46 - 124
2452401	Tris(1-chloro-2-propyl) phosphate (TCPP)	115	116	P/P	51 - 154
2452401	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	98.0	100	P/P	59 - 147
2452401	Tris(2-chloroethyl) phosphate (TCEP)	95.2	95.4	P/P	65 - 156

Reference Method: EPA 8321B

Batch ID: P437953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452053	2,4-D	96.6	102	P/P	40 - 150
2452053	2,4,5-T	76.0	73.5	P/P	40 - 150
2452053	Acetaminophen	98.9	101	P/P	30 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P437953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452053	Acetamiprid	47.7	45.6	P/P	40 - 150
2452053	Bentazon	33.1	34.2	P/P	30 - 150
2452053	Benzovindiflupyr	78.8	78.3	P/P	40 - 150
2452053	Carbamazepine	55.7	56.1	P/P	40 - 150
2452053	Clothianidin	82.2	83.3	P/P	40 - 150
2452053	Dinotefuran	62.1	63.3	P/P	40 - 150
2452053	Diuron	56.5	55.7	P/P	40 - 150
2452053	Fenuron	56.6	57.9	P/P	40 - 150
2452053	Fluridone	69.7	73.0	P/P	40 - 150
2452053	Hydrocodone	81.7	81.4	P/P	40 - 150
2452053	Ibuprofen	59.4	61.1	P/P	40 - 150
2452053	Imazapyr	92.7	94.4	P/P	40 - 150
2452053	Imidacloprid	101	105	P/P	40 - 150
2452053	Linuron	58.5	59.5	P/P	40 - 150
2452053	Mandestrobin	81.7	83.8	P/P	40 - 150
2452053	MCCP	84.3	80.4	P/P	40 - 150
2452053	Naproxen	71.2	59.4	P/P	40 - 150
2452053	Primidone	77.7	80.4	P/P	40 - 150
2452053	Pyraclostrobin	85.6	82.5	P/P	40 - 150
2452053	Silvex	79.8	71.0	P/P	40 - 150
2452053	Thiamethoxam	83.0	85.4	P/P	40 - 150
2452053	Tolfenpyrad	49.2	47.4	P/P	30 - 150
2452053	Triclopyr	85.3	77.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P438082

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452355	Acesulfame K	112	95.6	P/P	40 - 150
2452355	AMPA	96.0	97.6	P/P	40 - 160
2452355	Endothall	106	103	P/P	40 - 160
2452355	Glufosinate	96.0	104	P/P	40 - 160
2452355	Glyphosate	97.1	96.0	P/P	40 - 160
2452355	Sucralose	105	91.2	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P438334

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451833	Fluoride	103	103	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P438187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452346	Organic Carbon	93.5	93.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P438136

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452389	Color (true)	8.43	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P438141

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452403	Turbidity	1.13	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452360	Calcium	0.826	Spike	P	0 - 20
2452360	Iron	1.35	Spike	P	0 - 20
2452360	Magnesium	1.02	Spike	P	0 - 20
2452360	Potassium	0.746	Spike	P	0 - 20
2452360	Sodium	0.319	Spike	P	0 - 20
2452360	Strontium	0.764	Spike	P	0 - 20
2452360	Tin	0.922	Spike	P	0 - 20
2452360	Titanium	0.140	Spike	P	0 - 20
2452360	Vanadium	0.457	Spike	P	0 - 20
2452360	Zinc	0.120	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452360	Aluminum	1.25	Spike	P	0 - 20
2452360	Antimony	0.610	Spike	P	0 - 20
2452360	Arsenic	0.485	Spike	P	0 - 20
2452360	Barium	0.104	Spike	P	0 - 20
2452360	Beryllium	2.34	Spike	P	0 - 20
2452360	Boron	1.46	Spike	P	0 - 20
2452360	Cadmium	0.394	Spike	P	0 - 20
2452360	Chromium	2.54	Spike	P	0 - 20
2452360	Cobalt	0.169	Spike	P	0 - 20
2452360	Copper	1.52	Spike	P	0 - 20
2452360	Lead	0.477	Spike	P	0 - 20
2452360	Manganese	0.118	Spike	P	0 - 20
2452360	Molybdenum	1.36	Spike	P	0 - 20
2452360	Nickel	0.727	Spike	P	0 - 20
2452360	Selenium	3.34	Spike	P	0 - 20
2452360	Silver	0.00468	Spike	P	0 - 20
2452360	Thallium	1.25	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438318

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452389	Chloride	1.31	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452389	Sulfate	2.33	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438434

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452313	Ammonia-N	1.81	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P438170

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452438	Kjeldahl Nitrogen	1.70	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438253

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452091	NO2NO3-N	0.786	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P438209

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452390	Total-P	1.32	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P438126

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452391	O-Phosphate-P	1.63	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P438143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452401	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	6.83	Spike	P	0 - 35
2452401	Acetochlor	21.2	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P438143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452401	Alachlor	27.3	Spike	P	0 - 30
2452401	Ametryn	1.81	Spike	P	0 - 32
2452401	Atrazine	1.75	Spike	P	0 - 33
2452401	Atrazine Desethyl	9.79	Spike	P	0 - 36
2452401	Avobenzone	10.1	Spike	P	0 - 35
2452401	Azinphos Methyl	17.3	Spike	P	0 - 62
2452401	Azoxystrobin	6.18	Spike	P	0 - 39
2452401	Bromacil	10.2	Spike	P	0 - 33
2452401	Butylate	21.0	Spike	P	0 - 51
2452401	Caffeine	2.57	Spike	P	0 - 100
2452401	Carbophenothion	16.0	Spike	P	0 - 34
2452401	Carfentrazone Ethyl	12.5	Spike	P	0 - 33
2452401	Chlorfenapyr	19.0	Spike	P	0 - 28
2452401	Chlorpyrifos Ethyl	13.2	Spike	P	0 - 31
2452401	Chlorpyrifos Methyl	24.1	Spike	P	0 - 27
2452401	Coumaphos	22.4	Spike	P	0 - 62
2452401	Cyanazine	17.2	Spike	P	0 - 48
2452401	Cyprodinil	21.0	Spike	P	0 - 29
2452401	Dechlorane 602	3.01	Spike	P	0 - 60
2452401	Dechlorane 603	9.28	Spike	P	0 - 40
2452401	Dechlorane Plus	4.62	Spike	P	0 - 38
2452401	Demeton	26.0	Spike	P	0 - 33
2452401	Diazinon	5.87	Spike	P	0 - 32
2452401	Difenoconazole	4.53	Spike	P	0 - 71
2452401	Dimethenamid	5.46	Spike	P	0 - 60
2452401	Dimethomorph	9.46	Spike	P	0 - 61
2452401	Disulfoton	15.4	Spike	P	0 - 30
2452401	Dithiopyr	20.2	Spike	P	0 - 28
2452401	EPTC	4.61	Spike	P	0 - 56
2452401	Ethion	25.9	Spike	P	0 - 79
2452401	Ethoprop	9.59	Spike	P	0 - 31
2452401	Etridiazole	25.7	Spike	P	0 - 43
2452401	Fenamiphos	0.469	Spike	P	0 - 43
2452401	Fenbuconazole	21.1	Spike	P	0 - 79
2452401	Fipronil	9.52	Spike	P	0 - 46
2452401	Fipronil Desulfinyl	34.7	Spike	P	0 - 36
2452401	Fipronil Sulfide	8.79	Spike	P	0 - 34
2452401	Fipronil Sulfone	35.0	Spike	P	0 - 47
2452401	Fluazifop-P-butyl	8.27	Spike	P	0 - 38
2452401	Fludioxonil	3.70	Spike	P	0 - 29
2452401	Flumioxazin	2.30	Spike	P	0 - 63
2452401	Flutolanil	13.2	Spike	P	0 - 36
2452401	Fluxapyroxad	27.9	Spike	P	0 - 65
2452401	Fonofos	33.8	Spike	P	0 - 35
2452401	Hexabromobenzene	5.58	Spike	P	0 - 41
2452401	Hexazinone	8.21	Spike	P	0 - 31
2452401	Imazalil	12.8	Spike	P	0 - 52
2452401	Iprodione	14.6	Spike	P	0 - 49
2452401	Loratadine	0.636	Spike	P	0 - 59
2452401	Malathion	2.16	Spike	P	0 - 77
2452401	Metalaxyl	5.71	Spike	P	0 - 76

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P438143

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452401	Metolachlor	15.3	Spike	P	0 - 29
2452401	Metribuzin	20.4	Spike	P	0 - 51
2452401	Mevinphos	23.1	Spike	P	0 - 31
2452401	Molinate	22.4	Spike	P	0 - 39
2452401	Myclobutanil	15.7	Spike	P	0 - 34
2452401	Naled	13.2	Spike	P	0 - 37
2452401	Napropamide	20.4	Spike	P	0 - 100
2452401	Norflurazon	29.4	Spike	P	0 - 54
2452401	Octinoxate	0.584	Spike	P	0 - 35
2452401	Oxybenzone	8.21	Spike	P	0 - 35
2452401	Oxyfluorfen	3.71	Spike	P	0 - 28
2452401	Parathion Ethyl	8.66	Spike	P	0 - 31
2452401	Parathion Methyl	25.4	Spike	P	0 - 29
2452401	PBB-153	3.84	Spike	P	0 - 49
2452401	PBDE-47	0.573	Spike	P	0 - 36
2452401	PBDE-99	2.24	Spike	P	0 - 46
2452401	Pendimethalin	3.93	Spike	P	0 - 31
2452401	Pentabromotoluene	7.23	Spike	P	0 - 16
2452401	Phenytoin	5.80	Spike	P	0 - 100
2452401	Phorate	28.1	Spike	P	0 - 36
2452401	Prodiamine	28.6	Spike	P	0 - 68
2452401	Prometon	0.504	Spike	P	0 - 35
2452401	Prometryn	14.7	Spike	P	0 - 33
2452401	Pronamide	17.6	Spike	P	0 - 24
2452401	Propanil	17.8	Spike	P	0 - 28
2452401	Propargite	4.40	Spike	P	0 - 53
2452401	Propiconazole	2.87	Spike	P	0 - 44
2452401	Pyraflufen Ethyl	18.3	Spike	P	0 - 61
2452401	Pyridaben	5.60	Spike	P	0 - 43
2452401	Pyriproxyfen	8.09	Spike	P	0 - 82
2452401	Simazine	12.0	Spike	P	0 - 29
2452401	Stirophos	16.6	Spike	P	0 - 100
2452401	Sulfentrazone	21.1	Spike	P	0 - 64
2452401	Tebuconazole	15.4	Spike	P	0 - 76
2452401	Terbufos	9.50	Spike	P	0 - 29
2452401	Terbuthylazine	2.46	Spike	P	0 - 28
2452401	Tetradecachloro-m-terphenyl	6.24	Spike	P	0 - 42
2452401	Thiobencarb	11.0	Spike	P	0 - 26
2452401	Tri-o-cresyl Phosphate	2.31	Spike	P	0 - 24
2452401	Triadimefon	28.4	Spike	P	0 - 40
2452401	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.612	Spike	P	0 - 30
2452401	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.38	Spike	P	0 - 22
2452401	Tris(2-chloroethyl) phosphate (TCEP)	0.188	Spike	P	0 - 15

Reference Method: EPA 8321B

Batch ID: P437953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452053	2,4-D	5.06	Spike	P	0 - 30
2452053	2,4,5-T	3.35	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P437953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452053	Acetaminophen	2.55	Spike	P	0 - 30
2452053	Acetamiprid	4.33	Spike	P	0 - 30
2452053	Bentazon	3.36	Spike	P	0 - 30
2452053	Benzovindiflupyr	0.572	Spike	P	0 - 30
2452053	Carbamazepine	0.752	Spike	P	0 - 30
2452053	Clothianidin	1.26	Spike	P	0 - 30
2452053	Dinotefuran	2.02	Spike	P	0 - 30
2452053	Diuron	1.33	Spike	P	0 - 30
2452053	Fenuron	2.23	Spike	P	0 - 30
2452053	Fluridone	4.66	Spike	P	0 - 30
2452053	Hydrocodone	0.414	Spike	P	0 - 30
2452053	Ibuprofen	2.76	Spike	P	0 - 30
2452053	Imazapyr	1.83	Spike	P	0 - 30
2452053	Imidacloprid	3.00	Spike	P	0 - 30
2452053	Linuron	1.68	Spike	P	0 - 30
2452053	Mandestrobin	2.57	Spike	P	0 - 30
2452053	MCPP	4.67	Spike	P	0 - 30
2452053	Naproxen	18.0	Spike	P	0 - 30
2452053	Primidone	3.48	Spike	P	0 - 30
2452053	Pyraclostrobin	3.67	Spike	P	0 - 30
2452053	Silvex	11.7	Spike	P	0 - 30
2452053	Thiamethoxam	2.85	Spike	P	0 - 30
2452053	Tolfenpyrad	3.72	Spike	P	0 - 30
2452053	Triclopyr	9.41	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P438082

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452355	Acesulfame K	15.6	Spike	P	0 - 30
2452355	AMPA	1.66	Spike	P	0 - 30
2452355	Endothall	2.88	Spike	P	0 - 30
2452355	Glufosinate	7.87	Spike	P	0 - 30
2452355	Glyphosate	1.14	Spike	P	0 - 30
2452355	Sucralose	13.5	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P438221

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452403	Total Alkalinity	1.09	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438381

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452047	TDS	1.17	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P438334

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451833	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P438187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452346	Organic Carbon	0.0478	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2452399
Field Sample ID: G4SE0169

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	94.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.1	P	30 - 160
EPA 8321B	Diuron-d6	59.0	P	30 - 160
EPA 8321B	Endothall-d6	96.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.3	P	30 - 160
EPA 8321B	Primidone-d5	70.0	P	30 - 160
EPA 8321B	Sucralose-d6	94.1	P	30 - 160

Lab Sample ID: 2452401
Field Sample ID: G4SE0169

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.0	P	20 - 200
EPA 8270E	Simazine-d10	89.1	P	58 - 137
EPA 8270E	Terbufos-d10	77.5	P	50 - 134
EPA 8270E	Terphenyl-d14	88.3	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122866

Included Lab Sample IDs: 2452391

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	99.4	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A122870

Included Lab Sample IDs: 2452389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.3	99.0	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122871

Included Lab Sample IDs: 2452389

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

Reference Method: EPA 8321B

Run ID: A122875

Included Lab Sample IDs: 2452399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	125	123	P/P	60 - 160
Sucralose	99.4	103	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A122878

Included Lab Sample IDs: 2452399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.5	99.9	P/P	60 - 160
Endothall	93.2	98.1	P/P	60 - 160
Glufosinate	111	104	P/P	60 - 160
Glyphosate	100	98.7	P/P	60 - 160

Reference Method: SM 5310 B-2011

Run ID: A122895

Included Lab Sample IDs: 2452390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.8	94.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A122907

Included Lab Sample IDs: 2452389

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122920

Included Lab Sample IDs: 2452390

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122924

Included Lab Sample IDs: 2452400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	103	101	P/P	90 - 110
Antimony	100	99.8	P/P	90 - 110
Arsenic	99.2	98.6	P/P	90 - 110
Barium	101	100	P/P	90 - 110
Boron	102	104	P/P	90 - 110
Cadmium	99.3	99.4	P/P	90 - 110
Chromium	101	99.4	P/P	90 - 110
Cobalt	93.0	91.1	P/P	90 - 110
Copper	97.1	96.6	P/P	90 - 110
Lead	95.0	95.3	P/P	90 - 110
Manganese	101	98.6	P/P	90 - 110
Molybdenum	98.8	99.3	P/P	90 - 110
Nickel	97.9	97.3	P/P	90 - 110
Selenium	99.6	100	P/P	90 - 110
Silver	94.4	94.7	P/P	90 - 110
Thallium	96.5	96.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122927

Included Lab Sample IDs: 2452390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.0	99.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122934

Included Lab Sample IDs: 2452399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.5	84.0	P/P	50 - 150
2,4,5-T	86.9	93.8	P/P	50 - 150
Acetaminophen	111	113	P/P	60 - 160
Acetamiprid	107	106	P/P	50 - 150
Afidopyropen	93.6	101	P/P	50 - 150
Bentazon	94.1	91.3	P/P	50 - 160
Benzovindiflupyr	101	105	P/P	50 - 150
Carbamazepine	108	109	P/P	60 - 150
Clothianidin	106	102	P/P	60 - 150
Dinotefuran	107	114	P/P	50 - 150
Diuron	116	116	P/P	60 - 160
Fenuron	106	106	P/P	60 - 150
Fluridone	119	110	P/P	60 - 160
Hydrocodone	115	113	P/P	60 - 150
Ibuprofen	75.3	61.7	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122934
Included Lab Sample IDs: 2452399

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	92.4	92.8	P/P	50 - 150
Imidacloprid	94.1	99.8	P/P	60 - 150
Linuron	106	98.3	P/P	60 - 150
Mandestrobin	110	111	P/P	50 - 150
MCPP	95.0	94.0	P/P	50 - 150
Naproxen	112	93.2	P/P	50 - 160
Primidone	92.3	101	P/P	60 - 150
Pyraclostrobin	115	112	P/P	60 - 150
Silvex	95.1	98.6	P/P	50 - 150
Thiamethoxam	108	111	P/P	50 - 150
Tolfenpyrad	97.6	98.3	P/P	60 - 150
Triclopyr	97.3	94.9	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A122935
Included Lab Sample IDs: 2452390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.0	95.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122949
Included Lab Sample IDs: 2452389

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Sulfate	101	101	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A122950
Included Lab Sample IDs: 2452389

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122952
Included Lab Sample IDs: 2452400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	93.5	93.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A122988
Included Lab Sample IDs: 2452390

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A123039

Included Lab Sample IDs: 2452400

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	104	P/P	90 - 110
Iron	101	102	P/P	90 - 110
Magnesium	100	102	P/P	90 - 110
Potassium	99.4	101	P/P	90 - 110
Sodium	101	102	P/P	90 - 110
Strontium	101	102	P/P	90 - 110
Tin	101	101	P/P	90 - 110
Titanium	102	103	P/P	90 - 110
Vanadium	100	100	P/P	90 - 110
Zinc	100	101	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A123044

Included Lab Sample IDs: 2452401

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	93.7		P	80 - 120
Avobenzene	94.4		P	80 - 120
Dechlorane 602	97.8		P	80 - 120
Dechlorane 603	104		P	80 - 120
Dechlorane Plus	103		P	80 - 120
Hexabromobenzene	92.1		P	80 - 120
Octinoxate	98.6		P	80 - 120
Oxybenzone	99.0		P	80 - 120
PBB-153	85.7		P	80 - 120
PBDE-47	93.6		P	80 - 120
PBDE-99	90.8		P	80 - 120
Pentabromotoluene	100		P	80 - 120
Tetradecachloro-m-terphenyl	89.8		P	80 - 120
Tri-o-cresyl Phosphate	95.7		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	101		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	99.2		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	93.9		P	80 - 120

Reference Method: EPA 8270E

Run ID: A123248

Included Lab Sample IDs: 2452401

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.1		P	80 - 120
Alachlor	94.5		P	80 - 120
Ametryn	92.7		P	80 - 120
Atrazine	93.6		P	80 - 120
Atrazine Desethyl	92.9		P	80 - 120
Azinphos Methyl	102		P	80 - 120
Azoxystrobin	97.1		P	80 - 120
Bromacil	100		P	80 - 120
Butylate	88.2		P	80 - 120
Caffeine	92.2		P	80 - 120
Carbophenothion	110		P	80 - 120
Carfentrazone Ethyl	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123248
Included Lab Sample IDs: 2452401

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorfenapyr	94.5		P	80 - 120
Chlorpyrifos Ethyl	93.4		P	80 - 120
Chlorpyrifos Methyl	89.7		P	80 - 120
Coumaphos	104		P	80 - 120
Cyanazine	91.2		P	80 - 120
Cyprodinil	105		P	80 - 120
Demeton	104		P	80 - 120
Diazinon	95.7		P	80 - 120
Difenoconazole	102		P	80 - 120
Dimethenamid	90.7		P	80 - 120
Dimethomorph	109		P	80 - 120
Disulfoton	90.4		P	80 - 120
Dithiopyr	93.9		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	94.6		P	80 - 120
Ethoprop	103		P	80 - 120
Etridiazole	98.9		P	80 - 120
Fenamiphos	99.6		P	80 - 120
Fenbuconazole	99.4		P	80 - 120
Fipronil	90.9		P	80 - 120
Fipronil Desulfinyl	86.6		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	94.7		P	80 - 120
Fluazifop-P-butyl	93.2		P	80 - 120
Fludioxonil	97.7		P	80 - 120
Flumioxazin	104		P	80 - 120
Flutolanil	98.1		P	80 - 120
Fluxapyroxad	117		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	94.0		P	80 - 120
Imazalil	90.8		P	80 - 120
Iprodione	93.9		P	80 - 120
Loratadine	95.6		P	80 - 120
Malathion	95.9		P	80 - 120
Metalaxyl	90.1		P	80 - 120
Metolachlor	94.5		P	80 - 120
Metribuzin	97.9		P	80 - 120
Mevinphos	89.5		P	80 - 120
Molinate	95.0		P	80 - 120
Myclobutanil	95.7		P	80 - 120
Naled	107		P	80 - 120
Napropamide	99.7		P	80 - 120
Norflurazon	119		P	80 - 120
Oxadiazon	113		P	80 - 120
Oxyfluorfen	91.4		P	80 - 120
Parathion Ethyl	113		P	80 - 120
Parathion Methyl	91.0		P	80 - 120
Pendimethalin	116		P	80 - 120
Phenytoin	102		P	80 - 120
Phorate	118		P	80 - 120
Prodiamine	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A123248
Included Lab Sample IDs: 2452401

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometon	103		P	80 - 120
Prometryn	89.0		P	80 - 120
Pronamide	103		P	80 - 120
Propanil	85.5		P	80 - 120
Propargite	99.0		P	80 - 120
Propiconazole	114		P	80 - 120
Pyraflufen Ethyl	101		P	80 - 120
Pyridaben	98.8		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	88.1		P	80 - 120
Stirophos	78.9*		F	80 - 120
Sulfentrazone	102		P	80 - 120
Tebuconazole	108		P	80 - 120
Terbufos	104		P	80 - 120
Terbutylazine	107		P	80 - 120
Thiobencarb	91.3		P	80 - 120
Triadimefon	94.7		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision SMP	MS
			LCS				
DEP SOP: NU-094-1	Color (true)	97.5				8.43	
EPA 180.1 Rev. 2.0	Turbidity	103				1.13	
EPA 200.7 Rev. 4.4	Calcium	108	110	109	106		0.826
	Iron	109	110	109	108		1.35
	Magnesium	110	111	109	105		1.02
	Potassium	101	103	102	99.7		0.746
	Sodium	106	108	108	105		0.319
	Strontium	97.9	102	101	99.1		0.764
	Tin	96.8	98.1	99.1	94.5		0.922
	Titanium	101	102	102	101		0.140
	Vanadium	99.5	101	101	101		0.457
	Zinc	97.1	98.4	98.3	98.4		0.120
EPA 200.8 Rev. 5.4	Aluminum	100	99.4	98.1	99.6		1.25
	Antimony	100	99.2	99.8	99.9		0.610
	Arsenic	99.2	98.2	97.7	97.2		0.485
	Barium	101	100	100	98.7		0.104
	Beryllium	89.9	89.5	87.4	90.4		2.34
	Boron	101	104	103	101		1.46
	Cadmium	98.5	97.9	98.2	98.2		0.394
	Chromium	107	97.6	95.1	96.2		2.54
	Cobalt	93.3	91.8	91.6	89.4		0.169
	Copper	98.5	99.0	97.5	98.7		1.52
	Lead	94.6	94.4	93.9	94.6		0.477
	Manganese	100	100	100	91.7		0.118
	Molybdenum	96.7	99.2	97.9	99.3		1.36
	Nickel	100	95.8	95.1	94.7		0.727
	Selenium	99.7	99.1	95.9	95.3		3.34
	Silver	97.8	96.8	96.8	96.2		0.0046
	Thallium	98.6	99.9	98.7	98.4		1.25
EPA 300.0 Rev. 2.1	Chloride	106	104	106		1.31	
	Sulfate	108	105	107		2.33	
EPA 350.1 Rev. 2.0	Ammonia-N	96.6	96.2	98.2			1.81
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	104	101	104			1.70
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	98.5	100			0.786
EPA 365.1 Rev. 2.0	Total-P	102	103	104			1.32
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	93.1	97.2	98.8			1.63
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	31.7	50.8	54.4			6.83
	Acetochlor	89.5	107	86.6			21.2
	Alachlor	100	115	87.1			27.3
	Ametryn	108	100	98.4			1.81
	Atrazine	81.1					1.75
	Atrazine Desethyl	57.8	54.2	46.6			9.79
	Avobenzone	83.6	108	120			10.1
	Azinphos Methyl	162	176	148			17.3
	Azoxystrobin	82.7	82.3	77.2			6.18
	Bromacil	51.3	47.3	52.4			10.2
	Butylate	40.7	48.1	39.0			21.0
	Caffeine	108	114	110			2.57
	Carbophenothion	94.5	108	91.8			16.0
	Carfentrazone Ethyl	101	105	92.8			12.5
	Chlorfenapyr	75.5	92.8	76.6			19.0
	Chlorpyrifos Ethyl	64.1	53.5	61.1			13.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	98.6	108	85.0			24.1
	Coumaphos	94.5	94.2	118			22.4
	Cyanazine	129	150	126			17.2
	Cyprodinil	107	116	94.2			21.0
	Dechlorane 602	78.9	90.6	87.9			3.01
	Dechlorane 603	89.2	106	96.3			9.28
	Dechlorane Plus	98.1	107	102			4.62
	Demeton	84.2	99.9	76.9			26.0
	Diazinon	105	96.3	90.8			5.87
	Difenoconazole	70.3	66.9	63.9			4.53
	Dimethenamid	78.2	85.0	80.5			5.46
	Dimethomorph	126	134	122			9.46
	Disulfoton	67.8	60.5	70.6			15.4
	Dithiopyr	89.5	93.4	76.2			20.2
	EPTC	47.5	58.5	55.8			4.61
	Ethion	80.7	108	83.3			25.9
	Ethoprop	71.0	78.2	71.0			9.59
	Etridiazole	58.1	67.5	52.1			25.7
	Fenamiphos	75.2	76.0	75.6			0.469
	Fenbuconazole	61.3	71.1	87.9			21.1
	Fipronil	98.5	92.5	83.7			9.52
	Fipronil Desulfinyl	80.0	92.4	61.1			34.7
	Fipronil Sulfide	79.4	77.9	71.0			8.79
	Fipronil Sulfone	59.5	39.3	62.3			35.0
	Fluazifop-P-butyl	112	92.1	84.8			8.27
	Fludioxonil	85.5	81.1	78.2			3.70
	Flumioxazin	76.9	68.3	70.3			2.30
	Flutolanil	64.4	49.2	56.2			13.2
	Fluxapyroxad	72.9	62.8	87.2			27.9
	Fonofos	65.9	43.2	60.8			33.8
	Hexabromobenzene	75.3	74.4	78.7			5.58
	Hexazinone	79.8	93.2	85.9			8.21
	Imazalil	50.2	50.2	57.1			12.8
	Iprodione	64.2	51.5	59.6			14.6
	Loratadine	99.4	99.6	100			0.636
	Malathion	108	119	116			2.16
	Metalaxyl	76.4	68.4	64.6			5.71
	Metolachlor	90.1	91.3	77.1			15.3
	Metribuzin	82.9	91.1	74.2			20.4
	Mevinphos	54.0	53.4	67.3			23.1
	Molinate	70.9	68.8	54.9			22.4
	Myclobutanil	113	112	95.9			15.7
	Naled	56.2	57.0	50.0			13.2
	Napropamide	44.1	34.8	42.7			20.4
	Norflurazon	118	83.1	61.8			29.4
	Octinoxate	110	106	107			0.584
	Oxadiazon	99.3	90.3	72.7			
	Oxybenzone	104	95.2	103			8.21
	Oxyfluorfen	105	103	106			3.71
	Parathion Ethyl	96.9	97.7	89.6			8.66
	Parathion Methyl	109	141	109			25.4
	PBB-153	45.1	54.1	56.2			3.84
	PBDE-47	90.2	91.3	91.8			0.573
	PBDE-99	53.8	67.2	65.8			2.24

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Pendimethalin	98.4	98.4	102			3.93
	Pentabromotoluene	87.2	80.3	86.3			7.23
	Phenytoin	25.8	23.8	22.4			5.80
	Phorate	113	159	119			28.1
	Prodiamine	87.1	67.8	90.4			28.6
	Prometon	104	92.2	91.8			0.504
	Prometryn	113	111	96.2			14.7
	Pronamide	108	119	99.4			17.6
	Propanil	110	102	84.9			17.8
	Propargite	49.6	49.3	47.2			4.40
	Propiconazole	65.1	77.4	79.7			2.87
	Pyraflufen Ethyl	97.1	105	87.2			18.3
	Pyridaben	97.1	180	190			5.60
	Pyriproxyfen	123	138	127			8.09
	Simazine	76.3	89.4	79.3			12.0
	Stiophos	28.4	15.7	18.5			16.6
	Sulfentrazone	64.4	75.2	93.0			21.1
	Tebuconazole	48.7	49.2	57.5			15.4
	Terbufos	69.7	68.6	75.4			9.50
	Terbutylazine	93.3	89.6	91.8			2.46
	Tetradecachloro-m-terphenyl	78.6	98.7	92.7			6.24
	Thiobencarb	94.6	105	93.7			11.0
	Tri-o-cresyl Phosphate	115	111	114			2.31
	Triadimefon	73.0	74.2	55.8			28.4
	Tris(1-chloro-2-propyl) phosphate (TCPP)	122	116	115			0.612
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	95.8	100	98.0			2.38
	Tris(2-chloroethyl) phosphate (TCEP)	104	95.4	95.2			0.188
EPA 8321B	2,4-D	75.1	102	96.6			5.06
	2,4,5-T	61.7	73.5	76.0			3.35
	Acesulfame K	95.2	112	95.6			15.6
	Acetaminophen	82.3	98.9	101			2.55
	Acetamiprid	61.5	47.7	45.6			4.33
	AMPA	98.8	96.0	97.6			1.66
	Bentazon	56.7	34.2	33.1			3.36
	Benzovindiflupyr	76.9	78.8	78.3			0.572
	Carbamazepine	63.3	55.7	56.1			0.752
	Clothianidin	80.2	82.2	83.3			1.26
	Dinotefuran	66.1	62.1	63.3			2.02
	Diuron	62.2	56.5	55.7			1.33
	Endothall	102	106	103			2.88
	Fenuron	78.6	56.6	57.9			2.23
	Fluridone	77.4	69.7	73.0			4.66
	Glufosinate	105	96.0	104			7.87
	Glyphosate	103	97.1	96.0			1.14
	Hydrocodone	96.1	81.7	81.4			0.414
	Ibuprofen	51.3	61.1	59.4			2.76
	Imazapyr	75.3	92.7	94.4			1.83
	Imidacloprid	76.7	101	105			3.00
	Linuron	60.7	58.5	59.5			1.68
	Mandestrobin	79.3	81.7	83.8			2.57
	MCPP	66.7	80.4	84.3			4.67

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	Naproxen	45.3	59.4	71.2			18.0
	Primidone	75.0	77.7	80.4			3.48
	Pyraclostrobin	83.9	85.6	82.5			3.67
	Silvex	70.0	71.0	79.8			11.7
	Sucralose	99.3	105	91.2			13.5
	Thiamethoxam	78.2	83.0	85.4			2.85
	Tolfenpyrad	45.5	49.2	47.4			3.72
	Triclopyr	67.4	77.6	85.3			9.41
SM 2320 B-2011	Total Alkalinity	98.3				1.09	
SM 2540 C-2015	TDS	97.2				1.17	
SM 2540 D-2015	TSS	92.8					
SM 4500-F- C-2011	Fluoride	102	103	103			0.0
SM 5310 B-2011	Organic Carbon	94.2	93.5	93.5			0.0478

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2452389
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2452389
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2452400
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2452400
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2452389
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2452389
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2452390
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2452390
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2452390
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2452390
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2452391
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2452401
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2452401
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2452399
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2452389
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2452400
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2452389
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2452389
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2452389
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2452390

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	11/21/2023			11/21/2023 14:24	Chandler E Cox	2452389
EPA 180.1 Rev. 2.0	11/21/2023			11/21/2023 14:07	Anna M. Plaviak	2452389
EPA 200.7 Rev. 4.4	11/21/2023	11/27/2023 13:20	George D Taylor	12/05/2023 15:52	Chase Roberts	2452400
EPA 200.8 Rev. 5.4	11/21/2023	11/27/2023 13:20	George D Taylor	11/28/2023 16:44	Conrad Hartmann	2452400
	11/21/2023	11/27/2023 13:20	George D Taylor	11/29/2023 18:08	Emily M Philpot	2452400
EPA 300.0 Rev. 2.1	11/21/2023			11/28/2023 11:48	James L Waggeberby	2452389
EPA 350.1 Rev. 2.0	11/21/2023			12/01/2023 14:58	Khloe J Berg	2452390
EPA 351.2 Rev. 2.0	11/21/2023	11/27/2023 13:33	Simonne.V. Calhoun	11/29/2023 12:03	Ping Hua	2452390
EPA 353.2 Rev. 2.0	11/21/2023			11/28/2023 13:00	Fadila Guebre	2452390
EPA 365.1 Rev. 2.0	11/21/2023	11/28/2023 10:59	Adam P Silver	11/29/2023 10:42	James L Waggeberby	2452390
EPA 365.1 Rev. 2.0 dissolved	11/21/2023			11/21/2023 13:09	Elise M. Gillis	2452391
EPA 8270E	11/21/2023	11/27/2023 08:00	Fe-Val Siddell	12/04/2023 21:17	Arthur Maknenko	2452401
	11/21/2023	11/27/2023 08:00	Fe-Val Siddell	12/05/2023 18:58	Vandana T. Nagar	2452401
EPA 8321B	11/21/2023	11/21/2023 12:00	Tae K Lee	11/21/2023 12:51	Hana Lee	2452399
	11/21/2023	11/21/2023 12:00	Tae K Lee	11/21/2023 20:17	Hana Lee	2452399
	11/21/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 04:38	Juyoung Kim	2452399
SM 2320 B-2011	11/21/2023			11/27/2023 21:36	Adam P Silver	2452389
SM 2340 B-2011	11/21/2023			12/05/2023 15:52	Chase Roberts	2452400
SM 2540 C-2015	11/21/2023			11/21/2023 16:31	Yijie Li	2452389
SM 2540 D-2015	11/21/2023			11/21/2023 16:31	Yijie Li	2452389
SM 4500-F- C-2011	11/21/2023			11/30/2023 03:53	Chandler E Cox	2452389
SM 5310 B-2011	11/21/2023			11/27/2023 15:33	Kenneth H Lee	2452390