

Chemical Analysis Report

NW-DIST-2023-11-01-01

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

Event Description: **Bioassessment**
Request ID: **RQ-2023-08-14-23**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
Attn: Myranda Butler

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Certified by: Colin Wright, Program Administrator

Date Certified: 27-NOV-2023 12:30

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Pringle Branch below McDaniel Rd

Collection Date/Time: 10/30/2023 10:50

Field ID: G4NW0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447962	DEP SOP: NU-094-1	Color (true)	23		PCU	P437230	
	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P437242	
	EPA 300.0 Rev. 2.1	Chloride	4.0		mg Cl/L	P437824	
		Sulfate	0.28	I	mg SO4/L	P437828	
	SM 2320 B-2011	Total Alkalinity	2.1	I	mg CaCO3/L	P437665	
	SM 2540 C-2015	TDS	31		mg/L	P437680	
	SM 2540 D-2015	TSS	2	U	mg/L	P437569	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P437401	
2447963	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P437344	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.12	I	mg N/L	P437408	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.36		mg N/L	P437435	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P437281	
	SM 5310 B-2011	Organic Carbon	1.9		mg C/L	P437323	
2447964	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.008	IQ	mg P/L	P437239	
2447968	EPA 8321B	2,4-D	0.0020	U	ug/L	P437260	
		Acesulfame K	0.10	U	ug/L	P437132	
		2,4,5-T	0.0040	U	ug/L	P437260	
		AMPA	0.10	U	ug/L	P437132	
		Acetaminophen	0.0080	U	ug/L	P437260	
		Acetamiprid	0.0020	U	ug/L	P437260	
		Endothall	0.25	U	ug/L	P437132	
		Glufosinate	0.10	U	ug/L	P437132	
		Glyphosate	0.10	U	ug/L	P437132	
		Afidopyropen	0.0020	U	ug/L	P437260	
		Bentazon	0.0011	I	ug/L	P437260	
		Sucralose	0.024	I	ug/L	P437132	
		Benzovindiflupyr	0.0020	U	ug/L	P437260	
		Carbamazepine	8.0E-04	U	ug/L	P437260	
		Clothianidin	0.0020	U	ug/L	P437260	
		Dinotefuran	0.0020	U	ug/L	P437260	
		Diuron	0.0020	U	ug/L	P437260	
		Fenuron	0.032	U	ug/L	P437260	
		Fluridone	8.0E-04	U	ug/L	P437260	
		Imazapyr	0.0040	U	ug/L	P437260	
		Hydrocodone	0.0020	U	ug/L	P437260	
		Ibuprofen	0.080	U	ug/L	P437260	
		Imidacloprid	0.0020	U	ug/L	P437260	
		Linuron	0.0040	U	ug/L	P437260	
		Mandestrobin	0.0020	U	ug/L	P437260	
		MCP	0.0020	U	ug/L	P437260	
		Naproxen	0.0080	U	ug/L	P437260	
		Primidone	0.0040	U	ug/L	P437260	
		Pyraclostrobin	0.0020	U	ug/L	P437260	

Field ID: G4NW0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447968	EPA 8321B	Silvex	0.0040	U	ug/L	P437260	
		Thiamethoxam	0.0020	U	ug/L	P437260	
		Tolfenpyrad	0.0020	U	ug/L	P437260	
		Triclopyr	0.0040	U	ug/L	P437260	
2447969	EPA 200.7 Rev. 4.4	Calcium	1.02		mg/L	P437285	
		Iron	260		ug/L	P437285	
		Magnesium	0.93		mg/L	P437285	
		Potassium	0.30	U	mg/L	P437285	
		Sodium	2.2		mg/L	P437285	
		Strontium	8.1		ug/L	P437285	
		Tin	3.0	U	ug/L	P437285	
		Titanium	0.98	I	ug/L	P437285	
		Vanadium	2.0	U	ug/L	P437285	
		Zinc	5.0	U	ug/L	P437285	
	EPA 200.8 Rev. 5.4	Aluminum	54		ug/L	P437285	
		Antimony	0.050	U	ug/L	P437285	
		Arsenic	0.099	I	ug/L	P437285	
		Barium	18.0		ug/L	P437285	
		Beryllium	0.034	I	ug/L	P437285	
		Boron	7.6	I	ug/L	P437285	
		Cadmium	0.020	U	ug/L	P437285	
		Chromium	0.40	U	ug/L	P437285	
		Cobalt	0.200		ug/L	P437285	
		Copper	0.40	U	ug/L	P437285	
		Lead	0.20	U	ug/L	P437285	
		Manganese	7.71		ug/L	P437285	
		Molybdenum	0.15	U	ug/L	P437285	
		Nickel	0.50	U	ug/L	P437285	
		Selenium	0.20	U	ug/L	P437285	
		Silver	0.010	U	ug/L	P437285	
		Thallium	0.10	U	ug/L	P437285	
	SM 2340 B-2011	Hardness	6.4		mg/L	P437285	
2447970	EPA 8270E	Oxybenzone**	11	U	ng/L	P437288	
		Acetochlor	0.21	U	ng/L	P437288	
		Octinoxate**	160	U	ng/L	P437288	
		Alachlor	0.43	U	ng/L	P437288	
		Avobenzone**	110	U	ng/L	P437288	
		Ametryn	1.2	U	ng/L	P437288	
		Atrazine	0.21	U	ng/L	P437288	
		PBDE-47**	4.3	U	ng/L	P437288	
		Atrazine Desethyl	1.4	U	ng/L	P437288	
		PBDE-99**	5.3	U	ng/L	P437288	
		Azinphos Methyl	3.2	UJ	ng/L	P437288	CCV
		Tri-o-cresyl Phosphate**	6.4	U	ng/L	P437288	
		Azoxystrobin	0.43	U	ng/L	P437288	

Field ID: G4NW0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447970	EPA 8270E	Bromacil	0.64	U	ng/L	P437288	
		2-Ethylhexyl	13	U	ng/L	P437288	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.48	U	ng/L	P437288	
		Dechlorane Plus**	32	U	ng/L	P437288	
		Caffeine**	8.0	U	ng/L	P437288	
		Dechlorane 602**	5.3	U	ng/L	P437288	
		Carbophenothion	0.53	U	ng/L	P437288	
		Dechlorane 603**	4.3	U	ng/L	P437288	
		Carfentrazone Ethyl	0.16	U	ng/L	P437288	
		Hexabromobenzene**	6.4	U	ng/L	P437288	
		Chlorfenapyr	0.32	UJ	ng/L	P437288	CCV
		PBB-153**	6.4	U	ng/L	P437288	
		Chlorpyrifos Ethyl	0.32	UJ	ng/L	P437288	LCS
		Pentabromotoluene**	3.2	U	ng/L	P437288	
		Chlorpyrifos Methyl	0.11	UJ	ng/L	P437288	LCS
		Tris(2-chloroethyl) phosphate (TCEP)**	59	U	ng/L	P437288	
		Coumaphos	1.1	U	ng/L	P437288	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	27	U	ng/L	P437288	
		Cyanazine	5.3	U	ng/L	P437288	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.7	UJ	ng/L	P437288	LCS
		Cyprodinil	0.21	U	ng/L	P437288	MS
		Tetradecachloro-m-terphenyl**	8.0	U	ng/L	P437288	
		Demeton	3.7	U	ng/L	P437288	
		Diazinon	0.13	U	ng/L	P437288	MS
		Difenoconazole	0.64	U	ng/L	P437288	
		Dimethenamid	0.11	U	ng/L	P437288	
		Dimethomorph	0.32	U	ng/L	P437288	
		Disulfoton	0.64	U	ng/L	P437288	
		Dithiopyr	1.1	U	ng/L	P437288	MS, RPD
		EPTC	0.53	U	ng/L	P437288	
		Ethion	0.32	U	ng/L	P437288	
		Ethoprop	0.13	U	ng/L	P437288	
		Etridiazole	0.11	U	ng/L	P437288	
		Fenamiphos	0.48	U	ng/L	P437288	
		Fenbuconazole	0.53	U	ng/L	P437288	
		Fipronil	0.21	U	ng/L	P437288	
		Fipronil Desulfinyl**	0.11	U	ng/L	P437288	
		Fipronil Sulfide	0.11	U	ng/L	P437288	MS
		Fipronil Sulfone	0.11	U	ng/L	P437288	
		Fluazifop-P-butyl	0.11	U	ng/L	P437288	RPD
		Fludioxonil	0.11	U	ng/L	P437288	
		Flumioxazin	3.2	U	ng/L	P437288	
		Flutolanil	0.11	U	ng/L	P437288	
		Fluxapyroxad	0.27	U	ng/L	P437288	RPD

Field ID: G4NW0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2447970	EPA 8270E	Fonofos	0.16	U	ng/L	P437288	
		Hexazinone	0.53	U	ng/L	P437288	
		Imazalil	0.69	U	ng/L	P437288	
		Iprodione	0.53	U	ng/L	P437288	
		Loratadine**	0.32	U	ng/L	P437288	
		Malathion	0.37	U	ng/L	P437288	
		Metalaxyl	0.53	U	ng/L	P437288	
		Metolachlor	0.86	I	ng/L	P437288	
		Metribuzin	0.43	U	ng/L	P437288	
		Mevinphos	1.1	U	ng/L	P437288	
		Molinate	0.27	U	ng/L	P437288	
		Myclobutanil	0.37	U	ng/L	P437288	
		Naled	2.7	U	ng/L	P437288	
		Napropamide	0.74	U	ng/L	P437288	MS
		Norflurazon	1.1	U	ng/L	P437288	
		Oxadiazon	0.37	U	ng/L	P437288	
		Oxyfluorfen	0.21	U	ng/L	P437288	MS
		Parathion Ethyl	0.16	U	ng/L	P437288	MS
		Parathion Methyl	0.21	UJ	ng/L	P437288	LCS, MS
		Pendimethalin	1.8	UJ	ng/L	P437288	LCS, MS
		Phenytain**	5.6	U	ng/L	P437288	
		Phorate	0.27	U	ng/L	P437288	
		Prodiamine	0.21	U	ng/L	P437288	
		Prometon	3.2	U	ng/L	P437288	
		Prometryn	0.37	U	ng/L	P437288	
		Pronamide	0.11	U	ng/L	P437288	
		Propanil	0.11	U	ng/L	P437288	
		Propargite	0.85	U	ng/L	P437288	
		Propiconazole	0.64	U	ng/L	P437288	MS
		Pyraflufen Ethyl	0.32	U	ng/L	P437288	
		Pyridaben	1.5	U	ng/L	P437288	
		Pyriproxyfen	0.27	UJ	ng/L	P437288	CCV
		Simazine	0.27	U	ng/L	P437288	
		Stirophos	0.43	U	ng/L	P437288	
		Sulfentrazone	1.5	U	ng/L	P437288	RPD
		Tebuconazole	1.5	U	ng/L	P437288	
		Terbufos	0.21	U	ng/L	P437288	
		Terbuthylazine	0.21	U	ng/L	P437288	
		Thiobencarb	0.53	U	ng/L	P437288	RPD
		Triadimefon	0.16	U	ng/L	P437288	

Field ID: G4NW0043

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired upon receipt.
EPA 8321B: MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for strontium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters 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: P437230

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437242

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437285

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: P437285

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: P437824

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: P437828

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437344

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437408

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437435

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437281

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437239

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

Reference Method: EPA 8270E
Batch ID: P437288

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: P437288

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
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
PBB-153	6.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437288

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
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
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: P437132

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

Reference Method: EPA 8321B

Batch ID: P437260

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P437260

Component	Result	Code	Units
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
MCPPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011

Batch ID: P437665

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

Reference Method: SM 2540 C-2015

Batch ID: P437680

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P437569

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P437401

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P437323

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: P437230

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.5		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437242

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437285

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	111		P	85 - 115
Magnesium	104		P	85 - 115
Potassium	102		P	85 - 115
Sodium	109		P	85 - 115
Strontium	100		P	85 - 115
Tin	96.4		P	85 - 115
Titanium	100		P	85 - 115
Vanadium	99.2		P	85 - 115
Zinc	97.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437285

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.3		P	85 - 115
Antimony	97.7		P	85 - 115
Arsenic	99.3		P	85 - 115
Barium	102		P	85 - 115
Beryllium	94.3		P	85 - 115
Boron	96.3		P	85 - 115
Cadmium	96.5		P	85 - 115
Chromium	94.9		P	85 - 115
Cobalt	101		P	85 - 115
Copper	95.7		P	85 - 115
Lead	104		P	85 - 115
Manganese	96.6		P	85 - 115
Molybdenum	95.0		P	85 - 115
Nickel	96.2		P	85 - 115
Selenium	99.1		P	85 - 115
Silver	106		P	85 - 115
Thallium	106		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

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: P437828

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437344

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437408

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.4		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437435

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437281

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: P437239

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

Reference Method: EPA 8270E
Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4		P	37 - 154
Acetochlor	89.4		P	64 - 124
Alachlor	86.7		P	61 - 118
Ametryn	116		P	47 - 158
Atrazine	104		P	68 - 121
Atrazine Desethyl	101		P	30 - 119
Avobenzone	124		P	48 - 193
Azinphos Methyl	49.4		P	30 - 194
Azoxystrobin	65.2		P	58 - 154
Bromacil	105		P	47 - 126
Butylate	60.3		P	31 - 83.0
Caffeine	88.3		P	10 - 180
Carbophenothion	93.8		P	59 - 133
Carfentrazone Ethyl	98.5		P	59 - 147
Chlorfenapyr	78.3		P	52 - 118
Chlorpyrifos Ethyl	126		F	59 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	123		F	65 - 123
Coumaphos	66.8		P	11 - 223
Cyanazine	145		P	63 - 250
Cyprodinil	125		P	52 - 143
Dechlorane 602	110		P	23 - 142
Dechlorane 603	119		P	51 - 171
Dechlorane Plus	153		P	46 - 161
Demeton	85.3		P	42 - 119
Diazinon	112		P	67 - 132
Difenoconazole	53.4		P	12 - 204
Dimethenamid	93.2		P	53 - 113
Dimethomorph	101		P	13 - 238
Disulfoton	99.7		P	56 - 126
Dithiopyr	92.4		P	58 - 127
EPTC	52.7		P	31 - 78.0
Ethion	79.8		P	24 - 127
Ethoprop	98.2		P	60 - 118
Etridiazole	63.9		P	32 - 91.0
Fenamiphos	92.1		P	54 - 129
Fenbuconazole	37.1		P	31 - 162
Fipronil	89.7		P	56 - 131
Fipronil Desulfinyl	101		P	58 - 132
Fipronil Sulfide	101		P	51 - 123
Fipronil Sulfone	85.0		P	50 - 125
Fluazifop-P-butyl	101		P	52 - 132
Fludioxonil	79.0		P	52 - 129
Flumioxazin	59.1		P	34 - 250
Flutolanil	99.7		P	45 - 128
Fluxapyroxad	78.3		P	31 - 150
Fonofos	98.2		P	60 - 116
Hexabromobenzene	104		P	52 - 165
Hexazinone	108		P	59 - 120
Imazalil	103		P	39 - 134
Iprodione	101		P	39 - 243
Loratadine	117		P	10 - 240
Malathion	107		P	53 - 145
Metaxyl	87.3		P	59 - 120
Metolachlor	106		P	64 - 122
Metribuzin	104		P	33 - 128
Mevinphos	81.5		P	48 - 119
Molinate	60.9		P	42 - 89.0
Myclobutanil	91.0		P	54 - 129
Naled	40.2		P	10 - 138
Napropamide	89.0		P	40 - 122
Norflurazon	70.5		P	49 - 132
Octinoxate	124		P	29 - 176
Oxadiazon	85.4		P	50 - 115
Oxybenzone	121		P	45 - 145
Oxyfluorfen	129		P	62 - 149
Parathion Ethyl	105		P	68 - 119
Parathion Methyl	180		F	68 - 147
PBB-153	102		P	42 - 179

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	115		P	44 - 141
PBDE-99	107		P	36 - 141
Pendimethalin	159		F	59 - 158
Pentabromotoluene	107		P	58 - 148
Phenytoin	71.2		P	10 - 151
Phorate	96.7		P	44 - 124
Prodiamine	59.0		P	10 - 136
Prometon	111		P	45 - 131
Prometryn	123		P	52 - 140
Pronamide	118		P	70 - 129
Propanil	105		P	54 - 144
Propargite	86.8		P	10 - 191
Propiconazole	58.0		P	49 - 128
Pyraflufen Ethyl	86.5		P	46 - 141
Pyridaben	48.4		P	29 - 198
Pyriproxyfen	54.9		P	33 - 221
Simazine	91.4		P	62 - 119
Stirophos	81.3		P	13 - 144
Sulfentrazone	79.7		P	12 - 152
Tebuconazole	68.3		P	10 - 135
Terbufos	104		P	67 - 136
Terbutylazine	92.0		P	66 - 113
Tetradecachloro-m-terphenyl	180		P	30 - 235
Thiobencarb	100		P	51 - 125
Tri-o-cresyl Phosphate	130		P	50 - 150
Triadimefon	105		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	159		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142		F	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	159		P	59 - 166

Reference Method: EPA 8321B

Batch ID: P437132

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	84.3		P	40 - 150
Endothall	98.2		P	40 - 150
Glufosinate	99.9		P	40 - 150
Glyphosate	93.3		P	40 - 150
Sucralose	96.4		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	69.7		P	40 - 150
2,4,5-T	77.3		P	40 - 150
Acetaminophen	86.5		P	30 - 150
Acetamiprid	77.3		P	40 - 150
Afidopyropen	59.1		P	30 - 150
Bentazon	74.8		P	30 - 150
Benzovindiflupyr	80.4		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P437260

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	75.1		P	40 - 150
Clothianidin	87.6		P	40 - 150
Dinotefuran	102		P	40 - 150
Diuron	85.6		P	40 - 150
Fenuron	89.2		P	40 - 150
Fluridone	78.4		P	40 - 150
Hydrocodone	89.3		P	40 - 150
Ibuprofen	65.4		P	40 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	81.6		P	40 - 150
Linuron	81.3		P	40 - 150
Mandestrobin	79.3		P	40 - 150
MCPPP	73.4		P	40 - 150
Naproxen	61.0		P	40 - 150
Primidone	84.3		P	40 - 150
Pyraclostrobin	75.6		P	40 - 150
Silvex	68.8		P	40 - 150
Thiamethoxam	86.8		P	40 - 150
Tolfenpyrad	51.7		P	30 - 150
Triclopyr	82.8		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P437665

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	98.1		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P437680

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	107		P	85 - 115

Reference Method: SM 2540 D-2015

Batch ID: P437569

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.0		P	85 - 115

Reference Method: SM 4500-F- C-2011

Batch ID: P437401

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P437323

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447578	Calcium	103		P	80 - 120
2447578	Iron	110	110	P/P	80 - 120
2447578	Magnesium	104		P	80 - 120
2447578	Potassium	102	103	P/P	80 - 120
2447578	Sodium	108	109	P/P	80 - 120
2447578	Tin	95.4	96.2	P/P	80 - 120
2447578	Titanium	100	101	P/P	80 - 120
2447578	Vanadium	99.9	101	P/P	80 - 120
2447578	Zinc	95.3	95.6	P/P	80 - 120
2447933	Calcium	104		P	80 - 120
2447933	Iron	109		P	80 - 120
2447933	Magnesium	108		P	80 - 120
2447933	Potassium	101		P	80 - 120
2447933	Sodium	103		P	80 - 120
2447933	Strontium	99.2		P	80 - 120
2447933	Tin	95.1		P	80 - 120
2447933	Titanium	101		P	80 - 120
2447933	Vanadium	99.3		P	80 - 120
2447933	Zinc	96.4		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447578	Aluminum	98.8	97.9	P/P	80 - 120
2447578	Antimony	100	99.9	P/P	80 - 120
2447578	Arsenic	100	99.5	P/P	80 - 120
2447578	Barium	101	101	P/P	80 - 120
2447578	Beryllium	93.4	94.5	P/P	80 - 120
2447578	Boron	103	103	P/P	80 - 120
2447578	Cadmium	101	98.9	P/P	80 - 120
2447578	Chromium	95.9	95.6	P/P	80 - 120
2447578	Cobalt	98.7	99.2	P/P	80 - 120
2447578	Copper	95.2	94.6	P/P	80 - 120
2447578	Lead	105	105	P/P	80 - 120
2447578	Manganese	99.0	98.3	P/P	80 - 120
2447578	Molybdenum	98.0	98.3	P/P	80 - 120
2447578	Nickel	96.2	95.0	P/P	80 - 120
2447578	Selenium	98.1	96.4	P/P	80 - 120
2447578	Silver	107	107	P/P	80 - 120
2447578	Thallium	109	108	P/P	80 - 120
2447933	Aluminum	98.5		P	80 - 120
2447933	Antimony	98.5		P	80 - 120
2447933	Arsenic	98.8		P	80 - 120
2447933	Barium	100		P	80 - 120
2447933	Beryllium	92.3		P	80 - 120
2447933	Boron	100		P	80 - 120
2447933	Cadmium	99.1		P	80 - 120
2447933	Chromium	95.0		P	80 - 120
2447933	Cobalt	98.9		P	80 - 120
2447933	Copper	95.1		P	80 - 120
2447933	Lead	104		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437285

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447933	Manganese	98.8		P	80 - 120
2447933	Molybdenum	96.9		P	80 - 120
2447933	Nickel	94.4		P	80 - 120
2447933	Selenium	99.0		P	80 - 120
2447933	Silver	107		P	80 - 120
2447933	Thallium	106		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P437824

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447763	Chloride	101		P	90 - 110
2447881	Chloride	99.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P437828

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447763	Sulfate	100		P	90 - 110
2447881	Sulfate	94.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P437344

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447956	Ammonia-N	96.0	97.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P437408

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448030	Kjeldahl Nitrogen	101	99.3	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P437435

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447928	NO2NO3-N	102	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P437281

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447963	Total-P	104	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P437239

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447957	O-Phosphate-P	94.7	95.4	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	104	93.1	P/P	29 - 155
2447910	Acetochlor	106	86.8	P/P	60 - 124
2447910	Alachlor	105	84.0	P/P	54 - 122
2447910	Ametryn	133	119	P/P	51 - 208
2447910	Atrazine	112	100	P/P	57 - 131
2447910	Atrazine Desethyl	118	116	P/P	13 - 124
2447910	Avobenzone	136	149	P/P	35 - 187
2447910	Azinphos Methyl	159	186	P/P	43 - 276
2447910	Butylate	50.8	60.9	P/P	23 - 82.0
2447910	Caffeine	145	123	P/P	10 - 277
2447910	Carbophenothion	94.7	95.1	P/P	47 - 135
2447910	Carfentrazone Ethyl	117	104	P/P	46 - 147
2447910	Chlorfenapyr	72.4	80.1	P/P	43 - 114
2447910	Chlorpyrifos Ethyl	99.0	117	P/P	47 - 124
2447910	Chlorpyrifos Methyl	121	128	P/P	60 - 135
2447910	Coumaphos	167	118	P/P	10 - 222
2447910	Cyanazine	163	156	P/P	10 - 257
2447910	Cyprodinil	120	176	P/F	42 - 148
2447910	Dechlorane 602	94.9	102	P/P	14 - 133
2447910	Dechlorane 603	158	157	P/P	18 - 191
2447910	Dechlorane Plus	126	123	P/P	23 - 154
2447910	Demeton	80.4	95.9	P/P	41 - 137
2447910	Diazinon	-2.33	61.9	F/F	64 - 139
2447910	Difenoconazole	131	122	P/P	46 - 254
2447910	Dimethenamid	95.4	96.9	P/P	47 - 117
2447910	Dimethomorph	203	225	P/P	14 - 255
2447910	Disulfoton	129	99.6	P/P	52 - 130
2447910	Dithiopyr	122	87.8	F/P	40 - 121
2447910	EPTC	40.8	52.8	P/P	19 - 78.0
2447910	Ethion	88.9	66.0	P/P	12 - 124
2447910	Ethoprop	96.0	92.6	P/P	68 - 144
2447910	Etridiazole	64.5	60.3	P/P	26 - 96.0
2447910	Fenamiphos	94.2	94.9	P/P	41 - 129
2447910	Fenbuconazole	96.9	86.0	P/P	26 - 169
2447910	Fipronil	104	83.9	P/P	46 - 145
2447910	Fipronil Desulfinyl	119	119	P/P	47 - 136
2447910	Fipronil Sulfide	133	75.6	F/P	41 - 127
2447910	Fipronil Sulfone	61.7	89.6	P/P	35 - 133
2447910	Fluazifop-P-butyl	87.5	129	P/P	46 - 131
2447910	Flumioxazin	142	149	P/P	10 - 289
2447910	Flutolanil	78.4	112	P/P	34 - 130
2447910	Fonofos	79.3	99.7	P/P	42 - 131
2447910	Hexabromobenzene	128	106	P/P	47 - 178
2447910	Hexazinone	102	103	P/P	64 - 125
2447910	Imazalil	109	98.8	P/P	37 - 252
2447910	Iprodione	112	98.6	P/P	34 - 265
2447910	Loratadine	162	195	P/P	20 - 231
2447910	Malathion	99.6	125	P/P	34 - 164
2447910	Metalaxyl	108	90.0	P/P	49 - 125
2447910	Metolachlor	101	113	P/P	54 - 125
2447910	Metribuzin	97.7	92.5	P/P	51 - 139
2447910	Mevinphos	85.3	88.0	P/P	46 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437288

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447910	Molinate	53.9	68.5	P/P	39 - 93.0
2447910	Naled	31.7	29.6	P/P	10 - 150
2447910	Napropamide	111	80.5	F/P	10 - 109
2447910	Norflurazon	42.2	70.1	P/P	36 - 134
2447910	Octinoxate	135	135	P/P	18 - 170
2447910	Oxadiazon	106	85.7	P/P	43 - 112
2447910	Oxybenzone	134	142	P/P	33 - 154
2447910	Oxyfluorfen	163	122	F/P	62 - 154
2447910	Parathion Ethyl	120	112	F/P	65 - 120
2447910	Parathion Methyl	204	163	F/P	77 - 185
2447910	PBB-153	147	117	P/P	23 - 193
2447910	PBDE-47	134	127	P/P	31 - 139
2447910	PBDE-99	106	97.0	P/P	24 - 138
2447910	Pendimethalin	208	168	F/F	50 - 146
2447910	Pentabromotoluene	119	112	P/P	54 - 152
2447910	Phenytoin	80.1	51.2	P/P	10 - 157
2447910	Phorate	99.9	115	P/P	54 - 161
2447910	Prodiamine	46.3	72.4	P/P	29 - 160
2447910	Prometon	128	102	P/P	38 - 145
2447910	Prometryn	139	150	P/P	32 - 151
2447910	Pronamide	123	103	P/P	61 - 140
2447910	Propanil	109	93.8	P/P	50 - 147
2447910	Propargite	90.3	70.6	P/P	10 - 190
2447910	Propiconazole	237	290	F/F	30 - 146
2447910	Pyraflufen Ethyl	68.0	76.4	P/P	30 - 147
2447910	Pyridaben	111	119	P/P	15 - 195
2447910	Pyriproxyfen	122	199	P/P	31 - 218
2447910	Simazine	94.9	95.7	P/P	45 - 139
2447910	Stirophos	72.0	63.8	P/P	10 - 134
2447910	Tebuconazole	68.6	63.5	P/P	10 - 133
2447910	Terbufos	89.8	101	P/P	65 - 151
2447910	Terbutylazine	91.4	85.2	P/P	62 - 117
2447910	Tetradecachloro-m-terphenyl	148	121	P/P	10 - 260
2447910	Thiobencarb	110	83.8	P/P	48 - 122
2447910	Tri-o-cresyl Phosphate	137	131	P/P	32 - 151
2447910	Triadimefon	103	89.7	P/P	46 - 124
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	118	118	P/P	51 - 154
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	108	P/P	59 - 147
2447910	Tris(2-chloroethyl) phosphate (TCEP)	113	118	P/P	65 - 156

Reference Method: EPA 8321B

Batch ID: P437132

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	Acesulfame K	118	123	P/P	40 - 150
2447822	AMPA	79.5	90.2	P/P	40 - 150
2447822	Endothall	102	103	P/P	40 - 150
2447822	Glufosinate	92.1	87.3	P/P	40 - 150
2447822	Glyphosate	67.0	64.8	P/P	40 - 150
2447822	Sucralose	90.6	93.3	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P437260

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447822	2,4-D	80.4	79.2	P/P	40 - 150
2447822	2,4,5-T	76.0	74.6	P/P	40 - 150
2447822	Acetaminophen	85.2	82.1	P/P	30 - 150
2447822	Acetamiprid	54.7	58.5	P/P	40 - 150
2447822	Afidopyropen	63.0	59.6	P/P	30 - 150
2447822	Bentazon	46.5	43.8	P/P	30 - 150
2447822	Benzovindiflupyr	82.9	78.2	P/P	40 - 150
2447822	Carbamazepine	56.9	54.8	P/P	40 - 150
2447822	Clothianidin	67.5	65.9	P/P	40 - 150
2447822	Dinotefuran	60.2	58.5	P/P	40 - 150
2447822	Fluridone	65.4	57.5	P/P	40 - 150
2447822	Hydrocodone	54.4	53.2	P/P	40 - 150
2447822	Ibuprofen	48.7	57.7	P/P	40 - 150
2447822	Imazapyr	87.4	82.6	P/P	40 - 150
2447822	Imidacloprid	89.8	91.7	P/P	40 - 150
2447822	Linuron	66.4	60.4	P/P	40 - 150
2447822	Mandestrobin	73.6	73.3	P/P	40 - 150
2447822	MCPP	84.4	80.4	P/P	40 - 150
2447822	Naproxen	65.2	77.9	P/P	40 - 150
2447822	Primidone	72.9	71.5	P/P	40 - 150
2447822	Pyraclostrobin	77.6	79.2	P/P	40 - 150
2447822	Silvex	74.6	69.9	P/P	40 - 150
2447822	Thiamethoxam	61.3	61.9	P/P	40 - 150
2447822	Tolfenpyrad	57.4	53.2	P/P	30 - 150
2447822	Triclopyr	77.2	80.4	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P437401

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448552	Fluoride	100	100	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P437323

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2447811	Organic Carbon	94.9	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437230

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448029	Color (true)	7.26	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437242

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447974	Turbidity	5.76	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447578	Calcium	0.880	Spike	P	0 - 20
2447578	Iron	0.356	Spike	P	0 - 20
2447578	Magnesium	0.741	Spike	P	0 - 20
2447578	Potassium	0.528	Spike	P	0 - 20
2447578	Sodium	0.736	Spike	P	0 - 20
2447578	Strontium	1.85	Spike	P	0 - 20
2447578	Tin	0.846	Spike	P	0 - 20
2447578	Titanium	0.352	Spike	P	0 - 20
2447578	Vanadium	0.641	Spike	P	0 - 20
2447578	Zinc	0.364	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437285

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447578	Aluminum	0.681	Spike	P	0 - 20
2447578	Antimony	0.381	Spike	P	0 - 20
2447578	Arsenic	0.523	Spike	P	0 - 20
2447578	Barium	0.263	Spike	P	0 - 20
2447578	Beryllium	1.18	Spike	P	0 - 20
2447578	Boron	0.436	Spike	P	0 - 20
2447578	Cadmium	1.67	Spike	P	0 - 20
2447578	Chromium	0.241	Spike	P	0 - 20
2447578	Cobalt	0.426	Spike	P	0 - 20
2447578	Copper	0.619	Spike	P	0 - 20
2447578	Lead	0.651	Spike	P	0 - 20
2447578	Manganese	0.683	Spike	P	0 - 20
2447578	Molybdenum	0.120	Spike	P	0 - 20
2447578	Nickel	1.22	Spike	P	0 - 20
2447578	Selenium	1.76	Spike	P	0 - 20
2447578	Silver	0.430	Spike	P	0 - 20
2447578	Thallium	0.192	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437824

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447763	Chloride	0.363	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437828

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447763	Sulfate	12.0	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437344

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447956	Ammonia-N	1.42	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437408

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448030	Kjeldahl Nitrogen	1.44	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437435

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447928	NO2NO3-N	1.97	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437281

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447963	Total-P	0.191	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437239

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447957	O-Phosphate-P	0.652	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	10.8	Spike	P	0 - 35
2447910	Acetochlor	19.8	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	Alachlor	22.2	Spike	P	0 - 30
2447910	Ametryn	10.9	Spike	P	0 - 32
2447910	Atrazine	9.98	Spike	P	0 - 33
2447910	Atrazine Desethyl	1.67	Spike	P	0 - 36
2447910	Avobenzone	9.49	Spike	P	0 - 35
2447910	Azinphos Methyl	15.5	Spike	P	0 - 62
2447910	Azoxystrobin	6.56	Spike	P	0 - 39
2447910	Bromacil	16.9	Spike	P	0 - 33
2447910	Butylate	18.0	Spike	P	0 - 51
2447910	Caffeine	16.0	Spike	P	0 - 100
2447910	Carbophenothion	0.453	Spike	P	0 - 34
2447910	Carfentrazone Ethyl	11.2	Spike	P	0 - 33
2447910	Chlorfenapyr	10.1	Spike	P	0 - 28
2447910	Chlorpyrifos Ethyl	17.0	Spike	P	0 - 31
2447910	Chlorpyrifos Methyl	5.29	Spike	P	0 - 27
2447910	Coumaphos	33.9	Spike	P	0 - 62
2447910	Cyanazine	4.73	Spike	P	0 - 48
2447910	Cyprodinil	15.7	Spike	P	0 - 29
2447910	Dechlorane 602	7.33	Spike	P	0 - 60
2447910	Dechlorane 603	0.395	Spike	P	0 - 40
2447910	Dechlorane Plus	2.14	Spike	P	0 - 38
2447910	Demeton	17.6	Spike	P	0 - 33
2447910	Diazinon	9.95	Spike	P	0 - 32
2447910	Difenoconazole	5.96	Spike	P	0 - 71
2447910	Dimethenamid	1.51	Spike	P	0 - 60
2447910	Dimethomorph	10.3	Spike	P	0 - 61
2447910	Disulfoton	25.7	Spike	P	0 - 30
2447910	Dithiopyr	32.9	Spike	F	0 - 28
2447910	EPTC	25.6	Spike	P	0 - 56
2447910	Ethion	29.6	Spike	P	0 - 79
2447910	Ethoprop	3.58	Spike	P	0 - 31
2447910	Etridiazole	6.60	Spike	P	0 - 43
2447910	Fenamiphos	0.811	Spike	P	0 - 43
2447910	Fenbuconazole	11.9	Spike	P	0 - 79
2447910	Fipronil	20.8	Spike	P	0 - 46
2447910	Fipronil Desulfinyl	0.368	Spike	P	0 - 36
2447910	Fipronil Sulfide	28.5	Spike	P	0 - 34
2447910	Fipronil Sulfone	17.7	Spike	P	0 - 47
2447910	Fluazifop-P-butyl	38.2	Spike	F	0 - 38
2447910	Fludioxonil	5.02	Spike	P	0 - 29
2447910	Flumioxazin	5.15	Spike	P	0 - 63
2447910	Flutolanil	25.4	Spike	P	0 - 36
2447910	Fluxapyroxad	102	Spike	F	0 - 65
2447910	Fonofos	22.7	Spike	P	0 - 35
2447910	Hexabromobenzene	18.7	Spike	P	0 - 41
2447910	Hexazinone	0.794	Spike	P	0 - 31
2447910	Imazalil	9.38	Spike	P	0 - 52
2447910	Iprodione	12.8	Spike	P	0 - 49
2447910	Loratadine	18.8	Spike	P	0 - 59
2447910	Malathion	22.3	Spike	P	0 - 77
2447910	Metalaxyl	13.5	Spike	P	0 - 76

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P437288

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447910	Metolachlor	11.5	Spike	P	0 - 29
2447910	Metribuzin	5.40	Spike	P	0 - 51
2447910	Mevinphos	3.16	Spike	P	0 - 31
2447910	Molinate	23.9	Spike	P	0 - 39
2447910	Myclobutanil	22.9	Spike	P	0 - 34
2447910	Naled	6.81	Spike	P	0 - 37
2447910	Napropamide	31.9	Spike	P	0 - 100
2447910	Norflurazon	42.2	Spike	P	0 - 54
2447910	Octinoxate	0.325	Spike	P	0 - 35
2447910	Oxadiazon	21.4	Spike	P	0 - 34
2447910	Oxybenzone	5.75	Spike	P	0 - 35
2447910	Oxyfluorfen	21.1	Spike	P	0 - 28
2447910	Parathion Ethyl	6.83	Spike	P	0 - 31
2447910	Parathion Methyl	22.3	Spike	P	0 - 29
2447910	PBB-153	22.6	Spike	P	0 - 49
2447910	PBDE-47	5.37	Spike	P	0 - 36
2447910	PBDE-99	8.79	Spike	P	0 - 46
2447910	Pendimethalin	21.3	Spike	P	0 - 31
2447910	Pentabromotoluene	5.87	Spike	P	0 - 16
2447910	Phenytoin	44.1	Spike	P	0 - 100
2447910	Phorate	13.8	Spike	P	0 - 36
2447910	Prodiamine	26.8	Spike	P	0 - 68
2447910	Prometon	22.6	Spike	P	0 - 35
2447910	Prometryn	7.84	Spike	P	0 - 33
2447910	Pronamide	17.8	Spike	P	0 - 24
2447910	Propanil	15.0	Spike	P	0 - 28
2447910	Propargite	24.5	Spike	P	0 - 53
2447910	Propiconazole	20.3	Spike	P	0 - 44
2447910	Pyraflufen Ethyl	11.6	Spike	P	0 - 61
2447910	Pyridaben	7.29	Spike	P	0 - 43
2447910	Pyriproxyfen	47.5	Spike	P	0 - 82
2447910	Simazine	0.860	Spike	P	0 - 29
2447910	Stirophos	12.1	Spike	P	0 - 100
2447910	Sulfentrazone	105	Spike	F	0 - 64
2447910	Tebuconazole	7.66	Spike	P	0 - 76
2447910	Terbufos	12.0	Spike	P	0 - 29
2447910	Terbuthylazine	7.08	Spike	P	0 - 28
2447910	Tetradecachloro-m-terphenyl	20.5	Spike	P	0 - 42
2447910	Thiobencarb	26.9	Spike	F	0 - 26
2447910	Tri-o-cresyl Phosphate	4.20	Spike	P	0 - 24
2447910	Triadimefon	14.0	Spike	P	0 - 40
2447910	Tris(1-chloro-2-propyl) phosphate (TCPP)	0.305	Spike	P	0 - 30
2447910	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	0.521	Spike	P	0 - 22
2447910	Tris(2-chloroethyl) phosphate (TCEP)	4.60	Spike	P	0 - 15

Reference Method: EPA 8321B

Batch ID: P437132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	Acesulfame K	4.01	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P437132

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	AMPA	12.6	Spike	P	0 - 30
2447822	Endothall	1.38	Spike	P	0 - 30
2447822	Glufosinate	5.37	Spike	P	0 - 30
2447822	Glyphosate	3.37	Spike	P	0 - 30
2447822	Sucralose	2.83	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437260

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447822	2,4-D	1.47	Spike	P	0 - 30
2447822	2,4,5-T	1.94	Spike	P	0 - 30
2447822	Acetaminophen	3.64	Spike	P	0 - 30
2447822	Acetamiprid	6.62	Spike	P	0 - 30
2447822	Afidopyropen	5.67	Spike	P	0 - 30
2447822	Bentazon	5.99	Spike	P	0 - 30
2447822	Benzovindiflupyr	5.87	Spike	P	0 - 30
2447822	Carbamazepine	3.64	Spike	P	0 - 30
2447822	Clothianidin	2.46	Spike	P	0 - 30
2447822	Dinotefuran	2.81	Spike	P	0 - 30
2447822	Diuron	1.55	Spike	P	0 - 30
2447822	Fenuron	2.49	Spike	P	0 - 30
2447822	Fluridone	7.99	Spike	P	0 - 30
2447822	Hydrocodone	2.06	Spike	P	0 - 30
2447822	Ibuprofen	16.9	Spike	P	0 - 30
2447822	Imazapyr	5.74	Spike	P	0 - 30
2447822	Imidacloprid	2.05	Spike	P	0 - 30
2447822	Linuron	9.57	Spike	P	0 - 30
2447822	Mandestrobin	0.371	Spike	P	0 - 30
2447822	MCPP	4.90	Spike	P	0 - 30
2447822	Naproxen	17.8	Spike	P	0 - 30
2447822	Primidone	1.96	Spike	P	0 - 30
2447822	Pyraclostrobin	2.01	Spike	P	0 - 30
2447822	Silvex	6.55	Spike	P	0 - 30
2447822	Thiamethoxam	0.921	Spike	P	0 - 30
2447822	Tolfenpyrad	7.48	Spike	P	0 - 30
2447822	Triclopyr	4.06	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P437665

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449657	Total Alkalinity	0.358	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P437680

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

Reference Method: SM 2540 C-2015
Batch ID: P437680

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447881	TDS	5.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P437401

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448552	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437323

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2447811	Organic Carbon	0.548	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2447968
Field Sample ID: G4NW0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	93.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.4	P	30 - 160
EPA 8321B	Diuron-d6	68.3	P	30 - 160
EPA 8321B	Endothall-d6	88.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.3	P	30 - 160
EPA 8321B	Primidone-d5	82.3	P	30 - 160
EPA 8321B	Sucralose-d6	92.7	P	30 - 160

Lab Sample ID: 2447970
Field Sample ID: G4NW0043

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	85.1	P	20 - 200
EPA 8270E	Simazine-d10	101	P	58 - 137
EPA 8270E	Terbufos-d10	88.3	P	50 - 134
EPA 8270E	Terphenyl-d14	89.4	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A122485

Included Lab Sample IDs: 2447962

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.4	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122494

Included Lab Sample IDs: 2447964

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	98.9	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122495

Included Lab Sample IDs: 2447962

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

Reference Method: EPA 8321B

Run ID: A122535

Included Lab Sample IDs: 2447968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	128	119	P/P	60 - 160
Sucralose	86.4	94.1	P/P	60 - 160

Reference Method: SM 5310 B-2011

Run ID: A122540

Included Lab Sample IDs: 2447963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	98.2	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122542

Included Lab Sample IDs: 2447968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	99.3	103	P/P	60 - 160
Endothall	109	84.8	P/P	60 - 160
Glufosinate	98.6	92.0	P/P	60 - 160
Glyphosate	95.5	99.0	P/P	60 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122551

Included Lab Sample IDs: 2447963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.2	98.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122552

Included Lab Sample IDs: 2447963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	102	104	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122560

Included Lab Sample IDs: 2447969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.6	99.8	P/P	90 - 110
Antimony	97.7	97.6	P/P	90 - 110
Arsenic	99.4	98.3	P/P	90 - 110
Barium	99.7	99.2	P/P	90 - 110
Beryllium	96.2	96.8	P/P	90 - 110
Boron	99.3	101	P/P	90 - 110
Cadmium	99.4	98.9	P/P	90 - 110
Chromium	97.2	97.6	P/P	90 - 110
Copper	96.0	95.2	P/P	90 - 110
Lead	105	105	P/P	90 - 110
Manganese	99.9	101	P/P	90 - 110
Molybdenum	96.6	96.0	P/P	90 - 110
Nickel	97.6	97.0	P/P	90 - 110
Selenium	99.3	100	P/P	90 - 110
Silver	101	101	P/P	90 - 110
Thallium	103	104	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122562

Included Lab Sample IDs: 2447969

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	102	101	P/P	90 - 110
Iron	100	99.7	P/P	90 - 110
Magnesium	101	99.9	P/P	90 - 110
Potassium	99.9	99.5	P/P	90 - 110
Sodium	101	101	P/P	90 - 110
Strontium	98.9	99.9	P/P	90 - 110
Tin	97.6	98.2	P/P	90 - 110
Titanium	101	101	P/P	90 - 110
Vanadium	100	101	P/P	90 - 110
Zinc	96.8	97.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122565

Included Lab Sample IDs: 2447962

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122578

Included Lab Sample IDs: 2447963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	102	97.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122581

Included Lab Sample IDs: 2447969

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

Reference Method: EPA 8321B

Run ID: A122596

Included Lab Sample IDs: 2447968

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	80.5	85.3	P/P	50 - 150
2,4,5-T	86.0	95.6	P/P	50 - 150
Acetaminophen	110	111	P/P	60 - 160
Acetamiprid	104	105	P/P	50 - 150
Afidopyropen	93.7	102	P/P	50 - 150
Bentazon	95.2	96.5	P/P	50 - 160
Benzovindiflupyr	101	102	P/P	50 - 150
Carbamazepine	102	101	P/P	60 - 150
Clothianidin	103	108	P/P	60 - 150
Dinotefuran	113	112	P/P	50 - 150
Diuron	113	115	P/P	60 - 160
Fenuron	104	106	P/P	60 - 150
Fluridone	108	109	P/P	60 - 160
Hydrocodone	112	113	P/P	60 - 150
Ibuprofen	66.3	88.1	P/P	50 - 160
Imazapyr	93.3	89.4	P/P	50 - 150
Imidacloprid	99.6	96.7	P/P	60 - 150
Linuron	92.9	98.4	P/P	60 - 150
Mandestrobin	98.9	98.3	P/P	50 - 150
MCPP	96.8	85.6	P/P	50 - 150
Naproxen	73.4	109	P/P	50 - 160
Primidone	104	101	P/P	60 - 150
Pyraclostrobin	104	103	P/P	60 - 150
Silvex	88.6	98.0	P/P	50 - 150
Thiamethoxam	109	113	P/P	50 - 150
Tolfenpyrad	96.1	100	P/P	60 - 150
Triclopyr	83.3	84.1	P/P	50 - 150

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122601

Included Lab Sample IDs: 2447963

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	90.4	95.7	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A122610

Included Lab Sample IDs: 2447962

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.8	101	P/P	90 - 110
Sulfate	98.8	102	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A122678

Included Lab Sample IDs: 2447962

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	97.1	94.5	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A122789

Included Lab Sample IDs: 2447970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	88.5		P	80 - 120
Alachlor	91.8		P	80 - 120
Ametryn	96.9		P	80 - 120
Atrazine	99.4		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	145*		F	80 - 120
Azoxystrobin	93.8		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	96.8		P	80 - 120
Caffeine	95.8		P	80 - 120
Carbophenothion	99.2		P	80 - 120
Carfentrazone Ethyl	104		P	80 - 120
Chlorfenapyr	68.2*		F	80 - 120
Chlorpyrifos Ethyl	89.7		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	114		P	80 - 120
Cyanazine	109		P	80 - 120
Cyprodinil	110		P	80 - 120
Demeton	94.9		P	80 - 120
Diazinon	102		P	80 - 120
Difenoconazole	111		P	80 - 120
Dimethenamid	96.1		P	80 - 120
Dimethomorph	114		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	95.4		P	80 - 120
EPTC	99.6		P	80 - 120
Ethion	86.3		P	80 - 120
Ethoprop	96.1		P	80 - 120
Etridiazole	99.2		P	80 - 120
Fenamiphos	98.1		P	80 - 120
Fenbuconazole	95.0		P	80 - 120
Fipronil	81.4		P	80 - 120
Fipronil Desulfinyl	97.9		P	80 - 120
Fipronil Sulfide	106		P	80 - 120
Fipronil Sulfone	93.9		P	80 - 120
Fluazifop-P-butyl	98.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122789
Included Lab Sample IDs: 2447970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fludioxonil	98.7		P	80 - 120
Flumioxazin	114		P	80 - 120
Flutolanil	102		P	80 - 120
Fluxapyroxad	95.9		P	80 - 120
Fonofos	94.3		P	80 - 120
Hexazinone	98.0		P	80 - 120
Imazalil	110		P	80 - 120
Iprodione	113		P	80 - 120
Loratadine	116		P	80 - 120
Malathion	87.7		P	80 - 120
Metalaxyl	90.3		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	95.2		P	80 - 120
Mevinphos	96.6		P	80 - 120
Molinate	92.0		P	80 - 120
Myclobutanil	92.9		P	80 - 120
Naled	103		P	80 - 120
Napropamide	101		P	80 - 120
Norflurazon	97.1		P	80 - 120
Oxadiazon	100		P	80 - 120
Oxyfluorfen	119		P	80 - 120
Parathion Ethyl	98.3		P	80 - 120
Parathion Methyl	109		P	80 - 120
Pendimethalin	115		P	80 - 120
Phenytoin	97.6		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	108		P	80 - 120
Prometon	90.6		P	80 - 120
Prometryn	111		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	97.4		P	80 - 120
Propargite	103		P	80 - 120
Propiconazole	87.4		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120
Pyridaben	104		P	80 - 120
Pyriproxyfen	264*		F	80 - 120
Simazine	90.1		P	80 - 120
Stirophos	88.3		P	80 - 120
Sulfentrazone	81.3		P	80 - 120
Tebuconazole	93.7		P	80 - 120
Terbufos	95.2		P	80 - 120
Terbutylazine	85.2		P	80 - 120
Thiobencarb	105		P	80 - 120
Triadimefon	107		P	80 - 120

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122819
Included Lab Sample IDs: 2447970

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	92.3		P	80 - 120
Dechlorane 602	95.2		P	80 - 120
Dechlorane 603	95.6		P	80 - 120
Dechlorane Plus	93.2		P	80 - 120
Hexabromobenzene	92.6		P	80 - 120
Octinoxate	92.6		P	80 - 120
Oxybenzone	90.5		P	80 - 120
PBB-153	95.9		P	80 - 120
PBDE-47	91.8		P	80 - 120
PBDE-99	91.3		P	80 - 120
Pentabromotoluene	95.6		P	80 - 120
Tetradecachloro-m-terphenyl	91.3		P	80 - 120
Tri-o-cresyl Phosphate	94.8		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	89.9		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	89.5		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	86.1		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	98.5					7.26	
EPA 180.1 Rev. 2.0	Turbidity	105					5.76	
EPA 200.7 Rev. 4.4	Calcium	105	103	104				0.880
	Iron	111	110	110	109			0.356
	Magnesium	104	104	108				0.741
	Potassium	102	102	103	101			0.528
	Sodium	109	108	109	103			0.736
	Strontium	100	99.2					1.85
	Tin	96.4	95.4	96.2	95.1			0.846
	Titanium	100	100	101	101			0.352
	Vanadium	99.2	99.9	101	99.3			0.641
	Zinc	97.3	95.3	95.6	96.4			0.364
EPA 200.8 Rev. 5.4	Aluminum	98.3	98.8	97.9	98.5			0.681
	Antimony	97.7	100	99.9	98.5			0.381
	Arsenic	99.3	100	99.5	98.8			0.523
	Barium	102	101	101	100			0.263
	Beryllium	94.3	93.4	94.5	92.3			1.18
	Boron	96.3	103	103	100			0.436
	Cadmium	96.5	101	98.9	99.1			1.67
	Chromium	94.9	95.9	95.6	95.0			0.241
	Cobalt	101	98.9	98.7	99.2			0.426
	Copper	95.7	95.2	94.6	95.1			0.619
	Lead	104	105	105	104			0.651
	Manganese	96.6	99.0	98.3	98.8			0.683
	Molybdenum	95.0	98.0	98.3	96.9			0.120
	Nickel	96.2	96.2	95.0	94.4			1.22
	Selenium	99.1	98.1	96.4	99.0			1.76
	Silver	106	107	107	107			0.430
	Thallium	106	109	108	106			0.192
EPA 300.0 Rev. 2.1	Chloride	101	101	99.1			0.363	
	Sulfate	101	100	94.3			12.0	
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	96.0	97.6				1.42
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.4	101	99.3				1.44
EPA 353.2 Rev. 2.0	NO2NO3-N	98.0	102	100				1.97
EPA 365.1 Rev. 2.0	Total-P	102	104	105				0.191
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102	94.7	95.4				0.652
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.4	104	93.1				10.8
	Acetochlor	89.4	106	86.8				19.8
	Alachlor	86.7	105	84.0				22.2
	Ametryn	116	133	119				10.9
	Atrazine	104	112	100				9.98
	Atrazine Desethyl	101	118	116				1.67
	Avobenzone	124	136	149				9.49
	Azinphos Methyl	49.4	159	186				15.5
	Azoxystrobin	65.2						6.56
	Bromacil	105						16.9
	Butylate	60.3	50.8	60.9				18.0
	Caffeine	88.3	145	123				16.0
	Carbophenothion	93.8	94.7	95.1				0.453
	Carfentrazone Ethyl	98.5	117	104				11.2
	Chlorfenapyr	78.3	72.4	80.1				10.1
	Chlorpyrifos Ethyl	126	99.0	117				17.0

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Chlorpyrifos Methyl	123	121	128		5.29
	Coumaphos	66.8	167	118		33.9
	Cyanazine	145	163	156		4.73
	Cyprodinil	125	120	176		15.7
	Dechlorane 602	110	94.9	102		7.33
	Dechlorane 603	119	158	157		0.395
	Dechlorane Plus	153	126	123		2.14
	Demeton	85.3	80.4	95.9		17.6
	Diazinon	112	-2.33	61.9		9.95
	Difenoconazole	53.4	131	122		5.96
	Dimethenamid	93.2	95.4	96.9		1.51
	Dimethomorph	101	203	225		10.3
	Disulfoton	99.7	129	99.6		25.7
	Dithiopyr	92.4	122	87.8		32.9
	EPTC	52.7	40.8	52.8		25.6
	Ethion	79.8	88.9	66.0		29.6
	Ethoprop	98.2	96.0	92.6		3.58
	Etridiazole	63.9	64.5	60.3		6.60
	Fenamiphos	92.1	94.2	94.9		0.811
	Fenbuconazole	37.1	96.9	86.0		11.9
	Fipronil	89.7	104	83.9		20.8
	Fipronil Desulfinyl	101	119	119		0.368
	Fipronil Sulfide	101	133	75.6		28.5
	Fipronil Sulfone	85.0	61.7	89.6		17.7
	Fluazifop-P-butyl	101	87.5	129		38.2
	Fludioxonil	79.0				5.02
	Flumioxazin	59.1	142	149		5.15
	Flutolanil	99.7	78.4	112		25.4
	Fluxapyroxad	78.3				102
	Fonofos	98.2	79.3	99.7		22.7
	Hexabromobenzene	104	128	106		18.7
	Hexazinone	108	102	103		0.794
	Imazalil	103	109	98.8		9.38
	Iprodione	101	112	98.6		12.8
	Loratadine	117	162	195		18.8
	Malathion	107	99.6	125		22.3
	Metalaxyl	87.3	108	90.0		13.5
	Metolachlor	106	101	113		11.5
	Metribuzin	104	97.7	92.5		5.40
	Mevinphos	81.5	85.3	88.0		3.16
	Molinate	60.9	53.9	68.5		23.9
	Myclobutanil	91.0				22.9
	Naled	40.2	31.7	29.6		6.81
	Napropamide	89.0	111	80.5		31.9
	Norflurazon	70.5	42.2	70.1		42.2
	Octinoxate	124	135	135		0.325
	Oxadiazon	85.4	106	85.7		21.4
	Oxybenzone	121	134	142		5.75
	Oxyfluorfen	129	163	122		21.1
	Parathion Ethyl	105	120	112		6.83
	Parathion Methyl	180	204	163		22.3
	PBB-153	102	147	117		22.6
	PBDE-47	115	134	127		5.37
	PBDE-99	107	106	97.0		8.79

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	159	208	168		21.3
	Pentabromotoluene	107	119	112		5.87
	Phenytoin	71.2	80.1	51.2		44.1
	Phorate	96.7	99.9	115		13.8
	Prodiamine	59.0	46.3	72.4		26.8
	Prometon	111	128	102		22.6
	Prometryn	123	139	150		7.84
	Pronamide	118	123	103		17.8
	Propanil	105	109	93.8		15.0
	Propargite	86.8	90.3	70.6		24.5
	Propiconazole	58.0	237	290		20.3
	Pyraflufen Ethyl	86.5	68.0	76.4		11.6
	Pyridaben	48.4	111	119		7.29
	Pyriproxyfen	54.9	122	199		47.5
	Simazine	91.4	94.9	95.7		0.860
	Stiropfos	81.3	72.0	63.8		12.1
	Sulfentrazone	79.7				105
	Tebuconazole	68.3	68.6	63.5		7.66
	Terbufos	104	89.8	101		12.0
	Terbutylazine	92.0	91.4	85.2		7.08
	Tetradecachloro-m-terphenyl	180	148	121		20.5
	Thiobencarb	100	110	83.8		26.9
	Tri-o-cresyl Phosphate	130	137	131		4.20
	Triadimefon	105	103	89.7		14.0
	Tris(1-chloro-2-propyl) phosphate (TCPP)	159	118	118		0.305
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	142	107	108		0.521
	Tris(2-chloroethyl) phosphate (TCEP)	159	113	118		4.60
EPA 8321B	2,4-D	69.7	80.4	79.2		1.47
	2,4,5-T	77.3	76.0	74.6		1.94
	Acesulfame K	108	118	123		4.01
	Acetaminophen	86.5	85.2	82.1		3.64
	Acetamiprid	77.3	54.7	58.5		6.62
	Afidopyropen	59.1	63.0	59.6		5.67
	AMPA	84.3	79.5	90.2		12.6
	Bentazon	74.8	46.5	43.8		5.99
	Benzovindiflupyr	80.4	82.9	78.2		5.87
	Carbamazepine	75.1	56.9	54.8		3.64
	Clothianidin	87.6	67.5	65.9		2.46
	Dinotefuran	102	60.2	58.5		2.81
	Diuron	85.6				1.55
	Endothall	98.2	102	103		1.38
	Fenuron	89.2				2.49
	Fluridone	78.4	65.4	57.5		7.99
	Glufosinate	99.9	92.1	87.3		5.37
	Glyphosate	93.3	67.0	64.8		3.37
	Hydrocodone	89.3	54.4	53.2		2.06
	Ibuprofen	65.4	48.7	57.7		16.9
	Imazapyr	75.3	87.4	82.6		5.74
	Imidacloprid	81.6	89.8	91.7		2.05
	Linuron	81.3	66.4	60.4		9.57
	Mandestrobin	79.3	73.6	73.3		0.371

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	MCP	73.4	84.4	80.4			4.90
	Naproxen	61.0	65.2	77.9			17.8
	Primidone	84.3	72.9	71.5			1.96
	Pyraclostrobin	75.6	77.6	79.2			2.01
	Silvex	68.8	74.6	69.9			6.55
	Sucralose	96.4	90.6	93.3			2.83
	Thiamethoxam	86.8	61.3	61.9			0.921
	Tolfenpyrad	51.7	57.4	53.2			7.48
	Triclopyr	82.8	77.2	80.4			4.06
SM 2320 B-2011	Total Alkalinity	98.1				0.358	
SM 2540 C-2015	TDS	107				5.45	
SM 2540 D-2015	TSS	96.0					
SM 4500-F- C-2011	Fluoride	101	100	100			0.0
SM 5310 B-2011	Organic Carbon	96.4	94.9	95.6			0.548

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2447962
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2447962
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2447969
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2447969
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2447962
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2447962
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2447963
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2447963
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2447963
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2447963
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2447964
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2447970
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2447970
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2447968
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2447962
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2447969
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2447962
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2447962
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2447962
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2447963

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	11/01/2023			11/01/2023 10:41	Anna M. Plaviak	2447962
EPA 180.1 Rev. 2.0	11/01/2023			11/01/2023 10:50	Samantha L Bates	2447962
EPA 200.7 Rev. 4.4	11/01/2023	11/02/2023 12:45	George D Taylor	11/03/2023 20:05	Chase Roberts	2447969
EPA 200.8 Rev. 5.4	11/01/2023	11/02/2023 12:45	George D Taylor	11/03/2023 16:00	Conrad Hartmann	2447969
	11/01/2023	11/02/2023 12:45	George D Taylor	11/07/2023 03:34	Conrad Hartmann	2447969
EPA 300.0 Rev. 2.1	11/01/2023			11/08/2023 18:33	James L Waggeberby	2447962
EPA 350.1 Rev. 2.0	11/01/2023			11/03/2023 12:13	Khloe J Berg	2447963
EPA 351.2 Rev. 2.0	11/01/2023	11/06/2023 11:56	Simonne.V. Calhoun	11/07/2023 13:14	Samantha L Bates	2447963
EPA 353.2 Rev. 2.0	11/01/2023			11/03/2023 12:56	Fadila Guebre	2447963
EPA 365.1 Rev. 2.0	11/01/2023	11/02/2023 09:55	Simonne.V. Calhoun	11/03/2023 14:22	Simonne.V. Calhoun	2447963
EPA 365.1 Rev. 2.0 dissolved	11/01/2023			11/01/2023 14:46	Elise M. Gillis	2447964
EPA 8270E	11/01/2023	11/06/2023 08:30	Rasheda Ghaffari	11/09/2023 19:14	Vandana T. Nagar	2447970
	11/01/2023	11/06/2023 08:30	Rasheda Ghaffari	11/10/2023 00:36	Arthur Maknenko	2447970
EPA 8321B	11/01/2023	11/02/2023 14:00	Tae K Lee	11/02/2023 21:36	Hana Lee	2447968
	11/01/2023	11/02/2023 14:00	Tae K Lee	11/03/2023 07:15	Hana Lee	2447968
	11/01/2023	11/03/2023 14:30	Hoor Shaik	11/03/2023 17:38	Juyoung Kim	2447968
SM 2320 B-2011	11/01/2023			11/09/2023 18:26	Chandler E Cox	2447962
SM 2340 B-2011	11/01/2023			11/03/2023 20:05	Chase Roberts	2447969
SM 2540 C-2015	11/01/2023			11/03/2023 15:32	Yijie Li	2447962
SM 2540 D-2015	11/01/2023			11/03/2023 15:32	Yijie Li	2447962
SM 4500-F- C-2011	11/01/2023			11/04/2023 02:57	Chandler E Cox	2447962
SM 5310 B-2011	11/01/2023			11/02/2023 21:48	Elise M. Gillis	2447963