

Chemical Analysis Report

SE-DIST-2023-11-07-01

Florida DEP Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

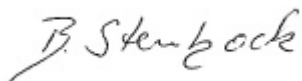
Event Description: **SMP - LVI - Hammock Lake**
Request ID: **RQ-2023-10-09-59**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
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FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 30-NOV-2023 13:23



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: HAMMOCK LAKE EAST NEAR CENTER

Collection Date/Time: 11/06/2023 11:45

Field ID: G4SE0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449420	DEP SOP: NU-094-1	Color (true)	11		PCU	P437487	
	EPA 180.1 Rev. 2.0	Turbidity	1.4		NTU	P437493	
	EPA 300.0 Rev. 2.1	Chloride	60	A	mg Cl/L	P437936	
		Sulfate	6.6	A	mg SO4/L	P437940	
	SM 2320 B-2011	Total Alkalinity	103		mg CaCO3/L	P437666	
	SM 2540 C-2015	TDS	229	A	mg/L	P438106	
	SM 2540 D-2015	TSS	3	IA	mg/L	P437819	
	SM 4500-F- C-2011	Fluoride	0.17		mg F/L	P437920	
2449421	EPA 350.1 Rev. 2.0	Ammonia-N	0.036		mg N/L	P437841	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P437560	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437763	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P437712	
	SM 5310 B-2011	Organic Carbon	6.6		mg C/L	P437788	
2449422	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P437478	
2449424	EPA 8321B	2,4-D	0.16		ug/L	P437469	
		Acesulfame K	0.10	U	ug/L	P437459	
		2,4,5-T	0.0040	U	ug/L	P437469	
		AMPA	0.10	U	ug/L	P437459	
		Acetaminophen	0.0080	U	ug/L	P437469	
		Acetamiprid	0.0020	U	ug/L	P437469	
		Endothall	0.25	U	ug/L	P437459	
		Glufosinate	0.10	U	ug/L	P437459	
		Glyphosate	0.10	U	ug/L	P437459	
		Afidopyropen	0.0020	U	ug/L	P437469	
		Bentazon	8.0E-04	U	ug/L	P437469	
		Sucralose	0.22		ug/L	P437459	
		Benzovindiflupyr	0.0020	U	ug/L	P437469	
		Carbamazepine	8.0E-04	U	ug/L	P437469	
		Clothianidin	0.0020	U	ug/L	P437469	
		Dinotefuran	0.0020	U	ug/L	P437469	
		Diuron	0.0020	U	ug/L	P437469	
		Fenuron	0.032	U	ug/L	P437469	
		Fluridone	8.0E-04	U	ug/L	P437469	
		Imazapyr	0.027		ug/L	P437469	
		Hydrocodone	0.0020	U	ug/L	P437469	
		Ibuprofen	0.080	U	ug/L	P437469	
		Imidacloprid	0.0022	I	ug/L	P437469	
		Linuron	0.0040	U	ug/L	P437469	
		Mandestrobin	0.0020	U	ug/L	P437469	
		MCPP	0.0020	U	ug/L	P437469	
		Naproxen	0.0080	U	ug/L	P437469	
		Primidone	0.0040	U	ug/L	P437469	
		Pyraclostrobin	0.0020	U	ug/L	P437469	

Field ID: G4SE0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449424	EPA 8321B	Silvex	0.0040	U	ug/L	P437469	
		Thiamethoxam	0.0020	U	ug/L	P437469	
		Tolfenpyrad	0.0020	U	ug/L	P437469	
		Triclopyr	0.0040	U	ug/L	P437469	
2449425	EPA 200.7 Rev. 4.4	Calcium	38.6		mg/L	P437553	
		Iron	30	U	ug/L	P437553	
		Magnesium	4.63		mg/L	P437553	
		Potassium	2.9		mg/L	P437553	
		Sodium	34.5		mg/L	P437553	
		Strontium	527		ug/L	P437553	
		Tin	3.0	U	ug/L	P437553	
		Titanium	0.75	U	ug/L	P437553	
		Vanadium	2.0	U	ug/L	P437553	
		Zinc	5.0	U	ug/L	P437553	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P437553	
		Antimony	0.050	U	ug/L	P437553	
		Arsenic	0.22		ug/L	P437553	
		Barium	10.3		ug/L	P437553	
		Beryllium	0.010	U	ug/L	P437553	
		Boron	54.4		ug/L	P437553	
		Cadmium	0.020	U	ug/L	P437553	
		Chromium	0.40	U	ug/L	P437553	
		Cobalt	0.020	U	ug/L	P437553	
		Copper	10.7		ug/L	P437553	
		Lead	0.20	U	ug/L	P437553	
		Manganese	3.88		ug/L	P437553	
		Molybdenum	0.16	I	ug/L	P437553	
		Nickel	0.50	U	ug/L	P437553	
		Selenium	0.20	U	ug/L	P437553	
		Silver	0.010	U	ug/L	P437553	
		Thallium	0.10	U	ug/L	P437553	
		Hardness	115		mg/L	P437553	
2449426	SM 2340 B-2011	Oxybenzone**	10	U	ng/L	P437464	
	EPA 8270E	Acetochlor	0.21	U	ng/L	P437464	
		Octinoxate**	150	U	ng/L	P437464	
		Alachlor	0.41	U	ng/L	P437464	
		Avobenzone**	100	U	ng/L	P437464	
		Ametryn	1.1	U	ng/L	P437464	
		Atrazine	5.1		ng/L	P437464	
		PBDE-47**	4.1	U	ng/L	P437464	
		Atrazine Desethyl	4.4	I	ng/L	P437464	
		PBDE-99**	5.2	U	ng/L	P437464	
		Azinphos Methyl	3.1	UJ	ng/L	P437464	CCV
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P437464	
		Azoxystrobin	0.41	U	ng/L	P437464	

Field ID: G4SE0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449426	EPA 8270E	Bromacil	0.62	U	ng/L	P437464	
		2-Ethylhexyl	12	U	ng/L	P437464	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.46	U	ng/L	P437464	
		Dechlorane Plus**	31	U	ng/L	P437464	
		Caffeine**	7.7	U	ng/L	P437464	
		Dechlorane 602**	5.2	U	ng/L	P437464	
		Carbophenothion	0.52	U	ng/L	P437464	
		Dechlorane 603**	4.1	U	ng/L	P437464	
		Carfentrazone Ethyl	0.15	U	ng/L	P437464	
		Hexabromobenzene**	6.2	U	ng/L	P437464	
		Chlorfenapyr	0.31	U	ng/L	P437464	
		PBB-153**	6.2	UJ	ng/L	P437464	LCS
		Chlorpyrifos Ethyl	0.31	U	ng/L	P437464	
		Pentabromotoluene**	3.1	U	ng/L	P437464	
		Chlorpyrifos Methyl	0.10	UJ	ng/L	P437464	MS
		Tris(2-chloroethyl) phosphate (TCEP)**	57	U	ng/L	P437464	
		Coumaphos	1.1	U	ng/L	P437464	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	26	UJ	ng/L	P437464	LCS
		Cyanazine	5.2	U	ng/L	P437464	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P437464	
		Cyprodinil	0.21	U	ng/L	P437464	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P437464	
		Demeton	3.6	U	ng/L	P437464	
		Diazinon	0.13	U	ng/L	P437464	
		Difenoconazole	0.62	U	ng/L	P437464	
		Dimethenamid	0.10	U	ng/L	P437464	
		Dimethomorph	0.31	U	ng/L	P437464	
		Disulfoton	0.62	U	ng/L	P437464	
		Dithiopyr	1.0	UJ	ng/L	P437464	RPD
		EPTC	0.52	U	ng/L	P437464	
		Ethion	0.31	U	ng/L	P437464	
		Ethoprop	0.13	U	ng/L	P437464	
		Etridiazole	0.10	U	ng/L	P437464	
		Fenamiphos	0.46	U	ng/L	P437464	
		Fenbuconazole	0.52	U	ng/L	P437464	
		Fipronil	0.21	U	ng/L	P437464	
		Fipronil Desulfinyl**	0.10	UJ	ng/L	P437464	RPD
		Fipronil Sulfide	0.10	U	ng/L	P437464	
		Fipronil Sulfone	0.10	U	ng/L	P437464	
		Fluazifop-P-butyl	0.10	U	ng/L	P437464	
		Fludioxonil	0.82	J	ng/L	P437464	MS
		Flumioxazin	3.1	U	ng/L	P437464	
		Flutolanil	0.10	U	ng/L	P437464	
		Fluxapyroxad	0.26	U	ng/L	P437464	

Field ID: G4SE0183

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2449426	EPA 8270E	Fonofos	0.15	U	ng/L	P437464	
		Hexazinone	0.52	U	ng/L	P437464	
		Imazalil	0.67	U	ng/L	P437464	
		Iprodione	0.52	U	ng/L	P437464	
		Loratadine**	0.31	U	ng/L	P437464	
		Malathion	0.36	U	ng/L	P437464	
		Metalaxyl	0.52	U	ng/L	P437464	
		Metolachlor	0.77	U	ng/L	P437464	
		Metribuzin	0.41	U	ng/L	P437464	
		Mevinphos	1.0	U	ng/L	P437464	
		Molinate	0.26	U	ng/L	P437464	
		Myclobutanil	0.36	U	ng/L	P437464	
		Naled	2.6	U	ng/L	P437464	
		Napropamide	0.72	U	ng/L	P437464	
		Norflurazon	1.0	U	ng/L	P437464	
		Oxadiazon	0.36	U	ng/L	P437464	
		Oxyfluorfen	0.21	UJ	ng/L	P437464	RPD
		Parathion Ethyl	0.15	U	ng/L	P437464	
		Parathion Methyl	0.21	UJ	ng/L	P437464	RPD
		Pendimethalin	1.8	U	ng/L	P437464	
		Phenytol**	5.5	U	ng/L	P437464	
		Phorate	0.26	U	ng/L	P437464	
		Prodiamine	0.21	U	ng/L	P437464	
		Prometon	3.1	U	ng/L	P437464	
		Prometryn	0.36	U	ng/L	P437464	
		Pronamide	0.10	U	ng/L	P437464	
		Propanil	0.10	U	ng/L	P437464	
		Propargite	0.82	U	ng/L	P437464	
		Propiconazole	0.62	U	ng/L	P437464	
		Pyraflufen Ethyl	0.31	UJ	ng/L	P437464	MS
		Pyridaben	7.2	I	ng/L	P437464	
		Pyriproxyfen	0.26	UJ	ng/L	P437464	CCV, LCS
		Simazine	0.26	U	ng/L	P437464	
		Stirophos	0.41	U	ng/L	P437464	
		Sulfentrazone	1.4	U	ng/L	P437464	
		Tebuconazole	1.4	U	ng/L	P437464	
		Terbufos	0.21	U	ng/L	P437464	
		Terbuthylazine	0.21	U	ng/L	P437464	
		Thiobencarb	0.52	U	ng/L	P437464	
		Triadimefon	0.15	U	ng/L	P437464	

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: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 11/13/2023.

EPA 8270E: 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: P437487

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437493

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437553

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: P437553

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: P437936

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: P437940

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437763

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

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

Reference Method: EPA 8270E
Batch ID: P437464

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: P437464

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: P437464

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
Phenytoln	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: P437459

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: P437469

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: P437469

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
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: SM 2320 B-2011

Batch ID: P437666

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

Reference Method: SM 2540 C-2015

Batch ID: P438106

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P437819

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P437920

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P437788

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: P437487

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	99.3		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437493

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	112		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	103		P	85 - 115
Sodium	102		P	85 - 115
Strontium	100		P	85 - 115
Tin	99.1		P	85 - 115
Titanium	102		P	85 - 115
Vanadium	101		P	85 - 115
Zinc	98.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437553

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.9		P	85 - 115
Antimony	93.7		P	85 - 115
Arsenic	96.0		P	85 - 115
Barium	96.3		P	85 - 115
Beryllium	93.7		P	85 - 115
Boron	110		P	85 - 115
Cadmium	97.2		P	85 - 115
Chromium	96.2		P	85 - 115
Cobalt	95.7		P	85 - 115
Copper	94.8		P	85 - 115
Lead	99.0		P	85 - 115
Manganese	93.6		P	85 - 115
Molybdenum	90.4		P	85 - 115
Nickel	97.3		P	85 - 115
Selenium	92.6		P	85 - 115
Silver	103		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437936

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: P437940

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.5		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437763

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.3		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P437464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	63.6		P	37 - 154
Acetochlor	77.8		P	64 - 124
Alachlor	86.6		P	61 - 118
Ametryn	124		P	47 - 158
Atrazine	97.7		P	68 - 121
Atrazine Desethyl	103		P	30 - 119
Avobenzone	158		P	48 - 193
Azinphos Methyl	33.4		P	30 - 194
Azoxystrobin	145		P	58 - 154
Bromacil	80.9		P	47 - 126
Butylate	68.6		P	31 - 83.0
Caffeine	112		P	10 - 180
Carbophenothion	118		P	59 - 133
Carfentrazone Ethyl	123		P	59 - 147
Chlorfenapyr	87.9		P	52 - 118
Chlorpyrifos Ethyl	112		P	59 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	120		P	65 - 123
Coumaphos	148		P	11 - 223
Cyanazine	159		P	63 - 250
Cyprodinil	132		P	52 - 143
Dechlorane 602	112		P	23 - 142
Dechlorane 603	67.2		P	51 - 171
Dechlorane Plus	96.1		P	46 - 161
Demeton	86.7		P	42 - 119
Diazinon	80.6		P	67 - 132
Difenoconazole	60.7		P	12 - 204
Dimethenamid	73.9		P	53 - 113
Dimethomorph	230		P	13 - 238
Disulfoton	108		P	56 - 126
Dithiopyr	88.2		P	58 - 127
EPTC	62.0		P	31 - 78.0
Ethion	33.1		P	24 - 127
Ethoprop	98.4		P	60 - 118
Etridiazole	78.3		P	32 - 91.0
Fenamiphos	125		P	54 - 129
Fenbuconazole	104		P	31 - 162
Fipronil	82.0		P	56 - 131
Fipronil Desulfinyl	89.7		P	58 - 132
Fipronil Sulfide	96.0		P	51 - 123
Fipronil Sulfone	97.6		P	50 - 125
Fluazifop-P-butyl	82.3		P	52 - 132
Fludioxonil	89.6		P	52 - 129
Flumioxazin	61.1		P	34 - 250
Flutolanil	97.4		P	45 - 128
Fluxapyroxad	62.4		P	31 - 150
Fonofos	115		P	60 - 116
Hexabromobenzene	64.3		P	52 - 165
Hexazinone	92.9		P	59 - 120
Imazalil	118		P	39 - 134
Iprodione	90.5		P	39 - 243
Loratadine	231		P	10 - 240
Malathion	113		P	53 - 145
Metaxyl	86.0		P	59 - 120
Metolachlor	104		P	64 - 122
Metribuzin	102		P	33 - 128
Mevinphos	108		P	48 - 119
Molinate	66.4		P	42 - 89.0
Myclobutanil	93.1		P	54 - 129
Naled	47.0		P	10 - 138
Napropamide	65.6		P	40 - 122
Norflurazon	85.6		P	49 - 132
Octinoxate	110		P	29 - 176
Oxadiazon	91.5		P	50 - 115
Oxybenzone	121		P	45 - 145
Oxyfluorfen	118		P	62 - 149
Parathion Ethyl	101		P	68 - 119
Parathion Methyl	124		P	68 - 147
PBB-153	37.1		F	42 - 179

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P437464

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	85.3		P	44 - 141
PBDE-99	92.3		P	36 - 141
Pendimethalin	115		P	59 - 158
Pentabromotoluene	78.3		P	58 - 148
Phenytoin	20.4		P	10 - 151
Phorate	101		P	44 - 124
Prodiamine	47.7		P	10 - 136
Prometon	109		P	45 - 131
Prometryn	123		P	52 - 140
Pronamide	109		P	70 - 129
Propanil	81.5		P	54 - 144
Propargite	53.8		P	10 - 191
Propiconazole	88.7		P	49 - 128
Pyraflufen Ethyl	97.6		P	46 - 141
Pyridaben	136		P	29 - 198
Pyriproxyfen	24.2		F	33 - 221
Simazine	99.9		P	62 - 119
Stirophos	53.1		P	13 - 144
Sulfentrazone	35.4		P	12 - 152
Tebuconazole	40.7		P	10 - 135
Terbufos	123		P	67 - 136
Terbutylazine	104		P	66 - 113
Tetradecachloro-m-terphenyl	135		P	30 - 235
Thiobencarb	87.2		P	51 - 125
Tri-o-cresyl Phosphate	105		P	50 - 150
Triadimefon	87.6		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	165		F	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	137		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	137		P	59 - 166

Reference Method: EPA 8321B

Batch ID: P437459

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	88.7		P	40 - 150
AMPA	112		P	40 - 160
Endothall	92.6		P	40 - 160
Glufosinate	100		P	40 - 160
Glyphosate	90.1		P	40 - 160
Sucralose	94.6		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	85.0		P	40 - 150
2,4,5-T	81.4		P	40 - 150
Acetaminophen	76.9		P	30 - 150
Acetamiprid	82.9		P	40 - 150
Afidopyropen	65.9		P	30 - 150
Bentazon	73.1		P	30 - 150
Benzovindiflupyr	86.3		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P437469

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	72.0		P	40 - 150
Clothianidin	91.0		P	40 - 150
Dinotefuran	101		P	40 - 150
Diuron	67.9		P	40 - 150
Fenuron	91.7		P	40 - 150
Fluridone	86.5		P	40 - 150
Hydrocodone	89.1		P	40 - 150
Ibuprofen	61.4		P	40 - 150
Imazapyr	87.2		P	40 - 150
Imidacloprid	88.4		P	40 - 150
Linuron	71.3		P	40 - 150
Mandestrobin	90.4		P	40 - 150
MCPPP	80.8		P	40 - 150
Naproxen	67.2		P	40 - 150
Primidone	83.9		P	40 - 150
Pyraclostrobin	81.0		P	40 - 150
Silvex	87.6		P	40 - 150
Thiamethoxam	83.7		P	40 - 150
Tolfenpyrad	52.7		P	30 - 150
Triclopyr	88.9		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P437666

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.2		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P438106

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	94.0		P	85 - 115

Reference Method: SM 2540 D-2015

Batch ID: P437819

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

Reference Method: SM 4500-F- C-2011

Batch ID: P437920

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

Reference Method: SM 5310 B-2011

Batch ID: P437788

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.5		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449425	Calcium	104		P	80 - 120
2449425	Iron	106	106	P/P	80 - 120
2449425	Magnesium	103		P	80 - 120
2449425	Potassium	102	101	P/P	80 - 120
2449425	Sodium	103		P	80 - 120
2449425	Strontium	95.9	95.5	P/P	80 - 120
2449425	Tin	92.7	92.4	P/P	80 - 120
2449425	Titanium	97.2	97.6	P/P	80 - 120
2449425	Vanadium	96.6	96.8	P/P	80 - 120
2449425	Zinc	93.5	94.0	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437553

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449425	Aluminum	98.5	95.8	P/P	80 - 120
2449425	Antimony	97.8	93.2	P/P	80 - 120
2449425	Arsenic	100	97.5	P/P	80 - 120
2449425	Barium	99.2	94.9	P/P	80 - 120
2449425	Beryllium	93.5	88.4	P/P	80 - 120
2449425	Boron	109	105	P/P	80 - 120
2449425	Cadmium	100	95.5	P/P	80 - 120
2449425	Chromium	95.3	91.0	P/P	80 - 120
2449425	Cobalt	94.8	92.0	P/P	80 - 120
2449425	Copper	97.4	92.7	P/P	80 - 120
2449425	Lead	103	98.4	P/P	80 - 120
2449425	Manganese	94.1	91.2	P/P	80 - 120
2449425	Molybdenum	97.3	91.8	P/P	80 - 120
2449425	Nickel	95.2	92.1	P/P	80 - 120
2449425	Selenium	95.7	90.7	P/P	80 - 120
2449425	Silver	104	99.9	P/P	80 - 120
2449425	Thallium	106	102	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P437936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449420	Chloride	107		P	90 - 110
2449615	Chloride	107		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P437940

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449420	Sulfate	107		P	90 - 110
2449615	Sulfate	108		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P437841

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449421	Ammonia-N	99.0	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P437560

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449421	Kjeldahl Nitrogen	97.5	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P437763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449093	NO2NO3-N	100	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P437712

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449095	Total-P	100	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P437478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449097	O-Phosphate-P	101	102	P/P	90 - 110

Reference Method: EPA 8270E

Batch ID: P437464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449426	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	63.9	84.2	P/P	29 - 155
2449426	Acetochlor	72.5	89.7	P/P	60 - 124
2449426	Alachlor	68.7	71.5	P/P	54 - 122
2449426	Ametryn	102	114	P/P	51 - 208
2449426	Atrazine	84.5	85.9	P/P	57 - 131
2449426	Atrazine Desethyl	95.9	87.9	P/P	13 - 124
2449426	Avobenzone	124	142	P/P	35 - 187
2449426	Azinphos Methyl	133	130	P/P	43 - 276
2449426	Azoxystrobin	100	134	P/P	52 - 300
2449426	Bromacil	70.6	91.2	P/P	44 - 134
2449426	Butylate	69.3	64.3	P/P	23 - 82.0
2449426	Caffeine	116	117	P/P	10 - 277
2449426	Carbophenothion	131	112	P/P	47 - 135
2449426	Carfentrazone Ethyl	143	118	P/P	46 - 147
2449426	Chlorfenapyr	76.3	93.5	P/P	43 - 114
2449426	Chlorpyrifos Ethyl	108	97.8	P/P	47 - 124
2449426	Chlorpyrifos Methyl	125	146	P/F	60 - 135
2449426	Coumaphos	91.7	153	P/P	10 - 222
2449426	Cyanazine	146	160	P/P	10 - 257
2449426	Cyprodinil	131	111	P/P	42 - 148
2449426	Dechlorane 602	97.4	94.2	P/P	14 - 133
2449426	Dechlorane 603	80.8	89.2	P/P	18 - 191
2449426	Dechlorane Plus	79.8	85.9	P/P	23 - 154
2449426	Demeton	96.3	87.2	P/P	41 - 137
2449426	Diazinon	93.7	107	P/P	64 - 139
2449426	Difenoconazole	72.1	93.4	P/P	46 - 254
2449426	Dimethenamid	73.3	91.8	P/P	47 - 117
2449426	Dimethomorph	194	225	P/P	14 - 255

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449426	Disulfoton	99.8	111	P/P	52 - 130
2449426	Dithiopyr	69.5	100	P/P	40 - 121
2449426	EPTC	56.4	56.8	P/P	19 - 78.0
2449426	Ethion	53.6	70.0	P/P	12 - 124
2449426	Ethoprop	109	95.7	P/P	68 - 144
2449426	Etridiazole	57.1	67.2	P/P	26 - 96.0
2449426	Fenamiphos	104	104	P/P	41 - 129
2449426	Fenbuconazole	66.7	94.7	P/P	26 - 169
2449426	Fipronil	71.5	105	P/P	46 - 145
2449426	Fipronil Desulfinyl	72.5	107	P/P	47 - 136
2449426	Fipronil Sulfide	83.2	111	P/P	41 - 127
2449426	Fipronil Sulfone	74.2	111	P/P	35 - 133
2449426	Fluazifop-P-butyl	70.9	100	P/P	46 - 131
2449426	Fludioxonil	45.1	56.6	F/P	51 - 124
2449426	Flumioxazin	103	127	P/P	10 - 289
2449426	Flutolanil	97.2	90.0	P/P	34 - 130
2449426	Fluxapyroxad	152	77.9	P/P	10 - 197
2449426	Fonofos	109	97.6	P/P	42 - 131
2449426	Hexabromobenzene	79.0	83.7	P/P	47 - 178
2449426	Hexazinone	108	99.4	P/P	64 - 125
2449426	Imazail	117	131	P/P	37 - 252
2449426	Iprodione	165	107	P/P	34 - 265
2449426	Loratadine	197	214	P/P	20 - 231
2449426	Malathion	122	108	P/P	34 - 164
2449426	Metalaxyl	75.8	97.1	P/P	49 - 125
2449426	Metolachlor	116	115	P/P	54 - 125
2449426	Metribuzin	92.0	89.6	P/P	51 - 139
2449426	Mevinphos	94.9	100	P/P	46 - 130
2449426	Molinate	75.0	66.3	P/P	39 - 93.0
2449426	Myclobutanil	73.8	96.5	P/P	50 - 130
2449426	Naled	24.9	28.7	P/P	10 - 150
2449426	Napropamide	75.1	96.9	P/P	10 - 109
2449426	Norflurazon	94.9	91.0	P/P	36 - 134
2449426	Octinoxate	116	121	P/P	18 - 170
2449426	Oxadiazon	71.6	90.1	P/P	43 - 112
2449426	Oxybenzone	119	130	P/P	33 - 154
2449426	Oxyfluorfen	89.4	129	P/P	62 - 154
2449426	Parathion Ethyl	99.6	109	P/P	65 - 120
2449426	Parathion Methyl	97.8	156	P/P	77 - 185
2449426	PBB-153	64.8	81.4	P/P	23 - 193
2449426	PBDE-47	101	109	P/P	31 - 139
2449426	PBDE-99	85.7	85.9	P/P	24 - 138
2449426	Pendimethalin	104	123	P/P	50 - 146
2449426	Pentabromotoluene	87.9	95.8	P/P	54 - 152
2449426	Phenytoin	34.2	43.5	P/P	10 - 157
2449426	Phorate	142	105	P/P	54 - 161
2449426	Prodiamine	47.6	61.8	P/P	29 - 160
2449426	Prometon	94.2	84.8	P/P	38 - 145
2449426	Prometryn	128	141	P/P	32 - 151
2449426	Pronamide	94.3	107	P/P	61 - 140
2449426	Propanil	68.6	85.4	P/P	50 - 147
2449426	Propargite	92.0	77.4	P/P	10 - 190

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P437464

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449426	Propiconazole	128	94.1	P/P	30 - 146
2449426	Pyraflufen Ethyl	161	96.2	F/P	30 - 147
2449426	Pyridaben	43.9	84.0	P/P	15 - 195
2449426	Pyriproxyfen	101	53.8	P/P	31 - 218
2449426	Simazine	90.9	97.3	P/P	45 - 139
2449426	Stiropfos	54.3	52.7	P/P	10 - 134
2449426	Sulfentrazone	145	87.8	P/P	53 - 186
2449426	Tebuconazole	87.2	65.6	P/P	10 - 133
2449426	Terbufos	115	102	P/P	65 - 151
2449426	Terbuthylazine	81.2	86.6	P/P	62 - 117
2449426	Tetradecachloro-m-terphenyl	95.2	112	P/P	10 - 260
2449426	Thiobencarb	77.2	81.8	P/P	48 - 122
2449426	Tri-o-cresyl Phosphate	111	122	P/P	32 - 151
2449426	Triadimefon	82.9	103	P/P	46 - 124
2449426	Tris(1-chloro-2-propyl) phosphate (TCPP)	123	111	P/P	51 - 154
2449426	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	103	99.0	P/P	59 - 147
2449426	Tris(2-chloroethyl) phosphate (TCEP)	105	99.5	P/P	65 - 156

Reference Method: EPA 8321B

Batch ID: P437459

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449628	Acesulfame K	109	109	P/P	40 - 150
2449628	AMPA	82.9	80.3	P/P	40 - 160
2449628	Endothall	93.4	91.4	P/P	40 - 160
2449628	Glufosinate	84.9	87.0	P/P	40 - 160
2449628	Glyphosate	92.7	94.7	P/P	40 - 160
2449628	Sucralose	124	126	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P437469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449424	2,4,5-T	72.0	81.4	P/P	40 - 150
2449424	Acetaminophen	65.5	69.5	P/P	30 - 150
2449424	Acetamiprid	52.7	46.5	P/P	40 - 150
2449424	Afidopyropen	59.1	62.4	P/P	30 - 150
2449424	Bentazon	35.9	36.5	P/P	30 - 150
2449424	Benzovindiflupyr	79.4	86.2	P/P	40 - 150
2449424	Carbamazepine	54.0	57.9	P/P	40 - 150
2449424	Clothianidin	68.9	72.7	P/P	40 - 150
2449424	Dinotefuran	59.6	61.8	P/P	40 - 150
2449424	Diuron	51.2	51.7	P/P	40 - 150
2449424	Fenuron	50.0	53.5	P/P	40 - 150
2449424	Fluridone	70.9	74.4	P/P	40 - 150
2449424	Hydrocodone	54.5	59.2	P/P	40 - 150
2449424	Ibuprofen	68.4	80.0	P/P	40 - 150
2449424	Imazapyr	86.2	100	P/P	40 - 150
2449424	Imidacloprid	89.4	95.8	P/P	40 - 150
2449424	Linuron	55.7	64.7	P/P	40 - 150
2449424	Mandestrobin	81.2	86.4	P/P	40 - 150
2449424	MCPP	76.5	84.7	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P437469

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449424	Naproxen	59.1	62.1	P/P	40 - 150
2449424	Primidone	70.9	79.2	P/P	40 - 150
2449424	Pyraclostrobin	77.4	86.0	P/P	40 - 150
2449424	Silvex	92.3	103	P/P	40 - 150
2449424	Thiamethoxam	57.9	60.3	P/P	40 - 150
2449424	Tolfenpyrad	53.8	61.2	P/P	30 - 150
2449424	Triclopyr	76.1	80.7	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P437920

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449025	Fluoride	101	101	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2448881	Organic Carbon	94.2	96.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437487

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449399	Color (true)	4.49	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437493

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449273	Turbidity	1.18	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449425	Calcium	0.287	Spike	P	0 - 20
2449425	Iron	0.132	Spike	P	0 - 20
2449425	Magnesium	0.520	Spike	P	0 - 20
2449425	Potassium	0.507	Spike	P	0 - 20
2449425	Sodium	0.258	Spike	P	0 - 20
2449425	Strontium	0.353	Spike	P	0 - 20
2449425	Tin	0.274	Spike	P	0 - 20
2449425	Titanium	0.344	Spike	P	0 - 20
2449425	Vanadium	0.234	Spike	P	0 - 20
2449425	Zinc	0.502	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437553

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449425	Aluminum	2.82	Spike	P	0 - 20
2449425	Antimony	4.84	Spike	P	0 - 20
2449425	Arsenic	2.73	Spike	P	0 - 20
2449425	Barium	3.91	Spike	P	0 - 20
2449425	Beryllium	5.62	Spike	P	0 - 20
2449425	Boron	2.81	Spike	P	0 - 20
2449425	Cadmium	4.92	Spike	P	0 - 20
2449425	Chromium	4.58	Spike	P	0 - 20
2449425	Cobalt	2.99	Spike	P	0 - 20
2449425	Copper	3.18	Spike	P	0 - 20
2449425	Lead	4.14	Spike	P	0 - 20
2449425	Manganese	2.78	Spike	P	0 - 20
2449425	Molybdenum	5.78	Spike	P	0 - 20
2449425	Nickel	3.38	Spike	P	0 - 20
2449425	Selenium	5.42	Spike	P	0 - 20
2449425	Silver	3.81	Spike	P	0 - 20
2449425	Thallium	3.85	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449420	Chloride	1.95	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P437940

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449420	Sulfate	1.22	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449421	Ammonia-N	1.16	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437560

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449421	Kjeldahl Nitrogen	3.62	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449093	NO2NO3-N	0.484	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437712

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449095	Total-P	1.18	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449097	O-Phosphate-P	0.791	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P437464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449426	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	27.3	Spike	P	0 - 35
2449426	Acetochlor	21.3	Spike	P	0 - 28

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P437464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449426	Alachlor	4.03	Spike	P	0 - 30
2449426	Ametryn	11.9	Spike	P	0 - 32
2449426	Atrazine	0.893	Spike	P	0 - 33
2449426	Atrazine Desethyl	7.37	Spike	P	0 - 36
2449426	Avobenzone	14.0	Spike	P	0 - 35
2449426	Azinphos Methyl	2.31	Spike	P	0 - 62
2449426	Azoxystrobin	28.8	Spike	P	0 - 39
2449426	Bromacil	25.4	Spike	P	0 - 33
2449426	Butylate	7.49	Spike	P	0 - 51
2449426	Caffeine	0.207	Spike	P	0 - 100
2449426	Carbophenothion	15.2	Spike	P	0 - 34
2449426	Carfentrazone Ethyl	19.8	Spike	P	0 - 33
2449426	Chlorfenapyr	20.2	Spike	P	0 - 28
2449426	Chlorpyrifos Ethyl	9.54	Spike	P	0 - 31
2449426	Chlorpyrifos Methyl	15.5	Spike	P	0 - 27
2449426	Coumaphos	49.8	Spike	P	0 - 62
2449426	Cyanazine	9.13	Spike	P	0 - 48
2449426	Cyprodinil	16.2	Spike	P	0 - 29
2449426	Dechlorane 602	3.33	Spike	P	0 - 60
2449426	Dechlorane 603	9.95	Spike	P	0 - 40
2449426	Dechlorane Plus	7.44	Spike	P	0 - 38
2449426	Demeton	9.93	Spike	P	0 - 33
2449426	Diazinon	13.3	Spike	P	0 - 32
2449426	Difenoconazole	25.8	Spike	P	0 - 71
2449426	Dimethenamid	22.4	Spike	P	0 - 60
2449426	Dimethomorph	15.2	Spike	P	0 - 61
2449426	Disulfoton	10.7	Spike	P	0 - 30
2449426	Dithiopyr	36.3	Spike	F	0 - 28
2449426	EPTC	0.740	Spike	P	0 - 56
2449426	Ethion	26.5	Spike	P	0 - 79
2449426	Ethoprop	13.1	Spike	P	0 - 31
2449426	Etridiazole	16.3	Spike	P	0 - 43
2449426	Fenamiphos	0.250	Spike	P	0 - 43
2449426	Fenbuconazole	34.8	Spike	P	0 - 79
2449426	Fipronil	37.9	Spike	P	0 - 46
2449426	Fipronil Desulfinyl	38.0	Spike	F	0 - 36
2449426	Fipronil Sulfide	28.6	Spike	P	0 - 34
2449426	Fipronil Sulfone	39.9	Spike	P	0 - 47
2449426	Fluazifop-P-butyl	34.1	Spike	P	0 - 38
2449426	Fludioxonil	15.2	Spike	P	0 - 29
2449426	Flumioxazin	20.7	Spike	P	0 - 63
2449426	Flutolanil	7.63	Spike	P	0 - 36
2449426	Fluxapyroxad	64.7	Spike	P	0 - 65
2449426	Fonofos	11.1	Spike	P	0 - 35
2449426	Hexabromobenzene	5.86	Spike	P	0 - 41
2449426	Hexazinone	7.95	Spike	P	0 - 31
2449426	Imazalil	11.1	Spike	P	0 - 52
2449426	Iprodione	43.1	Spike	P	0 - 49
2449426	Loratadine	8.32	Spike	P	0 - 59
2449426	Malathion	12.1	Spike	P	0 - 77
2449426	Metalaxyl	24.5	Spike	P	0 - 76

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P437464

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449426	Metolachlor	1.59	Spike	P	0 - 29
2449426	Metribuzin	2.63	Spike	P	0 - 51
2449426	Mevinphos	5.23	Spike	P	0 - 31
2449426	Molinate	12.4	Spike	P	0 - 39
2449426	Myclobutanil	26.7	Spike	P	0 - 34
2449426	Naled	14.2	Spike	P	0 - 37
2449426	Napropamide	25.4	Spike	P	0 - 100
2449426	Norflurazon	4.16	Spike	P	0 - 54
2449426	Octinoxate	3.90	Spike	P	0 - 35
2449426	Oxadiazon	22.9	Spike	P	0 - 34
2449426	Oxybenzone	8.59	Spike	P	0 - 35
2449426	Oxyfluorfen	36.3	Spike	F	0 - 28
2449426	Parathion Ethyl	9.20	Spike	P	0 - 31
2449426	Parathion Methyl	45.7	Spike	F	0 - 29
2449426	PBB-153	22.6	Spike	P	0 - 49
2449426	PBDE-47	8.18	Spike	P	0 - 36
2449426	PBDE-99	0.204	Spike	P	0 - 46
2449426	Pendimethalin	16.9	Spike	P	0 - 31
2449426	Pentabromotoluene	8.60	Spike	P	0 - 16
2449426	Phenytoin	24.0	Spike	P	0 - 100
2449426	Phorate	29.9	Spike	P	0 - 36
2449426	Prodiamine	26.0	Spike	P	0 - 68
2449426	Prometon	10.5	Spike	P	0 - 35
2449426	Prometryn	10.0	Spike	P	0 - 33
2449426	Pronamide	12.8	Spike	P	0 - 24
2449426	Propanil	21.8	Spike	P	0 - 28
2449426	Propargite	17.2	Spike	P	0 - 53
2449426	Propiconazole	30.7	Spike	P	0 - 44
2449426	Pyraflufen Ethyl	50.7	Spike	P	0 - 61
2449426	Pyridaben	33.9	Spike	P	0 - 43
2449426	Pyriproxyfen	60.8	Spike	P	0 - 82
2449426	Simazine	6.80	Spike	P	0 - 29
2449426	Stirophos	2.84	Spike	P	0 - 100
2449426	Sulfentrazone	49.0	Spike	P	0 - 64
2449426	Tebuconazole	28.2	Spike	P	0 - 76
2449426	Terbufos	11.8	Spike	P	0 - 29
2449426	Terbuthylazine	6.45	Spike	P	0 - 28
2449426	Tetradecachloro-m-terphenyl	16.2	Spike	P	0 - 42
2449426	Thiobencarb	5.77	Spike	P	0 - 26
2449426	Tri-o-cresyl Phosphate	9.31	Spike	P	0 - 24
2449426	Triadimefon	21.9	Spike	P	0 - 40
2449426	Tris(1-chloro-2-propyl) phosphate (TCPP)	10.1	Spike	P	0 - 30
2449426	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	3.93	Spike	P	0 - 22
2449426	Tris(2-chloroethyl) phosphate (TCEP)	5.08	Spike	P	0 - 15

Reference Method: EPA 8321B

Batch ID: P437459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449628	Acesulfame K	0.187	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P437459

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449628	AMPA	3.13	Spike	P	0 - 30
2449628	Endothall	2.23	Spike	P	0 - 30
2449628	Glufosinate	2.41	Spike	P	0 - 30
2449628	Glyphosate	2.09	Spike	P	0 - 30
2449628	Sucralose	1.62	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437469

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449424	2,4-D	8.40	Spike	P	0 - 30
2449424	2,4,5-T	12.3	Spike	P	0 - 30
2449424	Acetaminophen	5.94	Spike	P	0 - 30
2449424	Acetamiprid	12.7	Spike	P	0 - 30
2449424	Afidopyropen	5.51	Spike	P	0 - 30
2449424	Bentazon	1.45	Spike	P	0 - 30
2449424	Benzovindiflupyr	8.27	Spike	P	0 - 30
2449424	Carbamazepine	6.99	Spike	P	0 - 30
2449424	Clothianidin	5.37	Spike	P	0 - 30
2449424	Dinotefuran	3.56	Spike	P	0 - 30
2449424	Diuron	0.984	Spike	P	0 - 30
2449424	Fenuron	6.71	Spike	P	0 - 30
2449424	Fluridone	4.86	Spike	P	0 - 30
2449424	Hydrocodone	8.18	Spike	P	0 - 30
2449424	Ibuprofen	15.6	Spike	P	0 - 30
2449424	Imazapyr	11.3	Spike	P	0 - 30
2449424	Imidacloprid	6.64	Spike	P	0 - 30
2449424	Linuron	14.9	Spike	P	0 - 30
2449424	Mandestrobin	6.25	Spike	P	0 - 30
2449424	MCPP	10.2	Spike	P	0 - 30
2449424	Naproxen	4.84	Spike	P	0 - 30
2449424	Primidone	11.0	Spike	P	0 - 30
2449424	Pyraclostrobin	10.5	Spike	P	0 - 30
2449424	Silvex	10.4	Spike	P	0 - 30
2449424	Thiamethoxam	4.05	Spike	P	0 - 30
2449424	Tolfenpyrad	12.8	Spike	P	0 - 30
2449424	Triclopyr	5.84	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P437666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448305	Total Alkalinity	0.0855	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P438106

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: P438106

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449420	TDS	6.99	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P437920

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449025	Fluoride	0.479	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2448881	Organic Carbon	1.45	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2449424
Field Sample ID: G4SE0183

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	97.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	65.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	55.5	P	30 - 160
EPA 8321B	Diuron-d6	54.5	P	30 - 160
EPA 8321B	Endothall-d6	113	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	87.7	P	30 - 160
EPA 8321B	Ibuprofen-d3	62.6	P	30 - 160
EPA 8321B	Primidone-d5	69.0	P	30 - 160
EPA 8321B	Sucralose-d6	92.0	P	30 - 160

Lab Sample ID: 2449426
Field Sample ID: G4SE0183

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.4	P	20 - 200
EPA 8270E	Simazine-d10	109	P	58 - 137
EPA 8270E	Terbufos-d10	92.4	P	50 - 134
EPA 8270E	Terphenyl-d14	110	P	44 - 134

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122602

Included Lab Sample IDs: 2449422

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	99.3	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1

Run ID: A122603

Included Lab Sample IDs: 2449420

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	102	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122605

Included Lab Sample IDs: 2449420

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	100	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A122607

Included Lab Sample IDs: 2449424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	80.8	62.2	P/P	60 - 160
Endothall	105	91.7	P/P	60 - 160
Glufosinate	95.5	82.3	P/P	60 - 160
Glyphosate	84.2	91.2	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122642

Included Lab Sample IDs: 2449425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	99.9	99.1	P/P	90 - 110
Iron	98.7	97.8	P/P	90 - 110
Magnesium	98.9	98.1	P/P	90 - 110
Potassium	97.3	97.7	P/P	90 - 110
Sodium	97.8	97.8	P/P	90 - 110
Strontium	97.3	95.8	P/P	90 - 110
Tin	99.7	98.3	P/P	90 - 110
Titanium	99.7	98.6	P/P	90 - 110
Vanadium	99.4	98.4	P/P	90 - 110
Zinc	97.5	96.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122650

Included Lab Sample IDs: 2449425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	97.7	P/P	90 - 110
Antimony	93.0	92.4	P/P	90 - 110
Arsenic	97.4	95.7	P/P	90 - 110
Barium	96.8	94.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122650

Included Lab Sample IDs: 2449425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beryllium	94.6	93.5	P/P	90 - 110
Boron	106	107	P/P	90 - 110
Cadmium	99.0	97.0	P/P	90 - 110
Chromium	97.6	96.1	P/P	90 - 110
Cobalt	96.8	95.2	P/P	90 - 110
Copper	95.0	92.2	P/P	90 - 110
Lead	99.5	98.5	P/P	90 - 110
Manganese	93.4	91.0	P/P	90 - 110
Nickel	98.1	97.0	P/P	90 - 110
Selenium	97.2	93.8	P/P	90 - 110
Silver	98.8	97.4	P/P	90 - 110
Thallium	99.5	99.6	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A122678

Included Lab Sample IDs: 2449420

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.8	95.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122682

Included Lab Sample IDs: 2449425

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Molybdenum	94.5	95.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122684

Included Lab Sample IDs: 2449424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	116	115	P/P	60 - 160
Sucralose	100	105	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122697

Included Lab Sample IDs: 2449421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122701

Included Lab Sample IDs: 2449424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	98.2	92.5	P/P	50 - 150
2,4,5-T	111	94.8	P/P	50 - 150
Acetaminophen	108	103	P/P	60 - 160
Acetamiprid	107	109	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
Run ID: A122701
Included Lab Sample IDs: 2449424

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Afidopyropen	102	103	P/P	50 - 150
Bentazon	105	93.2	P/P	50 - 160
Benzovindiflupyr	101	104	P/P	50 - 150
Carbamazepine	112	110	P/P	60 - 150
Clothianidin	104	110	P/P	60 - 150
Dinotefuran	112	115	P/P	50 - 150
Diuron	111	104	P/P	60 - 160
Fenuron	106	104	P/P	60 - 150
Fluridone	109	107	P/P	60 - 160
Hydrocodone	108	111	P/P	60 - 150
Ibuprofen	66.9	81.8	P/P	50 - 160
Imazapyr	97.4	89.3	P/P	50 - 150
Imidacloprid	102	101	P/P	60 - 150
Linuron	100	106	P/P	60 - 150
Mandestrobin	108	109	P/P	50 - 150
MCPP	114	99.2	P/P	50 - 150
Naproxen	148	131	P/P	50 - 160
Primidone	103	103	P/P	60 - 150
Pyraclostrobin	107	109	P/P	60 - 150
Silvex	105	92.3	P/P	50 - 150
Thiamethoxam	111	113	P/P	50 - 150
Tolfenpyrad	99.3	96.3	P/P	60 - 150
Triclopyr	104	85.7	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A122709
Included Lab Sample IDs: 2449421

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

Reference Method: SM 5310 B-2011
Run ID: A122725
Included Lab Sample IDs: 2449421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	95.5	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A122736
Included Lab Sample IDs: 2449420

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

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A122742
Included Lab Sample IDs: 2449421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
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Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122742

Included Lab Sample IDs: 2449421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122744

Included Lab Sample IDs: 2449421

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.1	97.6	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A122774

Included Lab Sample IDs: 2449420

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

Reference Method: EPA 8270E

Run ID: A122821

Included Lab Sample IDs: 2449426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	92.9		P	80 - 120
Avobenzene	97.5		P	80 - 120
Dechlorane 602	97.2		P	80 - 120
Dechlorane 603	98.8		P	80 - 120
Dechlorane Plus	103		P	80 - 120
Hexabromobenzene	89.0		P	80 - 120
Octinoxate	92.7		P	80 - 120
Oxybenzone	95.8		P	80 - 120
PBB-153	90.2		P	80 - 120
PBDE-47	90.6		P	80 - 120
PBDE-99	93.5		P	80 - 120
Pentabromotoluene	93.5		P	80 - 120
Tetradecachloro-m-terphenyl	98.3		P	80 - 120
Tri-o-cresyl Phosphate	93.1		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	90.0		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	93.1		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	84.4		P	80 - 120

Reference Method: EPA 8270E

Run ID: A122923

Included Lab Sample IDs: 2449426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.4		P	80 - 120
Alachlor	83.1		P	80 - 120
Ametryn	96.6		P	80 - 120
Atrazine	95.6		P	80 - 120
Atrazine Desethyl	103		P	80 - 120
Azinphos Methyl	157*		F	80 - 120
Azoxystrobin	102		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122923
Included Lab Sample IDs: 2449426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bromacil	99.9		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	107		P	80 - 120
Carbophenothion	91.9		P	80 - 120
Carfentrazone Ethyl	91.2		P	80 - 120
Chlorfenapyr	91.4		P	80 - 120
Chlorpyrifos Ethyl	89.8		P	80 - 120
Chlorpyrifos Methyl	94.7		P	80 - 120
Coumaphos	110		P	80 - 120
Cyanazine	102		P	80 - 120
Cyprodinil	93.8		P	80 - 120
Demeton	95.4		P	80 - 120
Diazinon	98.2		P	80 - 120
Difenoconazole	90.6		P	80 - 120
Dimethenamid	94.9		P	80 - 120
Dimethomorph	89.4		P	80 - 120
Disulfoton	96.4		P	80 - 120
Dithiopyr	91.5		P	80 - 120
EPTC	100		P	80 - 120
Ethion	88.8		P	80 - 120
Ethoprop	96.4		P	80 - 120
Etridiazole	93.4		P	80 - 120
Fenamiphos	92.4		P	80 - 120
Fenbuconazole	88.6		P	80 - 120
Fipronil	86.8		P	80 - 120
Fipronil Desulfinyl	95.3		P	80 - 120
Fipronil Sulfide	94.1		P	80 - 120
Fipronil Sulfone	115		P	80 - 120
Fluazifop-P-butyl	99.3		P	80 - 120
Fludioxonil	107		P	80 - 120
Flumioxazin	102		P	80 - 120
Flutolanil	107		P	80 - 120
Fluxapyroxad	82.7		P	80 - 120
Fonofos	94.7		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	108		P	80 - 120
Iprodione	90.3		P	80 - 120
Loratadine	94.9		P	80 - 120
Malathion	89.7		P	80 - 120
Metalaxyl	93.8		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	94.2		P	80 - 120
Mevinphos	97.3		P	80 - 120
Molinate	89.8		P	80 - 120
Myclobutanil	88.5		P	80 - 120
Naled	103		P	80 - 120
Napropamide	102		P	80 - 120
Norflurazon	101		P	80 - 120
Oxadiazon	98.8		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	95.6		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A122923
Included Lab Sample IDs: 2449426

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Parathion Methyl	92.2		P	80 - 120
Pendimethalin	103		P	80 - 120
Phenytol	110		P	80 - 120
Phorate	94.7		P	80 - 120
Prodiamine	106		P	80 - 120
Prometon	98.1		P	80 - 120
Prometryn	102		P	80 - 120
Pronamide	95.1		P	80 - 120
Propanil	107		P	80 - 120
Propargite	97.6		P	80 - 120
Propiconazole	90.3		P	80 - 120
Pyraflufen Ethyl	99.7		P	80 - 120
Pyridaben	101		P	80 - 120
Pyriproxyfen	173*		F	80 - 120
Simazine	92.3		P	80 - 120
Stirophos	83.5		P	80 - 120
Sulfentrazone	90.1		P	80 - 120
Tebuconazole	93.4		P	80 - 120
Terbufos	98.7		P	80 - 120
Terbutylazine	86.1		P	80 - 120
Thiobencarb	100		P	80 - 120
Triadimefon	103		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)	99.3				4.49	
EPA 180.1 Rev. 2.0	Turbidity	103				1.18	
EPA 200.7 Rev. 4.4	Calcium	105		104			0.287
	Iron	112		106	106		0.132
	Magnesium	105		103			0.520
	Potassium	103		102	101		0.507
	Sodium	102		103			0.258
	Strontium	100		95.9	95.5		0.353
	Tin	99.1		92.7	92.4		0.274
	Titanium	102		97.2	97.6		0.344
	Vanadium	101		96.6	96.8		0.234
	Zinc	98.5		93.5	94.0		0.502
EPA 200.8 Rev. 5.4	Aluminum	98.9		98.5	95.8		2.82
	Antimony	93.7		97.8	93.2		4.84
	Arsenic	96.0		100	97.5		2.73
	Barium	96.3		99.2	94.9		3.91
	Beryllium	93.7		93.5	88.4		5.62
	Boron	110		109	105		2.81
	Cadmium	97.2		100	95.5		4.92
	Chromium	96.2		95.3	91.0		4.58
	Cobalt	95.7		94.8	92.0		2.99
	Copper	94.8		97.4	92.7		3.18
	Lead	99.0		103	98.4		4.14
	Manganese	93.6		94.1	91.2		2.78
	Molybdenum	90.4		97.3	91.8		5.78
	Nickel	97.3		95.2	92.1		3.38
	Selenium	92.6		95.7	90.7		5.42
	Silver	103		104	99.9		3.81
	Thallium	102		106	102		3.85
EPA 300.0 Rev. 2.1	Chloride	106		107	107	1.95	
	Sulfate	107		107	108	1.22	
EPA 350.1 Rev. 2.0	Ammonia-N	98.4		99.0	101		1.16
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	93.5		97.5	103		3.62
EPA 353.2 Rev. 2.0	NO2NO3-N	102		100	99.9		0.484
EPA 365.1 Rev. 2.0	Total-P	98.6		100	102		1.18
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.3		101	102		0.791
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	63.6		63.9	84.2		27.3
	Acetochlor	77.8		72.5	89.7		21.3
	Alachlor	86.6		68.7	71.5		4.03
	Ametryn	124		102	114		11.9
	Atrazine	97.7		84.5	85.9		0.893
	Atrazine Desethyl	103		95.9	87.9		7.37
	Avobenzone	158		124	142		14.0
	Azinphos Methyl	33.4		133	130		2.31
	Azoxystrobin	145		100	134		28.8
	Bromacil	80.9		70.6	91.2		25.4
	Butylate	68.6		69.3	64.3		7.49
	Caffeine	112		116	117		0.207
	Carbophenothion	118		131	112		15.2
	Carfentrazone Ethyl	123		143	118		19.8
	Chlorfenapyr	87.9		76.3	93.5		20.2
	Chlorpyrifos Ethyl	112		108	97.8		9.54

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS	MS		
EPA 8270E	Chlorpyrifos Methyl	120	125	146		15.5
	Coumaphos	148	91.7	153		49.8
	Cyanazine	159	146	160		9.13
	Cyprodinil	132	131	111		16.2
	Dechlorane 602	112	97.4	94.2		3.33
	Dechlorane 603	67.2	80.8	89.2		9.95
	Dechlorane Plus	96.1	79.8	85.9		7.44
	Demeton	86.7	96.3	87.2		9.93
	Diazinon	80.6	93.7	107		13.3
	Difenoconazole	60.7	72.1	93.4		25.8
	Dimethenamid	73.9	73.3	91.8		22.4
	Dimethomorph	230	194	225		15.2
	Disulfoton	108	99.8	111		10.7
	Dithiopyr	88.2	69.5	100		36.3
	EPTC	62.0	56.4	56.8		0.740
	Ethion	33.1	53.6	70.0		26.5
	Ethoprop	98.4	109	95.7		13.1
	Etridiazole	78.3	57.1	67.2		16.3
	Fenamiphos	125	104	104		0.250
	Fenbuconazole	104	66.7	94.7		34.8
	Fipronil	82.0	71.5	105		37.9
	Fipronil Desulfinyl	89.7	72.5	107		38.0
	Fipronil Sulfide	96.0	83.2	111		28.6
	Fipronil Sulfone	97.6	74.2	111		39.9
	Fluazifop-P-butyl	82.3	70.9	100		34.1
	Fludioxonil	89.6	45.1	56.6		15.2
	Flumioxazin	61.1	103	127		20.7
	Flutolanil	97.4	97.2	90.0		7.63
	Fluxapyroxad	62.4	152	77.9		64.7
	Fonofos	115	109	97.6		11.1
	Hexabromobenzene	64.3	79.0	83.7		5.86
	Hexazinone	92.9	108	99.4		7.95
	Imazalil	118	117	131		11.1
	Iprodione	90.5	165	107		43.1
	Loratadine	231	197	214		8.32
	Malathion	113	122	108		12.1
	Metalaxyl	86.0	75.8	97.1		24.5
	Metolachlor	104	116	115		1.59
	Metribuzin	102	92.0	89.6		2.63
	Mevinphos	108	94.9	100		5.23
	Molinate	66.4	75.0	66.3		12.4
	Myclobutanil	93.1	73.8	96.5		26.7
	Naled	47.0	24.9	28.7		14.2
	Napropamide	65.6	75.1	96.9		25.4
	Norflurazon	85.6	94.9	91.0		4.16
	Octinoxate	110	121	116		3.90
	Oxadiazon	91.5	71.6	90.1		22.9
	Oxybenzone	121	130	119		8.59
	Oxyfluorfen	118	89.4	129		36.3
	Parathion Ethyl	101	99.6	109		9.20
	Parathion Methyl	124	97.8	156		45.7
	PBB-153	37.1	64.8	81.4		22.6
	PBDE-47	85.3	101	109		8.18
	PBDE-99	92.3	85.7	85.9		0.204

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8270E	Pendimethalin	115	104	123			16.9
	Pentabromotoluene	78.3	87.9	95.8			8.60
	Phenytoin	20.4	34.2	43.5			24.0
	Phorate	101	142	105			29.9
	Prodiamine	47.7	47.6	61.8			26.0
	Prometon	109	94.2	84.8			10.5
	Prometryn	123	128	141			10.0
	Pronamide	109	94.3	107			12.8
	Propanil	81.5	68.6	85.4			21.8
	Propargite	53.8	92.0	77.4			17.2
	Propiconazole	88.7	128	94.1			30.7
	Pyraflufen Ethyl	97.6	161	96.2			50.7
	Pyridaben	136	43.9	84.0			33.9
	Pyriproxyfen	24.2	101	53.8			60.8
	Simazine	99.9	90.9	97.3			6.80
	Stiropfos	53.1	54.3	52.7			2.84
	Sulfentrazone	35.4	145	87.8			49.0
	Tebuconazole	40.7	87.2	65.6			28.2
	Terbufos	123	115	102			11.8
	Terbuthylazine	104	81.2	86.6			6.45
	Tetradecachloro-m-terphenyl	135	95.2	112			16.2
	Thiobencarb	87.2	77.2	81.8			5.77
	Tri-o-cresyl Phosphate	105	111	122			9.31
	Triadimefon	87.6	82.9	103			21.9
	Tris(1-chloro-2-propyl) phosphate (TCPP)	165	123	111			10.1
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	137	103	99.0			3.93
	Tris(2-chloroethyl) phosphate (TCEP)	137	105	99.5			5.08
EPA 8321B	2,4-D	85.0					8.40
	2,4,5-T	81.4	72.0	81.4			12.3
	Acesulfame K	88.7	109	109			0.187
	Acetaminophen	76.9	65.5	69.5			5.94
	Acetamiprid	82.9	52.7	46.5			12.7
	Afidopyropen	65.9	59.1	62.4			5.51
	AMPA	112	82.9	80.3			3.13
	Bentazon	73.1	35.9	36.5			1.45
	Benzovindiflupyr	86.3	79.4	86.2			8.27
	Carbamazepine	72.0	54.0	57.9			6.99
	Clothianidin	91.0	68.9	72.7			5.37
	Dinotefuran	101	59.6	61.8			3.56
	Diuron	67.9	51.2	51.7			0.984
	Endothall	92.6	93.4	91.4			2.23
	Fenuron	91.7	50.0	53.5			6.71
	Fluridone	86.5	70.9	74.4			4.86
	Glufosinate	100	84.9	87.0			2.41
	Glyphosate	90.1	92.7	94.7			2.09
	Hydrocodone	89.1	54.5	59.2			8.18
	Ibuprofen	61.4	68.4	80.0			15.6
	Imazapyr	87.2	86.2	100			11.3
	Imidacloprid	88.4	89.4	95.8			6.64
	Linuron	71.3	55.7	64.7			14.9
	Mandestrobin	90.4	81.2	86.4			6.25

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision LCS	SMP	MS
EPA 8321B	MCCP	80.8	76.5	84.7			10.2
	Naproxen	67.2	59.1	62.1			4.84
	Primidone	83.9	70.9	79.2			11.0
	Pyraclostrobin	81.0	77.4	86.0			10.5
	Silvex	87.6	92.3	103			10.4
	Sucralose	94.6	124	126			1.62
	Thiamethoxam	83.7	57.9	60.3			4.05
	Tolfenpyrad	52.7	53.8	61.2			12.8
	Triclopyr	88.9	76.1	80.7			5.84
SM 2320 B-2011	Total Alkalinity	99.2				0.0855	
SM 2540 C-2015	TDS	94.0				6.99	
SM 2540 D-2015	TSS	102					
SM 4500-F- C-2011	Fluoride	101	101	101			0.479
SM 5310 B-2011	Organic Carbon	94.5	94.2	96.4			1.45

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2449420
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2449420
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2449425
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2449425
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2449420
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2449420
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2449421
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2449421
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2449421
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2449421
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2449422
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2449426
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2449426
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2449424
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2449420
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2449425
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2449420
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2449420
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2449420
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2449421

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	11/07/2023			11/07/2023 15:44	Chandler E Cox	2449420
EPA 180.1 Rev. 2.0	11/07/2023			11/07/2023 14:18	Khloe J Berg	2449420
EPA 200.7 Rev. 4.4	11/07/2023	11/08/2023 11:05	Vijayalakshmi Reddy	11/08/2023 17:32	Chase Roberts	2449425
EPA 200.8 Rev. 5.4	11/07/2023	11/08/2023 11:05	Vijayalakshmi Reddy	11/08/2023 21:28	Conrad Hartmann	2449425
	11/07/2023	11/08/2023 11:05	Vijayalakshmi Reddy	11/09/2023 14:40	Emily M Philpot	2449425
EPA 300.0 Rev. 2.1	11/07/2023			11/15/2023 23:00	James L Waggeberby	2449420
EPA 350.1 Rev. 2.0	11/07/2023			11/15/2023 11:34	Ping Hua	2449421
EPA 351.2 Rev. 2.0	11/07/2023	11/09/2023 10:53	Simonne.V. Calhoun	11/13/2023 14:18	Samantha L Bates	2449421
EPA 353.2 Rev. 2.0	11/07/2023			11/14/2023 12:24	Fadila Guebre	2449421
EPA 365.1 Rev. 2.0	11/07/2023	11/14/2023 15:38	Adam P Silver	11/15/2023 12:05	James L Waggeberby	2449421
EPA 365.1 Rev. 2.0 dissolved	11/07/2023			11/07/2023 14:45	Elise M. Gillis	2449422
EPA 8270E	11/07/2023	11/11/2023 08:00	Fe-Val Siddell	11/16/2023 16:28	Vandana T. Nagar	2449426
	11/07/2023	11/11/2023 08:00	Fe-Val Siddell	11/16/2023 20:00	Arthur Maknenko	2449426
EPA 8321B	11/07/2023	11/08/2023 13:00	Hana Lee	11/08/2023 17:05	Tae K Lee	2449424
	11/07/2023	11/08/2023 13:00	Hana Lee	11/09/2023 12:12	Tae K Lee	2449424
	11/07/2023	11/09/2023 13:00	Hoor Shaik	11/13/2023 17:55	Juyoung Kim	2449424
SM 2320 B-2011	11/07/2023			11/10/2023 00:03	Chandler E Cox	2449420
SM 2340 B-2011	11/07/2023			11/08/2023 17:32	Chase Roberts	2449425
SM 2540 C-2015	11/07/2023			11/09/2023 13:42	Yijie Li	2449420
SM 2540 D-2015	11/07/2023			11/09/2023 13:42	Yijie Li	2449420
SM 4500-F- C-2011	11/07/2023			11/16/2023 06:22	Dale L. Simmons	2449420
SM 5310 B-2011	11/07/2023			11/13/2023 22:41	Khloe J Berg	2449421