

Chemical Analysis Report

CEN-DIST-2022-06-02-01

Florida Department of Environmental Protection
Central Laboratory
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Tallahassee, FL 32399-2400
DOH Accreditation E31780

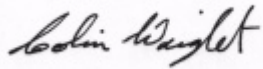
Event Description: **Johns Lake Bio and Lake Condel**
Request ID: **RQ-2022-05-30-40**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
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Certified by: Colin Wright, Program Administrator

Date Certified: 24-JUN-2022 09:47



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: Johns Lake @ conservation area dock

Collection Date/Time: 06/01/2022 11:56

Field ID: G1CE0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331267	DEP SOP: NU-094-1	Color (true)**	200		PCU	P415022	
	EPA 180.1 Rev. 2.0	Turbidity	3.5		NTU	P414666	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P414983	
		Sulfate	8.6		mg SO4/L	P414987	
	SM 2320 B-2011	Total Alkalinity	40		mg CaCO3/L	P415108	
	SM 2540 C-2011	TDS	149		mg/L	P414803	
	SM 2540 D-2011	TSS	2	I	mg/L	P414769	
	SM 4500-F- C-2011	Fluoride	0.10		mg F/L	P415112	
2331268	EPA 350.1 Rev. 2.0	Ammonia-N	0.058		mg N/L	P415173	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.91		mg N/L	P414743	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.016		mg N/L	P415305	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P414752	MS
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P414756	
2331269	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.090		mg P/L	P414705	
2331275	EPA 8321B	2,4-D	0.11		ug/L	P414735	
		Acesulfame K	0.10	U	ug/L	P414602	MS
		2,4,5-T	0.0040	U	ug/L	P414735	
		AMPA	0.47		ug/L	P414602	
		Acetaminophen	0.0080	U	ug/L	P414735	
		Acetamiprid	0.0020	U	ug/L	P414735	
		Endothall	0.25	U	ug/L	P414602	
		Glufosinate	0.10	U	ug/L	P414602	
		Glyphosate	0.50		ug/L	P414602	
		Afidopyropen	0.0020	U	ug/L	P414735	
		Bentazon	0.14		ug/L	P414735	
		Sucralose	1.7		ug/L	P414602	
		Benzovindiflupyr	0.0020	U	ug/L	P414735	
		Carbamazepine	8.0E-04	U	ug/L	P414735	
		Clothianidin	0.010		ug/L	P414735	
		Dinotefuran	0.0028	I	ug/L	P414735	
		Diuron	0.0027	I	ug/L	P414735	
		Fenuron	0.032	U	ug/L	P414735	
		Fluridone	0.012		ug/L	P414735	
		Imazapyr	0.25		ug/L	P414735	
		Hydrocodone	0.0020	U	ug/L	P414735	
		Ibuprofen	0.020	U	ug/L	P414735	
		Imidacloprid	0.021		ug/L	P414735	
		Linuron	0.0040	U	ug/L	P414735	
		Mandestrobin	0.0020	U	ug/L	P414735	
		MCP	0.0040	U	ug/L	P414735	
		Naproxen	0.0080	U	ug/L	P414735	
		Primidone	0.0040	U	ug/L	P414735	
		Pyraclostrobin	0.0020	U	ug/L	P414735	

Field ID: G1CE0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331275	EPA 8321B	Silvex	0.0040	U	ug/L	P414735	
		Thiamethoxam	0.0020	U	ug/L	P414735	
		Tolfenpyrad	0.0020	U	ug/L	P414735	
		Triclopyr	0.0040	U	ug/L	P414735	
2331276	EPA 200.7 Rev. 4.4	Calcium	15.2		mg/L	P414696	
		Iron	180		ug/L	P414696	
		Magnesium	4.33		mg/L	P414696	
		Potassium	5.4		mg/L	P414696	
		Sodium	18.8		mg/L	P414696	
		Strontium	45.0		ug/L	P414696	
		Tin	3.0	U	ug/L	P414696	
		Titanium	1.1	I	ug/L	P414696	
		Vanadium	2.0	U	ug/L	P414696	
		Zinc	5.5	I	ug/L	P414696	
	EPA 200.8 Rev. 5.4	Aluminum	113		ug/L	P414696	
		Antimony	0.16	I	ug/L	P414696	
		Arsenic	1.37		ug/L	P414696	
		Barium	12.9		ug/L	P414696	
		Beryllium	0.010	U	ug/L	P414696	
		Boron**	41.1		ug/L	P414696	
		Cadmium	0.020	U	ug/L	P414696	
		Chromium	0.40	U	ug/L	P414696	
		Cobalt	0.054	I	ug/L	P414696	
		Copper	1.82		ug/L	P414696	
		Lead	0.32	I	ug/L	P414696	
		Manganese	10.7		ug/L	P414696	
		Molybdenum	0.92		ug/L	P414696	
		Nickel	0.50	U	ug/L	P414696	
		Selenium	0.20	U	ug/L	P414696	
		Silver	0.010	U	ug/L	P414696	
		Thallium	0.10	U	ug/L	P414696	
		Hardness	55.8		mg/L	P414696	
2331278	SM 2340 B-2011	Oxybenzone**	9.5	U	ng/L	P414703	
	EPA 8270E	Acetochlor	0.24	U	ng/L	P414703	
		Octinoxate**	19	U	ng/L	P414703	
		Alachlor	0.24	U	ng/L	P414703	
		Avobenzone**	95	U	ng/L	P414703	
		Ametryn	0.80	I	ng/L	P414703	
		Atrazine	70		ng/L	P414703	
		Atrazine Desethyl	6.5		ng/L	P414703	
		Azinphos Methyl	1.9	U	ng/L	P414703	
		Azoxystrobin**	0.95	I	ng/L	P414703	
		Bromacil	0.48	U	ng/L	P414703	
		Butylate	0.38	U	ng/L	P414703	
		Caffeine**	8.1	I	ng/L	P414703	

Field ID: G1CE0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331278	EPA 8270E	Carbophenothion	0.19	U	ng/L	P414703	
		Carfentrazone Ethyl**	0.095	U	ng/L	P414703	
		Chlorfenapyr**	0.17	U	ng/L	P414703	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P414703	
		Chlorpyrifos Methyl	0.048	U	ng/L	P414703	
		Coumaphos**	0.48	U	ng/L	P414703	
		Cyanazine	3.1	U	ng/L	P414703	
		Cyprodinil**	0.095	U	ng/L	P414703	
		Demeton	1.4	U	ng/L	P414703	
		Diazinon	0.12	U	ng/L	P414703	
		Difenoconazole**	0.57	U	ng/L	P414703	
		Dimethenamid**	0.37	I	ng/L	P414703	
		Dimethomorph**	0.17	U	ng/L	P414703	
		Disulfoton	0.48	U	ng/L	P414703	
		Dithiopyr**	0.17	I	ng/L	P414703	
		EPTC	1.2	U	ng/L	P414703	
		Ethion	0.14	U	ng/L	P414703	
		Ethoprop	0.095	U	ng/L	P414703	
		Etridiazole**	0.14	U	ng/L	P414703	
		Fenamiphos	0.48	U	ng/L	P414703	
		Fenbuconazole**	0.12	U	ng/L	P414703	
		Fipronil	0.45	I	ng/L	P414703	
		Fipronil Desulfinyl**	0.83		ng/L	P414703	
		Fipronil Sulfide	0.48	I	ng/L	P414703	
		Fipronil Sulfone	1.0		ng/L	P414703	
		Fluazifop-P-butyl**	0.095	U	ng/L	P414703	
		Fludioxonil**	0.12	U	ng/L	P414703	
		Flumioxazin**	1.7	U	ng/L	P414703	
		Flutolanil**	0.095	U	ng/L	P414703	
		Fluxapyroxad**	0.40		ng/L	P414703	
		Fonofos	0.19	U	ng/L	P414703	
		Hexazinone	0.48	U	ng/L	P414703	
		Imazalil**	0.71	U	ng/L	P414703	
		Iprodione**	0.57	U	ng/L	P414703	
		Loratadine**	0.095	U	ng/L	P414703	
		Malathion	0.33	U	ng/L	P414703	
		Metalaxyl	0.71	U	ng/L	P414703	
		Metolachlor	0.52	I	ng/L	P414703	
		Metribuzin	2.4	U	ng/L	P414703	
		Mevinphos	1.0	U	ng/L	P414703	
		Molinate	0.29	U	ng/L	P414703	
		Myclobutanil**	1.5		ng/L	P414703	
		Naled**	1.4	U	ng/L	P414703	RPD
		Napropamide**	0.38	U	ng/L	P414703	
		Norflurazon	0.75	I	ng/L	P414703	

Field ID: G1CE0111

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331278	EPA 8270E	Oxadiazon	3.0		ng/L	P414703	
		Oxyfluorfen**	0.14	U	ng/L	P414703	
		Parathion Ethyl	0.24	U	ng/L	P414703	
		Parathion Methyl	0.52	U	ng/L	P414703	
		Pendimethalin	0.95	U	ng/L	P414703	
		Phenytol**	3.3	U	ng/L	P414703	MS
		Phorate	0.50	U	ng/L	P414703	
		Prodiamine**	0.17	U	ng/L	P414703	
		Prometon	0.86	U	ng/L	P414703	
		Prometryn	0.19	U	ng/L	P414703	
		Pronamide**	0.14	U	ng/L	P414703	
		Propanil**	0.12	U	ng/L	P414703	
		Propargite**	1.4	U	ng/L	P414703	
		Propiconazole**	1.4	I	ng/L	P414703	
		Pyraflufen Ethyl**	0.24	U	ng/L	P414703	
		Pyridaben**	0.43	U	ng/L	P414703	
		Pyriproxyfen**	0.12	U	ng/L	P414703	
		Simazine	5.1		ng/L	P414703	
		Stirophos**	0.12	U	ng/L	P414703	MS
		Sulfentrazone**	5.2		ng/L	P414703	
		Tebuconazole**	0.60	I	ng/L	P414703	
		Terbufos	0.095	U	ng/L	P414703	
		Terbutylazine	0.40	U	ng/L	P414703	
		Thiobencarb**	0.57	U	ng/L	P414703	
		Triadimefon**	0.24	U	ng/L	P414703	

Ref. Method and Comment:

EPA 8321B: MS accuracy and precision for bentazon could not be assessed due to high concentration of parameter in the spiked sample. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked.

Sample Location: Lake Condel @ Center

Collection Date/Time: 06/01/2022 14:23

Field ID: G4CE0177

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2331270	DEP SOP: NU-094-1	Color (true)**	39		PCU	P415022	
	EPA 180.1 Rev. 2.0	Turbidity	12		NTU	P414666	
	EPA 300.0 Rev. 2.1	Chloride	16		mg Cl/L	P414983	
		Sulfate	9.0		mg SO4/L	P414987	
	SM 2320 B-2011	Total Alkalinity	40		mg CaCO3/L	P415108	
	SM 2540 C-2011	TDS	106		mg/L	P414803	
	SM 2540 D-2011	TSS	23	I	mg/L	P414769	
	SM 4500-F- C-2011	Fluoride	0.040	I	mg F/L	P415112	
2331271	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P415173	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P415255	MS
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P415305	
	EPA 365.1 Rev. 2.0	Total-P	0.19		mg P/L	P414752	MS
	SM 5310 B-2011	Organic Carbon	11		mg C/L	P414756	
2331277	EPA 200.7 Rev. 4.4	Calcium	15.5		mg/L	P414696	
		Iron	30	U	ug/L	P414696	
		Magnesium	2.14		mg/L	P414696	
		Potassium	2.7		mg/L	P414696	
		Sodium	10.9		mg/L	P414696	
		Strontium	38.2		ug/L	P414696	
		Tin	3.0	U	ug/L	P414696	
		Titanium	0.84	I	ug/L	P414696	
		Vanadium	2.0	U	ug/L	P414696	
		Zinc	35		ug/L	P414696	
	EPA 200.8 Rev. 5.4	Aluminum	104		ug/L	P414696	
		Antimony	0.17	I	ug/L	P414696	
		Arsenic	1.14		ug/L	P414696	
		Barium	9.07		ug/L	P414696	
		Beryllium	0.010	U	ug/L	P414696	
		Boron**	60.0		ug/L	P414696	
		Cadmium	0.020	U	ug/L	P414696	
		Chromium	0.40	U	ug/L	P414696	
		Cobalt	0.036	I	ug/L	P414696	
		Copper	0.63	I	ug/L	P414696	
		Lead	0.80		ug/L	P414696	
		Manganese	22.5		ug/L	P414696	
		Molybdenum	0.18	I	ug/L	P414696	
		Nickel	0.50	U	ug/L	P414696	
		Selenium	0.20	U	ug/L	P414696	
		Silver	0.010	U	ug/L	P414696	
		Thallium	0.10	U	ug/L	P414696	
		Hardness	47.5		mg/L	P414696	

Ref. Method and Comment:

SM 2540 D-2011: The PQL was elevated because of sample matrix interference.

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for manganese are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P415022

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414666

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414696

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: P414696

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: P414983

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: P414987

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415173

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414743

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415305

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414752

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414705

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

Reference Method: EPA 8270E
Batch ID: P414703

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Avobenzene	100	U	ng/L
Avobenzene	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.18	U	ng/L
Dithiopyr	0.18	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	1.8	U	ng/L
Flumioxazin	1.8	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.10	U	ng/L
Loratadine	0.10	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.75	U	ng/L
Metaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	2.5	U	ng/L
Metribuzin	2.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P414703

Component	Result	Code	Units
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytol	3.5	U	ng/L
Phenytol	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiatone	0.18	U	ng/L
Prodiatone	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L
Terbutylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P414602

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: P414735

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	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	0.0040	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: P415108

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

Reference Method: SM 2540 C-2011

Batch ID: P414803

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-2011
Batch ID: P414769

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P414756

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: P415022

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414666

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	99.0		P	85 - 115
Magnesium	98.8		P	85 - 115
Potassium	100		P	85 - 115
Sodium	99.1		P	85 - 115
Strontium	98.9		P	85 - 115
Tin	102		P	85 - 115
Titanium	101		P	85 - 115
Vanadium	93.3		P	85 - 115
Zinc	102		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414696

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.3		P	85 - 115
Antimony	99.2		P	85 - 115
Arsenic	101		P	85 - 115
Barium	104		P	85 - 115
Beryllium	98.4		P	85 - 115
Boron	103		P	85 - 115
Cadmium	97.6		P	85 - 115
Chromium	98.0		P	85 - 115
Cobalt	105		P	85 - 115
Copper	98.3		P	85 - 115
Lead	102		P	85 - 115
Manganese	98.6		P	85 - 115
Molybdenum	101		P	85 - 115
Nickel	99.5		P	85 - 115
Selenium	101		P	85 - 115
Silver	106		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414983

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414987

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	99.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415173

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: P414743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	97.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415305

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414752

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414705

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	99.9		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	76.7		P	70 - 121
Alachlor	69.0		P	68 - 119
Ametryn	67.4		P	64 - 139
Atrazine	77.9		P	76 - 120
Atrazine Desethyl	46.2		P	44 - 126
Avobenzone	88.1		P	76 - 212
Azinphos Methyl	108		P	43 - 192
Azoxystrobin	95.4		P	36 - 224
Bromacil	58.1		P	52 - 121
Butylate	53.8		P	28 - 91.0

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Caffeine	98.4		P	50 - 134
Carbophenothion	91.6		P	56 - 129
Carfentrazone Ethyl	83.1		P	60 - 141
Chlorfenapyr	80.2		P	56 - 115
Chlorpyrifos Ethyl	86.9		P	60 - 118
Chlorpyrifos Methyl	95.2		P	68 - 119
Coumaphos	124		P	18 - 250
Cyanazine	70.8		P	61 - 250
Cyprodinil	70.2		P	55 - 145
Demeton	70.5		P	30 - 159
Diazinon	81.3		P	70 - 123
Difenoconazole	122		P	49 - 204
Dimethenamid	68.7		P	64 - 115
Dimethomorph	87.8		P	12 - 219
Disulfoton	83.3		P	44 - 125
Dithiopyr	69.7		P	64 - 115
EPTC	44.6		P	28 - 86.0
Ethion	66.4		P	33 - 125
Ethoprop	88.3		P	64 - 116
Etridiazole	50.8		P	34 - 91.0
Fenamiphos	90.1		P	12 - 127
Fenbuconazole	95.7		P	59 - 151
Fipronil	75.9		P	67 - 129
Fipronil Desulfinyl	71.1		P	65 - 127
Fipronil Sulfide	74.2		P	61 - 116
Fipronil Sulfone	85.2		P	55 - 117
Fluazifop-P-butyl	82.4		P	62 - 127
Fludioxonil	83.1		P	62 - 128
Flumioxazin	66.5		P	33 - 250
Flutolanil	72.9		P	56 - 127
Fluxapyroxad	94.6		P	45 - 128
Fonofos	78.5		P	62 - 111
Hexazinone	85.2		P	46 - 139
Imazalil	66.4		P	38 - 142
Iprodione	76.2		P	47 - 135
Loratadine	85.4		P	10 - 244
Malathion	97.6		P	61 - 139
Metalaxyl	64.2		P	10 - 119
Metolachlor	71.9		P	65 - 118
Metribuzin	81.4		P	51 - 250
Mevinphos	90.3		P	53 - 121
Molinate	60.8		P	42 - 96.0
Myclobutanil	75.9		P	55 - 128
Naled	71.9		P	10 - 98.0
Napropamide	61.3		P	49 - 121
Norflurazon	74.5		P	61 - 126
Octinoxate	68.8		P	30 - 159
Oxadiazon	67.4		P	59 - 116
Oxybenzone	67.7		P	61 - 139
Oxyfluorfen	86.9		P	64 - 137
Parathion Ethyl	79.0		P	70 - 112
Parathion Methyl	104		P	76 - 133

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P414703

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pendimethalin	70.2		P	52 - 117
Phenytoin	16.9		P	10 - 199
Phorate	72.0		P	48 - 121
Prodiamine	62.3		P	26 - 142
Prometon	70.6		P	43 - 123
Prometryn	74.4		P	66 - 127
Pronamide	81.1		P	75 - 121
Propanil	74.5		P	45 - 150
Propargite	91.5		P	42 - 208
Propiconazole	74.6		P	60 - 125
Pyraflufen Ethyl	87.2		P	70 - 138
Pyridaben	115		P	35 - 245
Pyriproxyfen	89.1		P	30 - 149
Simazine	80.7		P	72 - 125
Stiophos	73.2		P	29 - 164
Sulfentrazone	30.7		P	21 - 139
Tebuconazole	80.5		P	10 - 115
Terbufos	103		P	60 - 123
Terbutylazine	79.0		P	72 - 115
Thiobencarb	70.1		P	31 - 139
Triadimefon	67.2		P	65 - 116

Reference Method: EPA 8321B

Batch ID: P414602

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	147		P	40 - 150
AMPA	91.4		P	40 - 150
Endothall	70.4		P	40 - 150
Glufosinate	98.8		P	40 - 150
Glyphosate	94.7		P	40 - 150
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P414735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	99.5		P	40 - 150
2,4,5-T	90.7		P	40 - 150
Acetaminophen	85.8		P	30 - 150
Acetamiprid	82.0		P	40 - 150
Afidopyropen	44.1		P	30 - 150
Bentazon	90.9		P	30 - 150
Benzovindiflupyr	90.9		P	40 - 150
Carbamazepine	97.5		P	40 - 150
Clothianidin	93.8		P	40 - 150
Dinotefuran	93.0		P	40 - 150
Diuron	79.0		P	40 - 150
Fenuron	90.4		P	40 - 150
Fluridone	82.8		P	40 - 150
Hydrocodone	88.6		P	40 - 150
Ibuprofen	83.6		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P414735

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazapyr	91.8		P	40 - 150
Imidacloprid	87.1		P	40 - 150
Linuron	71.9		P	40 - 150
Mandestrobin	79.7		P	40 - 150
MCPP	105		P	40 - 150
Naproxen	87.0		P	40 - 150
Primidone	95.1		P	40 - 150
Pyraclostrobin	87.4		P	40 - 150
Silvex	83.3		P	40 - 150
Thiamethoxam	89.1		P	40 - 150
Tolfenpyrad	53.2		P	30 - 150
Triclopyr	89.8		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P415108

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

Reference Method: SM 4500-F- C-2011

Batch ID: P415112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	100		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P414756

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P414696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331424	Calcium	102		P	80 - 120
2331424	Iron	104		P	80 - 120
2331424	Magnesium	102		P	80 - 120
2331424	Potassium	101		P	80 - 120
2331424	Sodium	97.3		P	80 - 120
2331424	Strontium	101		P	80 - 120
2331424	Tin	105		P	80 - 120
2331424	Titanium	102		P	80 - 120
2331424	Vanadium	95.6		P	80 - 120
2331424	Zinc	104		P	80 - 120
2331465	Calcium	99.1	98.9	P/P	80 - 120
2331465	Iron	99.8	101	P/P	80 - 120
2331465	Magnesium	99.2	100	P/P	80 - 120
2331465	Potassium	106	107	P/P	80 - 120
2331465	Sodium	97.0	98.7	P/P	80 - 120
2331465	Strontium	98.2	99.9	P/P	80 - 120
2331465	Tin	101	102	P/P	80 - 120
2331465	Titanium	97.7	102	P/P	80 - 120
2331465	Vanadium	90.1	93.8	P/P	80 - 120
2331465	Zinc	98.1	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P414696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331424	Aluminum	112		P	80 - 120
2331424	Antimony	101		P	80 - 120
2331424	Arsenic	100		P	80 - 120
2331424	Barium	103		P	80 - 120
2331424	Beryllium	99.0		P	80 - 120
2331424	Boron	110		P	80 - 120
2331424	Cadmium	99.1		P	80 - 120
2331424	Chromium	101		P	80 - 120
2331424	Cobalt	105		P	80 - 120
2331424	Copper	97.6		P	80 - 120
2331424	Lead	104		P	80 - 120
2331424	Molybdenum	102		P	80 - 120
2331424	Nickel	100		P	80 - 120
2331424	Selenium	94.6		P	80 - 120
2331424	Silver	107		P	80 - 120
2331424	Thallium	105		P	80 - 120
2331465	Aluminum	101	101	P/P	80 - 120
2331465	Antimony	102	101	P/P	80 - 120
2331465	Arsenic	102	101	P/P	80 - 120
2331465	Barium	105	104	P/P	80 - 120
2331465	Beryllium	97.9	99.8	P/P	80 - 120
2331465	Boron	103	104	P/P	80 - 120
2331465	Cadmium	99.9	99.8	P/P	80 - 120
2331465	Chromium	100	99.2	P/P	80 - 120
2331465	Cobalt	108	106	P/P	80 - 120
2331465	Copper	101	98.1	P/P	80 - 120
2331465	Lead	103	103	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P414696

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331465	Manganese	102	98.6	P/P	80 - 120
2331465	Molybdenum	104	103	P/P	80 - 120
2331465	Nickel	102	100	P/P	80 - 120
2331465	Selenium	99.8	97.3	P/P	80 - 120
2331465	Silver	108	105	P/P	80 - 120
2331465	Thallium	105	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P414983

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330879	Chloride	100		P	90 - 110
2330889	Chloride	100		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P414987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330879	Sulfate	96.4		P	90 - 110
2330889	Sulfate	98.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P415173

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331221	Ammonia-N	93.8	94.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P414743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331237	Kjeldahl Nitrogen	99.5	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P415255

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331515	Kjeldahl Nitrogen	91.6	87.8	P/F	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P415305

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331222	NO2NO3-N	92.0	93.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P414752

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331288	Total-P	111	109	F/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P414705

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331204	O-Phosphate-P	102	103	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Acetochlor	78.7	94.0	P/P	65 - 124
2331485	Alachlor	72.5	89.8	P/P	61 - 121
2331485	Ametryn	74.0	81.1	P/P	52 - 216
2331485	Atrazine Desethyl	33.6	33.9	P/P	15 - 160
2331485	Avobenzone	84.0	84.1	P/P	59 - 206
2331485	Azinphos Methyl	98.6	128	P/P	40 - 292
2331485	Azoxystrobin	86.2	100	P/P	12 - 242
2331485	Bromacil	54.8	58.0	P/P	54 - 167
2331485	Butylate	65.1	65.3	P/P	14 - 94.0
2331485	Caffeine	97.4	94.5	P/P	10 - 226
2331485	Carbophenothion	77.2	89.8	P/P	49 - 122
2331485	Carfentrazone Ethyl	84.4	92.3	P/P	53 - 138
2331485	Chlorfenapyr	66.8	76.4	P/P	50 - 150
2331485	Chlorpyrifos Ethyl	73.6	87.3	P/P	52 - 122
2331485	Chlorpyrifos Methyl	81.7	104	P/P	66 - 117
2331485	Coumaphos	106	125	P/P	50 - 220
2331485	Cyanazine	63.4	77.7	P/P	43 - 245
2331485	Cyprodinil	71.4	80.2	P/P	50 - 150
2331485	Demeton	80.5	76.8	P/P	43 - 188
2331485	Diazinon	88.3	98.1	P/P	69 - 131
2331485	Difenoconazole	124	134	P/P	34 - 231
2331485	Dimethenamid	64.9	74.7	P/P	55 - 118
2331485	Dimethomorph	76.8	88.4	P/P	50 - 150
2331485	Disulfoton	70.8	91.7	P/P	38 - 141
2331485	Dithiopyr	70.5	83.0	P/P	42 - 116
2331485	EPTC	47.0	57.6	P/P	18 - 85.0
2331485	Ethion	58.1	68.0	P/P	10 - 131
2331485	Ethoprop	87.9	103	P/P	65 - 129
2331485	Etridiazole	57.5	64.1	P/P	50 - 150
2331485	Fenamiphos	78.2	77.4	P/P	31 - 137
2331485	Fenbuconazole	96.9	112	P/P	57 - 160
2331485	Fipronil	80.3	91.8	P/P	62 - 132
2331485	Fipronil Desulfinyl	75.4	88.7	P/P	57 - 131
2331485	Fipronil Sulfide	70.2	80.5	P/P	15 - 138
2331485	Fipronil Sulfone	80.2	90.5	P/P	21 - 134
2331485	Fluazifop-P-butyl	86.9	95.5	P/P	54 - 133
2331485	Fludioxonil	84.5	94.8	P/P	58 - 127
2331485	Flumioxazin	118	138	P/P	33 - 300
2331485	Flutolanil	71.5	85.0	P/P	42 - 130
2331485	Fluxapyroxad	104	120	P/P	23 - 141
2331485	Fonofos	65.8	85.8	P/P	58 - 119
2331485	Hexazinone	81.0	92.4	P/P	68 - 172
2331485	Imazalil	63.0	74.0	P/P	48 - 283
2331485	Iprodione	112	129	P/P	38 - 140
2331485	Loratadine	81.5	94.3	P/P	50 - 150
2331485	Malathion	82.3	106	P/P	40 - 137

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P414703

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331485	Metalaxyl	61.9	69.4	P/P	21 - 129
2331485	Metolachlor	73.6	85.0	P/P	55 - 122
2331485	Metribuzin	75.4	83.3	P/P	38 - 187
2331485	Mevinphos	78.5	94.9	P/P	54 - 134
2331485	Molinate	67.1	76.6	P/P	41 - 97.0
2331485	Myclobutanil	82.7	93.8	P/P	56 - 125
2331485	Naled	59.8	82.5	P/P	10 - 108
2331485	Napropamide	57.1	68.8	P/P	50 - 150
2331485	Norflurazon	79.9	86.2	P/P	32 - 122
2331485	Octinoxate	69.2	61.0	P/P	25 - 150
2331485	Oxadiazon	66.0	74.7	P/P	40 - 119
2331485	Oxybenzone	72.1	65.1	P/P	59 - 147
2331485	Oxyfluorfen	101	118	P/P	61 - 153
2331485	Parathion Ethyl	80.4	98.1	P/P	59 - 130
2331485	Parathion Methyl	96.3	119	P/P	65 - 155
2331485	Pendimethalin	80.8	97.8	P/P	49 - 138
2331485	Phenytoin	39.2	47.3	F/F	50 - 200
2331485	Phorate	68.8	82.3	P/P	54 - 161
2331485	Prodiamine	73.8	88.8	P/P	33 - 161
2331485	Prometon	64.1	80.3	P/P	48 - 140
2331485	Prometryn	67.0	76.4	P/P	55 - 134
2331485	Pronamide	83.6	99.8	P/P	66 - 137
2331485	Propanil	77.1	85.4	P/P	50 - 150
2331485	Propargite	96.3	111	P/P	50 - 200
2331485	Propiconazole	86.1	93.0	P/P	36 - 150
2331485	Pyraflufen Ethyl	90.0	103	P/P	50 - 150
2331485	Pyridaben	101	113	P/P	50 - 200
2331485	Pyriproxyfen	84.5	97.2	P/P	10 - 165
2331485	Simazine	99.4	108	P/P	57 - 145
2331485	Stirophos	45.4	57.5	F/P	50 - 150
2331485	Sulfentrazone	91.7	90.5	P/P	34 - 140
2331485	Tebuconazole	86.3	99.4	P/P	10 - 127
2331485	Terbufos	95.1	112	P/P	59 - 138
2331485	Terbuthylazine	75.2	84.6	P/P	68 - 119
2331485	Thiobencarb	73.2	83.7	P/P	50 - 150
2331485	Triadimefon	62.0	64.2	P/P	50 - 150

Reference Method: EPA 8321B
Batch ID: P414602

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330564	Acesulfame K	155	150	F/F	40 - 150
2330564	AMPA	88.2	91.4	P/P	40 - 150
2330564	Endothall	69.3	69.0	P/P	40 - 150
2330564	Glufosinate	95.1	99.5	P/P	40 - 150
2330564	Glyphosate	94.9	83.6	P/P	40 - 150
2330564	Sucralose	114	114	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P414735

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

Reference Method: EPA 8321B

Batch ID: P414735

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331275	2,4,5-T	104	97.2	P/P	40 - 150
2331275	Acetaminophen	110	110	P/P	30 - 150
2331275	Acetamiprid	83.9	75.6	P/P	40 - 150
2331275	Afidopyropen	46.4	47.8	P/P	30 - 150
2331275	Benzovindiflupyr	88.0	87.4	P/P	40 - 150
2331275	Carbamazepine	110	108	P/P	40 - 150
2331275	Clothianidin	119	118	P/P	40 - 150
2331275	Dinotefuran	135	130	P/P	40 - 150
2331275	Diuron	79.1	84.5	P/P	40 - 150
2331275	Fenuron	83.8	81.5	P/P	40 - 150
2331275	Fluridone	83.5	83.7	P/P	40 - 150
2331275	Hydrocodone	100	100	P/P	40 - 150
2331275	Ibuprofen	84.4	86.9	P/P	40 - 150
2331275	Imidacloprid	147	137	P/P	40 - 150
2331275	Linuron	69.7	72.7	P/P	40 - 150
2331275	Mandestrobin	83.7	82.5	P/P	40 - 150
2331275	MCPP	123	121	P/P	40 - 150
2331275	Naproxen	91.1	76.2	P/P	40 - 150
2331275	Primidone	118	117	P/P	40 - 150
2331275	Pyraclostrobin	83.6	77.5	P/P	40 - 150
2331275	Silvex	99.6	91.8	P/P	40 - 150
2331275	Thiamethoxam	140	134	P/P	40 - 150
2331275	Tolfenpyrad	57.0	53.6	P/P	30 - 150
2331275	Triclopyr	113	100	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P415112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2330820	Fluoride	100	100	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P414756

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2331158	Organic Carbon	95.3	95.0	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P415022

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331284	Color (true)	7.66	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P414666

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331154	Turbidity	5.09	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P414696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331465	Calcium	0.149	Spike	P	0 - 20
2331465	Iron	0.807	Spike	P	0 - 20
2331465	Magnesium	0.998	Spike	P	0 - 20
2331465	Potassium	0.992	Spike	P	0 - 20
2331465	Sodium	1.23	Spike	P	0 - 20
2331465	Strontium	1.75	Spike	P	0 - 20
2331465	Tin	1.50	Spike	P	0 - 20
2331465	Titanium	4.05	Spike	P	0 - 20
2331465	Vanadium	4.13	Spike	P	0 - 20
2331465	Zinc	4.11	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P414696

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331465	Aluminum	0.657	Spike	P	0 - 20
2331465	Antimony	1.04	Spike	P	0 - 20
2331465	Arsenic	0.549	Spike	P	0 - 20
2331465	Barium	0.784	Spike	P	0 - 20
2331465	Beryllium	1.89	Spike	P	0 - 20
2331465	Boron	0.253	Spike	P	0 - 20
2331465	Cadmium	0.118	Spike	P	0 - 20
2331465	Chromium	1.19	Spike	P	0 - 20
2331465	Cobalt	1.60	Spike	P	0 - 20
2331465	Copper	2.84	Spike	P	0 - 20
2331465	Lead	0.185	Spike	P	0 - 20
2331465	Manganese	2.72	Spike	P	0 - 20
2331465	Molybdenum	1.43	Spike	P	0 - 20
2331465	Nickel	1.79	Spike	P	0 - 20
2331465	Selenium	2.51	Spike	P	0 - 20
2331465	Silver	2.59	Spike	P	0 - 20
2331465	Thallium	0.970	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414983

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330879	Chloride	0.362	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P414987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330879	Sulfate	0.540	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P415173

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331221	Ammonia-N	0.915	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P414743

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331237	Kjeldahl Nitrogen	0.408	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P415255

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331515	Kjeldahl Nitrogen	3.78	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P415305

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331222	NO2NO3-N	1.56	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P414752

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331288	Total-P	1.49	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P414705

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331204	O-Phosphate-P	0.878	Spike	P	0 - 20

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Acetochlor	17.6	Spike	P	0 - 27
2331485	Alachlor	21.4	Spike	P	0 - 27
2331485	Ametryn	9.16	Spike	P	0 - 34
2331485	Atrazine	3.83	Spike	P	0 - 41
2331485	Atrazine Desethyl	0.563	Spike	P	0 - 38
2331485	Avobenzone	0.0828	Spike	P	0 - 30
2331485	Azinphos Methyl	25.6	Spike	P	0 - 62
2331485	Azoxystrobin	15.0	Spike	P	0 - 32
2331485	Bromacil	5.77	Spike	P	0 - 30
2331485	Butylate	0.271	Spike	P	0 - 59
2331485	Caffeine	2.95	Spike	P	0 - 60
2331485	Carbophenothion	15.1	Spike	P	0 - 25
2331485	Carfentrazone Ethyl	8.94	Spike	P	0 - 26
2331485	Chlorfenapyr	13.4	Spike	P	0 - 30
2331485	Chlorpyrifos Ethyl	17.1	Spike	P	0 - 27
2331485	Chlorpyrifos Methyl	23.8	Spike	P	0 - 26
2331485	Coumaphos	16.9	Spike	P	0 - 30
2331485	Cyanazine	20.3	Spike	P	0 - 58
2331485	Cyprodinil	11.6	Spike	P	0 - 30
2331485	Demeton	4.66	Spike	P	0 - 25
2331485	Diazinon	10.5	Spike	P	0 - 29
2331485	Difenoconazole	7.62	Spike	P	0 - 25
2331485	Dimethenamid	14.1	Spike	P	0 - 30
2331485	Dimethomorph	14.0	Spike	P	0 - 30
2331485	Disulfoton	25.7	Spike	P	0 - 33
2331485	Dithiopyr	16.4	Spike	P	0 - 22
2331485	EPTC	20.1	Spike	P	0 - 38
2331485	Ethion	15.7	Spike	P	0 - 79
2331485	Ethoprop	15.8	Spike	P	0 - 23
2331485	Etridiazole	10.9	Spike	P	0 - 30
2331485	Fenamiphos	1.03	Spike	P	0 - 58
2331485	Fenbuconazole	14.7	Spike	P	0 - 37
2331485	Fipronil	12.2	Spike	P	0 - 33
2331485	Fipronil Desulfanyl	14.3	Spike	P	0 - 26
2331485	Fipronil Sulfide	11.1	Spike	P	0 - 37
2331485	Fipronil Sulfone	8.29	Spike	P	0 - 50
2331485	Fluazifop-P-butyl	9.44	Spike	P	0 - 24
2331485	Fludioxonil	11.5	Spike	P	0 - 26
2331485	Flumioxazin	15.7	Spike	P	0 - 37
2331485	Flutolanil	17.3	Spike	P	0 - 26
2331485	Fluxapyroxad	14.4	Spike	P	0 - 34
2331485	Fonofos	26.4	Spike	P	0 - 27
2331485	Hexazinone	13.2	Spike	P	0 - 36
2331485	Imazalil	16.2	Spike	P	0 - 65
2331485	Iprodione	13.5	Spike	P	0 - 33
2331485	Loratadine	14.5	Spike	P	0 - 30
2331485	Malathion	25.0	Spike	P	0 - 44
2331485	Metalaxyl	11.4	Spike	P	0 - 38
2331485	Metolachlor	14.3	Spike	P	0 - 36
2331485	Metribuzin	9.95	Spike	P	0 - 63
2331485	Mevinphos	18.9	Spike	P	0 - 26

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P414703

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331485	Molinate	13.2	Spike	P	0 - 40
2331485	Myclobutanil	12.6	Spike	P	0 - 21
2331485	Naled	31.9	Spike	F	0 - 26
2331485	Napropamide	18.7	Spike	P	0 - 30
2331485	Norflurazon	7.59	Spike	P	0 - 24
2331485	Octinoxate	12.5	Spike	P	0 - 30
2331485	Oxadiazon	10.6	Spike	P	0 - 27
2331485	Oxybenzone	10.2	Spike	P	0 - 30
2331485	Oxyfluorfen	14.9	Spike	P	0 - 24
2331485	Parathion Ethyl	19.9	Spike	P	0 - 28
2331485	Parathion Methyl	20.8	Spike	P	0 - 27
2331485	Pendimethalin	19.1	Spike	P	0 - 31
2331485	Phenytoin	18.7	Spike	P	0 - 30
2331485	Phorate	17.8	Spike	P	0 - 27
2331485	Prodiamine	18.4	Spike	P	0 - 52
2331485	Prometon	22.5	Spike	P	0 - 31
2331485	Prometryn	13.2	Spike	P	0 - 28
2331485	Pronamide	17.7	Spike	P	0 - 26
2331485	Propanil	10.2	Spike	P	0 - 30
2331485	Propargite	14.3	Spike	P	0 - 30
2331485	Propiconazole	7.66	Spike	P	0 - 31
2331485	Pyraflufen Ethyl	13.8	Spike	P	0 - 30
2331485	Pyridaben	11.3	Spike	P	0 - 30
2331485	Pyriproxyfen	14.0	Spike	P	0 - 50
2331485	Simazine	8.08	Spike	P	0 - 29
2331485	Stirophos	23.4	Spike	P	0 - 30
2331485	Sulfentrazone	1.28	Spike	P	0 - 33
2331485	Tebuconazole	14.2	Spike	P	0 - 44
2331485	Terbufos	16.7	Spike	P	0 - 29
2331485	Terbuthylazine	11.8	Spike	P	0 - 27
2331485	Thiobencarb	13.4	Spike	P	0 - 30
2331485	Triadimefon	3.45	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P414602

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330564	Acesulfame K	3.00	Spike	P	0 - 30
2330564	AMPA	3.52	Spike	P	0 - 30
2330564	Endothall	0.443	Spike	P	0 - 30
2330564	Glufosinate	4.50	Spike	P	0 - 30
2330564	Glyphosate	12.6	Spike	P	0 - 30
2330564	Sucralose	0.0355	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P414735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331275	2,4-D	0.530	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P414735

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331275	2,4,5-T	7.18	Spike	P	0 - 30
2331275	Acetaminophen	0.0692	Spike	P	0 - 30
2331275	Acetamiprid	10.4	Spike	P	0 - 30
2331275	Afidopyropen	3.15	Spike	P	0 - 30
2331275	Benzovindiflupyr	0.688	Spike	P	0 - 30
2331275	Carbamazepine	1.45	Spike	P	0 - 30
2331275	Clothianidin	0.345	Spike	P	0 - 30
2331275	Dinotefuran	3.11	Spike	P	0 - 30
2331275	Diuron	6.36	Spike	P	0 - 30
2331275	Fenuron	2.78	Spike	P	0 - 30
2331275	Fluridone	0.0989	Spike	P	0 - 30
2331275	Hydrocodone	0.0943	Spike	P	0 - 30
2331275	Ibuprofen	2.89	Spike	P	0 - 30
2331275	Imazapyr	0.196	Spike	P	0 - 30
2331275	Imidacloprid	5.86	Spike	P	0 - 30
2331275	Linuron	4.22	Spike	P	0 - 30
2331275	Mandestrobin	1.47	Spike	P	0 - 30
2331275	MCPP	1.14	Spike	P	0 - 30
2331275	Naproxen	17.8	Spike	P	0 - 30
2331275	Primidone	1.40	Spike	P	0 - 30
2331275	Pyraclostrobin	7.59	Spike	P	0 - 30
2331275	Silvex	8.15	Spike	P	0 - 30
2331275	Thiamethoxam	4.75	Spike	P	0 - 30
2331275	Tolfenpyrad	6.32	Spike	P	0 - 30
2331275	Triclopyr	11.9	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P415108

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330820	Total Alkalinity	0.250	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2011
Batch ID: P414803

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331254	TDS	0.0	Sample	P	0 - 10

Reference Method: SM 2540 D-2011
Batch ID: P414769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331254	TSS	3.64	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P415112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2330820	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P414756

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2331158	Organic Carbon	0.259	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2331275
Field Sample ID: G1CE0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.4	P	30 - 160
EPA 8321B	Diuron-d6	72.1	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	82.6	P	30 - 160
EPA 8321B	Ibuprofen-d3	75.8	P	30 - 160
EPA 8321B	Primidone-d5	100	P	30 - 160
EPA 8321B	Sucralose-d6	156	P	30 - 160

Lab Sample ID: 2331278
Field Sample ID: G1CE0111

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	37.0	P	20 - 200
EPA 8270E	Simazine-d10	74.7	P	71 - 140
EPA 8270E	Terbufos-d10	75.5	P	62 - 131
EPA 8270E	Terphenyl-d14	71.9	P	52 - 141

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A112575

Included Lab Sample IDs: 2331267, 2331270

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

Reference Method: EPA 8321B

Run ID: A112591

Included Lab Sample IDs: 2331275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	152	149	P/P	60 - 160
Sucralose	116	116	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A112594

Included Lab Sample IDs: 2331269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	99.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A112595

Included Lab Sample IDs: 2331275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	92.5	102	P/P	60 - 160
Endothall	71.4	77.0	P/P	60 - 160
Glufosinate	99.5	102	P/P	60 - 160
Glyphosate	93.3	95.3	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112612

Included Lab Sample IDs: 2331276, 2331277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	99.7	100	P/P	90 - 110
Antimony	99.6	99.7	P/P	90 - 110
Arsenic	99.9	99.4	P/P	90 - 110
Barium	101	99.5	P/P	90 - 110
Beryllium	98.6	98.8	P/P	90 - 110
Boron	98.3	104	P/P	90 - 110
Cadmium	99.4	99.5	P/P	90 - 110
Chromium	99.2	99.3	P/P	90 - 110
Cobalt	105	102	P/P	90 - 110
Copper	98.4	97.2	P/P	90 - 110
Lead	101	101	P/P	90 - 110
Manganese	99.1	99.0	P/P	90 - 110
Nickel	101	98.3	P/P	90 - 110
Selenium	98.4	98.9	P/P	90 - 110
Silver	107	105	P/P	90 - 110
Thallium	99.2	98.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A112617

Included Lab Sample IDs: 2331268, 2331271

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.2	97.4	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A112634

Included Lab Sample IDs: 2331276, 2331277

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A112647

Included Lab Sample IDs: 2331268, 2331271

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

Reference Method: EPA 8321B

Run ID: A112673

Included Lab Sample IDs: 2331275

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	97.8	94.0	P/P	50 - 150
2,4,5-T	97.6	98.5	P/P	50 - 150
Acetaminophen	102	103	P/P	60 - 160
Acetamiprid	103	104	P/P	50 - 150
Afidopyropen	100	97.9	P/P	50 - 150
Bentazon	108	104	P/P	50 - 160
Benzovindiflupyr	109	109	P/P	50 - 150
Carbamazepine	101	101	P/P	60 - 150
Clothianidin	102	102	P/P	60 - 150
Dinotefuran	102	102	P/P	50 - 150
Diuron	111	107	P/P	60 - 160
Fenuron	103	101	P/P	60 - 150
Fluridone	111	112	P/P	60 - 160
Hydrocodone	99.0	98.6	P/P	60 - 150
Ibuprofen	115	101	P/P	50 - 160
Imazapyr	95.3	98.5	P/P	50 - 150
Imidacloprid	94.9	96.3	P/P	60 - 150
Linuron	101	102	P/P	60 - 150
Mandestrobin	109	107	P/P	50 - 150
MCPP	94.4	88.7	P/P	50 - 150
Naproxen	122	101	P/P	50 - 160
Primidone	102	97.5	P/P	60 - 150
Pyraclostrobin	108	111	P/P	60 - 150
Silvex	98.4	99.1	P/P	50 - 150
Thiamethoxam	99.0	98.8	P/P	50 - 150
Tolfenpyrad	101	103	P/P	60 - 150
Triclopyr	93.6	92.7	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A112677

Included Lab Sample IDs: 2331276, 2331277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	92.1	96.7	P/P	90 - 110
Iron	92.9	98.0	P/P	90 - 110
Magnesium	92.1	97.4	P/P	90 - 110
Potassium	94.7	99.4	P/P	90 - 110
Sodium	91.5	96.0	P/P	90 - 110
Strontium	97.5	96.8	P/P	90 - 110
Tin	99.6	99.1	P/P	90 - 110
Titanium	96.6	95.7	P/P	90 - 110
Vanadium	97.0	96.8	P/P	90 - 110
Zinc	99.7	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112704

Included Lab Sample IDs: 2331268

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.6	90.6	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A112707

Included Lab Sample IDs: 2331267, 2331270

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

Reference Method: EPA 8270E

Run ID: A112714

Included Lab Sample IDs: 2331278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	99.1		P	80 - 120
Alachlor	94.6		P	80 - 120
Ametryn	91.6		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	83.5		P	80 - 120
Bromacil	97.9		P	80 - 120
Butylate	101		P	80 - 120
Carbophenothion	106		P	80 - 120
Carfentrazone Ethyl	94.1		P	80 - 120
Chlorfenapyr	107		P	80 - 120
Chlorpyrifos Ethyl	102		P	80 - 120
Chlorpyrifos Methyl	102		P	80 - 120
Coumaphos	88.8		P	80 - 120
Cyanazine	87.6		P	80 - 120
Cyprodinil	90.9		P	80 - 120
Demeton	98.3		P	80 - 120
Diazinon	96.8		P	80 - 120
Difenoconazole	86.0		P	80 - 120
Dimethenamid	102		P	80 - 120
Dimethomorph	98.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
 Run ID: A112714
 Included Lab Sample IDs: 2331278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Disulfoton	99.4		P	80 - 120
Dithiopyr	97.3		P	80 - 120
EPTC	95.0		P	80 - 120
Ethion	95.0		P	80 - 120
Ethoprop	97.8		P	80 - 120
Etridiazole	99.5		P	80 - 120
Fenamiphos	103		P	80 - 120
Fenbuconazole	90.9		P	80 - 120
Fipronil	99.0		P	80 - 120
Fipronil Desulfinyl	97.8		P	80 - 120
Fipronil Sulfide	101		P	80 - 120
Fipronil Sulfone	106		P	80 - 120
Fluazifop-P-butyl	108		P	80 - 120
Fludioxonil	106		P	80 - 120
Flumioxazin	82.8		P	80 - 120
Flutolanil	98.5		P	80 - 120
Fluxapyroxad	96.8		P	80 - 120
Fonofos	93.2		P	80 - 120
Hexazinone	104		P	80 - 120
Imazalil	97.9		P	80 - 120
Iprodione	89.8		P	80 - 120
Loratadine	102		P	80 - 120
Malathion	104		P	80 - 120
Metalaxyl	95.8		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	100		P	80 - 120
Mevinphos	94.8		P	80 - 120
Molinate	94.2		P	80 - 120
Naled	104		P	80 - 120
Napropamide	95.6		P	80 - 120
Norflurazon	94.2		P	80 - 120
Oxadiazon	103		P	80 - 120
Oxyfluorfen	92.0		P	80 - 120
Parathion Ethyl	97.0		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	94.6		P	80 - 120
Phenytol	94.6		P	80 - 120
Phorate	91.3		P	80 - 120
Prodiamine	82.4		P	80 - 120
Prometon	85.4		P	80 - 120
Prometryn	88.1		P	80 - 120
Pronamide	90.8		P	80 - 120
Propanil	95.0		P	80 - 120
Propargite	91.2		P	80 - 120
Propiconazole	95.3		P	80 - 120
Pyraflufen Ethyl	99.0		P	80 - 120
Pyridaben	95.8		P	80 - 120
Pyriproxyfen	94.1		P	80 - 120
Stiropfos	97.3		P	80 - 120
Sulfentrazone	95.6		P	80 - 120
Tebuconazole	93.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A112714
Included Lab Sample IDs: 2331278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbufos	94.2		P	80 - 120
Terbutylazine	99.2		P	80 - 120
Thiobencarb	96.7		P	80 - 120
Triadimefon	106		P	80 - 120

Reference Method: DEP SOP: NU-094-1
Run ID: A112727
Included Lab Sample IDs: 2331267, 2331270

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	102	105	P/P	85 - 115
Color (true)	103	103	P/P	85 - 115

Reference Method: EPA 8270E
Run ID: A112760
Included Lab Sample IDs: 2331278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	98.8		P	80 - 120
Octinoxate	96.2		P	80 - 120
Oxybenzone	94.8		P	80 - 120

Reference Method: SM 2320 B-2011
Run ID: A112774
Included Lab Sample IDs: 2331267, 2331270

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	99.1	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A112774
Included Lab Sample IDs: 2331267, 2331270

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

Reference Method: EPA 8270E
Run ID: A112811
Included Lab Sample IDs: 2331278

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	100		P	80 - 120
Azoxystrobin	97.0		P	80 - 120
Caffeine	86.3		P	80 - 120
Myclobutanil	96.4		P	80 - 120
Simazine	97.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A112817

Included Lab Sample IDs: 2331268, 2331271

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	94.6	97.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A112870

Included Lab Sample IDs: 2331268, 2331271

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	96.0	94.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A112942

Included Lab Sample IDs: 2331271

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	101					7.66	
EPA 180.1 Rev. 2.0	Turbidity	97.0					5.09	
EPA 200.7 Rev. 4.4	Calcium	103	102	99.1	98.9			0.149
	Iron	99.0	104	99.8	101			0.807
	Magnesium	98.8	102	99.2	100			0.998
	Potassium	100	101	106	107			0.992
	Sodium	99.1	97.3	97.0	98.7			1.23
	Strontium	98.9	101	98.2	99.9			1.75
	Tin	102	105	101	102			1.50
	Titanium	101	102	97.7	102			4.05
	Vanadium	93.3	95.6	90.1	93.8			4.13
	Zinc	102	104	98.1	102			4.11
EPA 200.8 Rev. 5.4	Aluminum	99.3	101	101	112			0.657
	Antimony	99.2	102	101	101			1.04
	Arsenic	101	102	101	100			0.549
	Barium	104	105	104	103			0.784
	Beryllium	98.4	97.9	99.8	99.0			1.89
	Boron	103	103	104	110			0.253
	Cadmium	97.6	99.9	99.8	99.1			0.118
	Chromium	98.0	100	99.2	101			1.19
	Cobalt	105	108	106	105			1.60
	Copper	98.3	101	98.1	97.6			2.84
	Lead	102	103	103	104			0.185
	Manganese	98.6	102	98.6				2.72
	Molybdenum	101	104	103	102			1.43
	Nickel	99.5	102	100	100			1.79
	Selenium	101	99.8	97.3	94.6			2.51
	Silver	106	108	105	107			2.59
	Thallium	101	105	104	105			0.970
EPA 300.0 Rev. 2.1	Chloride	99.9	100	100			0.362	
	Sulfate	99.6	96.4	98.5			0.540	
EPA 350.1 Rev. 2.0	Ammonia-N	97.0	93.8	94.8				0.915
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	97.3	99.5	100				0.408
	Kjeldahl Nitrogen	100	91.6	87.8				3.78
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	92.0	93.4				1.56
EPA 365.1 Rev. 2.0	Total-P	107	111	109				1.49
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.9	102	103				0.878
EPA 8270E	Acetochlor	76.7	78.7	94.0				17.6
	Alachlor	69.0	72.5	89.8				21.4
	Ametryn	67.4	74.0	81.1				9.16
	Atrazine	77.9						3.83
	Atrazine Desethyl	46.2	33.6	33.9				0.563
	Avobenzone	88.1	84.0	84.1				0.0828
	Azinphos Methyl	108	98.6	128				25.6
	Azoxystrobin	95.4	86.2	100				15.0
	Bromacil	58.1	54.8	58.0				5.77
	Butylate	53.8	65.1	65.3				0.271
	Caffeine	98.4	97.4	94.5				2.95
	Carbophenothion	91.6	77.2	89.8				15.1
	Carfentrazone Ethyl	83.1	84.4	92.3				8.94
	Chlorfenapyr	80.2	66.8	76.4				13.4
	Chlorpyrifos Ethyl	86.9	73.6	87.3				17.1
	Chlorpyrifos Methyl	95.2	81.7	104				23.8
	Coumaphos	124	106	125				16.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Cyanazine	70.8	63.4	77.7			20.3
	Cyprodinil	70.2	71.4	80.2			11.6
	Demeton	70.5	80.5	76.8			4.66
	Diazinon	81.3	88.3	98.1			10.5
	Difenoconazole	122	124	134			7.62
	Dimethenamid	68.7	64.9	74.7			14.1
	Dimethomorph	87.8	76.8	88.4			14.0
	Disulfoton	83.3	70.8	91.7			25.7
	Dithiopyr	69.7	70.5	83.0			16.4
	EPTC	44.6	47.0	57.6			20.1
	Ethion	66.4	58.1	68.0			15.7
	Ethoprop	88.3	87.9	103			15.8
	Etridiazole	50.8	57.5	64.1			10.9
	Fenamiphos	90.1	78.2	77.4			1.03
	Fenbuconazole	95.7	96.9	112			14.7
	Fipronil	75.9	80.3	91.8			12.2
	Fipronil Desulfinyl	71.1	75.4	88.7			14.3
	Fipronil Sulfide	74.2	70.2	80.5			11.1
	Fipronil Sulfone	85.2	80.2	90.5			8.29
	Fluazifop-P-butyl	82.4	86.9	95.5			9.44
	Fludioxonil	83.1	84.5	94.8			11.5
	Flumioxazin	66.5	118	138			15.7
	Flutolanil	72.9	71.5	85.0			17.3
	Fluxapyroxad	94.6	104	120			14.4
	Fonofos	78.5	65.8	85.8			26.4
	Hexazinone	85.2	81.0	92.4			13.2
	Imazalil	66.4	63.0	74.0			16.2
	Iprodione	76.2	112	129			13.5
	Loratadine	85.4	81.5	94.3			14.5
	Malathion	97.6	82.3	106			25.0
	Metalaxyl	64.2	61.9	69.4			11.4
	Metolachlor	71.9	73.6	85.0			14.3
	Metribuzin	81.4	75.4	83.3			9.95
	Mevinphos	90.3	78.5	94.9			18.9
	Molinate	60.8	76.6	67.1			13.2
	Myclobutanil	75.9	93.8	82.7			12.6
	Naled	71.9	82.5	59.8			31.9
	Napropamide	61.3	68.8	57.1			18.7
	Norflurazon	74.5	86.2	79.9			7.59
	Octinoxate	68.8	69.2	61.0			12.5
	Oxadiazon	67.4	74.7	66.0			10.6
	Oxybenzone	67.7	72.1	65.1			10.2
	Oxyfluorfen	86.9	118	101			14.9
	Parathion Ethyl	79.0	98.1	80.4			19.9
	Parathion Methyl	104	119	96.3			20.8
	Pendimethalin	70.2	97.8	80.8			19.1
	Phenytol	16.9	47.3	39.2			18.7
	Phorate	72.0	82.3	68.8			17.8
	Prodiamine	62.3	88.8	73.8			18.4
	Prometon	70.6	80.3	64.1			22.5
	Prometryn	74.4	76.4	67.0			13.2
	Pronamide	81.1	99.8	83.6			17.7
	Propanil	74.5	85.4	77.1			10.2
	Propargite	91.5	111	96.3			14.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision SMP	MS
EPA 8270E	Propiconazole	74.6	93.0	86.1			7.66
	Pyraflufen Ethyl	87.2	103	90.0			13.8
	Pyridaben	115	113	101			11.3
	Pyriproxyfen	89.1	97.2	84.5			14.0
	Simazine	80.7	108	99.4			8.08
	Stirophos	73.2	57.5	45.4			23.4
	Sulfentrazone	30.7	90.5	91.7			1.28
	Tebuconazole	80.5	99.4	86.3			14.2
	Terbufos	103	112	95.1			16.7
	Terbuthylazine	79.0	84.6	75.2			11.8
	Thiobencarb	70.1	83.7	73.2			13.4
	Triadimefon	67.2	64.2	62.0			3.45
EPA 8321B	2,4-D	99.5					0.530
	2,4,5-T	90.7	97.2	104			7.18
	Acesulfame K	147	155	150			3.00
	Acetaminophen	85.8	110	110			0.0692
	Acetamiprid	82.0	83.9	75.6			10.4
	Afidopyropen	44.1	46.4	47.8			3.15
	AMPA	91.4	88.2	91.4			3.52
	Bentazon	90.9					
	Benzovindiflupyr	90.9	87.4	88.0			0.688
	Carbamazepine	97.5	110	108			1.45
	Clothianidin	93.8	119	118			0.345
	Dinotefuran	93.0	135	130			3.11
	Diuron	79.0	79.1	84.5			6.36
	Endothall	70.4	69.3	69.0			0.443
	Fenuron	90.4	83.8	81.5			2.78
	Fluridone	82.8	83.7	83.5			0.0989
	Glufosinate	98.8	95.1	99.5			4.50
	Glyphosate	94.7	94.9	83.6			12.6
	Hydrocodone	88.6	100	100			0.0943
	Ibuprofen	83.6	86.9	84.4			2.89
	Imazapyr	91.8					0.196
	Imidacloprid	87.1	147	137			5.86
	Linuron	71.9	72.7	69.7			4.22
	Mandestrobin	79.7	82.5	83.7			1.47
	MCPP	105	121	123			1.14
	Naproxen	87.0	76.2	91.1			17.8
	Primidone	95.1	118	117			1.40
	Pyraclostrobin	87.4	77.5	83.6			7.59
	Silvex	83.3	91.8	99.6			8.15
	Sucralose	110	114	114			0.0355
	Thiamethoxam	89.1	140	134			4.75
	Tolfenpyrad	53.2	53.6	57.0			6.32
	Triclopyr	89.8	100	113			11.9
SM 2320 B-2011	Total Alkalinity	102				0.250	
SM 2540 C-2011	TDS					0.0	
SM 2540 D-2011	TSS					3.64	
SM 4500-F- C-2011	Fluoride	100	100	100			0.0
SM 5310 B-2011	Organic Carbon	93.5	95.3	95.0			0.259

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2331267, 2331270
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2331267, 2331270
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2331276, 2331277
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2331276, 2331277
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2331267, 2331270
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2331267, 2331270
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2331268, 2331271
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2331268, 2331271
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2331268, 2331271
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2331268, 2331271
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2331269
EPA 8270E	Analysis of Sunscreen Compounds in Water by GC/MS-SIM	2331278
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2331278
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2331275
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2331267, 2331270
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2331276, 2331277
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2331267, 2331270
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2331267, 2331270
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2331267, 2331270
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2331268, 2331271

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	06/02/2022			06/02/2022 14:19	Blanca Fach	2331270
	06/02/2022			06/02/2022 14:44	Blanca Fach	2331267
EPA 180.1 Rev. 2.0	06/02/2022			06/02/2022 14:01	Anna M. Plaviak	2331267
	06/02/2022			06/02/2022 14:02	Anna M. Plaviak	2331270
EPA 200.7 Rev. 4.4	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/08/2022 01:35	McKinley C Carter	2331276
	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/08/2022 01:43	McKinley C Carter	2331277
EPA 200.8 Rev. 5.4	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/03/2022 20:48	Emily M Philpot	2331276
	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/03/2022 20:57	Emily M Philpot	2331277
	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/06/2022 15:39	Alexander Thompson	2331276
	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/06/2022 15:45	Alexander Thompson	2331277
	06/02/2022	06/03/2022 09:45	Megan Whitefoot	06/06/2022 15:45	Alexander Thompson	2331277
EPA 300.0 Rev. 2.1	06/02/2022			06/08/2022 21:31	Anna M. Plaviak	2331267
	06/02/2022			06/08/2022 21:43	Anna M. Plaviak	2331270
EPA 350.1 Rev. 2.0	06/02/2022			06/14/2022 12:23	Judith K. Clark	2331268
	06/02/2022			06/14/2022 12:24	Judith K. Clark	2331271
EPA 351.2 Rev. 2.0	06/02/2022	06/08/2022 11:39	Samantha L Bates	06/09/2022 12:59	Alexandra J Mattheus	2331268
	06/02/2022	06/17/2022 11:47	Samantha L Bates	06/20/2022 14:43	Alexandra J Mattheus	2331271
EPA 353.2 Rev. 2.0	06/02/2022			06/14/2022 17:53	Touraj Touran	2331268
	06/02/2022			06/14/2022 17:54	Touraj Touran	2331271
EPA 365.1 Rev. 2.0	06/02/2022	06/06/2022 15:34	Adam P Silver	06/07/2022 11:31	James L Waggeberby	2331268
	06/02/2022	06/06/2022 15:34	Adam P Silver	06/07/2022 11:32	James L Waggeberby	2331271
EPA 365.1 Rev. 2.0 dissolved	06/02/2022			06/02/2022 17:13	Nathaniel J Jones	2331269
EPA 8270E	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/09/2022 18:30	Vandana T. Nagar	2331278
	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/10/2022 16:01	Vandana T. Nagar	2331278
	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/10/2022 18:13	Vandana T. Nagar	2331278
	06/02/2022	06/06/2022 08:00	Fe-Val Siddell	06/10/2022 21:56	Arthur Maknenko	2331278
EPA 8321B	06/02/2022	06/02/2022 14:00	Umesh Chiluwal	06/02/2022 22:11	Umesh Chiluwal	2331275
	06/02/2022	06/02/2022 14:00	Umesh Chiluwal	06/03/2022 06:26	Umesh Chiluwal	2331275
	06/02/2022	06/06/2022 09:00	Hoor Shaik	06/06/2022 22:37	Juyoung Kim	2331275
	06/02/2022	06/06/2022 09:00	Hoor Shaik	06/07/2022 09:38	Juyoung Kim	2331275
SM 2320 B-2011	06/02/2022			06/13/2022 00:05	Dale L. Simmons	2331267
	06/02/2022			06/13/2022 00:19	Dale L. Simmons	2331270
SM 2340 B-2011	06/02/2022			06/08/2022 01:35	McKinley C Carter	2331276
	06/02/2022			06/08/2022 01:43	McKinley C Carter	2331277
SM 2540 C-2011	06/02/2022			06/03/2022 14:44	Ping Hua	2331267, 2331270
SM 2540 D-2011	06/02/2022			06/03/2022 14:44	Ping Hua	2331267, 2331270
SM 4500-F- C-2011	06/02/2022			06/13/2022 00:05	Dale L. Simmons	2331267
	06/02/2022			06/13/2022 00:19	Dale L. Simmons	2331270
SM 5310 B-2011	06/02/2022			06/03/2022 20:59	Khloe J Berg	2331268
	06/02/2022			06/03/2022 21:14	Khloe J Berg	2331271