

Chemical Analysis Report

NW-DIST-2022-12-09-01

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

Event Description: **SCI**
Request ID: **RQ-2022-12-12-35**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 208
Pensacola, FL 32502-5794
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Certified by: Colin Wright, Program Administrator

Date Certified: 05-JAN-2023 11:37

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

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Roberts Lake

Collection Date/Time: 12/07/2022 14:15

Field ID: G3NW0447

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374111	DEP SOP: NU-094-1	Color (true)	16		PCU	P423340	
	EPA 180.1 Rev. 2.0	Turbidity	0.50	I	NTU	P423380	
	EPA 300.0 Rev. 2.1	Chloride	3.4		mg Cl/L	P423673	
		Sulfate	2.0		mg SO4/L	P423677	
	SM 2320 B-2011	Total Alkalinity	1.7	I	mg CaCO3/L	P423720	
	SM 2540 C-2015	TDS	20	I	mg/L	P423777	
	SM 2540 D-2015	TSS	2	U	mg/L	P423652	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P423723	
2374112	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P423681	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.097	I	mg N/L	P423414	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P423580	
	EPA 365.1 Rev. 2.0	Total-P	0.003	I	mg P/L	P423426	
	SM 5310 B-2011	Organic Carbon	1.7		mg C/L	P423644	

Ref. Method and Comment:

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

Sample Location: Direct Runoff to Choctawhatchee Bay below Oregon Drive

Collection Date/Time: 12/07/2022 10:30

Field ID: G3NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374108	DEP SOP: NU-094-1	Color (true)	61	AQ	PCU	P423340	
	EPA 180.1 Rev. 2.0	Turbidity	7.1	A	NTU	P423380	
	EPA 300.0 Rev. 2.1	Chloride	140		mg Cl/L	P423673	
		Sulfate	26		mg SO4/L	P423677	
	SM 2320 B-2011	Total Alkalinity	53		mg CaCO3/L	P423720	
	SM 2540 C-2015	TDS	297		mg/L	P423777	
	SM 2540 D-2015	TSS	6	I	mg/L	P423652	
	SM 4500-F- C-2011	Fluoride	0.065	I	mg F/L	P423723	
2374109	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P423681	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P423413	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.052		mg N/L	P423580	
	EPA 365.1 Rev. 2.0	Total-P	0.052		mg P/L	P423426	
	SM 5310 B-2011	Organic Carbon	8.1		mg C/L	P423644	
2374110	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.016	Q	mg P/L	P423356	
2374117	EPA 8321B	2,4-D	0.0020	U	ug/L	P423422	
		Acesulfame K	0.10	U	ug/L	P423367	
		2,4,5-T	0.0040	U	ug/L	P423422	
		AMPA	0.10	U	ug/L	P423367	
		Acetaminophen	0.020	I	ug/L	P423422	
		Acetamiprid	0.0020	U	ug/L	P423422	
		Endothall	0.25	U	ug/L	P423367	
		Glufosinate	0.10	U	ug/L	P423367	
		Glyphosate	0.10	U	ug/L	P423367	
		Afidopyropen	0.0020	U	ug/L	P423422	
		Bentazon	8.0E-04	U	ug/L	P423422	
		Sucralose	0.11		ug/L	P423367	
		Benzovindiflupyr	0.0020	U	ug/L	P423422	
		Carbamazepine	8.0E-04	U	ug/L	P423422	
		Clothianidin	0.0038	I	ug/L	P423422	
		Dinotefuran	0.0052	I	ug/L	P423422	
		Diuron	0.0020	U	ug/L	P423422	
		Fenuron	0.032	U	ug/L	P423422	
		Fluridone	8.0E-04	U	ug/L	P423422	
		Imazapyr	0.062		ug/L	P423422	
		Hydrocodone	0.0020	U	ug/L	P423422	
		Ibuprofen	0.20	U	ug/L	P423422	
		Imidacloprid	0.12		ug/L	P423422	
		Linuron	0.0040	U	ug/L	P423422	
		Mandestrobin	0.0020	U	ug/L	P423422	
		MCP	0.0066	I	ug/L	P423422	
		Naproxen	0.0080	U	ug/L	P423422	
		Primidone	0.0040	U	ug/L	P423422	

Field ID: G3NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374117	EPA 8321B	Pyraclostrobin	0.0020	U	ug/L	P423422	
		Silvex	0.0040	U	ug/L	P423422	
		Thiamethoxam	0.0020	U	ug/L	P423422	
		Tolfenpyrad	0.0020	U	ug/L	P423422	
		Triclopyr	0.0040	U	ug/L	P423422	
2374118	EPA 200.7 Rev. 4.4	Calcium	24.1		mg/L	P423398	
		Iron	590		ug/L	P423398	
		Magnesium	10.1		mg/L	P423398	
		Potassium	3.6		mg/L	P423398	
		Sodium	80.8		mg/L	P423398	
		Strontium	147		ug/L	P423398	
		Tin	3.0	U	ug/L	P423398	
		Titanium	15.1		ug/L	P423398	
		Vanadium	2.0	U	ug/L	P423398	
		Zinc	9.9	I	ug/L	P423398	
	EPA 200.8 Rev. 5.4	Aluminum	502		ug/L	P423398	
		Antimony	0.13	I	ug/L	P423398	
		Arsenic	2.73		ug/L	P423398	
		Barium	8.56		ug/L	P423398	
		Beryllium	0.010	U	ug/L	P423398	
		Boron	64.0		ug/L	P423398	
		Cadmium	0.020	U	ug/L	P423398	
		Chromium	1.2	I	ug/L	P423398	
		Cobalt	0.128		ug/L	P423398	
		Copper	1.29		ug/L	P423398	
		Lead	1.42		ug/L	P423398	
		Manganese	13.8		ug/L	P423398	
		Molybdenum	0.50	I	ug/L	P423398	
		Nickel	0.59	I	ug/L	P423398	
		Selenium	0.35	I	ug/L	P423398	MS
		Silver	0.010	U	ug/L	P423398	
		Thallium	0.10	U	ug/L	P423398	
	SM 2340 B-2011	Hardness	102		mg/L	P423398	
2374120	EPA 8270E	Oxybenzone**	10	U	ng/L	P423385	
		Acetochlor	0.26	U	ng/L	P423385	
		Octinoxate**	21	U	ng/L	P423385	
		Alachlor	0.26	U	ng/L	P423385	
		Avobenzone**	100	U	ng/L	P423385	
		Ametryn	0.62	U	ng/L	P423385	
		Atrazine	0.98	I	ng/L	P423385	
		PBDE-47**	4.1	U	ng/L	P423385	
		Atrazine Desethyl	5.1	I	ng/L	P423385	
		PBDE-99**	5.1	U	ng/L	P423385	
		Azinphos Methyl	2.1	U	ng/L	P423385	
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P423385	

Field ID: G3NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374120	EPA 8270E	Azoxystrobin	0.51	U	ng/L	P423385	
		Bromacil	0.78	I	ng/L	P423385	
		2-Ethylhexyl	12	U	ng/L	P423385	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.41	U	ng/L	P423385	
		Dechlorane Plus**	31	U	ng/L	P423385	
		Caffeine**	7.7	U	ng/L	P423385	
		Carbophenothion	0.21	U	ng/L	P423385	
		Carfentrazone Ethyl	0.10	U	ng/L	P423385	
		Chlorfenapyr	0.32	I	ng/L	P423385	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P423385	
		Chlorpyrifos Methyl	0.051	U	ng/L	P423385	
		Coumaphos	0.51	U	ng/L	P423385	
		Cyanazine	3.3	U	ng/L	P423385	
		Cyprodinil	0.10	U	ng/L	P423385	
		Demeton	1.5	U	ng/L	P423385	
		Diazinon	0.13	U	ng/L	P423385	
		Difenoconazole	0.62	U	ng/L	P423385	
		Dimethenamid	0.10	U	ng/L	P423385	
		Dimethomorph	0.18	U	ng/L	P423385	
		Disulfoton	0.51	U	ng/L	P423385	
		Dithiopyr	0.64	U	ng/L	P423385	
		EPTC	1.3	U	ng/L	P423385	
		Ethion	0.15	U	ng/L	P423385	
		Ethoprop	0.10	U	ng/L	P423385	
		Etridiazole	0.15	U	ng/L	P423385	
		Fenamiphos	0.51	U	ng/L	P423385	
		Fenbuconazole	0.13	U	ng/L	P423385	
		Fipronil	10		ng/L	P423385	
		Fipronil Desulfinyl**	0.36	I	ng/L	P423385	
		Fipronil Sulfide	15		ng/L	P423385	
		Fipronil Sulfone	17		ng/L	P423385	
		Fluazifop-P-butyl	0.10	U	ng/L	P423385	
		Fludioxonil	0.13	U	ng/L	P423385	
		Flumioxazin	4.6	U	ng/L	P423385	
		Flutolanil	0.10	U	ng/L	P423385	
		Fluxapyroxad	0.10	U	ng/L	P423385	
		Fonofos	0.21	U	ng/L	P423385	
		Hexazinone	0.51	U	ng/L	P423385	
		Imazalil	0.77	U	ng/L	P423385	
		Iprodione	0.62	U	ng/L	P423385	
		Loratadine**	0.36	U	ng/L	P423385	
		Malathion	0.36	U	ng/L	P423385	
		Metalaxyl	0.77	U	ng/L	P423385	
		Metolachlor	0.36	U	ng/L	P423385	

Field ID: G3NW0001

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2374120	EPA 8270E	Metribuzin	1.5	U	ng/L	P423385	
		Mevinphos	1.1	U	ng/L	P423385	
		Molinate	0.31	U	ng/L	P423385	
		Myclobutanil	0.26	U	ng/L	P423385	
		Naled	1.5	U	ng/L	P423385	
		Napropamide	0.41	U	ng/L	P423385	
		Norflurazon	0.51	U	ng/L	P423385	
		Oxadiazon	0.31	U	ng/L	P423385	
		Oxyfluorfen	0.15	U	ng/L	P423385	
		Parathion Ethyl	0.26	UJ	ng/L	P423385	LCS
		Parathion Methyl	0.57	U	ng/L	P423385	MS
		Pendimethalin	1.0	U	ng/L	P423385	
		Phenytol**	3.6	U	ng/L	P423385	
		Phorate	0.54	U	ng/L	P423385	
		Prodiamine	0.18	U	ng/L	P423385	
		Prometon	0.92	U	ng/L	P423385	
		Prometryn	0.21	U	ng/L	P423385	
		Pronamide	0.15	U	ng/L	P423385	
		Propanil	0.13	U	ng/L	P423385	
		Propargite	1.5	U	ng/L	P423385	
		Propiconazole	0.51	U	ng/L	P423385	
		Pyraflufen Ethyl	0.26	U	ng/L	P423385	
		Pyridaben	0.46	U	ng/L	P423385	
		Pyriproxyfen	0.13	U	ng/L	P423385	
		Simazine	0.51	U	ng/L	P423385	
		Stirophos	0.13	U	ng/L	P423385	
		Sulfentrazone	16		ng/L	P423385	
		Tebuconazole	0.51	U	ng/L	P423385	
		Terbufos	0.10	U	ng/L	P423385	
		Terbutylazine	0.44	U	ng/L	P423385	
		Thiobencarb	0.62	U	ng/L	P423385	
		Triadimefon	0.26	U	ng/L	P423385	

Ref. Method and Comment:

DEP SOP: NU-094-1: The sample expired upon receipt.

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

EPA 365.1 Rev. 2.0 dissolved: O-Phosphate-P: The sample expired upon receipt.

EPA 8270E: MS accuracy for ametryn, atrazine, and metribuzin not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P423340

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423380

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423398

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: P423398

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: P423673

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: P423677

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423681

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423413

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423414

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423580

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423426

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P423356

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

Reference Method: EPA 8270E
Batch ID: P423385

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423385

Component	Result	Code	Units
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	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
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	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	0.62	U	ng/L
Dithiopyr	0.62	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423385

Component	Result	Code	Units
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
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	4.5	U	ng/L
Flumioxazin	4.5	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	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	1.5	U	ng/L
Metribuzin	1.5	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423385

Component	Result	Code	Units
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	20	U	ng/L
Octinoxate	20	U	ng/L
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
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	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
Prodiatamine	0.18	U	ng/L
Prodiatamine	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P423385

Component	Result	Code	Units
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
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8321B

Batch ID: P423367

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: P423422

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	0.20	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P423422

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P423720

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

Reference Method: SM 2540 C-2015
Batch ID: P423777

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P423652

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P423644

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: P423340

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.6		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423380

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	104		P	85 - 115
Magnesium	100		P	85 - 115
Potassium	96.2		P	85 - 115
Sodium	102		P	85 - 115
Strontium	99.2		P	85 - 115
Tin	101		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	102		P	85 - 115
Zinc	106		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P423398

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	104		P	85 - 115
Antimony	99.8		P	85 - 115
Arsenic	104		P	85 - 115
Barium	102		P	85 - 115
Beryllium	98.2		P	85 - 115
Boron	108		P	85 - 115
Cadmium	106		P	85 - 115
Chromium	97.8		P	85 - 115
Cobalt	97.7		P	85 - 115
Copper	102		P	85 - 115
Lead	95.4		P	85 - 115
Manganese	98.1		P	85 - 115
Molybdenum	100		P	85 - 115
Nickel	103		P	85 - 115
Selenium	103		P	85 - 115
Silver	102		P	85 - 115
Thallium	94.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423673

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423677

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423681

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423413

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423414

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: P423580

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423426

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P423356

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

Reference Method: EPA 8270E
Batch ID: P423385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	88.0		P	42 - 162
Acetochlor	105		P	69 - 123
Alachlor	98.1		P	65 - 118
Ametryn	126		P	58 - 141
Atrazine	126		P	66 - 128
Atrazine Desethyl	108		P	32 - 125
Avobenzone	99.1		P	40 - 203
Azinphos Methyl	174		P	36 - 197
Azoxystrobin	124		P	58 - 226
Bromacil	117		P	48 - 120

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P423385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Butylate	56.7		P	27 - 85.0
Caffeine	70.1		P	40 - 137
Carbophenothion	99.0		P	54 - 132
Carfentrazone Ethyl	108		P	60 - 142
Chlorfenapyr	91.5		P	53 - 117
Chlorpyrifos Ethyl	99.5		P	59 - 116
Chlorpyrifos Methyl	116		P	66 - 119
Coumaphos	108		P	11 - 234
Cyanazine	187		P	61 - 248
Cyprodinil	142		P	50 - 147
Dechlorane Plus	99.8		P	47 - 182
Demeton	87.2		P	30 - 138
Diazinon	108		P	67 - 126
Difenoconazole	198		P	38 - 205
Dimethenamid	87.1		P	57 - 111
Dimethomorph	181		P	16 - 212
Disulfoton	100		P	46 - 126
Dithiopyr	95.5		P	62 - 115
EPTC	56.2		P	28 - 80.0
Ethion	93.8		P	24 - 122
Ethoprop	109		P	62 - 113
Etridiazole	68.2		P	28 - 92.0
Fenamiphos	103		P	57 - 128
Fenbuconazole	147		P	52 - 155
Fipronil	97.9		P	63 - 130
Fipronil Desulfinyl	102		P	61 - 130
Fipronil Sulfide	85.3		P	56 - 117
Fipronil Sulfone	88.1		P	52 - 118
Fluazifop-P-butyl	98.6		P	61 - 128
Fludioxonil	99.7		P	59 - 129
Flumioxazin	182		P	30 - 250
Flutolanil	103		P	53 - 127
Fluxapyroxad	128		P	42 - 132
Fonofos	101		P	61 - 110
Hexazinone	119		P	46 - 139
Imazalil	129		P	40 - 139
Iprodione	106		P	40 - 146
Loratadine	107		P	10 - 224
Malathion	108		P	61 - 135
Metalaxyl	97.6		P	58 - 121
Metolachlor	90.9		P	64 - 118
Metribuzin	119		P	45 - 245
Mevinphos	106		P	49 - 118
Molinate	69.8		P	42 - 92.0
Myclobutanil	97.9		P	55 - 127
Naled	88.5		P	10 - 114
Napropamide	121		P	39 - 121
Norflurazon	125		P	55 - 129
Octinoxate	78.1		P	26 - 166
Oxadiazon	107		P	54 - 115
Oxybenzone	77.9		P	49 - 135
Oxyfluorfen	118		P	64 - 139

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P423385

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Parathion Ethyl	113		F	70 - 111
Parathion Methyl	131		P	76 - 136
PBDE-47	77.1		P	41 - 148
PBDE-99	82.0		P	38 - 147
Pendimethalin	88.2		P	52 - 118
Phenytol	42.3		P	10 - 162
Phorate	104		P	40 - 122
Prodiamine	49.0		P	26 - 141
Prometon	121		P	54 - 122
Prometryn	101		P	61 - 128
Pronamide	107		P	72 - 121
Propanil	128		P	45 - 144
Propargite	123		P	10 - 199
Propiconazole	94.5		P	56 - 127
Pyraflufen Ethyl	124		P	56 - 140
Pyridaben	145		P	26 - 211
Pyriproxyfen	139		P	33 - 194
Simazine	92.7		P	67 - 121
Stirophos	141		P	20 - 142
Sulfentrazone	61.3		P	21 - 144
Tebuconazole	94.1		P	10 - 122
Terbufos	114		P	60 - 129
Terbutylazine	89.6		P	69 - 113
Thiobencarb	88.1		P	51 - 120
Tri-o-cresyl Phosphate	80.9		P	49 - 150
Triadimefon	87.0		P	56 - 114

Reference Method: EPA 8321B

Batch ID: P423367

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	97.0		P	40 - 150
AMPA	90.7		P	40 - 150
Endothall	101		P	40 - 150
Glufosinate	96.9		P	40 - 150
Glyphosate	96.7		P	40 - 150
Sucralose	94.9		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P423422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	77.3		P	40 - 150
2,4,5-T	78.5		P	40 - 150
Acetaminophen	103		P	30 - 150
Acetamiprid	81.2		P	40 - 150
Afidopyropen	60.1		P	30 - 150
Bentazon	102		P	30 - 150
Benzovindiflupyr	92.9		P	40 - 150
Carbamazepine	95.3		P	40 - 150
Clothianidin	106		P	40 - 150
Dinotefuran	105		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P423422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diuron	92.2		P	40 - 150
Fenuron	112		P	40 - 150
Fluridone	99.2		P	40 - 150
Hydrocodone	105		P	40 - 150
Ibuprofen	66.5		P	40 - 150
Imazapyr	89.6		P	40 - 150
Imidacloprid	114		P	40 - 150
Linuron	84.8		P	40 - 150
Mandestrobin	94.8		P	40 - 150
MCPP	90.0		P	40 - 150
Naproxen	63.5		P	40 - 150
Primidone	103		P	40 - 150
Pyraclostrobin	89.5		P	40 - 150
Silvex	78.9		P	40 - 150
Thiamethoxam	101		P	40 - 150
Tolfenpyrad	42.6		P	30 - 150
Triclopyr	90.0		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P423720

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	96.8		P	94 - 106

Reference Method: SM 2540 C-2015

Batch ID: P423777

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

Reference Method: SM 2540 D-2015

Batch ID: P423652

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.8		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P423723

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	96 - 104

Reference Method: SM 5310 B-2011

Batch ID: P423644

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.2		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P423398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374146	Calcium	110	97.8	P/P	80 - 120
2374146	Iron	102	99.9	P/P	80 - 120
2374146	Magnesium	96.7	94.4	P/P	80 - 120
2374146	Potassium	99.1	97.4	P/P	80 - 120
2374146	Sodium	94.7	92.0	P/P	80 - 120
2374146	Strontium	97.3	95.8	P/P	80 - 120
2374146	Tin	106	94.7	P/P	80 - 120
2374146	Titanium	107	96.4	P/P	80 - 120
2374146	Vanadium	106	96.1	P/P	80 - 120
2374146	Zinc	112	101	P/P	80 - 120
2374195	Calcium	105		P	80 - 120
2374195	Iron	106		P	80 - 120
2374195	Magnesium	102		P	80 - 120
2374195	Potassium	99.5		P	80 - 120
2374195	Sodium	101		P	80 - 120
2374195	Strontium	102		P	80 - 120
2374195	Tin	102		P	80 - 120
2374195	Titanium	105		P	80 - 120
2374195	Vanadium	104		P	80 - 120
2374195	Zinc	112		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P423398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374146	Aluminum	103	102	P/P	80 - 120
2374146	Antimony	99.0	99.6	P/P	80 - 120
2374146	Arsenic	104	105	P/P	80 - 120
2374146	Barium	102	102	P/P	80 - 120
2374146	Beryllium	95.4	95.7	P/P	80 - 120
2374146	Boron	106	104	P/P	80 - 120
2374146	Cadmium	104	104	P/P	80 - 120
2374146	Chromium	97.4	97.8	P/P	80 - 120
2374146	Cobalt	98.1	98.6	P/P	80 - 120
2374146	Copper	102	103	P/P	80 - 120
2374146	Lead	94.9	94.8	P/P	80 - 120
2374146	Manganese	97.6	97.0	P/P	80 - 120
2374146	Molybdenum	98.9	101	P/P	80 - 120
2374146	Nickel	104	106	P/P	80 - 120
2374146	Selenium	101	102	P/P	80 - 120
2374146	Silver	101	102	P/P	80 - 120
2374146	Thallium	93.7	94.7	P/P	80 - 120
2374195	Aluminum	102		P	80 - 120
2374195	Antimony	100		P	80 - 120
2374195	Arsenic	106		P	80 - 120
2374195	Barium	100		P	80 - 120
2374195	Beryllium	98.1		P	80 - 120
2374195	Boron	103		P	80 - 120
2374195	Cadmium	102		P	80 - 120
2374195	Chromium	98.0		P	80 - 120
2374195	Cobalt	98.7		P	80 - 120
2374195	Copper	105		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P423398

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374195	Lead	93.4		P	80 - 120
2374195	Manganese	97.2		P	80 - 120
2374195	Molybdenum	101		P	80 - 120
2374195	Nickel	103		P	80 - 120
2374195	Selenium	78.4		F	80 - 120
2374195	Silver	101		P	80 - 120
2374195	Thallium	93.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373837	Chloride	101		P	90 - 110
2374156	Chloride	99.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423677

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373837	Sulfate	96.0		P	90 - 110
2374156	Sulfate	95.5		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423681

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374112	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423413

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373797	Kjeldahl Nitrogen	92.0	97.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423414

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373827	Kjeldahl Nitrogen	95.7	98.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374109	NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423426

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374256	Total-P	103	102	P/P	90 - 110

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P423356

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374002	O-Phosphate-P	98.5	95.8	P/P	90 - 110

Reference Method: EPA 8270E
 Batch ID: P423385

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373763	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	84.0	72.7	P/P	26 - 165
2373763	Acetochlor	89.0	92.2	P/P	67 - 124
2373763	Alachlor	78.1	76.6	P/P	60 - 120
2373763	Atrazine Desethyl	72.6	84.1	P/P	15 - 122
2373763	Avobenzone	112	96.5	P/P	37 - 178
2373763	Azinphos Methyl	126	129	P/P	40 - 292
2373763	Azoxystrobin	150	144	P/P	35 - 220
2373763	Bromacil	87.4	102	P/P	45 - 127
2373763	Butylate	39.1	46.4	P/P	20 - 83.0
2373763	Caffeine	68.1	66.6	P/P	10 - 194
2373763	Carbophenothion	80.2	84.1	P/P	57 - 127
2373763	Carfentrazone Ethyl	85.2	81.6	P/P	51 - 141
2373763	Chlorfenapyr	74.3	80.3	P/P	46 - 111
2373763	Chlorpyrifos Ethyl	79.4	81.4	P/P	52 - 120
2373763	Chlorpyrifos Methyl	102	103	P/P	63 - 119
2373763	Coumaphos	83.7	83.7	P/P	10 - 228
2373763	Cyanazine	148	169	P/P	59 - 241
2373763	Cyprodinil	114	121	P/P	47 - 146
2373763	Dechlorane Plus	84.2	65.8	P/P	50 - 150
2373763	Demeton	94.8	94.0	P/P	40 - 136
2373763	Diazinon	105	104	P/P	69 - 132
2373763	Difenoconazole	132	151	P/P	57 - 258
2373763	Dimethenamid	69.0	73.8	P/P	54 - 110
2373763	Dimethomorph	175	207	P/P	28 - 210
2373763	Disulfoton	114	110	P/P	43 - 133
2373763	Dithiopyr	79.2	84.5	P/P	39 - 116
2373763	EPTC	43.6	42.0	P/P	20 - 78.0
2373763	Ethion	55.1	58.0	P/P	17 - 119
2373763	Ethoprop	119	116	P/P	66 - 120
2373763	Etridiazole	56.8	59.9	P/P	28 - 96.0
2373763	Fenamiphos	77.1	82.3	P/P	41 - 126
2373763	Fenbuconazole	104	122	P/P	42 - 169
2373763	Fipronil	85.5	88.3	P/P	61 - 132
2373763	Fipronil Desulfinyl	88.7	94.7	P/P	56 - 132
2373763	Fipronil Sulfide	73.8	80.6	P/P	48 - 119
2373763	Fipronil Sulfone	64.5	68.4	P/P	42 - 131
2373763	Fluazifop-P-butyl	82.5	88.5	P/P	53 - 131
2373763	Fludioxonil	76.7	88.3	P/P	56 - 127
2373763	Flumioxazin	164	188	P/P	19 - 300
2373763	Flutolanil	83.4	83.9	P/P	41 - 127
2373763	Fluxapyroxad	88.8	102	P/P	42 - 172
2373763	Fonofos	105	106	P/P	59 - 113
2373763	Hexazinone	107	106	P/P	66 - 122
2373763	Imazalil	126	137	P/P	21 - 283
2373763	Iprodione	77.8	84.7	P/P	43 - 150
2373763	Loratadine	176	163	P/P	23 - 201

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P423385

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2373763	Malathion	91.0	95.5	P/P	58 - 136
2373763	Metalaxyl	83.0	81.9	P/P	55 - 120
2373763	Metolachlor	78.7	78.8	P/P	57 - 121
2373763	Mevinphos	111	114	P/P	50 - 126
2373763	Molinate	63.0	64.8	P/P	42 - 93.0
2373763	Myclobutanil	86.1	84.8	P/P	55 - 125
2373763	Naled	77.5	84.8	P/P	18 - 200
2373763	Napropamide	86.2	100	P/P	39 - 110
2373763	Norflurazon	88.2	101	P/P	48 - 128
2373763	Octinoxate	80.6	67.9	P/P	21 - 159
2373763	Oxadiazon	92.1	93.6	P/P	43 - 112
2373763	Oxybenzone	80.9	68.7	P/P	41 - 142
2373763	Oxyfluorfen	118	123	P/P	64 - 153
2373763	Parathion Ethyl	109	110	P/P	69 - 114
2373763	Parathion Methyl	185	189	F/F	79 - 139
2373763	PBDE-47	72.7	54.3	P/P	27 - 144
2373763	PBDE-99	77.1	65.8	P/P	18 - 150
2373763	Pendimethalin	125	123	P/P	50 - 139
2373763	Phenytoin	28.9	34.6	P/P	10 - 146
2373763	Phorate	104	104	P/P	54 - 161
2373763	Prodiamine	61.3	69.9	P/P	30 - 161
2373763	Prometon	62.3	67.1	P/P	45 - 134
2373763	Prometryn	87.4	92.1	P/P	45 - 137
2373763	Pronamide	99.8	104	P/P	65 - 133
2373763	Propanil	90.3	110	P/P	49 - 142
2373763	Propargite	77.3	86.6	P/P	10 - 203
2373763	Propiconazole	94.2	91.1	P/P	38 - 146
2373763	Pyraflufen Ethyl	82.5	91.9	P/P	34 - 153
2373763	Pyridaben	126	137	P/P	12 - 192
2373763	Pyriproxyfen	84.1	98.0	P/P	33 - 180
2373763	Simazine	98.3	104	P/P	51 - 157
2373763	Stiropfos	79.8	95.6	P/P	10 - 128
2373763	Sulfentrazone	87.9	102	P/P	53 - 186
2373763	Tebuconazole	50.2	58.7	P/P	10 - 133
2373763	Terbufos	122	121	P/P	65 - 139
2373763	Terbuthylazine	84.5	87.4	P/P	66 - 117
2373763	Thiobencarb	73.4	76.9	P/P	51 - 119
2373763	Tri-o-cresyl Phosphate	81.5	68.7	P/P	31 - 144
2373763	Triadimefon	67.8	72.3	P/P	48 - 119

Reference Method: EPA 8321B
Batch ID: P423367

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374117	Acesulfame K	65.5	58.1	P/P	40 - 150
2374117	AMPA	78.4	77.8	P/P	40 - 150
2374117	Endothall	107	106	P/P	40 - 150
2374117	Glufosinate	97.2	97.3	P/P	40 - 150
2374117	Glyphosate	97.3	103	P/P	40 - 150
2374117	Sucralose	83.2	101	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P423422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374876	2,4-D	82.5	83.5	P/P	40 - 150
2374876	2,4,5-T	82.2	84.3	P/P	40 - 150
2374876	Acetaminophen	102	98.7	P/P	30 - 150
2374876	Acetamiprid	85.4	87.4	P/P	40 - 150
2374876	Afidopyropen	72.9	70.9	P/P	30 - 150
2374876	Bentazon	88.8	96.2	P/P	30 - 150
2374876	Benzovindiflupyr	85.5	84.3	P/P	40 - 150
2374876	Carbamazepine	90.5	89.1	P/P	40 - 150
2374876	Clothianidin	98.7	98.6	P/P	40 - 150
2374876	Dinotefuran	97.3	97.8	P/P	40 - 150
2374876	Diuron	80.2	78.1	P/P	40 - 150
2374876	Fenuron	99.8	102	P/P	40 - 150
2374876	Fluridone	91.0	90.2	P/P	40 - 150
2374876	Hydrocodone	95.4	93.5	P/P	40 - 150
2374876	Ibuprofen	68.8	67.1	P/P	40 - 150
2374876	Imazapyr	91.3	87.5	P/P	40 - 150
2374876	Imidacloprid	109	116	P/P	40 - 150
2374876	Linuron	82.3	78.3	P/P	40 - 150
2374876	Mandestrobin	88.4	84.1	P/P	40 - 150
2374876	MCCPP	95.7	93.6	P/P	40 - 150
2374876	Naproxen	84.8	96.4	P/P	40 - 150
2374876	Primidone	89.5	92.1	P/P	40 - 150
2374876	Pyraclostrobin	63.3	76.6	P/P	40 - 150
2374876	Silvex	80.0	84.4	P/P	40 - 150
2374876	Thiamethoxam	96.4	96.9	P/P	40 - 150
2374876	Tolfenpyrad	37.6	47.7	P/P	30 - 150
2374876	Triclopyr	91.5	88.0	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P423723

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374318	Fluoride	100	98.6	P/P	94 - 104

Reference Method: SM 5310 B-2011

Batch ID: P423644

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2374360	Organic Carbon	98.1	99.2	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P423340

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374108	Color (true)	2.57	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P423380

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374108	Turbidity	3.52	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P423398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374146	Calcium	10.9	Spike	P	0 - 20
2374146	Iron	2.00	Spike	P	0 - 20
2374146	Magnesium	2.04	Spike	P	0 - 20
2374146	Potassium	1.72	Spike	P	0 - 20
2374146	Sodium	1.67	Spike	P	0 - 20
2374146	Strontium	1.55	Spike	P	0 - 20
2374146	Tin	11.2	Spike	P	0 - 20
2374146	Titanium	10.8	Spike	P	0 - 20
2374146	Vanadium	10.1	Spike	P	0 - 20
2374146	Zinc	10.1	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P423398

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374146	Aluminum	1.34	Spike	P	0 - 20
2374146	Antimony	0.662	Spike	P	0 - 20
2374146	Arsenic	0.831	Spike	P	0 - 20
2374146	Barium	0.420	Spike	P	0 - 20
2374146	Beryllium	0.187	Spike	P	0 - 20
2374146	Boron	1.58	Spike	P	0 - 20
2374146	Cadmium	0.732	Spike	P	0 - 20
2374146	Chromium	0.415	Spike	P	0 - 20
2374146	Cobalt	0.508	Spike	P	0 - 20
2374146	Copper	0.972	Spike	P	0 - 20
2374146	Lead	0.120	Spike	P	0 - 20
2374146	Manganese	0.603	Spike	P	0 - 20
2374146	Molybdenum	2.03	Spike	P	0 - 20
2374146	Nickel	1.88	Spike	P	0 - 20
2374146	Selenium	0.496	Spike	P	0 - 20
2374146	Silver	0.987	Spike	P	0 - 20
2374146	Thallium	1.09	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373837	Chloride	0.131	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P423677

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373837	Sulfate	0.0365	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P423681

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374112	Ammonia-N	1.19	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423413

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373797	Kjeldahl Nitrogen	3.25	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P423414

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373827	Kjeldahl Nitrogen	1.48	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P423580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374109	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P423426

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374256	Total-P	0.702	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P423356

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374002	O-Phosphate-P	1.38	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P423385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373763	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	14.4	Spike	P	0 - 37
2373763	Acetochlor	3.50	Spike	P	0 - 28
2373763	Alachlor	1.89	Spike	P	0 - 30
2373763	Ametryn	10.0	Spike	P	0 - 32
2373763	Atrazine	2.46	Spike	P	0 - 41
2373763	Atrazine Desethyl	11.1	Spike	P	0 - 36
2373763	Avobenzone	14.8	Spike	P	0 - 36
2373763	Azinphos Methyl	2.41	Spike	P	0 - 75
2373763	Azoxystrobin	3.15	Spike	P	0 - 39
2373763	Bromacil	15.4	Spike	P	0 - 33
2373763	Butylate	17.0	Spike	P	0 - 44
2373763	Caffeine	2.27	Spike	P	0 - 74
2373763	Carbophenothion	4.70	Spike	P	0 - 25
2373763	Carfentrazone Ethyl	4.31	Spike	P	0 - 27
2373763	Chlorfenapyr	7.82	Spike	P	0 - 24
2373763	Chlorpyrifos Ethyl	2.40	Spike	P	0 - 26
2373763	Chlorpyrifos Methyl	0.392	Spike	P	0 - 26
2373763	Coumaphos	0.000373	Spike	P	0 - 28
2373763	Cyanazine	12.9	Spike	P	0 - 48
2373763	Cyprodinil	5.85	Spike	P	0 - 29
2373763	Dechlorane Plus	24.4	Spike	P	0 - 30
2373763	Demeton	0.879	Spike	P	0 - 33
2373763	Diazinon	0.778	Spike	P	0 - 29
2373763	Difenoconazole	13.3	Spike	P	0 - 34
2373763	Dimethenamid	6.72	Spike	P	0 - 39
2373763	Dimethomorph	16.7	Spike	P	0 - 51
2373763	Disulfoton	3.70	Spike	P	0 - 30
2373763	Dithiopyr	6.52	Spike	P	0 - 26
2373763	EPTC	3.93	Spike	P	0 - 43
2373763	Ethion	5.17	Spike	P	0 - 79
2373763	Ethoprop	2.59	Spike	P	0 - 29
2373763	Etridiazole	5.31	Spike	P	0 - 33
2373763	Fenamiphos	6.55	Spike	P	0 - 40
2373763	Fenbuconazole	15.5	Spike	P	0 - 74
2373763	Fipronil	3.19	Spike	P	0 - 29
2373763	Fipronil Desulfanyl	6.54	Spike	P	0 - 32
2373763	Fipronil Sulfide	8.77	Spike	P	0 - 30
2373763	Fipronil Sulfone	5.80	Spike	P	0 - 33
2373763	Fluazifop-P-butyl	7.01	Spike	P	0 - 38
2373763	Fludioxonil	14.0	Spike	P	0 - 29
2373763	Flumioxazin	14.0	Spike	P	0 - 51
2373763	Flutolanil	0.475	Spike	P	0 - 25
2373763	Fluxapyroxad	12.0	Spike	P	0 - 45
2373763	Fonofos	1.18	Spike	P	0 - 27
2373763	Hexazinone	0.516	Spike	P	0 - 30
2373763	Imazalil	8.27	Spike	P	0 - 100
2373763	Iprodione	8.44	Spike	P	0 - 33
2373763	Loratadine	7.90	Spike	P	0 - 56
2373763	Malathion	4.85	Spike	P	0 - 37
2373763	Metalaxyl	1.23	Spike	P	0 - 40
2373763	Metolachlor	0.111	Spike	P	0 - 29

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P423385

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373763	Metribuzin	1.22	Spike	P	0 - 45
2373763	Mevinphos	3.32	Spike	P	0 - 29
2373763	Molinate	2.91	Spike	P	0 - 33
2373763	Myclobutanil	1.60	Spike	P	0 - 26
2373763	Naled	8.96	Spike	P	0 - 37
2373763	Napropamide	15.0	Spike	P	0 - 44
2373763	Norflurazon	11.3	Spike	P	0 - 30
2373763	Octinoxate	17.1	Spike	P	0 - 45
2373763	Oxadiazon	1.55	Spike	P	0 - 28
2373763	Oxybenzone	16.2	Spike	P	0 - 46
2373763	Oxyfluorfen	4.79	Spike	P	0 - 28
2373763	Parathion Ethyl	0.686	Spike	P	0 - 31
2373763	Parathion Methyl	2.46	Spike	P	0 - 29
2373763	PBDE-47	29.0	Spike	P	0 - 36
2373763	PBDE-99	15.9	Spike	P	0 - 40
2373763	Pendimethalin	1.41	Spike	P	0 - 33
2373763	Phenytoin	18.0	Spike	P	0 - 100
2373763	Phorate	0.0915	Spike	P	0 - 36
2373763	Prodiamine	13.0	Spike	P	0 - 71
2373763	Prometon	7.35	Spike	P	0 - 36
2373763	Prometryn	4.88	Spike	P	0 - 28
2373763	Pronamide	4.29	Spike	P	0 - 24
2373763	Propanil	19.9	Spike	P	0 - 28
2373763	Propargite	11.3	Spike	P	0 - 43
2373763	Propiconazole	3.38	Spike	P	0 - 33
2373763	Pyraflufen Ethyl	10.8	Spike	P	0 - 29
2373763	Pyridaben	8.29	Spike	P	0 - 30
2373763	Pyriproxyfen	15.3	Spike	P	0 - 79
2373763	Simazine	5.91	Spike	P	0 - 29
2373763	Stirophos	17.9	Spike	P	0 - 61
2373763	Sulfentrazone	13.1	Spike	P	0 - 33
2373763	Tebuconazole	15.6	Spike	P	0 - 69
2373763	Terbufos	1.19	Spike	P	0 - 29
2373763	Terbuthylazine	3.34	Spike	P	0 - 32
2373763	Thiobencarb	4.59	Spike	P	0 - 26
2373763	Tri-o-cresyl Phosphate	17.1	Spike	P	0 - 33
2373763	Triadimefon	6.46	Spike	P	0 - 28

Reference Method: EPA 8321B
Batch ID: P423367

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374117	Acesulfame K	11.8	Spike	P	0 - 30
2374117	AMPA	0.815	Spike	P	0 - 30
2374117	Endothall	0.813	Spike	P	0 - 30
2374117	Glufosinate	0.0448	Spike	P	0 - 30
2374117	Glyphosate	5.56	Spike	P	0 - 30
2374117	Sucralose	18.4	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P423422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374876	2,4-D	1.19	Spike	P	0 - 30
2374876	2,4,5-T	2.56	Spike	P	0 - 30
2374876	Acetaminophen	3.18	Spike	P	0 - 30
2374876	Acetamiprid	2.25	Spike	P	0 - 30
2374876	Afidopyropen	2.76	Spike	P	0 - 30
2374876	Bentazon	6.09	Spike	P	0 - 30
2374876	Benzovindiflupyr	1.41	Spike	P	0 - 30
2374876	Carbamazepine	1.56	Spike	P	0 - 30
2374876	Clothianidin	0.0828	Spike	P	0 - 30
2374876	Dinotefuran	0.464	Spike	P	0 - 30
2374876	Diuron	2.62	Spike	P	0 - 30
2374876	Fenuron	2.23	Spike	P	0 - 30
2374876	Fluridone	0.911	Spike	P	0 - 30
2374876	Hydrocodone	2.02	Spike	P	0 - 30
2374876	Ibuprofen	2.57	Spike	P	0 - 30
2374876	Imazapyr	4.20	Spike	P	0 - 30
2374876	Imidacloprid	6.24	Spike	P	0 - 30
2374876	Linuron	4.90	Spike	P	0 - 30
2374876	Mandestrobin	4.93	Spike	P	0 - 30
2374876	MCP	2.28	Spike	P	0 - 30
2374876	Naproxen	12.8	Spike	P	0 - 30
2374876	Primidone	2.92	Spike	P	0 - 30
2374876	Pyraclostrobin	19.1	Spike	P	0 - 30
2374876	Silvex	5.31	Spike	P	0 - 30
2374876	Thiamethoxam	0.476	Spike	P	0 - 30
2374876	Tolfenpyrad	23.9	Spike	P	0 - 30
2374876	Triclopyr	3.96	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P423720

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Total Alkalinity	1.80	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P423777

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2373795	TDS	6.45	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P423723

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374318	Fluoride	0.966	Spike	P	0 - 1.6

Quality Assurance Report

Precision

Reference Method: SM 5310 B-2011
Batch ID: P423644

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2374360	Organic Carbon	0.712	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2374117

Field Sample ID: G3NW0001

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	88.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.8	P	30 - 160
EPA 8321B	Diuron-d6	71.0	P	30 - 160
EPA 8321B	Endothall-d6	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	76.1	P	30 - 160
EPA 8321B	Primidone-d5	104	P	30 - 160
EPA 8321B	Sucralose-d6	88.3	P	30 - 160

Lab Sample ID: 2374120

Field Sample ID: G3NW0001

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	104	P	20 - 200
EPA 8270E	Simazine-d10	139	P	62 - 142
EPA 8270E	Terbufos-d10	80.6	P	58 - 132
EPA 8270E	Terphenyl-d14	101	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A116346

Included Lab Sample IDs: 2374108, 2374111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.2	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A116351

Included Lab Sample IDs: 2374110

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.3	99.4	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A116361

Included Lab Sample IDs: 2374108, 2374111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	98.0	P/P	95 - 105

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A116398

Included Lab Sample IDs: 2374108, 2374111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	104	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A116420

Included Lab Sample IDs: 2374117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	99.1	107	P/P	60 - 160
Sucralose	98.0	78.5	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A116422

Included Lab Sample IDs: 2374117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	102	102	P/P	60 - 160
Endothall	118	99.9	P/P	60 - 160
Glufosinate	109	94.1	P/P	60 - 160
Glyphosate	112	107	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A116435

Included Lab Sample IDs: 2374109, 2374112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.0	99.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A116447

Included Lab Sample IDs: 2374109, 2374112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.4	97.6	P/P	90 - 110
Kjeldahl Nitrogen	95.9	93.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A116459

Included Lab Sample IDs: 2374109, 2374112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A116473

Included Lab Sample IDs: 2374117

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	90.7	P/P	50 - 150
2,4,5-T	104	111	P/P	50 - 150
Acetaminophen	107	107	P/P	60 - 160
Acetamiprid	108	109	P/P	50 - 150
Afidopyropen	99.9	109	P/P	50 - 150
Bentazon	103	111	P/P	50 - 160
Benzovindiflupyr	110	110	P/P	50 - 150
Carbamazepine	108	111	P/P	60 - 150
Clothianidin	111	110	P/P	60 - 150
Dinotefuran	105	103	P/P	50 - 150
Diuron	121	118	P/P	60 - 160
Fenuron	104	109	P/P	60 - 150
Fluridone	111	114	P/P	60 - 160
Hydrocodone	102	104	P/P	60 - 150
Ibuprofen	78.7	108	P/P	50 - 160
Imazapyr	93.5	91.3	P/P	50 - 150
Imidacloprid	101	104	P/P	60 - 150
Linuron	113	108	P/P	60 - 150
Mandestrobin	106	106	P/P	50 - 150
MCPP	99.7	104	P/P	50 - 150
Naproxen	66.4	88.8	P/P	50 - 160
Primidone	111	98.4	P/P	60 - 150
Pyraclostrobin	109	109	P/P	60 - 150
Silvex	99.8	99.2	P/P	50 - 150
Thiamethoxam	104	98.7	P/P	50 - 150
Tolfenpyrad	104	105	P/P	60 - 150
Triclopyr	112	112	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A116485

Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	100		P	80 - 120
Avobenzene	97.7		P	80 - 120
Dechlorane Plus	95.2		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A116485
Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Octinoxate	102		P	80 - 120
Oxybenzone	100		P	80 - 120
PBDE-47	102		P	80 - 120
PBDE-99	102		P	80 - 120
Tri-o-cresyl Phosphate	99.7		P	80 - 120

Reference Method: SM 5310 B-2011
Run ID: A116493
Included Lab Sample IDs: 2374109, 2374112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.1	99.2	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A116494
Included Lab Sample IDs: 2374118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	100	P/P	90 - 110
Antimony	97.1	97.6	P/P	90 - 110
Arsenic	103	104	P/P	90 - 110
Barium	98.3	101	P/P	90 - 110
Beryllium	98.3	99.4	P/P	90 - 110
Boron	102	102	P/P	90 - 110
Cadmium	102	102	P/P	90 - 110
Chromium	96.1	97.1	P/P	90 - 110
Cobalt	95.6	97.8	P/P	90 - 110
Copper	100	102	P/P	90 - 110
Lead	94.6	95.8	P/P	90 - 110
Manganese	95.8	98.0	P/P	90 - 110
Molybdenum	98.6	99.5	P/P	90 - 110
Nickel	100	102	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Silver	98.7	98.8	P/P	90 - 110
Thallium	95.6	96.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A116509
Included Lab Sample IDs: 2374109, 2374112

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.5	98.0	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A116524
Included Lab Sample IDs: 2374118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	107	103	P/P	90 - 110
Iron	108	103	P/P	90 - 110
Magnesium	106	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A116524

Included Lab Sample IDs: 2374118

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	104	100	P/P	90 - 110
Sodium	106	103	P/P	90 - 110
Strontium	100	102	P/P	90 - 110
Tin	103	105	P/P	90 - 110
Titanium	102	105	P/P	90 - 110
Vanadium	102	105	P/P	90 - 110
Zinc	107	110	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A116543

Included Lab Sample IDs: 2374108, 2374111

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	93.2	96.7	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A116543

Included Lab Sample IDs: 2374108, 2374111

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

Reference Method: EPA 8270E

Run ID: A116632

Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	93.8		P	80 - 120
Ametryn	91.3		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	97.3		P	80 - 120
Azinphos Methyl	110		P	80 - 120
Azoxystrobin	96.4		P	80 - 120
Bromacil	93.3		P	80 - 120
Butylate	101		P	80 - 120
Caffeine	104		P	80 - 120
Carbophenothion	102		P	80 - 120
Carfentrazone Ethyl	104		P	80 - 120
Chlorfenapyr	99.4		P	80 - 120
Chlorpyrifos Ethyl	107		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	103		P	80 - 120
Cyanazine	83.6		P	80 - 120
Cyprodinil	96.0		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	101		P	80 - 120
Difenoconazole	99.3		P	80 - 120
Dimethenamid	105		P	80 - 120
Dimethomorph	87.5		P	80 - 120
Disulfoton	98.9		P	80 - 120

Quality Assurance Report

Calibration Verification

Reference Method: EPA 8270E
Run ID: A116632
Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dithiopyr	100		P	80 - 120
EPTC	98.9		P	80 - 120
Ethion	102		P	80 - 120
Ethoprop	102		P	80 - 120
Etridiazole	97.0		P	80 - 120
Fenamiphos	101		P	80 - 120
Fenbuconazole	96.9		P	80 - 120
Fipronil Desulfinyl	101		P	80 - 120
Fluazifop-P-butyl	99.5		P	80 - 120
Fludioxonil	103		P	80 - 120
Flumioxazin	104		P	80 - 120
Flutolanil	98.3		P	80 - 120
Fluxapyroxad	98.0		P	80 - 120
Fonofos	99.9		P	80 - 120
Hexazinone	102		P	80 - 120
Imazalil	98.2		P	80 - 120
Iprodione	101		P	80 - 120
Loratadine	103		P	80 - 120
Malathion	108		P	80 - 120
Metalaxyl	104		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	98.6		P	80 - 120
Mevinphos	105		P	80 - 120
Molinate	101		P	80 - 120
Myclobutanil	96.6		P	80 - 120
Naled	106		P	80 - 120
Napropamide	93.5		P	80 - 120
Norflurazon	96.9		P	80 - 120
Oxadiazon	97.3		P	80 - 120
Oxyfluorfen	111		P	80 - 120
Parathion Ethyl	103		P	80 - 120
Parathion Methyl	120		P	80 - 120
Pendimethalin	116		P	80 - 120
Phenytol	96.5		P	80 - 120
Phorate	103		P	80 - 120
Prodiamine	114		P	80 - 120
Prometon	97.4		P	80 - 120
Prometryn	98.4		P	80 - 120
Pronamide	103		P	80 - 120
Propanil	97.3		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	102		P	80 - 120
Pyraflufen Ethyl	91.2		P	80 - 120
Pyridaben	96.2		P	80 - 120
Pyriproxyfen	97.1		P	80 - 120
Simazine	103		P	80 - 120
Stirophos	107		P	80 - 120
Sulfentrazone	90.8		P	80 - 120
Tebuconazole	98.0		P	80 - 120
Terbufos	99.6		P	80 - 120
Terbutylazine	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A116632
Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Thiobencarb	101		P	80 - 120
Triadimefon	97.2		P	80 - 120

Reference Method: EPA 8270E
Run ID: A116654
Included Lab Sample IDs: 2374120

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil	97.5		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	101		P	80 - 120

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	98.6					2.57	
EPA 180.1 Rev. 2.0	Turbidity	99.9					3.52	
EPA 200.7 Rev. 4.4	Calcium	103	110	97.8	105			10.9
	Iron	104	102	99.9	106			2.00
	Magnesium	100	96.7	94.4	102			2.04
	Potassium	96.2	99.1	97.4	99.5			1.72
	Sodium	102	94.7	92.0	101			1.67
	Strontium	99.2	97.3	95.8	102			1.55
	Tin	101	106	94.7	102			11.2
	Titanium	103	107	96.4	105			10.8
	Vanadium	102	106	96.1	104			10.1
	Zinc	106	112	101	112			10.1
EPA 200.8 Rev. 5.4	Aluminum	104	103	102	102			1.34
	Antimony	99.8	99.0	99.6	100			0.662
	Arsenic	104	104	105	106			0.831
	Barium	102	102	102	100			0.420
	Beryllium	98.2	95.4	95.7	98.1			0.187
	Boron	108	106	104	103			1.58
	Cadmium	106	104	104	102			0.732
	Chromium	97.8	97.4	97.8	98.0			0.415
	Cobalt	97.7	98.1	98.6	98.7			0.508
	Copper	102	102	103	105			0.972
	Lead	95.4	94.9	94.8	93.4			0.120
	Manganese	98.1	97.6	97.0	97.2			0.603
	Molybdenum	100	98.9	101	101			2.03
	Nickel	103	104	106	103			1.88
	Selenium	103	101	102	78.4			0.496
	Silver	102	101	102	101			0.987
	Thallium	94.8	93.7	94.7	93.7			1.09
EPA 300.0 Rev. 2.1	Chloride	97.8	101	99.6			0.131	
	Sulfate	98.0	96.0	95.5			0.0365	
EPA 350.1 Rev. 2.0	Ammonia-N	96.0	101	100				1.19
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	92.0	97.0				3.25
	Kjeldahl Nitrogen	100	95.7	98.1				1.48
EPA 353.2 Rev. 2.0	NO2NO3-N	99.5	99.5	99.5				0.0
EPA 365.1 Rev. 2.0	Total-P	103	103	102				0.702
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100	98.5	95.8				1.38
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	88.0	84.0	72.7				14.4
	Acetochlor	105	89.0	92.2				3.50
	Alachlor	98.1	78.1	76.6				1.89
	Ametryn	126						10.0
	Atrazine	126						2.46
	Atrazine Desethyl	108	72.6	84.1				11.1
	Avobenzone	99.1	112	96.5				14.8
	Azinphos Methyl	174	129	126				2.41
	Azoxystrobin	124	144	150				3.15
	Bromacil	117	102	87.4				15.4
	Butylate	56.7	46.4	39.1				17.0
	Caffeine	70.1	66.6	68.1				2.27
	Carbophenothion	99.0	84.1	80.2				4.70
	Carfentrazone Ethyl	108	81.6	85.2				4.31
	Chlorfenapyr	91.5	80.3	74.3				7.82

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Ethyl	99.5	81.4	79.4			2.40
	Chlorpyrifos Methyl	116	103	102			0.392
	Coumaphos	108	83.7	83.7			0.0003
	Cyanazine	187	169	148			12.9
	Cyprodinil	142	121	114			5.85
	Dechlorane Plus	99.8	84.2	65.8			24.4
	Demeton	87.2	94.0	94.8			0.879
	Diazinon	108	104	105			0.778
	Difenoconazole	198	151	132			13.3
	Dimethenamid	87.1	73.8	69.0			6.72
	Dimethomorph	181	207	175			16.7
	Disulfoton	100	110	114			3.70
	Dithiopyr	95.5	84.5	79.2			6.52
	EPTC	56.2	42.0	43.6			3.93
	Ethion	93.8	58.0	55.1			5.17
	Ethoprop	109	116	119			2.59
	Etridiazole	68.2	59.9	56.8			5.31
	Fenamiphos	103	82.3	77.1			6.55
	Fenbuconazole	147	122	104			15.5
	Fipronil	97.9	88.3	85.5			3.19
	Fipronil Desulfinyl	102	94.7	88.7			6.54
	Fipronil Sulfide	85.3	80.6	73.8			8.77
	Fipronil Sulfone	88.1	68.4	64.5			5.80
	Fluazifop-P-butyl	98.6	88.5	82.5			7.01
	Fludioxonil	99.7	88.3	76.7			14.0
	Flumioxazin	182	188	164			14.0
	Flutolanil	103	83.9	83.4			0.475
	Fluxapyroxad	128	102	88.8			12.0
	Fonofos	101	106	105			1.18
	Hexazinone	119	106	107			0.516
	Imazalil	129	137	126			8.27
	Iprodione	106	84.7	77.8			8.44
	Loratadine	107	163	176			7.90
	Malathion	108	95.5	91.0			4.85
	Metalaxyl	97.6	81.9	83.0			1.23
	Metolachlor	90.9	78.8	78.7			0.111
	Metribuzin	119					1.22
	Mevinphos	106	114	111			3.32
	Molinate	69.8	64.8	63.0			2.91
	Myclobutanil	97.9	84.8	86.1			1.60
	Naled	88.5	84.8	77.5			8.96
	Napropamide	121	100	86.2			15.0
	Norflurazon	125	101	88.2			11.3
	Octinoxate	78.1	80.6	67.9			17.1
	Oxadiazon	107	93.6	92.1			1.55
	Oxybenzone	77.9	80.9	68.7			16.2
	Oxyfluorfen	118	123	118			4.79
	Parathion Ethyl	113	110	109			0.686
	Parathion Methyl	131	189	185			2.46
	PBDE-47	77.1	72.7	54.3			29.0
	PBDE-99	82.0	77.1	65.8			15.9
	Pendimethalin	88.2	123	125			1.41
	Phenytol	42.3	34.6	28.9			18.0
	Phorate	104	104	104			0.0915

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Prodiamine	49.0	69.9	61.3			13.0
	Prometon	121	67.1	62.3			7.35
	Prometryn	101	92.1	87.4			4.88
	Pronamide	107	104	99.8			4.29
	Propanil	128	110	90.3			19.9
	Propargite	123	86.6	77.3			11.3
	Propiconazole	94.5	91.1	94.2			3.38
	Pyraflufen Ethyl	124	91.9	82.5			10.8
	Pyridaben	145	137	126			8.29
	Pyriproxyfen	139	98.0	84.1			15.3
	Simazine	92.7	104	98.3			5.91
	Stirophos	141	95.6	79.8			17.9
	Sulfentrazone	61.3	102	87.9			13.1
	Tebuconazole	94.1	58.7	50.2			15.6
	Terbufos	114	121	122			1.19
	Terbuthylazine	89.6	87.4	84.5			3.34
	Thiobencarb	88.1	76.9	73.4			4.59
	Tri-o-cresyl Phosphate	80.9	81.5	68.7			17.1
	Triadimefon	87.0	72.3	67.8			6.46
EPA 8321B	2,4-D	77.3	82.5	83.5			1.19
	2,4,5-T	78.5	82.2	84.3			2.56
	Acesulfame K	97.0	65.5	58.1			11.8
	Acetaminophen	103	98.7	102			3.18
	Acetamiprid	81.2	87.4	85.4			2.25
	Afidopyropen	60.1	70.9	72.9			2.76
	AMPA	90.7	78.4	77.8			0.815
	Bentazon	102	88.8	96.2			6.09
	Benzovindiflupyr	92.9	85.5	84.3			1.41
	Carbamazepine	95.3	89.1	90.5			1.56
	Clothianidin	106	98.6	98.7			0.0828
	Dinotefuran	105	97.8	97.3			0.464
	Diuron	92.2	78.1	80.2			2.62
	Endothall	101	107	106			0.813
	Fenuron	112	102	99.8			2.23
	Fluridone	99.2	91.0	90.2			0.911
	Glufosinate	96.9	97.2	97.3			0.0448
	Glyphosate	96.7	97.3	103			5.56
	Hydrocodone	105	93.5	95.4			2.02
	Ibuprofen	66.5	68.8	67.1			2.57
	Imazapyr	89.6	91.3	87.5			4.20
	Imidacloprid	114	116	109			6.24
	Linuron	84.8	78.3	82.3			4.90
	Mandestrobin	94.8	88.4	84.1			4.93
	MCPP	90.0	95.7	93.6			2.28
	Naproxen	63.5	84.8	96.4			12.8
	Primidone	103	92.1	89.5			2.92
	Pyraclostrobin	89.5	63.3	76.6			19.1
	Silvex	78.9	80.0	84.4			5.31
	Sucralose	94.9	83.2	101			18.4
	Thiamethoxam	101	96.9	96.4			0.476
	Tolfenpyrad	42.6	37.6	47.7			23.9
	Triclopyr	90.0	91.5	88.0			3.96
SM 2320 B-2011	Total Alkalinity	96.8				1.80	
SM 2540 C-2015	TDS	98.0				6.45	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
SM 2540 D-2015	TSS	94.8				
SM 4500-F- C-2011	Fluoride	102	100	98.6		0.966
SM 5310 B-2011	Organic Carbon	98.2	98.1	99.2		0.712

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2374108, 2374111
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2374108, 2374111
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2374118
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2374118
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2374108, 2374111
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2374108, 2374111
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2374109, 2374112
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2374109, 2374112
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2374109, 2374112
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2374109, 2374112
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2374110
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2374120
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2374120
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2374117
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2374108, 2374111
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2374118
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2374108, 2374111
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2374108, 2374111
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2374108, 2374111
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2374109, 2374112

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	12/09/2022			12/09/2022 10:36	Chandler E Cox	2374108
	12/09/2022			12/09/2022 10:37	Chandler E Cox	2374111
EPA 180.1 Rev. 2.0	12/09/2022			12/09/2022 10:29	Anna M. Plaviak	2374108
	12/09/2022			12/09/2022 10:35	Anna M. Plaviak	2374111
EPA 200.7 Rev. 4.4	12/09/2022	12/12/2022 12:45	George D Taylor	12/16/2022 19:44	Betina Topolski	2374118
EPA 200.8 Rev. 5.4	12/09/2022	12/12/2022 12:45	George D Taylor	12/16/2022 07:01	Emily M Philpot	2374118
EPA 300.0 Rev. 2.1	12/09/2022			12/15/2022 15:06	Anna M. Plaviak	2374108
	12/09/2022			12/15/2022 15:21	Anna M. Plaviak	2374111
EPA 350.1 Rev. 2.0	12/09/2022			12/16/2022 13:40	Ping Hua	2374112
	12/09/2022			12/16/2022 13:48	Ping Hua	2374109
EPA 351.2 Rev. 2.0	12/09/2022	12/13/2022 13:13	Samantha L Bates	12/14/2022 16:44	Samantha L Bates	2374109
	12/09/2022	12/13/2022 13:13	Samantha L Bates	12/14/2022 17:18	Samantha L Bates	2374112
EPA 353.2 Rev. 2.0	12/09/2022			12/13/2022 10:29	Beverly Y. Sanders	2374109
	12/09/2022			12/13/2022 10:39	Beverly Y. Sanders	2374112
EPA 365.1 Rev. 2.0	12/09/2022	12/13/2022 09:50	Simonne.V. Calhoun	12/14/2022 13:25	James L Waggeberby	2374109, 2374112
EPA 365.1 Rev. 2.0 dissolved	12/09/2022			12/09/2022 11:58	Elise M. Gillis	2374110
EPA 8270E	12/09/2022	12/12/2022 08:30	Rasheda Ghaffari	12/15/2022 20:11	Arthur Maknenko	2374120
	12/09/2022	12/12/2022 08:30	Rasheda Ghaffari	12/17/2022 21:25	Michael Poppell	2374120
	12/09/2022	12/12/2022 08:30	Rasheda Ghaffari	12/24/2022 05:02	Michael Poppell	2374120
EPA 8321B	12/09/2022	12/13/2022 13:15	Manjita Shrestha	12/13/2022 14:16	Manjita Shrestha	2374117
	12/09/2022	12/13/2022 13:15	Manjita Shrestha	12/13/2022 22:54	Manjita Shrestha	2374117
	12/09/2022	12/14/2022 09:30	June Rhew	12/15/2022 05:29	Juyoung Kim	2374117
SM 2320 B-2011	12/09/2022			12/17/2022 10:34	Dale L. Simmons	2374108
	12/09/2022			12/17/2022 10:44	Dale L. Simmons	2374111
SM 2340 B-2011	12/09/2022			12/16/2022 19:44	Betina Topolski	2374118
SM 2540 C-2015	12/09/2022			12/13/2022 14:45	Yijie Li	2374108, 2374111
SM 2540 D-2015	12/09/2022			12/13/2022 14:45	Yijie Li	2374108, 2374111
SM 4500-F- C-2011	12/09/2022			12/17/2022 10:34	Dale L. Simmons	2374108
	12/09/2022			12/17/2022 10:44	Dale L. Simmons	2374111
SM 5310 B-2011	12/09/2022			12/15/2022 19:51	Khloe J Berg	2374109
	12/09/2022			12/15/2022 20:08	Khloe J Berg	2374112