

Chemical Analysis Report

NE-DIST-2023-04-07-02

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

Event Description: **LSJR South Lake 2023**
Request ID: **RQ-2023-03-27-20**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 28-APR-2023 08:38

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light pink 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: 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: LAKE BROWARD SOUTH

Collection Date/Time: 04/06/2023 10:10

Field ID: G2NE1218

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399012	DEP SOP: NU-094-1	Color (true)	22		PCU	P428214	
	EPA 180.1 Rev. 2.0	Turbidity	0.85	I	NTU	P428210	
	EPA 300.0 Rev. 2.1	Chloride	14		mg Cl/L	P428574	
		Sulfate	8.6		mg SO4/L	P428577	
	SM 2320 B-2011	Total Alkalinity	4.0		mg CaCO3/L	P428357	
	SM 2540 C-2015	TDS	50		mg/L	P428708	
	SM 2540 D-2015	TSS	2	I	mg/L	P428570	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P428728	
2399014	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P428454	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.43		mg N/L	P428678	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P428639	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P428246	
	SM 5310 B-2011	Organic Carbon	6.3		mg C/L	P428294	

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: SILVER LAKE CENTER

Collection Date/Time: 04/06/2023 10:55

Field ID: G2NE1132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399013	DEP SOP: NU-094-1	Color (true)	300		PCU	P428214	
	EPA 180.1 Rev. 2.0	Turbidity	0.65	I	NTU	P428210	
	EPA 300.0 Rev. 2.1	Chloride	12		mg Cl/L	P428574	
		Sulfate	2.9		mg SO4/L	P428577	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P428357	
	SM 2540 C-2015	TDS	82		mg/L	P428708	
	SM 2540 D-2015	TSS	2	U	mg/L	P428570	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P428728	
2399015	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P428454	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P428678	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.049		mg N/L	P428639	
	EPA 365.1 Rev. 2.0	Total-P	0.028		mg P/L	P428246	
	SM 5310 B-2011	Organic Carbon	24		mg C/L	P428294	

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: BULL CREEK DITCH DOWNSTREAM OF EAST DITCH **Collection Date/Time: 04/06/2023 12:30**

Field ID: G2NE1212

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399019	EPA 8276	Chlordane	2.1	U	ng/L	P428223	
		Toxaphene	16	U	ng/L	P428223	
2399020	EPA 8270E	Acetochlor	0.21	U	ng/L	P428317	
		Alachlor	0.42	U	ng/L	P428317	
		Ametryn	7.3		ng/L	P428317	
		Atrazine	26		ng/L	P428317	
		Atrazine Desethyl	14		ng/L	P428317	
		Azinphos Methyl	3.2	U	ng/L	P428317	
		Azoxystrobin	110		ng/L	P428317	
		Bromacil	0.63	U	ng/L	P428317	
		Butylate	0.21	U	ng/L	P428317	
		Caffeine**	17	IV	ng/L	P428317	
		Carbophenothion	0.53	U	ng/L	P428317	
		Carfentrazone Ethyl	0.16	U	ng/L	P428317	
		Chlorfenapyr	0.32	U	ng/L	P428317	
		Chlorpyrifos Ethyl	0.32	U	ng/L	P428317	
		Chlorpyrifos Methyl	0.11	U	ng/L	P428317	
		Coumaphos	1.1	U	ng/L	P428317	
		Cyanazine	5.3	U	ng/L	P428317	
		Cyprodinil	4.1	J	ng/L	P428317	MS
		Demeton	3.7	U	ng/L	P428317	
		Diazinon	0.13	U	ng/L	P428317	
		Difenoconazole	13		ng/L	P428317	
		Dimethenamid	0.11	U	ng/L	P428317	
		Dimethomorph	0.32	U	ng/L	P428317	
		Disulfoton	0.63	U	ng/L	P428317	
		Dithiopyr	2.0	I	ng/L	P428317	
		EPTC	0.53	U	ng/L	P428317	
		Ethion	0.32	U	ng/L	P428317	
		Ethoprop	0.13	U	ng/L	P428317	
		Etridiazole	0.11	U	ng/L	P428317	
		Fenamiphos	0.47	U	ng/L	P428317	
		Fenbuconazole	0.53	U	ng/L	P428317	
		Fipronil	28		ng/L	P428317	
		Fipronil Desulfinyl**	16		ng/L	P428317	
		Fipronil Sulfide	18		ng/L	P428317	
		Fipronil Sulfone	46		ng/L	P428317	
		Fluazifop-P-butyl	0.11	U	ng/L	P428317	
		Fludioxonil	180		ng/L	P428317	
		Flumioxazin	3.2	U	ng/L	P428317	
		Flutolanil	0.11	U	ng/L	P428317	
		Fluxapyroxad	0.26	U	ng/L	P428317	
		Fonofos	0.16	U	ng/L	P428317	

Field ID: G2NE1212

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2399020	EPA 8270E	Hexazinone	0.53	U	ng/L	P428317	
		Imazalil	0.68	U	ng/L	P428317	
		Iprodione	0.53	U	ng/L	P428317	
		Loratadine**	0.32	U	ng/L	P428317	
		Malathion	0.37	U	ng/L	P428317	
		Metalaxyl	4.8	J	ng/L	P428317	MS
		Metolachlor	210		ng/L	P428317	
		Metribuzin	35		ng/L	P428317	
		Mevinphos	1.1	U	ng/L	P428317	
		Molinate	0.26	U	ng/L	P428317	
		Myclobutanil	0.37	U	ng/L	P428317	
		Naled	2.6	U	ng/L	P428317	
		Napropamide	1.5	I	ng/L	P428317	
		Norflurazon	1.1	U	ng/L	P428317	
		Oxadiazon	300	J	ng/L	P428317	RPD
		Oxyfluorfen	9.1		ng/L	P428317	
		Parathion Ethyl	0.16	U	ng/L	P428317	
		Parathion Methyl	0.21	U	ng/L	P428317	
		Pendimethalin	4.7		ng/L	P428317	
		Phenytol**	5.6	U	ng/L	P428317	
		Phorate	0.26	U	ng/L	P428317	
		Prodiamine	0.24	I	ng/L	P428317	
		Prometon	3.2	U	ng/L	P428317	
		Prometryn	0.37	U	ng/L	P428317	
		Pronamide	0.11	U	ng/L	P428317	
		Propanil	0.11	U	ng/L	P428317	
		Propargite	0.84	U	ng/L	P428317	
		Propiconazole	0.63	U	ng/L	P428317	
		Pyraflufen Ethyl	0.32	U	ng/L	P428317	
		Pyridaben	1.5	U	ng/L	P428317	
		Pyriproxyfen	0.26	U	ng/L	P428317	
		Simazine	13		ng/L	P428317	
		Stirophos	0.42	U	ng/L	P428317	
		Sulfentrazone	1.5	U	ng/L	P428317	
		Tebuconazole	1.5	U	ng/L	P428317	
		Terbufos	0.21	U	ng/L	P428317	
		Terbuthylazine	0.21	U	ng/L	P428317	
		Thiobencarb	0.53	U	ng/L	P428317	
		Triadimefon	0.16	U	ng/L	P428317	

Ref. Method and Comment:

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked. V - Due to the presence of caffeine in both the Method Blank and the sample. 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: P428214

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428210

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428574

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428577

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428454

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428678

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428639

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428246

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

Reference Method: EPA 8270E
Batch ID: P428317

Component	Result	Code	Units
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428317

Component	Result	Code	Units
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	10	I	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	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	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P428317

Component	Result	Code	Units
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P428317

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Phenytol	5.3	U	ng/L
Phenytol	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiatone	0.20	U	ng/L
Prodiatone	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P428223

Component	Result	Code	Units
Chlordane	2.0	U	ng/L
Chlordane	2.0	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Reference Method: SM 2320 B-2011
Batch ID: P428357

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-2015
Batch ID: P428708

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P428570

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P428728

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P428294

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: P428214

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428210

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	98.5		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428574

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428577

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428454

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	92.8		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428678

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428639

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428246

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	98.5		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P428317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	92.6		P	69 - 123
Alachlor	88.3		P	65 - 118
Ametryn	132		P	58 - 141
Atrazine	107		P	73 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	107		P	32 - 125
Azinphos Methyl	67.0		P	36 - 197
Azoxystrobin	103		P	58 - 226
Bromacil	104		P	48 - 120
Butylate	53.4		P	27 - 85.0
Caffeine	93.0		P	40 - 137
Carbophenothion	86.5		P	54 - 132
Carfentrazone Ethyl	119		P	60 - 142
Chlorfenapyr	96.6		P	53 - 117
Chlorpyrifos Ethyl	78.9		P	59 - 116
Chlorpyrifos Methyl	77.0		P	66 - 119
Coumaphos	79.7		P	11 - 234
Cyanazine	190		P	61 - 248
Cyprodinil	96.5		P	50 - 147
Demeton	67.7		P	30 - 138
Diazinon	99.7		P	67 - 126
Difenoconazole	82.0		P	38 - 205
Dimethenamid	93.0		P	57 - 111
Dimethomorph	90.7		P	16 - 212
Disulfoton	71.7		P	46 - 126
Dithiopyr	89.7		P	62 - 115
EPTC	54.8		P	28 - 80.0
Ethion	75.4		P	24 - 122
Ethoprop	71.6		P	62 - 113
Etridiazole	64.5		P	28 - 92.0
Fenamiphos	116		P	57 - 128
Fenbuconazole	118		P	52 - 155
Fipronil	104		P	63 - 130
Fipronil Desulfinyl	83.3		P	61 - 130
Fipronil Sulfide	86.6		P	56 - 117
Fipronil Sulfone	96.0		P	52 - 118
Fluazifop-P-butyl	117		P	61 - 128
Fludioxonil	120		P	59 - 129
Flumioxazin	134		P	30 - 250
Flutolanil	85.2		P	53 - 127
Fluxapyroxad	97.3		P	42 - 132
Fonofos	108		P	61 - 110
Hexazinone	97.0		P	46 - 139
Imazalil	105		P	40 - 139
Iprodione	87.3		P	40 - 146
Loratadine	75.5		P	10 - 224
Malathion	100		P	61 - 135
Metaxyl	93.2		P	58 - 121
Metolachlor	108		P	64 - 118
Metribuzin	101		P	45 - 245
Mevinphos	62.7		P	49 - 118
Molinate	72.8		P	42 - 92.0
Myclobutanil	119		P	55 - 127
Naled	60.9		P	10 - 114
Napropamide	85.4		P	39 - 121
Norflurazon	127		P	55 - 129
Oxadiazon	101		P	54 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P428317

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Oxyfluorfen	116		P	64 - 139
Parathion Ethyl	86.2		P	70 - 111
Parathion Methyl	105		P	76 - 136
Pendimethalin	106		P	52 - 118
Phenytoin	97.3		P	10 - 162
Phorate	79.3		P	40 - 122
Prodiamine	52.4		P	26 - 141
Prometon	87.4		P	54 - 122
Prometryn	118		P	61 - 128
Pronamide	108		P	72 - 121
Propanil	90.2		P	45 - 144
Propargite	103		P	10 - 199
Propiconazole	93.4		P	56 - 127
Pyraflufen Ethyl	110		P	56 - 140
Pyridaben	136		P	26 - 211
Pyriproxyfen	51.9		P	33 - 194
Simazine	103		P	67 - 121
Stirophos	86.7		P	20 - 142
Sulfentrazone	96.2		P	21 - 144
Tebuconazole	68.6		P	10 - 122
Terbufos	73.8		P	60 - 129
Terbutylazine	88.6		P	69 - 113
Thiobencarb	114		P	51 - 120
Triadimefon	95.2		P	56 - 114

Reference Method: EPA 8276
Batch ID: P428223

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	63.9		P	61 - 116
Toxaphene	70.2		P	48 - 124

Reference Method: SM 2320 B-2011
Batch ID: P428357

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	94.9		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P428708

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TDS	96.8		P	90 - 110

Reference Method: SM 2540 D-2015
Batch ID: P428570

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	96.4		P	85 - 106

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P428728

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

Reference Method: SM 5310 B-2011
Batch ID: P428294

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	99.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398874	Chloride	98.0		P	90 - 110
2399038	Chloride	98.8		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398874	Sulfate	96.1		P	90 - 110
2399038	Sulfate	96.3		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428454

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399008	Ammonia-N	98.8	99.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428678

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399040	Kjeldahl Nitrogen	107	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428639

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399014	NO2NO3-N	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428246

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398990	Total-P	102	102	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P428317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399020	Acetochlor	67.1	72.7	P/P	67 - 124
2399020	Alachlor	95.6	103	P/P	60 - 120
2399020	Ametryn	153	186	P/P	54 - 216
2399020	Atrazine Desethyl	74.9	73.1	P/P	15 - 122
2399020	Azinphos Methyl	62.2	82.2	P/P	40 - 292
2399020	Bromacil	88.4	98.6	P/P	45 - 127
2399020	Butylate	32.3	38.7	P/P	20 - 83.0
2399020	Caffeine	90.7	96.4	P/P	10 - 194
2399020	Carbophenothion	63.3	65.4	P/P	57 - 127
2399020	Carfentrazone Ethyl	97.3	126	P/P	51 - 141
2399020	Chlorfenapyr	75.7	74.3	P/P	46 - 111
2399020	Chlorpyrifos Ethyl	65.6	68.2	P/P	52 - 120
2399020	Chlorpyrifos Methyl	74.1	75.5	P/P	63 - 119
2399020	Coumaphos	69.7	75.4	P/P	10 - 228

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P428317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399020	Cyanazine	179	213	P/P	59 - 241
2399020	Cyprodinil	41.2	47.9	F/P	47 - 146
2399020	Demeton	96.6	94.2	P/P	40 - 136
2399020	Diazinon	111	106	P/P	69 - 132
2399020	Difenoconazole	60.6	72.8	P/P	57 - 258
2399020	Dimethenamid	92.8	92.5	P/P	54 - 110
2399020	Dimethomorph	105	129	P/P	28 - 210
2399020	Disulfoton	76.6	73.3	P/P	43 - 133
2399020	Dithiopyr	88.2	89.1	P/P	39 - 116
2399020	EPTC	40.2	40.0	P/P	20 - 78.0
2399020	Ethion	63.9	63.4	P/P	17 - 119
2399020	Ethoprop	87.2	78.2	P/P	66 - 120
2399020	Etridiazole	56.6	60.4	P/P	28 - 96.0
2399020	Fenamiphos	69.5	73.8	P/P	41 - 126
2399020	Fenbuconazole	98.7	94.7	P/P	42 - 169
2399020	Fluazifop-P-butyl	102	96.5	P/P	53 - 131
2399020	Flumioxazin	118	108	P/P	19 - 300
2399020	Flutolanil	81.2	84.8	P/P	41 - 127
2399020	Fluxapyroxad	116	151	P/P	42 - 172
2399020	Fonofos	106	108	P/P	59 - 113
2399020	Hexazinone	90.7	94.5	P/P	66 - 122
2399020	Imazalil	92.6	85.9	P/P	21 - 283
2399020	Iprodione	70.3	61.3	P/P	43 - 150
2399020	Loratadine	75.9	85.5	P/P	23 - 201
2399020	Malathion	86.3	79.3	P/P	58 - 136
2399020	Metalaxyl	120	160	F/F	55 - 120
2399020	Mevinphos	63.5	57.6	P/P	50 - 126
2399020	Molinate	73.1	68.8	P/P	42 - 93.0
2399020	Myclobutanil	88.2	85.4	P/P	55 - 125
2399020	Naled	63.4	64.8	P/P	18 - 200
2399020	Napropamide	79.1	89.0	P/P	39 - 110
2399020	Norflurazon	83.9	83.3	P/P	48 - 128
2399020	Parathion Ethyl	98.6	92.6	P/P	69 - 114
2399020	Parathion Methyl	90.9	95.3	P/P	79 - 139
2399020	Pendimethalin	129	131	P/P	50 - 139
2399020	Phenytol	79.0	102	P/P	10 - 146
2399020	Phorate	103	109	P/P	54 - 161
2399020	Prodiamine	61.5	91.0	P/P	30 - 161
2399020	Prometon	82.0	90.9	P/P	45 - 134
2399020	Prometryn	99.0	106	P/P	45 - 137
2399020	Pronamide	106	104	P/P	65 - 133
2399020	Propanil	87.9	114	P/P	49 - 142
2399020	Propargite	80.5	93.0	P/P	10 - 203
2399020	Propiconazole	80.2	86.4	P/P	38 - 146
2399020	Pyraflufen Ethyl	112	124	P/P	34 - 153
2399020	Pyridaben	134	173	P/P	12 - 192
2399020	Pyriproxyfen	48.5	63.9	P/P	33 - 180
2399020	Simazine	78.9	75.3	P/P	51 - 157
2399020	Stirophos	52.5	46.3	P/P	10 - 128
2399020	Sulfentrazone	70.0	71.0	P/P	53 - 186
2399020	Tebuconazole	52.7	50.1	P/P	10 - 133
2399020	Terbufos	80.9	93.6	P/P	65 - 139

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P428317

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2399020	Terbutylazine	79.9	85.9	P/P	66 - 117
2399020	Thiobencarb	85.4	87.4	P/P	51 - 119
2399020	Triadimefon	79.7	85.0	P/P	48 - 119

Reference Method: EPA 8276
Batch ID: P428223

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398276	Chlordane	68.7	71.8	P/P	53 - 126
2398276	Toxaphene	77.2	77.5	P/P	56 - 211

Reference Method: SM 4500-F- C-2011
Batch ID: P428728

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398875	Fluoride	101	101	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P428294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2398896	Organic Carbon	95.0	96.7	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P428214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398984	Color (true)	2.01	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P428210

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399038	Turbidity	4.31	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398874	Chloride	1.19	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P428577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398874	Sulfate	0.165	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P428454

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399008	Ammonia-N	0.927	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P428678

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399040	Kjeldahl Nitrogen	1.92	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P428639

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399014	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P428246

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398990	Total-P	0.137	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P428317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399020	Acetochlor	8.01	Spike	P	0 - 28
2399020	Alachlor	7.19	Spike	P	0 - 30
2399020	Ametryn	14.8	Spike	P	0 - 32
2399020	Atrazine	9.02	Spike	P	0 - 41
2399020	Atrazine Desethyl	1.39	Spike	P	0 - 36
2399020	Azinphos Methyl	27.7	Spike	P	0 - 75
2399020	Azoxystrobin	1.68	Spike	P	0 - 39
2399020	Bromacil	10.9	Spike	P	0 - 33
2399020	Butylate	17.8	Spike	P	0 - 44
2399020	Caffeine	4.56	Spike	P	0 - 74
2399020	Carbophenothion	3.28	Spike	P	0 - 25
2399020	Carfentrazone Ethyl	25.9	Spike	P	0 - 27
2399020	Chlorfenapyr	1.78	Spike	P	0 - 24
2399020	Chlorpyrifos Ethyl	4.00	Spike	P	0 - 26
2399020	Chlorpyrifos Methyl	1.86	Spike	P	0 - 26
2399020	Coumaphos	7.84	Spike	P	0 - 28
2399020	Cyanazine	17.2	Spike	P	0 - 48
2399020	Cyprodinil	4.09	Spike	P	0 - 29
2399020	Demeton	2.48	Spike	P	0 - 33
2399020	Diazinon	4.87	Spike	P	0 - 29
2399020	Difenoconazole	7.61	Spike	P	0 - 34
2399020	Dimethenamid	0.334	Spike	P	0 - 39
2399020	Dimethomorph	20.5	Spike	P	0 - 51
2399020	Disulfoton	4.40	Spike	P	0 - 30
2399020	Dithiopyr	0.823	Spike	P	0 - 26
2399020	EPTC	0.447	Spike	P	0 - 43
2399020	Ethion	0.718	Spike	P	0 - 79
2399020	Ethoprop	10.9	Spike	P	0 - 29
2399020	Etridiazole	6.57	Spike	P	0 - 33
2399020	Fenamiphos	5.97	Spike	P	0 - 40
2399020	Fenbuconazole	4.18	Spike	P	0 - 74
2399020	Fipronil	16.7	Spike	P	0 - 29
2399020	Fipronil Desulfinyl	4.21	Spike	P	0 - 32
2399020	Fipronil Sulfide	19.1	Spike	P	0 - 30
2399020	Fipronil Sulfone	6.70	Spike	P	0 - 33
2399020	Fluazifop-P-butyl	5.18	Spike	P	0 - 38
2399020	Fludioxonil	19.2	Spike	P	0 - 29
2399020	Flumioxazin	8.65	Spike	P	0 - 51
2399020	Flutolanil	4.41	Spike	P	0 - 25
2399020	Fluxapyroxad	26.3	Spike	P	0 - 45
2399020	Fonofos	1.86	Spike	P	0 - 27
2399020	Hexazinone	4.09	Spike	P	0 - 30
2399020	Imazalil	7.57	Spike	P	0 - 100
2399020	Iprodione	13.6	Spike	P	0 - 33
2399020	Loratadine	11.9	Spike	P	0 - 56
2399020	Malathion	8.41	Spike	P	0 - 37
2399020	Metalaxyl	19.0	Spike	P	0 - 40
2399020	Metolachlor	17.3	Spike	P	0 - 29
2399020	Metribuzin	8.48	Spike	P	0 - 45
2399020	Mevinphos	9.71	Spike	P	0 - 29
2399020	Molinate	6.05	Spike	P	0 - 33

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P428317

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2399020	Myclobutanil	3.27	Spike	P	0 - 26
2399020	Naled	2.18	Spike	P	0 - 37
2399020	Napropamide	10.4	Spike	P	0 - 44
2399020	Norflurazon	0.701	Spike	P	0 - 30
2399020	Oxadiazon	30.2	Spike	F	0 - 28
2399020	Oxyfluorfen	14.5	Spike	P	0 - 28
2399020	Parathion Ethyl	6.25	Spike	P	0 - 31
2399020	Parathion Methyl	4.74	Spike	P	0 - 29
2399020	Pendimethalin	1.11	Spike	P	0 - 33
2399020	Phenytoin	25.5	Spike	P	0 - 100
2399020	Phorate	5.13	Spike	P	0 - 36
2399020	Prodiamine	35.4	Spike	P	0 - 71
2399020	Prometon	10.4	Spike	P	0 - 36
2399020	Prometryn	6.99	Spike	P	0 - 28
2399020	Pronamide	2.32	Spike	P	0 - 24
2399020	Propanil	25.7	Spike	P	0 - 28
2399020	Propargite	14.3	Spike	P	0 - 43
2399020	Propiconazole	7.38	Spike	P	0 - 33
2399020	Pyraflufen Ethyl	9.77	Spike	P	0 - 29
2399020	Pyridaben	25.6	Spike	P	0 - 30
2399020	Pyriproxyfen	27.4	Spike	P	0 - 79
2399020	Simazine	1.36	Spike	P	0 - 29
2399020	Stirophos	12.5	Spike	P	0 - 61
2399020	Sulfentrazone	1.49	Spike	P	0 - 33
2399020	Tebuconazole	5.09	Spike	P	0 - 69
2399020	Terbufos	14.5	Spike	P	0 - 29
2399020	Terbuthylazine	7.13	Spike	P	0 - 32
2399020	Thiobencarb	2.29	Spike	P	0 - 26
2399020	Triadimefon	6.41	Spike	P	0 - 28

Reference Method: EPA 8276
Batch ID: P428223

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398276	Chlordane	4.49	Spike	P	0 - 25
2398276	Toxaphene	0.385	Spike	P	0 - 26

Reference Method: SM 2320 B-2011
Batch ID: P428357

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398875	Total Alkalinity	2.12	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P428708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398876	TDS	6.33	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P428728

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398875	Fluoride	0.0	Spike	P	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P428294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2398896	Organic Carbon	1.70	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2399019
Field Sample ID: G2NE1212

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	87.9	P	30 - 101
EPA 8276	PCNB	95.1	P	48 - 121

Lab Sample ID: 2399020
Field Sample ID: G2NE1212

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	110	P	20 - 200
EPA 8270E	Simazine-d10	116	P	62 - 142
EPA 8270E	Terbufos-d10	79.6	P	58 - 132

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A118453

Included Lab Sample IDs: 2399012, 2399013

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

Reference Method: DEP SOP: NU-094-1

Run ID: A118455

Included Lab Sample IDs: 2399012, 2399013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	102	P/P	90 - 110
Color (true)	101	101	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A118486

Included Lab Sample IDs: 2399014, 2399015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	99.0	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A118506

Included Lab Sample IDs: 2399014, 2399015

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

Reference Method: SM 2320 B-2011

Run ID: A118519

Included Lab Sample IDs: 2399012, 2399013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.3	94.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A118557

Included Lab Sample IDs: 2399014, 2399015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.5	96.8	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A118599

Included Lab Sample IDs: 2399019

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	90.9		P	80 - 120
Toxaphene	87.2		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118603

Included Lab Sample IDs: 2399012, 2399013

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A118603

Included Lab Sample IDs: 2399012, 2399013

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	95.6	97.6	P/P	90 - 110
Sulfate	95.3	97.0	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A118620

Included Lab Sample IDs: 2399020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alachlor	89.9		P	80 - 120
Ametryn	90.8		P	80 - 120
Atrazine	104		P	80 - 120
Atrazine Desethyl	104		P	80 - 120
Azinphos Methyl	98.0		P	80 - 120
Azoxystrobin	97.1		P	80 - 120
Butylate	94.5		P	80 - 120
Carbophenothion	92.7		P	80 - 120
Carfentrazone Ethyl	86.7		P	80 - 120
Chlorpyrifos Methyl	99.3		P	80 - 120
Coumaphos	80.3		P	80 - 120
Cyanazine	94.5		P	80 - 120
Demeton	96.1		P	80 - 120
Difenoconazole	93.1		P	80 - 120
Dimethomorph	85.5		P	80 - 120
Disulfoton	106		P	80 - 120
EPTC	91.4		P	80 - 120
Ethion	87.5		P	80 - 120
Ethoprop	98.8		P	80 - 120
Etridiazole	90.4		P	80 - 120
Fenamiphos	102		P	80 - 120
Fenbuconazole	89.8		P	80 - 120
Fipronil	101		P	80 - 120
Fipronil Desulfinyl	103		P	80 - 120
Fipronil Sulfide	102		P	80 - 120
Fipronil Sulfone	89.4		P	80 - 120
Fluazifop-P-butyl	103		P	80 - 120
Flumioxazin	80.2		P	80 - 120
Flutolanil	103		P	80 - 120
Fluxapyroxad	82.2		P	80 - 120
Hexazinone	96.7		P	80 - 120
Imazalil	97.1		P	80 - 120
Loratadine	93.8		P	80 - 120
Metalaxyl	84.6		P	80 - 120
Metribuzin	94.9		P	80 - 120
Mevinphos	93.9		P	80 - 120
Molinate	109		P	80 - 120
Naled	97.2		P	80 - 120
Napropamide	110		P	80 - 120
Oxyfluorfen	87.2		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Phenytoin	95.9		P	80 - 120
Phorate	108		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118620
Included Lab Sample IDs: 2399020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prodiamine	85.9		P	80 - 120
Propanil	94.2		P	80 - 120
Propargite	86.1		P	80 - 120
Propiconazole	99.7		P	80 - 120
Pyraflufen Ethyl	114		P	80 - 120
Pyridaben	81.9		P	80 - 120
Pyriproxyfen	103		P	80 - 120
Simazine	106		P	80 - 120
Stirophos	103		P	80 - 120
Sulfentrazone	84.9		P	80 - 120
Terbufos	106		P	80 - 120
Triadimefon	83.9		P	80 - 120

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A118639
Included Lab Sample IDs: 2399014, 2399015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	102	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A118673
Included Lab Sample IDs: 2399012, 2399013

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

Reference Method: EPA 8270E
Run ID: A118677
Included Lab Sample IDs: 2399020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	84.8		P	80 - 120
Bromacil	101		P	80 - 120
Caffeine	104		P	80 - 120
Chlorfenapyr	83.3		P	80 - 120
Chlorpyrifos Ethyl	88.4		P	80 - 120
Cyprodinil	101		P	80 - 120
Diazinon	99.5		P	80 - 120
Dimethenamid	97.6		P	80 - 120
Dithiopyr	101		P	80 - 120
Fludioxonil	97.2		P	80 - 120
Fonofos	103		P	80 - 120
Iprodione	84.5		P	80 - 120
Malathion	84.3		P	80 - 120
Metolachlor	101		P	80 - 120
Myclobutanil	88.2		P	80 - 120
Norflurazon	97.6		P	80 - 120
Oxadiazon	103		P	80 - 120
Parathion Methyl	87.5		P	80 - 120
Pendimethalin	110		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E
Run ID: A118677
Included Lab Sample IDs: 2399020

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Prometon	103		P	80 - 120
Prometryn	99.0		P	80 - 120
Pronamide	99.7		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbuthylazine	87.3		P	80 - 120
Thiobencarb	103		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A118695
Included Lab Sample IDs: 2399014, 2399015

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	102	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	MS
						SMP	
DEP SOP: NU-094-1	Color (true)	101				2.01	
EPA 180.1 Rev. 2.0	Turbidity	98.5				4.31	
EPA 300.0 Rev. 2.1	Chloride	98.4	98.0	98.8		1.19	
	Sulfate	96.9	96.1	96.3		0.165	
EPA 350.1 Rev. 2.0	Ammonia-N	92.8	98.8	99.8			0.927
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103	107	104			1.92
EPA 353.2 Rev. 2.0	NO ₂ NO ₃ -N	101	101	102			0.494
EPA 365.1 Rev. 2.0	Total-P	98.5	102	102			0.137
EPA 8270E	Acetochlor	92.6	67.1	72.7			8.01
	Alachlor	88.3	95.6	103			7.19
	Ametryn	132	153	186			14.8
	Atrazine	107					9.02
	Atrazine Desethyl	107	74.9	73.1			1.39
	Azinphos Methyl	67.0	62.2	82.2			27.7
	Azoxystrobin	103					1.68
	Bromacil	104	88.4	98.6			10.9
	Butylate	53.4	32.3	38.7			17.8
	Caffeine	93.0	90.7	96.4			4.56
	Carbophenothion	86.5	63.3	65.4			3.28
	Carfentrazone Ethyl	119	97.3	126			25.9
	Chlorfenapyr	96.6	75.7	74.3			1.78
	Chlorpyrifos Ethyl	78.9	65.6	68.2			4.00
	Chlorpyrifos Methyl	77.0	74.1	75.5			1.86
	Coumaphos	79.7	69.7	75.4			7.84
	Cyanazine	190	179	213			17.2
	Cyprodinil	96.5	41.2	47.9			4.09
	Demeton	67.7	96.6	94.2			2.48
	Diazinon	99.7	111	106			4.87
	Difenoconazole	82.0	60.6	72.8			7.61
	Dimethenamid	93.0	92.8	92.5			0.334
	Dimethomorph	90.7	105	129			20.5
	Disulfoton	71.7	73.3	76.6			4.40
	Dithiopyr	89.7	88.2	89.1			0.823
	EPTC	54.8	40.0	40.2			0.447
	Ethion	75.4	63.4	63.9			0.718
	Ethoprop	71.6	78.2	87.2			10.9
	Etridiazole	64.5	60.4	56.6			6.57
	Fenamiphos	116	73.8	69.5			5.97
	Fenbuconazole	118	94.7	98.7			4.18
	Fipronil	104					16.7
	Fipronil Desulfinyl	83.3					4.21
	Fipronil Sulfide	86.6					19.1
	Fipronil Sulfone	96.0					6.70
	Fluazifop-P-butyl	117	96.5	102			5.18
	Fludioxonil	120					19.2
	Flumioxazin	134	108	118			8.65
	Flutolanil	85.2	84.8	81.2			4.41
	Fluxapyroxad	97.3	151	116			26.3
	Fonofos	108	106	108			1.86
	Hexazinone	97.0	94.5	90.7			4.09
	Imazalil	105	85.9	92.6			7.57
	Iprodione	87.3	70.3	61.3			13.6
	Loratadine	75.5	85.5	75.9			11.9
	Malathion	100	86.3	79.3			8.41

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8270E	Metalaxyl	93.2	120	160		19.0
	Metolachlor	108				17.3
	Metribuzin	101				8.48
	Mevinphos	62.7	57.6	63.5		9.71
	Molinate	72.8	68.8	73.1		6.05
	Myclobutanil	119	88.2	85.4		3.27
	Naled	60.9	64.8	63.4		2.18
	Napropamide	85.4	89.0	79.1		10.4
	Norflurazon	127	83.9	83.3		0.701
	Oxadiazon	101				30.2
	Oxyfluorfen	116				14.5
	Parathion Ethyl	86.2	92.6	98.6		6.25
	Parathion Methyl	105	90.9	95.3		4.74
	Pendimethalin	106	129	131		1.11
	Phenytoin	97.3	102	79.0		25.5
	Phorate	79.3	109	103		5.13
	Prodiamine	52.4	91.0	61.5		35.4
	Prometon	87.4	82.0	90.9		10.4
	Prometryn	118	99.0	106		6.99
	Pronamide	108	106	104		2.32
	Propanil	90.2	114	87.9		25.7
	Propargite	103	93.0	80.5		14.3
	Propiconazole	93.4	86.4	80.2		7.38
	Pyraflufen Ethyl	110	124	112		9.77
	Pyridaben	136	173	134		25.6
	Pyriproxyfen	51.9	63.9	48.5		27.4
	Simazine	103	75.3	78.9		1.36
	Stirophos	86.7	46.3	52.5		12.5
	Sulfentrazone	96.2	71.0	70.0		1.49
	Tebuconazole	68.6	52.7	50.1		5.09
	Terbufos	73.8	93.6	80.9		14.5
	Terbutylazine	88.6	79.9	85.9		7.13
	Thiobencarb	114	87.4	85.4		2.29
	Triadimefon	95.2	85.0	79.7		6.41
EPA 8276	Chlordane	63.9	68.7	71.8		4.49
	Toxaphene	70.2	77.2	77.5		0.385
SM 2320 B-2011	Total Alkalinity	94.9				2.12
SM 2540 C-2015	TDS	96.8				6.33
SM 2540 D-2015	TSS	96.4				
SM 4500-F- C-2011	Fluoride	100	101	101		0.0
SM 5310 B-2011	Organic Carbon	99.0	95.0	96.7		1.70

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2399012, 2399013
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2399012, 2399013
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2399012, 2399013
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2399012, 2399013
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2399014, 2399015
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2399014, 2399015
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2399014, 2399015
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2399014, 2399015

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2399020
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2399019
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2399012, 2399013
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2399012, 2399013
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2399012, 2399013
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2399012, 2399013
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2399014, 2399015

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	04/07/2023			04/07/2023 14:13	Alexis Price	2399012
	04/07/2023			04/07/2023 14:34	Alexis Price	2399013
EPA 180.1 Rev. 2.0	04/07/2023			04/07/2023 13:25	Chandler E Cox	2399012
	04/07/2023			04/07/2023 13:26	Chandler E Cox	2399013
EPA 300.0 Rev. 2.1	04/07/2023			04/14/2023 17:46	Anna M. Plaviak	2399012
	04/07/2023			04/14/2023 18:01	Anna M. Plaviak	2399013
EPA 350.1 Rev. 2.0	04/07/2023			04/13/2023 12:46	Khloe J Berg	2399014
	04/07/2023			04/13/2023 12:47	Khloe J Berg	2399015
EPA 351.2 Rev. 2.0	04/07/2023	04/19/2023 10:43	Dana G. Hughes	04/20/2023 14:12	Ping Hua	2399014
	04/07/2023	04/19/2023 10:43	Dana G. Hughes	04/20/2023 14:14	Ping Hua	2399015
EPA 353.2 Rev. 2.0	04/07/2023			04/18/2023 11:34	Anna M. Plaviak	2399014
	04/07/2023			04/18/2023 11:39	Anna M. Plaviak	2399015
EPA 365.1 Rev. 2.0	04/07/2023	04/10/2023 17:45	Alexis Price	04/11/2023 13:43	Simonne.V. Calhoun	2399014
	04/07/2023	04/10/2023 17:45	Alexis Price	04/11/2023 13:44	Simonne.V. Calhoun	2399015
EPA 8270E	04/07/2023	04/13/2023 08:30	Rasheda Ghaffari	04/14/2023 20:10	Vandana T. Nagar	2399020
	04/07/2023	04/13/2023 08:30	Rasheda Ghaffari	04/18/2023 15:08	Vandana T. Nagar	2399020
	04/07/2023	04/13/2023 08:30	Rasheda Ghaffari	04/18/2023 16:28	Vandana T. Nagar	2399020
	04/07/2023	04/13/2023 08:30	Rasheda Ghaffari	04/18/2023 17:48	Vandana T. Nagar	2399020
EPA 8276	04/07/2023	04/10/2023 08:30	Rasheda Ghaffari	04/13/2023 09:36	Lipi Saha	2399019
SM 2320 B-2011	04/07/2023			04/12/2023 06:48	Dale L. Simmons	2399012
	04/07/2023			04/12/2023 06:56	Dale L. Simmons	2399013
SM 2540 C-2015	04/07/2023			04/10/2023 16:07	Yijie Li	2399012, 2399013
SM 2540 D-2015	04/07/2023			04/10/2023 16:07	Yijie Li	2399012, 2399013
SM 4500-F- C-2011	04/07/2023			04/19/2023 19:31	Dale L. Simmons	2399012
	04/07/2023			04/19/2023 19:37	Dale L. Simmons	2399013
SM 5310 B-2011	04/07/2023			04/11/2023 05:01	Elise M. Gillis	2399014
	04/07/2023			04/11/2023 05:15	Elise M. Gillis	2399015