

Chemical Analysis Report

SW-DIST-2019-10-29-03

Florida Department of Environmental Protection
Central Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

Event Description: **SMP - Gap Cr, Nonsense, Braden, Rattlesnake, Cedar**
Request ID: **RQ-2019-11-04-16**
Customer: **SW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Attn: Ben Paswater

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 19-NOV-2019 14:49



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: Braden River @ Cypress Bend Park

Collection Date/Time: 10/28/2019 11:55

Field ID: G2SW0044

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132079	EPA 8321B	2,4-D	0.036		ug/L	P373332	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	0.71		ug/L	P373428	
		Sucralose**	0.70		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373332	
		Acetamiprid**	0.0020	U	ug/L	P373332	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	1.1		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373332	
		Bentazon	0.022		ug/L	P373332	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373332	
		Carbamazepine**	8.0E-04	U	ug/L	P373332	
		Clothianidin**	0.0060	I	ug/L	P373332	
		Dinotefuran**	0.0072	I	ug/L	P373332	
		Diuron	0.0082		ug/L	P373332	
		Fenuron	0.016	U	ug/L	P373332	
		Fluridone**	0.028		ug/L	P373332	
		Imazapyr**	0.13		ug/L	P373332	
		Hydrocodone**	0.0020	U	ug/L	P373332	
		Ibuprofen**	0.020	U	ug/L	P373332	
		Imidacloprid	0.064	J	ug/L	P373332	MS
		Linuron	0.0040	U	ug/L	P373332	
		Mandestrobin**	0.0020	UJ	ug/L	P373332	
		MCPP	0.0020	U	ug/L	P373332	
		Naproxen**	0.0080	U	ug/L	P373332	
		Primidone**	0.0040	U	ug/L	P373332	
		Pyraclostrobin**	0.0020	U	ug/L	P373332	
		Thiamethoxam**	0.0024	I	ug/L	P373332	
		Tolfenpyrad**	0.0020	U	ug/L	P373332	
		Triclopyr**	0.0040	U	ug/L	P373332	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Nonsense Creek at Tara Perserve Ln

Collection Date/Time: 10/28/2019 11:20

Field ID: G2SW0015

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132080	EPA 8321B	2,4-D	0.0062	I	ug/L	P373332	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	1.0		ug/L	P373428	
		Sucralose**	0.046		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373332	
		Acetamiprid**	0.0020	U	ug/L	P373332	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	1.6		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373332	
		Bentazon	0.020		ug/L	P373332	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373332	
		Carbamazepine**	8.0E-04	U	ug/L	P373332	
		Clothianidin**	0.0025	I	ug/L	P373332	
		Dinotefuran**	0.0020	U	ug/L	P373332	
		Diuron	0.018		ug/L	P373332	
		Fenuron	0.016	U	ug/L	P373332	
		Fluridone**	0.038		ug/L	P373332	
		Imazapyr**	0.32		ug/L	P373332	
		Hydrocodone**	0.0020	U	ug/L	P373332	
		Ibuprofen**	0.020	U	ug/L	P373332	
		Imidacloprid	0.062		ug/L	P373332	MS
		Linuron	0.0040	U	ug/L	P373332	
		Mandestrobin**	0.0020	UJ	ug/L	P373332	
		MCPP	0.0020	U	ug/L	P373332	
		Naproxen**	0.0080	U	ug/L	P373332	
		Primidone**	0.0040	U	ug/L	P373332	
		Pyraclostrobin**	0.0020	U	ug/L	P373332	
		Thiamethoxam**	0.0063	I	ug/L	P373332	
		Tolfenpyrad**	0.0020	U	ug/L	P373332	
		Triclopyr**	0.0040	U	ug/L	P373332	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Cedar Creek @ Saddlehorn

Collection Date/Time: 10/28/2019 13:20

Field ID: G2SW0018

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132081	EPA 8321B	2,4-D	0.012		ug/L	P373332	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	2.7		ug/L	P373428	
		Sucralose**	0.010	U	ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373332	
		Acetamiprid**	0.0020	U	ug/L	P373332	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	3.9		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373332	
		Bentazon	0.027		ug/L	P373332	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373332	
		Carbamazepine**	8.0E-04	U	ug/L	P373332	
		Clothianidin**	0.021		ug/L	P373332	
		Dinotefuran**	0.0020	U	ug/L	P373332	
		Diuron	0.0021	I	ug/L	P373332	
		Fenuron	0.016	U	ug/L	P373332	
		Fluridone**	3.7		ug/L	P373332	
		Imazapyr**	0.70		ug/L	P373332	
		Hydrocodone**	0.0020	U	ug/L	P373332	
		Ibuprofen**	0.020	U	ug/L	P373332	
		Imidacloprid	0.046		ug/L	P373332	MS
		Linuron	0.0040	U	ug/L	P373332	
		Mandestrobin**	0.0020	UJ	ug/L	P373332	
		MCPP	0.0020	U	ug/L	P373332	
		Naproxen**	0.0080	U	ug/L	P373332	
		Primidone**	0.0040	U	ug/L	P373332	
		Pyraclostrobin**	0.0020	U	ug/L	P373332	
		Thiamethoxam**	0.0031	I	ug/L	P373332	
		Tolfenpyrad**	0.0020	U	ug/L	P373332	
		Triclopyr**	0.0040	U	ug/L	P373332	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Rattlesnake Slough @ Linden

Collection Date/Time: 10/28/2019 12:55

Field ID: G2SW0017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132082	EPA 8321B	2,4-D	0.0041	I	ug/L	P373332	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	2.0		ug/L	P373428	
		Sucralose**	0.56		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373332	
		Acetamiprid**	0.0020	U	ug/L	P373332	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	2.9		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373332	
		Bentazon	0.0041		ug/L	P373332	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373332	
		Carbamazepine**	9.7E-04	I	ug/L	P373332	
		Clothianidin**	0.0036	I	ug/L	P373332	
		Dinotefuran**	0.0020	U	ug/L	P373332	
		Diuron	0.0026	I	ug/L	P373332	
		Fenuron	0.016	U	ug/L	P373332	
		Fluridone**	0.039		ug/L	P373332	
		Imazapyr**	0.63		ug/L	P373332	
		Hydrocodone**	0.0020	U	ug/L	P373332	
		Ibuprofen**	0.020	U	ug/L	P373332	
		Imidacloprid	0.018		ug/L	P373332	MS
		Linuron	0.0040	U	ug/L	P373332	
		Mandestrobin**	0.0020	UJ	ug/L	P373332	
		MCPP	0.0020	U	ug/L	P373332	
		Naproxen**	0.0080	U	ug/L	P373332	
		Primidone**	0.0040	U	ug/L	P373332	
		Pyraclostrobin**	0.0020	U	ug/L	P373332	
		Thiamethoxam**	0.0083		ug/L	P373332	
		Tolfenpyrad**	0.0020	U	ug/L	P373332	
		Triclopyr**	0.0040	U	ug/L	P373332	

Ref. Method and Comment:

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Gap Creek at 37th St. East

Collection Date/Time: 10/28/2019 12:20

Field ID: G2SW0110

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132047	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P373361	
	EPA 300.0 Rev. 2.1	Chloride	48		mg Cl/L	P373763	
		Sulfate	100		mg SO4/L	P373767	
	SM 2120 B	Color (true)	64		PCU	P373378	
	SM 2320 B-97	Total Alkalinity	168		mg CaCO3/L	P373443	
	SM 2540 C-97	TDS	406		mg/L	P373708	
	SM 2540 D-97	TSS	2	I	mg/L	P373519	
	SM 4500 F-C-97	Fluoride	0.57		mg F/L	P373446	
2132050	EPA 350.1 Rev. 2.0	Ammonia-N	0.067		mg N/L	P373541	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.87		mg N/L	P373505	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P373437	
	EPA 365.1 Rev. 2.0	Total-P	0.41		mg P/L	P373418	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P373473	
2132053	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.32		mg P/L	P373370	
2132076	EPA 8321B	2,4-D	0.030		ug/L	P373120	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	3.0		ug/L	P373428	
		Sucralose**	0.14	J	ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373120	
		Acetamiprid**	0.0020	U	ug/L	P373120	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	3.3		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373120	
		Bentazon	0.015		ug/L	P373120	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373120	
		Carbamazepine**	0.0011	I	ug/L	P373120	
		Clothianidin**	0.019		ug/L	P373120	
		Dinotefuran**	0.0021	I	ug/L	P373120	
		Diuron	6.6		ug/L	P373120	
		Fenuron	0.016	U	ug/L	P373120	
		Fluridone**	0.48		ug/L	P373120	
		Imazapyr**	0.32		ug/L	P373120	
		Hydrocodone**	0.0020	U	ug/L	P373120	
		Ibuprofen**	0.020	U	ug/L	P373120	
		Imidacloprid	0.041		ug/L	P373120	MS
		Linuron	0.0040	U	ug/L	P373120	
		Mandestrobin**	0.0020	UJ	ug/L	P373120	
		MCP	0.0020	U	ug/L	P373120	
		Naproxen**	0.0080	U	ug/L	P373120	
		Primidone**	0.0040	U	ug/L	P373120	
		Pyraclostrobin**	0.0020	U	ug/L	P373120	
		Thiamethoxam**	0.0020	U	ug/L	P373120	

Field ID: G2SW0110

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132076	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373120	
		Triclopyr**	0.0040	U	ug/L	P373120	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

EPA 8321B: Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Gap Creek at 37th St. East

Collection Date/Time: 10/28/2019 12:25

Field ID: G2SW0110_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132048	EPA 180.1 Rev. 2.0	Turbidity	3.3		NTU	P373361	
	EPA 300.0 Rev. 2.1	Chloride	48		mg Cl/L	P373763	
		Sulfate	100		mg SO4/L	P373767	
	SM 2120 B	Color (true)	63		PCU	P373378	
	SM 2320 B-97	Total Alkalinity	168		mg CaCO3/L	P373443	
	SM 2540 C-97	TDS	422		mg/L	P373709	
	SM 2540 D-97	TSS	3	I	mg/L	P373520	
	SM 4500 F-C-97	Fluoride	0.58		mg F/L	P373446	
2132051	EPA 350.1 Rev. 2.0	Ammonia-N	0.067		mg N/L	P373541	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.82		mg N/L	P373505	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.32		mg N/L	P373437	
	EPA 365.1 Rev. 2.0	Total-P	0.42		mg P/L	P373418	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P373473	
2132054	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.32		mg P/L	P373370	
2132077	EPA 8321B	2,4-D	0.031		ug/L	P373120	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	2.9		ug/L	P373428	
		Sucralose**	0.15		ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373120	
		Acetamiprid**	0.0020	U	ug/L	P373120	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	3.3		ug/L	P373428	
		Afidopyropen**	0.0020	UJ	ug/L	P373120	
		Bentazon	0.015		ug/L	P373120	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373120	
		Carbamazepine**	0.0011	I	ug/L	P373120	
		Clothianidin**	0.021		ug/L	P373120	
		Dinotefuran**	0.0023	I	ug/L	P373120	
		Diuron	7.2		ug/L	P373120	
		Fenuron	0.016	U	ug/L	P373120	
		Fluridone**	0.50		ug/L	P373120	
		Imazapyr**	0.33		ug/L	P373120	
		Hydrocodone**	0.0020	U	ug/L	P373120	
		Ibuprofen**	0.020	U	ug/L	P373120	
		Imidacloprid	0.044		ug/L	P373120	MS
		Linuron	0.0040	U	ug/L	P373120	
		Mandestrobin**	0.0020	UJ	ug/L	P373120	
		MCP	0.0020	U	ug/L	P373120	
		Naproxen**	0.0080	U	ug/L	P373120	
		Primidone**	0.0040	U	ug/L	P373120	
		Pyraclostrobin**	0.0020	U	ug/L	P373120	
		Thiamethoxam**	0.0020	U	ug/L	P373120	

Field ID: G2SW0110_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132077	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373120	
		Triclopyr**	0.0040	U	ug/L	P373120	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Field_Blank

Collection Date/Time: 10/28/2019 12:30

Field ID: FB 10282019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132049	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P373362	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P373763	
		Sulfate	0.20	U	mg SO4/L	P373767	
	SM 2120 B	Color (true)	2.5	U	PCU	P373378	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P373443	
	SM 2540 C-97	TDS	15	U	mg/L	P373707	
	SM 2540 D-97	TSS	2	U	mg/L	P373598	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P373446	
2132052	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P373541	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P373505	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P373437	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P373418	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P373473	
2132055	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P373370	
2132078	EPA 8321B	2,4-D	0.0020	U	ug/L	P373332	
		Acesulfame K**	0.10	U	ug/L	P373428	
		AMPA**	0.10	U	ug/L	P373428	
		Sucralose**	0.010	U	ug/L	P373428	MS
		Acetaminophen**	0.0080	U	ug/L	P373332	
		Acetamiprid**	0.0020	U	ug/L	P373332	
		Endothall**	0.25	U	ug/L	P373428	
		Glufosinate**	0.10	U	ug/L	P373428	
		Glyphosate**	0.10	U	ug/L	P373428	
		Afidopyrophen**	0.0020	UJ	ug/L	P373332	
		Bentazon	8.0E-04	U	ug/L	P373332	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P373332	
		Carbamazepine**	8.0E-04	U	ug/L	P373332	
		Clothianidin**	0.0020	U	ug/L	P373332	
		Dinotefuran**	0.0020	U	ug/L	P373332	
		Diuron	0.0020	U	ug/L	P373332	
		Fenuron	0.016	U	ug/L	P373332	
		Fluridone**	8.0E-04	U	ug/L	P373332	
		Imazapyr**	0.0040	U	ug/L	P373332	
		Hydrocodone**	0.0020	U	ug/L	P373332	
		Ibuprofen**	0.020	U	ug/L	P373332	
		Imidacloprid	0.0020	U	ug/L	P373332	MS
		Linuron	0.0040	U	ug/L	P373332	
		Mandestrobin**	0.0020	UJ	ug/L	P373332	
		MCP	0.0020	U	ug/L	P373332	
		Naproxen**	0.0080	U	ug/L	P373332	
		Primidone**	0.0040	U	ug/L	P373332	
		Pyraclostrobin**	0.0020	U	ug/L	P373332	
		Thiamethoxam**	0.0020	U	ug/L	P373332	

Field ID: FB 10282019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2132078	EPA 8321B	Tolfenpyrad**	0.0020	U	ug/L	P373332	
		Triclopyr**	0.0040	U	ug/L	P373332	

Ref. Method and Comment:

SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

EPA 8321B: J - second source check standards for some analytes were not available for analysis. MS accuracy for some analytes could not be assessed due to high concentration of parameter in the spiked sample.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373361

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373362

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373541

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373505

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373437

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373418

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373370

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B

Batch ID: P373120

Component	Result	Code	Units
2,4-D	0.0020	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	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B

Batch ID: P373332

Component	Result	Code	Units
2,4-D	0.0020	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	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P373332

Component	Result	Code	Units
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P373428

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: SM 2120 B
Batch ID: P373378

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P373443

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

Reference Method: SM 2540 C-97
Batch ID: P373707

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P373708

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P373709

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P373519

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P373520

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P373598

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P373446

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P373473

Component	Result	Code	Units
Organic Carbon	0.50	U	mg C/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373541

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373505

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373437

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373418

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373370

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

Reference Method: EPA 8321B
Batch ID: P373120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	123		P	40 - 160
Acetaminophen	82.4		P	30 - 160
Acetamiprid	102		P	40 - 160
Afidopyropen	93.8		P	40 - 160
Bentazon	97.4		P	30 - 160
Benzovindiflupyr	94.8		P	40 - 160
Carbamazepine	103		P	40 - 160
Clothianidin	85.5		P	40 - 160
Dinotefuran	90.1		P	40 - 160
Diuron	103		P	40 - 160

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P373120

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	103		P	40 - 160
Fluridone	92.8		P	40 - 160
Hydrocodone	89.0		P	40 - 160
Ibuprofen	84.4		P	30 - 160
Imazapyr	86.5		P	40 - 160
Imidacloprid	105		P	40 - 160
Linuron	78.4		P	40 - 160
Mandestrobin	94.6		P	40 - 160
MCPP	114		P	40 - 160
Naproxen	103		P	40 - 160
Primidone	90.3		P	40 - 160
Pyraclostrobin	83.4		P	30 - 160
Thiamethoxam	106		P	40 - 160
Tolfenpyrad	60.5		P	40 - 160
Triclopyr	87.5		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373332

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	94.2		P	40 - 160
Acetaminophen	85.3		P	30 - 160
Acetamiprid	99.4		P	40 - 160
Afidopyropen	87.8		P	40 - 160
Bentazon	77.6		P	30 - 160
Benzovindiflupyr	99.1		P	40 - 160
Carbamazepine	108		P	40 - 160
Clothianidin	87.3		P	40 - 160
Dinotefuran	85.8		P	40 - 160
Diuron	102		P	40 - 160
Fenuron	104		P	40 - 160
Fluridone	92.1		P	40 - 160
Hydrocodone	95.5		P	40 - 160
Ibuprofen	74.2		P	30 - 160
Imazapyr	57.1		P	40 - 160
Imidacloprid	108		P	40 - 160
Linuron	81.6		P	40 - 160
Mandestrobin	97.9		P	40 - 160
MCPP	99.8		P	40 - 160
Naproxen	74.4		P	40 - 160
Primidone	91.9		P	40 - 160
Pyraclostrobin	86.6		P	30 - 160
Thiamethoxam	104		P	40 - 160
Tolfenpyrad	56.3		P	40 - 160
Triclopyr	82.4		P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	108		P	40 - 150
AMPA	104		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P373428

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endothall	79.5		P	40 - 150
Glufosinate	85.8		P	40 - 150
Glyphosate	88.9		P	40 - 140
Sucralose	111		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P373378

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.9		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P373443

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	104		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P373446

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P373473

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	105		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132005	Chloride	99.7	100	P/P	90 - 110
2132184	Chloride	98.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132005	Sulfate	100	101	P/P	90 - 110
2132184	Sulfate	99.3		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373505

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132180	Kjeldahl Nitrogen	105	104	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373437

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132050	NO2NO3-N	99.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P373370

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131956	O-Phosphate-P	98.1	97.1	P/P	90 - 110

Reference Method: EPA 8321B
Batch ID: P373120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131538	2,4-D	116	104	P/P	40 - 160
2131538	Acetaminophen	76.9	77.5	P/P	30 - 160
2131538	Acetamiprid	104	104	P/P	40 - 160
2131538	Afidopyropen	94.5	95.7	P/P	40 - 160
2131538	Benzovindiflupyr	92.3	93.4	P/P	40 - 160
2131538	Carbamazepine	85.1	85.5	P/P	40 - 160
2131538	Clothianidin	95.2	88.4	P/P	40 - 160
2131538	Dinotefuran	108	105	P/P	40 - 160
2131538	Diuron	84.7	85.1	P/P	40 - 160
2131538	Fenuron	94.7	93.3	P/P	40 - 160
2131538	Hydrocodone	89.7	89.0	P/P	40 - 160
2131538	Ibuprofen	77.5	73.4	P/P	30 - 160
2131538	Imidacloprid	172	168	F/F	40 - 160
2131538	Linuron	68.8	69.3	P/P	40 - 160
2131538	Mandestrobin	89.2	86.9	P/P	40 - 160
2131538	MCP	109	98.3	P/P	40 - 160
2131538	Naproxen	76.8	62.1	P/P	40 - 160
2131538	Primidone	103	97.2	P/P	40 - 160
2131538	Pyraclostrobin	85.2	83.4	P/P	30 - 160
2131538	Thiamethoxam	140	139	P/P	40 - 160

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P373120

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131538	Tolfenpyrad	60.7	55.2	P/P	40 - 160
2131538	Triclopyr	91.8	82.3	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373332

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132079	2,4-D	91.0	72.9	P/P	40 - 160
2132079	Acetaminophen	81.9	72.0	P/P	30 - 160
2132079	Acetamiprid	104	91.2	P/P	40 - 160
2132079	Afidopyropen	96.2	80.9	P/P	40 - 160
2132079	Benzovindiflupyr	103	90.1	P/P	40 - 160
2132079	Carbamazepine	91.9	83.4	P/P	40 - 160
2132079	Clothianidin	89.1	75.8	P/P	40 - 160
2132079	Dinotefuran	102	98.1	P/P	40 - 160
2132079	Diuron	87.4	76.8	P/P	40 - 160
2132079	Fenuron	84.1	74.5	P/P	40 - 160
2132079	Hydrocodone	93.1	78.6	P/P	40 - 160
2132079	Ibuprofen	72.0	59.1	P/P	30 - 160
2132079	Imidacloprid	165	148	F/P	40 - 160
2132079	Linuron	72.0	63.3	P/P	40 - 160
2132079	Mandestrobin	101	85.2	P/P	40 - 160
2132079	MCCP	101	84.1	P/P	40 - 160
2132079	Naproxen	71.8	67.9	P/P	40 - 160
2132079	Primidone	104	94.4	P/P	40 - 160
2132079	Pyraclostrobin	90.4	76.4	P/P	30 - 160
2132079	Thiamethoxam	139	126	P/P	40 - 160
2132079	Tolfenpyrad	59.7	51.3	P/P	40 - 160
2132079	Triclopyr	96.8	74.9	P/P	30 - 160

Reference Method: EPA 8321B
Batch ID: P373428

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2132076	Acesulfame K	47.8	49.1	P/P	40 - 150
2132076	AMPA	74.2	70.7	P/P	40 - 150
2132076	Endothall	89.8	100	P/P	40 - 150
2132076	Glufosinate	90.5	78.0	P/P	40 - 150
2132076	Glyphosate	89.6	103	P/P	40 - 140
2132076	Sucralose	50.3	37.3	P/F	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P373446

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131953	Fluoride	96.2	95.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P373473

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2131954	Organic Carbon	103	103	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373361

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131977	Turbidity	1.12	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P373362

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132090	Turbidity	5.38	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373763

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132005	Chloride	0.391	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P373767

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132005	Sulfate	1.02	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P373541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132007	Ammonia-N	1.12	Sample	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P373505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132180	Kjeldahl Nitrogen	0.924	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P373437

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132050	NO2NO3-N	0.193	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P373418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132050	Total-P	0.875	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P373370

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131956	O-Phosphate-P	0.891	Spike	P	0 - 20

Reference Method: EPA 8321B
 Batch ID: P373120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131538	2,4-D	8.47	Spike	P	0 - 30
2131538	Acetaminophen	0.749	Spike	P	0 - 30
2131538	Acetamiprid	0.151	Spike	P	0 - 30
2131538	Afidopyropen	1.18	Spike	P	0 - 30
2131538	Bentazon	0.997	Spike	P	0 - 30
2131538	Benzovindiflupyr	1.16	Spike	P	0 - 30
2131538	Carbamazepine	0.468	Spike	P	0 - 30
2131538	Clothianidin	7.04	Spike	P	0 - 30
2131538	Dinotefuran	2.16	Spike	P	0 - 30
2131538	Diuron	0.415	Spike	P	0 - 30
2131538	Fenuron	1.52	Spike	P	0 - 30
2131538	Fluridone	0.743	Spike	P	0 - 30
2131538	Hydrocodone	0.830	Spike	P	0 - 30
2131538	Ibuprofen	5.44	Spike	P	0 - 30
2131538	Imazapyr	4.79	Spike	P	0 - 30
2131538	Imidacloprid	2.36	Spike	P	0 - 30
2131538	Linuron	0.662	Spike	P	0 - 30
2131538	Mandestrobin	2.57	Spike	P	0 - 30
2131538	MCP	10.5	Spike	P	0 - 30
2131538	Naproxen	21.2	Spike	P	0 - 30
2131538	Primidone	6.05	Spike	P	0 - 30
2131538	Pyraclostrobin	2.12	Spike	P	0 - 30
2131538	Thiamethoxam	0.719	Spike	P	0 - 30
2131538	Tolfenpyrad	9.44	Spike	P	0 - 30
2131538	Triclopyr	10.8	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P373332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132079	2,4-D	14.2	Spike	P	0 - 30
2132079	Acetaminophen	12.9	Spike	P	0 - 30
2132079	Acetamiprid	13.3	Spike	P	0 - 30
2132079	Afidopyropen	17.3	Spike	P	0 - 30
2132079	Bentazon	11.5	Spike	P	0 - 30
2132079	Benzovindiflupyr	13.7	Spike	P	0 - 30
2132079	Carbamazepine	9.65	Spike	P	0 - 30
2132079	Clothianidin	14.8	Spike	P	0 - 30
2132079	Dinotefuran	3.10	Spike	P	0 - 30
2132079	Diuron	11.5	Spike	P	0 - 30
2132079	Fenuron	12.1	Spike	P	0 - 30
2132079	Fluridone	12.9	Spike	P	0 - 30
2132079	Hydrocodone	16.8	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P373332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132079	Ibuprofen	19.6	Spike	P	0 - 30
2132079	Imazapyr	5.55	Spike	P	0 - 30
2132079	Imidacloprid	7.21	Spike	P	0 - 30
2132079	Linuron	12.9	Spike	P	0 - 30
2132079	Mandestrobin	16.4	Spike	P	0 - 30
2132079	MCCP	18.2	Spike	P	0 - 30
2132079	Naproxen	5.59	Spike	P	0 - 30
2132079	Primidone	10.2	Spike	P	0 - 30
2132079	Pyraclostrobin	16.7	Spike	P	0 - 30
2132079	Thiamethoxam	9.47	Spike	P	0 - 30
2132079	Tolfenpyrad	15.1	Spike	P	0 - 30
2132079	Triclopyr	25.5	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P373428

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132076	Acesulfame K	2.66	Spike	P	0 - 30
2132076	AMPA	0.927	Spike	P	0 - 30
2132076	Endothall	10.8	Spike	P	0 - 30
2132076	Glufosinate	14.8	Spike	P	0 - 30
2132076	Glyphosate	3.11	Spike	P	0 - 30
2132076	Sucralose	26.4	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P373378

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132179	Color (true)	0.144	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P373443

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131953	Total Alkalinity	0.447	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P373707

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131489	TDS	7.57	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P373708

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

Reference Method: SM 2540 C-97
Batch ID: P373708

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131605	TDS	2.15	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P373709

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2132184	TDS	3.02	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P373446

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131953	Fluoride	0.963	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
Batch ID: P373473

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2131954	Organic Carbon	0.486	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2132076
Field Sample ID: G2SW0110

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.0	P	30 - 160
EPA 8321B	Diuron-d6	57.6	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	138	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	138	P	30 - 160
EPA 8321B	Ibuprofen-d3	61.8	P	30 - 160
EPA 8321B	Primidone-d5	83.1	P	30 - 160
EPA 8321B	Sucralose-d6	34.3	P	30 - 160
EPA 8321B	Sucralose-d6	34.3	P	30 - 160

Lab Sample ID: 2132077
Field Sample ID: G2SW0110_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	85.6	P	30 - 160
EPA 8321B	Diuron-d6	62.2	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Endothall-d6	107	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	120	P	30 - 160
EPA 8321B	Ibuprofen-d3	67.0	P	30 - 160
EPA 8321B	Primidone-d5	103	P	30 - 160
EPA 8321B	Sucralose-d6	40.8	P	30 - 160
EPA 8321B	Sucralose-d6	40.8	P	30 - 160

Lab Sample ID: 2132078
Field Sample ID: FB 10282019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	70.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.5	P	30 - 160
EPA 8321B	Carbamazepine-d10	99.0	P	30 - 160
EPA 8321B	Diuron-d6	86.3	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.9	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	94.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	88.5	P	30 - 160
EPA 8321B	Primidone-d5	88.6	P	30 - 160
EPA 8321B	Sucralose-d6	97.8	P	30 - 160
EPA 8321B	Sucralose-d6	97.8	P	30 - 160

Lab Sample ID: 2132079
Field Sample ID: G2SW0044

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	97.6	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2132079
Field Sample ID: G2SW0044

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	78.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	90.0	P	30 - 160
EPA 8321B	Diuron-d6	72.5	P	30 - 160
EPA 8321B	Endothall-d6	113	P	30 - 160
EPA 8321B	Endothall-d6	113	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	111	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.4	P	30 - 160
EPA 8321B	Primidone-d5	92.8	P	30 - 160
EPA 8321B	Sucralose-d6	92.3	P	30 - 160
EPA 8321B	Sucralose-d6	92.3	P	30 - 160

Lab Sample ID: 2132080
Field Sample ID: G2SW0015

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	87.9	P	30 - 160
EPA 8321B	Diuron-d6	71.5	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	113	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	113	P	30 - 160
EPA 8321B	Ibuprofen-d3	78.5	P	30 - 160
EPA 8321B	Primidone-d5	93.1	P	30 - 160
EPA 8321B	Sucralose-d6	52.1	P	30 - 160
EPA 8321B	Sucralose-d6	52.1	P	30 - 160

Lab Sample ID: 2132081
Field Sample ID: G2SW0018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	92.2	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	86.1	P	30 - 160
EPA 8321B	Diuron-d6	68.8	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	137	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	137	P	30 - 160
EPA 8321B	Ibuprofen-d3	85.4	P	30 - 160
EPA 8321B	Primidone-d5	97.9	P	30 - 160
EPA 8321B	Sucralose-d6	38.1	P	30 - 160
EPA 8321B	Sucralose-d6	38.1	P	30 - 160

Lab Sample ID: 2132082
Field Sample ID: G2SW0017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	74.6	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2132082

Field Sample ID: G2SW0017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbamazepine-d10	90.0	P	30 - 160
EPA 8321B	Diuron-d6	68.3	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	123	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	123	P	30 - 160
EPA 8321B	Ibuprofen-d3	84.8	P	30 - 160
EPA 8321B	Primidone-d5	93.0	P	30 - 160
EPA 8321B	Sucralose-d6	99.4	P	30 - 160
EPA 8321B	Sucralose-d6	99.4	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A95314

Included Lab Sample IDs: 2132047, 2132048, 2132049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	100	P/P	95 - 105
Turbidity	98.0	100	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A95318

Included Lab Sample IDs: 2132053, 2132054, 2132055

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.9	99.8	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A95320

Included Lab Sample IDs: 2132047, 2132048, 2132049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.5	101	P/P	90 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A95355

Included Lab Sample IDs: 2132050, 2132051, 2132052

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

Reference Method: SM 2320 B-97

Run ID: A95356

Included Lab Sample IDs: 2132047, 2132048, 2132049

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

Reference Method: SM 4500 F-C-97

Run ID: A95356

Included Lab Sample IDs: 2132047, 2132048, 2132049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	98.5	99.1	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A95368

Included Lab Sample IDs: 2132050, 2132051, 2132052

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	108	103	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95377

Included Lab Sample IDs: 2132050, 2132051

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95377

Included Lab Sample IDs: 2132050, 2132051

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A95383

Included Lab Sample IDs: 2132052

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A95386

Included Lab Sample IDs: 2132050, 2132051, 2132052

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A95416

Included Lab Sample IDs: 2132050, 2132051, 2132052

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.7	98.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A95470

Included Lab Sample IDs: 2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	91.3	83.6	P/P	60 - 160
AMPA	96.2	91.3	P/P	60 - 160
Glufosinate	109	94.0	P/P	60 - 160
Glufosinate	94.0	104	P/P	60 - 160
Glyphosate	101	115	P/P	60 - 160
Glyphosate	115	111	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95474

Included Lab Sample IDs: 2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	105	73.3	P/P	60 - 160
Acesulfame K	122	105	P/P	60 - 160
Endothall	93.1	94.9	P/P	60 - 160
Endothall	94.9	96.3	P/P	60 - 160

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95511

Included Lab Sample IDs: 2132047, 2132048, 2132049

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A95511

Included Lab Sample IDs: 2132047, 2132048, 2132049

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	103	103	P/P	90 - 110
Sulfate	103	103	P/P	90 - 110
Sulfate	100	101	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A95576

Included Lab Sample IDs: 2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	81.3	79.1	P/P	50 - 150
2,4-D	81.5	81.3	P/P	50 - 150
2,4-D	89.8	81.5	P/P	50 - 150
Acetaminophen	103	104	P/P	60 - 160
Acetaminophen	103	103	P/P	60 - 160
Acetaminophen	98.5	103	P/P	60 - 160
Acetamiprid	107	109	P/P	50 - 150
Acetamiprid	110	111	P/P	50 - 150
Acetamiprid	111	107	P/P	50 - 150
Afidopyropen	90.5	97.0	P/P	50 - 150
Afidopyropen	94.0	90.5	P/P	50 - 150
Afidopyropen	97.0	83.1	P/P	50 - 150
Bentazon	72.3	69.4	P/P	50 - 160
Bentazon	73.0	72.3	P/P	50 - 160
Bentazon	91.1	73.0	P/P	50 - 160
Benzovindiflupyr	112	119	P/P	50 - 150
Benzovindiflupyr	115	115	P/P	50 - 150
Benzovindiflupyr	119	115	P/P	50 - 150
Carbamazepine	107	111	P/P	60 - 150
Carbamazepine	111	111	P/P	60 - 150
Carbamazepine	111	111	P/P	60 - 150
Clothianidin	102	95.6	P/P	60 - 150
Clothianidin	94.7	102	P/P	60 - 150
Clothianidin	95.6	103	P/P	60 - 150
Dinotefuran	92.9	93.4	P/P	50 - 150
Dinotefuran	93.4	91.7	P/P	50 - 150
Dinotefuran	95.1	92.9	P/P	50 - 150
Diuron	109	114	P/P	60 - 150
Diuron	111	114	P/P	60 - 150
Diuron	114	111	P/P	60 - 150
Fenuron	108	110	P/P	60 - 150
Fenuron	109	110	P/P	60 - 150
Fenuron	110	108	P/P	60 - 150
Fluridone	109	109	P/P	60 - 160
Fluridone	109	108	P/P	60 - 160
Fluridone	115	109	P/P	60 - 160
Hydrocodone	102	107	P/P	60 - 150
Hydrocodone	107	107	P/P	60 - 150
Hydrocodone	107	103	P/P	60 - 150
Ibuprofen	82.7	86.6	P/P	50 - 160
Ibuprofen	88.8	97.3	P/P	50 - 160
Ibuprofen	97.3	82.7	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A95576

Included Lab Sample IDs: 2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Imazapyr	79.5	83.1	P/P	50 - 150
Imazapyr	89.0	79.5	P/P	50 - 150
Imazapyr	89.4	89.0	P/P	50 - 150
Imidacloprid	97.4	99.0	P/P	60 - 150
Imidacloprid	99.0	99.4	P/P	60 - 150
Imidacloprid	99.4	102	P/P	60 - 150
Linuron	104	95.1	P/P	60 - 150
Linuron	104	102	P/P	60 - 150
Linuron	95.1	104	P/P	60 - 150
Mandestrobin	110	110	P/P	50 - 150
Mandestrobin	110	110	P/P	50 - 150
Mandestrobin	110	110	P/P	50 - 150
MCP	76.5	77.6	P/P	50 - 150
MCP	87.3	76.5	P/P	50 - 150
MCP	98.3	87.3	P/P	50 - 150
Naproxen	78.1	62.6	P/P	50 - 160
Naproxen	78.7	84.0	P/P	50 - 160
Naproxen	84.0	78.1	P/P	50 - 160
Primidone	103	106	P/P	60 - 150
Primidone	106	110	P/P	60 - 150
Primidone	110	101	P/P	60 - 150
Pyraclostrobin	100	102	P/P	60 - 150
Pyraclostrobin	101	103	P/P	60 - 150
Pyraclostrobin	103	100	P/P	60 - 150
Thiamethoxam	104	106	P/P	50 - 150
Thiamethoxam	106	104	P/P	50 - 150
Thiamethoxam	106	104	P/P	50 - 150
Tolfenpyrad	103	101	P/P	60 - 150
Tolfenpyrad	104	103	P/P	60 - 150
Tolfenpyrad	98.8	104	P/P	60 - 150
Triclopyr	68.9	75.5	P/P	50 - 150
Triclopyr	75.5	74.3	P/P	50 - 150
Triclopyr	80.6	68.9	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A95629

Included Lab Sample IDs: 2132081

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluridone	113	109	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A95766

Included Lab Sample IDs: 2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	93.2	96.8	P/P	60 - 160
Sucralose	96.8	111	P/P	60 - 160

Quality Assurance Report

Calibration Verification

* 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			Precision SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					1.12	
	Turbidity					5.38	
EPA 300.0 Rev. 2.1	Chloride	102	99.7	100	98.2		0.391
	Sulfate	101	100	101	99.3		1.02
EPA 350.1 Rev. 2.0	Ammonia-N	98.6				1.12	
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102	105	104			0.924
EPA 353.2 Rev. 2.0	NO2NO3-N	100	99.2				0.193
EPA 365.1 Rev. 2.0	Total-P	95.9					0.875
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.3	98.1	97.1			0.891
EPA 8321B	2,4-D	123	116	104			8.47
	2,4-D	94.2	91.0	72.9			14.2
	Acesulfame K	108	47.8	49.1			2.66
	Acetaminophen	82.4	76.9	77.5			0.749
	Acetaminophen	85.3	81.9	72.0			12.9
	Acetamiprid	102	104	104			0.151
	Acetamiprid	99.4	104	91.2			13.3
	Afidopyropen	93.8	94.5	95.7			1.18
	Afidopyropen	87.8	96.2	80.9			17.3
	AMPA	104	74.2	70.7			0.927
	Bentazon	97.4					0.997
	Bentazon	77.6					11.5
	Benzovindiflupyr	94.8	92.3	93.4			1.16
	Benzovindiflupyr	99.1	103	90.1			13.7
	Carbamazepine	103	85.1	85.5			0.468
	Carbamazepine	108	91.9	83.4			9.65
	Clothianidin	85.5	95.2	88.4			7.04
	Clothianidin	87.3	89.1	75.8			14.8
	Dinotefuran	90.1	108	105			2.16
	Dinotefuran	85.8	102	98.1			3.10
	Diuron	103	84.7	85.1			0.415
	Diuron	102	87.4	76.8			11.5
	Endothall	79.5	89.8	100			10.8
	Fenuron	103	94.7	93.3			1.52
	Fenuron	104	84.1	74.5			12.1
	Fluridone	92.8					0.743
	Fluridone	92.1					12.9
	Glufosinate	85.8	90.5	78.0			14.8
	Glyphosate	88.9	89.6	103			3.11
	Hydrocodone	89.0	89.7	89.0			0.830
	Hydrocodone	95.5	93.1	78.6			16.8
	Ibuprofen	84.4	77.5	73.4			5.44
	Ibuprofen	74.2	72.0	59.1			19.6
	Imazapyr	86.5					4.79
	Imazapyr	57.1					5.55
	Imidacloprid	105	172	168			2.36
	Imidacloprid	108	165	148			7.21
	Linuron	78.4	68.8	69.3			0.662
	Linuron	81.6	72.0	63.3			12.9
	Mandestrobin	94.6	89.2	86.9			2.57
	Mandestrobin	97.9	101	85.2			16.4
	MCPPP	114	109	98.3			10.5
	MCPPP	99.8	101	84.1			18.2
	Naproxen	103	76.8	62.1			21.2
	Naproxen	74.4	71.8	67.9			5.59

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Primidone	90.3	103	97.2		6.05
	Primidone	91.9	104	94.4		10.2
	Pyraclostrobin	83.4	85.2	83.4		2.12
	Pyraclostrobin	86.6	90.4	76.4		16.7
	Sucralose	111	50.3	37.3		26.4
	Thiamethoxam	106	140	139		0.719
	Thiamethoxam	104	139	126		9.47
	Tolfenpyrad	60.5	60.7	55.2		9.44
	Tolfenpyrad	56.3	59.7	51.3		15.1
	Triclopyr	87.5	91.8	82.3		10.8
	Triclopyr	82.4	96.8	74.9		25.5
SM 2120 B	Color (true)	98.9			0.144	
SM 2320 B-97	Total Alkalinity	104			0.447	
SM 2540 C-97	TDS				7.57	
	TDS				2.15	
	TDS				3.02	
SM 4500 F-C-97	Fluoride	96.9	96.2	95.1		0.963
SM 5310 B-00	Organic Carbon	105	103	103		0.486

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2132047, 2132048, 2132049
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2132047, 2132048, 2132049
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2132047, 2132048, 2132049
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2132050, 2132051, 2132052
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2132050, 2132051, 2132052
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2132050, 2132051, 2132052
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2132050, 2132051, 2132052
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2132053, 2132054, 2132055
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2132076, 2132077, 2132078, 2132079, 2132080, 2132081, 2132082
SM 2120 B / E31780	True Color measured at 450 nm	2132047, 2132048, 2132049
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2132047, 2132048, 2132049
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2132047, 2132048, 2132049
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2132047, 2132048, 2132049
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2132047, 2132048, 2132049
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2132050, 2132051, 2132052

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	10/29/2019			10/29/2019 15:54	Rosalyn Ballman	2132047, 2132048, 2132049
EPA 300.0 Rev. 2.1	10/29/2019			11/05/2019 10:37	Jhamieka S. Greenwood	2132047
	10/29/2019			11/05/2019 11:14	Jhamieka S. Greenwood	2132048
	10/29/2019			11/05/2019 11:26	Jhamieka S. Greenwood	2132049
	10/29/2019			11/06/2019 19:54	Jhamieka S. Greenwood	2132047
	10/29/2019			11/06/2019 20:06	Jhamieka S. Greenwood	2132048
EPA 350.1 Rev. 2.0	10/29/2019			10/31/2019 12:54	Ping Hua	2132050
	10/29/2019			10/31/2019 12:56	Ping Hua	2132051
	10/29/2019			10/31/2019 13:00	Ping Hua	2132052
EPA 351.2 Rev. 2.0	10/29/2019	10/31/2019 12:35	Sima Feizi	11/01/2019 15:46	Jhamieka S. Greenwood	2132050
	10/29/2019	10/31/2019 12:35	Sima Feizi	11/01/2019 15:48	Jhamieka S. Greenwood	2132051
	10/29/2019	10/31/2019 12:35	Sima Feizi	11/01/2019 15:49	Jhamieka S. Greenwood	2132052
EPA 353.2 Rev. 2.0	10/29/2019			10/30/2019 11:46	Beverly Y. Sanders	2132050
	10/29/2019			10/30/2019 11:53	Beverly Y. Sanders	2132051
	10/29/2019			10/30/2019 11:54	Beverly Y. Sanders	2132052
EPA 365.1 Rev. 2.0	10/29/2019	10/30/2019 11:09	Vijayalakshmi Reddy	10/31/2019 11:59	Julia Storbeck	2132050
	10/29/2019	10/30/2019 11:09	Vijayalakshmi Reddy	10/31/2019 12:06	Julia Storbeck	2132051
	10/29/2019	10/30/2019 11:09	Vijayalakshmi Reddy	10/31/2019 16:46	Julia Storbeck	2132052
EPA 365.1 Rev. 2.0 dissolved	10/29/2019			10/29/2019 15:45	Virginia P. Brown	2132053
	10/29/2019			10/29/2019 15:46	Virginia P. Brown	2132054
	10/29/2019			10/29/2019 15:47	Virginia P. Brown	2132055
EPA 8321B	10/29/2019	10/30/2019 09:00	Hoor Shaik	11/07/2019 13:23	Juyoung Kim	2132076
	10/29/2019	10/30/2019 09:00	Hoor Shaik	11/07/2019 13:58	Juyoung Kim	2132077
	10/29/2019	10/30/2019 09:00	Hoor Shaik	11/07/2019 14:32	Juyoung Kim	2132076
	10/29/2019	10/30/2019 09:00	Hoor Shaik	11/07/2019 15:07	Juyoung Kim	2132077
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/07/2019 18:34	Juyoung Kim	2132079
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/07/2019 19:43	Juyoung Kim	2132078
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/07/2019 20:18	Juyoung Kim	2132080
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/07/2019 21:27	Juyoung Kim	2132081
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/07/2019 22:02	Juyoung Kim	2132082
	10/29/2019	10/31/2019 09:00	Hoor Shaik	11/11/2019 16:27	Juyoung Kim	2132081
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 15:33	Rebecca Ware	2132076
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 16:00	Rebecca Ware	2132077
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 16:14	Rebecca Ware	2132078
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 16:42	Rebecca Ware	2132079
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 16:56	Rebecca Ware	2132080
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 17:09	Rebecca Ware	2132081
	10/29/2019	10/31/2019 11:30	Rebecca Ware	10/31/2019 17:23	Rebecca Ware	2132082
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 18:42	Rebecca Ware	2132076
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 19:03	Rebecca Ware	2132077

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 19:14	Rebecca Ware	2132078
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 19:35	Rebecca Ware	2132079
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 19:46	Rebecca Ware	2132080
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 19:57	Rebecca Ware	2132081
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/01/2019 20:08	Rebecca Ware	2132082
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 13:01	Rebecca Ware	2132076
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 13:24	Rebecca Ware	2132077
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 13:36	Rebecca Ware	2132078
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 14:01	Rebecca Ware	2132079
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 14:13	Rebecca Ware	2132080
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 14:24	Rebecca Ware	2132081
	10/29/2019	10/31/2019 11:30	Rebecca Ware	11/13/2019 14:36	Rebecca Ware	2132082
	10/29/2019					
SM 2120 B	10/29/2019			10/29/2019 17:35	Madeline Funaro	2132047
	10/29/2019			10/29/2019 17:36	Madeline Funaro	2132048
	10/29/2019			10/29/2019 17:37	Madeline Funaro	2132049
SM 2320 B-97	10/29/2019			10/30/2019 19:53	Dale L. Simmons	2132047
	10/29/2019			10/30/2019 20:06	Dale L. Simmons	2132048
	10/29/2019			10/30/2019 20:21	Dale L. Simmons	2132049
SM 2540 C-97	10/29/2019			10/30/2019 15:03	Yijie Li	2132047, 2132048, 2132049
SM 2540 D-97	10/29/2019			10/30/2019 15:03	Yijie Li	2132047, 2132048, 2132049
SM 4500 F-C-97	10/29/2019			10/30/2019 19:53	Dale L. Simmons	2132047
	10/29/2019			10/30/2019 20:06	Dale L. Simmons	2132048
	10/29/2019			10/30/2019 20:21	Dale L. Simmons	2132049
SM 5310 B-00	10/29/2019			10/31/2019 04:47	Lauren Lees	2132050
	10/29/2019			10/31/2019 05:02	Lauren Lees	2132051
	10/29/2019			10/31/2019 05:17	Lauren Lees	2132052