Chemical Analysis Report

SO-DIST-2023-01-24-01

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

Event Description: **2023 SMP : Shell Creek**
Request ID: **RQ-2023-01-23-16**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
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Certified by: Colin Wright, Program Administrator

Date Certified: 16-FEB-2023 10:37

Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Prairie Creek @ Washington Loop **Collection Date/Time: 01/23/2023 08:45**

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382350	EPA 8321B	2,4-D	0.022		ug/L	P424948	
		Acesulfame K	0.10	U	ug/L	P424718	
		2,4,5-T	0.0040	U	ug/L	P424948	
		AMPA	2.1		ug/L	P424718	
		Acetaminophen	0.0080	U	ug/L	P424948	
		Acetamiprid	0.0020	U	ug/L	P424948	
		Endothall	0.25	U	ug/L	P424718	
		Glufosinate	0.10	U	ug/L	P424718	
		Glyphosate	2.5		ug/L	P424718	
		Afidopyropen	0.0020	U	ug/L	P424948	
		Bentazon	0.038		ug/L	P424948	
		Sucralose	0.016	I	ug/L	P424718	
		Benzovindiflupyr	0.0020	U	ug/L	P424948	
		Carbamazepine	8.0E-04	U	ug/L	P424948	
		Clothianidin	0.057		ug/L	P424948	
		Dinotefuran	0.0020	U	ug/L	P424948	
		Diuron	0.021		ug/L	P424948	
		Fenuron	0.032	U	ug/L	P424948	
		Fluridone	0.0019	I	ug/L	P424948	
		Imazapyr	0.011	I	ug/L	P424948	
		Hydrocodone	0.0020	U	ug/L	P424948	
		Ibuprofen	0.080	U	ug/L	P424948	
		Imidacloprid	0.22		ug/L	P424948	
		Linuron	0.0040	U	ug/L	P424948	
		Mandestrobin	0.0020	U	ug/L	P424948	
		MCPP	0.0020	U	ug/L	P424948	MS
		Naproxen	0.0080	UJ	ug/L	P424948	CCV
		Primidone	0.0040	U	ug/L	P424948	
		Pyraclostrobin	0.0020	U	ug/L	P424948	
		Silvex	0.0040	U	ug/L	P424948	
		Thiamethoxam	0.063		ug/L	P424948	
		Tolfenpyrad	0.0020	U	ug/L	P424948	
		Triclopyr	0.0040	U	ug/L	P424948	
2382354	EPA 8270E	Oxybenzone**	9.5	U	ng/L	P424935	
		Acetochlor	0.24	U	ng/L	P424935	
		Octinoxate**	19	U	ng/L	P424935	
		Alachlor	0.24	U	ng/L	P424935	
		Avobenzone**	95	U	ng/L	P424935	
		Ametryn	0.57	U	ng/L	P424935	
		Atrazine	0.24	U	ng/L	P424935	
		PBDE-47**	3.8	U	ng/L	P424935	
		Atrazine Desethyl	1.4	U	ng/L	P424935	
		PBDE-99**	4.8	U	ng/L	P424935	
		Azinphos Methyl	1.9	U	ng/L	P424935	

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382354	EPA 8270E	Tri-o-cresyl Phosphate**	5.7	U	ng/L	P424935	
		Azoxystrobin	0.48	U	ng/L	P424935	
		Bromacil	0.48	U	ng/L	P424935	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	11	U	ng/L	P424935	
		Butylate	0.38	U	ng/L	P424935	
		Dechlorane Plus**	29	U	ng/L	P424935	
		Caffeine**	7.1	U	ng/L	P424935	
		Carbophenothion	0.19	U	ng/L	P424935	
		Carfentrazone Ethyl	0.095	U	ng/L	P424935	
		Chlorfenapyr	0.17	U	ng/L	P424935	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P424935	
		Chlorpyrifos Methyl	0.048	U	ng/L	P424935	
		Coumaphos	0.48	U	ng/L	P424935	
		Cyanazine	3.1	U	ng/L	P424935	
		Cyprodinil	0.095	U	ng/L	P424935	
		Demeton	1.4	U	ng/L	P424935	
		Diazinon	0.12	U	ng/L	P424935	
		Difenoconazole	0.57	U	ng/L	P424935	
		Dimethenamid	0.095	U	ng/L	P424935	
		Dimethomorph	0.17	U	ng/L	P424935	
		Disulfoton	0.48	U	ng/L	P424935	
		Dithiopyr	0.59	U	ng/L	P424935	
		EPTC	1.2	U	ng/L	P424935	
		Ethion	0.14	U	ng/L	P424935	
		Ethoprop	0.095	U	ng/L	P424935	
		Etridiazole	0.14	U	ng/L	P424935	
		Fenamiphos	0.48	U	ng/L	P424935	MS
		Fenbuconazole	0.12	U	ng/L	P424935	
		Fipronil	0.24	U	ng/L	P424935	MS, RPD
		Fipronil Desulfinyl**	0.12	U	ng/L	P424935	
		Fipronil Sulfide	0.14	U	ng/L	P424935	MS
		Fipronil Sulfone	0.14	U	ng/L	P424935	
		Fluazifop-P-butyl	0.095	U	ng/L	P424935	
		Fludioxonil	0.12	U	ng/L	P424935	
		Flumioxazin	4.3	U	ng/L	P424935	
		Flutolanil	0.095	U	ng/L	P424935	
		Fluxapyroxad	0.095	U	ng/L	P424935	
		Fonofos	0.19	U	ng/L	P424935	
		Hexazinone	0.48	U	ng/L	P424935	
		Imazalil	0.71	U	ng/L	P424935	
		Iprodione	0.57	U	ng/L	P424935	
		Loratadine**	0.33	U	ng/L	P424935	
		Malathion	0.33	U	ng/L	P424935	
		Metalaxyl	0.71	U	ng/L	P424935	

Field ID: G3SD0067 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382354	EPA 8270E	Metolachlor	0.33	U	ng/L	P424935	
		Metribuzin	1.4	U	ng/L	P424935	
		Mevinphos	1.0	U	ng/L	P424935	
		Molinate	0.29	U	ng/L	P424935	
		Myclobutanil	0.24	U	ng/L	P424935	
		Naled	1.4	U	ng/L	P424935	
		Napropamide	0.38	U	ng/L	P424935	
		Norflurazon	0.48	U	ng/L	P424935	
		Oxadiazon	0.29	U	ng/L	P424935	
		Oxyfluorfen	0.14	U	ng/L	P424935	
		Parathion Ethyl	0.24	U	ng/L	P424935	
		Parathion Methyl	0.52	U	ng/L	P424935	
		Pendimethalin	0.95	U	ng/L	P424935	
		Phenytoin**	3.3	U	ng/L	P424935	
		Phorate	0.50	U	ng/L	P424935	
		Prodiamine	0.17	U	ng/L	P424935	
		Prometon	0.86	U	ng/L	P424935	
		Prometryn	0.19	U	ng/L	P424935	
		Pronamide	0.14	U	ng/L	P424935	
		Propanil	0.12	U	ng/L	P424935	
		Propargite	1.4	U	ng/L	P424935	
		Propiconazole	0.48	U	ng/L	P424935	
		Pyraflufen Ethyl	0.24	U	ng/L	P424935	
		Pyridaben	0.43	U	ng/L	P424935	
		Pyriproxyfen	0.12	U	ng/L	P424935	
		Simazine	0.48	U	ng/L	P424935	
		Stirophos	0.12	U	ng/L	P424935	
		Sulfentrazone	0.48	U	ng/L	P424935	
		Tebuconazole	0.48	U	ng/L	P424935	
		Terbufos	0.095	U	ng/L	P424935	
		Terbuthylazine	0.40	U	ng/L	P424935	
		Thiobencarb	0.57	U	ng/L	P424935	
		Triadimefon	0.24	U	ng/L	P424935	

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

Sample Location: Shell Cr. @ Hathaway Park **Collection Date/Time: 01/23/2023 09:15**

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382353	EPA 200.7 Rev. 4.4	Calcium	115		mg/L	P424970	
		Chromium	1.0	U	ug/L	P424970	
		Cobalt	1.0	U	ug/L	P424970	
		Iron	230		ug/L	P424970	
		Magnesium	14.3		mg/L	P424970	
		Potassium	5.6		mg/L	P424970	
		Sodium	67.0		mg/L	P424970	
		Strontium	3.60E+03		ug/L	P424970	
		Tin	3.0	U	ug/L	P424970	
		Titanium	0.86	I	ug/L	P424970	
		Vanadium	2.0	U	ug/L	P424970	
		Zinc	5.0	U	ug/L	P424970	
	EPA 200.8 Rev. 5.4	Aluminum	16	I	ug/L	P424970	
		Antimony	0.15	I	ug/L	P424970	
		Arsenic	0.82		ug/L	P424970	
		Barium	40.1		ug/L	P424970	
		Beryllium	0.010	U	ug/L	P424970	
		Boron	53.7		ug/L	P424970	
		Cadmium	0.020	U	ug/L	P424970	
		Copper	0.59	I	ug/L	P424970	
		Lead	0.20	U	ug/L	P424970	
		Manganese	16.0		ug/L	P424970	
		Molybdenum	3.34		ug/L	P424970	
		Nickel	1.1	I	ug/L	P424970	
		Selenium	0.34	I	ug/L	P424970	
		Silver	0.010	U	ug/L	P424970	
		Thallium	0.10	U	ug/L	P424970	
	SM 2340 B-2011	Hardness	345		mg/L	P424970	
2387283	EPA 8321B	2,4-D	0.0020	U	ug/L	P424948	
		Acesulfame K	0.10	U	ug/L	P424903	
		2,4,5-T	0.0040	U	ug/L	P424948	
		AMPA	0.82		ug/L	P424903	
		Acetaminophen	0.0080	U	ug/L	P424948	
		Acetamiprid	0.0020	U	ug/L	P424948	
		Endothall	0.25	U	ug/L	P424903	
		Glufosinate	0.10	U	ug/L	P424903	
		Glyphosate	1.6		ug/L	P424903	
		Afidopyropen	0.0020	U	ug/L	P424948	
		Bentazon	0.010		ug/L	P424948	
		Sucralose	0.034	I	ug/L	P424903	
		Benzovindiflupyr	0.0020	U	ug/L	P424948	
		Carbamazepine	8.0E-04	U	ug/L	P424948	
		Clothianidin	0.014		ug/L	P424948	
		Dinotefuran	0.0020	U	ug/L	P424948	

Field ID: G3SD0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2387283	EPA 8321B	Diuron	0.0020	U	ug/L	P424948	
		Fenuron	0.032	U	ug/L	P424948	
		Fluridone	0.0084		ug/L	P424948	
		Imazapyr	0.0091	I	ug/L	P424948	
		Hydrocodone	0.0020	U	ug/L	P424948	
		Ibuprofen	0.080	U	ug/L	P424948	
		Imidacloprid	0.047		ug/L	P424948	
		Linuron	0.0040	U	ug/L	P424948	
		Mandestrobin	0.0020	U	ug/L	P424948	
		MCPP	0.0020	U	ug/L	P424948	MS
		Naproxen	0.0080	UJ	ug/L	P424948	CCV
		Primidone	0.0040	U	ug/L	P424948	
		Pyraclostrobin	0.0020	U	ug/L	P424948	
		Silvex	0.0040	U	ug/L	P424948	
		Thiamethoxam	0.0037	I	ug/L	P424948	
		Tolfenpyrad	0.0020	U	ug/L	P424948	
		Triclopyr	0.0040	U	ug/L	P424948	

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

Sample Location: Shell Creek Reservoir Mid **Collection Date/Time: 01/23/2023 10:10**

Field ID: G3SD0204 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382340	DEP SOP: NU-094-1	Color (true)	55		PCU	P424923	
	EPA 180.1 Rev. 2.0	Turbidity	5.4		NTU	P424930	
	EPA 300.0 Rev. 2.1	Chloride	110		mg Cl/L	P425174	
		Sulfate	100		mg SO4/L	P425176	
	SM 2320 B-2011	Total Alkalinity	135		mg CaCO3/L	P425395	
	SM 2540 C-2015	TDS	442		mg/L	P425331	
	SM 2540 D-2015	TSS	7	I	mg/L	P425212	
	SM 4500-F- C-2011	Fluoride	0.29		mg F/L	P425399	RPD
2382342	EPA 350.1 Rev. 2.0	Ammonia-N	0.011		mg N/L	P425533	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P425002	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.088		mg N/L	P425139	
	EPA 365.1 Rev. 2.0	Total-P	0.11		mg P/L	P425129	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P425251	
2382351	EPA 8321B	2,4-D	0.013		ug/L	P424948	
		Acesulfame K	0.10	U	ug/L	P424903	
		2,4,5-T	0.0040	U	ug/L	P424948	
		AMPA	1.6		ug/L	P424903	
		Acetaminophen	0.0080	U	ug/L	P424948	
		Acetamiprid	0.0020	U	ug/L	P424948	
		Endothall	0.25	U	ug/L	P424903	
		Glufosinate	0.10	U	ug/L	P424903	
		Glyphosate	2.0		ug/L	P424903	
		Afidopyropen	0.0020	U	ug/L	P424948	
		Bentazon	0.035		ug/L	P424948	
		Sucralose	0.033	I	ug/L	P424903	
		Benzovindiflupyr	0.0020	U	ug/L	P424948	
		Carbamazepine	8.0E-04	U	ug/L	P424948	
		Clothianidin	0.045		ug/L	P424948	
		Dinotefuran	0.0020	U	ug/L	P424948	
		Diuron	0.017		ug/L	P424948	
		Fenuron	0.032	U	ug/L	P424948	
		Fluridone	0.0031	I	ug/L	P424948	
		Imazapyr	0.012	I	ug/L	P424948	
		Hydrocodone	0.0020	U	ug/L	P424948	
		Ibuprofen	0.080	U	ug/L	P424948	
		Imidacloprid	0.15		ug/L	P424948	
		Linuron	0.0040	U	ug/L	P424948	
		Mandestrobin	0.0020	U	ug/L	P424948	
		MCPP	0.0020	U	ug/L	P424948	MS
		Naproxen	0.0080	UJ	ug/L	P424948	CCV
		Primidone	0.0040	U	ug/L	P424948	
		Pyraclostrobin	0.0020	U	ug/L	P424948	
		Silvex	0.0040	U	ug/L	P424948	
		Thiamethoxam	0.048		ug/L	P424948	

Field ID: G3SD0204 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2382351	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P424948	
		Triclopyr	0.0040	U	ug/L	P424948	

Ref. Method and Comment:
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: 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: P424923

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424930

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424970

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Chromium	1.0	U	ug/L
Cobalt	1.0	U	ug/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Strontium	2.0	U	ug/L
Tin	3.0	U	ug/L
Titanium	0.75	U	ug/L
Vanadium	2.0	U	ug/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424970

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Barium	0.20	U	ug/L
Beryllium	0.010	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Manganese	0.10	U	ug/L
Molybdenum	0.15	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425174

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425176

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425533

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425002

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425139

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425129

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

Reference Method: EPA 8270E
Batch ID: P424935

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.25	U	ng/L
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azinphos Methyl	2.0	U	ng/L
Azoxystrobin	0.50	U	ng/L
Azoxystrobin	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Butylate	0.40	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P424935

Component	Result	Code	Units
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.20	U	ng/L
Carbophenothion	0.20	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Carfentrazone Ethyl	0.10	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorfenapyr	0.18	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Chlorpyrifos Methyl	0.050	U	ng/L
Coumaphos	0.50	U	ng/L
Coumaphos	0.50	U	ng/L
Cyanazine	3.2	U	ng/L
Cyanazine	3.2	U	ng/L
Cyprodinil	0.10	U	ng/L
Cyprodinil	0.10	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	1.5	U	ng/L
Demeton	1.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.18	U	ng/L
Dimethomorph	0.18	U	ng/L
Disulfoton	0.50	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.62	U	ng/L
Dithiopyr	0.62	U	ng/L
EPTC	1.2	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Ethoprop	0.10	U	ng/L
Etridiazole	0.15	U	ng/L
Etridiazole	0.15	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenamiphos	0.50	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fenbuconazole	0.12	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfide	0.15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P424935

Component	Result	Code	Units
Fipronil Sulfone	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.12	U	ng/L
Fludioxonil	0.12	U	ng/L
Flumioxazin	4.5	U	ng/L
Flumioxazin	4.5	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fluxapyroxad	0.10	U	ng/L
Fonofos	0.20	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.75	U	ng/L
Imazalil	0.75	U	ng/L
Iprodione	0.60	U	ng/L
Iprodione	0.60	U	ng/L
Loratadine	0.35	U	ng/L
Loratadine	0.35	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.75	U	ng/L
Metalaxyl	0.75	U	ng/L
Metolachlor	0.35	U	ng/L
Metolachlor	0.35	U	ng/L
Metribuzin	1.5	U	ng/L
Metribuzin	1.5	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.30	U	ng/L
Molinate	0.30	U	ng/L
Myclobutanil	0.25	U	ng/L
Myclobutanil	0.25	U	ng/L
Naled	1.5	U	ng/L
Naled	1.5	U	ng/L
Napropamide	0.40	U	ng/L
Napropamide	0.40	U	ng/L
Norflurazon	0.50	U	ng/L
Norflurazon	0.50	U	ng/L
Octinoxate	230		ng/L
Octinoxate	20	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxadiazon	0.30	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Oxyfluorfen	0.15	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P424935

Component	Result	Code	Units
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
Phenytoin	3.5	U	ng/L
Phenytoin	3.5	U	ng/L
Phorate	0.52	U	ng/L
Phorate	0.52	U	ng/L
Prodiamine	0.18	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Prometryn	0.20	U	ng/L
Pronamide	0.15	U	ng/L
Pronamide	0.15	U	ng/L
Propanil	0.12	U	ng/L
Propanil	0.12	U	ng/L
Propargite	1.5	U	ng/L
Propargite	1.5	U	ng/L
Propiconazole	0.50	U	ng/L
Propiconazole	0.50	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyraflufen Ethyl	0.25	U	ng/L
Pyridaben	0.45	U	ng/L
Pyridaben	0.45	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Pyriproxyfen	0.12	U	ng/L
Simazine	0.50	U	ng/L
Simazine	0.50	U	ng/L
Stirophos	0.12	U	ng/L
Stirophos	0.12	U	ng/L
Sulfentrazone	0.50	U	ng/L
Sulfentrazone	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L
Terbuthylazine	0.42	U	ng/L
Thiobencarb	0.60	U	ng/L
Thiobencarb	0.60	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P424718

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P424903

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P424948

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
2,4,5-T	0.0040	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.032	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.080	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Silvex	0.0040	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P425395

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

Reference Method: SM 2540 C-2015
Batch ID: P425331

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P425212

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P425251

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: P424923

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424930

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	80 - 120
Chromium	98.9		P	80 - 120
Cobalt	101		P	80 - 120
Iron	103		P	80 - 120
Magnesium	102		P	80 - 120
Potassium	103		P	80 - 120
Sodium	102		P	80 - 120
Strontium	99.6		P	80 - 120
Tin	99.2		P	80 - 120
Titanium	99.1		P	80 - 120
Vanadium	99.2		P	80 - 120
Zinc	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.9		P	85 - 115
Antimony	94.7		P	85 - 115
Arsenic	99.3		P	85 - 115
Barium	101		P	85 - 115
Beryllium	97.9		P	80 - 120
Boron	98.2		P	85 - 115
Cadmium	98.5		P	85 - 115
Copper	100		P	85 - 115
Lead	91.9		P	85 - 115
Manganese	97.7		P	85 - 115
Molybdenum	93.1		P	85 - 115
Nickel	100		P	85 - 115
Selenium	99.8		P	80 - 120
Silver	94.6		P	85 - 115
Thallium	94.4		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425174

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425176

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425533

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	94.2		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425002

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425139

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425129

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	106		P	90 - 110

Reference Method: EPA 8270E
Batch ID: P424935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	97.6		P	42 - 162
Acetochlor	118		P	69 - 123
Alachlor	101		P	65 - 118
Ametryn	97.9		P	58 - 141
Atrazine	97.5		P	73 - 118
Atrazine Desethyl	61.4		P	32 - 125
Avobenzone	112		P	40 - 203
Azinphos Methyl	151		P	36 - 197
Azoxystrobin	88.9		P	58 - 226
Bromacil	117		P	48 - 120
Butylate	66.5		P	27 - 85.0
Caffeine	69.5		P	40 - 137
Carbophenothion	85.6		P	54 - 132
Carfentrazone Ethyl	99.0		P	60 - 142
Chlorfenapyr	91.8		P	53 - 117
Chlorpyrifos Ethyl	115		P	59 - 116
Chlorpyrifos Methyl	82.6		P	66 - 119
Coumaphos	130		P	11 - 234
Cyanazine	214		P	61 - 248
Cyprodinil	139		P	50 - 147
Dechlorane Plus	101		P	47 - 182
Demeton	74.0		P	30 - 138

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P424935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Diazinon	101		P	67 - 126
Difenoconazole	153		P	38 - 205
Dimethenamid	104		P	57 - 111
Dimethomorph	99.6		P	16 - 212
Disulfoton	83.3		P	46 - 126
Dithiopyr	109		P	62 - 115
EPTC	65.3		P	28 - 80.0
Ethion	86.9		P	24 - 122
Ethoprop	93.7		P	62 - 113
Etridiazole	45.3		P	28 - 92.0
Fenamiphos	112		P	57 - 128
Fenbuconazole	114		P	52 - 155
Fipronil	79.5		P	63 - 130
Fipronil Desulfinyl	100		P	61 - 130
Fipronil Sulfide	90.6		P	56 - 117
Fipronil Sulfone	86.3		P	52 - 118
Fluazifop-P-butyl	98.4		P	61 - 128
Fludioxonil	113		P	59 - 129
Flumioxazin	150		P	30 - 250
Flutolanil	113		P	53 - 127
Fluxapyroxad	86.5		P	42 - 132
Fonofos	109		P	61 - 110
Hexazinone	93.1		P	46 - 139
Imazalil	104		P	40 - 139
Iprodione	112		P	40 - 146
Loratadine	120		P	10 - 224
Malathion	92.4		P	61 - 135
Metalaxyl	99.2		P	58 - 121
Metolachlor	95.6		P	64 - 118
Metribuzin	88.4		P	45 - 245
Mevinphos	116		P	49 - 118
Molinate	63.7		P	42 - 92.0
Myclobutanil	123		P	55 - 127
Naled	76.9		P	10 - 114
Napropamide	50.4		P	39 - 121
Norflurazon	89.0		P	55 - 129
Octinoxate	153		P	26 - 166
Oxadiazon	77.9		P	54 - 115
Oxybenzone	78.8		P	49 - 135
Oxyfluorfen	129		P	64 - 139
Parathion Ethyl	90.0		P	70 - 111
Parathion Methyl	107		P	76 - 136
PBDE-47	94.2		P	41 - 148
PBDE-99	94.3		P	38 - 147
Pendimethalin	110		P	52 - 118
Phenytoin	70.3		P	10 - 162
Phorate	96.8		P	40 - 122
Prodiamine	72.8		P	26 - 141
Prometon	115		P	54 - 122
Prometryn	94.0		P	61 - 128
Pronamide	90.4		P	72 - 121
Propanil	106		P	45 - 144

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P424935

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propargite	66.3		P	10 - 199
Propiconazole	113		P	56 - 127
Pyraflufen Ethyl	106		P	56 - 140
Pyridaben	131		P	26 - 211
Pyriproxyfen	76.4		P	33 - 194
Simazine	99.8		P	67 - 121
Stirophos	87.5		P	20 - 142
Sulfentrazone	39.7		P	21 - 144
Tebuconazole	83.8		P	10 - 122
Terbufos	120		P	60 - 129
Terbuthylazine	108		P	69 - 113
Thiobencarb	102		P	51 - 120
Tri-o-cresyl Phosphate	92.6		P	49 - 150
Triadimefon	100		P	56 - 114

Reference Method: EPA 8321B
Batch ID: P424718

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	97.0		P	40 - 150
AMPA	100		P	40 - 150
Endothall	93.2		P	40 - 150
Glufosinate	98.1		P	40 - 150
Glyphosate	99.5		P	40 - 150
Sucralose	91.7		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P424903

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	89.3		P	40 - 150
AMPA	94.7		P	40 - 150
Endothall	93.7		P	40 - 150
Glufosinate	105		P	40 - 150
Glyphosate	99.3		P	40 - 150
Sucralose	97.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P424948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	87.4		P	40 - 150
2,4,5-T	75.7		P	40 - 150
Acetaminophen	90.7		P	30 - 150
Acetamiprid	81.3		P	40 - 150
Afidopyropen	70.8		P	30 - 150
Bentazon	84.1		P	30 - 150
Benzovindiflupyr	80.3		P	40 - 150
Carbamazepine	84.5		P	40 - 150
Clothianidin	98.9		P	40 - 150
Dinotefuran	97.5		P	40 - 150
Diuron	70.7		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P424948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fenuron	100		P	40 - 150
Fluridone	64.2		P	40 - 150
Hydrocodone	110		P	40 - 150
Ibuprofen	64.7		P	40 - 150
Imazapyr	94.2		P	40 - 150
Imidacloprid	82.7		P	40 - 150
Linuron	66.1		P	40 - 150
Mandestrobin	89.9		P	40 - 150
MCPP	111		P	40 - 150
Naproxen	67.5		P	40 - 150
Primidone	108		P	40 - 150
Pyraclostrobin	72.4		P	40 - 150
Silvex	79.8		P	40 - 150
Thiamethoxam	103		P	40 - 150
Tolfenpyrad	44.1		P	30 - 150
Triclopyr	79.3		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P425395

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	97.0		P	94 - 106

Reference Method: SM 2540 C-2015
Batch ID: P425331

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

Reference Method: SM 2540 D-2015
Batch ID: P425212

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	99.0		P	85 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	101		P	96 - 104

Reference Method: SM 5310 B-2011
Batch ID: P425251

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382074	Calcium	106		P	80 - 120
2382074	Chromium	101	99.7	P/P	80 - 120
2382074	Cobalt	101	102	P/P	80 - 120
2382074	Iron	105	106	P/P	80 - 120
2382074	Magnesium	105		P	80 - 120
2382074	Potassium	103	104	P/P	80 - 120
2382074	Sodium	105		P	80 - 120
2382074	Strontium	100	101	P/P	80 - 120
2382074	Tin	103	103	P/P	80 - 120
2382074	Titanium	101	101	P/P	80 - 120
2382074	Vanadium	102	101	P/P	80 - 120
2382074	Zinc	103	102	P/P	80 - 120
2382216	Calcium	104		P	80 - 120
2382216	Chromium	102		P	80 - 120
2382216	Cobalt	102		P	80 - 120
2382216	Iron	104		P	80 - 120
2382216	Magnesium	101		P	80 - 120
2382216	Potassium	103		P	80 - 120
2382216	Sodium	105		P	80 - 120
2382216	Strontium	101		P	80 - 120
2382216	Tin	102		P	80 - 120
2382216	Titanium	104		P	80 - 120
2382216	Vanadium	103		P	80 - 120
2382216	Zinc	105		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382074	Aluminum	97.8	99.0	P/P	80 - 120
2382074	Antimony	98.4	99.4	P/P	80 - 120
2382074	Arsenic	102	103	P/P	80 - 120
2382074	Barium	103	104	P/P	80 - 120
2382074	Beryllium	101	102	P/P	80 - 120
2382074	Boron	99.4	100	P/P	80 - 120
2382074	Cadmium	103	105	P/P	80 - 120
2382074	Copper	98.8	99.6	P/P	80 - 120
2382074	Lead	93.5	95.8	P/P	80 - 120
2382074	Manganese	101	102	P/P	80 - 120
2382074	Molybdenum	97.0	98.6	P/P	80 - 120
2382074	Nickel	101	102	P/P	80 - 120
2382074	Selenium	99.5	101	P/P	80 - 120
2382074	Silver	96.4	97.1	P/P	80 - 120
2382074	Thallium	97.4	101	P/P	80 - 120
2382216	Aluminum	98.3		P	80 - 120
2382216	Antimony	99.5		P	80 - 120
2382216	Arsenic	101		P	80 - 120
2382216	Barium	105		P	80 - 120
2382216	Beryllium	101		P	80 - 120
2382216	Boron	98.2		P	80 - 120
2382216	Cadmium	104		P	80 - 120
2382216	Copper	100		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382216	Lead	94.1		P	80 - 120
2382216	Manganese	104		P	80 - 120
2382216	Molybdenum	97.7		P	80 - 120
2382216	Nickel	103		P	80 - 120
2382216	Selenium	102		P	80 - 120
2382216	Silver	97.0		P	80 - 120
2382216	Thallium	98.0		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425174

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382230	Chloride	98.9		P	90 - 110
2382405	Chloride	102		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425176

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382230	Sulfate	94.2		P	90 - 110
2382405	Sulfate	99.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425533

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382268	Ammonia-N	107	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382386	Kjeldahl Nitrogen	103	95.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425139

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382342	NO2NO3-N	98.6	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425129

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382375	Total-P	107	105	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P424935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382260	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	82.0	102	P/P	26 - 165
2382260	Acetochlor	114	111	P/P	67 - 124

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P424935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382260	Alachlor	102	101	P/P	60 - 120
2382260	Ametryn	102	114	P/P	54 - 216
2382260	Atrazine	95.7	105	P/P	66 - 128
2382260	Atrazine Desethyl	65.1	70.9	P/P	15 - 122
2382260	Avobenzone	109	112	P/P	37 - 178
2382260	Azinphos Methyl	150	139	P/P	40 - 292
2382260	Azoxystrobin	89.7	99.9	P/P	35 - 220
2382260	Bromacil	114	119	P/P	45 - 127
2382260	Butylate	62.2	70.5	P/P	20 - 83.0
2382260	Caffeine	88.6	92.9	P/P	10 - 194
2382260	Carbophenothion	85.4	85.8	P/P	57 - 127
2382260	Carfentrazone Ethyl	96.0	101	P/P	51 - 141
2382260	Chlorfenapyr	92.1	100	P/P	46 - 111
2382260	Chlorpyrifos Ethyl	103	104	P/P	52 - 120
2382260	Chlorpyrifos Methyl	90.4	89.3	P/P	63 - 119
2382260	Coumaphos	120	127	P/P	10 - 228
2382260	Cyanazine	170	186	P/P	59 - 241
2382260	Cyprodinil	125	132	P/P	47 - 146
2382260	Dechlorane Plus	89.1	96.5	P/P	50 - 150
2382260	Demeton	79.7	81.8	P/P	40 - 136
2382260	Diazinon	78.7	79.4	P/P	69 - 132
2382260	Difenoconazole	140	177	P/P	57 - 258
2382260	Dimethenamid	90.2	88.1	P/P	54 - 110
2382260	Dimethomorph	114	118	P/P	28 - 210
2382260	Disulfoton	57.6	60.7	P/P	43 - 133
2382260	Dithiopyr	75.5	80.7	P/P	39 - 116
2382260	EPTC	61.2	64.2	P/P	20 - 78.0
2382260	Ethion	87.2	100	P/P	17 - 119
2382260	Ethoprop	109	104	P/P	66 - 120
2382260	Etridiazole	43.0	49.0	P/P	28 - 96.0
2382260	Fenamiphos	110	139	P/F	41 - 126
2382260	Fenbuconazole	101	107	P/P	42 - 169
2382260	Fipronil	223	102	F/P	61 - 132
2382260	Fipronil Desulfinyl	63.2	71.3	P/P	56 - 132
2382260	Fipronil Sulfide	144	107	F/P	48 - 119
2382260	Fipronil Sulfone	72.5	93.8	P/P	42 - 131
2382260	Fluazifop-P-butyl	85.3	87.5	P/P	53 - 131
2382260	Fludioxonil	97.4	103	P/P	56 - 127
2382260	Flumioxazin	156	179	P/P	19 - 300
2382260	Flutolanil	108	124	P/P	41 - 127
2382260	Fluxapyroxad	97.6	104	P/P	42 - 172
2382260	Fonofos	97.0	85.0	P/P	59 - 113
2382260	Hexazinone	94.1	99.9	P/P	66 - 122
2382260	Imazalil	69.7	91.6	P/P	21 - 283
2382260	Iprodione	126	123	P/P	43 - 150
2382260	Loratadine	133	167	P/P	23 - 201
2382260	Malathion	95.3	102	P/P	58 - 136
2382260	Metalaxyl	88.9	88.4	P/P	55 - 120
2382260	Metolachlor	87.5	105	P/P	57 - 121
2382260	Metribuzin	97.6	97.2	P/P	58 - 294
2382260	Mevinphos	119	120	P/P	50 - 126
2382260	Molinate	59.3	71.6	P/P	42 - 93.0

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P424935

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382260	Myclobutanil	112	125	P/P	55 - 125
2382260	Naled	72.4	78.0	P/P	18 - 200
2382260	Napropamide	51.4	69.8	P/P	39 - 110
2382260	Norflurazon	85.0	101	P/P	48 - 128
2382260	Octinoxate	151	121	P/P	21 - 159
2382260	Oxadiazon	68.7	79.7	P/P	43 - 112
2382260	Oxybenzone	78.6	83.8	P/P	41 - 142
2382260	Oxyfluorfen	119	128	P/P	64 - 153
2382260	Parathion Ethyl	109	111	P/P	69 - 114
2382260	Parathion Methyl	129	119	P/P	79 - 139
2382260	PBDE-47	88.9	96.0	P/P	27 - 144
2382260	PBDE-99	84.2	95.8	P/P	18 - 150
2382260	Pendimethalin	95.6	107	P/P	50 - 139
2382260	Phenytoin	84.6	97.9	P/P	10 - 146
2382260	Phorate	106	98.5	P/P	54 - 161
2382260	Prodiamine	62.1	67.6	P/P	30 - 161
2382260	Prometon	115	106	P/P	45 - 134
2382260	Prometryn	86.4	83.2	P/P	45 - 137
2382260	Pronamide	82.5	89.5	P/P	65 - 133
2382260	Propanil	109	104	P/P	49 - 142
2382260	Propargite	63.6	62.1	P/P	10 - 203
2382260	Propiconazole	107	117	P/P	38 - 146
2382260	Pyraflufen Ethyl	81.2	98.4	P/P	34 - 153
2382260	Pyridaben	119	120	P/P	12 - 192
2382260	Pyriproxyfen	72.3	79.0	P/P	33 - 180
2382260	Simazine	102	102	P/P	51 - 157
2382260	Stirophos	86.4	98.2	P/P	10 - 128
2382260	Sulfentrazone	82.9	93.3	P/P	53 - 186
2382260	Tebuconazole	81.9	88.3	P/P	10 - 133
2382260	Terbufos	115	109	P/P	65 - 139
2382260	Terbuthylazine	97.3	103	P/P	66 - 117
2382260	Thiobencarb	109	115	P/P	51 - 119
2382260	Tri-o-cresyl Phosphate	88.1	91.5	P/P	31 - 144
2382260	Triadimefon	94.8	94.9	P/P	48 - 119

Reference Method: EPA 8321B
Batch ID: P424718

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382026	Acesulfame K	97.9	98.3	P/P	40 - 150
2382026	AMPA	115	106	P/P	40 - 150
2382026	Endothall	95.0	93.9	P/P	40 - 150
2382026	Glufosinate	92.0	94.8	P/P	40 - 150
2382026	Glyphosate	106	84.5	P/P	40 - 150
2382026	Sucralose	90.7	93.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P424903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382351	Acesulfame K	87.0	86.7	P/P	40 - 150
2382351	AMPA	48.6	59.0	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P424903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382351	Endothall	120	119	P/P	40 - 150
2382351	Glufosinate	82.9	93.5	P/P	40 - 150
2382351	Glyphosate	83.0	97.7	P/P	40 - 150
2382351	Sucralose	90.7	87.9	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P424948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382256	2,4-D	98.2	85.5	P/P	40 - 150
2382256	2,4,5-T	101	92.0	P/P	40 - 150
2382256	Acetaminophen	110	100	P/P	30 - 150
2382256	Acetamiprid	101	85.1	P/P	40 - 150
2382256	Afidopyropen	85.0	67.4	P/P	30 - 150
2382256	Bentazon	84.3	79.5	P/P	30 - 150
2382256	Benzovindiflupyr	92.3	85.9	P/P	40 - 150
2382256	Carbamazepine	89.4	82.9	P/P	40 - 150
2382256	Clothianidin	130	104	P/P	40 - 150
2382256	Dinotefuran	117	110	P/P	40 - 150
2382256	Diuron	81.0	79.7	P/P	40 - 150
2382256	Fenuron	120	105	P/P	40 - 150
2382256	Fluridone	79.7	73.3	P/P	40 - 150
2382256	Hydrocodone	133	110	P/P	40 - 150
2382256	Ibuprofen	94.4	85.8	P/P	40 - 150
2382256	Imazapyr	113	102	P/P	40 - 150
2382256	Imidacloprid	111	109	P/P	40 - 150
2382256	Linuron	80.4	72.2	P/P	40 - 150
2382256	Mandestrobin	98.4	98.5	P/P	40 - 150
2382256	MCPP	157	141	F/P	40 - 150
2382256	Naproxen	71.3	64.9	P/P	40 - 150
2382256	Primidone	124	119	P/P	40 - 150
2382256	Pyraclostrobin	93.1	83.4	P/P	40 - 150
2382256	Silvex	89.6	78.0	P/P	40 - 150
2382256	Thiamethoxam	103	103	P/P	40 - 150
2382256	Tolfenpyrad	55.3	48.4	P/P	30 - 150
2382256	Triclopyr	96.7	85.6	P/P	40 - 150

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2382909	Fluoride	103	100	P/P	94 - 104

Reference Method: SM 5310 B-2011
Batch ID: P425251

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2383498	Organic Carbon	95.4	97.7	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P424923

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382289	Color (true)	0.374	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P424930

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382289	Turbidity	1.26	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P424970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382074	Calcium	0.234	Spike	P	0 - 20
2382074	Chromium	0.984	Spike	P	0 - 20
2382074	Cobalt	0.974	Spike	P	0 - 20
2382074	Iron	0.381	Spike	P	0 - 20
2382074	Magnesium	0.702	Spike	P	0 - 20
2382074	Potassium	1.13	Spike	P	0 - 20
2382074	Sodium	0.398	Spike	P	0 - 20
2382074	Strontium	0.648	Spike	P	0 - 20
2382074	Tin	0.193	Spike	P	0 - 20
2382074	Titanium	0.210	Spike	P	0 - 20
2382074	Vanadium	0.651	Spike	P	0 - 20
2382074	Zinc	0.357	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P424970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382074	Aluminum	1.10	Spike	P	0 - 20
2382074	Antimony	1.09	Spike	P	0 - 20
2382074	Arsenic	1.39	Spike	P	0 - 20
2382074	Barium	1.10	Spike	P	0 - 20
2382074	Beryllium	0.497	Spike	P	0 - 20
2382074	Boron	0.527	Spike	P	0 - 20
2382074	Cadmium	1.71	Spike	P	0 - 20
2382074	Copper	0.792	Spike	P	0 - 20
2382074	Lead	2.51	Spike	P	0 - 20
2382074	Manganese	1.34	Spike	P	0 - 20
2382074	Molybdenum	1.53	Spike	P	0 - 20
2382074	Nickel	0.916	Spike	P	0 - 20
2382074	Selenium	1.58	Spike	P	0 - 20
2382074	Silver	0.730	Spike	P	0 - 20
2382074	Thallium	3.15	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425174

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382230	Chloride	0.406	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P425176

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382230	Sulfate	0.354	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P425533

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382268	Ammonia-N	8.61	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P425002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382386	Kjeldahl Nitrogen	5.29	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P425139

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382342	NO2NO3-N	1.06	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P425129

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382375	Total-P	1.72	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P424935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382260	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	21.4	Spike	P	0 - 37
2382260	Acetochlor	2.69	Spike	P	0 - 28
2382260	Alachlor	1.06	Spike	P	0 - 30
2382260	Ametryn	10.8	Spike	P	0 - 32
2382260	Atrazine	8.68	Spike	P	0 - 41
2382260	Atrazine Desethyl	8.50	Spike	P	0 - 36
2382260	Avobenzone	2.56	Spike	P	0 - 36
2382260	Azinphos Methyl	7.43	Spike	P	0 - 75
2382260	Azoxystrobin	10.8	Spike	P	0 - 39

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P424935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382260	Bromacil	4.73	Spike	P	0 - 33
2382260	Butylate	12.5	Spike	P	0 - 44
2382260	Caffeine	4.52	Spike	P	0 - 74
2382260	Carbophenothion	0.503	Spike	P	0 - 25
2382260	Carfentrazone Ethyl	5.17	Spike	P	0 - 27
2382260	Chlorfenapyr	8.55	Spike	P	0 - 24
2382260	Chlorpyrifos Ethyl	1.41	Spike	P	0 - 26
2382260	Chlorpyrifos Methyl	1.21	Spike	P	0 - 26
2382260	Coumaphos	5.27	Spike	P	0 - 28
2382260	Cyanazine	9.38	Spike	P	0 - 48
2382260	Cyprodinil	5.73	Spike	P	0 - 29
2382260	Dechlorane Plus	7.90	Spike	P	0 - 30
2382260	Demeton	2.62	Spike	P	0 - 33
2382260	Diazinon	0.934	Spike	P	0 - 29
2382260	Difenoconazole	23.2	Spike	P	0 - 34
2382260	Dimethenamid	2.36	Spike	P	0 - 39
2382260	Dimethomorph	3.58	Spike	P	0 - 51
2382260	Disulfoton	5.25	Spike	P	0 - 30
2382260	Dithiopyr	6.72	Spike	P	0 - 26
2382260	EPTC	4.91	Spike	P	0 - 43
2382260	Ethion	14.0	Spike	P	0 - 79
2382260	Ethoprop	4.97	Spike	P	0 - 29
2382260	Etridiazole	13.2	Spike	P	0 - 33
2382260	Fenamiphos	23.4	Spike	P	0 - 40
2382260	Fenbuconazole	5.39	Spike	P	0 - 74
2382260	Fipronil	74.5	Spike	F	0 - 29
2382260	Fipronil Desulfinyl	12.0	Spike	P	0 - 32
2382260	Fipronil Sulfide	29.6	Spike	P	0 - 30
2382260	Fipronil Sulfone	25.7	Spike	P	0 - 33
2382260	Fluazifop-P-butyl	2.56	Spike	P	0 - 38
2382260	Fludioxonil	5.74	Spike	P	0 - 29
2382260	Flumioxazin	13.8	Spike	P	0 - 51
2382260	Flutolanil	14.3	Spike	P	0 - 25
2382260	Fluxapyroxad	5.84	Spike	P	0 - 45
2382260	Fonofos	13.2	Spike	P	0 - 27
2382260	Hexazinone	5.41	Spike	P	0 - 30
2382260	Imazalil	27.2	Spike	P	0 - 100
2382260	Iprodione	2.72	Spike	P	0 - 33
2382260	Loratadine	22.5	Spike	P	0 - 56
2382260	Malathion	6.62	Spike	P	0 - 37
2382260	Metalaxyl	0.596	Spike	P	0 - 40
2382260	Metolachlor	18.5	Spike	P	0 - 29
2382260	Metribuzin	0.441	Spike	P	0 - 45
2382260	Mevinphos	0.565	Spike	P	0 - 29
2382260	Molinate	18.7	Spike	P	0 - 33
2382260	Myclobutanil	10.6	Spike	P	0 - 26
2382260	Naled	7.41	Spike	P	0 - 37
2382260	Napropamide	30.3	Spike	P	0 - 44
2382260	Norflurazon	17.0	Spike	P	0 - 30
2382260	Octinoxate	16.1	Spike	P	0 - 45
2382260	Oxadiazon	14.8	Spike	P	0 - 28

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P424935

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382260	Oxybenzone	6.35	Spike	P	0 - 46
2382260	Oxyfluorfen	7.28	Spike	P	0 - 28
2382260	Parathion Ethyl	1.68	Spike	P	0 - 31
2382260	Parathion Methyl	7.84	Spike	P	0 - 29
2382260	PBDE-47	7.65	Spike	P	0 - 36
2382260	PBDE-99	12.9	Spike	P	0 - 40
2382260	Pendimethalin	11.2	Spike	P	0 - 33
2382260	Phenytoin	14.5	Spike	P	0 - 100
2382260	Phorate	6.92	Spike	P	0 - 36
2382260	Prodiamine	8.47	Spike	P	0 - 71
2382260	Prometon	7.56	Spike	P	0 - 36
2382260	Prometryn	3.85	Spike	P	0 - 28
2382260	Pronamide	8.07	Spike	P	0 - 24
2382260	Propanil	5.28	Spike	P	0 - 28
2382260	Propargite	2.36	Spike	P	0 - 43
2382260	Propiconazole	8.95	Spike	P	0 - 33
2382260	Pyraflufen Ethyl	19.2	Spike	P	0 - 29
2382260	Pyridaben	0.566	Spike	P	0 - 30
2382260	Pyriproxyfen	8.80	Spike	P	0 - 79
2382260	Simazine	0.140	Spike	P	0 - 29
2382260	Stirophos	12.8	Spike	P	0 - 61
2382260	Sulfentrazone	11.8	Spike	P	0 - 33
2382260	Tebuconazole	7.43	Spike	P	0 - 69
2382260	Terbufos	4.55	Spike	P	0 - 29
2382260	Terbuthylazine	5.55	Spike	P	0 - 32
2382260	Thiobencarb	5.28	Spike	P	0 - 26
2382260	Tri-o-cresyl Phosphate	3.74	Spike	P	0 - 33
2382260	Triadimefon	0.145	Spike	P	0 - 28

Reference Method: EPA 8321B
Batch ID: P424718

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382026	Acesulfame K	0.448	Spike	P	0 - 30
2382026	AMPA	8.17	Spike	P	0 - 30
2382026	Endothall	1.18	Spike	P	0 - 30
2382026	Glufosinate	3.03	Spike	P	0 - 30
2382026	Glyphosate	22.4	Spike	P	0 - 30
2382026	Sucralose	2.52	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P424903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382351	Acesulfame K	0.411	Spike	P	0 - 30
2382351	AMPA	8.86	Spike	P	0 - 30
2382351	Endothall	0.477	Spike	P	0 - 30
2382351	Glufosinate	12.0	Spike	P	0 - 30
2382351	Glyphosate	8.65	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P424903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382351	Sucralose	3.06	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P424948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382256	2,4-D	13.1	Spike	P	0 - 30
2382256	2,4,5-T	8.87	Spike	P	0 - 30
2382256	Acetaminophen	9.32	Spike	P	0 - 30
2382256	Acetamiprid	16.8	Spike	P	0 - 30
2382256	Afidopyropen	23.0	Spike	P	0 - 30
2382256	Bentazon	5.90	Spike	P	0 - 30
2382256	Benzovindiflupyr	7.17	Spike	P	0 - 30
2382256	Carbamazepine	7.58	Spike	P	0 - 30
2382256	Clothianidin	22.0	Spike	P	0 - 30
2382256	Dinotefuran	5.94	Spike	P	0 - 30
2382256	Diuron	1.71	Spike	P	0 - 30
2382256	Fenuron	12.7	Spike	P	0 - 30
2382256	Fluridone	8.40	Spike	P	0 - 30
2382256	Hydrocodone	18.9	Spike	P	0 - 30
2382256	Ibuprofen	9.52	Spike	P	0 - 30
2382256	Imazapyr	10.0	Spike	P	0 - 30
2382256	Imidacloprid	1.78	Spike	P	0 - 30
2382256	Linuron	10.7	Spike	P	0 - 30
2382256	Mandestrobin	0.0787	Spike	P	0 - 30
2382256	MCPP	10.6	Spike	P	0 - 30
2382256	Naproxen	9.41	Spike	P	0 - 30
2382256	Primidone	4.14	Spike	P	0 - 30
2382256	Pyraclostrobin	11.0	Spike	P	0 - 30
2382256	Silvex	13.7	Spike	P	0 - 30
2382256	Thiamethoxam	0.126	Spike	P	0 - 30
2382256	Tolfenpyrad	13.3	Spike	P	0 - 30
2382256	Triclopyr	12.1	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P425395

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382909	Total Alkalinity	0.110	Sample	P	0 - 3.8

Reference Method: SM 2540 C-2015
Batch ID: P425331

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382201	TDS	6.71	Sample	P	0 - 10

Quality Assurance Report
Precision

Reference Method: SM 4500-F- C-2011
Batch ID: P425399

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2382909	Fluoride	1.95	Spike	F	0 - 1.6

Reference Method: SM 5310 B-2011
Batch ID: P425251

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2383498	Organic Carbon	1.61	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2382350
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.1	P	30 - 160
EPA 8321B	Acetaminophen-d4	99.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.7	P	30 - 160
EPA 8321B	Diuron-d6	55.6	P	30 - 160
EPA 8321B	Endothall-d6	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	80.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	87.1	P	30 - 160
EPA 8321B	Primidone-d5	105	P	30 - 160
EPA 8321B	Sucralose-d6	79.4	P	30 - 160

Lab Sample ID: 2382351
Field Sample ID: G3SD0204

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	89.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.9	P	30 - 160
EPA 8321B	Diuron-d6	59.5	P	30 - 160
EPA 8321B	Endothall-d6	120	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	89.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	79.8	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	90.2	P	30 - 160

Lab Sample ID: 2382354
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	109	P	20 - 200
EPA 8270E	Simazine-d10	104	P	62 - 142
EPA 8270E	Terbufos-d10	65.5	P	58 - 132
EPA 8270E	Terphenyl-d14	94.1	P	52 - 137

Lab Sample ID: 2387283
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	95.4	P	30 - 160
EPA 8321B	Acetaminophen-d4	110	P	30 - 160
EPA 8321B	Carbamazepine-d10	64.3	P	30 - 160
EPA 8321B	Diuron-d6	64.8	P	30 - 160
EPA 8321B	Endothall-d6	114	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	105	P	30 - 160
EPA 8321B	Primidone-d5	116	P	30 - 160
EPA 8321B	Sucralose-d6	90.1	P	30 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A117051
Included Lab Sample IDs: 2382340

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	100	101	P/P	90 - 110
Sulfate	98.5	98.9	P/P	90 - 110

Reference Method: DEP SOP: NU-094-1
Run ID: A117071
Included Lab Sample IDs: 2382340

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	99.9	101	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A117073
Included Lab Sample IDs: 2382340

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

Reference Method: EPA 8321B
Run ID: A117080
Included Lab Sample IDs: 2382350, 2382351, 2387283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	92.8	91.8	P/P	60 - 160
Acesulfame K	93.1	87.9	P/P	60 - 160
Sucralose	88.5	88.5	P/P	60 - 160
Sucralose	96.4	92.6	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A117084
Included Lab Sample IDs: 2382350, 2382351, 2387283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	89.0	93.9	P/P	60 - 160
AMPA	99.2	94.6	P/P	60 - 160
Endothall	93.6	90.6	P/P	60 - 160
Endothall	96.6	96.4	P/P	60 - 160
Glufosinate	95.5	96.8	P/P	60 - 160
Glufosinate	95.6	93.1	P/P	60 - 160
Glyphosate	90.6	98.5	P/P	60 - 160
Glyphosate	98.9	94.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A117129
Included Lab Sample IDs: 2382350, 2382351, 2387283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	100	103	P/P	50 - 150
2,4,5-T	110	105	P/P	50 - 150
Acetaminophen	116	114	P/P	60 - 160
Acetamiprid	116	116	P/P	50 - 150
Afidopyropen	92.9	84.1	P/P	50 - 150

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A117129
Included Lab Sample IDs: 2382350, 2382351, 2387283

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	114	108	P/P	50 - 160
Benzovindiflupyr	116	105	P/P	50 - 150
Carbamazepine	104	108	P/P	60 - 150
Clothianidin	115	118	P/P	60 - 150
Dinotefuran	116	115	P/P	50 - 150
Diuron	114	110	P/P	60 - 160
Fenuron	112	117	P/P	60 - 150
Fluridone	99.9	110	P/P	60 - 160
Hydrocodone	143	145	P/P	60 - 150
Ibuprofen	128	120	P/P	50 - 160
Imazapyr	117	116	P/P	50 - 150
Imidacloprid	99.8	100	P/P	60 - 150
Linuron	115	95.0	P/P	60 - 150
Mandestrobin	106	115	P/P	50 - 150
MCPP	111	105	P/P	50 - 150
Naproxen	170*	147	F/P	50 - 160
Primidone	126	129	P/P	60 - 150
Pyraclostrobin	116	113	P/P	60 - 150
Silvex	111	106	P/P	50 - 150
Thiamethoxam	126	116	P/P	50 - 150
Tolfenpyrad	111	111	P/P	60 - 150
Triclopyr	108	95.6	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A117151
Included Lab Sample IDs: 2382354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	96.3		P	80 - 120
Avobenzone	97.4		P	80 - 120
Dechlorane Plus	96.7		P	80 - 120
Octinoxate	97.5		P	80 - 120
Oxybenzone	99.9		P	80 - 120
PBDE-47	97.8		P	80 - 120
PBDE-99	100		P	80 - 120
Tri-o-cresyl Phosphate	97.9		P	80 - 120

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A117153
Included Lab Sample IDs: 2382342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.6	95.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A117158
Included Lab Sample IDs: 2382342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	98.5	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A117168
Included Lab Sample IDs: 2382354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	87.5		P	80 - 120
Alachlor	84.4		P	80 - 120
Ametryn	105		P	80 - 120
Atrazine	99.7		P	80 - 120
Atrazine Desethyl	95.1		P	80 - 120
Azinphos Methyl	106		P	80 - 120
Azoxystrobin	99.6		P	80 - 120
Bromacil	94.0		P	80 - 120
Butylate	104		P	80 - 120
Caffeine	103		P	80 - 120
Carbophenothion	96.2		P	80 - 120
Carfentrazone Ethyl	92.7		P	80 - 120
Chlorfenapyr	84.2		P	80 - 120
Chlorpyrifos Ethyl	83.7		P	80 - 120
Chlorpyrifos Methyl	106		P	80 - 120
Coumaphos	85.8		P	80 - 120
Cyanazine	92.3		P	80 - 120
Cyprodinil	98.8		P	80 - 120
Demeton	107		P	80 - 120
Diazinon	95.7		P	80 - 120
Difenoconazole	80.4		P	80 - 120
Dimethenamid	89.0		P	80 - 120
Dimethomorph	102		P	80 - 120
Disulfoton	93.5		P	80 - 120
Dithiopyr	86.0		P	80 - 120
EPTC	104		P	80 - 120
Ethion	89.4		P	80 - 120
Ethoprop	97.8		P	80 - 120
Etridiazole	101		P	80 - 120
Fenamiphos	89.6		P	80 - 120
Fenbuconazole	87.0		P	80 - 120
Fipronil	116		P	80 - 120
Fipronil Desulfinyl	87.5		P	80 - 120
Fipronil Sulfide	99.2		P	80 - 120
Fipronil Sulfone	92.6		P	80 - 120
Fluazifop-P-butyl	89.2		P	80 - 120
Fludioxonil	87.5		P	80 - 120
Flumioxazin	93.3		P	80 - 120
Flutolanil	93.4		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	98.8		P	80 - 120
Imazalil	90.5		P	80 - 120
Iprodione	96.9		P	80 - 120
Loratadine	94.6		P	80 - 120
Malathion	93.3		P	80 - 120
Metalaxyl	86.8		P	80 - 120
Metolachlor	88.8		P	80 - 120
Metribuzin	94.3		P	80 - 120
Mevinphos	98.7		P	80 - 120
Molinate	93.4		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A117168
Included Lab Sample IDs: 2382354

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	84.7		P	80 - 120
Naled	113		P	80 - 120
Napropamide	114		P	80 - 120
Norflurazon	92.8		P	80 - 120
Oxadiazon	87.5		P	80 - 120
Oxyfluorfen	80.4		P	80 - 120
Parathion Ethyl	102		P	80 - 120
Parathion Methyl	94.0		P	80 - 120
Pendimethalin	101		P	80 - 120
Phenytoin	107		P	80 - 120
Phorate	90.3		P	80 - 120
Prodiamine	84.1		P	80 - 120
Prometon	93.2		P	80 - 120
Prometryn	98.4		P	80 - 120
Pronamide	92.5		P	80 - 120
Propanil	94.9		P	80 - 120
Propargite	117		P	80 - 120
Propiconazole	97.7		P	80 - 120
Pyraflufen Ethyl	95.0		P	80 - 120
Pyridaben	91.5		P	80 - 120
Pyriproxyfen	92.4		P	80 - 120
Simazine	95.2		P	80 - 120
Stirophos	90.5		P	80 - 120
Sulfentrazone	93.9		P	80 - 120
Tebuconazole	111		P	80 - 120
Terbufos	92.7		P	80 - 120
Terbuthylazine	88.5		P	80 - 120
Thiobencarb	89.1		P	80 - 120
Triadimefon	89.6		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A117176
Included Lab Sample IDs: 2382342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.4	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A117202
Included Lab Sample IDs: 2382342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	99.4	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A117247
Included Lab Sample IDs: 2382353

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	102	99.7	P/P	90 - 110
Cobalt	105	102	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A117247
Included Lab Sample IDs: 2382353

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Strontium	102	103	P/P	90 - 110
Tin	100	98.3	P/P	90 - 110
Titanium	101	98.3	P/P	90 - 110
Vanadium	102	99.7	P/P	90 - 110
Zinc	103	101	P/P	90 - 110

Reference Method: SM 2320 B-2011
Run ID: A117270
Included Lab Sample IDs: 2382340

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	95.1	96.8	P/P	90 - 110

Reference Method: SM 4500-F- C-2011
Run ID: A117270
Included Lab Sample IDs: 2382340

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A117283
Included Lab Sample IDs: 2382353

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	102	P/P	95 - 105
Iron	103	104	P/P	95 - 105
Magnesium	103	103	P/P	95 - 105
Potassium	103	104	P/P	95 - 105
Sodium	100	102	P/P	95 - 105

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A117289
Included Lab Sample IDs: 2382353

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A117308
Included Lab Sample IDs: 2382353

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	97.2	98.5	P/P	90 - 110
Antimony	94.8	95.7	P/P	90 - 110
Arsenic	98.2	98.8	P/P	90 - 110
Barium	99.2	100	P/P	90 - 110
Boron	96.6	96.2	P/P	90 - 110
Cadmium	98.4	99.5	P/P	90 - 110
Copper	97.7	98.3	P/P	90 - 110
Lead	95.3	96.0	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A117308
Included Lab Sample IDs: 2382353

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Manganese	98.6	99.7	P/P	90 - 110
Molybdenum	92.9	93.3	P/P	90 - 110
Nickel	97.9	99.6	P/P	90 - 110
Selenium	97.2	99.9	P/P	90 - 110
Silver	95.5	96.1	P/P	90 - 110
Thallium	95.5	95.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A117326
Included Lab Sample IDs: 2382342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	96.3	97.2	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			Precision		
						LCS	SMP	MS
DEP SOP: NU-094-1	Color (true)	99.3					0.374	
EPA 180.1 Rev. 2.0	Turbidity	101					1.26	
EPA 200.7 Rev. 4.4	Calcium	105	106	104				0.234
	Chromium	98.9	101	99.7	102			0.984
	Cobalt	101	101	102	102			0.974
	Iron	103	105	106	104			0.381
	Magnesium	102	105	101				0.702
	Potassium	103	103	104	103			1.13
	Sodium	102	105	105				0.398
	Strontium	99.6	100	101	101			0.648
	Tin	99.2	103	103	102			0.193
	Titanium	99.1	101	101	104			0.210
	Vanadium	99.2	102	101	103			0.651
	Zinc	102	103	102	105			0.357
EPA 200.8 Rev. 5.4	Aluminum	98.9	97.8	99.0	98.3			1.10
	Antimony	94.7	98.4	99.4	99.5			1.09
	Arsenic	99.3	102	103	101			1.39
	Barium	101	104	105	103			1.10
	Beryllium	97.9	101	102	101			0.497
	Boron	98.2	99.4	100	98.2			0.527
	Cadmium	98.5	103	105	104			1.71
	Copper	100	98.8	99.6	100			0.792
	Lead	91.9	93.5	95.8	94.1			2.51
	Manganese	97.7	101	102	104			1.34
	Molybdenum	93.1	97.0	98.6	97.7			1.53
	Nickel	100	101	102	103			0.916
	Selenium	99.8	99.5	101	102			1.58
	Silver	94.6	96.4	97.1	97.0			0.730
	Thallium	94.4	97.4	101	98.0			3.15
EPA 300.0 Rev. 2.1	Chloride	99.1	98.9	102			0.406	
	Sulfate	97.3	94.2	99.8			0.354	
EPA 350.1 Rev. 2.0	Ammonia-N	94.2	107	96.8				8.61
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	103	95.4				5.29
EPA 353.2 Rev. 2.0	NO2NO3-N	97.0	98.6	97.0				1.06
EPA 365.1 Rev. 2.0	Total-P	106	107	105				1.72
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	97.6	82.0	102				21.4
	Acetochlor	118	114	111				2.69
	Alachlor	101	102	101				1.06
	Ametryn	97.9	102	114				10.8
	Atrazine	97.5	95.7	105				8.68
	Atrazine Desethyl	61.4	65.1	70.9				8.50
	Avobenzone	112	109	112				2.56
	Azinphos Methyl	151	150	139				7.43
	Azoxystrobin	88.9	89.7	99.9				10.8
	Bromacil	117	114	119				4.73
	Butylate	66.5	62.2	70.5				12.5
	Caffeine	69.5	88.6	92.9				4.52
	Carbophenothion	85.6	85.4	85.8				0.503
	Carfentrazone Ethyl	99.0	96.0	101				5.17
	Chlorfenapyr	91.8	92.1	100				8.55
	Chlorpyrifos Ethyl	115	103	104				1.41
	Chlorpyrifos Methyl	82.6	90.4	89.3				1.21

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Coumaphos	130	120	127			5.27
	Cyanazine	214	170	186			9.38
	Cyprodinil	139	125	132			5.73
	Dechlorane Plus	101	89.1	96.5			7.90
	Demeton	74.0	79.7	81.8			2.62
	Diazinon	101	78.7	79.4			0.934
	Difenoconazole	153	140	177			23.2
	Dimethenamid	104	90.2	88.1			2.36
	Dimethomorph	99.6	114	118			3.58
	Disulfoton	83.3	57.6	60.7			5.25
	Dithiopyr	109	75.5	80.7			6.72
	EPTC	65.3	61.2	64.2			4.91
	Ethion	86.9	87.2	100			14.0
	Ethoprop	93.7	109	104			4.97
	Etridiazole	45.3	43.0	49.0			13.2
	Fenamiphos	112	110	139			23.4
	Fenbuconazole	114	101	107			5.39
	Fipronil	79.5	102	223			74.5
	Fipronil Desulfinyl	100	71.3	63.2			12.0
	Fipronil Sulfide	90.6	107	144			29.6
	Fipronil Sulfone	86.3	93.8	72.5			25.7
	Fluazifop-P-butyl	98.4	87.5	85.3			2.56
	Fludioxonil	113	103	97.4			5.74
	Flumioxazin	150	179	156			13.8
	Flutolanil	113	124	108			14.3
	Fluxapyroxad	86.5	104	97.6			5.84
	Fonofos	109	85.0	97.0			13.2
	Hexazinone	93.1	99.9	94.1			5.41
	Imazalil	104	91.6	69.7			27.2
	Iprodione	112	123	126			2.72
	Loratadine	120	167	133			22.5
	Malathion	92.4	102	95.3			6.62
	Metalaxyl	99.2	88.4	88.9			0.596
	Metolachlor	95.6	105	87.5			18.5
	Metribuzin	88.4	97.2	97.6			0.441
	Mevinphos	116	120	119			0.565
	Molinate	63.7	71.6	59.3			18.7
	Myclobutanil	123	125	112			10.6
	Naled	76.9	78.0	72.4			7.41
	Napropamide	50.4	69.8	51.4			30.3
	Norflurazon	89.0	101	85.0			17.0
	Octinoxate	153	151	121			16.1
	Oxadiazon	77.9	79.7	68.7			14.8
	Oxybenzone	78.8	78.6	83.8			6.35
	Oxyfluorfen	129	128	119			7.28
	Parathion Ethyl	90.0	111	109			1.68
	Parathion Methyl	107	119	129			7.84
	PBDE-47	94.2	88.9	96.0			7.65
	PBDE-99	94.3	84.2	95.8			12.9
	Pendimethalin	110	107	95.6			11.2
	Phenytoin	70.3	97.9	84.6			14.5
	Phorate	96.8	98.5	106			6.92
	Prodiamine	72.8	67.6	62.1			8.47
	Prometon	115	106	115			7.56

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Prometryn	94.0	83.2	86.4			3.85
	Pronamide	90.4	89.5	82.5			8.07
	Propanil	106	104	109			5.28
	Propargite	66.3	62.1	63.6			2.36
	Propiconazole	113	117	107			8.95
	Pyraflufen Ethyl	106	98.4	81.2			19.2
	Pyridaben	131	120	119			0.566
	Pyriproxyfen	76.4	79.0	72.3			8.80
	Simazine	99.8	102	102			0.140
	Stirophos	87.5	98.2	86.4			12.8
	Sulfentrazone	39.7	93.3	82.9			11.8
	Tebuconazole	83.8	88.3	81.9			7.43
	Terbufos	120	109	115			4.55
	Terbuthylazine	108	103	97.3			5.55
	Thiobencarb	102	115	109			5.28
	Tri-o-cresyl Phosphate	92.6	88.1	91.5			3.74
	Triadimefon	100	94.9	94.8			0.145
EPA 8321B	2,4-D	87.4	98.2	85.5			13.1
	2,4,5-T	75.7	101	92.0			8.87
	Acesulfame K	97.0	97.9	98.3			0.448
	Acesulfame K	89.3	87.0	86.7			0.411
	Acetaminophen	90.7	110	100			9.32
	Acetamiprid	81.3	101	85.1			16.8
	Afidopyropen	70.8	85.0	67.4			23.0
	AMPA	100	115	106			8.17
	AMPA	94.7	59.0	48.6			8.86
	Bentazon	84.1	84.3	79.5			5.90
	Benzovindiflupyr	80.3	92.3	85.9			7.17
	Carbamazepine	84.5	89.4	82.9			7.58
	Clothianidin	98.9	130	104			22.0
	Dinotefuran	97.5	117	110			5.94
	Diuron	70.7	81.0	79.7			1.71
	Endothall	93.2	95.0	93.9			1.18
	Endothall	93.7	119	120			0.477
	Fenuron	100	120	105			12.7
	Fluridone	64.2	79.7	73.3			8.40
	Glufosinate	98.1	92.0	94.8			3.03
	Glufosinate	105	93.5	82.9			12.0
	Glyphosate	99.5	106	84.5			22.4
	Glyphosate	99.3	97.7	83.0			8.65
	Hydrocodone	110	133	110			18.9
	Ibuprofen	64.7	94.4	85.8			9.52
	Imazapyr	94.2	113	102			10.0
	Imidacloprid	82.7	111	109			1.78
	Linuron	66.1	80.4	72.2			10.7
	Mandestrobin	89.9	98.4	98.5			0.0787
	MCPP	111	157	141			10.6
	Naproxen	67.5	71.3	64.9			9.41
	Primidone	108	124	119			4.14
	Pyraclostrobin	72.4	93.1	83.4			11.0
	Silvex	79.8	89.6	78.0			13.7
	Sucralose	91.7	90.7	93.1			2.52
	Sucralose	97.5	90.7	87.9			3.06
	Thiamethoxam	103	103	103			0.126

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Tolfenpyrad	44.1	55.3	48.4			13.3
	Triclopyr	79.3	96.7	85.6			12.1
SM 2320 B-2011	Total Alkalinity	97.0				0.110	
SM 2540 C-2015	TDS	96.9				6.71	
SM 2540 D-2015	TSS	99.0					
SM 4500-F- C-2011	Fluoride	101	103	100			1.95
SM 5310 B-2011	Organic Carbon	96.1	95.4	97.7			1.61

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2382340
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2382340
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2382353
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2382353
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2382340
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2382340
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2382342
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2382342
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2382342
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2382342
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2382354
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2382354
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2382350, 2382351, 2387283
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2382340
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2382353
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2382340
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2382340
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2382340
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2382342

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	01/24/2023			01/24/2023 14:16	Alexis Price	2382340
EPA 180.1 Rev. 2.0	01/24/2023			01/24/2023 13:42	Khloe J Berg	2382340
EPA 200.7 Rev. 4.4	01/24/2023	01/25/2023 10:50	Vijayalakshmi Reddy	02/02/2023 23:04	McKinley C Carter	2382353
	01/24/2023	01/25/2023 10:50	Vijayalakshmi Reddy	02/03/2023 16:15	McKinley C Carter	2382353
EPA 200.8 Rev. 5.4	01/24/2023	01/25/2023 10:50	Vijayalakshmi Reddy	02/06/2023 18:28	Emily M Philpot	2382353
	01/24/2023	01/25/2023 10:50	Vijayalakshmi Reddy	02/07/2023 17:25	Emily M Philpot	2382353
EPA 300.0 Rev. 2.1	01/24/2023			01/27/2023 23:15	Anna M. Plaviak	2382340
EPA 350.1 Rev. 2.0	01/24/2023			02/08/2023 12:23	Ping Hua	2382342
EPA 351.2 Rev. 2.0	01/24/2023	01/26/2023 15:30	Simonne.V. Calhoun	01/30/2023 11:01	Samantha L Bates	2382342
EPA 353.2 Rev. 2.0	01/24/2023			01/30/2023 10:08	Beverly Y. Sanders	2382342
EPA 365.1 Rev. 2.0	01/24/2023	01/30/2023 14:03	Adam P Silver	01/31/2023 09:45	James L Waggerby	2382342
EPA 8270E	01/24/2023	01/25/2023 08:30	Rasheda Ghaffari	01/27/2023 19:08	Michael Poppell	2382354
	01/24/2023	01/25/2023 08:30	Rasheda Ghaffari	01/28/2023 18:07	Arthur Maknenko	2382354
EPA 8321B	01/24/2023	01/24/2023 12:00	Manjita Shrestha	01/24/2023 20:20	Manjita Shrestha	2382350
	01/24/2023	01/24/2023 12:00	Manjita Shrestha	01/25/2023 05:54	Manjita Shrestha	2382350
	01/24/2023	01/25/2023 13:00	June Rhew	01/25/2023 14:51	Manjita Shrestha	2382351
	01/24/2023	01/25/2023 13:00	June Rhew	01/25/2023 15:04	Manjita Shrestha	2387283
	01/24/2023	01/25/2023 13:00	June Rhew	01/25/2023 21:22	Manjita Shrestha	2382351
	01/24/2023	01/25/2023 13:00	June Rhew	01/25/2023 21:37	Manjita Shrestha	2387283
	01/24/2023	01/26/2023 09:30	June Rhew	01/26/2023 23:00	Juyoung Kim	2382350
	01/24/2023	01/26/2023 09:30	June Rhew	01/26/2023 23:19	Juyoung Kim	2382351
	01/24/2023	01/26/2023 09:30	June Rhew	01/26/2023 23:37	Juyoung Kim	2387283
SM 2320 B-2011	01/24/2023			02/03/2023 00:32	Dale L. Simmons	2382340
SM 2340 B-2011	01/24/2023			02/03/2023 16:15	McKinley C Carter	2382353
SM 2540 C-2015	01/24/2023			01/25/2023 12:55	Yijie Li	2382340
SM 2540 D-2015	01/24/2023			01/25/2023 12:55	Yijie Li	2382340
SM 4500-F- C-2011	01/24/2023			02/03/2023 00:32	Dale L. Simmons	2382340
SM 5310 B-2011	01/24/2023			01/31/2023 22:56	Elise M. Gillis	2382342