Chemical Analysis Report

CEN-DIST-2022-02-04-01

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

Event Description: **Run 6**
Request ID: **RQ-2022-01-31-21**
Customer: **CEN-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
3319 Maguire Blvd., Suite 232
Orlando, FL 32803-3767
Attn: Matthew Bearden

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator Date Certified: 25-FEB-2022 12:52

B. Steinbock

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: Eau Gallie River 145m E of N Wickham Rd. **Collection Date/Time: 02/03/2022 11:25**

Field ID: G5CE0131 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303751	EPA 8321B	Aldicarb	0.020	U	ug/L	P409339	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P409339	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P409339	
		Carbaryl	0.0020	U	ug/L	P409339	
		Carbofuran	0.0020	U	ug/L	P409339	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P409339	
		Methiocarb	0.0020	U	ug/L	P409339	
		Methomyl	0.0020	U	ug/L	P409339	
		Oxamyl	0.0020	U	ug/L	P409339	
		Propoxur	0.0020	U	ug/L	P409339	
2303752		2,4-D	0.012		ug/L	P409557	
		Acesulfame K	0.34	I	ug/L	P409457	
		2,4,5-T	0.0040	U	ug/L	P409557	
		AMPA	0.31	I	ug/L	P409457	
		Acetaminophen	0.0080	U	ug/L	P409557	
		Acetamiprid	0.0020	U	ug/L	P409557	
		Endothall	0.25	U	ug/L	P409457	
		Glufosinate	0.10	U	ug/L	P409457	
		Glyphosate	3.3		ug/L	P409457	
		Afidopyropen	0.0020	U	ug/L	P409557	
		Bentazon	0.088		ug/L	P409557	
		Sucralose	0.83		ug/L	P409457	
		Benzovindiflupyr	0.0020	U	ug/L	P409557	
		Carbamazepine	0.0083		ug/L	P409557	
		Clothianidin	0.0023	I	ug/L	P409557	
		Dinotefuran	0.0029	I	ug/L	P409557	
		Diuron	0.0022	I	ug/L	P409557	
		Fenuron	0.016	U	ug/L	P409557	
		Fluridone	0.0046		ug/L	P409557	
		Imazapyr	0.78		ug/L	P409557	
		Hydrocodone	0.0020	U	ug/L	P409557	
		Ibuprofen	0.020	U	ug/L	P409557	RPD
		Imidacloprid	0.021		ug/L	P409557	
		Linuron	0.0040	U	ug/L	P409557	
		Mandestrobin	0.0020	U	ug/L	P409557	
		MCPP	0.0040	U	ug/L	P409557	
		Naproxen	0.0080	U	ug/L	P409557	
		Primidone	0.0054	I	ug/L	P409557	
		Pyraclostrobin	0.0020	U	ug/L	P409557	
		Thiamethoxam	0.0020	U	ug/L	P409557	
		Tolfenpyrad	0.0020	U	ug/L	P409557	
		Triclopyr	0.0040	U	ug/L	P409557	MS
2303758	EPA 8270E	Aldrin	0.66	U	ng/L	P409586	
		Alpha-BHC	0.10	U	ng/L	P409586	

Field ID: G5CE0131 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303758	EPA 8270E	Alpha-Chlordane	0.20	U	ng/L	P409586	
		Beta-BHC	0.10	UJ	ng/L	P409586	RPD
		Beta-Cyfluthrin**	1.3	U	ng/L	P409586	
		Bifenthrin**	0.51	U	ng/L	P409586	
		Chlorothalonil	1.3	U	ng/L	P409586	
		Cis-Nonachlor**	0.20	U	ng/L	P409586	
		Cypermethrin	1.5	U	ng/L	P409586	
		Dacthal**	0.15	U	ng/L	P409586	
		DDD-p,p'	0.25	U	ng/L	P409586	
		DDE-p,p'	0.20	U	ng/L	P409586	
		DDT-p,p'	0.25	U	ng/L	P409586	
		Delta-BHC	0.41	U	ng/L	P409586	
		Deltamethrin**	1.3	U	ng/L	P409586	
		Dichlobenil**	0.25	U	ng/L	P409586	
		Dicofol	1.3	UJ	ng/L	P409586	CCV, LCS, MS
		Dieldrin	0.41	U	ng/L	P409586	
		Endosulfan I	0.41	U	ng/L	P409586	
		Endosulfan II	0.41	U	ng/L	P409586	
		Endosulfan Sulfate	0.31	U	ng/L	P409586	
		Endrin	0.41	U	ng/L	P409586	
		Endrin Aldehyde	0.76	U	ng/L	P409586	
		Endrin Ketone	0.41	U	ng/L	P409586	
		Esfenvalerate**	0.76	U	ng/L	P409586	
		Ethalfluralin**	0.15	U	ng/L	P409586	
		Fenpropathrin**	0.25	UJ	ng/L	P409586	CCV, RPD
		Gamma-BHC	0.13	U	ng/L	P409586	
		Gamma-Chlordane	0.20	U	ng/L	P409586	
		Heptachlor	0.20	U	ng/L	P409586	
		Heptachlor Epoxide	0.25	U	ng/L	P409586	
		Hexachlorobenzene	1.0	U	ng/L	P409586	
		Kepone**	5.1	U	ng/L	P409586	
		Lambda-Cyhalothrin**	0.76	U	ng/L	P409586	
		Methoxychlor	0.31	U	ng/L	P409586	
		MGK-264**	0.20	U	ng/L	P409586	
		Mirex	0.71	U	ng/L	P409586	
		Permethrin	1.6	UJ	ng/L	P409586	MS
		Phenothrin**	0.92	U	ng/L	P409586	
		Piperonyl Butoxide**	0.15	UJ	ng/L	P409586	CCV
		Prallethrin**	2.0	U	ng/L	P409586	
		Tau-Fluvalinate**	0.25	UJ	ng/L	P409586	RPD
		Tetramethrin**	0.76	U	ng/L	P409586	
		Trans-Nonachlor**	0.20	U	ng/L	P409586	
		Triclosan Methyl**	0.15	U	ng/L	P409586	
		Trifluralin	0.20	U	ng/L	P409586	

Field ID: G5CE0131 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303758	EPA 8276	Chlordane	2.5	U	ng/L	P409586	
		Toxaphene	15	U	ng/L	P409586	
2303759	EPA 8270E	Acetochlor	0.24	U	ng/L	P409564	
		Alachlor	0.24	U	ng/L	P409564	
		Ametryn	3.0		ng/L	P409564	
		Atrazine	150		ng/L	P409564	
		Atrazine Desethyl	14		ng/L	P409564	
		Azinphos Methyl	1.9	U	ng/L	P409564	
		Azoxystrobin**	0.80	I	ng/L	P409564	
		Bromacil	2.0		ng/L	P409564	
		Butylate	0.38	U	ng/L	P409564	
		Caffeine**	13	I	ng/L	P409564	
		Carbophenothion	0.19	U	ng/L	P409564	
		Carfentrazone Ethyl**	0.096	U	ng/L	P409564	
		Chlorfenapyr**	0.17	U	ng/L	P409564	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P409564	
		Chlorpyrifos Methyl	0.048	U	ng/L	P409564	
		Coumaphos**	0.48	U	ng/L	P409564	
		Cyanazine	3.1	U	ng/L	P409564	
		Cyprodinil**	0.096	U	ng/L	P409564	
		Demeton	1.4	U	ng/L	P409564	
		Diazinon	0.12	U	ng/L	P409564	
		Difenoconazole**	0.58	U	ng/L	P409564	
		Dimethenamid**	0.096	U	ng/L	P409564	
		Dimethomorph**	0.22	I	ng/L	P409564	
		Disulfoton	0.48	U	ng/L	P409564	
		Dithiopyr**	0.25	I	ng/L	P409564	
		EPTC	1.2	U	ng/L	P409564	
		Ethion	0.14	U	ng/L	P409564	
		Ethoprop	0.096	U	ng/L	P409564	
		Etridiazole**	0.14	UJ	ng/L	P409564	MS
		Fenamiphos	0.48	U	ng/L	P409564	
		Fenbuconazole**	0.12	U	ng/L	P409564	
		Fipronil	0.62	I	ng/L	P409564	
		Fipronil Desulfinyl**	0.82		ng/L	P409564	
		Fipronil Sulfide	0.86		ng/L	P409564	
		Fipronil Sulfone	1.8		ng/L	P409564	
		Fluazifop-P-butyl**	0.096	U	ng/L	P409564	
		Fludioxonil**	0.12	U	ng/L	P409564	
		Flumioxazin**	1.7	U	ng/L	P409564	
		Flutolanil**	0.096	U	ng/L	P409564	
		Fluxapyroxad**	0.096	UJ	ng/L	P409564	MS
		Fonofos	0.19	U	ng/L	P409564	
		Hexazinone	0.48	U	ng/L	P409564	
		Imazalil**	0.72	U	ng/L	P409564	

Field ID: G5CE0131 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303759	EPA 8270E	Iprodione**	0.58	U	ng/L	P409564	
		Loratadine**	0.096	U	ng/L	P409564	
		Malathion	0.34	U	ng/L	P409564	
		Metalaxyl	0.72	U	ng/L	P409564	
		Metolachlor	0.50	I	ng/L	P409564	
		Metribuzin	2.4	U	ng/L	P409564	
		Mevinphos	1.0	U	ng/L	P409564	
		Molinate	0.29	U	ng/L	P409564	
		Myclobutanil**	1.3		ng/L	P409564	
		Naled**	1.4	UJ	ng/L	P409564	LCS, MS
		Napropamide**	0.38	U	ng/L	P409564	
		Norflurazon	0.48	U	ng/L	P409564	
		Oxadiazon	0.40	I	ng/L	P409564	
		Oxyfluorfen**	0.14	U	ng/L	P409564	
		Parathion Ethyl	0.24	U	ng/L	P409564	
		Parathion Methyl	0.53	U	ng/L	P409564	
		Pendimethalin	0.96	U	ng/L	P409564	
		Phenytoin**	3.4	U	ng/L	P409564	
		Phorate	0.50	U	ng/L	P409564	
		Prodiamine**	0.17	U	ng/L	P409564	
		Prometon	0.86	U	ng/L	P409564	
		Prometryn	0.19	U	ng/L	P409564	
		Pronamide**	0.14	U	ng/L	P409564	
		Propanil**	0.12	U	ng/L	P409564	
		Propargite**	1.4	U	ng/L	P409564	
		Propiconazole**	7.2		ng/L	P409564	
		Pyraflufen Ethyl**	0.24	U	ng/L	P409564	
		Pyridaben**	0.43	U	ng/L	P409564	
		Pyriproxyfen**	0.12	U	ng/L	P409564	
		Simazine	24		ng/L	P409564	
		Stirophos**	0.12	U	ng/L	P409564	
		Sulfentrazone**	34		ng/L	P409564	
		Tebuconazole**	0.62	I J	ng/L	P409564	MS
		Terbufos	0.096	U	ng/L	P409564	
		Terbuthylazine	0.41	U	ng/L	P409564	
		Thiobencarb**	0.58	U	ng/L	P409564	
		Triadimefon**	0.46	I	ng/L	P409564	

Ref. Method and Comment:
EPA 8321B: MS accuracy for oxamyl could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.

Sample Location: Falk Canal @ 50m Upstream of Fiske Blvd. **Collection Date/Time: 02/03/2022 12:18**

Field ID: G3CE0016 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303735	DEP SOP: NU-094-1	Color (true)**	60		PCU	P409483	
	EPA 180.1 Rev. 2.0	Turbidity	8.2		NTU	P409468	
	EPA 300.0 Rev. 2.1	Chloride	85		mg Cl/L	P409772	
		Sulfate	59		mg SO4/L	P409781	
	SM 2320 B-2011	Total Alkalinity	102		mg CaCO3/L	P409589	
	SM 2540 C-2011	TDS	357		mg/L	P409977	
	SM 2540 D-2011	TSS	4	I	mg/L	P409969	
	SM 4500 F-C-2011	Fluoride	0.048	I	mg F/L	P409591	
2303736	EPA 350.1 Rev. 2.0	Ammonia-N	0.23		mg N/L	P409950	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.2		mg N/L	P409541	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.25		mg N/L	P409612	
	EPA 365.1 Rev. 2.0	Total-P	0.046		mg P/L	P409555	
	SM 5310 B-2011	Organic Carbon	18		mg C/L	P410065	
2303737	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.007	I	mg P/L	P409463	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: FB **Collection Date/Time: 02/03/2022 12:26**

Field ID: FB_02032022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303726	DEP SOP: NU-094-1	Color (true)**	2.5	U	PCU	P409483	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P409468	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P409772	
		Sulfate	0.20	U	mg SO4/L	P409781	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P409589	
	SM 2540 C-2011	TDS	15	U	mg/L	P409977	
	SM 2540 D-2011	TSS	2	U	mg/L	P409969	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P409591	
2303727	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P409950	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P409541	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P409612	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P409555	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P410065	
2303728	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P409463	
2303753	EPA 8321B	Aldicarb	0.020	U	ug/L	P409339	RPD
		Aldicarb Sulfone	0.0020	U	ug/L	P409339	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P409339	
		Carbaryl	0.0020	U	ug/L	P409339	
		Carbofuran	0.0020	U	ug/L	P409339	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P409339	
		Methiocarb	0.0020	U	ug/L	P409339	
		Methomyl	0.0020	U	ug/L	P409339	
		Oxamyl	0.0020	U	ug/L	P409339	
		Propoxur	0.0020	U	ug/L	P409339	
2303754		2,4-D	0.0020	U	ug/L	P409557	
		Acesulfame K	0.10	U	ug/L	P409457	
		2,4,5-T	0.0040	U	ug/L	P409557	
		AMPA	0.10	U	ug/L	P409457	
		Acetaminophen	0.0080	U	ug/L	P409557	
		Acetamiprid	0.0020	U	ug/L	P409557	
		Endothall	0.25	U	ug/L	P409457	
		Glufosinate	0.10	U	ug/L	P409457	
		Glyphosate	0.10	U	ug/L	P409457	
		Afidopyropen	0.0020	U	ug/L	P409557	
		Bentazon	8.0E-04	U	ug/L	P409557	
		Sucralose	0.010	U	ug/L	P409457	
		Benzovindiflupyr	0.0020	U	ug/L	P409557	
		Carbamazepine	8.0E-04	U	ug/L	P409557	
		Clothianidin	0.0020	U	ug/L	P409557	
		Dinotefuran	0.0020	U	ug/L	P409557	
		Diuron	0.0020	U	ug/L	P409557	
		Fenuron	0.016	U	ug/L	P409557	
		Fluridone	8.0E-04	U	ug/L	P409557	

Field ID: FB_02032022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303754	EPA 8321B	Imazapyr	0.0040	U	ug/L	P409557	
		Hydrocodone	0.0020	U	ug/L	P409557	
		Ibuprofen	0.020	U	ug/L	P409557	RPD
		Imidacloprid	0.0020	U	ug/L	P409557	
		Linuron	0.0040	U	ug/L	P409557	
		Mandestrobin	0.0020	U	ug/L	P409557	
		MCPP	0.0040	U	ug/L	P409557	
		Naproxen	0.0080	U	ug/L	P409557	
		Primidone	0.0040	U	ug/L	P409557	
		Pyraclostrobin	0.0020	U	ug/L	P409557	
		Thiamethoxam	0.0020	U	ug/L	P409557	
		Tolfenpyrad	0.0020	U	ug/L	P409557	
		Triclopyr	0.0040	U	ug/L	P409557	MS
2303760	EPA 8270E	Aldrin	0.66	U	ng/L	P409586	
		Alpha-BHC	0.10	U	ng/L	P409586	
		Alpha-Chlordane	0.20	U	ng/L	P409586	
		Beta-BHC	0.10	U	ng/L	P409586	RPD
		Beta-Cyfluthrin**	1.3	U	ng/L	P409586	
		Bifenthrin**	0.51	U	ng/L	P409586	
		Chlorothalonil	1.3	U	ng/L	P409586	
		Cis-Nonachlor**	0.20	U	ng/L	P409586	
		Cypermethrin	1.5	U	ng/L	P409586	
		Dacthal**	0.15	U	ng/L	P409586	
		DDD-p,p'	0.25	U	ng/L	P409586	
		DDE-p,p'	0.20	U	ng/L	P409586	
		DDT-p,p'	0.25	U	ng/L	P409586	
		Delta-BHC	0.41	U	ng/L	P409586	
		Deltamethrin**	1.3	U	ng/L	P409586	
		Dichlobenil**	0.25	U	ng/L	P409586	
		Dicofol	1.3	UJ	ng/L	P409586	CCV, LCS, MS
		Dieldrin	0.41	U	ng/L	P409586	
		Endosulfan I	0.41	U	ng/L	P409586	
		Endosulfan II	0.41	U	ng/L	P409586	
		Endosulfan Sulfate	0.31	U	ng/L	P409586	
		Endrin	0.41	U	ng/L	P409586	
		Endrin Aldehyde	0.76	U	ng/L	P409586	
		Endrin Ketone	0.41	U	ng/L	P409586	
		Esfenvalerate**	0.76	U	ng/L	P409586	
		Ethalfluralin**	0.15	U	ng/L	P409586	
		Fenpropathrin**	0.25	UJ	ng/L	P409586	CCV, RPD
		Gamma-BHC	0.13	U	ng/L	P409586	
		Gamma-Chlordane	0.20	U	ng/L	P409586	
		Heptachlor	0.20	U	ng/L	P409586	
		Heptachlor Epoxide	0.25	U	ng/L	P409586	

Field ID: FB_02032022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303760	EPA 8270E	Hexachlorobenzene	1.0	U	ng/L	P409586	
		Kepone**	5.1	U	ng/L	P409586	
		Lambda-Cyhalothrin**	0.76	U	ng/L	P409586	
		Methoxychlor	0.31	U	ng/L	P409586	
		MGK-264**	0.20	U	ng/L	P409586	
		Mirex	0.71	U	ng/L	P409586	
		Permethrin	1.6	U	ng/L	P409586	MS
		Phenothrin**	0.92	U	ng/L	P409586	
		Piperonyl Butoxide**	0.15	UJ	ng/L	P409586	CCV
		Prallethrin**	2.0	U	ng/L	P409586	
		Tau-Fluvalinate**	0.25	U	ng/L	P409586	RPD
		Tetramethrin**	0.76	U	ng/L	P409586	
		Trans-Nonachlor**	0.20	U	ng/L	P409586	
		Triclosan Methyl**	0.15	U	ng/L	P409586	
		Trifluralin	0.20	U	ng/L	P409586	
	EPA 8276	Chlordane	2.5	U	ng/L	P409586	
		Toxaphene	15	U	ng/L	P409586	
2303761	EPA 8270E	Acetochlor	0.24	U	ng/L	P409564	
		Alachlor	0.24	U	ng/L	P409564	
		Ametryn	0.57	U	ng/L	P409564	
		Atrazine	0.24	U	ng/L	P409564	
		Atrazine Desethyl	1.4	U	ng/L	P409564	
		Azinphos Methyl	1.9	U	ng/L	P409564	
		Azoxystrobin**	0.48	U	ng/L	P409564	
		Bromacil	0.48	U	ng/L	P409564	
		Butylate	0.38	U	ng/L	P409564	
		Caffeine**	7.1	U	ng/L	P409564	
		Carbophenothion	0.19	U	ng/L	P409564	
		Carfentrazone Ethyl**	0.095	U	ng/L	P409564	
		Chlorfenapyr**	0.17	U	ng/L	P409564	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P409564	
		Chlorpyrifos Methyl	0.048	U	ng/L	P409564	
		Coumaphos**	0.48	U	ng/L	P409564	
		Cyanazine	3.1	U	ng/L	P409564	
		Cyprodinil**	0.095	U	ng/L	P409564	
		Demeton	1.4	U	ng/L	P409564	
		Diazinon	0.12	U	ng/L	P409564	
		Difenoconazole**	0.57	U	ng/L	P409564	
		Dimethenamid**	0.095	U	ng/L	P409564	
		Dimethomorph**	0.17	U	ng/L	P409564	
		Disulfoton	0.48	U	ng/L	P409564	
		Dithiopyr**	0.17	U	ng/L	P409564	
		EPTC	1.2	U	ng/L	P409564	
		Ethion	0.14	U	ng/L	P409564	
		Ethoprop	0.095	U	ng/L	P409564	

Field ID: FB_02032022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303761	EPA 8270E	Etridiazole**	0.14	U	ng/L	P409564	MS
		Fenamiphos	0.48	U	ng/L	P409564	
		Fenbuconazole**	0.12	U	ng/L	P409564	
		Fipronil	0.24	U	ng/L	P409564	
		Fipronil Desulfinyl**	0.12	U	ng/L	P409564	
		Fipronil Sulfide	0.14	U	ng/L	P409564	
		Fipronil Sulfone	0.14	U	ng/L	P409564	
		Fluazifop-P-butyl**	0.095	U	ng/L	P409564	
		Fludioxonil**	0.12	U	ng/L	P409564	
		Flumioxazin**	1.7	U	ng/L	P409564	
		Flutolanil**	0.095	U	ng/L	P409564	
		Fluxapyroxad**	0.095	U	ng/L	P409564	MS
		Fonofos	0.19	U	ng/L	P409564	
		Hexazinone	0.48	U	ng/L	P409564	
		Imazalil**	0.71	U	ng/L	P409564	
		Iprodione**	0.57	U	ng/L	P409564	
		Loratadine**	0.095	U	ng/L	P409564	
		Malathion	0.33	U	ng/L	P409564	
		Metalaxyl	0.71	U	ng/L	P409564	
		Metolachlor	0.33	U	ng/L	P409564	
		Metribuzin	2.4	U	ng/L	P409564	
		Mevinphos	1.0	U	ng/L	P409564	
		Molinate	0.29	U	ng/L	P409564	
		Myclobutanil**	0.24	U	ng/L	P409564	
		Naled**	1.4	UJ	ng/L	P409564	LCS, MS
		Napropamide**	0.38	U	ng/L	P409564	
		Norflurazon	0.48	U	ng/L	P409564	
		Oxadiazon	0.29	U	ng/L	P409564	
		Oxyfluorfen**	0.14	U	ng/L	P409564	
		Parathion Ethyl	0.24	U	ng/L	P409564	
		Parathion Methyl	0.52	U	ng/L	P409564	
		Pendimethalin	0.95	U	ng/L	P409564	
		Phenytoin**	3.3	U	ng/L	P409564	
		Phorate	0.50	U	ng/L	P409564	
		Prodiamine**	0.17	U	ng/L	P409564	
		Prometon	0.86	U	ng/L	P409564	
		Prometryn	0.19	U	ng/L	P409564	
		Pronamide**	0.14	U	ng/L	P409564	
		Propanil**	0.12	U	ng/L	P409564	
		Propargite**	1.4	U	ng/L	P409564	
		Propiconazole**	0.48	U	ng/L	P409564	
		Pyraflufen Ethyl**	0.24	U	ng/L	P409564	
		Pyridaben**	0.43	U	ng/L	P409564	
		Pyriproxyfen**	0.12	U	ng/L	P409564	
		Simazine	0.48	U	ng/L	P409564	

Field ID: FB_02032022 Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303761	EPA 8270E	Stirophos**	0.12	U	ng/L	P409564	
		Sulfentrazone**	0.48	U	ng/L	P409564	
		Tebuconazole**	0.48	U	ng/L	P409564	MS
		Terbufos	0.095	U	ng/L	P409564	
		Terbuthylazine	0.40	U	ng/L	P409564	
		Thiobencarb**	0.57	U	ng/L	P409564	
		Triadimefon**	0.24	U	ng/L	P409564	
2303762	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P409595	
		Iron	30	U	ug/L	P409595	
		Magnesium	0.040	U	mg/L	P409595	
		Potassium	0.30	U	mg/L	P409595	
		Sodium	0.50	U	mg/L	P409595	
		Strontium	2.0	U	ug/L	P409595	
		Tin	3.0	U	ug/L	P409595	
		Titanium	0.75	U	ug/L	P409595	
		Vanadium	2.0	U	ug/L	P409595	
		Zinc	5.0	U	ug/L	P409595	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P409595	
		Antimony	0.050	U	ug/L	P409595	
		Arsenic	0.050	U	ug/L	P409595	
		Barium	0.20	U	ug/L	P409595	
		Beryllium	0.010	U	ug/L	P409595	
		Boron**	2.0	U	ug/L	P409595	
		Cadmium	0.020	U	ug/L	P409595	
		Chromium	0.40	U	ug/L	P409595	
		Cobalt	0.020	U	ug/L	P409595	
		Copper	0.40	U	ug/L	P409595	
		Lead	0.20	U	ug/L	P409595	
		Manganese	0.10	U	ug/L	P409595	
		Molybdenum	0.15	U	ug/L	P409595	
		Nickel	0.50	U	ug/L	P409595	
		Selenium	0.20	U	ug/L	P409595	
		Silver	0.010	U	ug/L	P409595	
		Thallium	0.10	U	ug/L	P409595	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: MS accuracy for oxamyl could not be assessed due to high concentration of parameter in the spiked sample.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for multiple parameters not assessed due to high content of these parameters in the sample spiked. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for titanium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum and beryllium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Second Creek at S.R. 520 **Collection Date/Time: 02/03/2022 10:17**

Field ID: G3CE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303729	DEP SOP: NU-094-1	Color (true)**	57	A	PCU	P409483	
	EPA 180.1 Rev. 2.0	Turbidity	0.90	I	NTU	P409468	
	EPA 300.0 Rev. 2.1	Chloride	24	A	mg Cl/L	P409772	
		Sulfate	29	A	mg SO4/L	P409781	
	SM 2320 B-2011	Total Alkalinity	137		mg CaCO3/L	P409589	
	SM 2540 C-2011	TDS	247		mg/L	P409977	
	SM 2540 D-2011	TSS	2	U	mg/L	P409969	
	SM 4500 F-C-2011	Fluoride	0.051	I	mg F/L	P409591	
2303731	EPA 350.1 Rev. 2.0	Ammonia-N	0.008		mg N/L	P409950	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.56		mg N/L	P409507	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.008	I	mg N/L	P409612	
	EPA 365.1 Rev. 2.0	Total-P	0.014		mg P/L	P409555	
	SM 5310 B-2011	Organic Carbon	15		mg C/L	P410065	
2303733	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P409463	
2303755	EPA 8321B	2,4-D	0.0020	U	ug/L	P409557	
		Acesulfame K	0.10	U	ug/L	P409457	
		2,4,5-T	0.0040	U	ug/L	P409557	
		AMPA	0.10	U	ug/L	P409457	
		Acetaminophen	0.0080	U	ug/L	P409557	
		Acetamiprid	0.0020	U	ug/L	P409557	
		Endothall	0.25	U	ug/L	P409457	
		Glufosinate	0.10	U	ug/L	P409457	
		Glyphosate	0.25	I	ug/L	P409457	
		Afidopyropen	0.0020	U	ug/L	P409557	
		Bentazon	8.0E-04	U	ug/L	P409557	
		Sucralose	0.010	U	ug/L	P409457	
		Benzovindiflupyr	0.0020	U	ug/L	P409557	
		Carbamazepine	8.0E-04	U	ug/L	P409557	
		Clothianidin	0.0020	U	ug/L	P409557	
		Dinotefuran	0.0020	U	ug/L	P409557	
		Diuron	0.0020	U	ug/L	P409557	
		Fenuron	0.016	U	ug/L	P409557	
		Fluridone	8.0E-04	U	ug/L	P409557	
		Imazapyr	0.0040	U	ug/L	P409557	
		Hydrocodone	0.0020	U	ug/L	P409557	
		Ibuprofen	0.020	U	ug/L	P409557	RPD
		Imidacloprid	0.0020	U	ug/L	P409557	
		Linuron	0.0040	U	ug/L	P409557	
		Mandestrobin	0.0020	U	ug/L	P409557	
		MCPP	0.0040	U	ug/L	P409557	
		Naproxen	0.0080	U	ug/L	P409557	
		Primidone	0.0040	U	ug/L	P409557	
		Pyraclostrobin	0.0020	U	ug/L	P409557	

Field ID: G3CE0066 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303755	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P409557	
		Tolfenpyrad	0.0020	U	ug/L	P409557	
		Triclopyr	0.0040	U	ug/L	P409557	MS
2303763	EPA 200.7 Rev. 4.4	Calcium	62.8		mg/L	P409595	
		Iron	140		ug/L	P409595	
		Magnesium	2.72		mg/L	P409595	
		Potassium	0.98	I	mg/L	P409595	
		Sodium	13.4		mg/L	P409595	
		Strontium	291		ug/L	P409595	
		Tin	3.0	U	ug/L	P409595	
		Titanium	1.1	I	ug/L	P409595	
		Vanadium	2.0	U	ug/L	P409595	
		Zinc	5.0	U	ug/L	P409595	
	EPA 200.8 Rev. 5.4	Aluminum	46		ug/L	P409595	
		Antimony	0.066	I	ug/L	P409595	
		Arsenic	0.43		ug/L	P409595	
		Barium	23.3		ug/L	P409595	
		Beryllium	0.010	U	ug/L	P409595	
		Boron**	11.5		ug/L	P409595	
		Cadmium	0.020	U	ug/L	P409595	
		Chromium	0.40	U	ug/L	P409595	
		Cobalt	0.047	I	ug/L	P409595	
		Copper	0.40	U	ug/L	P409595	
		Lead	0.20	U	ug/L	P409595	
		Manganese	4.68		ug/L	P409595	
		Molybdenum	1.10		ug/L	P409595	
		Nickel	0.50	U	ug/L	P409595	
		Selenium	0.20	U	ug/L	P409595	
		Silver	0.010	U	ug/L	P409595	
		Thallium	0.10	U	ug/L	P409595	
	SM 2340B	Hardness	168		mg/L	P409595	

Ref. Method and Comment:
SM 2540 C-2011: The reported result is consistent with the conductivity measured in the laboratory, 402 umhos/cm.
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for titanium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum and beryllium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Sample Location: Jim Creek 95m US of 520 **Collection Date/Time: 02/03/2022 09:48**

Field ID: G3CE0047 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303730	DEP SOP: NU-094-1	Color (true)**	94		PCU	P409483	
	EPA 180.1 Rev. 2.0	Turbidity	0.50	I	NTU	P409468	
	EPA 300.0 Rev. 2.1	Chloride	29		mg Cl/L	P409772	
		Sulfate	1.2		mg SO4/L	P409781	
	SM 2320 B-2011	Total Alkalinity	36		mg CaCO3/L	P409589	
	SM 2540 C-2011	TDS	113	A	mg/L	P409977	
	SM 2540 D-2011	TSS	2	UA	mg/L	P409969	
	SM 4500 F-C-2011	Fluoride	0.035	U	mg F/L	P409591	
2303732	EPA 350.1 Rev. 2.0	Ammonia-N	0.005		mg N/L	P409950	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.64		mg N/L	P409507	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P409612	
	EPA 365.1 Rev. 2.0	Total-P	0.013		mg P/L	P409555	
	SM 5310 B-2011	Organic Carbon	17		mg C/L	P410065	
2303734	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P409463	
2303756	EPA 8321B	2,4-D	0.0020	U	ug/L	P409557	
		Acesulfame K	0.10	U	ug/L	P409457	
		2,4,5-T	0.0040	U	ug/L	P409557	
		AMPA	0.10	U	ug/L	P409457	
		Acetaminophen	0.0080	U	ug/L	P409557	
		Acetamiprid	0.0020	U	ug/L	P409557	
		Endothall	0.25	U	ug/L	P409457	
		Glufosinate	0.10	U	ug/L	P409457	
		Glyphosate	0.10	U	ug/L	P409457	
		Afidopyropen	0.0020	U	ug/L	P409557	
		Bentazon	8.0E-04	U	ug/L	P409557	
		Sucralose	0.010	U	ug/L	P409457	
		Benzovindiflupyr	0.0020	U	ug/L	P409557	
		Carbamazepine	8.0E-04	U	ug/L	P409557	
		Clothianidin	0.0020	U	ug/L	P409557	
		Dinotefuran	0.0020	U	ug/L	P409557	
		Diuron	0.0020	U	ug/L	P409557	
		Fenuron	0.016	U	ug/L	P409557	
		Fluridone	8.0E-04	U	ug/L	P409557	
		Imazapyr	0.035		ug/L	P409557	
		Hydrocodone	0.0020	U	ug/L	P409557	
		Ibuprofen	0.020	U	ug/L	P409557	RPD
		Imidacloprid	0.0020	U	ug/L	P409557	
		Linuron	0.0040	U	ug/L	P409557	
		Mandestrobin	0.0020	U	ug/L	P409557	
		MCPP	0.0040	U	ug/L	P409557	
		Naproxen	0.0080	U	ug/L	P409557	
		Primidone	0.0040	U	ug/L	P409557	
		Pyraclostrobin	0.0020	U	ug/L	P409557	

Field ID: G3CE0047 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2303756	EPA 8321B	Thiamethoxam	0.0020	U	ug/L	P409557	
		Tolfenpyrad	0.0020	U	ug/L	P409557	
		Triclopyr	0.0040	U	ug/L	P409557	MS
2303764	EPA 200.7 Rev. 4.4	Calcium	17.8		mg/L	P409595	
		Iron	170		ug/L	P409595	
		Magnesium	2.68		mg/L	P409595	
		Potassium	1.9		mg/L	P409595	
		Sodium	13.7		mg/L	P409595	
		Strontium	96.5		ug/L	P409595	
		Tin	3.0	U	ug/L	P409595	
		Titanium	0.79	I	ug/L	P409595	
		Vanadium	2.0	U	ug/L	P409595	
		Zinc	5.0	U	ug/L	P409595	
	EPA 200.8 Rev. 5.4	Aluminum	79		ug/L	P409595	
		Antimony	0.050	U	ug/L	P409595	
		Arsenic	0.19	I	ug/L	P409595	
		Barium	11.2		ug/L	P409595	
		Beryllium	0.010	U	ug/L	P409595	
		Boron**	15.1		ug/L	P409595	
		Cadmium	0.020	U	ug/L	P409595	
		Chromium	2.5		ug/L	P409595	
		Cobalt	0.184		ug/L	P409595	
		Copper	0.40	U	ug/L	P409595	
		Lead	0.20	U	ug/L	P409595	
		Manganese	3.17		ug/L	P409595	
		Molybdenum	0.15	U	ug/L	P409595	
		Nickel	5.7		ug/L	P409595	
		Selenium	0.20	U	ug/L	P409595	
		Silver	0.010	U	ug/L	P409595	
		Thallium	0.10	U	ug/L	P409595	
	SM 2340B	Hardness	55.5		mg/L	P409595	

Ref. Method and Comment:
SM 2540 D-2011: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for titanium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum and beryllium are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

Quality Assurance Report
Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P409483

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409468

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409595

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409595

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409772

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: P409781

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409950

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409507

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409541

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409612

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409555

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409463

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

Reference Method: EPA 8270E
Batch ID: P409564

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P409564

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P409564

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P409564

Component	Result	Code	Units
Parathion Ethyl	0.25	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Pendimethalin	1.0	U	ng/L
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
Triadimefon	0.25	U	ng/L
Triadimefon	0.25	U	ng/L

Reference Method: EPA 8270E
Batch ID: P409586

Component	Result	Code	Units
Aldrin	0.65	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P409586

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	1.2	U	ng/L
Chlorothalonil	1.2	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L
Cypermethrin	1.5	U	ng/L
Dacthal	0.15	U	ng/L
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.25	U	ng/L
DDT-p,p'	0.25	U	ng/L
Delta-BHC	0.40	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan II	0.40	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.40	U	ng/L
Endrin	0.40	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P409586

Component	Result	Code	Units
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	5.0	U	ng/L
Kepone	5.0	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.70	U	ng/L
Mirex	0.70	U	ng/L
Permethrin	1.6	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8276
Batch ID: P409586

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Chlordane	2.5	U	ng/L
Toxaphene	15	U	ng/L
Toxaphene	15	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P409339

Component	Result	Code	Units
3-Hydroxycarbofuran	0.0020	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Oxamyl	0.0020	U	ug/L
Propoxur	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P409457

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: P409557

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	0.016	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
MCPP	0.0040	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

Quality Assurance Report
Method Blank Results

Reference Method: SM 2320 B-2011
Batch ID: P409589

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

Reference Method: SM 2540 C-2011
Batch ID: P409977

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2011
Batch ID: P409969

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-2011
Batch ID: P409591

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P410065

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: P409483

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.4		P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Turbidity	96.2		P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	106		P	85 - 115
Iron	105		P	85 - 115
Magnesium	106		P	85 - 115
Potassium	103		P	85 - 115
Sodium	105		P	85 - 115
Strontium	104		P	85 - 115
Tin	108		P	85 - 115
Titanium	105		P	85 - 115
Vanadium	98.6		P	85 - 115
Zinc	107		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	99.9		P	85 - 115
Antimony	99.7		P	85 - 115
Arsenic	102		P	85 - 115
Barium	103		P	85 - 115
Beryllium	94.8		P	85 - 115
Boron	100		P	85 - 115
Cadmium	97.8		P	85 - 115
Chromium	96.9		P	85 - 115
Cobalt	100		P	85 - 115
Copper	98.6		P	85 - 115
Lead	97.4		P	85 - 115
Manganese	98.0		P	85 - 115
Molybdenum	100		P	85 - 115
Nickel	100		P	85 - 115
Selenium	98.4		P	85 - 115
Silver	105		P	85 - 115
Thallium	103		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409772

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

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409781

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409950

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409507

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409541

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	98.2		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409612

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409555

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409463

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

Reference Method: EPA 8270E
Batch ID: P409564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	106		P	70 - 121
Alachlor	95.5		P	68 - 119
Ametryn	115		P	64 - 139
Atrazine	105		P	76 - 120
Atrazine Desethyl	78.4		P	44 - 126
Azinphos Methyl	75.5		P	43 - 192
Azoxystrobin	96.7		P	36 - 224
Bromacil	96.9		P	52 - 121
Butylate	64.1		P	28 - 91.0
Caffeine	83.7		P	50 - 134

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbophenothion	107		P	56 - 129
Carfentrazone Ethyl	122		P	60 - 141
Chlorfenapyr	94.3		P	56 - 115
Chlorpyrifos Ethyl	104		P	60 - 118
Chlorpyrifos Methyl	109		P	68 - 119
Coumaphos	164		P	18 - 250
Cyanazine	144		P	61 - 250
Cyprodinil	129		P	55 - 145
Demeton	88.4		P	30 - 159
Diazinon	108		P	70 - 123
Difenoconazole	88.1		P	49 - 204
Dimethenamid	89.5		P	64 - 115
Dimethomorph	102		P	12 - 219
Disulfoton	98.2		P	44 - 125
Dithiopyr	95.9		P	64 - 115
EPTC	60.7		P	28 - 86.0
Ethion	113		P	33 - 125
Ethoprop	101		P	64 - 116
Etridiazole	64.6		P	34 - 91.0
Fenamiphos	108		P	12 - 127
Fenbuconazole	142		P	59 - 151
Fipronil	103		P	67 - 129
Fipronil Desulfinyl	97.0		P	65 - 127
Fipronil Sulfide	93.2		P	61 - 116
Fipronil Sulfone	104		P	55 - 117
Fluazifop-P-butyl	89.7		P	62 - 127
Fludioxonil	101		P	62 - 128
Flumioxazin	179		P	33 - 250
Flutolanil	79.3		P	56 - 127
Fluxapyroxad	93.2		P	45 - 128
Fonofos	99.1		P	62 - 111
Hexazinone	108		P	46 - 139
Imazalil	87.9		P	38 - 142
Iprodione	71.5		P	47 - 135
Loratadine	67.3		P	10 - 244
Malathion	127		P	61 - 139
Metalaxyl	91.5		P	10 - 119
Metolachlor	102		P	65 - 118
Metribuzin	101		P	51 - 250
Mevinphos	102		P	53 - 121
Molinate	77.8		P	42 - 96.0
Myclobutanil	98.5		P	55 - 128
Naled	118		F	10 - 98.0
Napropamide	93.3		P	49 - 121
Norflurazon	114		P	61 - 126
Oxadiazon	83.9		P	59 - 116
Oxyfluorfen	86.5		P	64 - 137
Parathion Ethyl	100		P	70 - 112
Parathion Methyl	120		P	76 - 133
Pendimethalin	66.1		P	52 - 117
Phenytoin	130		P	10 - 199
Phorate	89.9		P	48 - 121

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409564

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prodiamine	61.2		P	26 - 142
Prometon	95.2		P	43 - 123
Prometryn	120		P	66 - 127
Pronamide	102		P	75 - 121
Propanil	92.3		P	45 - 150
Propargite	141		P	42 - 208
Propiconazole	113		P	60 - 125
Pyraflufen Ethyl	125		P	70 - 138
Pyridaben	134		P	35 - 245
Pyriproxyfen	59.5		P	30 - 149
Simazine	99.0		P	72 - 125
Stirophos	110		P	29 - 164
Sulfentrazone	130		P	21 - 139
Tebuconazole	67.9		P	10 - 115
Terbufos	117		P	60 - 123
Terbuthylazine	98.8		P	72 - 115
Thiobencarb	94.3		P	31 - 139
Triadimefon	87.7		P	65 - 116

Reference Method: EPA 8270E
Batch ID: P409586

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	52.2		P	10 - 93.0
Alpha-BHC	90.3		P	75 - 106
Alpha-Chlordane	69.0		P	50 - 109
Beta-BHC	91.1		P	65 - 135
Beta-Cyfluthrin	98.2		P	23 - 167
Bifenthrin	55.5		P	11 - 123
Chlorothalonil	103		P	26 - 182
Cis-Nonachlor	68.6		P	40 - 111
Cypermethrin	84.7		P	25 - 155
Dacthal	88.0		P	73 - 112
DDD-p,p'	56.1		P	47 - 108
DDE-p,p'	66.4		P	48 - 107
DDT-p,p'	80.7		P	49 - 111
Delta-BHC	102		P	68 - 143
Deltamethrin	70.1		P	16 - 176
Dichlobenil	80.9		P	32 - 113
Dicofol	47.0		F	50 - 108
Dieldrin	70.5		P	56 - 110
Endosulfan I	75.2		P	60 - 105
Endosulfan II	70.9		P	50 - 120
Endosulfan Sulfate	88.5		P	55 - 121
Endrin	66.4		P	35 - 117
Endrin Aldehyde	58.2		P	36 - 116
Endrin Ketone	99.2		P	56 - 130
Esfenvalerate	86.1		P	10 - 179
Ethalfluralin	65.1		P	49 - 99.0
Fenpropathrin	64.5		P	35 - 119
Gamma-BHC	90.6		P	72 - 115
Gamma-Chlordane	69.1		P	45 - 107

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P409586

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Heptachlor	64.8		P	41 - 100
Heptachlor Epoxide	80.0		P	58 - 106
Hexachlorobenzene	73.9		P	39 - 100
Kepone	144		P	10 - 191
Lambda-Cyhalothrin	65.0		P	10 - 186
Methoxychlor	87.9		P	61 - 111
MGK-264	74.8		P	20 - 123
Mirex	46.3		P	10 - 182
Permethrin	137		P	26 - 152
Phenothrin	41.3		P	10 - 109
Piperonyl Butoxide	64.3		P	27 - 142
Prallethrin	66.5		P	14 - 109
Tau-Fluvalinate	64.0		P	16 - 134
Tetramethrin	67.8		P	10 - 125
Trans-Nonachlor	74.4		P	45 - 107
Triclosan Methyl	94.3		P	60 - 110
Trifluralin	59.9		P	49 - 98.0

Reference Method: EPA 8276
Batch ID: P409586

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	79.2		P	61 - 118
Toxaphene	65.8		P	51 - 122

Reference Method: EPA 8321B
Batch ID: P409339

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	65.1		P	40 - 150
Aldicarb	53.2		P	30 - 150
Aldicarb Sulfone	111		P	40 - 150
Aldicarb Sulfoxide	82.4		P	40 - 150
Carbaryl	73.5		P	40 - 150
Carbofuran	85.9		P	40 - 150
Methiocarb	78.5		P	40 - 150
Methomyl	82.9		P	40 - 150
Oxamyl	112		P	40 - 150
Propoxur	88.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P409457

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	76.7		P	40 - 150
AMPA	109		P	40 - 150
Endothall	68.2		P	40 - 150
Glufosinate	103		P	40 - 150
Glyphosate	96.0		P	40 - 150
Sucralose	81.7		P	40 - 150

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P409557

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	86.8		P	40 - 150
2,4,5-T	63.9		P	40 - 150
Acetaminophen	62.7		P	30 - 150
Acetamiprid	83.8		P	40 - 150
Afidopyropen	49.6		P	40 - 150
Bentazon	83.1		P	30 - 150
Benzovindiflupyr	66.9		P	40 - 150
Carbamazepine	96.6		P	40 - 150
Clothianidin	81.7		P	40 - 150
Dinotefuran	98.9		P	40 - 150
Diuron	98.1		P	40 - 150
Fenuron	86.1		P	40 - 150
Fluridone	89.1		P	40 - 150
Hydrocodone	85.0		P	40 - 150
Ibuprofen	101		P	40 - 150
Imazapyr	101		P	40 - 150
Imidacloprid	79.8		P	40 - 150
Linuron	59.2		P	40 - 150
Mandestrobin	93.4		P	40 - 150
MCPP	102		P	40 - 150
Naproxen	64.8		P	40 - 150
Primidone	109		P	40 - 150
Pyraclostrobin	70.6		P	40 - 150
Thiamethoxam	103		P	40 - 150
Tolfenpyrad	40.4		P	30 - 150
Triclopyr	55.8		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P409589

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	99.1		P	94 - 106

Reference Method: SM 4500 F-C-2011
Batch ID: P409591

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	93 - 104

Reference Method: SM 5310 B-2011
Batch ID: P410065

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.4		P	85 - 115

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303248	Calcium	103		P	80 - 120
2303248	Iron	101		P	80 - 120
2303248	Magnesium	100		P	80 - 120
2303248	Potassium	105		P	80 - 120
2303248	Sodium	101		P	80 - 120
2303248	Strontium	106		P	80 - 120
2303248	Tin	102		P	80 - 120
2303248	Vanadium	98.8		P	80 - 120
2303248	Zinc	111		P	80 - 120
2303749	Calcium	108	109	P/P	80 - 120
2303749	Iron	108	109	P/P	80 - 120
2303749	Magnesium	109	110	P/P	80 - 120
2303749	Potassium	110	110	P/P	80 - 120
2303749	Sodium	105	104	P/P	80 - 120
2303749	Strontium	106	106	P/P	80 - 120
2303749	Tin	107	110	P/P	80 - 120
2303749	Titanium	104	106	P/P	80 - 120
2303749	Vanadium	97.6	98.7	P/P	80 - 120
2303749	Zinc	106	108	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303248	Antimony	95.4		P	80 - 120
2303248	Arsenic	103		P	80 - 120
2303248	Barium	106		P	80 - 120
2303248	Boron	107		P	80 - 120
2303248	Cadmium	101		P	80 - 120
2303248	Chromium	100		P	80 - 120
2303248	Cobalt	102		P	80 - 120
2303248	Copper	102		P	80 - 120
2303248	Lead	100		P	80 - 120
2303248	Manganese	99.7		P	80 - 120
2303248	Molybdenum	103		P	80 - 120
2303248	Nickel	102		P	80 - 120
2303248	Selenium	100		P	80 - 120
2303248	Silver	105		P	80 - 120
2303248	Thallium	106		P	80 - 120
2303749	Aluminum	98.8	100	P/P	80 - 120
2303749	Antimony	98.5	99.1	P/P	80 - 120
2303749	Arsenic	103	102	P/P	80 - 120
2303749	Barium	103	104	P/P	80 - 120
2303749	Beryllium	102	101	P/P	80 - 120
2303749	Boron	97.2	100	P/P	80 - 120
2303749	Cadmium	98.7	99.5	P/P	80 - 120
2303749	Chromium	97.3	97.1	P/P	80 - 120
2303749	Cobalt	102	102	P/P	80 - 120
2303749	Copper	101	102	P/P	80 - 120
2303749	Lead	97.7	97.6	P/P	80 - 120
2303749	Manganese	96.8	98.1	P/P	80 - 120
2303749	Molybdenum	99.9	99.6	P/P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409595

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303749	Nickel	103	105	P/P	80 - 120
2303749	Selenium	99.1	101	P/P	80 - 120
2303749	Silver	104	104	P/P	80 - 120
2303749	Thallium	103	105	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303729	Chloride	103		P	90 - 110
2303948	Chloride	105		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409781

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303729	Sulfate	98.0		P	90 - 110
2303948	Sulfate	101		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409950

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303671	Ammonia-N	98.6	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409507

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303732	Kjeldahl Nitrogen	105	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409541

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303746	Kjeldahl Nitrogen	99.2	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409612

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303671	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303736	Total-P	102	101	P/P	90 - 110

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409463

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303673	O-Phosphate-P	98.9	100	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P409564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303759	Acetochlor	103	113	P/P	65 - 124
2303759	Alachlor	93.5	98.8	P/P	61 - 121
2303759	Ametryn	116	114	P/P	52 - 216
2303759	Atrazine Desethyl	74.9	74.2	P/P	15 - 160
2303759	Azinphos Methyl	73.1	80.2	P/P	40 - 292
2303759	Azoxystrobin	99.5	103	P/P	12 - 242
2303759	Bromacil	90.0	104	P/P	54 - 167
2303759	Butylate	41.3	50.5	P/P	14 - 94.0
2303759	Caffeine	86.6	109	P/P	10 - 226
2303759	Carbophenothion	114	114	P/P	49 - 122
2303759	Carfentrazone Ethyl	131	135	P/P	53 - 138
2303759	Chlorfenapyr	86.1	88.8	P/P	50 - 150
2303759	Chlorpyrifos Ethyl	99.2	113	P/P	52 - 122
2303759	Chlorpyrifos Methyl	102	108	P/P	66 - 117
2303759	Coumaphos	171	178	P/P	50 - 220
2303759	Cyanazine	134	133	P/P	43 - 245
2303759	Cyprodinil	116	123	P/P	50 - 150
2303759	Demeton	107	114	P/P	43 - 188
2303759	Diazinon	107	115	P/P	69 - 131
2303759	Difenoconazole	91.1	88.5	P/P	34 - 231
2303759	Dimethenamid	89.0	94.1	P/P	55 - 118
2303759	Dimethomorph	97.7	103	P/P	50 - 150
2303759	Disulfoton	93.4	109	P/P	38 - 141
2303759	Dithiopyr	92.1	99.1	P/P	42 - 116
2303759	EPTC	37.0	47.5	P/P	18 - 85.0
2303759	Ethion	112	115	P/P	10 - 131
2303759	Ethoprop	101	107	P/P	65 - 129
2303759	Etridiazole	47.7	60.0	F/P	50 - 150
2303759	Fenamiphos	101	104	P/P	31 - 137
2303759	Fenbuconazole	138	142	P/P	57 - 160
2303759	Fipronil	104	109	P/P	62 - 132
2303759	Fipronil Desulfinyl	101	104	P/P	57 - 131
2303759	Fipronil Sulfide	90.3	93.1	P/P	15 - 138
2303759	Fipronil Sulfone	89.5	99.2	P/P	21 - 134
2303759	Fluazifop-P-butyl	82.5	85.6	P/P	54 - 133
2303759	Fludioxonil	96.2	102	P/P	58 - 127
2303759	Flumioxazin	202	214	P/P	33 - 300
2303759	Flutolanil	73.4	74.8	P/P	42 - 130
2303759	Fluxapyroxad	153	158	F/F	23 - 141
2303759	Fonofos	100	109	P/P	58 - 119
2303759	Hexazinone	107	111	P/P	68 - 172
2303759	Imazalil	64.9	71.7	P/P	48 - 283
2303759	Iprodione	77.0	79.2	P/P	38 - 140
2303759	Loratadine	81.0	77.1	P/P	50 - 150
2303759	Malathion	122	129	P/P	40 - 137
2303759	Metalaxyl	92.1	96.9	P/P	21 - 129

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P409564

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303759	Metolachlor	94.3	103	P/P	55 - 122
2303759	Metribuzin	94.5	101	P/P	38 - 187
2303759	Mevinphos	98.3	107	P/P	54 - 134
2303759	Molinate	62.4	76.1	P/P	41 - 97.0
2303759	Myclobutanil	93.7	99.1	P/P	56 - 125
2303759	Naled	102	115	P/F	10 - 108
2303759	Napropamide	85.3	89.8	P/P	50 - 150
2303759	Norflurazon	112	118	P/P	32 - 122
2303759	Oxadiazon	72.3	77.0	P/P	40 - 119
2303759	Oxyfluorfen	105	116	P/P	61 - 153
2303759	Parathion Ethyl	92.8	101	P/P	59 - 130
2303759	Parathion Methyl	121	123	P/P	65 - 155
2303759	Pendimethalin	80.4	86.2	P/P	49 - 138
2303759	Phenytoin	137	141	P/P	50 - 200
2303759	Phorate	106	116	P/P	54 - 161
2303759	Prodiamine	125	137	P/P	33 - 161
2303759	Prometon	124	135	P/P	48 - 140
2303759	Prometryn	117	122	P/P	55 - 134
2303759	Pronamide	99.3	112	P/P	66 - 137
2303759	Propanil	90.2	96.0	P/P	50 - 150
2303759	Propargite	138	147	P/P	50 - 200
2303759	Pyraflufen Ethyl	129	126	P/P	50 - 150
2303759	Pyridaben	140	151	P/P	50 - 200
2303759	Pyriproxyfen	58.9	56.9	P/P	10 - 165
2303759	Stirophos	98.6	105	P/P	50 - 150
2303759	Tebuconazole	133	143	F/F	10 - 127
2303759	Terbufos	123	130	P/P	59 - 138
2303759	Terbuthylazine	102	106	P/P	68 - 119
2303759	Thiobencarb	89.7	96.6	P/P	50 - 150
2303759	Triadimefon	83.2	103	P/P	50 - 150

Reference Method: EPA 8270E
Batch ID: P409586

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303758	Aldrin	43.0	40.9	P/P	10 - 89.0
2303758	Alpha-BHC	88.2	87.9	P/P	71 - 105
2303758	Alpha-Chlordane	57.5	55.5	P/P	43 - 107
2303758	Beta-BHC	72.6	102	P/P	57 - 152
2303758	Beta-Cyfluthrin	107	82.4	P/P	29 - 186
2303758	Bifenthrin	67.4	49.8	P/P	19 - 119
2303758	Chlorothalonil	114	148	P/P	10 - 245
2303758	Cis-Nonachlor	57.9	50.7	P/P	36 - 110
2303758	Cypermethrin	111	82.2	P/P	24 - 169
2303758	Dacthal	89.9	83.9	P/P	62 - 115
2303758	DDD-p,p'	49.7	47.0	P/P	36 - 109
2303758	DDE-p,p'	53.4	46.6	P/P	30 - 114
2303758	DDT-p,p'	69.1	60.1	P/P	42 - 108
2303758	Delta-BHC	100	113	P/P	60 - 164
2303758	Deltamethrin	77.6	54.5	P/P	10 - 210
2303758	Dichlobenil	46.6	57.9	P/P	23 - 108
2303758	Dicofol	45.1	39.6	P/F	44 - 109

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P409586

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303758	Dieldrin	61.6	57.5	P/P	37 - 119
2303758	Endosulfan I	64.9	63.9	P/P	52 - 105
2303758	Endosulfan II	62.5	65.9	P/P	35 - 127
2303758	Endosulfan Sulfate	88.0	96.1	P/P	39 - 130
2303758	Endrin	59.7	55.0	P/P	30 - 116
2303758	Endrin Aldehyde	48.2	52.1	P/P	20 - 110
2303758	Endrin Ketone	115	117	P/P	48 - 134
2303758	Esfenvalerate	127	80.2	P/P	10 - 199
2303758	Ethalfluralin	62.9	59.6	P/P	48 - 95.0
2303758	Fenpropathrin	85.0	57.4	P/P	37 - 121
2303758	Gamma-BHC	90.3	95.8	P/P	61 - 126
2303758	Gamma-Chlordane	59.8	55.7	P/P	39 - 105
2303758	Heptachlor	57.9	59.4	P/P	38 - 96.0
2303758	Heptachlor Epoxide	78.0	76.5	P/P	42 - 114
2303758	Hexachlorobenzene	65.7	57.2	P/P	39 - 93.0
2303758	Kepone	88.3	111	P/P	10 - 215
2303758	Lambda-Cyhalothrin	91.4	73.4	P/P	10 - 204
2303758	Methoxychlor	85.7	84.8	P/P	56 - 115
2303758	MGK-264	77.2	84.3	P/P	35 - 120
2303758	Mirex	47.6	38.6	P/P	10 - 178
2303758	Permethrin	181	159	F/P	27 - 170
2303758	Phenothrin	66.0	62.8	P/P	10 - 133
2303758	Piperonyl Butoxide	112	106	P/P	23 - 150
2303758	Prallethrin	67.9	68.3	P/P	21 - 113
2303758	Tau-Fluvalinate	100	64.0	P/P	16 - 158
2303758	Tetramethrin	82.7	89.7	P/P	22 - 132
2303758	Trans-Nonachlor	53.8	51.4	P/P	43 - 102
2303758	Triclosan Methyl	74.3	68.3	P/P	49 - 109
2303758	Trifluralin	55.1	52.6	P/P	48 - 93.0

Reference Method: EPA 8276
Batch ID: P409586

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2304434	Chlordane	85.5	80.2	P/P	55 - 128
2304434	Toxaphene	87.6	80.6	P/P	57 - 211

Reference Method: EPA 8321B
Batch ID: P409339

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2302736	3-Hydroxycarbofuran	114	87.9	P/P	40 - 150
2302736	Aldicarb	76.7	55.4	P/P	30 - 150
2302736	Aldicarb Sulfone	104	123	P/P	40 - 150
2302736	Aldicarb Sulfoxide	54.3	40.6	P/P	40 - 150
2302736	Carbaryl	79.9	69.3	P/P	40 - 150
2302736	Carbofuran	95.4	98.0	P/P	40 - 150
2302736	Methiocarb	80.3	76.3	P/P	40 - 150
2302736	Methomyl	91.8	98.1	P/P	40 - 150
2302736	Propoxur	85.3	85.4	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P409457

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303298	Acesulfame K	90.8	101	P/P	40 - 150
2303298	AMPA	93.5	87.5	P/P	40 - 150
2303298	Endothall	92.3	86.3	P/P	40 - 150
2303298	Glufosinate	100	99.3	P/P	40 - 150
2303298	Glyphosate	89.1	90.5	P/P	40 - 150
2303298	Sucralose	82.1	92.1	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P409557

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303655	2,4-D	105	93.0	P/P	40 - 150
2303655	2,4,5-T	43.0	45.7	P/P	40 - 150
2303655	Acetaminophen	91.7	96.6	P/P	30 - 150
2303655	Acetamiprid	114	101	P/P	40 - 150
2303655	Afidopyropen	96.2	100	P/P	40 - 150
2303655	Bentazon	63.4	77.2	P/P	30 - 150
2303655	Benzovindiflupyr	95.6	78.2	P/P	40 - 150
2303655	Carbamazepine	115	114	P/P	40 - 150
2303655	Clothianidin	103	96.4	P/P	40 - 150
2303655	Dinotefuran	132	117	P/P	40 - 150
2303655	Diuron	99.9	76.3	P/P	40 - 150
2303655	Fenuron	90.5	95.4	P/P	40 - 150
2303655	Fluridone	91.1	104	P/P	40 - 150
2303655	Hydrocodone	98.9	98.6	P/P	40 - 150
2303655	Ibuprofen	121	85.4	P/P	40 - 150
2303655	Imazapyr	136	141	P/P	40 - 150
2303655	Imidacloprid	114	120	P/P	40 - 150
2303655	Linuron	69.8	71.9	P/P	40 - 150
2303655	Mandestrobin	91.3	105	P/P	40 - 150
2303655	MCPP	118	104	P/P	40 - 150
2303655	Naproxen	71.5	85.6	P/P	40 - 150
2303655	Primidone	105	81.4	P/P	40 - 150
2303655	Pyraclostrobin	86.4	88.4	P/P	40 - 150
2303655	Thiamethoxam	124	121	P/P	40 - 150
2303655	Tolfenpyrad	50.3	38.5	P/P	30 - 150
2303655	Triclopyr	48.9	37.5	P/F	40 - 150

Reference Method: SM 4500 F-C-2011
Batch ID: P409591

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303797	Fluoride	98.7	98.1	P/P	92 - 107

Reference Method: SM 5310 B-2011
Batch ID: P410065

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2303636	Organic Carbon	93.4	94.0	P/P	85 - 115

Quality Assurance Report
Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P409483

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303729	Color (true)	2.06	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P409468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303701	Turbidity	4.16	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P409595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303749	Calcium	0.829	Spike	P	0 - 20
2303749	Iron	0.821	Spike	P	0 - 20
2303749	Magnesium	0.561	Spike	P	0 - 20
2303749	Potassium	0.246	Spike	P	0 - 20
2303749	Sodium	0.324	Spike	P	0 - 20
2303749	Strontium	0.00528	Spike	P	0 - 20
2303749	Tin	3.09	Spike	P	0 - 20
2303749	Titanium	1.14	Spike	P	0 - 20
2303749	Vanadium	1.15	Spike	P	0 - 20
2303749	Zinc	1.17	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P409595

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303749	Aluminum	1.38	Spike	P	0 - 20
2303749	Antimony	0.604	Spike	P	0 - 20
2303749	Arsenic	0.0250	Spike	P	0 - 20
2303749	Barium	0.811	Spike	P	0 - 20
2303749	Beryllium	0.975	Spike	P	0 - 20
2303749	Boron	2.83	Spike	P	0 - 20
2303749	Cadmium	0.888	Spike	P	0 - 20
2303749	Chromium	0.203	Spike	P	0 - 20
2303749	Cobalt	0.690	Spike	P	0 - 20
2303749	Copper	0.111	Spike	P	0 - 20
2303749	Lead	0.0895	Spike	P	0 - 20
2303749	Manganese	1.23	Spike	P	0 - 20
2303749	Molybdenum	0.370	Spike	P	0 - 20
2303749	Nickel	1.57	Spike	P	0 - 20
2303749	Selenium	1.39	Spike	P	0 - 20
2303749	Silver	0.132	Spike	P	0 - 20
2303749	Thallium	1.70	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303729	Chloride	0.539	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P409781

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303729	Sulfate	0.745	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P409950

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303671	Ammonia-N	0.180	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409507

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303732	Kjeldahl Nitrogen	2.22	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P409541

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303746	Kjeldahl Nitrogen	2.48	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P409612

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303671	NO2NO3-N	0.494	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P409555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303736	Total-P	0.669	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P409463

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303673	O-Phosphate-P	1.21	Spike	P	0 - 20

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P409564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303759	Acetochlor	9.10	Spike	P	0 - 27
2303759	Alachlor	5.53	Spike	P	0 - 27
2303759	Ametryn	0.547	Spike	P	0 - 34
2303759	Atrazine	15.8	Spike	P	0 - 41
2303759	Atrazine Desethyl	0.428	Spike	P	0 - 38
2303759	Azinphos Methyl	9.24	Spike	P	0 - 62
2303759	Azoxystrobin	2.65	Spike	P	0 - 32
2303759	Bromacil	11.7	Spike	P	0 - 30
2303759	Butylate	20.0	Spike	P	0 - 59
2303759	Caffeine	17.0	Spike	P	0 - 60
2303759	Carbophenothion	0.423	Spike	P	0 - 25
2303759	Carfentrazone Ethyl	3.06	Spike	P	0 - 26
2303759	Chlorfenapyr	3.11	Spike	P	0 - 30
2303759	Chlorpyrifos Ethyl	13.2	Spike	P	0 - 27
2303759	Chlorpyrifos Methyl	5.52	Spike	P	0 - 26
2303759	Coumaphos	4.18	Spike	P	0 - 30
2303759	Cyanazine	0.963	Spike	P	0 - 58
2303759	Cyprodinil	5.34	Spike	P	0 - 30
2303759	Demeton	6.18	Spike	P	0 - 25
2303759	Diazinon	6.88	Spike	P	0 - 29
2303759	Difenoconazole	2.79	Spike	P	0 - 25
2303759	Dimethenamid	5.63	Spike	P	0 - 30
2303759	Dimethomorph	5.30	Spike	P	0 - 30
2303759	Disulfoton	15.3	Spike	P	0 - 33
2303759	Dithiopyr	6.81	Spike	P	0 - 22
2303759	EPTC	25.0	Spike	P	0 - 38
2303759	Ethion	2.91	Spike	P	0 - 79
2303759	Ethoprop	5.90	Spike	P	0 - 23
2303759	Etridiazole	22.8	Spike	P	0 - 30
2303759	Fenamiphos	3.43	Spike	P	0 - 58
2303759	Fenbuconazole	3.36	Spike	P	0 - 37
2303759	Fipronil	4.32	Spike	P	0 - 33
2303759	Fipronil Desulfinyl	2.41	Spike	P	0 - 26
2303759	Fipronil Sulfide	2.02	Spike	P	0 - 37
2303759	Fipronil Sulfone	5.23	Spike	P	0 - 50
2303759	Fluazifop-P-butyl	3.74	Spike	P	0 - 24
2303759	Fludioxonil	5.56	Spike	P	0 - 26
2303759	Flumioxazin	5.37	Spike	P	0 - 37
2303759	Flutolanil	1.82	Spike	P	0 - 26
2303759	Fluxapyroxad	3.23	Spike	P	0 - 34
2303759	Fonofos	8.45	Spike	P	0 - 27
2303759	Hexazinone	3.77	Spike	P	0 - 36
2303759	Imazalil	10.0	Spike	P	0 - 65
2303759	Iprodione	2.81	Spike	P	0 - 33
2303759	Loratadine	4.93	Spike	P	0 - 30
2303759	Malathion	4.98	Spike	P	0 - 44
2303759	Metalaxyl	5.11	Spike	P	0 - 38
2303759	Metolachlor	8.15	Spike	P	0 - 36
2303759	Metribuzin	6.31	Spike	P	0 - 63
2303759	Mevinphos	8.36	Spike	P	0 - 26
2303759	Molinate	19.8	Spike	P	0 - 40

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P409564

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303759	Myclobutanil	4.12	Spike	P	0 - 21
2303759	Naled	12.2	Spike	P	0 - 26
2303759	Napropamide	5.13	Spike	P	0 - 30
2303759	Norflurazon	5.09	Spike	P	0 - 24
2303759	Oxadiazon	5.54	Spike	P	0 - 27
2303759	Oxyfluorfen	10.2	Spike	P	0 - 24
2303759	Parathion Ethyl	8.47	Spike	P	0 - 28
2303759	Parathion Methyl	1.54	Spike	P	0 - 27
2303759	Pendimethalin	6.91	Spike	P	0 - 31
2303759	Phenytoin	3.10	Spike	P	0 - 30
2303759	Phorate	8.94	Spike	P	0 - 27
2303759	Prodiamine	8.70	Spike	P	0 - 52
2303759	Prometon	8.83	Spike	P	0 - 31
2303759	Prometryn	4.73	Spike	P	0 - 28
2303759	Pronamide	11.7	Spike	P	0 - 26
2303759	Propanil	6.23	Spike	P	0 - 30
2303759	Propargite	6.86	Spike	P	0 - 30
2303759	Propiconazole	0.618	Spike	P	0 - 31
2303759	Pyraflufen Ethyl	1.68	Spike	P	0 - 30
2303759	Pyridaben	7.55	Spike	P	0 - 30
2303759	Pyriproxyfen	3.44	Spike	P	0 - 50
2303759	Simazine	3.55	Spike	P	0 - 29
2303759	Stirophos	6.22	Spike	P	0 - 30
2303759	Sulfentrazone	2.43	Spike	P	0 - 33
2303759	Tebuconazole	6.63	Spike	P	0 - 44
2303759	Terbufos	6.00	Spike	P	0 - 29
2303759	Terbuthylazine	3.40	Spike	P	0 - 27
2303759	Thiobencarb	7.48	Spike	P	0 - 30
2303759	Triadimefon	16.6	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P409586

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303758	Aldrin	5.06	Spike	P	0 - 37
2303758	Alpha-BHC	0.289	Spike	P	0 - 16
2303758	Alpha-Chlordane	3.43	Spike	P	0 - 28
2303758	Beta-BHC	33.5	Spike	F	0 - 32
2303758	Beta-Cyfluthrin	26.1	Spike	P	0 - 41
2303758	Bifenthrin	30.0	Spike	P	0 - 36
2303758	Chlorothalonil	26.0	Spike	P	0 - 54
2303758	Cis-Nonachlor	13.3	Spike	P	0 - 33
2303758	Cypermethrin	29.3	Spike	P	0 - 38
2303758	Dacthal	6.91	Spike	P	0 - 23
2303758	DDD-p,p'	5.45	Spike	P	0 - 35
2303758	DDE-p,p'	13.7	Spike	P	0 - 27
2303758	DDT-p,p'	13.9	Spike	P	0 - 31
2303758	Delta-BHC	12.2	Spike	P	0 - 30
2303758	Deltamethrin	34.9	Spike	P	0 - 76
2303758	Dichlobenil	21.8	Spike	P	0 - 33

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P409586

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303758	Dicofol	12.9	Spike	P	0 - 24
2303758	Dieldrin	6.86	Spike	P	0 - 35
2303758	Endosulfan I	1.59	Spike	P	0 - 25
2303758	Endosulfan II	5.24	Spike	P	0 - 31
2303758	Endosulfan Sulfate	8.82	Spike	P	0 - 38
2303758	Endrin	8.15	Spike	P	0 - 53
2303758	Endrin Aldehyde	7.84	Spike	P	0 - 81
2303758	Endrin Ketone	2.09	Spike	P	0 - 33
2303758	Esfenvalerate	45.2	Spike	P	0 - 46
2303758	Ethalfluralin	5.46	Spike	P	0 - 22
2303758	Fenpropathrin	38.7	Spike	F	0 - 29
2303758	Gamma-BHC	5.96	Spike	P	0 - 17
2303758	Gamma-Chlordane	7.06	Spike	P	0 - 28
2303758	Heptachlor	2.45	Spike	P	0 - 28
2303758	Heptachlor Epoxide	1.96	Spike	P	0 - 23
2303758	Hexachlorobenzene	13.9	Spike	P	0 - 22
2303758	Kepone	22.9	Spike	P	0 - 61
2303758	Lambda-Cyhalothrin	21.8	Spike	P	0 - 52
2303758	Methoxychlor	1.04	Spike	P	0 - 29
2303758	MGK-264	8.76	Spike	P	0 - 41
2303758	Mirex	20.9	Spike	P	0 - 39
2303758	Permethrin	12.7	Spike	P	0 - 39
2303758	Phenothrin	5.02	Spike	P	0 - 52
2303758	Piperonyl Butoxide	5.28	Spike	P	0 - 91
2303758	Prallethrin	0.514	Spike	P	0 - 34
2303758	Tau-Fluvalinate	44.4	Spike	F	0 - 41
2303758	Tetramethrin	8.15	Spike	P	0 - 43
2303758	Trans-Nonachlor	4.62	Spike	P	0 - 31
2303758	Triclosan Methyl	8.49	Spike	P	0 - 24
2303758	Trifluralin	4.64	Spike	P	0 - 23

Reference Method: EPA 8276
Batch ID: P409586

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2304434	Chlordane	6.43	Spike	P	0 - 25
2304434	Toxaphene	8.41	Spike	P	0 - 24

Reference Method: EPA 8321B
Batch ID: P409339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302736	3-Hydroxycarbofuran	25.5	Spike	P	0 - 30
2302736	Aldicarb	32.4	Spike	F	0 - 30
2302736	Aldicarb Sulfone	16.2	Spike	P	0 - 30
2302736	Aldicarb Sulfoxide	28.8	Spike	P	0 - 30
2302736	Carbaryl	14.2	Spike	P	0 - 30
2302736	Carbofuran	2.73	Spike	P	0 - 30
2302736	Methiocarb	5.11	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P409339

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2302736	Methomyl	6.68	Spike	P	0 - 30
2302736	Oxamyl	4.41	Spike	P	0 - 30
2302736	Propoxur	0.146	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P409457

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303298	Acesulfame K	10.5	Spike	P	0 - 30
2303298	AMPA	6.65	Spike	P	0 - 30
2303298	Endothall	6.68	Spike	P	0 - 30
2303298	Glufosinate	0.830	Spike	P	0 - 30
2303298	Glyphosate	1.42	Spike	P	0 - 30
2303298	Sucralose	9.21	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P409557

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303655	2,4-D	11.7	Spike	P	0 - 30
2303655	2,4,5-T	6.20	Spike	P	0 - 30
2303655	Acetaminophen	5.18	Spike	P	0 - 30
2303655	Acetamiprid	12.8	Spike	P	0 - 30
2303655	Afidopyropen	4.19	Spike	P	0 - 30
2303655	Bentazon	11.3	Spike	P	0 - 30
2303655	Benzovindiflupyr	20.0	Spike	P	0 - 30
2303655	Carbamazepine	0.304	Spike	P	0 - 30
2303655	Clothianidin	6.40	Spike	P	0 - 30
2303655	Dinotefuran	12.2	Spike	P	0 - 30
2303655	Diuron	25.2	Spike	P	0 - 30
2303655	Fenuron	5.28	Spike	P	0 - 30
2303655	Fluridone	12.6	Spike	P	0 - 30
2303655	Hydrocodone	0.229	Spike	P	0 - 30
2303655	Ibuprofen	34.6	Spike	F	0 - 30
2303655	Imazapyr	3.09	Spike	P	0 - 30
2303655	Imidacloprid	5.12	Spike	P	0 - 30
2303655	Linuron	2.95	Spike	P	0 - 30
2303655	Mandestrobin	13.7	Spike	P	0 - 30
2303655	MCPP	12.4	Spike	P	0 - 30
2303655	Naproxen	18.0	Spike	P	0 - 30
2303655	Primidone	25.0	Spike	P	0 - 30
2303655	Pyraclostrobin	2.21	Spike	P	0 - 30
2303655	Thiamethoxam	2.62	Spike	P	0 - 30
2303655	Tolfenpyrad	26.5	Spike	P	0 - 30
2303655	Triclopyr	26.3	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: SM 2320 B-2011
Batch ID: P409589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303797	Total Alkalinity	1.23	Sample	P	0 - 5.2

Reference Method: SM 2540 C-2011
Batch ID: P409977

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303730	TDS	1.77	Sample	P	0 - 10

Reference Method: SM 4500 F-C-2011
Batch ID: P409591

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303797	Fluoride	0.483	Spike	P	0 - 2.1

Reference Method: SM 5310 B-2011
Batch ID: P410065

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2303636	Organic Carbon	0.491	Spike	P	0 - 20

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2303751
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	77.9	P	30 - 160

Lab Sample ID: 2303752
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	108	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	112	P	30 - 160
EPA 8321B	Diuron-d6	86.8	P	30 - 160
EPA 8321B	Endothall-d6	67.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	87.1	P	30 - 160
EPA 8321B	Ibuprofen-d3	71.6	P	30 - 160
EPA 8321B	Primidone-d5	76.2	P	30 - 160
EPA 8321B	Sucralose-d6	75.2	P	30 - 160

Lab Sample ID: 2303753
Field Sample ID: FB_02032022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	85.5	P	30 - 160

Lab Sample ID: 2303754
Field Sample ID: FB_02032022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	70.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	103	P	30 - 160
EPA 8321B	Diuron-d6	110	P	30 - 160
EPA 8321B	Endothall-d6	78.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	117	P	30 - 160
EPA 8321B	Ibuprofen-d3	115	P	30 - 160
EPA 8321B	Primidone-d5	128	P	30 - 160
EPA 8321B	Sucralose-d6	93.3	P	30 - 160

Lab Sample ID: 2303755
Field Sample ID: G3CE0066

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	91.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	110	P	30 - 160
EPA 8321B	Carbamazepine-d10	105	P	30 - 160
EPA 8321B	Diuron-d6	81.2	P	30 - 160
EPA 8321B	Endothall-d6	78.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	95.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	64.3	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	79.6	P	30 - 160

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Surrogates

Lab Sample ID: 2303756
Field Sample ID: G3CE0047

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	120	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	115	P	30 - 160
EPA 8321B	Diuron-d6	75.8	P	30 - 160
EPA 8321B	Endothall-d6	86.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.0	P	30 - 160
EPA 8321B	Primidone-d5	123	P	30 - 160
EPA 8321B	Sucralose-d6	90.5	P	30 - 160

Lab Sample ID: 2303758
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	56.3	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	60.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	64.1	P	30 - 97.0
EPA 8276	PCNB	69.1	P	45 - 119

Lab Sample ID: 2303759
Field Sample ID: G5CE0131

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	75.1	P	20 - 200
EPA 8270E	Simazine-d10	119	P	71 - 140
EPA 8270E	Terbufos-d10	120	P	62 - 131

Lab Sample ID: 2303760
Field Sample ID: FB_02032022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	65.7	P	31 - 118
EPA 8270E	Tetrachloro-m-xylene	80.4	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	67.2	P	30 - 97.0
EPA 8276	PCNB	73.9	P	45 - 119

Lab Sample ID: 2303761
Field Sample ID: FB_02032022

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	73.5	P	20 - 200
EPA 8270E	Simazine-d10	116	P	71 - 140
EPA 8270E	Terbufos-d10	100	P	62 - 131

Quality Assurance Report
Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A110244
Included Lab Sample IDs: 2303728, 2303733, 2303734, 2303737

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

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A110246
Included Lab Sample IDs: 2303726, 2303729, 2303730, 2303735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	98.0	99.0	P/P	95 - 105
Turbidity	99.0	99.0	P/P	95 - 105

Reference Method: DEP SOP: NU-094-1
Run ID: A110254
Included Lab Sample IDs: 2303726, 2303729, 2303730, 2303735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.5	99.5	P/P	85 - 115

Reference Method: EPA 8321B
Run ID: A110271
Included Lab Sample IDs: 2303751, 2303753

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	103	112	P/P	60 - 150
Aldicarb	122	128	P/P	60 - 150
Aldicarb Sulfone	110	108	P/P	50 - 150
Aldicarb Sulfoxide	89.1	95.8	P/P	50 - 150
Carbaryl	108	92.9	P/P	60 - 150
Carbofuran	106	101	P/P	50 - 150
Methiocarb	107	85.2	P/P	50 - 150
Methomyl	95.9	107	P/P	50 - 150
Oxamyl	94.8	100	P/P	50 - 150
Propoxur	115	102	P/P	50 - 150

Reference Method: SM 2320 B-2011
Run ID: A110292
Included Lab Sample IDs: 2303726, 2303729, 2303730, 2303735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	96.5	98.7	P/P	90 - 110
Total Alkalinity	97.2	96.5	P/P	90 - 110

Reference Method: SM 4500 F-C-2011
Run ID: A110292
Included Lab Sample IDs: 2303726, 2303729, 2303730, 2303735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	101	101	P/P	90 - 110
Fluoride	99.5	101	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0
Run ID: A110301
Included Lab Sample IDs: 2303727, 2303731, 2303732, 2303736

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

Reference Method: EPA 8321B
Run ID: A110307
Included Lab Sample IDs: 2303752, 2303754, 2303755, 2303756

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	89.1	91.2	P/P	60 - 160
Acesulfame K	90.2	89.1	P/P	60 - 160
Endothall	61.6	61.6	P/P	60 - 160
Endothall	75.5	61.6	P/P	60 - 160
Sucralose	75.6	80.5	P/P	60 - 160
Sucralose	80.5	75.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A110310
Included Lab Sample IDs: 2303752, 2303754, 2303755, 2303756

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	124	127	P/P	60 - 160
AMPA	127	128	P/P	60 - 160
Glufosinate	102	107	P/P	60 - 160
Glufosinate	103	102	P/P	60 - 160
Glyphosate	102	97.1	P/P	60 - 160
Glyphosate	98.7	102	P/P	60 - 160

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110318
Included Lab Sample IDs: 2303762, 2303763, 2303764

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.6	98.2	P/P	90 - 110
Aluminum	98.0	95.6	P/P	90 - 110
Antimony	92.8	93.7	P/P	90 - 110
Antimony	94.5	92.8	P/P	90 - 110
Arsenic	100	98.1	P/P	90 - 110
Arsenic	98.3	100	P/P	90 - 110
Barium	97.7	96.2	P/P	90 - 110
Barium	98.0	97.7	P/P	90 - 110
Beryllium	93.5	94.9	P/P	90 - 110
Beryllium	94.9	91.8	P/P	90 - 110
Boron	92.5	98.0	P/P	90 - 110
Boron	94.4	92.5	P/P	90 - 110
Cadmium	96.2	97.6	P/P	90 - 110
Cadmium	98.0	96.2	P/P	90 - 110
Chromium	94.0	95.4	P/P	90 - 110
Chromium	96.8	94.0	P/P	90 - 110
Cobalt	97.0	99.0	P/P	90 - 110
Cobalt	99.0	96.7	P/P	90 - 110
Copper	97.1	99.6	P/P	90 - 110
Copper	99.6	96.6	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110318
Included Lab Sample IDs: 2303762, 2303763, 2303764

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	93.6	94.4	P/P	90 - 110
Lead	94.0	93.6	P/P	90 - 110
Manganese	95.2	95.3	P/P	90 - 110
Manganese	95.8	95.2	P/P	90 - 110
Molybdenum	97.4	97.7	P/P	90 - 110
Molybdenum	98.5	97.4	P/P	90 - 110
Nickel	97.5	99.5	P/P	90 - 110
Nickel	99.5	96.8	P/P	90 - 110
Selenium	96.7	95.1	P/P	90 - 110
Selenium	96.8	96.7	P/P	90 - 110
Thallium	101	102	P/P	90 - 110
Thallium	102	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110319
Included Lab Sample IDs: 2303731, 2303732

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.6	97.7	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Run ID: A110335
Included Lab Sample IDs: 2303727, 2303736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.9	92.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Run ID: A110337
Included Lab Sample IDs: 2303727, 2303731, 2303732, 2303736

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A110344
Included Lab Sample IDs: 2303762, 2303763, 2303764

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	94.0	94.7	P/P	90 - 110
Silver	94.7	94.0	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Run ID: A110370
Included Lab Sample IDs: 2303726, 2303729, 2303730, 2303735

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	104	106	P/P	90 - 110
Sulfate	103	104	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A110373
Included Lab Sample IDs: 2303759, 2303761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	98.3		P	80 - 120
Ametryn	102		P	80 - 120
Atrazine	99.3		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	108		P	80 - 120
Azoxystrobin	102		P	80 - 120
Bromacil	106		P	80 - 120
Butylate	99.3		P	80 - 120
Caffeine	86.9		P	80 - 120
Carbophenothion	92.8		P	80 - 120
Carfentrazone Ethyl	103		P	80 - 120
Chlorfenapyr	104		P	80 - 120
Chlorpyrifos Ethyl	104		P	80 - 120
Chlorpyrifos Methyl	98.9		P	80 - 120
Coumaphos	99.8		P	80 - 120
Cyanazine	99.6		P	80 - 120
Cyprodinil	103		P	80 - 120
Demeton	97.6		P	80 - 120
Diazinon	105		P	80 - 120
Difenoconazole	101		P	80 - 120
Dimethenamid	104		P	80 - 120
Dimethomorph	102		P	80 - 120
Disulfoton	94.4		P	80 - 120
Dithiopyr	104		P	80 - 120
EPTC	101		P	80 - 120
Ethion	104		P	80 - 120
Ethoprop	100		P	80 - 120
Etridiazole	102		P	80 - 120
Fenamiphos	99.5		P	80 - 120
Fenbuconazole	98.7		P	80 - 120
Fipronil	104		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	105		P	80 - 120
Fipronil Sulfone	105		P	80 - 120
Fluazifop-P-butyl	98.7		P	80 - 120
Fludioxonil	107		P	80 - 120
Flumioxazin	93.9		P	80 - 120
Flutolanil	84.9		P	80 - 120
Fluxapyroxad	103		P	80 - 120
Fonofos	98.8		P	80 - 120
Hexazinone	100		P	80 - 120
Imazalil	101		P	80 - 120
Iprodione	111		P	80 - 120
Loratadine	103		P	80 - 120
Malathion	103		P	80 - 120
Metalaxyl	100		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	101		P	80 - 120
Mevinphos	97.1		P	80 - 120
Molinate	99.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A110373
Included Lab Sample IDs: 2303759, 2303761

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Myclobutanil	103		P	80 - 120
Naled	106		P	80 - 120
Napropamide	105		P	80 - 120
Norflurazon	98.8		P	80 - 120
Oxadiazon	102		P	80 - 120
Oxyfluorfen	99.5		P	80 - 120
Parathion Ethyl	97.2		P	80 - 120
Parathion Methyl	98.2		P	80 - 120
Pendimethalin	102		P	80 - 120
Phenytoin	99.4		P	80 - 120
Phorate	102		P	80 - 120
Prodiamine	95.8		P	80 - 120
Prometon	97.1		P	80 - 120
Prometryn	104		P	80 - 120
Pronamide	102		P	80 - 120
Propanil	101		P	80 - 120
Propargite	98.9		P	80 - 120
Propiconazole	99.9		P	80 - 120
Pyraflufen Ethyl	99.8		P	80 - 120
Pyridaben	96.7		P	80 - 120
Pyriproxyfen	116		P	80 - 120
Simazine	100		P	80 - 120
Stirophos	99.2		P	80 - 120
Sulfentrazone	99.6		P	80 - 120
Tebuconazole	101		P	80 - 120
Terbufos	98.4		P	80 - 120
Terbuthylazine	102		P	80 - 120
Thiobencarb	102		P	80 - 120
Triadimefon	101		P	80 - 120

Reference Method: EPA 8276
Run ID: A110376
Included Lab Sample IDs: 2303758, 2303760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.5		P	80 - 120
Chlordane	98.1		P	80 - 120
Toxaphene	107		P	80 - 120
Toxaphene	98.2		P	80 - 120

Reference Method: EPA 8321B
Run ID: A110380
Included Lab Sample IDs: 2303752, 2303754, 2303755, 2303756

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	86.3	P/P	50 - 150
2,4,5-T	81.4	119	P/P	50 - 150
Acetaminophen	103	97.2	P/P	60 - 160
Acetamiprid	115	111	P/P	50 - 150
Afidopyropen	105	102	P/P	50 - 150
Bentazon	112	98.2	P/P	50 - 160

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A110380
Included Lab Sample IDs: 2303752, 2303754, 2303755, 2303756

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Benzovindiflupyr	93.9	77.8	P/P	50 - 150
Carbamazepine	103	98.0	P/P	60 - 150
Clothianidin	119	111	P/P	60 - 150
Dinotefuran	90.5	99.8	P/P	50 - 150
Diuron	120	110	P/P	60 - 160
Fenuron	104	89.1	P/P	60 - 150
Fluridone	98.4	108	P/P	60 - 160
Hydrocodone	102	96.9	P/P	60 - 150
Ibuprofen	159	135	P/P	50 - 160
Imazapyr	129	106	P/P	50 - 150
Imidacloprid	112	115	P/P	60 - 150
Linuron	92.8	81.0	P/P	60 - 150
Mandestrobin	113	119	P/P	50 - 150
MCPP	90.6	95.5	P/P	50 - 150
Naproxen	74.5	69.6	P/P	50 - 160
Primidone	126	107	P/P	60 - 150
Pyraclostrobin	104	120	P/P	60 - 150
Thiamethoxam	109	102	P/P	50 - 150
Tolfenpyrad	79.7	94.9	P/P	60 - 150
Triclopyr	67.9	99.5	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A110407
Included Lab Sample IDs: 2303758, 2303760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	94.5		P	80 - 120
Alpha-BHC	113		P	80 - 120
Alpha-Chlordane	96.1		P	80 - 120
Beta-BHC	89.4		P	80 - 120
Beta-Cyfluthrin	92.3		P	80 - 120
Bifenthrin	84.1		P	80 - 120
Chlorothalonil	110		P	80 - 120
Cis-Nonachlor	99.4		P	80 - 120
Cypermethrin	90.2		P	80 - 120
Dacthal	93.1		P	80 - 120
DDD-p,p'	93.2		P	80 - 120
DDE-p,p'	92.2		P	80 - 120
DDT-p,p'	104		P	80 - 120
Delta-BHC	106		P	80 - 120
Deltamethrin	82.0		P	80 - 120
Dichlobenil	100		P	80 - 120
Dicofol	66.9*		F	80 - 120
Dieldrin	96.3		P	80 - 120
Endosulfan I	97.2		P	80 - 120
Endosulfan II	94.6		P	80 - 120
Endosulfan Sulfate	92.8		P	80 - 120
Endrin	95.8		P	80 - 120
Endrin Aldehyde	101		P	80 - 120
Endrin Ketone	88.9		P	80 - 120
Esfenvalerate	93.1		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A110407
Included Lab Sample IDs: 2303758, 2303760

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ethalfluralin	99.2		P	80 - 120
Fenpropathrin	77.1*		F	80 - 120
Gamma-BHC	113		P	80 - 120
Gamma-Chlordane	101		P	80 - 120
Heptachlor	103		P	80 - 120
Heptachlor Epoxide	98.3		P	80 - 120
Hexachlorobenzene	106		P	80 - 120
Kepone	82.5		P	80 - 120
Lambda-Cyhalothrin	82.7		P	80 - 120
Methoxychlor	92.7		P	80 - 120
MGK-264	91.5		P	80 - 120
Mirex	89.5		P	80 - 120
Permethrin	90.1		P	80 - 120
Phenothrin	80.0		P	80 - 120
Piperonyl Butoxide	71.6*		F	80 - 120
Prallethrin	93.5		P	80 - 120
Tau-Fluvalinate	82.8		P	80 - 120
Tetramethrin	81.4		P	80 - 120
Trans-Nonachlor	106		P	80 - 120
Triclosan Methyl	99.2		P	80 - 120
Trifluralin	90.5		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A110426
Included Lab Sample IDs: 2303762, 2303763, 2303764

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	101	105	P/P	95 - 105
Calcium	105	102	P/P	90 - 110
Iron	101	105	P/P	95 - 105
Iron	105	102	P/P	90 - 110
Magnesium	101	104	P/P	95 - 105
Magnesium	104	101	P/P	90 - 110
Potassium	102	99.3	P/P	90 - 110
Potassium	99.0	102	P/P	95 - 105
Sodium	100	103	P/P	95 - 105
Sodium	103	101	P/P	90 - 110
Strontium	101	105	P/P	95 - 105
Strontium	105	103	P/P	90 - 110
Tin	103	106	P/P	95 - 105
Tin	106	104	P/P	90 - 110
Titanium	101	103	P/P	95 - 105
Titanium	103	101	P/P	90 - 110
Vanadium	102	104	P/P	95 - 105
Vanadium	104	103	P/P	90 - 110
Zinc	104	108	P/P	95 - 105
Zinc	108	105	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A110429
Included Lab Sample IDs: 2303759

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	102		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0
Run ID: A110454
Included Lab Sample IDs: 2303727, 2303731, 2303732, 2303736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.6	98.5	P/P	90 - 110
Ammonia-N	99.1	98.6	P/P	90 - 110

Reference Method: SM 5310 B-2011
Run ID: A110496
Included Lab Sample IDs: 2303727, 2303731, 2303732, 2303736

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	95.7	P/P	90 - 110
Organic Carbon	96.1	95.0	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)	97.4					2.06	
EPA 180.1 Rev. 2.0	Turbidity	96.2					4.16	
EPA 200.7 Rev. 4.4	Calcium	106	108	109	103			0.829
	Iron	105	108	109	101			0.821
	Magnesium	106	109	110	100			0.561
	Potassium	103	110	110	105			0.246
	Sodium	105	105	104	101			0.324
	Strontium	104	106	106	106			0.0052
	Tin	108	107	110	102			3.09
	Titanium	105	104	106				1.14
	Vanadium	98.6	97.6	98.7	98.8			1.15
	Zinc	107	106	108	111			1.17
EPA 200.8 Rev. 5.4	Aluminum	99.9	98.8	100				1.38
	Antimony	99.7	98.5	99.1	95.4			0.604
	Arsenic	102	103	102	103			0.0250
	Barium	103	103	104	106			0.811
	Beryllium	94.8	102	101				0.975
	Boron	100	97.2	100	107			2.83
	Cadmium	97.8	98.7	99.5	101			0.888
	Chromium	96.9	97.3	97.1	100			0.203
	Cobalt	100	102	102	102			0.690
	Copper	98.6	101	102	102			0.111
	Lead	97.4	97.7	97.6	100			0.0895
	Manganese	98.0	96.8	98.1	99.7			1.23
	Molybdenum	100	99.9	99.6	103			0.370
	Nickel	100	103	105	102			1.57
	Selenium	98.4	99.1	101	100			1.39
	Silver	105	104	104	105			0.132
	Thallium	103	103	105	106			1.70
EPA 300.0 Rev. 2.1	Chloride	104	103	105			0.539	
	Sulfate	103	98.0	101			0.745	
EPA 350.1 Rev. 2.0	Ammonia-N	99.8	98.6	98.8				0.180
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1	105	101				2.22
	Kjeldahl Nitrogen	98.2	99.2	102				2.48
EPA 353.2 Rev. 2.0	NO2NO3-N	101	102	101				0.494
EPA 365.1 Rev. 2.0	Total-P	102	102	101				0.669
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.6	98.9	100				1.21
EPA 8270E	Acetochlor	106	103	113				9.10
	Alachlor	95.5	93.5	98.8				5.53
	Aldrin	52.2	43.0	40.9				5.06
	Alpha-BHC	90.3	88.2	87.9				0.289
	Alpha-Chlordane	69.0	57.5	55.5				3.43
	Ametryn	115	116	114				0.547
	Atrazine	105						15.8
	Atrazine Desethyl	78.4	74.9	74.2				0.428
	Azinphos Methyl	75.5	73.1	80.2				9.24
	Azoxystrobin	96.7	99.5	103				2.65
	Beta-BHC	91.1	72.6	102				33.5
	Beta-Cyfluthrin	98.2	107	82.4				26.1
	Bifenthrin	55.5	67.4	49.8				30.0
	Bromacil	96.9	90.0	104				11.7
	Butylate	64.1	41.3	50.5				20.0
	Caffeine	83.7	86.6	109				17.0
	Carbophenothion	107	114	114				0.423

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Carfentrazone Ethyl	122	131	135			3.06
	Chlorfenapyr	94.3	86.1	88.8			3.11
	Chlorothalonil	103	114	148			26.0
	Chlorpyrifos Ethyl	104	99.2	113			13.2
	Chlorpyrifos Methyl	109	102	108			5.52
	Cis-Nonachlor	68.6	57.9	50.7			13.3
	Coumaphos	164	171	178			4.18
	Cyanazine	144	134	133			0.963
	Cypermethrin	84.7	111	82.2			29.3
	Cyprodinil	129	116	123			5.34
	Dacthal	88.0	89.9	83.9			6.91
	DDD-p,p'	56.1	49.7	47.0			5.45
	DDE-p,p'	66.4	53.4	46.6			13.7
	DDT-p,p'	80.7	69.1	60.1			13.9
	Delta-BHC	102	100	113			12.2
	Deltamethrin	70.1	77.6	54.5			34.9
	Demeton	88.4	107	114			6.18
	Diazinon	108	107	115			6.88
	Dichlobenil	80.9	46.6	57.9			21.8
	Dicofol	47.0	45.1	39.6			12.9
	Dieldrin	70.5	61.6	57.5			6.86
	Difenoconazole	88.1	91.1	88.5			2.79
	Dimethenamid	89.5	89.0	94.1			5.63
	Dimethomorph	102	97.7	103			5.30
	Disulfoton	98.2	93.4	109			15.3
	Dithiopyr	95.9	92.1	99.1			6.81
	Endosulfan I	75.2	64.9	63.9			1.59
	Endosulfan II	70.9	62.5	65.9			5.24
	Endosulfan Sulfate	88.5	88.0	96.1			8.82
	Endrin	66.4	59.7	55.0			8.15
	Endrin Aldehyde	58.2	48.2	52.1			7.84
	Endrin Ketone	99.2	115	117			2.09
	EPTC	60.7	37.0	47.5			25.0
	Esfenvalerate	86.1	127	80.2			45.2
	Ethalfluralin	65.1	62.9	59.6			5.46
	Ethion	113	112	115			2.91
	Ethoprop	101	101	107			5.90
	Etridiazole	64.6	47.7	60.0			22.8
	Fenamiphos	108	101	104			3.43
	Fenbuconazole	142	138	142			3.36
	Fenpropathrin	64.5	85.0	57.4			38.7
	Fipronil	103	104	109			4.32
	Fipronil Desulfinyl	97.0	101	104			2.41
	Fipronil Sulfide	93.2	90.3	93.1			2.02
	Fipronil Sulfone	104	89.5	99.2			5.23
	Fluazifop-P-butyl	89.7	82.5	85.6			3.74
	Fludioxonil	101	96.2	102			5.56
	Flumioxazin	179	202	214			5.37
	Flutolanil	79.3	73.4	74.8			1.82
	Fluxapyroxad	93.2	153	158			3.23
	Fonofos	99.1	100	109			8.45
	Gamma-BHC	90.6	90.3	95.8			5.96
	Gamma-Chlordane	69.1	59.8	55.7			7.06
	Heptachlor	64.8	57.9	59.4			2.45

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Heptachlor Epoxide	80.0	78.0	76.5			1.96
	Hexachlorobenzene	73.9	65.7	57.2			13.9
	Hexazinone	108	107	111			3.77
	Imazalil	87.9	71.7	64.9			10.0
	Iprodione	71.5	77.0	79.2			2.81
	Kepone	144	88.3	111			22.9
	Lambda-Cyhalothrin	65.0	91.4	73.4			21.8
	Loratadine	67.3	81.0	77.1			4.93
	Malathion	127	122	129			4.98
	Metalaxyl	91.5	92.1	96.9			5.11
	Methoxychlor	87.9	85.7	84.8			1.04
	Metolachlor	102	94.3	103			8.15
	Metribuzin	101	94.5	101			6.31
	Mevinphos	102	98.3	107			8.36
	MGK-264	74.8	77.2	84.3			8.76
	Mirex	46.3	47.6	38.6			20.9
	Molinate	77.8	62.4	76.1			19.8
	Myclobutanil	98.5	93.7	99.1			4.12
	Naled	118	102	115			12.2
	Napropamide	93.3	85.3	89.8			5.13
	Norflurazon	114	112	118			5.09
	Oxadiazon	83.9	72.3	77.0			5.54
	Oxyfluorfen	86.5	105	116			10.2
	Parathion Ethyl	100	92.8	101			8.47
	Parathion Methyl	120	121	123			1.54
	Pendimethalin	66.1	80.4	86.2			6.91
	Permethrin	137	181	159			12.7
	Phenothrin	41.3	66.0	62.8			5.02
	Phenytoin	130	137	141			3.10
	Phorate	89.9	106	116			8.94
	Piperonyl Butoxide	64.3	112	106			5.28
	Prallethrin	66.5	67.9	68.3			0.514
	Prodiamine	61.2	125	137			8.70
	Prometon	95.2	124	135			8.83
	Prometryn	120	117	122			4.73
	Pronamide	102	99.3	112			11.7
	Propanil	92.3	90.2	96.0			6.23
	Propargite	141	138	147			6.86
	Propiconazole	113					0.618
	Pyraflufen Ethyl	125	129	126			1.68
	Pyridaben	134	140	151			7.55
	Pyriproxyfen	59.5	58.9	56.9			3.44
	Simazine	99.0					3.55
	Stirophos	110	98.6	105			6.22
	Sulfentrazone	130					2.43
	Tau-Fluvalinate	64.0	100	64.0			44.4
	Tebuconazole	67.9	133	143			6.63
	Terbufos	117	123	130			6.00
	Terbuthylazine	98.8	102	106			3.40
	Tetramethrin	67.8	82.7	89.7			8.15
	Thiobencarb	94.3	89.7	96.6			7.48
	Trans-Nonachlor	74.4	53.8	51.4			4.62
	Triadimefon	87.7	83.2	103			16.6
	Triclosan Methyl	94.3	74.3	68.3			8.49

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Trifluralin	59.9	55.1	52.6			4.64
EPA 8276	Chlordane	79.2	85.5	80.2			6.43
	Toxaphene	65.8	87.6	80.6			8.41
EPA 8321B	2,4-D	86.8	105	93.0			11.7
	2,4,5-T	63.9	43.0	45.7			6.20
	3-Hydroxycarbofuran	65.1	114	87.9			25.5
	Acesulfame K	76.7	90.8	101			10.5
	Acetaminophen	62.7	91.7	96.6			5.18
	Acetamiprid	83.8	114	101			12.8
	Afidopyropen	49.6	96.2	100			4.19
	Aldicarb	53.2	76.7	55.4			32.4
	Aldicarb Sulfone	111	104	123			16.2
	Aldicarb Sulfoxide	82.4	54.3	40.6			28.8
	AMPA	109	93.5	87.5			6.65
	Bentazon	83.1	63.4	77.2			11.3
	Benzovindiflupyr	66.9	95.6	78.2			20.0
	Carbamazepine	96.6	115	114			0.304
	Carbaryl	73.5	79.9	69.3			14.2
	Carbofuran	85.9	95.4	98.0			2.73
	Clothianidin	81.7	103	96.4			6.40
	Dinotefuran	98.9	132	117			12.2
	Diuron	98.1	99.9	76.3			25.2
	Endothall	68.2	92.3	86.3			6.68
	Fenuron	86.1	90.5	95.4			5.28
	Fluridone	89.1	91.1	104			12.6
	Glufosinate	103	100	99.3			0.830
	Glyphosate	96.0	89.1	90.5			1.42
	Hydrocodone	85.0	98.9	98.6			0.229
	Ibuprofen	101	121	85.4			34.6
	Imazapyr	101	136	141			3.09
	Imidacloprid	79.8	114	120			5.12
	Linuron	59.2	69.8	71.9			2.95
	Mandestrobin	93.4	91.3	105			13.7
	MCPP	102	118	104			12.4
	Methiocarb	78.5	80.3	76.3			5.11
	Methomyl	82.9	91.8	98.1			6.68
	Naproxen	64.8	71.5	85.6			18.0
	Oxamyl	112					4.41
	Primidone	109	105	81.4			25.0
	Propoxur	88.2	85.3	85.4			0.146
	Pyraclostrobin	70.6	86.4	88.4			2.21
	Sucralose	81.7	82.1	92.1			9.21
	Thiamethoxam	103	124	121			2.62
	Tolfenpyrad	40.4	50.3	38.5			26.5
	Triclopyr	55.8	48.9	37.5			26.3
SM 2320 B-2011	Total Alkalinity	99.1				1.23	
SM 2540 C-2011	TDS					1.77	
SM 4500 F-C-2011	Fluoride	97.8	98.7	98.1			0.483
SM 5310 B-2011	Organic Carbon	93.4	93.4	94.0			0.491

Reference Method Descriptions

Method	Description	Associated Samples

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2303726, 2303729, 2303730, 2303735
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2303726, 2303729, 2303730, 2303735
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2303762, 2303763, 2303764
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2303762, 2303763, 2303764
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2303726, 2303729, 2303730, 2303735
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2303726, 2303729, 2303730, 2303735
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2303727, 2303731, 2303732, 2303736
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2303727, 2303731, 2303732, 2303736
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2303727, 2303731, 2303732, 2303736
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2303727, 2303731, 2303732, 2303736
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2303728, 2303733, 2303734, 2303737
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2303758, 2303760
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2303759, 2303761
EPA 8276	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2303758, 2303760
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2303751, 2303753
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2303752, 2303754, 2303755, 2303756
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2303726, 2303729, 2303730, 2303735
SM 2340B	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2303763, 2303764
SM 2540 C-2011	Total Dissolved Solids in aqueous matrices	2303726, 2303729, 2303730, 2303735
SM 2540 D-2011	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2303726, 2303729, 2303730, 2303735
SM 4500 F-C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2303726, 2303729, 2303730, 2303735
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2303727, 2303731, 2303732, 2303736

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	02/04/2022			02/04/2022 16:19	Anna M. Plaviak	2303726
	02/04/2022			02/04/2022 16:20	Anna M. Plaviak	2303729
	02/04/2022			02/04/2022 16:21	Anna M. Plaviak	2303730
	02/04/2022			02/04/2022 16:22	Anna M. Plaviak	2303735
EPA 180.1 Rev. 2.0	02/04/2022			02/04/2022 15:17	Khloe J Berg	2303726
	02/04/2022			02/04/2022 15:19	Khloe J Berg	2303729
	02/04/2022			02/04/2022 15:21	Khloe J Berg	2303730
	02/04/2022			02/04/2022 15:25	Khloe J Berg	2303735
EPA 200.7 Rev. 4.4	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/15/2022 16:25	Josef B Mick	2303762
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/15/2022 18:38	Josef B Mick	2303763
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/15/2022 18:46	Josef B Mick	2303764
EPA 200.8 Rev. 5.4	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/09/2022 17:47	Alexander Thompson	2303762
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/09/2022 19:41	Alexander Thompson	2303763
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/09/2022 19:51	Alexander Thompson	2303764
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/10/2022 13:38	Alexander Thompson	2303762
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/10/2022 14:56	Alexander Thompson	2303763
	02/04/2022	02/09/2022 10:44	Megan Whitefoot	02/10/2022 15:03	Alexander Thompson	2303764
EPA 300.0 Rev. 2.1	02/04/2022			02/11/2022 19:19	James L Waggerby	2303729
	02/04/2022			02/11/2022 20:07	James L Waggerby	2303726
	02/04/2022			02/11/2022 20:19	James L Waggerby	2303730
	02/04/2022			02/11/2022 20:31	James L Waggerby	2303735
EPA 350.1 Rev. 2.0	02/04/2022			02/16/2022 12:41	Ping Hua	2303731
	02/04/2022			02/16/2022 12:42	Ping Hua	2303732
	02/04/2022			02/16/2022 12:50	Ping Hua	2303727
	02/04/2022			02/16/2022 14:28	Ping Hua	2303736
EPA 351.2 Rev. 2.0	02/04/2022	02/08/2022 13:34	Samantha L Bates	02/09/2022 15:01	Alexandra J Mattheus	2303731
	02/04/2022	02/08/2022 13:34	Samantha L Bates	02/09/2022 15:03	Alexandra J Mattheus	2303732
	02/04/2022	02/09/2022 15:02	Samantha L Bates	02/10/2022 13:54	Alexandra J Mattheus	2303727
	02/04/2022	02/09/2022 15:02	Samantha L Bates	02/10/2022 13:55	Alexandra J Mattheus	2303736
EPA 353.2 Rev. 2.0	02/04/2022			02/09/2022 11:01	Beverly Y. Sanders	2303727
	02/04/2022			02/09/2022 11:02	Beverly Y. Sanders	2303731
	02/04/2022			02/09/2022 11:04	Beverly Y. Sanders	2303732
	02/04/2022			02/09/2022 11:05	Beverly Y. Sanders	2303736
EPA 365.1 Rev. 2.0	02/04/2022	02/09/2022 16:20	Simonne.V. Calhoun	02/10/2022 14:02	Shengyu Ding	2303727
	02/04/2022	02/09/2022 16:20	Simonne.V. Calhoun	02/10/2022 14:10	Shengyu Ding	2303736
	02/04/2022	02/09/2022 16:20	Simonne.V. Calhoun	02/10/2022 14:14	Shengyu Ding	2303731
	02/04/2022	02/09/2022 16:20	Simonne.V. Calhoun	02/10/2022 14:15	Shengyu Ding	2303732
EPA 365.1 Rev. 2.0 dissolved	02/04/2022			02/04/2022 14:15	James L Waggerby	2303728
	02/04/2022			02/04/2022 14:16	James L Waggerby	2303733
	02/04/2022			02/04/2022 14:17	James L Waggerby	2303734

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0 dissolved	02/04/2022			02/04/2022 14:18	James L Waggerby	2303737
EPA 8270E	02/04/2022	02/09/2022 08:00	Fe-Val Siddell	02/14/2022 23:04	Vandana T. Nagar	2303758
	02/04/2022	02/09/2022 08:00	Fe-Val Siddell	02/15/2022 00:31	Vandana T. Nagar	2303760
	02/04/2022	02/09/2022 08:00	Rasheda Ghaffari	02/11/2022 15:18	Michael Poppell	2303759
	02/04/2022	02/09/2022 08:00	Rasheda Ghaffari	02/11/2022 17:00	Michael Poppell	2303761
	02/04/2022	02/09/2022 08:00	Rasheda Ghaffari	02/12/2022 18:10	Michael Poppell	2303759
EPA 8276	02/04/2022	02/09/2022 08:00	Fe-Val Siddell	02/11/2022 11:02	Arthur Maknenko	2303758
	02/04/2022	02/09/2022 08:00	Fe-Val Siddell	02/11/2022 12:53	Arthur Maknenko	2303760
EPA 8321B	02/04/2022	02/04/2022 13:00	June Rhew	02/08/2022 06:20	Juyoung Kim	2303751
	02/04/2022	02/04/2022 13:00	June Rhew	02/08/2022 06:55	Juyoung Kim	2303753
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 12:20	Manjita Shrestha	2303752
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 12:42	Manjita Shrestha	2303754
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 12:52	Manjita Shrestha	2303755
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 13:09	Manjita Shrestha	2303756
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 19:57	Manjita Shrestha	2303752
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 20:12	Manjita Shrestha	2303754
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 20:27	Manjita Shrestha	2303755
	02/04/2022	02/08/2022 10:00	Manjita Shrestha	02/08/2022 20:56	Manjita Shrestha	2303756
	02/04/2022	02/09/2022 13:30	June Rhew	02/11/2022 05:05	Juyoung Kim	2303752
	02/04/2022	02/09/2022 13:30	June Rhew	02/11/2022 05:40	Juyoung Kim	2303754
	02/04/2022	02/09/2022 13:30	June Rhew	02/11/2022 06:15	Juyoung Kim	2303755
	02/04/2022	02/09/2022 13:30	June Rhew	02/11/2022 06:49	Juyoung Kim	2303756
SM 2320 B-2011	02/04/2022			02/08/2022 21:08	Dale L. Simmons	2303726
	02/04/2022			02/08/2022 21:21	Dale L. Simmons	2303729
	02/04/2022			02/08/2022 22:06	Dale L. Simmons	2303730
	02/04/2022			02/08/2022 22:18	Dale L. Simmons	2303735
SM 2340B	02/04/2022			02/15/2022 18:38	Josef B Mick	2303763
	02/04/2022			02/15/2022 18:46	Josef B Mick	2303764
SM 2540 C-2011	02/04/2022			02/09/2022 14:36	Yijie Li	2303726, 2303729, 2303730, 2303735
SM 2540 D-2011	02/04/2022			02/09/2022 14:36	Yijie Li	2303726, 2303729, 2303730, 2303735
SM 4500 F-C-2011	02/04/2022			02/08/2022 21:08	Dale L. Simmons	2303726
	02/04/2022			02/08/2022 21:21	Dale L. Simmons	2303729
	02/04/2022			02/08/2022 22:06	Dale L. Simmons	2303730
	02/04/2022			02/08/2022 22:18	Dale L. Simmons	2303735
SM 5310 B-2011	02/04/2022			02/17/2022 17:33	Khloe J Berg	2303732
	02/04/2022			02/17/2022 21:06	Khloe J Berg	2303727
	02/04/2022			02/17/2022 21:28	Khloe J Berg	2303731
	02/04/2022			02/17/2022 21:44	Khloe J Berg	2303736