Chemical Analysis Report

CEN-DIST-2023-11-17-01

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

Event Description: **Run 20**
Request ID: **RQ-2023-11-13-18**
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

For additional information please contact
Colin Wright, Ph.D.
Chris Bowen, B.S.
Kerry Tate, Ph.D.
Marek Topolski, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Colin Wright, Program Administrator

Date Certified: 15-DEC-2023 16:16

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 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: PHELPS CREEK 85M N OF LAKE MARY BLVD **Collection Date/Time: 11/16/2023 11:50**

Field ID: G2CE0247 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452131	EPA 8321B	2,4-D	0.0020	U	ug/L	P437953	
		Acesulfame K	3.5		ug/L	P437906	
		2,4,5-T	0.0040	U	ug/L	P437953	
		AMPA	0.13	I	ug/L	P437906	
		Acetaminophen	0.018	I	ug/L	P437953	
		Acetamiprid	0.0020	U	ug/L	P437953	
		Endothall	0.25	U	ug/L	P437906	
		Glufosinate	0.10	U	ug/L	P437906	
		Glyphosate	0.33	I	ug/L	P437906	
		Afidopyropen	0.0020	U	ug/L	P437953	
		Bentazon	0.0017	I	ug/L	P437953	
		Sucralose	0.060		ug/L	P437906	
		Benzovindiflupyr	0.0020	U	ug/L	P437953	
		Carbamazepine	8.0E-04	U	ug/L	P437953	
		Clothianidin	0.0020	U	ug/L	P437953	
		Dinotefuran	0.0020	U	ug/L	P437953	
		Diuron	0.025		ug/L	P437953	
		Fenuron	0.032	U	ug/L	P437953	
		Fluridone	8.0E-04	U	ug/L	P437953	
		Imazapyr	0.0074	I	ug/L	P437953	
		Hydrocodone	0.0020	U	ug/L	P437953	
		Ibuprofen	0.080	U	ug/L	P437953	
		Imidacloprid	0.063		ug/L	P437953	
		Linuron	0.0040	U	ug/L	P437953	
		Mandestrobin	0.0020	U	ug/L	P437953	
		MCPP	0.0020	U	ug/L	P437953	
		Naproxen	0.0080	U	ug/L	P437953	
		Primidone	0.0040	U	ug/L	P437953	
		Pyraclostrobin	0.0020	U	ug/L	P437953	
		Silvex	0.0040	U	ug/L	P437953	
		Thiamethoxam	0.0020	U	ug/L	P437953	
		Tolfenpyrad	0.0020	U	ug/L	P437953	
		Triclopyr	0.0040	U	ug/L	P437953	

Ref. Method and Comment:
EPA 8321B: The matrix spike and LCS recoveries for afidopyropen could not be evaluated due to laboratory technical difficulties.

Sample Location: ELDER SPRINGS RUN AT US OF MYRTLE ST **Collection Date/Time: 11/16/2023 12:13**

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452134	EPA 8321B	Aldicarb	0.020	U	ug/L	P437954	
		Aldicarb Sulfone	0.0020	U	ug/L	P437954	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P437954	
		Carbaryl	0.0020	U	ug/L	P437954	
		Carbofuran	0.0020	U	ug/L	P437954	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P437954	
		Methiocarb	0.0020	U	ug/L	P437954	
		Methomyl	0.0020	U	ug/L	P437954	
		Oxamyl	0.0020	U	ug/L	P437954	
		Propoxur	0.0020	U	ug/L	P437954	
2452135		2,4-D	0.014		ug/L	P437953	
		Acesulfame K	0.11	I	ug/L	P437906	
		2,4,5-T	0.0040	U	ug/L	P437953	
		AMPA	0.43		ug/L	P437906	
		Acetaminophen	0.0080	U	ug/L	P437953	
		Acetamiprid	0.0020	U	ug/L	P437953	
		Endothall	0.25	U	ug/L	P437906	
		Glufosinate	0.10	U	ug/L	P437906	
		Glyphosate	1.7		ug/L	P437906	
		Afidopyropen	0.0020	U	ug/L	P437953	
		Bentazon	0.022		ug/L	P437953	
		Sucralose	0.28		ug/L	P437906	
		Benzovindiflupyr	0.0020	U	ug/L	P437953	
		Carbamazepine	8.0E-04	U	ug/L	P437953	
		Clothianidin	0.0020	U	ug/L	P437953	
		Dinotefuran	0.0021	I	ug/L	P437953	
		Diuron	0.0023	I	ug/L	P437953	
		Fenuron	0.032	U	ug/L	P437953	
		Fluridone	0.0012	I	ug/L	P437953	
		Imazapyr	0.092		ug/L	P437953	
		Hydrocodone	0.0020	U	ug/L	P437953	
		Ibuprofen	0.080	U	ug/L	P437953	
		Imidacloprid	0.020		ug/L	P437953	
		Linuron	0.0040	U	ug/L	P437953	
		Mandestrobin	0.0020	U	ug/L	P437953	
		MCPP	0.0020	U	ug/L	P437953	
		Naproxen	0.0080	U	ug/L	P437953	
		Primidone	0.0040	U	ug/L	P437953	
		Pyraclostrobin	0.0020	U	ug/L	P437953	
		Silvex	0.0040	U	ug/L	P437953	
		Thiamethoxam	0.0020	U	ug/L	P437953	
		Tolfenpyrad	0.0020	U	ug/L	P437953	
		Triclopyr	0.0040	U	ug/L	P437953	
2452136	EPA 8270E	Aldrin	0.66	U	ng/L	P437943	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452136	EPA 8270E	Alpha-BHC	0.10	U	ng/L	P437943	MS
		Alpha-Chlordane	0.20	U	ng/L	P437943	
		PCB-1016	2.0	U	ng/L	P437943	
		Beta-BHC	0.14	I	ng/L	P437943	
		PCB-1221	2.0	U	ng/L	P437943	
		Beta-Cyfluthrin	1.3	U	ng/L	P437943	
		PCB-1232	2.0	U	ng/L	P437943	
		Bifenthrin	0.51	U	ng/L	P437943	
		PCB-1242	2.0	U	ng/L	P437943	
		PCB-1248	2.0	U	ng/L	P437943	
		Chlorothalonil	3.7	U	ng/L	P437943	RPD
		PCB-1254	2.0	U	ng/L	P437943	
		Cis-Nonachlor	0.20	U	ng/L	P437943	
		PCB-1260	2.0	U	ng/L	P437943	
		Cypermethrin	1.5	U	ng/L	P437943	RPD
		Dacthal	0.15	U	ng/L	P437943	MS, RPD
		DDD-p,p'	0.26	U	ng/L	P437943	
		DDE-p,p'	0.20	U	ng/L	P437943	
		DDT-p,p'	0.82	UJ	ng/L	P437943	LCS, MS
		Delta-BHC	0.41	U	ng/L	P437943	RPD
		Deltamethrin	1.3	U	ng/L	P437943	
		Dichlobenil	0.26	U	ng/L	P437943	
		Dicofol	1.3	U	ng/L	P437943	RPD
		Dieldrin	0.41	U	ng/L	P437943	RPD
		Endosulfan I	0.41	U	ng/L	P437943	
		Endosulfan II	0.92	U	ng/L	P437943	RPD
		Endosulfan Sulfate	0.31	U	ng/L	P437943	RPD
		Endrin	0.92	U	ng/L	P437943	
		Endrin Aldehyde	0.77	U	ng/L	P437943	MS, RPD
		Endrin Ketone	0.41	U	ng/L	P437943	
		Esfenvalerate	0.77	U	ng/L	P437943	
		Ethalfluralin	0.15	U	ng/L	P437943	RPD
		Fenpropathrin	0.26	U	ng/L	P437943	
		Gamma-BHC	0.13	U	ng/L	P437943	
		Gamma-Chlordane	0.20	U	ng/L	P437943	
		Heptachlor	0.20	U	ng/L	P437943	
		Heptachlor Epoxide	0.26	U	ng/L	P437943	
		Hexachlorobenzene**	1.0	U	ng/L	P437943	MS
		Kepone	14	U	ng/L	P437943	
		Lambda-Cyhalothrin	0.77	U	ng/L	P437943	
		Methoprene	0.77	U	ng/L	P437943	
		Methoxychlor	0.31	U	ng/L	P437943	
		MGK-264	0.20	U	ng/L	P437943	
		Mirex	0.36	U	ng/L	P437943	
		Oxychlordane	0.31	U	ng/L	P437943	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452136	EPA 8270E	Permethrin	1.6	U	ng/L	P437943	
		Phenothrin	0.92	U	ng/L	P437943	
		Piperonyl Butoxide	79		ng/L	P437943	
		Prallethrin	2.0	U	ng/L	P437943	RPD
		Tau-Fluvalinate	0.26	U	ng/L	P437943	
		Tetramethrin	0.77	U	ng/L	P437943	
		Trans-Nonachlor	0.20	U	ng/L	P437943	
		Triclosan Methyl	0.15	U	ng/L	P437943	
		Trifluralin	0.20	U	ng/L	P437943	MS
	EPA 8276	Chlordane	2.0	U	ng/L	P437943	
		Toxaphene	15	U	ng/L	P437943	
2452137	EPA 8270E	Oxybenzone**	10	U	ng/L	P437970	
		Acetochlor	0.21	U	ng/L	P437970	
		Octinoxate**	160	U	ng/L	P437970	
		Alachlor	0.41	U	ng/L	P437970	
		Avobenzone**	100	U	ng/L	P437970	
		Ametryn	1.1	U	ng/L	P437970	
		Atrazine	290		ng/L	P437970	
		PBDE-47**	4.1	U	ng/L	P437970	
		Atrazine Desethyl	23		ng/L	P437970	
		PBDE-99**	5.2	U	ng/L	P437970	
		Azinphos Methyl	3.1	UJ	ng/L	P437970	LCS, MS
		Tri-o-cresyl Phosphate**	6.2	U	ng/L	P437970	
		Azoxystrobin	0.41	U	ng/L	P437970	
		Bromacil	0.62	U	ng/L	P437970	
		2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P437970	
		Butylate	0.47	U	ng/L	P437970	
		Dechlorane Plus**	31	U	ng/L	P437970	
		Caffeine**	20	I	ng/L	P437970	
		Dechlorane 602**	5.2	U	ng/L	P437970	
		Carbophenothion	0.52	U	ng/L	P437970	
		Dechlorane 603**	4.1	U	ng/L	P437970	
		Carfentrazone Ethyl	0.16	U	ng/L	P437970	
		Hexabromobenzene**	6.2	U	ng/L	P437970	
		Chlorfenapyr	0.31	UJ	ng/L	P437970	CCV
		PBB-153**	6.2	U	ng/L	P437970	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P437970	
		Pentabromotoluene**	3.1	U	ng/L	P437970	
		Chlorpyrifos Methyl	0.10	U	ng/L	P437970	
		Tris(2-chloroethyl) phosphate (TCEP)**	57	U	ng/L	P437970	
		Coumaphos	1.1	U	ng/L	P437970	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	78	I	ng/L	P437970	
		Cyanazine	5.2	U	ng/L	P437970	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	5.9	I	ng/L	P437970	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452137	EPA 8270E	Cyprodinil	0.21	U	ng/L	P437970	
		Tetradecachloro-m-terphenyl**	7.8	U	ng/L	P437970	
		Demeton	3.6	U	ng/L	P437970	
		2-(2H-benzotriazol-2-yl)-4,6-ditertpentyl phenol (UV-328)**	62	U	ng/L	P437970	
		Diazinon	0.13	U	ng/L	P437970	
		Difenoconazole	0.62	U	ng/L	P437970	
		Dimethenamid	0.10	U	ng/L	P437970	
		Dimethomorph	0.31	U	ng/L	P437970	
		Disulfoton	0.62	U	ng/L	P437970	
		Dithiopyr	1.0	U	ng/L	P437970	
		EPTC	0.52	U	ng/L	P437970	
		Ethion	0.31	U	ng/L	P437970	
		Ethoprop	0.13	U	ng/L	P437970	MS
		Etridiazole	0.10	U	ng/L	P437970	
		Fenamiphos	0.47	U	ng/L	P437970	
		Fenbuconazole	0.52	U	ng/L	P437970	
		Fipronil	2.3	J	ng/L	P437970	CCV
		Fipronil Desulfinyl**	0.75		ng/L	P437970	
		Fipronil Sulfide	0.77		ng/L	P437970	
		Fipronil Sulfone	1.2		ng/L	P437970	
		Fluazifop-P-butyl	0.10	U	ng/L	P437970	
		Fludioxonil	0.10	U	ng/L	P437970	
		Flumioxazin	3.1	U	ng/L	P437970	
		Flutolanil	0.10	U	ng/L	P437970	
		Fluxapyroxad	0.26	U	ng/L	P437970	
		Fonofos	0.16	U	ng/L	P437970	
		Hexazinone	0.52	U	ng/L	P437970	
		Imazalil	0.67	U	ng/L	P437970	
		Iprodione	0.52	U	ng/L	P437970	
		Loratadine**	0.31	U	ng/L	P437970	
		Malathion	0.36	U	ng/L	P437970	
		Metalaxyl	0.52	U	ng/L	P437970	
		Metolachlor	0.78	U	ng/L	P437970	
		Metribuzin	0.41	U	ng/L	P437970	
		Mevinphos	1.0	U	ng/L	P437970	
		Molinate	0.26	U	ng/L	P437970	
		Myclobutanil	0.36	U	ng/L	P437970	
		Naled	2.6	U	ng/L	P437970	
		Napropamide	0.73	U	ng/L	P437970	
		Norflurazon	1.0	U	ng/L	P437970	
		Oxadiazon	0.80	I	ng/L	P437970	
		Oxyfluorfen	0.21	U	ng/L	P437970	
		Parathion Ethyl	0.16	U	ng/L	P437970	
		Parathion Methyl	0.21	U	ng/L	P437970	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452137	EPA 8270E	Pendimethalin	1.8	U	ng/L	P437970	
		Phenytoin**	5.5	U	ng/L	P437970	
		Phorate	0.26	U	ng/L	P437970	
		Prodiamine	0.56	I	ng/L	P437970	RPD
		Prometon	3.1	U	ng/L	P437970	
		Prometryn	0.36	U	ng/L	P437970	
		Pronamide	0.10	U	ng/L	P437970	
		Propanil	0.10	U	ng/L	P437970	
		Propargite	0.83	U	ng/L	P437970	
		Propiconazole	2.2	I	ng/L	P437970	
		Pyraflufen Ethyl	0.31	U	ng/L	P437970	
		Pyridaben	1.5	U	ng/L	P437970	
		Pyriproxyfen	0.26	U	ng/L	P437970	
		Simazine	0.26	U	ng/L	P437970	
		Stirophos	0.41	U	ng/L	P437970	
		Sulfentrazone	42	J	ng/L	P437970	
		Tebuconazole	1.5	U	ng/L	P437970	
		Terbufos	0.21	UJ	ng/L	P437970	LCS
		Terbuthylazine	0.21	U	ng/L	P437970	
		Thiobencarb	0.52	U	ng/L	P437970	
		Triadimefon	0.16	U	ng/L	P437970	
2452140	EPA 200.7 Rev. 4.4	Calcium	25.3		mg/L	P438057	
		Iron	1.84E+03		ug/L	P438057	
		Magnesium	5.05		mg/L	P438057	
		Potassium	3.7		mg/L	P438057	
		Sodium	36.7		mg/L	P438057	
		Strontium	141		ug/L	P438057	
		Tin	3.0	U	ug/L	P438057	
		Titanium	25.3		ug/L	P438057	
		Vanadium	4.0	I	ug/L	P438057	
		Zinc	19	I	ug/L	P438057	
	EPA 200.8 Rev. 5.4	Aluminum	1.88E+03		ug/L	P438057	
		Antimony	0.24		ug/L	P438057	
		Arsenic	2.85		ug/L	P438057	
		Barium	23.3		ug/L	P438057	
		Beryllium	0.059		ug/L	P438057	
		Boron	37.6		ug/L	P438057	
		Cadmium	0.043	I	ug/L	P438057	
		Chromium	3.0		ug/L	P438057	
		Cobalt	0.282		ug/L	P438057	
		Copper	5.04		ug/L	P438057	
		Lead	3.92		ug/L	P438057	
		Manganese	32.7		ug/L	P438057	
		Molybdenum	0.81		ug/L	P438057	
		Nickel	0.91	I	ug/L	P438057	

Field ID: G2CE0120 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452140	EPA 200.8 Rev. 5.4	Selenium	0.23	I	ug/L	P438057	
		Silver	0.016	I	ug/L	P438276	
		Thallium	0.10	U	ug/L	P438057	
	SM 2340 B-2011	Hardness	83.9		mg/L	P438057	

Ref. Method and Comment:
EPA 8321B: The matrix spike and LCS recoveries for afidopyropen could not be evaluated due to laboratory technical difficulties.
EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 8270E: MS accuracy for atrazine and hexazinone not assessed due to high content of these parameters in the sample spiked. Estimation for sulfentrazone due to internal standard recovery exceeding control limits. Refer to the Lab Analysis Report for an explanation of QC Codes.
EPA 200.8 Rev. 5.4: The lead result was confirmed in the undigested sample on 11/27/2023.

Sample Location: MILLS CREEK AT PARK **Collection Date/Time: 11/16/2023 10:51**

Field ID: G2CE0233 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452132	EPA 8321B	2,4-D	0.017		ug/L	P437953	
		Acesulfame K	0.10	U	ug/L	P437906	
		2,4,5-T	0.0040	U	ug/L	P437953	
		AMPA	0.55		ug/L	P437906	
		Acetaminophen	0.051		ug/L	P437953	
		Acetamiprid	0.0020	U	ug/L	P437953	
		Endothall	0.25	U	ug/L	P437906	
		Glufosinate	0.10	U	ug/L	P437906	
		Glyphosate	0.56		ug/L	P437906	
		Afidopyropen	0.0020	U	ug/L	P437953	
		Bentazon	0.012		ug/L	P437953	
		Sucralose	6.3		ug/L	P437906	
		Benzovindiflupyr	0.0020	U	ug/L	P437953	
		Carbamazepine	0.0036		ug/L	P437953	
		Clothianidin	0.0020	U	ug/L	P437953	
		Dinotefuran	0.0060	I	ug/L	P437953	
		Diuron	0.030		ug/L	P437953	
		Fenuron	0.032	U	ug/L	P437953	
		Fluridone	9.6E-04	I	ug/L	P437953	
		Imazapyr	0.18		ug/L	P437953	
		Hydrocodone	0.0020	U	ug/L	P437953	
		Ibuprofen	0.080	U	ug/L	P437953	
		Imidacloprid	0.0047	I	ug/L	P437953	
		Linuron	0.0040	U	ug/L	P437953	
		Mandestrobin	0.0020	U	ug/L	P437953	
		MCPP	0.0020	U	ug/L	P437953	
		Naproxen	0.0080	U	ug/L	P437953	
		Primidone	0.0080	I	ug/L	P437953	
		Pyraclostrobin	0.0020	U	ug/L	P437953	
		Silvex	0.0040	U	ug/L	P437953	
		Thiamethoxam	0.0020	U	ug/L	P437953	
		Tolfenpyrad	0.0020	U	ug/L	P437953	
		Triclopyr	0.0040	U	ug/L	P437953	
2452138	EPA 200.7 Rev. 4.4	Calcium	47.5		mg/L	P438057	
		Iron	8.75E+03		ug/L	P438057	
		Magnesium	3.20		mg/L	P438057	
		Potassium	3.3		mg/L	P438057	
		Sodium	19.1		mg/L	P438057	
		Strontium	163		ug/L	P438057	
		Tin	3.0	U	ug/L	P438057	
		Titanium	77.5		ug/L	P438057	
		Vanadium	10.7		ug/L	P438057	
		Zinc	79		ug/L	P438057	
	EPA 200.8 Rev. 5.4	Aluminum	3.05E+03		ug/L	P438057	

Field ID: G2CE0233 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452138	EPA 200.8 Rev. 5.4	Antimony	0.67		ug/L	P438057	
		Arsenic	7.14		ug/L	P438057	
		Barium	62.8		ug/L	P438057	
		Beryllium	0.154		ug/L	P438057	
		Boron	40.8		ug/L	P438057	
		Cadmium	0.180		ug/L	P438057	
		Chromium	8.0		ug/L	P438057	
		Cobalt	0.736		ug/L	P438057	
		Copper	20.3		ug/L	P438057	
		Lead	13.9		ug/L	P438057	
		Manganese	128		ug/L	P438057	
		Molybdenum	1.80		ug/L	P438057	
		Nickel	2.7		ug/L	P438057	
		Selenium	0.20	U	ug/L	P438057	
		Silver	0.037	I	ug/L	P438057	
		Thallium	0.10	U	ug/L	P438057	
	SM 2340 B-2011	Hardness	132		mg/L	P438057	

Ref. Method and Comment:
EPA 8321B: The matrix spike and LCS recoveries for afidopyropen could not be evaluated due to laboratory technical difficulties.
EPA 200.8 Rev. 5.4: The beryllium, copper and lead result was confirmed in the undigested sample on 11/27/2023.

Sample Location: CHUB CREEK AT CAMERON AVE **Collection Date/Time: 11/16/2023 11:33**

Field ID: G2CE0270 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452141	EPA 200.7 Rev. 4.4	Calcium	41.7		mg/L	P438057	
		Iron	290		ug/L	P438057	
		Magnesium	7.50		mg/L	P438057	
		Potassium	6.7		mg/L	P438057	
		Sodium	75.1		mg/L	P438057	
		Strontium	268		ug/L	P438057	
		Tin	3.0	U	ug/L	P438057	
		Titanium	3.3		ug/L	P438057	
		Vanadium	2.0	U	ug/L	P438057	
		Zinc	15	I	ug/L	P438057	
	EPA 200.8 Rev. 5.4	Aluminum	178		ug/L	P438057	
		Antimony	0.18	I	ug/L	P438057	
		Arsenic	2.36		ug/L	P438057	
		Barium	29.7		ug/L	P438057	
		Beryllium	0.013	I	ug/L	P438057	
		Boron	39.5		ug/L	P438057	
		Cadmium	0.020	U	ug/L	P438057	
		Chromium	0.80	I	ug/L	P438057	
		Cobalt	0.106		ug/L	P438057	
		Copper	9.17		ug/L	P438057	
		Lead	0.43		ug/L	P438057	
		Manganese	23.6		ug/L	P438057	
		Molybdenum	1.04		ug/L	P438057	
		Nickel	0.50	U	ug/L	P438057	
		Selenium	0.20	U	ug/L	P438057	
		Silver	0.010	U	ug/L	P438057	
		Thallium	0.10	U	ug/L	P438057	
	SM 2340 B-2011	Hardness	135		mg/L	P438057	

Sample Location: SMITH CANAL 40M S OF ST JOHNS PKWY **Collection Date/Time: 11/16/2023 10:31**

Field ID: G2CE0241 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452133	EPA 8321B	2,4-D	0.056		ug/L	P437953	
		Acesulfame K	0.18	I	ug/L	P437906	
		2,4,5-T	0.0040	U	ug/L	P437953	
		AMPA	0.40		ug/L	P437906	
		Acetaminophen	0.0080	U	ug/L	P437953	
		Acetamiprid	0.0020	U	ug/L	P437953	
		Endothall	0.25	U	ug/L	P437906	
		Glufosinate	0.10	U	ug/L	P437906	
		Glyphosate	2.0		ug/L	P437906	
		Afidopyropen	0.0020	U	ug/L	P437953	
		Bentazon	0.63		ug/L	P437953	
		Sucralose	2.0		ug/L	P437906	
		Benzovindiflupyr	0.0020	U	ug/L	P437953	
		Carbamazepine	8.0E-04	U	ug/L	P437953	
		Clothianidin	0.0092		ug/L	P437953	
		Dinotefuran	0.0020	U	ug/L	P437953	
		Diuron	0.0020	I	ug/L	P437953	
		Fenuron	0.032	U	ug/L	P437953	
		Fluridone	0.0031	I	ug/L	P437953	
		Imazapyr	0.32		ug/L	P437953	
		Hydrocodone	0.0020	U	ug/L	P437953	
		Ibuprofen	0.080	U	ug/L	P437953	
		Imidacloprid	0.022		ug/L	P437953	
		Linuron	0.0040	U	ug/L	P437953	
		Mandestrobin	0.0020	U	ug/L	P437953	
		MCPP	0.043		ug/L	P437953	
		Naproxen	0.0080	U	ug/L	P437953	
		Primidone	0.0040	U	ug/L	P437953	
		Pyraclostrobin	0.0020	U	ug/L	P437953	
		Silvex	0.0040	U	ug/L	P437953	
		Thiamethoxam	0.0020	U	ug/L	P437953	
		Tolfenpyrad	0.0020	U	ug/L	P437953	
		Triclopyr	0.0040	U	ug/L	P437953	
2452139	EPA 200.7 Rev. 4.4	Calcium	32.4		mg/L	P438057	
		Iron	770		ug/L	P438057	
		Magnesium	3.50		mg/L	P438057	
		Potassium	3.2		mg/L	P438057	
		Sodium	17.0		mg/L	P438057	
		Strontium	138		ug/L	P438057	
		Tin	3.0	U	ug/L	P438057	
		Titanium	2.6	I	ug/L	P438057	
		Vanadium	2.0	U	ug/L	P438057	
		Zinc	5.0	U	ug/L	P438057	
	EPA 200.8 Rev. 5.4	Aluminum	124		ug/L	P438057	

Field ID: G2CE0241 Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2452139	EPA 200.8 Rev. 5.4	Antimony	0.14	I	ug/L	P438057	
		Arsenic	0.62		ug/L	P438057	
		Barium	22.0		ug/L	P438057	
		Beryllium	0.010	U	ug/L	P438057	
		Boron	42.2		ug/L	P438057	
		Cadmium	0.020	U	ug/L	P438057	
		Chromium	0.56	I	ug/L	P438057	
		Cobalt	0.103		ug/L	P438057	
		Copper	0.94		ug/L	P438057	
		Lead	0.23	I	ug/L	P438057	
		Manganese	22.3		ug/L	P438057	
		Molybdenum	1.07		ug/L	P438057	
		Nickel	0.50	U	ug/L	P438057	
		Selenium	0.20	U	ug/L	P438057	
		Silver	0.010	U	ug/L	P438057	
		Thallium	0.10	U	ug/L	P438057	
	SM 2340 B-2011	Hardness	95.3		mg/L	P438057	

Ref. Method and Comment:
EPA 8321B: The matrix spike and LCS recoveries for afidopyropen could not be evaluated due to laboratory technical difficulties.

Quality Assurance Report
Method Blank Results

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438057

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: P438057

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 200.8 Rev. 5.4
Batch ID: P438276

Component	Result	Code	Units
Silver	0.010	U	ug/L

Reference Method: EPA 8270E
Batch ID: P437943

Component	Result	Code	Units
Aldrin	0.65	U	ng/L
Alpha-BHC	0.10	U	ng/L
Alpha-Chlordane	0.20	U	ng/L
Beta-BHC	0.10	U	ng/L
Beta-Cyfluthrin	1.2	U	ng/L
Bifenthrin	0.50	U	ng/L
Chlorothalonil	3.6	U	ng/L
Cis-Nonachlor	0.20	U	ng/L
Cypermethrin	1.5	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P437943

Component	Result	Code	Units
Dacthal	0.15	U	ng/L
DDD-p,p'	0.25	U	ng/L
DDE-p,p'	0.20	U	ng/L
DDT-p,p'	0.80	U	ng/L
Delta-BHC	0.40	U	ng/L
Deltamethrin	1.2	U	ng/L
Dichlobenil	0.25	U	ng/L
Dicofol	1.2	U	ng/L
Dieldrin	0.40	U	ng/L
Endosulfan I	0.40	U	ng/L
Endosulfan II	0.90	U	ng/L
Endosulfan Sulfate	0.30	U	ng/L
Endrin	0.90	U	ng/L
Endrin Aldehyde	0.75	U	ng/L
Endrin Ketone	0.40	U	ng/L
Esfenvalerate	0.75	U	ng/L
Ethalfluralin	0.15	U	ng/L
Fenpropathrin	0.25	U	ng/L
Gamma-BHC	0.12	U	ng/L
Gamma-Chlordane	0.20	U	ng/L
Heptachlor	0.20	U	ng/L
Heptachlor Epoxide	0.25	U	ng/L
Hexachlorobenzene	1.0	U	ng/L
Kepone	14	U	ng/L
Lambda-Cyhalothrin	0.75	U	ng/L
Methoprene	0.75	U	ng/L
Methoxychlor	0.30	U	ng/L
MGK-264	0.20	U	ng/L
Mirex	0.35	U	ng/L
Oxychlordane	0.30	U	ng/L
PCB-1016	2.0	U	ng/L
PCB-1221	2.0	U	ng/L
PCB-1232	2.0	U	ng/L
PCB-1242	2.0	U	ng/L
PCB-1248	2.0	U	ng/L
PCB-1254	2.0	U	ng/L
PCB-1260	2.0	U	ng/L
Permethrin	1.6	U	ng/L
Phenothrin	0.90	U	ng/L
Piperonyl Butoxide	0.15	U	ng/L
Prallethrin	2.0	U	ng/L
Tau-Fluvalinate	0.25	U	ng/L
Tetramethrin	0.75	U	ng/L
Trans-Nonachlor	0.20	U	ng/L
Triclosan Methyl	0.15	U	ng/L
Trifluralin	0.20	U	ng/L

Reference Method: EPA 8270E
Batch ID: P437970

Component	Result	Code	Units
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	60	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P437970

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8270E
Batch ID: P437970

Component	Result	Code	Units
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	6.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	1.7	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbuthylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	25	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	55	U	ng/L

Reference Method: EPA 8276
Batch ID: P437943

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P437906

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: P437953

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

Reference Method: EPA 8321B
Batch ID: P437954

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

Quality Assurance Report
Method Blank Results

Reference Method: EPA 8321B
Batch ID: P437954

Component	Result	Code	Units
Propoxur	0.0020	U	ug/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438057

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	104		P	85 - 115
Magnesium	99.4		P	85 - 115
Potassium	100		P	85 - 115
Sodium	99.2		P	85 - 115
Strontium	100		P	85 - 115
Tin	97.5		P	85 - 115
Titanium	99.3		P	85 - 115
Vanadium	100		P	85 - 115
Zinc	99.6		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438057

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	101		P	85 - 115
Antimony	99.6		P	85 - 115
Arsenic	100		P	85 - 115
Barium	102		P	85 - 115
Beryllium	96.1		P	85 - 115
Boron	103		P	85 - 115
Cadmium	98.0		P	85 - 115
Chromium	102		P	85 - 115
Cobalt	96.2		P	85 - 115
Copper	100		P	85 - 115
Lead	94.3		P	85 - 115
Manganese	101		P	85 - 115
Molybdenum	97.7		P	85 - 115
Nickel	100		P	85 - 115
Selenium	98.4		P	85 - 115
Silver	100		P	85 - 115
Thallium	96.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438276

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	104		P	85 - 115

Reference Method: EPA 8270E
Batch ID: P437943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	45.2		P	30 - 96.0
Alpha-BHC	80.2		P	70 - 109
Alpha-Chlordane	57.7		P	45 - 107
Beta-BHC	88.1		P	64 - 138
Beta-Cyfluthrin	80.0		P	17 - 141
Bifenthrin	57.3		P	10 - 113
Chlorothalonil	71.4		P	26 - 180
Cis-Nonachlor	69.4		P	37 - 102
Cypermethrin	77.6		P	20 - 133

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dacthal	84.4		P	69 - 114
DDD-p,p'	55.7		P	42 - 105
DDE-p,p'	75.4		P	42 - 106
DDT-p,p'	36.9		F	42 - 107
Delta-BHC	80.0		P	67 - 144
Deltamethrin	79.9		P	15 - 149
Dichlobenil	81.0		P	46 - 117
Dicofol	57.6		P	34 - 114
Dieldrin	77.8		P	50 - 108
Endosulfan I	66.9		P	55 - 104
Endosulfan II	67.5		P	51 - 111
Endosulfan Sulfate	95.9		P	56 - 121
Endrin	67.6		P	10 - 106
Endrin Aldehyde	50.5		P	34 - 114
Endrin Ketone	91.3		P	63 - 177
Esfenvalerate	71.7		P	29 - 143
Ethalfluralin	67.4		P	46 - 96.0
Fenpropathrin	72.2		P	28 - 115
Gamma-BHC	72.1		P	65 - 121
Gamma-Chlordane	59.6		P	39 - 103
Heptachlor	53.3		P	39 - 94.0
Heptachlor Epoxide	59.7		P	54 - 104
Hexachlorobenzene	61.4		P	36 - 100
Kepone	121		P	10 - 225
Lambda-Cyhalothrin	74.2		P	10 - 135
Methoprene	69.5		P	10 - 109
Methoxychlor	72.7		P	52 - 112
MGK-264	73.8		P	44 - 117
Mirex	33.8		P	20 - 90.0
Oxychlordane	54.6		P	44 - 102
PCB-1016	102		P	45 - 107
PCB-1260	101		P	40 - 112
Permethrin	65.6		P	18 - 135
Phenothrin	61.9		P	10 - 102
Piperonyl Butoxide	49.1		P	28 - 156
Prallethrin	58.7		P	28 - 113
Tau-Fluvalinate	69.7		P	10 - 123
Tetramethrin	45.8		P	18 - 158
Trans-Nonachlor	64.9		P	39 - 104
Triclosan Methyl	77.9		P	54 - 108
Trifluralin	47.5		P	46 - 97.0

Reference Method: EPA 8270E
Batch ID: P437970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	98.8		P	50 - 150
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.8		P	37 - 154
Acetochlor	78.6		P	64 - 124
Alachlor	76.8		P	61 - 118
Ametryn	108		P	47 - 158
Atrazine	77.3		P	68 - 121

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	87.1		P	30 - 119
Avobenzone	119		P	48 - 193
Azinphos Methyl	19.8		F	30 - 194
Azoxystrobin	87.3		P	58 - 154
Bromacil	102		P	47 - 126
Butylate	46.0		P	31 - 83.0
Caffeine	71.0		P	10 - 180
Carbophenothion	82.7		P	59 - 133
Carfentrazone Ethyl	114		P	59 - 147
Chlorfenapyr	52.7		P	52 - 118
Chlorpyrifos Ethyl	67.4		P	59 - 119
Chlorpyrifos Methyl	70.9		P	65 - 123
Coumaphos	128		P	11 - 223
Cyanazine	94.3		P	63 - 250
Cyprodinil	86.1		P	52 - 143
Dechlorane 602	100		P	23 - 142
Dechlorane 603	100		P	51 - 171
Dechlorane Plus	119		P	46 - 161
Demeton	44.1		P	42 - 119
Diazinon	98.4		P	67 - 132
Difenoconazole	101		P	12 - 204
Dimethenamid	71.5		P	53 - 113
Dimethomorph	139		P	13 - 238
Disulfoton	68.6		P	56 - 126
Dithiopyr	91.0		P	58 - 127
EPTC	48.6		P	31 - 78.0
Ethion	78.3		P	24 - 127
Ethoprop	63.2		P	60 - 118
Etridiazole	60.6		P	32 - 91.0
Fenamiphos	71.8		P	54 - 129
Fenbuconazole	105		P	31 - 162
Fipronil	75.8		P	56 - 131
Fipronil Desulfinyl	80.0		P	58 - 132
Fipronil Sulfide	96.2		P	51 - 123
Fipronil Sulfone	71.7		P	50 - 125
Fluazifop-P-butyl	75.1		P	52 - 132
Fludioxonil	75.8		P	52 - 129
Flumioxazin	97.8		P	34 - 250
Flutolanil	81.5		P	45 - 128
Fluxapyroxad	73.7		P	31 - 150
Fonofos	64.1		P	60 - 116
Hexabromobenzene	91.4		P	52 - 165
Hexazinone	85.5		P	59 - 120
Imazalil	73.5		P	39 - 134
Iprodione	92.6		P	39 - 243
Loratadine	122		P	10 - 240
Malathion	78.3		P	53 - 145
Metalaxyl	78.7		P	59 - 120
Metolachlor	82.5		P	64 - 122
Metribuzin	79.3		P	33 - 128
Mevinphos	64.4		P	48 - 119
Molinate	43.2		P	42 - 89.0

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437970

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Myclobutanil	92.9		P	54 - 129
Naled	43.7		P	10 - 138
Napropamide	90.1		P	40 - 122
Norflurazon	71.1		P	49 - 132
Octinoxate	101		P	29 - 176
Oxadiazon	84.6		P	50 - 115
Oxybenzone	93.9		P	45 - 145
Oxyfluorfen	104		P	62 - 149
Parathion Ethyl	72.6		P	68 - 119
Parathion Methyl	114		P	68 - 147
PBB-153	94.0		P	42 - 179
PBDE-47	98.7		P	44 - 141
PBDE-99	94.3		P	36 - 141
Pendimethalin	107		P	59 - 158
Pentabromotoluene	90.8		P	58 - 148
Phenytoin	65.3		P	10 - 151
Phorate	52.2		P	44 - 124
Prodiamine	31.8		P	10 - 136
Prometon	105		P	45 - 131
Prometryn	89.3		P	52 - 140
Pronamide	98.7		P	70 - 129
Propanil	113		P	54 - 144
Propargite	100		P	10 - 191
Propiconazole	69.5		P	49 - 128
Pyraflufen Ethyl	98.1		P	46 - 141
Pyridaben	108		P	29 - 198
Pyriproxyfen	46.7		P	33 - 221
Simazine	79.1		P	62 - 119
Stirophos	102		P	13 - 144
Sulfentrazone	76.1		P	12 - 152
Tebuconazole	97.6		P	10 - 135
Terbufos	64.2		F	67 - 136
Terbuthylazine	78.4		P	66 - 113
Tetradecachloro-m-terphenyl	95.4		P	30 - 235
Thiobencarb	97.3		P	51 - 125
Tri-o-cresyl Phosphate	112		P	50 - 150
Triadimefon	97.7		P	57 - 118
Tris(1-chloro-2-propyl) phosphate (TCPP)	115		P	60 - 160
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107		P	66 - 141
Tris(2-chloroethyl) phosphate (TCEP)	120		P	59 - 166

Reference Method: EPA 8276
Batch ID: P437943

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	70.5		P	52 - 117
Toxaphene	78.0		P	44 - 125

Reference Method: EPA 8321B
Batch ID: P437906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits

Quality Assurance Report
Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P437906

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	130		P	40 - 150
AMPA	90.5		P	40 - 160
Endothall	104		P	40 - 160
Glufosinate	97.4		P	40 - 160
Glyphosate	97.3		P	40 - 160
Sucralose	120		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437953

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	75.1		P	40 - 150
2,4,5-T	61.7		P	40 - 150
Acetaminophen	82.3		P	30 - 150
Acetamiprid	61.5		P	40 - 150
Bentazon	56.7		P	30 - 150
Benzovindiflupyr	76.9		P	40 - 150
Carbamazepine	63.3		P	40 - 150
Clothianidin	80.2		P	40 - 150
Dinotefuran	66.1		P	40 - 150
Diuron	62.2		P	40 - 150
Fenuron	78.6		P	40 - 150
Fluridone	77.4		P	40 - 150
Hydrocodone	96.1		P	40 - 150
Ibuprofen	51.3		P	40 - 150
Imazapyr	75.3		P	40 - 150
Imidacloprid	76.7		P	40 - 150
Linuron	60.7		P	40 - 150
Mandestrobin	79.3		P	40 - 150
MCPP	66.7		P	40 - 150
Naproxen	45.3		P	40 - 150
Primidone	75.0		P	40 - 150
Pyraclostrobin	83.9		P	40 - 150
Silvex	70.0		P	40 - 150
Thiamethoxam	78.2		P	40 - 150
Tolfenpyrad	45.5		P	30 - 150
Triclopyr	67.4		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437954

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	78.3		P	40 - 150
Aldicarb	43.7		P	30 - 150
Aldicarb Sulfone	88.8		P	40 - 150
Aldicarb Sulfoxide	123		P	40 - 150
Carbaryl	71.8		P	40 - 150
Carbofuran	76.4		P	40 - 150
Methiocarb	60.0		P	40 - 150
Methomyl	80.5		P	40 - 150
Oxamyl	85.9		P	40 - 150
Propoxur	72.6		P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438057

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452107	Calcium	95.8		P	80 - 120
2452107	Iron	97.5	99.2	P/P	80 - 120
2452107	Magnesium	95.3		P	80 - 120
2452107	Potassium	94.9	98.0	P/P	80 - 120
2452107	Sodium	98.2		P	80 - 120
2452107	Strontium	95.4	98.5	P/P	80 - 120
2452107	Tin	94.9	96.0	P/P	80 - 120
2452107	Titanium	96.5	98.1	P/P	80 - 120
2452107	Vanadium	96.7	99.1	P/P	80 - 120
2452107	Zinc	93.4	95.7	P/P	80 - 120
2452139	Calcium	99.7		P	80 - 120
2452139	Iron	101		P	80 - 120
2452139	Magnesium	100		P	80 - 120
2452139	Potassium	95.8		P	80 - 120
2452139	Sodium	98.9		P	80 - 120
2452139	Strontium	97.5		P	80 - 120
2452139	Tin	95.5		P	80 - 120
2452139	Titanium	96.1		P	80 - 120
2452139	Vanadium	101		P	80 - 120
2452139	Zinc	98.9		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438057

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452107	Aluminum	101	100	P/P	80 - 120
2452107	Antimony	102	100	P/P	80 - 120
2452107	Arsenic	101	99.4	P/P	80 - 120
2452107	Barium	102	101	P/P	80 - 120
2452107	Beryllium	94.7	92.5	P/P	80 - 120
2452107	Boron	105	107	P/P	80 - 120
2452107	Cadmium	100	99.0	P/P	80 - 120
2452107	Chromium	101	102	P/P	80 - 120
2452107	Cobalt	94.1	93.1	P/P	80 - 120
2452107	Copper	97.9	96.2	P/P	80 - 120
2452107	Lead	95.7	94.6	P/P	80 - 120
2452107	Manganese	101	99.5	P/P	80 - 120
2452107	Molybdenum	101	99.3	P/P	80 - 120
2452107	Nickel	97.2	96.8	P/P	80 - 120
2452107	Selenium	95.9	93.3	P/P	80 - 120
2452107	Silver	100	99.9	P/P	80 - 120
2452107	Thallium	98.3	97.4	P/P	80 - 120
2452139	Aluminum	101		P	80 - 120
2452139	Antimony	101		P	80 - 120
2452139	Arsenic	101		P	80 - 120
2452139	Barium	102		P	80 - 120
2452139	Beryllium	95.7		P	80 - 120
2452139	Boron	106		P	80 - 120
2452139	Cadmium	99.0		P	80 - 120
2452139	Chromium	100		P	80 - 120
2452139	Cobalt	92.9		P	80 - 120
2452139	Copper	96.2		P	80 - 120

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438057

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452139	Lead	95.9		P	80 - 120
2452139	Manganese	99.3		P	80 - 120
2452139	Molybdenum	100		P	80 - 120
2452139	Nickel	98.1		P	80 - 120
2452139	Selenium	96.2		P	80 - 120
2452139	Silver	99.3		P	80 - 120
2452139	Thallium	98.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438276

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452737	Silver	102	103	P/P	80 - 120
2453042	Silver	101		P	80 - 120

Reference Method: EPA 8270E
Batch ID: P437943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451891	Aldrin	35.3	40.4	P/P	24 - 81.0
2451891	Alpha-BHC	51.0	61.4	F/F	65 - 110
2451891	Alpha-Chlordane	64.5	50.6	P/P	43 - 119
2451891	Beta-BHC	84.5	103	P/P	54 - 165
2451891	Beta-Cyfluthrin	58.0	55.3	P/P	27 - 165
2451891	Bifenthrin	42.9	41.1	P/P	17 - 117
2451891	Chlorothalonil	23.2	56.8	P/P	10 - 255
2451891	Cis-Nonachlor	60.3	74.0	P/P	34 - 98.0
2451891	Cypermethrin	81.3	47.1	P/P	25 - 143
2451891	Dacthal	53.1	81.2	F/P	55 - 139
2451891	DDD-p,p'	53.4	36.4	P/P	30 - 109
2451891	DDE-p,p'	51.6	57.5	P/P	35 - 106
2451891	DDT-p,p'	41.4	33.3	P/F	41 - 101
2451891	Delta-BHC	72.6	109	P/P	58 - 165
2451891	Deltamethrin	66.8	69.8	P/P	10 - 194
2451891	Dichlobenil	29.0	22.1	P/P	22 - 114
2451891	Dicofol	60.9	41.4	P/P	17 - 133
2451891	Dieldrin	50.0	68.8	P/P	45 - 129
2451891	Endosulfan I	55.9	65.3	P/P	49 - 104
2451891	Endosulfan II	60.1	85.5	P/P	37 - 117
2451891	Endosulfan Sulfate	67.6	115	P/P	38 - 128
2451891	Endrin	46.6	62.7	P/P	35 - 116
2451891	Endrin Aldehyde	5.11	73.6	F/P	19 - 108
2451891	Endrin Ketone	91.2	90.1	P/P	44 - 134
2451891	Esfenvalerate	70.3	72.0	P/P	27 - 176
2451891	Ethalfluralin	66.3	52.9	P/P	49 - 100
2451891	Fenpropathrin	47.8	58.1	P/P	34 - 117
2451891	Gamma-BHC	61.9	78.0	P/P	59 - 129
2451891	Gamma-Chlordane	63.7	52.2	P/P	33 - 107
2451891	Heptachlor	40.8	42.8	P/P	37 - 94.0
2451891	Heptachlor Epoxide	49.6	61.0	P/P	38 - 118
2451891	Hexachlorobenzene	30.0	35.7	F/P	35 - 97.0
2451891	Kepone	97.5	97.6	P/P	10 - 221

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451891	Lambda-Cyhalothrin	53.1	62.8	P/P	23 - 190
2451891	Methoprene	50.3	43.4	P/P	21 - 109
2451891	Methoxychlor	62.7	78.2	P/P	46 - 118
2451891	MGK-264	60.6	66.7	P/P	39 - 122
2451891	Mirex	31.0	26.1	P/P	25 - 90.0
2451891	Oxychlordane	52.5	61.9	P/P	42 - 100
2451891	Permethrin	68.8	42.8	P/P	33 - 181
2451891	Phenothrin	83.7	50.9	P/P	12 - 125
2451891	Piperonyl Butoxide	74.0	54.6	P/P	10 - 178
2451891	Prallethrin	95.4	38.8	P/P	24 - 122
2451891	Tau-Fluvalinate	77.6	65.1	P/P	13 - 151
2451891	Tetramethrin	49.1	41.5	P/P	16 - 172
2451891	Trans-Nonachlor	66.0	45.5	P/P	39 - 100
2451891	Triclosan Methyl	65.4	70.8	P/P	43 - 110
2451891	Trifluralin	40.1	41.6	F/F	45 - 94.0
2452054	PCB-1016	63.5	67.0	P/P	45 - 107
2452054	PCB-1260	70.6	83.2	P/P	40 - 112

Reference Method: EPA 8270E
Batch ID: P437970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451648	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	109	108	P/P	50 - 150
2451648	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	110	94.8	P/P	29 - 155
2451648	Acetochlor	88.5	68.0	P/P	60 - 124
2451648	Alachlor	77.5	77.5	P/P	54 - 122
2451648	Ametryn	108	107	P/P	51 - 208
2451648	Atrazine Desethyl	97.0	88.7	P/P	13 - 124
2451648	Avobenzone	147	130	P/P	35 - 187
2451648	Azinphos Methyl	14.5	16.8	F/F	43 - 276
2451648	Azoxystrobin	89.5	94.8	P/P	52 - 300
2451648	Bromacil	109	95.7	P/P	44 - 134
2451648	Butylate	42.0	38.9	P/P	23 - 82.0
2451648	Caffeine	89.7	89.6	P/P	10 - 277
2451648	Carbophenothion	94.3	78.4	P/P	47 - 135
2451648	Carfentrazone Ethyl	98.1	86.8	P/P	46 - 147
2451648	Chlorfenapyr	56.2	63.9	P/P	43 - 114
2451648	Chlorpyrifos Ethyl	75.1	82.0	P/P	47 - 124
2451648	Chlorpyrifos Methyl	100	97.1	P/P	60 - 135
2451648	Coumaphos	134	112	P/P	10 - 222
2451648	Cyanazine	110	98.9	P/P	10 - 257
2451648	Cyprodinil	101	102	P/P	42 - 148
2451648	Dechlorane 602	100	87.2	P/P	14 - 133
2451648	Dechlorane 603	93.3	75.8	P/P	18 - 191
2451648	Dechlorane Plus	86.0	75.9	P/P	23 - 154
2451648	Demeton	62.6	68.6	P/P	41 - 137
2451648	Diazinon	112	94.1	P/P	64 - 139
2451648	Difenoconazole	123	105	P/P	46 - 254
2451648	Dimethenamid	68.5	78.8	P/P	47 - 117
2451648	Dimethomorph	181	165	P/P	14 - 255
2451648	Disulfoton	91.1	81.4	P/P	52 - 130
2451648	Dithiopyr	72.3	69.7	P/P	40 - 121

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451648	EPTC	40.1	37.1	P/P	19 - 78.0
2451648	Ethion	89.5	57.2	P/P	12 - 124
2451648	Ethoprop	70.3	67.9	P/F	68 - 144
2451648	Etridiazole	55.4	43.1	P/P	26 - 96.0
2451648	Fenamiphos	50.9	52.2	P/P	41 - 129
2451648	Fenbuconazole	93.1	70.1	P/P	26 - 169
2451648	Fipronil	79.0	75.8	P/P	46 - 145
2451648	Fipronil Desulfinyl	84.9	68.4	P/P	47 - 136
2451648	Fipronil Sulfide	99.6	87.0	P/P	41 - 127
2451648	Fipronil Sulfone	72.7	71.4	P/P	35 - 133
2451648	Fluazifop-P-butyl	85.5	91.8	P/P	46 - 131
2451648	Fludioxonil	67.0	77.4	P/P	51 - 124
2451648	Flumioxazin	143	140	P/P	10 - 289
2451648	Flutolanil	89.7	91.8	P/P	34 - 130
2451648	Fluxapyroxad	76.3	77.2	P/P	10 - 197
2451648	Fonofos	84.2	85.6	P/P	42 - 131
2451648	Hexabromobenzene	109	74.8	P/P	47 - 178
2451648	Imazalil	117	106	P/P	37 - 252
2451648	Iprodione	102	86.0	P/P	34 - 265
2451648	Loratadine	163	105	P/P	20 - 231
2451648	Malathion	83.9	96.9	P/P	34 - 164
2451648	Metalaxyl	69.5	68.8	P/P	49 - 125
2451648	Metolachlor	91.3	91.9	P/P	54 - 125
2451648	Metribuzin	86.5	84.0	P/P	51 - 139
2451648	Mevinphos	77.3	75.5	P/P	46 - 130
2451648	Molinate	45.4	47.5	P/P	39 - 93.0
2451648	Myclobutanil	76.2	66.9	P/P	50 - 130
2451648	Naled	34.9	26.2	P/P	10 - 150
2451648	Napropamide	83.0	78.5	P/P	10 - 109
2451648	Norflurazon	81.4	70.1	P/P	36 - 134
2451648	Octinoxate	109	111	P/P	18 - 170
2451648	Oxadiazon	77.6	65.8	P/P	43 - 112
2451648	Oxybenzone	107	98.5	P/P	33 - 154
2451648	Oxyfluorfen	109	96.6	P/P	62 - 154
2451648	Parathion Ethyl	88.7	78.3	P/P	65 - 120
2451648	Parathion Methyl	135	120	P/P	77 - 185
2451648	PBB-153	104	80.7	P/P	23 - 193
2451648	PBDE-47	110	103	P/P	31 - 139
2451648	PBDE-99	103	82.6	P/P	24 - 138
2451648	Pendimethalin	138	125	P/P	50 - 146
2451648	Pentabromotoluene	103	98.1	P/P	54 - 152
2451648	Phenytoin	67.5	52.1	P/P	10 - 157
2451648	Phorate	65.9	84.8	P/P	54 - 161
2451648	Prodiamine	44.4	129	P/P	29 - 160
2451648	Prometon	111	98.4	P/P	38 - 145
2451648	Prometryn	99.8	103	P/P	32 - 151
2451648	Pronamide	108	94.9	P/P	61 - 140
2451648	Propanil	135	132	P/P	50 - 147
2451648	Propargite	105	75.2	P/P	10 - 190
2451648	Propiconazole	76.3	78.7	P/P	30 - 146
2451648	Pyraflufen Ethyl	84.0	76.6	P/P	30 - 147
2451648	Pyridaben	91.5	63.8	P/P	15 - 195

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437970

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451648	Pyriproxyfen	40.4	35.9	P/P	31 - 218
2451648	Simazine	76.7	85.5	P/P	45 - 139
2451648	Stirophos	50.4	88.6	P/P	10 - 134
2451648	Sulfentrazone	84.6	64.0	P/P	53 - 186
2451648	Tebuconazole	115	72.8	P/P	10 - 133
2451648	Terbufos	77.7	91.6	P/P	65 - 151
2451648	Terbuthylazine	84.5	83.1	P/P	62 - 117
2451648	Tetradecachloro-m-terphenyl	90.3	97.1	P/P	10 - 260
2451648	Thiobencarb	84.4	81.3	P/P	48 - 122
2451648	Tri-o-cresyl Phosphate	119	112	P/P	32 - 151
2451648	Triadimefon	106	75.2	P/P	46 - 124
2451648	Tris(1-chloro-2-propyl) phosphate (TCPP)	135	129	P/P	51 - 154
2451648	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	111	104	P/P	59 - 147
2451648	Tris(2-chloroethyl) phosphate (TCEP)	131	116	P/P	65 - 156

Reference Method: EPA 8276
Batch ID: P437943

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452054	Chlordane	51.8	61.3	P/P	43 - 123
2452054	Toxaphene	55.0	66.2	P/P	27 - 156

Reference Method: EPA 8321B
Batch ID: P437906

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452037	Acesulfame K	132	132	P/P	40 - 150
2452037	AMPA	88.0	89.8	P/P	40 - 160
2452037	Endothall	97.2	109	P/P	40 - 160
2452037	Glufosinate	94.7	94.7	P/P	40 - 160
2452037	Glyphosate	97.1	90.9	P/P	40 - 160
2452037	Sucralose	125	121	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452053	2,4-D	96.6	102	P/P	40 - 150
2452053	2,4,5-T	76.0	73.5	P/P	40 - 150
2452053	Acetaminophen	98.9	101	P/P	30 - 150
2452053	Acetamiprid	47.7	45.6	P/P	40 - 150
2452053	Bentazon	33.1	34.2	P/P	30 - 150
2452053	Benzovindiflupyr	78.8	78.3	P/P	40 - 150
2452053	Carbamazepine	55.7	56.1	P/P	40 - 150
2452053	Clothianidin	82.2	83.3	P/P	40 - 150
2452053	Dinotefuran	62.1	63.3	P/P	40 - 150
2452053	Diuron	56.5	55.7	P/P	40 - 150
2452053	Fenuron	56.6	57.9	P/P	40 - 150
2452053	Fluridone	69.7	73.0	P/P	40 - 150
2452053	Hydrocodone	81.7	81.4	P/P	40 - 150
2452053	Ibuprofen	59.4	61.1	P/P	40 - 150
2452053	Imazapyr	92.7	94.4	P/P	40 - 150

Quality Assurance Report
Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P437953

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452053	Imidacloprid	101	105	P/P	40 - 150
2452053	Linuron	58.5	59.5	P/P	40 - 150
2452053	Mandestrobin	81.7	83.8	P/P	40 - 150
2452053	MCPP	84.3	80.4	P/P	40 - 150
2452053	Naproxen	71.2	59.4	P/P	40 - 150
2452053	Primidone	77.7	80.4	P/P	40 - 150
2452053	Pyraclostrobin	85.6	82.5	P/P	40 - 150
2452053	Silvex	79.8	71.0	P/P	40 - 150
2452053	Thiamethoxam	83.0	85.4	P/P	40 - 150
2452053	Tolfenpyrad	49.2	47.4	P/P	30 - 150
2452053	Triclopyr	85.3	77.6	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437954

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2452354	3-Hydroxycarbofuran	77.2	84.8	P/P	40 - 150
2452354	Aldicarb	41.7	47.0	P/P	30 - 150
2452354	Aldicarb Sulfone	90.9	100	P/P	40 - 150
2452354	Aldicarb Sulfoxide	62.4	71.5	P/P	40 - 150
2452354	Carbaryl	56.3	62.2	P/P	40 - 150
2452354	Carbofuran	57.6	57.4	P/P	40 - 150
2452354	Methiocarb	61.0	64.2	P/P	40 - 150
2452354	Methomyl	71.8	78.9	P/P	40 - 150
2452354	Oxamyl	80.3	89.8	P/P	40 - 150
2452354	Propoxur	55.8	55.8	P/P	40 - 150

Quality Assurance Report
Precision

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P438057

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452107	Calcium	3.58	Spike	P	0 - 20
2452107	Iron	1.73	Spike	P	0 - 20
2452107	Magnesium	1.99	Spike	P	0 - 20
2452107	Potassium	2.03	Spike	P	0 - 20
2452107	Sodium	3.57	Spike	P	0 - 20
2452107	Strontium	3.10	Spike	P	0 - 20
2452107	Tin	1.18	Spike	P	0 - 20
2452107	Titanium	1.66	Spike	P	0 - 20
2452107	Vanadium	2.52	Spike	P	0 - 20
2452107	Zinc	2.46	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438057

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452107	Aluminum	0.505	Spike	P	0 - 20
2452107	Antimony	1.50	Spike	P	0 - 20
2452107	Arsenic	1.64	Spike	P	0 - 20
2452107	Barium	1.02	Spike	P	0 - 20
2452107	Beryllium	2.35	Spike	P	0 - 20
2452107	Boron	1.49	Spike	P	0 - 20
2452107	Cadmium	1.24	Spike	P	0 - 20
2452107	Chromium	0.833	Spike	P	0 - 20
2452107	Cobalt	1.04	Spike	P	0 - 20
2452107	Copper	1.70	Spike	P	0 - 20
2452107	Lead	1.12	Spike	P	0 - 20
2452107	Manganese	1.71	Spike	P	0 - 20
2452107	Molybdenum	1.30	Spike	P	0 - 20
2452107	Nickel	0.455	Spike	P	0 - 20
2452107	Selenium	2.72	Spike	P	0 - 20
2452107	Silver	0.313	Spike	P	0 - 20
2452107	Thallium	0.879	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P438276

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452737	Silver	0.462	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P437943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451891	Aldrin	13.4	Spike	P	0 - 41
2451891	Alpha-BHC	18.6	Spike	P	0 - 25
2451891	Alpha-Chlordane	24.1	Spike	P	0 - 32
2451891	Beta-BHC	19.4	Spike	P	0 - 33
2451891	Beta-Cyfluthrin	4.91	Spike	P	0 - 43

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P437943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451891	Bifenthrin	4.47	Spike	P	0 - 52
2451891	Chlorothalonil	84.0	Spike	F	0 - 82
2451891	Cis-Nonachlor	20.3	Spike	P	0 - 33
2451891	Cypermethrin	53.3	Spike	F	0 - 51
2451891	Dacthal	41.9	Spike	F	0 - 27
2451891	DDD-p,p'	38.0	Spike	P	0 - 39
2451891	DDE-p,p'	10.8	Spike	P	0 - 31
2451891	DDT-p,p'	21.7	Spike	P	0 - 29
2451891	Delta-BHC	40.3	Spike	F	0 - 35
2451891	Deltamethrin	4.37	Spike	P	0 - 100
2451891	Dichlobenil	27.2	Spike	P	0 - 40
2451891	Dicofol	38.2	Spike	F	0 - 37
2451891	Dieldrin	31.7	Spike	F	0 - 27
2451891	Endosulfan I	15.5	Spike	P	0 - 23
2451891	Endosulfan II	34.8	Spike	F	0 - 34
2451891	Endosulfan Sulfate	52.0	Spike	F	0 - 36
2451891	Endrin	29.4	Spike	P	0 - 45
2451891	Endrin Aldehyde	174	Spike	F	0 - 76
2451891	Endrin Ketone	1.26	Spike	P	0 - 43
2451891	Esfenvalerate	2.37	Spike	P	0 - 51
2451891	Ethalfluralin	22.5	Spike	F	0 - 22
2451891	Fenpropathrin	19.4	Spike	P	0 - 49
2451891	Gamma-BHC	23.0	Spike	P	0 - 28
2451891	Gamma-Chlordane	19.8	Spike	P	0 - 40
2451891	Heptachlor	4.96	Spike	P	0 - 29
2451891	Heptachlor Epoxide	20.7	Spike	P	0 - 33
2451891	Hexachlorobenzene	17.3	Spike	P	0 - 36
2451891	Kepone	0.131	Spike	P	0 - 85
2451891	Lambda-Cyhalothrin	16.8	Spike	P	0 - 55
2451891	Methoprene	14.8	Spike	P	0 - 53
2451891	Methoxychlor	22.0	Spike	P	0 - 50
2451891	MGK-264	9.64	Spike	P	0 - 43
2451891	Mirex	17.3	Spike	P	0 - 40
2451891	Oxychlordane	16.5	Spike	P	0 - 31
2451891	Permethrin	46.6	Spike	P	0 - 50
2451891	Phenothrin	48.7	Spike	P	0 - 58
2451891	Piperonyl Butoxide	30.2	Spike	P	0 - 100
2451891	Prallethrin	84.3	Spike	F	0 - 39
2451891	Tau-Fluvalinate	17.5	Spike	P	0 - 54
2451891	Tetramethrin	16.9	Spike	P	0 - 51
2451891	Trans-Nonachlor	36.8	Spike	P	0 - 39
2451891	Triclosan Methyl	7.93	Spike	P	0 - 31
2451891	Trifluralin	3.75	Spike	P	0 - 22
2452054	PCB-1016	5.25	Spike	P	0 - 25
2452054	PCB-1260	16.4	Spike	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P437970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P437970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451648	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	1.31	Spike	P	0 - 30
2451648	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	14.4	Spike	P	0 - 35
2451648	Acetochlor	26.2	Spike	P	0 - 28
2451648	Alachlor	0.00605	Spike	P	0 - 30
2451648	Ametryn	0.732	Spike	P	0 - 32
2451648	Atrazine	2.00	Spike	P	0 - 33
2451648	Atrazine Desethyl	7.45	Spike	P	0 - 36
2451648	Avobenzone	12.4	Spike	P	0 - 35
2451648	Azinphos Methyl	14.5	Spike	P	0 - 62
2451648	Azoxystrobin	5.75	Spike	P	0 - 39
2451648	Bromacil	13.0	Spike	P	0 - 33
2451648	Butylate	7.59	Spike	P	0 - 51
2451648	Caffeine	0.0798	Spike	P	0 - 100
2451648	Carbophenothion	18.5	Spike	P	0 - 34
2451648	Carfentrazone Ethyl	12.3	Spike	P	0 - 33
2451648	Chlorfenapyr	12.8	Spike	P	0 - 28
2451648	Chlorpyrifos Ethyl	8.86	Spike	P	0 - 31
2451648	Chlorpyrifos Methyl	3.24	Spike	P	0 - 27
2451648	Coumaphos	17.6	Spike	P	0 - 62
2451648	Cyanazine	10.8	Spike	P	0 - 48
2451648	Cyprodinil	1.50	Spike	P	0 - 29
2451648	Dechlorane 602	13.7	Spike	P	0 - 60
2451648	Dechlorane 603	20.7	Spike	P	0 - 40
2451648	Dechlorane Plus	12.6	Spike	P	0 - 38
2451648	Demeton	9.22	Spike	P	0 - 33
2451648	Diazinon	17.1	Spike	P	0 - 32
2451648	Difenoconazole	15.8	Spike	P	0 - 71
2451648	Dimethenamid	13.9	Spike	P	0 - 60
2451648	Dimethomorph	9.08	Spike	P	0 - 61
2451648	Disulfoton	11.3	Spike	P	0 - 30
2451648	Dithiopyr	3.74	Spike	P	0 - 28
2451648	EPTC	7.72	Spike	P	0 - 56
2451648	Ethion	44.1	Spike	P	0 - 79
2451648	Ethoprop	3.43	Spike	P	0 - 31
2451648	Etridiazole	25.0	Spike	P	0 - 43
2451648	Fenamiphos	2.43	Spike	P	0 - 43
2451648	Fenbuconazole	28.3	Spike	P	0 - 79
2451648	Fipronil	4.05	Spike	P	0 - 46
2451648	Fipronil Desulfinyl	19.4	Spike	P	0 - 36
2451648	Fipronil Sulfide	12.2	Spike	P	0 - 34
2451648	Fipronil Sulfone	1.47	Spike	P	0 - 47
2451648	Fluazifop-P-butyl	7.12	Spike	P	0 - 38
2451648	Fludioxonil	14.4	Spike	P	0 - 29
2451648	Flumioxazin	1.57	Spike	P	0 - 63
2451648	Flutolanil	2.29	Spike	P	0 - 36
2451648	Fluxapyroxad	1.17	Spike	P	0 - 65
2451648	Fonofos	1.68	Spike	P	0 - 35
2451648	Hexabromobenzene	37.1	Spike	P	0 - 41
2451648	Hexazinone	8.67	Spike	P	0 - 31
2451648	Imazalil	10.7	Spike	P	0 - 52
2451648	Iprodione	16.8	Spike	P	0 - 49

Quality Assurance Report
Precision

Reference Method: EPA 8270E
Batch ID: P437970

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451648	Loratadine	43.3	Spike	P	0 - 59
2451648	Malathion	14.4	Spike	P	0 - 77
2451648	Metalaxyl	1.11	Spike	P	0 - 76
2451648	Metolachlor	0.418	Spike	P	0 - 29
2451648	Metribuzin	2.95	Spike	P	0 - 51
2451648	Mevinphos	2.28	Spike	P	0 - 31
2451648	Molinate	4.59	Spike	P	0 - 39
2451648	Myclobutanil	11.2	Spike	P	0 - 34
2451648	Naled	28.5	Spike	P	0 - 37
2451648	Napropamide	5.63	Spike	P	0 - 100
2451648	Norflurazon	14.9	Spike	P	0 - 54
2451648	Octinoxate	2.30	Spike	P	0 - 35
2451648	Oxadiazon	14.2	Spike	P	0 - 34
2451648	Oxybenzone	8.66	Spike	P	0 - 35
2451648	Oxyfluorfen	12.5	Spike	P	0 - 28
2451648	Parathion Ethyl	12.5	Spike	P	0 - 31
2451648	Parathion Methyl	11.4	Spike	P	0 - 29
2451648	PBB-153	25.4	Spike	P	0 - 49
2451648	PBDE-47	5.75	Spike	P	0 - 36
2451648	PBDE-99	21.8	Spike	P	0 - 46
2451648	Pendimethalin	10.1	Spike	P	0 - 31
2451648	Pentabromotoluene	5.07	Spike	P	0 - 16
2451648	Phenytoin	25.7	Spike	P	0 - 100
2451648	Phorate	25.1	Spike	P	0 - 36
2451648	Prodiamine	97.5	Spike	F	0 - 68
2451648	Prometon	11.6	Spike	P	0 - 35
2451648	Prometryn	3.03	Spike	P	0 - 33
2451648	Pronamide	13.2	Spike	P	0 - 24
2451648	Propanil	1.67	Spike	P	0 - 28
2451648	Propargite	32.9	Spike	P	0 - 53
2451648	Propiconazole	3.07	Spike	P	0 - 44
2451648	Pyraflufen Ethyl	9.26	Spike	P	0 - 61
2451648	Pyridaben	22.8	Spike	P	0 - 43
2451648	Pyriproxyfen	12.0	Spike	P	0 - 82
2451648	Simazine	10.9	Spike	P	0 - 29
2451648	Stirophos	55.0	Spike	P	0 - 100
2451648	Sulfentrazone	18.2	Spike	P	0 - 64
2451648	Tebuconazole	32.7	Spike	P	0 - 76
2451648	Terbufos	16.4	Spike	P	0 - 29
2451648	Terbuthylazine	1.57	Spike	P	0 - 28
2451648	Tetradecachloro-m-terphenyl	7.24	Spike	P	0 - 42
2451648	Thiobencarb	3.73	Spike	P	0 - 26
2451648	Tri-o-cresyl Phosphate	6.12	Spike	P	0 - 24
2451648	Triadimefon	34.2	Spike	P	0 - 40
2451648	Tris(1-chloro-2-propyl) phosphate (TCPP)	3.59	Spike	P	0 - 30
2451648	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	6.06	Spike	P	0 - 22
2451648	Tris(2-chloroethyl) phosphate (TCEP)	12.0	Spike	P	0 - 15

Quality Assurance Report
Precision

Reference Method: EPA 8276
Batch ID: P437943

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452054	Chlordane	16.7	Spike	P	0 - 28
2452054	Toxaphene	18.4	Spike	P	0 - 27

Reference Method: EPA 8321B
Batch ID: P437906

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452037	Acesulfame K	0.406	Spike	P	0 - 30
2452037	AMPA	2.03	Spike	P	0 - 30
2452037	Endothall	11.3	Spike	P	0 - 30
2452037	Glufosinate	0.0182	Spike	P	0 - 30
2452037	Glyphosate	6.52	Spike	P	0 - 30
2452037	Sucralose	3.23	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P437953

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452053	2,4-D	5.06	Spike	P	0 - 30
2452053	2,4,5-T	3.35	Spike	P	0 - 30
2452053	Acetaminophen	2.55	Spike	P	0 - 30
2452053	Acetamiprid	4.33	Spike	P	0 - 30
2452053	Bentazon	3.36	Spike	P	0 - 30
2452053	Benzovindiflupyr	0.572	Spike	P	0 - 30
2452053	Carbamazepine	0.752	Spike	P	0 - 30
2452053	Clothianidin	1.26	Spike	P	0 - 30
2452053	Dinotefuran	2.02	Spike	P	0 - 30
2452053	Diuron	1.33	Spike	P	0 - 30
2452053	Fenuron	2.23	Spike	P	0 - 30
2452053	Fluridone	4.66	Spike	P	0 - 30
2452053	Hydrocodone	0.414	Spike	P	0 - 30
2452053	Ibuprofen	2.76	Spike	P	0 - 30
2452053	Imazapyr	1.83	Spike	P	0 - 30
2452053	Imidacloprid	3.00	Spike	P	0 - 30
2452053	Linuron	1.68	Spike	P	0 - 30
2452053	Mandestrobin	2.57	Spike	P	0 - 30
2452053	MCPP	4.67	Spike	P	0 - 30
2452053	Naproxen	18.0	Spike	P	0 - 30
2452053	Primidone	3.48	Spike	P	0 - 30
2452053	Pyraclostrobin	3.67	Spike	P	0 - 30
2452053	Silvex	11.7	Spike	P	0 - 30
2452053	Thiamethoxam	2.85	Spike	P	0 - 30
2452053	Tolfenpyrad	3.72	Spike	P	0 - 30
2452053	Triclopyr	9.41	Spike	P	0 - 30

Quality Assurance Report
Precision

Reference Method: EPA 8321B
Batch ID: P437954

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2452354	3-Hydroxycarbofuran	9.34	Spike	P	0 - 30
2452354	Aldicarb	12.0	Spike	P	0 - 30
2452354	Aldicarb Sulfone	9.74	Spike	P	0 - 30
2452354	Aldicarb Sulfoxide	13.5	Spike	P	0 - 30
2452354	Carbaryl	9.88	Spike	P	0 - 30
2452354	Carbofuran	0.324	Spike	P	0 - 30
2452354	Methiocarb	5.13	Spike	P	0 - 30
2452354	Methomyl	9.43	Spike	P	0 - 30
2452354	Oxamyl	11.2	Spike	P	0 - 30
2452354	Propoxur	0.0126	Spike	P	0 - 30

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

Quality Assurance Report
Surrogates

Lab Sample ID: 2452131
Field Sample ID: G2CE0247

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	97.9	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	62.2	P	30 - 160
EPA 8321B	Diuron-d6	57.2	P	30 - 160
EPA 8321B	Endothall-d6	90.0	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	93.0	P	30 - 160
EPA 8321B	Ibuprofen-d3	59.3	P	30 - 160
EPA 8321B	Primidone-d5	72.5	P	30 - 160
EPA 8321B	Sucralose-d6	115	P	30 - 160

Lab Sample ID: 2452132
Field Sample ID: G2CE0233

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	88.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	77.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	56.4	P	30 - 160
EPA 8321B	Diuron-d6	49.9	P	30 - 160
EPA 8321B	Endothall-d6	115	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	55.6	P	30 - 160
EPA 8321B	Primidone-d5	70.8	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160

Lab Sample ID: 2452133
Field Sample ID: G2CE0241

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	96.0	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	60.5	P	30 - 160
EPA 8321B	Diuron-d6	49.1	P	30 - 160
EPA 8321B	Endothall-d6	102	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	91.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.9	P	30 - 160
EPA 8321B	Primidone-d5	57.0	P	30 - 160
EPA 8321B	Sucralose-d6	121	P	30 - 160

Lab Sample ID: 2452134
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	47.1	P	30 - 160

Lab Sample ID: 2452135
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	94.6	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	53.5	P	30 - 160
EPA 8321B	Diuron-d6	50.5	P	30 - 160

Quality Assurance Report
Surrogates

Lab Sample ID: 2452135
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Endothall-d6	97.4	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	86.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	60.9	P	30 - 160
EPA 8321B	Primidone-d5	49.2	P	30 - 160
EPA 8321B	Sucralose-d6	123	P	30 - 160

Lab Sample ID: 2452136
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	93.7	P	37 - 129
EPA 8270E	Decachlorobiphenyl	41.9	P	26 - 115
EPA 8270E	Tetrachloro-m-xylene	66.3	P	30 - 101
EPA 8270E	Tetrachloro-m-xylene	45.7	P	29 - 95.0
EPA 8276	Decachlorobiphenyl	70.7	P	28 - 102
EPA 8276	PCNB	85.5	P	49 - 115

Lab Sample ID: 2452137
Field Sample ID: G2CE0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	88.0	P	20 - 200
EPA 8270E	Simazine-d10	85.0	P	58 - 137
EPA 8270E	Terbufos-d10	77.2	P	50 - 134
EPA 8270E	Terphenyl-d14	57.5	P	44 - 134

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A122799
Included Lab Sample IDs: 2452131, 2452132, 2452133, 2452135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	93.4	90.1	P/P	60 - 160
Endothall	111	87.5	P/P	60 - 160
Glufosinate	91.0	90.6	P/P	60 - 160
Glyphosate	92.4	90.3	P/P	60 - 160

Reference Method: EPA 8321B
Run ID: A122812
Included Lab Sample IDs: 2452131, 2452132, 2452133, 2452135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	131	150	P/P	60 - 160
Sucralose	118	126	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A122877
Included Lab Sample IDs: 2452138, 2452139, 2452140, 2452141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	97.3	97.4	P/P	90 - 110
Iron	95.9	95.5	P/P	90 - 110
Magnesium	95.2	95.4	P/P	90 - 110
Potassium	95.2	94.4	P/P	90 - 110
Sodium	97.2	97.2	P/P	90 - 110
Strontium	101	95.6	P/P	90 - 110
Tin	98.0	92.9	P/P	90 - 110
Titanium	98.1	94.2	P/P	90 - 110
Vanadium	99.2	95.0	P/P	90 - 110
Zinc	101	96.1	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122879
Included Lab Sample IDs: 2452138, 2452139, 2452140, 2452141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	101	100	P/P	90 - 110
Aluminum	103	101	P/P	90 - 110
Antimony	98.7	98.1	P/P	90 - 110
Antimony	99.8	98.7	P/P	90 - 110
Arsenic	100	99.0	P/P	90 - 110
Arsenic	102	100	P/P	90 - 110
Barium	101	99.3	P/P	90 - 110
Barium	99.3	99.4	P/P	90 - 110
Beryllium	96.6	97.8	P/P	90 - 110
Beryllium	99.0	96.6	P/P	90 - 110
Boron	102	102	P/P	90 - 110
Boron	102	105	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Chromium	103	102	P/P	90 - 110
Cobalt	92.7	91.3	P/P	90 - 110
Cobalt	94.4	92.7	P/P	90 - 110
Copper	96.6	94.6	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122879
Included Lab Sample IDs: 2452138, 2452139, 2452140, 2452141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Copper	98.9	96.6	P/P	90 - 110
Lead	95.4	96.7	P/P	90 - 110
Lead	97.2	95.4	P/P	90 - 110
Manganese	99.1	97.6	P/P	90 - 110
Manganese	99.8	99.1	P/P	90 - 110
Molybdenum	99.4	98.5	P/P	90 - 110
Molybdenum	99.9	99.4	P/P	90 - 110
Nickel	101	99.1	P/P	90 - 110
Nickel	99.1	99.0	P/P	90 - 110
Silver	94.8	93.8	P/P	90 - 110
Silver	95.1	94.8	P/P	90 - 110
Thallium	94.5	94.6	P/P	90 - 110
Thallium	95.0	94.5	P/P	90 - 110

Reference Method: EPA 8321B
Run ID: A122897
Included Lab Sample IDs: 2452134

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	108	105	P/P	60 - 150
Aldicarb	102	100	P/P	60 - 150
Aldicarb Sulfone	110	107	P/P	50 - 150
Aldicarb Sulfoxide	111	107	P/P	50 - 150
Carbaryl	105	109	P/P	60 - 150
Carbofuran	107	107	P/P	50 - 150
Methiocarb	98.4	104	P/P	50 - 150
Methomyl	108	105	P/P	50 - 150
Oxamyl	110	109	P/P	50 - 150
Propoxur	113	111	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122898
Included Lab Sample IDs: 2452138, 2452139, 2452140, 2452141

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

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122924
Included Lab Sample IDs: 2452138, 2452139, 2452140, 2452141

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Cadmium	99.4	99.6	P/P	90 - 110
Cadmium	99.6	97.9	P/P	90 - 110

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8321B
Run ID: A122934
Included Lab Sample IDs: 2452131, 2452132, 2452133, 2452135

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	94.3	97.5	P/P	50 - 150
2,4,5-T	94.4	86.9	P/P	50 - 150
Acetaminophen	113	111	P/P	60 - 160
Acetamiprid	107	107	P/P	50 - 150
Afidopyropen	98.7	93.6	P/P	50 - 150
Bentazon	93.7	94.1	P/P	50 - 160
Bentazon	97.2	97.7	P/P	50 - 160
Benzovindiflupyr	103	101	P/P	50 - 150
Carbamazepine	105	108	P/P	60 - 150
Clothianidin	101	106	P/P	60 - 150
Dinotefuran	109	107	P/P	50 - 150
Diuron	113	116	P/P	60 - 160
Fenuron	106	106	P/P	60 - 150
Fluridone	105	119	P/P	60 - 160
Hydrocodone	112	115	P/P	60 - 150
Ibuprofen	71.6	75.3	P/P	50 - 160
Imazapyr	92.7	92.4	P/P	50 - 150
Imidacloprid	100	94.1	P/P	60 - 150
Linuron	95.9	106	P/P	60 - 150
Mandestrobin	112	110	P/P	50 - 150
MCPP	103	95.0	P/P	50 - 150
Naproxen	83.1	112	P/P	50 - 160
Primidone	101	92.3	P/P	60 - 150
Pyraclostrobin	115	115	P/P	60 - 150
Silvex	104	95.1	P/P	50 - 150
Thiamethoxam	109	108	P/P	50 - 150
Tolfenpyrad	101	97.6	P/P	60 - 150
Triclopyr	99.8	97.3	P/P	50 - 150

Reference Method: EPA 8270E
Run ID: A122957
Included Lab Sample IDs: 2452136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
PCB-1016	99.2		P	80 - 120
PCB-1260	95.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Run ID: A122975
Included Lab Sample IDs: 2452140

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

Reference Method: EPA 8270E
Run ID: A123000
Included Lab Sample IDs: 2452137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	97.2		P	80 - 120
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	95.7		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A123000
Included Lab Sample IDs: 2452137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Avobenzone	99.6		P	80 - 120
Dechlorane 602	101		P	80 - 120
Dechlorane 603	93.6		P	80 - 120
Dechlorane Plus	95.7		P	80 - 120
Hexabromobenzene	95.2		P	80 - 120
Octinoxate	98.4		P	80 - 120
Oxybenzone	103		P	80 - 120
PBB-153	89.7		P	80 - 120
PBDE-47	97.2		P	80 - 120
PBDE-99	96.8		P	80 - 120
Pentabromotoluene	103		P	80 - 120
Tetradecachloro-m-terphenyl	90.5		P	80 - 120
Tri-o-cresyl Phosphate	103		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	104		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	104		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	108		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123076
Included Lab Sample IDs: 2452137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	85.8		P	80 - 120
Alachlor	92.2		P	80 - 120
Ametryn	97.0		P	80 - 120
Atrazine Desethyl	106		P	80 - 120
Azinphos Methyl	107		P	80 - 120
Azoxystrobin	107		P	80 - 120
Bromacil	103		P	80 - 120
Butylate	94.6		P	80 - 120
Caffeine	84.8		P	80 - 120
Carbophenothion	93.1		P	80 - 120
Carfentrazone Ethyl	92.5		P	80 - 120
Chlorfenapyr	77.8*		F	80 - 120
Chlorpyrifos Ethyl	87.7		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Coumaphos	102		P	80 - 120
Cyanazine	99.9		P	80 - 120
Cyprodinil	103		P	80 - 120
Demeton	100		P	80 - 120
Diazinon	107		P	80 - 120
Difenoconazole	95.4		P	80 - 120
Dimethenamid	93.8		P	80 - 120
Dimethomorph	97.6		P	80 - 120
Disulfoton	98.9		P	80 - 120
Dithiopyr	106		P	80 - 120
EPTC	99.4		P	80 - 120
Ethion	88.2		P	80 - 120
Ethoprop	97.6		P	80 - 120
Etridiazole	98.4		P	80 - 120
Fenamiphos	88.3		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A123076
Included Lab Sample IDs: 2452137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fenbuconazole	96.4		P	80 - 120
Fipronil	77.9*		F	80 - 120
Fipronil Desulfinyl	88.8		P	80 - 120
Fipronil Sulfide	95.3		P	80 - 120
Fipronil Sulfone	96.3		P	80 - 120
Fluazifop-P-butyl	87.3		P	80 - 120
Fludioxonil	100		P	80 - 120
Flumioxazin	95.3		P	80 - 120
Flutolanil	99.2		P	80 - 120
Fluxapyroxad	93.0		P	80 - 120
Fonofos	97.4		P	80 - 120
Hexazinone	99.6		P	80 - 120
Imazalil	101		P	80 - 120
Iprodione	86.8		P	80 - 120
Loratadine	93.2		P	80 - 120
Malathion	88.0		P	80 - 120
Metalaxyl	90.9		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	99.3		P	80 - 120
Mevinphos	94.3		P	80 - 120
Molinate	88.8		P	80 - 120
Myclobutanil	89.7		P	80 - 120
Naled	100		P	80 - 120
Napropamide	94.0		P	80 - 120
Norflurazon	100		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	95.8		P	80 - 120
Parathion Methyl	102		P	80 - 120
Pendimethalin	105		P	80 - 120
Phenytoin	96.7		P	80 - 120
Phorate	105		P	80 - 120
Prodiamine	102		P	80 - 120
Prometon	95.0		P	80 - 120
Prometryn	99.4		P	80 - 120
Pronamide	100		P	80 - 120
Propanil	111		P	80 - 120
Propargite	99.7		P	80 - 120
Propiconazole	84.5		P	80 - 120
Pyraflufen Ethyl	96.9		P	80 - 120
Pyridaben	98.3		P	80 - 120
Pyriproxyfen	112		P	80 - 120
Simazine	85.7		P	80 - 120
Stirophos	99.9		P	80 - 120
Sulfentrazone	86.1		P	80 - 120
Tebuconazole	96.6		P	80 - 120
Terbufos	103		P	80 - 120
Terbuthylazine	97.2		P	80 - 120
Thiobencarb	101		P	80 - 120
Triadimefon	99.2		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A123107
Included Lab Sample IDs: 2452137

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	88.4		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123137
Included Lab Sample IDs: 2452136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	108		P	80 - 120
Alpha-BHC	88.7		P	80 - 120
Alpha-Chlordane	114		P	80 - 120
Beta-BHC	102		P	80 - 120
Beta-Cyfluthrin	94.3		P	80 - 120
Bifenthrin	108		P	80 - 120
Chlorothalonil	92.6		P	80 - 120
Cis-Nonachlor	97.4		P	80 - 120
Cypermethrin	101		P	80 - 120
Dacthal	99.6		P	80 - 120
DDD-p,p'	112		P	80 - 120
DDE-p,p'	97.1		P	80 - 120
Delta-BHC	99.0		P	80 - 120
Deltamethrin	98.9		P	80 - 120
Dichlobenil	102		P	80 - 120
Dicofol	101		P	80 - 120
Dieldrin	96.4		P	80 - 120
Endosulfan I	86.0		P	80 - 120
Endosulfan II	85.5		P	80 - 120
Endosulfan Sulfate	89.9		P	80 - 120
Endrin	88.2		P	80 - 120
Endrin Aldehyde	80.4		P	80 - 120
Endrin Ketone	96.9		P	80 - 120
Esfenvalerate	100		P	80 - 120
Ethalfluralin	94.2		P	80 - 120
Fenpropathrin	110		P	80 - 120
Gamma-BHC	98.5		P	80 - 120
Gamma-Chlordane	106		P	80 - 120
Heptachlor	81.2		P	80 - 120
Heptachlor Epoxide	90.2		P	80 - 120
Hexachlorobenzene	89.3		P	80 - 120
Kepone	83.1		P	80 - 120
Lambda-Cyhalothrin	95.5		P	80 - 120
Methoprene	98.0		P	80 - 120
Methoxychlor	98.3		P	80 - 120
MGK-264	96.1		P	80 - 120
Mirex	92.6		P	80 - 120
Oxychlordane	92.8		P	80 - 120
Permethrin	95.3		P	80 - 120
Phenothrin	102		P	80 - 120
Piperonyl Butoxide	93.7		P	80 - 120
Prallethrin	99.2		P	80 - 120
Tau-Fluvalinate	109		P	80 - 120
Tetramethrin	98.0		P	80 - 120

Quality Assurance Report
Calibration Verification

Reference Method: EPA 8270E
Run ID: A123137
Included Lab Sample IDs: 2452136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Trans-Nonachlor	114		P	80 - 120
Triclosan Methyl	87.8		P	80 - 120
Trifluralin	96.8		P	80 - 120

Reference Method: EPA 8270E
Run ID: A123138
Included Lab Sample IDs: 2452136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
DDT-p,p'	107		P	80 - 120

Reference Method: EPA 8276
Run ID: A123260
Included Lab Sample IDs: 2452136

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.9		P	80 - 120
Toxaphene	104		P	80 - 120

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

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery			Precision		
						LCS	SMP	MS
EPA 200.7 Rev. 4.4	Calcium	101	95.8	99.7				3.58
	Iron	104	97.5	99.2	101			1.73
	Magnesium	99.4	95.3	100				1.99
	Potassium	100	94.9	98.0	95.8			2.03
	Sodium	99.2	98.2	98.9				3.57
	Strontium	100	95.4	98.5	97.5			3.10
	Tin	97.5	94.9	96.0	95.5			1.18
	Titanium	99.3	96.5	98.1	96.1			1.66
	Vanadium	100	96.7	99.1	101			2.52
	Zinc	99.6	93.4	95.7	98.9			2.46
EPA 200.8 Rev. 5.4	Aluminum	101	101	100	101			0.505
	Antimony	99.6	102	100	101			1.50
	Arsenic	100	101	99.4	101			1.64
	Barium	102	102	101	102			1.02
	Beryllium	96.1	94.7	92.5	95.7			2.35
	Boron	103	105	107	106			1.49
	Cadmium	98.0	100	99.0	99.0			1.24
	Chromium	102	101	102	100			0.833
	Cobalt	96.2	94.1	93.1	92.9			1.04
	Copper	100	97.9	96.2	96.2			1.70
	Lead	94.3	95.7	94.6	95.9			1.12
	Manganese	101	101	99.5	99.3			1.71
	Molybdenum	97.7	101	99.3	100			1.30
	Nickel	100	97.2	96.8	98.1			0.455
	Selenium	98.4	95.9	93.3	96.2			2.72
	Silver	100	100	99.9	99.3			0.313
	Silver	104	102	103	101			0.462
	Thallium	96.8	98.3	97.4	98.7			0.879
EPA 8270E	2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328)	98.8	108	109				1.31
	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	89.8	110	94.8				14.4
	Acetochlor	78.6	88.5	68.0				26.2
	Alachlor	76.8	77.5	77.5				0.0060
	Aldrin	45.2	35.3	40.4				13.4
	Alpha-BHC	80.2	51.0	61.4				18.6
	Alpha-Chlordane	57.7	64.5	50.6				24.1
	Ametryn	108	108	107				0.732
	Atrazine	77.3						2.00
	Atrazine Desethyl	87.1	97.0	88.7				7.45
	Avobenzone	119	147	130				12.4
	Azinphos Methyl	19.8	14.5	16.8				14.5
	Azoxystrobin	87.3	89.5	94.8				5.75
	Beta-BHC	88.1	84.5	103				19.4
	Beta-Cyfluthrin	80.0	58.0	55.3				4.91
	Bifenthrin	57.3	42.9	41.1				4.47
	Bromacil	102	109	95.7				13.0
	Butylate	46.0	42.0	38.9				7.59
	Caffeine	71.0	89.7	89.6				0.0798
	Carbophenothion	82.7	94.3	78.4				18.5
	Carfentrazone Ethyl	114	98.1	86.8				12.3
	Chlorfenapyr	52.7	56.2	63.9				12.8
	Chlorothalonil	71.4	23.2	56.8				84.0

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Chlorpyrifos Ethyl	67.4	75.1	82.0			8.86
	Chlorpyrifos Methyl	70.9	100	97.1			3.24
	Cis-Nonachlor	69.4	60.3	74.0			20.3
	Coumaphos	128	134	112			17.6
	Cyanazine	94.3	110	98.9			10.8
	Cypermethrin	77.6	81.3	47.1			53.3
	Cyprodinil	86.1	101	102			1.50
	Dacthal	84.4	53.1	81.2			41.9
	DDD-p,p'	55.7	53.4	36.4			38.0
	DDE-p,p'	75.4	51.6	57.5			10.8
	DDT-p,p'	36.9	41.4	33.3			21.7
	Dechlorane 602	100	100	87.2			13.7
	Dechlorane 603	100	93.3	75.8			20.7
	Dechlorane Plus	119	86.0	75.9			12.6
	Delta-BHC	80.0	72.6	109			40.3
	Deltamethrin	79.9	66.8	69.8			4.37
	Demeton	44.1	62.6	68.6			9.22
	Diazinon	98.4	112	94.1			17.1
	Dichlobenil	81.0	29.0	22.1			27.2
	Dicofol	57.6	60.9	41.4			38.2
	Dieldrin	77.8	50.0	68.8			31.7
	Difenoconazole	101	123	105			15.8
	Dimethenamid	71.5	68.5	78.8			13.9
	Dimethomorph	139	181	165			9.08
	Disulfoton	68.6	91.1	81.4			11.3
	Dithiopyr	91.0	72.3	69.7			3.74
	Endosulfan I	66.9	55.9	65.3			15.5
	Endosulfan II	67.5	60.1	85.5			34.8
	Endosulfan Sulfate	95.9	67.6	115			52.0
	Endrin	67.6	46.6	62.7			29.4
	Endrin Aldehyde	50.5	5.11	73.6			174
	Endrin Ketone	91.3	91.2	90.1			1.26
	EPTC	48.6	40.1	37.1			7.72
	Esfenvalerate	71.7	70.3	72.0			2.37
	Ethalfluralin	67.4	66.3	52.9			22.5
	Ethion	78.3	89.5	57.2			44.1
	Ethoprop	63.2	70.3	67.9			3.43
	Etridiazole	60.6	55.4	43.1			25.0
	Fenamiphos	71.8	50.9	52.2			2.43
	Fenbuconazole	105	93.1	70.1			28.3
	Fenpropathrin	72.2	47.8	58.1			19.4
	Fipronil	75.8	79.0	75.8			4.05
	Fipronil Desulfinyl	80.0	84.9	68.4			19.4
	Fipronil Sulfide	96.2	99.6	87.0			12.2
	Fipronil Sulfone	71.7	72.7	71.4			1.47
	Fluazifop-P-butyl	75.1	85.5	91.8			7.12
	Fludioxonil	75.8	67.0	77.4			14.4
	Flumioxazin	97.8	143	140			1.57
	Flutolanil	81.5	89.7	91.8			2.29
	Fluxapyroxad	73.7	76.3	77.2			1.17
	Fonofos	64.1	84.2	85.6			1.68
	Gamma-BHC	72.1	61.9	78.0			23.0
	Gamma-Chlordane	59.6	63.7	52.2			19.8
	Heptachlor	53.3	40.8	42.8			4.96

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Heptachlor Epoxide	59.7	49.6	61.0			20.7
	Hexabromobenzene	91.4	109	74.8			37.1
	Hexachlorobenzene	61.4	30.0	35.7			17.3
	Hexazinone	85.5					8.67
	Imazalil	73.5	117	106			10.7
	Iprodione	92.6	102	86.0			16.8
	Kepone	121	97.5	97.6			0.131
	Lambda-Cyhalothrin	74.2	53.1	62.8			16.8
	Loratadine	122	163	105			43.3
	Malathion	78.3	83.9	96.9			14.4
	Metalaxyl	78.7	69.5	68.8			1.11
	Methoprene	69.5	50.3	43.4			14.8
	Methoxychlor	72.7	62.7	78.2			22.0
	Metolachlor	82.5	91.3	91.9			0.418
	Metribuzin	79.3	86.5	84.0			2.95
	Mevinphos	64.4	77.3	75.5			2.28
	MGK-264	73.8	60.6	66.7			9.64
	Mirex	33.8	31.0	26.1			17.3
	Molinate	43.2	45.4	47.5			4.59
	Myclobutanil	92.9	76.2	66.9			11.2
	Naled	43.7	34.9	26.2			28.5
	Napropamide	90.1	83.0	78.5			5.63
	Norflurazon	71.1	81.4	70.1			14.9
	Octinoxate	101	109	111			2.30
	Oxadiazon	84.6	77.6	65.8			14.2
	Oxybenzone	93.9	107	98.5			8.66
	Oxychlordane	54.6	52.5	61.9			16.5
	Oxyfluorfen	104	96.6	109			12.5
	Parathion Ethyl	72.6	78.3	88.7			12.5
	Parathion Methyl	114	120	135			11.4
	PBB-153	94.0	104	80.7			25.4
	PBDE-47	98.7	110	103			5.75
	PBDE-99	94.3	103	82.6			21.8
	PCB-1016	102	63.5	67.0			5.25
	PCB-1260	101	70.6	83.2			16.4
	Pendimethalin	107	125	138			10.1
	Pentabromotoluene	90.8	103	98.1			5.07
	Permethrin	65.6	68.8	42.8			46.6
	Phenothrin	61.9	83.7	50.9			48.7
	Phenytoin	65.3	52.1	67.5			25.7
	Phorate	52.2	84.8	65.9			25.1
	Piperonyl Butoxide	49.1	74.0	54.6			30.2
	Prallethrin	58.7	95.4	38.8			84.3
	Prodiamine	31.8	129	44.4			97.5
	Prometon	105	98.4	111			11.6
	Prometryn	89.3	103	99.8			3.03
	Pronamide	98.7	94.9	108			13.2
	Propanil	113	132	135			1.67
	Propargite	100	75.2	105			32.9
	Propiconazole	69.5	78.7	76.3			3.07
	Pyraflufen Ethyl	98.1	76.6	84.0			9.26
	Pyridaben	108	63.8	91.5			22.8
	Pyriproxyfen	46.7	35.9	40.4			12.0
	Simazine	79.1	85.5	76.7			10.9

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8270E	Stirophos	102	88.6	50.4			55.0
	Sulfentrazone	76.1	64.0	84.6			18.2
	Tau-Fluvalinate	69.7	77.6	65.1			17.5
	Tebuconazole	97.6	72.8	115			32.7
	Terbufos	64.2	91.6	77.7			16.4
	Terbuthylazine	78.4	83.1	84.5			1.57
	Tetradecachloro-m-terphenyl	95.4	90.3	97.1			7.24
	Tetramethrin	45.8	49.1	41.5			16.9
	Thiobencarb	97.3	81.3	84.4			3.73
	Trans-Nonachlor	64.9	66.0	45.5			36.8
	Tri-o-cresyl Phosphate	112	119	112			6.12
	Triadimefon	97.7	75.2	106			34.2
	Triclosan Methyl	77.9	65.4	70.8			7.93
	Trifluralin	47.5	40.1	41.6			3.75
	Tris(1-chloro-2-propyl) phosphate (TCPP)	115	135	129			3.59
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	107	111	104			6.06
	Tris(2-chloroethyl) phosphate (TCEP)	120	131	116			12.0
EPA 8276	Chlordane	70.5	51.8	61.3			16.7
	Toxaphene	78.0	55.0	66.2			18.4
EPA 8321B	2,4-D	75.1	102	96.6			5.06
	2,4,5-T	61.7	73.5	76.0			3.35
	3-Hydroxycarbofuran	78.3	77.2	84.8			9.34
	Acesulfame K	130	132	132			0.406
	Acetaminophen	82.3	98.9	101			2.55
	Acetamiprid	61.5	47.7	45.6			4.33
	Aldicarb	43.7	41.7	47.0			12.0
	Aldicarb Sulfone	88.8	90.9	100			9.74
	Aldicarb Sulfoxide	123	62.4	71.5			13.5
	AMPA	90.5	88.0	89.8			2.03
	Bentazon	56.7	34.2	33.1			3.36
	Benzovindiflupyr	76.9	78.8	78.3			0.572
	Carbamazepine	63.3	55.7	56.1			0.752
	Carbaryl	71.8	56.3	62.2			9.88
	Carbofuran	76.4	57.6	57.4			0.324
	Clothianidin	80.2	82.2	83.3			1.26
	Dinotefuran	66.1	62.1	63.3			2.02
	Diuron	62.2	56.5	55.7			1.33
	Endothall	104	97.2	109			11.3
	Fenuron	78.6	56.6	57.9			2.23
	Fluridone	77.4	69.7	73.0			4.66
	Glufosinate	97.4	94.7	94.7			0.0182
	Glyphosate	97.3	97.1	90.9			6.52
	Hydrocodone	96.1	81.7	81.4			0.414
	Ibuprofen	51.3	61.1	59.4			2.76
	Imazapyr	75.3	92.7	94.4			1.83
	Imidacloprid	76.7	101	105			3.00
	Linuron	60.7	58.5	59.5			1.68
	Mandestrobin	79.3	81.7	83.8			2.57
	MCPP	66.7	80.4	84.3			4.67
	Methiocarb	60.0	61.0	64.2			5.13
	Methomyl	80.5	71.8	78.9			9.43

Quality Assurance Report
Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision		
					LCS	SMP	MS
EPA 8321B	Naproxen	45.3	59.4	71.2			18.0
	Oxamyl	85.9	80.3	89.8			11.2
	Primidone	75.0	77.7	80.4			3.48
	Propoxur	72.6	55.8	55.8			0.0126
	Pyraclostrobin	83.9	85.6	82.5			3.67
	Silvex	70.0	71.0	79.8			11.7
	Sucralose	120	125	121			3.23
	Thiamethoxam	78.2	83.0	85.4			2.85
	Tolfenpyrad	45.5	49.2	47.4			3.72
	Triclopyr	67.4	77.6	85.3			9.41

Reference Method Descriptions

Method	Description	Associated Samples
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2452138, 2452139, 2452140, 2452141
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2452138, 2452139, 2452140, 2452141
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2452137
EPA 8270E	Organochlorine pesticides, pyrethroids and tracers in water matrices by GC/MS/MS	2452136
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2452137
EPA 8270E	PCBs in water matrices by GC/MS/MS	2452136
EPA 8276	Chlordane and Toxaphene in water matrices by GC/MS with Negative Chemical Ionization	2452136
EPA 8321B	Carbamates in water matrices by HPLC/MS/MS	2452134
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2452131, 2452132, 2452133, 2452135
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO3	2452138, 2452139, 2452140, 2452141

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 200.7 Rev. 4.4	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 16:41	Samatha Luckman	2452138
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 16:48	Samatha Luckman	2452139
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 17:08	Samatha Luckman	2452140
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 17:15	Samatha Luckman	2452141
EPA 200.8 Rev. 5.4	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 18:10	Conrad Hartmann	2452138
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 18:19	Conrad Hartmann	2452140
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 19:22	Conrad Hartmann	2452141
	11/17/2023	11/20/2023 12:20	George D Taylor	11/21/2023 19:57	Conrad Hartmann	2452139
	11/17/2023	11/20/2023 12:20	George D Taylor	11/27/2023 15:01	Conrad Hartmann	2452138
	11/17/2023	11/20/2023 12:20	George D Taylor	11/27/2023 15:09	Conrad Hartmann	2452138
	11/17/2023	11/20/2023 12:20	George D Taylor	11/27/2023 16:12	Conrad Hartmann	2452140
	11/17/2023	11/20/2023 12:20	George D Taylor	11/27/2023 16:21	Conrad Hartmann	2452141
	11/17/2023	11/20/2023 12:20	George D Taylor	11/27/2023 16:56	Conrad Hartmann	2452139
	11/17/2023	11/20/2023 12:20	George D Taylor	11/28/2023 19:33	Conrad Hartmann	2452139
	11/17/2023	11/20/2023 12:20	George D Taylor	11/28/2023 20:35	Conrad Hartmann	2452138
	11/17/2023	11/20/2023 12:20	George D Taylor	11/28/2023 20:53	Conrad Hartmann	2452140
	11/17/2023	11/20/2023 12:20	George D Taylor	11/28/2023 21:01	Conrad Hartmann	2452141
	11/17/2023	11/29/2023 13:50	George D Taylor	11/30/2023 17:40	Emily M Philpot	2452140
EPA 8270E	11/17/2023	11/19/2023 08:00	Fe-Val Siddell	11/30/2023 03:52	Lipi Saha	2452136
	11/17/2023	11/19/2023 08:00	Fe-Val Siddell	12/03/2023 03:27	Julie Wi	2452136
	11/17/2023	11/19/2023 08:00	Fe-Val Siddell	12/10/2023 08:36	Julie Wi	2452136
	11/17/2023	11/21/2023 08:30	Rasheda Ghaffari	11/30/2023 23:56	Vandana T. Nagar	2452137
	11/17/2023	11/21/2023 08:30	Rasheda Ghaffari	12/03/2023 20:37	Arthur Maknenko	2452137
	11/17/2023	11/21/2023 08:30	Rasheda Ghaffari	12/07/2023 22:39	Vandana T. Nagar	2452137
EPA 8276	11/17/2023	11/19/2023 08:00	Fe-Val Siddell	12/14/2023 09:45	Kenedi Mills	2452136
EPA 8321B	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 12:16	Hana Lee	2452131
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 12:30	Hana Lee	2452132
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 12:44	Hana Lee	2452133
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 12:58	Hana Lee	2452135
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 15:06	Hana Lee	2452131
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 15:20	Hana Lee	2452132
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 15:34	Hana Lee	2452133
	11/17/2023	11/17/2023 11:00	Tae K Lee	11/17/2023 15:48	Hana Lee	2452135
	11/17/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 01:40	Juyoung Kim	2452131
	11/17/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 01:58	Juyoung Kim	2452132
	11/17/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 02:16	Juyoung Kim	2452133
	11/17/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 02:34	Juyoung Kim	2452135
	11/17/2023	11/21/2023 13:00	Hoor Shaik	11/29/2023 11:28	Juyoung Kim	2452133
	11/17/2023	11/21/2023 14:00	Hoor Shaik	11/28/2023 04:39	Juyoung Kim	2452134
SM 2340 B-2011	11/17/2023			11/21/2023 16:41	Samatha Luckman	2452138

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2340 B-2011	11/17/2023			11/21/2023 16:48	Samatha Luckman	2452139
	11/17/2023			11/21/2023 17:08	Samatha Luckman	2452140
	11/17/2023			11/21/2023 17:15	Samatha Luckman	2452141