

Chemical Analysis Report

SO-DIST-2023-07-20-01

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

Event Description: **2023 SMP : Shell Creek**
Request ID: **RQ-2023-07-17-36**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 314
Fort Myers, FL 33901-3381
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 07-AUG-2023 14:39



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: PRAIRIE CREEK AT WASHINGTON LOOP

Collection Date/Time: 07/19/2023 08:45

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425721	EPA 8321B	2,4-D	0.052		ug/L	P432883	
		Acesulfame K	0.10	U	ug/L	P432878	RPD
		2,4,5-T	0.0040	U	ug/L	P432883	
		AMPA	2.1		ug/L	P432878	MS
		Acetaminophen	0.0080	U	ug/L	P432883	
		Acetamiprid	0.0020	U	ug/L	P432883	
		Endothall	0.25	U	ug/L	P432878	
		Glufosinate	0.10	U	ug/L	P432878	
		Glyphosate	2.6		ug/L	P432878	
		Afidopyropen	0.0020	U	ug/L	P432883	
		Bentazon	0.048		ug/L	P432883	
		Sucralose	0.010	U	ug/L	P432878	RPD
		Benzovindiflupyr	0.0020	U	ug/L	P432883	
		Carbamazepine	8.0E-04	U	ug/L	P432883	
		Clothianidin	0.056		ug/L	P432883	
		Dinotefuran	0.0020	U	ug/L	P432883	
		Diuron	0.12		ug/L	P432883	MS
		Fenuron	0.032	U	ug/L	P432883	
		Fluridone	0.0020	I	ug/L	P432883	
		Imazapyr	0.0047	I	ug/L	P432883	
		Hydrocodone	0.0020	U	ug/L	P432883	
		Ibuprofen	0.080	U	ug/L	P432883	
		Imidacloprid	0.19		ug/L	P432883	
		Linuron	0.0040	U	ug/L	P432883	
		Mandestrobin	0.0020	U	ug/L	P432883	
		MCPP	0.0020	U	ug/L	P432883	
		Naproxen	0.0080	U	ug/L	P432883	
		Primidone	0.0040	U	ug/L	P432883	
		Pyraclostrobin	0.0020	U	ug/L	P432883	
		Silvex	0.0040	U	ug/L	P432883	
		Thiamethoxam	0.067		ug/L	P432883	
		Tolfenpyrad	0.0020	U	ug/L	P432883	
		Triclopyr	0.0040	U	ug/L	P432883	
2425726	EPA 8270E	Oxybenzone**	10	U	ng/L	P432740	
		Acetochlor	0.21	U	ng/L	P432740	
		Octinoxate**	160	U	ng/L	P432740	
		Alachlor	0.42	U	ng/L	P432740	
		Avobenzone**	100	U	ng/L	P432740	
		Ametryn	1.7	I	ng/L	P432740	
		Atrazine	4.0		ng/L	P432740	
		PBDE-47**	4.2	U	ng/L	P432740	
		Atrazine Desethyl	2.6	I	ng/L	P432740	
		PBDE-99**	5.2	U	ng/L	P432740	
		Azinphos Methyl	3.1	U	ng/L	P432740	

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425726	EPA 8270E	Tri-o-cresyl Phosphate**	6.2	U	ng/L	P432740	LCS, MS
		Azoxystrobin	5.8		ng/L	P432740	
		Bromacil	130		ng/L	P432740	
		2-Ethylhexyl	12	U	ng/L	P432740	
		2,3,4,5-tetrabromobenzoate (EHTBB)**					
		Butylate	0.21	U	ng/L	P432740	
		Dechlorane Plus**	31	U	ng/L	P432740	
		Caffeine**	7.8	U	ng/L	P432740	
		Dechlorane 602**	5.2	UJ	ng/L	P432740	
		Carbophenothion	0.52	U	ng/L	P432740	
		Dechlorane 603**	4.2	U	ng/L	P432740	
		Carfentrazone Ethyl	0.16	U	ng/L	P432740	
		Hexabromobenzene**	6.2	U	ng/L	P432740	
		Chlorfenapyr	0.31	U	ng/L	P432740	
		PBB-153**	8.3	U	ng/L	P432740	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P432740	
		Pentabromotoluene**	3.1	U	ng/L	P432740	
		Chlorpyrifos Methyl	0.10	U	ng/L	P432740	
		Tris(2-chloroethyl) phosphate (TCEP)**	73	U	ng/L	P432740	
		Coumaphos	1.1	U	ng/L	P432740	
		Tris(1-chloro-2-propyl) phosphate (TCP)**	16	U	ng/L	P432740	
		Cyanazine	5.2	U	ng/L	P432740	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P432740	
		Cyprodinil	0.21	U	ng/L	P432740	
		Tetradecachloro-m-terphenyl**	7.8	U	ng/L	P432740	
		Demeton	3.6	U	ng/L	P432740	
		Diazinon	0.13	U	ng/L	P432740	
		Difenoconazole	1.4	I	ng/L	P432740	
		Dimethenamid	0.10	U	ng/L	P432740	
		Dimethomorph	0.31	U	ng/L	P432740	
		Disulfoton	0.62	U	ng/L	P432740	
		Dithiopyr	1.0	U	ng/L	P432740	
		EPTC	0.52	U	ng/L	P432740	
		Ethion	0.31	U	ng/L	P432740	
		Ethoprop	0.13	U	ng/L	P432740	
		Etridiazole	0.10	U	ng/L	P432740	
		Fenamiphos	0.47	U	ng/L	P432740	
		Fenbuconazole	4.8		ng/L	P432740	
		Fipronil	0.21	U	ng/L	P432740	
		Fipronil Desulfinyl**	0.10	U	ng/L	P432740	
		Fipronil Sulfide	0.10	U	ng/L	P432740	
		Fipronil Sulfone	0.10	U	ng/L	P432740	
		Fluazifop-P-butyl	0.10	U	ng/L	P432740	
		Fludioxonil	0.10	U	ng/L	P432740	
		Flumioxazin	3.1	U	ng/L	P432740	

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425726	EPA 8270E	Flutolanil	0.10	U	ng/L	P432740	
		Fluxapyroxad	0.26	U	ng/L	P432740	
		Fonofos	0.16	U	ng/L	P432740	
		Hexazinone	6.6		ng/L	P432740	
		Imazalil	0.68	U	ng/L	P432740	
		Iprodione	0.52	UJ	ng/L	P432740	CCV
		Loratadine**	0.31	UJ	ng/L	P432740	CCV
		Malathion	0.36	U	ng/L	P432740	
		Metalaxyl	79		ng/L	P432740	
		Metolachlor	140		ng/L	P432740	
		Metribuzin	0.42	U	ng/L	P432740	
		Mevinphos	1.0	U	ng/L	P432740	
		Molinate	0.26	U	ng/L	P432740	
		Myclobutanil	0.36	U	ng/L	P432740	
		Naled	2.6	U	ng/L	P432740	
		Napropamide	0.73	U	ng/L	P432740	
		Norflurazon	420		ng/L	P432740	
		Oxadiazon	0.50	I	ng/L	P432740	
		Oxyfluorfen	0.21	U	ng/L	P432740	
		Parathion Ethyl	0.16	U	ng/L	P432740	
		Parathion Methyl	0.21	U	ng/L	P432740	
		Pendimethalin	0.78	U	ng/L	P432740	
		Phenytol**	5.5	U	ng/L	P432740	
		Phorate	0.26	U	ng/L	P432740	
		Prodiamine	0.21	U	ng/L	P432740	
		Prometon	3.1	U	ng/L	P432740	
		Prometryn	0.36	U	ng/L	P432740	
		Pronamide	0.10	U	ng/L	P432740	
		Propanil	0.10	U	ng/L	P432740	
		Propargite	0.83	U	ng/L	P432740	
		Propiconazole	0.62	U	ng/L	P432740	
		Pyraflufen Ethyl	0.31	U	ng/L	P432740	
		Pyridaben	1.5	U	ng/L	P432740	
		Pyriproxyfen	0.26	U	ng/L	P432740	
		Simazine	0.26	U	ng/L	P432740	
		Stirophos	0.42	U	ng/L	P432740	
		Sulfentrazone	5.2	I	ng/L	P432740	
		Tebuconazole	1.5	U	ng/L	P432740	
		Terbufos	0.21	U	ng/L	P432740	
		Terbutylazine	0.21	U	ng/L	P432740	
		Thiobencarb	0.52	U	ng/L	P432740	
		Triadimefon	0.16	U	ng/L	P432740	

Ref. Method and Comment:

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for hexazinone and norflurazon 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: SHELL CR AT HATHAWAY PARK

Collection Date/Time: 07/19/2023 09:20

Field ID: G3SD0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425722	EPA 8321B	2,4-D	0.0038	I	ug/L	P432883	
		Acesulfame K	0.10	U	ug/L	P432878	RPD
		2,4,5-T	0.0040	U	ug/L	P432883	
		AMPA	1.1		ug/L	P432878	MS
		Acetaminophen	0.0080	U	ug/L	P432883	
		Acetamiprid	0.0020	U	ug/L	P432883	
		Endothall	0.25	U	ug/L	P432878	
		Glufosinate	0.10	U	ug/L	P432878	
		Glyphosate	0.98		ug/L	P432878	
		Afidopyropen	0.0020	U	ug/L	P432883	
		Bentazon	0.017		ug/L	P432883	
		Sucralose	0.010	U	ug/L	P432878	RPD
		Benzovindiflupyr	0.0048	I	ug/L	P432883	
		Carbamazepine	8.0E-04	U	ug/L	P432883	
		Clothianidin	0.017		ug/L	P432883	
		Dinotefuran	0.0020	U	ug/L	P432883	
		Diuron	0.0020	U	ug/L	P432883	MS
		Fenuron	0.032	U	ug/L	P432883	
		Fluridone	0.0092		ug/L	P432883	
		Imazapyr	0.013	I	ug/L	P432883	
		Hydrocodone	0.0020	U	ug/L	P432883	
		Ibuprofen	0.080	U	ug/L	P432883	
		Imidacloprid	0.054		ug/L	P432883	
		Linuron	0.0040	U	ug/L	P432883	
		Mandestrobin	0.0020	U	ug/L	P432883	
		MCPP	0.0020	U	ug/L	P432883	
		Naproxen	0.0080	U	ug/L	P432883	
		Primidone	0.0040	U	ug/L	P432883	
		Pyraclostrobin	0.0020	U	ug/L	P432883	
		Silvex	0.0040	U	ug/L	P432883	
		Thiamethoxam	0.013		ug/L	P432883	
		Tolfenpyrad	0.0020	U	ug/L	P432883	
		Triclopyr	0.0040	U	ug/L	P432883	
2425724	EPA 200.7 Rev. 4.4	Calcium	107		mg/L	P432849	
		Iron	140		ug/L	P432849	
		Magnesium	13.6		mg/L	P432849	
		Potassium	7.9		mg/L	P432849	
		Sodium	65.6		mg/L	P432849	
		Strontium	3.45E+03		ug/L	P432849	
		Tin	3.3	I	ug/L	P432849	
		Titanium	0.75	U	ug/L	P432849	
		Vanadium	2.5	I	ug/L	P432849	
		Zinc	5.0	U	ug/L	P432849	
	EPA 200.8 Rev. 5.4	Aluminum	18	I	ug/L	P432849	

Field ID: G3SD0120

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425724	EPA 200.8 Rev. 5.4	Antimony	0.24		ug/L	P432849	
		Arsenic	1.38		ug/L	P432849	
		Barium	40.8		ug/L	P432849	
		Beryllium	0.010	U	ug/L	P432849	
		Boron	67.5		ug/L	P432849	
		Cadmium	0.020	U	ug/L	P432849	
		Chromium	0.40	U	ug/L	P432849	
		Cobalt	0.107		ug/L	P432849	
		Copper	0.43	I	ug/L	P432849	
		Lead	0.20	U	ug/L	P432849	
		Manganese	48.1		ug/L	P432849	
		Molybdenum	4.33		ug/L	P432849	
		Nickel	1.2	I	ug/L	P432849	
		Selenium	0.53	I	ug/L	P432849	
		Silver	0.010	U	ug/L	P432849	
	SM 2340 B-2011	Thallium	0.10	U	ug/L	P432849	
		Hardness	323		mg/L	P432849	

Sample Location: SHELLCREEKRESERVOIR MID

Collection Date/Time: 07/19/2023 10:05

Field ID: G3SD0204

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425709	DEP SOP: NU-094-1	Color (true)	150		PCU	P432790	
	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P432798	
	EPA 300.0 Rev. 2.1	Chloride	80		mg Cl/L	P433121	
		Sulfate	95		mg SO4/L	P433124	
	SM 2320 B-2011	Total Alkalinity	86		mg CaCO3/L	P432942	
	SM 2540 C-2015	TDS	417		mg/L	P433337	
	SM 2540 D-2015	TSS	4	I	mg/L	P433187	
2425710	SM 4500-F- C-2011	Fluoride	0.29		mg F/L	P432944	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.064		mg N/L	P432999	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P432966	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P432951	
	EPA 365.1 Rev. 2.0	Total-P	0.20		mg P/L	P432889	
2425723	EPA 8321B	SM 5310 B-2011	Organic Carbon	22	mg C/L	P432967	
		2,4-D	0.038		ug/L	P432883	
		Acesulfame K	0.10	U	ug/L	P432878	RPD
		2,4,5-T	0.0040	U	ug/L	P432883	
		AMPA	2.0		ug/L	P432878	MS
		Acetaminophen	0.0080	U	ug/L	P432883	
		Acetamiprid	0.0020	U	ug/L	P432883	
		Endothall	0.25	U	ug/L	P432878	
		Glufosinate	0.10	U	ug/L	P432878	
		Glyphosate	2.0		ug/L	P432878	
		Afidopyropen	0.0020	U	ug/L	P432883	
		Bentazon	0.029		ug/L	P432883	
		Sucralose	0.010	U	ug/L	P432878	RPD
		Benzovindiflupyr	0.0020	U	ug/L	P432883	
		Carbamazepine	8.0E-04	U	ug/L	P432883	
		Clothianidin	0.042		ug/L	P432883	
		Dinotefuran	0.0020	U	ug/L	P432883	
		Diuron	0.13		ug/L	P432883	MS
		Fenuron	0.032	U	ug/L	P432883	
		Fluridone	0.0028	I	ug/L	P432883	
		Imazapyr	0.0061	I	ug/L	P432883	
		Hydrocodone	0.0020	U	ug/L	P432883	
		Ibuprofen	0.080	U	ug/L	P432883	
		Imidacloprid	0.15		ug/L	P432883	
		Linuron	0.0040	U	ug/L	P432883	
		Mandestrobin	0.0020	U	ug/L	P432883	
		MCP	0.0020	U	ug/L	P432883	
		Naproxen	0.0080	U	ug/L	P432883	
		Primidone	0.0040	U	ug/L	P432883	
		Pyraclostrobin	0.0020	U	ug/L	P432883	
		Silvex	0.0040	U	ug/L	P432883	
		Thiamethoxam	0.053		ug/L	P432883	

Field ID: G3SD0204

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425723	EPA 8321B	Tolfenpyrad	0.0020	U	ug/L	P432883	
		Triclopyr	0.0040	U	ug/L	P432883	
2425725	EPA 200.7 Rev. 4.4	Calcium	58.1		mg/L	P432849	
		Iron	640		ug/L	P432849	
		Magnesium	19.2		mg/L	P432849	
		Potassium	12.8		mg/L	P432849	
		Sodium	35.7		mg/L	P432849	
		Strontium	4.32E+03		ug/L	P432849	
		Tin	4.4	I	ug/L	P432849	
		Titanium	1.1	I	ug/L	P432849	
		Vanadium	3.4	I	ug/L	P432849	
		Zinc	5.0	U	ug/L	P432849	
	EPA 200.8 Rev. 5.4	Aluminum	65		ug/L	P432849	
		Antimony	0.16	I	ug/L	P432849	
		Arsenic	1.15		ug/L	P432849	
		Barium	42.4		ug/L	P432849	
		Beryllium	0.010	U	ug/L	P432849	
		Boron	72.3		ug/L	P432849	
		Cadmium	0.020	U	ug/L	P432849	
		Chromium	0.56	I	ug/L	P432849	
		Cobalt	0.138		ug/L	P432849	
		Copper	1.09		ug/L	P432849	
		Lead	0.20	U	ug/L	P432849	
		Manganese	54.9		ug/L	P432849	
		Molybdenum	0.64		ug/L	P432849	
		Nickel	0.82	I	ug/L	P432849	
		Selenium	0.30	I	ug/L	P432849	
		Silver	0.010	U	ug/L	P432849	
		Thallium	0.10	U	ug/L	P432849	
	SM 2340 B-2011	Hardness	224		mg/L	P432849	
2425727	EPA 8270E	Oxybenzone**	10	U	ng/L	P432740	
		Acetochlor	0.20	U	ng/L	P432740	
		Octinoxate**	150	U	ng/L	P432740	
		Alachlor	0.41	U	ng/L	P432740	
		Avobenzone**	100	U	ng/L	P432740	
		Ametryn	2.4	I	ng/L	P432740	
		Atrazine	7.8		ng/L	P432740	
		PBDE-47**	4.1	U	ng/L	P432740	
		Atrazine Desethyl	4.3	I	ng/L	P432740	
		PBDE-99**	5.1	U	ng/L	P432740	
		Azinphos Methyl	3.1	U	ng/L	P432740	
		Tri-o-cresyl Phosphate**	6.1	U	ng/L	P432740	
		Azoxystrobin	2.7		ng/L	P432740	
		Bromacil	100		ng/L	P432740	

Field ID: G3SD0204

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425727	EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)**	12	U	ng/L	P432740	LCS, MS
		Butylate	0.20	U	ng/L	P432740	
		Dechlorane Plus**	31	U	ng/L	P432740	
		Caffeine**	7.7	U	ng/L	P432740	
		Dechlorane 602**	5.1	UJ	ng/L	P432740	
		Carbophenothion	0.51	U	ng/L	P432740	
		Dechlorane 603**	4.1	U	ng/L	P432740	
		Carfentrazone Ethyl	0.15	U	ng/L	P432740	
		Hexabromobenzene**	6.1	U	ng/L	P432740	
		Chlorfenapyr	0.31	U	ng/L	P432740	
		PBB-153**	8.2	U	ng/L	P432740	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P432740	
		Pentabromotoluene**	3.1	U	ng/L	P432740	
		Chlorpyrifos Methyl	0.10	U	ng/L	P432740	
		Tris(2-chloroethyl) phosphate (TCEP)**	71	U	ng/L	P432740	
		Coumaphos	1.1	U	ng/L	P432740	
		Tris(1-chloro-2-propyl) phosphate (TCPP)**	15	U	ng/L	P432740	
		Cyanazine	5.1	U	ng/L	P432740	
		Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)**	2.6	U	ng/L	P432740	
		Cyprodinil	0.20	U	ng/L	P432740	
		Tetradecachloro-m-terphenyl**	7.7	U	ng/L	P432740	
		Demeton	3.6	U	ng/L	P432740	
		Diazinon	0.13	U	ng/L	P432740	
		Difenoconazole	0.61	U	ng/L	P432740	
		Dimethenamid	0.10	U	ng/L	P432740	
		Dimethomorph	0.31	U	ng/L	P432740	
		Disulfoton	0.61	U	ng/L	P432740	
		Dithiopyr	1.0	U	ng/L	P432740	
		EPTC	0.51	U	ng/L	P432740	
		Ethion	0.31	U	ng/L	P432740	
		Ethoprop	0.13	U	ng/L	P432740	
		Etridiazole	0.10	U	ng/L	P432740	
		Fenamiphos	0.46	U	ng/L	P432740	
		Fenbuconazole	3.8		ng/L	P432740	
		Fipronil	0.20	U	ng/L	P432740	
		Fipronil Desulfinyl**	0.10	U	ng/L	P432740	
		Fipronil Sulfide	0.10	U	ng/L	P432740	
		Fipronil Sulfone	0.10	U	ng/L	P432740	
		Fluazifop-P-butyl	0.10	U	ng/L	P432740	
		Fludioxonil	0.10	U	ng/L	P432740	
		Flumioxazin	3.1	U	ng/L	P432740	
		Flutolanil	0.10	U	ng/L	P432740	
		Fluxapyroxad	0.26	U	ng/L	P432740	
		Fonofos	0.15	U	ng/L	P432740	

Field ID: G3SD0204

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2425727	EPA 8270E	Hexazinone	4.9		ng/L	P432740	
		Imazalil	0.66	U	ng/L	P432740	
		Iprodione	0.51	UJ	ng/L	P432740	CCV
		Loratadine**	0.31	UJ	ng/L	P432740	CCV
		Malathion	0.36	U	ng/L	P432740	
		Metalaxyl	170		ng/L	P432740	
		Metolachlor	4.2		ng/L	P432740	
		Metribuzin	0.41	U	ng/L	P432740	
		Mevinphos	1.0	U	ng/L	P432740	
		Molinate	0.26	U	ng/L	P432740	
		Myclobutanil	0.36	U	ng/L	P432740	
		Naled	2.6	U	ng/L	P432740	
		Napropamide	0.71	U	ng/L	P432740	
		Norflurazon	350		ng/L	P432740	
		Oxadiazon	0.54	I	ng/L	P432740	
		Oxyfluorfen	0.20	U	ng/L	P432740	
		Parathion Ethyl	0.15	U	ng/L	P432740	
		Parathion Methyl	0.20	U	ng/L	P432740	
		Pendimethalin	0.77	U	ng/L	P432740	
		Phenytol**	5.4	U	ng/L	P432740	
		Phorate	0.26	U	ng/L	P432740	
		Prodiamine	0.20	U	ng/L	P432740	
		Prometon	3.1	U	ng/L	P432740	
		Prometryn	0.36	U	ng/L	P432740	
		Pronamide	0.10	U	ng/L	P432740	
		Propanil	0.10	U	ng/L	P432740	
		Propargite	0.82	U	ng/L	P432740	
		Propiconazole	0.61	U	ng/L	P432740	
		Pyraflufen Ethyl	0.31	U	ng/L	P432740	
		Pyridaben	1.4	U	ng/L	P432740	
		Pyriproxyfen	0.26	U	ng/L	P432740	
		Simazine	1.7		ng/L	P432740	
		Stirophos	0.41	U	ng/L	P432740	
		Sulfentrazone	5.8	I	ng/L	P432740	
		Tebuconazole	1.4	U	ng/L	P432740	
		Terbufos	0.20	U	ng/L	P432740	
		Terbuthylazine	0.20	U	ng/L	P432740	
		Thiobencarb	0.51	U	ng/L	P432740	
		Triadimefon	0.15	U	ng/L	P432740	
2425742	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.14		mg P/L	P432794	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 8270E: Refer to the Lab Analysis Report for an explanation of QC Codes.

EPA 8270E: MS accuracy for hexazinone and norflurazon 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.

Quality Assurance Report Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P432790

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432798

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432849

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: P432849

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: P433121

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: P433124

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432999

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432966

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432951

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432889

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432794

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

Reference Method: EPA 8270E
Batch ID: P432740

Component	Result	Code	Units
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	12	U	ng/L
Acetochlor	0.20	U	ng/L
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Atrazine Desethyl	1.3	U	ng/L
Avobenzone	100	U	ng/L
Avobenzone	100	U	ng/L
Azinphos Methyl	3.0	U	ng/L
Azinphos Methyl	3.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432740

Component	Result	Code	Units
Azoxystrobin	0.40	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.20	U	ng/L
Butylate	0.20	U	ng/L
Caffeine	7.5	U	ng/L
Caffeine	7.5	U	ng/L
Carbophenothion	0.50	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorfenapyr	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Coumaphos	1.0	U	ng/L
Coumaphos	1.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyanazine	5.0	U	ng/L
Cyprodinil	0.20	U	ng/L
Cyprodinil	0.20	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 602	5.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane 603	4.0	U	ng/L
Dechlorane Plus	30	U	ng/L
Dechlorane Plus	30	U	ng/L
Demeton	3.5	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethenamid	0.10	U	ng/L
Dimethomorph	0.30	U	ng/L
Dimethomorph	0.30	U	ng/L
Disulfoton	0.60	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Ethoprop	0.12	U	ng/L
Etridiazole	0.10	U	ng/L
Etridiazole	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432740

Component	Result	Code	Units
Fenamiphos	0.45	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Fonofos	0.15	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexabromobenzene	6.0	U	ng/L
Hexazinone	0.50	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Iprodione	0.50	U	ng/L
Loratadine	0.30	U	ng/L
Loratadine	0.30	U	ng/L
Malathion	0.35	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.50	U	ng/L
Metalaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Naled	2.5	U	ng/L
Napropamide	0.70	U	ng/L
Napropamide	0.70	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432740

Component	Result	Code	Units
Norflurazon	1.0	U	ng/L
Norflurazon	1.0	U	ng/L
Octinoxate	150	U	ng/L
Octinoxate	150	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxybenzone	10	U	ng/L
Oxybenzone	10	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Parathion Methyl	0.20	U	ng/L
PBB-153	8.0	U	ng/L
PBB-153	8.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-47	4.0	U	ng/L
PBDE-99	5.0	U	ng/L
PBDE-99	5.0	U	ng/L
Pendimethalin	0.75	U	ng/L
Pendimethalin	0.75	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Pentabromotoluene	3.0	U	ng/L
Phenytoin	5.3	U	ng/L
Phenytoin	5.3	U	ng/L
Phorate	0.25	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L
Pronamide	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propanil	0.10	U	ng/L
Propargite	0.80	U	ng/L
Propargite	0.80	U	ng/L
Propiconazole	0.60	U	ng/L
Propiconazole	0.60	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyraflufen Ethyl	0.30	U	ng/L
Pyridaben	1.4	U	ng/L
Pyridaben	1.4	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Simazine	0.25	U	ng/L
Stirophos	0.40	U	ng/L
Stirophos	0.40	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P432740

Component	Result	Code	Units
Sulfentrazone	1.4	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Tetradecachloro-m-terphenyl	7.5	U	ng/L
Thiobencarb	0.50	U	ng/L
Thiobencarb	0.50	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Tri-o-cresyl Phosphate	6.0	U	ng/L
Triadimefon	0.15	U	ng/L
Triadimefon	0.15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1-chloro-2-propyl) phosphate (TCPP)	15	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	2.5	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L
Tris(2-chloroethyl) phosphate (TCEP)	70	U	ng/L

Reference Method: EPA 8321B

Batch ID: P432878

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: P432883

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B

Batch ID: P432883

Component	Result	Code	Units
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: SM 2320 B-2011

Batch ID: P432942

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

Reference Method: SM 2540 C-2015

Batch ID: P433337

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-2015

Batch ID: P433187

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500-F- C-2011

Batch ID: P432944

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011

Batch ID: P432967

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: P432790

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	97.8		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432798

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432849

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	109		P	85 - 115
Iron	107		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	105		P	85 - 115
Sodium	106		P	85 - 115
Strontium	103		P	85 - 115
Tin	106		P	85 - 115
Titanium	103		P	85 - 115
Vanadium	103		P	85 - 115
Zinc	105		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432849

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	97.1		P	80 - 120
Antimony	98.2		P	80 - 120
Arsenic	96.6		P	80 - 120
Barium	101		P	80 - 120
Beryllium	92.4		P	80 - 120
Boron	94.9		P	80 - 120
Cadmium	97.8		P	80 - 120
Chromium	92.4		P	80 - 120
Cobalt	95.7		P	80 - 120
Copper	96.6		P	80 - 120
Lead	91.6		P	80 - 120
Manganese	93.3		P	80 - 120
Molybdenum	96.3		P	80 - 120
Nickel	94.1		P	80 - 120
Selenium	98.5		P	80 - 120
Silver	114		P	80 - 120
Thallium	93.4		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433121

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433124

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432999

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.4		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432966

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432951

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432889

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432794

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

Reference Method: EPA 8270E
Batch ID: P432740

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	73.6		P	42 - 162
Acetochlor	83.5		P	69 - 123
Alachlor	102		P	65 - 118
Ametryn	106		P	58 - 141
Atrazine	86.4		P	73 - 118
Atrazine Desethyl	96.8		P	32 - 125
Avobenzone	80.7		P	40 - 203
Azinphos Methyl	79.5		P	36 - 197
Azoxystrobin	86.7		P	58 - 226
Bromacil	86.7		P	48 - 120
Butylate	62.7		P	27 - 85.0
Caffeine	91.9		P	40 - 137
Carbophenothion	105		P	54 - 132
Carfentrazone Ethyl	122		P	60 - 142
Chlorfenapyr	94.9		P	53 - 117
Chlorpyrifos Ethyl	86.0		P	59 - 116

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432740

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlorpyrifos Methyl	95.3		P	66 - 119
Coumaphos	102		P	11 - 234
Cyanazine	190		P	61 - 248
Cyprodinil	114		P	50 - 147
Dechlorane 602	32.3		F	50 - 150
Dechlorane 603	86.1		P	50 - 150
Dechlorane Plus	76.3		P	47 - 182
Demeton	77.6		P	30 - 138
Diazinon	106		P	67 - 126
Difenoconazole	67.9		P	38 - 205
Dimethenamid	78.0		P	57 - 111
Dimethomorph	147		P	16 - 212
Disulfoton	90.1		P	46 - 126
Dithiopyr	90.3		P	62 - 115
EPTC	58.7		P	28 - 80.0
Ethion	32.8		P	24 - 122
Ethoprop	90.5		P	62 - 113
Etridiazole	63.1		P	28 - 92.0
Fenamiphos	66.2		P	57 - 128
Fenbuconazole	83.0		P	52 - 155
Fipronil	97.7		P	63 - 130
Fipronil Desulfinyl	101		P	61 - 130
Fipronil Sulfide	95.4		P	56 - 117
Fipronil Sulfone	87.1		P	52 - 118
Fluazifop-P-butyl	101		P	61 - 128
Fludioxonil	77.6		P	59 - 129
Flumioxazin	88.6		P	30 - 250
Flutolanil	71.0		P	53 - 127
Fluxapyroxad	60.0		P	42 - 132
Fonofos	93.0		P	61 - 110
Hexabromobenzene	91.9		P	50 - 150
Hexazinone	77.9		P	46 - 139
Imazalil	76.0		P	40 - 139
Iprodione	82.0		P	40 - 146
Loratadine	152		P	10 - 224
Malathion	93.8		P	61 - 135
Metalaxyl	86.1		P	58 - 121
Metolachlor	88.9		P	64 - 118
Metribuzin	87.5		P	45 - 245
Mevinphos	90.3		P	49 - 118
Molinate	59.1		P	42 - 92.0
Myclobutanil	82.0		P	55 - 127
Naled	41.0		P	10 - 114
Napropamide	45.9		P	39 - 121
Norflurazon	92.5		P	55 - 129
Octinoxate	105		P	26 - 166
Oxadiazon	75.2		P	54 - 115
Oxybenzone	100		P	49 - 135
Oxyfluorfen	87.3		P	64 - 139
Parathion Ethyl	90.4		P	70 - 111
Parathion Methyl	112		P	76 - 136
PBB-153	86.7		P	50 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P432740

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
PBDE-47	61.3		P	41 - 148
PBDE-99	63.4		P	38 - 147
Pendimethalin	96.8		P	52 - 118
Pentabromotoluene	87.4		P	50 - 150
Phenytoin	18.5		P	10 - 162
Phorate	92.6		P	40 - 122
Prodiamine	53.1		P	26 - 141
Prometon	77.9		P	54 - 122
Prometryn	90.5		P	61 - 128
Pronamide	95.7		P	72 - 121
Propanil	86.2		P	45 - 144
Propargite	43.4		P	10 - 199
Propiconazole	76.4		P	56 - 127
Pyraflufen Ethyl	101		P	56 - 140
Pyridaben	106		P	26 - 211
Pyriproxyfen	43.5		P	33 - 194
Simazine	76.4		P	67 - 121
Stirophos	31.8		P	20 - 142
Sulfentrazone	45.9		P	21 - 144
Tebuconazole	34.0		P	10 - 122
Terbufos	98.2		P	60 - 129
Terbutylazine	88.8		P	69 - 113
Tetradecachloro-m-terphenyl	132		P	70 - 200
Thiobencarb	78.8		P	51 - 120
Tri-o-cresyl Phosphate	86.6		P	49 - 150
Triadimefon	80.5		P	56 - 114
Tris(1-chloro-2-propyl) phosphate (TCPP)	95.6		P	50 - 150
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	83.6		P	50 - 150
Tris(2-chloroethyl) phosphate (TCEP)	86.7		P	70 - 180

Reference Method: EPA 8321B

Batch ID: P432878

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	94.8		P	40 - 150
AMPA	144		P	40 - 150
Endothall	106		P	40 - 150
Glufosinate	93.4		P	40 - 150
Glyphosate	91.5		P	40 - 150
Sucralose	83.8		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432883

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	81.8		P	40 - 150
2,4,5-T	70.3		P	40 - 150
Acetaminophen	79.0		P	30 - 150
Acetamiprid	79.5		P	40 - 150
Afidopyropen	57.9		P	30 - 150
Bentazon	126		P	30 - 150
Benzovindiflupyr	78.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B

Batch ID: P432883

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbamazepine	69.8		P	40 - 150
Clothianidin	88.8		P	40 - 150
Dinotefuran	88.5		P	40 - 150
Diuron	44.0		P	40 - 150
Fenuron	96.2		P	40 - 150
Fluridone	98.8		P	40 - 150
Hydrocodone	80.8		P	40 - 150
Ibuprofen	72.5		P	40 - 150
Imazapyr	79.8		P	40 - 150
Imidacloprid	73.2		P	40 - 150
Linuron	52.1		P	40 - 150
Mandestrobin	81.4		P	40 - 150
MCPP	86.2		P	40 - 150
Naproxen	69.0		P	40 - 150
Primidone	68.7		P	40 - 150
Pyraclostrobin	74.0		P	40 - 150
Silvex	87.9		P	40 - 150
Thiamethoxam	98.3		P	40 - 150
Tolfenpyrad	56.8		P	30 - 150
Triclopyr	70.8		P	40 - 150

Reference Method: SM 2320 B-2011

Batch ID: P432942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	95.7		P	92 - 105

Reference Method: SM 2540 C-2015

Batch ID: P433337

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

Reference Method: SM 2540 D-2015

Batch ID: P433187

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	94.1		P	85 - 106

Reference Method: SM 4500-F- C-2011

Batch ID: P432944

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.0		P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P432967

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P432849

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425656	Calcium	108	106	P/P	80 - 120
2425656	Iron	107	107	P/P	80 - 120
2425656	Magnesium	107	107	P/P	80 - 120
2425656	Potassium	107	105	P/P	80 - 120
2425656	Sodium	105	105	P/P	80 - 120
2425656	Strontium	103	105	P/P	80 - 120
2425656	Tin	107	103	P/P	80 - 120
2425656	Titanium	102	102	P/P	80 - 120
2425656	Vanadium	102	102	P/P	80 - 120
2425656	Zinc	104	103	P/P	80 - 120
2425747	Calcium	101		P	80 - 120
2425747	Iron	105		P	80 - 120
2425747	Magnesium	102		P	80 - 120
2425747	Potassium	107		P	80 - 120
2425747	Sodium	105		P	80 - 120
2425747	Strontium	102		P	80 - 120
2425747	Tin	102		P	80 - 120
2425747	Titanium	103		P	80 - 120
2425747	Vanadium	104		P	80 - 120
2425747	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P432849

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425656	Aluminum	99.0	97.9	P/P	80 - 120
2425656	Antimony	100	99.6	P/P	80 - 120
2425656	Arsenic	96.9	96.0	P/P	80 - 120
2425656	Barium	102	101	P/P	80 - 120
2425656	Beryllium	92.9	93.0	P/P	80 - 120
2425656	Boron	99.3	98.7	P/P	80 - 120
2425656	Cadmium	99.3	99.0	P/P	80 - 120
2425656	Chromium	94.4	94.5	P/P	80 - 120
2425656	Cobalt	95.8	94.9	P/P	80 - 120
2425656	Copper	97.6	96.0	P/P	80 - 120
2425656	Lead	93.6	93.1	P/P	80 - 120
2425656	Manganese	94.1	94.1	P/P	80 - 120
2425656	Molybdenum	96.6	95.6	P/P	80 - 120
2425656	Nickel	94.6	93.0	P/P	80 - 120
2425656	Selenium	98.0	96.7	P/P	80 - 120
2425656	Silver	113	113	P/P	80 - 120
2425656	Thallium	96.4	96.0	P/P	80 - 120
2425747	Aluminum	96.0		P	80 - 120
2425747	Antimony	99.9		P	80 - 120
2425747	Arsenic	95.2		P	80 - 120
2425747	Barium	101		P	80 - 120
2425747	Beryllium	88.4		P	80 - 120
2425747	Boron	98.0		P	80 - 120
2425747	Cadmium	100		P	80 - 120
2425747	Chromium	92.5		P	80 - 120
2425747	Cobalt	90.6		P	80 - 120
2425747	Copper	92.6		P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432849

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425747	Lead	91.9		P	80 - 120
2425747	Manganese	92.0		P	80 - 120
2425747	Molybdenum	98.7		P	80 - 120
2425747	Nickel	88.0		P	80 - 120
2425747	Selenium	96.6		P	80 - 120
2425747	Silver	112		P	80 - 120
2425747	Thallium	95.7		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433121

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425462	Chloride	97.3		P	90 - 110
2425629	Chloride	103		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433124

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425462	Sulfate	97.1		P	90 - 110
2425629	Sulfate	99.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432999

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425630	Ammonia-N	94.8	96.6	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425770	Kjeldahl Nitrogen	101	97.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432951

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425510	NO2NO3-N	97.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432889

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425735	Total-P	105	105	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432794

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425631	O-Phosphate-P	101	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432740

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424987	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	90.9	94.8	P/P	26 - 165
2424987	Acetochlor	100	107	P/P	67 - 124
2424987	Alachlor	95.3	90.5	P/P	60 - 120
2424987	Ametryn	111	112	P/P	54 - 216
2424987	Atrazine	101	98.1	P/P	66 - 128
2424987	Atrazine Desethyl	109	101	P/P	15 - 122
2424987	Avobenzone	93.9	104	P/P	37 - 178
2424987	Azinphos Methyl	82.3	88.6	P/P	40 - 292
2424987	Azoxystrobin	103	126	P/P	35 - 220
2424987	Bromacil	114	98.6	P/P	45 - 127
2424987	Butylate	74.2	72.8	P/P	20 - 83.0
2424987	Caffeine	100	103	P/P	10 - 194
2424987	Carbophenothion	109	108	P/P	57 - 127
2424987	Carfentrazone Ethyl	136	139	P/P	51 - 141
2424987	Chlorfenapyr	96.5	109	P/P	46 - 111
2424987	Chlorpyrifos Ethyl	82.7	77.2	P/P	52 - 120
2424987	Chlorpyrifos Methyl	107	108	P/P	63 - 119
2424987	Coumaphos	132	147	P/P	10 - 228
2424987	Cyanazine	227	225	P/P	59 - 241
2424987	Cyprodinil	126	125	P/P	47 - 146
2424987	Dechlorane 602	44.4	40.8	F/F	50 - 150
2424987	Dechlorane 603	91.5	98.0	P/P	50 - 150
2424987	Dechlorane Plus	80.9	84.4	P/P	50 - 150
2424987	Demeton	94.1	101	P/P	40 - 136
2424987	Diazinon	130	130	P/P	69 - 132
2424987	Difenoconazole	93.6	99.5	P/P	57 - 258
2424987	Dimethenamid	90.3	95.9	P/P	54 - 110
2424987	Dimethomorph	173	202	P/P	28 - 210
2424987	Disulfoton	110	113	P/P	43 - 133
2424987	Dithiopyr	102	101	P/P	39 - 116
2424987	EPTC	60.8	63.6	P/P	20 - 78.0
2424987	Ethion	54.8	47.8	P/P	17 - 119
2424987	Ethoprop	107	114	P/P	66 - 120
2424987	Etridiazole	75.1	76.9	P/P	28 - 96.0
2424987	Fenamiphos	48.9	49.4	P/P	41 - 126
2424987	Fenbuconazole	94.9	120	P/P	42 - 169
2424987	Fipronil	115	119	P/P	61 - 132
2424987	Fipronil Desulfinyl	123	120	P/P	56 - 132
2424987	Fipronil Sulfide	111	110	P/P	48 - 119
2424987	Fipronil Sulfone	114	109	P/P	42 - 131
2424987	Fluazifop-P-butyl	119	120	P/P	53 - 131
2424987	Fludioxonil	98.5	95.0	P/P	56 - 127
2424987	Flumioxazin	128	137	P/P	19 - 300
2424987	Flutolanil	96.5	93.4	P/P	41 - 127
2424987	Fluxapyroxad	83.5	85.9	P/P	42 - 172
2424987	Fonofos	104	108	P/P	59 - 113
2424987	Hexabromobenzene	105	115	P/P	50 - 150
2424987	Imazalil	113	113	P/P	21 - 283
2424987	Iprodione	106	99.6	P/P	43 - 150
2424987	Loratadine	151	193	P/P	23 - 201
2424987	Malathion	106	89.5	P/P	58 - 136
2424987	Metalaxyl	82.7	80.0	P/P	55 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P432740

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424987	Metolachlor	114	94.5	P/P	57 - 121
2424987	Metribuzin	104	114	P/P	58 - 294
2424987	Mevinphos	104	121	P/P	50 - 126
2424987	Molinate	69.7	75.4	P/P	42 - 93.0
2424987	Myclobutanil	103	103	P/P	55 - 125
2424987	Naled	51.7	57.1	P/P	18 - 200
2424987	Napropamide	85.0	74.8	P/P	39 - 110
2424987	Octinoxate	113	119	P/P	21 - 159
2424987	Oxadiazon	86.4	84.5	P/P	43 - 112
2424987	Oxybenzone	114	123	P/P	41 - 142
2424987	Oxyfluorfen	126	122	P/P	64 - 153
2424987	Parathion Ethyl	100	102	P/P	69 - 114
2424987	Parathion Methyl	132	129	P/P	79 - 139
2424987	PBB-153	96.0	109	P/P	50 - 150
2424987	PBDE-47	75.5	74.8	P/P	27 - 144
2424987	PBDE-99	75.2	75.4	P/P	18 - 150
2424987	Pendimethalin	108	105	P/P	50 - 139
2424987	Pentabromotoluene	102	106	P/P	50 - 150
2424987	Phenytoin	28.6	29.1	P/P	10 - 146
2424987	Phorate	115	118	P/P	54 - 161
2424987	Prodiamine	61.7	64.5	P/P	30 - 161
2424987	Prometon	96.7	107	P/P	45 - 134
2424987	Prometryn	104	108	P/P	45 - 137
2424987	Pronamide	116	116	P/P	65 - 133
2424987	Propanil	101	101	P/P	49 - 142
2424987	Propargite	60.4	57.4	P/P	10 - 203
2424987	Propiconazole	88.8	99.2	P/P	38 - 146
2424987	Pyraflufen Ethyl	113	112	P/P	34 - 153
2424987	Pyridaben	115	134	P/P	12 - 192
2424987	Pyriproxyfen	67.6	61.2	P/P	33 - 180
2424987	Simazine	92.7	81.3	P/P	51 - 157
2424987	Stiropfos	61.2	36.8	P/P	10 - 128
2424987	Sulfentrazone	100	118	P/P	53 - 186
2424987	Tebuconazole	55.8	49.3	P/P	10 - 133
2424987	Terbufos	124	129	P/P	65 - 139
2424987	Terbutylazine	110	105	P/P	66 - 117
2424987	Tetradecachloro-m-terphenyl	135	149	P/P	70 - 200
2424987	Thiobencarb	97.6	81.6	P/P	51 - 119
2424987	Tri-o-cresyl Phosphate	92.6	97.8	P/P	31 - 144
2424987	Triadimefon	104	108	P/P	48 - 119
2424987	Tris(1-chloro-2-propyl) phosphate (TCPP)	102	104	P/P	50 - 150
2424987	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	97.1	102	P/P	50 - 150
2424987	Tris(2-chloroethyl) phosphate (TCEP)	92.4	95.0	P/P	70 - 180

Reference Method: EPA 8321B

Batch ID: P432878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424967	Acesulfame K	60.0	81.4	P/P	40 - 150
2424967	AMPA	25.0	25.9	F/F	40 - 150
2424967	Endothall	133	124	P/P	40 - 150
2424967	Glufosinate	42.6	42.5	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B

Batch ID: P432878

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2424967	Glyphosate	79.8	82.6	P/P	40 - 150
2424967	Sucralose	91.2	125	P/P	40 - 150

Reference Method: EPA 8321B

Batch ID: P432883

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425633	2,4-D	113	118	P/P	40 - 150
2425633	2,4,5-T	109	104	P/P	40 - 150
2425633	Acetaminophen	99.4	98.4	P/P	30 - 150
2425633	Acetamiprid	60.0	61.8	P/P	40 - 150
2425633	Afidopyropen	66.9	73.3	P/P	30 - 150
2425633	Bentazon	119	117	P/P	30 - 150
2425633	Benzovindiflupyr	80.7	79.7	P/P	40 - 150
2425633	Carbamazepine	50.0	55.9	P/P	40 - 150
2425633	Clothianidin	87.2	84.9	P/P	40 - 150
2425633	Dinotefuran	67.5	82.3	P/P	40 - 150
2425633	Diuron	31.6	34.4	F/F	40 - 150
2425633	Fenuron	61.1	64.6	P/P	40 - 150
2425633	Fluridone	87.9	90.3	P/P	40 - 150
2425633	Hydrocodone	60.2	62.3	P/P	40 - 150
2425633	Ibuprofen	66.2	69.8	P/P	40 - 150
2425633	Imazapyr	95.7	98.5	P/P	40 - 150
2425633	Imidacloprid	115	120	P/P	40 - 150
2425633	Linuron	52.8	50.5	P/P	40 - 150
2425633	Mandestrobin	80.0	85.3	P/P	40 - 150
2425633	MCPP	124	123	P/P	40 - 150
2425633	Naproxen	128	128	P/P	40 - 150
2425633	Primidone	78.0	75.2	P/P	40 - 150
2425633	Pyraclostrobin	77.3	76.6	P/P	40 - 150
2425633	Silvex	116	114	P/P	40 - 150
2425633	Thiamethoxam	76.5	76.7	P/P	40 - 150
2425633	Tolfenpyrad	57.7	56.4	P/P	30 - 150
2425633	Triclopyr	102	103	P/P	40 - 150

Reference Method: SM 4500-F- C-2011

Batch ID: P432944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2426008	Fluoride	96.4	97.2	P/P	94 - 106

Reference Method: SM 5310 B-2011

Batch ID: P432967

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2425464	Organic Carbon	94.4	95.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P432790

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425629	Color (true)	1.11	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P432798

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425505	Turbidity	8.07	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P432849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425656	Calcium	1.14	Spike	P	0 - 20
2425656	Iron	0.337	Spike	P	0 - 20
2425656	Magnesium	0.368	Spike	P	0 - 20
2425656	Potassium	1.04	Spike	P	0 - 20
2425656	Sodium	0.449	Spike	P	0 - 20
2425656	Strontium	1.52	Spike	P	0 - 20
2425656	Tin	3.06	Spike	P	0 - 20
2425656	Titanium	0.189	Spike	P	0 - 20
2425656	Vanadium	0.101	Spike	P	0 - 20
2425656	Zinc	0.194	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P432849

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425656	Aluminum	1.10	Spike	P	0 - 20
2425656	Antimony	0.915	Spike	P	0 - 20
2425656	Arsenic	0.969	Spike	P	0 - 20
2425656	Barium	0.511	Spike	P	0 - 20
2425656	Beryllium	0.114	Spike	P	0 - 20
2425656	Boron	0.554	Spike	P	0 - 20
2425656	Cadmium	0.272	Spike	P	0 - 20
2425656	Chromium	0.174	Spike	P	0 - 20
2425656	Cobalt	0.923	Spike	P	0 - 20
2425656	Copper	1.71	Spike	P	0 - 20
2425656	Lead	0.541	Spike	P	0 - 20
2425656	Manganese	0.00874	Spike	P	0 - 20
2425656	Molybdenum	0.967	Spike	P	0 - 20
2425656	Nickel	1.68	Spike	P	0 - 20
2425656	Selenium	1.42	Spike	P	0 - 20
2425656	Silver	0.0993	Spike	P	0 - 20
2425656	Thallium	0.512	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433121

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425462	Chloride	0.127	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P433124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425462	Sulfate	0.0	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P432999

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425630	Ammonia-N	1.77	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P432966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425770	Kjeldahl Nitrogen	2.80	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P432951

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425510	NO2NO3-N	0.514	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P432889

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425735	Total-P	0.0212	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P432794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425631	O-Phosphate-P	1.18	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P432740

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424987	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	4.17	Spike	P	0 - 37
2424987	Acetochlor	6.80	Spike	P	0 - 28

Quality Assurance Report

Precision

Reference Method: EPA 8270E
Batch ID: P432740

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424987	Alachlor	5.23	Spike	P	0 - 30
2424987	Ametryn	1.23	Spike	P	0 - 32
2424987	Atrazine	2.49	Spike	P	0 - 41
2424987	Atrazine Desethyl	7.62	Spike	P	0 - 36
2424987	Avobenzone	10.4	Spike	P	0 - 36
2424987	Azinphos Methyl	7.34	Spike	P	0 - 75
2424987	Azoxystrobin	19.6	Spike	P	0 - 39
2424987	Bromacil	12.4	Spike	P	0 - 33
2424987	Butylate	1.92	Spike	P	0 - 44
2424987	Caffeine	2.56	Spike	P	0 - 74
2424987	Carbophenothion	1.48	Spike	P	0 - 25
2424987	Carfentrazone Ethyl	2.17	Spike	P	0 - 27
2424987	Chlorfenapyr	11.8	Spike	P	0 - 24
2424987	Chlorpyrifos Ethyl	6.95	Spike	P	0 - 26
2424987	Chlorpyrifos Methyl	0.496	Spike	P	0 - 26
2424987	Coumaphos	10.5	Spike	P	0 - 28
2424987	Cyanazine	0.924	Spike	P	0 - 48
2424987	Cyprodinil	0.497	Spike	P	0 - 29
2424987	Dechlorane 602	8.29	Spike	P	0 - 30
2424987	Dechlorane 603	6.90	Spike	P	0 - 30
2424987	Dechlorane Plus	4.25	Spike	P	0 - 30
2424987	Demeton	6.86	Spike	P	0 - 33
2424987	Diazinon	0.326	Spike	P	0 - 29
2424987	Difenoconazole	6.09	Spike	P	0 - 34
2424987	Dimethenamid	6.02	Spike	P	0 - 39
2424987	Dimethomorph	15.7	Spike	P	0 - 51
2424987	Disulfoton	2.72	Spike	P	0 - 30
2424987	Dithiopyr	0.951	Spike	P	0 - 26
2424987	EPTC	4.50	Spike	P	0 - 43
2424987	Ethion	13.6	Spike	P	0 - 79
2424987	Ethoprop	6.58	Spike	P	0 - 29
2424987	Etridiazole	2.34	Spike	P	0 - 33
2424987	Fenamiphos	0.986	Spike	P	0 - 40
2424987	Fenbuconazole	23.1	Spike	P	0 - 74
2424987	Fipronil	3.82	Spike	P	0 - 29
2424987	Fipronil Desulfinyl	2.35	Spike	P	0 - 32
2424987	Fipronil Sulfide	1.32	Spike	P	0 - 30
2424987	Fipronil Sulfone	4.57	Spike	P	0 - 33
2424987	Fluazifop-P-butyl	1.08	Spike	P	0 - 38
2424987	Fludioxonil	3.67	Spike	P	0 - 29
2424987	Flumioxazin	6.65	Spike	P	0 - 51
2424987	Flutolanil	3.20	Spike	P	0 - 25
2424987	Fluxapyroxad	2.39	Spike	P	0 - 45
2424987	Fonofos	3.65	Spike	P	0 - 27
2424987	Hexabromobenzene	8.98	Spike	P	0 - 30
2424987	Hexazinone	1.27	Spike	P	0 - 30
2424987	Imazalil	0.502	Spike	P	0 - 100
2424987	Iprodione	6.25	Spike	P	0 - 33
2424987	Loratadine	24.0	Spike	P	0 - 56
2424987	Malathion	16.4	Spike	P	0 - 37
2424987	Metalaxyl	2.81	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P432740

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424987	Metolachlor	17.4	Spike	P	0 - 29
2424987	Metribuzin	9.30	Spike	P	0 - 45
2424987	Mevinphos	14.8	Spike	P	0 - 29
2424987	Molinate	7.82	Spike	P	0 - 33
2424987	Myclobutanil	0.459	Spike	P	0 - 26
2424987	Naled	10.0	Spike	P	0 - 37
2424987	Napropamide	12.9	Spike	P	0 - 44
2424987	Norflurazon	2.02	Spike	P	0 - 30
2424987	Octinoxate	5.12	Spike	P	0 - 45
2424987	Oxadiazon	1.89	Spike	P	0 - 28
2424987	Oxybenzone	7.17	Spike	P	0 - 46
2424987	Oxyfluorfen	3.28	Spike	P	0 - 28
2424987	Parathion Ethyl	1.33	Spike	P	0 - 31
2424987	Parathion Methyl	1.78	Spike	P	0 - 29
2424987	PBB-153	12.3	Spike	P	0 - 30
2424987	PBDE-47	0.935	Spike	P	0 - 36
2424987	PBDE-99	0.271	Spike	P	0 - 40
2424987	Pendimethalin	3.46	Spike	P	0 - 33
2424987	Pentabromotoluene	4.49	Spike	P	0 - 30
2424987	Phenytoin	1.80	Spike	P	0 - 100
2424987	Phorate	2.48	Spike	P	0 - 36
2424987	Prodiamine	4.52	Spike	P	0 - 71
2424987	Prometon	9.76	Spike	P	0 - 36
2424987	Prometryn	3.58	Spike	P	0 - 28
2424987	Pronamide	0.359	Spike	P	0 - 24
2424987	Propanil	0.0493	Spike	P	0 - 28
2424987	Propargite	5.11	Spike	P	0 - 43
2424987	Propiconazole	11.1	Spike	P	0 - 33
2424987	Pyraflufen Ethyl	0.421	Spike	P	0 - 29
2424987	Pyridaben	14.6	Spike	P	0 - 30
2424987	Pyriproxyfen	9.82	Spike	P	0 - 79
2424987	Simazine	13.1	Spike	P	0 - 29
2424987	Stirophos	49.9	Spike	P	0 - 61
2424987	Sulfentrazone	16.2	Spike	P	0 - 33
2424987	Tebuconazole	12.3	Spike	P	0 - 69
2424987	Terbufos	3.49	Spike	P	0 - 29
2424987	Terbuthylazine	4.96	Spike	P	0 - 32
2424987	Tetradecachloro-m-terphenyl	10.3	Spike	P	0 - 30
2424987	Thiobencarb	17.8	Spike	P	0 - 26
2424987	Tri-o-cresyl Phosphate	5.47	Spike	P	0 - 33
2424987	Triadimefon	4.50	Spike	P	0 - 28
2424987	Tris(1-chloro-2-propyl) phosphate (TCPP)	1.84	Spike	P	0 - 30
2424987	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	4.73	Spike	P	0 - 30
2424987	Tris(2-chloroethyl) phosphate (TCEP)	2.76	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P432878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424967	Acesulfame K	30.2	Spike	F	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P432878

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2424967	AMPA	2.87	Spike	P	0 - 30
2424967	Endothall	6.61	Spike	P	0 - 30
2424967	Glufosinate	0.199	Spike	P	0 - 30
2424967	Glyphosate	3.46	Spike	P	0 - 30
2424967	Sucralose	30.8	Spike	F	0 - 30

Reference Method: EPA 8321B
Batch ID: P432883

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425633	2,4-D	4.43	Spike	P	0 - 30
2425633	2,4,5-T	4.92	Spike	P	0 - 30
2425633	Acetaminophen	1.09	Spike	P	0 - 30
2425633	Acetamiprid	3.04	Spike	P	0 - 30
2425633	Afidopyropen	9.12	Spike	P	0 - 30
2425633	Bentazon	1.48	Spike	P	0 - 30
2425633	Benzovindiflupyr	1.21	Spike	P	0 - 30
2425633	Carbamazepine	11.1	Spike	P	0 - 30
2425633	Clothianidin	2.58	Spike	P	0 - 30
2425633	Dinotefuran	19.8	Spike	P	0 - 30
2425633	Diuron	8.62	Spike	P	0 - 30
2425633	Fenuron	5.50	Spike	P	0 - 30
2425633	Fluridone	2.69	Spike	P	0 - 30
2425633	Hydrocodone	3.44	Spike	P	0 - 30
2425633	Ibuprofen	5.32	Spike	P	0 - 30
2425633	Imazapyr	2.90	Spike	P	0 - 30
2425633	Imidacloprid	4.25	Spike	P	0 - 30
2425633	Linuron	4.34	Spike	P	0 - 30
2425633	Mandestrobin	6.39	Spike	P	0 - 30
2425633	MCPP	0.402	Spike	P	0 - 30
2425633	Naproxen	0.122	Spike	P	0 - 30
2425633	Primidone	3.65	Spike	P	0 - 30
2425633	Pyraclostrobin	0.916	Spike	P	0 - 30
2425633	Silvex	2.05	Spike	P	0 - 30
2425633	Thiamethoxam	0.286	Spike	P	0 - 30
2425633	Tolfenpyrad	2.18	Spike	P	0 - 30
2425633	Triclopyr	0.638	Spike	P	0 - 30

Reference Method: SM 2320 B-2011
Batch ID: P432942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2426008	Total Alkalinity	0.850	Sample	P	0 - 3.9

Reference Method: SM 2540 C-2015
Batch ID: P433337

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

Reference Method: SM 2540 C-2015
Batch ID: P433337

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425293	TDS	5.13	Sample	P	0 - 10

Reference Method: SM 4500-F- C-2011
Batch ID: P432944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2426008	Fluoride	0.524	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P432967

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2425464	Organic Carbon	0.425	Spike	P	0 - 20

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

Quality Assurance Report Surrogates

Lab Sample ID: 2425721
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	98.7	P	30 - 160
EPA 8321B	Acetaminophen-d4	72.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	40.2	P	30 - 160
EPA 8321B	Diuron-d6	36.3	P	30 - 160
EPA 8321B	Endothall-d6	109	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	66.2	P	30 - 160
EPA 8321B	Ibuprofen-d3	72.8	P	30 - 160
EPA 8321B	Primidone-d5	68.9	P	30 - 160
EPA 8321B	Sucralose-d6	96.3	P	30 - 160

Lab Sample ID: 2425722
Field Sample ID: G3SD0120

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	107	P	30 - 160
EPA 8321B	Acetaminophen-d4	83.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	41.8	P	30 - 160
EPA 8321B	Diuron-d6	35.5	P	30 - 160
EPA 8321B	Endothall-d6	116	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	57.9	P	30 - 160
EPA 8321B	Ibuprofen-d3	73.8	P	30 - 160
EPA 8321B	Primidone-d5	83.3	P	30 - 160
EPA 8321B	Sucralose-d6	97.5	P	30 - 160

Lab Sample ID: 2425723
Field Sample ID: G3SD0204

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	73.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	39.2	P	30 - 160
EPA 8321B	Diuron-d6	33.1	P	30 - 160
EPA 8321B	Endothall-d6	119	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	71.8	P	30 - 160
EPA 8321B	Ibuprofen-d3	69.1	P	30 - 160
EPA 8321B	Primidone-d5	74.7	P	30 - 160
EPA 8321B	Sucralose-d6	85.5	P	30 - 160

Lab Sample ID: 2425726
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	61.6	P	20 - 200
EPA 8270E	Simazine-d10	84.9	P	62 - 142
EPA 8270E	Terbufos-d10	76.8	P	58 - 132
EPA 8270E	Terphenyl-d14	103	P	52 - 137

Lab Sample ID: 2425727
Field Sample ID: G3SD0204

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	74.0	P	20 - 200

Quality Assurance Report Surrogates

Lab Sample ID: 2425727
Field Sample ID: G3SD0204

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	95.9	P	62 - 142
EPA 8270E	Terbufos-d10	83.2	P	58 - 132
EPA 8270E	Terphenyl-d14	103	P	52 - 137

Quality Assurance Report Calibration Verification

Reference Method: DEP SOP: NU-094-1

Run ID: A120528

Included Lab Sample IDs: 2425709

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	99.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A120530

Included Lab Sample IDs: 2425742

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.7	98.8	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A120531

Included Lab Sample IDs: 2425709

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A120590

Included Lab Sample IDs: 2425710

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A120600

Included Lab Sample IDs: 2425724, 2425725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	95.2	98.3	P/P	90 - 110
Antimony	96.5	97.7	P/P	90 - 110
Arsenic	94.1	94.4	P/P	90 - 110
Barium	96.8	98.6	P/P	90 - 110
Beryllium	91.8	92.4	P/P	90 - 110
Boron	94.7	95.6	P/P	90 - 110
Cadmium	96.5	97.2	P/P	90 - 110
Chromium	93.9	94.6	P/P	90 - 110
Cobalt	92.9	93.5	P/P	90 - 110
Copper	92.1	93.6	P/P	90 - 110
Lead	90.2	90.9	P/P	90 - 110
Manganese	95.0	95.6	P/P	90 - 110
Molybdenum	94.4	94.7	P/P	90 - 110
Nickel	90.9	91.5	P/P	90 - 110
Selenium	96.3	97.2	P/P	90 - 110
Silver	98.1	98.9	P/P	90 - 110
Thallium	92.7	93.2	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A120601

Included Lab Sample IDs: 2425721, 2425722, 2425723

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

Reference Method: EPA 8321B

Run ID: A120601

Included Lab Sample IDs: 2425721, 2425722, 2425723

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	96.7	106	P/P	60 - 160
Sucralose	88.3	86.2	P/P	60 - 160

Reference Method: SM 2320 B-2011

Run ID: A120602

Included Lab Sample IDs: 2425709

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	92.9	96.2	P/P	90 - 110

Reference Method: SM 4500-F- C-2011

Run ID: A120602

Included Lab Sample IDs: 2425709

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A120604

Included Lab Sample IDs: 2425721, 2425722, 2425723

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	75.2	86.3	P/P	60 - 160
Endothall	117	110	P/P	60 - 160
Glufosinate	89.5	99.4	P/P	60 - 160
Glyphosate	107	110	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A120605

Included Lab Sample IDs: 2425724, 2425725

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	99.8	P/P	90 - 110
Iron	99.3	100	P/P	90 - 110
Magnesium	99.0	99.6	P/P	90 - 110
Potassium	97.5	97.5	P/P	90 - 110
Sodium	97.6	97.3	P/P	90 - 110
Strontium	105	102	P/P	90 - 110
Tin	102	101	P/P	90 - 110
Titanium	101	99.7	P/P	90 - 110
Vanadium	100	99.3	P/P	90 - 110
Zinc	103	102	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A120608

Included Lab Sample IDs: 2425710

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

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-2011

Run ID: A120614

Included Lab Sample IDs: 2425710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.6	98.2	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A120627

Included Lab Sample IDs: 2425710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	101	94.3	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A120669

Included Lab Sample IDs: 2425726, 2425727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	101		P	80 - 120
Avobenzene	107		P	80 - 120
Dechlorane 602	102		P	80 - 120
Dechlorane 603	103		P	80 - 120
Dechlorane Plus	102		P	80 - 120
Hexabromobenzene	103		P	80 - 120
Octinoxate	98.7		P	80 - 120
Oxybenzone	101		P	80 - 120
PBB-153	105		P	80 - 120
PBDE-47	98.3		P	80 - 120
PBDE-99	98.7		P	80 - 120
Pentabromotoluene	100		P	80 - 120
Tetradecachloro-m-terphenyl	105		P	80 - 120
Tri-o-cresyl Phosphate	97.6		P	80 - 120
Tris(1-chloro-2-propyl) phosphate (TCPP)	93.4		P	80 - 120
Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	96.8		P	80 - 120
Tris(2-chloroethyl) phosphate (TCEP)	99.1		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A120686

Included Lab Sample IDs: 2425709

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A120687

Included Lab Sample IDs: 2425710

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.3	95.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A120734

Included Lab Sample IDs: 2425721, 2425722, 2425723

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	114	107	P/P	50 - 150
2,4,5-T	109	101	P/P	50 - 150
Acetaminophen	129	127	P/P	60 - 160
Acetamiprid	128	125	P/P	50 - 150
Afidopyropen	113	118	P/P	50 - 150
Bentazon	148	144	P/P	50 - 160
Benzovindiflupyr	124	120	P/P	50 - 150
Carbamazepine	133	137	P/P	60 - 150
Clothianidin	134	139	P/P	60 - 150
Dinotefuran	145	140	P/P	50 - 150
Diuron	124	130	P/P	60 - 160
Fenuron	128	126	P/P	60 - 150
Fluridone	135	135	P/P	60 - 160
Hydrocodone	129	119	P/P	60 - 150
Ibuprofen	103	109	P/P	50 - 160
Imazapyr	115	117	P/P	50 - 150
Imidacloprid	112	106	P/P	60 - 150
Linuron	108	111	P/P	60 - 150
Mandestrobin	133	131	P/P	50 - 150
MCPP	109	117	P/P	50 - 150
Naproxen	112	142	P/P	50 - 160
Primidone	99.1	116	P/P	60 - 150
Pyraclostrobin	127	125	P/P	60 - 150
Silvex	112	112	P/P	50 - 150
Thiamethoxam	130	125	P/P	50 - 150
Tolfenpyrad	121	117	P/P	60 - 150
Triclopyr	95.2	112	P/P	50 - 150

Reference Method: EPA 8270E

Run ID: A120774

Included Lab Sample IDs: 2425726, 2425727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	86.2		P	80 - 120
Alachlor	92.4		P	80 - 120
Ametryn	95.9		P	80 - 120
Atrazine	91.9		P	80 - 120
Atrazine Desethyl	112		P	80 - 120
Azinphos Methyl	103		P	80 - 120
Azoxystrobin	97.7		P	80 - 120
Bromacil	97.2		P	80 - 120
Butylate	103		P	80 - 120
Caffeine	97.7		P	80 - 120
Carbophenothion	92.8		P	80 - 120
Carfentrazone Ethyl	92.2		P	80 - 120
Chlorfenapyr	97.2		P	80 - 120
Chlorpyrifos Ethyl	87.7		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Coumaphos	94.8		P	80 - 120
Cyanazine	116		P	80 - 120
Cyprodinil	96.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A120774

Included Lab Sample IDs: 2425726, 2425727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Demeton	104		P	80 - 120
Diazinon	99.8		P	80 - 120
Difenoconazole	87.9		P	80 - 120
Dimethenamid	92.7		P	80 - 120
Dimethomorph	84.2		P	80 - 120
Disulfoton	104		P	80 - 120
Dithiopyr	90.7		P	80 - 120
EPTC	99.5		P	80 - 120
Ethion	102		P	80 - 120
Ethoprop	99.7		P	80 - 120
Etridiazole	102		P	80 - 120
Fenamiphos	83.9		P	80 - 120
Fenbuconazole	90.1		P	80 - 120
Fipronil	86.8		P	80 - 120
Fipronil Desulfinyl	95.4		P	80 - 120
Fipronil Sulfide	94.5		P	80 - 120
Fipronil Sulfone	92.4		P	80 - 120
Fluazifop-P-butyl	88.0		P	80 - 120
Fludioxonil	94.8		P	80 - 120
Flumioxazin	92.3		P	80 - 120
Flutolanil	93.5		P	80 - 120
Fluxapyroxad	94.0		P	80 - 120
Fonofos	96.4		P	80 - 120
Hexazinone	101		P	80 - 120
Imazalil	99.8		P	80 - 120
Iprodione	78.1*		F	80 - 120
Loratadine	78.1*		F	80 - 120
Malathion	87.3		P	80 - 120
Metalaxyl	88.0		P	80 - 120
Metolachlor	101		P	80 - 120
Metribuzin	103		P	80 - 120
Mevinphos	96.0		P	80 - 120
Molinate	88.5		P	80 - 120
Myclobutanil	89.2		P	80 - 120
Naled	101		P	80 - 120
Napropamide	97.4		P	80 - 120
Oxadiazon	101		P	80 - 120
Oxyfluorfen	101		P	80 - 120
Parathion Ethyl	101		P	80 - 120
Parathion Methyl	84.1		P	80 - 120
Pendimethalin	100		P	80 - 120
Phenytoin	101		P	80 - 120
Phorate	104		P	80 - 120
Prodiamine	96.3		P	80 - 120
Prometon	88.1		P	80 - 120
Prometryn	89.8		P	80 - 120
Pronamide	101		P	80 - 120
Propanil	99.0		P	80 - 120
Propargite	101		P	80 - 120
Propiconazole	82.1		P	80 - 120
Pyraflufen Ethyl	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A120774

Included Lab Sample IDs: 2425726, 2425727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyridaben	98.1		P	80 - 120
Pyriproxyfen	104		P	80 - 120
Simazine	98.5		P	80 - 120
Stirophos	91.4		P	80 - 120
Sulfentrazone	93.8		P	80 - 120
Tebuconazole	99.2		P	80 - 120
Terbufos	102		P	80 - 120
Terbuthylazine	87.4		P	80 - 120
Thiobencarb	99.0		P	80 - 120
Triadimefon	102		P	80 - 120

Reference Method: EPA 8270E

Run ID: A120785

Included Lab Sample IDs: 2425726, 2425727

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Metalaxyl	88.1		P	80 - 120
Norflurazon	99.4		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			LCS	Precision SMP	MS
DEP SOP: NU-094-1	Color (true)	97.8					1.11	
EPA 180.1 Rev. 2.0	Turbidity	99.2					8.07	
EPA 200.7 Rev. 4.4	Calcium	109	108	106	101			1.14
	Iron	107	107	107	105			0.337
	Magnesium	107	107	107	102			0.368
	Potassium	105	107	105	107			1.04
	Sodium	106	105	105	105			0.449
	Strontium	103	103	105	102			1.52
	Tin	106	107	103	102			3.06
	Titanium	103	102	102	103			0.189
	Vanadium	103	102	102	104			0.101
	Zinc	105	104	103	101			0.194
EPA 200.8 Rev. 5.4	Aluminum	97.1	99.0	97.9	96.0			1.10
	Antimony	98.2	100	99.6	99.9			0.915
	Arsenic	96.6	96.9	96.0	95.2			0.969
	Barium	101	102	101	101			0.511
	Beryllium	92.4	92.9	93.0	88.4			0.114
	Boron	94.9	99.3	98.7	98.0			0.554
	Cadmium	97.8	99.3	99.0	100			0.272
	Chromium	92.4	94.4	94.5	92.5			0.174
	Cobalt	95.7	95.8	94.9	90.6			0.923
	Copper	96.6	97.6	96.0	92.6			1.71
	Lead	91.6	93.6	93.1	91.9			0.541
	Manganese	93.3	94.1	94.1	92.0			0.0087
	Molybdenum	96.3	96.6	95.6	98.7			0.967
	Nickel	94.1	94.6	93.0	88.0			1.68
	Selenium	98.5	98.0	96.7	96.6			1.42
	Silver	114	113	113	112			0.0993
	Thallium	93.4	96.4	96.0	95.7			0.512
EPA 300.0 Rev. 2.1	Chloride	101	97.3	103			0.127	
	Sulfate	99.8	97.1	99.9			0.0	
EPA 350.1 Rev. 2.0	Ammonia-N	97.4	94.8	96.6				1.77
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	101	97.4				2.80
EPA 353.2 Rev. 2.0	NO2NO3-N	102	97.5	97.0				0.514
EPA 365.1 Rev. 2.0	Total-P	101	105	105				0.0212
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101	101	102				1.18
EPA 8270E	2-Ethylhexyl 2,3,4,5-tetrabromobenzoate (EHTBB)	73.6	90.9	94.8				4.17
	Acetochlor	83.5	100	107				6.80
	Alachlor	102	95.3	90.5				5.23
	Ametryn	106	111	112				1.23
	Atrazine	86.4	101	98.1				2.49
	Atrazine Desethyl	96.8	109	101				7.62
	Avobenzone	80.7	93.9	104				10.4
	Azinphos Methyl	79.5	82.3	88.6				7.34
	Azoxystrobin	86.7	103	126				19.6
	Bromacil	86.7	114	98.6				12.4
	Butylate	62.7	74.2	72.8				1.92
	Caffeine	91.9	100	103				2.56
	Carbophenothion	105	109	108				1.48
	Carfentrazone Ethyl	122	136	139				2.17
	Chlorfenapyr	94.9	96.5	109				11.8
	Chlorpyrifos Ethyl	86.0	82.7	77.2				6.95

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Chlorpyrifos Methyl	95.3	107	108			0.496
	Coumaphos	102	132	147			10.5
	Cyanazine	190	227	225			0.924
	Cyprodinil	114	126	125			0.497
	Dechlorane 602	32.3	44.4	40.8			8.29
	Dechlorane 603	86.1	91.5	98.0			6.90
	Dechlorane Plus	76.3	80.9	84.4			4.25
	Demeton	77.6	94.1	101			6.86
	Diazinon	106	130	130			0.326
	Difenoconazole	67.9	93.6	99.5			6.09
	Dimethenamid	78.0	90.3	95.9			6.02
	Dimethomorph	147	173	202			15.7
	Disulfoton	90.1	110	113			2.72
	Dithiopyr	90.3	102	101			0.951
	EPTC	58.7	60.8	63.6			4.50
	Ethion	32.8	54.8	47.8			13.6
	Ethoprop	90.5	107	114			6.58
	Etridiazole	63.1	75.1	76.9			2.34
	Fenamiphos	66.2	48.9	49.4			0.986
	Fenbuconazole	83.0	94.9	120			23.1
	Fipronil	97.7	115	119			3.82
	Fipronil Desulfinyl	101	123	120			2.35
	Fipronil Sulfide	95.4	111	110			1.32
	Fipronil Sulfone	87.1	114	109			4.57
	Fluazifop-P-butyl	101	119	120			1.08
	Fludioxonil	77.6	98.5	95.0			3.67
	Flumioxazin	88.6	128	137			6.65
	Flutolanil	71.0	96.5	93.4			3.20
	Fluxapyroxad	60.0	83.5	85.9			2.39
	Fonofos	93.0	104	108			3.65
	Hexabromobenzene	91.9	105	115			8.98
	Hexazinone	77.9					1.27
	Imazalil	76.0	113	113			0.502
	Iprodione	82.0	106	99.6			6.25
	Loratadine	152	151	193			24.0
	Malathion	93.8	106	89.5			16.4
	Metalaxyl	86.1	82.7	80.0			2.81
	Metolachlor	88.9	114	94.5			17.4
	Metribuzin	87.5	104	114			9.30
	Mevinphos	90.3	104	121			14.8
	Molinate	59.1	69.7	75.4			7.82
	Myclobutanil	82.0	103	103			0.459
	Naled	41.0	51.7	57.1			10.0
	Napropamide	45.9	85.0	74.8			12.9
	Norflurazon	92.5					2.02
	Octinoxate	105	113	119			5.12
	Oxadiazon	75.2	86.4	84.5			1.89
	Oxybenzone	100	114	123			7.17
	Oxyfluorfen	87.3	126	122			3.28
	Parathion Ethyl	90.4	100	102			1.33
	Parathion Methyl	112	132	129			1.78
	PBB-153	86.7	96.0	109			12.3
	PBDE-47	61.3	75.5	74.8			0.935
	PBDE-99	63.4	75.2	75.4			0.271

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision SMP	MS
			LCS			
EPA 8270E	Pendimethalin	96.8	108	105		3.46
	Pentabromotoluene	87.4	102	106		4.49
	Phenytoin	18.5	28.6	29.1		1.80
	Phorate	92.6	115	118		2.48
	Prodiamine	53.1	61.7	64.5		4.52
	Prometon	77.9	96.7	107		9.76
	Prometryn	90.5	104	108		3.58
	Pronamide	95.7	116	116		0.359
	Propanil	86.2	101	101		0.0493
	Propargite	43.4	60.4	57.4		5.11
	Propiconazole	76.4	88.8	99.2		11.1
	Pyraflufen Ethyl	101	113	112		0.421
	Pyridaben	106	115	134		14.6
	Pyriproxyfen	43.5	67.6	61.2		9.82
	Simazine	76.4	92.7	81.3		13.1
	Stirophos	31.8	61.2	36.8		49.9
	Sulfentrazone	45.9	100	118		16.2
	Tebuconazole	34.0	55.8	49.3		12.3
	Terbufos	98.2	124	129		3.49
	Terbutylazine	88.8	110	105		4.96
	Tetradecachloro-m-terphenyl	132	135	149		10.3
	Thiobencarb	78.8	97.6	81.6		17.8
	Tri-o-cresyl Phosphate	86.6	92.6	97.8		5.47
	Triadimefon	80.5	104	108		4.50
	Tris(1-chloro-2-propyl) phosphate (TCPP)	95.6	102	104		1.84
	Tris(1,3-dichloro-2-propyl) phosphate (TDCPP)	83.6	97.1	102		4.73
	Tris(2-chloroethyl) phosphate (TCEP)	86.7	92.4	95.0		2.76
EPA 8321B	2,4-D	81.8	118	113		4.43
	2,4,5-T	70.3	104	109		4.92
	Acesulfame K	94.8	60.0	81.4		30.2
	Acetaminophen	79.0	99.4	98.4		1.09
	Acetamiprid	79.5	60.0	61.8		3.04
	Afidopyropen	57.9	66.9	73.3		9.12
	AMPA	144	25.0	25.9		2.87
	Bentazon	126	117	119		1.48
	Benzovindiflupyr	78.2	80.7	79.7		1.21
	Carbamazepine	69.8	50.0	55.9		11.1
	Clothianidin	88.8	87.2	84.9		2.58
	Dinotefuran	88.5	67.5	82.3		19.8
	Diuron	44.0	31.6	34.4		8.62
	Endothall	106	133	124		6.61
	Fenuron	96.2	61.1	64.6		5.50
	Fluridone	98.8	87.9	90.3		2.69
	Glufosinate	93.4	42.6	42.5		0.199
	Glyphosate	91.5	79.8	82.6		3.46
	Hydrocodone	80.8	60.2	62.3		3.44
	Ibuprofen	72.5	69.8	66.2		5.32
	Imazapyr	79.8	98.5	95.7		2.90
	Imidacloprid	73.2	115	120		4.25
	Linuron	52.1	52.8	50.5		4.34
	Mandestrobin	81.4	80.0	85.3		6.39

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	SMP
EPA 8321B	MCCP	86.2	123	124		
	Naproxen	69.0	128	128		
	Primidone	68.7	78.0	75.2		
	Pyraclostrobin	74.0	77.3	76.6		
	Silvex	87.9	114	116		
	Sucralose	83.8	91.2	125		
	Thiamethoxam	98.3	76.5	76.7		
	Tolfenpyrad	56.8	57.7	56.4		
	Triclopyr	70.8	103	102		
SM 2320 B-2011	Total Alkalinity	95.7				0.850
SM 2540 C-2015	TDS	104				5.13
SM 2540 D-2015	TSS	94.1				
SM 4500-F- C-2011	Fluoride	98.0	96.4	97.2		
SM 5310 B-2011	Organic Carbon	95.0	94.4	95.1		

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2425709
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2425709
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2425724, 2425725
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2425724, 2425725
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2425709
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2425709
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2425710
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2425710
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2425710
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2425710
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2425742
EPA 8270E	Analysis of Sunscreen Compounds and Flame Retardants in Water by GC/MS-SIM	2425726, 2425727
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2425726, 2425727
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2425721, 2425722, 2425723
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2425709
SM 2340 B-2011	Hardness by calculation, in aqueous matrices, reported as mg/L CaCO ₃	2425724, 2425725
SM 2540 C-2015	Total Dissolved Solids in aqueous matrices	2425709
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2425709
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2425709
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2425710

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	07/20/2023			07/20/2023 14:51	Alexis Price	2425709
EPA 180.1 Rev. 2.0	07/20/2023			07/20/2023 15:01	Khloe J Berg	2425709
EPA 200.7 Rev. 4.4	07/20/2023	07/21/2023 12:10	George D Taylor	07/24/2023 22:23	McKinley C Carter	2425724
	07/20/2023	07/21/2023 12:10	George D Taylor	07/24/2023 22:38	McKinley C Carter	2425725
EPA 200.8 Rev. 5.4	07/20/2023	07/21/2023 12:10	George D Taylor	07/24/2023 18:30	Emily M Philpot	2425724
	07/20/2023	07/21/2023 12:10	George D Taylor	07/24/2023 18:40	Emily M Philpot	2425725
EPA 300.0 Rev. 2.1	07/20/2023			07/26/2023 05:18	James L Waggeberby	2425709
EPA 350.1 Rev. 2.0	07/20/2023			07/25/2023 15:25	Ping Hua	2425710
EPA 351.2 Rev. 2.0	07/20/2023	07/26/2023 10:21	Dana G. Hughes	07/27/2023 13:42	Samantha L Bates	2425710
EPA 353.2 Rev. 2.0	07/20/2023			07/24/2023 13:45	Judith K. Clark	2425710
EPA 365.1 Rev. 2.0	07/20/2023	07/24/2023 11:56	Alexis Price	07/24/2023 15:28	Simonne.V. Calhoun	2425710
EPA 365.1 Rev. 2.0 dissolved	07/20/2023			07/20/2023 15:43	James L Waggeberby	2425742
EPA 8270E	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/24/2023 18:22	Vandana T. Nagar	2425726
	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/24/2023 18:49	Vandana T. Nagar	2425727
	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/27/2023 00:22	Arthur Maknenko	2425726
	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/27/2023 00:48	Arthur Maknenko	2425727
	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/27/2023 19:27	Vandana T. Nagar	2425726
	07/20/2023	07/21/2023 08:00	Fe-Val Siddell	07/27/2023 19:54	Vandana T. Nagar	2425727
EPA 8321B	07/20/2023	07/24/2023 10:00	Hana Lee	07/24/2023 17:48	Tae K Lee	2425721
	07/20/2023	07/24/2023 10:00	Hana Lee	07/24/2023 18:02	Tae K Lee	2425722
	07/20/2023	07/24/2023 10:00	Hana Lee	07/24/2023 18:16	Tae K Lee	2425723
	07/20/2023	07/24/2023 10:00	Hana Lee	07/25/2023 04:17	Tae K Lee	2425721
	07/20/2023	07/24/2023 10:00	Hana Lee	07/25/2023 04:30	Tae K Lee	2425722
	07/20/2023	07/24/2023 10:00	Hana Lee	07/25/2023 04:43	Tae K Lee	2425723
	07/20/2023	07/25/2023 14:00	Hoor Shaik	07/25/2023 21:43	Juyoung Kim	2425721
	07/20/2023	07/25/2023 14:00	Hoor Shaik	07/25/2023 22:02	Juyoung Kim	2425722
	07/20/2023	07/25/2023 14:00	Hoor Shaik	07/25/2023 22:21	Juyoung Kim	2425723
SM 2320 B-2011	07/20/2023			07/25/2023 00:01	Dale L. Simmons	2425709
SM 2340 B-2011	07/20/2023			07/24/2023 22:23	McKinley C Carter	2425724
	07/20/2023			07/24/2023 22:38	McKinley C Carter	2425725
SM 2540 C-2015	07/20/2023			07/25/2023 15:46	Yijie Li	2425709
SM 2540 D-2015	07/20/2023			07/25/2023 15:46	Yijie Li	2425709
SM 4500-F- C-2011	07/20/2023			07/25/2023 00:01	Dale L. Simmons	2425709
SM 5310 B-2011	07/20/2023			07/24/2023 23:19	Khloe J Berg	2425710