

Chemical Analysis Report

CEN-DIST-2019-08-23-01

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

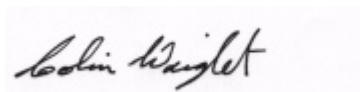
Event Description: **Howell / Soldier / Gee + D&B**
Request ID: **RQ-2019-08-05-54**
Customer: **CEN-DIST**
Project ID: **SMP**

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Certified by: Colin Wright, Program Administrator

Date Certified: 20-SEP-2019 12:39

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

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: Gee Creek @ Alton Rd

Collection Date/Time: 08/22/2019 10:30

Field ID: G2CE0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114197	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P369631	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P369924	
		Sulfate	5.6		mg SO4/L	P369927	
	SM 2120 B	Color (true)	74		PCU	P369663	
	SM 2320 B-97	Total Alkalinity	48		mg CaCO3/L	P370024	
	SM 2540 C-97	TDS	89		mg/L	P370067	
	SM 2540 D-97	TSS	4	I	mg/L	P370072	
	SM 4500 F-C-97	Fluoride	0.073	I	mg F/L	P370028	
2114200	EPA 350.1 Rev. 2.0	Ammonia-N	0.031		mg N/L	P370100	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.64		mg N/L	P369656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.087		mg N/L	P369936	
	EPA 365.1 Rev. 2.0	Total-P	0.055		mg P/L	P369792	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P370039	
2114203	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P369898	
2114260	EPA 8321B	Aldicarb	0.020	U	ug/L	P369584	
		Aldicarb Sulfone	0.0020	U	ug/L	P369584	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369584	
		Carbaryl	0.0020	U	ug/L	P369584	
		Carbofuran	0.0020	U	ug/L	P369584	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P369584	
		Methiocarb	0.0020	U	ug/L	P369584	
		Methomyl	0.0020	U	ug/L	P369584	
		Oxamyl	0.0020	U	ug/L	P369584	
		Propoxur	0.0020	U	ug/L	P369584	
2114263		2,4-D	0.094		ug/L	P369653	
		Acesulfame K**	0.11	I	ug/L	P369616	
		AMPA**	0.20	I	ug/L	P369616	
		Sucralose**	0.58		ug/L	P369616	
		Acetaminophen**	0.0080	U	ug/L	P369653	
		Endothall**	0.25	U	ug/L	P369616	
		Acetamiprid**	0.0020	U	ug/L	P369653	
		Glufosinate**	0.10	U	ug/L	P369616	
		Glyphosate**	0.46		ug/L	P369616	
		Afidopyropen**	0.0020	UJ	ug/L	P369653	
		Bentazon	0.037		ug/L	P369653	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P369653	
		Carbamazepine**	0.0015	I	ug/L	P369653	
		Clothianidin**	0.0020	U	ug/L	P369653	
		Dinotefuran**	0.0020	U	ug/L	P369653	
		Diuron	0.0094		ug/L	P369653	
		Fenuron	0.016	U	ug/L	P369653	
		Fluridone**	0.046		ug/L	P369653	
		Imazapyr**	0.088		ug/L	P369653	

Field ID: G2CE0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114263	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P369653	
		Ibuprofen**	0.020	U	ug/L	P369653	
		Imidacloprid	0.014		ug/L	P369653	
		Linuron	0.0040	U	ug/L	P369653	
		Mandestrobin**	0.0020	UJ	ug/L	P369653	
		MCP	0.011		ug/L	P369653	MS
		Naproxen**	0.0080	U	ug/L	P369653	
		Primidone**	0.0040	U	ug/L	P369653	
		Pyraclostrobin**	0.0020	U	ug/L	P369653	
		Thiamethoxam**	0.0020	U	ug/L	P369653	
		Tolfenpyrad**	0.0020	U	ug/L	P369653	
		Triclopyr**	0.0040	U	ug/L	P369653	
2114270	EPA 8270E	Aldrin	4.3	UJ	ng/L	P369575	RPD
		Alpha-BHC	2.2	U	ng/L	P369575	
		Alpha-Chlordane	1.1	U	ng/L	P369575	
		Beta-BHC	11	U	ng/L	P369575	
		Bifenthrin**	4.3	U	ng/L	P369575	
		Delta-BHC	8.6	U	ng/L	P369575	
		Gamma-BHC	8.6	U	ng/L	P369575	
		Carbophenothion	11	U	ng/L	P369575	
		Chlorothalonil	2.2	UJ	ng/L	P369575	LCS
		Cis-Nonachlor**	1.1	U	ng/L	P369575	
		Cypermethrin	22	U	ng/L	P369575	
		DDD-p,p'	6.5	U	ng/L	P369575	
		DDE-p,p'	6.5	U	ng/L	P369575	
		DDT-p,p'	7.5	U	ng/L	P369575	
		Dicofol	32	U	ng/L	P369575	
		Dieldrin	4.3	U	ng/L	P369575	
		Endosulfan I	4.3	U	ng/L	P369575	
		Endosulfan II	4.3	U	ng/L	P369575	
		Endosulfan Sulfate	2.2	U	ng/L	P369575	
		Endrin	2.2	U	ng/L	P369575	
		Endrin Aldehyde	2.2	U	ng/L	P369575	
		Endrin Ketone	2.2	U	ng/L	P369575	
		Ethalfuralin**	3.2	U	ng/L	P369575	
		Gamma-Chlordane	1.1	U	ng/L	P369575	
		Heptachlor	1.6	U	ng/L	P369575	
		Heptachlor Epoxide	2.2	U	ng/L	P369575	
		Hexachlorobenzene	2.2	U	ng/L	P369575	
		Methoxychlor	4.3	U	ng/L	P369575	MS
		Mirex	2.2	UJ	ng/L	P369575	LCS, RPD
		Permethrin	11	U	ng/L	P369575	
		Trans-Nonachlor**	1.1	U	ng/L	P369575	
		Trifluralin	2.7	U	ng/L	P369575	
	EPA 8276	Chlordane	5.4	U	ng/L	P369575	

Field ID: G2CE0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114270	EPA 8276	Toxaphene	32	U	ng/L	P369575	
2114273	EPA 8270E	Acetochlor	0.27	U	ng/L	P369838	
		Alachlor	0.27	U	ng/L	P369838	
		Ametryn	0.65	U	ng/L	P369838	
		Atrazine	16		ng/L	P369838	
		Atrazine Desethyl	4.3	IJ	ng/L	P369838	CCV, RPD
		Azinphos Methyl	5.4	U	ng/L	P369838	
		Bromacil	0.54	U	ng/L	P369838	
		Butylate	0.43	U	ng/L	P369838	
		Chlorpyrifos Ethyl	0.27	U	ng/L	P369838	
		Chlorpyrifos Methyl	0.11	UJ	ng/L	P369838	LCS, RPD
		Cyanazine	3.5	UJ	ng/L	P369838	CCV, RPD
		Demeton	7.6	UJ	ng/L	P369838	RPD
		Diazinon	0.14	U	ng/L	P369838	
		Dimethenamid**	0.11	U	ng/L	P369838	
		Disulfoton	0.54	UJ	ng/L	P369838	LCS
		Dithiopyr**	0.17	I	ng/L	P369838	
		EPTC	1.4	UJ	ng/L	P369838	RPD
		Ethion	0.16	U	ng/L	P369838	
		Ethoprop	0.11	UJ	ng/L	P369838	RPD
		Fenamiphos	0.54	U	ng/L	P369838	
		Fipronil	0.27	U	ng/L	P369838	
		Fipronil Desulfinyl**	0.72		ng/L	P369838	
		Fipronil Sulfide	0.54	I	ng/L	P369838	
		Fipronil Sulfone	0.16	U	ng/L	P369838	
		Fonofos	0.22	UJ	ng/L	P369838	LCS, RPD
		Hexazinone	0.54	U	ng/L	P369838	
		Malathion	0.38	U	ng/L	P369838	
		Metalaxyl	0.32	U	ng/L	P369838	
		Metolachlor	0.54	U	ng/L	P369838	
		Metribuzin	0.83	IJ	ng/L	P369838	CCV
		Mevinphos	0.54	UJ	ng/L	P369838	RPD
		Molinate	0.32	UJ	ng/L	P369838	RPD
		Norflurazon	0.54	U	ng/L	P369838	
		Oxadiazon**	0.84		ng/L	P369838	
		Parathion Ethyl	0.27	U	ng/L	P369838	
		Parathion Methyl	0.59	U	ng/L	P369838	
		Pendimethalin	1.1	U	ng/L	P369838	
		Phorate	0.27	UJ	ng/L	P369838	RPD
		Prodiamine**	0.54	I	ng/L	P369838	RPD
		Prometon	0.97	U	ng/L	P369838	
		Prometryn	0.22	U	ng/L	P369838	
		Simazine	0.92	I	ng/L	P369838	
		Tebuconazole**	0.54	U	ng/L	P369838	
		Terbufos	0.11	UJ	ng/L	P369838	LCS, RPD

Field ID: G2CE0161

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114273	EPA 8270E	Terbutylazine	0.46	U	ng/L	P369838	
2114280	EPA 200.7 Rev. 4.4	Barium	6.6		ug/L	P369637	
		Calcium	19.3		mg/L	P369637	
		Iron	210		ug/L	P369637	
		Magnesium	2.22		mg/L	P369637	
		Potassium	1.6		mg/L	P369637	
		Sodium	10.9		mg/L	P369637	
		Zinc	5.0	U	ug/L	P369637	
	EPA 200.8 Rev. 5.4	Aluminum	109		ug/L	P369637	
		Antimony	0.14	I	ug/L	P369637	
		Arsenic	1.34		ug/L	P369637	
		Boron**	38.7		ug/L	P369637	
		Cadmium	0.020	U	ug/L	P369637	
		Chromium	0.40	U	ug/L	P369637	
		Copper	1.62		ug/L	P369637	
		Lead	0.24	I	ug/L	P369637	
		Nickel	0.50	U	ug/L	P369637	
		Selenium	0.20	U	ug/L	P369637	
		Silver	0.010	U	ug/L	P369637	
		Thallium	0.10	U	ug/L	P369637	

Ref. Method and Comment:

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

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

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

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 09/18/2019.

Sample Location: Gee Creek @ Alton Rd

Collection Date/Time: 08/22/2019 10:40

Field ID: G2CE0161_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114206	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P369631	
	EPA 300.0 Rev. 2.1	Chloride	17		mg Cl/L	P369924	
		Sulfate	5.6		mg SO4/L	P369927	
	SM 2120 B	Color (true)	74		PCU	P369663	
	SM 2320 B-97	Total Alkalinity	49		mg CaCO3/L	P370025	
	SM 2540 C-97	TDS	95		mg/L	P370067	
	SM 2540 D-97	TSS	4	I	mg/L	P370072	
	SM 4500 F-C-97	Fluoride	0.073	I	mg F/L	P370029	
2114208	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P370100	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.63		mg N/L	P369656	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.086		mg N/L	P369936	
	EPA 365.1 Rev. 2.0	Total-P	0.056		mg P/L	P369870	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P370039	
2114210	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.022		mg P/L	P369898	
2114266	EPA 8321B	Aldicarb	0.020	U	ug/L	P369584	
		Aldicarb Sulfone	0.0020	U	ug/L	P369584	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369584	
		Carbaryl	0.0020	U	ug/L	P369584	
		Carbofuran	0.0020	U	ug/L	P369584	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P369584	
		Methiocarb	0.0020	U	ug/L	P369584	
		Methomyl	0.0020	U	ug/L	P369584	
		Oxamyl	0.0020	U	ug/L	P369584	
		Propoxur	0.0020	U	ug/L	P369584	
2114268		2,4-D	0.11		ug/L	P369653	
		Acesulfame K**	0.18	I	ug/L	P369616	
		AMPA**	0.21	I	ug/L	P369616	
		Sucralose**	0.68		ug/L	P369616	
		Acetaminophen**	0.0080	U	ug/L	P369653	
		Endothall**	0.25	U	ug/L	P369616	
		Acetamiprid**	0.0020	U	ug/L	P369653	
		Glufosinate**	0.10	U	ug/L	P369616	
		Glyphosate**	0.48		ug/L	P369616	
		Afidopyropen**	0.0020	UJ	ug/L	P369653	
		Bentazon	0.037		ug/L	P369653	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P369653	
		Carbamazepine**	0.0017	I	ug/L	P369653	
		Clothianidin**	0.0020	U	ug/L	P369653	
		Dinotefuran**	0.0020	U	ug/L	P369653	
		Diuron	0.0094		ug/L	P369653	
		Fenuron	0.016	U	ug/L	P369653	
		Fluridone**	0.049		ug/L	P369653	
		Imazapyr**	0.082		ug/L	P369653	

Field ID: G2CE0161_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114268	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P369653	
		Ibuprofen**	0.020	U	ug/L	P369653	
		Imidacloprid	0.015		ug/L	P369653	
		Linuron	0.0040	U	ug/L	P369653	
		Mandestrobin**	0.0020	UJ	ug/L	P369653	
		MCP	0.011		ug/L	P369653	MS
		Naproxen**	0.0080	U	ug/L	P369653	
		Primidone**	0.0040	U	ug/L	P369653	
		Pyraclostrobin**	0.0020	U	ug/L	P369653	
		Thiamethoxam**	0.0020	U	ug/L	P369653	
		Tolfenpyrad**	0.0020	U	ug/L	P369653	
		Triclopyr**	0.0040	U	ug/L	P369653	
2114276	EPA 8270E	Aldrin	4.6	UJ	ng/L	P369575	RPD
		Alpha-BHC	2.3	U	ng/L	P369575	
		Alpha-Chlordane	1.1	U	ng/L	P369575	
		Beta-BHC	11	U	ng/L	P369575	
		Bifenthrin**	4.6	U	ng/L	P369575	
		Delta-BHC	9.1	U	ng/L	P369575	
		Gamma-BHC	9.1	U	ng/L	P369575	
		Carbophenothion	11	U	ng/L	P369575	
		Chlorothalonil	2.3	UJ	ng/L	P369575	LCS
		Cis-Nonachlor**	1.1	U	ng/L	P369575	
		Cypermethrin	23	U	ng/L	P369575	
		DDD-p,p'	6.8	U	ng/L	P369575	
		DDE-p,p'	6.8	U	ng/L	P369575	
		DDT-p,p'	8.0	U	ng/L	P369575	
		Dicofol	34	U	ng/L	P369575	
		Dieldrin	4.6	U	ng/L	P369575	
		Endosulfan I	4.6	U	ng/L	P369575	
		Endosulfan II	4.6	U	ng/L	P369575	
		Endosulfan Sulfate	2.3	U	ng/L	P369575	
		Endrin	2.3	U	ng/L	P369575	
		Endrin Aldehyde	2.3	U	ng/L	P369575	
		Endrin Ketone	2.3	U	ng/L	P369575	
		Ethalfuralin**	3.4	U	ng/L	P369575	
		Gamma-Chlordane	1.1	U	ng/L	P369575	
		Heptachlor	1.7	U	ng/L	P369575	
		Heptachlor Epoxide	2.3	U	ng/L	P369575	
		Hexachlorobenzene	2.3	U	ng/L	P369575	
		Methoxychlor	4.6	U	ng/L	P369575	MS
		Mirex	2.3	UJ	ng/L	P369575	LCS, RPD
		Permethrin	11	U	ng/L	P369575	
		Trans-Nonachlor**	1.1	U	ng/L	P369575	
		Trifluralin	2.9	U	ng/L	P369575	
	EPA 8276	Chlordane	5.7	U	ng/L	P369575	

Field ID: G2CE0161_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114276	EPA 8276	Toxaphene	34	U	ng/L	P369575	
2114278	EPA 8270E	Acetochlor	0.29	U	ng/L	P369838	
		Alachlor	0.29	U	ng/L	P369838	
		Ametryn	0.69	U	ng/L	P369838	
		Atrazine	16		ng/L	P369838	
		Atrazine Desethyl	4.3	IJ	ng/L	P369838	CCV, RPD
		Azinphos Methyl	5.7	U	ng/L	P369838	
		Bromacil	0.57	U	ng/L	P369838	
		Butylate	0.46	U	ng/L	P369838	
		Chlorpyrifos Ethyl	0.29	U	ng/L	P369838	
		Chlorpyrifos Methyl	0.11	UJ	ng/L	P369838	LCS, RPD
		Cyanazine	3.7	UJ	ng/L	P369838	CCV, RPD
		Demeton	8.0	UJ	ng/L	P369838	RPD
		Diazinon	0.14	U	ng/L	P369838	
		Dimethenamid**	0.11	U	ng/L	P369838	
		Disulfoton	0.57	UJ	ng/L	P369838	LCS
		Dithiopyr**	0.18	I	ng/L	P369838	
		EPTC	1.4	UJ	ng/L	P369838	RPD
		Ethion	0.17	U	ng/L	P369838	
		Ethoprop	0.11	UJ	ng/L	P369838	RPD
		Fenamiphos	0.57	U	ng/L	P369838	
		Fipronil	0.29	U	ng/L	P369838	
		Fipronil Desulfinyl**	0.75		ng/L	P369838	
		Fipronil Sulfide	0.57	I	ng/L	P369838	
		Fipronil Sulfone	0.17	U	ng/L	P369838	
		Fonofos	0.23	UJ	ng/L	P369838	LCS, RPD
		Hexazinone	0.57	U	ng/L	P369838	
		Malathion	0.40	U	ng/L	P369838	
		Metalaxyl	0.34	U	ng/L	P369838	
		Metolachlor	0.57	U	ng/L	P369838	
		Metribuzin	0.88	IJ	ng/L	P369838	CCV
		Mevinphos	0.57	UJ	ng/L	P369838	RPD
		Molinate	0.34	UJ	ng/L	P369838	RPD
		Norflurazon	0.57	U	ng/L	P369838	
		Oxadiazon**	0.85		ng/L	P369838	
		Parathion Ethyl	0.29	U	ng/L	P369838	
		Parathion Methyl	0.63	U	ng/L	P369838	
		Pendimethalin	1.1	U	ng/L	P369838	
		Phorate	0.29	UJ	ng/L	P369838	RPD
		Prodiamine**	0.54	I	ng/L	P369838	RPD
		Prometon	1.0	U	ng/L	P369838	
		Prometryn	0.23	U	ng/L	P369838	
		Simazine	0.84	I	ng/L	P369838	
		Tebuconazole**	0.57	U	ng/L	P369838	
		Terbufos	0.11	UJ	ng/L	P369838	LCS, RPD

Field ID: G2CE0161_DUP

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114278	EPA 8270E	Terbutylazine	0.49	U	ng/L	P369838	
2114283	EPA 200.7 Rev. 4.4	Barium	6.6		ug/L	P369637	
		Calcium	18.9		mg/L	P369637	
		Iron	210		ug/L	P369637	
		Magnesium	2.21		mg/L	P369637	
		Potassium	1.6		mg/L	P369637	
		Sodium	10.9		mg/L	P369637	
		Zinc	5.0	U	ug/L	P369637	
	EPA 200.8 Rev. 5.4	Aluminum	112		ug/L	P369637	
		Antimony	0.14	I	ug/L	P369637	
		Arsenic	1.33		ug/L	P369637	
		Boron**	36.2		ug/L	P369637	
		Cadmium	0.020	U	ug/L	P369637	
		Chromium	0.51	I	ug/L	P369637	
		Copper	2.03		ug/L	P369637	
		Lead	0.25	I	ug/L	P369637	
		Nickel	0.50	U	ug/L	P369637	
		Selenium	0.20	U	ug/L	P369637	
		Silver	0.010	U	ug/L	P369637	
		Thallium	0.10	U	ug/L	P369637	

Ref. Method and Comment:

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

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

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

EPA 200.8 Rev. 5.4: The copper result was confirmed in the undigested sample on 09/18/2019.

Sample Location: FB_08222019

Collection Date/Time: 08/22/2019 10:50

Field ID: FB_08222019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114207	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P369631	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P369924	
		Sulfate	0.20	U	mg SO4/L	P369927	
	SM 2120 B	Color (true)	2.5	U	PCU	P369663	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P370025	
	SM 2540 C-97	TDS	15	U	mg/L	P370067	
	SM 2540 D-97	TSS	2	U	mg/L	P370072	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P370029	
2114209	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P370032	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P369657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P369936	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P369870	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P370040	
2114211	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P369898	
2114267	EPA 8321B	Aldicarb	0.020	U	ug/L	P369584	
		Aldicarb Sulfone	0.0020	U	ug/L	P369584	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369584	
		Carbaryl	0.0020	U	ug/L	P369584	
		Carbofuran	0.0020	U	ug/L	P369584	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P369584	
		Methiocarb	0.0020	U	ug/L	P369584	
		Methomyl	0.0020	U	ug/L	P369584	
		Oxamyl	0.0020	U	ug/L	P369584	
		Propoxur	0.0020	U	ug/L	P369584	
2114269		2,4-D	0.0020	U	ug/L	P369653	
		Acesulfame K**	0.10	U	ug/L	P369616	
		AMPA**	0.10	U	ug/L	P369616	
		Sucralose**	0.010	U	ug/L	P369616	
		Acetaminophen**	0.0080	U	ug/L	P369653	
		Endothall**	0.25	U	ug/L	P369616	
		Acetamiprid**	0.0020	U	ug/L	P369653	
		Glufosinate**	0.10	U	ug/L	P369616	
		Glyphosate**	0.10	U	ug/L	P369616	
		Afidopyrophen**	0.0020	UJ	ug/L	P369653	
		Bentazon	8.0E-04	U	ug/L	P369653	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P369653	
		Carbamazepine**	8.0E-04	U	ug/L	P369653	
		Clothianidin**	0.0020	U	ug/L	P369653	
		Dinotefuran**	0.0020	U	ug/L	P369653	
		Diuron	0.0020	U	ug/L	P369653	
		Fenuron	0.016	U	ug/L	P369653	
		Fluridone**	8.0E-04	U	ug/L	P369653	
		Imazapyr**	0.0040	U	ug/L	P369653	

Field ID: FB_08222019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114269	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P369653	
		Ibuprofen**	0.020	U	ug/L	P369653	
		Imidacloprid	0.0020	U	ug/L	P369653	
		Linuron	0.0040	U	ug/L	P369653	
		Mandestrobin**	0.0020	UJ	ug/L	P369653	
		MCP	0.0020	U	ug/L	P369653	MS
		Naproxen**	0.0080	U	ug/L	P369653	
		Primidone**	0.0040	U	ug/L	P369653	
		Pyraclostrobin**	0.0020	U	ug/L	P369653	
		Thiamethoxam**	0.0020	U	ug/L	P369653	
		Tolfenpyrad**	0.0020	U	ug/L	P369653	
		Triclopyr**	0.0040	U	ug/L	P369653	
2114277	EPA 8270E	Aldrin	4.1	UJ	ng/L	P369575	RPD
		Alpha-BHC	2.1	U	ng/L	P369575	
		Alpha-Chlordane	1.0	U	ng/L	P369575	
		Beta-BHC	10	U	ng/L	P369575	
		Bifenthrin**	4.1	U	ng/L	P369575	
		Delta-BHC	8.2	U	ng/L	P369575	
		Gamma-BHC	8.2	U	ng/L	P369575	
		Carbophenothion	10	U	ng/L	P369575	
		Chlorothalonil	2.1	UJ	ng/L	P369575	LCS
		Cis-Nonachlor**	1.0	U	ng/L	P369575	
		Cypermethrin	21	U	ng/L	P369575	
		DDD-p,p'	6.2	U	ng/L	P369575	
		DDE-p,p'	6.2	U	ng/L	P369575	
		DDT-p,p'	7.2	U	ng/L	P369575	
		Dicofol	31	U	ng/L	P369575	
		Dieldrin	4.1	U	ng/L	P369575	
		Endosulfan I	4.1	U	ng/L	P369575	
		Endosulfan II	4.1	U	ng/L	P369575	
		Endosulfan Sulfate	2.1	U	ng/L	P369575	
		Endrin	2.1	U	ng/L	P369575	
		Endrin Aldehyde	2.1	U	ng/L	P369575	
		Endrin Ketone	2.1	U	ng/L	P369575	
		Ethalfuralin**	3.1	U	ng/L	P369575	
		Gamma-Chlordane	1.0	U	ng/L	P369575	
		Heptachlor	1.5	U	ng/L	P369575	
		Heptachlor Epoxide	2.1	U	ng/L	P369575	
		Hexachlorobenzene	2.1	U	ng/L	P369575	
		Methoxychlor	4.1	U	ng/L	P369575	MS
		Mirex	2.1	UJ	ng/L	P369575	LCS, RPD
		Permethrin	10	U	ng/L	P369575	
		Trans-Nonachlor**	1.0	U	ng/L	P369575	
		Trifluralin	2.6	U	ng/L	P369575	
	EPA 8276	Chlordane	5.2	U	ng/L	P369575	

Field ID: FB_08222019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114277	EPA 8276	Toxaphene	31	U	ng/L	P369575	
2114279	EPA 8270E	Acetochlor	0.24	U	ng/L	P369838	
		Alachlor	0.24	U	ng/L	P369838	
		Ametryn	0.59	U	ng/L	P369838	
		Atrazine	0.24	U	ng/L	P369838	
		Atrazine Desethyl	1.5	UJ	ng/L	P369838	CCV, RPD
		Azinphos Methyl	4.9	U	ng/L	P369838	
		Bromacil	0.49	U	ng/L	P369838	
		Butylate	0.39	U	ng/L	P369838	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P369838	
		Chlorpyrifos Methyl	0.098	UJ	ng/L	P369838	LCS, RPD
		Cyanazine	3.2	UJ	ng/L	P369838	CCV, RPD
		Demeton	6.8	UJ	ng/L	P369838	RPD
		Diazinon	0.12	U	ng/L	P369838	
		Dimethenamid**	0.098	U	ng/L	P369838	
		Disulfoton	0.49	UJ	ng/L	P369838	LCS
		Dithiopyr**	0.098	U	ng/L	P369838	
		EPTC	1.2	UJ	ng/L	P369838	RPD
		Ethion	0.15	U	ng/L	P369838	
		Ethoprop	0.098	UJ	ng/L	P369838	RPD
		Fenamiphos	0.49	U	ng/L	P369838	
		Fipronil	0.24	U	ng/L	P369838	
		Fipronil Desulfinyl**	0.12	U	ng/L	P369838	
		Fipronil Sulfide	0.15	U	ng/L	P369838	
		Fipronil Sulfone	0.15	U	ng/L	P369838	
		Fonofos	0.20	UJ	ng/L	P369838	LCS, RPD
		Hexazinone	0.49	U	ng/L	P369838	
		Malathion	0.34	U	ng/L	P369838	
		Metalaxyl	0.29	U	ng/L	P369838	
		Metolachlor	0.49	U	ng/L	P369838	
		Metribuzin	0.73	UJ	ng/L	P369838	CCV
		Mevinphos	0.49	UJ	ng/L	P369838	RPD
		Molinate	0.29	UJ	ng/L	P369838	RPD
		Norflurazon	0.49	U	ng/L	P369838	
		Oxadiazon**	0.098	U	ng/L	P369838	
		Parathion Ethyl	0.24	U	ng/L	P369838	
		Parathion Methyl	0.54	U	ng/L	P369838	
		Pendimethalin	0.98	U	ng/L	P369838	
		Phorate	0.24	UJ	ng/L	P369838	RPD
		Prodiamine**	0.17	U	ng/L	P369838	RPD
		Prometon	0.88	U	ng/L	P369838	
		Prometryn	0.20	U	ng/L	P369838	
		Simazine	0.49	U	ng/L	P369838	
		Tebuconazole**	0.49	U	ng/L	P369838	
		Terbufos	0.098	UJ	ng/L	P369838	LCS, RPD

Field ID: FB_08222019

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114279	EPA 8270E	Terbutylazine	0.42	U	ng/L	P369838	
2114284	EPA 200.7 Rev. 4.4	Barium	1.0	U	ug/L	P369637	
		Calcium	0.075	U	mg/L	P369637	
		Iron	30	U	ug/L	P369637	
		Magnesium	0.040	U	mg/L	P369637	
		Potassium	0.30	U	mg/L	P369637	
		Sodium	0.50	U	mg/L	P369637	
		Zinc	5.0	U	ug/L	P369637	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P369637	
		Antimony	0.050	U	ug/L	P369637	
		Arsenic	0.050	U	ug/L	P369637	
		Boron**	2.0	U	ug/L	P369637	
		Cadmium	0.020	U	ug/L	P369637	
		Chromium	0.40	U	ug/L	P369637	
		Copper	0.40	U	ug/L	P369637	
		Lead	0.20	U	ug/L	P369637	
		Nickel	0.50	U	ug/L	P369637	
		Selenium	0.20	U	ug/L	P369637	
		Silver	0.010	U	ug/L	P369637	
		Thallium	0.10	U	ug/L	P369637	

Ref. Method and Comment:

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

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

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Howell Creek @ US of Lake Howell Ln

Collection Date/Time: 08/22/2019 09:50

Field ID: G2CE0138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114198	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P369629	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P369924	
		Sulfate	14		mg SO4/L	P369927	
	SM 2120 B	Color (true)	34	A	PCU	P369661	
	SM 2320 B-97	Total Alkalinity	52		mg CaCO3/L	P370024	
	SM 2540 C-97	TDS	116		mg/L	P370067	
	SM 2540 D-97	TSS	2	U	mg/L	P370072	
	SM 4500 F-C-97	Fluoride	0.072	I	mg F/L	P370028	
2114201	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P370032	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P369657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.033		mg N/L	P369936	
	EPA 365.1 Rev. 2.0	Total-P	0.024		mg P/L	P369792	
	SM 5310 B-00	Organic Carbon	6.5		mg C/L	P370039	
2114204	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P369898	
2114261	EPA 8321B	Aldicarb	0.020	U	ug/L	P369584	
		Aldicarb Sulfone	0.0020	U	ug/L	P369584	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369584	
		Carbaryl	0.0020	U	ug/L	P369584	
		Carbofuran	0.0020	U	ug/L	P369584	
		3-Hydroxycarbofuran	0.0026	I	ug/L	P369584	
		Methiocarb	0.0020	U	ug/L	P369584	
		Methomyl	0.0020	U	ug/L	P369584	
		Oxamyl	0.0020	U	ug/L	P369584	
		Propoxur	0.0020	U	ug/L	P369584	
2114264		2,4-D	0.11		ug/L	P369653	
		Acesulfame K**	0.10	U	ug/L	P369616	
		AMPA**	0.24	I	ug/L	P369616	
		Sucralose**	0.17		ug/L	P369616	
		Acetaminophen**	0.0080	U	ug/L	P369653	
		Endothall**	0.25	U	ug/L	P369616	
		Acetamiprid**	0.0020	U	ug/L	P369653	
		Glufosinate**	0.10	U	ug/L	P369616	
		Glyphosate**	2.0		ug/L	P369616	
		Afidopyropen**	0.0020	UJ	ug/L	P369653	
		Bentazon	0.084		ug/L	P369653	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P369653	
		Carbamazepine**	8.0E-04	U	ug/L	P369653	
		Clothianidin**	0.0020	U	ug/L	P369653	
		Dinotefuran**	0.0020	U	ug/L	P369653	
		Diuron	0.0041	I	ug/L	P369653	
		Fenuron	0.016	U	ug/L	P369653	
		Fluridone**	0.015		ug/L	P369653	
		Imazapyr**	0.0045	I	ug/L	P369653	

Field ID: G2CE0138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114264	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P369653	
		Ibuprofen**	0.020	U	ug/L	P369653	
		Imidacloprid	0.090		ug/L	P369653	
		Linuron	0.0040	U	ug/L	P369653	
		Mandestrobin**	0.0020	UJ	ug/L	P369653	
		MCP	0.0020	U	ug/L	P369653	MS
		Naproxen**	0.0080	U	ug/L	P369653	
		Primidone**	0.0040	U	ug/L	P369653	
		Pyraclostrobin**	0.0020	U	ug/L	P369653	
		Thiamethoxam**	0.0020	U	ug/L	P369653	
		Tolfenpyrad**	0.0020	U	ug/L	P369653	
		Triclopyr**	0.0040	U	ug/L	P369653	
2114271	EPA 8270E	Aldrin	4.3	UJ	ng/L	P369575	RPD
		Alpha-BHC	2.1	U	ng/L	P369575	
		Alpha-Chlordane	1.1	U	ng/L	P369575	
		Beta-BHC	11	U	ng/L	P369575	
		Bifenthrin**	4.3	U	ng/L	P369575	
		Delta-BHC	8.5	U	ng/L	P369575	
		Gamma-BHC	8.5	U	ng/L	P369575	
		Carbophenothion	11	U	ng/L	P369575	
		Chlorothalonil	2.1	UJ	ng/L	P369575	LCS
		Cis-Nonachlor**	1.1	U	ng/L	P369575	
		Cypermethrin	21	U	ng/L	P369575	
		DDD-p,p'	6.4	U	ng/L	P369575	
		DDE-p,p'	6.4	U	ng/L	P369575	
		DDT-p,p'	7.4	U	ng/L	P369575	
		Dicofol	32	U	ng/L	P369575	
		Dieldrin	4.3	U	ng/L	P369575	
		Endosulfan I	4.3	U	ng/L	P369575	
		Endosulfan II	4.3	U	ng/L	P369575	
		Endosulfan Sulfate	2.1	U	ng/L	P369575	
		Endrin	2.1	U	ng/L	P369575	
		Endrin Aldehyde	2.1	U	ng/L	P369575	
		Endrin Ketone	2.1	U	ng/L	P369575	
		Ethalfuralin**	3.2	U	ng/L	P369575	
		Gamma-Chlordane	1.1	U	ng/L	P369575	
		Heptachlor	1.6	U	ng/L	P369575	
		Heptachlor Epoxide	2.1	U	ng/L	P369575	
		Hexachlorobenzene	2.1	U	ng/L	P369575	
		Methoxychlor	4.3	U	ng/L	P369575	MS
		Mirex	2.1	UJ	ng/L	P369575	LCS, RPD
		Permethrin	11	U	ng/L	P369575	
		Trans-Nonachlor**	1.1	U	ng/L	P369575	
		Trifluralin	2.7	U	ng/L	P369575	
		Chlordane	5.3	U	ng/L	P369575	
	EPA 8276						

Field ID: G2CE0138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114271	EPA 8276	Toxaphene	32	U	ng/L	P369575	
2114274	EPA 8270E	Acetochlor	0.26	U	ng/L	P369838	
		Alachlor	0.26	U	ng/L	P369838	
		Ametryn	0.62	U	ng/L	P369838	
		Atrazine	29		ng/L	P369838	
		Atrazine Desethyl	7.2	J	ng/L	P369838	CCV, RPD
		Azinphos Methyl	5.1	U	ng/L	P369838	
		Bromacil	0.51	U	ng/L	P369838	
		Butylate	0.41	U	ng/L	P369838	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P369838	
		Chlorpyrifos Methyl	0.10	UJ	ng/L	P369838	LCS, RPD
		Cyanazine	3.3	UJ	ng/L	P369838	CCV, RPD
		Demeton	7.2	UJ	ng/L	P369838	RPD
		Diazinon	0.13	U	ng/L	P369838	
		Dimethenamid**	0.10	U	ng/L	P369838	
		Disulfoton	0.51	UJ	ng/L	P369838	LCS
		Dithiopyr**	0.11	I	ng/L	P369838	
		EPTC	1.3	UJ	ng/L	P369838	RPD
		Ethion	0.15	U	ng/L	P369838	
		Ethoprop	0.10	UJ	ng/L	P369838	RPD
		Fenamiphos	0.51	U	ng/L	P369838	
		Fipronil	0.48	I	ng/L	P369838	
		Fipronil Desulfinyl**	0.57		ng/L	P369838	
		Fipronil Sulfide	0.31	I	ng/L	P369838	
		Fipronil Sulfone	0.92		ng/L	P369838	
		Fonofos	0.21	UJ	ng/L	P369838	LCS, RPD
		Hexazinone	0.51	U	ng/L	P369838	
		Malathion	0.36	U	ng/L	P369838	
		Metalaxyl	2.0		ng/L	P369838	
		Metolachlor	0.51	U	ng/L	P369838	
		Metribuzin	0.77	UJ	ng/L	P369838	CCV
		Mevinphos	0.51	UJ	ng/L	P369838	RPD
		Molinate	0.31	UJ	ng/L	P369838	RPD
		Norflurazon	0.51	U	ng/L	P369838	
		Oxadiazon**	0.18	I	ng/L	P369838	
		Parathion Ethyl	0.26	U	ng/L	P369838	
		Parathion Methyl	0.56	U	ng/L	P369838	
		Pendimethalin	1.0	U	ng/L	P369838	
		Phorate	0.26	UJ	ng/L	P369838	RPD
		Prodiamine**	0.18	U	ng/L	P369838	RPD
		Prometon	0.92	U	ng/L	P369838	
		Prometryn	0.21	U	ng/L	P369838	
		Simazine	1.1	I	ng/L	P369838	
		Tebuconazole**	1.7	I	ng/L	P369838	
		Terbufos	0.10	UJ	ng/L	P369838	LCS, RPD

Field ID: G2CE0138

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114274	EPA 8270E	Terbutylazine	0.44	U	ng/L	P369838	
2114281	EPA 200.7 Rev. 4.4	Barium	7.9		ug/L	P369637	
		Calcium	23.0		mg/L	P369637	
		Iron	35	I	ug/L	P369637	
		Magnesium	3.40		mg/L	P369637	
		Potassium	2.1		mg/L	P369637	
		Sodium	13.8		mg/L	P369637	
		Zinc	5.0	U	ug/L	P369637	
	EPA 200.8 Rev. 5.4	Aluminum	25		ug/L	P369637	
		Antimony	0.21		ug/L	P369637	
		Arsenic	1.38		ug/L	P369637	
		Boron**	36.0		ug/L	P369637	
		Cadmium	0.020	U	ug/L	P369637	
		Chromium	0.40	U	ug/L	P369637	
		Copper	0.65	I	ug/L	P369637	
		Lead	0.20	U	ug/L	P369637	
		Nickel	0.50	U	ug/L	P369637	
		Selenium	0.20	U	ug/L	P369637	
		Silver	0.010	U	ug/L	P369637	
		Thallium	0.10	U	ug/L	P369637	

Ref. Method and Comment:

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

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

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

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Soldier Creek @ 150m Upstream of SR Hwy 419 Collection Date/Time: 08/22/2019 11:20

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114199	EPA 180.1 Rev. 2.0	Turbidity	8.7	A	NTU	P369629	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P369924	
		Sulfate	2.5		mg SO4/L	P369927	
	SM 2120 B	Color (true)	210		PCU	P369661	
	SM 2320 B-97	Total Alkalinity	57		mg CaCO3/L	P370025	
	SM 2540 C-97	TDS	144	A	mg/L	P370067	
	SM 2540 D-97	TSS	7	IA	mg/L	P370072	
	SM 4500 F-C-97	Fluoride	0.085	I	mg F/L	P370029	
2114202	EPA 350.1 Rev. 2.0	Ammonia-N	0.016		mg N/L	P370032	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P369657	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.096		mg N/L	P369936	
	EPA 365.1 Rev. 2.0	Total-P	0.12		mg P/L	P369870	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P370039	
2114205	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.074		mg P/L	P369898	
2114262	EPA 8321B	Aldicarb	0.020	U	ug/L	P369584	
		Aldicarb Sulfone	0.0020	U	ug/L	P369584	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P369584	
		Carbaryl	0.0020	U	ug/L	P369584	
		Carbofuran	0.0020	U	ug/L	P369584	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P369584	
		Methiocarb	0.0020	U	ug/L	P369584	
		Methomyl	0.0020	U	ug/L	P369584	
		Oxamyl	0.0020	U	ug/L	P369584	
		Propoxur	0.0020	U	ug/L	P369584	
2114265		2,4-D	0.020		ug/L	P369653	
		Acesulfame K**	0.18	I	ug/L	P369616	
		AMPA**	0.24	I	ug/L	P369616	
		Sucralose**	0.79		ug/L	P369616	
		Acetaminophen**	0.0080	U	ug/L	P369653	
		Endothall**	0.25	U	ug/L	P369616	
		Acetamiprid**	0.0020	U	ug/L	P369653	
		Glufosinate**	0.10	U	ug/L	P369616	
		Glyphosate**	0.56		ug/L	P369616	
		Afidopyropen**	0.0020	UJ	ug/L	P369653	
		Bentazon	0.068		ug/L	P369653	
		Benzovindiflupyr**	0.0020	UJ	ug/L	P369653	
		Carbamazepine**	0.0010	I	ug/L	P369653	
		Clothianidin**	0.0020	U	ug/L	P369653	
		Dinotefuran**	0.0020	U	ug/L	P369653	
		Diuron	0.0057	I	ug/L	P369653	
		Fenuron	0.016	U	ug/L	P369653	
		Fluridone**	0.023		ug/L	P369653	
		Imazapyr**	0.31		ug/L	P369653	

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114265	EPA 8321B	Hydrocodone**	0.0020	U	ug/L	P369653	
		Ibuprofen**	0.020	U	ug/L	P369653	
		Imidacloprid	0.014		ug/L	P369653	
		Linuron	0.0040	U	ug/L	P369653	
		Mandestrobin**	0.0020	UJ	ug/L	P369653	
		MCP	0.0020	U	ug/L	P369653	MS
		Naproxen**	0.0080	U	ug/L	P369653	
		Primidone**	0.0040	U	ug/L	P369653	
		Pyraclostrobin**	0.0020	U	ug/L	P369653	
		Thiamethoxam**	0.0020	U	ug/L	P369653	
		Tolfenpyrad**	0.0020	U	ug/L	P369653	
		Triclopyr**	0.0040	U	ug/L	P369653	
2114272	EPA 8270E	Aldrin	4.2	UJ	ng/L	P369575	RPD
		Alpha-BHC	2.1	U	ng/L	P369575	
		Alpha-Chlordane	1.0	U	ng/L	P369575	
		Beta-BHC	10	U	ng/L	P369575	
		Bifenthrin**	4.2	U	ng/L	P369575	
		Delta-BHC	8.3	U	ng/L	P369575	
		Gamma-BHC	8.3	U	ng/L	P369575	
		Carbophenothion	10	U	ng/L	P369575	
		Chlorothalonil	2.1	UJ	ng/L	P369575	LCS
		Cis-Nonachlor**	1.0	U	ng/L	P369575	
		Cypermethrin	21	U	ng/L	P369575	
		DDD-p,p'	6.2	U	ng/L	P369575	
		DDE-p,p'	6.2	U	ng/L	P369575	
		DDT-p,p'	7.3	U	ng/L	P369575	
		Dicofol	31	U	ng/L	P369575	
		Dieldrin	4.2	U	ng/L	P369575	
		Endosulfan I	4.2	U	ng/L	P369575	
		Endosulfan II	4.2	U	ng/L	P369575	
		Endosulfan Sulfate	2.1	U	ng/L	P369575	
		Endrin	2.1	U	ng/L	P369575	
		Endrin Aldehyde	2.1	U	ng/L	P369575	
		Endrin Ketone	2.1	U	ng/L	P369575	
		Ethalfuralin**	3.1	U	ng/L	P369575	
		Gamma-Chlordane	1.0	U	ng/L	P369575	
		Heptachlor	1.6	U	ng/L	P369575	
		Heptachlor Epoxide	2.1	U	ng/L	P369575	
		Hexachlorobenzene	2.1	U	ng/L	P369575	
		Methoxychlor	4.2	U	ng/L	P369575	MS
		Mirex	2.1	UJ	ng/L	P369575	LCS, RPD
		Permethrin	10	U	ng/L	P369575	
		Trans-Nonachlor**	1.0	U	ng/L	P369575	
		Trifluralin	2.6	U	ng/L	P369575	
		Chlordane	5.2	U	ng/L	P369575	

EPA 8276

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114272	EPA 8276	Toxaphene	31	U	ng/L	P369575	
2114275	EPA 8270E	Acetochlor	0.26	U	ng/L	P369838	
		Alachlor	0.26	U	ng/L	P369838	
		Ametryn	0.62	U	ng/L	P369838	
		Atrazine	13		ng/L	P369838	
		Atrazine Desethyl	1.6	UJ	ng/L	P369838	CCV, RPD
		Azinphos Methyl	5.2	U	ng/L	P369838	
		Bromacil	0.52	U	ng/L	P369838	
		Butylate	0.42	U	ng/L	P369838	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P369838	
		Chlorpyrifos Methyl	0.10	UJ	ng/L	P369838	LCS, RPD
		Cyanazine	3.4	UJ	ng/L	P369838	CCV, RPD
		Demeton	7.3	UJ	ng/L	P369838	RPD
		Diazinon	0.13	U	ng/L	P369838	
		Dimethenamid**	0.10	U	ng/L	P369838	
		Disulfoton	0.52	UJ	ng/L	P369838	LCS
		Dithiopyr**	0.14	I	ng/L	P369838	
		EPTC	1.3	UJ	ng/L	P369838	RPD
		Ethion	0.16	U	ng/L	P369838	
		Ethoprop	0.10	UJ	ng/L	P369838	RPD
		Fenamiphos	0.52	U	ng/L	P369838	
		Fipronil	0.26	U	ng/L	P369838	
		Fipronil Desulfinyl**	0.51	I	ng/L	P369838	
		Fipronil Sulfide	0.47	I	ng/L	P369838	
		Fipronil Sulfone	0.85		ng/L	P369838	
		Fonofos	0.21	UJ	ng/L	P369838	LCS, RPD
		Hexazinone	0.52	U	ng/L	P369838	
		Malathion	0.36	U	ng/L	P369838	
		Metalaxyl	0.31	U	ng/L	P369838	
		Metolachlor	0.52	U	ng/L	P369838	
		Metribuzin	0.78	UJ	ng/L	P369838	CCV
		Mevinphos	0.52	UJ	ng/L	P369838	RPD
		Molinate	0.31	UJ	ng/L	P369838	RPD
		Norflurazon	0.52	U	ng/L	P369838	
		Oxadiazon**	0.40	I	ng/L	P369838	
		Parathion Ethyl	0.26	U	ng/L	P369838	
		Parathion Methyl	0.57	U	ng/L	P369838	
		Pendimethalin	1.0	U	ng/L	P369838	
		Phorate	0.26	UJ	ng/L	P369838	RPD
		Prodiamine**	0.18	U	ng/L	P369838	RPD
		Prometon	0.94	U	ng/L	P369838	
		Prometryn	0.21	U	ng/L	P369838	
		Simazine	0.52	U	ng/L	P369838	
		Tebuconazole**	0.52	U	ng/L	P369838	
		Terbufos	0.10	UJ	ng/L	P369838	LCS, RPD

Field ID: G2CE0071

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2114275	EPA 8270E	Terbutylazine	0.44	U	ng/L	P369838	
2114282	EPA 200.7 Rev. 4.4	Barium	10.3		ug/L	P369637	
		Calcium	22.3		mg/L	P369637	
		Iron	430		ug/L	P369637	
		Magnesium	2.96		mg/L	P369637	
		Potassium	2.0		mg/L	P369637	
		Sodium	12.5		mg/L	P369637	
		Zinc	5.0	U	ug/L	P369637	
	EPA 200.8 Rev. 5.4	Aluminum	298		ug/L	P369637	
		Antimony	0.062	I	ug/L	P369637	
		Arsenic	0.76		ug/L	P369637	
		Boron**	37.0		ug/L	P369637	
		Cadmium	0.020	U	ug/L	P369637	
		Chromium	0.57	I	ug/L	P369637	
		Copper	0.47	I	ug/L	P369637	
		Lead	0.65		ug/L	P369637	
		Nickel	0.50	U	ug/L	P369637	
		Selenium	0.20	U	ug/L	P369637	
		Silver	0.010	U	ug/L	P369637	
		Thallium	0.10	U	ug/L	P369637	

Ref. Method and Comment:

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

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

EPA 8270E: Refer to the narrative for an explanation of QC Codes.

EPA 8270E: MS accuracy for atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369629

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369631

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369637

Component	Result	Code	Units
Barium	1.0	U	ug/L
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
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369637

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	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: P369924

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369927

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370032

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370100

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369656

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369657

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P369936

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P369792

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P369870

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369898

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

Reference Method: EPA 8270E
Batch ID: P369575

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P369575

Component	Result	Code	Units
Bifenthrin	4.0	U	ng/L
Carbophenothion	10	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	6.0	U	ng/L
DDE-p,p'	6.0	U	ng/L
DDT-p,p'	7.0	U	ng/L
Delta-BHC	8.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	8.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P369838

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.50	U	ng/L
Dithiopyr	0.10	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P369838

Component	Result	Code	Units
Fenamiphos	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metalaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8276

Batch ID: P369575

Component	Result	Code	Units
Chlordane	5.0	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B

Batch ID: P369584

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P369616

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: P369653

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Acetamiprid	0.0020	U	ug/L
Afidopyropen	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Benzovindiflupyr	0.0020	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Clothianidin	0.0020	U	ug/L
Dinotefuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
Mandestrobin	0.0020	U	ug/L
MCPP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Thiamethoxam	0.0020	U	ug/L
Tolfenpyrad	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P369661

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P369663

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Quality Assurance Report

Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P370024

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2320 B-97
Batch ID: P370025

Component	Result	Code	Units
Total Alkalinity	0.65	U	mg CaCO ₃ /L

Reference Method: SM 2540 C-97
Batch ID: P370067

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P370072

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P370028

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P370029

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P370039

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

Reference Method: SM 5310 B-00
Batch ID: P370040

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369637

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	105		P	80 - 120
Calcium	106		P	80 - 120
Iron	107		P	80 - 120
Magnesium	114		P	80 - 120
Potassium	111		P	80 - 120
Sodium	106		P	80 - 120
Zinc	104		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369637

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	98.1		P	85 - 115
Antimony	97.9		P	85 - 115
Arsenic	102		P	85 - 115
Boron	99.8		P	85 - 115
Cadmium	98.4		P	85 - 115
Chromium	101		P	85 - 115
Copper	100		P	85 - 115
Lead	97.6		P	85 - 115
Nickel	101		P	85 - 115
Selenium	104		P	85 - 115
Silver	103		P	85 - 115
Thallium	101		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369924

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369927

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370032

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	96.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	97.2		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P369656

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

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P369657

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

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P369936

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P369792

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	93.4		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P369870

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P369898

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

Reference Method: EPA 8270E
 Batch ID: P369575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	35.0	48.3	P/P	20 - 93.0
Alpha-BHC	103	124	P/P	55 - 133
Alpha-Chlordane	69.7	80.8	P/P	58 - 112
Beta-BHC	115	137	P/P	54 - 168
Bifenthrin	56.8	69.9	P/P	30 - 134
Carbophenothion	78.0	85.6	P/P	26 - 147
Chlorothalonil	164	140	F/P	20 - 155
Cis-Nonachlor	68.7	81.1	P/P	54 - 115
Cypermethrin	56.7	66.2	P/P	40 - 137
DDD-p,p'	80.4	90.1	P/P	65 - 129
DDE-p,p'	61.7	74.7	P/P	57 - 116
DDT-p,p'	90.9	101	P/P	53 - 133
Delta-BHC	126	143	P/P	59 - 178
Dicofol	87.6	88.9	P/P	24 - 138
Dieldrin	81.7	88.9	P/P	60 - 120
Endosulfan I	85.9	87.4	P/P	64 - 118

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P369575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Endosulfan II	99.6	102	P/P	58 - 142
Endosulfan Sulfate	93.3	95.3	P/P	60 - 127
Endrin	89.5	99.5	P/P	59 - 122
Endrin Aldehyde	101	101	P/P	49 - 132
Endrin Ketone	89.3	89.8	P/P	64 - 121
Ethalfuralin	87.9	97.6	P/P	60 - 126
Gamma-BHC	111	133	P/P	57 - 154
Gamma-Chlordane	65.1	77.6	P/P	56 - 110
Heptachlor	56.0	67.3	P/P	46 - 96.0
Heptachlor Epoxide	81.4	87.2	P/P	61 - 112
Hexachlorobenzene	60.6	71.1	P/P	44 - 98.0
Methoxychlor	123	126	P/P	63 - 134
Mirex	39.0	54.8	F/P	45 - 100
Permethrin	55.4	68.4	P/P	53 - 115
Trans-Nonachlor	62.6	76.0	P/P	47 - 110
Trifluralin	80.6	91.5	P/P	39 - 142

Reference Method: EPA 8270E

Batch ID: P369838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	104	84.8	P/P	69 - 122
Alachlor	102	83.5	P/P	71 - 120
Ametryn	102	93.1	P/P	47 - 138
Atrazine	95.7	87.4	P/P	74 - 124
Atrazine Desethyl	84.1	54.0	P/P	38 - 138
Azinphos Methyl	106	87.8	P/P	69 - 154
Bromacil	89.8	73.4	P/P	39 - 121
Butylate	51.3	38.4	P/P	27 - 87.0
Chlorpyrifos Ethyl	87.6	78.7	P/P	69 - 118
Chlorpyrifos Methyl	91.5	67.5	P/F	70 - 120
Cyanazine	151	67.1	P/P	20 - 250
Demeton	69.8	42.0	P/P	39 - 118
Diazinon	96.4	75.0	P/P	68 - 127
Dimethenamid	102	84.5	P/P	66 - 125
Disulfoton	56.2	47.5	P/F	52 - 126
Dithiopyr	96.9	82.0	P/P	67 - 127
EPTC	63.3	43.9	P/P	24 - 88.0
Ethion	93.5	91.9	P/P	51 - 132
Ethoprop	92.9	63.4	P/P	58 - 117
Fenamiphos	90.5	77.5	P/P	38 - 139
Fipronil	115	97.8	P/P	61 - 124
Fipronil Desulfinyl	94.6	90.6	P/P	47 - 120
Fipronil Sulfide	96.1	87.6	P/P	56 - 119
Fipronil Sulfone	95.9	92.6	P/P	50 - 117
Fonofos	85.2	55.5	P/F	60 - 121
Hexazinone	97.1	106	P/P	55 - 137
Malathion	99.1	88.5	P/P	66 - 126
Metaxyl	97.7	83.5	P/P	33 - 140
Metolachlor	98.9	88.1	P/P	69 - 119
Metribuzin	101	77.6	P/P	31 - 238
Mevinphos	92.3	64.3	P/P	42 - 113

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P369838

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	78.2	51.3	P/P	32 - 96.0
Norflurazon	104	94.2	P/P	54 - 123
Oxadiazon	94.6	90.2	P/P	63 - 128
Parathion Ethyl	92.8	83.0	P/P	72 - 111
Parathion Methyl	94.2	80.0	P/P	74 - 126
Pendimethalin	85.2	72.1	P/P	61 - 131
Phorate	84.7	60.6	P/P	51 - 115
Prodiamine	75.2	71.1	P/P	38 - 144
Prometon	98.0	92.4	P/P	54 - 119
Prometryn	117	94.5	P/P	63 - 120
Simazine	105	92.5	P/P	75 - 126
Tebuconazole	76.8	97.3	P/P	20 - 119
Terbufos	83.3	55.6	P/F	64 - 116
Terbutylazine	95.7	88.8	P/P	73 - 117

Reference Method: EPA 8276

Batch ID: P369575

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.4	91.4	P/P	43 - 128
Toxaphene	62.8	66.7	P/P	38 - 140

Reference Method: EPA 8321B

Batch ID: P369584

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	81.6		P	40 - 160
Aldicarb	71.0		P	30 - 160
Aldicarb Sulfone	84.5		P	40 - 160
Aldicarb Sulfoxide	77.7		P	40 - 160
Carbaryl	57.7		P	40 - 160
Carbofuran	71.7		P	40 - 160
Methiocarb	59.3		P	40 - 160
Methomyl	75.1		P	40 - 160
Oxamyl	77.4		P	40 - 160
Propoxur	75.0		P	40 - 160

Reference Method: EPA 8321B

Batch ID: P369616

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	95.2		P	40 - 150
AMPA	140		P	40 - 150
Endothall	95.9		P	40 - 150
Glufosinate	113		P	40 - 150
Glyphosate	128		P	40 - 140
Sucralose	75.2		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P369653

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

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P369653

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	119		P	40 - 160
Acetaminophen	74.9		P	30 - 160
Acetamiprid	82.1		P	40 - 160
Afidopyropen	87.0		P	40 - 160
Bentazon	91.2		P	30 - 160
Benzovindiflupyr	75.2		P	40 - 160
Carbamazepine	78.4		P	40 - 160
Clothianidin	78.0		P	40 - 160
Dinotefuran	82.9		P	40 - 160
Diuron	79.1		P	40 - 160
Fenuron	90.5		P	40 - 160
Fluridone	90.2		P	40 - 160
Hydrocodone	79.3		P	40 - 160
Ibuprofen	86.5		P	30 - 160
Imazapyr	95.6		P	40 - 160
Imidacloprid	86.8		P	40 - 160
Linuron	64.9		P	40 - 160
Mandestrobin	77.1		P	40 - 160
MCPP	144		P	40 - 160
Naproxen	84.0		P	40 - 160
Primidone	78.5		P	40 - 160
Pyraclostrobin	74.5		P	30 - 160
Thiamethoxam	90.7		P	40 - 160
Tolfenpyrad	49.7		P	40 - 160
Triclopyr	102		P	30 - 160

Reference Method: SM 2120 B
Batch ID: P369661

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	85 - 115

Reference Method: SM 2120 B
Batch ID: P369663

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	103		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P370024

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 106

Reference Method: SM 2320 B-97
Batch ID: P370025

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500 F-C-97
Batch ID: P370028

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	98.6		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P370029

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.1		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P370039

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

Reference Method: SM 5310 B-00
Batch ID: P370040

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113495	Barium	103		P	80 - 120
2113495	Calcium	104		P	80 - 120
2113495	Iron	101		P	80 - 120
2113495	Magnesium	99.7		P	80 - 120
2113495	Potassium	100		P	80 - 120
2113495	Sodium	101		P	80 - 120
2113495	Zinc	104		P	80 - 120
2114281	Barium	103	103	P/P	80 - 120
2114281	Calcium	102		P	80 - 120
2114281	Iron	105	105	P/P	80 - 120
2114281	Magnesium	106	108	P/P	80 - 120
2114281	Potassium	107	110	P/P	80 - 120
2114281	Sodium	103		P	80 - 120
2114281	Zinc	105	105	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369637

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113495	Aluminum	96.9		P	80 - 120
2113495	Antimony	95.6		P	80 - 120
2113495	Arsenic	99.4		P	80 - 120
2113495	Boron	105		P	80 - 120
2113495	Cadmium	99.8		P	80 - 120
2113495	Chromium	106		P	80 - 120
2113495	Copper	99.4		P	80 - 120
2113495	Lead	98.9		P	80 - 120
2113495	Nickel	100		P	80 - 120
2113495	Selenium	100		P	80 - 120
2113495	Silver	103		P	80 - 120
2113495	Thallium	110		P	80 - 120
2114281	Aluminum	97.0	97.8	P/P	80 - 120
2114281	Antimony	101	102	P/P	80 - 120
2114281	Arsenic	101	104	P/P	80 - 120
2114281	Boron	102	101	P/P	80 - 120
2114281	Cadmium	101	103	P/P	80 - 120
2114281	Chromium	102	105	P/P	80 - 120
2114281	Copper	98.1	99.8	P/P	80 - 120
2114281	Lead	100	102	P/P	80 - 120
2114281	Nickel	98.4	100	P/P	80 - 120
2114281	Selenium	104	104	P/P	80 - 120
2114281	Silver	104	105	P/P	80 - 120
2114281	Thallium	105	110	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113658	Chloride	104		P	90 - 110
2114199	Chloride	104		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369927

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113658	Sulfate	106		P	90 - 110
2114199	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370032

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114201	Ammonia-N	97.5	97.3	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370100

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114025	Ammonia-N	94.2	94.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369656

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114024	Kjeldahl Nitrogen	100	93.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114342	Kjeldahl Nitrogen	93.7	97.2	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P369936

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2112824	NO2NO3-N	98.0	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P369870

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114208	Total-P	98.2	97.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114203	O-Phosphate-P	96.2	97.1	P/P	90 - 110

Reference Method: EPA 8270E
Batch ID: P369575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114295	Aldrin	56.4	52.1	P/P	25 - 92.0
2114295	Alpha-BHC	132	134	P/P	48 - 150
2114295	Alpha-Chlordane	82.9	84.8	P/P	50 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P369575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114295	Beta-BHC	148	158	P/P	39 - 184
2114295	Bifenthrin	82.8	73.6	P/P	46 - 116
2114295	Carbophenothion	105	93.5	P/P	27 - 180
2114295	Chlorothalonil	204	167	P/P	10 - 216
2114295	Cis-Nonachlor	81.5	83.8	P/P	55 - 112
2114295	Cypermethrin	79.7	68.4	P/P	40 - 153
2114295	DDD-p,p'	92.0	98.0	P/P	53 - 128
2114295	DDE-p,p'	77.9	80.5	P/P	48 - 116
2114295	DDT-p,p'	114	115	P/P	47 - 128
2114295	Delta-BHC	177	178	P/P	48 - 221
2114295	Dicofol	116	95.5	P/P	10 - 147
2114295	Dieldrin	92.0	94.2	P/P	48 - 128
2114295	Endosulfan I	96.2	97.0	P/P	58 - 126
2114295	Endosulfan II	108	107	P/P	50 - 150
2114295	Endosulfan Sulfate	95.9	96.9	P/P	56 - 130
2114295	Endrin	118	104	P/P	50 - 126
2114295	Endrin Aldehyde	94.0	96.8	P/P	12 - 145
2114295	Endrin Ketone	93.0	95.2	P/P	59 - 132
2114295	Ethalfuralin	97.2	99.0	P/P	65 - 122
2114295	Gamma-BHC	153	143	P/P	40 - 190
2114295	Gamma-Chlordane	77.9	80.2	P/P	50 - 112
2114295	Heptachlor	68.8	66.3	P/P	41 - 98.0
2114295	Heptachlor Epoxide	90.3	92.2	P/P	55 - 117
2114295	Hexachlorobenzene	70.9	70.5	P/P	47 - 91.0
2114295	Methoxychlor	133	133	F/P	55 - 133
2114295	Mirex	55.4	55.7	P/P	44 - 101
2114295	Permethrin	72.8	63.6	P/P	52 - 124
2114295	Trans-Nonachlor	74.4	78.8	P/P	53 - 99.0
2114295	Trifluralin	96.0	97.1	P/P	10 - 201

Reference Method: EPA 8270E
Batch ID: P369838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2112739	Acetochlor	105	98.1	P/P	63 - 129
2112739	Alachlor	99.7	96.1	P/P	65 - 127
2112739	Ametryn	114	111	P/P	40 - 164
2112739	Atrazine Desethyl	74.6	54.5	P/P	14 - 157
2112739	Azinphos Methyl	96.3	90.4	P/P	49 - 180
2112739	Bromacil	113	72.3	P/P	48 - 130
2112739	Butylate	53.0	47.7	P/P	10 - 94.0
2112739	Chlorpyrifos Ethyl	96.0	85.5	P/P	58 - 123
2112739	Chlorpyrifos Methyl	88.5	79.2	P/P	58 - 125
2112739	Cyanazine	102	82.2	P/P	24 - 253
2112739	Demeton	69.5	58.8	P/P	25 - 149
2112739	Diazinon	94.3	88.9	P/P	59 - 144
2112739	Dimethenamid	103	100	P/P	46 - 139
2112739	Disulfoton	75.0	64.1	P/P	54 - 132
2112739	Dithiopyr	96.4	94.0	P/P	64 - 130
2112739	EPTC	62.5	56.4	P/P	10 - 92.0
2112739	Ethion	105	91.9	P/P	30 - 148
2112739	Ethoprop	94.8	85.0	P/P	50 - 130

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E
 Batch ID: P369838

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2112739	Fenamiphos	98.0	95.1	P/P	49 - 142
2112739	Fipronil	109	105	P/P	46 - 140
2112739	Fipronil Desulfinyl	101	95.2	P/P	30 - 121
2112739	Fipronil Sulfide	103	89.5	P/P	31 - 136
2112739	Fipronil Sulfone	134	93.8	P/P	16 - 136
2112739	Fonofos	85.7	71.2	P/P	55 - 129
2112739	Hexazinone	123	112	P/P	56 - 141
2112739	Malathion	102	94.4	P/P	56 - 135
2112739	Metalaxyl	95.1	92.4	P/P	54 - 135
2112739	Metolachlor	103	97.4	P/P	51 - 140
2112739	Metribuzin	95.4	74.9	P/P	45 - 254
2112739	Mevinphos	93.8	89.3	P/P	33 - 131
2112739	Molinate	75.6	67.6	P/P	14 - 98.0
2112739	Norflurazon	104	98.5	P/P	34 - 136
2112739	Oxadiazon	98.1	93.1	P/P	67 - 116
2112739	Parathion Ethyl	98.5	85.9	P/P	66 - 118
2112739	Parathion Methyl	95.4	88.5	P/P	64 - 136
2112739	Pendimethalin	93.5	82.2	P/P	59 - 144
2112739	Phorate	95.0	80.8	P/P	42 - 130
2112739	Prodiamine	143	75.2	P/P	42 - 148
2112739	Prometon	101	98.3	P/P	59 - 134
2112739	Prometryn	110	108	P/P	54 - 135
2112739	Simazine	99.5	85.4	P/P	53 - 156
2112739	Tebuconazole	110	108	P/P	10 - 131
2112739	Terbufos	83.8	70.6	P/P	57 - 131
2112739	Terbutylazine	104	87.6	P/P	68 - 125

Reference Method: EPA 8276
 Batch ID: P369575

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114270	Chlordane	90.1	88.8	P/P	34 - 136
2114270	Toxaphene	63.6	63.6	P/P	22 - 152

Reference Method: EPA 8321B
 Batch ID: P369584

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2112734	3-Hydroxycarbofuran	101	85.8	P/P	40 - 160
2112734	Aldicarb	95.8	70.9	P/P	30 - 160
2112734	Aldicarb Sulfone	102	84.1	P/P	40 - 160
2112734	Aldicarb Sulfoxide	59.2	50.9	P/P	40 - 160
2112734	Carbaryl	66.0	55.6	P/P	40 - 160
2112734	Carbofuran	82.5	70.7	P/P	40 - 160
2112734	Methiocarb	69.5	59.2	P/P	40 - 160
2112734	Methomyl	82.7	72.5	P/P	40 - 160
2112734	Oxamyl	94.4	74.1	P/P	40 - 160
2112734	Propoxur	84.7	74.0	P/P	40 - 160

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P369616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113575	Acesulfame K	88.8	91.5	P/P	40 - 150
2113575	AMPA	86.0	94.9	P/P	40 - 150
2113575	Endothall	86.7	89.2	P/P	40 - 150
2113575	Glufosinate	86.6	95.0	P/P	40 - 150
2113575	Glyphosate	93.5	94.9	P/P	40 - 140
2113575	Sucralose	77.3	72.4	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P369653

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113573	2,4-D	148	157	P/P	40 - 160
2113573	Acetaminophen	79.6	81.7	P/P	30 - 160
2113573	Acetamiprid	88.9	93.5	P/P	40 - 160
2113573	Afidopyropen	99.8	106	P/P	40 - 160
2113573	Benzovindiflupyr	85.5	86.8	P/P	40 - 160
2113573	Carbamazepine	80.2	82.7	P/P	40 - 160
2113573	Clothianidin	92.6	101	P/P	40 - 160
2113573	Dinotefuran	113	108	P/P	40 - 160
2113573	Diuron	71.9	76.8	P/P	40 - 160
2113573	Fenuron	82.3	85.6	P/P	40 - 160
2113573	Fluridone	80.3	86.2	P/P	40 - 160
2113573	Hydrocodone	82.4	92.5	P/P	40 - 160
2113573	Ibuprofen	105	103	P/P	30 - 160
2113573	Imidacloprid	159	159	P/P	40 - 160
2113573	Linuron	55.5	61.0	P/P	40 - 160
2113573	Mandestrobin	73.0	76.1	P/P	40 - 160
2113573	MCCP	189	201	F/F	40 - 160
2113573	Naproxen	86.4	108	P/P	40 - 160
2113573	Primidone	91.8	96.7	P/P	40 - 160
2113573	Pyraclostrobin	81.6	81.7	P/P	30 - 160
2113573	Thiamethoxam	141	135	P/P	40 - 160
2113573	Tolfenpyrad	67.7	69.6	P/P	40 - 160
2113573	Triclopyr	127	117	P/P	30 - 160

Reference Method: SM 4500 F-C-97
Batch ID: P370028

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2113537	Fluoride	99.4	99.4	P/P	89 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P370029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114341	Fluoride	95.6	96.1	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P370039

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114201	Organic Carbon	95.4	94.9	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: SM 5310 B-00
Batch ID: P370040

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2114328	Organic Carbon	96.2	95.1	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114199	Turbidity	5.65	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P369631

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114219	Turbidity	11.1	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P369637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114281	Barium	0.482	Spike	P	0 - 20
2114281	Calcium	1.04	Spike	P	0 - 20
2114281	Iron	0.228	Spike	P	0 - 20
2114281	Magnesium	0.741	Spike	P	0 - 20
2114281	Potassium	1.47	Spike	P	0 - 20
2114281	Sodium	2.02	Spike	P	0 - 20
2114281	Zinc	0.168	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P369637

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114281	Aluminum	0.878	Spike	P	0 - 20
2114281	Antimony	1.02	Spike	P	0 - 20
2114281	Arsenic	2.58	Spike	P	0 - 20
2114281	Boron	0.480	Spike	P	0 - 20
2114281	Cadmium	2.44	Spike	P	0 - 20
2114281	Chromium	2.98	Spike	P	0 - 20
2114281	Copper	1.69	Spike	P	0 - 20
2114281	Lead	2.18	Spike	P	0 - 20
2114281	Nickel	1.88	Spike	P	0 - 20
2114281	Selenium	0.0865	Spike	P	0 - 20
2114281	Silver	0.529	Spike	P	0 - 20
2114281	Thallium	5.28	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113658	Chloride	0.382	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P369927

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113658	Sulfate	0.258	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370032

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114201	Ammonia-N	0.167	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P370100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114025	Ammonia-N	0.229	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369656

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114024	Kjeldahl Nitrogen	6.13	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P369657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114342	Kjeldahl Nitrogen	2.84	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P369936

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2112824	NO2NO3-N	0.331	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P369792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113664	Total-P	2.17	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P369870

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114208	Total-P	0.894	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P369898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114203	O-Phosphate-P	0.757	Spike	P	0 - 20

Reference Method: EPA 8270E
Batch ID: P369575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114295	Aldrin	7.91	Spike	P	0 - 30
2114295	Alpha-BHC	1.44	Spike	P	0 - 30
2114295	Alpha-Chlordane	2.17	Spike	P	0 - 30
2114295	Beta-BHC	6.80	Spike	P	0 - 30
2114295	Bifenthrin	11.7	Spike	P	0 - 30
2114295	Carbophenothion	11.6	Spike	P	0 - 30
2114295	Chlorothalonil	19.5	Spike	P	0 - 30
2114295	Cis-Nonachlor	2.87	Spike	P	0 - 30
2114295	Cypermethrin	15.3	Spike	P	0 - 30
2114295	DDD-p,p'	6.30	Spike	P	0 - 30
2114295	DDE-p,p'	3.28	Spike	P	0 - 30
2114295	DDT-p,p'	0.597	Spike	P	0 - 30
2114295	Delta-BHC	0.643	Spike	P	0 - 30
2114295	Dicofol	19.8	Spike	P	0 - 30
2114295	Dieldrin	2.38	Spike	P	0 - 30
2114295	Endosulfan I	0.780	Spike	P	0 - 30
2114295	Endosulfan II	0.393	Spike	P	0 - 30
2114295	Endosulfan Sulfate	1.04	Spike	P	0 - 30
2114295	Endrin	12.9	Spike	P	0 - 30
2114295	Endrin Aldehyde	2.98	Spike	P	0 - 30
2114295	Endrin Ketone	2.40	Spike	P	0 - 30
2114295	Ethalfuralin	1.77	Spike	P	0 - 30
2114295	Gamma-BHC	6.64	Spike	P	0 - 30
2114295	Gamma-Chlordane	2.92	Spike	P	0 - 30
2114295	Heptachlor	3.74	Spike	P	0 - 30
2114295	Heptachlor Epoxide	2.07	Spike	P	0 - 30
2114295	Hexachlorobenzene	0.564	Spike	P	0 - 30
2114295	Methoxychlor	0.438	Spike	P	0 - 30
2114295	Mirex	0.545	Spike	P	0 - 30
2114295	Permethrin	13.5	Spike	P	0 - 30
2114295	Trans-Nonachlor	5.72	Spike	P	0 - 30
2114295	Trifluralin	1.20	Spike	P	0 - 30
LFB	Aldrin	32.0	LCS	F	0 - 30
LFB	Alpha-BHC	18.2	LCS	P	0 - 30
LFB	Alpha-Chlordane	14.8	LCS	P	0 - 30
LFB	Beta-BHC	17.3	LCS	P	0 - 30
LFB	Bifenthrin	20.6	LCS	P	0 - 30
LFB	Carbophenothion	9.32	LCS	P	0 - 30
LFB	Chlorothalonil	15.9	LCS	P	0 - 30
LFB	Cis-Nonachlor	16.6	LCS	P	0 - 30
LFB	Cypermethrin	15.5	LCS	P	0 - 30
LFB	DDD-p,p'	11.4	LCS	P	0 - 30
LFB	DDE-p,p'	19.1	LCS	P	0 - 30
LFB	DDT-p,p'	10.2	LCS	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P369575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Delta-BHC	12.7	LCS	P	0 - 30
LFB	Dicofol	1.44	LCS	P	0 - 30
LFB	Dieldrin	8.42	LCS	P	0 - 30
LFB	Endosulfan I	1.67	LCS	P	0 - 30
LFB	Endosulfan II	2.26	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.16	LCS	P	0 - 30
LFB	Endrin	10.5	LCS	P	0 - 30
LFB	Endrin Aldehyde	0.811	LCS	P	0 - 30
LFB	Endrin Ketone	0.591	LCS	P	0 - 30
LFB	Ethalfuralin	10.5	LCS	P	0 - 30
LFB	Gamma-BHC	18.2	LCS	P	0 - 30
LFB	Gamma-Chlordane	17.4	LCS	P	0 - 30
LFB	Heptachlor	18.3	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.92	LCS	P	0 - 30
LFB	Hexachlorobenzene	15.9	LCS	P	0 - 30
LFB	Methoxychlor	2.44	LCS	P	0 - 30
LFB	Mirex	33.8	LCS	F	0 - 30
LFB	Permethrin	21.0	LCS	P	0 - 30
LFB	Trans-Nonachlor	19.4	LCS	P	0 - 30
LFB	Trifluralin	12.7	LCS	P	0 - 30

Reference Method: EPA 8270E

Batch ID: P369838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2112739	Acetochlor	6.52	Spike	P	0 - 30
2112739	Alachlor	3.72	Spike	P	0 - 30
2112739	Ametryn	2.53	Spike	P	0 - 30
2112739	Atrazine	10.0	Spike	P	0 - 30
2112739	Atrazine Desethyl	20.2	Spike	P	0 - 30
2112739	Azinphos Methyl	6.29	Spike	P	0 - 30
2112739	Bromacil	21.4	Spike	P	0 - 30
2112739	Butylate	10.3	Spike	P	0 - 30
2112739	Chlorpyrifos Ethyl	11.5	Spike	P	0 - 30
2112739	Chlorpyrifos Methyl	11.1	Spike	P	0 - 30
2112739	Cyanazine	21.3	Spike	P	0 - 30
2112739	Demeton	16.7	Spike	P	0 - 30
2112739	Diazinon	5.88	Spike	P	0 - 30
2112739	Dimethenamid	2.98	Spike	P	0 - 30
2112739	Disulfoton	15.6	Spike	P	0 - 30
2112739	Dithiopyr	2.46	Spike	P	0 - 30
2112739	EPTC	10.2	Spike	P	0 - 30
2112739	Ethion	13.6	Spike	P	0 - 30
2112739	Ethoprop	10.9	Spike	P	0 - 30
2112739	Fenamiphos	3.02	Spike	P	0 - 30
2112739	Fipronil	2.10	Spike	P	0 - 30
2112739	Fipronil Desulfinyl	5.88	Spike	P	0 - 30
2112739	Fipronil Sulfide	10.5	Spike	P	0 - 30
2112739	Fipronil Sulfone	10.2	Spike	P	0 - 30
2112739	Fonofos	18.4	Spike	P	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P369838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2112739	Hexazinone	9.06	Spike	P	0 - 30
2112739	Malathion	7.38	Spike	P	0 - 30
2112739	Metalaxyl	2.90	Spike	P	0 - 30
2112739	Metolachlor	5.68	Spike	P	0 - 30
2112739	Metribuzin	24.0	Spike	P	0 - 30
2112739	Mevinphos	4.85	Spike	P	0 - 30
2112739	Molinate	11.1	Spike	P	0 - 30
2112739	Norflurazon	5.84	Spike	P	0 - 30
2112739	Oxadiazon	5.22	Spike	P	0 - 30
2112739	Parathion Ethyl	13.7	Spike	P	0 - 30
2112739	Parathion Methyl	7.46	Spike	P	0 - 30
2112739	Pendimethalin	12.9	Spike	P	0 - 30
2112739	Phorate	16.2	Spike	P	0 - 30
2112739	Prodiamine	43.4	Spike	F	0 - 30
2112739	Prometon	1.90	Spike	P	0 - 30
2112739	Prometryn	1.34	Spike	P	0 - 30
2112739	Simazine	8.16	Spike	P	0 - 30
2112739	Tebuconazole	1.17	Spike	P	0 - 30
2112739	Terbufos	17.0	Spike	P	0 - 30
2112739	Terbutylazine	11.6	Spike	P	0 - 30
LFB	Acetochlor	20.0	LCS	P	0 - 30
LFB	Alachlor	19.8	LCS	P	0 - 30
LFB	Ametryn	8.77	LCS	P	0 - 30
LFB	Atrazine	9.02	LCS	P	0 - 30
LFB	Atrazine Desethyl	43.6	LCS	F	0 - 30
LFB	Azinphos Methyl	18.4	LCS	P	0 - 30
LFB	Bromacil	20.2	LCS	P	0 - 30
LFB	Butylate	28.6	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	10.7	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	30.2	LCS	F	0 - 30
LFB	Cyanazine	76.8	LCS	F	0 - 30
LFB	Demeton	49.6	LCS	F	0 - 30
LFB	Diazinon	25.0	LCS	P	0 - 30
LFB	Dimethenamid	19.0	LCS	P	0 - 30
LFB	Disulfoton	16.8	LCS	P	0 - 30
LFB	Dithiopyr	16.7	LCS	P	0 - 30
LFB	EPTC	36.3	LCS	F	0 - 30
LFB	Ethion	1.70	LCS	P	0 - 30
LFB	Ethoprop	37.8	LCS	F	0 - 30
LFB	Fenamiphos	15.5	LCS	P	0 - 30
LFB	Fipronil	15.7	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	4.31	LCS	P	0 - 30
LFB	Fipronil Sulfide	9.27	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.48	LCS	P	0 - 30
LFB	Fonofos	42.2	LCS	F	0 - 30
LFB	Hexazinone	8.58	LCS	P	0 - 30
LFB	Malathion	11.3	LCS	P	0 - 30
LFB	Metalaxyl	15.6	LCS	P	0 - 30
LFB	Metolachlor	11.6	LCS	P	0 - 30
LFB	Metribuzin	26.6	LCS	P	0 - 30
LFB	Mevinphos	35.8	LCS	F	0 - 30

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P369838

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Molinate	41.7	LCS	F	0 - 30
LFB	Norflurazon	9.50	LCS	P	0 - 30
LFB	Oxadiazon	4.83	LCS	P	0 - 30
LFB	Parathion Ethyl	11.1	LCS	P	0 - 30
LFB	Parathion Methyl	16.3	LCS	P	0 - 30
LFB	Pendimethalin	16.7	LCS	P	0 - 30
LFB	Phorate	33.1	LCS	F	0 - 30
LFB	Prodiamine	5.57	LCS	P	0 - 30
LFB	Prometon	5.89	LCS	P	0 - 30
LFB	Prometryn	21.3	LCS	P	0 - 30
LFB	Simazine	12.8	LCS	P	0 - 30
LFB	Tebuconazole	23.6	LCS	P	0 - 30
LFB	Terbufos	39.9	LCS	F	0 - 30
LFB	Terbutylazine	7.56	LCS	P	0 - 30

Reference Method: EPA 8276

Batch ID: P369575

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114270	Chlordane	1.49	Spike	P	0 - 30
2114270	Toxaphene	0.0205	Spike	P	0 - 30
LFB	Chlordane	6.81	LCS	P	0 - 30
LFB	Toxaphene	6.01	LCS	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P369584

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2112734	3-Hydroxycarbofuran	16.7	Spike	P	0 - 30
2112734	Aldicarb	29.9	Spike	P	0 - 30
2112734	Aldicarb Sulfone	19.2	Spike	P	0 - 30
2112734	Aldicarb Sulfoxide	15.2	Spike	P	0 - 30
2112734	Carbaryl	17.0	Spike	P	0 - 30
2112734	Carbofuran	15.5	Spike	P	0 - 30
2112734	Methiocarb	16.0	Spike	P	0 - 30
2112734	Methomyl	13.1	Spike	P	0 - 30
2112734	Oxamyl	24.1	Spike	P	0 - 30
2112734	Propoxur	13.5	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P369616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113575	Acesulfame K	2.96	Spike	P	0 - 30
2113575	AMPA	9.92	Spike	P	0 - 30
2113575	Endothall	2.85	Spike	P	0 - 30
2113575	Glufosinate	9.24	Spike	P	0 - 30
2113575	Glyphosate	1.50	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P369616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113575	Sucralose	6.44	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P369653

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113573	2,4-D	3.76	Spike	P	0 - 30
2113573	Acetaminophen	2.11	Spike	P	0 - 30
2113573	Acetamiprid	5.05	Spike	P	0 - 30
2113573	Afidopyropen	6.02	Spike	P	0 - 30
2113573	Bentazon	1.34	Spike	P	0 - 30
2113573	Benzovindiflupyr	1.58	Spike	P	0 - 30
2113573	Carbamazepine	3.04	Spike	P	0 - 30
2113573	Clothianidin	8.89	Spike	P	0 - 30
2113573	Dinotefuran	3.94	Spike	P	0 - 30
2113573	Diuron	6.21	Spike	P	0 - 30
2113573	Fenuron	3.92	Spike	P	0 - 30
2113573	Fluridone	5.15	Spike	P	0 - 30
2113573	Hydrocodone	11.5	Spike	P	0 - 30
2113573	Ibuprofen	2.29	Spike	P	0 - 30
2113573	Imazapyr	2.15	Spike	P	0 - 30
2113573	Imidacloprid	0.140	Spike	P	0 - 30
2113573	Linuron	9.49	Spike	P	0 - 30
2113573	Mandestrobin	4.10	Spike	P	0 - 30
2113573	MCP	5.70	Spike	P	0 - 30
2113573	Naproxen	22.5	Spike	P	0 - 30
2113573	Primidone	5.21	Spike	P	0 - 30
2113573	Pyraclostrobin	0.111	Spike	P	0 - 30
2113573	Thiamethoxam	4.53	Spike	P	0 - 30
2113573	Tolfenpyrad	2.84	Spike	P	0 - 30
2113573	Triclopyr	7.97	Spike	P	0 - 30

Reference Method: SM 2120 B
 Batch ID: P369661

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114198	Color (true)	2.72	Sample	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P369663

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114224	Color (true)	7.06	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
 Batch ID: P370024

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113537	Total Alkalinity	0.380	Sample	P	0 - 2.8

Reference Method: SM 2320 B-97
 Batch ID: P370025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114341	Total Alkalinity	0.390	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
 Batch ID: P370067

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114199	TDS	1.39	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
 Batch ID: P370028

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2113537	Fluoride	0.0	Spike	P	0 - 2.5

Reference Method: SM 4500 F-C-97
 Batch ID: P370029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114341	Fluoride	0.516	Spike	P	0 - 2.5

Reference Method: SM 5310 B-00
 Batch ID: P370039

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114201	Organic Carbon	0.353	Spike	P	0 - 20

Reference Method: SM 5310 B-00
 Batch ID: P370040

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2114328	Organic Carbon	0.709	Spike	P	0 - 20

* Sample, spike and/or laboratory control sample precision (LCS) is reported.
 Replicate spike precision may be reported when sample results are below quantifiable levels.

Quality Assurance Report Surrogates

Lab Sample ID: 2114260
Field Sample ID: G2CE0161

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	57.5	P	30 - 160

Lab Sample ID: 2114261
Field Sample ID: G2CE0138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	59.5	P	30 - 160

Lab Sample ID: 2114262
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	59.0	P	30 - 160

Lab Sample ID: 2114263
Field Sample ID: G2CE0161

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	155	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.9	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.1	P	30 - 160
EPA 8321B	Diuron-d6	87.8	P	30 - 160
EPA 8321B	Endothall-d6	77.7	P	30 - 160
EPA 8321B	Endothall-d6	77.7	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	105	P	30 - 160
EPA 8321B	Ibuprofen-d3	79.0	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	52.2	P	30 - 160
EPA 8321B	Sucralose-d6	52.2	P	30 - 160

Lab Sample ID: 2114264
Field Sample ID: G2CE0138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	152	P	30 - 160
EPA 8321B	Acetaminophen-d4	76.6	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.9	P	30 - 160
EPA 8321B	Diuron-d6	88.5	P	30 - 160
EPA 8321B	Endothall-d6	80.3	P	30 - 160
EPA 8321B	Endothall-d6	80.3	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	103	P	30 - 160
EPA 8321B	Ibuprofen-d3	107	P	30 - 160
EPA 8321B	Primidone-d5	107	P	30 - 160
EPA 8321B	Sucralose-d6	80.9	P	30 - 160
EPA 8321B	Sucralose-d6	80.9	P	30 - 160

Lab Sample ID: 2114265
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 2114265
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	101	P	30 - 160
EPA 8321B	Acetaminophen-d4	82.0	P	30 - 160
EPA 8321B	Carbamazepine-d10	78.9	P	30 - 160
EPA 8321B	Diuron-d6	83.7	P	30 - 160
EPA 8321B	Endothall-d6	77.8	P	30 - 160
EPA 8321B	Endothall-d6	77.8	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	117	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	117	P	30 - 160
EPA 8321B	Ibuprofen-d3	92.8	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	71.1	P	30 - 160
EPA 8321B	Sucralose-d6	71.1	P	30 - 160

Lab Sample ID: 2114266
Field Sample ID: G2CE0161_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	55.1	P	30 - 160

Lab Sample ID: 2114267
Field Sample ID: FB_08222019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	62.6	P	30 - 160

Lab Sample ID: 2114268
Field Sample ID: G2CE0161_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	110	P	30 - 160
EPA 8321B	Acetaminophen-d4	81.7	P	30 - 160
EPA 8321B	Carbamazepine-d10	84.3	P	30 - 160
EPA 8321B	Diuron-d6	84.5	P	30 - 160
EPA 8321B	Endothall-d6	79.1	P	30 - 160
EPA 8321B	Endothall-d6	79.1	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	108	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	108	P	30 - 160
EPA 8321B	Ibuprofen-d3	102	P	30 - 160
EPA 8321B	Primidone-d5	109	P	30 - 160
EPA 8321B	Sucralose-d6	81.7	P	30 - 160
EPA 8321B	Sucralose-d6	81.7	P	30 - 160

Lab Sample ID: 2114269
Field Sample ID: FB_08222019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	132	P	30 - 160
EPA 8321B	Acetaminophen-d4	71.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	79.4	P	30 - 160
EPA 8321B	Diuron-d6	83.4	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160
EPA 8321B	Endothall-d6	105	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2114269
 Field Sample ID: FB_08222019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Glyphosate 13C 15N	128	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	128	P	30 - 160
EPA 8321B	Ibuprofen-d3	86.6	P	30 - 160
EPA 8321B	Primidone-d5	80.6	P	30 - 160
EPA 8321B	Sucralose-d6	75.2	P	30 - 160
EPA 8321B	Sucralose-d6	75.2	P	30 - 160

Lab Sample ID: 2114270
 Field Sample ID: G2CE0161

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	72.8	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	62.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	40.5	P	30 - 103
EPA 8276	PCNB	106	P	37 - 143

Lab Sample ID: 2114271
 Field Sample ID: G2CE0138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.0	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	58.6	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	40.1	P	30 - 103
EPA 8276	PCNB	86.1	P	37 - 143

Lab Sample ID: 2114272
 Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	80.3	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	72.1	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	48.2	P	30 - 103
EPA 8276	PCNB	95.7	P	37 - 143

Lab Sample ID: 2114273
 Field Sample ID: G2CE0161

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	95.7	P	68 - 130
EPA 8270E	Terbufos-d10	104	P	61 - 136

Lab Sample ID: 2114274
 Field Sample ID: G2CE0138

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	92.4	P	68 - 130
EPA 8270E	Terbufos-d10	99.3	P	61 - 136

Lab Sample ID: 2114275
 Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
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Quality Assurance Report Surrogates

Lab Sample ID: 2114275
Field Sample ID: G2CE0071

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	95.5	P	68 - 130
EPA 8270E	Terbufos-d10	93.2	P	61 - 136

Lab Sample ID: 2114276
Field Sample ID: G2CE0161_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	56.6	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	59.7	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	38.0	P	30 - 103
EPA 8276	PCNB	89.7	P	37 - 143

Lab Sample ID: 2114277
Field Sample ID: FB_08222019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Decachlorobiphenyl	66.5	P	39 - 109
EPA 8270E	Tetrachloro-m-xylene	76.3	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	46.2	P	30 - 103
EPA 8276	PCNB	83.8	P	37 - 143

Lab Sample ID: 2114278
Field Sample ID: G2CE0161_DUP

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	106	P	68 - 130
EPA 8270E	Terbufos-d10	116	P	61 - 136

Lab Sample ID: 2114279
Field Sample ID: FB_08222019

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	88.9	P	68 - 130
EPA 8270E	Terbufos-d10	98.2	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A93768

Included Lab Sample IDs: 2114197, 2114198, 2114199, 2114206, 2114207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	102	102	P/P	95 - 105
Turbidity	102	102	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A93782

Included Lab Sample IDs: 2114197, 2114198, 2114199, 2114206, 2114207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	101	P/P	90 - 115
Color (true)	103	102	P/P	90 - 115
Color (true)	99.9	99.1	P/P	90 - 115

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A93818

Included Lab Sample IDs: 2114200, 2114201, 2114202, 2114208, 2114209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.3	98.4	P/P	90 - 110
Kjeldahl Nitrogen	95.7	94.3	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A93819

Included Lab Sample IDs: 2114197, 2114198, 2114199, 2114206, 2114207

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	103	P/P	90 - 110
Chloride	103	103	P/P	90 - 110
Sulfate	104	105	P/P	90 - 110
Sulfate	105	105	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93822

Included Lab Sample IDs: 2114280, 2114281, 2114282, 2114283, 2114284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	103	104	P/P	90 - 110
Barium	103	103	P/P	90 - 110
Barium	103	103	P/P	90 - 110
Calcium	101	99.4	P/P	90 - 110
Calcium	101	101	P/P	90 - 110
Calcium	99.6	101	P/P	90 - 110
Iron	101	100	P/P	90 - 110
Iron	101	101	P/P	90 - 110
Iron	100	101	P/P	90 - 110
Magnesium	100	99.5	P/P	90 - 110
Magnesium	101	101	P/P	90 - 110
Magnesium	99.3	100	P/P	90 - 110
Potassium	101	102	P/P	90 - 110
Potassium	102	102	P/P	90 - 110
Potassium	102	101	P/P	90 - 110
Sodium	102	101	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A93822

Included Lab Sample IDs: 2114280, 2114281, 2114282, 2114283, 2114284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sodium	103	102	P/P	90 - 110
Sodium	99.2	102	P/P	90 - 110
Zinc	102	102	P/P	90 - 110
Zinc	102	103	P/P	90 - 110
Zinc	103	102	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A93824

Included Lab Sample IDs: 2114263, 2114264, 2114265, 2114268, 2114269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	140	110	P/P	60 - 160
Acesulfame K	96.6	140	P/P	60 - 160
Endothall	96.1	97.1	P/P	60 - 160
Endothall	96.8	96.1	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A93825

Included Lab Sample IDs: 2114263, 2114264, 2114265, 2114268, 2114269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	94.0	93.2	P/P	60 - 160
AMPA	99.1	94.0	P/P	60 - 160
Glufosinate	92.0	92.9	P/P	60 - 160
Glufosinate	92.9	92.6	P/P	60 - 160
Glyphosate	111	96.4	P/P	60 - 160
Glyphosate	96.4	94.7	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A93838

Included Lab Sample IDs: 2114260, 2114261, 2114262, 2114266, 2114267

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	109	107	P/P	60 - 150
Aldicarb	101	103	P/P	60 - 150
Aldicarb Sulfone	102	105	P/P	50 - 150
Aldicarb Sulfoxide	104	105	P/P	50 - 150
Carbaryl	82.7	88.0	P/P	60 - 150
Carbofuran	113	114	P/P	50 - 150
Methiocarb	103	96.0	P/P	50 - 150
Methomyl	104	98.8	P/P	50 - 150
Oxamyl	102	95.7	P/P	50 - 150
Propoxur	112	114	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A93861

Included Lab Sample IDs: 2114263, 2114264, 2114265, 2114268, 2114269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	60.7	80.5	P/P	60 - 160
Sucralose	73.1	60.7	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A93865

Included Lab Sample IDs: 2114203, 2114204, 2114205, 2114210, 2114211

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.9	P/P	90 - 110
O-Phosphate-P	98.5	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93877

Included Lab Sample IDs: 2114200, 2114201

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A93888

Included Lab Sample IDs: 2114200, 2114201, 2114202, 2114208, 2114209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93921

Included Lab Sample IDs: 2114202, 2114208

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

Reference Method: SM 2320 B-97

Run ID: A93928

Included Lab Sample IDs: 2114197, 2114198, 2114199, 2114206, 2114207

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

Reference Method: SM 4500 F-C-97

Run ID: A93928

Included Lab Sample IDs: 2114197, 2114198, 2114199, 2114206, 2114207

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

Reference Method: EPA 8276

Run ID: A93929

Included Lab Sample IDs: 2114270, 2114271, 2114272, 2114276, 2114277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	92.2		P	80 - 120
Chlordane	97.1		P	80 - 120
Toxaphene	91.5		P	80 - 120
Toxaphene	96.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93933

Included Lab Sample IDs: 2114201, 2114202, 2114209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	97.8	99.0	P/P	90 - 110
Ammonia-N	99.0	99.0	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A93938

Included Lab Sample IDs: 2114200, 2114201, 2114202, 2114208, 2114209

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	100	99.8	P/P	90 - 110
Organic Carbon	99.4	98.1	P/P	90 - 110
Organic Carbon	100	100	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A93948

Included Lab Sample IDs: 2114270, 2114271, 2114272, 2114276, 2114277

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.6		P	80 - 120
Alpha-BHC	96.0		P	80 - 120
Alpha-Chlordane	94.2		P	80 - 120
Beta-BHC	97.1		P	80 - 120
Bifenthrin	89.6		P	80 - 120
Carbophenothion	92.9		P	80 - 120
Chlorothalonil	82.2		P	80 - 120
Cis-Nonachlor	92.1		P	80 - 120
Cypermethrin	83.7		P	80 - 120
DDD-p,p'	91.9		P	80 - 120
DDE-p,p'	94.3		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	86.7		P	80 - 120
Dicofol	98.3		P	80 - 120
Dieldrin	95.0		P	80 - 120
Endosulfan I	94.4		P	80 - 120
Endosulfan II	95.3		P	80 - 120
Endosulfan Sulfate	90.5		P	80 - 120
Endrin	93.6		P	80 - 120
Endrin Aldehyde	90.1		P	80 - 120
Endrin Ketone	93.3		P	80 - 120
Ethalfuralin	93.0		P	80 - 120
Gamma-BHC	98.3		P	80 - 120
Gamma-Chlordane	94.2		P	80 - 120
Heptachlor	92.7		P	80 - 120
Heptachlor Epoxide	94.2		P	80 - 120
Hexachlorobenzene	97.7		P	80 - 120
Methoxychlor	97.6		P	80 - 120
Mirex	97.1		P	80 - 120
Permethrin	86.6		P	80 - 120
Trans-Nonachlor	94.1		P	80 - 120
Trifluralin	94.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A93962

Included Lab Sample IDs: 2114200, 2114208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.3	99.9	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A93978

Included Lab Sample IDs: 2114209

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

Reference Method: EPA 8270E

Run ID: A94064

Included Lab Sample IDs: 2114273, 2114274, 2114275, 2114278, 2114279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	101		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	108		P	80 - 120
Atrazine	86.1		P	80 - 120
Atrazine Desethyl	76.8*		F	80 - 120
Azinphos Methyl	92.8		P	80 - 120
Bromacil	101		P	80 - 120
Butylate	94.2		P	80 - 120
Chlorpyrifos Ethyl	100		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	61.6*		F	80 - 120
Demeton	98.2		P	80 - 120
Diazinon	98.9		P	80 - 120
Dimethenamid	101		P	80 - 120
Disulfoton	99.0		P	80 - 120
Dithiopyr	101		P	80 - 120
EPTC	98.3		P	80 - 120
Ethion	101		P	80 - 120
Ethoprop	100		P	80 - 120
Fenamiphos	96.6		P	80 - 120
Fipronil	102		P	80 - 120
Fipronil Desulfinyl	105		P	80 - 120
Fipronil Sulfide	100		P	80 - 120
Fipronil Sulfone	103		P	80 - 120
Fonofos	96.7		P	80 - 120
Hexazinone	96.3		P	80 - 120
Malathion	98.1		P	80 - 120
Metalaxyl	102		P	80 - 120
Metolachlor	105		P	80 - 120
Metribuzin	76.4*		F	80 - 120
Mevinphos	98.5		P	80 - 120
Molinate	99.6		P	80 - 120
Norflurazon	98.9		P	80 - 120
Oxadiazon	101		P	80 - 120
Parathion Ethyl	98.1		P	80 - 120
Parathion Methyl	98.4		P	80 - 120
Pendimethalin	96.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A94064

Included Lab Sample IDs: 2114273, 2114274, 2114275, 2114278, 2114279

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phorate	96.5		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	102		P	80 - 120
Simazine	93.4		P	80 - 120
Tebuconazole	102		P	80 - 120
Terbufos	95.7		P	80 - 120
Terbuthylazine	102		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94075

Included Lab Sample IDs: 2114280, 2114281, 2114282, 2114283, 2114284

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	99.4	P/P	90 - 110
Aluminum	102	100	P/P	90 - 110
Aluminum	99.4	101	P/P	90 - 110
Antimony	96.4	99.2	P/P	90 - 110
Antimony	97.0	96.4	P/P	90 - 110
Antimony	97.2	97.0	P/P	90 - 110
Arsenic	102	103	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Arsenic	104	102	P/P	90 - 110
Boron	100	106	P/P	90 - 110
Boron	104	102	P/P	90 - 110
Boron	106	104	P/P	90 - 110
Cadmium	101	103	P/P	90 - 110
Cadmium	103	104	P/P	90 - 110
Cadmium	103	103	P/P	90 - 110
Chromium	102	109	P/P	90 - 110
Chromium	109	110	P/P	90 - 110
Chromium	110	107	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Copper	103	104	P/P	90 - 110
Copper	103	103	P/P	90 - 110
Lead	100	102	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Lead	102	102	P/P	90 - 110
Nickel	104	104	P/P	90 - 110
Nickel	104	105	P/P	90 - 110
Nickel	105	104	P/P	90 - 110
Silver	101	102	P/P	90 - 110
Silver	102	102	P/P	90 - 110
Silver	102	103	P/P	90 - 110
Thallium	97.3	99.6	P/P	90 - 110
Thallium	99.2	98.6	P/P	90 - 110
Thallium	99.6	99.2	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94124

Included Lab Sample IDs: 2114263, 2114264, 2114265, 2114268, 2114269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	106	111	P/P	50 - 150
2,4-D	111	114	P/P	50 - 150
2,4-D	114	107	P/P	50 - 150
Acetaminophen	102	96.3	P/P	60 - 160
Acetaminophen	109	102	P/P	60 - 160
Acetaminophen	96.3	88.4	P/P	60 - 160
Acetamiprid	106	111	P/P	50 - 150
Acetamiprid	108	106	P/P	50 - 150
Acetamiprid	113	108	P/P	50 - 150
Afidopyropen	108	114	P/P	50 - 150
Afidopyropen	114	108	P/P	50 - 150
Afidopyropen	99.6	108	P/P	50 - 150
Bentazon	102	108	P/P	50 - 160
Bentazon	103	103	P/P	50 - 160
Bentazon	103	102	P/P	50 - 160
Benzovindiflupyr	107	101	P/P	50 - 150
Benzovindiflupyr	108	107	P/P	50 - 150
Benzovindiflupyr	110	108	P/P	50 - 150
Carbamazepine	112	112	P/P	60 - 150
Carbamazepine	112	113	P/P	60 - 150
Carbamazepine	113	109	P/P	60 - 150
Clothianidin	103	105	P/P	60 - 150
Clothianidin	104	103	P/P	60 - 150
Clothianidin	107	104	P/P	60 - 150
Dinotefuran	105	96.7	P/P	50 - 150
Dinotefuran	108	105	P/P	50 - 150
Dinotefuran	96.7	99.9	P/P	50 - 150
Diuron	103	105	P/P	60 - 150
Diuron	105	109	P/P	60 - 150
Diuron	109	103	P/P	60 - 150
Fenuron	110	91.7	P/P	60 - 150
Fenuron	110	110	P/P	60 - 150
Fenuron	113	110	P/P	60 - 150
Fluridone	123	129	P/P	60 - 160
Fluridone	128	125	P/P	60 - 160
Fluridone	129	128	P/P	60 - 160
Hydrocodone	105	109	P/P	60 - 150
Hydrocodone	109	111	P/P	60 - 150
Hydrocodone	111	112	P/P	60 - 150
Ibuprofen	103	89.2	P/P	50 - 160
Ibuprofen	68.3	103	P/P	50 - 160
Ibuprofen	89.2	88.8	P/P	50 - 160
Imazapyr	103	84.1	P/P	50 - 150
Imazapyr	110	103	P/P	50 - 150
Imazapyr	84.1	89.5	P/P	50 - 150
Imidacloprid	100	96.7	P/P	60 - 150
Imidacloprid	102	100	P/P	60 - 150
Imidacloprid	96.7	102	P/P	60 - 150
Linuron	102	96.3	P/P	60 - 150
Linuron	96.0	102	P/P	60 - 150
Linuron	96.3	96.0	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A94124

Included Lab Sample IDs: 2114263, 2114264, 2114265, 2114268, 2114269

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Mandestrobin	108	115	P/P	50 - 150
Mandestrobin	114	112	P/P	50 - 150
Mandestrobin	115	114	P/P	50 - 150
MCP	104	109	P/P	50 - 150
MCP	106	108	P/P	50 - 150
MCP	109	106	P/P	50 - 150
Naproxen	135	72.5	P/P	50 - 160
Naproxen	72.5	93.8	P/P	50 - 160
Naproxen	93.8	105	P/P	50 - 160
Primidone	101	98.5	P/P	60 - 150
Primidone	103	101	P/P	60 - 150
Primidone	98.5	106	P/P	60 - 150
Pyraclastrobin	109	115	P/P	60 - 150
Pyraclastrobin	115	117	P/P	60 - 150
Pyraclastrobin	117	115	P/P	60 - 150
Thiamethoxam	107	107	P/P	50 - 150
Thiamethoxam	107	107	P/P	50 - 150
Thiamethoxam	117	107	P/P	50 - 150
Tolfenpyrad	114	118	P/P	60 - 150
Tolfenpyrad	118	124	P/P	60 - 150
Tolfenpyrad	124	121	P/P	60 - 150
Triclopyr	103	116	P/P	50 - 150
Triclopyr	108	109	P/P	50 - 150
Triclopyr	109	103	P/P	50 - 150

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A94138

Included Lab Sample IDs: 2114280, 2114281, 2114282, 2114283, 2114284

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

* Pass/Fail determinations are made for each bracketing calibration verification check.

Control limits for initial calibration checks may be different from those for continuing checks, depending on method requirements.

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							5.65	
	Turbidity							11.1	
EPA 200.7 Rev. 4.4	Barium	105		103	103	103			0.482
	Calcium	106		104	102				1.04
	Iron	107		101	105	105			0.228
	Magnesium	114		99.7	106	108			0.741
	Potassium	111		100	107	110			1.47
	Sodium	106		101	103				2.02
	Zinc	104		104	105	105			0.168
EPA 200.8 Rev. 5.4	Aluminum	98.1		96.9	97.0	97.8			0.878
	Antimony	97.9		95.6	101	102			1.02
	Arsenic	102		99.4	101	104			2.58
	Boron	99.8		105	102	101			0.480
	Cadmium	98.4		99.8	101	103			2.44
	Chromium	101		106	102	105			2.98
	Copper	100		99.4	98.1	99.8			1.69
	Lead	97.6		98.9	100	102			2.18
	Nickel	101		100	98.4	100			1.88
	Selenium	104		100	104	104			0.0865
	Silver	103		103	104	105			0.529
	Thallium	101		110	105	110			5.28
EPA 300.0 Rev. 2.1	Chloride	102		104	104			0.382	
	Sulfate	103		106	103			0.258	
EPA 350.1 Rev. 2.0	Ammonia-N	96.1		97.5	97.3				0.167
	Ammonia-N	97.2		94.2	94.0				0.229
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	95.7		100	93.9				6.13
	Kjeldahl Nitrogen	95.6		93.7	97.2				2.84
EPA 353.2 Rev. 2.0	NO2NO3-N	100		98.0	97.5				0.331
EPA 365.1 Rev. 2.0	Total-P	93.4							2.17
	Total-P	96.3		98.2	97.2				0.894
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		96.2	97.1				0.757
EPA 8270E	Acetochlor	104	84.8	105	98.1	20.0			6.52
	Alachlor	102	83.5	99.7	96.1	19.8			3.72
	Aldrin	35.0	48.3	56.4	52.1	32.0			7.91
	Alpha-BHC	103	124	132	134	18.2			1.44
	Alpha-Chlordane	69.7	80.8	82.9	84.8	14.8			2.17
	Ametryn	102	93.1	114	111	8.77			2.53
	Atrazine	95.7	87.4			9.02			10.0
	Atrazine Desethyl	84.1	54.0	74.6	54.5	43.6			20.2
	Azinphos Methyl	106	87.8	96.3	90.4	18.4			6.29
	Beta-BHC	115	137	148	158	17.3			6.80
	Bifenthrin	56.8	69.9	82.8	73.6	20.6			11.7
	Bromacil	89.8	73.4	113	72.3	20.2			21.4
	Butylate	51.3	38.4	53.0	47.7	28.6			10.3
	Carbophenothion	78.0	85.6	105	93.5	9.32			11.6
	Chlorothalonil	164	140	204	167	15.9			19.5
	Chlorpyrifos Ethyl	87.6	78.7	96.0	85.5	10.7			11.5
	Chlorpyrifos Methyl	91.5	67.5	88.5	79.2	30.2			11.1
	Cis-Nonachlor	68.7	81.1	81.5	83.8	16.6			2.87
	Cyanazine	151	67.1	102	82.2	76.8			21.3
	Cypermethrin	56.7	66.2	79.7	68.4	15.5			15.3
	DDD-p,p'	80.4	90.1	92.0	98.0	11.4			6.30
	DDE-p,p'	61.7	74.7	77.9	80.5	19.1			3.28
	DDT-p,p'	90.9	101	114	115	10.2			0.597

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						SMP	MS
EPA 8270E	Delta-BHC	126	143	177	178	12.7	0.643
	Demeton	69.8	42.0	69.5	58.8	49.6	16.7
	Diazinon	96.4	75.0	94.3	88.9	25.0	5.88
	Dicofol	87.6	88.9	116	95.5	1.44	19.8
	Dieldrin	81.7	88.9	92.0	94.2	8.42	2.38
	Dimethenamid	102	84.5	103	100	19.0	2.98
	Disulfoton	56.2	47.5	75.0	64.1	16.8	15.6
	Dithiopyr	96.9	82.0	96.4	94.0	16.7	2.46
	Endosulfan I	85.9	87.4	96.2	97.0	1.67	0.780
	Endosulfan II	99.6	102	108	107	2.26	0.393
	Endosulfan Sulfate	93.3	95.3	95.9	96.9	2.16	1.04
	Endrin	89.5	99.5	118	104	10.5	12.9
	Endrin Aldehyde	101	101	94.0	96.8	0.811	2.98
	Endrin Ketone	89.3	89.8	93.0	95.2	0.591	2.40
	EPTC	63.3	43.9	62.5	56.4	36.3	10.2
	Ethalfuralin	87.9	97.6	97.2	99.0	10.5	1.77
	Ethion	93.5	91.9	105	91.9	1.70	13.6
	Ethoprop	92.9	63.4	94.8	85.0	37.8	10.9
	Fenamiphos	90.5	77.5	98.0	95.1	15.5	3.02
	Fipronil	115	97.8	109	105	15.7	2.10
	Fipronil Desulfinyl	94.6	90.6	101	95.2	4.31	5.88
	Fipronil Sulfide	96.1	87.6	103	89.5	9.27	10.5
	Fipronil Sulfone	95.9	92.6	134	93.8	3.48	10.2
	Fonofos	85.2	55.5	85.7	71.2	42.2	18.4
	Gamma-BHC	111	133	153	143	18.2	6.64
	Gamma-Chlordane	65.1	77.6	77.9	80.2	17.4	2.92
	Heptachlor	56.0	67.3	68.8	66.3	18.3	3.74
	Heptachlor Epoxide	81.4	87.2	90.3	92.2	6.92	2.07
	Hexachlorobenzene	60.6	71.1	70.9	70.5	15.9	0.564
	Hexazinone	97.1	106	123	112	8.58	9.06
	Malathion	99.1	88.5	102	94.4	11.3	7.38
	Metalaxyl	97.7	83.5	95.1	92.4	15.6	2.90
	Methoxychlor	123	126	133	133	2.44	0.438
	Metolachlor	98.9	88.1	103	97.4	11.6	5.68
	Metribuzin	101	77.6	95.4	74.9	26.6	24.0
	Mevinphos	92.3	64.3	93.8	89.3	35.8	4.85
	Mirex	39.0	54.8	55.4	55.7	33.8	0.545
	Molinate	78.2	51.3	75.6	67.6	41.7	11.1
	Norflurazon	104	94.2	104	98.5	9.50	5.84
	Oxadiazon	94.6	90.2	98.1	93.1	4.83	5.22
	Parathion Ethyl	92.8	83.0	98.5	85.9	11.1	13.7
	Parathion Methyl	94.2	80.0	95.4	88.5	16.3	7.46
	Pendimethalin	85.2	72.1	93.5	82.2	16.7	12.9
	Permethrin	55.4	68.4	72.8	63.6	21.0	13.5
	Phorate	84.7	60.6	95.0	80.8	33.1	16.2
	Prodiamine	75.2	71.1	143	75.2	5.57	43.4
	Prometon	98.0	92.4	101	98.3	5.89	1.90
	Prometryn	117	94.5	110	108	21.3	1.34
	Simazine	105	92.5	99.5	85.4	12.8	8.16
	Tebuconazole	76.8	97.3	110	108	23.6	1.17
	Terbufos	83.3	55.6	83.8	70.6	39.9	17.0
	Terbuthylazine	95.7	88.8	104	87.6	7.56	11.6
	Trans-Nonachlor	62.6	76.0	74.4	78.8	19.4	5.72
	Trifluralin	80.6	91.5	96.0	97.1	12.7	1.20

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8276	Chlordane	85.4	91.4	90.1	88.8	6.81		1.49
	Toxaphene	62.8	66.7	63.6	63.6	6.01		0.0205
EPA 8321B	2,4-D	119		148	157			3.76
	3-Hydroxycarbofuran	81.6		101	85.8			16.7
	Acesulfame K	95.2		88.8	91.5			2.96
	Acetaminophen	74.9		79.6	81.7			2.11
	Acetamiprid	82.1		88.9	93.5			5.05
	Afidopyropen	87.0		99.8	106			6.02
	Aldicarb	71.0		95.8	70.9			29.9
	Aldicarb Sulfone	84.5		102	84.1			19.2
	Aldicarb Sulfoxide	77.7		59.2	50.9			15.2
	AMPA	140		86.0	94.9			9.92
	Bentazon	91.2						1.34
	Benzovindiflupyr	75.2		85.5	86.8			1.58
	Carbamazepine	78.4		80.2	82.7			3.04
	Carbaryl	57.7		66.0	55.6			17.0
	Carbofuran	71.7		82.5	70.7			15.5
	Clothianidin	78.0		92.6	101			8.89
	Dinotefuran	82.9		113	108			3.94
	Diuron	79.1		71.9	76.8			6.21
	Endothall	95.9		86.7	89.2			2.85
	Fenuron	90.5		82.3	85.6			3.92
	Fluridone	90.2		80.3	86.2			5.15
	Glufosinate	113		86.6	95.0			9.24
	Glyphosate	128		93.5	94.9			1.50
	Hydrocodone	79.3		82.4	92.5			11.5
	Ibuprofen	86.5		105	103			2.29
	Imazapyr	95.6						2.15
	Imidacloprid	86.8		159	159			0.140
	Linuron	64.9		55.5	61.0			9.49
	Mandestrobin	77.1		73.0	76.1			4.10
	MCPP	144		189	201			5.70
	Methiocarb	59.3		69.5	59.2			16.0
	Methomyl	75.1		82.7	72.5			13.1
	Naproxen	84.0		86.4	108			22.5
	Oxamyl	77.4		94.4	74.1			24.1
	Primidone	78.5		91.8	96.7			5.21
	Propoxur	75.0		84.7	74.0			13.5
	Pyraclostrobin	74.5		81.6	81.7			0.111
	Sucralose	75.2		77.3	72.4			6.44
	Thiamethoxam	90.7		141	135			4.53
	Tolfenpyrad	49.7		67.7	69.6			2.84
	Triclopyr	102		127	117			7.97
SM 2120 B	Color (true)	101					2.72	
	Color (true)	103					7.06	
SM 2320 B-97	Total Alkalinity	103					0.380	
	Total Alkalinity	104					0.390	
SM 2540 C-97	TDS						1.39	
SM 4500 F-C-97	Fluoride	98.6		99.4	99.4			0.0
	Fluoride	97.1		95.6	96.1			0.516
SM 5310 B-00	Organic Carbon	94.4		95.4	94.9			0.353
	Organic Carbon	97.0		96.2	95.1			0.709

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2114197, 2114198, 2114199, 2114206, 2114207
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2114280, 2114281, 2114282, 2114283, 2114284
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2114280, 2114281, 2114282, 2114283, 2114284
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2114197, 2114198, 2114199, 2114206, 2114207
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2114197, 2114198, 2114199, 2114206, 2114207
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2114200, 2114201, 2114202, 2114208, 2114209
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2114200, 2114201, 2114202, 2114208, 2114209
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2114200, 2114201, 2114202, 2114208, 2114209
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2114200, 2114201, 2114202, 2114208, 2114209
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2114203, 2114204, 2114205, 2114210, 2114211
EPA 8270E / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2114270, 2114271, 2114272, 2114276, 2114277
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2114273, 2114274, 2114275, 2114278, 2114279
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2114270, 2114271, 2114272, 2114276, 2114277
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2114260, 2114261, 2114262, 2114266, 2114267
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2114263, 2114264, 2114265, 2114268, 2114269
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2114263, 2114264, 2114265, 2114268, 2114269
SM 2120 B / E31780	True Color measured at 450 nm	2114197, 2114198, 2114199, 2114206, 2114207
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2114197, 2114198, 2114199, 2114206, 2114207
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2114197, 2114198, 2114199, 2114206, 2114207
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2114197, 2114198, 2114199, 2114206, 2114207
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2114197, 2114198, 2114199, 2114206, 2114207
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2114200, 2114201, 2114202, 2114208, 2114209

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	08/23/2019			08/23/2019 17:45	Samantha Davila	2114197, 2114198, 2114199, 2114206, 2114207
EPA 200.7 Rev. 4.4	08/23/2019	08/26/2019 12:45	Elliott D. Healy	08/27/2019 15:29	Alexander Thompson	2114284
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	08/27/2019 18:19	Alexander Thompson	2114280
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	08/27/2019 18:26	Alexander Thompson	2114281
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	08/27/2019 19:15	Alexander Thompson	2114282
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	08/27/2019 19:22	Alexander Thompson	2114283
EPA 200.8 Rev. 5.4	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/09/2019 13:28	Robert K Palmer	2114284
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/09/2019 16:34	Robert K Palmer	2114280
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/09/2019 16:43	Robert K Palmer	2114282
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/09/2019 17:23	Robert K Palmer	2114283
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/09/2019 17:52	Robert K Palmer	2114281
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/11/2019 15:10	Robert K Palmer	2114284
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/11/2019 15:49	Robert K Palmer	2114280
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/11/2019 15:56	Robert K Palmer	2114282
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/11/2019 16:02	Robert K Palmer	2114283
	08/23/2019	08/26/2019 12:45	Elliott D. Healy	09/11/2019 16:35	Robert K Palmer	2114281
EPA 300.0 Rev. 2.1	08/23/2019			08/28/2019 19:37	Jhamieka S. Greenwood	2114199
	08/23/2019			08/28/2019 21:51	Jhamieka S. Greenwood	2114197
	08/23/2019			08/28/2019 22:03	Jhamieka S. Greenwood	2114198
	08/23/2019			08/28/2019 22:15	Jhamieka S. Greenwood	2114206
	08/23/2019			08/28/2019 22:27	Jhamieka S. Greenwood	2114207
EPA 350.1 Rev. 2.0	08/23/2019			08/30/2019 14:01	Ping Hua	2114201
	08/23/2019			08/30/2019 14:13	Ping Hua	2114202
	08/23/2019			08/30/2019 14:23	Ping Hua	2114209
	08/23/2019			09/03/2019 13:12	Ping Hua	2114208
	08/23/2019			09/03/2019 13:14	Ping Hua	2114200
EPA 351.2 Rev. 2.0	08/23/2019	08/26/2019 12:50	Sima Feizi	08/26/2019 21:28	Julia Storbeck	2114200
	08/23/2019	08/26/2019 12:50	Sima Feizi	08/26/2019 21:29	Julia Storbeck	2114208
	08/23/2019	08/26/2019 12:50	Sima Feizi	08/26/2019 21:43	Julia Storbeck	2114201
	08/23/2019	08/26/2019 12:50	Sima Feizi	08/26/2019 21:45	Julia Storbeck	2114202
	08/23/2019	08/26/2019 12:50	Sima Feizi	08/26/2019 21:46	Julia Storbeck	2114209
EPA 353.2 Rev. 2.0	08/23/2019			08/29/2019 12:33	Beverly Y. Sanders	2114200
	08/23/2019			08/29/2019 12:34	Beverly Y. Sanders	2114201
	08/23/2019			08/29/2019 12:35	Beverly Y. Sanders	2114202
	08/23/2019			08/29/2019 12:36	Beverly Y. Sanders	2114208
	08/23/2019			08/29/2019 12:37	Beverly Y. Sanders	2114209
EPA 365.1 Rev. 2.0	08/23/2019	08/28/2019 09:14	Joseph Suarez	08/29/2019 14:05	Lipi Saha	2114200
	08/23/2019	08/28/2019 09:14	Joseph Suarez	08/29/2019 14:06	Lipi Saha	2114201
	08/23/2019	08/29/2019 07:30	Joseph Suarez	08/30/2019 09:56	Lipi Saha	2114208

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 365.1 Rev. 2.0	08/23/2019	08/29/2019 07:30	Joseph Suarez	08/30/2019 09:59	Lipi Saha	2114202
	08/23/2019	08/29/2019 07:30	Joseph Suarez	08/30/2019 12:10	Lipi Saha	2114209
EPA 365.1 Rev. 2.0 dissolved	08/23/2019			08/23/2019 14:18	Lipi Saha	2114203
	08/23/2019			08/23/2019 14:41	Lipi Saha	2114204
	08/23/2019			08/23/2019 14:42	Lipi Saha	2114205
	08/23/2019			08/23/2019 14:43	Lipi Saha	2114210
	08/23/2019			08/23/2019 14:44	Lipi Saha	2114211
	08/23/2019	08/26/2019 09:00	Julie Wi	08/29/2019 20:44	Vandana T. Nagar	2114273
EPA 8270E	08/23/2019	08/26/2019 09:00	Julie Wi	08/29/2019 21:10	Vandana T. Nagar	2114274
	08/23/2019	08/26/2019 09:00	Julie Wi	08/29/2019 21:37	Vandana T. Nagar	2114275
	08/23/2019	08/26/2019 09:00	Julie Wi	08/29/2019 22:03	Vandana T. Nagar	2114278
	08/23/2019	08/26/2019 09:00	Julie Wi	08/29/2019 22:30	Vandana T. Nagar	2114279
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/29/2019 23:24	Arthur Maknenko	2114270
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/29/2019 23:55	Arthur Maknenko	2114271
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 00:27	Arthur Maknenko	2114272
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 00:59	Arthur Maknenko	2114276
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 01:31	Arthur Maknenko	2114277
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/29/2019 23:48	Luis Flores	2114270
EPA 8276	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 06:16	Luis Flores	2114272
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 07:11	Luis Flores	2114276
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 08:07	Luis Flores	2114277
	08/23/2019	08/27/2019 09:00	Fe-Val Siddell	08/30/2019 12:46	Luis Flores	2114271
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/26/2019 16:11	Rebecca Ware	2114263
EPA 8321B	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/26/2019 16:33	Rebecca Ware	2114264
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/26/2019 16:44	Rebecca Ware	2114265
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/26/2019 16:54	Rebecca Ware	2114268
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/26/2019 17:05	Rebecca Ware	2114269
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/27/2019 12:32	Rebecca Ware	2114263
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/27/2019 13:04	Rebecca Ware	2114264
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/27/2019 13:18	Rebecca Ware	2114265
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/27/2019 13:32	Rebecca Ware	2114268
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/27/2019 13:46	Rebecca Ware	2114269
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/28/2019 17:18	Rebecca Ware	2114263
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/28/2019 17:29	Rebecca Ware	2114264
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/28/2019 17:41	Rebecca Ware	2114265
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/28/2019 18:16	Rebecca Ware	2114268
	08/23/2019	08/26/2019 09:30	Rebecca Ware	08/28/2019 18:28	Rebecca Ware	2114269
	08/23/2019	08/26/2019 10:00	Hoor Shaik	08/28/2019 18:21	Juyoung Kim	2114260
	08/23/2019	08/26/2019 10:00	Hoor Shaik	08/28/2019 18:56	Juyoung Kim	2114261
	08/23/2019	08/26/2019 10:00	Hoor Shaik	08/28/2019 19:30	Juyoung Kim	2114262

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	08/23/2019	08/26/2019 10:00	Hoor Shaik	08/28/2019 20:05	Juyoung Kim	2114266
	08/23/2019	08/26/2019 10:00	Hoor Shaik	08/28/2019 20:40	Juyoung Kim	2114267
	08/23/2019	08/27/2019 13:30	Hoor Shaik	08/30/2019 12:33	Juyoung Kim	2114263
	08/23/2019	08/27/2019 13:30	Hoor Shaik	08/30/2019 13:43	Juyoung Kim	2114264
	08/23/2019	08/27/2019 13:30	Hoor Shaik	08/30/2019 14:17	Juyoung Kim	2114265
	08/23/2019	08/27/2019 13:30	Hoor Shaik	08/30/2019 15:26	Juyoung Kim	2114268
	08/23/2019	08/27/2019 13:30	Hoor Shaik	08/30/2019 17:10	Juyoung Kim	2114269
SM 2120 B	08/23/2019			08/23/2019 18:06	Madeline Funaro	2114198
	08/23/2019			08/23/2019 18:28	Madeline Funaro	2114197
	08/23/2019			08/23/2019 18:29	Madeline Funaro	2114206
	08/23/2019			08/23/2019 18:30	Madeline Funaro	2114207
	08/23/2019			08/23/2019 18:50	Madeline Funaro	2114199
SM 2320 B-97	08/23/2019			08/30/2019 03:41	Dale L. Simmons	2114197
	08/23/2019			08/30/2019 03:54	Dale L. Simmons	2114198
	08/23/2019			08/30/2019 05:50	Dale L. Simmons	2114199
	08/23/2019			08/30/2019 06:03	Dale L. Simmons	2114206
	08/23/2019			08/30/2019 06:17	Dale L. Simmons	2114207
SM 2540 C-97	08/23/2019			08/28/2019 14:52	Yijie Li	2114197, 2114198, 2114199, 2114206, 2114207
SM 2540 D-97	08/23/2019			08/28/2019 14:52	Yijie Li	2114197, 2114198, 2114199, 2114206, 2114207
SM 4500 F-C-97	08/23/2019			08/30/2019 03:41	Dale L. Simmons	2114197
	08/23/2019			08/30/2019 03:54	Dale L. Simmons	2114198
	08/23/2019			08/30/2019 05:50	Dale L. Simmons	2114199
	08/23/2019			08/30/2019 06:03	Dale L. Simmons	2114206
	08/23/2019			08/30/2019 06:17	Dale L. Simmons	2114207
SM 5310 B-00	08/23/2019			08/30/2019 15:04	Madeline Funaro	2114201
	08/23/2019			08/30/2019 20:07	Madeline Funaro	2114200
	08/23/2019			08/30/2019 20:21	Madeline Funaro	2114202
	08/23/2019			08/30/2019 20:35	Madeline Funaro	2114208
	08/23/2019			08/30/2019 22:21	Madeline Funaro	2114209