

Chemical Analysis Report

NE-DIST-2018-10-24-02

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

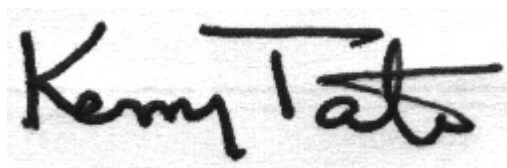
Event Description: **LSJR Southside 1**
Request ID: **RQ-2018-10-22-07**
Customer: **NE-DIST**
Project ID: **SMP**

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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 15-NOV-2018 14:27

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line above the first name.

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 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: Field Blank Location: NE ROC DI

Collection Date/Time: 10/23/2018 09:00

Field ID: BLANK 10232018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035465	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P353758	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P353866	
		Sulfate	0.20	U	mg SO4/L	P353868	
		Color (true)	2.5	U	PCU	P353618	
	SM 2120 B	Total Alkalinity	0.65	U	mg CaCO3/L	P353898	
	SM 2540 C-97	TDS	15	U	mg/L	P354122	
	SM 2540 D-97	TSS	2	U	mg/L	P354018	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P353903	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P354089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P353913	
2035466	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P353775	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P353664	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P353794	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P353642	
	dissolved						
2035516	EPA 8321B	Aldicarb	0.020	U	ug/L	P353529	
		Aldicarb Sulfone	0.0020	U	ug/L	P353529	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P353529	
		Carbaryl	0.0020	U	ug/L	P353529	
		Carbofuran	0.0020	U	ug/L	P353529	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P353529	
		Methiocarb	0.0020	U	ug/L	P353529	
		Methomyl	0.0020	U	ug/L	P353529	
		Oxamyl	0.0020	U	ug/L	P353529	
		Propoxur	0.0020	U	ug/L	P353529	
2035517		2,4-D	0.0020	U	ug/L	P353529	
		Bentazon	8.0E-04	U	ug/L	P353529	
		MCP	0.0020	U	ug/L	P353529	
		Triclopyr**	0.0040	U	ug/L	P353529	MS
		Imidacloprid	0.0020	U	ug/L	P353529	MS
		Diuron	0.0020	U	ug/L	P353529	
		Pyraclostrobin**	0.0020	U	ug/L	P353529	
		Primidone**	0.0040	U	ug/L	P353529	
		Linuron	0.0040	U	ug/L	P353529	
		Acetaminophen**	0.0080	U	ug/L	P353529	
		Fenuron	0.016	U	ug/L	P353529	
		Imazapyr**	0.0040	U	ug/L	P353529	
		Carbamazepine**	8.0E-04	U	ug/L	P353529	
		Fluridone**	4.0E-04	U	ug/L	P353529	
		Hydrocodone**	8.0E-04	U	ug/L	P353529	
		Naproxen**	0.0080	U	ug/L	P353529	
		Ibuprofen**	0.020	U	ug/L	P353529	
		Sucralose**	0.010	U	ug/L	P353544	
		Glyphosate**	0.10	U	ug/L	P353544	

Field ID: BLANK 10232018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035517	EPA 8321B	AMPA**	0.10	U	ug/L	P353544	
		Endothall**	0.25	U	ug/L	P353544	
		Glufosinate**	0.10	U	ug/L	P353544	
		Acesulfame K**	0.10	U	ug/L	P353544	
2035520	EPA 8270D	Aldrin	4.1	U	ng/L	P353657	
		Alpha-BHC	2.0	U	ng/L	P353657	
		Beta-BHC	4.1	U	ng/L	P353657	
		Delta-BHC	4.1	U	ng/L	P353657	
		Gamma-BHC	4.1	U	ng/L	P353657	
		Carbophenothion	4.1	U	ng/L	P353657	
		Chlorothalonil	2.0	UJ	ng/L	P353657	RPD
		Cypermethrin	20	U	ng/L	P353657	
		DDD-p,p'	3.0	U	ng/L	P353657	
		DDE-p,p'	3.0	U	ng/L	P353657	
		DDT-p,p'	3.0	U	ng/L	P353657	
		Dieldrin	4.1	U	ng/L	P353657	
		Endosulfan I	4.1	U	ng/L	P353657	
		Endosulfan II	4.1	U	ng/L	P353657	
		Endosulfan Sulfate	2.0	U	ng/L	P353657	
		Endrin	2.0	U	ng/L	P353657	
		Endrin Aldehyde	2.0	U	ng/L	P353657	
		Heptachlor	1.5	U	ng/L	P353657	
		Heptachlor Epoxide	2.0	U	ng/L	P353657	
		Methoxychlor	4.1	U	ng/L	P353657	
		Mirex	2.0	U	ng/L	P353657	
		Permethrin	10	U	ng/L	P353657	
		Trifluralin	1.0	U	ng/L	P353657	
		Alpha-Chlordane	1.0	U	ng/L	P353657	
		Gamma-Chlordane	1.0	U	ng/L	P353657	
		Endrin Ketone	2.0	U	ng/L	P353657	
		Dicofol	30	U	ng/L	P353657	
		Chlordane	2.5	U	ng/L	P353657	
		Toxaphene	30	U	ng/L	P353657	
		Alachlor	0.24	U	ng/L	P353789	
		Ametryn	0.31	U	ng/L	P353789	
		Atrazine	0.24	UJ	ng/L	P353789	LCS
		Atrazine Desethyl	1.4	U	ng/L	P353789	
		Azinphos Methyl	2.1	U	ng/L	P353789	
		Bromacil	0.47	U	ng/L	P353789	
		Butylate	0.38	UJ	ng/L	P353789	LCS
		Chlorpyrifos Ethyl	0.24	UJ	ng/L	P353789	LCS
		Chlorpyrifos Methyl	0.094	U	ng/L	P353789	
		Demeton	1.9	U	ng/L	P353789	
		Diazinon	0.12	UJ	ng/L	P353789	LCS
		Disulfoton	0.47	U	ng/L	P353789	
2035521	EPA 8270D	Alachlor	0.24	U	ng/L	P353789	
		Ametryn	0.31	U	ng/L	P353789	
		Atrazine	0.24	UJ	ng/L	P353789	LCS
		Atrazine Desethyl	1.4	U	ng/L	P353789	
	EPA 8276	Azinphos Methyl	2.1	U	ng/L	P353789	
		Bromacil	0.47	U	ng/L	P353789	
		Butylate	0.38	UJ	ng/L	P353789	LCS
		Chlorpyrifos Ethyl	0.24	UJ	ng/L	P353789	LCS
	EPA 8270D	Chlorpyrifos Methyl	0.094	U	ng/L	P353789	
		Demeton	1.9	U	ng/L	P353789	
		Diazinon	0.12	UJ	ng/L	P353789	LCS
		Disulfoton	0.47	U	ng/L	P353789	

Field ID: BLANK 10232018

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035521	EPA 8270D	EPTC	1.2	U	ng/L	P353789	
		Ethion	0.14	UJ	ng/L	P353789	LCS, MS, RPD
		Ethoprop	0.094	U	ng/L	P353789	
		Fenamiphos	0.24	U	ng/L	P353789	
		Fipronil	0.24	U	ng/L	P353789	
		Fipronil Sulfide	0.14	U	ng/L	P353789	
		Fipronil Sulfone	0.14	U	ng/L	P353789	
		Hexazinone	0.47	U	ng/L	P353789	
		Malathion	0.33	U	ng/L	P353789	
		Metribuzin	0.19	U	ng/L	P353789	
		Mevinphos	0.47	U	ng/L	P353789	
		Molinate	0.28	U	ng/L	P353789	
		Norflurazon	0.47	U	ng/L	P353789	
		Pendimethalin	0.94	U	ng/L	P353789	
		Phorate	0.24	U	ng/L	P353789	
		Prometon	0.85	U	ng/L	P353789	
		Prometryn	0.19	U	ng/L	P353789	
		Simazine	0.47	U	ng/L	P353789	
		Terbufos	0.094	U	ng/L	P353789	
		Terbutylazine	0.40	U	ng/L	P353789	
		Fonofos	0.19	U	ng/L	P353789	
		Metalaxyl	0.24	U	ng/L	P353789	
		Metolachlor	0.24	U	ng/L	P353789	
		Acetochlor	0.24	UJ	ng/L	P353789	LCS
		Cyanazine	0.47	U	ng/L	P353789	RPD
		Parathion Ethyl	0.24	U	ng/L	P353789	
		Parathion Methyl	0.24	U	ng/L	P353789	
		Dimethenamid**	0.094	U	ng/L	P353789	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P353789	
		Dithiopyr**	0.094	U	ng/L	P353789	
		Prodiamine**	0.17	U	ng/L	P353789	
		Oxadiazon**	0.094	U	ng/L	P353789	
		Tebuconazole**	0.47	UJ	ng/L	P353789	MS, RPD

Ref. Method and Comment:

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

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

EPA 8270D: 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. Estimated value for Fipronil Desulfinyl due to the lack of the second source standard.

Sample Location: MIRAMAR CR @ GADSEN RD

Collection Date/Time: 10/23/2018 10:00

Field ID: 20030825

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035515	EPA 8321B	2,4-D	0.22		ug/L	P353529	
		Bentazon	0.015		ug/L	P353529	
		MCP	0.0027	I	ug/L	P353529	
		Triclopyr**	0.0040	U	ug/L	P353529	MS
		Imidacloprid	0.036		ug/L	P353529	MS
		Diuron	0.11		ug/L	P353529	
		Pyraclostrobin**	0.0020	U	ug/L	P353529	
		Primidone**	0.0040	I	ug/L	P353529	
		Linuron	0.0040	U	ug/L	P353529	
		Acetaminophen**	0.0080	U	ug/L	P353529	
		Fenuron	0.016	U	ug/L	P353529	
		Imazapyr**	0.064		ug/L	P353529	
		Carbamazepine**	0.053		ug/L	P353529	
		Fluridone**	4.0E-04	U	ug/L	P353529	
		Hydrocodone**	8.0E-04	U	ug/L	P353529	
		Naproxen**	0.0080	U	ug/L	P353529	
		Ibuprofen**	0.020	U	ug/L	P353529	
		Sucralose**	1.4		ug/L	P353544	
		Acesulfame K**	1.2		ug/L	P353544	

Sample Location: BIG POTTSBURG CR ~ 200m N BOWDEN RD Collection Date/Time: 10/23/2018 09:20

Field ID: 20030068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035459	EPA 180.1 Rev. 2.0	Turbidity	3.1		NTU	P353757	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P353866	
		Sulfate	25		mg SO4/L	P353868	
		Color (true)	51		PCU	P353618	
	SM 2320 B-97	Total Alkalinity	89		mg CaCO3/L	P353897	
	SM 2540 C-97	TDS	197		mg/L	P354124	
	SM 2540 D-97	TSS	3	I	mg/L	P354020	
	SM 4500 F-C-97	Fluoride	0.11		mg F/L	P353902	
2035461	EPA 350.1 Rev. 2.0	Ammonia-N	0.042		mg N/L	P354089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.46		mg N/L	P353913	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.11		mg N/L	P353775	
	EPA 365.1 Rev. 2.0	Total-P	0.10		mg P/L	P353664	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P353794	
2035463	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.064		mg P/L	P353642	
2035513	EPA 8321B	2,4-D	0.034		ug/L	P353529	
		Bentazon	0.028		ug/L	P353529	
		MCP	0.0020	U	ug/L	P353529	
		Triclopyr**	0.0040	U	ug/L	P353529	MS
		Imidacloprid	0.043		ug/L	P353529	MS
		Diuron	0.010		ug/L	P353529	
		Pyraclostrobin**	0.0020	U	ug/L	P353529	
		Primidone**	0.0040	U	ug/L	P353529	
		Linuron	0.0040	U	ug/L	P353529	
		Acetaminophen**	0.0080	U	ug/L	P353529	
		Fenuron	0.016	U	ug/L	P353529	
		Imazapyr**	0.28		ug/L	P353529	
		Carbamazepine**	8.0E-04	U	ug/L	P353529	
		Fluridone**	0.088		ug/L	P353529	
		Hydrocodone**	8.0E-04	U	ug/L	P353529	
		Naproxen**	0.0080	U	ug/L	P353529	
		Ibuprofen**	0.020	U	ug/L	P353529	
		Sucralose**	0.12		ug/L	P353544	
		Acesulfame K**	0.16	I	ug/L	P353544	
2035523	EPA 200.7 Rev. 4.4	Calcium	38.1		mg/L	P353655	
		Iron	390		ug/L	P353655	
		Magnesium	7.20		mg/L	P353655	
		Potassium	2.7		mg/L	P353655	
		Sodium	15.0		mg/L	P353655	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P353655	
		Arsenic	0.81		ug/L	P353655	
		Cadmium	0.020	U	ug/L	P353655	
		Chromium	0.40	U	ug/L	P353655	
		Copper	0.55	I	ug/L	P353655	

Field ID: 20030068

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035523	EPA 200.8 Rev. 5.4	Lead	0.071	I	ug/L	P353655	
		Nickel	0.81		ug/L	P353655	
		Silver	0.010	U	ug/L	P353655	

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

Sample Location: Miramar at San Jose

Collection Date/Time: 10/23/2018 10:50

Field ID: G2NE1164

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035456	EPA 180.1 Rev. 2.0	Turbidity	3.0		NTU	P353757	
	EPA 300.0 Rev. 2.1	Chloride	380		mg Cl/L	P353866	
		Sulfate	120		mg SO4/L	P353868	
		Color (true)	28		PCU	P353618	
	SM 2320 B-97	Total Alkalinity	77		mg CaCO3/L	P353897	
	SM 2540 C-97	TDS	816		mg/L	P354124	
	SM 2540 D-97	TSS	3	I	mg/L	P354020	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P353902	
2035457	EPA 350.1 Rev. 2.0	Ammonia-N	0.090		mg N/L	P354088	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.49		mg N/L	P353912	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.4		mg N/L	P353829	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P353755	
	SM 5310 B-00	Organic Carbon	4.7		mg C/L	P353794	
2035458	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.035		mg P/L	P353649	
2035511	EPA 8321B	Aldicarb	0.020	U	ug/L	P353529	
		Aldicarb Sulfone	0.0020	U	ug/L	P353529	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P353529	
		Carbaryl	0.0020	U	ug/L	P353529	
		Carbofuran	0.0020	U	ug/L	P353529	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P353529	
		Methiocarb	0.0020	U	ug/L	P353529	
		Methomyl	0.0020	U	ug/L	P353529	
		Oxamyl	0.0020	U	ug/L	P353529	
		Propoxur	0.0020	U	ug/L	P353529	
2035512		2,4-D	0.046		ug/L	P353529	
		Bentazon	0.044		ug/L	P353529	
		MCP	0.0020	U	ug/L	P353529	
		Triclopyr**	0.0040	UJ	ug/L	P353529	MS
		Imidacloprid	0.029	J	ug/L	P353529	MS
		Diuron	0.037		ug/L	P353529	
		Pyraclostrobin**	0.0020	U	ug/L	P353529	
		Primidone**	0.0040	U	ug/L	P353529	
		Linuron	0.0040	U	ug/L	P353529	
		Acetaminophen**	0.0080	U	ug/L	P353529	
		Fenuron	0.016	U	ug/L	P353529	
		Imazapyr**	0.058		ug/L	P353529	
		Carbamazepine**	0.018		ug/L	P353529	
		Fluridone**	0.0011	I	ug/L	P353529	
		Hydrocodone**	8.0E-04	U	ug/L	P353529	
		Naproxen**	0.0080	U	ug/L	P353529	
		Ibuprofen**	0.020	U	ug/L	P353529	
		Sucralose**	0.83		ug/L	P353544	
		Glyphosate**	0.10	U	ug/L	P353544	

Field ID: G2NE1164

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035512	EPA 8321B	AMPA**	0.10	U	ug/L	P353544	
		Endothall**	0.25	U	ug/L	P353544	
		Glufosinate**	0.10	U	ug/L	P353544	
		Acesulfame K**	0.36	I	ug/L	P353544	
2035518	EPA 8270D	Aldrin	4.1	U	ng/L	P353657	
		Alpha-BHC	2.0	U	ng/L	P353657	
		Beta-BHC	4.1	U	ng/L	P353657	
		Delta-BHC	4.1	U	ng/L	P353657	
		Gamma-BHC	4.1	U	ng/L	P353657	
		Carbophenothion	4.1	U	ng/L	P353657	
		Chlorothalonil	2.0	UJ	ng/L	P353657	RPD
		Cypermethrin	20	U	ng/L	P353657	
		DDD-p,p'	3.0	U	ng/L	P353657	
		DDE-p,p'	3.0	U	ng/L	P353657	
		DDT-p,p'	3.0	U	ng/L	P353657	
		Dieldrin	4.1	U	ng/L	P353657	
		Endosulfan I	4.1	U	ng/L	P353657	
		Endosulfan II	4.1	U	ng/L	P353657	
		Endosulfan Sulfate	2.0	U	ng/L	P353657	
		Endrin	2.0	U	ng/L	P353657	
		Endrin Aldehyde	2.0	U	ng/L	P353657	
		Heptachlor	1.5	U	ng/L	P353657	
		Heptachlor Epoxide	2.0	U	ng/L	P353657	
		Methoxychlor	4.1	U	ng/L	P353657	
		Mirex	2.0	U	ng/L	P353657	
		Permethrin	10	U	ng/L	P353657	
		Trifluralin	1.0	U	ng/L	P353657	
		Alpha-Chlordane	1.0	U	ng/L	P353657	
		Gamma-Chlordane	1.0	U	ng/L	P353657	
		Endrin Ketone	2.0	U	ng/L	P353657	
		Dicofol	30	U	ng/L	P353657	
		Chlordane	5.8	I	ng/L	P353657	
		Toxaphene	30	U	ng/L	P353657	
	EPA 8276	Alachlor	0.24	U	ng/L	P353789	
2035519	EPA 8270D	Ametryn	1.4		ng/L	P353789	
		Atrazine	10	J	ng/L	P353789	LCS
		Atrazine Desethyl	4.7	I	ng/L	P353789	
		Azinphos Methyl	2.2	U	ng/L	P353789	
		Bromacil	0.48	U	ng/L	P353789	
		Butylate	0.38	UJ	ng/L	P353789	LCS
		Chlorpyrifos Ethyl	0.24	UJ	ng/L	P353789	LCS
		Chlorpyrifos Methyl	0.096	U	ng/L	P353789	
		Demeton	1.9	U	ng/L	P353789	
		Diazinon	0.12	UJ	ng/L	P353789	LCS
		Disulfoton	0.48	U	ng/L	P353789	

Field ID: G2NE1164

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035519	EPA 8270D	EPTC	1.2	U	ng/L	P353789	LCS, MS, RPD
		Ethion	0.14	UJ	ng/L	P353789	
		Ethoprop	0.096	U	ng/L	P353789	
		Fenamiphos	0.24	U	ng/L	P353789	
		Fipronil	2.8		ng/L	P353789	
		Fipronil Sulfide	2.7		ng/L	P353789	
		Fipronil Sulfone	3.3		ng/L	P353789	
		Hexazinone	0.48	U	ng/L	P353789	
		Malathion	0.34	U	ng/L	P353789	
		Metribuzin	1.3		ng/L	P353789	
		Mevinphos	0.48	U	ng/L	P353789	
		Molinate	0.29	U	ng/L	P353789	
		Norflurazon	0.48	U	ng/L	P353789	
		Pendimethalin	0.96	U	ng/L	P353789	
		Phorate	0.24	U	ng/L	P353789	
		Prometon	0.86	U	ng/L	P353789	
		Prometryn	0.19	U	ng/L	P353789	
		Simazine	5.4		ng/L	P353789	
		Terbufos	0.096	U	ng/L	P353789	
		Terbutylazine	0.41	U	ng/L	P353789	
		Fonofos	0.19	U	ng/L	P353789	
		Metalaxyl	0.24	U	ng/L	P353789	
		Metolachlor	2.8		ng/L	P353789	
		Acetochlor	0.24	UJ	ng/L	P353789	LCS RPD
		Cyanazine	0.48	U	ng/L	P353789	
		Parathion Ethyl	0.24	U	ng/L	P353789	
		Parathion Methyl	0.24	U	ng/L	P353789	
		Dimethenamid**	0.096	U	ng/L	P353789	
		Fipronil Desulfinyl**	0.12	UJ	ng/L	P353789	
		Dithiopyr**	0.23	I	ng/L	P353789	
		Prodiamine**	0.74		ng/L	P353789	
		Oxadiazon**	0.45		ng/L	P353789	
		Tebuconazole**	0.48	UJ	ng/L	P353789	
2035522	EPA 200.7 Rev. 4.4	Calcium	53.2		mg/L	P353655	MS, RPD
		Iron	510		ug/L	P353655	
		Magnesium	44.1		mg/L	P353655	
		Potassium	13.0		mg/L	P353655	
		Sodium	313		mg/L	P353655	
		Zinc	6.6	I	ug/L	P353655	
	EPA 200.8 Rev. 5.4	Arsenic	0.68		ug/L	P353655	
		Cadmium	0.020	U	ug/L	P353655	
		Chromium	0.40	U	ug/L	P353655	
		Copper	0.58	I	ug/L	P353655	
		Lead	0.38		ug/L	P353655	

Field ID: G2NE1164

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035522	EPA 200.8 Rev. 5.4	Nickel	0.54	I	ug/L	P353655	
		Silver	0.010	U	ug/L	P353655	

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: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: 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. Estimated value for Fipronil Desulfinyl due to the lack of the second source standard.

Sample Location: BIG POTTSBURG CR AT BELFORT RD

Collection Date/Time: 10/23/2018 08:45

Field ID: 20030064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035460	EPA 180.1 Rev. 2.0	Turbidity	4.3		NTU	P353757	
	EPA 300.0 Rev. 2.1	Chloride	27		mg Cl/L	P353866	
		Sulfate	30		mg SO4/L	P353868	
		Color (true)	53	A	PCU	P353618	
	SM 2320 B-97	Total Alkalinity	88		mg CaCO3/L	P353898	
	SM 2540 C-97	TDS	201	A	mg/L	P354124	
	SM 2540 D-97	TSS	3	IA	mg/L	P354020	
	SM 4500 F-C-97	Fluoride	0.10		mg F/L	P353903	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.018		mg N/L	P354089	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.45		mg N/L	P353913	
2035462	EPA 353.2 Rev. 2.0	NO2NO3-N	0.16		mg N/L	P353775	
	EPA 365.1 Rev. 2.0	Total-P	0.087		mg P/L	P353664	
	SM 5310 B-00	Organic Carbon	9.8		mg C/L	P353794	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.058		mg P/L	P353642	
	EPA 8321B	2,4-D	0.034		ug/L	P353529	
2035514		Bentazon	0.036		ug/L	P353529	
		MCP	0.0020	U	ug/L	P353529	
		Triclopyr**	0.0040	U	ug/L	P353529	MS
		Imidacloprid	0.036		ug/L	P353529	MS
		Diuron	0.0095		ug/L	P353529	
		Pyraclostrobin**	0.0020	U	ug/L	P353529	
		Primidone**	0.0040	U	ug/L	P353529	
		Linuron	0.0040	U	ug/L	P353529	
		Acetaminophen**	0.0080	U	ug/L	P353529	
		Fenuron	0.016	U	ug/L	P353529	
		Imazapyr**	0.25		ug/L	P353529	
		Carbamazepine**	8.0E-04	U	ug/L	P353529	
		Fluridone**	0.11		ug/L	P353529	
		Hydrocodone**	8.0E-04	U	ug/L	P353529	
		Naproxen**	0.0080	U	ug/L	P353529	
		Ibuprofen**	0.020	U	ug/L	P353529	
		Sucralose**	0.041		ug/L	P353544	
		Acesulfame K**	0.11	I	ug/L	P353544	
	EPA 200.7 Rev. 4.4	Calcium	40.0		mg/L	P353655	
		Iron	410		ug/L	P353655	
		Magnesium	7.25		mg/L	P353655	
		Potassium	1.9		mg/L	P353655	
		Sodium	14.9		mg/L	P353655	
		Zinc	5.0	U	ug/L	P353655	
2035524	EPA 200.8 Rev. 5.4	Arsenic	0.73		ug/L	P353655	
		Cadmium	0.020	U	ug/L	P353655	
		Chromium	0.40	U	ug/L	P353655	
		Copper	0.98		ug/L	P353655	

Field ID: 20030064

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2035524	EPA 200.8 Rev. 5.4	Lead	0.17	I	ug/L	P353655	
		Nickel	0.73	I	ug/L	P353655	
		Silver	0.010	U	ug/L	P353655	

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353757

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353758

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P353655

Component	Result	Code	Units
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P353655

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.20	U	ug/L
Lead	0.050	U	ug/L
Nickel	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353866

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353868

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354088

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354089

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353912

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353913

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353775

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353829

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353664

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353755

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353642

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353649

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P353657

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	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	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
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8270D
Batch ID: P353789

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	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	0.50	U	ng/L
Demeton	2.0	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
Fenamiphos	0.25	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P353789

Component	Result	Code	Units
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	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	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	0.25	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: P353657

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	30	U	ng/L

Reference Method: EPA 8321B
Batch ID: P353529

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P353529

Component	Result	Code	Units
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: EPA 8321B
Batch ID: P353544

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: SM 2120 B
Batch ID: P353618

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P353897

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

Reference Method: SM 2320 B-97
Batch ID: P353898

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

Reference Method: SM 2540 C-97
Batch ID: P354122

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P354124

Component	Result	Code	Units
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Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 C-97
Batch ID: P354124

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P354018

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P354020

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P353902

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P353903

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P353794

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: P353655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	103		P	85 - 115
Iron	105		P	85 - 115
Magnesium	107		P	85 - 115
Potassium	102		P	85 - 115
Sodium	103		P	85 - 115
Zinc	99.2		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P353655

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.9		P	85 - 115
Cadmium	96.3		P	85 - 115
Chromium	97.3		P	85 - 115
Copper	99.0		P	85 - 115
Lead	93.1		P	85 - 115
Nickel	99.5		P	85 - 115
Silver	96.0		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353866

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353868

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354088

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354089

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353912

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353913

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353775

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353829

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: P353664

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.0		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353755

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.3		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353642

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353649

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

Reference Method: EPA 8270D
Batch ID: P353657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.2	59.2	P/P	24 - 89.0
Alpha-BHC	105	106	P/P	58 - 117
Alpha-Chlordane	91.2	91.5	P/P	56 - 115
Beta-BHC	113	117	P/P	55 - 137
Carbophenothion	87.6	91.9	P/P	37 - 145
Chlorothalonil	52.8	113	P/P	26 - 163
Cypermethrin	81.8	84.1	P/P	42 - 156
DDD-p,p'	88.9	95.5	P/P	59 - 129
DDE-p,p'	91.3	94.2	P/P	52 - 117
DDT-p,p'	103	104	P/P	48 - 128

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P353657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Delta-BHC	119	125	P/P	59 - 158
Dicofol	99.3	100	P/P	19 - 124
Dieldrin	93.8	97.7	P/P	57 - 126
Endosulfan I	94.1	93.0	P/P	59 - 133
Endosulfan II	100	101	P/P	58 - 148
Endosulfan Sulfate	86.4	83.0	P/P	56 - 135
Endrin	94.5	101	P/P	50 - 140
Endrin Aldehyde	95.1	96.2	P/P	47 - 141
Endrin Ketone	85.2	87.5	P/P	63 - 123
Gamma-BHC	123	109	P/P	59 - 132
Gamma-Chlordane	89.5	90.6	P/P	55 - 112
Heptachlor	78.0	77.8	P/P	45 - 102
Heptachlor Epoxide	93.1	93.1	P/P	61 - 116
Methoxychlor	114	111	P/P	60 - 133
Mirex	70.0	73.4	P/P	40 - 98.0
Permethrin	74.7	77.9	P/P	45 - 131
Trifluralin	90.7	97.2	P/P	38 - 179

Reference Method: EPA 8270D
Batch ID: P353789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	112	128	P/F	67 - 125
Alachlor	107	119	P/P	69 - 123
Ametryn	89.0	97.6	P/P	52 - 151
Atrazine	117	126	P/F	71 - 125
Atrazine Desethyl	94.1	115	P/P	19 - 129
Azinphos Methyl	152	154	P/P	48 - 200
Bromacil	96.6	105	P/P	46 - 130
Butylate	73.9	88.7	P/F	10 - 85.0
Chlorpyrifos Ethyl	98.0	122	P/F	54 - 115
Chlorpyrifos Methyl	97.2	115	P/P	44 - 117
Cyanazine	108	132	P/P	26 - 262
Demeton	83.6	96.5	P/P	24 - 145
Diazinon	128	134	P/F	66 - 129
Dimethenamid	92.2	124	P/P	60 - 130
Disulfoton	91.9	102	P/P	45 - 139
Dithiopyr	114	128	P/P	60 - 130
EPTC	68.1	85.3	P/P	10 - 86.0
Ethion	56.8	94.0	F/P	63 - 127
Ethoprop	85.9	95.8	P/P	63 - 109
Fenamiphos	88.0	103	P/P	55 - 140
Fipronil	103	116	P/P	37 - 142
Fipronil Sulfide	85.0	100	P/P	37 - 130
Fipronil Sulfone	77.7	88.7	P/P	18 - 143
Fonofos	104	115	P/P	55 - 118
Hexazinone	101	115	P/P	62 - 140
Malathion	99.0	117	P/P	64 - 132
Metaxyl	107	119	P/P	55 - 129
Metolachlor	105	119	P/P	56 - 137
Metribuzin	184	197	P/P	16 - 218
Mevinphos	102	109	P/P	34 - 129

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P353789

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	63.4	72.7	P/P	16 - 99.0
Norflurazon	107	121	P/P	43 - 135
Oxadiazon	110	126	P/P	60 - 130
Parathion Ethyl	89.0	97.5	P/P	78 - 109
Parathion Methyl	105	121	P/P	65 - 127
Pendimethalin	102	119	P/P	35 - 159
Phorate	97.0	112	P/P	41 - 129
Prodiamine	91.2	118	P/P	60 - 130
Prometon	90.3	108	P/P	56 - 140
Prometryn	105	113	P/P	65 - 130
Simazine	108	117	P/P	54 - 148
Tebuconazole	30.2	49.4	P/P	30 - 100
Terbufos	117	124	P/P	53 - 126
Terbutylazine	89.3	107	P/P	76 - 113

Reference Method: EPA 8276
Batch ID: P353657

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	85.6	82.2	P/P	47 - 125
Toxaphene	77.7	71.1	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P353529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	90.6		P	40 - 150
3-Hydroxycarbofuran	125		P	40 - 150
Acetaminophen	143		P	30 - 150
Aldicarb	98.7		P	30 - 150
Aldicarb Sulfone	112		P	40 - 150
Aldicarb Sulfoxide	113		P	40 - 150
Bentazon	73.3		P	30 - 150
Carbamazepine	97.0		P	40 - 150
Carbaryl	90.4		P	40 - 150
Carbofuran	92.5		P	40 - 150
Diuron	93.3		P	40 - 150
Fenuron	133		P	40 - 150
Fluridone	116		P	40 - 150
Hydrocodone	130		P	40 - 150
Ibuprofen	41.3		P	40 - 150
Imazapyr	110		P	40 - 150
Imidacloprid	137		P	40 - 160
Linuron	87.2		P	40 - 150
MCPP	97.5		P	40 - 150
Methiocarb	74.4		P	40 - 150
Methomyl	121		P	40 - 150
Naproxen	92.8		P	40 - 150
Oxamyl	116		P	40 - 150
Primidone	130		P	40 - 150
Propoxur	93.8		P	40 - 150
Pyraclostrobin	93.1		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P353529

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Triclopyr	99.9		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P353544

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	84.0		P	40 - 150
AMPA	120		P	40 - 150
Endothall	81.0		P	40 - 150
Glufosinate	82.6		P	40 - 150
Glyphosate	71.3		P	40 - 140
Sucralose	83.5		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P353618

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	102		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P353897

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	98 - 107

Reference Method: SM 2320 B-97
Batch ID: P353898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 107

Reference Method: SM 4500 F-C-97
Batch ID: P353902

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.1		P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P353903

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	99.1		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P353794

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

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P353655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034830	Calcium	104		P	80 - 120
2034830	Iron	106	104	P/P	80 - 120
2034830	Magnesium	107	104	P/P	80 - 120
2034830	Potassium	105	103	P/P	80 - 120
2034830	Sodium	105		P	80 - 120
2034830	Zinc	102	100	P/P	80 - 120
2035504	Calcium	102		P	80 - 120
2035504	Iron	105		P	80 - 120
2035504	Magnesium	107		P	80 - 120
2035504	Potassium	105		P	80 - 120
2035504	Sodium	109		P	80 - 120
2035504	Zinc	101		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P353655

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034830	Arsenic	102	100	P/P	80 - 120
2034830	Cadmium	99.2	97.9	P/P	80 - 120
2034830	Chromium	98.6	96.6	P/P	80 - 120
2034830	Copper	99.6	98.3	P/P	80 - 120
2034830	Lead	95.7	94.8	P/P	80 - 120
2034830	Nickel	99.0	97.0	P/P	80 - 120
2034830	Silver	96.3	96.0	P/P	80 - 120
2035504	Arsenic	101		P	80 - 120
2035504	Cadmium	101		P	80 - 120
2035504	Chromium	99.5		P	80 - 120
2035504	Copper	102		P	80 - 120
2035504	Lead	97.2		P	80 - 120
2035504	Nickel	99.5		P	80 - 120
2035504	Silver	97.6		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353866

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034762	Chloride	104	103	P/P	90 - 110
2035091	Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353868

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034762	Sulfate	102	102	P/P	90 - 110
2035091	Sulfate	98.9		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354088

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035303	Ammonia-N	102	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354089

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035461	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353912

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035413	Kjeldahl Nitrogen	98.9	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353913

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035471	Kjeldahl Nitrogen	101	99.9	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353775

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035461	NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353829

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035413	NO2NO3-N	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353664

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035471	Total-P	98.8	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353755

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035345	Total-P	94.0	92.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353642

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035474	O-Phosphate-P	96.6	97.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035343	O-Phosphate-P	101	102	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P353657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2036945	Aldrin	59.9	62.6	P/P	26 - 96.0
2036945	Alpha-BHC	97.5	110	P/P	51 - 123
2036945	Alpha-Chlordane	90.8	88.7	P/P	45 - 120
2036945	Beta-BHC	111	120	P/P	43 - 146
2036945	Carbophenothion	72.4	88.0	P/P	26 - 179
2036945	Chlorothalonil	98.0	95.7	P/P	10 - 215
2036945	Cypermethrin	74.1	80.2	P/P	35 - 169
2036945	DDD-p,p'	76.0	95.3	P/P	49 - 131
2036945	DDE-p,p'	92.2	92.4	P/P	39 - 127
2036945	DDT-p,p'	95.4	102	P/P	49 - 120
2036945	Delta-BHC	145	154	P/P	49 - 187
2036945	Dicofol	99.4	98.3	P/P	10 - 129
2036945	Dieldrin	114	111	P/P	46 - 132
2036945	Endosulfan I	95.7	90.2	P/P	57 - 130
2036945	Endosulfan II	89.8	94.1	P/P	52 - 148
2036945	Endosulfan Sulfate	89.9	88.4	P/P	55 - 129
2036945	Endrin	97.3	95.7	P/P	45 - 133
2036945	Endrin Aldehyde	77.4	88.8	P/P	26 - 140
2036945	Endrin Ketone	89.8	95.9	P/P	60 - 125
2036945	Gamma-BHC	135	134	P/P	50 - 145
2036945	Gamma-Chlordane	89.6	87.6	P/P	44 - 118
2036945	Heptachlor	72.0	75.4	P/P	35 - 106
2036945	Heptachlor Epoxide	95.2	92.4	P/P	52 - 123
2036945	Methoxychlor	101	109	P/P	54 - 132
2036945	Mirex	68.0	73.6	P/P	36 - 107
2036945	Permethrin	74.7	79.6	P/P	47 - 135
2036945	Trifluralin	89.4	101	P/P	32 - 228

Reference Method: EPA 8270D
Batch ID: P353789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034829	Acetochlor	108	108	P/P	67 - 125
2034829	Alachlor	97.6	103	P/P	69 - 123
2034829	Ametryn	108	97.7	P/P	52 - 151
2034829	Atrazine Desethyl	113	94.7	P/P	10 - 129
2034829	Azinphos Methyl	153	155	P/P	48 - 200
2034829	Bromacil	100	92.0	P/P	46 - 130
2034829	Butylate	65.8	81.1	P/P	10 - 85.0
2034829	Chlorpyrifos Ethyl	93.6	91.9	P/P	54 - 115
2034829	Chlorpyrifos Methyl	92.6	90.8	P/P	44 - 117
2034829	Cyanazine	136	75.0	P/P	10 - 262
2034829	Demeton	85.9	94.8	P/P	24 - 145
2034829	Diazinon	119	121	P/P	66 - 129
2034829	Dimethenamid	87.8	69.4	P/P	60 - 130
2034829	Disulfoton	92.6	101	P/P	45 - 139
2034829	Dithiopyr	106	104	P/P	60 - 130
2034829	EPTC	61.8	66.8	P/P	10 - 86.0
2034829	Ethion	31.7	13.7	F/F	59 - 133
2034829	Ethoprop	99.7	107	P/P	54 - 116
2034829	Fenamiphos	88.4	84.9	P/P	55 - 140
2034829	Fipronil	97.4	83.6	P/P	37 - 142

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P353789

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034829	Fipronil Sulfide	81.5	64.8	P/P	37 - 130
2034829	Fipronil Sulfone	73.4	53.2	P/P	18 - 143
2034829	Fonofos	99.4	103	P/P	55 - 118
2034829	Hexazinone	109	84.0	P/P	62 - 140
2034829	Malathion	98.4	95.6	P/P	64 - 132
2034829	Metalaxyl	101	101	P/P	55 - 129
2034829	Metolachlor	103	100	P/P	56 - 137
2034829	Metribuzin	173	165	P/P	16 - 218
2034829	Mevinphos	95.0	102	P/P	34 - 129
2034829	Molinate	63.6	64.3	P/P	16 - 99.0
2034829	Norflurazon	101	81.4	P/P	43 - 135
2034829	Oxadiazon	101	90.2	P/P	60 - 130
2034829	Parathion Ethyl	90.9	90.4	P/P	71 - 112
2034829	Parathion Methyl	99.1	99.8	P/P	65 - 127
2034829	Pendimethalin	103	102	P/P	35 - 159
2034829	Phorate	105	111	P/P	41 - 129
2034829	Prodiamine	92.2	70.7	P/P	60 - 130
2034829	Prometon	95.3	84.2	P/P	56 - 140
2034829	Prometryn	104	103	P/P	65 - 130
2034829	Simazine	102	94.7	P/P	54 - 148
2034829	Tebuconazole	38.8	18.9	P/F	30 - 100
2034829	Terbufos	113	121	P/P	53 - 126
2034829	Terbutylazine	111	109	P/P	73 - 114

Reference Method: EPA 8276
Batch ID: P353657

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2036303	Chlordane	89.9	81.9	P/P	41 - 134
2036303	Toxaphene	76.4	74.4	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P353529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035511	3-Hydroxycarbofuran	102	115	P/P	40 - 150
2035511	Aldicarb	67.5	69.7	P/P	30 - 150
2035511	Aldicarb Sulfone	93.2	102	P/P	40 - 150
2035511	Aldicarb Sulfoxide	41.0	43.8	P/P	40 - 150
2035511	Carbaryl	58.9	64.7	P/P	40 - 150
2035511	Carbofuran	67.3	60.4	P/P	40 - 150
2035511	Methiocarb	59.3	62.0	P/P	40 - 150
2035511	Methomyl	94.9	105	P/P	40 - 150
2035511	Oxamyl	92.6	97.0	P/P	40 - 150
2035511	Propoxur	64.2	76.6	P/P	40 - 150
2035512	2,4-D	139	120	P/P	40 - 150
2035512	Acetaminophen	126	135	P/P	30 - 150
2035512	Bentazon	95.7	68.5	P/P	30 - 150
2035512	Carbamazepine	74.4	74.6	P/P	40 - 150
2035512	Diuron	65.9	65.5	P/P	40 - 150
2035512	Fenuron	114	115	P/P	40 - 150
2035512	Fluridone	105	107	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P353529

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035512	Hydrocodone	119	123	P/P	40 - 150
2035512	Ibuprofen	44.5	41.7	P/P	40 - 150
2035512	Imazapyr	101	110	P/P	40 - 150
2035512	Imidacloprid	200	187	F/F	40 - 160
2035512	Linuron	68.7	67.9	P/P	40 - 150
2035512	MCPP	136	134	P/P	40 - 150
2035512	Naproxen	103	102	P/P	40 - 150
2035512	Primidone	121	118	P/P	40 - 150
2035512	Pyraclostrobin	85.2	81.1	P/P	40 - 150
2035512	Triclopyr	165	132	F/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P353544

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034746	Acesulfame K	104	99.7	P/P	40 - 150
2034746	AMPA	62.1	50.2	P/P	40 - 150
2034746	Endothall	101	107	P/P	40 - 150
2034746	Glufosinate	81.7	83.3	P/P	40 - 150
2034746	Glyphosate	65.2	53.9	P/P	40 - 140
2034746	Sucralose	81.8	78.5	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P353902

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2034796	Fluoride	101	100	P/P	91 - 105

Reference Method: SM 4500 F-C-97
Batch ID: P353903

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035886	Fluoride	98.9	100	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P353794

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2035305	Organic Carbon	95.2	95.6	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353757

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035333	Turbidity	0.220	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P353758

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035470	Turbidity	1.48	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P353655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034830	Calcium	2.34	Spike	P	0 - 20
2034830	Iron	2.41	Spike	P	0 - 20
2034830	Magnesium	2.09	Spike	P	0 - 20
2034830	Potassium	1.74	Spike	P	0 - 20
2034830	Sodium	1.76	Spike	P	0 - 20
2034830	Zinc	2.39	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P353655

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034830	Arsenic	1.63	Spike	P	0 - 20
2034830	Cadmium	1.34	Spike	P	0 - 20
2034830	Chromium	2.01	Spike	P	0 - 20
2034830	Copper	1.23	Spike	P	0 - 20
2034830	Lead	0.874	Spike	P	0 - 20
2034830	Nickel	2.12	Spike	P	0 - 20
2034830	Silver	0.283	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353866

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034762	Chloride	0.529	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P353868

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034762	Sulfate	0.0954	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354088

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035303	Ammonia-N	0.320	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P354089

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035461	Ammonia-N	0.605	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353912

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035413	Kjeldahl Nitrogen	1.12	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P353913

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035471	Kjeldahl Nitrogen	0.703	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353775

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035461	NO2NO3-N	0.324	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P353829

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035413	NO2NO3-N	0.451	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353664

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035471	Total-P	2.96	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P353755

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035345	Total-P	2.10	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353642

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035474	O-Phosphate-P	0.722	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P353649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035343	O-Phosphate-P	0.691	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P353657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2036945	Aldrin	4.57	Spike	P	0 - 30
2036945	Alpha-BHC	12.3	Spike	P	0 - 30
2036945	Alpha-Chlordane	2.30	Spike	P	0 - 30
2036945	Beta-BHC	8.01	Spike	P	0 - 30
2036945	Carbophenothion	19.5	Spike	P	0 - 30
2036945	Chlorothalonil	2.36	Spike	P	0 - 30
2036945	Cypermethrin	7.86	Spike	P	0 - 30
2036945	DDD-p,p'	22.6	Spike	P	0 - 30
2036945	DDE-p,p'	0.278	Spike	P	0 - 30
2036945	DDT-p,p'	7.11	Spike	P	0 - 30
2036945	Delta-BHC	6.02	Spike	P	0 - 30
2036945	Dicofol	1.12	Spike	P	0 - 30
2036945	Dieldrin	2.70	Spike	P	0 - 30
2036945	Endosulfan I	5.90	Spike	P	0 - 30
2036945	Endosulfan II	4.67	Spike	P	0 - 30
2036945	Endosulfan Sulfate	1.71	Spike	P	0 - 30
2036945	Endrin	1.65	Spike	P	0 - 30
2036945	Endrin Aldehyde	13.7	Spike	P	0 - 30
2036945	Endrin Ketone	6.63	Spike	P	0 - 30
2036945	Gamma-BHC	0.308	Spike	P	0 - 30
2036945	Gamma-Chlordane	2.24	Spike	P	0 - 30
2036945	Heptachlor	4.72	Spike	P	0 - 30
2036945	Heptachlor Epoxide	2.94	Spike	P	0 - 30
2036945	Methoxychlor	7.42	Spike	P	0 - 30
2036945	Mirex	8.04	Spike	P	0 - 30
2036945	Permethrin	6.34	Spike	P	0 - 30
2036945	Trifluralin	12.1	Spike	P	0 - 30
LFB	Aldrin	3.34	LCS	P	0 - 30
LFB	Alpha-BHC	1.14	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.358	LCS	P	0 - 30
LFB	Beta-BHC	3.34	LCS	P	0 - 30
LFB	Carbophenothion	4.79	LCS	P	0 - 30
LFB	Chlorothalonil	72.8	LCS	F	0 - 30
LFB	Cypermethrin	2.67	LCS	P	0 - 30
LFB	DDD-p,p'	7.23	LCS	P	0 - 30
LFB	DDE-p,p'	3.20	LCS	P	0 - 30
LFB	DDT-p,p'	0.861	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P353657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Delta-BHC	4.65	LCS	P	0 - 30
LFB	Dicofol	1.09	LCS	P	0 - 30
LFB	Dieldrin	4.06	LCS	P	0 - 30
LFB	Endosulfan I	1.17	LCS	P	0 - 30
LFB	Endosulfan II	0.464	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.97	LCS	P	0 - 30
LFB	Endrin	6.57	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.10	LCS	P	0 - 30
LFB	Endrin Ketone	2.65	LCS	P	0 - 30
LFB	Gamma-BHC	11.8	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.21	LCS	P	0 - 30
LFB	Heptachlor	0.268	LCS	P	0 - 30
LFB	Heptachlor Epoxide	0.0373	LCS	P	0 - 30
LFB	Methoxychlor	2.10	LCS	P	0 - 30
LFB	Mirex	4.73	LCS	P	0 - 30
LFB	Permethrin	4.20	LCS	P	0 - 30
LFB	Trifluralin	6.94	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P353789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034829	Acetochlor	0.0417	Spike	P	0 - 30
2034829	Alachlor	5.53	Spike	P	0 - 30
2034829	Ametryn	3.53	Spike	P	0 - 30
2034829	Atrazine	17.2	Spike	P	0 - 30
2034829	Atrazine Desethyl	9.77	Spike	P	0 - 30
2034829	Azinphos Methyl	1.50	Spike	P	0 - 30
2034829	Bromacil	8.33	Spike	P	0 - 30
2034829	Butylate	20.9	Spike	P	0 - 30
2034829	Chlorpyrifos Ethyl	1.92	Spike	P	0 - 30
2034829	Chlorpyrifos Methyl	2.00	Spike	P	0 - 30
2034829	Cyanazine	57.6	Spike	F	0 - 30
2034829	Demeton	9.86	Spike	P	0 - 30
2034829	Diazinon	1.03	Spike	P	0 - 30
2034829	Dimethenamid	23.4	Spike	P	0 - 30
2034829	Disulfoton	8.69	Spike	P	0 - 30
2034829	Dithiopyr	1.49	Spike	P	0 - 30
2034829	EPTC	7.75	Spike	P	0 - 30
2034829	Ethion	79.5	Spike	F	0 - 30
2034829	Ethoprop	7.03	Spike	P	0 - 30
2034829	Fenamiphos	3.96	Spike	P	0 - 30
2034829	Fipronil	13.9	Spike	P	0 - 30
2034829	Fipronil Sulfide	17.3	Spike	P	0 - 30
2034829	Fipronil Sulfone	19.4	Spike	P	0 - 30
2034829	Fonofos	3.75	Spike	P	0 - 30
2034829	Hexazinone	17.7	Spike	P	0 - 30
2034829	Malathion	2.91	Spike	P	0 - 30
2034829	Metalaxyl	0.183	Spike	P	0 - 30
2034829	Metolachlor	1.84	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P353789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034829	Metribuzin	2.75	Spike	P	0 - 30
2034829	Mevinphos	6.83	Spike	P	0 - 30
2034829	Molinate	1.03	Spike	P	0 - 30
2034829	Norflurazon	21.8	Spike	P	0 - 30
2034829	Oxadiazon	5.46	Spike	P	0 - 30
2034829	Parathion Ethyl	0.554	Spike	P	0 - 30
2034829	Parathion Methyl	0.687	Spike	P	0 - 30
2034829	Pendimethalin	0.476	Spike	P	0 - 30
2034829	Phorate	5.37	Spike	P	0 - 30
2034829	Prodiamine	26.4	Spike	P	0 - 30
2034829	Prometon	12.3	Spike	P	0 - 30
2034829	Prometryn	1.03	Spike	P	0 - 30
2034829	Simazine	6.26	Spike	P	0 - 30
2034829	Tebuconazole	51.6	Spike	F	0 - 30
2034829	Terbufos	7.28	Spike	P	0 - 30
2034829	Terbutylazine	1.29	Spike	P	0 - 30
LFB	Acetochlor	12.8	LCS	P	0 - 30
LFB	Alachlor	10.8	LCS	P	0 - 30
LFB	Ametryn	9.26	LCS	P	0 - 30
LFB	Atrazine	7.81	LCS	P	0 - 30
LFB	Atrazine Desethyl	19.8	LCS	P	0 - 30
LFB	Azinphos Methyl	1.56	LCS	P	0 - 30
LFB	Bromacil	8.45	LCS	P	0 - 30
LFB	Butylate	18.2	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	22.1	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	17.0	LCS	P	0 - 30
LFB	Cyanazine	19.7	LCS	P	0 - 30
LFB	Demeton	14.4	LCS	P	0 - 30
LFB	Diazinon	5.09	LCS	P	0 - 30
LFB	Dimethenamid	29.7	LCS	P	0 - 30
LFB	Disulfoton	10.8	LCS	P	0 - 30
LFB	Dithiopyr	11.4	LCS	P	0 - 30
LFB	EPTC	22.4	LCS	P	0 - 30
LFB	Ethion	49.3	LCS	F	0 - 30
LFB	Ethoprop	11.0	LCS	P	0 - 30
LFB	Fenamiphos	15.2	LCS	P	0 - 30
LFB	Fipronil	11.5	LCS	P	0 - 30
LFB	Fipronil Sulfide	16.6	LCS	P	0 - 30
LFB	Fipronil Sulfone	13.1	LCS	P	0 - 30
LFB	Fonofos	9.56	LCS	P	0 - 30
LFB	Hexazinone	13.1	LCS	P	0 - 30
LFB	Malathion	16.7	LCS	P	0 - 30
LFB	Metalaxyl	10.3	LCS	P	0 - 30
LFB	Metolachlor	12.6	LCS	P	0 - 30
LFB	Metribuzin	7.11	LCS	P	0 - 30
LFB	Mevinphos	7.49	LCS	P	0 - 30
LFB	Molinate	13.7	LCS	P	0 - 30
LFB	Norflurazon	11.6	LCS	P	0 - 30
LFB	Oxadiazon	13.5	LCS	P	0 - 30
LFB	Parathion Ethyl	9.11	LCS	P	0 - 30
LFB	Parathion Methyl	14.2	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P353789

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Pendimethalin	15.7	LCS	P	0 - 30
LFB	Phorate	14.1	LCS	P	0 - 30
LFB	Prodiamine	25.7	LCS	P	0 - 30
LFB	Prometon	17.6	LCS	P	0 - 30
LFB	Prometryn	7.57	LCS	P	0 - 30
LFB	Simazine	8.13	LCS	P	0 - 30
LFB	Tebuconazole	48.4	LCS	F	0 - 30
LFB	Terbufos	6.27	LCS	P	0 - 30
LFB	Terbutylazine	17.6	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P353657

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2036303	Chlordane	9.37	Spike	P	0 - 30
2036303	Toxaphene	2.66	Spike	P	0 - 30
LFB	Chlordane	4.10	LCS	P	0 - 30
LFB	Toxaphene	8.88	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P353529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035511	3-Hydroxycarbofuran	11.6	Spike	P	0 - 30
2035511	Aldicarb	3.19	Spike	P	0 - 30
2035511	Aldicarb Sulfone	8.66	Spike	P	0 - 30
2035511	Aldicarb Sulfoxide	6.57	Spike	P	0 - 30
2035511	Carbaryl	9.43	Spike	P	0 - 30
2035511	Carbofuran	10.8	Spike	P	0 - 30
2035511	Methiocarb	4.48	Spike	P	0 - 30
2035511	Methomyl	10.0	Spike	P	0 - 30
2035511	Oxamyl	4.65	Spike	P	0 - 30
2035511	Propoxur	17.6	Spike	P	0 - 30
2035512	2,4-D	10.4	Spike	P	0 - 30
2035512	Acetaminophen	7.33	Spike	P	0 - 30
2035512	Bentazon	19.9	Spike	P	0 - 30
2035512	Carbamazepine	0.268	Spike	P	0 - 30
2035512	Diuron	0.333	Spike	P	0 - 30
2035512	Fenuron	0.665	Spike	P	0 - 30
2035512	Fluridone	2.37	Spike	P	0 - 30
2035512	Hydrocodone	3.02	Spike	P	0 - 30
2035512	Ibuprofen	6.51	Spike	P	0 - 30
2035512	Imazapyr	5.27	Spike	P	0 - 30
2035512	Imidacloprid	5.73	Spike	P	0 - 30
2035512	Linuron	1.21	Spike	P	0 - 30
2035512	MCP	1.79	Spike	P	0 - 30
2035512	Naproxen	0.735	Spike	P	0 - 30
2035512	Primidone	2.34	Spike	P	0 - 30
2035512	Pyraclostrobin	4.90	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P353529

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035512	Triclopyr	22.1	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P353544

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034746	Acesulfame K	3.97	Spike	P	0 - 30
2034746	AMPA	2.52	Spike	P	0 - 30
2034746	Endothall	5.85	Spike	P	0 - 30
2034746	Glufosinate	1.88	Spike	P	0 - 30
2034746	Glyphosate	3.71	Spike	P	0 - 30
2034746	Sucralose	3.21	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P353618

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035460	Color (true)	3.82	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P353897

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034796	Total Alkalinity	0.312	Sample	P	0 - 1.6

Reference Method: SM 2320 B-97
Batch ID: P353898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035886	Total Alkalinity	0.504	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P354122

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034717	TDS	1.65	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P354124

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035460	TDS	7.96	Sample	P	0 - 10

Quality Assurance Report Precision

Reference Method: SM 4500 F-C-97
Batch ID: P353902

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2034796	Fluoride	0.470	Spike	P	0 - 3.5

Reference Method: SM 4500 F-C-97
Batch ID: P353903

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035886	Fluoride	0.940	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P353794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2035305	Organic Carbon	0.231	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: 2035511
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	67.2	P	30 - 160

Lab Sample ID: 2035512
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	104	P	30 - 160
EPA 8321B	Acetaminophen-d4	142	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.7	P	30 - 160
EPA 8321B	Diuron-d6	76.6	P	30 - 160
EPA 8321B	Endothall-d6	104	P	40 - 160
EPA 8321B	Endothall-d6	82.2	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	48.1	P	40 - 160
EPA 8321B	Ibuprofen-d3	96.3	P	30 - 160
EPA 8321B	Primidone-d5	137	P	30 - 160
EPA 8321B	Sucralose-d6	108	P	40 - 160

Lab Sample ID: 2035513
Field Sample ID: 20030068

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	129	P	30 - 160
EPA 8321B	Acetaminophen-d4	134	P	30 - 160
EPA 8321B	Carbamazepine-d10	76.6	P	30 - 160
EPA 8321B	Diuron-d6	70.9	P	30 - 160
EPA 8321B	Endothall-d6	102	P	40 - 160
EPA 8321B	Ibuprofen-d3	98.5	P	30 - 160
EPA 8321B	Primidone-d5	121	P	30 - 160
EPA 8321B	Sucralose-d6	120	P	40 - 160

Lab Sample ID: 2035514
Field Sample ID: 20030064

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	146	P	30 - 160
EPA 8321B	Acetaminophen-d4	136	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.4	P	30 - 160
EPA 8321B	Diuron-d6	66.7	P	30 - 160
EPA 8321B	Endothall-d6	113	P	40 - 160
EPA 8321B	Ibuprofen-d3	119	P	30 - 160
EPA 8321B	Primidone-d5	112	P	30 - 160
EPA 8321B	Sucralose-d6	113	P	40 - 160

Lab Sample ID: 2035515
Field Sample ID: 20030825

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	137	P	30 - 160
EPA 8321B	Carbamazepine-d10	77.3	P	30 - 160
EPA 8321B	Diuron-d6	65.7	P	30 - 160
EPA 8321B	Endothall-d6	108	P	40 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 2035515
Field Sample ID: 20030825

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	88.1	P	30 - 160
EPA 8321B	Primidone-d5	117	P	30 - 160
EPA 8321B	Sucralose-d6	116	P	40 - 160

Lab Sample ID: 2035516
Field Sample ID: BLANK 10232018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	96.4	P	30 - 160

Lab Sample ID: 2035517
Field Sample ID: BLANK 10232018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	90.3	P	30 - 160
EPA 8321B	Acetaminophen-d4	123	P	30 - 160
EPA 8321B	Carbamazepine-d10	95.3	P	30 - 160
EPA 8321B	Diuron-d6	86.0	P	30 - 160
EPA 8321B	Endothall-d6	105	P	40 - 160
EPA 8321B	Endothall-d6	93.4	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	93.4	P	40 - 160
EPA 8321B	Ibuprofen-d3	81.6	P	30 - 160
EPA 8321B	Primidone-d5	110	P	30 - 160
EPA 8321B	Sucralose-d6	109	P	40 - 160

Lab Sample ID: 2035518
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	84.9	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	43.2	P	34 - 101
EPA 8276	Decachlorobiphenyl	62.5	P	31 - 108
EPA 8276	PCNB	97.2	P	62 - 142

Lab Sample ID: 2035519
Field Sample ID: G2NE1164

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	100	P	71 - 126
EPA 8270D	Terbufos-d10	93.2	P	59 - 149

Lab Sample ID: 2035520
Field Sample ID: BLANK 10232018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	70.2	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	55.0	P	34 - 101
EPA 8276	Decachlorobiphenyl	59.0	P	31 - 108
EPA 8276	PCNB	78.0	P	62 - 142

Quality Assurance Report Surrogates

Lab Sample ID: 2035521
Field Sample ID: BLANK 10232018

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	102	P	71 - 126
EPA 8270D	Terbufos-d10	103	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A87259

Included Lab Sample IDs: 2035456, 2035459, 2035460, 2035465

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A87273

Included Lab Sample IDs: 2035458, 2035463, 2035464, 2035467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.4	99.0	P/P	90 - 110
O-Phosphate-P	99.7	99.4	P/P	90 - 110
O-Phosphate-P	99.9	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87310

Included Lab Sample IDs: 2035461, 2035462

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87319

Included Lab Sample IDs: 2035466

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A87320

Included Lab Sample IDs: 2035456, 2035459, 2035460, 2035465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	100	101	P/P	95 - 105
Turbidity	101	100	P/P	95 - 105

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A87323

Included Lab Sample IDs: 2035461, 2035462, 2035466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.5	99.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A87330

Included Lab Sample IDs: 2035512, 2035513, 2035514, 2035515, 2035517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	75.4	77.5	P/P	60 - 160

Quality Assurance Report Calibration Verification

Reference Method: SM 5310 B-00

Run ID: A87335

Included Lab Sample IDs: 2035457, 2035461, 2035462, 2035466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	98.8	P/P	90 - 110
Organic Carbon	98.8	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A87354

Included Lab Sample IDs: 2035457

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.5	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A87359

Included Lab Sample IDs: 2035512, 2035517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Endothall	81.3	92.4	P/P	60 - 160
Endothall	86.7	81.3	P/P	60 - 160

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A87361

Included Lab Sample IDs: 2035457

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A87368

Included Lab Sample IDs: 2035456, 2035459, 2035460, 2035465

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

Reference Method: EPA 8321B

Run ID: A87369

Included Lab Sample IDs: 2035512, 2035513, 2035514, 2035515, 2035517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	61.7	60.8	P/P	60 - 160

Reference Method: SM 2320 B-97

Run ID: A87382

Included Lab Sample IDs: 2035456, 2035459, 2035460, 2035465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	102	P/P	90 - 110
Total Alkalinity	102	99.5	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A87382

Included Lab Sample IDs: 2035456, 2035459, 2035460, 2035465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	100	102	P/P	90 - 110
Fluoride	101	100	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A87399

Included Lab Sample IDs: 2035522, 2035523, 2035524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	104	102	P/P	90 - 110
Iron	103	101	P/P	90 - 110
Magnesium	102	100	P/P	90 - 110
Potassium	105	103	P/P	90 - 110
Sodium	107	104	P/P	90 - 110
Zinc	101	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A87400

Included Lab Sample IDs: 2035522, 2035523, 2035524

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	98.3	98.5	P/P	90 - 110
Cadmium	98.1	97.4	P/P	90 - 110
Chromium	100	99.2	P/P	90 - 110
Copper	101	102	P/P	90 - 110
Lead	96.4	96.7	P/P	90 - 110
Nickel	101	100	P/P	90 - 110
Silver	95.4	95.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A87414

Included Lab Sample IDs: 2035457, 2035461, 2035462, 2035466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	104	101	P/P	90 - 110
Kjeldahl Nitrogen	108	104	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A87443

Included Lab Sample IDs: 2035512, 2035513, 2035514, 2035515, 2035517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	111	108	P/P	50 - 150
2,4-D	117	111	P/P	50 - 150
3-Hydroxycarbofuran	125	109	P/P	50 - 150
Acetaminophen	130	120	P/P	60 - 160
Acetaminophen	135	112	P/P	60 - 160
Aldicarb	116	121	P/P	60 - 150
Aldicarb Sulfone	110	119	P/P	50 - 150
Aldicarb Sulfoxide	114	102	P/P	50 - 150
Bentazon	106	105	P/P	50 - 160
Bentazon	111	111	P/P	50 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A87443

Included Lab Sample IDs: 2035512, 2035513, 2035514, 2035515, 2035517

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	127	125	P/P	60 - 160
Carbamazepine	134	132	P/P	60 - 160
Carbaryl	134	132	P/P	60 - 150
Carbofuran	139	125	P/P	50 - 150
Diuron	111	139	P/P	60 - 150
Diuron	141	139	P/P	60 - 150
Fenuron	105	104	P/P	60 - 150
Fenuron	109	107	P/P	60 - 150
Fluridone	123	116	P/P	60 - 160
Fluridone	126	126	P/P	60 - 160
Hydrocodone	127	131	P/P	60 - 150
Hydrocodone	127	132	P/P	60 - 150
Ibuprofen	56.7	75.9	P/P	50 - 160
Ibuprofen	75.9	79.5	P/P	50 - 160
Imazapyr	100	121	P/P	50 - 150
Imazapyr	115	94.0	P/P	50 - 150
Imidacloprid	129	128	P/P	60 - 160
Imidacloprid	129	133	P/P	60 - 160
Linuron	112	125	P/P	60 - 150
Linuron	126	130	P/P	60 - 150
MCPP	103	100	P/P	50 - 150
MCPP	110	103	P/P	50 - 150
Methiocarb	133	125	P/P	50 - 150
Methomyl	121	121	P/P	50 - 150
Naproxen	104	110	P/P	50 - 160
Naproxen	110	112	P/P	50 - 160
Oxamyl	125	121	P/P	50 - 150
Primidone	111	129	P/P	60 - 160
Primidone	135	114	P/P	60 - 160
Propoxur	130	128	P/P	50 - 150
Pyraclostrobin	124	126	P/P	60 - 150
Pyraclostrobin	133	126	P/P	60 - 150
Triclopyr	98.7	98.9	P/P	50 - 160
Triclopyr	98.9	108	P/P	50 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A87465

Included Lab Sample IDs: 2035457, 2035461, 2035462, 2035466

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	103	103	P/P	90 - 110
Ammonia-N	103	105	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A87492

Included Lab Sample IDs: 2035518, 2035520

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.7		P	80 - 120
Alpha-BHC	99.4		P	80 - 120
Alpha-Chlordane	93.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A87492

Included Lab Sample IDs: 2035518, 2035520

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Beta-BHC	102		P	80 - 120
Carbophenothion	89.7		P	80 - 120
Chlorothalonil	105		P	80 - 120
Cypermethrin	87.3		P	80 - 120
DDD-p,p'	93.1		P	80 - 120
DDE-p,p'	94.9		P	80 - 120
DDT-p,p'	98.9		P	80 - 120
Delta-BHC	102		P	80 - 120
Dicofol	98.8		P	80 - 120
Dieldrin	94.1		P	80 - 120
Endosulfan I	93.6		P	80 - 120
Endosulfan II	93.4		P	80 - 120
Endosulfan Sulfate	92.8		P	80 - 120
Endrin	92.9		P	80 - 120
Endrin Aldehyde	89.6		P	80 - 120
Endrin Ketone	94.7		P	80 - 120
Gamma-BHC	96.6		P	80 - 120
Gamma-Chlordane	94.6		P	80 - 120
Heptachlor	91.3		P	80 - 120
Heptachlor Epoxide	95.0		P	80 - 120
Methoxychlor	102		P	80 - 120
Mirex	94.1		P	80 - 120
Permethrin	88.2		P	80 - 120
Trifluralin	91.6		P	80 - 120

Reference Method: EPA 8276

Run ID: A87517

Included Lab Sample IDs: 2035518, 2035520

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.8		P	80 - 120
Toxaphene	100		P	80 - 120

Reference Method: EPA 8270D

Run ID: A87547

Included Lab Sample IDs: 2035519, 2035521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.5		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	96.8		P	80 - 120
Atrazine	102		P	80 - 120
Atrazine Desethyl	95.4		P	80 - 120
Azinphos Methyl	97.6		P	80 - 120
Bromacil	90.5		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	99.7		P	80 - 120
Cyanazine	91.8		P	80 - 120
Demeton	93.5		P	80 - 120
Diazinon	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A87547

Included Lab Sample IDs: 2035519, 2035521

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dimethenamid	98.7		P	80 - 120
Disulfoton	101		P	80 - 120
Dithiopyr	99.4		P	80 - 120
EPTC	99.0		P	80 - 120
Ethion	86.7		P	80 - 120
Ethoprop	94.7		P	80 - 120
Fenamiphos	96.0		P	80 - 120
Fipronil	98.0		P	80 - 120
Fipronil Desulfinyl	99.5		P	80 - 120
Fipronil Sulfide	96.3		P	80 - 120
Fipronil Sulfone	97.4		P	80 - 120
Fonofos	97.4		P	80 - 120
Hexazinone	98.6		P	80 - 120
Malathion	99.7		P	80 - 120
Metaxyl	101		P	80 - 120
Metolachlor	104		P	80 - 120
Metribuzin	93.8		P	80 - 120
Mevinphos	100		P	80 - 120
Molinate	91.4		P	80 - 120
Norflurazon	96.6		P	80 - 120
Oxadiazon	101		P	80 - 120
Parathion Ethyl	98.3		P	80 - 120
Parathion Methyl	95.7		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	100		P	80 - 120
Prodiamine	101		P	80 - 120
Prometon	99.2		P	80 - 120
Prometryn	98.9		P	80 - 120
Simazine	101		P	80 - 120
Tebuconazole	96.7		P	80 - 120
Terbufos	98.9		P	80 - 120
Terbutylazine	99.0		P	80 - 120

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			LCS	Precision SMP	MS
EPA 180.1 Rev. 2.0	Turbidity							0.220	
	Turbidity							1.48	
EPA 200.7 Rev. 4.4	Calcium	103		104	102				2.34
	Iron	105		106	104	105			2.41
	Magnesium	107		107	104	107			2.09
	Potassium	102		105	103	105			1.74
	Sodium	103		105	109				1.76
	Zinc	99.2		102	100	101			2.39
EPA 200.8 Rev. 5.4	Arsenic	99.9		102	100	101			1.63
	Cadmium	96.3		99.2	97.9	101			1.34
	Chromium	97.3		98.6	96.6	99.5			2.01
	Copper	99.0		99.6	98.3	102			1.23
	Lead	93.1		95.7	94.8	97.2			0.874
	Nickel	99.5		99.0	97.0	99.5			2.12
	Silver	96.0		96.3	96.0	97.6			0.283
EPA 300.0 Rev. 2.1	Chloride	100		104	103	98.7			0.529
	Sulfate	99.4		102	102	98.9			0.0954
EPA 350.1 Rev. 2.0	Ammonia-N	102		102	101				0.320
	Ammonia-N	102		103	102				0.605
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	103		98.9	100				1.12
	Kjeldahl Nitrogen	101		101	99.9				0.703
EPA 353.2 Rev. 2.0	NO2NO3-N	100		99.0	99.5				0.324
	NO2NO3-N	100		101	101				0.451
EPA 365.1 Rev. 2.0	Total-P	99.0		98.8	102				2.96
	Total-P	99.3		94.0	92.0				2.10
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	102		96.6	97.3				0.722
	O-Phosphate-P	100		101	102				0.691
EPA 8270D	Acetochlor	112	128	108	108		12.8		0.0417
	Alachlor	107	119	97.6	103		10.8		5.53
	Aldrin	57.2	59.2	59.9	62.6		3.34		4.57
	Alpha-BHC	105	106	97.5	110		1.14		12.3
	Alpha-Chlordane	91.2	91.5	90.8	88.7		0.358		2.30
	Ametryn	89.0	97.6	108	97.7		9.26		3.53
	Atrazine	117	126				7.81		17.2
	Atrazine Desethyl	94.1	115	113	94.7		19.8		9.77
	Azinphos Methyl	152	154	153	155		1.56		1.50
	Beta-BHC	113	117	111	120		3.34		8.01
	Bromacil	96.6	105	100	92.0		8.45		8.33
	Butylate	73.9	88.7	65.8	81.1		18.2		20.9
	Carbophenothion	87.6	91.9	72.4	88.0		4.79		19.5
	Chlorothalonil	52.8	113	98.0	95.7		72.8		2.36
	Chlorpyrifos Ethyl	98.0	122	93.6	91.9		22.1		1.92
	Chlorpyrifos Methyl	97.2	115	92.6	90.8		17.0		2.00
	Cyanazine	108	132	136	75.0		19.7		57.6
	Cypermethrin	81.8	84.1	74.1	80.2		2.67		7.86
	DDD-p,p'	88.9	95.5	76.0	95.3		7.23		22.6
	DDE-p,p'	91.3	94.2	92.2	92.4		3.20		0.278
	DDT-p,p'	103	104	95.4	102		0.861		7.11
	Delta-BHC	119	125	145	154		4.65		6.02
	Demeton	83.6	96.5	85.9	94.8		14.4		9.86
	Diazinon	128	134	119	121		5.09		1.03
	Dicofol	99.3	100	99.4	98.3		1.09		1.12
	Dieldrin	93.8	97.7	114	111		4.06		2.70
	Dimethenamid	92.2	124	87.8	69.4		29.7		23.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Disulfoton	91.9	102	92.6	101	10.8	8.69
	Dithiopyr	114	128	106	104	11.4	1.49
	Endosulfan I	94.1	93.0	95.7	90.2	1.17	5.90
	Endosulfan II	100	101	89.8	94.1	0.464	4.67
	Endosulfan Sulfate	86.4	83.0	89.9	88.4	3.97	1.71
	Endrin	94.5	101	97.3	95.7	6.57	1.65
	Endrin Aldehyde	95.1	96.2	77.4	88.8	1.10	13.7
	Endrin Ketone	85.2	87.5	89.8	95.9	2.65	6.63
	EPTC	68.1	85.3	61.8	66.8	22.4	7.75
	Ethion	56.8	94.0	31.7	13.7	49.3	79.5
	Ethoprop	85.9	95.8	99.7	107	11.0	7.03
	Fenamiphos	88.0	103	88.4	84.9	15.2	3.96
	Fipronil	103	116	97.4	83.6	11.5	13.9
	Fipronil Sulfide	85.0	100	81.5	64.8	16.6	17.3
	Fipronil Sulfone	77.7	88.7	73.4	53.2	13.1	19.4
	Fonofos	104	115	99.4	103	9.56	3.75
	Gamma-BHC	123	109	135	134	11.8	0.308
	Gamma-Chlordane	89.5	90.6	89.6	87.6	1.21	2.24
	Heptachlor	78.0	77.8	72.0	75.4	0.268	4.72
	Heptachlor Epoxide	93.1	93.1	95.2	92.4	0.0373	2.94
	Hexazinone	101	115	109	84.0	13.1	17.7
	Malathion	99.0	117	98.4	95.6	16.7	2.91
	Metalaxyl	107	119	101	101	10.3	0.183
	Methoxychlor	114	111	101	109	2.10	7.42
	Metolachlor	105	119	103	100	12.6	1.84
	Metribuzin	184	197	173	165	7.11	2.75
	Mevinphos	102	109	95.0	102	7.49	6.83
	Mirex	70.0	73.4	68.0	73.6	4.73	8.04
	Molinate	63.4	72.7	63.6	64.3	13.7	1.03
	Norflurazon	107	121	101	81.4	11.6	21.8
	Oxadiazon	110	126	101	90.2	13.5	5.46
	Parathion Ethyl	89.0	97.5	90.9	90.4	9.11	0.554
	Parathion Methyl	105	121	99.1	99.8	14.2	0.687
	Pendimethalin	102	119	103	102	15.7	0.476
	Permethrin	74.7	77.9	74.7	79.6	4.20	6.34
	Phorate	97.0	112	105	111	14.1	5.37
	Prodiamine	91.2	118	92.2	70.7	25.7	26.4
	Prometon	90.3	108	95.3	84.2	17.6	12.3
	Prometryn	105	113	104	103	7.57	1.03
	Simazine	108	117	102	94.7	8.13	6.26
	Tebuconazole	30.2	49.4	38.8	18.9	48.4	51.6
	Terbufos	117	124	113	121	6.27	7.28
	Terbuthylazine	89.3	107	111	109	17.6	1.29
	Trifluralin	90.7	97.2	89.4	101	6.94	12.1
EPA 8276	Chlordane	85.6	82.2	89.9	81.9	4.10	9.37
	Toxaphene	77.7	71.1	76.4	74.4	8.88	2.66
EPA 8321B	2,4-D	90.6		139	120		10.4
	3-Hydroxycarbofuran	125		102	115		11.6
	Acesulfame K	84.0		104	99.7		3.97
	Acetaminophen	143		126	135		7.33
	Aldicarb	98.7		67.5	69.7		3.19
	Aldicarb Sulfone	112		93.2	102		8.66
	Aldicarb Sulfoxide	113		41.0	43.8		6.57
	AMPA	120		50.2	62.1		2.52

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Bentazon	73.3	95.7	68.5		19.9
	Carbamazepine	97.0	74.4	74.6		0.268
	Carbaryl	90.4	58.9	64.7		9.43
	Carbofuran	92.5	67.3	60.4		10.8
	Diuron	93.3	65.9	65.5		0.333
	Endothall	81.0	101	107		5.85
	Fenuron	133	114	115		0.665
	Fluridone	116	105	107		2.37
	Glufosinate	82.6	81.7	83.3		1.88
	Glyphosate	71.3	53.9	65.2		3.71
	Hydrocodone	130	119	123		3.02
	Ibuprofen	41.3	44.5	41.7		6.51
	Imazapyr	110	101	110		5.27
	Imidacloprid	137	200	187		5.73
	Linuron	87.2	68.7	67.9		1.21
	MCPP	97.5	136	134		1.79
	Methiocarb	74.4	59.3	62.0		4.48
	Methomyl	121	94.9	105		10.0
	Naproxen	92.8	103	102		0.735
	Oxamyl	116	92.6	97.0		4.65
	Primidone	130	121	118		2.34
	Propoxur	93.8	64.2	76.6		17.6
	Pyraclostrobin	93.1	85.2	81.1		4.90
	Sucralose	83.5	81.8	78.5		3.21
	Triclopyr	99.9	165	132		22.1
SM 2120 B	Color (true)	102			3.82	
SM 2320 B-97	Total Alkalinity	103			0.312	
	Total Alkalinity	102			0.504	
SM 2540 C-97	TDS				1.65	
	TDS				7.96	
SM 4500 F-C-97	Fluoride	99.1	101	100		0.470
	Fluoride	99.1	98.9	100		0.940
SM 5310 B-00	Organic Carbon	96.1	95.2	95.6		0.231

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2035456, 2035459, 2035460, 2035465
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2035522, 2035523, 2035524
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2035522, 2035523, 2035524
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2035456, 2035459, 2035460, 2035465
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2035456, 2035459, 2035460, 2035465
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2035457, 2035461, 2035462, 2035466
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2035457, 2035461, 2035462, 2035466
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2035457, 2035461, 2035462, 2035466
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2035457, 2035461, 2035462, 2035466

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2035458, 2035463, 2035464, 2035467
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2035518, 2035520
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2035519, 2035521
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2035518, 2035520
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2035511, 2035516
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2035512, 2035513, 2035514, 2035515, 2035517
SM 2120 B / E31780	True Color measured at 450 nm	2035456, 2035459, 2035460, 2035465
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2035456, 2035459, 2035460, 2035465
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2035456, 2035459, 2035460, 2035465
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2035456, 2035459, 2035460, 2035465
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2035456, 2035459, 2035460, 2035465
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2035457, 2035461, 2035462, 2035466

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	10/24/2018			10/24/2018 17:02	Megan Treadwell	2035456, 2035459, 2035460, 2035465
EPA 200.7 Rev. 4.4	10/24/2018	10/25/2018 15:04	Devin Thornton	10/30/2018 22:50	Betina Topolski	2035522
	10/24/2018	10/25/2018 15:04	Devin Thornton	10/30/2018 22:57	Betina Topolski	2035522
	10/24/2018	10/25/2018 15:04	Devin Thornton	10/30/2018 23:04	Betina Topolski	2035523
	10/24/2018	10/25/2018 15:04	Devin Thornton	10/30/2018 23:12	Betina Topolski	2035524
EPA 200.8 Rev. 5.4	10/24/2018	10/25/2018 15:04	Devin Thornton	10/31/2018 03:50	Robert K Palmer	2035522
	10/24/2018	10/25/2018 15:04	Devin Thornton	10/31/2018 04:00	Robert K Palmer	2035523
	10/24/2018	10/25/2018 15:04	Devin Thornton	10/31/2018 04:09	Robert K Palmer	2035524
EPA 300.0 Rev. 2.1	10/24/2018			10/29/2018 22:09	Irina Carbone	2035456
	10/24/2018			10/29/2018 22:22	Irina Carbone	2035459
	10/24/2018			10/29/2018 22:34	Irina Carbone	2035460
	10/24/2018			10/29/2018 22:46	Irina Carbone	2035465
EPA 350.1 Rev. 2.0	10/24/2018			11/01/2018 12:05	Ping Hua	2035457
	10/24/2018			11/01/2018 12:09	Ping Hua	2035461
	10/24/2018			11/01/2018 12:23	Ping Hua	2035462
	10/24/2018			11/01/2018 12:32	Ping Hua	2035466
EPA 351.2 Rev. 2.0	10/24/2018	10/30/2018 11:55	Adrian Shelby	10/31/2018 11:55	Virginia P. Brown	2035457
	10/24/2018	10/30/2018 11:55	Adrian Shelby	10/31/2018 12:13	Virginia P. Brown	2035461
	10/24/2018	10/30/2018 11:55	Adrian Shelby	10/31/2018 12:14	Virginia P. Brown	2035462
	10/24/2018	10/30/2018 11:55	Adrian Shelby	10/31/2018 12:16	Virginia P. Brown	2035466
EPA 353.2 Rev. 2.0	10/24/2018			10/26/2018 14:23	Lauren Bottorf	2035461
	10/24/2018			10/26/2018 14:29	Lauren Bottorf	2035466
	10/24/2018			10/26/2018 14:30	Lauren Bottorf	2035462
	10/24/2018			10/29/2018 12:45	Beverly Y. Sanders	2035457
EPA 365.1 Rev. 2.0	10/24/2018	10/25/2018 12:50	Sima Feizi	10/26/2018 09:37	Beverly Y. Sanders	2035461
	10/24/2018	10/25/2018 12:50	Sima Feizi	10/26/2018 09:38	Beverly Y. Sanders	2035462
	10/24/2018	10/25/2018 12:50	Sima Feizi	10/26/2018 13:38	Beverly Y. Sanders	2035466
	10/24/2018	10/26/2018 12:55	Sima Feizi	10/29/2018 13:37	Lipi Saha	2035457
EPA 365.1 Rev. 2.0 dissolved	10/24/2018			10/24/2018 17:10	Julia Storbeck	2035467
	10/24/2018			10/24/2018 18:14	Julia Storbeck	2035463
	10/24/2018			10/24/2018 18:15	Julia Storbeck	2035464
	10/24/2018			10/24/2018 18:41	Julia Storbeck	2035458
EPA 8270D	10/24/2018	10/29/2018 08:30	Fe-Val Siddell	11/02/2018 00:25	Arthur Maknenko	2035518
	10/24/2018	10/29/2018 08:30	Fe-Val Siddell	11/02/2018 00:55	Arthur Maknenko	2035520
	10/24/2018	10/29/2018 08:52	Dinesh Mishra	11/01/2018 17:42	Vandana T. Nagar	2035519
	10/24/2018	10/29/2018 08:52	Dinesh Mishra	11/01/2018 18:30	Vandana T. Nagar	2035521
EPA 8276	10/24/2018	10/29/2018 08:30	Fe-Val Siddell	11/03/2018 14:03	Dinesh Mishra	2035518
	10/24/2018	10/29/2018 08:30	Fe-Val Siddell	11/03/2018 14:59	Dinesh Mishra	2035520
EPA 8321B	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 07:28	Juyoung Kim	2035512
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 14:57	Juyoung Kim	2035513

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 15:32	Juyoung Kim	2035514
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 16:07	Juyoung Kim	2035515
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 16:41	Juyoung Kim	2035517
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 21:18	Juyoung Kim	2035511
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 21:53	Juyoung Kim	2035516
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/27/2018 23:36	Juyoung Kim	2035512
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/28/2018 07:41	Juyoung Kim	2035513
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/28/2018 08:15	Juyoung Kim	2035514
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/28/2018 08:50	Juyoung Kim	2035515
	10/24/2018	10/25/2018 10:00	Hoor Shaik	10/28/2018 09:24	Juyoung Kim	2035517
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/25/2018 18:34	Rebecca Ware	2035512
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/26/2018 09:39	Rebecca Ware	2035517
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/26/2018 20:34	Rebecca Ware	2035517
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/27/2018 17:30	Mohammad Ghaffari	2035512
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/27/2018 17:45	Mohammad Ghaffari	2035513
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/27/2018 18:00	Mohammad Ghaffari	2035514
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/27/2018 18:14	Mohammad Ghaffari	2035515
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/27/2018 18:29	Mohammad Ghaffari	2035517
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 12:12	Rebecca Ware	2035512
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 18:45	Rebecca Ware	2035512
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 18:59	Rebecca Ware	2035513
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 19:14	Rebecca Ware	2035514
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 19:29	Rebecca Ware	2035515
	10/24/2018	10/25/2018 13:00	Rebecca Ware	10/29/2018 19:43	Rebecca Ware	2035517
SM 2120 B	10/24/2018			10/24/2018 16:26	Chelsea Hernandez	2035456
	10/24/2018			10/24/2018 16:27	Chelsea Hernandez	2035459
	10/24/2018			10/24/2018 16:29	Chelsea Hernandez	2035460, 2035465
SM 2320 B-97	10/24/2018			10/29/2018 01:55	Dale L. Simmons	2035459
	10/24/2018			10/29/2018 02:48	Dale L. Simmons	2035456
	10/24/2018			10/29/2018 04:32	Dale L. Simmons	2035460
	10/24/2018			10/29/2018 04:45	Dale L. Simmons	2035465
SM 2540 C-97	10/24/2018			10/25/2018 15:41	Yijie Li	2035456, 2035459, 2035460, 2035465
SM 2540 D-97	10/24/2018			10/25/2018 15:41	Yijie Li	2035456, 2035459, 2035460, 2035465
SM 4500 F-C-97	10/24/2018			10/29/2018 01:55	Dale L. Simmons	2035459
	10/24/2018			10/29/2018 02:48	Dale L. Simmons	2035456
	10/24/2018			10/29/2018 04:32	Dale L. Simmons	2035460
	10/24/2018			10/29/2018 04:45	Dale L. Simmons	2035465
SM 5310 B-00	10/24/2018			10/26/2018 11:14	Megan Treadwell	2035457
	10/24/2018			10/26/2018 11:26	Megan Treadwell	2035461
	10/24/2018			10/26/2018 11:38	Megan Treadwell	2035462

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	10/24/2018			10/27/2018 12:15	Megan Treadwell	2035466