

Chemical Analysis Report

SO-DIST-2018-06-06-01

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

Event Description: **Peace River Streams**
Request ID: **RQ-2018-06-11-36**
Customer: **SO-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901
Attn: Nicole Reistad

For additional information please contact
Colin Wright, Ph.D.
Liang-Tsair Lin, Ph.D.
Kerry Tate, Ph.D.
Dr. rer. nat. Bettina Steinbock
Thekkekalathil Chandrasekhar, Ph.D, QA Officer
Phone (850) 245-8085

Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 28-JUN-2018 13:22



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: PrairieCreek@WshngtnLp

Collection Date/Time: 06/05/2018 10:00

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997992	EPA 180.1 Rev. 2.0	Turbidity	6.3		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	45		mg Cl/L	P346641	
		Sulfate	56		mg SO4/L	P346643	
		Color (true)	380		PCU	P346499	
	SM 2320 B-97	Total Alkalinity	64		mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	284		mg/L	P347014	
	SM 2540 D-97	TSS	11		mg/L	P347021	
	SM 4500 F-C-97	Fluoride	0.23		mg F/L	P346674	
1997995	EPA 350.1 Rev. 2.0	Ammonia-N	0.080		mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P346941	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P346684	
	EPA 365.1 Rev. 2.0	Total-P	0.43		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	33		mg C/L	P346788	
1997998	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.31		mg P/L	P346530	
1998035	EPA 200.7 Rev. 4.4	Calcium	38.7		mg/L	P346578	
		Iron	1.66E+03		ug/L	P346578	
		Magnesium	12.0		mg/L	P346578	
		Potassium	10.4		mg/L	P346578	
		Sodium	22.4		mg/L	P346578	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P346578	
		Arsenic	1.92		ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	1.2	I	ug/L	P346578	
		Copper	2.72		ug/L	P346578	
		Lead	0.29		ug/L	P346886	
		Nickel	0.90		ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

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: PrairieCreek@WshngtnLp

Collection Date/Time: 06/05/2018 10:00

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998024	EPA 8321B	Aldicarb	0.020	U	ug/L	P346478	
		Aldicarb Sulfone	0.0020	U	ug/L	P346478	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P346478	MS
		Carbaryl	0.0020	U	ug/L	P346478	MS
		Carbofuran	0.0020	U	ug/L	P346478	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P346478	
		Methiocarb	0.0020	U	ug/L	P346478	
		Methomyl	0.0020	U	ug/L	P346478	
		Oxamyl	0.0020	U	ug/L	P346478	
		Propoxur	0.0020	U	ug/L	P346478	
1998025		2,4-D	0.063		ug/L	P346478	
		Bentazon	0.0014	I	ug/L	P346478	
		MCP	0.0020	U	ug/L	P346478	
		Triclopyr**	0.0040	U	ug/L	P346478	
		Imidacloprid	0.71		ug/L	P346478	MS
		Diuron	0.040		ug/L	P346478	
		Pyraclostrobin**	0.0020	U	ug/L	P346478	
		Primidone**	0.0040	U	ug/L	P346478	
		Linuron	0.0040	U	ug/L	P346478	
		Acetaminophen**	0.0080	U	ug/L	P346478	
		Fenuron	0.016	U	ug/L	P346478	
		Imazapyr**	0.0066	I	ug/L	P346478	
		Carbamazepine**	4.0E-04	U	ug/L	P346478	
		Fluridone**	4.7E-04	I	ug/L	P346478	
		Hydrocodone**	8.0E-04	U	ug/L	P346478	
		Sucralose**	0.010	U	ug/L	P346468	
		Glyphosate**	1.9		ug/L	P346468	
		AMPA**	2.0		ug/L	P346468	
		Endothal**	0.10	U	ug/L	P346468	
		Glufosinate**	0.10	U	ug/L	P346468	
1998028	EPA 8270D	Acesulfame K**	0.10	U	ug/L	P346468	
		Aldrin	4.2	U	ng/L	P346580	
		Alpha-BHC	2.1	U	ng/L	P346580	
		Beta-BHC	4.2	U	ng/L	P346580	
		Delta-BHC	4.2	U	ng/L	P346580	
		Gamma-BHC	4.2	U	ng/L	P346580	
		Carbophenothion	4.2	U	ng/L	P346580	
		Chlorothalonil	2.1	U	ng/L	P346580	
		Cypermethrin	21	U	ng/L	P346580	
		DDD-p,p'	3.2	U	ng/L	P346580	
		DDE-p,p'	3.2	U	ng/L	P346580	
		DDT-p,p'	3.2	U	ng/L	P346580	
		Dieldrin	4.2	U	ng/L	P346580	
		Endosulfan I	4.2	U	ng/L	P346580	

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998028	EPA 8270D	Endosulfan II	4.2	U	ng/L	P346580	
		Endosulfan Sulfate	2.1	U	ng/L	P346580	
		Endrin	2.1	U	ng/L	P346580	
		Endrin Aldehyde	2.1	U	ng/L	P346580	
		Heptachlor	1.6	U	ng/L	P346580	
		Heptachlor Epoxide	2.1	U	ng/L	P346580	
		Methoxychlor	4.2	U	ng/L	P346580	
		Mirex	2.1	U	ng/L	P346580	
		Permethrin	11	U	ng/L	P346580	
		Trifluralin	1.1	U	ng/L	P346580	
		Alpha-Chlordane	1.1	U	ng/L	P346580	
		Gamma-Chlordane	1.1	U	ng/L	P346580	
		Endrin Ketone	2.1	U	ng/L	P346580	
		Dicofol	32	U	ng/L	P346580	
		Chlordane	2.6	U	ng/L	P346580	
		Toxaphene	32	U	ng/L	P346580	
1998029	EPA 8270D	Alachlor	0.25	U	ng/L	P346534	
		Ametryn	0.33	U	ng/L	P346534	
		Atrazine	220		ng/L	P346534	
		Atrazine Desethyl	33		ng/L	P346534	
		Azinphos Methyl	2.3	U	ng/L	P346534	
		Bromacil	1.2E+03		ng/L	P346534	
		Butylate	0.40	U	ng/L	P346534	
		Chlorpyrifos Ethyl	0.67	I	ng/L	P346534	
		Chlorpyrifos Methyl	0.10	U	ng/L	P346534	
		Demeton	2.0	U	ng/L	P346534	
		Diazinon	0.13	U	ng/L	P346534	
		Disulfoton	0.51	U	ng/L	P346534	
		EPTC	1.3	U	ng/L	P346534	
		Ethion	0.15	UJ	ng/L	P346534	LCS, MS, RPD
		Ethoprop	0.10	U	ng/L	P346534	
		Fenamiphos	0.25	U	ng/L	P346534	
		Fipronil	0.25	U	ng/L	P346534	
		Fipronil Sulfide	0.15	U	ng/L	P346534	
		Fipronil Sulfone	0.15	U	ng/L	P346534	
		Hexazinone	9.6	J	ng/L	P346534	
		Malathion	0.35	U	ng/L	P346534	
		Metribuzin	0.20	U	ng/L	P346534	
		Mevinphos	0.51	U	ng/L	P346534	
		Molinate	0.30	U	ng/L	P346534	
		Norflurazon	670		ng/L	P346534	
		Pendimethalin	1.0	U	ng/L	P346534	
		Phorate	0.25	U	ng/L	P346534	
		Prometon	0.91	U	ng/L	P346534	RPD

Field ID: G3SD0067

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998029	EPA 8270D	Prometryn	0.20	U	ng/L	P346534	
		Simazine	230		ng/L	P346534	
		Terbufos	0.10	U	ng/L	P346534	
		Terbuthylazine	0.43	U	ng/L	P346534	
		Fonofos	0.20	U	ng/L	P346534	
		Metaxyl	120		ng/L	P346534	
		Metolachlor	57		ng/L	P346534	
		Acetochlor	0.25	U	ng/L	P346534	
		Cyanazine	0.51	U	ng/L	P346534	
		Parathion Ethyl	0.25	U	ng/L	P346534	
		Parathion Methyl	0.25	U	ng/L	P346534	

Ref. Method and Comment:

EPA 8276: Duplicate matrix spike was partially lost during extraction and is not reported.

EPA 8270D: MS accuracy for Atrazine Desethyl, Atrazine, Simazine, Metaxyl, Bromacil, Mtolachlor and Norflurazon not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes. Reported result for Hexazione qualified with J due to internal standard recovery below control limits.

Sample Location: **PrairieCreek@WshngtnLp**

Collection Date/Time: **06/05/2018 10:20**

Field ID: **BLANK_06052018**

Matrix: **W-FIELD-BK**

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998001	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P346641	
		Sulfate	0.20	U	mg SO4/L	P346643	
		Color (true)	2.5	U	PCU	P346499	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	15	U	mg/L	P347011	
	SM 2540 D-97	TSS	2	U	mg/L	P347018	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P346674	
1998002	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P346942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P346684	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	0.85	I	mg C/L	P346788	
1998003	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P346530	
1998038	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P346578	
		Iron	30	U	ug/L	P346578	
		Magnesium	0.040	U	mg/L	P346578	
		Potassium	0.30	U	mg/L	P346578	
		Sodium	0.50	U	mg/L	P346578	
		Zinc	5.0	U	ug/L	P346578	
	EPA 200.8 Rev. 5.4	Arsenic	0.050	U	ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	0.40	U	ug/L	P346578	
		Copper	0.20	U	ug/L	P346578	
		Lead	0.050	U	ug/L	P346578	
		Nickel	0.20	U	ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

SM 5310 B-00: The result was confirmed on 06/18/2018.

Sample Location: MyrtleSlough@Pinelands

Collection Date/Time: 06/05/2018 11:10

Field ID: G3SD0095

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997993	EPA 180.1 Rev. 2.0	Turbidity	5.9		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	28		mg Cl/L	P346641	
		Sulfate	25		mg SO4/L	P346643	
		Color (true)	600		PCU	P346499	
	SM 2320 B-97	Total Alkalinity	92		mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	293		mg/L	P347014	
	SM 2540 D-97	TSS	10		mg/L	P347021	
	SM 4500 F-C-97	Fluoride	0.13		mg F/L	P346674	
1997996	EPA 350.1 Rev. 2.0	Ammonia-N	0.20		mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	3.4		mg N/L	P346942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.015		mg N/L	P346684	
	EPA 365.1 Rev. 2.0	Total-P	0.66		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	46		mg C/L	P346788	
1997999	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.46		mg P/L	P346530	
1998036	EPA 200.7 Rev. 4.4	Calcium	40.2		mg/L	P346578	
		Iron	3.02E+03		ug/L	P346578	
		Magnesium	7.57		mg/L	P346578	
		Potassium	11.7		mg/L	P346578	
		Sodium	15.8		mg/L	P346578	
	EPA 200.8 Rev. 5.4	Zinc	5.0	U	ug/L	P346578	
		Arsenic	3.44		ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	0.73	I	ug/L	P346578	
		Copper	1.01		ug/L	P346578	
		Lead	0.34		ug/L	P346886	
		Nickel	0.49	I	ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Myrtle Slough @ SR 31

Collection Date/Time: 06/05/2018 11:55

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997994	EPA 180.1 Rev. 2.0	Turbidity	5.2		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	120		mg Cl/L	P346641	
		Sulfate	64		mg SO4/L	P346643	
		Color (true)	130		PCU	P346499	
	SM 2320 B-97	Total Alkalinity	142		mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	503		mg/L	P347014	
	SM 2540 D-97	TSS	5	I	mg/L	P347021	
	SM 4500 F-C-97	Fluoride	0.22		mg F/L	P346674	
1997997	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P346942	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.041		mg N/L	P346684	
	EPA 365.1 Rev. 2.0	Total-P	0.33		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	20		mg C/L	P346788	
1998000	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.26		mg P/L	P346530	
1998037	EPA 200.7 Rev. 4.4	Calcium	82.4		mg/L	P346578	
		Iron	800		ug/L	P346578	
		Magnesium	12.6		mg/L	P346578	
		Potassium	12.8		mg/L	P346578	
		Sodium	57.9		mg/L	P346578	
		Zinc	5.0	U	ug/L	P346578	
	EPA 200.8 Rev. 5.4	Arsenic	1.45		ug/L	P346578	
		Cadmium	0.020	U	ug/L	P346578	
		Chromium	0.75	I	ug/L	P346578	
		Copper	2.00		ug/L	P346578	
		Lead	0.11	I	ug/L	P346886	
		Nickel	1.58		ug/L	P346578	
		Silver	0.010	U	ug/L	P347286	

Ref. Method and Comment:

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

EPA 351.2 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Myrtle Slough @ SR 31

Collection Date/Time: 06/05/2018 11:55

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998022	EPA 8321B	Aldicarb	0.020	U	ug/L	P346478	
		Aldicarb Sulfone	0.0020	U	ug/L	P346478	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P346478	MS
		Carbaryl	0.0020	UJ	ug/L	P346478	MS
		Carbofuran	0.0020	U	ug/L	P346478	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P346478	
		Methiocarb	0.0020	U	ug/L	P346478	
		Methomyl	0.0020	U	ug/L	P346478	
		Oxamyl	0.0020	U	ug/L	P346478	
		Propoxur	0.0020	U	ug/L	P346478	
1998023		2,4-D	0.023		ug/L	P346478	
		Bentazon	8.0E-04	U	ug/L	P346478	
		MCP	0.0020	U	ug/L	P346478	
		Triclopyr**	0.0040	U	ug/L	P346478	
		Imidacloprid	1.0		ug/L	P346478	MS
		Diuron	0.25		ug/L	P346478	
		Pyraclostrobin**	0.0020	U	ug/L	P346478	
		Primidone**	0.0040	U	ug/L	P346478	
		Linuron	0.0040	U	ug/L	P346478	
		Acetaminophen**	0.0080	U	ug/L	P346478	
		Fenuron	0.016	U	ug/L	P346478	
		Imazapyr**	0.0071	I	ug/L	P346478	
		Carbamazepine**	4.0E-04	U	ug/L	P346478	
		Fluridone**	0.012		ug/L	P346478	
		Hydrocodone**	8.0E-04	U	ug/L	P346478	
		Sucralose**	0.010	U	ug/L	P346468	
		Glyphosate**	5.1		ug/L	P346468	
		AMPA**	3.0		ug/L	P346468	
		Endothal**	0.10	U	ug/L	P346468	
		Glufosinate**	0.10	U	ug/L	P346468	
1998026	EPA 8270D	Acesulfame K**	0.10	U	ug/L	P346468	
		Aldrin	4.2	U	ng/L	P346580	
		Alpha-BHC	2.1	U	ng/L	P346580	
		Beta-BHC	4.2	U	ng/L	P346580	
		Delta-BHC	4.2	U	ng/L	P346580	
		Gamma-BHC	4.2	U	ng/L	P346580	
		Carbophenothion	4.2	U	ng/L	P346580	
		Chlorothalonil	2.1	U	ng/L	P346580	
		Cypermethrin	21	U	ng/L	P346580	
		DDD-p,p'	3.2	U	ng/L	P346580	
		DDE-p,p'	3.2	U	ng/L	P346580	
		DDT-p,p'	3.2	U	ng/L	P346580	
		Dieldrin	4.2	U	ng/L	P346580	
		Endosulfan I	4.2	U	ng/L	P346580	

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998026	EPA 8270D	Endosulfan II	4.2	U	ng/L	P346580	
		Endosulfan Sulfate	2.1	U	ng/L	P346580	
		Endrin	2.1	U	ng/L	P346580	
		Endrin Aldehyde	2.1	U	ng/L	P346580	
		Heptachlor	1.6	U	ng/L	P346580	
		Heptachlor Epoxide	2.1	U	ng/L	P346580	
		Methoxychlor	4.2	U	ng/L	P346580	
		Mirex	2.1	U	ng/L	P346580	
		Permethrin	11	U	ng/L	P346580	
		Trifluralin	1.1	U	ng/L	P346580	
		Alpha-Chlordane	1.1	U	ng/L	P346580	
		Gamma-Chlordane	1.1	U	ng/L	P346580	
		Endrin Ketone	2.1	U	ng/L	P346580	
		Dicofol	32	U	ng/L	P346580	
		Chlordane	2.6	U	ng/L	P346580	
	EPA 8276	Toxaphene	32	U	ng/L	P346580	
		Alachlor	0.25	U	ng/L	P346534	
		Ametryn	0.33	U	ng/L	P346534	
1998027	EPA 8270D	Atrazine	7.2		ng/L	P346534	
		Atrazine Desethyl	20		ng/L	P346534	
		Azinphos Methyl	2.3	U	ng/L	P346534	
		Bromacil	410		ng/L	P346534	
		Butylate	0.41	U	ng/L	P346534	
		Chlorpyrifos Ethyl	0.25	U	ng/L	P346534	
		Chlorpyrifos Methyl	0.10	U	ng/L	P346534	
		Demeton	2.0	U	ng/L	P346534	
		Diazinon	0.13	U	ng/L	P346534	
		Disulfoton	0.51	U	ng/L	P346534	
		EPTC	1.3	U	ng/L	P346534	
		Ethion	0.15	UJ	ng/L	P346534	LCS, MS, RPD
		Ethoprop	0.10	U	ng/L	P346534	
		Fenamiphos	0.25	U	ng/L	P346534	
		Fipronil	0.25	U	ng/L	P346534	
		Fipronil Sulfide	0.15	U	ng/L	P346534	
		Fipronil Sulfone	0.15	U	ng/L	P346534	
		Hexazinone	3.8		ng/L	P346534	
		Malathion	0.36	U	ng/L	P346534	
		Metribuzin	0.20	U	ng/L	P346534	
		Mevinphos	0.51	U	ng/L	P346534	
		Molinate	0.30	U	ng/L	P346534	
		Norflurazon	420		ng/L	P346534	
		Pendimethalin	1.0	U	ng/L	P346534	
		Phorate	0.25	U	ng/L	P346534	
		Prometon	0.91	UJ	ng/L	P346534	RPD

Field ID: G3SD0097

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998027	EPA 8270D	Prometryn	0.20	U	ng/L	P346534	
		Simazine	42		ng/L	P346534	
		Terbufos	0.10	U	ng/L	P346534	
		Terbuthylazine	0.43	U	ng/L	P346534	
		Fonofos	0.20	U	ng/L	P346534	
		Metalaxyl	320		ng/L	P346534	
		Metolachlor	31		ng/L	P346534	
		Acetochlor	0.25	U	ng/L	P346534	
		Cyanazine	0.51	U	ng/L	P346534	
		Parathion Ethyl	0.25	U	ng/L	P346534	
		Parathion Methyl	0.25	U	ng/L	P346534	

Ref. Method and Comment:

EPA 8321B: Refer to the narrative for an explanation of QC Codes.

EPA 8276: Duplicate matrix spike was partially lost during extraction and is not reported.

EPA 8270D: MS accuracy for Atrazine Desethyl, Atrazine, Simazine, Metalaxyl, Bromacil, Mtolachlor and Norflurazon not assessed due to high content of these parameters in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Hog Bay @ CR 763

Collection Date/Time: 06/05/2018 12:35

Field ID: G3SD0096

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997983	EPA 180.1 Rev. 2.0	Turbidity	3.6		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	49		mg Cl/L	P346641	
		Sulfate	59		mg SO4/L	P346643	
	SM 2120 B	Color (true)	320		PCU	P346499	
	SM 2320 B-97	Total Alkalinity	79	A	mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	321	A	mg/L	P347012	
	SM 2540 D-97	TSS	6	IA	mg/L	P347019	
	SM 4500 F-C-97	Fluoride	0.25		mg F/L	P346674	
1997986	EPA 350.1 Rev. 2.0	Ammonia-N	0.28		mg N/L	P347051	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.4		mg N/L	P346941	
	EPA 353.2 Rev. 2.0	NO2NO3-N	1.2		mg N/L	P346683	
	EPA 365.1 Rev. 2.0	Total-P	0.41		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	29		mg C/L	P346788	
1997989	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.29		mg P/L	P346522	

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: HawthorneCrk@ReynoldsSt

Collection Date/Time: 06/05/2018 13:05

Field ID: G3SD0011

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1998021	EPA 8321B	2,4-D	0.031		ug/L	P346478	
		Bentazon	8.0E-04	U	ug/L	P346478	
		MCP	0.0020	U	ug/L	P346478	
		Triclopyr**	0.0040	U	ug/L	P346478	
		Imidacloprid	0.61		ug/L	P346478	MS
		Diuron	0.078		ug/L	P346478	
		Pyraclostrobin**	0.0020	U	ug/L	P346478	
		Primidone**	0.0040	U	ug/L	P346478	
		Linuron	0.0040	U	ug/L	P346478	
		Acetaminophen**	0.0080	U	ug/L	P346478	
		Fenuron	0.016	U	ug/L	P346478	
		Imazapyr**	0.0056	I	ug/L	P346478	
		Carbamazepine**	0.0013	I	ug/L	P346478	
		Fluridone**	4.0E-04	U	ug/L	P346478	
		Hydrocodone**	8.0E-04	U	ug/L	P346478	
		Sucralose**	0.010	U	ug/L	P346468	

Sample Location: RunoffPeace River Site3

Collection Date/Time: 06/05/2018 13:50

Field ID: G3SD0132

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997984	EPA 180.1 Rev. 2.0	Turbidity	25		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	36		mg Cl/L	P346641	
		Sulfate	21		mg SO4/L	P346643	
		Color (true)	440		PCU	P346505	
	SM 2320 B-97	Total Alkalinity	32		mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	215		mg/L	P347014	
	SM 2540 D-97	TSS	8	I	mg/L	P347021	
	SM 4500 F-C-97	Fluoride	0.31		mg F/L	P346674	
1997987	EPA 350.1 Rev. 2.0	Ammonia-N	0.18		mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P346941	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.032		mg N/L	P346683	
	EPA 365.1 Rev. 2.0	Total-P	0.89		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	43		mg C/L	P346788	
1997990	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.49		mg P/L	P346530	

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: BobcatCreek in Preserve

Collection Date/Time: 06/05/2018 14:20

Field ID: G3SD0131

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1997985	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P346500	
	EPA 300.0 Rev. 2.1	Chloride	20		mg Cl/L	P346641	
		Sulfate	20		mg SO4/L	P346643	
	SM 2120 B	Color (true)	450		PCU	P346499	
	SM 2320 B-97	Total Alkalinity	43		mg CaCO3/L	P346671	
	SM 2540 C-97	TDS	180	A	mg/L	P347014	
	SM 2540 D-97	TSS	6	IA	mg/L	P347021	
	SM 4500 F-C-97	Fluoride	0.32		mg F/L	P346674	
1997988	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P347052	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.0		mg N/L	P346941	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.058		mg N/L	P346683	
	EPA 365.1 Rev. 2.0	Total-P	0.87		mg P/L	P346812	
	SM 5310 B-00	Organic Carbon	34		mg C/L	P346788	
1997991	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.73		mg P/L	P346530	

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: P346500

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P346578

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: P346578

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	0.23		ug/L
Nickel	0.20	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Component	Result	Code	Units
Lead	0.050	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Component	Result	Code	Units
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346641

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346643

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347051

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347051

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347052

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346941

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346942

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346683

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346684

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346812

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346522

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346530

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: P346534

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
Disulfoton	0.50	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
Fipronil	0.25	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
Metaxyl	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
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
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P346580

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P346580

Component	Result	Code	Units
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 8276
Batch ID: P346580

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

Reference Method: EPA 8321B
Batch ID: P346468

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.10	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: P346478

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	4.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8321B
Batch ID: P346478

Component	Result	Code	Units
Diuron	0.0020	U	ug/L
Fenuron	0.039	I	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
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
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: SM 2120 B
Batch ID: P346499

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P346505

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P346671

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

Reference Method: SM 2540 C-97
Batch ID: P347011

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P347012

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P347014

Component	Result	Code	Units
TDS	15	U	mg/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P347018

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P347019

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P347021

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P346674

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P346788

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: P346578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	101		P	85 - 115
Iron	104		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	102		P	85 - 115
Sodium	106		P	85 - 115
Zinc	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	102		P	85 - 115
Cadmium	101		P	85 - 115
Chromium	100		P	85 - 115
Copper	97.7		P	85 - 115
Lead	97.1		P	85 - 115
Nickel	100		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Lead	98.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	95.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346641

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	98.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346643

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347051

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347052

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347052

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346941

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346942

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	93.8		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346683

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: P346684

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: P346812

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	99.7		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346522

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346530

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

Reference Method: EPA 8270D
Batch ID: P346534

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	99.5	101	P/P	74 - 119
Alachlor	90.2	95.8	P/P	75 - 118
Ametryn	94.9	114	P/P	59 - 137
Atrazine	96.6	102	P/P	73 - 120

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P346534

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Atrazine Desethyl	101	112	P/P	19 - 129
Azinphos Methyl	102	111	P/P	65 - 181
Bromacil	91.0	90.6	P/P	43 - 123
Butylate	62.6	65.4	P/P	28 - 85.0
Chlorpyrifos Ethyl	82.8	87.3	P/P	55 - 112
Chlorpyrifos Methyl	91.7	96.0	P/P	35 - 124
Cyanazine	140	154	P/P	26 - 262
Demeton	73.1	77.2	P/P	43 - 122
Diazinon	103	110	P/P	72 - 120
Disulfoton	82.3	87.1	P/P	45 - 137
EPTC	60.8	61.0	P/P	28 - 95.0
Ethion	67.7	55.9	P/F	63 - 127
Ethoprop	68.3	83.2	P/P	63 - 109
Fenamiphos	77.3	86.6	P/P	66 - 136
Fipronil	95.8	98.0	P/P	63 - 126
Fipronil Sulfide	83.4	86.0	P/P	59 - 123
Fipronil Sulfone	76.3	76.2	P/P	56 - 122
Fonofos	96.6	105	P/P	64 - 114
Hexazinone	97.1	102	P/P	49 - 144
Malathion	88.3	88.0	P/P	68 - 131
Metalaxyl	94.6	98.3	P/P	57 - 126
Metolachlor	90.1	94.9	P/P	75 - 118
Metribuzin	147	132	P/P	46 - 169
Mevinphos	88.7	92.8	P/P	34 - 126
Molinate	58.2	67.9	P/P	37 - 101
Norflurazon	91.2	94.9	P/P	63 - 127
Parathion Ethyl	92.2	96.8	P/P	78 - 109
Parathion Methyl	103	104	P/P	74 - 123
Pendimethalin	108	115	P/P	51 - 130
Phorate	80.3	89.8	P/P	53 - 116
Prometon	86.3	84.1	P/P	66 - 124
Prometryn	91.8	95.0	P/P	66 - 124
Simazine	96.9	99.5	P/P	62 - 134
Terbufos	93.7	102	P/P	59 - 115
Terbuthylazine	94.4	99.2	P/P	76 - 113

Reference Method: EPA 8270D
 Batch ID: P346580

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	52.3	55.2	P/P	24 - 89.0
Alpha-BHC	85.8	94.8	P/P	58 - 117
Alpha-Chlordane	83.8	91.0	P/P	56 - 115
Beta-BHC	108	105	P/P	55 - 137
Carbophenothion	83.4	88.1	P/P	37 - 145
Chlorothalonil	71.1	91.0	P/P	26 - 163
Cypermethrin	83.9	88.2	P/P	42 - 156
DDD-p,p'	99.8	109	P/P	59 - 129
DDE-p,p'	86.1	98.2	P/P	52 - 117
DDT-p,p'	90.5	97.9	P/P	48 - 128
Delta-BHC	111	125	P/P	59 - 158
Dicofol	110	104	P/P	19 - 124

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P346580

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dieldrin	84.2	103	P/P	57 - 126
Endosulfan I	96.5	97.9	P/P	59 - 133
Endosulfan II	105	112	P/P	58 - 148
Endosulfan Sulfate	95.3	104	P/P	56 - 135
Endrin	92.9	83.8	P/P	50 - 140
Endrin Aldehyde	95.7	108	P/P	47 - 141
Endrin Ketone	93.1	98.7	P/P	63 - 123
Gamma-BHC	99.4	101	P/P	59 - 132
Gamma-Chlordane	81.2	88.0	P/P	55 - 112
Heptachlor	68.7	69.0	P/P	45 - 102
Heptachlor Epoxide	85.4	92.1	P/P	61 - 116
Methoxychlor	106	106	P/P	60 - 133
Mirex	72.2	79.1	P/P	40 - 98.0
Permethrin	81.1	87.8	P/P	45 - 131
Trifluralin	83.4	86.3	P/P	38 - 179

Reference Method: EPA 8276
 Batch ID: P346580

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	87.6	100	P/P	47 - 125
Toxaphene	77.3	81.5	P/P	46 - 147

Reference Method: EPA 8321B
 Batch ID: P346468

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	109		P	40 - 140
AMPA	96.8		P	40 - 140
Endothall	99.9		P	40 - 140
Glufosinate	96.3		P	40 - 140
Glyphosate	105		P	40 - 140
Sucralose	82.3		P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P346478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	88.9		P	40 - 150
3-Hydroxycarbofuran	97.1		P	40 - 150
Acetaminophen	114		P	30 - 150
Aldicarb	71.7		P	30 - 150
Aldicarb Sulfone	99.3		P	40 - 150
Aldicarb Sulfoxide	86.4		P	40 - 150
Bentazon	86.5		P	30 - 150
Carbamazepine	103		P	40 - 150
Carbaryl	60.1		P	40 - 150
Carbofuran	79.3		P	40 - 150
Diuron	74.5		P	40 - 150
Fenuron	107		P	40 - 150
Fluridone	88.5		P	40 - 150
Hydrocodone	97.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P346478

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Imazapyr	87.9		P	40 - 150
Imidacloprid	123		P	40 - 160
Linuron	77.4		P	40 - 150
MCPP	91.5		P	40 - 150
Methiocarb	81.4		P	40 - 150
Methomyl	92.7		P	40 - 150
Oxamyl	93.8		P	40 - 150
Primidone	105		P	40 - 150
Propoxur	86.8		P	40 - 150
Pyraclostrobin	97.2		P	40 - 150
Triclopyr	93.4		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P346671

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

Reference Method: SM 4500 F-C-97
Batch ID: P346674

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.3		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P346788

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: P346578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998151	Calcium	102		P	80 - 120
1998151	Iron	106		P	80 - 120
1998151	Magnesium	101		P	80 - 120
1998151	Potassium	108		P	80 - 120
1998151	Sodium	109		P	80 - 120
1998151	Zinc	105		P	80 - 120
1998153	Calcium	100		P	80 - 120
1998153	Iron	103	104	P/P	80 - 120
1998153	Magnesium	100		P	80 - 120
1998153	Potassium	103	104	P/P	80 - 120
1998153	Sodium	102	105	P/P	80 - 120
1998153	Zinc	97.4	98.8	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998151	Arsenic	101		P	80 - 120
1998151	Cadmium	101		P	80 - 120
1998151	Chromium	99.3		P	80 - 120
1998151	Copper	95.3		P	80 - 120
1998151	Lead	97.9		P	80 - 120
1998151	Nickel	98.6		P	80 - 120
1998153	Arsenic	102	101	P/P	80 - 120
1998153	Cadmium	101	100	P/P	80 - 120
1998153	Chromium	102	101	P/P	80 - 120
1998153	Copper	95.0	94.5	P/P	80 - 120
1998153	Lead	98.2	96.8	P/P	80 - 120
1998153	Nickel	97.6	97.5	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1989807	Lead	101	101	P/P	80 - 120
1998151	Lead	99.3		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998096	Silver	103		P	80 - 120
1998150	Silver	104	104	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346641

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997916	Chloride	95.5		P	90 - 110
1998030	Chloride	97.2		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346643

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997916	Sulfate	100		P	90 - 110
1998030	Sulfate	97.0		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347051

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997811	Ammonia-N	105	106	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347052

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998031	Ammonia-N	103	102	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346941

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997949	Kjeldahl Nitrogen	98.8	107	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346683

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997917	NO2NO3-N	98.6	98.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346684

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997995	NO2NO3-N	97.0	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346812

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997971	Total-P	96.7	100	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997919	O-Phosphate-P	98.8	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346530

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998119	O-Phosphate-P	97.4	97.7	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P346534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998027	Acetochlor	89.0	94.7	P/P	67 - 125
1998027	Alachlor	82.6	89.0	P/P	69 - 123
1998027	Ametryn	122	109	P/P	52 - 151
1998027	Azinphos Methyl	94.3	90.4	P/P	48 - 200
1998027	Butylate	59.3	69.6	P/P	10 - 85.0
1998027	Chlorpyrifos Ethyl	84.5	93.1	P/P	54 - 115
1998027	Chlorpyrifos Methyl	84.4	88.3	P/P	44 - 117
1998027	Cyanazine	96.6	101	P/P	10 - 262
1998027	Demeton	103	105	P/P	24 - 145
1998027	Diazinon	105	111	P/P	66 - 129
1998027	Disulfoton	101	105	P/P	45 - 139
1998027	EPTC	51.9	65.0	P/P	10 - 86.0
1998027	Ethion	24.8	41.9	F/F	59 - 133
1998027	Ethoprop	75.3	73.7	P/P	54 - 116
1998027	Fenamiphos	59.8	57.6	P/P	55 - 140
1998027	Fipronil	82.7	85.0	P/P	37 - 142
1998027	Fipronil Sulfide	81.5	94.1	P/P	37 - 130
1998027	Fipronil Sulfone	69.5	74.8	P/P	18 - 143
1998027	Fonofos	107	112	P/P	55 - 118
1998027	Hexazinone	101	104	P/P	62 - 140
1998027	Malathion	86.7	85.9	P/P	64 - 132
1998027	Metribuzin	149	150	P/P	16 - 218
1998027	Mevinphos	101	112	P/P	34 - 129
1998027	Molinate	47.9	54.6	P/P	16 - 99.0
1998027	Parathion Ethyl	97.3	108	P/P	71 - 112
1998027	Parathion Methyl	110	118	P/P	65 - 127
1998027	Pendimethalin	122	130	P/P	35 - 159
1998027	Phorate	104	107	P/P	41 - 129
1998027	Prometon	59.5	82.5	P/P	56 - 140
1998027	Prometryn	84.5	90.0	P/P	65 - 130
1998027	Terbufos	115	117	P/P	53 - 126
1998027	Terbutylazine	94.3	97.2	P/P	73 - 114

Reference Method: EPA 8270D
Batch ID: P346580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998576	Aldrin	64.2	62.8	P/P	26 - 96.0
1998576	Alpha-BHC	94.7	98.9	P/P	51 - 123
1998576	Alpha-Chlordane	96.1	92.4	P/P	45 - 120
1998576	Beta-BHC	102	101	P/P	43 - 146
1998576	Carbophenothion	94.6	89.2	P/P	26 - 179
1998576	Chlorothalonil	105	94.3	P/P	10 - 215
1998576	Cypermethrin	95.6	85.0	P/P	35 - 169
1998576	DDD-p,p'	108	106	P/P	49 - 131
1998576	DDE-p,p'	95.7	91.1	P/P	39 - 127
1998576	DDT-p,p'	97.7	96.0	P/P	49 - 120
1998576	Delta-BHC	131	147	P/P	49 - 187
1998576	Dicofol	103	111	P/P	10 - 129
1998576	Dieldrin	95.7	105	P/P	46 - 132
1998576	Endosulfan I	109	103	P/P	57 - 130
1998576	Endosulfan II	120	101	P/P	52 - 148

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P346580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998576	Endosulfan Sulfate	107	105	P/P	55 - 129
1998576	Endrin	111	114	P/P	45 - 133
1998576	Endrin Aldehyde	98.1	104	P/P	26 - 140
1998576	Endrin Ketone	114	112	P/P	60 - 125
1998576	Gamma-BHC	110	110	P/P	50 - 145
1998576	Gamma-Chlordane	91.9	89.1	P/P	44 - 118
1998576	Heptachlor	79.0	74.3	P/P	35 - 106
1998576	Heptachlor Epoxide	98.9	95.9	P/P	52 - 123
1998576	Methoxychlor	112	116	P/P	54 - 132
1998576	Mirex	78.2	77.0	P/P	36 - 107
1998576	Permethrin	85.4	87.9	P/P	47 - 135
1998576	Trifluralin	88.0	86.7	P/P	32 - 228

Reference Method: EPA 8276
 Batch ID: P346580

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1999411	Chlordane	104		P	41 - 134
1999411	Toxaphene	85.2		P	39 - 158

Reference Method: EPA 8321B
 Batch ID: P346468

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998021	Acesulfame K	136	125	P/P	40 - 140
1998021	AMPA	97.7	93.1	P/P	40 - 140
1998021	Endothall	75.0	69.1	P/P	40 - 140
1998021	Glufosinate	120	137	P/P	40 - 140
1998021	Glyphosate	83.1	95.3	P/P	40 - 140
1998021	Sucralose	83.8	82.7	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P346478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998022	3-Hydroxycarbofuran	67.3	66.3	P/P	40 - 150
1998022	Aldicarb	32.5	41.8	P/P	30 - 150
1998022	Aldicarb Sulfone	71.1	64.8	P/P	40 - 150
1998022	Aldicarb Sulfoxide	28.3	28.8	F/F	40 - 150
1998022	Carbaryl	33.8	36.9	F/F	40 - 150
1998022	Carbofuran	45.0	55.0	P/P	40 - 150
1998022	Methiocarb	57.2	67.2	P/P	40 - 150
1998022	Methomyl	54.2	57.9	P/P	40 - 150
1998022	Oxamyl	59.4	67.2	P/P	40 - 150
1998022	Propoxur	47.3	47.0	P/P	40 - 150
1998146	2,4-D	55.0	68.1	P/P	40 - 150
1998146	Acetaminophen	101	114	P/P	30 - 150
1998146	Bentazon	59.5	67.8	P/P	30 - 150
1998146	Carbamazepine	61.7	67.3	P/P	40 - 150
1998146	Diuron	43.4	44.9	P/P	40 - 150
1998146	Fenuron	73.9	80.6	P/P	40 - 150
1998146	Fluridone	67.4	65.8	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P346478

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1998146	Hydrocodone	92.1	93.0	P/P	40 - 150
1998146	Imazapyr	91.2	102	P/P	40 - 150
1998146	Imidacloprid	160	188	P/F	40 - 160
1998146	Linuron	53.0	52.2	P/P	40 - 150
1998146	MCPP	108	109	P/P	40 - 150
1998146	Primidone	118	123	P/P	40 - 150
1998146	Pyraclostrobin	59.0	56.8	P/P	40 - 150
1998146	Triclopyr	105	113	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P346674

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997983	Fluoride	97.0	98.5	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P346788

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1997811	Organic Carbon	99.2	101	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P346500

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997970	Turbidity	3.19	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P346578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998153	Calcium	1.15	Spike	P	0 - 20
1998153	Iron	1.02	Spike	P	0 - 20
1998153	Magnesium	1.54	Spike	P	0 - 20
1998153	Potassium	1.62	Spike	P	0 - 20
1998153	Sodium	1.16	Spike	P	0 - 20
1998153	Zinc	1.41	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346578

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998153	Arsenic	0.943	Spike	P	0 - 20
1998153	Cadmium	1.16	Spike	P	0 - 20
1998153	Chromium	0.432	Spike	P	0 - 20
1998153	Copper	0.551	Spike	P	0 - 20
1998153	Lead	1.40	Spike	P	0 - 20
1998153	Nickel	0.179	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P346886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1989807	Lead	0.511	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P347286

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998150	Silver	0.247	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346641

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997916	Chloride	3.26	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P346643

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997916	Sulfate	4.09	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347051

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997811	Ammonia-N	0.457	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P347052

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998031	Ammonia-N	0.462	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997949	Kjeldahl Nitrogen	4.25	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P346942

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998066	Kjeldahl Nitrogen	2.15	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346683

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997917	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P346684

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997995	NO2NO3-N	0.299	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P346812

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997971	Total-P	3.35	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346522

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997919	O-Phosphate-P	0.404	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P346530

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998119	O-Phosphate-P	0.241	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P346534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998027	Acetochlor	6.20	Spike	P	0 - 30
1998027	Alachlor	7.52	Spike	P	0 - 30
1998027	Ametryn	11.2	Spike	P	0 - 30
1998027	Atrazine	5.54	Spike	P	0 - 30
1998027	Atrazine Desethyl	10.2	Spike	P	0 - 30
1998027	Azinphos Methyl	4.23	Spike	P	0 - 30
1998027	Bromacil	5.03	Spike	P	0 - 30
1998027	Butylate	15.9	Spike	P	0 - 30
1998027	Chlorpyrifos Ethyl	9.69	Spike	P	0 - 30
1998027	Chlorpyrifos Methyl	4.54	Spike	P	0 - 30
1998027	Cyanazine	4.29	Spike	P	0 - 30
1998027	Demeton	2.65	Spike	P	0 - 30
1998027	Diazinon	5.40	Spike	P	0 - 30
1998027	Disulfoton	3.66	Spike	P	0 - 30
1998027	EPTC	22.5	Spike	P	0 - 30
1998027	Ethion	51.5	Spike	F	0 - 30
1998027	Ethoprop	2.23	Spike	P	0 - 30
1998027	Fenamiphos	3.81	Spike	P	0 - 30
1998027	Fipronil	2.70	Spike	P	0 - 30
1998027	Fipronil Sulfide	14.3	Spike	P	0 - 30
1998027	Fipronil Sulfone	7.43	Spike	P	0 - 30
1998027	Fonofos	3.89	Spike	P	0 - 30
1998027	Hexazinone	1.78	Spike	P	0 - 30
1998027	Malathion	0.891	Spike	P	0 - 30
1998027	Metalaxyl	9.02	Spike	P	0 - 30
1998027	Metolachlor	2.95	Spike	P	0 - 30
1998027	Metribuzin	0.571	Spike	P	0 - 30
1998027	Mevinphos	10.4	Spike	P	0 - 30
1998027	Molinate	13.1	Spike	P	0 - 30
1998027	Norflurazon	9.92	Spike	P	0 - 30
1998027	Parathion Ethyl	10.8	Spike	P	0 - 30
1998027	Parathion Methyl	7.72	Spike	P	0 - 30
1998027	Pendimethalin	5.77	Spike	P	0 - 30
1998027	Phorate	3.06	Spike	P	0 - 30
1998027	Prometon	32.3	Spike	F	0 - 30
1998027	Prometryn	6.29	Spike	P	0 - 30
1998027	Simazine	11.7	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P346534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998027	Terbufos	2.20	Spike	P	0 - 30
1998027	Terbutylazine	2.93	Spike	P	0 - 30
LFB	Acetochlor	1.62	LCS	P	0 - 30
LFB	Alachlor	5.94	LCS	P	0 - 30
LFB	Ametryn	18.5	LCS	P	0 - 30
LFB	Atrazine	5.90	LCS	P	0 - 30
LFB	Atrazine Desethyl	10.5	LCS	P	0 - 30
LFB	Azinphos Methyl	8.56	LCS	P	0 - 30
LFB	Bromacil	0.422	LCS	P	0 - 30
LFB	Butylate	4.27	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	5.26	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	4.61	LCS	P	0 - 30
LFB	Cyanazine	9.08	LCS	P	0 - 30
LFB	Demeton	5.48	LCS	P	0 - 30
LFB	Diazinon	6.71	LCS	P	0 - 30
LFB	Disulfoton	5.67	LCS	P	0 - 30
LFB	EPTC	0.442	LCS	P	0 - 30
LFB	Ethion	19.1	LCS	P	0 - 30
LFB	Ethoprop	19.7	LCS	P	0 - 30
LFB	Fenamiphos	11.4	LCS	P	0 - 30
LFB	Fipronil	2.24	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.16	LCS	P	0 - 30
LFB	Fipronil Sulfone	0.0754	LCS	P	0 - 30
LFB	Fonofos	8.22	LCS	P	0 - 30
LFB	Hexazinone	5.36	LCS	P	0 - 30
LFB	Malathion	0.264	LCS	P	0 - 30
LFB	Metalaxyl	3.81	LCS	P	0 - 30
LFB	Metolachlor	5.19	LCS	P	0 - 30
LFB	Metribuzin	10.6	LCS	P	0 - 30
LFB	Mevinphos	4.56	LCS	P	0 - 30
LFB	Molinate	15.4	LCS	P	0 - 30
LFB	Norflurazon	3.94	LCS	P	0 - 30
LFB	Parathion Ethyl	4.94	LCS	P	0 - 30
LFB	Parathion Methyl	1.31	LCS	P	0 - 30
LFB	Pendimethalin	5.78	LCS	P	0 - 30
LFB	Phorate	11.2	LCS	P	0 - 30
LFB	Prometon	2.51	LCS	P	0 - 30
LFB	Prometryn	3.32	LCS	P	0 - 30
LFB	Simazine	2.58	LCS	P	0 - 30
LFB	Terbufos	8.35	LCS	P	0 - 30
LFB	Terbutylazine	5.01	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P346580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998576	Aldrin	2.15	Spike	P	0 - 30
1998576	Alpha-BHC	4.43	Spike	P	0 - 30
1998576	Alpha-Chlordane	3.92	Spike	P	0 - 30
1998576	Beta-BHC	0.446	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P346580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998576	Carbophenothion	5.83	Spike	P	0 - 30
1998576	Chlorothalonil	10.6	Spike	P	0 - 30
1998576	Cypermethrin	11.7	Spike	P	0 - 30
1998576	DDD-p,p'	2.15	Spike	P	0 - 30
1998576	DDE-p,p'	4.92	Spike	P	0 - 30
1998576	DDT-p,p'	1.76	Spike	P	0 - 30
1998576	Delta-BHC	12.1	Spike	P	0 - 30
1998576	Dicofol	7.96	Spike	P	0 - 30
1998576	Dieldrin	9.00	Spike	P	0 - 30
1998576	Endosulfan I	5.29	Spike	P	0 - 30
1998576	Endosulfan II	17.2	Spike	P	0 - 30
1998576	Endosulfan Sulfate	2.04	Spike	P	0 - 30
1998576	Endrin	2.90	Spike	P	0 - 30
1998576	Endrin Aldehyde	5.53	Spike	P	0 - 30
1998576	Endrin Ketone	1.63	Spike	P	0 - 30
1998576	Gamma-BHC	0.102	Spike	P	0 - 30
1998576	Gamma-Chlordane	3.07	Spike	P	0 - 30
1998576	Heptachlor	6.11	Spike	P	0 - 30
1998576	Heptachlor Epoxide	3.06	Spike	P	0 - 30
1998576	Methoxychlor	3.53	Spike	P	0 - 30
1998576	Mirex	1.54	Spike	P	0 - 30
1998576	Permethrin	2.84	Spike	P	0 - 30
1998576	Trifluralin	1.42	Spike	P	0 - 30
LFB	Aldrin	5.40	LCS	P	0 - 30
LFB	Alpha-BHC	9.99	LCS	P	0 - 30
LFB	Alpha-Chlordane	8.26	LCS	P	0 - 30
LFB	Beta-BHC	2.37	LCS	P	0 - 30
LFB	Carbophenothion	5.53	LCS	P	0 - 30
LFB	Chlorothalonil	24.5	LCS	P	0 - 30
LFB	Cypermethrin	4.98	LCS	P	0 - 30
LFB	DDD-p,p'	9.16	LCS	P	0 - 30
LFB	DDE-p,p'	13.1	LCS	P	0 - 30
LFB	DDT-p,p'	7.92	LCS	P	0 - 30
LFB	Delta-BHC	11.8	LCS	P	0 - 30
LFB	Dicofol	5.26	LCS	P	0 - 30
LFB	Dieldrin	20.4	LCS	P	0 - 30
LFB	Endosulfan I	1.37	LCS	P	0 - 30
LFB	Endosulfan II	6.47	LCS	P	0 - 30
LFB	Endosulfan Sulfate	8.63	LCS	P	0 - 30
LFB	Endrin	10.3	LCS	P	0 - 30
LFB	Endrin Aldehyde	11.8	LCS	P	0 - 30
LFB	Endrin Ketone	5.88	LCS	P	0 - 30
LFB	Gamma-BHC	1.28	LCS	P	0 - 30
LFB	Gamma-Chlordane	7.95	LCS	P	0 - 30
LFB	Heptachlor	0.490	LCS	P	0 - 30
LFB	Heptachlor Epoxide	7.53	LCS	P	0 - 30
LFB	Methoxychlor	0.731	LCS	P	0 - 30
LFB	Mirex	9.15	LCS	P	0 - 30
LFB	Permethrin	7.93	LCS	P	0 - 30
LFB	Trifluralin	3.43	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8276
 Batch ID: P346580

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Chlordane	13.5	LCS	P	0 - 30
LFB	Toxaphene	5.31	LCS	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P346468

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998021	Acesulfame K	8.46	Spike	P	0 - 30
1998021	AMPA	2.24	Spike	P	0 - 30
1998021	Endothall	8.19	Spike	P	0 - 30
1998021	Glufosinate	12.9	Spike	P	0 - 30
1998021	Glyphosate	6.40	Spike	P	0 - 30
1998021	Sucralose	1.34	Spike	P	0 - 30

Reference Method: EPA 8321B
 Batch ID: P346478

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1998022	3-Hydroxycarbofuran	1.53	Spike	P	0 - 30
1998022	Aldicarb	25.1	Spike	P	0 - 30
1998022	Aldicarb Sulfone	9.29	Spike	P	0 - 30
1998022	Aldicarb Sulfoxide	1.75	Spike	P	0 - 30
1998022	Carbaryl	8.68	Spike	P	0 - 30
1998022	Carbofuran	20.0	Spike	P	0 - 30
1998022	Methiocarb	16.0	Spike	P	0 - 30
1998022	Methomyl	6.67	Spike	P	0 - 30
1998022	Oxamyl	12.3	Spike	P	0 - 30
1998022	Propoxur	0.754	Spike	P	0 - 30
1998146	2,4-D	9.61	Spike	P	0 - 30
1998146	Acetaminophen	11.7	Spike	P	0 - 30
1998146	Bentazon	13.0	Spike	P	0 - 30
1998146	Carbamazepine	8.72	Spike	P	0 - 30
1998146	Diuron	1.72	Spike	P	0 - 30
1998146	Fenuron	8.73	Spike	P	0 - 30
1998146	Fluridone	2.33	Spike	P	0 - 30
1998146	Hydrocodone	1.02	Spike	P	0 - 30
1998146	Imazapyr	7.02	Spike	P	0 - 30
1998146	Imidacloprid	14.6	Spike	P	0 - 30
1998146	Linuron	1.49	Spike	P	0 - 30
1998146	MCP	0.875	Spike	P	0 - 30
1998146	Primidone	4.07	Spike	P	0 - 30
1998146	Pyraclostrobin	3.79	Spike	P	0 - 30
1998146	Triclopyr	7.72	Spike	P	0 - 30

Reference Method: SM 2120 B
 Batch ID: P346499

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

Reference Method: SM 2120 B
Batch ID: P346499

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997946	Color (true)	3.42	Sample	P	0 - 20

Reference Method: SM 2120 B
Batch ID: P346505

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997716	Color (true)	1.64	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P346671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997983	Total Alkalinity	0.781	Sample	P	0 - 1.6

Reference Method: SM 2540 C-97
Batch ID: P347011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997364	TDS	2.29	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P347012

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997983	TDS	8.10	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P347014

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997985	TDS	6.09	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P346674

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997983	Fluoride	0.946	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P346788

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1997811	Organic Carbon	0.927	Spike	P	0 - 20

Quality Assurance Report

Precision

* 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: 1998021
Field Sample ID: G3SD0011

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	142	P	30 - 160
EPA 8321B	Acetaminophen-d4	101	P	30 - 160
EPA 8321B	Carbamazepine-d10	81.6	P	30 - 160
EPA 8321B	Diuron-d6	52.2	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	88.0	P	40 - 160
EPA 8321B	Primidone-d5	85.7	P	30 - 160
EPA 8321B	Sucralose-d6	93.4	P	40 - 160

Lab Sample ID: 1998022
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	36.1	P	30 - 160

Lab Sample ID: 1998023
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	111	P	30 - 160
EPA 8321B	Acetaminophen-d4	89.1	P	30 - 160
EPA 8321B	Carbamazepine-d10	61.7	P	30 - 160
EPA 8321B	Diuron-d6	40.2	P	30 - 160
EPA 8321B	Endothall-d6	84.9	P	50 - 160
EPA 8321B	Glyphosate 13C 15N	92.5	P	40 - 160
EPA 8321B	Primidone-d5	75.2	P	30 - 160
EPA 8321B	Sucralose-d6	122	P	40 - 160

Lab Sample ID: 1998024
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	35.0	P	30 - 160

Lab Sample ID: 1998025
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	126	P	30 - 160
EPA 8321B	Acetaminophen-d4	90.3	P	30 - 160
EPA 8321B	Carbamazepine-d10	86.9	P	30 - 160
EPA 8321B	Diuron-d6	46.3	P	30 - 160
EPA 8321B	Endothall-d6	75.0	P	50 - 160
EPA 8321B	Glyphosate 13C 15N	88.2	P	40 - 160
EPA 8321B	Primidone-d5	70.9	P	30 - 160
EPA 8321B	Sucralose-d6	95.1	P	40 - 160

Lab Sample ID: 1998026
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	76.7	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	54.5	P	34 - 101

Quality Assurance Report Surrogates

Lab Sample ID: 1998026
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8276	Decachlorobiphenyl	72.5	P	31 - 108
EPA 8276	PCNB	93.0	P	62 - 142

Lab Sample ID: 1998027
Field Sample ID: G3SD0097

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	90.1	P	71 - 126
EPA 8270D	Terbufos-d10	96.3	P	59 - 149

Lab Sample ID: 1998028
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	67.1	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	53.1	P	34 - 101
EPA 8276	Decachlorobiphenyl	64.4	P	31 - 108
EPA 8276	PCNB	94.4	P	62 - 142

Lab Sample ID: 1998029
Field Sample ID: G3SD0067

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	105	P	71 - 126
EPA 8270D	Terbufos-d10	108	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A84395

Included Lab Sample IDs: 1997983, 1997985, 1997992, 1997993, 1997994, 1998001

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	101	P/P	90 - 115
Color (true)	101	96.4	P/P	90 - 115

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A84396

Included Lab Sample IDs: 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	99.5	99.0	P/P	95 - 105

Reference Method: SM 2120 B

Run ID: A84397

Included Lab Sample IDs: 1997984

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	100	99.7	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A84413

Included Lab Sample IDs: 1997989, 1997990, 1997991, 1997998, 1997999, 1998000, 1998003

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.2	99.2	P/P	90 - 110
O-Phosphate-P	99.5	99.2	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A84472

Included Lab Sample IDs: 1998035, 1998036, 1998037, 1998038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	97.0	99.2	P/P	90 - 110
Calcium	99.6	97.0	P/P	90 - 110
Iron	98.6	98.0	P/P	90 - 110
Iron	99.2	98.6	P/P	90 - 110
Magnesium	100	99.4	P/P	90 - 110
Magnesium	99.4	99.4	P/P	90 - 110
Potassium	99.0	99.3	P/P	90 - 110
Potassium	99.3	99.7	P/P	90 - 110
Sodium	99.2	99.8	P/P	90 - 110
Sodium	99.8	99.2	P/P	90 - 110
Zinc	99.4	99.3	P/P	90 - 110
Zinc	99.5	99.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A84476

Included Lab Sample IDs: 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Chloride	99.3	101	P/P	90 - 110
Sulfate	99.3	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A84476

Included Lab Sample IDs: 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sulfate	99.8	99.3	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A84488

Included Lab Sample IDs: 1998021, 1998023, 1998025

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	87.6	90.2	P/P	50 - 150
3-Hydroxycarbofuran	125	119	P/P	50 - 150
Acetaminophen	149	137	P/P	60 - 150
Aldicarb	101	91.5	P/P	60 - 150
Aldicarb Sulfone	112	105	P/P	50 - 150
Aldicarb Sulfoxide	98.2	92.0	P/P	50 - 150
Bentazon	108	104	P/P	50 - 150
Carbamazepine	146	131	P/P	60 - 150
Carbaryl	108	97.2	P/P	60 - 150
Carbofuran	121	122	P/P	50 - 150
Diuron	125	127	P/P	60 - 150
Fenuron	106	111	P/P	60 - 150
Fluridone	139	136	P/P	60 - 160
Hydrocodone	105	111	P/P	60 - 150
Imazapyr	104	98.3	P/P	50 - 150
Imidacloprid	120	109	P/P	60 - 150
Linuron	125	142	P/P	60 - 150
MCPP	95.0	92.6	P/P	50 - 150
Methiocarb	143	142	P/P	50 - 150
Methomyl	102	104	P/P	50 - 150
Oxamyl	103	111	P/P	50 - 150
Primidone	125	135	P/P	60 - 150
Propoxur	107	122	P/P	50 - 150
Pyraclostrobin	136	133	P/P	60 - 150
Triclopyr	98.9	97.9	P/P	50 - 160

Reference Method: SM 2320 B-97

Run ID: A84489

Included Lab Sample IDs: 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001

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

Reference Method: SM 4500 F-C-97

Run ID: A84489

Included Lab Sample IDs: 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	99.0	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A84493

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	100	100	P/P	90 - 110
NO2NO3-N	102	102	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84497

Included Lab Sample IDs: 1998035, 1998036, 1998037, 1998038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	99.5	P/P	90 - 110
Arsenic	99.5	99.1	P/P	90 - 110
Cadmium	98.9	98.7	P/P	90 - 110
Cadmium	99.7	98.9	P/P	90 - 110
Chromium	101	99.9	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Copper	97.7	97.7	P/P	90 - 110
Copper	99.0	97.7	P/P	90 - 110
Lead	98.1	97.4	P/P	90 - 110
Nickel	97.9	97.8	P/P	90 - 110
Nickel	98.9	97.9	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A84524

Included Lab Sample IDs: 1998021, 1998023

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Diuron	111	98.6	P/P	60 - 150
Imidacloprid	97.2	96.6	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A84525

Included Lab Sample IDs: 1998021, 1998023, 1998025

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	120	119	P/P	60 - 160
AMPA	106	107	P/P	60 - 160
Endothall	97.4	108	P/P	60 - 160
Glufosinate	98.4	98.1	P/P	60 - 160
Glyphosate	105	98.6	P/P	60 - 160
Sucralose	122	81.6	P/P	60 - 160
Sucralose	81.6	102	P/P	60 - 160

Reference Method: SM 5310 B-00

Run ID: A84530

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.0	95.1	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A84584

Included Lab Sample IDs: 1998026, 1998028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	101		P	80 - 120
Alpha-BHC	103		P	80 - 120
Alpha-Chlordane	99.0		P	80 - 120
Beta-BHC	92.0		P	80 - 120
Carbophenothion	89.4		P	80 - 120
Chlorothalonil	94.4		P	80 - 120
Cypermethrin	94.9		P	80 - 120
DDD-p,p'	100		P	80 - 120
DDE-p,p'	99.4		P	80 - 120
DDT-p,p'	107		P	80 - 120
Delta-BHC	102		P	80 - 120
Dicofol	93.2		P	80 - 120
Dieldrin	106		P	80 - 120
Endosulfan I	97.9		P	80 - 120
Endosulfan II	95.1		P	80 - 120
Endosulfan Sulfate	96.2		P	80 - 120
Endrin	102		P	80 - 120
Endrin Aldehyde	96.7		P	80 - 120
Endrin Ketone	95.8		P	80 - 120
Gamma-BHC	100		P	80 - 120
Gamma-Chlordane	96.9		P	80 - 120
Heptachlor	100		P	80 - 120
Heptachlor Epoxide	100		P	80 - 120
Methoxychlor	105		P	80 - 120
Mirex	94.9		P	80 - 120
Permethrin	93.0		P	80 - 120
Trifluralin	98.4		P	80 - 120

Reference Method: EPA 8270D

Run ID: A84612

Included Lab Sample IDs: 1998027, 1998029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	96.9		P	80 - 120
Alachlor	96.4		P	80 - 120
Ametryn	103		P	80 - 120
Atrazine	98.1		P	80 - 120
Atrazine Desethyl	102		P	80 - 120
Azinphos Methyl	97.9		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	96.1		P	80 - 120
Chlorpyrifos Methyl	96.3		P	80 - 120
Cyanazine	94.9		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	97.0		P	80 - 120
Disulfoton	95.2		P	80 - 120
EPTC	98.5		P	80 - 120
Ethion	94.4		P	80 - 120
Ethoprop	98.8		P	80 - 120
Fenamiphos	93.7		P	80 - 120
Fipronil	95.7		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A84612

Included Lab Sample IDs: 1998027, 1998029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fipronil Sulfide	95.5		P	80 - 120
Fipronil Sulfone	96.8		P	80 - 120
Fonofos	97.2		P	80 - 120
Hexazinone	95.2		P	80 - 120
Malathion	97.6		P	80 - 120
Metalaxyl	97.6		P	80 - 120
Metolachlor	102		P	80 - 120
Metribuzin	98.9		P	80 - 120
Mevinphos	94.9		P	80 - 120
Molinate	93.9		P	80 - 120
Parathion Ethyl	94.2		P	80 - 120
Parathion Methyl	94.9		P	80 - 120
Pendimethalin	101		P	80 - 120
Phorate	97.2		P	80 - 120
Prometon	98.4		P	80 - 120
Prometryn	96.3		P	80 - 120
Simazine	94.7		P	80 - 120
Terbufos	94.6		P	80 - 120
Terbutylazine	97.8		P	80 - 120

Reference Method: EPA 8270D

Run ID: A84616

Included Lab Sample IDs: 1998027, 1998029

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	97.7		P	80 - 120
Bromacil	99.0		P	80 - 120
Metalaxyl	101		P	80 - 120
Norflurazon	98.6		P	80 - 120
Simazine	95.3		P	80 - 120

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A84621

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995, 1997996, 1997997

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

Reference Method: EPA 8276

Run ID: A84649

Included Lab Sample IDs: 1998026, 1998028

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	94.0		P	80 - 120
Toxaphene	98.3		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A84650

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A84650

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	102	103	P/P	90 - 110
Ammonia-N	102	102	P/P	90 - 110
Ammonia-N	103	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A84663

Included Lab Sample IDs: 1998002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	100	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84664

Included Lab Sample IDs: 1998035, 1998036, 1998037

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Lead	98.8	99.4	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A84701

Included Lab Sample IDs: 1997986, 1997987, 1997988, 1997995

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	98.6	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A84733

Included Lab Sample IDs: 1997996, 1997997, 1998002

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	95.6	97.8	P/P	90 - 110
Kjeldahl Nitrogen	97.8	99.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A84822

Included Lab Sample IDs: 1998035, 1998036, 1998037, 1998038

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	102	94.6	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							3.19	
EPA 200.7 Rev. 4.4	Calcium	101		102	100				1.15
	Iron	104		106	103	104			1.02
	Magnesium	102		101	100				1.54
	Potassium	102		108	103	104			1.62
	Sodium	106		109	102	105			1.16
	Zinc	101		105	97.4	98.8			1.41
EPA 200.8 Rev. 5.4	Arsenic	102		101	102	101			0.943
	Cadmium	101		101	101	100			1.16
	Chromium	100		99.3	102	101			0.432
	Copper	97.7		95.3	95.0	94.5			0.551
	Lead	97.1		97.9	98.2	96.8			1.40
	Lead	98.5		101	101	99.3			0.511
	Nickel	100		98.6	97.6	97.5			0.179
	Silver	95.2		103	104	104			0.247
EPA 300.0 Rev. 2.1	Chloride	98.7		95.5	97.2			3.26	
	Sulfate	100		100	97.0			4.09	
EPA 350.1 Rev. 2.0	Ammonia-N	104		105	106				0.457
	Ammonia-N	104		103	102				0.462
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	108		98.8	107				4.25
	Kjeldahl Nitrogen	93.8							2.15
EPA 353.2 Rev. 2.0	NO2NO3-N	100		98.6	98.6				0.0
	NO2NO3-N	100		97.0	97.5				0.299
EPA 365.1 Rev. 2.0	Total-P	99.7		96.7	100				3.35
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.8		98.8	99.2				0.404
	O-Phosphate-P	100		97.4	97.7				0.241
EPA 8270D	Acetochlor	99.5	101	89.0	94.7		1.62		6.20
	Alachlor	95.8	90.2	82.6	89.0		5.94		7.52
	Aldrin	52.3	55.2	64.2	62.8		5.40		2.15
	Alpha-BHC	85.8	94.8	94.7	98.9		9.99		4.43
	Alpha-Chlordane	83.8	91.0	96.1	92.4		8.26		3.92
	Ametryn	94.9	114	122	109		18.5		11.2
	Atrazine	96.6	102				5.90		5.54
	Atrazine Desethyl	101	112				10.5		10.2
	Azinphos Methyl	102	111	94.3	90.4		8.56		4.23
	Beta-BHC	108	105	102	101		2.37		0.446
	Bromacil	91.0	90.6				0.422		5.03
	Butylate	62.6	65.4	59.3	69.6		4.27		15.9
	Carbophenothion	83.4	88.1	94.6	89.2		5.53		5.83
	Chlorothalonil	71.1	91.0	105	94.3		24.5		10.6
	Chlorpyrifos Ethyl	82.8	87.3	84.5	93.1		5.26		9.69
	Chlorpyrifos Methyl	91.7	96.0	84.4	88.3		4.61		4.54
	Cyanazine	140	154	96.6	101		9.08		4.29
	Cypermethrin	83.9	88.2	95.6	85.0		4.98		11.7
	DDD-p,p'	99.8	109	108	106		9.16		2.15
	DDE-p,p'	86.1	98.2	95.7	91.1		13.1		4.92
	DDT-p,p'	90.5	97.9	97.7	96.0		7.92		1.76
	Delta-BHC	111	125	131	147		11.8		12.1
	Demeton	77.2	73.1	103	105		5.48		2.65
	Diazinon	110	103	105	111		6.71		5.40
	Dicofol	110	104	103	111		5.26		7.96
	Dieldrin	84.2	103	95.7	105		20.4		9.00
	Disulfoton	87.1	82.3	101	105		5.67		3.66
	Endosulfan I	96.5	97.9	109	103		1.37		5.29

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision SMP	MS
EPA 8270D	Endosulfan II	105	112	120	101	6.47		17.2
	Endosulfan Sulfate	95.3	104	107	105	8.63		2.04
	Endrin	92.9	83.8	111	114	10.3		2.90
	Endrin Aldehyde	95.7	108	98.1	104	11.8		5.53
	Endrin Ketone	93.1	98.7	114	112	5.88		1.63
	EPTC	61.0	60.8	51.9	65.0	0.442		22.5
	Ethion	55.9	67.7	24.8	41.9	19.1		51.5
	Ethoprop	83.2	68.3	75.3	73.7	19.7		2.23
	Fenamiphos	86.6	77.3	59.8	57.6	11.4		3.81
	Fipronil	95.8	98.0	82.7	85.0	2.24		2.70
	Fipronil Sulfide	83.4	86.0	81.5	94.1	3.16		14.3
	Fipronil Sulfone	76.3	76.2	69.5	74.8	0.0754		7.43
	Fonofos	96.6	105	107	112	8.22		3.89
	Gamma-BHC	99.4	101	110	110	1.28		0.102
	Gamma-Chlordane	81.2	88.0	91.9	89.1	7.95		3.07
	Heptachlor	68.7	69.0	79.0	74.3	0.490		6.11
	Heptachlor Epoxide	85.4	92.1	98.9	95.9	7.53		3.06
	Hexazinone	97.1	102	101	104	5.36		1.78
	Malathion	88.3	88.0	86.7	85.9	0.264		0.891
	Metalaxyl	94.6	98.3			3.81		9.02
	Methoxychlor	106	106	112	116	0.731		3.53
	Metolachlor	90.1	94.9			5.19		2.95
	Metribuzin	147	132	149	150	10.6		0.571
	Mevinphos	88.7	92.8	101	112	4.56		10.4
	Mirex	72.2	79.1	78.2	77.0	9.15		1.54
	Molinate	58.2	67.9	47.9	54.6	15.4		13.1
	Norflurazon	91.2	94.9			3.94		9.92
	Parathion Ethyl	92.2	96.8	97.3	108	4.94		10.8
	Parathion Methyl	103	104	110	118	1.31		7.72
	Pendimethalin	108	115	122	130	5.78		5.77
	Permethrin	81.1	87.8	85.4	87.9	7.93		2.84
	Phorate	80.3	89.8	104	107	11.2		3.06
	Prometon	86.3	84.1	59.5	82.5	2.51		32.3
	Prometryn	91.8	95.0	84.5	90.0	3.32		6.29
	Simazine	96.9	99.5			2.58		11.7
	Terbufos	93.7	102	115	117	8.35		2.20
	Terbutylazine	94.4	99.2	94.3	97.2	5.01		2.93
	Trifluralin	83.4	86.3	88.0	86.7	3.43		1.42
EPA 8276	Chlordane	87.6	100	104		13.5		
	Toxaphene	77.3	81.5	85.2		5.31		
EPA 8321B	2,4-D	88.9		55.0	68.1			9.61
	3-Hydroxycarbofuran	97.1		67.3	66.3			1.53
	Acesulfame K	109		136	125			8.46
	Acetaminophen	114		101	114			11.7
	Aldicarb	71.7		32.5	41.8			25.1
	Aldicarb Sulfone	99.3		71.1	64.8			9.29
	Aldicarb Sulfoxide	86.4		28.3	28.8			1.75
	AMPA	96.8		97.7	93.1			2.24
	Bentazon	86.5		59.5	67.8			13.0
	Carbamazepine	103		61.7	67.3			8.72
	Carbaryl	60.1		33.8	36.9			8.68
	Carbofuran	79.3		45.0	55.0			20.0
	Diuron	74.5		43.4	44.9			1.72
	Endothall	99.9		75.0	69.1			8.19

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Fenuron	107	73.9	80.6		8.73
	Fluridone	88.5	67.4	65.8		2.33
	Glufosinate	96.3	120	137		12.9
	Glyphosate	105	83.1	95.3		6.40
	Hydrocodone	97.6	92.1	93.0		1.02
	Imazapyr	87.9	91.2	102		7.02
	Imidacloprid	123	160	188		14.6
	Linuron	77.4	53.0	52.2		1.49
	MCPP	91.5	108	109		0.875
	Methiocarb	81.4	57.2	67.2		16.0
	Methomyl	92.7	54.2	57.9		6.67
	Oxamyl	93.8	59.4	67.2		12.3
	Primidone	105	118	123		4.07
	Propoxur	86.8	47.3	47.0		0.754
	Pyraclostrobin	97.2	59.0	56.8		3.79
	Sucralose	82.3	83.8	82.7		1.34
	Triclopyr	93.4	105	113		7.72
SM 2120 B	Color (true)					3.42
	Color (true)					1.64
SM 2320 B-97	Total Alkalinity	103				0.781
SM 2540 C-97	TDS					2.29
	TDS					8.10
	TDS					6.09
SM 4500 F-C-97	Fluoride	97.3	97.0	98.5		0.946
SM 5310 B-00	Organic Carbon	97.0	99.2	101		0.927

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1998035, 1998036, 1998037, 1998038
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1998035, 1998036, 1998037, 1998038
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1997989, 1997990, 1997991, 1997998, 1997999, 1998000, 1998003
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1998026, 1998028
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1998027, 1998029
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1998026, 1998028
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	1998022, 1998024

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 8321B / E31780 SM 2120 B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS True Color measured at 450 nm	1998021, 1998023, 1998025 1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1997986, 1997987, 1997988, 1997995, 1997996, 1997997, 1998002

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	06/06/2018			06/06/2018 17:13	William L. Brown IV	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
EPA 200.7 Rev. 4.4	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/08/2018 20:41	Betina Topolski	1998038
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/08/2018 21:22	Betina Topolski	1998035
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/08/2018 21:28	Betina Topolski	1998036
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/08/2018 22:00	Betina Topolski	1998037
EPA 200.8 Rev. 5.4	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 14:51	Nadine Brooks	1998038
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 16:56	Nadine Brooks	1998035
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 17:06	Nadine Brooks	1998036
	06/06/2018	06/07/2018 18:15	Elliott D. Healy	06/11/2018 17:15	Nadine Brooks	1998037
	06/06/2018	06/14/2018 14:00	Elliott D. Healy	06/18/2018 18:12	Robert K Palmer	1998035
	06/06/2018	06/14/2018 14:00	Elliott D. Healy	06/18/2018 18:17	Robert K Palmer	1998036
	06/06/2018	06/14/2018 14:00	Elliott D. Healy	06/18/2018 18:23	Robert K Palmer	1998037
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 14:01	Robert K Palmer	1998038
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 14:23	Robert K Palmer	1998035
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 14:29	Robert K Palmer	1998036
	06/06/2018	06/21/2018 17:05	Elliott D. Healy	06/25/2018 14:34	Robert K Palmer	1998037
EPA 300.0 Rev. 2.1	06/06/2018			06/08/2018 23:39	Lipi Saha	1997983
	06/06/2018			06/09/2018 00:16	Lipi Saha	1997984
	06/06/2018			06/09/2018 00:28	Lipi Saha	1997985
	06/06/2018			06/09/2018 00:39	Lipi Saha	1997992
	06/06/2018			06/09/2018 00:52	Lipi Saha	1997993
	06/06/2018			06/09/2018 01:04	Lipi Saha	1997994
	06/06/2018			06/09/2018 01:16	Lipi Saha	1998001
EPA 350.1 Rev. 2.0	06/06/2018			06/15/2018 11:07	Ping Hua	1997997
	06/06/2018			06/15/2018 11:18	Ping Hua	1997988
	06/06/2018			06/15/2018 11:19	Ping Hua	1997995
	06/06/2018			06/15/2018 11:21	Ping Hua	1997996
	06/06/2018			06/15/2018 11:22	Ping Hua	1997987
	06/06/2018			06/15/2018 11:30	Ping Hua	1998002
	06/06/2018			06/15/2018 12:25	Ping Hua	1997986
EPA 351.2 Rev. 2.0	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/19/2018 15:21	Joseph Suarez	1997986
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/19/2018 15:22	Joseph Suarez	1997987
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/19/2018 15:24	Joseph Suarez	1997988
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/19/2018 15:26	Joseph Suarez	1997995
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/20/2018 16:05	Joseph Suarez	1997996
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/20/2018 16:06	Joseph Suarez	1997997
	06/06/2018	06/14/2018 16:00	Adrian Shelby	06/20/2018 16:11	Joseph Suarez	1998002
EPA 353.2 Rev. 2.0	06/06/2018			06/11/2018 12:17	Lauren Bottorf	1997988
	06/06/2018			06/11/2018 12:24	Lauren Bottorf	1997995

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 353.2 Rev. 2.0	06/06/2018			06/11/2018 12:30	Lauren Bottorf	1998002
	06/06/2018			06/11/2018 12:33	Lauren Bottorf	1997996
	06/06/2018			06/11/2018 12:34	Lauren Bottorf	1997997
	06/06/2018			06/11/2018 14:37	Lauren Bottorf	1997986
	06/06/2018			06/11/2018 14:38	Lauren Bottorf	1997987
EPA 365.1 Rev. 2.0	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:52	Beverly Y. Sanders	1997986
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:53	Beverly Y. Sanders	1997987
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:54	Beverly Y. Sanders	1997988
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:55	Beverly Y. Sanders	1997995
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:56	Beverly Y. Sanders	1997996
	06/06/2018	06/13/2018 11:22	Sima Feizi	06/15/2018 11:57	Beverly Y. Sanders	1997997
EPA 365.1 Rev. 2.0 dissolved	06/06/2018	06/13/2018 11:22	Sima Feizi	06/18/2018 11:05	Beverly Y. Sanders	1998002
	06/06/2018			06/06/2018 17:36	Megan Treadwell	1997989
	06/06/2018			06/06/2018 17:41	Megan Treadwell	1997990
	06/06/2018			06/06/2018 17:42	Megan Treadwell	1997991, 1997998
	06/06/2018			06/06/2018 17:43	Megan Treadwell	1997999
	06/06/2018			06/06/2018 17:44	Megan Treadwell	1998000
EPA 8270D	06/06/2018			06/06/2018 17:45	Megan Treadwell	1998003
	06/06/2018	06/08/2018 08:42	Rasheda Ghaffari	06/12/2018 14:50	Vandana T. Nagar	1998027
	06/06/2018	06/08/2018 08:42	Rasheda Ghaffari	06/12/2018 15:14	Vandana T. Nagar	1998029
	06/06/2018	06/08/2018 08:42	Rasheda Ghaffari	06/13/2018 16:28	Vandana T. Nagar	1998027
	06/06/2018	06/08/2018 08:42	Rasheda Ghaffari	06/13/2018 16:52	Vandana T. Nagar	1998029
	06/06/2018	06/11/2018 09:00	Fe-Val Siddell	06/13/2018 18:38	Dinesh Mishra	1998026
EPA 8276	06/06/2018	06/11/2018 09:00	Fe-Val Siddell	06/13/2018 19:10	Dinesh Mishra	1998028
	06/06/2018	06/11/2018 09:00	Fe-Val Siddell	06/15/2018 17:06	Dinesh Mishra	1998026
	06/06/2018	06/11/2018 09:00	Fe-Val Siddell	06/15/2018 18:02	Dinesh Mishra	1998028
EPA 8321B	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/09/2018 18:38	Juyoung Kim	1998022
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/09/2018 19:13	Juyoung Kim	1998024
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/09/2018 23:49	Juyoung Kim	1998021
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/10/2018 00:24	Juyoung Kim	1998023
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/10/2018 00:59	Juyoung Kim	1998025
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/11/2018 21:03	Juyoung Kim	1998021
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/11/2018 22:12	Juyoung Kim	1998023
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 09:44	Juyoung Kim	1998023
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 14:22	Juyoung Kim	1998021
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 14:56	Juyoung Kim	1998023
	06/06/2018	06/07/2018 12:00	Hoor Shaik	06/12/2018 15:31	Juyoung Kim	1998025
	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/07/2018 22:46	Mohammad Ghaffari	1998021
	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/08/2018 01:15	Mohammad Ghaffari	1998023
	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/08/2018 01:34	Mohammad Ghaffari	1998025

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Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/08/2018 21:28	Mohammad Ghaffari	1998023
	06/06/2018	06/07/2018 16:00	Hoor Shaik	06/08/2018 21:46	Mohammad Ghaffari	1998025
SM 2120 B	06/06/2018			06/06/2018 16:11	Julia Storbeck	1997994
	06/06/2018			06/06/2018 16:12	Julia Storbeck	1998001
	06/06/2018			06/06/2018 16:46	Julia Storbeck	1997983
	06/06/2018			06/06/2018 16:47	Julia Storbeck	1997985
	06/06/2018			06/06/2018 16:48	Julia Storbeck	1997992
	06/06/2018			06/06/2018 16:49	Julia Storbeck	1997993
	06/06/2018			06/06/2018 17:11	Julia Storbeck	1997984
SM 2320 B-97	06/06/2018			06/08/2018 05:42	Dale L. Simmons	1997983
	06/06/2018			06/08/2018 06:10	Dale L. Simmons	1997984
	06/06/2018			06/08/2018 06:20	Dale L. Simmons	1997985
	06/06/2018			06/08/2018 06:30	Dale L. Simmons	1997992
	06/06/2018			06/08/2018 06:40	Dale L. Simmons	1997993
	06/06/2018			06/08/2018 06:50	Dale L. Simmons	1997994
	06/06/2018			06/08/2018 06:59	Dale L. Simmons	1998001
SM 2540 C-97	06/06/2018			06/07/2018 17:38	Yijie Li	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 2540 D-97	06/06/2018			06/07/2018 17:38	Yijie Li	1997983, 1997984, 1997985, 1997992, 1997993, 1997994, 1998001
SM 4500 F-C-97	06/06/2018			06/08/2018 05:34	Dale L. Simmons	1997983
	06/06/2018			06/08/2018 06:10	Dale L. Simmons	1997984
	06/06/2018			06/08/2018 06:20	Dale L. Simmons	1997985
	06/06/2018			06/08/2018 06:30	Dale L. Simmons	1997992
	06/06/2018			06/08/2018 06:40	Dale L. Simmons	1997993
	06/06/2018			06/08/2018 06:50	Dale L. Simmons	1997994
	06/06/2018			06/08/2018 06:59	Dale L. Simmons	1998001
SM 5310 B-00	06/06/2018			06/12/2018 04:07	Megan Treadwell	1997986
	06/06/2018			06/12/2018 04:25	Megan Treadwell	1997987
	06/06/2018			06/12/2018 04:40	Megan Treadwell	1997988
	06/06/2018			06/12/2018 04:58	Megan Treadwell	1997995
	06/06/2018			06/12/2018 05:13	Megan Treadwell	1997996
	06/06/2018			06/12/2018 05:29	Megan Treadwell	1997997
	06/06/2018			06/12/2018 05:46	Megan Treadwell	1998002