

Chemical Analysis Report

SE-DIST-2019-05-14-02

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

Event Description: **SMP-LW Drainage**
Request ID: **RQ-2019-05-06-45**
Customer: **SE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FL Dept. of Environmental Protection
2199 South Rock Road
Fort Pierce, FL 34945
Attn: Drew Liddick

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 05-JUN-2019 14:02



Case Narrative

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

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

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: E-3 @ Palmetto Park

Collection Date/Time: 05/13/2019 12:00

Field ID: G3SE0034

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085909	EPA 180.1 Rev. 2.0	Turbidity	0.90		NTU	P363957	
	EPA 300.0 Rev. 2.1	Chloride	49		mg Cl/L	P364112	
		Sulfate	27		mg SO4/L	P364114	
		Color (true)	41		PCU	P363941	
	SM 2120 B	Total Alkalinity	151		mg CaCO3/L	P364261	
	SM 2540 C-97	TDS	276		mg/L	P364390	
	SM 2540 D-97	TSS	2	I	mg/L	P364396	
	SM 4500 F-C-97	Fluoride	0.19		mg F/L	P364266	
2085910	EPA 350.1 Rev. 2.0	Ammonia-N	0.014		mg N/L	P364153	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.75		mg N/L	P364295	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.017		mg N/L	P364214	
	EPA 365.1 Rev. 2.0	Total-P	0.047		mg P/L	P364187	
	SM 5310 B-00	Organic Carbon	10		mg C/L	P364410	
2085911	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.028		mg P/L	P363937	
2085928	EPA 200.7 Rev. 4.4	Barium	15.2		ug/L	P364002	
		Calcium	62.2		mg/L	P364002	
		Iron	30	U	ug/L	P364002	
		Magnesium	3.90		mg/L	P364002	
		Potassium	4.6		mg/L	P364002	
		Sodium	29.0		mg/L	P364002	
		Zinc	5.0	U	ug/L	P364002	
	EPA 200.8 Rev. 5.4	Aluminum	13	I	ug/L	P364002	
		Antimony	0.15	I	ug/L	P364002	
		Arsenic	1.91		ug/L	P364002	
		Boron**	43.4		ug/L	P364002	
		Cadmium	0.020	U	ug/L	P364002	
		Chromium	0.49	I	ug/L	P364002	
		Copper	4.24		ug/L	P364002	
		Lead	0.20	U	ug/L	P364002	
		Nickel	0.50	U	ug/L	P364002	
		Selenium	0.20	U	ug/L	P364002	
		Silver	0.010	U	ug/L	P364002	
		Thallium	0.10	U	ug/L	P364002	

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: E-2 @ Glades

Collection Date/Time: 05/13/2019 12:25

Field ID: G3SE0035

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085906	EPA 180.1 Rev. 2.0	Turbidity	2.8		NTU	P363957	
	EPA 300.0 Rev. 2.1	Chloride	32		mg Cl/L	P364112	
		Sulfate	17		mg SO4/L	P364114	
		Color (true)	39		PCU	P363941	
	SM 2120 B	Total Alkalinity	143		mg CaCO3/L	P364261	
	SM 2540 C-97	TDS	233		mg/L	P364390	
	SM 2540 D-97	TSS	4	I	mg/L	P364396	
	SM 4500 F-C-97	Fluoride	0.20		mg F/L	P364266	
2085907	EPA 350.1 Rev. 2.0	Ammonia-N	0.006		mg N/L	P364153	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.0		mg N/L	P364295	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.005	I	mg N/L	P364214	
	EPA 365.1 Rev. 2.0	Total-P	0.077		mg P/L	P364187	
	SM 5310 B-00	Organic Carbon	11		mg C/L	P364410	
2085908	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.049		mg P/L	P363937	
2085927	EPA 200.7 Rev. 4.4	Barium	11.3		ug/L	P364002	
		Calcium	55.8		mg/L	P364002	
		Iron	30	U	ug/L	P364002	
		Magnesium	4.41		mg/L	P364002	
		Potassium	5.3		mg/L	P364002	
		Sodium	21.7		mg/L	P364002	
		Zinc	5.0	U	ug/L	P364002	
	EPA 200.8 Rev. 5.4	Aluminum	18	I	ug/L	P364002	
		Antimony	0.14	I	ug/L	P364002	
		Arsenic	2.71		ug/L	P364002	
		Boron**	41.0		ug/L	P364002	
		Cadmium	0.020	U	ug/L	P364002	
		Chromium	0.40	U	ug/L	P364002	
		Copper	3.06		ug/L	P364002	
		Lead	0.20	U	ug/L	P364002	
		Nickel	0.50	U	ug/L	P364002	
		Selenium	0.20	U	ug/L	P364002	
		Silver	0.010	U	ug/L	P364002	
		Thallium	0.10	U	ug/L	P364002	

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: E-1 West @ Glades

Collection Date/Time: 05/13/2019 13:00

Field ID: G3SE0033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085903	EPA 180.1 Rev. 2.0	Turbidity	1.6		NTU	P363957	
	EPA 300.0 Rev. 2.1	Chloride	41		mg Cl/L	P364112	
		Sulfate	31		mg SO4/L	P364114	
	SM 2120 B	Color (true)	46		PCU	P363941	
	SM 2320 B-97	Total Alkalinity	193		mg CaCO3/L	P364261	
	SM 2540 C-97	TDS	312		mg/L	P364390	
	SM 2540 D-97	TSS	3	I	mg/L	P364396	
	SM 4500 F-C-97	Fluoride	0.30		mg F/L	P364266	
2085904	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P364153	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P364294	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.013		mg N/L	P364214	
	EPA 365.1 Rev. 2.0	Total-P	0.29		mg P/L	P364187	
	SM 5310 B-00	Organic Carbon	13		mg C/L	P364410	
2085905	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.24		mg P/L	P363937	
2085919	EPA 8321B	Aldicarb	0.020	U	ug/L	P363978	
		Aldicarb Sulfone	0.0020	U	ug/L	P363978	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P363978	MS
		Carbaryl	0.0020	U	ug/L	P363978	
		Carbofuran	0.0020	U	ug/L	P363978	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P363978	
		Methiocarb	0.0020	U	ug/L	P363978	
		Methomyl	0.0020	U	ug/L	P363978	
		Oxamyl	0.0020	U	ug/L	P363978	
		Propoxur	0.0020	U	ug/L	P363978	
2085920		2,4-D	0.015		ug/L	P363904	
		Acesulfame K**	0.10	U	ug/L	P364011	
		AMPA**	1.0		ug/L	P364011	MS
		Sucralose**	0.28		ug/L	P364011	
		Acetaminophen**	0.0080	U	ug/L	P363904	
		Endothall**	0.25	U	ug/L	P364011	
		Glufosinate**	0.10	U	ug/L	P364011	
		Bentazon	0.69		ug/L	P363904	
		Glyphosate**	1.6		ug/L	P364011	
		Carbamazepine**	8.0E-04	U	ug/L	P363904	
		Diuron	0.0030	I	ug/L	P363904	
		Fenuron	0.016	U	ug/L	P363904	
		Fluridone**	0.26		ug/L	P363904	
		Imazapyr**	0.16		ug/L	P363904	
		Hydrocodone**	0.0020	U	ug/L	P363904	
		Ibuprofen**	0.020	U	ug/L	P363904	
		Imidacloprid	0.014		ug/L	P363904	
		Linuron	0.0040	U	ug/L	P363904	
		MCP	0.0020	U	ug/L	P363904	MS

Field ID: G3SE0033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085920	EPA 8321B	Naproxen**	0.0080	U	ug/L	P363904	
		Primidone**	0.0040	U	ug/L	P363904	
		Pyraclostrobin**	0.0020	U	ug/L	P363904	RPD
		Triclopyr**	0.0040	U	ug/L	P363904	
2085923	EPA 8270D	Aldrin	4.2	U	ng/L	P364035	
		Alpha-BHC	2.1	U	ng/L	P364035	
		Alpha-Chlordane	1.1	U	ng/L	P364035	
		Beta-BHC	11	U	ng/L	P364035	
		Bifenthrin**	4.2	U	ng/L	P364035	
		Delta-BHC	11	U	ng/L	P364035	
		Gamma-BHC	11	U	ng/L	P364035	
		Carbophenothion	13	UJ	ng/L	P364035	CCV
		Chlorothalonil	2.1	UJ	ng/L	P364035	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P364035	
		Cypermethrin	21	U	ng/L	P364035	
		DDD-p,p'	8.4	U	ng/L	P364035	
		DDE-p,p'	8.4	U	ng/L	P364035	
		DDT-p,p'	11	U	ng/L	P364035	
		Dicofol	32	U	ng/L	P364035	
		Dieldrin	4.2	U	ng/L	P364035	
		Endosulfan I	4.2	U	ng/L	P364035	
		Endosulfan II	4.2	U	ng/L	P364035	
		Endosulfan Sulfate	2.1	U	ng/L	P364035	
		Endrin	2.1	U	ng/L	P364035	
		Endrin Aldehyde	2.1	U	ng/L	P364035	
		Endrin Ketone	2.1	U	ng/L	P364035	
		Ethalfuralin**	3.2	U	ng/L	P364035	
		Gamma-Chlordane	1.1	U	ng/L	P364035	
		Heptachlor	1.6	U	ng/L	P364035	
		Heptachlor Epoxide	2.1	U	ng/L	P364035	
		Hexachlorobenzene**	2.1	U	ng/L	P364035	
		Methoxychlor	4.2	U	ng/L	P364035	
		Mirex	2.1	U	ng/L	P364035	
		Permethrin	11	U	ng/L	P364035	
		Trans-Nonachlor**	1.1	U	ng/L	P364035	
		Trifluralin	2.6	U	ng/L	P364035	
		Chlordane	5.3	U	ng/L	P364035	
		Toxaphene	32	U	ng/L	P364035	
2085924	EPA 8270E	Acetochlor	0.26	U	ng/L	P364041	
		Alachlor	0.26	U	ng/L	P364041	
		Ametryn	5.2	J	ng/L	P364041	RPD
		Atrazine	53		ng/L	P364041	
		Atrazine Desethyl	4.9	I	ng/L	P364041	
		Azinphos Methyl	5.2	U	ng/L	P364041	
		Bromacil	0.52	U	ng/L	P364041	

Field ID: G3SE0033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085924	EPA 8270E	Butylate	0.41	U	ng/L	P364041	RPD
		Chlorpyrifos Ethyl	0.26	U	ng/L	P364041	
		Chlorpyrifos Methyl	0.10	U	ng/L	P364041	
		Cyanazine	3.4	U	ng/L	P364041	
		Demeton	7.3	U	ng/L	P364041	
		Diazinon	0.13	U	ng/L	P364041	
		Dimethenamid**	0.10	U	ng/L	P364341	
		Disulfoton	0.52	U	ng/L	P364041	
		Dithiopyr**	0.12	I	ng/L	P364041	
		EPTC	1.3	U	ng/L	P364041	RPD
		Ethion	0.16	U	ng/L	P364041	
		Ethoprop	0.10	U	ng/L	P364041	
		Fenamiphos	0.52	UJ	ng/L	P364041	LCS, RPD
		Fipronil	9.3		ng/L	P364041	
		Fipronil Desulfinyl**	9.3		ng/L	P364041	
		Fipronil Sulfide	4.5		ng/L	P364041	MS
		Fipronil Sulfone	2.8		ng/L	P364041	RPD
		Fonofos	0.21	U	ng/L	P364041	
		Hexazinone	2.8	J	ng/L	P364041	MS, RPD
		Malathion	0.36	U	ng/L	P364041	
		Metalaxyl	6.9	J	ng/L	P364041	LCS, RPD
		Metolachlor	9.8		ng/L	P364041	
		Metribuzin	0.78	U	ng/L	P364041	
		Mevinphos	0.52	UJ	ng/L	P364041	RPD
		Molinate	0.31	U	ng/L	P364041	
		Norflurazon	0.52	UJ	ng/L	P364041	RPD
		Oxadiazon**	3.8		ng/L	P364041	
		Parathion Ethyl	0.26	U	ng/L	P364041	
		Parathion Methyl	0.57	U	ng/L	P364041	
		Pendimethalin	1.0	U	ng/L	P364041	
		Phorate	0.26	U	ng/L	P364041	
		Prodiamine**	0.18	U	ng/L	P364041	
		Prometon	0.93	UJ	ng/L	P364041	LCS, MS, RPD
		Prometryn	0.21	U	ng/L	P364041	
		Simazine	0.52	U	ng/L	P364041	
		Tebuconazole**	2.3	J	ng/L	P364041	RPD
		Terbufos	0.10	U	ng/L	P364041	
		Terbuthylazine	0.44	U	ng/L	P364041	
2085926	EPA 200.7 Rev. 4.4	Barium	14.7		ug/L	P364002	
		Calcium	74.7		mg/L	P364002	
		Iron	32	I	ug/L	P364002	
		Magnesium	5.87		mg/L	P364002	
		Potassium	8.4		mg/L	P364002	
		Sodium	23.5		mg/L	P364002	

Field ID: G3SE0033

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085926	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P364002	
	EPA 200.8 Rev. 5.4	Aluminum	5.9	I	ug/L	P364002	
		Antimony	0.14	I	ug/L	P364002	
		Arsenic	1.84		ug/L	P364002	
		Boron**	62.2		ug/L	P364002	
		Cadmium	0.020	U	ug/L	P364002	
		Chromium	0.42	I	ug/L	P364002	
		Copper	1.20		ug/L	P364002	
		Lead	0.20	U	ug/L	P364002	
		Nickel	0.50	U	ug/L	P364002	
		Selenium	0.20	U	ug/L	P364002	
		Silver	0.010	U	ug/L	P364002	
		Thallium	0.10	U	ug/L	P364002	

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 8270E: MS accuracies for atrazine, dimethenamid, tebuconazole, fipronil, norflurazon, and bromacil 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: E-2 West @ Clint Moore

Collection Date/Time: 05/13/2019 13:40

Field ID: G3SE0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085897	EPA 180.1 Rev. 2.0	Turbidity	2.3	A	NTU	P363957	
	EPA 300.0 Rev. 2.1	Chloride	39		mg Cl/L	P364112	
		Sulfate	18		mg SO4/L	P364114	
	SM 2120 B	Color (true)	57		PCU	P363941	
	SM 2320 B-97	Total Alkalinity	147		mg CaCO3/L	P364261	
	SM 2540 C-97	TDS	262	A	mg/L	P364390	
	SM 2540 D-97	TSS	4	IA	mg/L	P364396	
	SM 4500 F-C-97	Fluoride	0.20		mg F/L	P364266	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.017		mg N/L	P364153	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P364294	
2085898	EPA 353.2 Rev. 2.0	NO2NO3-N	0.010		mg N/L	P364213	
	EPA 365.1 Rev. 2.0	Total-P	0.16		mg P/L	P364187	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P364410	
	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.11		mg P/L	P363937	
	EPA 8321B	Aldicarb	0.020	U	ug/L	P363978	
2085899		Aldicarb Sulfone	0.0020	U	ug/L	P363978	
		Aldicarb Sulfoxide	0.0020	U	ug/L	P363978	MS
		Carbaryl	0.0020	U	ug/L	P363978	
		Carbofuran	0.0020	U	ug/L	P363978	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P363978	
		Methiocarb	0.0020	U	ug/L	P363978	
		Methomyl	0.0020	U	ug/L	P363978	
		Oxamyl	0.0020	U	ug/L	P363978	
		Propoxur	0.0020	U	ug/L	P363978	
		2,4-D	0.024		ug/L	P363904	
2085918		Acesulfame K**	0.10	U	ug/L	P364011	
		AMPA**	0.59		ug/L	P364011	MS
		Sucralose**	0.42		ug/L	P364011	
		Acetaminophen**	0.0080	U	ug/L	P363904	
		Endothall**	0.25	U	ug/L	P364011	
		Glufosinate**	0.10	U	ug/L	P364011	
		Bentazon	0.11		ug/L	P363904	
		Glyphosate**	0.58		ug/L	P364011	
		Carbamazepine**	8.0E-04	U	ug/L	P363904	
		Diuron	0.0040	I	ug/L	P363904	
		Fenuron	0.016	U	ug/L	P363904	
		Fluridone**	1.3		ug/L	P363904	
		Imazapyr**	0.16		ug/L	P363904	
		Hydrocodone**	0.0020	U	ug/L	P363904	
		Ibuprofen**	0.020	U	ug/L	P363904	
		Imidacloprid	0.24		ug/L	P363904	
		Linuron	0.0040	U	ug/L	P363904	
		MCP	0.0033	I	ug/L	P363904	MS

Field ID: G3SE0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085918	EPA 8321B	Naproxen**	0.0080	U	ug/L	P363904	
		Primidone**	0.0040	U	ug/L	P363904	
		Pyraclostrobin**	0.0020	U	ug/L	P363904	RPD
		Triclopyr**	0.0040	U	ug/L	P363904	
2085921	EPA 8270D	Aldrin	4.3	U	ng/L	P364035	
		Alpha-BHC	2.1	U	ng/L	P364035	
		Alpha-Chlordane	1.1	U	ng/L	P364035	
		Beta-BHC	11	U	ng/L	P364035	
		Bifenthrin**	4.3	U	ng/L	P364035	
		Delta-BHC	11	U	ng/L	P364035	
		Gamma-BHC	11	U	ng/L	P364035	
		Carbophenothion	13	UJ	ng/L	P364035	CCV
		Chlorothalonil	2.1	UJ	ng/L	P364035	CCV
		Cis-Nonachlor**	1.1	U	ng/L	P364035	
		Cypermethrin	21	U	ng/L	P364035	
		DDD-p,p'	8.5	U	ng/L	P364035	
		DDE-p,p'	8.5	U	ng/L	P364035	
		DDT-p,p'	11	U	ng/L	P364035	
		Dicofol	32	U	ng/L	P364035	
		Dieldrin	4.3	U	ng/L	P364035	
		Endosulfan I	4.3	U	ng/L	P364035	
		Endosulfan II	4.3	U	ng/L	P364035	
		Endosulfan Sulfate	2.1	U	ng/L	P364035	
		Endrin	2.1	U	ng/L	P364035	
		Endrin Aldehyde	2.1	U	ng/L	P364035	
		Endrin Ketone	2.1	U	ng/L	P364035	
		Ethalfuralin**	3.2	U	ng/L	P364035	
		Gamma-Chlordane	1.1	U	ng/L	P364035	
		Heptachlor	1.6	U	ng/L	P364035	
		Heptachlor Epoxide	2.1	U	ng/L	P364035	
		Hexachlorobenzene**	2.1	U	ng/L	P364035	
		Methoxychlor	4.3	U	ng/L	P364035	
		Mirex	2.1	U	ng/L	P364035	
		Permethrin	11	U	ng/L	P364035	
		Trans-Nonachlor**	1.1	U	ng/L	P364035	
		Trifluralin	2.7	U	ng/L	P364035	
		Chlordane	5.3	U	ng/L	P364035	
		Toxaphene	32	U	ng/L	P364035	
2085922	EPA 8270E	Acetochlor	0.26	U	ng/L	P364041	
		Alachlor	0.26	U	ng/L	P364041	
		Ametryn	4.0	J	ng/L	P364041	RPD
		Atrazine	280		ng/L	P364041	
		Atrazine Desethyl	21		ng/L	P364041	
		Azinphos Methyl	5.2	U	ng/L	P364041	
		Bromacil	0.52	U	ng/L	P364041	

Field ID: G3SE0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085922	EPA 8270E	Butylate	0.42	U	ng/L	P364041	RPD
		Chlorpyrifos Ethyl	0.26	U	ng/L	P364041	
		Chlorpyrifos Methyl	0.10	U	ng/L	P364041	
		Cyanazine	3.4	U	ng/L	P364041	
		Demeton	7.3	U	ng/L	P364041	
		Diazinon	0.13	U	ng/L	P364041	
		Dimethenamid**	0.82		ng/L	P364341	
		Disulfoton	0.52	U	ng/L	P364041	
		Dithiopyr**	0.45		ng/L	P364041	
		EPTC	1.3	U	ng/L	P364041	RPD
		Ethion	0.16	U	ng/L	P364041	
		Ethoprop	0.10	U	ng/L	P364041	
		Fenamiphos	0.52	UJ	ng/L	P364041	LCS, RPD
		Fipronil	0.26	U	ng/L	P364041	
		Fipronil Desulfinyl**	0.37	I	ng/L	P364041	
		Fipronil Sulfide	0.18	I	ng/L	P364041	MS
		Fipronil Sulfone	0.67		ng/L	P364041	RPD
		Fonofos	0.21	U	ng/L	P364041	
		Hexazinone	3.3	J	ng/L	P364041	MS, RPD
		Malathion	0.36	U	ng/L	P364041	
		Metalaxyl	3.2	J	ng/L	P364041	LCS, RPD
		Metolachlor	1.4	I	ng/L	P364041	
		Metribuzin	0.78	U	ng/L	P364041	
		Mevinphos	0.52	UJ	ng/L	P364041	RPD
		Molinate	0.31	U	ng/L	P364041	
		Norflurazon	0.52	UJ	ng/L	P364041	RPD
		Oxadiazon**	4.3		ng/L	P364041	
		Parathion Ethyl	0.26	U	ng/L	P364041	
		Parathion Methyl	0.57	U	ng/L	P364041	
		Pendimethalin	1.0	U	ng/L	P364041	
		Phorate	0.26	U	ng/L	P364041	
		Prodiamine**	0.18	U	ng/L	P364041	
		Prometon	0.94	UJ	ng/L	P364041	LCS, MS, RPD
		Prometryn	0.21	U	ng/L	P364041	
		Simazine	0.52	U	ng/L	P364041	
		Tebuconazole**	1.2	IJ	ng/L	P364041	RPD
		Terbufos	0.10	U	ng/L	P364041	
		Terbuthylazine	0.44	U	ng/L	P364041	
2085925	EPA 200.7 Rev. 4.4	Barium	13.1		ug/L	P364002	
		Calcium	58.8		mg/L	P364002	
		Iron	63	I	ug/L	P364002	
		Magnesium	4.98		mg/L	P364002	
		Potassium	5.5		mg/L	P364002	
		Sodium	24.0		mg/L	P364002	

Field ID: G3SE0032

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085925	EPA 200.7 Rev. 4.4	Zinc	5.0	U	ug/L	P364002	
	EPA 200.8 Rev. 5.4	Aluminum	25		ug/L	P364002	
		Antimony	0.12	I	ug/L	P364002	
		Arsenic	1.50		ug/L	P364002	
		Boron**	44.6		ug/L	P364002	
		Cadmium	0.020	U	ug/L	P364002	
		Chromium	0.54	I	ug/L	P364002	
		Copper	1.91		ug/L	P364002	
		Lead	0.20	U	ug/L	P364002	
		Nickel	0.50	U	ug/L	P364002	
		Selenium	0.20	U	ug/L	P364002	
		Silver	0.010	U	ug/L	P364002	
		Thallium	0.10	U	ug/L	P364002	

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 8270E: MS accuracies for atrazine, dimethenamid, tebuconazole, fipronil, norflurazon, and bromacil 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: E-3 @ Clint Moore Boca

Collection Date/Time: 05/13/2019 14:25

Field ID: G3SE0006

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2085900	EPA 180.1 Rev. 2.0	Turbidity	1.7		NTU	P363957	
	EPA 300.0 Rev. 2.1	Chloride	48		mg Cl/L	P364112	
		Sulfate	30		mg SO4/L	P364114	
	SM 2120 B	Color (true)	55		PCU	P363941	
	SM 2320 B-97	Total Alkalinity	152		mg CaCO3/L	P364261	
	SM 2540 C-97	TDS	284		mg/L	P364390	
	SM 2540 D-97	TSS	2	I	mg/L	P364396	
	SM 4500 F-C-97	Fluoride	0.20		mg F/L	P364266	
2085901	EPA 350.1 Rev. 2.0	Ammonia-N	0.010		mg N/L	P364153	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.1		mg N/L	P364294	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P364213	
	EPA 365.1 Rev. 2.0	Total-P	0.32		mg P/L	P364187	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P364410	
2085902	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.28		mg P/L	P363937	

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: P363957

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P364002

Component	Result	Code	Units
Barium	1.0	U	ug/L
Calcium	0.075	U	mg/L
Iron	30	U	ug/L
Magnesium	0.040	U	mg/L
Potassium	0.30	U	mg/L
Sodium	0.50	U	mg/L
Zinc	5.0	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364002

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Antimony	0.050	U	ug/L
Arsenic	0.050	U	ug/L
Boron	2.0	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L
Thallium	0.10	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364112

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364114

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364153

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364294

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364295

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364213

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364214

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364187

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363937

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

Reference Method: EPA 8270D
Batch ID: P364035

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	10	U	ng/L
Bifenthrin	4.0	U	ng/L
Carbophenothion	12	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cis-Nonachlor	1.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	8.0	U	ng/L
DDE-p,p'	8.0	U	ng/L
DDT-p,p'	10	U	ng/L
Delta-BHC	10	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P364035

Component	Result	Code	Units
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Ethalfuralin	3.0	U	ng/L
Gamma-BHC	10	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Hexachlorobenzene	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trans-Nonachlor	1.0	U	ng/L
Trifluralin	2.5	U	ng/L

Reference Method: EPA 8270E
Batch ID: P364041

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.60	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	5.0	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	3.2	U	ng/L
Demeton	7.0	U	ng/L
Diazinon	0.12	U	ng/L
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	0.50	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Desulfinyl	0.12	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.30	U	ng/L
Metolachlor	0.50	U	ng/L
Metribuzin	0.75	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E
Batch ID: P364041

Component	Result	Code	Units
Norflurazon	0.50	U	ng/L
Oxadiazon	0.10	U	ng/L
Parathion Ethyl	0.25	U	ng/L
Parathion Methyl	0.55	U	ng/L
Pendimethalin	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.18	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Tebuconazole	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270E
Batch ID: P364341

Component	Result	Code	Units
Dimethenamid	0.10	U	ng/L

Reference Method: EPA 8276
Batch ID: P364035

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

Reference Method: EPA 8321B
Batch ID: P363904

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	8.0E-04	U	ug/L
Hydrocodone	0.0020	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Primidone	0.0040	U	ug/L
Pyraclostrobin	0.0020	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P363978

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

Reference Method: EPA 8321B
Batch ID: P364011

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: P363941

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P364261

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

Reference Method: SM 2540 C-97
Batch ID: P364390

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P364396

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P364266

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 5310 B-00
Batch ID: P364410

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: P364002

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Barium	99.1		P	85 - 115
Calcium	94.5		P	85 - 115
Iron	99.0		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	97.3		P	85 - 115
Sodium	90.7		P	85 - 115
Zinc	97.8		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364002

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	96.1		P	85 - 115
Antimony	96.9		P	85 - 115
Arsenic	102		P	85 - 115
Boron	96.6		P	85 - 115
Cadmium	99.5		P	85 - 115
Chromium	99.8		P	85 - 115
Copper	99.8		P	85 - 115
Lead	99.9		P	85 - 115
Nickel	101		P	85 - 115
Selenium	99.8		P	85 - 115
Silver	97.9		P	85 - 115
Thallium	102		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364112

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chloride	97.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364114

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sulfate	96.8		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364153

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: P364294

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	99.1		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364295

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	105		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364213

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364214

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364187

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363937

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

Reference Method: EPA 8270D
Batch ID: P364035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	51.7	51.1	P/P	20 - 93.0
Alpha-BHC	91.2	87.9	P/P	57 - 119
Alpha-Chlordane	77.9	76.3	P/P	58 - 112
Beta-BHC	119	118	P/P	56 - 149
Bifenthrin	74.8	72.7	P/P	50 - 130
Carbophenothion	132	129	P/P	26 - 147
Chlorothalonil	56.5	50.4	P/P	20 - 155
Cis-Nonachlor	78.0	75.5	P/P	50 - 130
Cypermethrin	73.0	67.5	P/P	40 - 137
DDD-p,p'	86.0	83.0	P/P	65 - 129
DDE-p,p'	79.5	79.3	P/P	57 - 116
DDT-p,p'	89.3	88.6	P/P	53 - 133
Delta-BHC	131	124	P/P	59 - 163
Dicofol	89.0	80.8	P/P	24 - 138
Dieldrin	79.4	79.3	P/P	60 - 120
Endosulfan I	84.1	79.9	P/P	64 - 118
Endosulfan II	92.6	89.9	P/P	58 - 142
Endosulfan Sulfate	78.6	76.4	P/P	60 - 127
Endrin	85.7	88.5	P/P	59 - 122
Endrin Aldehyde	87.7	84.6	P/P	49 - 132
Endrin Ketone	80.5	77.4	P/P	64 - 121
Ethalfuralin	83.4	76.4	P/P	50 - 130

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P364035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Gamma-BHC	116	111	P/P	56 - 141
Gamma-Chlordane	74.5	73.7	P/P	56 - 110
Heptachlor	62.5	60.9	P/P	46 - 96.0
Heptachlor Epoxide	81.1	78.9	P/P	61 - 112
Hexachlorobenzene	69.1	66.9	P/P	50 - 130
Methoxychlor	99.1	97.1	P/P	63 - 134
Mirex	58.6	58.2	P/P	45 - 100
Permethrin	67.9	63.6	P/P	53 - 115
Trans-Nonachlor	73.3	70.8	P/P	50 - 130
Trifluralin	81.4	80.6	P/P	39 - 142

Reference Method: EPA 8270E
Batch ID: P364041

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	108	107	P/P	71 - 121
Alachlor	108	107	P/P	72 - 119
Ametryn	76.8	116	P/P	47 - 144
Atrazine	116	119	P/P	75 - 123
Atrazine Desethyl	61.5	60.6	P/P	45 - 133
Azinphos Methyl	96.2	115	P/P	66 - 165
Bromacil	48.5	63.7	P/P	43 - 123
Butylate	69.7	75.9	P/P	27 - 83.0
Chlorpyrifos Ethyl	98.5	103	P/P	70 - 117
Chlorpyrifos Methyl	89.6	92.6	P/P	71 - 120
Cyanazine	74.3	62.0	P/P	34 - 264
Demeton	54.4	49.2	P/P	41 - 122
Diazinon	99.9	98.1	P/P	70 - 127
Disulfoton	63.4	57.1	P/P	56 - 127
Dithiopyr	107	105	P/P	67 - 125
EPTC	66.5	72.1	P/P	24 - 84.0
Ethion	115	121	P/P	53 - 132
Ethoprop	106	109	P/P	57 - 117
Fenamiphos	11.1	33.3	F/F	55 - 136
Fipronil	97.5	106	P/P	64 - 126
Fipronil Desulfinyl	105	111	P/P	47 - 114
Fipronil Sulfide	113	117	P/P	57 - 120
Fipronil Sulfone	111	115	P/P	52 - 115
Fonofos	79.3	84.1	P/P	61 - 121
Hexazinone	66.4	127	P/P	62 - 131
Malathion	106	114	P/P	67 - 126
Metaxyl	0.748	2.41	F/F	54 - 128
Metolachlor	110	111	P/P	71 - 118
Metribuzin	97.0	87.2	P/P	42 - 221
Mevinphos	53.6	76.7	P/P	45 - 114
Molinate	80.6	85.5	P/P	33 - 91.0
Norflurazon	71.1	96.5	P/P	60 - 123
Oxadiazon	116	115	P/P	66 - 121
Parathion Ethyl	96.0	100	P/P	73 - 111
Parathion Methyl	95.6	99.7	P/P	74 - 126
Pendimethalin	93.0	88.2	P/P	63 - 131
Phorate	63.3	60.5	P/P	54 - 115

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P364041

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prodiamine	84.8	85.9	P/P	38 - 140
Prometon	42.9	99.7	F/P	61 - 120
Prometryn	96.0	106	P/P	62 - 126
Simazine	103	108	P/P	75 - 126
Tebuconazole	33.2	50.0	P/P	21 - 115
Terbufos	79.4	80.2	P/P	65 - 116
Terbutylazine	109	108	P/P	73 - 117

Reference Method: EPA 8270E
Batch ID: P364341

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Dimethenamid	103	99.7	P/P	66 - 123

Reference Method: EPA 8276
Batch ID: P364035

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	76.1	71.5	P/P	43 - 128
Toxaphene	54.5	54.4	P/P	38 - 140

Reference Method: EPA 8321B
Batch ID: P363904

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	114		P	40 - 150
Acetaminophen	88.5		P	30 - 150
Bentazon	125		P	30 - 150
Carbamazepine	95.9		P	40 - 150
Diuron	88.9		P	40 - 150
Fenuron	103		P	40 - 150
Fluridone	106		P	40 - 150
Hydrocodone	90.5		P	40 - 150
Ibuprofen	89.0		P	40 - 150
Imazapyr	99.6		P	40 - 150
Imidacloprid	96.8		P	40 - 150
Linuron	78.6		P	40 - 150
MCPP	128		P	40 - 150
Naproxen	99.7		P	40 - 150
Primidone	90.9		P	40 - 150
Pyraclostrobin	83.2		P	40 - 150
Triclopyr	87.5		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P363978

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
3-Hydroxycarbofuran	61.6		P	40 - 150
Aldicarb	78.5		P	30 - 150
Aldicarb Sulfone	87.1		P	40 - 150
Aldicarb Sulfoxide	77.0		P	40 - 150
Carbaryl	72.5		P	40 - 150

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P363978

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Carbofuran	69.7		P	40 - 150
Methiocarb	69.5		P	40 - 150
Methomyl	75.0		P	40 - 150
Oxamyl	90.7		P	40 - 150
Propoxur	71.2		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P364011

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	93.7		P	40 - 150
AMPA	124		P	40 - 150
Endothall	77.8		P	40 - 150
Glufosinate	107		P	40 - 150
Glyphosate	99.1		P	40 - 140
Sucralose	102		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P363941

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	98.4		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P364261

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	102		P	98 - 106

Reference Method: SM 4500 F-C-97
Batch ID: P364266

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P364410

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P364002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085989	Barium	96.8		P	80 - 120
2085989	Calcium	92.4		P	80 - 120
2085989	Iron	101		P	80 - 120
2085989	Magnesium	95.0		P	80 - 120
2085989	Potassium	92.6		P	80 - 120
2085989	Sodium	91.1		P	80 - 120
2085989	Zinc	98.2		P	80 - 120
2086093	Barium	96.6	95.5	P/P	80 - 120
2086093	Calcium	95.2		P	80 - 120
2086093	Iron	98.5	97.3	P/P	80 - 120
2086093	Magnesium	100	99.8	P/P	80 - 120
2086093	Potassium	92.7	92.1	P/P	80 - 120
2086093	Sodium	95.4		P	80 - 120
2086093	Zinc	99.8	98.8	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364002

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085989	Aluminum	93.5		P	80 - 120
2085989	Antimony	97.4		P	80 - 120
2085989	Arsenic	103		P	80 - 120
2085989	Boron	93.6		P	80 - 120
2085989	Cadmium	99.4		P	80 - 120
2085989	Chromium	99.2		P	80 - 120
2085989	Copper	101		P	80 - 120
2085989	Lead	101		P	80 - 120
2085989	Nickel	100		P	80 - 120
2085989	Selenium	99.8		P	80 - 120
2085989	Silver	96.0		P	80 - 120
2085989	Thallium	104		P	80 - 120
2086093	Aluminum	93.1	91.6	P/P	80 - 120
2086093	Antimony	95.6	95.2	P/P	80 - 120
2086093	Arsenic	101	100	P/P	80 - 120
2086093	Boron	109	105	P/P	80 - 120
2086093	Cadmium	97.6	96.6	P/P	80 - 120
2086093	Chromium	95.1	94.8	P/P	80 - 120
2086093	Copper	98.3	97.1	P/P	80 - 120
2086093	Lead	98.9	98.4	P/P	80 - 120
2086093	Nickel	99.2	97.4	P/P	80 - 120
2086093	Selenium	98.5	97.6	P/P	80 - 120
2086093	Silver	94.9	94.4	P/P	80 - 120
2086093	Thallium	101	101	P/P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364112

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085881	Chloride	93.6		P	90 - 110
2086040	Chloride	99.0		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364114

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085881	Sulfate	94.4		P	90 - 110
2086040	Sulfate	97.7		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085882	Ammonia-N	106	103	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364294

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085826	Kjeldahl Nitrogen	90.4	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364295

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2086062	Kjeldahl Nitrogen	101	95.5	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364213

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085826	NO2NO3-N	100	98.4	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364214

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085904	NO2NO3-N	102	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364187

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085904	Total-P	91.6	94.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363937

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085941	O-Phosphate-P	94.0	95.8	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P364035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2086314	Aldrin	53.0	51.9	P/P	25 - 92.0
2086314	Alpha-BHC	109	112	P/P	49 - 130
2086314	Alpha-Chlordane	81.7	76.3	P/P	50 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P364035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2086314	Beta-BHC	149	140	P/P	43 - 157
2086314	Bifenthrin	66.6	75.0	P/P	50 - 130
2086314	Carbophenothion	157	152	P/P	27 - 180
2086314	Chlorothalonil	96.3	78.1	P/P	10 - 216
2086314	Cis-Nonachlor	82.0	76.9	P/P	50 - 130
2086314	Cypermethrin	66.8	63.7	P/P	40 - 153
2086314	DDD-p,p'	93.7	89.2	P/P	53 - 128
2086314	DDE-p,p'	77.4	65.3	P/P	48 - 116
2086314	DDT-p,p'	95.4	97.2	P/P	47 - 128
2086314	Delta-BHC	158	191	P/P	51 - 196
2086314	Dicofol	97.5	101	P/P	10 - 147
2086314	Dieldrin	90.5	87.0	P/P	48 - 128
2086314	Endosulfan I	93.2	83.7	P/P	58 - 126
2086314	Endosulfan II	101	95.9	P/P	50 - 150
2086314	Endosulfan Sulfate	98.8	95.7	P/P	56 - 130
2086314	Endrin	96.4	88.1	P/P	50 - 126
2086314	Endrin Aldehyde	89.9	81.7	P/P	12 - 145
2086314	Endrin Ketone	95.2	97.5	P/P	59 - 132
2086314	Ethalfuralin	93.0	93.8	P/P	50 - 130
2086314	Gamma-BHC	139	128	P/P	50 - 155
2086314	Gamma-Chlordane	77.7	71.9	P/P	50 - 112
2086314	Heptachlor	62.4	61.4	P/P	41 - 98.0
2086314	Heptachlor Epoxide	87.4	81.8	P/P	55 - 117
2086314	Hexachlorobenzene	67.9	67.0	P/P	50 - 130
2086314	Methoxychlor	101	103	P/P	55 - 133
2086314	Mirex	53.7	51.2	P/P	44 - 101
2086314	Permethrin	63.8	66.4	P/P	52 - 124
2086314	Trans-Nonachlor	75.6	69.4	P/P	50 - 130
2086314	Trifluralin	89.6	87.2	P/P	10 - 201

Reference Method: EPA 8270E
Batch ID: P364041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085692	Acetochlor	106	106	P/P	63 - 129
2085692	Alachlor	106	102	P/P	65 - 127
2085692	Ametryn	131	121	P/P	40 - 164
2085692	Atrazine Desethyl	84.4	73.1	P/P	14 - 157
2085692	Azinphos Methyl	112	140	P/P	49 - 180
2085692	Butylate	43.8	61.9	P/P	10 - 94.0
2085692	Chlorpyrifos Ethyl	109	105	P/P	58 - 123
2085692	Chlorpyrifos Methyl	101	98.1	P/P	58 - 125
2085692	Cyanazine	102	93.0	P/P	24 - 253
2085692	Demeton	67.5	77.7	P/P	25 - 149
2085692	Diazinon	97.9	98.7	P/P	59 - 144
2085692	Disulfoton	84.8	84.0	P/P	54 - 132
2085692	Dithiopyr	108	104	P/P	64 - 130
2085692	EPTC	45.2	64.7	P/P	10 - 92.0
2085692	Ethion	122	118	P/P	30 - 148
2085692	Ethoprop	91.8	92.5	P/P	50 - 130
2085692	Fenamiphos	107	99.7	P/P	49 - 142
2085692	Fipronil Desulfanyl	109	89.3	P/P	30 - 121

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P364041

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085692	Fipronil Sulfide	116	138	P/F	31 - 136
2085692	Fipronil Sulfone	124	61.9	P/P	16 - 136
2085692	Fonofos	82.7	84.7	P/P	55 - 129
2085692	Hexazinone	195	156	F/F	56 - 141
2085692	Malathion	123	122	P/P	56 - 135
2085692	Metalaxyl	115	121	P/P	54 - 135
2085692	Metolachlor	109	112	P/P	51 - 140
2085692	Metribuzin	129	140	P/P	45 - 254
2085692	Mevinphos	82.7	85.3	P/P	33 - 131
2085692	Molinate	55.4	71.6	P/P	14 - 98.0
2085692	Oxadiazon	111	114	P/P	67 - 116
2085692	Parathion Ethyl	103	102	P/P	66 - 118
2085692	Parathion Methyl	110	101	P/P	64 - 136
2085692	Pendimethalin	101	101	P/P	59 - 144
2085692	Phorate	74.3	83.6	P/P	42 - 130
2085692	Prodiamine	122	124	P/P	42 - 148
2085692	Prometon	141	109	F/P	59 - 134
2085692	Prometryn	107	109	P/P	54 - 135
2085692	Simazine	113	114	P/P	53 - 156
2085692	Terbufos	87.6	88.8	P/P	57 - 131
2085692	Terbutylazine	111	114	P/P	68 - 125

Reference Method: EPA 8270E
Batch ID: P364341

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085860	Dimethenamid	94.9	102	P/P	46 - 139

Reference Method: EPA 8276
Batch ID: P364035

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2087008	Chlordane	91.2	91.7	P/P	34 - 136
2087008	Toxaphene	59.7	63.1	P/P	22 - 152

Reference Method: EPA 8321B
Batch ID: P363904

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2086016	2,4-D	130	120	P/P	40 - 150
2086016	Acetaminophen	73.4	61.5	P/P	30 - 150
2086016	Bentazon	89.0	45.7	P/P	30 - 150
2086016	Carbamazepine	77.4	69.3	P/P	40 - 150
2086016	Diuron	73.0	66.2	P/P	40 - 150
2086016	Fenuron	68.3	58.9	P/P	40 - 150
2086016	Fluridone	110	96.9	P/P	40 - 150
2086016	Hydrocodone	75.0	65.8	P/P	40 - 150
2086016	Ibuprofen	95.6	82.4	P/P	40 - 150
2086016	Imazapyr	116	87.8	P/P	40 - 150
2086016	Imidacloprid	137	121	P/P	40 - 150
2086016	Linuron	76.3	72.8	P/P	40 - 150
2086016	MCP	176	147	F/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P363904

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2086016	Naproxen	98.0	86.0	P/P	40 - 150
2086016	Primidone	83.8	69.9	P/P	40 - 150
2086016	Pyraclostrobin	103	72.1	P/P	40 - 150
2086016	Triclopyr	121	115	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P363978

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085811	3-Hydroxycarbofuran	64.0	72.6	P/P	40 - 150
2085811	Aldicarb	72.3	75.2	P/P	30 - 150
2085811	Aldicarb Sulfone	79.8	86.5	P/P	40 - 150
2085811	Aldicarb Sulfoxide	33.4	42.0	F/P	40 - 150
2085811	Carbaryl	53.7	58.8	P/P	40 - 150
2085811	Carbofuran	55.1	58.6	P/P	40 - 150
2085811	Methiocarb	52.6	57.1	P/P	40 - 150
2085811	Methomyl	65.6	72.5	P/P	40 - 150
2085811	Oxamyl	76.7	87.9	P/P	40 - 150
2085811	Propoxur	50.1	59.8	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P364011

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085812	Acesulfame K	111	106	P/P	40 - 150
2085812	AMPA	36.6	37.1	F/F	40 - 150
2085812	Endothall	69.2	76.6	P/P	40 - 150
2085812	Glufosinate	64.9	63.5	P/P	40 - 150
2085812	Glyphosate	53.5	58.3	P/P	40 - 140
2085812	Sucralose	97.8	108	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P364266

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085804	Fluoride	98.8	101	P/P	89 - 106

Reference Method: SM 5310 B-00
Batch ID: P364410

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2085898	Organic Carbon	99.2	97.4	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P363957

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085897	Turbidity	4.42	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P364002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086093	Barium	1.16	Spike	P	0 - 20
2086093	Calcium	0.130	Spike	P	0 - 20
2086093	Iron	1.22	Spike	P	0 - 20
2086093	Magnesium	0.482	Spike	P	0 - 20
2086093	Potassium	0.550	Spike	P	0 - 20
2086093	Sodium	0.617	Spike	P	0 - 20
2086093	Zinc	1.05	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P364002

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086093	Aluminum	1.54	Spike	P	0 - 20
2086093	Antimony	0.421	Spike	P	0 - 20
2086093	Arsenic	1.13	Spike	P	0 - 20
2086093	Boron	2.14	Spike	P	0 - 20
2086093	Cadmium	0.978	Spike	P	0 - 20
2086093	Chromium	0.256	Spike	P	0 - 20
2086093	Copper	1.17	Spike	P	0 - 20
2086093	Lead	0.475	Spike	P	0 - 20
2086093	Nickel	1.85	Spike	P	0 - 20
2086093	Selenium	0.857	Spike	P	0 - 20
2086093	Silver	0.522	Spike	P	0 - 20
2086093	Thallium	0.373	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364112

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085881	Chloride	0.775	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P364114

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085881	Sulfate	0.946	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P364153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085882	Ammonia-N	1.80	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364294

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085826	Kjeldahl Nitrogen	6.20	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P364295

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086062	Kjeldahl Nitrogen	3.67	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364213

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085826	NO2NO3-N	1.40	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P364214

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085904	NO2NO3-N	0.926	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P364187

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085904	Total-P	1.74	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P363937

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085941	O-Phosphate-P	1.40	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P364035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086314	Aldrin	2.02	Spike	P	0 - 30
2086314	Alpha-BHC	2.88	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P364035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086314	Alpha-Chlordane	6.82	Spike	P	0 - 30
2086314	Beta-BHC	6.54	Spike	P	0 - 30
2086314	Bifenthrin	11.9	Spike	P	0 - 30
2086314	Carbophenothion	3.58	Spike	P	0 - 30
2086314	Chlorothalonil	20.9	Spike	P	0 - 30
2086314	Cis-Nonachlor	6.43	Spike	P	0 - 30
2086314	Cypermethrin	4.82	Spike	P	0 - 30
2086314	DDD-p,p'	4.98	Spike	P	0 - 30
2086314	DDE-p,p'	16.9	Spike	P	0 - 30
2086314	DDT-p,p'	1.95	Spike	P	0 - 30
2086314	Delta-BHC	18.7	Spike	P	0 - 30
2086314	Dicofol	3.54	Spike	P	0 - 30
2086314	Dieldrin	3.85	Spike	P	0 - 30
2086314	Endosulfan I	10.7	Spike	P	0 - 30
2086314	Endosulfan II	4.82	Spike	P	0 - 30
2086314	Endosulfan Sulfate	3.16	Spike	P	0 - 30
2086314	Endrin	9.07	Spike	P	0 - 30
2086314	Endrin Aldehyde	9.55	Spike	P	0 - 30
2086314	Endrin Ketone	2.38	Spike	P	0 - 30
2086314	Ethalfuralin	0.789	Spike	P	0 - 30
2086314	Gamma-BHC	8.15	Spike	P	0 - 30
2086314	Gamma-Chlordane	7.70	Spike	P	0 - 30
2086314	Heptachlor	1.61	Spike	P	0 - 30
2086314	Heptachlor Epoxide	6.66	Spike	P	0 - 30
2086314	Hexachlorobenzene	1.43	Spike	P	0 - 30
2086314	Methoxychlor	2.33	Spike	P	0 - 30
2086314	Mirex	4.76	Spike	P	0 - 30
2086314	Permethrin	4.03	Spike	P	0 - 30
2086314	Trans-Nonachlor	8.53	Spike	P	0 - 30
2086314	Trifluralin	2.64	Spike	P	0 - 30
LFB	Aldrin	1.15	LCS	P	0 - 30
LFB	Alpha-BHC	3.76	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.03	LCS	P	0 - 30
LFB	Beta-BHC	0.698	LCS	P	0 - 30
LFB	Bifenthrin	2.87	LCS	P	0 - 30
LFB	Carbophenothion	2.30	LCS	P	0 - 30
LFB	Chlorothalonil	11.4	LCS	P	0 - 30
LFB	Cis-Nonachlor	3.22	LCS	P	0 - 30
LFB	Cypermethrin	7.87	LCS	P	0 - 30
LFB	DDD-p,p'	3.57	LCS	P	0 - 30
LFB	DDE-p,p'	0.249	LCS	P	0 - 30
LFB	DDT-p,p'	0.776	LCS	P	0 - 30
LFB	Delta-BHC	5.42	LCS	P	0 - 30
LFB	Dicofol	9.68	LCS	P	0 - 30
LFB	Dieldrin	0.103	LCS	P	0 - 30
LFB	Endosulfan I	5.16	LCS	P	0 - 30
LFB	Endosulfan II	2.93	LCS	P	0 - 30
LFB	Endosulfan Sulfate	2.83	LCS	P	0 - 30
LFB	Endrin	3.25	LCS	P	0 - 30
LFB	Endrin Aldehyde	3.61	LCS	P	0 - 30
LFB	Endrin Ketone	3.95	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P364035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Ethalfuralin	8.83	LCS	P	0 - 30
LFB	Gamma-BHC	4.03	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.09	LCS	P	0 - 30
LFB	Heptachlor	2.59	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.74	LCS	P	0 - 30
LFB	Hexachlorobenzene	3.12	LCS	P	0 - 30
LFB	Methoxychlor	2.04	LCS	P	0 - 30
LFB	Mirex	0.820	LCS	P	0 - 30
LFB	Permethrin	6.64	LCS	P	0 - 30
LFB	Trans-Nonachlor	3.41	LCS	P	0 - 30
LFB	Trifluralin	0.944	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P364041

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085692	Acetochlor	0.556	Spike	P	0 - 30
2085692	Alachlor	3.43	Spike	P	0 - 30
2085692	Ametryn	8.09	Spike	P	0 - 30
2085692	Atrazine	0.990	Spike	P	0 - 30
2085692	Atrazine Desethyl	9.66	Spike	P	0 - 30
2085692	Azinphos Methyl	21.9	Spike	P	0 - 30
2085692	Bromacil	5.03	Spike	P	0 - 30
2085692	Butylate	34.3	Spike	F	0 - 30
2085692	Chlorpyrifos Ethyl	3.69	Spike	P	0 - 30
2085692	Chlorpyrifos Methyl	2.88	Spike	P	0 - 30
2085692	Cyanazine	9.77	Spike	P	0 - 30
2085692	Demeton	14.1	Spike	P	0 - 30
2085692	Diazinon	0.809	Spike	P	0 - 30
2085692	Disulfoton	0.982	Spike	P	0 - 30
2085692	Dithiopyr	2.90	Spike	P	0 - 30
2085692	EPTC	35.5	Spike	F	0 - 30
2085692	Ethion	3.09	Spike	P	0 - 30
2085692	Ethoprop	0.792	Spike	P	0 - 30
2085692	Fenamiphos	6.66	Spike	P	0 - 30
2085692	Fipronil	7.56	Spike	P	0 - 30
2085692	Fipronil Desulfinyl	12.4	Spike	P	0 - 30
2085692	Fipronil Sulfide	13.2	Spike	P	0 - 30
2085692	Fipronil Sulfone	31.1	Spike	F	0 - 30
2085692	Fonofos	2.39	Spike	P	0 - 30
2085692	Hexazinone	20.4	Spike	P	0 - 30
2085692	Malathion	1.27	Spike	P	0 - 30
2085692	Metalaxyl	4.74	Spike	P	0 - 30
2085692	Metolachlor	2.63	Spike	P	0 - 30
2085692	Metribuzin	7.93	Spike	P	0 - 30
2085692	Mevinphos	3.20	Spike	P	0 - 30
2085692	Molinate	25.4	Spike	P	0 - 30
2085692	Norflurazon	11.6	Spike	P	0 - 30
2085692	Oxadiazon	2.61	Spike	P	0 - 30
2085692	Parathion Ethyl	0.999	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P364041

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085692	Parathion Methyl	8.13	Spike	P	0 - 30
2085692	Pendimethalin	0.669	Spike	P	0 - 30
2085692	Phorate	11.8	Spike	P	0 - 30
2085692	Prodiamine	1.36	Spike	P	0 - 30
2085692	Prometon	22.7	Spike	P	0 - 30
2085692	Prometryn	1.18	Spike	P	0 - 30
2085692	Simazine	0.788	Spike	P	0 - 30
2085692	Tebuconazole	1.23	Spike	P	0 - 30
2085692	Terbufos	1.32	Spike	P	0 - 30
2085692	Terbuthylazine	2.26	Spike	P	0 - 30
LFB	Acetochlor	0.608	LCS	P	0 - 30
LFB	Alachlor	0.648	LCS	P	0 - 30
LFB	Ametryn	40.5	LCS	F	0 - 30
LFB	Atrazine	2.63	LCS	P	0 - 30
LFB	Atrazine Desethyl	1.40	LCS	P	0 - 30
LFB	Azinphos Methyl	17.4	LCS	P	0 - 30
LFB	Bromacil	27.0	LCS	P	0 - 30
LFB	Butylate	8.52	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	4.56	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	3.38	LCS	P	0 - 30
LFB	Cyanazine	18.0	LCS	P	0 - 30
LFB	Demeton	9.99	LCS	P	0 - 30
LFB	Diazinon	1.82	LCS	P	0 - 30
LFB	Disulfoton	10.3	LCS	P	0 - 30
LFB	Dithiopyr	1.75	LCS	P	0 - 30
LFB	EPTC	8.06	LCS	P	0 - 30
LFB	Ethion	4.99	LCS	P	0 - 30
LFB	Ethoprop	2.36	LCS	P	0 - 30
LFB	Fenamiphos	99.9	LCS	F	0 - 30
LFB	Fipronil	7.92	LCS	P	0 - 30
LFB	Fipronil Desulfinyl	5.59	LCS	P	0 - 30
LFB	Fipronil Sulfide	3.68	LCS	P	0 - 30
LFB	Fipronil Sulfone	3.28	LCS	P	0 - 30
LFB	Fonofos	5.84	LCS	P	0 - 30
LFB	Hexazinone	63.0	LCS	F	0 - 30
LFB	Malathion	6.47	LCS	P	0 - 30
LFB	Metalaxyl	105	LCS	F	0 - 30
LFB	Metolachlor	1.02	LCS	P	0 - 30
LFB	Metribuzin	10.6	LCS	P	0 - 30
LFB	Mevinphos	35.5	LCS	F	0 - 30
LFB	Molinate	5.86	LCS	P	0 - 30
LFB	Norflurazon	30.3	LCS	F	0 - 30
LFB	Oxadiazon	0.825	LCS	P	0 - 30
LFB	Parathion Ethyl	4.17	LCS	P	0 - 30
LFB	Parathion Methyl	4.20	LCS	P	0 - 30
LFB	Pendimethalin	5.30	LCS	P	0 - 30
LFB	Phorate	4.63	LCS	P	0 - 30
LFB	Prodiamine	1.28	LCS	P	0 - 30
LFB	Prometon	79.6	LCS	F	0 - 30
LFB	Prometryn	9.43	LCS	P	0 - 30
LFB	Simazine	4.24	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P364041

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Tebuconazole	40.2	LCS	F	0 - 30
LFB	Terbufos	0.979	LCS	P	0 - 30
LFB	Terbutylazine	0.633	LCS	P	0 - 30

Reference Method: EPA 8270E
Batch ID: P364341

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085860	Dimethenamid	7.27	Spike	P	0 - 30
LFB	Dimethenamid	3.06	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P364035

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2087008	Chlordane	0.368	Spike	P	0 - 30
2087008	Toxaphene	5.62	Spike	P	0 - 30
LFB	Chlordane	6.23	LCS	P	0 - 30
LFB	Toxaphene	0.163	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P363904

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2086016	2,4-D	7.70	Spike	P	0 - 30
2086016	Acetaminophen	17.7	Spike	P	0 - 30
2086016	Bentazon	17.2	Spike	P	0 - 30
2086016	Carbamazepine	11.1	Spike	P	0 - 30
2086016	Diuron	9.72	Spike	P	0 - 30
2086016	Fenuron	14.8	Spike	P	0 - 30
2086016	Fluridone	13.1	Spike	P	0 - 30
2086016	Hydrocodone	13.1	Spike	P	0 - 30
2086016	Ibuprofen	14.8	Spike	P	0 - 30
2086016	Imazapyr	15.1	Spike	P	0 - 30
2086016	Imidacloprid	11.6	Spike	P	0 - 30
2086016	Linuron	4.62	Spike	P	0 - 30
2086016	MCPP	18.0	Spike	P	0 - 30
2086016	Naproxen	13.1	Spike	P	0 - 30
2086016	Primidone	18.1	Spike	P	0 - 30
2086016	Pyraclostrobin	34.8	Spike	F	0 - 30
2086016	Triclopyr	5.51	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P363978

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085811	3-Hydroxycarbofuran	12.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
Batch ID: P363978

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085811	Aldicarb	3.90	Spike	P	0 - 30
2085811	Aldicarb Sulfone	8.02	Spike	P	0 - 30
2085811	Aldicarb Sulfoxide	22.9	Spike	P	0 - 30
2085811	Carbaryl	8.97	Spike	P	0 - 30
2085811	Carbofuran	6.19	Spike	P	0 - 30
2085811	Methiocarb	8.20	Spike	P	0 - 30
2085811	Methomyl	9.93	Spike	P	0 - 30
2085811	Oxamyl	13.5	Spike	P	0 - 30
2085811	Propoxur	17.8	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P364011

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085812	Acesulfame K	4.63	Spike	P	0 - 30
2085812	AMPA	0.380	Spike	P	0 - 30
2085812	Endothall	10.2	Spike	P	0 - 30
2085812	Glufosinate	2.21	Spike	P	0 - 30
2085812	Glyphosate	1.62	Spike	P	0 - 30
2085812	Sucralose	8.65	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P363941

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085871	Color (true)	1.38	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P364261

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085804	Total Alkalinity	0.262	Sample	P	0 - 2.8

Reference Method: SM 2540 C-97
Batch ID: P364390

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085897	TDS	6.87	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P364266

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085804	Fluoride	1.41	Spike	P	0 - 2.5

Quality Assurance Report Precision

Reference Method: SM 5310 B-00
Batch ID: P364410

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2085898	Organic Carbon	1.05	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: 2085917
Field Sample ID: G3SE0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	74.3	P	30 - 160

Lab Sample ID: 2085918
Field Sample ID: G3SE0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	130	P	30 - 160
EPA 8321B	Acetaminophen-d4	80.8	P	30 - 160
EPA 8321B	Carbamazepine-d10	80.7	P	30 - 160
EPA 8321B	Diuron-d6	70.8	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Endothall-d6	118	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	104	P	30 - 160
EPA 8321B	Ibuprofen-d3	104	P	30 - 160
EPA 8321B	Primidone-d5	96.2	P	30 - 160
EPA 8321B	Sucralose-d6	99.7	P	30 - 160
EPA 8321B	Sucralose-d6	99.7	P	30 - 160

Lab Sample ID: 2085919
Field Sample ID: G3SE0033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	73.3	P	30 - 160

Lab Sample ID: 2085920
Field Sample ID: G3SE0033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	131	P	30 - 160
EPA 8321B	Acetaminophen-d4	78.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	75.2	P	30 - 160
EPA 8321B	Diuron-d6	67.4	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Endothall-d6	111	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.5	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	96.5	P	30 - 160
EPA 8321B	Ibuprofen-d3	101	P	30 - 160
EPA 8321B	Primidone-d5	96.3	P	30 - 160
EPA 8321B	Sucralose-d6	95.4	P	30 - 160
EPA 8321B	Sucralose-d6	95.4	P	30 - 160

Lab Sample ID: 2085921
Field Sample ID: G3SE0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	73.0	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	61.8	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	52.9	P	30 - 103
EPA 8276	PCNB	77.2	P	37 - 143

Quality Assurance Report Surrogates

Lab Sample ID: 2085922
Field Sample ID: G3SE0032

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	102	P	68 - 130
EPA 8270E	Terbufos-d10	80.0	P	61 - 136

Lab Sample ID: 2085923
Field Sample ID: G3SE0033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	66.5	P	39 - 109
EPA 8270D	Tetrachloro-m-xylene	52.7	P	28 - 96.0
EPA 8276	Decachlorobiphenyl	56.2	P	30 - 103
EPA 8276	PCNB	71.9	P	37 - 143

Lab Sample ID: 2085924
Field Sample ID: G3SE0033

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Simazine-d10	117	P	68 - 130
EPA 8270E	Terbufos-d10	93.8	P	61 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A91404

Included Lab Sample IDs: 2085897, 2085900, 2085903, 2085906, 2085909

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A91415

Included Lab Sample IDs: 2085899, 2085902, 2085905, 2085908, 2085911

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.5	99.4	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A91416

Included Lab Sample IDs: 2085897, 2085900, 2085903, 2085906, 2085909

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

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A91434

Included Lab Sample IDs: 2085897, 2085900, 2085903, 2085906, 2085909

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

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A91506

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907, 2085910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	106	106	P/P	90 - 110
Ammonia-N	107	106	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A91508

Included Lab Sample IDs: 2085918, 2085920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	97.4	95.6	P/P	60 - 160
Endothall	107	110	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A91517

Included Lab Sample IDs: 2085925, 2085926, 2085927, 2085928

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Barium	101	98.6	P/P	95 - 105
Barium	98.6	97.6	P/P	90 - 110
Calcium	103	99.4	P/P	95 - 105
Calcium	99.4	97.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A91517

Included Lab Sample IDs: 2085925, 2085926, 2085927, 2085928

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	104	98.7	P/P	95 - 105
Iron	98.7	97.9	P/P	90 - 110
Magnesium	103	98.6	P/P	95 - 105
Magnesium	98.6	97.9	P/P	90 - 110
Potassium	103	97.0	P/P	95 - 105
Potassium	97.0	97.1	P/P	90 - 110
Sodium	102	95.7	P/P	95 - 105
Sodium	95.7	97.5	P/P	90 - 110
Zinc	100	98.4	P/P	90 - 110
Zinc	103	100	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A91524

Included Lab Sample IDs: 2085918, 2085920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	95.9	90.0	P/P	50 - 150
Acetaminophen	107	103	P/P	60 - 160
Bentazon	102	102	P/P	50 - 160
Carbamazepine	103	99.8	P/P	60 - 150
Diuron	103	106	P/P	60 - 150
Fenuron	100	101	P/P	60 - 150
Hydrocodone	97.3	101	P/P	60 - 150
Ibuprofen	108	115	P/P	50 - 160
Imazapyr	93.8	99.6	P/P	50 - 150
Imidacloprid	99.0	92.5	P/P	60 - 150
Linuron	109	104	P/P	60 - 150
MCPP	112	101	P/P	50 - 150
Naproxen	108	105	P/P	50 - 160
Primidone	95.3	95.1	P/P	60 - 150
Pyraclostrobin	105	106	P/P	60 - 150
Triclopyr	97.4	91.7	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A91528

Included Lab Sample IDs: 2085918, 2085920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	127	108	P/P	60 - 160
AMPA	131	127	P/P	60 - 160
Glufosinate	105	107	P/P	60 - 160
Glufosinate	115	105	P/P	60 - 160
Glyphosate	105	93.1	P/P	60 - 160
Glyphosate	93.1	90.5	P/P	60 - 160

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91529

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907, 2085910

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A91529

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907, 2085910

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

Reference Method: EPA 8270D

Run ID: A91543

Included Lab Sample IDs: 2085921, 2085923

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	92.6		P	80 - 120
Alpha-BHC	96.3		P	80 - 120
Alpha-Chlordane	97.6		P	80 - 120
Beta-BHC	91.5		P	80 - 120
Bifenthrin	93.6		P	80 - 120
Carbophenothion	150*		F	80 - 120
Chlorothalonil	61.7*		F	80 - 120
Cis-Nonachlor	98.6		P	80 - 120
Cypermethrin	86.1		P	80 - 120
DDD-p,p'	99.4		P	80 - 120
DDE-p,p'	98.4		P	80 - 120
DDT-p,p'	101		P	80 - 120
Delta-BHC	88.0		P	80 - 120
Dicofol	99.8		P	80 - 120
Dieldrin	96.2		P	80 - 120
Endosulfan I	93.3		P	80 - 120
Endosulfan II	95.0		P	80 - 120
Endosulfan Sulfate	92.6		P	80 - 120
Endrin	97.7		P	80 - 120
Endrin Aldehyde	90.6		P	80 - 120
Endrin Ketone	93.3		P	80 - 120
Ethalfuralin	95.8		P	80 - 120
Gamma-BHC	95.4		P	80 - 120
Gamma-Chlordane	95.6		P	80 - 120
Heptachlor	98.9		P	80 - 120
Heptachlor Epoxide	95.8		P	80 - 120
Hexachlorobenzene	95.7		P	80 - 120
Methoxychlor	98.9		P	80 - 120
Mirex	96.4		P	80 - 120
Permethrin	91.3		P	80 - 120
Trans-Nonachlor	96.9		P	80 - 120
Trifluralin	94.5		P	80 - 120

Reference Method: SM 2320 B-97

Run ID: A91544

Included Lab Sample IDs: 2085897, 2085900, 2085903, 2085906, 2085909

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	103	P/P	90 - 110
Total Alkalinity	103	102	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500 F-C-97

Run ID: A91544

Included Lab Sample IDs: 2085897, 2085900, 2085903, 2085906, 2085909

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A91561

Included Lab Sample IDs: 2085925, 2085926, 2085927, 2085928

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	94.0	91.1	P/P	90 - 110
Antimony	94.6	93.7	P/P	90 - 110
Arsenic	96.6	97.1	P/P	90 - 110
Boron	93.7	90.7	P/P	90 - 110
Cadmium	95.4	93.8	P/P	90 - 110
Chromium	96.9	95.8	P/P	90 - 110
Copper	97.2	97.3	P/P	90 - 110
Lead	96.8	96.2	P/P	90 - 110
Nickel	96.5	96.9	P/P	90 - 110
Selenium	94.4	95.9	P/P	90 - 110
Silver	93.5	92.4	P/P	90 - 110
Thallium	93.6	93.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91570

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	100	P/P	90 - 110
Total-P	99.7	99.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A91572

Included Lab Sample IDs: 2085910

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

Reference Method: SM 5310 B-00

Run ID: A91605

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907, 2085910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	97.8	98.6	P/P	90 - 110
Organic Carbon	99.1	97.8	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A91610

Included Lab Sample IDs: 2085917, 2085919

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
3-Hydroxycarbofuran	80.5	88.5	P/P	60 - 150
Aldicarb	89.0	92.8	P/P	60 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A91610

Included Lab Sample IDs: 2085917, 2085919

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldicarb Sulfone	99.7	104	P/P	50 - 150
Aldicarb Sulfoxide	74.0	95.5	P/P	50 - 150
Carbaryl	100	96.6	P/P	60 - 150
Carbofuran	103	96.5	P/P	50 - 150
Methiocarb	106	101	P/P	50 - 150
Methomyl	98.8	86.4	P/P	50 - 150
Oxamyl	103	94.4	P/P	50 - 150
Propoxur	102	99.6	P/P	50 - 150

Reference Method: EPA 8321B

Run ID: A91622

Included Lab Sample IDs: 2085918, 2085920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Bentazon	111	110	P/P	50 - 160
Fluridone	97.8	102	P/P	60 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A91625

Included Lab Sample IDs: 2085898, 2085901, 2085904, 2085907, 2085910

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	94.8	P/P	90 - 110

Reference Method: EPA 8276

Run ID: A91671

Included Lab Sample IDs: 2085921, 2085923

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	101		P	80 - 120
Toxaphene	100		P	80 - 120

Reference Method: EPA 8321B

Run ID: A91690

Included Lab Sample IDs: 2085918, 2085920

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	95.9	99.9	P/P	60 - 160
Sucralose	99.9	97.4	P/P	60 - 160

Reference Method: EPA 8270E

Run ID: A91710

Included Lab Sample IDs: 2085922, 2085924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dimethenamid	101		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A91747

Included Lab Sample IDs: 2085922, 2085924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	98.2		P	80 - 120
Alachlor	101		P	80 - 120
Ametryn	95.3		P	80 - 120
Atrazine Desethyl	100		P	80 - 120
Azinphos Methyl	87.3		P	80 - 120
Bromacil	95.9		P	80 - 120
Butylate	93.6		P	80 - 120
Chlorpyrifos Ethyl	96.3		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	89.6		P	80 - 120
Demeton	98.8		P	80 - 120
Diazinon	97.6		P	80 - 120
Disulfoton	97.2		P	80 - 120
Dithiopyr	97.8		P	80 - 120
EPTC	98.9		P	80 - 120
Ethion	97.9		P	80 - 120
Ethoprop	99.0		P	80 - 120
Fenamiphos	101		P	80 - 120
Fipronil	96.8		P	80 - 120
Fipronil Desulfinyl	104		P	80 - 120
Fipronil Sulfide	97.7		P	80 - 120
Fipronil Sulfone	99.9		P	80 - 120
Fonofos	98.1		P	80 - 120
Hexazinone	99.3		P	80 - 120
Malathion	91.5		P	80 - 120
Metaxyl	99.7		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	98.6		P	80 - 120
Mevinphos	99.6		P	80 - 120
Molinate	97.7		P	80 - 120
Norflurazon	95.5		P	80 - 120
Oxadiazon	101		P	80 - 120
Parathion Ethyl	96.3		P	80 - 120
Parathion Methyl	92.8		P	80 - 120
Pendimethalin	89.0		P	80 - 120
Phorate	95.2		P	80 - 120
Prodiamine	84.5		P	80 - 120
Prometon	96.3		P	80 - 120
Prometryn	98.5		P	80 - 120
Simazine	98.5		P	80 - 120
Tebuconazole	98.6		P	80 - 120
Terbufos	96.8		P	80 - 120
Terbutylazine	101		P	80 - 120

Reference Method: EPA 8270E

Run ID: A91750

Included Lab Sample IDs: 2085922, 2085924

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	98.1		P	80 - 120

Quality Assurance Report

Calibration Verification

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

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery			Precision	
							LCS	SMP MS
EPA 180.1 Rev. 2.0	Turbidity							4.42
EPA 200.7 Rev. 4.4	Barium	99.1		96.8	96.6	95.5		1.16
	Calcium	94.5		92.4	95.2			0.130
	Iron	99.0		101	98.5	97.3		1.22
	Magnesium	105		95.0	100	99.8		0.482
	Potassium	97.3		92.6	92.7	92.1		0.550
	Sodium	90.7		91.1	95.4			0.617
	Zinc	97.8		98.2	99.8	98.8		1.05
EPA 200.8 Rev. 5.4	Aluminum	96.1		93.5	93.1	91.6		1.54
	Antimony	96.9		97.4	95.6	95.2		0.421
	Arsenic	102		103	101	100		1.13
	Boron	96.6		93.6	109	105		2.14
	Cadmium	99.5		99.4	97.6	96.6		0.978
	Chromium	99.8		99.2	95.1	94.8		0.256
	Copper	99.8		101	98.3	97.1		1.17
	Lead	99.9		101	98.9	98.4		0.475
	Nickel	101		100	99.2	97.4		1.85
	Selenium	99.8		99.8	98.5	97.6		0.857
	Silver	97.9		96.0	94.9	94.4		0.522
	Thallium	102		104	101	101		0.373
EPA 300.0 Rev. 2.1	Chloride	97.6		93.6	99.0			0.775
	Sulfate	96.8		94.4	97.7			0.946
EPA 350.1 Rev. 2.0	Ammonia-N	104		106	103			1.80
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	99.1		90.4	100			6.20
	Kjeldahl Nitrogen	105		101	95.5			3.67
EPA 353.2 Rev. 2.0	NO2NO3-N	102		100	98.4			1.40
	NO2NO3-N	101		102	101			0.926
EPA 365.1 Rev. 2.0	Total-P	99.4		91.6	94.4			1.74
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	101		94.0	95.8			1.40
EPA 8270D	Aldrin	51.7	51.1	53.0	51.9	1.15		2.02
	Alpha-BHC	87.9	91.2	109	112	3.76		2.88
	Alpha-Chlordane	76.3	77.9	81.7	76.3	2.03		6.82
	Beta-BHC	118	119	149	140	0.698		6.54
	Bifenthrin	72.7	74.8	66.6	75.0	2.87		11.9
	Carbophenothion	129	132	157	152	2.30		3.58
	Chlorothalonil	50.4	56.5	96.3	78.1	11.4		20.9
	Cis-Nonachlor	75.5	78.0	82.0	76.9	3.22		6.43
	Cypermethrin	67.5	73.0	66.8	63.7	7.87		4.82
	DDD-p,p'	83.0	86.0	93.7	89.2	3.57		4.98
	DDE-p,p'	79.3	79.5	77.4	65.3	0.249		16.9
	DDT-p,p'	88.6	89.3	95.4	97.2	0.776		1.95
	Delta-BHC	124	131	158	191	5.42		18.7
	Dicofol	80.8	89.0	97.5	101	9.68		3.54
	Dieldrin	79.3	79.4	90.5	87.0	0.103		3.85
	Endosulfan I	79.9	84.1	93.2	83.7	5.16		10.7
	Endosulfan II	89.9	92.6	101	95.9	2.93		4.82
	Endosulfan Sulfate	76.4	78.6	98.8	95.7	2.83		3.16
	Endrin	88.5	85.7	96.4	88.1	3.25		9.07
	Endrin Aldehyde	84.6	87.7	89.9	81.7	3.61		9.55
	Endrin Ketone	77.4	80.5	95.2	97.5	3.95		2.38
	Ethalfuralin	76.4	83.4	93.0	93.8	8.83		0.789
	Gamma-BHC	111	116	139	128	4.03		8.15
	Gamma-Chlordane	73.7	74.5	77.7	71.9	1.09		7.70
	Heptachlor	60.9	62.5	62.4	61.4	2.59		1.61

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Heptachlor Epoxide	78.9	81.1	87.4	81.8	2.74	6.66
	Hexachlorobenzene	66.9	69.1	67.9	67.0	3.12	1.43
	Methoxychlor	97.1	99.1	101	103	2.04	2.33
	Mirex	58.2	58.6	53.7	51.2	0.820	4.76
	Permethrin	63.6	67.9	63.8	66.4	6.64	4.03
	Trans-Nonachlor	70.8	73.3	75.6	69.4	3.41	8.53
EPA 8270E	Trifluralin	80.6	81.4	89.6	87.2	0.944	2.64
	Acetochlor	108	107	106	106	0.608	0.556
	Alachlor	108	107	102	106	0.648	3.43
	Ametryn	76.8	116	131	121	40.5	8.09
	Atrazine	116	119			2.63	0.990
	Atrazine Desethyl	61.5	60.6	84.4	73.1	1.40	9.66
	Azinphos Methyl	96.2	115	112	140	17.4	21.9
	Bromacil	48.5	63.7			27.0	5.03
	Butylate	69.7	75.9	43.8	61.9	8.52	34.3
	Chlorpyrifos Ethyl	98.5	103	109	105	4.56	3.69
	Chlorpyrifos Methyl	89.6	92.6	98.1	101	3.38	2.88
	Cyanazine	74.3	62.0	93.0	102	18.0	9.77
	Demeton	54.4	49.2	77.7	67.5	9.99	14.1
	Diazinon	99.9	98.1	98.7	97.9	1.82	0.809
	Dimethenamid	103	99.7	94.9	102	3.06	7.27
	Disulfoton	63.4	57.1	84.0	84.8	10.3	0.982
	Dithiopyr	107	105	104	108	1.75	2.90
	EPTC	66.5	72.1	64.7	45.2	8.06	35.5
	Ethion	115	121	118	122	4.99	3.09
	Ethoprop	106	109	92.5	91.8	2.36	0.792
	Fenamiphos	11.1	33.3	99.7	107	99.9	6.66
	Fipronil	97.5	106			7.92	7.56
	Fipronil Desulfinyl	105	111	89.3	109	5.59	12.4
	Fipronil Sulfide	113	117	138	116	3.68	13.2
	Fipronil Sulfone	111	115	61.9	124	3.28	31.1
	Fonofos	79.3	84.1	84.7	82.7	5.84	2.39
	Hexazinone	66.4	127	156	195	63.0	20.4
	Malathion	106	114	122	123	6.47	1.27
	Metalaxyl	0.748	2.41	121	115	105	4.74
	Metolachlor	110	111	112	109	1.02	2.63
	Metribuzin	97.0	87.2	129	140	10.6	7.93
	Mevinphos	53.6	76.7	82.7	85.3	35.5	3.20
	Molinate	80.6	85.5	55.4	71.6	5.86	25.4
	Norflurazon	71.1	96.5			30.3	11.6
	Oxadiazon	116	115	111	114	0.825	2.61
	Parathion Ethyl	96.0	100	103	102	4.17	0.999
	Parathion Methyl	95.6	99.7	110	101	4.20	8.13
	Pendimethalin	93.0	88.2	101	101	5.30	0.669
	Phorate	63.3	60.5	74.3	83.6	4.63	11.8
	Prodiamine	84.8	85.9	122	124	1.28	1.36
	Prometon	42.9	99.7	141	109	79.6	22.7
	Prometryn	96.0	106	107	109	9.43	1.18
	Simazine	103	108	113	114	4.24	0.788
	Tebuconazole	33.2	50.0			40.2	1.23
	Terbufos	79.4	80.2	87.6	88.8	0.979	1.32
	Terbuthylazine	109	108	111	114	0.633	2.26
EPA 8276	Chlordane	76.1	71.5	91.2	91.7	6.23	0.368
	Toxaphene	54.5	54.4	59.7	63.1	0.163	5.62

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8321B	2,4-D	114	130	120			7.70
	3-Hydroxycarbofuran	61.6	64.0	72.6			12.5
	Acesulfame K	93.7	111	106			4.63
	Acetaminophen	88.5	73.4	61.5			17.7
	Aldicarb	78.5	72.3	75.2			3.90
	Aldicarb Sulfone	87.1	79.8	86.5			8.02
	Aldicarb Sulfoxide	77.0	33.4	42.0			22.9
	AMPA	124	36.6	37.1			0.380
	Bentazon	125	89.0	45.7			17.2
	Carbamazepine	95.9	77.4	69.3			11.1
	Carbaryl	72.5	53.7	58.8			8.97
	Carbofuran	69.7	55.1	58.6			6.19
	Diuron	88.9	73.0	66.2			9.72
	Endothall	77.8	69.2	76.6			10.2
	Fenuron	103	68.3	58.9			14.8
	Fluridone	106	110	96.9			13.1
	Glufosinate	107	64.9	63.5			2.21
	Glyphosate	99.1	53.5	58.3			1.62
	Hydrocodone	90.5	75.0	65.8			13.1
	Ibuprofen	89.0	95.6	82.4			14.8
	Imazapyr	99.6	116	87.8			15.1
	Imidacloprid	96.8	137	121			11.6
	Linuron	78.6	76.3	72.8			4.62
	MCPP	128	176	147			18.0
	Methiocarb	69.5	52.6	57.1			8.20
	Methomyl	75.0	65.6	72.5			9.93
	Naproxen	99.7	98.0	86.0			13.1
	Oxamyl	90.7	76.7	87.9			13.5
	Primidone	90.9	83.8	69.9			18.1
	Propoxur	71.2	50.1	59.8			17.8
	Pyraclostrobin	83.2	103	72.1			34.8
	Sucralose	102	97.8	108			8.65
	Triclopyr	87.5	121	115			5.51
SM 2120 B	Color (true)	98.4				1.38	
SM 2320 B-97	Total Alkalinity	102				0.262	
SM 2540 C-97	TDS					6.87	
SM 4500 F-C-97	Fluoride	97.9	98.8	101			1.41
SM 5310 B-00	Organic Carbon	96.8	99.2	97.4			1.05

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2085897, 2085900, 2085903, 2085906, 2085909
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2085925, 2085926, 2085927, 2085928
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2085925, 2085926, 2085927, 2085928
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2085897, 2085900, 2085903, 2085906, 2085909
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2085897, 2085900, 2085903, 2085906, 2085909
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2085898, 2085901, 2085904, 2085907, 2085910

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2085898, 2085901, 2085904, 2085907, 2085910
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2085898, 2085901, 2085904, 2085907, 2085910
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2085898, 2085901, 2085904, 2085907, 2085910
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2085899, 2085902, 2085905, 2085908, 2085911
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2085921, 2085923
EPA 8270E / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2085922, 2085924
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2085921, 2085923
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2085917, 2085919
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2085918, 2085920
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	2085918, 2085920
SM 2120 B / E31780	True Color measured at 450 nm	2085897, 2085900, 2085903, 2085906, 2085909
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	2085897, 2085900, 2085903, 2085906, 2085909
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2085897, 2085900, 2085903, 2085906, 2085909
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2085897, 2085900, 2085903, 2085906, 2085909
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2085897, 2085900, 2085903, 2085906, 2085909
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2085898, 2085901, 2085904, 2085907, 2085910

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	05/14/2019			05/14/2019 16:44	Sima Feizi	2085897, 2085900, 2085903, 2085906, 2085909
EPA 200.7 Rev. 4.4	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/17/2019 12:26	Betina Topolski	2085925
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/17/2019 12:33	Betina Topolski	2085926
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/17/2019 13:02	Betina Topolski	2085927
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/17/2019 13:09	Betina Topolski	2085928
EPA 200.8 Rev. 5.4	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/20/2019 23:08	Martin Acosta	2085925
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/20/2019 23:17	Martin Acosta	2085926
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/20/2019 23:27	Martin Acosta	2085927
	05/14/2019	05/15/2019 17:15	Elliott D. Healy	05/20/2019 23:36	Martin Acosta	2085928
EPA 300.0 Rev. 2.1	05/14/2019			05/16/2019 15:59	Lipi Saha	2085897
	05/14/2019			05/16/2019 16:11	Lipi Saha	2085900
	05/14/2019			05/16/2019 16:23	Lipi Saha	2085903
	05/14/2019			05/16/2019 17:00	Lipi Saha	2085906
	05/14/2019			05/16/2019 17:12	Lipi Saha	2085909
EPA 350.1 Rev. 2.0	05/14/2019			05/16/2019 12:43	Ping Hua	2085898
	05/14/2019			05/16/2019 12:52	Ping Hua	2085901
	05/14/2019			05/16/2019 12:54	Ping Hua	2085904
	05/14/2019			05/16/2019 12:55	Ping Hua	2085907
	05/14/2019			05/16/2019 12:57	Ping Hua	2085910
EPA 351.2 Rev. 2.0	05/14/2019	05/21/2019 13:07	Jhamieka S. Greenwood	05/23/2019 12:34	Joseph Suarez	2085898
	05/14/2019	05/21/2019 13:07	Jhamieka S. Greenwood	05/23/2019 12:36	Joseph Suarez	2085901
	05/14/2019	05/21/2019 13:07	Jhamieka S. Greenwood	05/23/2019 12:37	Joseph Suarez	2085904
	05/14/2019	05/21/2019 13:07	Jhamieka S. Greenwood	05/23/2019 12:42	Joseph Suarez	2085907
	05/14/2019	05/21/2019 13:07	Jhamieka S. Greenwood	05/23/2019 12:43	Joseph Suarez	2085910
EPA 353.2 Rev. 2.0	05/14/2019			05/20/2019 10:45	Beverly Y. Sanders	2085898
	05/14/2019			05/20/2019 10:46	Beverly Y. Sanders	2085901
	05/14/2019			05/20/2019 10:53	Beverly Y. Sanders	2085904
	05/14/2019			05/20/2019 10:59	Beverly Y. Sanders	2085907
	05/14/2019			05/20/2019 11:00	Beverly Y. Sanders	2085910
EPA 365.1 Rev. 2.0	05/14/2019	05/20/2019 08:30	Joseph Suarez	05/21/2019 16:09	Rosalyn Ballman	2085904
	05/14/2019	05/20/2019 08:30	Joseph Suarez	05/21/2019 16:13	Rosalyn Ballman	2085898
	05/14/2019	05/20/2019 08:30	Joseph Suarez	05/21/2019 16:16	Rosalyn Ballman	2085901
	05/14/2019	05/20/2019 08:30	Joseph Suarez	05/21/2019 16:17	Rosalyn Ballman	2085907
	05/14/2019	05/20/2019 08:30	Joseph Suarez	05/21/2019 18:33	Rosalyn Ballman	2085910
EPA 365.1 Rev. 2.0 dissolved	05/14/2019			05/14/2019 14:46	Jhamieka S. Greenwood	2085899
	05/14/2019			05/14/2019 14:47	Jhamieka S. Greenwood	2085902
	05/14/2019			05/14/2019 14:48	Jhamieka S. Greenwood	2085905
	05/14/2019			05/14/2019 14:49	Jhamieka S. Greenwood	2085908
	05/14/2019			05/14/2019 14:50	Jhamieka S. Greenwood	2085911

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270D	05/14/2019	05/17/2019 09:00	Fe-Val Siddell	05/21/2019 02:10	Arthur Maknenko	2085921
	05/14/2019	05/17/2019 09:00	Fe-Val Siddell	05/21/2019 02:42	Arthur Maknenko	2085923
EPA 8270E	05/14/2019	05/15/2019 09:00	Julie Wi	05/16/2019 17:24	Vandana T. Nagar	2085922
	05/14/2019	05/15/2019 09:00	Julie Wi	05/16/2019 17:48	Vandana T. Nagar	2085924
	05/14/2019	05/15/2019 09:00	Julie Wi	05/17/2019 14:40	Vandana T. Nagar	2085922
	05/14/2019	05/15/2019 09:00	Julie Wi	05/17/2019 15:04	Vandana T. Nagar	2085924
	05/14/2019	05/20/2019 09:00	Julie Wi	05/22/2019 15:28	Vandana T. Nagar	2085922
	05/14/2019	05/20/2019 09:00	Julie Wi	05/22/2019 15:52	Vandana T. Nagar	2085924
	05/14/2019	05/17/2019 09:00	Fe-Val Siddell	05/25/2019 03:11	Dinesh Mishra	2085921
EPA 8276	05/14/2019	05/17/2019 09:00	Fe-Val Siddell	05/25/2019 04:06	Dinesh Mishra	2085923
EPA 8321B	05/14/2019	05/15/2019 14:00	Hoor Shaik	05/19/2019 03:25	Juyoung Kim	2085918
	05/14/2019	05/15/2019 14:00	Hoor Shaik	05/19/2019 04:00	Juyoung Kim	2085920
	05/14/2019	05/15/2019 14:00	Hoor Shaik	05/21/2019 01:32	Juyoung Kim	2085918
	05/14/2019	05/15/2019 14:00	Hoor Shaik	05/21/2019 02:07	Juyoung Kim	2085920
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/16/2019 17:45	Rebecca Ware	2085918
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/16/2019 17:59	Rebecca Ware	2085920
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/17/2019 18:31	Rebecca Ware	2085918
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/17/2019 18:53	Rebecca Ware	2085920
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/23/2019 15:44	Rebecca Ware	2085918
	05/14/2019	05/16/2019 14:00	Rebecca Ware	05/23/2019 16:10	Rebecca Ware	2085920
	05/14/2019	05/20/2019 09:00	Hoor Shaik	05/22/2019 19:44	Juyoung Kim	2085917
	05/14/2019	05/20/2019 09:00	Hoor Shaik	05/22/2019 20:19	Juyoung Kim	2085919
	05/14/2019			05/14/2019 15:42	Madeline Funaro	2085897
SM 2120 B	05/14/2019			05/14/2019 15:43	Madeline Funaro	2085900, 2085903
	05/14/2019			05/14/2019 15:44	Madeline Funaro	2085906
	05/14/2019			05/14/2019 15:45	Madeline Funaro	2085909
	05/14/2019			05/18/2019 20:38	Dale L. Simmons	2085897
SM 2320 B-97	05/14/2019			05/18/2019 20:51	Dale L. Simmons	2085900
	05/14/2019			05/18/2019 21:06	Dale L. Simmons	2085903
	05/14/2019			05/18/2019 22:03	Dale L. Simmons	2085906
	05/14/2019			05/18/2019 22:16	Dale L. Simmons	2085909
	05/14/2019			05/16/2019 15:31	Yijie Li	2085897, 2085900, 2085903, 2085906, 2085909
SM 2540 C-97	05/14/2019			05/16/2019 15:31	Yijie Li	2085897, 2085900, 2085903, 2085906, 2085909
SM 2540 D-97	05/14/2019			05/16/2019 15:31	Yijie Li	2085897, 2085900, 2085903, 2085906, 2085909
SM 4500 F-C-97	05/14/2019			05/18/2019 20:38	Dale L. Simmons	2085897
	05/14/2019			05/18/2019 20:51	Dale L. Simmons	2085900
	05/14/2019			05/18/2019 21:06	Dale L. Simmons	2085903
	05/14/2019			05/18/2019 22:03	Dale L. Simmons	2085906
	05/14/2019			05/18/2019 22:16	Dale L. Simmons	2085909

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 5310 B-00	05/14/2019			05/21/2019 04:17	Julia Storbeck	2085898
	05/14/2019			05/21/2019 05:18	Julia Storbeck	2085901
	05/14/2019			05/21/2019 08:02	Julia Storbeck	2085904
	05/14/2019			05/21/2019 08:18	Julia Storbeck	2085907
	05/14/2019			05/21/2019 08:31	Julia Storbeck	2085910