

Chemical Analysis Report

NW-DIST-2018-09-21-01

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

Event Description: **Holmes RUN**
Request ID: **RQ-2018-09-17-19**
Customer: **NW-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
160 Government Center
Suite 208
Pensacola, FL 32502-5794
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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 18-OCT-2018 12:35



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: Sikes Creek upstream of Bonifay Gritney Rd

Collection Date/Time: 09/20/2018 12:30

Field ID: G3NW0159

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2027578	EPA 180.1 Rev. 2.0	Turbidity	5.1		NTU	P352116	
	EPA 300.0 Rev. 2.1	Chloride	2.6		mg Cl/L	P352520	
		Sulfate	0.23	I	mg SO4/L	P352522	
	SM 2120 B	Color (true)	190	A	PCU	P352100	
	SM 2320 B-97	Total Alkalinity	14		mg CaCO3/L	P352565	
	SM 2540 C-97	TDS	65		mg/L	P352444	
	SM 2540 D-97	TSS	4	I	mg/L	P352515	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P352567	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.035		mg N/L	P352555	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.78		mg N/L	P352332	
2027579	EPA 353.2 Rev. 2.0	NO2NO3-N	0.029		mg N/L	P352301	
	EPA 365.1 Rev. 2.0	Total-P	0.021		mg P/L	P352321	
	SM 5310 B-00	Organic Carbon	18		mg C/L	P352348	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.004	U	mg P/L	P352103	
	dissolved						

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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

Sample Location: East Pittman Creek upstream of Hwy 179

Collection Date/Time: 09/20/2018 11:45

Field ID: G3NW0157

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2027572	EPA 180.1 Rev. 2.0	Turbidity	5.3	A	NTU	P352116	
	EPA 300.0 Rev. 2.1	Chloride	4.1		mg Cl/L	P352520	
		Sulfate	0.43	I	mg SO4/L	P352522	
		Color (true)	83		PCU	P352099	
	SM 2120 B	Total Alkalinity	12		mg CaCO3/L	P352565	
	SM 2540 C-97	TDS	52		mg/L	P352444	
	SM 2540 D-97	TSS	3	I	mg/L	P352515	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P352567	
2027573	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P352555	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.59		mg N/L	P352331	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.83		mg N/L	P352301	
	EPA 365.1 Rev. 2.0	Total-P	0.017		mg P/L	P352320	
	SM 5310 B-00	Organic Carbon	6.7		mg C/L	P352348	
2027574	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P352103	
2027602	EPA 8321B	Aldicarb	0.020	U	ug/L	P351946	
		Aldicarb Sulfone	0.0020	U	ug/L	P351946	
		Aldicarb Sulfoxide	0.0020	UJ	ug/L	P351946	MS
		Carbaryl	0.0020	U	ug/L	P351946	
		Carbofuran	0.0020	U	ug/L	P351946	
		3-Hydroxycarbofuran	0.0020	U	ug/L	P351946	
		Methiocarb	0.0020	U	ug/L	P351946	
		Methomyl	0.0020	U	ug/L	P351946	
		Oxamyl	0.0020	U	ug/L	P351946	
		Propoxur	0.0020	U	ug/L	P351946	
		2,4-D	0.0020	U	ug/L	P351946	
		Bentazon	8.0E-04	U	ug/L	P351946	
		MCP	0.0020	U	ug/L	P351946	
2027603		Triclopyr**	0.0040	U	ug/L	P351946	
		Imidacloprid	0.0020	U	ug/L	P351946	
		Diuron	0.0020	U	ug/L	P351946	
		Pyraclostrobin**	0.0020	U	ug/L	P351946	
		Primidone**	0.0040	U	ug/L	P351946	
		Linuron	0.0040	U	ug/L	P351946	
		Acetaminophen**	0.0080	U	ug/L	P351946	
		Fenuron	0.016	U	ug/L	P351946	
		Imazapyr**	0.019		ug/L	P351946	
		Carbamazepine**	8.0E-04	U	ug/L	P351946	
		Fluridone**	4.0E-04	U	ug/L	P351946	
		Hydrocodone**	8.0E-04	U	ug/L	P351946	
		Naproxen**	0.0080	U	ug/L	P351946	
		Ibuprofen**	0.020	U	ug/L	P351946	
		Sucralose**	0.010	U	ug/L	P351945	
		Glyphosate**	0.10	U	ug/L	P351945	

Field ID: G3NW0157

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2027603	EPA 8321B	AMPA**	0.10	U	ug/L	P351945	
		Endothall**	0.25	U	ug/L	P351945	
		Glufosinate**	0.10	U	ug/L	P351945	
		Acesulfame K**	0.10	U	ug/L	P351945	
2027609	EPA 8270D	Aldrin	4.2	U	ng/L	P352502	
		Alpha-BHC	2.1	U	ng/L	P352502	
		Beta-BHC	4.2	U	ng/L	P352502	
		Delta-BHC	4.2	UJ	ng/L	P352502	LCS, RPD
		Gamma-BHC	4.2	U	ng/L	P352502	
		Carbophenothion	4.2	UJ	ng/L	P352502	LCS
		Chlorothalonil	2.1	UJ	ng/L	P352502	CCV, LCS, RPD
		Cypermethrin	21	U	ng/L	P352502	
		DDD-p,p'	3.1	U	ng/L	P352502	
		DDE-p,p'	3.1	U	ng/L	P352502	
		DDT-p,p'	3.1	U	ng/L	P352502	
		Dieldrin	4.2	U	ng/L	P352502	MS
		Endosulfan I	4.2	U	ng/L	P352502	
		Endosulfan II	4.2	U	ng/L	P352502	
		Endosulfan Sulfate	2.1	UJ	ng/L	P352502	LCS
		Endrin	2.1	U	ng/L	P352502	
		Endrin Aldehyde	2.1	UJ	ng/L	P352502	CCV, MS, RPD
		Heptachlor	1.6	U	ng/L	P352502	
		Heptachlor Epoxide	2.1	U	ng/L	P352502	
		Methoxychlor	4.2	UJ	ng/L	P352502	LCS
		Mirex	2.1	U	ng/L	P352502	
		Permethrin	10	U	ng/L	P352502	
		Trifluralin	1.0	U	ng/L	P352502	
		Alpha-Chlordane	1.0	U	ng/L	P352502	
		Gamma-Chlordane	1.0	U	ng/L	P352502	
		Endrin Ketone	2.1	U	ng/L	P352502	
		Dicofol	31	UJ	ng/L	P352502	LCS, RPD
	EPA 8276	Chlordane	2.6	U	ng/L	P352502	
		Toxaphene	31	U	ng/L	P352502	
2027610	EPA 8270D	Alachlor	0.26	U	ng/L	P351924	
		Ametryn	0.33	U	ng/L	P351924	
		Atrazine	1.2		ng/L	P351924	
		Atrazine Desethyl	1.5	UJ	ng/L	P351924	RPD
		Azinphos Methyl	2.3	U	ng/L	P351924	
		Bromacil	0.51	U	ng/L	P351924	
		Butylate	0.41	U	ng/L	P351924	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P351924	
		Chlorpyrifos Methyl	0.10	U	ng/L	P351924	
		Demeton	2.0	UJ	ng/L	P351924	LCS, MS
		Diazinon	0.13	U	ng/L	P351924	

Field ID: G3NW0157

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2027610	EPA 8270D	Disulfoton	0.51	U	ng/L	P351924	
		EPTC	1.3	U	ng/L	P351924	MS
		Ethion	0.15	U	ng/L	P351924	MS, RPD
		Ethoprop	0.10	U	ng/L	P351924	
		Fenamiphos	0.26	U	ng/L	P351924	
		Fipronil	0.26	U	ng/L	P351924	
		Fipronil Sulfide	0.15	U	ng/L	P351924	
		Fipronil Sulfone	0.15	UJ	ng/L	P351924	LCS, RPD
		Hexazinone	1.3	I	ng/L	P351924	
		Malathion	0.36	U	ng/L	P351924	
		Metribuzin	0.20	UJ	ng/L	P351924	RPD
		Mevinphos	0.51	U	ng/L	P351924	
		Molinate	0.31	U	ng/L	P351924	
		Norflurazon	0.51	U	ng/L	P351924	
		Pendimethalin	1.0	U	ng/L	P351924	
		Phorate	0.26	U	ng/L	P351924	
		Prometon	0.92	U	ng/L	P351924	
		Prometryn	0.20	U	ng/L	P351924	
		Simazine	0.51	U	ng/L	P351924	
		Terbufos	0.10	U	ng/L	P351924	
		Terbuthylazine	0.43	U	ng/L	P351924	
		Fonofos	0.20	U	ng/L	P351924	
		Metalaxyl	0.26	U	ng/L	P351924	
		Metolachlor	0.99	I	ng/L	P351924	
		Acetochlor	0.26	U	ng/L	P351924	
		Cyanazine	0.51	U	ng/L	P351924	
		Parathion Ethyl	0.26	U	ng/L	P351924	
		Parathion Methyl	0.26	UJ	ng/L	P351924	LCS
2027624	EPA 200.7 Rev. 4.4	Calcium	5.07		mg/L	P352138	
		Iron	1.64E+03		ug/L	P352138	
		Magnesium	1.57		mg/L	P352138	
		Potassium	0.69	I	mg/L	P352138	
		Sodium	2.2		mg/L	P352138	
		Zinc	5.0	U	ug/L	P352138	
	EPA 200.8 Rev. 5.4	Arsenic	0.72		ug/L	P352138	
		Cadmium	0.027	I	ug/L	P352138	
		Chromium	0.43	I	ug/L	P352138	
		Copper	0.21	I	ug/L	P352138	
		Lead	0.24		ug/L	P352138	
		Nickel	0.48	I	ug/L	P352138	
		Silver	0.010	U	ug/L	P352898	

Field ID: G3NW0157

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:
EPA 300.0 Rev. 2.1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
SM 2540 D-97: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 8321B: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: Refer to the narrative for an explanation of QC Codes.
EPA 8270D: MS accuracy for Atrazine and Ametryn not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.

Sample Location: Limestone Branch upstream of Mt. Ida Rd.

Collection Date/Time: 09/20/2018 11:20

Field ID: G3NW0023

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2027575	EPA 180.1 Rev. 2.0	Turbidity	3.4		NTU	P352116	
	EPA 300.0 Rev. 2.1	Chloride	3.4		mg Cl/L	P352520	
		Sulfate	1.1		mg SO4/L	P352522	
		Color (true)	29		PCU	P352099	
	SM 2320 B-97	Total Alkalinity	70		mg CaCO3/L	P352565	
	SM 2540 C-97	TDS	92	A	mg/L	P352444	
	SM 2540 D-97	TSS	3	IA	mg/L	P352515	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P352567	
2027576	EPA 350.1 Rev. 2.0	Ammonia-N	0.021		mg N/L	P352555	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.40		mg N/L	P352332	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.22		mg N/L	P352301	
	EPA 365.1 Rev. 2.0	Total-P	0.016		mg P/L	P352321	
	SM 5310 B-00	Organic Carbon	3.8		mg C/L	P352348	
2027577	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P352103	
2027625	EPA 200.7 Rev. 4.4	Calcium	26.0		mg/L	P352138	
		Iron	570		ug/L	P352138	
		Magnesium	1.75		mg/L	P352138	
		Potassium	0.65	I	mg/L	P352138	
		Sodium	1.8	I	mg/L	P352138	
		Zinc	5.0	U	ug/L	P352138	
	EPA 200.8 Rev. 5.4	Arsenic	0.39		ug/L	P352138	
		Cadmium	0.020	U	ug/L	P352138	
		Chromium	0.40	U	ug/L	P352138	
		Copper	0.20	U	ug/L	P352138	
		Lead	0.091	I	ug/L	P352138	
		Nickel	0.20	U	ug/L	P352138	
		Silver	0.010	U	ug/L	P352898	

Ref. Method and Comment:

EPA 300.0 Rev. 2.1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

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: P352116

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P352138

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: P352138

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

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352898

Component	Result	Code	Units
Silver	0.010	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352520

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352522

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352555

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352331

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352331

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352332

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P352301

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352320

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352321

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P352103

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

Reference Method: EPA 8270D
Batch ID: P351924

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P351924

Component	Result	Code	Units
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
Metalaxyl	0.25	U	ng/L
Metolachlor	0.25	U	ng/L
Metribuzin	0.20	U	ng/L
Mevinphos	0.50	U	ng/L
Molinate	0.30	U	ng/L
Norflurazon	0.50	U	ng/L
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
Terbutylazine	0.42	U	ng/L

Reference Method: EPA 8270D
Batch ID: P352502

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D
Batch ID: P352502

Component	Result	Code	Units
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P352502

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

Reference Method: EPA 8321B
Batch ID: P351945

Component	Result	Code	Units
Acesulfame K	0.10	U	ug/L
AMPA	0.10	U	ug/L
Endothall	0.25	U	ug/L
Glufosinate	0.10	U	ug/L
Glyphosate	0.10	U	ug/L
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P351946

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
3-Hydroxycarbofuran	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Aldicarb	0.020	U	ug/L
Aldicarb Sulfone	0.0020	U	ug/L
Aldicarb Sulfoxide	0.0020	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	8.0E-04	U	ug/L
Carbaryl	0.0020	U	ug/L
Carbofuran	0.0020	U	ug/L
Diuron	0.0020	U	ug/L
Fenuron	0.016	U	ug/L
Fluridone	4.0E-04	U	ug/L
Hydrocodone	8.0E-04	U	ug/L
Ibuprofen	0.020	U	ug/L
Imazapyr	0.0040	U	ug/L
Imidacloprid	0.0020	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Methiocarb	0.0020	U	ug/L
Methomyl	0.0020	U	ug/L
Naproxen	0.0080	U	ug/L
Oxamyl	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Propoxur	0.0020	U	ug/L
Pyraclostrobin	0.0020	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8321B
Batch ID: P351946

Component	Result	Code	Units
Triclopyr	0.0040	U	ug/L

Reference Method: SM 2120 B
Batch ID: P352099

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2120 B
Batch ID: P352100

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P352565

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

Reference Method: SM 2540 C-97
Batch ID: P352444

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P352515

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P352567

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P352348

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: P352138

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	102		P	85 - 115
Iron	98.3		P	85 - 115
Magnesium	102		P	85 - 115
Potassium	96.5		P	85 - 115
Sodium	97.0		P	85 - 115
Zinc	95.1		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352138

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	106		P	85 - 115
Cadmium	99.4		P	85 - 115
Chromium	102		P	85 - 115
Copper	104		P	85 - 115
Lead	95.2		P	85 - 115
Nickel	103		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352898

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Silver	95.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352520

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352522

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352555

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352331

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352332

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

Laboratory Control Sample Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352332

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: P352301

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352320

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	96.9		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352321

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P352103

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.2		P	90 - 110

Reference Method: EPA 8270D
Batch ID: P351924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	109	93.6	P/P	74 - 119
Alachlor	109	91.1	P/P	75 - 118
Ametryn	101	89.2	P/P	59 - 137
Atrazine	91.6	90.8	P/P	73 - 120
Atrazine Desethyl	89.5	65.1	P/P	19 - 129
Azinphos Methyl	131	98.6	P/P	65 - 181
Bromacil	90.3	81.0	P/P	43 - 123
Butylate	72.8	61.5	P/P	28 - 85.0
Chlorpyrifos Ethyl	104	94.5	P/P	55 - 112
Chlorpyrifos Methyl	110	92.4	P/P	35 - 124
Cyanazine	104	82.1	P/P	26 - 262
Demeton	179	148	F/F	43 - 122
Diazinon	105	94.4	P/P	72 - 120
Disulfoton	109	84.3	P/P	45 - 137
EPTC	68.5	60.3	P/P	28 - 95.0
Ethion	105	108	P/P	63 - 127
Ethoprop	84.3	73.5	P/P	63 - 109
Fenamiphos	103	98.7	P/P	66 - 136
Fipronil	82.3	71.7	P/P	63 - 126
Fipronil Sulfide	83.0	77.8	P/P	59 - 123
Fipronil Sulfone	80.4	55.5	P/F	56 - 122
Fonofos	92.7	83.7	P/P	64 - 114

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P351924

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Hexazinone	106	94.6	P/P	49 - 144
Malathion	96.6	92.2	P/P	68 - 131
Metaxyl	92.2	86.6	P/P	57 - 126
Metolachlor	100	95.8	P/P	75 - 118
Metribuzin	156	115	P/P	46 - 169
Mevinphos	73.7	70.4	P/P	34 - 126
Molinate	74.0	63.6	P/P	37 - 101
Norflurazon	85.6	76.1	P/P	63 - 127
Parathion Ethyl	102	92.4	P/P	78 - 109
Parathion Methyl	125	92.2	F/P	74 - 123
Pendimethalin	126	114	P/P	51 - 130
Phorate	88.2	73.2	P/P	53 - 116
Prometon	95.4	87.8	P/P	66 - 124
Prometryn	95.2	97.4	P/P	66 - 124
Simazine	112	95.9	P/P	62 - 134
Terbufos	100	81.0	P/P	59 - 115
Terbutylazine	107	96.9	P/P	76 - 113

Reference Method: EPA 8270D
Batch ID: P352502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	58.6	57.2	P/P	24 - 89.0
Alpha-BHC	87.4	85.7	P/P	58 - 117
Alpha-Chlordane	77.5	70.0	P/P	56 - 115
Beta-BHC	99.3	103	P/P	55 - 137
Carbophenothion	27.0	20.4	F/F	37 - 145
Chlorothalonil	27.9	13.3	P/F	26 - 163
Cypermethrin	61.1	52.4	P/P	42 - 156
DDD-p,p'	73.7	64.4	P/P	59 - 129
DDE-p,p'	100	92.0	P/P	52 - 117
DDT-p,p'	114	109	P/P	48 - 128
Delta-BHC	75.8	55.2	P/F	59 - 158
Dicofol	133	259	F/F	19 - 124
Dieldrin	84.6	77.5	P/P	57 - 126
Endosulfan I	82.1	73.7	P/P	59 - 133
Endosulfan II	91.7	73.3	P/P	58 - 148
Endosulfan Sulfate	62.5	48.8	P/F	56 - 135
Endrin	79.8	72.0	P/P	50 - 140
Endrin Aldehyde	88.6	79.7	P/P	47 - 141
Endrin Ketone	79.1	72.8	P/P	63 - 123
Gamma-BHC	86.6	76.7	P/P	59 - 132
Gamma-Chlordane	77.1	70.1	P/P	55 - 112
Heptachlor	69.3	65.3	P/P	45 - 102
Heptachlor Epoxide	80.3	73.8	P/P	61 - 116
Methoxychlor	144	153	F/F	60 - 133
Mirex	72.3	69.7	P/P	40 - 98.0
Permethrin	70.9	58.3	P/P	45 - 131
Trifluralin	88.2	88.1	P/P	38 - 179

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8276
Batch ID: P352502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	94.6	92.6	P/P	47 - 125
Toxaphene	90.2	93.8	P/P	46 - 147

Reference Method: EPA 8321B
Batch ID: P351945

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acesulfame K	100		P	40 - 150
AMPA	97.3		P	40 - 150
Endothall	103		P	40 - 150
Glufosinate	84.5		P	40 - 150
Glyphosate	75.7		P	40 - 140
Sucralose	110		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P351946

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	92.7		P	40 - 150
3-Hydroxycarbofuran	96.8		P	40 - 150
Acetaminophen	103		P	30 - 150
Aldicarb	66.5		P	30 - 150
Aldicarb Sulfone	86.7		P	40 - 150
Aldicarb Sulfoxide	89.4		P	40 - 150
Bentazon	98.6		P	30 - 150
Carbamazepine	80.1		P	40 - 150
Carbaryl	70.0		P	40 - 150
Carbofuran	67.2		P	40 - 150
Diuron	71.0		P	40 - 150
Fenuron	105		P	40 - 150
Fluridone	104		P	40 - 150
Hydrocodone	113		P	40 - 150
Ibuprofen	92.5		P	40 - 150
Imazapyr	78.9		P	40 - 150
Imidacloprid	98.4		P	40 - 160
Linuron	65.0		P	40 - 150
MCPP	101		P	40 - 150
Methiocarb	53.4		P	40 - 150
Methomyl	99.6		P	40 - 150
Naproxen	80.9		P	40 - 150
Oxamyl	94.5		P	40 - 150
Primidone	98.3		P	40 - 150
Propoxur	69.1		P	40 - 150
Pyraclostrobin	75.9		P	40 - 150
Triclopyr	98.1		P	40 - 150

Reference Method: SM 2120 B
Batch ID: P352099

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

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: SM 2120 B
Batch ID: P352100

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	96.7		P	85 - 115

Reference Method: SM 2320 B-97
Batch ID: P352565

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

Reference Method: SM 4500 F-C-97
Batch ID: P352567

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.8		P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P352348

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	93.8		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P352138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027064	Calcium	94.7		P	80 - 120
2027064	Iron	98.7		P	80 - 120
2027064	Magnesium	99.9		P	80 - 120
2027064	Potassium	98.6		P	80 - 120
2027064	Sodium	94.9		P	80 - 120
2027064	Zinc	93.2		P	80 - 120
2027534	Calcium	96.7		P	80 - 120
2027534	Iron	100	103	P/P	80 - 120
2027534	Magnesium	102	105	P/P	80 - 120
2027534	Potassium	104	106	P/P	80 - 120
2027534	Sodium	98.0	102	P/P	80 - 120
2027534	Zinc	98.4	96.7	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352138

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027064	Arsenic	106		P	80 - 120
2027064	Cadmium	97.5		P	80 - 120
2027064	Chromium	102		P	80 - 120
2027064	Copper	102		P	80 - 120
2027064	Lead	95.1		P	80 - 120
2027064	Nickel	98.8		P	80 - 120
2027534	Arsenic	103	105	P/P	80 - 120
2027534	Cadmium	99.7	101	P/P	80 - 120
2027534	Chromium	102	103	P/P	80 - 120
2027534	Copper	101	103	P/P	80 - 120
2027534	Lead	95.1	96.8	P/P	80 - 120
2027534	Nickel	98.9	100	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352898

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027624	Silver	95.0	95.0	P/P	80 - 120
2027661	Silver	95.5		P	80 - 120

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352520

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027509	Chloride	93.8		P	90 - 110
2027582	Chloride	96.6		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352522

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027509	Sulfate	93.3		P	90 - 110
2027582	Sulfate	95.9		P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 350.1 Rev. 2.0
 Batch ID: P352555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027510	Ammonia-N	98.5	104	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P352331

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027473	Kjeldahl Nitrogen	106	107	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
 Batch ID: P352332

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027631	Kjeldahl Nitrogen	99.2	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P352301

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027544	NO2NO3-N	99.5	97.5	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P352320

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027474	Total-P	97.5	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P352321

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027631	Total-P	101	95.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P352103

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027577	O-Phosphate-P	95.4	95.9	P/P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P351924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027107	Acetochlor	115	99.5	P/P	67 - 125
2027107	Alachlor	110	97.1	P/P	69 - 123
2027107	Atrazine Desethyl	88.7	85.4	P/P	10 - 129
2027107	Azinphos Methyl	113	105	P/P	48 - 200
2027107	Bromacil	83.1	79.0	P/P	46 - 130
2027107	Butylate	79.0	60.9	P/P	10 - 85.0
2027107	Chlorpyrifos Ethyl	114	95.0	P/P	54 - 115
2027107	Chlorpyrifos Methyl	117	100	P/P	44 - 117
2027107	Cyanazine	89.0	92.6	P/P	10 - 262
2027107	Demeton	200	177	F/F	24 - 145

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P351924

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027107	Diazinon	117	98.8	P/P	66 - 129
2027107	Disulfoton	117	97.2	P/P	45 - 139
2027107	EPTC	103	89.2	F/F	10 - 86.0
2027107	Ethion	142	103	F/P	59 - 133
2027107	Ethoprop	92.0	82.1	P/P	54 - 116
2027107	Fenamiphos	110	106	P/P	55 - 140
2027107	Fipronil	80.4	75.9	P/P	37 - 142
2027107	Fipronil Sulfide	81.5	75.1	P/P	37 - 130
2027107	Fipronil Sulfone	55.6	58.8	P/P	18 - 143
2027107	Fonofos	105	91.3	P/P	55 - 118
2027107	Hexazinone	111	95.8	P/P	62 - 140
2027107	Malathion	106	97.1	P/P	64 - 132
2027107	Metalaxyl	95.3	86.3	P/P	55 - 129
2027107	Metolachlor	102	101	P/P	56 - 137
2027107	Metribuzin	159	139	P/P	16 - 218
2027107	Mevinphos	90.4	80.7	P/P	34 - 129
2027107	Molinate	81.4	70.1	P/P	16 - 99.0
2027107	Norflurazon	72.2	59.7	P/P	43 - 135
2027107	Parathion Ethyl	107	87.1	P/P	71 - 112
2027107	Parathion Methyl	127	107	P/P	65 - 127
2027107	Pendimethalin	140	116	P/P	35 - 159
2027107	Phorate	95.8	81.5	P/P	41 - 129
2027107	Prometon	99.2	88.0	P/P	56 - 140
2027107	Prometryn	99.2	90.6	P/P	65 - 130
2027107	Simazine	109	100	P/P	54 - 148
2027107	Terbufos	109	93.7	P/P	53 - 126
2027107	Terbutylazine	112	95.9	P/P	73 - 114

Reference Method: EPA 8270D
Batch ID: P352502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027514	Aldrin	65.0	61.7	P/P	26 - 96.0
2027514	Alpha-BHC	103	87.3	P/P	51 - 123
2027514	Alpha-Chlordane	91.3	91.4	P/P	45 - 120
2027514	Beta-BHC	119	132	P/P	43 - 146
2027514	Carbophenothion	99.4	107	P/P	26 - 179
2027514	Chlorothalonil	136	27.4	P/P	10 - 215
2027514	Cypermethrin	109	98.6	P/P	35 - 169
2027514	DDD-p,p'	105	97.3	P/P	49 - 131
2027514	DDE-p,p'	86.4	89.8	P/P	39 - 127
2027514	DDT-p,p'	89.5	95.1	P/P	49 - 120
2027514	Delta-BHC	153	109	P/P	49 - 187
2027514	Dicofol	89.4	92.7	P/P	10 - 129
2027514	Dieldrin	124	165	P/F	46 - 132
2027514	Endosulfan I	98.7	89.3	P/P	57 - 130
2027514	Endosulfan II	109	99.2	P/P	52 - 148
2027514	Endosulfan Sulfate	106	88.0	P/P	55 - 129
2027514	Endrin	101	105	P/P	45 - 133
2027514	Endrin Aldehyde	25.4	14.3	F/F	26 - 140
2027514	Endrin Ketone	120	100	P/P	60 - 125
2027514	Gamma-BHC	114	104	P/P	50 - 145

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P352502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027514	Gamma-Chlordane	89.1	89.3	P/P	44 - 118
2027514	Heptachlor	67.5	66.7	P/P	35 - 106
2027514	Heptachlor Epoxide	92.7	91.1	P/P	52 - 123
2027514	Methoxychlor	113	113	P/P	54 - 132
2027514	Mirex	75.6	74.1	P/P	36 - 107
2027514	Permethrin	96.7	94.2	P/P	47 - 135
2027514	Trifluralin	83.6	85.6	P/P	32 - 228

Reference Method: EPA 8276
Batch ID: P352502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027609	Chlordane	81.9	80.1	P/P	41 - 134
2027609	Toxaphene	103	92.0	P/P	39 - 158

Reference Method: EPA 8321B
Batch ID: P351945

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027105	Acesulfame K	76.5	75.9	P/P	40 - 150
2027105	AMPA	63.1	62.7	P/P	40 - 150
2027105	Endothall	148	141	P/P	40 - 150
2027105	Glufosinate	63.0	62.4	P/P	40 - 150
2027105	Glyphosate	83.2	78.2	P/P	40 - 140
2027105	Sucralose	119	115	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P351946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027602	3-Hydroxycarbofuran	74.3	78.2	P/P	40 - 150
2027602	Aldicarb	62.6	61.6	P/P	30 - 150
2027602	Aldicarb Sulfone	95.2	79.3	P/P	40 - 150
2027602	Aldicarb Sulfoxide	36.7	33.4	F/F	40 - 150
2027602	Carbaryl	43.7	44.5	P/P	40 - 150
2027602	Carbofuran	50.2	45.1	P/P	40 - 150
2027602	Methiocarb	45.4	43.1	P/P	40 - 150
2027602	Methomyl	85.4	77.5	P/P	40 - 150
2027602	Oxamyl	82.2	77.0	P/P	40 - 150
2027602	Propoxur	49.5	50.5	P/P	40 - 150
2027603	2,4-D	116	88.0	P/P	40 - 150
2027603	Acetaminophen	95.6	116	P/P	30 - 150
2027603	Bentazon	39.3	30.7	P/P	30 - 150
2027603	Carbamazepine	61.9	61.1	P/P	40 - 150
2027603	Diuron	49.5	51.7	P/P	40 - 150
2027603	Fenuron	81.6	94.9	P/P	40 - 150
2027603	Fluridone	94.0	104	P/P	40 - 150
2027603	Hydrocodone	107	126	P/P	40 - 150
2027603	Ibuprofen	77.9	64.4	P/P	40 - 150
2027603	Imazapyr	100	117	P/P	40 - 150
2027603	Imidacloprid	158	154	P/P	40 - 160
2027603	Linuron	50.4	56.0	P/P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
Batch ID: P351946

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027603	MCCP	121	102	P/P	40 - 150
2027603	Naproxen	75.7	70.4	P/P	40 - 150
2027603	Primidone	91.3	104	P/P	40 - 150
2027603	Pyraclostrobin	79.0	92.1	P/P	40 - 150
2027603	Triclopyr	115	98.7	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P352567

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027329	Fluoride	96.0	96.0	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P352348

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2027354	Organic Carbon	103		P	85 - 115

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P352116

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027572	Turbidity	1.13	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P352138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027534	Calcium	2.27	Spike	P	0 - 20
2027534	Iron	2.78	Spike	P	0 - 20
2027534	Magnesium	1.89	Spike	P	0 - 20
2027534	Potassium	2.37	Spike	P	0 - 20
2027534	Sodium	2.36	Spike	P	0 - 20
2027534	Zinc	1.79	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352138

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027534	Arsenic	1.70	Spike	P	0 - 20
2027534	Cadmium	1.30	Spike	P	0 - 20
2027534	Chromium	0.637	Spike	P	0 - 20
2027534	Copper	1.98	Spike	P	0 - 20
2027534	Lead	1.81	Spike	P	0 - 20
2027534	Nickel	1.59	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P352898

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027624	Silver	0.0318	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P352520

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027509	Chloride	0.00256	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P352555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027510	Ammonia-N	4.57	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352331

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027473	Kjeldahl Nitrogen	0.389	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P352332

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027631	Kjeldahl Nitrogen	0.615	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P352301

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027544	NO2NO3-N	2.03	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352320

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027474	Total-P	2.33	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P352321

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027631	Total-P	5.31	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P352103

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027577	O-Phosphate-P	0.501	Spike	P	0 - 20

Reference Method: EPA 8270D
Batch ID: P351924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027107	Acetochlor	14.7	Spike	P	0 - 30
2027107	Alachlor	12.9	Spike	P	0 - 30
2027107	Ametryn	18.5	Spike	P	0 - 30
2027107	Atrazine	0.528	Spike	P	0 - 30
2027107	Atrazine Desethyl	3.83	Spike	P	0 - 30
2027107	Azinphos Methyl	7.25	Spike	P	0 - 30
2027107	Bromacil	5.12	Spike	P	0 - 30
2027107	Butylate	22.1	Spike	P	0 - 30
2027107	Chlorpyrifos Ethyl	18.2	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P351924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027107	Chlorpyrifos Methyl	15.0	Spike	P	0 - 30
2027107	Cyanazine	3.92	Spike	P	0 - 30
2027107	Demeton	11.9	Spike	P	0 - 30
2027107	Diazinon	16.8	Spike	P	0 - 30
2027107	Disulfoton	18.5	Spike	P	0 - 30
2027107	EPTC	14.4	Spike	P	0 - 30
2027107	Ethion	31.6	Spike	F	0 - 30
2027107	Ethoprop	11.4	Spike	P	0 - 30
2027107	Fenamiphos	3.67	Spike	P	0 - 30
2027107	Fipronil	5.76	Spike	P	0 - 30
2027107	Fipronil Sulfide	7.23	Spike	P	0 - 30
2027107	Fipronil Sulfone	3.61	Spike	P	0 - 30
2027107	Fonofos	14.3	Spike	P	0 - 30
2027107	Hexazinone	11.2	Spike	P	0 - 30
2027107	Malathion	9.13	Spike	P	0 - 30
2027107	Metalaxyl	9.20	Spike	P	0 - 30
2027107	Metolachlor	0.797	Spike	P	0 - 30
2027107	Metribuzin	13.0	Spike	P	0 - 30
2027107	Mevinphos	11.3	Spike	P	0 - 30
2027107	Molinate	14.9	Spike	P	0 - 30
2027107	Norflurazon	19.0	Spike	P	0 - 30
2027107	Parathion Ethyl	20.3	Spike	P	0 - 30
2027107	Parathion Methyl	16.4	Spike	P	0 - 30
2027107	Pendimethalin	18.3	Spike	P	0 - 30
2027107	Phorate	16.1	Spike	P	0 - 30
2027107	Prometon	12.0	Spike	P	0 - 30
2027107	Prometryn	9.12	Spike	P	0 - 30
2027107	Simazine	8.28	Spike	P	0 - 30
2027107	Terbufos	15.3	Spike	P	0 - 30
2027107	Terbuthylazine	15.4	Spike	P	0 - 30
LFB	Acetochlor	15.2	LCS	P	0 - 30
LFB	Alachlor	18.3	LCS	P	0 - 30
LFB	Ametryn	12.6	LCS	P	0 - 30
LFB	Atrazine	0.835	LCS	P	0 - 30
LFB	Atrazine Desethyl	31.5	LCS	F	0 - 30
LFB	Azinphos Methyl	28.0	LCS	P	0 - 30
LFB	Bromacil	10.9	LCS	P	0 - 30
LFB	Butylate	16.8	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	9.47	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	17.5	LCS	P	0 - 30
LFB	Cyanazine	23.6	LCS	P	0 - 30
LFB	Demeton	19.1	LCS	P	0 - 30
LFB	Diazinon	10.9	LCS	P	0 - 30
LFB	Disulfoton	25.2	LCS	P	0 - 30
LFB	EPTC	12.9	LCS	P	0 - 30
LFB	Ethion	2.87	LCS	P	0 - 30
LFB	Ethoprop	13.8	LCS	P	0 - 30
LFB	Fenamiphos	4.53	LCS	P	0 - 30
LFB	Fipronil	13.8	LCS	P	0 - 30
LFB	Fipronil Sulfide	6.38	LCS	P	0 - 30
LFB	Fipronil Sulfone	36.6	LCS	F	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P351924

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fonofos	10.2	LCS	P	0 - 30
LFB	Hexazinone	11.2	LCS	P	0 - 30
LFB	Malathion	4.71	LCS	P	0 - 30
LFB	Metalaxyl	6.25	LCS	P	0 - 30
LFB	Metolachlor	4.64	LCS	P	0 - 30
LFB	Metribuzin	30.2	LCS	F	0 - 30
LFB	Mevinphos	4.51	LCS	P	0 - 30
LFB	Molinate	15.2	LCS	P	0 - 30
LFB	Norflurazon	11.7	LCS	P	0 - 30
LFB	Parathion Ethyl	9.78	LCS	P	0 - 30
LFB	Parathion Methyl	29.9	LCS	P	0 - 30
LFB	Pendimethalin	10.5	LCS	P	0 - 30
LFB	Phorate	18.6	LCS	P	0 - 30
LFB	Prometon	8.26	LCS	P	0 - 30
LFB	Prometryn	2.24	LCS	P	0 - 30
LFB	Simazine	15.4	LCS	P	0 - 30
LFB	Terbufos	21.2	LCS	P	0 - 30
LFB	Terbutylazine	9.97	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P352502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027514	Aldrin	4.71	Spike	P	0 - 30
2027514	Alpha-BHC	16.5	Spike	P	0 - 30
2027514	Alpha-Chlordane	0.486	Spike	P	0 - 30
2027514	Beta-BHC	11.1	Spike	P	0 - 30
2027514	Carbophenothion	7.53	Spike	P	0 - 30
2027514	Chlorothalonil	133	Spike	F	0 - 30
2027514	Cypermethrin	9.95	Spike	P	0 - 30
2027514	DDD-p,p'	7.41	Spike	P	0 - 30
2027514	DDE-p,p'	4.31	Spike	P	0 - 30
2027514	DDT-p,p'	6.55	Spike	P	0 - 30
2027514	Delta-BHC	33.0	Spike	F	0 - 30
2027514	Dicofol	3.94	Spike	P	0 - 30
2027514	Dieldrin	5.88	Spike	P	0 - 30
2027514	Endosulfan I	9.58	Spike	P	0 - 30
2027514	Endosulfan II	9.17	Spike	P	0 - 30
2027514	Endosulfan Sulfate	18.0	Spike	P	0 - 30
2027514	Endrin	5.15	Spike	P	0 - 30
2027514	Endrin Aldehyde	55.6	Spike	F	0 - 30
2027514	Endrin Ketone	17.1	Spike	P	0 - 30
2027514	Gamma-BHC	8.81	Spike	P	0 - 30
2027514	Gamma-Chlordane	0.573	Spike	P	0 - 30
2027514	Heptachlor	0.828	Spike	P	0 - 30
2027514	Heptachlor Epoxide	1.41	Spike	P	0 - 30
2027514	Methoxychlor	0.158	Spike	P	0 - 30
2027514	Mirex	1.58	Spike	P	0 - 30
2027514	Permethrin	2.20	Spike	P	0 - 30
2027514	Trifluralin	2.80	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P352502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	2.44	LCS	P	0 - 30
LFB	Alpha-BHC	2.03	LCS	P	0 - 30
LFB	Alpha-Chlordane	10.2	LCS	P	0 - 30
LFB	Beta-BHC	4.11	LCS	P	0 - 30
LFB	Carbophenothion	28.1	LCS	P	0 - 30
LFB	Chlorothalonil	71.1	LCS	F	0 - 30
LFB	Cypermethrin	15.5	LCS	P	0 - 30
LFB	DDD-p,p'	13.5	LCS	P	0 - 30
LFB	DDE-p,p'	8.60	LCS	P	0 - 30
LFB	DDT-p,p'	4.06	LCS	P	0 - 30
LFB	Delta-BHC	31.4	LCS	F	0 - 30
LFB	Dicofol	64.0	LCS	F	0 - 30
LFB	Dieldrin	8.79	LCS	P	0 - 30
LFB	Endosulfan I	10.8	LCS	P	0 - 30
LFB	Endosulfan II	22.3	LCS	P	0 - 30
LFB	Endosulfan Sulfate	24.7	LCS	P	0 - 30
LFB	Endrin	10.3	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.5	LCS	P	0 - 30
LFB	Endrin Ketone	8.19	LCS	P	0 - 30
LFB	Gamma-BHC	12.1	LCS	P	0 - 30
LFB	Gamma-Chlordane	9.53	LCS	P	0 - 30
LFB	Heptachlor	5.91	LCS	P	0 - 30
LFB	Heptachlor Epoxide	8.41	LCS	P	0 - 30
LFB	Methoxychlor	6.01	LCS	P	0 - 30
LFB	Mirex	3.65	LCS	P	0 - 30
LFB	Permethrin	19.5	LCS	P	0 - 30
LFB	Trifluralin	0.0692	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P352502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027609	Chlordane	2.05	Spike	P	0 - 30
2027609	Toxaphene	11.4	Spike	P	0 - 30
LFB	Chlordane	2.10	LCS	P	0 - 30
LFB	Toxaphene	3.89	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P351945

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027105	Acesulfame K	0.729	Spike	P	0 - 30
2027105	AMPA	0.128	Spike	P	0 - 30
2027105	Endothall	4.59	Spike	P	0 - 30
2027105	Glufosinate	0.930	Spike	P	0 - 30
2027105	Glyphosate	1.27	Spike	P	0 - 30
2027105	Sucralose	3.47	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8321B
 Batch ID: P351946

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027602	3-Hydroxycarbofuran	5.11	Spike	P	0 - 30
2027602	Aldicarb	1.54	Spike	P	0 - 30
2027602	Aldicarb Sulfone	18.2	Spike	P	0 - 30
2027602	Aldicarb Sulfoxide	9.30	Spike	P	0 - 30
2027602	Carbaryl	1.75	Spike	P	0 - 30
2027602	Carbofuran	10.6	Spike	P	0 - 30
2027602	Methiocarb	5.35	Spike	P	0 - 30
2027602	Methomyl	9.63	Spike	P	0 - 30
2027602	Oxamyl	6.43	Spike	P	0 - 30
2027602	Propoxur	2.01	Spike	P	0 - 30
2027603	2,4-D	27.2	Spike	P	0 - 30
2027603	Acetaminophen	19.3	Spike	P	0 - 30
2027603	Bentazon	24.4	Spike	P	0 - 30
2027603	Carbamazepine	1.39	Spike	P	0 - 30
2027603	Diuron	4.30	Spike	P	0 - 30
2027603	Fenuron	15.1	Spike	P	0 - 30
2027603	Fluridone	9.90	Spike	P	0 - 30
2027603	Hydrocodone	16.4	Spike	P	0 - 30
2027603	Ibuprofen	18.9	Spike	P	0 - 30
2027603	Imazapyr	12.9	Spike	P	0 - 30
2027603	Imidacloprid	2.70	Spike	P	0 - 30
2027603	Linuron	10.7	Spike	P	0 - 30
2027603	MCPP	17.1	Spike	P	0 - 30
2027603	Naproxen	7.16	Spike	P	0 - 30
2027603	Primidone	13.0	Spike	P	0 - 30
2027603	Pyraclostrobin	15.3	Spike	P	0 - 30
2027603	Triclopyr	14.8	Spike	P	0 - 30

Reference Method: SM 2120 B
 Batch ID: P352099

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027543	Color (true)	1.08	Sample	P	0 - 20

Reference Method: SM 2120 B
 Batch ID: P352100

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027578	Color (true)	0.881	Sample	P	0 - 20

Reference Method: SM 2320 B-97
 Batch ID: P352565

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027329	Total Alkalinity	1.02	Sample	P	0 - 1.6

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P352444

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027575	TDS	1.09	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P352567

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027329	Fluoride	0.0	Spike	P	0 - 3.5

Reference Method: SM 5310 B-00
Batch ID: P352348

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2027354	Organic Carbon	1.52	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: 2027602
Field Sample ID: G3NW0157

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Carbaryl-d7	48.5	P	30 - 160

Lab Sample ID: 2027603
Field Sample ID: G3NW0157

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	2,4-D-d3	84.8	P	30 - 160
EPA 8321B	Acetaminophen-d4	107	P	30 - 160
EPA 8321B	Carbamazepine-d10	73.7	P	30 - 160
EPA 8321B	Diuron-d6	59.3	P	30 - 160
EPA 8321B	Endothall-d6	147	P	40 - 160
EPA 8321B	Glyphosate 13C 15N	87.0	P	40 - 160
EPA 8321B	Ibuprofen-d3	61.1	P	30 - 160
EPA 8321B	Primidone-d5	101	P	30 - 160
EPA 8321B	Sucralose-d6	133	P	40 - 160

Lab Sample ID: 2027609
Field Sample ID: G3NW0157

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	67.2	P	37 - 117
EPA 8270D	Tetrachloro-m-xylene	55.2	P	34 - 101
EPA 8276	Decachlorobiphenyl	57.0	P	31 - 108
EPA 8276	PCNB	120	P	62 - 142

Lab Sample ID: 2027610
Field Sample ID: G3NW0157

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Simazine-d10	107	P	71 - 126
EPA 8270D	Terbufos-d10	82.8	P	59 - 149

Quality Assurance Report Calibration Verification

Reference Method: SM 2120 B

Run ID: A86649

Included Lab Sample IDs: 2027572, 2027575, 2027578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	103	105	P/P	90 - 115
Color (true)	104	105	P/P	90 - 115

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A86650

Included Lab Sample IDs: 2027574, 2027577, 2027580

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	98.6	98.6	P/P	90 - 110
O-Phosphate-P	98.7	98.5	P/P	90 - 110
O-Phosphate-P	98.8	98.6	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A86652

Included Lab Sample IDs: 2027603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	103	98.4	P/P	60 - 160

Reference Method: EPA 8321B

Run ID: A86657

Included Lab Sample IDs: 2027603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acesulfame K	113	115	P/P	60 - 160
Endothall	96.8	95.1	P/P	60 - 160

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A86658

Included Lab Sample IDs: 2027572, 2027575, 2027578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Turbidity	103	102	P/P	95 - 105

Reference Method: EPA 8321B

Run ID: A86664

Included Lab Sample IDs: 2027603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
AMPA	89.8	119	P/P	60 - 160
Glufosinate	83.4	99.1	P/P	60 - 160
Glyphosate	91.9	104	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A86714

Included Lab Sample IDs: 2027624, 2027625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	93.0	94.5	P/P	90 - 110
Iron	95.6	96.8	P/P	90 - 110
Magnesium	95.8	97.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A86714

Included Lab Sample IDs: 2027624, 2027625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Potassium	94.1	96.2	P/P	90 - 110
Sodium	94.6	94.4	P/P	90 - 110
Zinc	94.9	94.4	P/P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A86718

Included Lab Sample IDs: 2027572, 2027575, 2027578

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	98.1	99.9	P/P	90 - 110
Sulfate	97.9	99.6	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A86728

Included Lab Sample IDs: 2027573, 2027576, 2027579

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

Reference Method: SM 5310 B-00

Run ID: A86745

Included Lab Sample IDs: 2027573, 2027576, 2027579

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.4	94.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A86753

Included Lab Sample IDs: 2027573, 2027576, 2027579

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	101	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A86761

Included Lab Sample IDs: 2027573, 2027576, 2027579

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.8	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A86818

Included Lab Sample IDs: 2027603

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	101	83.8	P/P	50 - 150
3-Hydroxycarbofuran	90.9	92.0	P/P	50 - 150
Acetaminophen	100	90.9	P/P	60 - 160
Aldicarb	104	83.0	P/P	60 - 150
Aldicarb Sulfone	96.1	98.3	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B
 Run ID: A86818
 Included Lab Sample IDs: 2027602

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldicarb Sulfoxide	90.9	90.6	P/P	50 - 150
Bentazon	112	95.9	P/P	50 - 160
Carbamazepine	105	101	P/P	60 - 160
Carbaryl	105	98.5	P/P	60 - 150
Carbofuran	100	99.9	P/P	50 - 150
Diuron	103	93.6	P/P	60 - 150
Fenuron	106	109	P/P	60 - 150
Fluridone	125	119	P/P	60 - 160
Hydrocodone	109	106	P/P	60 - 150
Ibuprofen	78.4	108	P/P	50 - 160
Imazapyr	105	99.8	P/P	50 - 150
Imidacloprid	93.7	95.1	P/P	60 - 150
Linuron	106	108	P/P	60 - 150
MCPP	101	85.4	P/P	50 - 150
Methiocarb	107	95.8	P/P	50 - 150
Methomyl	102	103	P/P	50 - 150
Naproxen	92.2	93.3	P/P	50 - 160
Oxamyl	102	98.9	P/P	50 - 150
Primidone	96.3	87.8	P/P	60 - 150
Propoxur	98.5	102	P/P	50 - 150
Pyraclostrobin	108	133	P/P	60 - 150
Triclopyr	110	93.7	P/P	50 - 160

Reference Method: EPA 8270D
 Run ID: A86820
 Included Lab Sample IDs: 2027610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	92.8		P	80 - 120
Alachlor	94.5		P	80 - 120
Ametryn	91.3		P	80 - 120
Atrazine	97.7		P	80 - 120
Atrazine Desethyl	99.1		P	80 - 120
Azinphos Methyl	95.0		P	80 - 120
Bromacil	96.4		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	93.9		P	80 - 120
Chlorpyrifos Methyl	87.1		P	80 - 120
Cyanazine	90.6		P	80 - 120
Demeton	87.8		P	80 - 120
Diazinon	106		P	80 - 120
Disulfoton	101		P	80 - 120
EPTC	97.6		P	80 - 120
Ethion	88.0		P	80 - 120
Ethoprop	89.6		P	80 - 120
Fenamiphos	101		P	80 - 120
Fipronil	98.1		P	80 - 120
Fipronil Sulfide	104		P	80 - 120
Fipronil Sulfone	96.8		P	80 - 120
Fonofos	90.8		P	80 - 120
Hexazinone	95.8		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A86820

Included Lab Sample IDs: 2027610

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Malathion	83.9		P	80 - 120
Metaxyl	95.9		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	104		P	80 - 120
Mevinphos	89.8		P	80 - 120
Molinate	100		P	80 - 120
Norflurazon	90.5		P	80 - 120
Parathion Ethyl	89.4		P	80 - 120
Parathion Methyl	95.5		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	88.7		P	80 - 120
Prometon	97.5		P	80 - 120
Prometryn	94.1		P	80 - 120
Simazine	105		P	80 - 120
Terbufos	92.0		P	80 - 120
Terbutylazine	100		P	80 - 120

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A86826

Included Lab Sample IDs: 2027573, 2027576, 2027579

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

Reference Method: SM 2320 B-97

Run ID: A86829

Included Lab Sample IDs: 2027572, 2027575, 2027578

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

Reference Method: SM 4500 F-C-97

Run ID: A86829

Included Lab Sample IDs: 2027572, 2027575, 2027578

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A86832

Included Lab Sample IDs: 2027624, 2027625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.5	100	P/P	90 - 110
Cadmium	97.2	97.1	P/P	90 - 110
Copper	100	101	P/P	90 - 110
Lead	95.3	96.0	P/P	90 - 110
Nickel	98.5	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A86855

Included Lab Sample IDs: 2027624, 2027625

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

Reference Method: EPA 8276

Run ID: A86869

Included Lab Sample IDs: 2027609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	95.5		P	80 - 120
Toxaphene	97.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A87002

Included Lab Sample IDs: 2027624, 2027625

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Silver	93.4	93.9	P/P	90 - 110
Silver	93.9	93.4	P/P	90 - 110

Reference Method: EPA 8270D

Run ID: A87021

Included Lab Sample IDs: 2027609

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.1		P	80 - 120
Alpha-BHC	97.9		P	80 - 120
Alpha-Chlordane	95.3		P	80 - 120
Beta-BHC	96.4		P	80 - 120
Carbophenothion	84.7		P	80 - 120
Chlorothalonil	61.1*		F	80 - 120
Cypermethrin	82.6		P	80 - 120
DDD-p,p'	94.4		P	80 - 120
DDE-p,p'	98.0		P	80 - 120
DDT-p,p'	110		P	80 - 120
Delta-BHC	92.3		P	80 - 120
Dicofol	106		P	80 - 120
Dieldrin	95.1		P	80 - 120
Endosulfan I	89.2		P	80 - 120
Endosulfan II	80.1		P	80 - 120
Endosulfan Sulfate	95.9		P	80 - 120
Endrin	97.7		P	80 - 120
Endrin Aldehyde	64.0*		F	80 - 120
Endrin Ketone	97.8		P	80 - 120
Gamma-BHC	98.1		P	80 - 120
Gamma-Chlordane	94.9		P	80 - 120
Heptachlor	92.6		P	80 - 120
Heptachlor Epoxide	94.8		P	80 - 120
Methoxychlor	107		P	80 - 120
Mirex	101		P	80 - 120
Permethrin	92.5		P	80 - 120
Trifluralin	98.6		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			LCS	Precision	MS
								SMP	
EPA 180.1 Rev. 2.0	Turbidity							1.13	
EPA 200.7 Rev. 4.4	Calcium	102		94.7	96.7				2.27
	Iron	98.3		98.7	100	103			2.78
	Magnesium	102		99.9	102	105			1.89
	Potassium	96.5		98.6	104	106			2.37
	Sodium	97.0		94.9	98.0	102			2.36
	Zinc	95.1		93.2	98.4	96.7			1.79
EPA 200.8 Rev. 5.4	Arsenic	106		106	103	105			1.70
	Cadmium	99.4		97.5	99.7	101			1.30
	Chromium	102		102	102	103			0.637
	Copper	104		102	101	103			1.98
	Lead	95.2		95.1	95.1	96.8			1.81
	Nickel	103		98.8	98.9	100			1.59
	Silver	95.8		95.0	95.0	95.5			0.0318
EPA 300.0 Rev. 2.1	Chloride	95.7		93.8	96.6			0.0025	
	Sulfate	95.6		93.3	95.9				
EPA 350.1 Rev. 2.0	Ammonia-N	98.3		98.5	104				4.57
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	102		106	107				0.389
	Kjeldahl Nitrogen	105		99.2	100				0.615
EPA 353.2 Rev. 2.0	NO2NO3-N	102		99.5	97.5				2.03
EPA 365.1 Rev. 2.0	Total-P	96.9		97.5	95.0				2.33
	Total-P	98.7		101	95.0				5.31
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.2		95.4	95.9				0.501
EPA 8270D	Acetochlor	109	93.6	115	99.5		15.2		14.7
	Alachlor	109	91.1	110	97.1		18.3		12.9
	Aldrin	58.6	57.2	65.0	61.7		2.44		4.71
	Alpha-BHC	87.4	85.7	103	87.3		2.03		16.5
	Alpha-Chlordane	77.5	70.0	91.3	91.4		10.2		0.486
	Ametryn	101	89.2				12.6		18.5
	Atrazine	91.6	90.8				0.835		0.528
	Atrazine Desethyl	89.5	65.1	88.7	85.4		31.5		3.83
	Azinphos Methyl	131	98.6	113	105		28.0		7.25
	Beta-BHC	99.3	103	119	132		4.11		11.1
	Bromacil	90.3	81.0	83.1	79.0		10.9		5.12
	Butylate	72.8	61.5	79.0	60.9		16.8		22.1
	Carbophenothion	27.0	20.4	99.4	107		28.1		7.53
	Chlorothalonil	27.9	13.3	136	27.4		71.1		133
	Chlorpyrifos Ethyl	104	94.5	114	95.0		9.47		18.2
	Chlorpyrifos Methyl	110	92.4	117	100		17.5		15.0
	Cyanazine	104	82.1	89.0	92.6		23.6		3.92
	Cypermethrin	61.1	52.4	109	98.6		15.5		9.95
	DDD-p,p'	73.7	64.4	105	97.3		13.5		7.41
	DDE-p,p'	100	92.0	86.4	89.8		8.60		4.31
	DDT-p,p'	114	109	89.5	95.1		4.06		6.55
	Delta-BHC	75.8	55.2	153	109		31.4		33.0
	Demeton	179	148	200	177		19.1		11.9
	Diazinon	105	94.4	117	98.8		10.9		16.8
	Dicofol	133	259	89.4	92.7		64.0		3.94
	Dieldrin	84.6	77.5	124	165		8.79		5.88
	Disulfoton	109	84.3	117	97.2		25.2		18.5
	Endosulfan I	82.1	73.7	98.7	89.3		10.8		9.58
	Endosulfan II	91.7	73.3	109	99.2		22.3		9.17
	Endosulfan Sulfate	62.5	48.8	106	88.0		24.7		18.0
	Endrin	79.8	72.0	101	105		10.3		5.15

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Endrin Aldehyde	88.6	79.7	25.4	14.3	10.5	55.6
	Endrin Ketone	79.1	72.8	120	100	8.19	17.1
	EPTC	68.5	60.3	103	89.2	12.9	14.4
	Ethion	105	108	142	103	2.87	31.6
	Ethoprop	84.3	73.5	92.0	82.1	13.8	11.4
	Fenamiphos	103	98.7	110	106	4.53	3.67
	Fipronil	82.3	71.7	80.4	75.9	13.8	5.76
	Fipronil Sulfide	83.0	77.8	81.5	75.1	6.38	7.23
	Fipronil Sulfone	80.4	55.5	55.6	58.8	36.6	3.61
	Fonofos	92.7	83.7	105	91.3	10.2	14.3
	Gamma-BHC	86.6	76.7	114	104	12.1	8.81
	Gamma-Chlordane	77.1	70.1	89.1	89.3	9.53	0.573
	Heptachlor	69.3	65.3	67.5	66.7	5.91	0.828
	Heptachlor Epoxide	80.3	73.8	92.7	91.1	8.41	1.41
	Hexazinone	106	94.6	111	95.8	11.2	11.2
	Malathion	96.6	92.2	106	97.1	4.71	9.13
	Metalaxyl	92.2	86.6	95.3	86.3	6.25	9.20
	Methoxychlor	144	153	113	113	6.01	0.158
	Metolachlor	100	95.8	102	101	4.64	0.797
	Metribuzin	156	115	159	139	30.2	13.0
	Mevinphos	73.7	70.4	90.4	80.7	4.51	11.3
	Mirex	72.3	69.7	75.6	74.1	3.65	1.58
	Molinate	74.0	63.6	81.4	70.1	15.2	14.9
	Norflurazon	85.6	76.1	72.2	59.7	11.7	19.0
	Parathion Ethyl	102	92.4	107	87.1	9.78	20.3
	Parathion Methyl	125	92.2	127	107	29.9	16.4
	Pendimethalin	126	114	140	116	10.5	18.3
	Permethrin	70.9	58.3	96.7	94.2	19.5	2.20
	Phorate	88.2	73.2	95.8	81.5	18.6	16.1
	Prometon	95.4	87.8	99.2	88.0	8.26	12.0
	Prometryn	95.2	97.4	99.2	90.6	2.24	9.12
	Simazine	112	95.9	109	100	15.4	8.28
	Terbufos	100	81.0	109	93.7	21.2	15.3
	Terbuthylazine	107	96.9	112	95.9	9.97	15.4
	Trifluralin	88.2	88.1	83.6	85.6	0.0692	2.80
EPA 8276	Chlordane	94.6	92.6	81.9	80.1	2.10	2.05
	Toxaphene	90.2	93.8	103	92.0	3.89	11.4
EPA 8321B	2,4-D	92.7		116	88.0		27.2
	3-Hydroxycarbofuran	96.8		74.3	78.2		5.11
	Acesulfame K	100		76.5	75.9		0.729
	Acetaminophen	103		95.6	116		19.3
	Aldicarb	66.5		62.6	61.6		1.54
	Aldicarb Sulfone	86.7		95.2	79.3		18.2
	Aldicarb Sulfoxide	89.4		36.7	33.4		9.30
	AMPA	97.3		63.1	62.7		0.128
	Bentazon	98.6		39.3	30.7		24.4
	Carbamazepine	80.1		61.9	61.1		1.39
	Carbaryl	70.0		43.7	44.5		1.75
	Carbofuran	67.2		50.2	45.1		10.6
	Diuron	71.0		49.5	51.7		4.30
	Endothall	103		148	141		4.59
	Fenuron	105		81.6	94.9		15.1
	Fluridone	104		94.0	104		9.90
	Glufosinate	84.5		63.0	62.4		0.930

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8321B	Glyphosate	75.7	83.2	78.2		1.27
	Hydrocodone	113	107	126		16.4
	Ibuprofen	92.5	77.9	64.4		18.9
	Imazapyr	78.9	100	117		12.9
	Imidacloprid	98.4	158	154		2.70
	Linuron	65.0	50.4	56.0		10.7
	MCPP	101	121	102		17.1
	Methiocarb	53.4	45.4	43.1		5.35
	Methomyl	99.6	85.4	77.5		9.63
	Naproxen	80.9	75.7	70.4		7.16
	Oxamyl	94.5	82.2	77.0		6.43
	Primidone	98.3	91.3	104		13.0
	Propoxur	69.1	49.5	50.5		2.01
	Pyraclostrobin	75.9	79.0	92.1		15.3
	Sucralose	110	119	115		3.47
	Triclopyr	98.1	115	98.7		14.8
SM 2120 B	Color (true)	98.4			1.08	
	Color (true)	96.7			0.881	
SM 2320 B-97	Total Alkalinity	102			1.02	
SM 2540 C-97	TDS				1.09	
SM 4500 F-C-97	Fluoride	97.8	96.0	96.0		0.0
SM 5310 B-00	Organic Carbon	93.8	103			1.52

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	2027572, 2027575, 2027578
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2027624, 2027625
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2027624, 2027625
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	2027572, 2027575, 2027578
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	2027572, 2027575, 2027578
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	2027573, 2027576, 2027579
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	2027573, 2027576, 2027579
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	2027573, 2027576, 2027579
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	2027573, 2027576, 2027579
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2027574, 2027577, 2027580
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	2027609
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2027610
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	2027609
EPA 8321B / E31780	Carbamates in water matrices by HPLC/MS/MS	2027602
EPA 8321B / E31780	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2027603
SM 2120 B / E31780	True Color measured at 450 nm	2027572, 2027575, 2027578
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	2027572, 2027575, 2027578
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	2027572, 2027575, 2027578

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2027572, 2027575, 2027578
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2027572, 2027575, 2027578
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	2027573, 2027576, 2027579

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	09/21/2018			09/21/2018 16:28	Megan Treadwell	2027572, 2027575, 2027578
EPA 200.7 Rev. 4.4	09/21/2018	09/24/2018 13:10	Elliott D. Healy	09/25/2018 19:07	Betina Topolski	2027624
	09/21/2018	09/24/2018 13:10	Elliott D. Healy	09/25/2018 19:13	Betina Topolski	2027625
EPA 200.8 Rev. 5.4	09/21/2018	09/24/2018 13:10	Elliott D. Healy	10/02/2018 02:47	Robert K Palmer	2027624
	09/21/2018	09/24/2018 13:10	Elliott D. Healy	10/02/2018 02:57	Robert K Palmer	2027625
	09/21/2018	09/24/2018 13:10	Elliott D. Healy	10/02/2018 21:25	Robert K Palmer	2027624
	09/21/2018	09/24/2018 13:10	Elliott D. Healy	10/02/2018 21:31	Robert K Palmer	2027625
	09/21/2018	10/08/2018 10:04	Devin Thornton	10/08/2018 19:05	Robert K Palmer	2027624
	09/21/2018	10/08/2018 10:04	Devin Thornton	10/08/2018 20:52	Robert K Palmer	2027625
EPA 300.0 Rev. 2.1	09/21/2018			09/28/2018 17:04	Lipi Saha	2027572
	09/21/2018			09/28/2018 17:16	Lipi Saha	2027575
	09/21/2018			09/28/2018 17:28	Lipi Saha	2027578
EPA 350.1 Rev. 2.0	09/21/2018			09/28/2018 11:53	Ping Hua	2027573
	09/21/2018			09/28/2018 12:02	Ping Hua	2027576
	09/21/2018			09/28/2018 12:03	Ping Hua	2027579
EPA 351.2 Rev. 2.0	09/21/2018	09/26/2018 15:45	Adrian Shelby	09/27/2018 13:12	Joseph Suarez	2027573
	09/21/2018	09/26/2018 15:45	Adrian Shelby	09/27/2018 13:17	Joseph Suarez	2027576
	09/21/2018	09/26/2018 15:45	Adrian Shelby	09/27/2018 13:19	Joseph Suarez	2027579
EPA 353.2 Rev. 2.0	09/21/2018			09/26/2018 14:00	Lauren Bottorf	2027579
	09/21/2018			09/26/2018 14:29	Lauren Bottorf	2027573
	09/21/2018			09/26/2018 14:31	Lauren Bottorf	2027576
EPA 365.1 Rev. 2.0	09/21/2018	09/26/2018 11:30	Adrian Shelby	09/27/2018 14:04	Beverly Y. Sanders	2027573
	09/21/2018	09/26/2018 11:30	Adrian Shelby	09/27/2018 14:06	Beverly Y. Sanders	2027576
	09/21/2018	09/26/2018 11:30	Adrian Shelby	09/27/2018 14:07	Beverly Y. Sanders	2027579
EPA 365.1 Rev. 2.0 dissolved	09/21/2018			09/21/2018 15:48	Julia Storbeck	2027577
	09/21/2018			09/21/2018 16:19	Julia Storbeck	2027574
	09/21/2018			09/21/2018 16:25	Julia Storbeck	2027580
EPA 8270D	09/21/2018	09/21/2018 13:00	Fe-Val Siddell	09/24/2018 21:33	Vandana T. Nagar	2027610
	09/21/2018	09/25/2018 10:00	Rasheda Ghaffari	09/29/2018 02:54	Arthur Maknenko	2027609
EPA 8276	09/21/2018	09/25/2018 10:00	Rasheda Ghaffari	09/29/2018 04:35	Arthur Maknenko	2027609
EPA 8321B	09/21/2018	09/21/2018 15:00	Mohammad Ghaffari	09/22/2018 09:11	Mohammad Ghaffari	2027603
	09/21/2018	09/21/2018 15:00	Mohammad Ghaffari	09/23/2018 19:44	Mohammad Ghaffari	2027603
	09/21/2018	09/21/2018 15:00	Mohammad Ghaffari	09/24/2018 09:29	Mohammad Ghaffari	2027603
	09/21/2018	09/26/2018 09:00	Hoor Shaik	09/29/2018 02:43	Juyoung Kim	2027603
	09/21/2018	09/26/2018 09:00	Hoor Shaik	09/30/2018 12:09	Juyoung Kim	2027602
	09/21/2018	09/26/2018 09:00	Hoor Shaik	09/30/2018 15:36	Juyoung Kim	2027603
SM 2120 B	09/21/2018			09/21/2018 15:42	DeAsia Armster	2027572
	09/21/2018			09/21/2018 15:43	DeAsia Armster	2027575
	09/21/2018			09/21/2018 16:16	DeAsia Armster	2027578
SM 2320 B-97	09/21/2018			09/28/2018 07:28	Dale L. Simmons	2027572

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
SM 2320 B-97	09/21/2018			09/28/2018 07:38	Dale L. Simmons	2027575
	09/21/2018			09/28/2018 07:48	Dale L. Simmons	2027578
SM 2540 C-97	09/21/2018			09/25/2018 15:05	Yijie Li	2027572, 2027575, 2027578
SM 2540 D-97	09/21/2018			09/25/2018 15:05	Yijie Li	2027572, 2027575, 2027578
SM 4500 F-C-97	09/21/2018			09/28/2018 07:28	Dale L. Simmons	2027572
	09/21/2018			09/28/2018 07:38	Dale L. Simmons	2027575
	09/21/2018			09/28/2018 07:48	Dale L. Simmons	2027578
SM 5310 B-00	09/21/2018			09/26/2018 20:21	Megan Treadwell	2027573
	09/21/2018			09/26/2018 20:34	Megan Treadwell	2027576
	09/21/2018			09/26/2018 20:47	Megan Treadwell	2027579