

Chemical Analysis Report

SO-DIST-2017-06-09-02

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

Event Description: **SMP: Lee County Streams**

Request ID: **RQ-2017-05-29-04**

Customer: **SO-DIST**

Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
FLDEP South District Office
2295 Victoria Ave. Suite 364
Fort Myers, FL 33901-3381
Attn: Ben Paswater

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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator

Date Certified: 05-JUL-2017 11:47



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: 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: OAK CREEK @ OAK CREEK PRESERVE

Collection Date/Time: 06/08/2017 09:30

Field ID: G1SD060817-4

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905297	EPA 180.1 Rev. 2.0	Turbidity	2.4		NTU	P326545	
	EPA 300.0 Rev. 2.1	Chloride	50		mg Cl/L	P327033	
		Sulfate	76		mg SO4/L	P327037	
	SM 2120 B	Color (true)	39		PCU	P326585	
	SM 2320 B-97	Total Alkalinity	193		mg CaCO3/L	P326792	
	SM 2540 C-97	TDS	421		mg/L	P327120	
	SM 2540 D-97	TSS	2	I	mg/L	P327086	
	SM 4500 F-C-97	Fluoride	0.092	I	mg F/L	P326794	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.16		mg N/L	P326551	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P326721	
1905300	EPA 353.2 Rev. 2.0	NO2NO3-N	0.049		mg N/L	P326679	
	EPA 365.1 Rev. 2.0	Total-P	0.057		mg P/L	P326675	
	SM 5310 B-00	Organic Carbon	8.8		mg C/L	P326871	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.028		mg P/L	P326576	
	dissolved						

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: IMPERIAL RIVER AT ORR RD IN BONITA

Collection Date/Time: 06/08/2017 09:50

Field ID: G1SD060817-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905298	EPA 180.1 Rev. 2.0	Turbidity	4.2		NTU	P326545	
	EPA 300.0 Rev. 2.1	Chloride	23		mg Cl/L	P327033	
		Sulfate	21		mg SO4/L	P327037	
	SM 2120 B	Color (true)	71		PCU	P326585	
	SM 2320 B-97	Total Alkalinity	188		mg CaCO3/L	P326792	
	SM 2540 C-97	TDS	310		mg/L	P327120	
	SM 2540 D-97	TSS	6	I	mg/L	P327086	
	SM 4500 F-C-97	Fluoride	0.085	I	mg F/L	P326794	
	EPA 350.1 Rev. 2.0	Ammonia-N	0.31		mg N/L	P326551	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.3		mg N/L	P326721	
1905301	EPA 353.2 Rev. 2.0	NO2NO3-N	0.14		mg N/L	P326679	
	EPA 365.1 Rev. 2.0	Total-P	0.062		mg P/L	P326675	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P326871	
	EPA 365.1 Rev. 2.0	O-Phosphate-P	0.014		mg P/L	P326576	
	dissolved						

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: FIELD BLANK

Collection Date/Time: 06/08/2017 10:00

Field ID: G1SD060817-6

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905299	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P326545	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P327033	
		Sulfate	0.20	U	mg SO4/L	P327037	

Field ID: G1SD060817-6

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905299	SM 2120 B	Color (true)	2.5	U	PCU	P326585	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P326792	
	SM 2540 C-97	TDS	15	U	mg/L	P327119	
	SM 2540 D-97	TSS	2	U	mg/L	P327085	
	SM 4500 F-C-97	Fluoride	0.035	U	mg F/L	P326794	
1905302	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P326551	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P326721	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P326679	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P326675	
	SM 5310 B-00	Organic Carbon	0.50	U	mg C/L	P326871	
1905305	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326576	

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: HENDRY CREEK @ OLD GLADIOLUS DR

Collection Date/Time: 06/08/2017 08:35

Field ID: G1SD060817-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905306	EPA 180.1 Rev. 2.0	Turbidity	2.7		NTU	P326545	
	SM 2320 B-97	Total Alkalinity	113		mg CaCO3/L	P326792	
	SM 2540 D-97	TSS	4	IA	mg/L	P327091	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P326794	
1905308	EPA 350.1 Rev. 2.0	Ammonia-N	0.030		mg N/L	P326551	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.60		mg N/L	P326721	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P326679	
	EPA 365.1 Rev. 2.0	Total-P	0.042		mg P/L	P326675	
	SM 5310 B-00	Organic Carbon	7.0		mg C/L	P326871	
1905310	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P326576	

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: IMPERIAL RIVER NEAR US 41

Collection Date/Time: 06/08/2017 12:15

Field ID: G1SD060817-2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905307	EPA 180.1 Rev. 2.0	Turbidity	2.0		NTU	P326546	
	SM 2320 B-97	Total Alkalinity	121		mg CaCO3/L	P326792	
	SM 2540 D-97	TSS	2	I	mg/L	P327091	
	SM 4500 F-C-97	Fluoride	0.21		mg F/L	P327060	
1905309	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P326550	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.74		mg N/L	P326672	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.085		mg N/L	P326877	
	EPA 365.1 Rev. 2.0	Total-P	0.092		mg P/L	P326805	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P326873	
1905311	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.066		mg P/L	P326574	

Field ID: G1SD060817-2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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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: IMPERIAL RIVER AT ORR RD IN BONITA

Collection Date/Time: 06/08/2017 09:50

Field ID: G1SD060817-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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1905340	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P326579	
		Sucralose**	0.011	I	ug/L	P326632	
	USGS O-2060-01	2,4-D	0.0010	I	ug/L	P326471	
		Diuron	8.0E-04	U	ug/L	P326471	
		Fenuron	0.0075	I	ug/L	P326471	
		Imidacloprid	8.0E-04	U	ug/L	P326471	MS
		Bentazon	0.032		ug/L	P326471	MS
		Linuron	0.0040	U	ug/L	P326471	
		Acetaminophen**	0.0080	U	ug/L	P326471	
		MCP	0.0020	U	ug/L	P326471	
		Carbamazepine**	4.0E-04	U	ug/L	P326471	
		Triclopyr**	0.0040	U	ug/L	P326471	
		Primidone**	0.0040	U	ug/L	P326471	
		Fluridone**	0.013		ug/L	P326471	
1905344	EPA 8270D	Aldrin	4.1	U	ng/L	P326604	
		Alpha-BHC	2.1	U	ng/L	P326604	
		Beta-BHC	4.1	U	ng/L	P326604	
		Delta-BHC	4.1	U	ng/L	P326604	
		Gamma-BHC	4.1	U	ng/L	P326604	
		Carbophenothion	4.1	U	ng/L	P326604	
		Chlorothalonil	2.1	UJ	ng/L	P326604	RPD
		Cypermethrin	21	U	ng/L	P326604	
		DDD-p,p'	2.1	U	ng/L	P326604	
		DDE-p,p'	3.1	U	ng/L	P326604	
		DDT-p,p'	3.1	U	ng/L	P326604	
		Dieldrin	4.1	U	ng/L	P326604	
		Endosulfan I	4.1	U	ng/L	P326604	
		Endosulfan II	4.1	U	ng/L	P326604	
		Endosulfan Sulfate	2.1	U	ng/L	P326604	
		Endrin	2.1	U	ng/L	P326604	
		Endrin Aldehyde	2.1	U	ng/L	P326604	
		Heptachlor	1.5	U	ng/L	P326604	
		Heptachlor Epoxide	2.1	U	ng/L	P326604	
		Methoxychlor	4.1	U	ng/L	P326604	
		Mirex	2.1	U	ng/L	P326604	
		Permethrin	10	U	ng/L	P326604	
		Trifluralin	1.0	UJ	ng/L	P326604	LCS
		Alpha-Chlordane	1.0	U	ng/L	P326604	
		Gamma-Chlordane	1.0	U	ng/L	P326604	

Field ID: G1SD060817-3

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905344	EPA 8270D	Endrin Ketone	2.1	U	ng/L	P326604	
		Dicofol	31	UJ	ng/L	P326604	RPD
	EPA 8276	Chlordane**	2.6	U	ng/L	P326604	
		Toxaphene**	13	U	ng/L	P326604	
1905347	EPA 8270D	Alachlor	0.24	U	ng/L	P326502	
		Ametryn	0.31	U	ng/L	P326502	
		Atrazine	1.5		ng/L	P326502	
		Atrazine Desethyl	1.4	U	ng/L	P326502	MS
		Azinphos Methyl	2.1	U	ng/L	P326502	
		Bromacil	0.48	U	ng/L	P326502	
		Butylate	0.38	U	ng/L	P326502	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P326502	MS
		Chlorpyrifos Methyl	0.095	U	ng/L	P326502	
		Demeton	1.9	U	ng/L	P326502	
		Diazinon	0.12	U	ng/L	P326502	
		Disulfoton	0.31	U	ng/L	P326502	MS
		EPTC	1.2	U	ng/L	P326502	
		Ethion	0.14	U	ng/L	P326502	
		Ethoprop	0.095	U	ng/L	P326502	
		Fenamiphos	0.24	U	ng/L	P326502	
		Fipronil	0.24	U	ng/L	P326502	
		Fipronil Sulfide	0.14	U	ng/L	P326502	
		Fipronil Sulfone	0.23	I	ng/L	P326502	
		Hexazinone	3.1E+03		ng/L	P326502	
		Malathion	0.33	U	ng/L	P326502	
		Metribuzin	0.19	UJ	ng/L	P326502	LCS, MS
		Mevinphos	0.48	U	ng/L	P326502	
		Molinate	0.29	U	ng/L	P326502	
		Norflurazon	1.1	I	ng/L	P326502	
		Pendimethalin	1.4	U	ng/L	P326502	
		Phorate	0.24	U	ng/L	P326502	
		Prometon	0.86	U	ng/L	P326502	
		Prometryn	0.19	U	ng/L	P326502	
		Simazine	0.48	U	ng/L	P326502	
		Terbufos	0.095	U	ng/L	P326502	
		Terbuthylazine	0.41	U	ng/L	P326502	
		Fonofos	0.19	U	ng/L	P326502	
		Metalaxyl	0.19	U	ng/L	P326502	
		Metolachlor	0.47	I	ng/L	P326502	
		Acetochlor	0.24	U	ng/L	P326502	
		Cyanazine	0.48	U	ng/L	P326502	MS
		Parathion Ethyl	0.24	U	ng/L	P326502	
		Parathion Methyl	0.24	U	ng/L	P326502	

Field ID: G1SD060817-3

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

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

Sample Location: HENDRY CREEK @ OLD GLADIOLUS DR

Collection Date/Time: 06/08/2017 08:35

Field ID: G1SD060817-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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1905341	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P326579	
		Sucralose**	0.056		ug/L	P326632	
	USGS O-2060-01	2,4-D	0.14		ug/L	P326471	
		Diuron	0.010		ug/L	P326471	
		Fenuron	0.0040	U	ug/L	P326471	
		Imidacloprid	0.055		ug/L	P326471	MS
		Bentazon	0.014		ug/L	P326471	MS
		Linuron	0.0040	U	ug/L	P326471	
		Acetaminophen**	0.0080	U	ug/L	P326471	
		MCP	0.0020	U	ug/L	P326471	
		Carbamazepine**	4.0E-04	U	ug/L	P326471	
		Triclopyr**	0.0040	U	ug/L	P326471	
		Primidone**	0.0040	U	ug/L	P326471	
		Fluridone**	0.0067		ug/L	P326471	
1905345	EPA 8270D	Aldrin	4.3	U	ng/L	P326604	
		Alpha-BHC	2.1	U	ng/L	P326604	
		Beta-BHC	4.3	U	ng/L	P326604	
		Delta-BHC	4.3	U	ng/L	P326604	
		Gamma-BHC	4.3	U	ng/L	P326604	
		Carbophenothion	4.3	U	ng/L	P326604	
		Chlorothalonil	2.1	UJ	ng/L	P326604	RPD
		Cypermethrin	21	U	ng/L	P326604	
		DDD-p,p'	2.1	U	ng/L	P326604	
		DDE-p,p'	3.2	U	ng/L	P326604	
		DDT-p,p'	3.2	U	ng/L	P326604	
		Dieldrin	4.3	U	ng/L	P326604	
		Endosulfan I	4.3	U	ng/L	P326604	
		Endosulfan II	4.3	U	ng/L	P326604	
		Endosulfan Sulfate	2.1	U	ng/L	P326604	
		Endrin	2.1	U	ng/L	P326604	
		Endrin Aldehyde	2.1	U	ng/L	P326604	
		Heptachlor	1.6	U	ng/L	P326604	
		Heptachlor Epoxide	2.1	U	ng/L	P326604	
		Methoxychlor	4.3	U	ng/L	P326604	
		Mirex	2.1	U	ng/L	P326604	
		Permethrin	11	U	ng/L	P326604	
		Trifluralin	1.1	UJ	ng/L	P326604	LCS

Field ID: G1SD060817-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905345	EPA 8270D	Alpha-Chlordane	1.1	U	ng/L	P326604	
		Gamma-Chlordane	1.1	U	ng/L	P326604	
		Endrin Ketone	2.1	U	ng/L	P326604	
		Dicofol	32	U	ng/L	P326604	RPD
	EPA 8276	Chlordane**	4.0	I	ng/L	P326604	
		Toxaphene**	13	U	ng/L	P326604	
1905348	EPA 8270D	Alachlor	0.26	U	ng/L	P326502	
		Ametryn	0.33	U	ng/L	P326502	
		Atrazine	28		ng/L	P326502	
		Atrazine Desethyl	7.7		ng/L	P326502	MS
		Azinphos Methyl	2.3	U	ng/L	P326502	
		Bromacil	0.51	U	ng/L	P326502	
		Butylate	0.41	U	ng/L	P326502	
		Chlorpyrifos Ethyl	0.26	U	ng/L	P326502	MS
		Chlorpyrifos Methyl	0.10	U	ng/L	P326502	
		Demeton	2.0	U	ng/L	P326502	
		Diazinon	0.13	U	ng/L	P326502	
		Disulfoton	0.33	U	ng/L	P326502	MS
		EPTC	1.3	U	ng/L	P326502	
		Ethion	0.15	U	ng/L	P326502	
		Ethoprop	0.10	U	ng/L	P326502	
		Fenamiphos	0.26	U	ng/L	P326502	
		Fipronil	8.2		ng/L	P326502	
		Fipronil Sulfide	1.1		ng/L	P326502	
		Fipronil Sulfone	3.3		ng/L	P326502	
		Hexazinone	1.2	I	ng/L	P326502	
		Malathion	0.36	U	ng/L	P326502	
		Metribuzin	0.20	UJ	ng/L	P326502	LCS, MS
		Mevinphos	0.51	U	ng/L	P326502	
		Molinate	0.31	U	ng/L	P326502	
		Norflurazon	0.51	U	ng/L	P326502	
		Pendimethalin	1.5	U	ng/L	P326502	
		Phorate	0.26	U	ng/L	P326502	
		Prometon	0.92	U	ng/L	P326502	
		Prometryn	0.20	U	ng/L	P326502	
		Simazine	0.51	U	ng/L	P326502	
		Terbufos	0.10	U	ng/L	P326502	
		Terbuthylazine	0.43	U	ng/L	P326502	
		Fonofos	0.20	U	ng/L	P326502	
		Metalaxyl	0.66	I	ng/L	P326502	
		Metolachlor	0.50	I	ng/L	P326502	
		Acetochlor	0.26	U	ng/L	P326502	
		Cyanazine	0.51	U	ng/L	P326502	MS
		Parathion Ethyl	0.26	U	ng/L	P326502	
		Parathion Methyl	0.26	U	ng/L	P326502	

Field ID: G1SD060817-1

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
Ref. Method and Comment:							
EPA 8270D: Refer to the narrative for an explanation of QC Codes.							
EPA 8270D: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Refer to the narrative for an explanation of QC Codes.							

Sample Location: IMPERIAL RIVER NEAR US 41

Collection Date/Time: 06/08/2017 12:15

Field ID: G1SD060817-2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905342	EPA 8321B	Pyraclostrobin**	0.0020	U	ug/L	P326579	
		Sucralose**	0.15		ug/L	P326632	
	USGS O-2060-01	2,4-D	0.015		ug/L	P326471	
		Diuron	0.0051		ug/L	P326471	
		Fenuron	0.0040	U	ug/L	P326471	
		Imidacloprid	0.12		ug/L	P326471	MS
		Bentazon	0.033		ug/L	P326471	MS
		Linuron	0.0040	U	ug/L	P326471	
		Acetaminophen**	0.0080	U	ug/L	P326471	
		MCP	0.0020	U	ug/L	P326471	
		Carbamazepine**	4.0E-04	U	ug/L	P326471	
		Triclopyr**	0.0040	U	ug/L	P326471	
		Primidone**	0.0040	U	ug/L	P326471	
		Fluridone**	0.0089		ug/L	P326471	
1905346	EPA 8270D	Aldrin	4.2	U	ng/L	P326604	
		Alpha-BHC	2.1	U	ng/L	P326604	
		Beta-BHC	4.2	U	ng/L	P326604	
		Delta-BHC	4.2	U	ng/L	P326604	
		Gamma-BHC	4.2	U	ng/L	P326604	
		Carbophenothion	4.2	U	ng/L	P326604	
		Chlorothalonil	2.1	UJ	ng/L	P326604	RPD
		Cypermethrin	21	U	ng/L	P326604	
		DDD-p,p'	2.1	U	ng/L	P326604	
		DDE-p,p'	3.1	U	ng/L	P326604	
		DDT-p,p'	3.1	U	ng/L	P326604	
		Dieldrin	4.2	U	ng/L	P326604	
		Endosulfan I	4.2	U	ng/L	P326604	
		Endosulfan II	4.2	U	ng/L	P326604	
		Endosulfan Sulfate	2.1	U	ng/L	P326604	
		Endrin	2.1	U	ng/L	P326604	
		Endrin Aldehyde	2.1	U	ng/L	P326604	
		Heptachlor	1.6	U	ng/L	P326604	
		Heptachlor Epoxide	2.1	U	ng/L	P326604	
		Methoxychlor	4.2	U	ng/L	P326604	
		Mirex	2.1	U	ng/L	P326604	
		Permethrin	10	U	ng/L	P326604	
		Trifluralin	1.0	UJ	ng/L	P326604	LCS

Field ID: G1SD060817-2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1905346	EPA 8270D	Alpha-Chlordane	1.0	U	ng/L	P326604	
		Gamma-Chlordane	1.0	U	ng/L	P326604	
		Endrin Ketone	2.1	U	ng/L	P326604	
		Dicofol	31	U	ng/L	P326604	RPD
	EPA 8276	Chlordane**	2.6	U	ng/L	P326604	
		Toxaphene**	13	U	ng/L	P326604	
1905349	EPA 8270D	Alachlor	0.24	U	ng/L	P326502	
		Ametryn	0.31	U	ng/L	P326502	
		Atrazine	87		ng/L	P326502	
		Atrazine Desethyl	5.6	I	ng/L	P326502	MS
		Azinphos Methyl	2.2	U	ng/L	P326502	
		Bromacil	0.48	U	ng/L	P326502	
		Butylate	0.38	U	ng/L	P326502	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P326502	MS
		Chlorpyrifos Methyl	0.096	U	ng/L	P326502	
		Demeton	1.9	U	ng/L	P326502	
		Diazinon	0.12	U	ng/L	P326502	
		Disulfoton	0.31	U	ng/L	P326502	MS
		EPTC	1.2	U	ng/L	P326502	
		Ethion	0.14	U	ng/L	P326502	
		Ethoprop	0.096	U	ng/L	P326502	
		Fenamiphos	0.24	U	ng/L	P326502	
		Fipronil	1.2		ng/L	P326502	
		Fipronil Sulfide	0.25	I	ng/L	P326502	
		Fipronil Sulfone	1.2		ng/L	P326502	
		Hexazinone	26		ng/L	P326502	
		Malathion	0.33	U	ng/L	P326502	
		Metribuzin	0.58	IJ	ng/L	P326502	LCS, MS
		Mevinphos	0.48	U	ng/L	P326502	
		Molinate	0.29	U	ng/L	P326502	
		Norflurazon	0.48	U	ng/L	P326502	
		Pendimethalin	1.4	U	ng/L	P326502	
		Phorate	0.24	U	ng/L	P326502	
		Prometon	0.86	U	ng/L	P326502	
		Prometryn	0.19	U	ng/L	P326502	
		Simazine	0.90	I	ng/L	P326502	
		Terbufos	0.096	U	ng/L	P326502	
		Terbuthylazine	0.41	U	ng/L	P326502	
		Fonofos	0.19	U	ng/L	P326502	
		Metalaxyl	0.44	I	ng/L	P326502	
		Metolachlor	0.40	I	ng/L	P326502	
		Acetochlor	0.24	U	ng/L	P326502	
		Cyanazine	0.48	U	ng/L	P326502	MS
		Parathion Ethyl	0.24	U	ng/L	P326502	
		Parathion Methyl	0.24	U	ng/L	P326502	

Field ID: G1SD060817-2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
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Ref. Method and Comment:

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

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P326545

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0

Batch ID: P326546

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P327033

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P327037

Component	Result	Code	Units
Sulfate	0.20	U	mg SO ₄ /L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P326550

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P326551

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P326672

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P326721

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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326679

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326877

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326675

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326805

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326574

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326576

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

Reference Method: EPA 8270D
Batch ID: P326502

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	0.32	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: P326502

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	0.20	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	1.5	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: P326604

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'	2.0	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: P326604

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: P326604

Component	Result	Code	Units
Chlordane	2.5	U	ng/L
Toxaphene	12	U	ng/L

Reference Method: EPA 8321B
Batch ID: P326579

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P326632

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P326585

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P326792

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

Reference Method: SM 2540 C-97
Batch ID: P327119

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P327120

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327085

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P327086

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P327091

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P326794

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P327060

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P326871

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

Reference Method: SM 5310 B-00
Batch ID: P326873

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

Reference Method: USGS O-2060-01
Batch ID: P326471

Component	Result	Code	Units
2,4-D	8.0E-04	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L
Diuron	8.0E-04	U	ug/L
Fenuron	0.0040	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCPP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327033

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327037

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326550

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.6		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326551

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326672

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326721

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326679

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	104		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326877

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
NO2NO3-N	106		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326675

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326805

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326574

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P326576

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

Reference Method: EPA 8270D
Batch ID: P326502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	80.4	80.6	P/P	78 - 118
Alachlor	81.9	80.4	P/P	77 - 119
Ametryn	80.4	82.2	P/P	61 - 136
Atrazine	91.1	90.0	P/P	73 - 120
Atrazine Desethyl	95.8	88.7	P/P	16 - 122
Azinphos Methyl	105	101	P/P	69 - 186
Bromacil	84.0	83.9	P/P	40 - 125
Butylate	49.8	45.9	P/P	32 - 87.0
Chlorpyrifos Ethyl	91.3	84.6	P/P	53 - 110
Chlorpyrifos Methyl	93.4	88.8	P/P	31 - 119
Cyanazine	222	212	P/P	36 - 224
Demeton	77.9	87.9	P/P	39 - 122
Diazinon	82.2	83.7	P/P	75 - 119
Disulfoton	88.0	90.6	P/P	42 - 139
EPTC	48.6	44.3	P/P	33 - 96.0
Ethion	97.1	90.7	P/P	63 - 127
Ethoprop	81.5	76.6	P/P	65 - 107
Fenamiphos	102	98.9	P/P	64 - 137
Fipronil	87.0	85.4	P/P	60 - 126
Fipronil Sulfide	89.5	90.4	P/P	58 - 124
Fipronil Sulfone	87.5	80.8	P/P	57 - 126
Fonofos	85.2	84.7	P/P	65 - 111
Hexazinone	85.5	83.3	P/P	46 - 151
Malathion	98.9	92.8	P/P	68 - 132
Metalaxyl	86.2	83.2	P/P	51 - 132
Metolachlor	83.4	82.2	P/P	78 - 119
Metribuzin	140	122	F/P	64 - 138
Mevinphos	74.1	69.5	P/P	34 - 128
Molinate	63.2	48.0	P/P	44 - 101
Norflurazon	83.9	79.7	P/P	63 - 129
Parathion Ethyl	87.3	84.9	P/P	80 - 109
Parathion Methyl	90.0	86.1	P/P	74 - 125
Pendimethalin	85.8	84.6	P/P	48 - 134
Phorate	91.3	83.4	P/P	52 - 119

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
Batch ID: P326502

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Prometon	78.0	78.8	P/P	69 - 124
Prometryn	82.7	83.8	P/P	66 - 124
Simazine	93.4	96.0	P/P	61 - 134
Terbufos	84.0	84.6	P/P	58 - 115
Terbutylazine	84.6	83.7	P/P	77 - 113

Reference Method: EPA 8270D
Batch ID: P326604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	61.8	67.8	P/P	26 - 88.0
Alpha-BHC	106	112	P/P	63 - 114
Alpha-Chlordane	86.0	89.6	P/P	56 - 117
Beta-BHC	122	121	P/P	57 - 138
Carbophenothion	36.2	43.2	P/P	36 - 148
Chlorothalonil	170	125	P/P	26 - 173
Cypermethrin	104	116	P/P	42 - 159
DDD-p,p'	111	100	P/P	62 - 126
DDE-p,p'	84.7	81.6	P/P	53 - 115
DDT-p,p'	74.0	71.2	P/P	54 - 117
Delta-BHC	140	139	P/P	68 - 158
Dicofol	32.6	36.1	P/P	25 - 114
Dieldrin	85.8	85.8	P/P	59 - 126
Endosulfan I	106	102	P/P	62 - 138
Endosulfan II	119	106	P/P	61 - 150
Endosulfan Sulfate	97.2	94.2	P/P	63 - 132
Endrin	81.2	81.3	P/P	49 - 148
Endrin Aldehyde	75.8	63.1	P/P	50 - 144
Endrin Ketone	83.8	87.5	P/P	66 - 122
Gamma-BHC	109	107	P/P	60 - 137
Gamma-Chlordane	86.6	84.4	P/P	54 - 113
Heptachlor	79.1	75.7	P/P	43 - 104
Heptachlor Epoxide	90.0	84.7	P/P	64 - 118
Methoxychlor	86.0	94.9	P/P	63 - 129
Mirex	55.8	62.8	P/P	39 - 93.0
Permethrin	81.9	77.0	P/P	51 - 123
Trifluralin	179	188	P/F	35 - 187

Reference Method: EPA 8276
Batch ID: P326604

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	94.5	96.3	P/P	48 - 121
Toxaphene	108	115	P/P	43 - 135

Reference Method: EPA 8321B
Batch ID: P326579

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	60.3		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P326632

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	83.0		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P326792

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

Reference Method: SM 4500 F-C-97
Batch ID: P326794

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	97.5		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P327060

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.9		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P326871

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.1		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P326873

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.4		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P326471

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	90.0		P	40 - 140
Acetaminophen	70.4		P	40 - 140
Bentazon	77.4		P	40 - 140
Carbamazepine	132		P	40 - 140
Diuron	120		P	40 - 140
Fenuron	113		P	40 - 140
Fluridone	115		P	40 - 140
Imidacloprid	110		P	40 - 160
Linuron	119		P	40 - 140
MCPP	95.6		P	40 - 140
Primidone	110		P	40 - 140
Triclopyr	94.2		P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327033

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904975	Chloride	102		P	90 - 110
1905441	Chloride	106		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327037

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904975	Sulfate	98.1		P	90 - 110
1905441	Sulfate	103		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326550

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904810	Ammonia-N	105	103	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326551

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905308	Ammonia-N	99.8	110	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326672

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905180	Kjeldahl Nitrogen	96.6	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905308	Kjeldahl Nitrogen	99.0	100	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326679

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905300	NO2NO3-N	103	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P326877

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905309	NO2NO3-N	108	106	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P326675

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905300	Total-P	102	99.1	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P326805

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905521	Total-P	97.3	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P326574

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905192	O-Phosphate-P	96.1	97.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P326576

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905303	O-Phosphate-P	94.0	95.3	P/P	90 - 110

Reference Method: EPA 8270D

Batch ID: P326502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904161	Acetochlor	81.1	80.3	P/P	74 - 123
1904161	Alachlor	88.6	89.7	P/P	73 - 124
1904161	Ametryn	103	101	P/P	56 - 149
1904161	Atrazine Desethyl	114	96.8	F/P	12 - 103
1904161	Azinphos Methyl	171	164	P/P	60 - 202
1904161	Bromacil	96.8	92.6	P/P	42 - 133
1904161	Butylate	17.7	22.9	P/P	10 - 85.0
1904161	Chlorpyrifos Ethyl	125	116	F/F	53 - 113
1904161	Chlorpyrifos Methyl	92.4	94.6	P/P	40 - 115
1904161	Cyanazine	315	308	F/F	22 - 210
1904161	Demeton	102	113	P/P	17 - 149
1904161	Diazinon	87.9	86.7	P/P	72 - 124
1904161	Disulfoton	135	145	P/F	43 - 139
1904161	EPTC	24.3	27.0	P/P	10 - 86.0
1904161	Ethion	92.7	95.5	P/P	65 - 131
1904161	Ethoprop	95.2	104	P/P	59 - 110
1904161	Fenamiphos	97.1	96.2	P/P	57 - 138
1904161	Fipronil	83.4	81.7	P/P	40 - 130
1904161	Fipronil Sulfide	88.6	89.9	P/P	36 - 128
1904161	Fipronil Sulfone	76.9	80.7	P/P	16 - 145
1904161	Fonofos	101	109	P/P	60 - 112
1904161	Hexazinone	89.2	94.1	P/P	69 - 142
1904161	Malathion	105	109	P/P	68 - 132
1904161	Metalaxyl	82.3	90.1	P/P	66 - 118
1904161	Metolachlor	79.6	81.7	P/P	71 - 124
1904161	Metribuzin	301	293	F/F	61 - 140
1904161	Mevinphos	68.1	76.0	P/P	38 - 130
1904161	Molinate	71.3	83.2	P/P	23 - 99.0
1904161	Norflurazon	92.5	83.9	P/P	39 - 139
1904161	Parathion Ethyl	86.9	92.1	P/P	75 - 111
1904161	Parathion Methyl	91.3	92.2	P/P	64 - 130
1904161	Pendimethalin	97.5	100	P/P	26 - 173
1904161	Phorate	104	114	P/P	43 - 127
1904161	Prometon	77.1	74.2	P/P	50 - 144

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P326502

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904161	Prometryn	82.7	80.9	P/P	69 - 126
1904161	Simazine	129	122	P/P	51 - 152
1904161	Terbufos	108	115	P/P	54 - 125
1904161	Terbutylazine	89.5	88.3	P/P	76 - 113

Reference Method: EPA 8270D
Batch ID: P326604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905344	Aldrin	54.9	49.5	P/P	22 - 97.0
1905344	Alpha-BHC	95.2	74.3	P/P	43 - 132
1905344	Alpha-Chlordane	69.2	61.2	P/P	36 - 126
1905344	Beta-BHC	80.5	76.5	P/P	41 - 150
1905344	Carbophenothion	90.4	94.9	P/P	13 - 196
1905344	Chlorothalonil	100	183	P/P	10 - 266
1905344	Cypermethrin	101	121	P/P	37 - 161
1905344	DDD-p,p'	76.7	69.8	P/P	44 - 131
1905344	DDE-p,p'	66.6	59.7	P/P	32 - 127
1905344	DDT-p,p'	59.0	59.4	P/P	45 - 116
1905344	Delta-BHC	108	110	P/P	50 - 201
1905344	Dicofol	19.2	12.0	P/P	10 - 100
1905344	Dieldrin	69.8	63.8	P/P	39 - 142
1905344	Endosulfan I	109	85.4	P/P	51 - 139
1905344	Endosulfan II	92.7	96.5	P/P	49 - 155
1905344	Endosulfan Sulfate	67.3	87.0	P/P	54 - 136
1905344	Endrin	67.4	81.5	P/P	38 - 141
1905344	Endrin Aldehyde	72.8	77.6	P/P	14 - 152
1905344	Endrin Ketone	70.0	88.4	P/P	60 - 128
1905344	Gamma-BHC	96.8	74.3	P/P	48 - 157
1905344	Gamma-Chlordane	66.3	60.5	P/P	35 - 123
1905344	Heptachlor	58.0	51.8	P/P	25 - 112
1905344	Heptachlor Epoxide	70.8	61.0	P/P	48 - 125
1905344	Methoxychlor	71.2	59.8	P/P	52 - 127
1905344	Mirex	55.8	52.7	P/P	25 - 108
1905344	Permethrin	68.4	81.5	P/P	46 - 133
1905344	Trifluralin	148	116	P/P	29 - 254

Reference Method: EPA 8276
Batch ID: P326604

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905114	Chlordane	111	98.6	P/P	44 - 134
1905114	Toxaphene	134	122	P/P	36 - 147

Reference Method: EPA 8321B
Batch ID: P326579

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905091	Pyraclostrobin	59.2	49.3	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8321B
 Batch ID: P326632

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905341	Sucralose	82.0	77.5	P/P	40 - 150

Reference Method: SM 4500 F-C-97
 Batch ID: P326794

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905012	Fluoride	97.6	98.8	P/P	91 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P327060

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1903795	Fluoride	100	105	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P326871

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1905300	Organic Carbon	99.1	96.2	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P326873

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904963	Organic Carbon	91.3	95.2	P/P	85 - 115

Reference Method: USGS O-2060-01
 Batch ID: P326471

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1904436	2,4-D	93.2	87.4	P/P	40 - 140
1904436	Acetaminophen	99.2	115	P/P	40 - 140
1904436	Bentazon	32.4	29.6	F/F	40 - 140
1904436	Carbamazepine	116	111	P/P	40 - 140
1904436	Diuron	88.5	79.9	P/P	40 - 140
1904436	Fenuron	86.9	83.2	P/P	40 - 140
1904436	Fluridone	79.1	71.8	P/P	40 - 140
1904436	Imidacloprid	197	187	F/F	40 - 160
1904436	Linuron	112	98.7	P/P	40 - 140
1904436	MCP	71.4	65.2	P/P	40 - 140
1904436	Primidone	98.8	95.1	P/P	40 - 140
1904436	Triclopyr	75.2	72.4	P/P	40 - 140

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P326545

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326545

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904975	Turbidity	7.95	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P326546

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905087	Turbidity	0.358	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327033

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904975	Chloride	0.330	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P327037

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904975	Sulfate	2.51	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326550

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904810	Ammonia-N	1.32	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P326551

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905308	Ammonia-N	6.02	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326672

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905180	Kjeldahl Nitrogen	3.34	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P326721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905308	Kjeldahl Nitrogen	0.895	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P326679

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905300	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
 Batch ID: P326877

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905309	NO2NO3-N	1.00	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P326675

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905300	Total-P	2.87	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P326805

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905521	Total-P	1.57	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P326574

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905192	O-Phosphate-P	1.04	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P326576

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905303	O-Phosphate-P	1.06	Spike	P	0 - 20

Reference Method: EPA 8270D
 Batch ID: P326502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904161	Acetochlor	1.02	Spike	P	0 - 30
1904161	Alachlor	1.24	Spike	P	0 - 30
1904161	Ametryn	1.67	Spike	P	0 - 30
1904161	Atrazine	2.14	Spike	P	0 - 30
1904161	Atrazine Desethyl	14.5	Spike	P	0 - 30
1904161	Azinphos Methyl	4.34	Spike	P	0 - 30
1904161	Bromacil	4.44	Spike	P	0 - 30
1904161	Butylate	25.5	Spike	P	0 - 30
1904161	Chlorpyrifos Ethyl	7.06	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P326502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904161	Chlorpyrifos Methyl	2.29	Spike	P	0 - 30
1904161	Cyanazine	1.99	Spike	P	0 - 30
1904161	Demeton	10.5	Spike	P	0 - 30
1904161	Diazinon	1.48	Spike	P	0 - 30
1904161	Disulfoton	7.17	Spike	P	0 - 30
1904161	EPTC	10.6	Spike	P	0 - 30
1904161	Ethion	2.95	Spike	P	0 - 30
1904161	Ethoprop	8.72	Spike	P	0 - 30
1904161	Fenamiphos	1.00	Spike	P	0 - 30
1904161	Fipronil	1.99	Spike	P	0 - 30
1904161	Fipronil Sulfide	1.28	Spike	P	0 - 30
1904161	Fipronil Sulfone	4.15	Spike	P	0 - 30
1904161	Fonofos	7.52	Spike	P	0 - 30
1904161	Hexazinone	4.53	Spike	P	0 - 30
1904161	Malathion	3.52	Spike	P	0 - 30
1904161	Metalaxyl	9.06	Spike	P	0 - 30
1904161	Metolachlor	2.49	Spike	P	0 - 30
1904161	Metribuzin	2.95	Spike	P	0 - 30
1904161	Mevinphos	11.0	Spike	P	0 - 30
1904161	Molinate	15.5	Spike	P	0 - 30
1904161	Norflurazon	9.73	Spike	P	0 - 30
1904161	Parathion Ethyl	5.75	Spike	P	0 - 30
1904161	Parathion Methyl	0.965	Spike	P	0 - 30
1904161	Pendimethalin	2.76	Spike	P	0 - 30
1904161	Phorate	9.03	Spike	P	0 - 30
1904161	Prometon	3.76	Spike	P	0 - 30
1904161	Prometryn	2.19	Spike	P	0 - 30
1904161	Simazine	5.14	Spike	P	0 - 30
1904161	Terbufos	5.60	Spike	P	0 - 30
1904161	Terbutylazine	1.42	Spike	P	0 - 30
LFB	Acetochlor	0.306	LCS	P	0 - 30
LFB	Alachlor	1.93	LCS	P	0 - 30
LFB	Ametryn	2.19	LCS	P	0 - 30
LFB	Atrazine	1.23	LCS	P	0 - 30
LFB	Atrazine Desethyl	7.60	LCS	P	0 - 30
LFB	Azinphos Methyl	4.08	LCS	P	0 - 30
LFB	Bromacil	0.0812	LCS	P	0 - 30
LFB	Butylate	8.30	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	7.65	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	5.03	LCS	P	0 - 30
LFB	Cyanazine	4.88	LCS	P	0 - 30
LFB	Demeton	12.1	LCS	P	0 - 30
LFB	Diazinon	1.83	LCS	P	0 - 30
LFB	Disulfoton	2.84	LCS	P	0 - 30
LFB	EPTC	9.33	LCS	P	0 - 30
LFB	Ethion	6.83	LCS	P	0 - 30
LFB	Ethoprop	6.15	LCS	P	0 - 30
LFB	Fenamiphos	3.15	LCS	P	0 - 30
LFB	Fipronil	1.85	LCS	P	0 - 30
LFB	Fipronil Sulfide	1.05	LCS	P	0 - 30
LFB	Fipronil Sulfone	7.90	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P326502

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Fonofos	0.530	LCS	P	0 - 30
LFB	Hexazinone	2.59	LCS	P	0 - 30
LFB	Malathion	6.41	LCS	P	0 - 30
LFB	Metalaxyl	3.53	LCS	P	0 - 30
LFB	Metolachlor	1.45	LCS	P	0 - 30
LFB	Metribuzin	13.7	LCS	P	0 - 30
LFB	Mevinphos	6.43	LCS	P	0 - 30
LFB	Molinate	27.5	LCS	P	0 - 30
LFB	Norflurazon	5.08	LCS	P	0 - 30
LFB	Parathion Ethyl	2.72	LCS	P	0 - 30
LFB	Parathion Methyl	4.48	LCS	P	0 - 30
LFB	Pendimethalin	1.31	LCS	P	0 - 30
LFB	Phorate	9.08	LCS	P	0 - 30
LFB	Prometon	1.10	LCS	P	0 - 30
LFB	Prometryn	1.32	LCS	P	0 - 30
LFB	Simazine	2.79	LCS	P	0 - 30
LFB	Terbufos	0.716	LCS	P	0 - 30
LFB	Terbutylazine	1.09	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P326604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905344	Aldrin	10.4	Spike	P	0 - 30
1905344	Alpha-BHC	24.7	Spike	P	0 - 30
1905344	Alpha-Chlordane	12.3	Spike	P	0 - 30
1905344	Beta-BHC	5.14	Spike	P	0 - 30
1905344	Carbophenothion	4.93	Spike	P	0 - 30
1905344	Chlorothalonil	58.6	Spike	F	0 - 30
1905344	Cypermethrin	18.1	Spike	P	0 - 30
1905344	DDD-p,p'	9.37	Spike	P	0 - 30
1905344	DDE-p,p'	11.0	Spike	P	0 - 30
1905344	DDT-p,p'	0.521	Spike	P	0 - 30
1905344	Delta-BHC	1.23	Spike	P	0 - 30
1905344	Dicofol	46.1	Spike	F	0 - 30
1905344	Dieldrin	9.09	Spike	P	0 - 30
1905344	Endosulfan I	24.0	Spike	P	0 - 30
1905344	Endosulfan II	4.00	Spike	P	0 - 30
1905344	Endosulfan Sulfate	25.5	Spike	P	0 - 30
1905344	Endrin	19.0	Spike	P	0 - 30
1905344	Endrin Aldehyde	6.39	Spike	P	0 - 30
1905344	Endrin Ketone	23.3	Spike	P	0 - 30
1905344	Gamma-BHC	26.3	Spike	P	0 - 30
1905344	Gamma-Chlordane	9.12	Spike	P	0 - 30
1905344	Heptachlor	11.2	Spike	P	0 - 30
1905344	Heptachlor Epoxide	14.9	Spike	P	0 - 30
1905344	Methoxychlor	17.4	Spike	P	0 - 30
1905344	Mirex	5.55	Spike	P	0 - 30
1905344	Permethrin	17.5	Spike	P	0 - 30
1905344	Trifluralin	24.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P326604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Aldrin	9.20	LCS	P	0 - 30
LFB	Alpha-BHC	5.08	LCS	P	0 - 30
LFB	Alpha-Chlordane	4.05	LCS	P	0 - 30
LFB	Beta-BHC	0.463	LCS	P	0 - 30
LFB	Carbophenothion	17.7	LCS	P	0 - 30
LFB	Chlorothalonil	30.5	LCS	F	0 - 30
LFB	Cypermethrin	10.9	LCS	P	0 - 30
LFB	DDD-p,p'	10.6	LCS	P	0 - 30
LFB	DDE-p,p'	3.67	LCS	P	0 - 30
LFB	DDT-p,p'	3.87	LCS	P	0 - 30
LFB	Delta-BHC	1.13	LCS	P	0 - 30
LFB	Dicofol	10.3	LCS	P	0 - 30
LFB	Dieldrin	0.0693	LCS	P	0 - 30
LFB	Endosulfan I	3.26	LCS	P	0 - 30
LFB	Endosulfan II	11.2	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.08	LCS	P	0 - 30
LFB	Endrin	0.107	LCS	P	0 - 30
LFB	Endrin Aldehyde	18.3	LCS	P	0 - 30
LFB	Endrin Ketone	4.38	LCS	P	0 - 30
LFB	Gamma-BHC	1.08	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.54	LCS	P	0 - 30
LFB	Heptachlor	4.38	LCS	P	0 - 30
LFB	Heptachlor Epoxide	6.02	LCS	P	0 - 30
LFB	Methoxychlor	9.81	LCS	P	0 - 30
LFB	Mirex	11.8	LCS	P	0 - 30
LFB	Permethrin	6.17	LCS	P	0 - 30
LFB	Trifluralin	5.02	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P326604

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905114	Chlordane	11.4	Spike	P	0 - 30
1905114	Toxaphene	9.97	Spike	P	0 - 30
LFB	Chlordane	1.90	LCS	P	0 - 30
LFB	Toxaphene	6.34	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P326579

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905091	Pyraclostrobin	18.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P326632

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905341	Sucralose	5.47	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: SM 2120 B
Batch ID: P326585

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904981	Color (true)	4.64	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P326792

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905012	Total Alkalinity	0.140	Sample	P	0 - 4.8

Reference Method: SM 2540 C-97
Batch ID: P327119

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904793	TDS	1.76	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P327120

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905012	TDS	5.45	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P326794

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905012	Fluoride	1.04	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P327060

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1903795	Fluoride	2.88	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P326871

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1905300	Organic Carbon	2.01	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P326873

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904963	Organic Carbon	3.55	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P326471

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1904436	2,4-D	5.69	Spike	P	0 - 30
1904436	Acetaminophen	14.5	Spike	P	0 - 30
1904436	Bentazon	6.33	Spike	P	0 - 30
1904436	Carbamazepine	4.41	Spike	P	0 - 30
1904436	Diuron	9.47	Spike	P	0 - 30
1904436	Fenuron	4.33	Spike	P	0 - 30
1904436	Fluridone	8.95	Spike	P	0 - 30
1904436	Imidacloprid	4.13	Spike	P	0 - 30
1904436	Linuron	12.4	Spike	P	0 - 30
1904436	MCP	9.08	Spike	P	0 - 30
1904436	Primidone	3.80	Spike	P	0 - 30
1904436	Triclopyr	3.79	Spike	P	0 - 30

* 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: 1905340
Field Sample ID: G1SD060817-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	121	P	30 - 150
EPA 8321B	Carbamazepine-d10	107	P	30 - 160
EPA 8321B	Diuron-d6	100	P	30 - 160
EPA 8321B	Diuron-d6	74.6	P	30 - 160
EPA 8321B	Primidone-d5	88.3	P	30 - 150
EPA 8321B	Sucralose-d6	117	P	40 - 160
USGS O-2060-01	2,4-D-d3	83.7	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	121	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	107	P	30 - 160
USGS O-2060-01	Diuron-d6	100	P	30 - 160
USGS O-2060-01	Diuron-d6	74.6	P	30 - 160
USGS O-2060-01	Primidone-d5	88.3	P	30 - 150

Lab Sample ID: 1905341
Field Sample ID: G1SD060817-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	125	P	30 - 150
EPA 8321B	Carbamazepine-d10	129	P	30 - 160
EPA 8321B	Diuron-d6	98.7	P	30 - 160
EPA 8321B	Diuron-d6	85.4	P	30 - 160
EPA 8321B	Primidone-d5	115	P	30 - 150
EPA 8321B	Sucralose-d6	98.0	P	40 - 160
USGS O-2060-01	2,4-D-d3	87.1	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	125	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	129	P	30 - 160
USGS O-2060-01	Diuron-d6	98.7	P	30 - 160

Quality Assurance Report Surrogates

Lab Sample ID: 1905341

Field Sample ID: G1SD060817-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Diuron-d6	85.4	P	30 - 160
USGS O-2060-01	Primidone-d5	115	P	30 - 150

Lab Sample ID: 1905342

Field Sample ID: G1SD060817-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	107	P	30 - 150
EPA 8321B	Carbamazepine-d10	117	P	30 - 160
EPA 8321B	Diuron-d6	95.7	P	30 - 160
EPA 8321B	Diuron-d6	85.5	P	30 - 160
EPA 8321B	Primidone-d5	98.1	P	30 - 150
EPA 8321B	Sucralose-d6	118	P	40 - 160
USGS O-2060-01	2,4-D-d3	87.4	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	107	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	117	P	30 - 160
USGS O-2060-01	Diuron-d6	95.7	P	30 - 160
USGS O-2060-01	Diuron-d6	85.5	P	30 - 160
USGS O-2060-01	Primidone-d5	98.1	P	30 - 150

Lab Sample ID: 1905344

Field Sample ID: G1SD060817-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	54.3	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	38.1	P	32 - 103
EPA 8276	Decachlorobiphenyl	48.8	P	31 - 100

Lab Sample ID: 1905345

Field Sample ID: G1SD060817-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	50.6	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	37.9	P	32 - 103
EPA 8276	Decachlorobiphenyl	43.2	P	31 - 100

Lab Sample ID: 1905346

Field Sample ID: G1SD060817-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	47.7	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	37.2	P	32 - 103
EPA 8276	Decachlorobiphenyl	39.7	P	31 - 100

Lab Sample ID: 1905347

Field Sample ID: G1SD060817-3

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	87.7	P	62 - 132
EPA 8270D	Simazine-d10	82.2	P	72 - 127

Quality Assurance Report Surrogates

Lab Sample ID: 1905348

Field Sample ID: G1SD060817-1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	73.2	P	62 - 132
EPA 8270D	Simazine-d10	79.2	P	72 - 127

Lab Sample ID: 1905349

Field Sample ID: G1SD060817-2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	106	P	62 - 132
EPA 8270D	Simazine-d10	82.5	P	72 - 127

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A76994

Included Lab Sample IDs: 1905297, 1905298, 1905299, 1905306, 1905307

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: A76995

Included Lab Sample IDs: 1905300, 1905301, 1905302, 1905308, 1905309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.5	99.6	P/P	90 - 110
Ammonia-N	99.8	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A76999

Included Lab Sample IDs: 1905303, 1905304, 1905305, 1905310, 1905311

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.5	P/P	90 - 110
O-Phosphate-P	99.5	100	P/P	90 - 110
O-Phosphate-P	99.9	99.9	P/P	90 - 110

Reference Method: SM 2120 B

Run ID: A77000

Included Lab Sample IDs: 1905297, 1905298, 1905299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	98.7	100	P/P	85 - 115

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77033

Included Lab Sample IDs: 1905300, 1905301, 1905302, 1905308

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A77065

Included Lab Sample IDs: 1905340, 1905341, 1905342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	107	97.2	P/P	60 - 150

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77075

Included Lab Sample IDs: 1905300, 1905301

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77076

Included Lab Sample IDs: 1905297, 1905298, 1905299

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	101	100	P/P	90 - 110
Sulfate	108	101	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A77078

Included Lab Sample IDs: 1905297, 1905298, 1905299, 1905306, 1905307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	100	104	P/P	90 - 110
Total Alkalinity	104	100	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77078

Included Lab Sample IDs: 1905297, 1905298, 1905299, 1905306

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

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77083

Included Lab Sample IDs: 1905302, 1905308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.5	99.0	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77100

Included Lab Sample IDs: 1905300, 1905301, 1905302, 1905308, 1905309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	101	98.4	P/P	90 - 110
Organic Carbon	93.0	98.8	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77102

Included Lab Sample IDs: 1905309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	103	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77106

Included Lab Sample IDs: 1905309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	98.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77140

Included Lab Sample IDs: 1905309

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	91.6	93.2	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77142

Included Lab Sample IDs: 1905300, 1905301, 1905302, 1905308

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	103	100	P/P	90 - 110
Kjeldahl Nitrogen	104	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77172

Included Lab Sample IDs: 1905307

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	96.2	96.0	P/P	90 - 110

Reference Method: USGS O-2060-01

Run ID: A77208

Included Lab Sample IDs: 1905340, 1905341, 1905342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	88.4	82.8	P/P	50 - 150
Acetaminophen	101	102	P/P	60 - 150
Bentazon	97.6	98.0	P/P	50 - 150
Carbamazepine	115	114	P/P	60 - 150
Diuron	103	105	P/P	60 - 150
Fenuron	107	108	P/P	60 - 150
Fluridone	109	110	P/P	60 - 160
Imidacloprid	98.2	104	P/P	60 - 150
Linuron	107	108	P/P	60 - 150
MCPP	80.8	78.0	P/P	50 - 150
Primidone	91.0	103	P/P	60 - 150
Triclopyr	81.2	81.2	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A77239

Included Lab Sample IDs: 1905344, 1905345, 1905346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	97.1		P	80 - 120
Toxaphene	106		P	80 - 120

Reference Method: EPA 8270D

Run ID: A77269

Included Lab Sample IDs: 1905344, 1905345, 1905346

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.0		P	80 - 120
Alpha-BHC	102		P	80 - 120
Alpha-Chlordane	91.5		P	80 - 120
Beta-BHC	101		P	80 - 120
Carbophenothion	80.6		P	80 - 120
Chlorothalonil	97.8		P	80 - 120
Cypermethrin	93.1		P	80 - 120
DDD-p,p'	94.3		P	80 - 120
DDE-p,p'	91.7		P	80 - 120
DDT-p,p'	102		P	80 - 120
Delta-BHC	96.3		P	80 - 120
Dicofol	88.8		P	80 - 120
Dieldrin	90.2		P	80 - 120
Endosulfan I	90.2		P	80 - 120
Endosulfan II	88.2		P	80 - 120
Endosulfan Sulfate	110		P	80 - 120
Endrin	85.0		P	80 - 120
Endrin Aldehyde	84.8		P	80 - 120
Endrin Ketone	102		P	80 - 120
Gamma-BHC	103		P	80 - 120
Gamma-Chlordane	92.8		P	80 - 120
Heptachlor	90.9		P	80 - 120
Heptachlor Epoxide	91.0		P	80 - 120
Methoxychlor	101		P	80 - 120
Mirex	99.7		P	80 - 120
Permethrin	95.2		P	80 - 120
Trifluralin	82.9		P	80 - 120

Reference Method: EPA 8321B

Run ID: A77273

Included Lab Sample IDs: 1905340, 1905341, 1905342

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	108	130	P/P	60 - 160
Sucralose	129	107	P/P	60 - 160
Sucralose	130	121	P/P	60 - 160

Reference Method: EPA 8270D

Run ID: A77337

Included Lab Sample IDs: 1905347, 1905348, 1905349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	97.5		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D

Run ID: A77337

Included Lab Sample IDs: 1905347, 1905348, 1905349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Alachlor	100		P	80 - 120
Ametryn	96.4		P	80 - 120
Atrazine	98.8		P	80 - 120
Atrazine Desethyl	87.2		P	80 - 120
Azinphos Methyl	100		P	80 - 120
Bromacil	94.5		P	80 - 120
Butylate	101		P	80 - 120
Chlorpyrifos Ethyl	101		P	80 - 120
Chlorpyrifos Methyl	101		P	80 - 120
Cyanazine	113		P	80 - 120
Demeton	105		P	80 - 120
Diazinon	98.9		P	80 - 120
Disulfoton	95.6		P	80 - 120
EPTC	100		P	80 - 120
Ethion	97.4		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	94.2		P	80 - 120
Fipronil	95.6		P	80 - 120
Fipronil Sulfide	96.5		P	80 - 120
Fipronil Sulfone	101		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	101		P	80 - 120
Malathion	99.8		P	80 - 120
Metalaxyl	97.5		P	80 - 120
Metolachlor	103		P	80 - 120
Metribuzin	108		P	80 - 120
Mevinphos	104		P	80 - 120
Molinate	105		P	80 - 120
Norflurazon	95.4		P	80 - 120
Parathion Ethyl	96.7		P	80 - 120
Parathion Methyl	97.7		P	80 - 120
Pendimethalin	92.6		P	80 - 120
Phorate	99.4		P	80 - 120
Prometon	97.2		P	80 - 120
Prometryn	97.4		P	80 - 120
Simazine	95.4		P	80 - 120
Terbufos	99.5		P	80 - 120
Terbuthylazine	99.2		P	80 - 120

Reference Method: EPA 8270D

Run ID: A77338

Included Lab Sample IDs: 1905347, 1905349

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Atrazine	101		P	80 - 120
Hexazinone	98.2		P	80 - 120

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

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

Where they are different, both control limits are provided.

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 180.1 Rev. 2.0	Turbidity						7.95	
	Turbidity						0.358	
EPA 300.0 Rev. 2.1	Chloride	104		102	106		0.330	
	Sulfate	104		98.1	103		2.51	
EPA 350.1 Rev. 2.0	Ammonia-N	98.6		105	103			1.32
	Ammonia-N	101		99.8	110			6.02
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	94.3		96.6	100			3.34
	Kjeldahl Nitrogen	104		99.0	100			0.895
EPA 353.2 Rev. 2.0	NO2NO3-N	104		103	103			0.0
	NO2NO3-N	106		108	106			1.00
EPA 365.1 Rev. 2.0	Total-P	102		102	99.1			2.87
	Total-P	102		97.3	98.8			1.57
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	96.9		96.1	97.1			1.04
	O-Phosphate-P	96.1		94.0	95.3			1.06
EPA 8270D	Acetochlor	80.4	80.6	81.1	80.3	0.306		1.02
	Alachlor	81.9	80.4	88.6	89.7	1.93		1.24
	Aldrin	61.8	67.8	54.9	49.5	9.20		10.4
	Alpha-BHC	106	112	95.2	74.3	5.08		24.7
	Alpha-Chlordane	86.0	89.6	69.2	61.2	4.05		12.3
	Ametryn	80.4	82.2	103	101	2.19		1.67
	Atrazine	91.1	90.0			1.23		2.14
	Atrazine Desethyl	95.8	88.7	114	96.8	7.60		14.5
	Azinphos Methyl	105	101	171	164	4.08		4.34
	Beta-BHC	122	121	80.5	76.5	0.463		5.14
	Bromacil	84.0	83.9	96.8	92.6	0.0812		4.44
	Butylate	49.8	45.9	17.7	22.9	8.30		25.5
	Carbophenothion	36.2	43.2	90.4	94.9	17.7		4.93
	Chlorothalonil	170	125	100	183	30.5		58.6
	Chlorpyrifos Ethyl	91.3	84.6	125	116	7.65		7.06
	Chlorpyrifos Methyl	93.4	88.8	92.4	94.6	5.03		2.29
	Cyanazine	222	212	315	308	4.88		1.99
	Cypermethrin	104	116	101	121	10.9		18.1
	DDD-p,p'	111	100	76.7	69.8	10.6		9.37
	DDE-p,p'	84.7	81.6	66.6	59.7	3.67		11.0
	DDT-p,p'	74.0	71.2	59.0	59.4	3.87		0.521
	Delta-BHC	140	139	108	110	1.13		1.23
	Demeton	77.9	87.9	102	113	12.1		10.5
	Diazinon	82.2	83.7	87.9	86.7	1.83		1.48
	Dicofol	32.6	36.1	19.2	12.0	10.3		46.1
	Dieldrin	85.8	85.8	69.8	63.8	0.0693		9.09
	Disulfoton	88.0	90.6	135	145	2.84		7.17
	Endosulfan I	106	102	109	85.4	3.26		24.0
	Endosulfan II	119	106	92.7	96.5	11.2		4.00
	Endosulfan Sulfate	97.2	94.2	67.3	87.0	3.08		25.5
	Endrin	81.2	81.3	67.4	81.5	0.107		19.0
	Endrin Aldehyde	75.8	63.1	72.8	77.6	18.3		6.39
	Endrin Ketone	83.8	87.5	70.0	88.4	4.38		23.3
	EPTC	48.6	44.3	24.3	27.0	9.33		10.6
	Ethion	97.1	90.7	92.7	95.5	6.83		2.95
	Ethoprop	81.5	76.6	95.2	104	6.15		8.72
	Fenamiphos	102	98.9	97.1	96.2	3.15		1.00
	Fipronil	87.0	85.4	83.4	81.7	1.85		1.99
	Fipronil Sulfide	89.5	90.4	88.6	89.9	1.05		1.28
	Fipronil Sulfone	87.5	80.8	76.9	80.7	7.90		4.15

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Fonofos	85.2	84.7	101	109	0.530	7.52
	Gamma-BHC	109	107	96.8	74.3	1.08	26.3
	Gamma-Chlordane	86.6	84.4	66.3	60.5	2.54	9.12
	Heptachlor	79.1	75.7	58.0	51.8	4.38	11.2
	Heptachlor Epoxide	90.0	84.7	70.8	61.0	6.02	14.9
	Hexazinone	85.5	83.3	89.2	94.1	2.59	4.53
	Malathion	98.9	92.8	105	109	6.41	3.52
	Metalaxyl	86.2	83.2	82.3	90.1	3.53	9.06
	Methoxychlor	86.0	94.9	71.2	59.8	9.81	17.4
	Metolachlor	83.4	82.2	79.6	81.7	1.45	2.49
	Metribuzin	140	122	301	293	13.7	2.95
	Mevinphos	74.1	69.5	68.1	76.0	6.43	11.0
	Mirex	55.8	62.8	55.8	52.7	11.8	5.55
	Molinate	63.2	48.0	71.3	83.2	27.5	15.5
	Norflurazon	83.9	79.7	92.5	83.9	5.08	9.73
	Parathion Ethyl	87.3	84.9	86.9	92.1	2.72	5.75
	Parathion Methyl	90.0	86.1	91.3	92.2	4.48	0.965
	Pendimethalin	85.8	84.6	97.5	100	1.31	2.76
	Permethrin	81.9	77.0	68.4	81.5	6.17	17.5
	Phorate	91.3	83.4	104	114	9.08	9.03
	Prometon	78.0	78.8	77.1	74.2	1.10	3.76
	Prometryn	82.7	83.8	82.7	80.9	1.32	2.19
	Simazine	93.4	96.0	129	122	2.79	5.14
	Terbufos	84.0	84.6	108	115	0.716	5.60
	Terbutylazine	84.6	83.7	89.5	88.3	1.09	1.42
	Trifluralin	179	188	148	116	5.02	24.5
EPA 8276	Chlordane	94.5	96.3	111	98.6	1.90	11.4
	Toxaphene	108	115	134	122	6.34	9.97
EPA 8321B	Pyraclostrobin	60.3		49.3	59.2		18.2
	Sucralose	83.0		82.0	77.5		5.47
SM 2120 B	Color (true)					4.64	
SM 2320 B-97	Total Alkalinity	103				0.140	
SM 2540 C-97	TDS					1.76	
	TDS					5.45	
SM 4500 F-C-97	Fluoride	97.5		97.6	98.8		1.04
	Fluoride	96.9		100	105		2.88
SM 5310 B-00	Organic Carbon	94.1		99.1	96.2		2.01
	Organic Carbon	96.4		91.3	95.2		3.55
USGS O-2060-01	2,4-D	90.0		93.2	87.4		5.69
	Acetaminophen	70.4		99.2	115		14.5
	Bentazon	77.4		32.4	29.6		6.33
	Carbamazepine	132		116	111		4.41
	Diuron	120		88.5	79.9		9.47
	Fenuron	113		86.9	83.2		4.33
	Fluridone	115		79.1	71.8		8.95
	Imidacloprid	110		197	187		4.13
	Linuron	119		112	98.7		12.4
	MCPD	95.6		71.4	65.2		9.08
	Primidone	110		98.8	95.1		3.80
	Triclopyr	94.2		75.2	72.4		3.79

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1905297, 1905298, 1905299, 1905306, 1905307
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1905297, 1905298, 1905299
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1905297, 1905298, 1905299
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1905300, 1905301, 1905302, 1905308, 1905309
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1905300, 1905301, 1905302, 1905308, 1905309
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1905300, 1905301, 1905302, 1905308, 1905309
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1905300, 1905301, 1905302, 1905308, 1905309
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1905303, 1905304, 1905305, 1905310, 1905311
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1905344, 1905345, 1905346
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1905347, 1905348, 1905349
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1905344, 1905345, 1905346
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1905340, 1905341, 1905342
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1905340, 1905341, 1905342
SM 2120 B / E31780	True Color measured at 450 nm	1905297, 1905298, 1905299
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1905297, 1905298, 1905299, 1905306, 1905307
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1905297, 1905298, 1905299
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1905297, 1905298, 1905299, 1905306, 1905307
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1905297, 1905298, 1905299, 1905306, 1905307
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1905300, 1905301, 1905302, 1905308, 1905309
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1905340, 1905341, 1905342
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1905340, 1905341, 1905342

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	06/09/2017			06/09/2017 16:38	Sima Feizi	1905297, 1905298, 1905299, 1905306, 1905307
EPA 300.0 Rev. 2.1	06/09/2017			06/17/2017	Julia Storbeck	1905297, 1905298, 1905299
EPA 350.1 Rev. 2.0	06/09/2017			06/09/2017	Julie Michelle Frank	1905300, 1905301, 1905302, 1905308, 1905309
EPA 351.2 Rev. 2.0	06/09/2017	06/13/2017	Adrian Shelby	06/16/2017	Joseph Suarez	1905309
	06/09/2017	06/14/2017	Adrian Shelby	06/16/2017	Joseph Suarez	1905300, 1905301, 1905302, 1905308
EPA 353.2 Rev. 2.0	06/09/2017			06/13/2017	Beverly Y. Sanders	1905300, 1905301, 1905302, 1905308
	06/09/2017			06/15/2017	Beverly Y. Sanders	1905309
EPA 365.1 Rev. 2.0	06/09/2017	06/13/2017	Adrian Shelby	06/14/2017	Christopher Armour	1905300, 1905301
	06/09/2017	06/13/2017	Adrian Shelby	06/14/2017	Lipi Saha	1905302, 1905308
	06/09/2017	06/14/2017	Vijayalakshmi Reddy	06/15/2017	Lipi Saha	1905309
EPA 365.1 Rev. 2.0 dissolved	06/09/2017			06/09/2017 16:18	Anthony C. Onicha	1905311
	06/09/2017			06/09/2017 16:38	Anthony C. Onicha	1905303
	06/09/2017			06/09/2017 17:03	Anthony C. Onicha	1905304
	06/09/2017			06/09/2017 17:04	Anthony C. Onicha	1905305
	06/09/2017			06/09/2017 17:05	Anthony C. Onicha	1905310
EPA 8270D	06/09/2017	06/09/2017	John Kaba	06/13/2017	Irina Carbone	1905347, 1905348, 1905349
	06/09/2017	06/09/2017	John Kaba	06/19/2017	Irina Carbone	1905347, 1905349
	06/09/2017	06/12/2017	John Kaba	06/16/2017	Marek Topolski	1905344, 1905345, 1905346
EPA 8276	06/09/2017	06/12/2017	John Kaba	06/16/2017	Marek Topolski	1905344, 1905345, 1905346
EPA 8321B	06/09/2017	06/13/2017	Hoor Shaik	06/13/2017	Juyoung Kim	1905340, 1905341, 1905342
	06/09/2017	06/15/2017	Mohammad Ghaffari	06/21/2017	Mohammad Ghaffari	1905340, 1905341, 1905342
SM 2120 B	06/09/2017			06/09/2017 16:15	Tanya Welborn	1905297
	06/09/2017			06/09/2017 16:16	Tanya Welborn	1905298
	06/09/2017			06/09/2017 16:17	Tanya Welborn	1905299
SM 2320 B-97	06/09/2017			06/13/2017	Dale L. Simmons	1905297, 1905298, 1905299, 1905306, 1905307
SM 2540 C-97	06/09/2017			06/14/2017	Yijie Li	1905297, 1905298, 1905299
SM 2540 D-97	06/09/2017			06/14/2017	Yijie Li	1905297, 1905298, 1905299, 1905306, 1905307
SM 4500 F-C-97	06/09/2017			06/13/2017	Dale L. Simmons	1905297, 1905298, 1905299, 1905306
	06/09/2017			06/16/2017	Elisa J Lutz	1905307
SM 5310 B-00	06/09/2017			06/14/2017	Christopher Armour	1905300, 1905301, 1905302, 1905308
	06/09/2017			06/15/2017	Christopher Armour	1905309
USGS O-2060-01	06/09/2017	06/14/2017	Hoor Shaik	06/17/2017	Juyoung Kim	1905340, 1905341, 1905342