

Chemical Analysis Report

NE-DIST-2017-06-29-01

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

Event Description: **SUW 5-6/28/17**
Request ID: **RQ-2017-06-26-07**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
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8800 Baymeadows Way W
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Certified by: Thekkekalathil Chandrasekhar, Chemist Administrator Date Certified: 27-JUL-2017 11:23



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: Bivens Arm Outlet @ SR 331

Collection Date/Time: 06/28/2017 12:15

Field ID: G1NE0208 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910159	EPA 180.1 Rev. 2.0	Turbidity	0.95		NTU	P327750	
	EPA 300.0 Rev. 2.1	Chloride	8.9		mg Cl/L	P328145	
		Sulfate	11		mg SO4/L	P328150	
	SM 2120 B	Color (true)	56		PCU	P327734	
	SM 2320 B-97	Total Alkalinity	85		mg CaCO3/L	P328061	
	SM 2540 C-97	TDS	139	A	mg/L	P328162	
	SM 2540 D-97	TSS	2	IA	mg/L	P328175	
	SM 4500 F-C-97	Fluoride	0.14		mg F/L	P328068	
1910162	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P327895	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P327884	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.035		mg N/L	P327856	
	EPA 365.1 Rev. 2.0	Total-P	0.40		mg P/L	P327861	
	SM 5310 B-00	Organic Carbon	9.9		mg C/L	P327944	
1910165	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.34		mg P/L	P327742	

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: Montechoa Creek @ CR 340 (NE 156th Ave)

Collection Date/Time: 06/28/2017 10:15

Field ID: G1NE0591 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910160	EPA 180.1 Rev. 2.0	Turbidity	4.2	A	NTU	P327750	
	EPA 300.0 Rev. 2.1	Chloride	9.0		mg Cl/L	P328145	
		Sulfate	0.24	I	mg SO4/L	P328150	
	SM 2120 B	Color (true)	920		PCU	P327734	
	SM 2320 B-97	Total Alkalinity	0.65	U	mg CaCO3/L	P328061	
	SM 2540 C-97	TDS	146		mg/L	P328163	
	SM 2540 D-97	TSS	14		mg/L	P328176	
	SM 4500 F-C-97	Fluoride	0.045	I	mg F/L	P328068	
1910163	EPA 350.1 Rev. 2.0	Ammonia-N	0.12		mg N/L	P327895	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	2.2		mg N/L	P327884	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P327856	
	EPA 365.1 Rev. 2.0	Total-P	0.077		mg P/L	P327964	
	SM 5310 B-00	Organic Carbon	80		mg C/L	P327944	
1910166	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P327742	

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: Montechoa Creek @ CR 340 (NE 156th Ave)

Collection Date/Time: 06/28/2017 10:15

Field ID: G1NE0591 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910179	EPA 8321B	Sucralose**	0.010	U	ug/L	P327721	
	USGS O-2060-01	2,4-D	8.9E-04	I	ug/L	P327711	
		Diuron	8.0E-04	U	ug/L	P327711	

Field ID: G1NE0591 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910179	USGS O-2060-01	Fenuron	0.0080	U	ug/L	P327711	
		Imidacloprid	8.0E-04	U	ug/L	P327711	
		Bentazon	8.0E-04	U	ug/L	P327711	
		Linuron	0.0040	U	ug/L	P327711	RPD
		Acetaminophen**	0.0080	UJ	ug/L	P327711	SUR
		MCP	0.0020	U	ug/L	P327711	
		Carbamazepine**	4.0E-04	U	ug/L	P327711	
		Triclopyr**	0.0040	U	ug/L	P327711	
		Primidone**	0.0040	U	ug/L	P327711	
		Fluridone**	4.0E-04	U	ug/L	P327711	

Ref. Method and Comment:

USGS O-2060-01: Refer to the narrative for an explanation of QC Codes. Acetaminophen-d4 surrogate spike recovery exceeding the control limits.

Sample Location: Turkey Creek @ NW 59th

Collection Date/Time: 06/28/2017 11:20

Field ID: G1NE0018 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910161	EPA 180.1 Rev. 2.0	Turbidity	3.9		NTU	P327750	
	EPA 300.0 Rev. 2.1	Chloride	9.4		mg Cl/L	P328145	
		Sulfate	6.5		mg SO4/L	P328150	
	SM 2120 B	Color (true)	650		PCU	P327734	
	SM 2320 B-97	Total Alkalinity	51		mg CaCO3/L	P328061	
	SM 2540 C-97	TDS	172		mg/L	P328162	
	SM 2540 D-97	TSS	6	I	mg/L	P328175	
	SM 4500 F-C-97	Fluoride	0.15		mg F/L	P328068	
1910164	EPA 350.1 Rev. 2.0	Ammonia-N	0.029		mg N/L	P327895	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.5		mg N/L	P327884	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.037		mg N/L	P327856	
	EPA 365.1 Rev. 2.0	Total-P	0.37		mg P/L	P327964	
	SM 5310 B-00	Organic Carbon	48		mg C/L	P327944	
1910167	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.26		mg P/L	P327743	

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: Turkey Creek @ NW 59th

Collection Date/Time: 06/28/2017 11:20

Field ID: G1NE0018 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910180	EPA 8321B	Sucralose**	0.028	I	ug/L	P327721	
	USGS O-2060-01	2,4-D	0.067		ug/L	P327782	
		Diuron	0.021		ug/L	P327782	
		Fenuron	0.021	I	ug/L	P327782	
		Imidacloprid	0.0080		ug/L	P327782	
		Bentazon	8.0E-04	U	ug/L	P327782	
		Linuron	0.0040	U	ug/L	P327782	
		Acetaminophen**	0.26	I	ug/L	P327782	

Field ID: G1NE0018 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910180	USGS O-2060-01	MCP	0.0020	U	ug/L	P327782	
		Carbamazepine**	4.0E-04	U	ug/L	P327782	
		Triclopyr**	0.0040	U	ug/L	P327782	
		Primidone**	0.0040	U	ug/L	P327782	
		Fluridone**	4.0E-04	U	ug/L	P327782	

Ref. Method and Comment:

USGS O-2060-01: MS accuracy for 2,4-D could not be assessed due to high concentration of parameter in the spiked sample.

USGS O-2060-01: MS accuracy for acetaminophen could not be assessed due to high concentration of parameter in the spiked sample.

Sample Location: Hague Branch Trib @ US 441 80m W 77th Terrace

Collection Date/Time: 06/28/2017 10:30

Field ID: G1NE0631 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910178	EPA 8321B	Glyphosate**	10	U	ug/L	P327603	
		Pyraclostrobin**	0.0020	U	ug/L	P327601	
		Sucralose**	0.070		ug/L	P327721	
	USGS O-2060-01	2,4-D	0.014		ug/L	P327711	
		Diuron	8.0E-04	U	ug/L	P327711	
		Fenuron	0.0080	U	ug/L	P327711	
		Imidacloprid	8.0E-04	U	ug/L	P327711	
		Bentazon	8.0E-04	U	ug/L	P327711	
		Linuron	0.0040	U	ug/L	P327711	RPD
		Acetaminophen**	0.0080	U	ug/L	P327711	
		MCP	0.0020	U	ug/L	P327711	
		Carbamazepine**	6.5E-04	I	ug/L	P327711	
		Triclopyr**	0.0040	U	ug/L	P327711	
		Primidone**	0.0040	U	ug/L	P327711	
		Fluridone**	4.0E-04	U	ug/L	P327711	
1910196	EPA 8270D	Aldrin	4.2	U	ng/L	P327948	
		Alpha-BHC	2.1	U	ng/L	P327948	
		Beta-BHC	4.2	U	ng/L	P327948	
		Delta-BHC	4.2	U	ng/L	P327948	
		Gamma-BHC	4.2	U	ng/L	P327948	
		Carbophenothion	4.2	U	ng/L	P327948	
		Chlorothalonil	2.1	UJ	ng/L	P327948	RPD
		Cypermethrin	21	U	ng/L	P327948	RPD
		DDD-p,p'	2.1	U	ng/L	P327948	
		DDE-p,p'	3.1	U	ng/L	P327948	
		DDT-p,p'	3.1	U	ng/L	P327948	
		Dieldrin	4.2	U	ng/L	P327948	
		Endosulfan I	4.2	U	ng/L	P327948	
		Endosulfan II	4.2	U	ng/L	P327948	
		Endosulfan Sulfate	2.1	U	ng/L	P327948	
		Endrin	2.1	U	ng/L	P327948	
		Endrin Aldehyde	2.1	U	ng/L	P327948	

Field ID: G1NE0631 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910196	EPA 8270D	Heptachlor	1.6	U	ng/L	P327948	
		Heptachlor Epoxide	2.1	U	ng/L	P327948	
		Methoxychlor	4.2	U	ng/L	P327948	
		Mirex	2.1	U	ng/L	P327948	
		Permethrin	10	U	ng/L	P327948	RPD
		Trifluralin	1.0	U	ng/L	P327948	
		Alpha-Chlordane	1.0	U	ng/L	P327948	
		Gamma-Chlordane	1.0	U	ng/L	P327948	
		Endrin Ketone	2.1	U	ng/L	P327948	
		Dicofol	31	U	ng/L	P327948	RPD
	EPA 8276	Chlordane**	2.6	U	ng/L	P327948	
		Toxaphene**	13	U	ng/L	P327948	
1910197	EPA 8270D	Alachlor	0.24	U	ng/L	P327768	
		Ametryn	2.0		ng/L	P327768	
		Atrazine	5.7		ng/L	P327768	
		Atrazine Desethyl	4.0	I	ng/L	P327768	
		Azinphos Methyl	2.1	U	ng/L	P327768	
		Bromacil	4.8		ng/L	P327768	
		Butylate	0.38	U	ng/L	P327768	
		Chlorpyrifos Ethyl	1.3		ng/L	P327768	
		Chlorpyrifos Methyl	0.095	U	ng/L	P327768	
		Demeton	1.9	U	ng/L	P327768	
		Diazinon	0.12	U	ng/L	P327768	
		Disulfoton	0.31	U	ng/L	P327768	
		EPTC	1.2	U	ng/L	P327768	
		Ethion	0.14	U	ng/L	P327768	
		Ethoprop	0.095	U	ng/L	P327768	
		Fenamiphos	0.24	U	ng/L	P327768	
		Fipronil	0.24	U	ng/L	P327768	
		Fipronil Sulfide	0.14	U	ng/L	P327768	
		Fipronil Sulfone	0.14	U	ng/L	P327768	
		Hexazinone	1.1	I	ng/L	P327768	
		Malathion	0.33	U	ng/L	P327768	
		Metribuzin	0.19	UJ	ng/L	P327768	LCS, MS
		Mevinphos	0.48	U	ng/L	P327768	
		Molinate	0.29	U	ng/L	P327768	
		Norflurazon	0.48	U	ng/L	P327768	
		Pendimethalin	1.4	U	ng/L	P327768	
		Phorate	0.24	U	ng/L	P327768	
		Prometon	1.8	IJ	ng/L	P327768	LCS
		Prometryn	0.19	U	ng/L	P327768	
		Simazine	0.48	U	ng/L	P327768	
		Terbufos	0.095	U	ng/L	P327768	
		Terbuthylazine	0.40	U	ng/L	P327768	
		Fonofos	0.19	U	ng/L	P327768	

Field ID: G1NE0631 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910197	EPA 8270D	Metalaxyl	0.19	U	ng/L	P327768	
		Metolachlor	1.5	J	ng/L	P327768	LCS
		Acetochlor	0.24	U	ng/L	P327768	
		Cyanazine	0.48	UJ	ng/L	P327768	
		Parathion Ethyl	0.24	U	ng/L	P327768	
		Parathion Methyl	0.24	U	ng/L	P327768	

Ref. Method and Comment:

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

EPA 8270D: MS accuracy for Atrazine, Atrazine Desethyl, Ametryn, and Fipronil Sulfone 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: Hague Branch Trib @ US 441 80m W 77th Terrace

Collection Date/Time: 06/28/2017 10:30

Field ID: G1NE0631 06282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1910168	EPA 180.1 Rev. 2.0	Turbidity	8.0		NTU	P327750	
	EPA 300.0 Rev. 2.1	Chloride	24		mg Cl/L	P328145	
		Sulfate	22		mg SO4/L	P328150	
	SM 2120 B	Color (true)	270		PCU	P327734	
	SM 2320 B-97	Total Alkalinity	108		mg CaCO3/L	P328061	
	SM 2540 C-97	TDS	243		mg/L	P328162	
	SM 2540 D-97	TSS	16		mg/L	P328175	
	SM 4500 F-C-97	Fluoride	0.24		mg F/L	P328068	
1910169	EPA 350.1 Rev. 2.0	Ammonia-N	0.045		mg N/L	P327895	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	1.6		mg N/L	P327884	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.85		mg N/L	P327856	
	EPA 365.1 Rev. 2.0	Total-P	1.1		mg P/L	P327964	
	SM 5310 B-00	Organic Carbon	29		mg C/L	P327944	
1910170	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.86		mg P/L	P327742	
1910208	EPA 200.7 Rev. 4.4	Calcium	31.5		mg/L	P327754	
		Iron	1.12E+03		ug/L	P327754	
		Magnesium	10.0		mg/L	P327754	
		Potassium	14.1		mg/L	P327754	
		Sodium	20.6		mg/L	P327754	
		Zinc	11	I	ug/L	P327754	
	EPA 200.8 Rev. 5.4	Arsenic	2.36		ug/L	P327754	
		Cadmium	1.83		ug/L	P327754	
		Chromium	1.5	I	ug/L	P327754	
		Copper	2.18		ug/L	P327754	
		Lead	0.53		ug/L	P327754	
		Nickel	5.78		ug/L	P327754	
		Silver	0.010	U	ug/L	P327754	

Ref. Method and Comment:

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327750

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327754

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: P327754

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328145

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328150

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327895

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327884

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: P327856

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327861

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327964

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327742

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327743

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

Reference Method: EPA 8270D
Batch ID: P327768

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
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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270D

Batch ID: P327768

Component	Result	Code	Units
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	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: P327948

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
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8276
Batch ID: P327948

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

Reference Method: EPA 8321B
Batch ID: P327601

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P327603

Component	Result	Code	Units
Glyphosate	10	U	ug/L

Reference Method: EPA 8321B
Batch ID: P327721

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: SM 2120 B
Batch ID: P327734

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: SM 2320 B-97
Batch ID: P328061

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

Reference Method: SM 2540 C-97
Batch ID: P328162

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 C-97
Batch ID: P328163

Component	Result	Code	Units
TDS	15	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P328175

Component	Result	Code	Units
TSS	2	U	mg/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2540 D-97
Batch ID: P328176

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P328068

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P327944

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

Reference Method: USGS O-2060-01
Batch ID: P327711

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	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Reference Method: USGS O-2060-01
Batch ID: P327782

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	0.0080	U	ug/L
Fluridone	4.0E-04	U	ug/L
Imidacloprid	8.0E-04	U	ug/L
Linuron	0.0040	U	ug/L
MCP	0.0020	U	ug/L
Primidone	0.0040	U	ug/L
Triclopyr	0.0040	U	ug/L

Quality Assurance Report
Laboratory Control Sample Accuracy

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P327754

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	100		P	85 - 115
Iron	102		P	85 - 115
Magnesium	103		P	85 - 115
Potassium	99.0		P	85 - 115
Sodium	102		P	85 - 115
Zinc	95.5		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P327754

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	99.0		P	85 - 115
Cadmium	98.5		P	85 - 115
Chromium	95.9		P	85 - 115
Copper	95.8		P	85 - 115
Lead	95.1		P	85 - 115
Nickel	98.6		P	85 - 115
Silver	96.2		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P328145

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

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P328150

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

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P327895

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

Reference Method: EPA 351.2 Rev. 2.0

Batch ID: P327884

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

Reference Method: EPA 353.2 Rev. 2.0

Batch ID: P327856

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P327861

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

Reference Method: EPA 365.1 Rev. 2.0
 Batch ID: P327964

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P327742

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P327743

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.9		P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P327768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	86.1	91.3	P/P	78 - 118
Alachlor	84.9	89.0	P/P	77 - 119
Ametryn	71.5	84.1	P/P	61 - 136
Atrazine	83.1	90.5	P/P	73 - 120
Atrazine Desethyl	114	121	P/P	16 - 122
Azinphos Methyl	104	114	P/P	69 - 186
Bromacil	78.7	81.6	P/P	40 - 125
Butylate	41.8	42.6	P/P	32 - 87.0
Chlorpyrifos Ethyl	78.6	84.9	P/P	53 - 110
Chlorpyrifos Methyl	81.3	89.7	P/P	31 - 119
Cyanazine	181	188	P/P	36 - 224
Demeton	59.1	56.5	P/P	39 - 122
Diazinon	88.2	91.0	P/P	75 - 119
Disulfoton	71.1	72.1	P/P	42 - 139
EPTC	44.0	47.8	P/P	33 - 96.0
Ethion	70.1	81.2	P/P	63 - 127
Ethoprop	82.0	84.5	P/P	65 - 107
Fenamiphos	76.4	79.8	P/P	64 - 137
Fipronil	80.8	89.7	P/P	60 - 126
Fipronil Sulfide	58.1	59.4	P/P	58 - 124
Fipronil Sulfone	69.5	76.0	P/P	57 - 126
Fonofos	80.3	89.1	P/P	65 - 111
Hexazinone	81.6	86.0	P/P	46 - 151
Malathion	76.7	82.1	P/P	68 - 132
Metaxyl	75.7	81.3	P/P	51 - 132
Metolachlor	76.4	83.7	F/P	78 - 119
Metribuzin	145	139	F/F	64 - 138
Mevinphos	72.2	72.4	P/P	34 - 128

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D
 Batch ID: P327768

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Molinate	46.7	47.1	P/P	44 - 101
Norflurazon	80.3	84.1	P/P	63 - 129
Parathion Ethyl	88.2	88.6	P/P	80 - 109
Parathion Methyl	88.4	89.5	P/P	74 - 125
Pendimethalin	77.8	89.1	P/P	48 - 134
Phorate	80.0	84.9	P/P	52 - 119
Prometon	67.7	81.0	F/P	69 - 124
Prometryn	75.9	81.9	P/P	66 - 124
Simazine	90.0	87.9	P/P	61 - 134
Terbufos	80.1	78.9	P/P	58 - 115
Terbuthylazine	83.4	87.9	P/P	77 - 113

Reference Method: EPA 8270D
 Batch ID: P327948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	57.1	55.5	P/P	26 - 88.0
Alpha-BHC	76.2	69.5	P/P	63 - 114
Alpha-Chlordane	73.2	73.6	P/P	56 - 117
Beta-BHC	74.2	75.7	P/P	57 - 138
Carbophenothion	67.1	64.5	P/P	36 - 148
Chlorothalonil	66.6	47.1	P/P	26 - 173
Cypermethrin	70.6	80.6	P/P	42 - 159
DDD-p,p'	82.9	82.8	P/P	62 - 126
DDE-p,p'	75.2	75.5	P/P	53 - 115
DDT-p,p'	75.3	77.1	P/P	54 - 117
Delta-BHC	85.1	85.9	P/P	68 - 158
Dicofol	45.2	51.4	P/P	25 - 114
Dieldrin	78.9	76.2	P/P	59 - 126
Endosulfan I	79.3	75.7	P/P	62 - 138
Endosulfan II	84.3	80.9	P/P	61 - 150
Endosulfan Sulfate	71.4	75.5	P/P	63 - 132
Endrin	76.4	82.5	P/P	49 - 148
Endrin Aldehyde	74.7	83.2	P/P	50 - 144
Endrin Ketone	76.2	75.8	P/P	66 - 122
Gamma-BHC	81.6	76.8	P/P	60 - 137
Gamma-Chlordane	71.9	73.0	P/P	54 - 113
Heptachlor	58.5	60.7	P/P	43 - 104
Heptachlor Epoxide	74.1	72.7	P/P	64 - 118
Methoxychlor	83.3	86.6	P/P	63 - 129
Mirex	62.3	66.4	P/P	39 - 93.0
Permethrin	71.9	78.3	P/P	51 - 123
Trifluralin	87.8	94.7	P/P	35 - 187

Reference Method: EPA 8276
 Batch ID: P327948

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	101	106	P/P	48 - 121
Toxaphene	132	133	P/P	43 - 135

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8321B
Batch ID: P327601

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	140		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P327603

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	95.3		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P327721

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	92.8		P	40 - 150

Reference Method: SM 2320 B-97
Batch ID: P328061

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	95 - 108

Reference Method: SM 4500 F-C-97
Batch ID: P328068

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	94.6		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P327944

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.9		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P327711

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	101		P	40 - 150
Acetaminophen	101		P	30 - 150
Bentazon	82.7		P	40 - 150
Carbamazepine	107		P	40 - 150
Diuron	103		P	40 - 150
Fenuron	110		P	40 - 150
Fluridone	92.4		P	40 - 150
Imidacloprid	110		P	40 - 160
Linuron	102		P	40 - 150
MCPP	84.6		P	40 - 150
Primidone	92.6		P	40 - 150
Triclopyr	82.2		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: USGS O-2060-01
Batch ID: P327782

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	77.8		P	40 - 150
Acetaminophen	103		P	30 - 150
Bentazon	60.8		P	40 - 150
Carbamazepine	77.3		P	40 - 150
Diuron	65.3		P	40 - 150
Fenuron	87.6		P	40 - 150
Fluridone	78.3		P	40 - 150
Imidacloprid	78.7		P	40 - 160
Linuron	77.0		P	40 - 150
MCPP	69.4		P	40 - 150
Primidone	76.0		P	40 - 150
Triclopyr	72.7		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1909385	Calcium	97.9		P	80 - 120
1909385	Iron	98.8		P	80 - 120
1909385	Magnesium	96.3		P	80 - 120
1909385	Potassium	96.1		P	80 - 120
1909385	Sodium	102		P	80 - 120
1909385	Zinc	93.0		P	80 - 120
1909850	Calcium	97.9		P	80 - 120
1909850	Iron	103	102	P/P	80 - 120
1909850	Magnesium	104	101	P/P	80 - 120
1909850	Potassium	98.1	97.5	P/P	80 - 120
1909850	Sodium	103	99.8	P/P	80 - 120
1909850	Zinc	95.0	92.1	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327754

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1909385	Arsenic	101		P	80 - 120
1909385	Cadmium	100		P	80 - 120
1909385	Chromium	97.3		P	80 - 120
1909385	Copper	92.7		P	80 - 120
1909385	Lead	96.5		P	80 - 120
1909385	Nickel	96.2		P	80 - 120
1909385	Silver	96.1		P	80 - 120
1909850	Arsenic	99.7	98.5	P/P	80 - 120
1909850	Cadmium	100	101	P/P	80 - 120
1909850	Chromium	98.0	97.3	P/P	80 - 120
1909850	Copper	93.3	92.7	P/P	80 - 120
1909850	Lead	96.7	96.2	P/P	80 - 120
1909850	Nickel	97.2	96.0	P/P	80 - 120
1909850	Silver	96.4	96.9	P/P	80 - 120

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328145

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910181	Chloride	95.9		P	90 - 110
1910183	Chloride	96.1		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910181	Sulfate	98.1		P	90 - 110
1910183	Sulfate	97.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327895

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910139	Ammonia-N	102	99.3	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327884

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910189	Kjeldahl Nitrogen	107	98.8	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327856

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910139	NO2NO3-N	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327861

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1909997	Total-P	101	102	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327964

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910187	Total-P	93.6	98.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327742

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910000	O-Phosphate-P	98.5	99.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P327743

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910195	O-Phosphate-P	92.9	95.5	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D

Batch ID: P327768

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910249	Acetochlor	78.7	80.4	P/P	74 - 123
1910249	Alachlor	80.7	82.7	P/P	73 - 124
1910249	Azinphos Methyl	84.2	85.6	P/P	60 - 202
1910249	Bromacil	90.0	87.8	P/P	42 - 133
1910249	Butylate	20.6	21.5	P/P	10 - 85.0
1910249	Chlorpyrifos Ethyl	74.0	84.1	P/P	53 - 113
1910249	Chlorpyrifos Methyl	78.2	79.7	P/P	40 - 115
1910249	Cyanazine	143	129	P/P	22 - 210
1910249	Demeton	84.2	81.2	P/P	17 - 149
1910249	Diazinon	87.9	96.5	P/P	72 - 124
1910249	Disulfoton	91.3	94.9	P/P	43 - 139
1910249	EPTC	23.4	22.7	P/P	10 - 86.0
1910249	Ethion	77.6	80.4	P/P	65 - 131
1910249	Ethoprop	68.9	74.6	P/P	59 - 110
1910249	Fenamiphos	86.2	76.9	P/P	57 - 138
1910249	Fipronil	96.3	101	P/P	40 - 130
1910249	Fipronil Sulfide	62.6	71.1	P/P	36 - 128
1910249	Fonofos	73.0	86.7	P/P	60 - 112
1910249	Hexazinone	83.7	84.6	P/P	69 - 142
1910249	Malathion	76.8	79.6	P/P	68 - 132
1910249	Metaxyl	81.6	79.4	P/P	66 - 118
1910249	Metolachlor	78.8	80.5	P/P	71 - 124
1910249	Metribuzin	185	190	F/F	61 - 140
1910249	Mevinphos	63.3	70.5	P/P	38 - 130
1910249	Molinate	30.5	37.2	P/P	23 - 99.0
1910249	Norflurazon	86.3	90.9	P/P	39 - 139
1910249	Parathion Ethyl	78.8	86.0	P/P	75 - 111
1910249	Parathion Methyl	83.0	81.8	P/P	64 - 130
1910249	Pendimethalin	88.0	92.5	P/P	26 - 173
1910249	Phorate	62.8	70.1	P/P	43 - 127
1910249	Prometon	98.3	101	P/P	50 - 144
1910249	Prometryn	85.1	87.9	P/P	69 - 126
1910249	Simazine	87.5	92.8	P/P	51 - 152
1910249	Terbufos	71.9	83.5	P/P	54 - 125
1910249	Terbuthylazine	80.6	80.8	P/P	76 - 113

Reference Method: EPA 8270D

Batch ID: P327948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910768	Aldrin	73.1	66.7	P/P	22 - 97.0
1910768	Alpha-BHC	87.4	82.0	P/P	43 - 132
1910768	Alpha-Chlordane	91.5	77.8	P/P	36 - 126
1910768	Beta-BHC	105	86.4	P/P	41 - 150
1910768	Carbophenothion	123	92.5	P/P	13 - 196
1910768	Chlorothalonil	143	93.9	P/P	10 - 266
1910768	Cypermethrin	142	91.0	P/P	37 - 161
1910768	DDD-p,p'	104	89.5	P/P	44 - 131
1910768	DDE-p,p'	93.5	81.8	P/P	32 - 127
1910768	DDT-p,p'	102	84.9	P/P	45 - 116
1910768	Delta-BHC	115	94.6	P/P	50 - 201
1910768	Dicofol	28.5	52.0	P/P	10 - 100

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P327948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910768	Dieldrin	94.2	84.3	P/P	39 - 142
1910768	Endosulfan I	98.9	81.5	P/P	51 - 139
1910768	Endosulfan II	105	90.4	P/P	49 - 155
1910768	Endosulfan Sulfate	117	87.7	P/P	54 - 136
1910768	Endrin	93.1	78.4	P/P	38 - 141
1910768	Endrin Aldehyde	107	86.1	P/P	14 - 152
1910768	Endrin Ketone	112	85.7	P/P	60 - 128
1910768	Gamma-BHC	98.0	85.1	P/P	48 - 157
1910768	Gamma-Chlordane	93.6	78.6	P/P	35 - 123
1910768	Heptachlor	77.4	66.5	P/P	25 - 112
1910768	Heptachlor Epoxide	94.2	78.0	P/P	48 - 125
1910768	Methoxychlor	111	94.8	P/P	52 - 127
1910768	Mirex	92.7	76.1	P/P	25 - 108
1910768	Permethrin	121	84.4	P/P	46 - 133
1910768	Trifluralin	167	134	P/P	29 - 254

Reference Method: EPA 8276
Batch ID: P327948

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910464	Chlordane	99.1	94.5	P/P	44 - 134
1910464	Toxaphene	122	125	P/P	36 - 147

Reference Method: EPA 8321B
Batch ID: P327601

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908898	Pyraclostrobin	130	130	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P327603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1908898	Glyphosate	98.4	112	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P327721

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910178	Sucralose	144	136	P/P	40 - 150

Reference Method: SM 4500 F-C-97
Batch ID: P328068

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910183	Fluoride	97.4	98.6	P/P	91 - 105

Reference Method: SM 5310 B-00
Batch ID: P327944

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1909993	Organic Carbon	89.0	92.8	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
Batch ID: P327711

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1909869	2,4-D	105	83.3	P/P	40 - 150
1909869	Acetaminophen	89.8	81.2	P/P	30 - 150
1909869	Bentazon	64.3	59.9	P/P	40 - 150
1909869	Carbamazepine	120	108	P/P	40 - 150
1909869	Diuron	99.3	82.8	P/P	40 - 150
1909869	Fenuron	106	89.2	P/P	40 - 150
1909869	Fluridone	88.7	76.8	P/P	40 - 150
1909869	Imidacloprid	134	109	P/P	40 - 160
1909869	Linuron	106	76.4	P/P	40 - 150
1909869	MCP	93.9	80.6	P/P	40 - 150
1909869	Primidone	119	103	P/P	40 - 150
1909869	Triclopyr	87.8	73.9	P/P	40 - 150

Reference Method: USGS O-2060-01
Batch ID: P327782

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1910586	Bentazon	58.8	51.2	P/P	40 - 150
1910586	Carbamazepine	113	99.1	P/P	40 - 150
1910586	Diuron	71.3	58.5	P/P	40 - 150
1910586	Fenuron	91.1	90.6	P/P	40 - 150
1910586	Fluridone	48.1	40.3	P/P	40 - 150
1910586	Imidacloprid	156	151	P/P	40 - 160
1910586	Linuron	85.2	74.0	P/P	40 - 150
1910586	MCP	108	99.4	P/P	40 - 150
1910586	Primidone	85.1	87.0	P/P	40 - 150
1910586	Triclopyr	94.5	86.4	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P327750

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910160	Turbidity	4.82	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P327754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1909850	Calcium	2.13	Spike	P	0 - 20
1909850	Iron	1.76	Spike	P	0 - 20
1909850	Magnesium	1.65	Spike	P	0 - 20
1909850	Potassium	0.503	Spike	P	0 - 20
1909850	Sodium	1.85	Spike	P	0 - 20
1909850	Zinc	3.05	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P327754

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1909850	Arsenic	1.23	Spike	P	0 - 20
1909850	Cadmium	0.826	Spike	P	0 - 20
1909850	Chromium	0.751	Spike	P	0 - 20
1909850	Copper	0.670	Spike	P	0 - 20
1909850	Lead	0.497	Spike	P	0 - 20
1909850	Nickel	1.19	Spike	P	0 - 20
1909850	Silver	0.461	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328145

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910181	Chloride	0.561	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P328150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910181	Sulfate	2.75	Sample	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P327895

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910139	Ammonia-N	2.14	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P327884

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910189	Kjeldahl Nitrogen	4.80	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P327856

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910139	NO2NO3-N	0.482	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P327861

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1909997	Total-P	0.677	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P327964

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910187	Total-P	4.84	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P327742

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910000	O-Phosphate-P	0.910	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P327743

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910195	O-Phosphate-P	2.64	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P327768

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910249	Acetochlor	2.05	Spike	P	0 - 30
1910249	Alachlor	2.39	Spike	P	0 - 30
1910249	Ametryn	3.27	Spike	P	0 - 30
1910249	Atrazine	12.5	Spike	P	0 - 30
1910249	Atrazine Desethyl	4.09	Spike	P	0 - 30
1910249	Azinphos Methyl	1.69	Spike	P	0 - 30
1910249	Bromacil	2.54	Spike	P	0 - 30
1910249	Butylate	4.52	Spike	P	0 - 30
1910249	Chlorpyrifos Ethyl	12.8	Spike	P	0 - 30
1910249	Chlorpyrifos Methyl	1.86	Spike	P	0 - 30
1910249	Cyanazine	10.5	Spike	P	0 - 30
1910249	Demeton	3.65	Spike	P	0 - 30
1910249	Diazinon	9.28	Spike	P	0 - 30
1910249	Disulfoton	3.91	Spike	P	0 - 30
1910249	EPTC	3.24	Spike	P	0 - 30
1910249	Ethion	3.51	Spike	P	0 - 30
1910249	Ethoprop	8.02	Spike	P	0 - 30
1910249	Fenamiphos	11.5	Spike	P	0 - 30
1910249	Fipronil	4.39	Spike	P	0 - 30
1910249	Fipronil Sulfide	7.38	Spike	P	0 - 30
1910249	Fipronil Sulfone	5.78	Spike	P	0 - 30
1910249	Fonofos	17.1	Spike	P	0 - 30
1910249	Hexazinone	0.864	Spike	P	0 - 30
1910249	Malathion	3.65	Spike	P	0 - 30
1910249	Metalaxyl	2.59	Spike	P	0 - 30
1910249	Metolachlor	2.12	Spike	P	0 - 30
1910249	Metribuzin	2.73	Spike	P	0 - 30
1910249	Mevinphos	10.8	Spike	P	0 - 30
1910249	Molinate	19.9	Spike	P	0 - 30
1910249	Norflurazon	5.21	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P327768

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910249	Parathion Ethyl	8.74	Spike	P	0 - 30
1910249	Parathion Methyl	1.56	Spike	P	0 - 30
1910249	Pendimethalin	4.98	Spike	P	0 - 30
1910249	Phorate	10.9	Spike	P	0 - 30
1910249	Prometon	2.51	Spike	P	0 - 30
1910249	Prometryn	3.27	Spike	P	0 - 30
1910249	Simazine	3.82	Spike	P	0 - 30
1910249	Terbufos	14.9	Spike	P	0 - 30
1910249	Terbuthylazine	0.337	Spike	P	0 - 30
LFB	Acetochlor	5.85	LCS	P	0 - 30
LFB	Alachlor	4.70	LCS	P	0 - 30
LFB	Ametryn	16.2	LCS	P	0 - 30
LFB	Atrazine	8.53	LCS	P	0 - 30
LFB	Atrazine Desethyl	6.34	LCS	P	0 - 30
LFB	Azinphos Methyl	9.70	LCS	P	0 - 30
LFB	Bromacil	3.62	LCS	P	0 - 30
LFB	Butylate	1.82	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	7.71	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	9.72	LCS	P	0 - 30
LFB	Cyanazine	3.98	LCS	P	0 - 30
LFB	Demeton	4.43	LCS	P	0 - 30
LFB	Diazinon	3.10	LCS	P	0 - 30
LFB	Disulfoton	1.49	LCS	P	0 - 30
LFB	EPTC	8.28	LCS	P	0 - 30
LFB	Ethion	14.6	LCS	P	0 - 30
LFB	Ethoprop	3.06	LCS	P	0 - 30
LFB	Fenamiphos	4.39	LCS	P	0 - 30
LFB	Fipronil	10.4	LCS	P	0 - 30
LFB	Fipronil Sulfide	2.18	LCS	P	0 - 30
LFB	Fipronil Sulfone	8.96	LCS	P	0 - 30
LFB	Fonofos	10.4	LCS	P	0 - 30
LFB	Hexazinone	5.31	LCS	P	0 - 30
LFB	Malathion	6.86	LCS	P	0 - 30
LFB	Metalaxyl	7.14	LCS	P	0 - 30
LFB	Metolachlor	9.14	LCS	P	0 - 30
LFB	Metribuzin	4.33	LCS	P	0 - 30
LFB	Mevinphos	0.324	LCS	P	0 - 30
LFB	Molinate	0.851	LCS	P	0 - 30
LFB	Norflurazon	4.71	LCS	P	0 - 30
LFB	Parathion Ethyl	0.515	LCS	P	0 - 30
LFB	Parathion Methyl	1.23	LCS	P	0 - 30
LFB	Pendimethalin	13.6	LCS	P	0 - 30
LFB	Phorate	6.04	LCS	P	0 - 30
LFB	Prometon	17.8	LCS	P	0 - 30
LFB	Prometryn	7.55	LCS	P	0 - 30
LFB	Simazine	2.35	LCS	P	0 - 30
LFB	Terbufos	1.46	LCS	P	0 - 30
LFB	Terbuthylazine	5.23	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P327948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910768	Aldrin	9.13	Spike	P	0 - 30
1910768	Alpha-BHC	6.28	Spike	P	0 - 30
1910768	Alpha-Chlordane	16.3	Spike	P	0 - 30
1910768	Beta-BHC	19.6	Spike	P	0 - 30
1910768	Carbophenothion	28.2	Spike	P	0 - 30
1910768	Chlorothalonil	41.4	Spike	F	0 - 30
1910768	Cypermethrin	43.8	Spike	F	0 - 30
1910768	DDD-p,p'	14.8	Spike	P	0 - 30
1910768	DDE-p,p'	13.3	Spike	P	0 - 30
1910768	DDT-p,p'	18.7	Spike	P	0 - 30
1910768	Delta-BHC	19.3	Spike	P	0 - 30
1910768	Dicofol	58.5	Spike	F	0 - 30
1910768	Dieldrin	11.1	Spike	P	0 - 30
1910768	Endosulfan I	19.3	Spike	P	0 - 30
1910768	Endosulfan II	14.6	Spike	P	0 - 30
1910768	Endosulfan Sulfate	28.7	Spike	P	0 - 30
1910768	Endrin	17.2	Spike	P	0 - 30
1910768	Endrin Aldehyde	21.8	Spike	P	0 - 30
1910768	Endrin Ketone	26.6	Spike	P	0 - 30
1910768	Gamma-BHC	14.1	Spike	P	0 - 30
1910768	Gamma-Chlordane	17.5	Spike	P	0 - 30
1910768	Heptachlor	15.1	Spike	P	0 - 30
1910768	Heptachlor Epoxide	18.8	Spike	P	0 - 30
1910768	Methoxychlor	15.5	Spike	P	0 - 30
1910768	Mirex	19.7	Spike	P	0 - 30
1910768	Permethrin	35.5	Spike	F	0 - 30
1910768	Trifluralin	21.9	Spike	P	0 - 30
LFB	Aldrin	2.98	LCS	P	0 - 30
LFB	Alpha-BHC	9.17	LCS	P	0 - 30
LFB	Alpha-Chlordane	0.552	LCS	P	0 - 30
LFB	Beta-BHC	1.92	LCS	P	0 - 30
LFB	Carbophenothion	3.94	LCS	P	0 - 30
LFB	Chlorothalonil	34.2	LCS	F	0 - 30
LFB	Cypermethrin	13.1	LCS	P	0 - 30
LFB	DDD-p,p'	0.170	LCS	P	0 - 30
LFB	DDE-p,p'	0.418	LCS	P	0 - 30
LFB	DDT-p,p'	2.30	LCS	P	0 - 30
LFB	Delta-BHC	0.958	LCS	P	0 - 30
LFB	Dicofol	13.0	LCS	P	0 - 30
LFB	Dieldrin	3.43	LCS	P	0 - 30
LFB	Endosulfan I	4.67	LCS	P	0 - 30
LFB	Endosulfan II	4.11	LCS	P	0 - 30
LFB	Endosulfan Sulfate	5.50	LCS	P	0 - 30
LFB	Endrin	7.79	LCS	P	0 - 30
LFB	Endrin Aldehyde	10.7	LCS	P	0 - 30
LFB	Endrin Ketone	0.627	LCS	P	0 - 30
LFB	Gamma-BHC	6.04	LCS	P	0 - 30
LFB	Gamma-Chlordane	1.53	LCS	P	0 - 30
LFB	Heptachlor	3.60	LCS	P	0 - 30
LFB	Heptachlor Epoxide	1.90	LCS	P	0 - 30
LFB	Methoxychlor	3.89	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P327948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Mirex	6.30	LCS	P	0 - 30
LFB	Permethrin	8.47	LCS	P	0 - 30
LFB	Trifluralin	7.53	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P327948

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910464	Chlordane	4.79	Spike	P	0 - 30
1910464	Toxaphene	2.51	Spike	P	0 - 30
LFB	Chlordane	5.48	LCS	P	0 - 30
LFB	Toxaphene	0.988	LCS	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P327601

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908898	Pyraclostrobin	0.0	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P327603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1908898	Glyphosate	13.2	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P327721

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910178	Sucralose	6.01	Spike	P	0 - 30

Reference Method: SM 2120 B
Batch ID: P327734

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910005	Color (true)	1.69	Sample	P	0 - 20

Reference Method: SM 2320 B-97
Batch ID: P328061

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910183	Total Alkalinity	0.359	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2540 C-97
Batch ID: P328162

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910159	TDS	1.44	Sample	P	0 - 10

Reference Method: SM 2540 C-97
Batch ID: P328163

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910185	TDS	3.41	Sample	P	0 - 10

Reference Method: SM 4500 F-C-97
Batch ID: P328068

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910183	Fluoride	0.996	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P327944

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1909993	Organic Carbon	3.33	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P327711

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1909869	2,4-D	23.3	Spike	P	0 - 30
1909869	Acetaminophen	10.1	Spike	P	0 - 30
1909869	Bentazon	7.08	Spike	P	0 - 30
1909869	Carbamazepine	10.5	Spike	P	0 - 30
1909869	Diuron	18.1	Spike	P	0 - 30
1909869	Fenuron	17.3	Spike	P	0 - 30
1909869	Fluridone	14.3	Spike	P	0 - 30
1909869	Imidacloprid	20.4	Spike	P	0 - 30
1909869	Linuron	32.5	Spike	F	0 - 30
1909869	MCPP	15.3	Spike	P	0 - 30
1909869	Primidone	14.2	Spike	P	0 - 30
1909869	Triclopyr	17.2	Spike	P	0 - 30

Reference Method: USGS O-2060-01
Batch ID: P327782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910586	2,4-D	15.2	Spike	P	0 - 30
1910586	Acetaminophen	15.6	Spike	P	0 - 30
1910586	Bentazon	8.08	Spike	P	0 - 30
1910586	Carbamazepine	13.1	Spike	P	0 - 30
1910586	Diuron	17.5	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: USGS O-2060-01
Batch ID: P327782

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1910586	Fenuron	0.572	Spike	P	0 - 30
1910586	Fluridone	10.9	Spike	P	0 - 30
1910586	Imidacloprid	2.56	Spike	P	0 - 30
1910586	Linuron	14.0	Spike	P	0 - 30
1910586	MCP	8.57	Spike	P	0 - 30
1910586	Primidone	2.19	Spike	P	0 - 30
1910586	Triclopyr	8.89	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: 1910178
Field Sample ID: G1NE0631 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	98.4	P	30 - 150
EPA 8321B	Carbamazepine-d10	89.8	P	30 - 165
EPA 8321B	Diuron-d6	115	P	30 - 160
EPA 8321B	Diuron-d6	71.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	128	P	40 - 150
EPA 8321B	Primidone-d5	72.9	P	30 - 150
EPA 8321B	Sucralose-d6	134	P	40 - 160
USGS O-2060-01	2,4-D-d3	113	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	98.4	P	30 - 150
USGS O-2060-01	Carbamazepine-d10	89.8	P	30 - 165
USGS O-2060-01	Diuron-d6	115	P	30 - 160
USGS O-2060-01	Diuron-d6	71.6	P	30 - 160
USGS O-2060-01	Primidone-d5	72.9	P	30 - 150

Lab Sample ID: 1910179
Field Sample ID: G1NE0591 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	48.2	P	40 - 160
USGS O-2060-01	2,4-D-d3	89.8	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	161	F	30 - 150
USGS O-2060-01	Carbamazepine-d10	69.1	P	30 - 165
USGS O-2060-01	Diuron-d6	52.1	P	30 - 160
USGS O-2060-01	Primidone-d5	36.9	P	30 - 150

Lab Sample ID: 1910180
Field Sample ID: G1NE0018 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Sucralose-d6	77.8	P	40 - 160
USGS O-2060-01	2,4-D-d3	112	P	40 - 150
USGS O-2060-01	Acetaminophen-d4	132	P	30 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 1910180
Field Sample ID: G1NE0018 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
USGS O-2060-01	Carbamazepine-d10	97.7	P	30 - 165
USGS O-2060-01	Diuron-d6	64.4	P	30 - 160
USGS O-2060-01	Primidone-d5	65.9	P	30 - 150

Lab Sample ID: 1910196
Field Sample ID: G1NE0631 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	64.0	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	47.3	P	32 - 103
EPA 8276	Decachlorobiphenyl	61.5	P	31 - 100

Lab Sample ID: 1910197
Field Sample ID: G1NE0631 06282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	65.6	P	53 - 135
EPA 8270D	Simazine-d10	92.2	P	71 - 126

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Run ID: A77426
Included Lab Sample IDs: 1910165, 1910166, 1910167, 1910170

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	99.1	P/P	90 - 110
O-Phosphate-P	100	99.6	P/P	90 - 110

Reference Method: SM 2120 B
Run ID: A77427
Included Lab Sample IDs: 1910159, 1910160, 1910161, 1910168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	97.7	99.0	P/P	85 - 115
Color (true)	99.0	96.3	P/P	85 - 115

Reference Method: EPA 180.1 Rev. 2.0
Run ID: A77435
Included Lab Sample IDs: 1910159, 1910160, 1910161, 1910168

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

Reference Method: EPA 200.7 Rev. 4.4
Run ID: A77476
Included Lab Sample IDs: 1910208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	96.2	97.6	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A77476

Included Lab Sample IDs: 1910208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	97.1	96.9	P/P	90 - 110
Magnesium	97.0	96.7	P/P	90 - 110
Potassium	96.7	95.3	P/P	90 - 110
Sodium	97.6	98.1	P/P	90 - 110
Zinc	95.3	95.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77479

Included Lab Sample IDs: 1910178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	90.0	100	P/P	60 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A77492

Included Lab Sample IDs: 1910162, 1910163, 1910164, 1910169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	100	101	P/P	90 - 110
NO2NO3-N	100	99.0	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A77505

Included Lab Sample IDs: 1910178

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	121	118	P/P	70 - 160

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A77506

Included Lab Sample IDs: 1910162, 1910163, 1910164, 1910169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.8	97.2	P/P	90 - 110

Reference Method: SM 5310 B-00

Run ID: A77524

Included Lab Sample IDs: 1910162, 1910163, 1910164, 1910169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	94.1	96.4	P/P	90 - 110
Organic Carbon	96.4	97.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77541

Included Lab Sample IDs: 1910162

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

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A77551

Included Lab Sample IDs: 1910159, 1910160, 1910161, 1910168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	102	P/P	90 - 110
Chloride	102	102	P/P	90 - 110
Sulfate	100	94.4	P/P	90 - 110
Sulfate	94.4	100	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A77557

Included Lab Sample IDs: 1910159, 1910160, 1910161, 1910168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	98.9	103	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A77557

Included Lab Sample IDs: 1910159, 1910160, 1910161, 1910168

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	97.1	97.0	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A77564

Included Lab Sample IDs: 1910208

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	99.1	100	P/P	90 - 110
Cadmium	99.5	100	P/P	90 - 110
Chromium	98.5	99.6	P/P	90 - 110
Copper	98.0	98.2	P/P	90 - 110
Lead	97.0	97.3	P/P	90 - 110
Nickel	98.5	99.3	P/P	90 - 110
Silver	95.3	96.1	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A77568

Included Lab Sample IDs: 1910163, 1910164, 1910169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	101	99.4	P/P	90 - 110
Total-P	103	101	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A77590

Included Lab Sample IDs: 1910162, 1910163, 1910164, 1910169

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	93.8	95.3	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8276

Run ID: A77604

Included Lab Sample IDs: 1910196

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	102		P	80 - 120
Toxaphene	110		P	80 - 120

Reference Method: EPA 8270D

Run ID: A77610

Included Lab Sample IDs: 1910196

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	95.3		P	80 - 120
Alpha-BHC	101		P	80 - 120
Alpha-Chlordane	95.1		P	80 - 120
Beta-BHC	104		P	80 - 120
Carbophenothion	94.8		P	80 - 120
Chlorothalonil	101		P	80 - 120
Cypermethrin	89.4		P	80 - 120
DDD-p,p'	96.9		P	80 - 120
DDE-p,p'	98.9		P	80 - 120
DDT-p,p'	106		P	80 - 120
Delta-BHC	98.6		P	80 - 120
Dicofol	102		P	80 - 120
Dieldrin	96.6		P	80 - 120
Endosulfan I	96.0		P	80 - 120
Endosulfan II	93.8		P	80 - 120
Endosulfan Sulfate	95.8		P	80 - 120
Endrin	92.0		P	80 - 120
Endrin Aldehyde	90.6		P	80 - 120
Endrin Ketone	95.8		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	99.0		P	80 - 120
Heptachlor	94.8		P	80 - 120
Heptachlor Epoxide	97.4		P	80 - 120
Methoxychlor	105		P	80 - 120
Mirex	100		P	80 - 120
Permethrin	93.9		P	80 - 120
Trifluralin	102		P	80 - 120

Reference Method: USGS O-2060-01

Run ID: A77714

Included Lab Sample IDs: 1910178, 1910179, 1910180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	77.3	82.0	P/P	50 - 150
2,4-D	82.0	79.4	P/P	50 - 150
Bentazon	69.3	61.6	P/P	50 - 150
Bentazon	71.6	69.3	P/P	50 - 150
MCP	91.1	93.7	P/P	50 - 150
MCP	93.7	83.8	P/P	50 - 150
Triclopyr	72.7	77.2	P/P	50 - 150
Triclopyr	77.2	82.4	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A77717

Included Lab Sample IDs: 1910178, 1910179, 1910180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	87.6	74.0	P/P	60 - 150
Carbamazepine	83.4	93.3	P/P	60 - 150
Carbamazepine	88.6	83.4	P/P	60 - 150
Diuron	75.2	82.6	P/P	60 - 150
Diuron	83.8	75.2	P/P	60 - 150
Fenuron	91.2	91.3	P/P	60 - 150
Fenuron	91.3	85.8	P/P	60 - 150
Fluridone	83.4	78.8	P/P	60 - 160
Fluridone	90.5	83.4	P/P	60 - 160
Imidacloprid	82.2	86.6	P/P	60 - 150
Imidacloprid	86.6	94.1	P/P	60 - 150
Linuron	79.4	86.0	P/P	60 - 150
Linuron	86.0	75.9	P/P	60 - 150
Primidone	68.8	90.1	P/P	60 - 150
Primidone	86.1	68.8	P/P	60 - 150

Reference Method: EPA 8321B

Run ID: A77777

Included Lab Sample IDs: 1910178, 1910179, 1910180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	135	118	P/P	60 - 160
Sucralose	77.4	93.0	P/P	60 - 160
Sucralose	98.8	108	P/P	60 - 160

Reference Method: USGS O-2060-01

Run ID: A77797

Included Lab Sample IDs: 1910180

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetaminophen	110	102	P/P	60 - 150

Reference Method: EPA 8270D

Run ID: A77809

Included Lab Sample IDs: 1910197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	90.2		P	80 - 120
Alachlor	92.0		P	80 - 120
Ametryn	97.4		P	80 - 120
Atrazine	94.2		P	80 - 120
Atrazine Desethyl	110		P	80 - 120
Azinphos Methyl	95.3		P	80 - 120
Bromacil	97.5		P	80 - 120
Butylate	87.6		P	80 - 120
Chlorpyrifos Ethyl	94.7		P	80 - 120
Chlorpyrifos Methyl	103		P	80 - 120
Cyanazine	104		P	80 - 120
Demeton	98.9		P	80 - 120
Diazinon	95.2		P	80 - 120
Disulfoton	94.0		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A77809
Included Lab Sample IDs: 1910197

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
EPTC	92.8		P	80 - 120
Ethion	94.3		P	80 - 120
Ethoprop	97.5		P	80 - 120
Fenamiphos	99.8		P	80 - 120
Fipronil	91.1		P	80 - 120
Fipronil Sulfide	97.6		P	80 - 120
Fipronil Sulfone	97.4		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	97.0		P	80 - 120
Malathion	102		P	80 - 120
Metaxyl	94.0		P	80 - 120
Metolachlor	99.4		P	80 - 120
Metribuzin	91.9		P	80 - 120
Mevinphos	95.2		P	80 - 120
Molinate	103		P	80 - 120
Norflurazon	93.5		P	80 - 120
Parathion Ethyl	88.1		P	80 - 120
Parathion Methyl	95.0		P	80 - 120
Pendimethalin	92.5		P	80 - 120
Phorate	94.7		P	80 - 120
Prometon	93.3		P	80 - 120
Prometryn	103		P	80 - 120
Simazine	95.0		P	80 - 120
Terbufos	96.9		P	80 - 120
Terbutylazine	96.1		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			Precision SMP	MS
			LCS				
EPA 180.1 Rev. 2.0	Turbidity					4.82	
EPA 200.7 Rev. 4.4	Calcium	100	97.9	97.9			2.13
	Iron	102	98.8	103	102		1.76
	Magnesium	103	96.3	104	101		1.65
	Potassium	99.0	96.1	98.1	97.5		0.503
	Sodium	102	102	103	99.8		1.85
	Zinc	95.5	93.0	95.0	92.1		3.05
EPA 200.8 Rev. 5.4	Arsenic	99.0	101	99.7	98.5		1.23
	Cadmium	98.5	100	100	101		0.826
	Chromium	95.9	97.3	98.0	97.3		0.751
	Copper	95.8	92.7	93.3	92.7		0.670
	Lead	95.1	96.5	96.7	96.2		0.497
	Nickel	98.6	96.2	97.2	96.0		1.19
	Silver	96.2	96.1	96.4	96.9		0.461
EPA 300.0 Rev. 2.1	Chloride	99.3	95.9	96.1		0.561	

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 300.0 Rev. 2.1	Sulfate	96.9		98.1	97.1		2.75	
EPA 350.1 Rev. 2.0	Ammonia-N	103		102	99.3			2.14
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		107	98.8			4.80
EPA 353.2 Rev. 2.0	NO2NO3-N	103		104	104			0.482
EPA 365.1 Rev. 2.0	Total-P	101		101	102			0.677
	Total-P	100		93.6	98.4			4.84
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	100		98.5	99.4			0.910
	O-Phosphate-P	98.9		92.9	95.5			2.64
EPA 8270D	Acetochlor	86.1	91.3	78.7	80.4	5.85		2.05
	Alachlor	84.9	89.0	80.7	82.7	4.70		2.39
	Aldrin	57.1	55.5	73.1	66.7	2.98		9.13
	Alpha-BHC	76.2	69.5	87.4	82.0	9.17		6.28
	Alpha-Chlordane	73.2	73.6	91.5	77.8	0.552		16.3
	Ametryn	71.5	84.1			16.2		3.27
	Atrazine	83.1	90.5			8.53		12.5
	Atrazine Desethyl	114	121			6.34		4.09
	Azinphos Methyl	104	114	84.2	85.6	9.70		1.69
	Beta-BHC	74.2	75.7	105	86.4	1.92		19.6
	Bromacil	78.7	81.6	90.0	87.8	3.62		2.54
	Butylate	41.8	42.6	20.6	21.5	1.82		4.52
	Carbophenothion	67.1	64.5	123	92.5	3.94		28.2
	Chlorothalonil	66.6	47.1	143	93.9	34.2		41.4
	Chlorpyrifos Ethyl	78.6	84.9	74.0	84.1	7.71		12.8
	Chlorpyrifos Methyl	81.3	89.7	78.2	79.7	9.72		1.86
	Cyanazine	181	188	143	129	3.98		10.5
	Cypermethrin	70.6	80.6	142	91.0	13.1		43.8
	DDD-p,p'	82.9	82.8	104	89.5	0.170		14.8
	DDE-p,p'	75.2	75.5	93.5	81.8	0.418		13.3
	DDT-p,p'	75.3	77.1	102	84.9	2.30		18.7
	Delta-BHC	85.1	85.9	115	94.6	0.958		19.3
	Demeton	59.1	56.5	84.2	81.2	4.43		3.65
	Diazinon	88.2	91.0	87.9	96.5	3.10		9.28
	Dicofol	45.2	51.4	28.5	52.0	13.0		58.5
	Dieldrin	78.9	76.2	94.2	84.3	3.43		11.1
	Disulfoton	71.1	72.1	91.3	94.9	1.49		3.91
	Endosulfan I	79.3	75.7	98.9	81.5	4.67		19.3
	Endosulfan II	84.3	80.9	105	90.4	4.11		14.6
	Endosulfan Sulfate	71.4	75.5	117	87.7	5.50		28.7
	Endrin	76.4	82.5	93.1	78.4	7.79		17.2
	Endrin Aldehyde	74.7	83.2	107	86.1	10.7		21.8
	Endrin Ketone	76.2	75.8	112	85.7	0.627		26.6
	EPTC	44.0	47.8	23.4	22.7	8.28		3.24
	Ethion	70.1	81.2	77.6	80.4	14.6		3.51
	Ethoprop	82.0	84.5	68.9	74.6	3.06		8.02
	Fenamiphos	76.4	79.8	86.2	76.9	4.39		11.5
	Fipronil	80.8	89.7	96.3	101	10.4		4.39
	Fipronil Sulfide	58.1	59.4	62.6	71.1	2.18		7.38
	Fipronil Sulfone	69.5	76.0			8.96		5.78
	Fonofos	80.3	89.1	73.0	86.7	10.4		17.1
	Gamma-BHC	81.6	76.8	98.0	85.1	6.04		14.1
	Gamma-Chlordane	71.9	73.0	93.6	78.6	1.53		17.5
	Heptachlor	58.5	60.7	77.4	66.5	3.60		15.1
	Heptachlor Epoxide	74.1	72.7	78.0	94.2	1.90		18.8
	Hexazinone	81.6	86.0	83.7	84.6	5.31		0.864

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Malathion	76.7	82.1	76.8	79.6	6.86	3.65
	Metalaxyl	75.7	81.3	81.6	79.4	7.14	2.59
	Methoxychlor	83.3	86.6	94.8	111	3.89	15.5
	Metolachlor	76.4	83.7	78.8	80.5	9.14	2.12
	Metribuzin	145	139	185	190	4.33	2.73
	Mevinphos	72.2	72.4	63.3	70.5	0.324	10.8
	Mirex	62.3	66.4	76.1	92.7	6.30	19.7
	Molinate	46.7	47.1	30.5	37.2	0.851	19.9
	Norflurazon	80.3	84.1	86.3	90.9	4.71	5.21
	Parathion Ethyl	88.2	88.6	78.8	86.0	0.515	8.74
	Parathion Methyl	88.4	89.5	83.0	81.8	1.23	1.56
	Pendimethalin	77.8	89.1	88.0	92.5	13.6	4.98
	Permethrin	71.9	78.3	84.4	121	8.47	35.5
	Phorate	80.0	84.9	62.8	70.1	6.04	10.9
	Prometon	67.7	81.0	98.3	101	17.8	2.51
	Prometryn	75.9	81.9	85.1	87.9	7.55	3.27
	Simazine	90.0	87.9	87.5	92.8	2.35	3.82
	Terbufos	80.1	78.9	71.9	83.5	1.46	14.9
	Terbutylazine	83.4	87.9	80.6	80.8	5.23	0.337
	Trifluralin	87.8	94.7	134	167	7.53	21.9
EPA 8276	Chlordane	101	106	99.1	94.5	5.48	4.79
	Toxaphene	132	133	122	125	0.988	2.51
EPA 8321B	Glyphosate	95.3		98.4	112		13.2
	Pyraclostrobin	140		130	130		0.0
	Sucralose	92.8		144	136		6.01
SM 2120 B	Color (true)					1.69	
SM 2320 B-97	Total Alkalinity	101				0.359	
SM 2540 C-97	TDS					1.44	
	TDS					3.41	
SM 4500 F-C-97	Fluoride	94.6		97.4	98.6		0.996
SM 5310 B-00	Organic Carbon	98.9		89.0	92.8		3.33
USGS O-2060-01	2,4-D	101		105	83.3		23.3
	2,4-D	77.8					15.2
	Acetaminophen	101		89.8	81.2		10.1
	Acetaminophen	103					15.6
	Bentazon	82.7		64.3	59.9		7.08
	Bentazon	60.8		58.8	51.2		8.08
	Carbamazepine	107		120	108		10.5
	Carbamazepine	77.3		113	99.1		13.1
	Diuron	103		99.3	82.8		18.1
	Diuron	65.3		71.3	58.5		17.5
	Fenuron	110		106	89.2		17.3
	Fenuron	87.6		91.1	90.6		0.572
	Fluridone	92.4		88.7	76.8		14.3
	Fluridone	78.3		48.1	40.3		10.9
	Imidacloprid	110		134	109		20.4
	Imidacloprid	78.7		156	151		2.56
	Linuron	102		106	76.4		32.5
	Linuron	77.0		85.2	74.0		14.0
	MCPP	84.6		93.9	80.6		15.3
	MCPP	69.4		108	99.4		8.57
	Primidone	92.6		119	103		14.2
	Primidone	76.0		85.1	87.0		2.19
	Triclopyr	82.2		87.8	73.9		17.2

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery	LCS	Precision SMP	MS
USGS O-2060-01	Triclopyr	72.7	94.5 86.4			8.89

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1910159, 1910160, 1910161, 1910168
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1910208
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1910208
EPA 300.0 Rev. 2.1 / E31780	Chloride in aqueous matrices	1910159, 1910160, 1910161, 1910168
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1910159, 1910160, 1910161, 1910168
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1910162, 1910163, 1910164, 1910169
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1910162, 1910163, 1910164, 1910169
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1910162, 1910163, 1910164, 1910169
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1910162, 1910163, 1910164, 1910169
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1910165, 1910166, 1910167, 1910170
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1910196
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1910197
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1910196
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1910178
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1910178
EPA 8321B / E31780	Water soluble organic compounds by HPLC/MS/MS	1910178, 1910179, 1910180
SM 2120 B / E31780	True Color measured at 450 nm	1910159, 1910160, 1910161, 1910168
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO ₃ /L	1910159, 1910160, 1910161, 1910168
SM 2540 C-97 / E31780	Total Dissolved Solids in aqueous matrices	1910159, 1910160, 1910161, 1910168
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1910159, 1910160, 1910161, 1910168
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1910159, 1910160, 1910161, 1910168
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1910162, 1910163, 1910164, 1910169
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1910178, 1910179, 1910180
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1910178, 1910179, 1910180

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	06/29/2017			06/29/2017 16:54	DeAsia Armster	1910159, 1910160, 1910161, 1910168
EPA 200.7 Rev. 4.4	06/29/2017	06/29/2017	Elliott D. Healy	06/30/2017	Betina Topolski	1910208
EPA 200.8 Rev. 5.4	06/29/2017	06/29/2017	Elliott D. Healy	07/06/2017	Nadine Brooks	1910208
EPA 300.0 Rev. 2.1	06/29/2017			07/07/2017	Ping Hua	1910159, 1910160, 1910161, 1910168
EPA 350.1 Rev. 2.0	06/29/2017			07/03/2017	Sofia Elnemr	1910162, 1910163, 1910164, 1910169
EPA 351.2 Rev. 2.0	06/29/2017	07/05/2017	Adrian Shelby	07/07/2017	Joseph Suarez	1910162, 1910163, 1910164, 1910169
EPA 353.2 Rev. 2.0	06/29/2017			07/03/2017	Beverly Y. Sanders	1910162, 1910163, 1910164, 1910169
EPA 365.1 Rev. 2.0	06/29/2017	07/03/2017	Vijayalakshmi Reddy	07/06/2017	Lipi Saha	1910162
	06/29/2017	07/06/2017	Adrian Shelby	07/07/2017	Lipi Saha	1910163, 1910164, 1910169
EPA 365.1 Rev. 2.0 dissolved	06/29/2017			06/29/2017 12:31	Ping Hua	1910167
	06/29/2017			06/29/2017 12:54	Ping Hua	1910165
	06/29/2017			06/29/2017 12:55	Ping Hua	1910166
	06/29/2017			06/29/2017 12:57	Ping Hua	1910170
EPA 8270D	06/29/2017	06/30/2017	John Kaba	07/12/2017	Irina Carbone	1910197
	06/29/2017	07/03/2017	Rasheda Ghaffari	07/06/2017	Vandana T. Nagar	1910196
EPA 8276	06/29/2017	07/03/2017	Rasheda Ghaffari	07/07/2017	Vandana T. Nagar	1910196
EPA 8321B	06/29/2017	06/30/2017	Julie Michelle Frank	06/30/2017	Julie Michelle Frank	1910178
	06/29/2017	06/30/2017	Julie Michelle Frank	07/01/2017	Julie Michelle Frank	1910178
	06/29/2017	07/12/2017	Mohammad Ghaffari	07/14/2017	Mohammad Ghaffari	1910178, 1910179
	06/29/2017	07/12/2017	Mohammad Ghaffari	07/15/2017	Mohammad Ghaffari	1910180
SM 2120 B	06/29/2017			06/29/2017 14:55	Julia Storbeck	1910159
	06/29/2017			06/29/2017 15:06	Julia Storbeck	1910160
	06/29/2017			06/29/2017 15:07	Julia Storbeck	1910161
	06/29/2017			06/29/2017 15:08	Julia Storbeck	1910168
SM 2320 B-97	06/29/2017			07/06/2017	Dale L. Simmons	1910159, 1910160, 1910161, 1910168
SM 2540 C-97	06/29/2017			07/03/2017	Sima Feizi	1910159, 1910160, 1910161, 1910168
SM 2540 D-97	06/29/2017			07/03/2017	Sima Feizi	1910159, 1910160, 1910161, 1910168
SM 4500 F-C-97	06/29/2017			07/06/2017	Dale L. Simmons	1910159, 1910160, 1910161, 1910168
SM 5310 B-00	06/29/2017			07/04/2017	Sofia Elnemr	1910162, 1910163, 1910164, 1910169
USGS O-2060-01	06/29/2017	06/30/2017	Hoor Shaik	07/12/2017	Juyoung Kim	1910178, 1910179
	06/29/2017	07/03/2017	Hoor Shaik	07/12/2017	Juyoung Kim	1910180
	06/29/2017	07/03/2017	Hoor Shaik	07/19/2017	Juyoung Kim	1910180