

Chemical Analysis Report

NE-DIST-2017-09-28-01

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

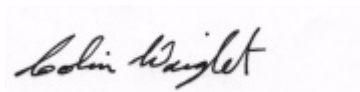
Event Description: **LSJR Coast**
Request ID: **RQ-2017-09-25-08**
Customer: **NE-DIST**
Project ID: **SMP**

Send Reports to:
FL Dept. of Environmental Protection
8800 Baymeadows Way West
Jacksonville, FL 32256-7577
Attn: Jeremy Parrish

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Certified by: Colin Wright, Program Administrator

Date Certified: 23-OCT-2017 10:48

A handwritten signature in black ink, appearing to read "Colin Wright", is displayed on a light gray rectangular background.

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: St. Johns R @ Little Jetties Pier

Collection Date/Time: 09/27/2017 10:10

Field ID: G2NE0745 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932472	EPA 180.1 Rev. 2.0	Turbidity	5.7		NTU	P332418	
	SM 2320 B-97	Total Alkalinity	62		mg CaCO3/L	P332841	
	SM 2540 D-97	TSS	4	I	mg/L	P332548	
	SM 4500 F-C-97	Fluoride	0.36		mg F/L	P332844	
1932473	EPA 350.1 Rev. 2.0	Ammonia-N	0.026		mg N/L	P332822	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.62		mg N/L	P332594	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.17		mg N/L	P332772	
	EPA 365.1 Rev. 2.0	Total-P	0.087		mg P/L	P332624	
	SM 5310 B-00	Organic Carbon	15		mg C/L	P332615	
1932474	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.061		mg P/L	P332411	
1932536	EPA 200.7 Rev. 4.4	Iron	390		ug/L	P332649	
	EPA 200.8 Rev. 5.4	Arsenic	1.71		ug/L	P332649	
		Cadmium	0.060	U	ug/L	P332649	
		Chromium	1.4	I	ug/L	P332649	
		Copper	2.9		ug/L	P332649	
		Lead	0.52	I	ug/L	P332649	
		Nickel	1.1	I	ug/L	P332649	
		Silver	0.030	U	ug/L	P332649	
		Zinc	5.1	I	ug/L	P332649	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: Greenfield Creek @ Wonderwood

Collection Date/Time: 09/27/2017 09:30

Field ID: G2NE1137 0928017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932463	EPA 180.1 Rev. 2.0	Turbidity	6.1		NTU	P332418	
	SM 2320 B-97	Total Alkalinity	76		mg CaCO3/L	P332841	
	SM 2540 D-97	TSS	6	I	mg/L	P332548	
	SM 4500 F-C-97	Fluoride	0.45		mg F/L	P332844	
1932466	EPA 350.1 Rev. 2.0	Ammonia-N	0.054		mg N/L	P332820	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.80		mg N/L	P332594	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.076		mg N/L	P332771	
	EPA 365.1 Rev. 2.0	Total-P	0.075		mg P/L	P332624	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P332615	
1932469	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.042		mg P/L	P332411	

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: Sherman Creek @ A1A bridge

Collection Date/Time: 09/27/2017 09:50

Field ID: G2NE1141 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932464	EPA 180.1 Rev. 2.0	Turbidity	5.4		NTU	P332418	

Field ID: G2NE1141 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932464	SM 2320 B-97	Total Alkalinity	91		mg CaCO3/L	P332841	
	SM 2540 D-97	TSS	6	I	mg/L	P332548	
	SM 4500 F-C-97	Fluoride	0.52		mg F/L	P332844	
1932467	EPA 350.1 Rev. 2.0	Ammonia-N	0.055		mg N/L	P332822	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.77		mg N/L	P332594	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.049		mg N/L	P332771	
	EPA 365.1 Rev. 2.0	Total-P	0.13		mg P/L	P332624	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P332615	
1932470	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.090		mg P/L	P332411	

Ref. Method and Comment:

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

EPA 350.1 Rev. 2.0: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.

Sample Location: ICW @ Isle of Palms Boat Ramp

Collection Date/Time: 09/27/2017 11:30

Field ID: G2NE1136 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932460	EPA 180.1 Rev. 2.0	Turbidity	8.3		NTU	P332418	
	EPA 300.0 Rev. 2.1	Sulfate	800		mg SO4/L	P332577	
	SM 2320 B-97	Total Alkalinity	76		mg CaCO3/L	P332841	
	SM 2540 D-97	TSS	15		mg/L	P332548	
	SM 4500 F-C-97	Fluoride	0.46		mg F/L	P332844	
1932461	EPA 350.1 Rev. 2.0	Ammonia-N	0.025		mg N/L	P332820	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.76		mg N/L	P332594	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.061		mg N/L	P332771	
	EPA 365.1 Rev. 2.0	Total-P	0.085		mg P/L	P332624	
	SM 5310 B-00	Organic Carbon	14		mg C/L	P332615	
1932462	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.046		mg P/L	P332411	
1932494	EPA 8321B	Sucralose**	0.23		ug/L	P332449	
	USGS O-2060-01	2,4-D	0.0077	I	ug/L	P332448	
		Diuron	0.013		ug/L	P332448	
		Fenuron	0.0080	U	ug/L	P332448	
		Imidacloprid	0.022		ug/L	P332448	MS
		Bentazon	0.0036		ug/L	P332448	MS
		Linuron	0.0040	U	ug/L	P332448	
		Acetaminophen**	0.0080	U	ug/L	P332448	
		MCPD	0.0020	U	ug/L	P332448	
		Carbamazepine**	6.6E-04	I	ug/L	P332448	
		Triclopyr**	0.0040	U	ug/L	P332448	
		Primidone**	0.0040	U	ug/L	P332448	
		Fluridone**	0.0066		ug/L	P332448	

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: St. John R @ Little Jetties Pier

Collection Date/Time: 09/27/2017 10:10

Field ID: G2NE0745 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932495	EPA 8321B	Glyphosate**	0.50	UJ	ug/L	P332309	SUR
		Pyraclostrobin**	0.0020	U	ug/L	P332315	
	USGS O-2060-01	Sucralose**	0.28		ug/L	P332449	
		2,4-D	0.011		ug/L	P332448	
		Diuron	0.026		ug/L	P332448	
		Fenuron	0.0080	U	ug/L	P332448	
		Imidacloprid	0.019	J	ug/L	P332448	MS
		Bentazon	0.0025	IJ	ug/L	P332448	MS
		Linuron	0.0040	U	ug/L	P332448	
		Acetaminophen**	0.0080	U	ug/L	P332448	
		MCP	0.0020	U	ug/L	P332448	
		Carbamazepine**	7.8E-04	I	ug/L	P332448	
		Triclopyr**	0.0040	U	ug/L	P332448	
		Primidone**	0.0040	U	ug/L	P332448	
		Fluridone**	0.0021		ug/L	P332448	
1932531	EPA 8270D	Aldrin	4.3	U	ng/L	P332509	
		Alpha-BHC	2.2	U	ng/L	P332509	
		Beta-BHC	4.3	U	ng/L	P332509	
		Delta-BHC	4.3	U	ng/L	P332509	
		Gamma-BHC	4.3	U	ng/L	P332509	
		Carbophenothion	4.3	U	ng/L	P332509	
		Chlorothalonil	2.2	U	ng/L	P332509	RPD
		Cypermethrin	22	U	ng/L	P332509	
		DDD-p,p'	3.2	U	ng/L	P332509	
		DDE-p,p'	3.2	U	ng/L	P332509	
		DDT-p,p'	3.2	U	ng/L	P332509	
		Dieldrin	4.3	U	ng/L	P332509	
		Endosulfan I	4.3	U	ng/L	P332509	
		Endosulfan II	4.3	U	ng/L	P332509	
		Endosulfan Sulfate	2.2	U	ng/L	P332509	
		Endrin	2.2	U	ng/L	P332509	
		Endrin Aldehyde	2.2	U	ng/L	P332509	
		Heptachlor	1.6	U	ng/L	P332509	
		Heptachlor Epoxide	2.2	U	ng/L	P332509	
		Methoxychlor	4.3	U	ng/L	P332509	
	EPA 8276	Mirex	2.2	U	ng/L	P332509	
		Permethrin	11	U	ng/L	P332509	
		Trifluralin	1.1	U	ng/L	P332509	
	EPA 8270D	Alpha-Chlordane	1.1	U	ng/L	P332509	
		Gamma-Chlordane	1.1	U	ng/L	P332509	
		Endrin Ketone	2.2	U	ng/L	P332509	
		Dicofol	32	UJ	ng/L	P332509	CCV
		Chlordane**	2.7	U	ng/L	P332509	
		Toxaphene**	13	U	ng/L	P332509	
		Alachlor	0.24	U	ng/L	P332422	

Field ID: G2NE0745 09282017

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932532	EPA 8270D	Ametryn	0.31	U	ng/L	P332422	
		Atrazine	6.8		ng/L	P332422	
		Atrazine Desethyl	1.4	UJ	ng/L	P332422	RPD
		Azinphos Methyl	2.2	U	ng/L	P332422	
		Bromacil	0.48	U	ng/L	P332422	
		Butylate	0.38	U	ng/L	P332422	
		Chlorpyrifos Ethyl	0.24	U	ng/L	P332422	
		Chlorpyrifos Methyl	0.096	U	ng/L	P332422	
		Demeton	1.9	U	ng/L	P332422	
		Diazinon	0.12	U	ng/L	P332422	
		Disulfoton	0.48	U	ng/L	P332422	
		EPTC	1.2	U	ng/L	P332422	
		Ethion	0.14	U	ng/L	P332422	
		Ethoprop	0.096	U	ng/L	P332422	
		Fenamiphos	0.24	U	ng/L	P332422	
		Fipronil	1.1		ng/L	P332422	
		Fipronil Sulfide	0.50	I	ng/L	P332422	
		Fipronil Sulfone	0.89	J	ng/L	P332422	
		Hexazinone	2.0		ng/L	P332422	
		Malathion	0.33	U	ng/L	P332422	
		Metribuzin	1.8	J	ng/L	P332422	RPD
		Mevinphos	0.48	U	ng/L	P332422	
		Molinate	0.29	U	ng/L	P332422	
		Norflurazon	0.48	U	ng/L	P332422	
		Pendimethalin	0.96	U	ng/L	P332422	
		Phorate	0.24	U	ng/L	P332422	
		Prometon	0.86	U	ng/L	P332422	
		Prometryn	0.19	U	ng/L	P332422	
		Simazine	7.2		ng/L	P332422	
		Terbufos	0.096	U	ng/L	P332422	
		Terbuthylazine	0.41	U	ng/L	P332422	
		Fonofos	0.19	U	ng/L	P332422	
		Metaxyl	0.68	I	ng/L	P332422	
		Metolachlor	9.1		ng/L	P332422	
		Acetochlor	0.24	U	ng/L	P332422	
		Cyanazine	0.48	UJ	ng/L	P332422	RPD
		Parathion Ethyl	0.24	U	ng/L	P332422	
		Parathion Methyl	0.24	U	ng/L	P332422	

Ref. Method and Comment:

EPA 8321B: Refer to the narrative for an explanation of QC Codes. Results confirmed in re-extraction.

USGS O-2060-01: Refer to the narrative for an explanation of QC Codes.

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

EPA 8276: The second LFB was lost in preparation.

EPA 8270D: MS accuracy for Atrazine not assessed due to high content of this parameter in the sample spiked. Estimated value for Fipronil Sulfone due to internal standard recovery outside control limits. Refer to the narrative for an explanation of QC Codes.

Sample Location: Open Creek @ San Pablo Rd

Collection Date/Time: 09/27/2017 11:50

Field ID: G2NE0703 09282017

Matrix: W-SURF-FRH

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
1932465	EPA 180.1 Rev. 2.0	Turbidity	1.9		NTU	P332418	
	SM 2320 B-97	Total Alkalinity	67		mg CaCO3/L	P332667	
	SM 2540 D-97	TSS	2	U	mg/L	P332545	
	SM 4500 F-C-97	Fluoride	0.090	I	mg F/L	P332670	
1932468	EPA 350.1 Rev. 2.0	Ammonia-N	0.064		mg N/L	P332821	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.58		mg N/L	P332534	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.19		mg N/L	P332858	
	EPA 365.1 Rev. 2.0	Total-P	0.038		mg P/L	P332531	
	SM 5310 B-00	Organic Carbon	12		mg C/L	P332616	
1932471	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.015		mg P/L	P332409	

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: P332418

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P332649

Component	Result	Code	Units
Iron	30	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P332649

Component	Result	Code	Units
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.30	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
Zinc	1.0	U	ug/L

Reference Method: EPA 300.0 Rev. 2.1

Batch ID: P332577

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0

Batch ID: P332820

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332821

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332822

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332534

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332594

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332771

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332772

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332858

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332531

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332624

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

Quality Assurance Report Method Blank Results

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332409

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332411

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

Reference Method: EPA 8270D
Batch ID: P332422

Component	Result	Code	Units
Acetochlor	0.25	U	ng/L
Alachlor	0.25	U	ng/L
Ametryn	0.32	U	ng/L
Atrazine	0.25	U	ng/L
Atrazine Desethyl	1.5	U	ng/L
Azinphos Methyl	2.2	U	ng/L
Bromacil	0.50	U	ng/L
Butylate	0.40	U	ng/L
Chlorpyrifos Ethyl	0.25	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	0.50	U	ng/L
Demeton	2.0	U	ng/L
Diazinon	0.12	U	ng/L
Disulfoton	0.50	U	ng/L
EPTC	1.2	U	ng/L
Ethion	0.15	U	ng/L
Ethoprop	0.10	U	ng/L
Fenamiphos	0.25	U	ng/L
Fipronil	0.25	U	ng/L
Fipronil Sulfide	0.15	U	ng/L
Fipronil Sulfone	0.15	U	ng/L
Fonofos	0.20	U	ng/L
Hexazinone	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.20	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	1.0	U	ng/L
Phorate	0.25	U	ng/L
Prometon	0.90	U	ng/L
Prometryn	0.20	U	ng/L
Simazine	0.50	U	ng/L
Terbufos	0.10	U	ng/L
Terbuthylazine	0.42	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270D
Batch ID: P332509

Component	Result	Code	Units
Aldrin	4.0	U	ng/L
Alpha-BHC	2.0	U	ng/L
Alpha-Chlordane	1.0	U	ng/L
Beta-BHC	4.0	U	ng/L
Carbophenothion	4.0	U	ng/L
Chlorothalonil	2.0	U	ng/L
Cypermethrin	20	U	ng/L
DDD-p,p'	3.0	U	ng/L
DDE-p,p'	3.0	U	ng/L
DDT-p,p'	3.0	U	ng/L
Delta-BHC	4.0	U	ng/L
Dicofol	30	U	ng/L
Dieldrin	4.0	U	ng/L
Endosulfan I	4.0	U	ng/L
Endosulfan II	4.0	U	ng/L
Endosulfan Sulfate	2.0	U	ng/L
Endrin	2.0	U	ng/L
Endrin Aldehyde	2.0	U	ng/L
Endrin Ketone	2.0	U	ng/L
Gamma-BHC	4.0	U	ng/L
Gamma-Chlordane	1.0	U	ng/L
Heptachlor	1.5	U	ng/L
Heptachlor Epoxide	2.0	U	ng/L
Methoxychlor	4.0	U	ng/L
Mirex	2.0	U	ng/L
Permethrin	10	U	ng/L
Trifluralin	1.0	U	ng/L

Reference Method: EPA 8276
Batch ID: P332509

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

Reference Method: EPA 8321B
Batch ID: P332309

Component	Result	Code	Units
Glyphosate	0.50	U	ug/L

Reference Method: EPA 8321B
Batch ID: P332315

Component	Result	Code	Units
Pyraclostrobin	0.0020	U	ug/L

Reference Method: EPA 8321B
Batch ID: P332449

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: SM 2320 B-97
Batch ID: P332667

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

Reference Method: SM 2320 B-97
Batch ID: P332841

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

Reference Method: SM 2540 D-97
Batch ID: P332545

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-97
Batch ID: P332548

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500 F-C-97
Batch ID: P332670

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 4500 F-C-97
Batch ID: P332844

Component	Result	Code	Units
Fluoride	0.035	U	mg F/L

Reference Method: SM 5310 B-00
Batch ID: P332615

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

Reference Method: SM 5310 B-00
Batch ID: P332616

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

Reference Method: USGS O-2060-01
Batch ID: P332448

Component	Result	Code	Units
2,4-D	0.0020	U	ug/L
Acetaminophen	0.0080	U	ug/L
Bentazon	8.0E-04	U	ug/L
Carbamazepine	4.0E-04	U	ug/L

Quality Assurance Report Method Blank Results

Reference Method: USGS O-2060-01
Batch ID: P332448

Component	Result	Code	Units
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
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 200.7 Rev. 4.4
Batch ID: P332649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Iron	95.4		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332649

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Arsenic	98.2		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	97.7		P	85 - 115
Copper	95.5		P	85 - 115
Lead	96.9		P	85 - 115
Nickel	96.7		P	85 - 115
Silver	96.6		P	85 - 115
Zinc	96.8		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P332577

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332820

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332821

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332822

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: P332534

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332594

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Kjeldahl Nitrogen	96.7		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332771

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332772

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332858

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332531

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332624

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332409

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	98.1		P	90 - 110

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
 Batch ID: P332411

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
O-Phosphate-P	97.8		P	90 - 110

Reference Method: EPA 8270D
 Batch ID: P332422

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	88.6	89.6	P/P	78 - 118
Alachlor	86.7	94.5	P/P	77 - 119
Ametryn	90.0	98.6	P/P	61 - 136
Atrazine	87.3	98.0	P/P	73 - 120
Atrazine Desethyl	93.4	57.3	P/P	16 - 122
Azinphos Methyl	121	106	P/P	69 - 186
Bromacil	77.9	80.7	P/P	40 - 125
Butylate	56.8	59.4	P/P	32 - 87.0
Chlorpyrifos Ethyl	93.4	91.0	P/P	53 - 110
Chlorpyrifos Methyl	99.7	88.4	P/P	31 - 119
Cyanazine	112	81.2	P/P	36 - 224
Demeton	98.0	90.2	P/P	39 - 122
Diazinon	84.4	88.1	P/P	75 - 119
Disulfoton	110	93.1	P/P	42 - 139
EPTC	50.2	51.8	P/P	33 - 96.0
Ethion	88.7	96.0	P/P	63 - 127
Ethoprop	81.3	71.7	P/P	65 - 107
Fenamiphos	107	101	P/P	64 - 137
Fipronil	98.7	98.3	P/P	60 - 126
Fipronil Sulfide	99.5	90.6	P/P	58 - 124
Fipronil Sulfone	87.5	89.8	P/P	57 - 126
Fonofos	91.5	78.4	P/P	65 - 111
Hexazinone	82.2	88.8	P/P	46 - 151
Malathion	100	101	P/P	68 - 132
Metaxyl	84.9	82.0	P/P	51 - 132
Metolachlor	83.0	95.8	P/P	78 - 119
Metribuzin	114	78.7	P/P	58 - 148
Mevinphos	85.3	69.2	P/P	34 - 128
Molinate	56.4	59.0	P/P	44 - 101
Norflurazon	87.2	93.7	P/P	63 - 129
Parathion Ethyl	87.3	93.1	P/P	80 - 109
Parathion Methyl	106	96.1	P/P	74 - 125
Pendimethalin	81.3	86.7	P/P	48 - 134
Phorate	81.7	73.5	P/P	52 - 119
Prometon	82.2	91.0	P/P	69 - 124
Prometryn	96.1	103	P/P	66 - 124
Simazine	93.8	88.0	P/P	61 - 134
Terbufos	91.3	83.8	P/P	58 - 115
Terbutylazine	81.5	95.5	P/P	77 - 113

Reference Method: EPA 8270D
 Batch ID: P332509

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aldrin	37.9	46.9	P/P	26 - 88.0
Alpha-BHC	76.2	76.6	P/P	63 - 114

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270D

Batch ID: P332509

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Alpha-Chlordane	75.8	74.0	P/P	56 - 117
Beta-BHC	91.7	87.8	P/P	57 - 138
Carbophenothion	73.9	81.8	P/P	36 - 148
Chlorothalonil	59.9	59.2	P/P	26 - 173
Cypermethrin	65.4	63.8	P/P	42 - 159
DDD-p,p'	88.7	83.8	P/P	62 - 126
DDE-p,p'	80.7	78.3	P/P	53 - 115
DDT-p,p'	79.8	78.4	P/P	54 - 117
Delta-BHC	87.9	84.4	P/P	68 - 158
Dicofol	45.7	41.5	P/P	25 - 114
Dieldrin	81.4	78.7	P/P	59 - 126
Endosulfan I	79.4	76.8	P/P	62 - 138
Endosulfan II	86.9	78.9	P/P	61 - 150
Endosulfan Sulfate	77.1	79.8	P/P	63 - 132
Endrin	81.7	81.2	P/P	49 - 148
Endrin Aldehyde	81.9	80.4	P/P	50 - 144
Endrin Ketone	78.9	80.9	P/P	66 - 122
Gamma-BHC	88.4	88.3	P/P	60 - 137
Gamma-Chlordane	74.9	73.3	P/P	54 - 113
Heptachlor	65.7	67.8	P/P	43 - 104
Heptachlor Epoxide	78.1	76.3	P/P	64 - 118
Methoxychlor	85.5	85.7	P/P	63 - 129
Mirex	68.7	70.6	P/P	39 - 93.0
Permethrin	74.6	75.9	P/P	51 - 123
Trifluralin	131	136	P/P	35 - 187

Reference Method: EPA 8276

Batch ID: P332509

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Chlordane	88.6		P	48 - 121
Toxaphene	95.9		P	43 - 135

Reference Method: EPA 8321B

Batch ID: P332309

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Glyphosate	117		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P332315

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Pyraclostrobin	85.0		P	40 - 150

Reference Method: EPA 8321B

Batch ID: P332449

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	86.6		P	40 - 150

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 2320 B-97
Batch ID: P332667

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	103		P	95 - 108

Reference Method: SM 2320 B-97
Batch ID: P332841

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

Reference Method: SM 4500 F-C-97
Batch ID: P332670

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.8		P	92 - 103

Reference Method: SM 4500 F-C-97
Batch ID: P332844

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	96.3		P	92 - 103

Reference Method: SM 5310 B-00
Batch ID: P332615

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.7		P	85 - 115

Reference Method: SM 5310 B-00
Batch ID: P332616

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	97.0		P	85 - 115

Reference Method: USGS O-2060-01
Batch ID: P332448

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,4-D	69.5		P	40 - 150
Acetaminophen	126		P	30 - 150
Bentazon	41.3		P	40 - 150
Carbamazepine	124		P	40 - 150
Diuron	111		P	40 - 150
Fenuron	115		P	40 - 150
Fluridone	101		P	40 - 150
Imidacloprid	107		P	40 - 160
Linuron	115		P	40 - 150
MCPP	72.8		P	40 - 150
Primidone	107		P	40 - 150
Triclopyr	75.6		P	40 - 150

Quality Assurance Report Matrix Spike Accuracy

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P332649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933322	Iron	100	102	P/P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P332649

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1933322	Arsenic	108	105	P/P	70 - 130
1933322	Cadmium	100	97.9	P/P	70 - 130
1933322	Chromium	99.6	100	P/P	70 - 130
1933322	Copper	95.5	95.0	P/P	70 - 130
1933322	Lead	106	106	P/P	70 - 130
1933322	Nickel	99.8	98.5	P/P	70 - 130
1933322	Silver	92.6	92.7	P/P	70 - 130
1933322	Zinc	93.2	92.5	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P332577

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932317	Sulfate	97.5		P	90 - 110
1932712	Sulfate	99.1		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332820

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1931920	Ammonia-N	105	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332821

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932446	Ammonia-N	101	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332534

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932353	Kjeldahl Nitrogen	95.3	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332594

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932448	Kjeldahl Nitrogen	93.3	90.1	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332771

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932352	NO2NO3-N	99.1	99.1	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332772

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932473	NO2NO3-N	104	103	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332858

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932445	NO2NO3-N	101		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332531

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932504	Total-P	97.9	98.6	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P332624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932527	Total-P	94.9	95.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332409

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932195	O-Phosphate-P	98.0	95.2	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P332411

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932290	O-Phosphate-P	95.0	97.4	P/P	90 - 110

Reference Method: EPA 8270D
Batch ID: P332422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932880	Acetochlor	91.6	91.2	P/P	74 - 123
1932880	Alachlor	89.3	87.8	P/P	73 - 124
1932880	Ametryn	97.3	87.9	P/P	56 - 149
1932880	Atrazine Desethyl	79.0	83.1	P/P	12 - 103
1932880	Azinphos Methyl	118	117	P/P	60 - 202
1932880	Bromacil	91.6	79.5	P/P	42 - 133
1932880	Butylate	46.6	51.0	P/P	10 - 85.0
1932880	Chlorpyrifos Ethyl	84.7	82.7	P/P	53 - 113
1932880	Chlorpyrifos Methyl	101	104	P/P	40 - 115
1932880	Cyanazine	112	113	P/P	22 - 210
1932880	Demeton	93.8	95.6	P/P	17 - 149
1932880	Diazinon	98.5	101	P/P	72 - 124
1932880	Disulfoton	107	113	P/P	43 - 139
1932880	EPTC	41.7	41.3	P/P	10 - 86.0
1932880	Ethion	92.2	87.3	P/P	65 - 131
1932880	Ethoprop	90.0	97.3	P/P	59 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
Batch ID: P332422

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932880	Fenamiphos	101	96.5	P/P	57 - 138
1932880	Fipronil	116	107	P/P	40 - 130
1932880	Fipronil Sulfide	102	94.0	P/P	36 - 128
1932880	Fipronil Sulfone	92.9	80.8	P/P	16 - 145
1932880	Fonofos	92.5	95.8	P/P	60 - 112
1932880	Hexazinone	89.8	87.7	P/P	69 - 142
1932880	Malathion	97.8	101	P/P	68 - 132
1932880	Metalaxyl	93.0	86.2	P/P	66 - 118
1932880	Metolachlor	86.3	82.6	P/P	71 - 124
1932880	Metribuzin	130	135	P/P	61 - 140
1932880	Mevinphos	85.4	89.4	P/P	38 - 130
1932880	Molinate	54.8	58.1	P/P	23 - 99.0
1932880	Norflurazon	90.6	84.0	P/P	39 - 139
1932880	Parathion Ethyl	88.4	91.4	P/P	75 - 111
1932880	Parathion Methyl	109	110	P/P	64 - 130
1932880	Pendimethalin	93.7	93.8	P/P	26 - 173
1932880	Phorate	85.9	97.3	P/P	43 - 127
1932880	Prometon	91.7	85.7	P/P	50 - 144
1932880	Prometryn	107	100	P/P	69 - 126
1932880	Simazine	84.7	101	P/P	51 - 152
1932880	Terbufos	89.8	97.2	P/P	54 - 125
1932880	Terbutylazine	86.7	86.5	P/P	76 - 113

Reference Method: EPA 8270D
Batch ID: P332509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932417	Aldrin	45.1	46.9	P/P	22 - 97.0
1932417	Alpha-BHC	63.8	76.4	P/P	43 - 132
1932417	Alpha-Chlordane	73.3	74.5	P/P	36 - 126
1932417	Beta-BHC	83.4	85.7	P/P	41 - 150
1932417	Carbophenothion	77.8	82.4	P/P	13 - 196
1932417	Chlorothalonil	77.5	57.3	P/P	10 - 266
1932417	Cypermethrin	75.1	70.7	P/P	37 - 161
1932417	DDD-p,p'	84.5	83.7	P/P	44 - 131
1932417	DDE-p,p'	76.1	79.5	P/P	32 - 127
1932417	DDT-p,p'	78.4	77.7	P/P	45 - 116
1932417	Delta-BHC	93.3	88.6	P/P	50 - 201
1932417	Dicofol	41.4	42.0	P/P	10 - 100
1932417	Dieldrin	75.4	78.7	P/P	39 - 142
1932417	Endosulfan I	75.0	77.3	P/P	51 - 139
1932417	Endosulfan II	75.6	73.9	P/P	49 - 155
1932417	Endosulfan Sulfate	78.1	76.5	P/P	54 - 136
1932417	Endrin	78.4	80.1	P/P	38 - 141
1932417	Endrin Aldehyde	74.4	78.4	P/P	14 - 152
1932417	Endrin Ketone	77.5	78.3	P/P	60 - 128
1932417	Gamma-BHC	76.0	84.7	P/P	48 - 157
1932417	Gamma-Chlordane	72.9	73.8	P/P	35 - 123
1932417	Heptachlor	67.5	70.1	P/P	25 - 112
1932417	Heptachlor Epoxide	74.9	75.6	P/P	48 - 125
1932417	Methoxychlor	85.4	88.7	P/P	52 - 127
1932417	Mirex	70.1	74.1	P/P	25 - 108

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270D
 Batch ID: P332509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932417	Permethrin	78.8	88.0	P/P	46 - 133
1932417	Trifluralin	130	133	P/P	29 - 254

Reference Method: EPA 8276
 Batch ID: P332509

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1931883	Chlordane	84.0	91.7	P/P	44 - 134
1931883	Toxaphene	94.4	101	P/P	36 - 147

Reference Method: EPA 8321B
 Batch ID: P332309

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1931647	Glyphosate	100	104	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P332315

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932874	Pyraclostrobin	98.6	93.5	P/P	40 - 150

Reference Method: EPA 8321B
 Batch ID: P332449

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932400	Sucralose	88.4	77.9	P/P	40 - 150

Reference Method: SM 4500 F-C-97
 Batch ID: P332670

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932888	Fluoride	98.8	98.8	P/P	91 - 105

Reference Method: SM 4500 F-C-97
 Batch ID: P332844

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932780	Fluoride	95.9	95.1	P/P	91 - 105

Reference Method: SM 5310 B-00
 Batch ID: P332615

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932411	Organic Carbon	96.0	94.9	P/P	85 - 115

Reference Method: SM 5310 B-00
 Batch ID: P332616

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932192	Organic Carbon	94.6	94.9	P/P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: USGS O-2060-01
 Batch ID: P332448

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1932495	2,4-D	73.9	74.8	P/P	40 - 150
1932495	Acetaminophen	85.1	95.2	P/P	30 - 150
1932495	Bentazon	29.1	30.2	F/F	40 - 150
1932495	Carbamazepine	96.0	91.3	P/P	40 - 150
1932495	Diuron	76.4	69.4	P/P	40 - 150
1932495	Fenuron	90.4	83.0	P/P	40 - 150
1932495	Fluridone	49.3	49.3	P/P	40 - 150
1932495	Imidacloprid	213	192	F/F	40 - 160
1932495	Linuron	97.8	95.8	P/P	40 - 150
1932495	MCP	59.6	56.8	P/P	40 - 150
1932495	Primidone	109	101	P/P	40 - 150
1932495	Triclopyr	55.5	59.0	P/P	40 - 150

Quality Assurance Report Precision

Reference Method: EPA 180.1 Rev. 2.0
 Batch ID: P332418

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932440	Turbidity	4.07	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
 Batch ID: P332649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933322	Iron	2.28	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
 Batch ID: P332649

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1933322	Arsenic	2.10	Spike	P	0 - 20
1933322	Cadmium	2.33	Spike	P	0 - 20
1933322	Chromium	0.405	Spike	P	0 - 20
1933322	Copper	0.447	Spike	P	0 - 20
1933322	Lead	0.322	Spike	P	0 - 20
1933322	Nickel	1.29	Spike	P	0 - 20
1933322	Silver	0.128	Spike	P	0 - 20
1933322	Zinc	0.722	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
 Batch ID: P332577

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932317	Sulfate	4.04	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332820

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1931920	Ammonia-N	0.878	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332821

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932446	Ammonia-N	0.819	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P332822

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932467	Ammonia-N	0.130	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332534

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932353	Kjeldahl Nitrogen	0.932	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P332594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932448	Kjeldahl Nitrogen	2.64	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332771

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932352	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332772

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932473	NO2NO3-N	0.264	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P332858

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932445	NO2NO3-N	0.0	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P332531

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932504	Total-P	0.643	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0

Batch ID: P332624

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932527	Total-P	0.335	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P332409

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932195	O-Phosphate-P	2.90	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Batch ID: P332411

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932290	O-Phosphate-P	2.11	Spike	P	0 - 20

Reference Method: EPA 8270D

Batch ID: P332422

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932880	Acetochlor	0.423	Spike	P	0 - 30
1932880	Alachlor	1.76	Spike	P	0 - 30
1932880	Ametryn	6.33	Spike	P	0 - 30
1932880	Atrazine	1.12	Spike	P	0 - 30
1932880	Atrazine Desethyl	4.07	Spike	P	0 - 30
1932880	Azinphos Methyl	0.322	Spike	P	0 - 30
1932880	Bromacil	14.1	Spike	P	0 - 30
1932880	Butylate	9.15	Spike	P	0 - 30
1932880	Chlorpyrifos Ethyl	2.38	Spike	P	0 - 30
1932880	Chlorpyrifos Methyl	2.58	Spike	P	0 - 30
1932880	Cyanazine	1.06	Spike	P	0 - 30
1932880	Demeton	1.90	Spike	P	0 - 30
1932880	Diazinon	2.67	Spike	P	0 - 30
1932880	Disulfoton	5.45	Spike	P	0 - 30
1932880	EPTC	0.846	Spike	P	0 - 30
1932880	Ethion	5.43	Spike	P	0 - 30
1932880	Ethoprop	7.83	Spike	P	0 - 30
1932880	Fenamiphos	4.61	Spike	P	0 - 30
1932880	Fipronil	6.82	Spike	P	0 - 30
1932880	Fipronil Sulfide	7.30	Spike	P	0 - 30
1932880	Fipronil Sulfone	11.4	Spike	P	0 - 30
1932880	Fonofos	3.50	Spike	P	0 - 30
1932880	Hexazinone	1.93	Spike	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P332422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932880	Malathion	3.18	Spike	P	0 - 30
1932880	Metalaxyl	7.53	Spike	P	0 - 30
1932880	Metolachlor	4.45	Spike	P	0 - 30
1932880	Metribuzin	3.86	Spike	P	0 - 30
1932880	Mevinphos	4.62	Spike	P	0 - 30
1932880	Molinate	5.81	Spike	P	0 - 30
1932880	Norflurazon	7.61	Spike	P	0 - 30
1932880	Parathion Ethyl	3.34	Spike	P	0 - 30
1932880	Parathion Methyl	1.82	Spike	P	0 - 30
1932880	Pendimethalin	0.0670	Spike	P	0 - 30
1932880	Phorate	12.4	Spike	P	0 - 30
1932880	Prometon	6.75	Spike	P	0 - 30
1932880	Prometryn	6.32	Spike	P	0 - 30
1932880	Simazine	12.9	Spike	P	0 - 30
1932880	Terbufos	7.98	Spike	P	0 - 30
1932880	Terbutylazine	0.249	Spike	P	0 - 30
LFB	Acetochlor	1.08	LCS	P	0 - 30
LFB	Alachlor	8.63	LCS	P	0 - 30
LFB	Ametryn	9.12	LCS	P	0 - 30
LFB	Atrazine	11.5	LCS	P	0 - 30
LFB	Atrazine Desethyl	48.0	LCS	F	0 - 30
LFB	Azinphos Methyl	13.1	LCS	P	0 - 30
LFB	Bromacil	3.56	LCS	P	0 - 30
LFB	Butylate	4.50	LCS	P	0 - 30
LFB	Chlorpyrifos Ethyl	2.68	LCS	P	0 - 30
LFB	Chlorpyrifos Methyl	11.9	LCS	P	0 - 30
LFB	Cyanazine	31.8	LCS	F	0 - 30
LFB	Demeton	8.31	LCS	P	0 - 30
LFB	Diazinon	4.34	LCS	P	0 - 30
LFB	Disulfoton	16.3	LCS	P	0 - 30
LFB	EPTC	3.15	LCS	P	0 - 30
LFB	Ethion	7.95	LCS	P	0 - 30
LFB	Ethoprop	12.5	LCS	P	0 - 30
LFB	Fenamiphos	6.05	LCS	P	0 - 30
LFB	Fipronil	0.402	LCS	P	0 - 30
LFB	Fipronil Sulfide	9.36	LCS	P	0 - 30
LFB	Fipronil Sulfone	2.52	LCS	P	0 - 30
LFB	Fonofos	15.5	LCS	P	0 - 30
LFB	Hexazinone	7.67	LCS	P	0 - 30
LFB	Malathion	0.135	LCS	P	0 - 30
LFB	Metalaxyl	3.51	LCS	P	0 - 30
LFB	Metolachlor	14.2	LCS	P	0 - 30
LFB	Metribuzin	36.9	LCS	F	0 - 30
LFB	Mevinphos	20.9	LCS	P	0 - 30
LFB	Molinate	4.50	LCS	P	0 - 30
LFB	Norflurazon	7.26	LCS	P	0 - 30
LFB	Parathion Ethyl	6.50	LCS	P	0 - 30
LFB	Parathion Methyl	9.71	LCS	P	0 - 30
LFB	Pendimethalin	6.39	LCS	P	0 - 30
LFB	Phorate	10.6	LCS	P	0 - 30
LFB	Prometon	10.2	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P332422

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Prometryn	6.70	LCS	P	0 - 30
LFB	Simazine	6.37	LCS	P	0 - 30
LFB	Terbufos	8.63	LCS	P	0 - 30
LFB	Terbutylazine	15.8	LCS	P	0 - 30

Reference Method: EPA 8270D
Batch ID: P332509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932417	Aldrin	3.97	Spike	P	0 - 30
1932417	Alpha-BHC	18.0	Spike	P	0 - 30
1932417	Alpha-Chlordane	1.72	Spike	P	0 - 30
1932417	Beta-BHC	2.71	Spike	P	0 - 30
1932417	Carbophenothion	5.77	Spike	P	0 - 30
1932417	Chlorothalonil	30.1	Spike	F	0 - 30
1932417	Cypermethrin	5.99	Spike	P	0 - 30
1932417	DDD-p,p'	0.955	Spike	P	0 - 30
1932417	DDE-p,p'	4.38	Spike	P	0 - 30
1932417	DDT-p,p'	0.918	Spike	P	0 - 30
1932417	Delta-BHC	5.24	Spike	P	0 - 30
1932417	Dicofol	1.54	Spike	P	0 - 30
1932417	Dieldrin	4.21	Spike	P	0 - 30
1932417	Endosulfan I	3.04	Spike	P	0 - 30
1932417	Endosulfan II	2.26	Spike	P	0 - 30
1932417	Endosulfan Sulfate	2.10	Spike	P	0 - 30
1932417	Endrin	2.07	Spike	P	0 - 30
1932417	Endrin Aldehyde	5.21	Spike	P	0 - 30
1932417	Endrin Ketone	0.950	Spike	P	0 - 30
1932417	Gamma-BHC	10.8	Spike	P	0 - 30
1932417	Gamma-Chlordane	1.33	Spike	P	0 - 30
1932417	Heptachlor	3.76	Spike	P	0 - 30
1932417	Heptachlor Epoxide	0.990	Spike	P	0 - 30
1932417	Methoxychlor	3.81	Spike	P	0 - 30
1932417	Mirex	5.52	Spike	P	0 - 30
1932417	Permethrin	11.0	Spike	P	0 - 30
1932417	Trifluralin	2.37	Spike	P	0 - 30
LFB	Aldrin	21.3	LCS	P	0 - 30
LFB	Alpha-BHC	0.567	LCS	P	0 - 30
LFB	Alpha-Chlordane	2.43	LCS	P	0 - 30
LFB	Beta-BHC	4.41	LCS	P	0 - 30
LFB	Carbophenothion	10.1	LCS	P	0 - 30
LFB	Chlorothalonil	1.21	LCS	P	0 - 30
LFB	Cypermethrin	2.55	LCS	P	0 - 30
LFB	DDD-p,p'	5.61	LCS	P	0 - 30
LFB	DDE-p,p'	3.08	LCS	P	0 - 30
LFB	DDT-p,p'	1.75	LCS	P	0 - 30
LFB	Delta-BHC	4.11	LCS	P	0 - 30
LFB	Dicofol	9.55	LCS	P	0 - 30
LFB	Dieldrin	3.38	LCS	P	0 - 30
LFB	Endosulfan I	3.34	LCS	P	0 - 30

Quality Assurance Report Precision

Reference Method: EPA 8270D
Batch ID: P332509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
LFB	Endosulfan II	9.66	LCS	P	0 - 30
LFB	Endosulfan Sulfate	3.39	LCS	P	0 - 30
LFB	Endrin	0.659	LCS	P	0 - 30
LFB	Endrin Aldehyde	1.94	LCS	P	0 - 30
LFB	Endrin Ketone	2.46	LCS	P	0 - 30
LFB	Gamma-BHC	0.119	LCS	P	0 - 30
LFB	Gamma-Chlordane	2.21	LCS	P	0 - 30
LFB	Heptachlor	3.03	LCS	P	0 - 30
LFB	Heptachlor Epoxide	2.41	LCS	P	0 - 30
LFB	Methoxychlor	0.281	LCS	P	0 - 30
LFB	Mirex	2.72	LCS	P	0 - 30
LFB	Permethrin	1.69	LCS	P	0 - 30
LFB	Trifluralin	3.40	LCS	P	0 - 30

Reference Method: EPA 8276
Batch ID: P332509

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1931883	Chlordane	8.71	Spike	P	0 - 30
1931883	Toxaphene	7.23	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P332309

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1931647	Glyphosate	3.10	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P332315

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932874	Pyraclostrobin	5.37	Spike	P	0 - 30

Reference Method: EPA 8321B
Batch ID: P332449

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932400	Sucralose	6.88	Spike	P	0 - 30

Reference Method: SM 2320 B-97
Batch ID: P332667

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932888	Total Alkalinity	0.00389	Sample	P	0 - 4.8

Quality Assurance Report Precision

Reference Method: SM 2320 B-97
Batch ID: P332841

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932780	Total Alkalinity	0.145	Sample	P	0 - 4.8

Reference Method: SM 4500 F-C-97
Batch ID: P332670

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932888	Fluoride	0.0	Spike	P	0 - 3.0

Reference Method: SM 4500 F-C-97
Batch ID: P332844

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932780	Fluoride	0.480	Spike	P	0 - 3.0

Reference Method: SM 5310 B-00
Batch ID: P332615

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932411	Organic Carbon	0.918	Spike	P	0 - 20

Reference Method: SM 5310 B-00
Batch ID: P332616

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932192	Organic Carbon	0.243	Spike	P	0 - 20

Reference Method: USGS O-2060-01
Batch ID: P332448

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
1932495	2,4-D	0.857	Spike	P	0 - 30
1932495	Acetaminophen	11.2	Spike	P	0 - 30
1932495	Bentazon	3.30	Spike	P	0 - 30
1932495	Carbamazepine	4.90	Spike	P	0 - 30
1932495	Diuron	5.00	Spike	P	0 - 30
1932495	Fenuron	8.51	Spike	P	0 - 30
1932495	Fluridone	0.0367	Spike	P	0 - 30
1932495	Imidacloprid	8.31	Spike	P	0 - 30
1932495	Linuron	1.98	Spike	P	0 - 30
1932495	MCP	4.71	Spike	P	0 - 30
1932495	Primidone	7.65	Spike	P	0 - 30
1932495	Triclopyr	6.15	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: 1932494
Field Sample ID: G2NE1136 09282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	79.2	P	30 - 160
EPA 8321B	Carbamazepine-d10	92.8	P	30 - 160
EPA 8321B	Diuron-d6	72.8	P	30 - 160
EPA 8321B	Primidone-d5	95.9	P	30 - 160
EPA 8321B	Sucralose-d6	92.5	P	40 - 160
USGS O-2060-01	2,4-D-d3	72.2	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	79.2	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	92.8	P	30 - 160
USGS O-2060-01	Diuron-d6	72.8	P	30 - 160
USGS O-2060-01	Primidone-d5	95.9	P	30 - 160
USGS O-2060-01	Sucralose-d6	92.5	P	40 - 160

Lab Sample ID: 1932495
Field Sample ID: G2NE0745 09282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Acetaminophen-d4	103	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.4	P	30 - 160
EPA 8321B	Carbamazepine-d10	91.4	P	30 - 160
EPA 8321B	Diuron-d6	72.5	P	30 - 160
EPA 8321B	Diuron-d6	79.6	P	30 - 160
EPA 8321B	Diuron-d6	72.5	P	30 - 160
EPA 8321B	Diuron-d6	79.6	P	30 - 160
EPA 8321B	Glyphosate 13C 15N	34.4	F	40 - 160
EPA 8321B	Primidone-d5	89.9	P	30 - 160
EPA 8321B	Primidone-d5	89.9	P	30 - 160
EPA 8321B	Sucralose-d6	89.4	P	40 - 160
EPA 8321B	Sucralose-d6	89.4	P	40 - 160
USGS O-2060-01	2,4-D-d3	72.8	P	40 - 160
USGS O-2060-01	Acetaminophen-d4	103	P	30 - 160
USGS O-2060-01	Carbamazepine-d10	91.4	P	30 - 160
USGS O-2060-01	Diuron-d6	72.5	P	30 - 160
USGS O-2060-01	Diuron-d6	79.6	P	30 - 160
USGS O-2060-01	Primidone-d5	89.9	P	30 - 160
USGS O-2060-01	Sucralose-d6	89.4	P	40 - 160

Lab Sample ID: 1932531
Field Sample ID: G2NE0745 09282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Decachlorobiphenyl	69.6	P	39 - 118
EPA 8270D	Tetrachloro-m-xylene	46.3	P	32 - 103
EPA 8276	Decachlorobiphenyl	68.4	P	31 - 100

Lab Sample ID: 1932532
Field Sample ID: G2NE0745 09282017

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270D	Malathion-d7	66.4	P	53 - 135
EPA 8270D	Simazine-d10	91.9	P	71 - 126

Quality Assurance Report Calibration Verification

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A79203

Included Lab Sample IDs: 1932460

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A79216

Included Lab Sample IDs: 1932462, 1932469, 1932470, 1932471, 1932474

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	99.1	100	P/P	90 - 110
O-Phosphate-P	99.2	99.2	P/P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A79220

Included Lab Sample IDs: 1932460, 1932463, 1932464, 1932465, 1932472

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

Reference Method: EPA 8321B

Run ID: A79283

Included Lab Sample IDs: 1932495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Glyphosate	103	108	P/P	70 - 160

Reference Method: SM 5310 B-00

Run ID: A79302

Included Lab Sample IDs: 1932461, 1932466, 1932467, 1932468, 1932473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.5	95.4	P/P	90 - 110
Organic Carbon	97.0	95.5	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A79318

Included Lab Sample IDs: 1932465

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.5	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A79318

Included Lab Sample IDs: 1932465

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A79326

Included Lab Sample IDs: 1932536

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

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A79326

Included Lab Sample IDs: 1932536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Iron	100	98.4	P/P	95 - 105

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79330

Included Lab Sample IDs: 1932468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	99.2	96.8	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79332

Included Lab Sample IDs: 1932468

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.5	93.5	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A79339

Included Lab Sample IDs: 1932536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Arsenic	101	104	P/P	90 - 110
Cadmium	104	103	P/P	90 - 110
Copper	99.8	103	P/P	90 - 110
Lead	100	99.7	P/P	90 - 110
Nickel	99.0	102	P/P	90 - 110
Silver	98.7	99.3	P/P	90 - 110
Zinc	104	105	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A79342

Included Lab Sample IDs: 1932461, 1932466, 1932467, 1932473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	94.2	97.5	P/P	90 - 110
Kjeldahl Nitrogen	97.5	97.0	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79346

Included Lab Sample IDs: 1932467

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	106	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79348

Included Lab Sample IDs: 1932461, 1932466, 1932467, 1932473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
NO2NO3-N	99.0	99.5	P/P	90 - 110
NO2NO3-N	99.5	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A79355

Included Lab Sample IDs: 1932461, 1932466, 1932473

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	100	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A79368

Included Lab Sample IDs: 1932461, 1932466, 1932467, 1932468, 1932473

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

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A79371

Included Lab Sample IDs: 1932536

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chromium	92.6	97.0	P/P	90 - 110

Reference Method: SM 2320 B-97

Run ID: A79374

Included Lab Sample IDs: 1932460, 1932463, 1932464, 1932472

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	102	98.6	P/P	90 - 110
Total Alkalinity	98.8	102	P/P	90 - 110

Reference Method: SM 4500 F-C-97

Run ID: A79374

Included Lab Sample IDs: 1932460, 1932463, 1932464, 1932472

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

Reference Method: EPA 8321B

Run ID: A79377

Included Lab Sample IDs: 1932495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Pyraclostrobin	97.3	95.8	P/P	60 - 150

Reference Method: USGS O-2060-01

Run ID: A79377

Included Lab Sample IDs: 1932494, 1932495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2,4-D	102	103	P/P	50 - 150
2,4-D	103	108	P/P	50 - 150
Acetaminophen	103	104	P/P	60 - 150
Acetaminophen	106	103	P/P	60 - 150
Bentazon	117	120	P/P	50 - 150
Bentazon	119	117	P/P	50 - 150

Quality Assurance Report Calibration Verification

Reference Method: USGS O-2060-01

Run ID: A79377

Included Lab Sample IDs: 1932494, 1932495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Carbamazepine	107	110	P/P	60 - 150
Carbamazepine	110	109	P/P	60 - 150
Diuron	105	108	P/P	60 - 150
Diuron	108	102	P/P	60 - 150
Fenuron	101	103	P/P	60 - 150
Fenuron	103	101	P/P	60 - 150
Fluridone	101	103	P/P	60 - 160
Fluridone	103	104	P/P	60 - 160
Imidacloprid	97.1	96.3	P/P	60 - 150
Imidacloprid	98.6	97.1	P/P	60 - 150
Linuron	105	109	P/P	60 - 150
Linuron	106	105	P/P	60 - 150
MCPP	101	98.5	P/P	50 - 150
MCPP	98.5	101	P/P	50 - 150
Primidone	101	90.4	P/P	60 - 150
Primidone	97.6	101	P/P	60 - 150
Triclopyr	106	97.8	P/P	50 - 150
Triclopyr	106	106	P/P	50 - 150

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A79383

Included Lab Sample IDs: 1932468

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

Reference Method: EPA 8321B

Run ID: A79445

Included Lab Sample IDs: 1932494, 1932495

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	105	93.1	P/P	60 - 150

Reference Method: EPA 8276

Run ID: A79446

Included Lab Sample IDs: 1932531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlordane	90.2		P	80 - 120
Toxaphene	103		P	80 - 120

Reference Method: EPA 8270D

Run ID: A79453

Included Lab Sample IDs: 1932531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aldrin	98.2		P	80 - 120
Alpha-BHC	96.4		P	80 - 120
Alpha-Chlordane	97.2		P	80 - 120
Beta-BHC	97.2		P	80 - 120
Carbophenothion	87.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
 Run ID: A79453
 Included Lab Sample IDs: 1932531

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorothalonil	84.0		P	80 - 120
Cypermethrin	85.7		P	80 - 120
DDD-p,p'	102		P	80 - 120
DDE-p,p'	100		P	80 - 120
DDT-p,p'	105		P	80 - 120
Delta-BHC	94.1		P	80 - 120
Dicofol	143*		F	80 - 120
Dieldrin	99.9		P	80 - 120
Endosulfan I	94.7		P	80 - 120
Endosulfan II	92.4		P	80 - 120
Endosulfan Sulfate	95.8		P	80 - 120
Endrin	99.1		P	80 - 120
Endrin Aldehyde	95.6		P	80 - 120
Endrin Ketone	98.6		P	80 - 120
Gamma-BHC	101		P	80 - 120
Gamma-Chlordane	98.1		P	80 - 120
Heptachlor	95.9		P	80 - 120
Heptachlor Epoxide	99.0		P	80 - 120
Methoxychlor	99.9		P	80 - 120
Mirex	99.3		P	80 - 120
Permethrin	92.2		P	80 - 120
Trifluralin	116		P	80 - 120

Reference Method: EPA 8270D
 Run ID: A79546
 Included Lab Sample IDs: 1932532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	102		P	80 - 120
Alachlor	105		P	80 - 120
Ametryn	101		P	80 - 120
Atrazine	95.4		P	80 - 120
Atrazine Desethyl	109		P	80 - 120
Azinphos Methyl	93.7		P	80 - 120
Bromacil	102		P	80 - 120
Butylate	108		P	80 - 120
Chlorpyrifos Ethyl	98.5		P	80 - 120
Chlorpyrifos Methyl	95.2		P	80 - 120
Cyanazine	107		P	80 - 120
Demeton	94.8		P	80 - 120
Diazinon	96.7		P	80 - 120
Disulfoton	95.1		P	80 - 120
EPTC	99.7		P	80 - 120
Ethion	91.3		P	80 - 120
Ethoprop	93.3		P	80 - 120
Fenamiphos	101		P	80 - 120
Fipronil	107		P	80 - 120
Fipronil Sulfide	98.9		P	80 - 120
Fipronil Sulfone	102		P	80 - 120
Fonofos	101		P	80 - 120
Hexazinone	96.4		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270D
Run ID: A79546
Included Lab Sample IDs: 1932532

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Malathion	96.8		P	80 - 120
Metalaxyl	98.6		P	80 - 120
Metolachlor	106		P	80 - 120
Metribuzin	81.7		P	80 - 120
Mevinphos	87.9		P	80 - 120
Molinate	111		P	80 - 120
Norflurazon	96.0		P	80 - 120
Parathion Ethyl	92.5		P	80 - 120
Parathion Methyl	89.1		P	80 - 120
Pendimethalin	93.0		P	80 - 120
Phorate	97.0		P	80 - 120
Prometon	99.7		P	80 - 120
Prometryn	110		P	80 - 120
Simazine	89.6		P	80 - 120
Terbufos	91.7		P	80 - 120
Terbutylazine	97.2		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 SMP	MS
EPA 180.1 Rev. 2.0	Turbidity						4.07	
EPA 200.7 Rev. 4.4	Iron	95.4		100	102			2.28
EPA 200.8 Rev. 5.4	Arsenic	98.2		108	105			2.10
	Cadmium	100		100	97.9			2.33
	Chromium	97.7		99.6	100			0.405
	Copper	95.5		95.5	95.0			0.447
	Lead	96.9		106	106			0.322
	Nickel	96.7		99.8	98.5			1.29
	Silver	96.6		92.6	92.7			0.128
	Zinc	96.8		93.2	92.5			0.722
EPA 300.0 Rev. 2.1	Sulfate	100		97.5	99.1		4.04	
EPA 350.1 Rev. 2.0	Ammonia-N	103		105	104			0.878
	Ammonia-N	102		101	100			0.819
	Ammonia-N	103						0.130
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101		95.3	96.8			0.932
	Kjeldahl Nitrogen	96.7		93.3	90.1			2.64
EPA 353.2 Rev. 2.0	NO2NO3-N	103		99.1	99.1			0.0
	NO2NO3-N	103		104	103			0.264
	NO2NO3-N	102		101				0.0
EPA 365.1 Rev. 2.0	Total-P	102		97.9	98.6			0.643
	Total-P	99.2		94.9	95.2			0.335
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	98.1		98.0	95.2			2.90
	O-Phosphate-P	97.8		95.0	97.4			2.11
EPA 8270D	Acetochlor	88.6	89.6	91.6	91.2	1.08		0.423

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
						SMP	
EPA 8270D	Alachlor	86.7	94.5	89.3	87.8	8.63	1.76
	Aldrin	37.9	46.9	45.1	46.9	21.3	3.97
	Alpha-BHC	76.2	76.6	63.8	76.4	0.567	18.0
	Alpha-Chlordane	75.8	74.0	73.3	74.5	2.43	1.72
	Ametryn	90.0	98.6	97.3	87.9	9.12	6.33
	Atrazine	87.3	98.0			11.5	1.12
	Atrazine Desethyl	93.4	57.3	79.0	83.1	48.0	4.07
	Azinphos Methyl	121	106	118	117	13.1	0.322
	Beta-BHC	91.7	87.8	83.4	85.7	4.41	2.71
	Bromacil	77.9	80.7	91.6	79.5	3.56	14.1
	Butylate	56.8	59.4	46.6	51.0	4.50	9.15
	Carbophenothion	73.9	81.8	77.8	82.4	10.1	5.77
	Chlorothalonil	59.9	59.2	77.5	57.3	1.21	30.1
	Chlorpyrifos Ethyl	93.4	91.0	84.7	82.7	2.68	2.38
	Chlorpyrifos Methyl	99.7	88.4	101	104	11.9	2.58
	Cyanazine	112	81.2	112	113	31.8	1.06
	Cypermethrin	65.4	63.8	75.1	70.7	2.55	5.99
	DDD-p,p'	88.7	83.8	84.5	83.7	5.61	0.955
	DDE-p,p'	80.7	78.3	76.1	79.5	3.08	4.38
	DDT-p,p'	79.8	78.4	78.4	77.7	1.75	0.918
	Delta-BHC	87.9	84.4	93.3	88.6	4.11	5.24
	Demeton	98.0	90.2	93.8	95.6	8.31	1.90
	Diazinon	84.4	88.1	98.5	101	4.34	2.67
	Dicofol	45.7	41.5	41.4	42.0	9.55	1.54
	Dieldrin	81.4	78.7	75.4	78.7	3.38	4.21
	Disulfoton	110	93.1	107	113	16.3	5.45
	Endosulfan I	79.4	76.8	75.0	77.3	3.34	3.04
	Endosulfan II	86.9	78.9	75.6	73.9	9.66	2.26
	Endosulfan Sulfate	77.1	79.8	78.1	76.5	3.39	2.10
	Endrin	81.7	81.2	78.4	80.1	0.659	2.07
	Endrin Aldehyde	81.9	80.4	74.4	78.4	1.94	5.21
	Endrin Ketone	78.9	80.9	77.5	78.3	2.46	0.950
	EPTC	50.2	51.8	41.7	41.3	3.15	0.846
	Ethion	88.7	96.0	92.2	87.3	7.95	5.43
	Ethoprop	81.3	71.7	90.0	97.3	12.5	7.83
	Fenamiphos	107	101	101	96.5	6.05	4.61
	Fipronil	98.7	98.3	116	107	0.402	6.82
	Fipronil Sulfide	99.5	90.6	102	94.0	9.36	7.30
	Fipronil Sulfone	87.5	89.8	92.9	80.8	2.52	11.4
	Fonofos	91.5	78.4	92.5	95.8	15.5	3.50
	Gamma-BHC	88.4	88.3	76.0	84.7	0.119	10.8
	Gamma-Chlordane	74.9	73.3	72.9	73.8	2.21	1.33
	Heptachlor	65.7	67.8	67.5	70.1	3.03	3.76
	Heptachlor Epoxide	78.1	76.3	74.9	75.6	2.41	0.990
	Hexazinone	82.2	88.8	89.8	87.7	7.67	1.93
	Malathion	100	101	97.8	101	0.135	3.18
	Metalaxyl	84.9	82.0	93.0	86.2	3.51	7.53
	Methoxychlor	85.5	85.7	85.4	88.7	0.281	3.81
	Metolachlor	83.0	95.8	86.3	82.6	14.2	4.45
	Metribuzin	114	78.7	130	135	36.9	3.86
	Mevinphos	85.3	69.2	85.4	89.4	20.9	4.62
	Mirex	68.7	70.6	70.1	74.1	2.72	5.52
	Molinate	56.4	59.0	54.8	58.1	4.50	5.81
	Norflurazon	87.2	93.7	90.6	84.0	7.26	7.61

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		Precision	
						LCS	MS
EPA 8270D	Parathion Ethyl	87.3	93.1	88.4	91.4	6.50	3.34
	Parathion Methyl	106	96.1	109	110	9.71	1.82
	Pendimethalin	81.3	86.7	93.7	93.8	6.39	0.0670
	Permethrin	74.6	75.9	78.8	88.0	1.69	11.0
	Phorate	81.7	73.5	85.9	97.3	10.6	12.4
	Prometon	82.2	91.0	91.7	85.7	10.2	6.75
	Prometryn	96.1	103	107	100	6.70	6.32
	Simazine	93.8	88.0	84.7	101	6.37	12.9
	Terbufos	91.3	83.8	89.8	97.2	8.63	7.98
	Terbutylazine	81.5	95.5	86.7	86.5	15.8	0.249
	Trifluralin	131	136	130	133	3.40	2.37
EPA 8276	Chlordane	88.6		84.0	91.7		8.71
	Toxaphene	95.9		94.4	101		7.23
EPA 8321B	Glyphosate	117		100	104		3.10
	Pyraclostrobin	85.0		98.6	93.5		5.37
	Sucralose	86.6		88.4	77.9		6.88
SM 2320 B-97	Total Alkalinity	103				0.0038	
	Total Alkalinity	101				0.145	
SM 4500 F-C-97	Fluoride	96.8		98.8	98.8		0.0
	Fluoride	96.3		95.9	95.1		0.480
SM 5310 B-00	Organic Carbon	96.7		96.0	94.9		0.918
	Organic Carbon	97.0		94.6	94.9		0.243
USGS O-2060-01	2,4-D	69.5		73.9	74.8		0.857
	Acetaminophen	126		85.1	95.2		11.2
	Bentazon	41.3		29.1	30.2		3.30
	Carbamazepine	124		96.0	91.3		4.90
	Diuron	111		76.4	69.4		5.00
	Fenuron	115		90.4	83.0		8.51
	Fluridone	101		49.3	49.3		0.0367
	Imidacloprid	107		213	192		8.31
	Linuron	115		97.8	95.8		1.98
	MCPP	72.8		59.6	56.8		4.71
	Primidone	107		109	101		7.65
	Triclopyr	75.6		55.5	59.0		6.15

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 180.1 Rev. 2.0 / E31780	Turbidity in aqueous matrices	1932460, 1932463, 1932464, 1932465, 1932472
EPA 200.7 Rev. 4.4 / E31780	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	1932536
EPA 200.8 Rev. 5.4 / E31780	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	1932536
EPA 300.0 Rev. 2.1 / E31780	Sulfate in aqueous matrices	1932460
EPA 350.1 Rev. 2.0 / E31780	Ammonia in aqueous matrices as mg N/L	1932461, 1932466, 1932467, 1932468, 1932473
EPA 351.2 Rev. 2.0 / E31780	Total Kjeldahl Nitrogen in aqueous matrices	1932461, 1932466, 1932467, 1932468, 1932473
EPA 353.2 Rev. 2.0 / E31780	Nitrite/Nitrate in aqueous matrices as mg N/L	1932461, 1932466, 1932467, 1932468, 1932473
EPA 365.1 Rev. 2.0 / E31780	Total Phosphorus in aqueous matrices as mg P/L	1932461, 1932466, 1932467, 1932468, 1932473

Reference Method Descriptions

Method / DoH Cert #	Description	Associated Samples
EPA 365.1 Rev. 2.0 dissolved / E31780	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	1932462, 1932469, 1932470, 1932471, 1932474
EPA 8270D / E31780	Organochlorine pesticides in water matrices by GC/MS-SIM	1932531
EPA 8270D / E31780	Organonitrogen and phosphorus pesticides (ultra trace level) in water matrices by GC/MS/MS	1932532
EPA 8276 / E31780	Organochlorine pesticides in water matrices by GC/MS with Negative Chemical Ionization	1932531
EPA 8321B / E31780	Analysis of sucralose in water matrices by HPLC/MS/MS	1932494, 1932495
EPA 8321B / E31780	Glyphosate in water matrices by HPLC/MS/MS	1932495
EPA 8321B / E31780	Pyraclostrobin in water matrices by HPLC/MS/MS	1932495
SM 2320 B-97 / E31780	Alkalinity in aqueous matrices as mg CaCO3/L	1932460, 1932463, 1932464, 1932465, 1932472
SM 2540 D-97 / E31780	Total Suspended Solids in aqueous matrices	1932460, 1932463, 1932464, 1932465, 1932472
SM 4500 F-C-97 / E31780	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	1932460, 1932463, 1932464, 1932465, 1932472
SM 5310 B-00 / E31780	Nonpurgeable Organic Carbon in aqueous matrices	1932461, 1932466, 1932467, 1932468, 1932473
USGS O-2060-01 / E31780	Chlorinated (phenoxy acid) herbicides in water matrices by HPLC/MS/MS	1932494, 1932495
USGS O-2060-01 / E31780	Urea herbicides and other chemicals in water matrices by HPLC/MS/MS	1932494, 1932495

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 180.1 Rev. 2.0	09/28/2017			09/28/2017 16:22	DeAsia Armster	1932460, 1932463, 1932464, 1932465, 1932472
EPA 200.7 Rev. 4.4	09/28/2017	10/03/2017	Elliott D. Healy	10/04/2017	Betina Topolski	1932536
EPA 200.8 Rev. 5.4	09/28/2017	10/03/2017	Elliott D. Healy	10/04/2017	Nadine Brooks	1932536
	09/28/2017	10/03/2017	Elliott D. Healy	10/05/2017	Robert K Palmer	1932536
EPA 300.0 Rev. 2.1	09/28/2017			09/29/2017	Julia Storbeck	1932460
EPA 350.1 Rev. 2.0	09/28/2017			10/05/2017	Sofia Elnemr	1932461, 1932466, 1932467, 1932468, 1932473
EPA 351.2 Rev. 2.0	09/28/2017	10/02/2017	Sofia Elnemr	10/03/2017	Joseph Suarez	1932468
	09/28/2017	10/03/2017	Adrian Shelby	10/04/2017	Tanya Welborn	1932461, 1932466, 1932467, 1932473
EPA 353.2 Rev. 2.0	09/28/2017			10/05/2017	Beverly Y. Sanders	1932461, 1932466, 1932467, 1932473
	09/28/2017			10/06/2017	Beverly Y. Sanders	1932468
EPA 365.1 Rev. 2.0	09/28/2017	10/02/2017	Sima Feizi	10/04/2017	Beverly Y. Sanders	1932468
	09/28/2017	10/03/2017	Sima Feizi	10/04/2017	Lipi Saha	1932467
	09/28/2017	10/03/2017	Sima Feizi	10/05/2017	Lipi Saha	1932461, 1932466, 1932473
EPA 365.1 Rev. 2.0 dissolved	09/28/2017			09/28/2017 14:25	Megan Treadwell	1932471
	09/28/2017			09/28/2017 14:28	Megan Treadwell	1932474
	09/28/2017			09/28/2017 14:30	Megan Treadwell	1932462
	09/28/2017			09/28/2017 14:31	Megan Treadwell	1932469
	09/28/2017			09/28/2017 14:51	Megan Treadwell	1932470
EPA 8270D	09/28/2017	10/02/2017	Fe-Val Siddell	10/04/2017	Irina Carbone	1932532
	09/28/2017	10/02/2017	John Kaba	10/06/2017	Vandana T. Nagar	1932531
EPA 8276	09/28/2017	10/02/2017	John Kaba	10/07/2017	John P. Burgos	1932531
EPA 8321B	09/28/2017	10/02/2017	Julie Michelle Frank	10/02/2017	Julie Michelle Frank	1932495
	09/28/2017	10/03/2017	Hoor Shaik	10/05/2017	Julie Michelle Frank	1932495
	09/28/2017	10/03/2017	Hoor Shaik	10/05/2017	Juyoung Kim	1932494, 1932495
SM 2320 B-97	09/28/2017			10/04/2017	Dale L. Simmons	1932465
	09/28/2017			10/06/2017	Dale L. Simmons	1932460, 1932463, 1932464, 1932472
SM 2540 D-97	09/28/2017			09/29/2017	DeAsia Armster	1932460, 1932463, 1932464, 1932465, 1932472
SM 4500 F-C-97	09/28/2017			10/04/2017	Dale L. Simmons	1932465
	09/28/2017			10/06/2017	Dale L. Simmons	1932460, 1932463, 1932464, 1932472
SM 5310 B-00	09/28/2017			10/03/2017	Ping Hua	1932461, 1932466, 1932467, 1932468, 1932473
USGS O-2060-01	09/28/2017	10/03/2017	Hoor Shaik	10/07/2017	Julie Michelle Frank	1932494, 1932495