

Chemical Analysis Report

NW-DIST-2023-11-08-01

Florida DEP Laboratory
2600 Blair Stone Road
Tallahassee, FL 32399-2400
DOH Accreditation E31780

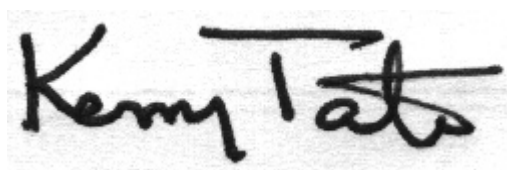
Event Description: **FY15 w/o Tox Navarre Beach WWTP FL0023981**
Request ID: **RQ-2023-10-23-30**
Customer: **NW-DIST**
Project ID: **FY15**

Send Reports to:
FL Dept. of Environmental Protection
160 Governmental Center
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Pensacola, FL 32501
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Certified by: Kerry Tate, Ph.D., Environmental Administrator

Date Certified: 06-DEC-2023 12:39

A handwritten signature in black ink that reads "Kerry Tate". The signature is written in a cursive, flowing style with a horizontal line extending from the end of the name.

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, Pesticides and Priority Organic Pollutants.

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

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

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

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

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

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

Precision is reported as relative percent difference unless otherwise noted.

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

QC Codes used in this report may include:

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

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

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

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

Sample Location: Navarre Beach WWTP

Collection Date/Time: 11/07/2023 10:03

Field ID: EFF-01 COMPOSITE

Matrix: W-EFFLUENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450094	EPA 350.1 Rev. 2.0	Ammonia-N	0.040		mg N/L	P438073	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.65		mg N/L	P437724	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.67		mg N/L	P438104	
	EPA 365.1 Rev. 2.0	Total-P	1.4		mg P/L	P437862	
	SM 5310 B-2011	Organic Carbon	4.0		mg C/L	P437966	
2450095	SM 2540 D-2015	TSS	2	I	mg/L	P437821	
2450124	EPA 200.8 Rev. 5.4	Copper	1.20		ug/L	P437629	

Ref. Method and Comment:
EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

Sample Location: Navarre Beach WWTP

Collection Date/Time: 11/07/2023 10:25

Field ID: EFF-01 GRAB

Matrix: W-EFFLUENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450091	DEP SOP: NU-094-1	Color (true)	2.5	UA	PCU	P437595	
	EPA 180.1 Rev. 2.0	Turbidity	0.60	I	NTU	P437589	
	EPA 300.0 Rev. 2.1	Chloride	87	A	mg Cl/L	P438149	
		Sulfate	70	A	mg SO4/L	P438153	
	SM 2320 B-2011	Total Alkalinity	107	A	mg CaCO3/L	P438026	
	SM 4500-F- C-2011	Fluoride	0.028	I	mg F/L	P438030	
2450092	EPA 350.1 Rev. 2.0	Ammonia-N	0.038		mg N/L	P438073	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.57		mg N/L	P437724	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.44		mg N/L	P438104	
	EPA 365.1 Rev. 2.0	Total-P	1.2		mg P/L	P437862	
	SM 5310 B-2011	Organic Carbon	3.5	A	mg C/L	P437966	
2450093	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	1.2		mg P/L	P437603	
2450102	EPA 522	1,4-Dioxane	0.040	U	ug/L	P438322	
2450104	EPA 625	Acenaphthene	0.026	U	ug/L	P437747	
		Acenaphthylene	0.026	U	ug/L	P437747	
		Anthracene	0.051	U	ug/L	P437747	
		Benzidine	10	U	ug/L	P437747	
		Benzo(a)anthracene	0.026	U	ug/L	P437747	
		Benzo(a)pyrene	0.026	U	ug/L	P437747	
		Benzo(b)fluoranthene	0.026	U	ug/L	P437747	
		Benzo(k)fluoranthene	0.026	U	ug/L	P437747	
		Benzo(g,h,i)perylene	0.026	U	ug/L	P437747	
		Bis(2-chloroethoxy)methane	0.051	U	ug/L	P437747	
		Bis(2-chloroethyl)ether	0.051	U	ug/L	P437747	
		Bis(2-chloroisopropyl)ether	0.051	U	ug/L	P437747	
		Bis(2-ethylhexyl)phthalate	5.1	U	ug/L	P437747	
		Butyl benzyl phthalate	1.5	I	ug/L	P437747	
		4-Bromophenyl phenyl ether	0.051	U	ug/L	P437747	
		2-Chloronaphthalene	0.051	U	ug/L	P437747	
		4-Chlorophenyl phenyl ether	0.051	U	ug/L	P437747	
		Chrysene	0.026	U	ug/L	P437747	
		Di-n-butyl phthalate	2.0	U	ug/L	P437747	
		Di-n-octyl phthalate	0.051	U	ug/L	P437747	
		Dibenzo(a,h)anthracene	0.026	U	ug/L	P437747	
		3,3'-Dichlorobenzidine	10	U	ug/L	P437747	
		Diethyl phthalate	2.0	U	ug/L	P437747	
		Dimethyl phthalate	0.20	U	ug/L	P437747	
		2,4-Dinitrotoluene	0.051	U	ug/L	P437747	
		2,6-Dinitrotoluene	0.051	U	ug/L	P437747	
		Fluoranthene	0.051	U	ug/L	P437747	
		Fluorene	0.026	U	ug/L	P437747	
		Hexachlorobenzene	0.051	U	ug/L	P437747	
		Hexachlorobutadiene	0.051	U	ug/L	P437747	

Field ID: EFF-01 GRAB

Matrix: W-EFFLUENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450104	EPA 625	Hexachlorocyclopentadiene	0.051	U	ug/L	P437747	
		Hexachloroethane	0.051	U	ug/L	P437747	
		Indeno(1,2,3-cd)pyrene	0.026	U	ug/L	P437747	
		Isophorone	0.051	U	ug/L	P437747	
		Naphthalene	0.10	U	ug/L	P437747	
		Nitrobenzene	0.051	U	ug/L	P437747	
		N-Nitrosodimethylamine	2.0	U	ug/L	P437747	
		N-Nitrosodi-n-propylamine	0.051	U	ug/L	P437747	
		Phenanthrene	0.10	U	ug/L	P437747	
		Pyrene	0.10	U	ug/L	P437747	
		1,2,4-Trichlorobenzene	0.051	U	ug/L	P437747	
		4-Chloro-3-methylphenol	0.051	U	ug/L	P437747	
		2-Chlorophenol	0.051	U	ug/L	P437747	
		2,4-Dichlorophenol	0.051	U	ug/L	P437747	
		2,4-Dimethylphenol	0.051	U	ug/L	P437747	
		2,4-Dinitrophenol	10	U	ug/L	P437747	
		2-Methyl-4,6-dinitrophenol	3.1	U	ug/L	P437747	
		2-Nitrophenol	0.051	U	ug/L	P437747	
		4-Nitrophenol	10	U	ug/L	P437747	
		Pentachlorophenol	0.51	U	ug/L	P437747	
		Phenol	0.051	U	ug/L	P437747	
		2,4,6-Trichlorophenol	0.051	U	ug/L	P437747	
2450121	EPA 8321B	Sucralose	83		ug/L	P437555	
		Ibuprofen	0.080	U	ug/L	P437568	
		Naproxen	0.0080	U	ug/L	P437568	
2450123	EPA 200.7 Rev. 4.4	Calcium	19.3		mg/L	P437629	
		Iron	30	U	ug/L	P437629	
		Magnesium	5.75		mg/L	P437629	
		Potassium	10.5		mg/L	P437629	
		Sodium	103		mg/L	P437629	
		Zinc	57		ug/L	P437629	
	EPA 200.8 Rev. 5.4	Aluminum	39		ug/L	P437629	
		Arsenic	2.55		ug/L	P437629	
		Cadmium	0.020	U	ug/L	P437629	
		Chromium	0.40	U	ug/L	P437629	
		Copper	0.47	I	ug/L	P437629	
		Lead	0.20	U	ug/L	P437629	
		Nickel	0.56	I	ug/L	P437629	
		Selenium	0.20	U	ug/L	P437629	
		Silver	0.010	U	ug/L	P437629	
2450126	EPA 8270E	Acetochlor	0.20	U	ng/L	P437624	
		Alachlor	0.41	U	ng/L	P437624	
		Ametryn	1.1	U	ng/L	P437624	
		Atrazine	2.4		ng/L	P437624	
		Atrazine Desethyl	1.3	U	ng/L	P437624	

Field ID: EFF-01 GRAB

Matrix: W-EFFLUENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450126	EPA 8270E	Azinphos Methyl	3.1	U	ng/L	P437624	
		Azoxystrobin	0.41	U	ng/L	P437624	
		Bromacil	0.61	U	ng/L	P437624	
		Butylate	0.46	U	ng/L	P437624	
		Carbophenothion	0.51	U	ng/L	P437624	
		Carfentrazone Ethyl	0.15	U	ng/L	P437624	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P437624	
		Chlorpyrifos Methyl	0.10	U	ng/L	P437624	
		Cyanazine	5.1	U	ng/L	P437624	
		Demeton	3.6	U	ng/L	P437624	
		Diazinon	0.13	U	ng/L	P437624	
		Difenoconazole	0.61	U	ng/L	P437624	
		Dimethenamid	0.10	U	ng/L	P437624	
		Disulfoton	0.61	U	ng/L	P437624	
		Dithiopyr	1.0	U	ng/L	P437624	
		EPTC	0.51	U	ng/L	P437624	
		Ethion	0.31	U	ng/L	P437624	
		Ethoprop	0.13	U	ng/L	P437624	
		Fenamiphos	0.46	U	ng/L	P437624	
		Fenbuconazole	0.51	U	ng/L	P437624	
		Fipronil	0.20	U	ng/L	P437624	
		Fipronil Desulfinyll**	0.63		ng/L	P437624	
		Fipronil Sulfide	3.9		ng/L	P437624	
		Fipronil Sulfone	0.10	U	ng/L	P437624	
		Fluazifop-P-butyl	0.10	U	ng/L	P437624	
		Fludioxonil	0.10	U	ng/L	P437624	
		Flumioxazin	3.1	U	ng/L	P437624	
		Flutolanil	0.10	U	ng/L	P437624	
		Fluxapyroxad	0.25	U	ng/L	P437624	MS, RPD
		Fonofos	0.15	U	ng/L	P437624	
		Hexazinone	0.51	U	ng/L	P437624	
		Imazalil	0.66	U	ng/L	P437624	
		Iprodione	0.51	U	ng/L	P437624	RPD
		Malathion	0.36	U	ng/L	P437624	
		Metalaxyl	0.51	U	ng/L	P437624	
		Metolachlor	0.76	U	ng/L	P437624	
		Metribuzin	0.41	U	ng/L	P437624	
		Mevinphos	1.0	U	ng/L	P437624	
		Molinate	0.25	U	ng/L	P437624	
		Myclobutanil	0.36	U	ng/L	P437624	
		Naled	2.5	U	ng/L	P437624	
		Norflurazon	1.0	U	ng/L	P437624	
		Oxadiazon	0.36	U	ng/L	P437624	
		Oxyfluorfen	0.20	U	ng/L	P437624	
		Parathion Ethyl	0.15	U	ng/L	P437624	

Field ID: EFF-01 GRAB

Matrix: W-EFFLUENT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450126	EPA 8270E	Parathion Methyl	0.20	U	ng/L	P437624	
		Pendimethalin	1.7	U	ng/L	P437624	
		Phorate	0.25	U	ng/L	P437624	
		Prodiamine	0.20	U	ng/L	P437624	
		Prometon	3.1	U	ng/L	P437624	
		Prometryn	0.36	U	ng/L	P437624	
		Pronamide	0.10	U	ng/L	P437624	
		Propiconazole	3.6		ng/L	P437624	
		Pyriproxyfen	0.25	U	ng/L	P437624	MS
		Simazine	0.25	U	ng/L	P437624	
		Sulfentrazone	1.4	U	ng/L	P437624	MS, RPD
		Tebuconazole	5.9	I	ng/L	P437624	
		Terbufos	0.20	U	ng/L	P437624	
		Terbuthylazine	0.20	U	ng/L	P437624	

Ref. Method and Comment:
DEP SOP: NU-094-1: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.
EPA 365.1 Rev. 2.0: Total-P: Batch matrix spike recoveries are unavailable because of high analyte concentration in the QC sample.
EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.
EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Sample Location: Navarre Beach WWTP

Collection Date/Time: 11/07/2023 11:00

Field ID: FIELD BLANKS

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450096	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P437594	
	EPA 180.1 Rev. 2.0	Turbidity	0.10	U	NTU	P437589	
	EPA 300.0 Rev. 2.1	Chloride	0.20	U	mg Cl/L	P438146	
		Sulfate	0.20	U	mg SO4/L	P438150	
	SM 2320 B-2011	Total Alkalinity	0.65	U	mg CaCO3/L	P438026	
	SM 4500-F- C-2011	Fluoride	0.025	U	mg F/L	P438030	
2450097	EPA 350.1 Rev. 2.0	Ammonia-N	0.002	U	mg N/L	P437984	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.080	U	mg N/L	P437673	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437765	
	EPA 365.1 Rev. 2.0	Total-P	0.002	U	mg P/L	P437793	
	SM 5310 B-2011	Organic Carbon	0.50	U	mg C/L	P437885	
2450098	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P437598	
2450103	EPA 522	1,4-Dioxane	0.040	U	ug/L	P438322	
2450105	EPA 625	Acenaphthene	0.026	U	ug/L	P437747	
		Acenaphthylene	0.026	U	ug/L	P437747	
		Anthracene	0.051	U	ug/L	P437747	
		Benzidine	10	U	ug/L	P437747	
		Benzo(a)anthracene	0.026	U	ug/L	P437747	
		Benzo(a)pyrene	0.026	U	ug/L	P437747	
		Benzo(b)fluoranthene	0.026	U	ug/L	P437747	
		Benzo(k)fluoranthene	0.026	U	ug/L	P437747	
		Benzo(g,h,i)perylene	0.026	U	ug/L	P437747	
		Bis(2-chloroethoxy)methane	0.051	U	ug/L	P437747	
		Bis(2-chloroethyl)ether	0.051	U	ug/L	P437747	
		Bis(2-chloroisopropyl)ether	0.051	U	ug/L	P437747	
		Bis(2-ethylhexyl)phthalate	5.1	U	ug/L	P437747	
		Butyl benzyl phthalate	2.1	I	ug/L	P437747	
		4-Bromophenyl phenyl ether	0.051	U	ug/L	P437747	
		2-Chloronaphthalene	0.051	U	ug/L	P437747	
		4-Chlorophenyl phenyl ether	0.051	U	ug/L	P437747	
		Chrysene	0.026	U	ug/L	P437747	
		Di-n-butyl phthalate	2.0	U	ug/L	P437747	
		Di-n-octyl phthalate	0.051	U	ug/L	P437747	
		Dibenzo(a,h)anthracene	0.026	U	ug/L	P437747	
		3,3'-Dichlorobenzidine	10	U	ug/L	P437747	
		Diethyl phthalate	2.0	U	ug/L	P437747	
		Dimethyl phthalate	0.20	U	ug/L	P437747	
		2,4-Dinitrotoluene	0.051	U	ug/L	P437747	
		2,6-Dinitrotoluene	0.051	U	ug/L	P437747	
		Fluoranthene	0.051	U	ug/L	P437747	
		Fluorene	0.026	U	ug/L	P437747	
		Hexachlorobenzene	0.051	U	ug/L	P437747	
		Hexachlorobutadiene	0.051	U	ug/L	P437747	

Field ID: FIELD BLANKS

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450105	EPA 625	Hexachlorocyclopentadiene	0.051	U	ug/L	P437747	
		Hexachloroethane	0.051	U	ug/L	P437747	
		Indeno(1,2,3-cd)pyrene	0.026	U	ug/L	P437747	
		Isophorone	0.051	U	ug/L	P437747	
		Naphthalene	0.10	U	ug/L	P437747	
		Nitrobenzene	0.051	U	ug/L	P437747	
		N-Nitrosodimethylamine	2.0	U	ug/L	P437747	
		N-Nitrosodi-n-propylamine	0.051	U	ug/L	P437747	
		Phenanthrene	0.10	U	ug/L	P437747	
		Pyrene	0.10	U	ug/L	P437747	
		1,2,4-Trichlorobenzene	0.051	U	ug/L	P437747	
		4-Chloro-3-methylphenol	0.051	U	ug/L	P437747	
		2-Chlorophenol	0.051	U	ug/L	P437747	
		2,4-Dichlorophenol	0.051	U	ug/L	P437747	
		2,4-Dimethylphenol	0.051	U	ug/L	P437747	
		2,4-Dinitrophenol	10	U	ug/L	P437747	
		2-Methyl-4,6-dinitrophenol	3.1	U	ug/L	P437747	
		2-Nitrophenol	0.051	U	ug/L	P437747	
		4-Nitrophenol	10	U	ug/L	P437747	
		Pentachlorophenol	0.51	U	ug/L	P437747	
		Phenol	0.051	U	ug/L	P437747	
		2,4,6-Trichlorophenol	0.051	U	ug/L	P437747	
2450122	EPA 8321B	Sucralose	0.010	U	ug/L	P437555	
		Ibuprofen	0.080	U	ug/L	P437568	
		Naproxen	0.0080	U	ug/L	P437568	
2450125	EPA 200.7 Rev. 4.4	Calcium	0.075	U	mg/L	P437629	
		Iron	30	U	ug/L	P437629	
		Magnesium	0.040	U	mg/L	P437629	
		Potassium	0.30	U	mg/L	P437629	
		Sodium	0.50	U	mg/L	P437629	
		Zinc	5.0	U	ug/L	P437629	
	EPA 200.8 Rev. 5.4	Aluminum	5.0	U	ug/L	P437629	
		Arsenic	0.050	U	ug/L	P437629	
		Cadmium	0.020	U	ug/L	P437629	
		Chromium	0.40	U	ug/L	P437629	
		Copper	0.40	U	ug/L	P437629	
		Lead	0.20	U	ug/L	P437629	
		Nickel	0.50	U	ug/L	P437629	
		Selenium	0.20	U	ug/L	P437629	
		Silver	0.010	U	ug/L	P437629	
		Acetochlor	0.21	U	ng/L	P437624	
2450127	EPA 8270E	Alachlor	0.41	U	ng/L	P437624	
		Ametryn	1.1	U	ng/L	P437624	
		Atrazine	0.21	U	ng/L	P437624	
		Atrazine Desethyl	1.3	U	ng/L	P437624	

Field ID: FIELD BLANKS

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450127	EPA 8270E	Azinphos Methyl	3.1	U	ng/L	P437624	
		Azoxystrobin	0.41	U	ng/L	P437624	
		Bromacil	0.62	U	ng/L	P437624	
		Butylate	0.46	U	ng/L	P437624	
		Carbophenothion	0.51	U	ng/L	P437624	
		Carfentrazone Ethyl	0.15	U	ng/L	P437624	
		Chlorpyrifos Ethyl	0.31	U	ng/L	P437624	
		Chlorpyrifos Methyl	0.10	U	ng/L	P437624	
		Cyanazine	5.1	U	ng/L	P437624	
		Demeton	3.6	U	ng/L	P437624	
		Diazinon	0.13	U	ng/L	P437624	
		Difenoconazole	0.62	U	ng/L	P437624	
		Dimethenamid	0.10	U	ng/L	P437624	
		Disulfoton	0.62	U	ng/L	P437624	
		Dithiopyr	1.0	U	ng/L	P437624	
		EPTC	0.51	U	ng/L	P437624	
		Ethion	0.31	U	ng/L	P437624	
		Ethoprop	0.13	U	ng/L	P437624	
		Fenamiphos	0.46	U	ng/L	P437624	
		Fenbuconazole	0.51	U	ng/L	P437624	
		Fipronil	0.21	U	ng/L	P437624	
		Fipronil Desulfinyl**	0.10	U	ng/L	P437624	
		Fipronil Sulfide	0.10	U	ng/L	P437624	
		Fipronil Sulfone	0.10	U	ng/L	P437624	
		Fluazifop-P-butyl	0.10	U	ng/L	P437624	
		Fludioxonil	0.10	U	ng/L	P437624	
		Flumioxazin	3.1	U	ng/L	P437624	
		Flutolanil	0.10	U	ng/L	P437624	
		Fluxapyroxad	0.26	U	ng/L	P437624	MS, RPD
		Fonofos	0.15	U	ng/L	P437624	
		Hexazinone	0.51	U	ng/L	P437624	
		Imazalil	0.67	U	ng/L	P437624	
		Iprodione	0.51	U	ng/L	P437624	RPD
		Malathion	0.36	U	ng/L	P437624	
		Metalaxyl	0.51	U	ng/L	P437624	
		Metolachlor	0.77	U	ng/L	P437624	
		Metribuzin	0.41	U	ng/L	P437624	
		Mevinphos	1.0	U	ng/L	P437624	
		Molinate	0.26	U	ng/L	P437624	
		Myclobutanil	0.36	U	ng/L	P437624	
		Naled	2.6	U	ng/L	P437624	
		Norflurazon	1.0	U	ng/L	P437624	
		Oxadiazon	0.36	U	ng/L	P437624	
		Oxyfluorfen	0.21	U	ng/L	P437624	
		Parathion Ethyl	0.15	U	ng/L	P437624	

Field ID: FIELD BLANKS

Matrix: W-FIELD-BK

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450127	EPA 8270E	Parathion Methyl	0.21	U	ng/L	P437624	
		Pendimethalin	1.7	U	ng/L	P437624	
		Phorate	0.26	U	ng/L	P437624	
		Prodiamine	0.21	U	ng/L	P437624	
		Prometon	3.1	U	ng/L	P437624	
		Prometryn	0.36	U	ng/L	P437624	
		Pronamide	0.10	U	ng/L	P437624	
		Propiconazole	0.62	U	ng/L	P437624	
		Pyriproxyfen	0.26	U	ng/L	P437624	MS
		Simazine	0.26	U	ng/L	P437624	
		Sulfentrazone	1.4	U	ng/L	P437624	MS, RPD
		Tebuconazole	1.4	U	ng/L	P437624	
		Terbufos	0.21	U	ng/L	P437624	
		Terbuthylazine	0.21	U	ng/L	P437624	

Ref. Method and Comment:

EPA 200.8 Rev. 5.4: Batch matrix spike recoveries for aluminum are unavailable for one of two spiked samples because of high analyte concentration in the QC sample.

EPA 8270E: MS accuracy for some parameters not assessed due to high content of these parameters in the sample spiked.

Sample Location: Navarre Beach WWTP Control

Collection Date/Time: 11/07/2023 10:15

Field ID: Navarre Beach WWTP Control

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450181	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P437594	
	EPA 180.1 Rev. 2.0	Turbidity	1.2		NTU	P437590	
	EPA 300.0 Rev. 2.1	Chloride	1.5E+04		mg Cl/L	P438146	
		Sulfate	2.2E+03		mg SO4/L	P438150	
	SM 2320 B-2011	Total Alkalinity	97		mg CaCO3/L	P438025	
	SM 2540 D-2015	TSS	4	I	mg/L	P437950	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P438029	
2450184	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P437987	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.23	I	mg N/L	P437671	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437959	
	EPA 365.1 Rev. 2.0	Total-P	0.006	I	mg P/L	P437769	
	SM 5310 B-2011	Organic Carbon	2.0	I	mg C/L	P437786	
2450187	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P437599	
2450196	EPA 522	1,4-Dioxane	0.040	U	ug/L	P438322	
2450199	EPA 8321B	Sucralose	0.13		ug/L	P437555	
		Ibuprofen	0.080	U	ug/L	P437568	
		Naproxen	0.0080	U	ug/L	P437568	
2450202	EPA 200.7 Rev. 4.4	Calcium	314		mg/L	P437686	
		Iron	120	U	ug/L	P437686	
		Magnesium	986		mg/L	P437686	
		Potassium	310		mg/L	P437686	
		Sodium	8.63E+03		mg/L	P437686	
	EPA 200.8 Rev. 5.4	Zinc	20	U	ug/L	P437686	
		Aluminum	566		ug/L	P437686	
		Arsenic	1.31		ug/L	P437686	
		Cadmium	0.080	U	ug/L	P437686	
		Chromium	4.0	U	ug/L	P437686	
		Copper	2.3	I	ug/L	P437686	
		Lead	2.0	U	ug/L	P437686	
		Nickel	2.0	U	ug/L	P437686	
		Selenium	0.80	U	ug/L	P437686	
		Silver	0.040	U	ug/L	P437686	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Navarre Beach WWTP Test 1

Collection Date/Time: 11/07/2023 10:45

Field ID: Navarre Beach WWTP Test 1

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450182	DEP SOP: NU-094-1	Color (true)	5.0	U	PCU	P437594	
	EPA 180.1 Rev. 2.0	Turbidity	1.1		NTU	P437590	
	EPA 300.0 Rev. 2.1	Chloride	1.5E+04		mg Cl/L	P438146	
		Sulfate	2.2E+03		mg SO4/L	P438150	
	SM 2320 B-2011	Total Alkalinity	96		mg CaCO3/L	P438025	
	SM 2540 D-2015	TSS	5	I	mg/L	P437950	
	SM 4500-F- C-2011	Fluoride	1.0		mg F/L	P438029	
2450185	EPA 350.1 Rev. 2.0	Ammonia-N	0.004	I	mg N/L	P437987	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.34	I	mg N/L	P437671	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.004	U	mg N/L	P437959	
	EPA 365.1 Rev. 2.0	Total-P	0.006	I	mg P/L	P437769	
	SM 5310 B-2011	Organic Carbon	2.0	U	mg C/L	P437886	
2450188	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	I	mg P/L	P437599	
2450197	EPA 522	1,4-Dioxane	0.040	U	ug/L	P438322	
2450200	EPA 8321B	Sucralose	0.29		ug/L	P437555	
		Ibuprofen	0.080	U	ug/L	P437568	
		Naproxen	0.0080	U	ug/L	P437568	
2450203	EPA 200.7 Rev. 4.4	Calcium	297		mg/L	P437686	
		Iron	120	U	ug/L	P437686	
		Magnesium	965		mg/L	P437686	
		Potassium	310		mg/L	P437686	
		Sodium	8.49E+03		mg/L	P437686	
		Zinc	20	U	ug/L	P437686	
	EPA 200.8 Rev. 5.4	Aluminum	320		ug/L	P437686	
		Arsenic	1.44		ug/L	P437686	
		Cadmium	0.080	U	ug/L	P437686	
		Chromium	4.0	U	ug/L	P437686	
		Copper	1.6	U	ug/L	P437686	
		Lead	2.0	U	ug/L	P437686	
		Nickel	2.0	U	ug/L	P437686	
		Selenium	0.80	U	ug/L	P437686	
		Silver	0.040	U	ug/L	P437686	

Ref. Method and Comment:

DEP SOP: NU-094-1: The MDL was elevated because of sample matrix interference.

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Sample Location: Navarre Beach WWTP Test 2

Collection Date/Time: 11/07/2023 11:00

Field ID: Navarre Beach WWTP Test 2

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2450183	DEP SOP: NU-094-1	Color (true)	2.5	U	PCU	P437594	
	EPA 180.1 Rev. 2.0	Turbidity	1.0		NTU	P437590	
	EPA 300.0 Rev. 2.1	Chloride	1.6E+04		mg Cl/L	P438146	
		Sulfate	2.2E+03		mg SO4/L	P438150	
	SM 2320 B-2011	Total Alkalinity	98		mg CaCO3/L	P438025	
	SM 2540 D-2015	TSS	3	IA	mg/L	P437950	
	SM 4500-F- C-2011	Fluoride	1.1		mg F/L	P438029	
2450186	EPA 350.1 Rev. 2.0	Ammonia-N	0.005	I	mg N/L	P437987	
	EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	0.24	I	mg N/L	P437671	
	EPA 353.2 Rev. 2.0	NO2NO3-N	0.006	I	mg N/L	P437959	
	EPA 365.1 Rev. 2.0	Total-P	0.008	I	mg P/L	P437769	
	SM 5310 B-2011	Organic Carbon	2.4	I	mg C/L	P437994	
2450189	EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	0.004	U	mg P/L	P437600	
2450198	EPA 522	1,4-Dioxane	0.040	U	ug/L	P438322	
2450201	EPA 8321B	Sucralose	0.40		ug/L	P437555	
		Ibuprofen	0.080	U	ug/L	P437568	
		Naproxen	0.0080	U	ug/L	P437568	
2450204	EPA 200.7 Rev. 4.4	Calcium	296		mg/L	P437686	
		Iron	120	U	ug/L	P437686	
		Magnesium	996		mg/L	P437686	
		Potassium	330		mg/L	P437686	
		Sodium	8.66E+03		mg/L	P437686	
	EPA 200.8 Rev. 5.4	Zinc	20	U	ug/L	P437686	
		Aluminum	43	I	ug/L	P437686	
		Arsenic	1.37		ug/L	P437686	
		Cadmium	0.080	U	ug/L	P437686	
		Chromium	4.0	U	ug/L	P437686	
		Copper	2.1	I	ug/L	P437686	
		Lead	2.0	U	ug/L	P437686	
		Nickel	2.0	U	ug/L	P437686	
		Selenium	0.80	U	ug/L	P437686	
		Silver	0.040	U	ug/L	P437686	

Ref. Method and Comment:

SM 2540 D-2015: Batch relative percent difference is unavailable because of low analyte concentration in the QC sample.

EPA 200.7 Rev. 4.4: Batch matrix spike recoveries for calcium, magnesium, potassium and sodium are unavailable because of high analyte concentration in the QC sample.

Quality Assurance Report

Method Blank Results

Reference Method: DEP SOP: NU-094-1
Batch ID: P437594

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: DEP SOP: NU-094-1
Batch ID: P437595

Component	Result	Code	Units
Color (true)	2.5	U	PCU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437589

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437590

Component	Result	Code	Units
Turbidity	0.10	U	NTU

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437629

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 200.7 Rev. 4.4
Batch ID: P437686

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: P437629

Component	Result	Code	Units
Aluminum	5.0	U	ug/L
Arsenic	0.050	U	ug/L
Cadmium	0.020	U	ug/L
Chromium	0.40	U	ug/L
Copper	0.40	U	ug/L
Lead	0.20	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Component	Result	Code	Units
Nickel	0.50	U	ug/L
Selenium	0.20	U	ug/L
Silver	0.010	U	ug/L

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437686

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438146

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438149

Component	Result	Code	Units
Chloride	0.20	U	mg Cl/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438150

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438153

Component	Result	Code	Units
Sulfate	0.20	U	mg SO4/L

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

Component	Result	Code	Units
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Quality Assurance Report Method Blank Results

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438073

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437671

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437673

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437724

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437765

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437959

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438104

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437769

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
Batch ID: P437793

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

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437862

Component	Result	Code	Units
Total-P	0.010	U	mg P/L

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437598

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437599

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437600

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437603

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

Reference Method: EPA 522
Batch ID: P438322

Component	Result	Code	Units
1,4-Dioxane	0.040	U	ug/L

Reference Method: EPA 625
Batch ID: P437747

Component	Result	Code	Units
1,2,4-Trichlorobenzene	0.050	U	ug/L
2-Chloronaphthalene	0.050	U	ug/L
2-Chlorophenol	0.050	U	ug/L
2-Methyl-4,6-dinitrophenol	3.0	U	ug/L
2-Nitrophenol	0.050	U	ug/L
2,4-Dichlorophenol	0.050	U	ug/L
2,4-Dimethylphenol	0.050	U	ug/L
2,4-Dinitrophenol	10	U	ug/L
2,4-Dinitrotoluene	0.050	U	ug/L
2,4,6-Trichlorophenol	0.050	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 625
Batch ID: P437747

Component	Result	Code	Units
2,6-Dinitrotoluene	0.050	U	ug/L
3,3'-Dichlorobenzidine	10	U	ug/L
4-Bromophenyl phenyl ether	0.050	U	ug/L
4-Chloro-3-methylphenol	0.050	U	ug/L
4-Chlorophenyl phenyl ether	0.050	U	ug/L
4-Nitrophenol	10	U	ug/L
Acenaphthene	0.025	U	ug/L
Acenaphthylene	0.025	U	ug/L
Anthracene	0.050	U	ug/L
Benzidine	10	U	ug/L
Benzo(a)anthracene	0.025	U	ug/L
Benzo(a)pyrene	0.025	U	ug/L
Benzo(b)fluoranthene	0.025	U	ug/L
Benzo(g,h,i)perylene	0.025	U	ug/L
Benzo(k)fluoranthene	0.025	U	ug/L
Bis(2-chloroethoxy)methane	0.050	U	ug/L
Bis(2-chloroethyl)ether	0.050	U	ug/L
Bis(2-chloroisopropyl)ether	0.050	U	ug/L
Bis(2-ethylhexyl)phthalate	5.0	U	ug/L
Butyl benzyl phthalate	1.0	U	ug/L
Chrysene	0.025	U	ug/L
Di-n-butyl phthalate	2.0	U	ug/L
Di-n-octyl phthalate	0.050	U	ug/L
Dibenzo(a,h)anthracene	0.025	U	ug/L
Diethyl phthalate	2.0	U	ug/L
Dimethyl phthalate	0.20	U	ug/L
Fluoranthene	0.050	U	ug/L
Fluorene	0.025	U	ug/L
Hexachlorobenzene	0.050	U	ug/L
Hexachlorobutadiene	0.050	U	ug/L
Hexachlorocyclopentadiene	0.050	U	ug/L
Hexachloroethane	0.050	U	ug/L
Indeno(1,2,3-cd)pyrene	0.025	U	ug/L
Isophorone	0.050	U	ug/L
N-Nitrosodi-n-propylamine	0.050	U	ug/L
N-Nitrosodimethylamine	2.0	U	ug/L
Naphthalene	0.10	U	ug/L
Nitrobenzene	0.050	U	ug/L
Pentachlorophenol	0.50	U	ug/L
Phenanthrene	0.10	U	ug/L
Phenol	0.050	U	ug/L
Pyrene	0.10	U	ug/L

Reference Method: EPA 8270E
Batch ID: P437624

Component	Result	Code	Units
Acetochlor	0.20	U	ng/L
Alachlor	0.40	U	ng/L
Ametryn	1.1	U	ng/L
Atrazine	0.20	U	ng/L
Atrazine Desethyl	1.3	U	ng/L

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P437624

Component	Result	Code	Units
Azinphos Methyl	3.0	U	ng/L
Azoxystrobin	0.40	U	ng/L
Bromacil	0.60	U	ng/L
Butylate	0.45	U	ng/L
Carbophenothion	0.50	U	ng/L
Carfentrazone Ethyl	0.15	U	ng/L
Chlorpyrifos Ethyl	0.30	U	ng/L
Chlorpyrifos Methyl	0.10	U	ng/L
Cyanazine	5.0	U	ng/L
Demeton	3.5	U	ng/L
Diazinon	0.12	U	ng/L
Difenoconazole	0.60	U	ng/L
Dimethenamid	0.10	U	ng/L
Disulfoton	0.60	U	ng/L
Dithiopyr	1.0	U	ng/L
EPTC	0.50	U	ng/L
Ethion	0.30	U	ng/L
Ethoprop	0.12	U	ng/L
Fenamiphos	0.45	U	ng/L
Fenbuconazole	0.50	U	ng/L
Fipronil	0.20	U	ng/L
Fipronil Desulfinyl	0.10	U	ng/L
Fipronil Sulfide	0.10	U	ng/L
Fipronil Sulfone	0.10	U	ng/L
Fluazifop-P-butyl	0.10	U	ng/L
Fludioxonil	0.10	U	ng/L
Flumioxazin	3.0	U	ng/L
Flutolanil	0.10	U	ng/L
Fluxapyroxad	0.25	U	ng/L
Fonofos	0.15	U	ng/L
Hexazinone	0.50	U	ng/L
Imazalil	0.65	U	ng/L
Iprodione	0.50	U	ng/L
Malathion	0.35	U	ng/L
Metaxyl	0.50	U	ng/L
Metolachlor	0.75	U	ng/L
Metribuzin	0.40	U	ng/L
Mevinphos	1.0	U	ng/L
Molinate	0.25	U	ng/L
Myclobutanil	0.35	U	ng/L
Naled	2.5	U	ng/L
Norflurazon	1.0	U	ng/L
Oxadiazon	0.35	U	ng/L
Oxyfluorfen	0.20	U	ng/L
Parathion Ethyl	0.15	U	ng/L
Parathion Methyl	0.20	U	ng/L
Pendimethalin	1.7	U	ng/L
Phorate	0.25	U	ng/L
Prodiamine	0.20	U	ng/L
Prometon	3.0	U	ng/L
Prometryn	0.35	U	ng/L
Pronamide	0.10	U	ng/L

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E
Batch ID: P437624

Component	Result	Code	Units
Propiconazole	0.60	U	ng/L
Pyriproxyfen	0.25	U	ng/L
Simazine	0.25	U	ng/L
Sulfentrazone	1.4	U	ng/L
Tebuconazole	1.4	U	ng/L
Terbufos	0.20	U	ng/L
Terbutylazine	0.20	U	ng/L

Reference Method: EPA 8321B
Batch ID: P437555

Component	Result	Code	Units
Sucralose	0.010	U	ug/L

Reference Method: EPA 8321B
Batch ID: P437568

Component	Result	Code	Units
Ibuprofen	0.080	U	ug/L
Naproxen	0.0080	U	ug/L

Reference Method: SM 2320 B-2011
Batch ID: P438025

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

Reference Method: SM 2320 B-2011
Batch ID: P438026

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

Reference Method: SM 2540 D-2015
Batch ID: P437821

Component	Result	Code	Units
TSS	2	U	mg/L

Reference Method: SM 2540 D-2015
Batch ID: P437950

Component	Result	Code	Units
TSS	3	U	mg/L

Reference Method: SM 4500-F- C-2011
Batch ID: P438029

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Quality Assurance Report

Method Blank Results

Reference Method: SM 4500-F- C-2011
Batch ID: P438030

Component	Result	Code	Units
Fluoride	0.025	U	mg F/L

Reference Method: SM 5310 B-2011
Batch ID: P437786

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

Reference Method: SM 5310 B-2011
Batch ID: P437885

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

Reference Method: SM 5310 B-2011
Batch ID: P437886

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

Reference Method: SM 5310 B-2011
Batch ID: P437966

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

Reference Method: SM 5310 B-2011
Batch ID: P437994

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: DEP SOP: NU-094-1
Batch ID: P437594

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: DEP SOP: NU-094-1
Batch ID: P437595

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Color (true)	101		P	90 - 110

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437589

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

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437590

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

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	105		P	85 - 115
Iron	111		P	85 - 115
Magnesium	105		P	85 - 115
Potassium	102		P	85 - 115
Sodium	107		P	85 - 115
Zinc	98.1		P	85 - 115

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437686

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Calcium	98.2		P	85 - 115
Iron	100		P	85 - 115
Magnesium	96.8		P	85 - 115
Potassium	101		P	85 - 115
Sodium	103		P	85 - 115
Zinc	98.3		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	102		P	85 - 115
Arsenic	100		P	85 - 115
Cadmium	100		P	85 - 115
Chromium	96.3		P	85 - 115
Copper	101		P	85 - 115
Lead	97.4		P	85 - 115

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Nickel	99.5		P	85 - 115
Selenium	101		P	85 - 115
Silver	101		P	85 - 115

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437686

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Aluminum	103		P	85 - 115
Arsenic	101		P	85 - 115
Cadmium	103		P	85 - 115
Chromium	103		P	85 - 115
Copper	97.8		P	85 - 115
Lead	107		P	85 - 115
Nickel	98.7		P	85 - 115
Selenium	101		P	85 - 115
Silver	106		P	85 - 115

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438146

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438149

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438150

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

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438153

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

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

Laboratory Control Sample Accuracy

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

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

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438073

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ammonia-N	98.0		P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437671

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: P437673

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

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437724

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: P437765

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437959

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

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438104

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: P437769

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

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437793

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total-P	107		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437862

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437598

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437599

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: P437600

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

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437603

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

Reference Method: EPA 522
Batch ID: P438322

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1,4-Dioxane	83.4	73.4	P/P	70 - 130

Reference Method: EPA 625
Batch ID: P437747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1,2,4-Trichlorobenzene	97.9		P	50 - 130
2-Chloronaphthalene	104		P	50 - 130
2-Chlorophenol	95.8		P	50 - 130
2-Methyl-4,6-dinitrophenol	126		P	50 - 150
2-Nitrophenol	110		P	50 - 130
2,4-Dichlorophenol	105		P	50 - 130
2,4-Dimethylphenol	111		P	50 - 130
2,4-Dinitrophenol	74.7		P	30 - 160
2,4-Dinitrotoluene	115		P	50 - 130
2,4,6-Trichlorophenol	108		P	50 - 130

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 625
Batch ID: P437747

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2,6-Dinitrotoluene	128		P	50 - 130
3,3'-Dichlorobenzidine	149		P	0.0 - 200
4-Bromophenyl phenyl ether	111		P	50 - 130
4-Chloro-3-methylphenol	107		P	50 - 130
4-Chlorophenyl phenyl ether	94.5		P	50 - 130
4-Nitrophenol	104		P	15 - 120
Acenaphthene	109		P	50 - 130
Acenaphthylene	105		P	50 - 130
Anthracene	113		P	50 - 130
Benzidine	103		P	0.0 - 240
Benzo(a)anthracene	113		P	50 - 130
Benzo(a)pyrene	109		P	50 - 130
Benzo(b)fluoranthene	121		P	50 - 130
Benzo(g,h,i)perylene	115		P	50 - 130
Benzo(k)fluoranthene	126		P	50 - 130
Bis(2-chloroethoxy)methane	106		P	50 - 130
Bis(2-chloroethyl)ether	99.0		P	50 - 160
Bis(2-chloroisopropyl)ether	99.6		P	50 - 130
Bis(2-ethylhexyl)phthalate	125		P	50 - 160
Butyl benzyl phthalate	118		P	50 - 160
Chrysene	113		P	50 - 130
Di-n-butyl phthalate	122		P	50 - 160
Di-n-octyl phthalate	115		P	50 - 130
Dibenzo(a,h)anthracene	115		P	50 - 130
Diethyl phthalate	121		P	50 - 130
Dimethyl phthalate	94.1		P	50 - 130
Fluoranthene	115		P	50 - 130
Fluorene	112		P	50 - 130
Hexachlorobenzene	112		P	50 - 130
Hexachlorobutadiene	95.0		P	20 - 130
Hexachlorocyclopentadiene	127		P	20 - 130
Hexachloroethane	93.2		P	40 - 130
Indeno(1,2,3-cd)pyrene	109		P	50 - 130
Isophorone	108		P	50 - 130
N-Nitrosodi-n-propylamine	102		P	50 - 130
N-Nitrosodimethylamine	89.6		P	30 - 130
Naphthalene	102		P	50 - 130
Nitrobenzene	102		P	50 - 130
Pentachlorophenol	113		P	50 - 130
Phenanthrene	115		P	50 - 130
Phenol	49.7		P	15 - 110
Pyrene	115		P	50 - 130

Reference Method: EPA 8270E
Batch ID: P437624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Acetochlor	91.8		P	64 - 124
Alachlor	92.5		P	61 - 118
Ametryn	103		P	47 - 158
Atrazine	84.2		P	68 - 121
Atrazine Desethyl	93.7		P	30 - 119

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Azinphos Methyl	125		P	30 - 194
Azoxystrobin	88.4		P	58 - 154
Bromacil	91.7		P	47 - 126
Butylate	42.6		P	31 - 83.0
Carbophenothion	98.7		P	59 - 133
Carfentrazone Ethyl	102		P	59 - 147
Chlorpyrifos Ethyl	91.1		P	59 - 119
Chlorpyrifos Methyl	106		P	65 - 123
Cyanazine	111		P	63 - 250
Demeton	58.7		P	42 - 119
Diazinon	103		P	67 - 132
Difenoconazole	103		P	12 - 204
Dimethenamid	91.8		P	53 - 113
Disulfoton	82.3		P	56 - 126
Dithiopyr	99.3		P	58 - 127
EPTC	42.8		P	31 - 78.0
Ethion	94.4		P	24 - 127
Ethoprop	75.3		P	60 - 118
Fenamiphos	104		P	54 - 129
Fenbuconazole	102		P	31 - 162
Fipronil	89.8		P	56 - 131
Fipronil Desulfinyl	107		P	58 - 132
Fipronil Sulfide	102		P	51 - 123
Fipronil Sulfone	81.3		P	50 - 125
Fluazifop-P-butyl	94.8		P	52 - 132
Fludioxonil	77.9		P	52 - 129
Flumioxazin	116		P	34 - 250
Flutolanil	103		P	45 - 128
Fluxapyroxad	82.9		P	31 - 150
Fonofos	76.6		P	60 - 116
Hexazinone	93.0		P	59 - 120
Imazalil	100		P	39 - 134
Iprodione	103		P	39 - 243
Malathion	98.0		P	53 - 145
Metaxyl	87.7		P	59 - 120
Metolachlor	101		P	64 - 122
Metribuzin	93.7		P	33 - 128
Mevinphos	63.9		P	48 - 119
Molinate	44.0		P	42 - 89.0
Myclobutanil	91.9		P	54 - 129
Naled	39.9		P	10 - 138
Norflurazon	100		P	49 - 132
Oxadiazon	89.1		P	50 - 115
Oxyfluorfen	117		P	62 - 149
Parathion Ethyl	99.0		P	68 - 119
Parathion Methyl	125		P	68 - 147
Pendimethalin	122		P	59 - 158
Phorate	67.6		P	44 - 124
Prodiamine	48.5		P	10 - 136
Prometon	103		P	45 - 131
Prometryn	104		P	52 - 140
Pronamide	112		P	70 - 129

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P437624

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Propiconazole	94.8		P	49 - 128
Pyriproxyfen	132		P	33 - 221
Simazine	80.1		P	62 - 119
Sulfentrazone	81.2		P	12 - 152
Tebuconazole	99.0		P	10 - 135
Terbufos	77.5		P	67 - 136
Terbutylazine	80.5		P	66 - 113

Reference Method: EPA 8321B
Batch ID: P437555

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Sucralose	100		P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437568

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Ibuprofen	58.7		P	40 - 150
Naproxen	54.1		P	40 - 150

Reference Method: SM 2320 B-2011
Batch ID: P438025

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	92 - 105

Reference Method: SM 2320 B-2011
Batch ID: P438026

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Total Alkalinity	101		P	92 - 105

Reference Method: SM 2540 D-2015
Batch ID: P437821

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	93.6		P	85 - 115

Reference Method: SM 2540 D-2015
Batch ID: P437950

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TSS	108		P	85 - 115

Reference Method: SM 4500-F- C-2011
Batch ID: P438029

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	102		P	94 - 106

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P438030

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Fluoride	103		P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437786

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

Reference Method: SM 5310 B-2011
Batch ID: P437885

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	94.5		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437886

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	96.1		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437966

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	98.6		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437994

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Organic Carbon	95.7		P	85 - 115

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449630	Calcium	101		P	80 - 120
2449630	Iron	107	106	P/P	80 - 120
2449630	Magnesium	100		P	80 - 120
2449630	Potassium	106	105	P/P	80 - 120
2449630	Sodium	106	103	P/P	80 - 120
2449630	Zinc	94.5	95.0	P/P	80 - 120
2449954	Calcium	102		P	80 - 120
2449954	Iron	109		P	80 - 120
2449954	Magnesium	108		P	80 - 120
2449954	Potassium	100		P	80 - 120
2449954	Sodium	101		P	80 - 120
2449954	Zinc	97.8		P	80 - 120

Reference Method: EPA 200.7 Rev. 4.4

Batch ID: P437686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449451	Iron	95.8	95.7	P/P	70 - 130
2449451	Zinc	95.3	95.2	P/P	70 - 130

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437629

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449630	Arsenic	100	101	P/P	80 - 120
2449630	Cadmium	99.8	102	P/P	80 - 120
2449630	Chromium	99.7	94.7	P/P	80 - 120
2449630	Copper	98.6	99.1	P/P	80 - 120
2449630	Lead	100	100	P/P	80 - 120
2449630	Nickel	96.5	96.8	P/P	80 - 120
2449630	Selenium	98.2	101	P/P	80 - 120
2449630	Silver	102	103	P/P	80 - 120
2449954	Aluminum	101		P	80 - 120
2449954	Arsenic	101		P	80 - 120
2449954	Cadmium	103		P	80 - 120
2449954	Chromium	95.1		P	80 - 120
2449954	Copper	98.9		P	80 - 120
2449954	Lead	99.5		P	80 - 120
2449954	Nickel	96.9		P	80 - 120
2449954	Selenium	96.6		P	80 - 120
2449954	Silver	99.7		P	80 - 120

Reference Method: EPA 200.8 Rev. 5.4

Batch ID: P437686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449451	Aluminum	107	106	P/P	70 - 130
2449451	Arsenic	113	113	P/P	70 - 130
2449451	Cadmium	95.1	97.1	P/P	70 - 130
2449451	Chromium	93.5	95.2	P/P	70 - 130
2449451	Copper	90.6	102	P/P	70 - 130
2449451	Lead	115	116	P/P	70 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437686

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449451	Nickel	91.5	91.7	P/P	70 - 130
2449451	Selenium	103	102	P/P	70 - 130
2449451	Silver	94.9	95.9	P/P	70 - 130

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438146

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450037	Chloride	95.2		P	90 - 110
2450149	Chloride	96.7		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438149

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450091	Chloride	101		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438150

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450037	Sulfate	96.5		P	90 - 110
2450149	Sulfate	99.2		P	90 - 110

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438153

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450091	Sulfate	102		P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449890	Ammonia-N	97.6	98.8	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450184	Ammonia-N	102	104	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438073

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450092	Ammonia-N	97.4	99.0	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437671

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
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Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437671

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450186	Kjeldahl Nitrogen	102	97.5	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437673

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450054	Kjeldahl Nitrogen	105	100	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437724

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450092	Kjeldahl Nitrogen	97.1	101	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437765

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449972	NO2NO3-N	98.0		P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437959

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449819	NO2NO3-N	103	105	P/P	90 - 110

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438104

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450092	NO2NO3-N	99.2		P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437769

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450001	Total-P	101	101	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437793

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450132	Total-P	109	108	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437598

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450296	O-Phosphate-P	98.8	101	P/P	90 - 110

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437599

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449825	O-Phosphate-P	99.3	97.4	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437600

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450189	O-Phosphate-P	104	104	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437603

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450093	O-Phosphate-P	102	101	P/P	90 - 110

Reference Method: EPA 522
Batch ID: P438322

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450196	1,4-Dioxane	82.2	89.4	P/P	70 - 130

Reference Method: EPA 625
Batch ID: P437747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450104	1,2,4-Trichlorobenzene	97.8	101	P/P	50 - 130
2450104	2-Chloronaphthalene	101	107	P/P	50 - 130
2450104	2-Chlorophenol	98.2	103	P/P	50 - 130
2450104	2-Methyl-4,6-dinitrophenol	128	137	P/P	50 - 150
2450104	2-Nitrophenol	110	111	P/P	50 - 130
2450104	2,4-Dichlorophenol	104	109	P/P	50 - 130
2450104	2,4-Dimethylphenol	117	121	P/P	50 - 130
2450104	2,4-Dinitrophenol	132	157	P/P	30 - 160
2450104	2,4-Dinitrotoluene	109	114	P/P	50 - 130
2450104	2,4,6-Trichlorophenol	105	110	P/P	50 - 130
2450104	2,6-Dinitrotoluene	125	128	P/P	50 - 130
2450104	3,3'-Dichlorobenzidine	130	127	P/P	0.0 - 200
2450104	4-Bromophenyl phenyl ether	107	109	P/P	50 - 130
2450104	4-Chloro-3-methylphenol	106	110	P/P	50 - 130
2450104	4-Chlorophenyl phenyl ether	91.3	95.6	P/P	50 - 130
2450104	4-Nitrophenol	100	105	P/P	15 - 120
2450104	Acenaphthene	105	110	P/P	50 - 130
2450104	Acenaphthylene	102	107	P/P	50 - 130
2450104	Anthracene	103	105	P/P	50 - 130
2450104	Benzdine	41.3	42.7	P/P	0.0 - 240
2450104	Benzo(a)anthracene	108	108	P/P	50 - 130
2450104	Benzo(a)pyrene	106	108	P/P	50 - 130
2450104	Benzo(b)fluoranthene	108	112	P/P	50 - 130
2450104	Benzo(g,h,i)perylene	112	114	P/P	50 - 130
2450104	Benzo(k)fluoranthene	118	120	P/P	50 - 130
2450104	Bis(2-chloroethoxy)methane	107	110	P/P	50 - 130
2450104	Bis(2-chloroethyl)ether	102	105	P/P	50 - 160
2450104	Bis(2-chloroisopropyl)ether	101	106	P/P	50 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 625

Batch ID: P437747

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450104	Bis(2-ethylhexyl)phthalate	124	121	P/P	50 - 160
2450104	Butyl benzyl phthalate	99.0	98.7	P/P	50 - 160
2450104	Chrysene	111	109	P/P	50 - 130
2450104	Di-n-butyl phthalate	118	121	P/P	50 - 160
2450104	Di-n-octyl phthalate	110	113	P/P	50 - 130
2450104	Dibenzo(a,h)anthracene	112	113	P/P	50 - 130
2450104	Diethyl phthalate	114	120	P/P	50 - 130
2450104	Dimethyl phthalate	90.3	94.5	P/P	50 - 130
2450104	Fluoranthene	110	113	P/P	50 - 130
2450104	Fluorene	109	114	P/P	50 - 130
2450104	Hexachlorobenzene	108	110	P/P	50 - 130
2450104	Hexachlorobutadiene	96.4	98.5	P/P	20 - 130
2450104	Hexachlorocyclopentadiene	87.3	105	P/P	20 - 130
2450104	Hexachloroethane	94.3	99.0	P/P	40 - 130
2450104	Indeno(1,2,3-cd)pyrene	107	107	P/P	50 - 130
2450104	Isophorone	108	110	P/P	50 - 130
2450104	N-Nitrosodi-n-propylamine	104	110	P/P	50 - 130
2450104	N-Nitrosodimethylamine	101	102	P/P	30 - 130
2450104	Naphthalene	102	104	P/P	50 - 130
2450104	Nitrobenzene	104	107	P/P	50 - 130
2450104	Pentachlorophenol	124	122	P/P	50 - 130
2450104	Phenanthrene	110	113	P/P	50 - 130
2450104	Phenol	55.6	58.9	P/P	15 - 110
2450104	Pyrene	110	110	P/P	50 - 130

Reference Method: EPA 8270E

Batch ID: P437624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450371	Acetochlor	86.2	76.9	P/P	60 - 124
2450371	Alachlor	80.8	74.7	P/P	54 - 122
2450371	Ametryn	105	93.2	P/P	51 - 208
2450371	Atrazine	77.5	78.1	P/P	57 - 131
2450371	Atrazine Desethyl	94.5	106	P/P	13 - 124
2450371	Azinphos Methyl	151	224	P/P	43 - 276
2450371	Bromacil	86.8	83.3	P/P	44 - 134
2450371	Butylate	36.3	47.2	P/P	23 - 82.0
2450371	Carbophenothion	87.9	79.2	P/P	47 - 135
2450371	Carfentrazone Ethyl	93.8	80.2	P/P	46 - 147
2450371	Chlorpyrifos Ethyl	84.3	101	P/P	47 - 124
2450371	Chlorpyrifos Methyl	107	127	P/P	60 - 135
2450371	Cyanazine	111	111	P/P	10 - 257
2450371	Demeton	74.5	98.9	P/P	41 - 137
2450371	Diazinon	109	107	P/P	64 - 139
2450371	Dimethenamid	89.9	78.2	P/P	47 - 117
2450371	Disulfoton	93.5	100	P/P	52 - 130
2450371	Dithiopyr	96.6	78.7	P/P	40 - 121
2450371	EPTC	34.4	41.0	P/P	19 - 78.0
2450371	Ethion	83.1	51.4	P/P	12 - 124
2450371	Ethoprop	80.2	102	P/P	68 - 144
2450371	Fenamiphos	114	96.2	P/P	41 - 129
2450371	Fenbuconazole	91.4	79.7	P/P	26 - 169

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E
Batch ID: P437624

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450371	Fipronil	83.0	72.8	P/P	46 - 145
2450371	Fipronil Desulfinyl	106	77.8	P/P	47 - 136
2450371	Fipronil Sulfide	74.0	64.9	P/P	41 - 127
2450371	Fipronil Sulfone	79.4	54.8	P/P	35 - 133
2450371	Fluazifop-P-butyl	98.7	104	P/P	46 - 131
2450371	Flumioxazin	118	97.9	P/P	10 - 289
2450371	Flutolanil	105	101	P/P	34 - 130
2450371	Fluxapyroxad	84.2	258	P/F	10 - 197
2450371	Fonofos	82.6	96.7	P/P	42 - 131
2450371	Hexazinone	104	110	P/P	64 - 125
2450371	Imazalil	105	101	P/P	37 - 252
2450371	Iprodione	83.6	156	P/P	34 - 265
2450371	Malathion	97.0	112	P/P	34 - 164
2450371	Metalaxyl	71.6	78.9	P/P	49 - 125
2450371	Metribuzin	91.6	96.3	P/P	51 - 139
2450371	Mevinphos	67.2	88.3	P/P	46 - 130
2450371	Molinate	47.3	65.0	P/P	39 - 93.0
2450371	Myclobutanil	85.1	78.0	P/P	50 - 130
2450371	Naled	32.5	23.3	P/P	10 - 150
2450371	Norflurazon	89.4	72.4	P/P	36 - 134
2450371	Oxadiazon	85.3	74.3	P/P	43 - 112
2450371	Oxyfluorfen	114	109	P/P	62 - 154
2450371	Parathion Ethyl	97.0	89.0	P/P	65 - 120
2450371	Parathion Methyl	118	116	P/P	77 - 185
2450371	Pendimethalin	134	125	P/P	50 - 146
2450371	Phorate	81.9	99.5	P/P	54 - 161
2450371	Prodiamine	46.7	59.0	P/P	29 - 160
2450371	Prometon	100	89.7	P/P	38 - 145
2450371	Prometryn	110	119	P/P	32 - 151
2450371	Pronamide	104	98.1	P/P	61 - 140
2450371	Propiconazole	94.7	74.3	P/P	30 - 146
2450371	Pyriproxyfen	271	251	F/F	31 - 218
2450371	Simazine	77.3	84.7	P/P	45 - 139
2450371	Sulfentrazone	85.2	217	P/F	53 - 186
2450371	Tebuconazole	86.0	80.6	P/P	10 - 133
2450371	Terbufos	86.5	113	P/P	65 - 151
2450371	Terbutylazine	75.9	85.0	P/P	62 - 117

Reference Method: EPA 8321B
Batch ID: P437555

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449881	Sucralose	106	114	P/P	40 - 150

Reference Method: EPA 8321B
Batch ID: P437568

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450109	Ibuprofen	64.1	60.0	P/P	40 - 150
2450109	Naproxen	73.0	90.7	P/P	40 - 150

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: SM 4500-F- C-2011
Batch ID: P438029

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450882	Fluoride	102	104	P/P	94 - 106

Reference Method: SM 4500-F- C-2011
Batch ID: P438030

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450091	Fluoride	100	100	P/P	94 - 106

Reference Method: SM 5310 B-2011
Batch ID: P437786

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450184	Organic Carbon	85.9	91.1	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437885

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2449972	Organic Carbon	93.9	95.2	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437886

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450185	Organic Carbon	86.6	92.0	P/P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437966

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2450092	Organic Carbon	98.2		P	85 - 115

Reference Method: SM 5310 B-2011
Batch ID: P437994

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2451730	Organic Carbon	85.1	88.5	P/P	85 - 115

Quality Assurance Report Precision

Reference Method: DEP SOP: NU-094-1
Batch ID: P437594

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450149	Color (true)	7.85	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437589

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449971	Turbidity	6.00	Sample	P	0 - 20

Reference Method: EPA 180.1 Rev. 2.0
Batch ID: P437590

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450149	Turbidity	16.5	Sample	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449630	Calcium	2.60	Spike	P	0 - 20
2449630	Iron	0.489	Spike	P	0 - 20
2449630	Magnesium	1.89	Spike	P	0 - 20
2449630	Potassium	0.905	Spike	P	0 - 20
2449630	Sodium	2.11	Spike	P	0 - 20
2449630	Zinc	0.466	Spike	P	0 - 20

Reference Method: EPA 200.7 Rev. 4.4
Batch ID: P437686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449451	Calcium	1.27	Spike	P	0 - 20
2449451	Iron	0.0575	Spike	P	0 - 20
2449451	Magnesium	0.373	Spike	P	0 - 20
2449451	Potassium	0.226	Spike	P	0 - 20
2449451	Sodium	1.57	Spike	P	0 - 20
2449451	Zinc	0.119	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449630	Aluminum	4.67	Spike	P	0 - 20
2449630	Arsenic	1.02	Spike	P	0 - 20
2449630	Cadmium	1.99	Spike	P	0 - 20
2449630	Chromium	3.76	Spike	P	0 - 20
2449630	Copper	0.426	Spike	P	0 - 20
2449630	Lead	0.180	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437629

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449630	Nickel	0.243	Spike	P	0 - 20
2449630	Selenium	3.19	Spike	P	0 - 20
2449630	Silver	0.760	Spike	P	0 - 20

Reference Method: EPA 200.8 Rev. 5.4
Batch ID: P437686

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449451	Aluminum	0.592	Spike	P	0 - 20
2449451	Arsenic	0.425	Spike	P	0 - 20
2449451	Cadmium	2.03	Spike	P	0 - 20
2449451	Chromium	1.71	Spike	P	0 - 20
2449451	Copper	11.3	Spike	P	0 - 20
2449451	Lead	0.996	Spike	P	0 - 20
2449451	Nickel	0.180	Spike	P	0 - 20
2449451	Selenium	0.627	Spike	P	0 - 20
2449451	Silver	0.973	Spike	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438146

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450037	Chloride	0.396	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438149

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450091	Chloride	1.25	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438150

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450037	Sulfate	0.690	Sample	P	0 - 20

Reference Method: EPA 300.0 Rev. 2.1
Batch ID: P438153

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450091	Sulfate	1.41	Sample	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437984

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449890	Ammonia-N	0.798	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P437987

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450184	Ammonia-N	2.17	Spike	P	0 - 20

Reference Method: EPA 350.1 Rev. 2.0
Batch ID: P438073

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450092	Ammonia-N	0.921	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437671

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450186	Kjeldahl Nitrogen	4.42	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437673

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450054	Kjeldahl Nitrogen	2.36	Spike	P	0 - 20

Reference Method: EPA 351.2 Rev. 2.0
Batch ID: P437724

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450092	Kjeldahl Nitrogen	3.21	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437765

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449972	NO2NO3-N	1.15	Spike	P	0 - 20

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P437959

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449819	NO2NO3-N	1.20	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 353.2 Rev. 2.0
Batch ID: P438104

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450092	NO2NO3-N	0.0	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437769

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450001	Total-P	0.0495	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437793

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450132	Total-P	0.845	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0
Batch ID: P437862

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450092	Total-P	0.262	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437598

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450296	O-Phosphate-P	2.26	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437599

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449825	O-Phosphate-P	1.44	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437600

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450189	O-Phosphate-P	0.673	Spike	P	0 - 20

Reference Method: EPA 365.1 Rev. 2.0 dissolved
Batch ID: P437603

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450093	O-Phosphate-P	0.435	Spike	P	0 - 20

Quality Assurance Report Precision

Reference Method: EPA 522

Batch ID: P438322

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450196	1,4-Dioxane	8.32	Spike	P	0 - 30
LFB	1,4-Dioxane	12.8	LCS	P	0 - 30

Reference Method: EPA 625

Batch ID: P437747

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450104	1,2,4-Trichlorobenzene	3.22	Spike	P	0 - 40
2450104	2-Chloronaphthalene	5.97	Spike	P	0 - 40
2450104	2-Chlorophenol	4.97	Spike	P	0 - 40
2450104	2-Methyl-4,6-dinitrophenol	6.80	Spike	P	0 - 40
2450104	2-Nitrophenol	0.543	Spike	P	0 - 40
2450104	2,4-Dichlorophenol	4.12	Spike	P	0 - 40
2450104	2,4-Dimethylphenol	3.03	Spike	P	0 - 40
2450104	2,4-Dinitrophenol	17.1	Spike	P	0 - 40
2450104	2,4-Dinitrotoluene	4.83	Spike	P	0 - 40
2450104	2,4,6-Trichlorophenol	5.40	Spike	P	0 - 40
2450104	2,6-Dinitrotoluene	2.36	Spike	P	0 - 40
2450104	3,3'-Dichlorobenzidine	2.17	Spike	P	0 - 40
2450104	4-Bromophenyl phenyl ether	2.13	Spike	P	0 - 40
2450104	4-Chloro-3-methylphenol	2.96	Spike	P	0 - 40
2450104	4-Chlorophenyl phenyl ether	4.55	Spike	P	0 - 40
2450104	4-Nitrophenol	5.16	Spike	P	0 - 40
2450104	Acenaphthene	5.03	Spike	P	0 - 40
2450104	Acenaphthylene	4.20	Spike	P	0 - 40
2450104	Anthracene	1.92	Spike	P	0 - 40
2450104	Benzidine	3.39	Spike	P	0 - 40
2450104	Benzo(a)anthracene	0.0926	Spike	P	0 - 40
2450104	Benzo(a)pyrene	1.97	Spike	P	0 - 40
2450104	Benzo(b)fluoranthene	3.45	Spike	P	0 - 40
2450104	Benzo(g,h,i)perylene	1.42	Spike	P	0 - 40
2450104	Benzo(k)fluoranthene	1.68	Spike	P	0 - 40
2450104	Bis(2-chloroethoxy)methane	3.59	Spike	P	0 - 40
2450104	Bis(2-chloroethyl)ether	3.01	Spike	P	0 - 40
2450104	Bis(2-chloroisopropyl)ether	4.36	Spike	P	0 - 40
2450104	Bis(2-ethylhexyl)phthalate	2.04	Spike	P	0 - 40
2450104	Butyl benzyl phthalate	0.263	Spike	P	0 - 40
2450104	Chrysene	1.91	Spike	P	0 - 40
2450104	Di-n-butyl phthalate	2.50	Spike	P	0 - 40
2450104	Di-n-octyl phthalate	2.42	Spike	P	0 - 40
2450104	Dibenzo(a,h)anthracene	1.42	Spike	P	0 - 40
2450104	Diethyl phthalate	4.44	Spike	P	0 - 40
2450104	Dimethyl phthalate	4.51	Spike	P	0 - 40
2450104	Fluoranthene	2.60	Spike	P	0 - 40
2450104	Fluorene	4.66	Spike	P	0 - 40
2450104	Hexachlorobenzene	2.66	Spike	P	0 - 40
2450104	Hexachlorobutadiene	2.15	Spike	P	0 - 40
2450104	Hexachlorocyclopentadiene	18.0	Spike	P	0 - 40
2450104	Hexachloroethane	4.86	Spike	P	0 - 40
2450104	Indeno(1,2,3-cd)pyrene	0.187	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 625

Batch ID: P437747

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450104	Isophorone	2.57	Spike	P	0 - 40
2450104	N-Nitrosodi-n-propylamine	5.51	Spike	P	0 - 40
2450104	N-Nitrosodimethylamine	1.58	Spike	P	0 - 40
2450104	Naphthalene	2.43	Spike	P	0 - 40
2450104	Nitrobenzene	2.57	Spike	P	0 - 40
2450104	Pentachlorophenol	1.79	Spike	P	0 - 40
2450104	Phenanthrene	2.33	Spike	P	0 - 40
2450104	Phenol	5.76	Spike	P	0 - 40
2450104	Pyrene	0.182	Spike	P	0 - 40

Reference Method: EPA 8270E

Batch ID: P437624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450371	Acetochlor	11.4	Spike	P	0 - 28
2450371	Alachlor	7.74	Spike	P	0 - 30
2450371	Ametryn	11.4	Spike	P	0 - 32
2450371	Atrazine	0.414	Spike	P	0 - 33
2450371	Atrazine Desethyl	11.7	Spike	P	0 - 36
2450371	Azinphos Methyl	39.1	Spike	P	0 - 62
2450371	Azoxystrobin	1.95	Spike	P	0 - 39
2450371	Bromacil	4.04	Spike	P	0 - 33
2450371	Butylate	26.1	Spike	P	0 - 51
2450371	Carbophenothion	10.5	Spike	P	0 - 34
2450371	Carfentrazone Ethyl	15.7	Spike	P	0 - 33
2450371	Chlorpyrifos Ethyl	17.9	Spike	P	0 - 31
2450371	Chlorpyrifos Methyl	17.0	Spike	P	0 - 27
2450371	Cyanazine	0.0282	Spike	P	0 - 48
2450371	Demeton	28.2	Spike	P	0 - 33
2450371	Diazinon	1.25	Spike	P	0 - 32
2450371	Difenoconazole	8.23	Spike	P	0 - 71
2450371	Dimethenamid	13.9	Spike	P	0 - 60
2450371	Disulfoton	6.97	Spike	P	0 - 30
2450371	Dithiopyr	20.4	Spike	P	0 - 28
2450371	EPTC	17.7	Spike	P	0 - 56
2450371	Ethion	47.2	Spike	P	0 - 79
2450371	Ethoprop	22.0	Spike	P	0 - 31
2450371	Fenamiphos	16.6	Spike	P	0 - 43
2450371	Fenbuconazole	13.6	Spike	P	0 - 79
2450371	Fipronil	12.6	Spike	P	0 - 46
2450371	Fipronil Desulfinyl	28.8	Spike	P	0 - 36
2450371	Fipronil Sulfide	6.38	Spike	P	0 - 34
2450371	Fipronil Sulfone	18.1	Spike	P	0 - 47
2450371	Fluazifop-P-butyl	4.85	Spike	P	0 - 38
2450371	Fludioxonil	3.97	Spike	P	0 - 29
2450371	Flumioxazin	18.9	Spike	P	0 - 63
2450371	Flutolanil	4.57	Spike	P	0 - 36
2450371	Fluxapyroxad	75.7	Spike	F	0 - 65
2450371	Fonofos	15.8	Spike	P	0 - 35
2450371	Hexazinone	5.79	Spike	P	0 - 31

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P437624

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450371	Imazalil	3.54	Spike	P	0 - 52
2450371	Iprodione	60.1	Spike	F	0 - 49
2450371	Malathion	14.4	Spike	P	0 - 77
2450371	Metalaxyl	7.09	Spike	P	0 - 76
2450371	Metolachlor	9.55	Spike	P	0 - 29
2450371	Metribuzin	4.68	Spike	P	0 - 51
2450371	Mevinphos	27.2	Spike	P	0 - 31
2450371	Molinate	31.5	Spike	P	0 - 39
2450371	Myclobutanil	8.80	Spike	P	0 - 34
2450371	Naled	33.1	Spike	P	0 - 37
2450371	Norflurazon	21.0	Spike	P	0 - 54
2450371	Oxadiazon	13.7	Spike	P	0 - 34
2450371	Oxyfluorfen	3.89	Spike	P	0 - 28
2450371	Parathion Ethyl	8.68	Spike	P	0 - 31
2450371	Parathion Methyl	1.86	Spike	P	0 - 29
2450371	Pendimethalin	7.03	Spike	P	0 - 31
2450371	Phorate	19.4	Spike	P	0 - 36
2450371	Prodiamine	23.2	Spike	P	0 - 68
2450371	Prometon	11.3	Spike	P	0 - 35
2450371	Prometryn	7.67	Spike	P	0 - 33
2450371	Pronamide	5.41	Spike	P	0 - 24
2450371	Propiconazole	21.7	Spike	P	0 - 44
2450371	Pyriproxyfen	7.43	Spike	P	0 - 82
2450371	Simazine	6.61	Spike	P	0 - 29
2450371	Sulfentrazone	87.1	Spike	F	0 - 64
2450371	Tebuconazole	6.47	Spike	P	0 - 76
2450371	Terbufos	26.2	Spike	P	0 - 29
2450371	Terbutylazine	11.3	Spike	P	0 - 28

Reference Method: EPA 8321B

Batch ID: P437555

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449881	Sucralose	7.76	Spike	P	0 - 30

Reference Method: EPA 8321B

Batch ID: P437568

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450109	Ibuprofen	6.67	Spike	P	0 - 30
2450109	Naproxen	21.6	Spike	P	0 - 30

Reference Method: SM 2320 B-2011

Batch ID: P438025

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450882	Total Alkalinity	0.0647	Sample	P	0 - 3.9

Quality Assurance Report Precision

Reference Method: SM 2320 B-2011
Batch ID: P438026

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450091	Total Alkalinity	0.511	Sample	P	0 - 3.9

Reference Method: SM 4500-F- C-2011
Batch ID: P438029

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450882	Fluoride	1.40	Spike	P	0 - 1.9

Reference Method: SM 4500-F- C-2011
Batch ID: P438030

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450091	Fluoride	0.0	Spike	P	0 - 1.9

Reference Method: SM 5310 B-2011
Batch ID: P437786

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450184	Organic Carbon	5.77	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437885

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2449972	Organic Carbon	1.01	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437886

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450185	Organic Carbon	6.05	Spike	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437966

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2450092	Organic Carbon	2.00	Sample	P	0 - 20

Reference Method: SM 5310 B-2011
Batch ID: P437994

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2451730	Organic Carbon	3.20	Spike	P	0 - 20

Quality Assurance Report Precision

* Sample, spike and/or laboratory control sample precision (LCS) is reported.

Quality Assurance Report Surrogates

Lab Sample ID: 2450102
Field Sample ID: EFF-01 GRAB

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 522	1,4-Dioxane-d8	75.8	P	70 - 130

Lab Sample ID: 2450103
Field Sample ID: FIELD BLANKS

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 522	1,4-Dioxane-d8	101	P	70 - 130

Lab Sample ID: 2450104
Field Sample ID: EFF-01 GRAB

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 625	2-Fluorobiphenyl	129	P	30 - 150
EPA 625	2-Fluorophenol	103	P	20 - 150
EPA 625	2,4,6-Tribromophenol	138	P	30 - 150
EPA 625	Nitrobenzene-d5	137	P	30 - 150
EPA 625	Phenol-d5	78.5	P	20 - 150
EPA 625	Terphenyl-d14	122	P	30 - 150

Lab Sample ID: 2450105
Field Sample ID: FIELD BLANKS

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 625	2-Fluorobiphenyl	130	P	30 - 150
EPA 625	2-Fluorophenol	92.5	P	20 - 150
EPA 625	2,4,6-Tribromophenol	138	P	30 - 150
EPA 625	Nitrobenzene-d5	137	P	30 - 150
EPA 625	Phenol-d5	68.3	P	20 - 150
EPA 625	Terphenyl-d14	121	P	30 - 150

Lab Sample ID: 2450121
Field Sample ID: EFF-01 GRAB

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	65.6	P	30 - 160
EPA 8321B	Sucralose-d6	124	P	30 - 160

Lab Sample ID: 2450122
Field Sample ID: FIELD BLANKS

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	65.2	P	30 - 160
EPA 8321B	Sucralose-d6	93.0	P	30 - 160

Lab Sample ID: 2450126
Field Sample ID: EFF-01 GRAB

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	67.9	P	20 - 200
EPA 8270E	Simazine-d10	82.1	P	58 - 137
EPA 8270E	Terbufos-d10	73.3	P	50 - 134

Quality Assurance Report Surrogates

Lab Sample ID: 2450127

Field Sample ID: FIELD BLANKS

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	Caffeine-d9	68.7	P	20 - 200
EPA 8270E	Simazine-d10	88.4	P	58 - 137
EPA 8270E	Terbufos-d10	75.6	P	50 - 134

Lab Sample ID: 2450196

Field Sample ID: Navarre Beach WWTP Control

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 522	1,4-Dioxane-d8	76.1	P	70 - 130

Lab Sample ID: 2450197

Field Sample ID: Navarre Beach WWTP Test 1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 522	1,4-Dioxane-d8	79.0	P	70 - 130

Lab Sample ID: 2450198

Field Sample ID: Navarre Beach WWTP Test 2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 522	1,4-Dioxane-d8	112	P	70 - 130

Lab Sample ID: 2450199

Field Sample ID: Navarre Beach WWTP Control

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	66.7	P	30 - 160
EPA 8321B	Sucralose-d6	47.1	P	30 - 160

Lab Sample ID: 2450200

Field Sample ID: Navarre Beach WWTP Test 1

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	67.0	P	30 - 160
EPA 8321B	Sucralose-d6	95.5	P	30 - 160

Lab Sample ID: 2450201

Field Sample ID: Navarre Beach WWTP Test 2

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8321B	Ibuprofen-d3	58.5	P	30 - 160
EPA 8321B	Sucralose-d6	92.3	P	30 - 160

Quality Assurance Report Calibration Verification

Reference Method: EPA 180.1 Rev. 2.0

Run ID: A122634

Included Lab Sample IDs: 2450091, 2450096, 2450181, 2450182, 2450183

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

Reference Method: DEP SOP: NU-094-1

Run ID: A122635

Included Lab Sample IDs: 2450091, 2450096, 2450181, 2450182, 2450183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Color (true)	101	98.6	P/P	90 - 110
Color (true)	101	100	P/P	90 - 110
Color (true)	98.6	98.3	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0 dissolved

Run ID: A122636

Included Lab Sample IDs: 2450093, 2450098, 2450187, 2450188, 2450189

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
O-Phosphate-P	100	98.9	P/P	90 - 110
O-Phosphate-P	98.5	98.9	P/P	90 - 110
O-Phosphate-P	99.3	99.7	P/P	90 - 110
O-Phosphate-P	99.7	100	P/P	90 - 110

Reference Method: EPA 8321B

Run ID: A122684

Included Lab Sample IDs: 2450121, 2450122, 2450199, 2450200, 2450201

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Sucralose	112	121	P/P	60 - 160
Sucralose	114	112	P/P	60 - 160

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122698

Included Lab Sample IDs: 2450123, 2450125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	100	102	P/P	90 - 110
Calcium	102	99.6	P/P	90 - 110
Iron	101	99.0	P/P	90 - 110
Iron	99.5	101	P/P	90 - 110
Magnesium	101	99.3	P/P	90 - 110
Magnesium	99.6	101	P/P	90 - 110
Potassium	100	98.5	P/P	90 - 110
Potassium	98.7	100	P/P	90 - 110
Sodium	100	98.5	P/P	90 - 110
Sodium	98.7	99.7	P/P	90 - 110
Zinc	100	99.8	P/P	90 - 110
Zinc	99.8	99.9	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122699

Included Lab Sample IDs: 2450123, 2450124, 2450125

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	100	102	P/P	90 - 110
Aluminum	103	100	P/P	90 - 110
Arsenic	101	98.6	P/P	90 - 110
Arsenic	98.6	100	P/P	90 - 110
Cadmium	100	101	P/P	90 - 110
Cadmium	101	101	P/P	90 - 110
Chromium	98.1	97.8	P/P	90 - 110
Chromium	98.4	98.1	P/P	90 - 110
Copper	101	96.8	P/P	90 - 110
Copper	96.8	96.3	P/P	90 - 110
Lead	100	98.7	P/P	90 - 110
Lead	98.7	100	P/P	90 - 110
Nickel	102	99.1	P/P	90 - 110
Nickel	99.1	101	P/P	90 - 110
Selenium	101	102	P/P	90 - 110
Selenium	101	101	P/P	90 - 110
Silver	95.5	95.9	P/P	90 - 110
Silver	95.9	95.9	P/P	90 - 110

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122706

Included Lab Sample IDs: 2450184, 2450185, 2450186

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122709

Included Lab Sample IDs: 2450097

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

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122713

Included Lab Sample IDs: 2450097

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	99.6	102	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A122724

Included Lab Sample IDs: 2450184

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.4	94.0	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 8321B

Run ID: A122727

Included Lab Sample IDs: 2450121, 2450122, 2450199, 2450200, 2450201

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ibuprofen	91.7	95.6	P/P	50 - 160
Naproxen	106	104	P/P	50 - 160

Reference Method: EPA 351.2 Rev. 2.0

Run ID: A122728

Included Lab Sample IDs: 2450092, 2450094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Kjeldahl Nitrogen	102	107	P/P	90 - 110

Reference Method: EPA 200.7 Rev. 4.4

Run ID: A122753

Included Lab Sample IDs: 2450202, 2450203, 2450204

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Calcium	95.7	93.6	P/P	90 - 110
Iron	94.6	94.4	P/P	90 - 110
Magnesium	94.4	93.9	P/P	90 - 110
Potassium	100	101	P/P	90 - 110
Sodium	102	103	P/P	90 - 110
Zinc	98.8	96.8	P/P	90 - 110

Reference Method: EPA 200.8 Rev. 5.4

Run ID: A122754

Included Lab Sample IDs: 2450202, 2450203, 2450204

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Aluminum	102	101	P/P	90 - 110
Arsenic	102	102	P/P	90 - 110
Cadmium	99.8	99.7	P/P	90 - 110
Chromium	101	100	P/P	90 - 110
Chromium	102	101	P/P	90 - 110
Copper	99.0	98.0	P/P	90 - 110
Lead	104	103	P/P	90 - 110
Lead	104	104	P/P	90 - 110
Nickel	99.7	98.9	P/P	90 - 110
Selenium	102	102	P/P	90 - 110
Silver	99.0	99.0	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A122760

Included Lab Sample IDs: 2450097, 2450185

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.4	96.0	P/P	90 - 110
Organic Carbon	96.6	91.4	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122770

Included Lab Sample IDs: 2450097, 2450184, 2450185, 2450186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total-P	98.2	98.0	P/P	90 - 110
Total-P	99.8	100	P/P	90 - 110

Reference Method: EPA 625

Run ID: A122773

Included Lab Sample IDs: 2450104, 2450105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1,2,4-Trichlorobenzene	104		P	70 - 130
2-Chloronaphthalene	105		P	70 - 130
2-Chlorophenol	97.5		P	70 - 130
2-Nitrophenol	89.4		P	70 - 130
2,4-Dichlorophenol	98.9		P	70 - 130
2,4-Dimethylphenol	99.3		P	70 - 130
2,4-Dinitrotoluene	101		P	70 - 130
2,4,6-Trichlorophenol	96.4		P	70 - 130
2,6-Dinitrotoluene	122		P	70 - 130
4-Bromophenyl phenyl ether	103		P	70 - 130
4-Chloro-3-methylphenol	89.7		P	70 - 130
4-Chlorophenyl phenyl ether	106		P	70 - 130
Acenaphthene	106		P	70 - 130
Acenaphthylene	107		P	70 - 130
Anthracene	102		P	70 - 130
Benzo(a)anthracene	104		P	70 - 130
Benzo(a)pyrene	107		P	70 - 130
Benzo(b)fluoranthene	98.4		P	70 - 130
Benzo(g,h,i)perylene	94.6		P	70 - 130
Benzo(k)fluoranthene	118		P	70 - 130
Bis(2-chloroethoxy)methane	93.6		P	70 - 130
Bis(2-chloroethyl)ether	92.8		P	70 - 130
Bis(2-chloroisopropyl)ether	105		P	70 - 130
Chrysene	108		P	70 - 130
Di-n-octyl phthalate	94.9		P	70 - 130
Dibenzo(a,h)anthracene	91.0		P	70 - 130
Dimethyl phthalate	105		P	70 - 130
Fluoranthene	105		P	70 - 130
Fluorene	108		P	70 - 130
Hexachlorobenzene	104		P	70 - 130
Hexachlorobutadiene	104		P	70 - 130
Hexachlorocyclopentadiene	108		P	70 - 130
Hexachloroethane	104		P	70 - 130
Indeno(1,2,3-cd)pyrene	99.1		P	70 - 130
Isophorone	100		P	70 - 130
N-Nitrosodi-n-propylamine	99.5		P	70 - 130
Naphthalene	102		P	70 - 130
Nitrobenzene	97.4		P	70 - 130
Phenanthrene	102		P	70 - 130
Phenol	103		P	70 - 130
Pyrene	109		P	70 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 625

Run ID: A122780

Included Lab Sample IDs: 2450104, 2450105

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
2-Methyl-4,6-dinitrophenol	117		P	70 - 130
2,4-Dinitrophenol	100		P	70 - 130
3,3'-Dichlorobenzidine	73.5		P	50 - 130
4-Nitrophenol	96.0		P	70 - 130
Benzidine	62.2		P	50 - 130
Bis(2-ethylhexyl)phthalate	95.3		P	70 - 130
Butyl benzyl phthalate	95.2		P	70 - 130
Di-n-butyl phthalate	97.0		P	70 - 130
Diethyl phthalate	96.0		P	70 - 130
N-Nitrosodimethylamine	107		P	70 - 130
Pentachlorophenol	96.2		P	70 - 130

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122790

Included Lab Sample IDs: 2450184, 2450185, 2450186

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

Reference Method: SM 5310 B-2011

Run ID: A122792

Included Lab Sample IDs: 2450092, 2450094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	96.6	97.0	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122806

Included Lab Sample IDs: 2450097, 2450184, 2450185, 2450186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	98.0	99.9	P/P	90 - 110
Ammonia-N	99.0	99.4	P/P	90 - 110

Reference Method: SM 5310 B-2011

Run ID: A122810

Included Lab Sample IDs: 2450186

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Organic Carbon	95.0	94.8	P/P	90 - 110

Reference Method: SM 2320 B-2011

Run ID: A122818

Included Lab Sample IDs: 2450091, 2450096, 2450181, 2450182, 2450183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Total Alkalinity	101	97.3	P/P	90 - 110
Total Alkalinity	97.3	100	P/P	90 - 110

Quality Assurance Report Calibration Verification

Reference Method: SM 4500-F- C-2011

Run ID: A122818

Included Lab Sample IDs: 2450091, 2450096, 2450181, 2450182, 2450183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Fluoride	102	101	P/P	90 - 110
Fluoride	104	102	P/P	90 - 110

Reference Method: EPA 350.1 Rev. 2.0

Run ID: A122831

Included Lab Sample IDs: 2450092, 2450094

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Ammonia-N	99.1	98.8	P/P	90 - 110

Reference Method: EPA 365.1 Rev. 2.0

Run ID: A122844

Included Lab Sample IDs: 2450092, 2450094

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

Reference Method: EPA 353.2 Rev. 2.0

Run ID: A122849

Included Lab Sample IDs: 2450092, 2450094

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

Reference Method: EPA 300.0 Rev. 2.1

Run ID: A122874

Included Lab Sample IDs: 2450091, 2450096, 2450181, 2450182, 2450183

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chloride	102	105	P/P	90 - 110
Chloride	105	107	P/P	90 - 110
Sulfate	100	103	P/P	90 - 110
Sulfate	104	107	P/P	90 - 110

Reference Method: EPA 8270E

Run ID: A122948

Included Lab Sample IDs: 2450126, 2450127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Acetochlor	86.4		P	80 - 120
Alachlor	95.8		P	80 - 120
Ametryn	100		P	80 - 120
Atrazine	84.3		P	80 - 120
Atrazine Desethyl	101		P	80 - 120
Azinphos Methyl	108		P	80 - 120
Azoxystrobin	88.0		P	80 - 120
Bromacil	97.5		P	80 - 120
Butylate	104		P	80 - 120
Carbophenothion	108		P	80 - 120
Carfentrazone Ethyl	96.3		P	80 - 120
Chlorpyrifos Ethyl	93.9		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A122948

Included Lab Sample IDs: 2450126, 2450127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Chlorpyrifos Methyl	109		P	80 - 120
Cyanazine	98.4		P	80 - 120
Demeton	102		P	80 - 120
Diazinon	109		P	80 - 120
Difenoconazole	117		P	80 - 120
Dimethenamid	104		P	80 - 120
Disulfoton	94.0		P	80 - 120
Dithiopyr	98.2		P	80 - 120
EPTC	103		P	80 - 120
Ethion	89.2		P	80 - 120
Ethoprop	101		P	80 - 120
Fenamiphos	99.1		P	80 - 120
Fenbuconazole	92.1		P	80 - 120
Fipronil	89.1		P	80 - 120
Fipronil Desulfinyl	114		P	80 - 120
Fipronil Sulfide	105		P	80 - 120
Fipronil Sulfone	105		P	80 - 120
Fluazifop-P-butyl	108		P	80 - 120
Fludioxonil	94.4		P	80 - 120
Flumioxazin	106		P	80 - 120
Flutolanil	106		P	80 - 120
Fluxapyroxad	102		P	80 - 120
Fonofos	102		P	80 - 120
Hexazinone	98.7		P	80 - 120
Imazalil	103		P	80 - 120
Iprodione	90.1		P	80 - 120
Malathion	96.3		P	80 - 120
Metaxyl	98.3		P	80 - 120
Metolachlor	106		P	80 - 120
Metribuzin	96.9		P	80 - 120
Mevinphos	102		P	80 - 120
Molinate	91.1		P	80 - 120
Myclobutanil	89.5		P	80 - 120
Naled	106		P	80 - 120
Norflurazon	97.0		P	80 - 120
Oxadiazon	97.5		P	80 - 120
Oxyfluorfen	102		P	80 - 120
Parathion Ethyl	99.6		P	80 - 120
Parathion Methyl	97.5		P	80 - 120
Pendimethalin	103		P	80 - 120
Phorate	107		P	80 - 120
Prodiamine	113		P	80 - 120
Prometon	107		P	80 - 120
Prometryn	107		P	80 - 120
Pronamide	100		P	80 - 120
Propiconazole	94.2		P	80 - 120
Pyriproxyfen	112		P	80 - 120
Simazine	90.3		P	80 - 120
Sulfentrazone	93.3		P	80 - 120
Tebuconazole	98.4		P	80 - 120
Terbufos	105		P	80 - 120

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A122948

Included Lab Sample IDs: 2450126, 2450127

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Terbutylazine	89.5		P	80 - 120

Reference Method: EPA 522

Run ID: A123012

Included Lab Sample IDs: 2450102, 2450103, 2450196, 2450197, 2450198

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1,4-Dioxane	109		P	70 - 130

* 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
DEP SOP: NU-094-1	Color (true)	101					7.85	
	Color (true)	101						
EPA 180.1 Rev. 2.0	Turbidity	104					6.00	
	Turbidity	104					16.5	
EPA 200.7 Rev. 4.4	Calcium	105	101	102				2.60
	Calcium	98.2						1.27
	Iron	111	107	106	109			0.489
	Iron	100	95.8	95.7				0.0575
	Magnesium	105	100	108				1.89
	Magnesium	96.8						0.373
	Potassium	102	106	105	100			0.905
	Potassium	101						0.226
	Sodium	107	106	103	101			2.11
	Sodium	103						1.57
	Zinc	98.1	94.5	95.0	97.8			0.466
	Zinc	98.3	95.3	95.2				0.119
EPA 200.8 Rev. 5.4	Aluminum	102	101					4.67
	Aluminum	103	107	106				0.592
	Arsenic	100	100	101	101			1.02
	Arsenic	101	113	113				0.425
	Cadmium	100	99.8	102	103			1.99
	Cadmium	103	95.1	97.1				2.03
	Chromium	96.3	99.7	94.7	95.1			3.76
	Chromium	103	93.5	95.2				1.71
	Copper	101	98.9	98.6	99.1			0.426
	Copper	97.8	90.6	102				11.3
	Lead	97.4	100	100	99.5			0.180
	Lead	107	115	116				0.996
	Nickel	99.5	96.5	96.8	96.9			0.243
	Nickel	98.7	91.5	91.7				0.180
	Selenium	101	98.2	101	96.6			3.19
	Selenium	101	103	102				0.627
	Silver	101	102	103	99.7			0.760
	Silver	106	94.9	95.9				0.973
EPA 300.0 Rev. 2.1	Chloride	99.8	95.2	96.7			0.396	
	Chloride	105	101				1.25	
	Sulfate	98.1	96.5	99.2			0.690	
	Sulfate	104	102				1.41	
EPA 350.1 Rev. 2.0	Ammonia-N	99.6	97.6	98.8				0.798
	Ammonia-N	99.6	102	104				2.17
	Ammonia-N	98.0	97.4	99.0				0.921
EPA 351.2 Rev. 2.0	Kjeldahl Nitrogen	101	102	97.5				4.42
	Kjeldahl Nitrogen	104	105	100				2.36
	Kjeldahl Nitrogen	101	97.1	101				3.21
EPA 353.2 Rev. 2.0	NO2NO3-N	100	98.0					1.15
	NO2NO3-N	104	103	105				1.20
	NO2NO3-N	102	99.2					0.0
EPA 365.1 Rev. 2.0	Total-P	102	101	101				0.0495
	Total-P	107	109	108				0.845
	Total-P	106						0.262
EPA 365.1 Rev. 2.0 dissolved	O-Phosphate-P	99.5	98.8	101				2.26
	O-Phosphate-P	100	99.3	97.4				1.44
	O-Phosphate-P	101	104	104				0.673
	O-Phosphate-P	102	102	101				0.435

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery		MS % Recovery		LCS	Precision	MS
							SMP	
EPA 522	1,4-Dioxane	83.4	73.4	82.2	89.4	12.8		8.32
EPA 625	1,2,4-Trichlorobenzene	97.9		97.8	101			3.22
	2-Chloronaphthalene	104		101	107			5.97
	2-Chlorophenol	95.8		98.2	103			4.97
	2-Methyl-4,6-dinitrophenol	126		128	137			6.80
	2-Nitrophenol	110		110	111			0.543
	2,4-Dichlorophenol	105		104	109			4.12
	2,4-Dimethylphenol	111		117	121			3.03
	2,4-Dinitrophenol	74.7		132	157			17.1
	2,4-Dinitrotoluene	115		109	114			4.83
	2,4,6-Trichlorophenol	108		105	110			5.40
	2,6-Dinitrotoluene	128		125	128			2.36
	3,3'-Dichlorobenzidine	149		130	127			2.17
	4-Bromophenyl phenyl ether	111		107	109			2.13
	4-Chloro-3-methylphenol	107		106	110			2.96
	4-Chlorophenyl phenyl ether	94.5		91.3	95.6			4.55
	4-Nitrophenol	104		100	105			5.16
	Acenaphthene	109		105	110			5.03
	Acenaphthylene	105		102	107			4.20
	Anthracene	113		103	105			1.92
	Benzydine	103		41.3	42.7			3.39
	Benzo(a)anthracene	113		108	108			0.0926
	Benzo(a)pyrene	109		106	108			1.97
	Benzo(b)fluoranthene	121		108	112			3.45
	Benzo(g,h,i)perylene	115		112	114			1.42
	Benzo(k)fluoranthene	126		118	120			1.68
	Bis(2-chloroethoxy)methane	106		107	110			3.59
	Bis(2-chloroethyl)ether	99.0		102	105			3.01
	Bis(2-chloroisopropyl)ether	99.6		101	106			4.36
	Bis(2-ethylhexyl)phthalate	125		124	121			2.04
	Butyl benzyl phthalate	118		99.0	98.7			0.263
	Chrysene	113		111	109			1.91
	Di-n-butyl phthalate	122		118	121			2.50
	Di-n-octyl phthalate	115		110	113			2.42
	Dibenzo(a,h)anthracene	115		112	113			1.42
	Diethyl phthalate	121		114	120			4.44
	Dimethyl phthalate	94.1		90.3	94.5			4.51
	Fluoranthene	115		110	113			2.60
	Fluorene	112		109	114			4.66
	Hexachlorobenzene	112		108	110			2.66
	Hexachlorobutadiene	95.0		96.4	98.5			2.15
	Hexachlorocyclopentadiene	127		87.3	105			18.0
	Hexachloroethane	93.2		94.3	99.0			4.86
	Indeno(1,2,3-cd)pyrene	109		107	107			0.187
	Isophorone	108		108	110			2.57
	N-Nitrosodi-n-propylamine	102		104	110			5.51
	N-Nitrosodimethylamine	89.6		101	102			1.58
	Naphthalene	102		102	104			2.43
	Nitrobenzene	102		104	107			2.57
	Pentachlorophenol	113		124	122			1.79
	Phenanthrene	115		110	113			2.33
	Phenol	49.7		55.6	58.9			5.76
	Pyrene	115		110	110			0.182
EPA 8270E	Acetochlor	91.8		86.2	76.9			11.4

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Alachlor	92.5	80.8	74.7			7.74
	Ametryn	103	105	93.2			11.4
	Atrazine	84.2	77.5	78.1			0.414
	Atrazine Desethyl	93.7	94.5	106			11.7
	Azinphos Methyl	125	151	224			39.1
	Azoxystrobin	88.4					1.95
	Bromacil	91.7	86.8	83.3			4.04
	Butylate	42.6	36.3	47.2			26.1
	Carbophenothion	98.7	87.9	79.2			10.5
	Carfentrazone Ethyl	102	93.8	80.2			15.7
	Chlorpyrifos Ethyl	91.1	84.3	101			17.9
	Chlorpyrifos Methyl	106	107	127			17.0
	Cyanazine	111	111	111			0.0282
	Demeton	58.7	74.5	98.9			28.2
	Diazinon	103	107	109			1.25
	Difenoconazole	103					8.23
	Dimethenamid	91.8	78.2	89.9			13.9
	Disulfoton	82.3	100	93.5			6.97
	Dithiopyr	99.3	78.7	96.6			20.4
	EPTC	42.8	41.0	34.4			17.7
	Ethion	94.4	51.4	83.1			47.2
	Ethoprop	75.3	102	80.2			22.0
	Fenamiphos	104	114	96.2			16.6
	Fenbuconazole	102	91.4	79.7			13.6
	Fipronil	89.8	83.0	72.8			12.6
	Fipronil Desulfinyl	107	106	77.8			28.8
	Fipronil Sulfide	102	74.0	64.9			6.38
	Fipronil Sulfone	81.3	79.4	54.8			18.1
	Fluazifop-P-butyl	94.8	98.7	104			4.85
	Fludioxonil	77.9					3.97
	Flumioxazin	116	118	97.9			18.9
	Flutolanil	103	105	101			4.57
	Fluxapyroxad	82.9	84.2	258			75.7
	Fonofos	76.6	82.6	96.7			15.8
	Hexazinone	93.0	104	110			5.79
	Imazalil	100	105	101			3.54
	Iprodione	103	83.6	156			60.1
	Malathion	98.0	97.0	112			14.4
	Metalaxyl	87.7	71.6	78.9			7.09
	Metolachlor	101					9.55
	Metribuzin	93.7	91.6	96.3			4.68
	Mevinphos	63.9	67.2	88.3			27.2
	Molinate	44.0	47.3	65.0			31.5
	Myclobutanil	91.9	85.1	78.0			8.80
	Naled	39.9	32.5	23.3			33.1
	Norflurazon	100	89.4	72.4			21.0
	Oxadiazon	89.1	85.3	74.3			13.7
	Oxyfluorfen	117	114	109			3.89
	Parathion Ethyl	99.0	97.0	89.0			8.68
	Parathion Methyl	125	118	116			1.86
	Pendimethalin	122	134	125			7.03
	Phorate	67.6	81.9	99.5			19.4
	Prodiamine	48.5	46.7	59.0			23.2
	Prometon	103	100	89.7			11.3

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		Precision	
					LCS	MS
EPA 8270E	Prometryn	104	110	119		7.67
	Pronamide	112	104	98.1		5.41
	Propiconazole	94.8	94.7	74.3		21.7
	Pyriproxyfen	132	271	251		7.43
	Simazine	80.1	77.3	84.7		6.61
	Sulfentrazone	81.2	85.2	217		87.1
	Tebuconazole	99.0	86.0	80.6		6.47
	Terbufos	77.5	86.5	113		26.2
	Terbutylazine	80.5	75.9	85.0		11.3
	Ibuprofen	58.7	64.1	60.0		6.67
EPA 8321B	Naproxen	54.1	73.0	90.7		21.6
	Sucralose	100	106	114		7.76
SM 2320 B-2011	Total Alkalinity	101			0.0647	
	Total Alkalinity	101			0.511	
SM 2540 D-2015	TSS	93.6				
	TSS	108				
SM 4500-F- C-2011	Fluoride	102	102	104		1.40
	Fluoride	103	100	100		0.0
SM 5310 B-2011	Organic Carbon	96.2	85.9	91.1		5.77
	Organic Carbon	94.5	93.9	95.2		1.01
	Organic Carbon	96.1	86.6	92.0		6.05
	Organic Carbon	98.6	98.2		2.00	
	Organic Carbon	95.7	85.1	88.5		3.20

Reference Method Descriptions

Method	Description	Associated Samples
DEP SOP: NU-094-1	True Color measured at 450 nm (not valid for NPDES monitoring)	2450091, 2450096, 2450181, 2450182, 2450183
EPA 180.1 Rev. 2.0	Turbidity in aqueous matrices	2450091, 2450096, 2450181, 2450182, 2450183
EPA 200.7 Rev. 4.4	Total Recoverable Metals analysis using ICP emission spectroscopy for aqueous samples supporting Clean Water Act Projects	2450123, 2450125, 2450202, 2450203, 2450204
EPA 200.8 Rev. 5.4	Total Recoverable Metals analysis using ICP-MS for aqueous samples supporting Clean Water Act Projects	2450123, 2450124, 2450125, 2450202, 2450203, 2450204
EPA 300.0 Rev. 2.1	Chloride in aqueous matrices	2450091, 2450096, 2450181, 2450182, 2450183
EPA 300.0 Rev. 2.1	Sulfate in aqueous matrices	2450091, 2450096, 2450181, 2450182, 2450183
EPA 350.1 Rev. 2.0	Ammonia in aqueous matrices as mg N/L	2450092, 2450094, 2450097, 2450184, 2450185, 2450186
EPA 351.2 Rev. 2.0	Total Kjeldahl Nitrogen in aqueous matrices	2450092, 2450094, 2450097, 2450184, 2450185, 2450186
EPA 353.2 Rev. 2.0	Nitrite/Nitrate in aqueous matrices as mg N/L	2450092, 2450094, 2450097, 2450184, 2450185, 2450186
EPA 365.1 Rev. 2.0	Total Phosphorus in aqueous matrices as mg P/L	2450092, 2450094, 2450097, 2450184, 2450185, 2450186
EPA 365.1 Rev. 2.0 dissolved	Ortho-phosphate, dissolved, in filtered, aqueous matrices as mg P/L	2450093, 2450098, 2450187, 2450188, 2450189
EPA 522	1,4-Dioxane in Aqueous Matrices by GC/MS using SIM	2450102, 2450103, 2450196, 2450197, 2450198
EPA 625	EPA Method 625 with 3510C prep, Semi-volatile organic pollutants including PAHs, excluding PCBs and Toxaphene, in water matrices by GC/MS.	2450104, 2450105
EPA 8270E	Organonitrogen and phosphorus pesticides in water matrices by GC/MS/MS	2450126, 2450127
EPA 8321B	Pesticides, herbicides, and other chemicals in water matrices by HPLC/MS/MS	2450121, 2450122, 2450199, 2450200, 2450201

Reference Method Descriptions

Method	Description	Associated Samples
SM 2320 B-2011	Alkalinity in aqueous matrices as mg CaCO3/L	2450091, 2450096, 2450181, 2450182, 2450183
SM 2540 D-2015	Total Suspended Solids in aqueous matrices using a maximum of 250 mL of sample	2450095, 2450181, 2450182, 2450183
SM 4500-F- C-2011	Fluoride in aqueous matrices, without distillation (not valid for NPDES monitoring)	2450091, 2450096, 2450181, 2450182, 2450183
SM 5310 B-2011	Nonpurgeable Organic Carbon in aqueous matrices	2450092, 2450094, 2450097, 2450184, 2450185, 2450186

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
DEP SOP: NU-094-1	11/08/2023			11/08/2023 15:51	Anna M. Plaviak	2450096
	11/08/2023			11/08/2023 15:56	Anna M. Plaviak	2450181
	11/08/2023			11/08/2023 15:57	Anna M. Plaviak	2450183
	11/08/2023			11/08/2023 16:02	Anna M. Plaviak	2450091
	11/08/2023			11/08/2023 16:15	Anna M. Plaviak	2450182
EPA 180.1 Rev. 2.0	11/08/2023			11/08/2023 14:55	Samantha L Bates	2450091
	11/08/2023			11/08/2023 14:56	Samantha L Bates	2450096
	11/08/2023			11/08/2023 15:08	Samantha L Bates	2450181
	11/08/2023			11/08/2023 15:09	Samantha L Bates	2450182
	11/08/2023			11/08/2023 15:11	Samantha L Bates	2450183
EPA 200.7 Rev. 4.4	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 17:45	Chase Roberts	2450125
	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 21:01	Chase Roberts	2450123
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 21:57	Samatha Luckman	2450202
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 22:07	Samatha Luckman	2450202
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 22:15	Samatha Luckman	2450203
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 22:25	Samatha Luckman	2450203
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 22:33	Samatha Luckman	2450204
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 22:43	Samatha Luckman	2450204
EPA 200.8 Rev. 5.4	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 19:49	Emily M Philpot	2450125
	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 22:11	Emily M Philpot	2450123
	11/08/2023	11/09/2023 13:40	George D Taylor	11/13/2023 22:20	Emily M Philpot	2450124
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 19:39	Emily M Philpot	2450202
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 20:55	Emily M Philpot	2450203
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 21:04	Emily M Philpot	2450204
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 21:23	Emily M Philpot	2450202
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 21:33	Emily M Philpot	2450203
	11/08/2023	11/13/2023 13:35	George D Taylor	11/15/2023 21:42	Emily M Philpot	2450204
	11/08/2023			11/21/2023 20:33	James L Waggeberby	2450096
EPA 300.0 Rev. 2.1	11/08/2023			11/21/2023 21:34	James L Waggeberby	2450181
	11/08/2023			11/21/2023 21:49	James L Waggeberby	2450182
	11/08/2023			11/21/2023 22:04	James L Waggeberby	2450183
	11/08/2023			11/22/2023 15:12	James L Waggeberby	2450091
	11/08/2023			11/17/2023 15:13	Khloe J Berg	2450097
EPA 350.1 Rev. 2.0	11/08/2023			11/17/2023 16:18	Khloe J Berg	2450184
	11/08/2023			11/17/2023 16:22	Khloe J Berg	2450185
	11/08/2023			11/17/2023 16:23	Khloe J Berg	2450186
	11/08/2023			11/20/2023 14:34	Khloe J Berg	2450092
	11/08/2023			11/20/2023 14:38	Khloe J Berg	2450094
EPA 351.2 Rev. 2.0	11/08/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 12:51	Samantha L Bates	2450184
	11/08/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 12:52	Samantha L Bates	2450185

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 351.2 Rev. 2.0	11/08/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 12:57	Samantha L Bates	2450186
	11/08/2023	11/13/2023 14:50	Simonne.V. Calhoun	11/14/2023 17:13	Samantha L Bates	2450097
	11/08/2023	11/14/2023 11:29	Simonne.V. Calhoun	11/15/2023 11:12	Samantha L Bates	2450092
	11/08/2023	11/14/2023 11:29	Simonne.V. Calhoun	11/15/2023 11:19	Samantha L Bates	2450094
EPA 353.2 Rev. 2.0	11/08/2023			11/14/2023 13:10	Fadila Guebre	2450097
	11/08/2023			11/16/2023 11:06	Anna M. Plaviak	2450184
	11/08/2023			11/16/2023 11:07	Anna M. Plaviak	2450185
	11/08/2023			11/16/2023 11:08	Anna M. Plaviak	2450186
	11/08/2023			11/20/2023 15:29	Anna M. Plaviak	2450092
	11/08/2023			11/20/2023 15:35	Anna M. Plaviak	2450094
EPA 365.1 Rev. 2.0	11/08/2023	11/15/2023 11:07	Adam P Silver	11/16/2023 11:22	James L Waggeberby	2450184
	11/08/2023	11/15/2023 11:07	Adam P Silver	11/16/2023 11:23	James L Waggeberby	2450185
	11/08/2023	11/15/2023 11:07	Adam P Silver	11/16/2023 11:24	James L Waggeberby	2450186
	11/08/2023	11/15/2023 11:07	Adam P Silver	11/16/2023 12:25	James L Waggeberby	2450097
	11/08/2023	11/16/2023 12:40	Adam P Silver	11/20/2023 17:00	Simonne.V. Calhoun	2450092
	11/08/2023	11/16/2023 12:40	Adam P Silver	11/20/2023 17:04	Simonne.V. Calhoun	2450094
EPA 365.1 Rev. 2.0 dissolved	11/08/2023			11/08/2023 15:19	Elise M. Gillis	2450098
	11/08/2023			11/08/2023 15:42	Elise M. Gillis	2450187
	11/08/2023			11/08/2023 15:43	Elise M. Gillis	2450188
	11/08/2023			11/08/2023 15:50	Elise M. Gillis	2450189
	11/08/2023			11/08/2023 16:42	Elise M. Gillis	2450093
EPA 522	11/08/2023	11/30/2023 09:18	Linda Giardelli	12/01/2023 14:29	Linda Giardelli	2450102
	11/08/2023	11/30/2023 09:18	Linda Giardelli	12/01/2023 14:48	Linda Giardelli	2450103
	11/08/2023	11/30/2023 09:18	Linda Giardelli	12/01/2023 15:07	Linda Giardelli	2450196
	11/08/2023	11/30/2023 09:18	Linda Giardelli	12/01/2023 15:26	Linda Giardelli	2450197
	11/08/2023	11/30/2023 09:18	Linda Giardelli	12/01/2023 15:45	Linda Giardelli	2450198
EPA 625	11/08/2023	11/14/2023 09:00	Hoor Shaik	11/16/2023 12:33	Juyoung Kim	2450104
	11/08/2023	11/14/2023 09:00	Hoor Shaik	11/16/2023 13:00	Juyoung Kim	2450105
	11/08/2023	11/14/2023 09:00	Hoor Shaik	11/16/2023 15:02	Juyoung Kim	2450104
	11/08/2023	11/14/2023 09:00	Hoor Shaik	11/16/2023 15:27	Juyoung Kim	2450105
EPA 8270E	11/08/2023	11/09/2023 08:30	Rasheda Ghaffari	11/17/2023 22:22	Vandana T. Nagar	2450126
	11/08/2023	11/09/2023 08:30	Rasheda Ghaffari	11/17/2023 22:49	Vandana T. Nagar	2450127
EPA 8321B	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 21:33	Tae K Lee	2450122
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 22:01	Tae K Lee	2450199
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 22:15	Tae K Lee	2450200
	11/08/2023	11/08/2023 16:00	Hana Lee	11/09/2023 22:29	Tae K Lee	2450201
	11/08/2023	11/08/2023 16:00	Hana Lee	11/10/2023 00:49	Tae K Lee	2450121
	11/08/2023	11/13/2023 11:00	Hoor Shaik	11/15/2023 03:49	Juyoung Kim	2450121
	11/08/2023	11/13/2023 11:00	Hoor Shaik	11/15/2023 04:07	Juyoung Kim	2450122
	11/08/2023	11/13/2023 11:00	Hoor Shaik	11/15/2023 04:25	Juyoung Kim	2450199

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8321B	11/08/2023	11/13/2023 11:00	Hoor Shaik	11/15/2023 04:43	Juyoung Kim	2450200
	11/08/2023	11/13/2023 11:00	Hoor Shaik	11/15/2023 05:00	Juyoung Kim	2450201
SM 2320 B-2011	11/08/2023			11/17/2023 07:38	Dale L. Simmons	2450181
	11/08/2023			11/17/2023 07:52	Dale L. Simmons	2450182
	11/08/2023			11/17/2023 08:06	Dale L. Simmons	2450183
	11/08/2023			11/17/2023 11:12	Dale L. Simmons	2450096
	11/08/2023			11/17/2023 11:36	Dale L. Simmons	2450091
SM 2540 D-2015	11/08/2023			11/09/2023 13:42	Yijie Li	2450095
	11/08/2023			11/13/2023 16:04	Yijie Li	2450181, 2450182, 2450183
SM 4500-F- C-2011	11/08/2023			11/17/2023 05:14	Dale L. Simmons	2450181
	11/08/2023			11/17/2023 05:19	Dale L. Simmons	2450182
	11/08/2023			11/17/2023 05:25	Dale L. Simmons	2450183
	11/08/2023			11/17/2023 11:12	Dale L. Simmons	2450096
	11/08/2023			11/17/2023 11:25	Dale L. Simmons	2450091
SM 5310 B-2011	11/08/2023			11/13/2023 23:14	Khloe J Berg	2450184
	11/08/2023			11/15/2023 19:03	Khloe J Berg	2450097
	11/08/2023			11/15/2023 23:44	Khloe J Berg	2450185
	11/08/2023			11/17/2023 10:51	Khloe J Berg	2450092
	11/08/2023			11/17/2023 11:21	Khloe J Berg	2450094
	11/08/2023			11/18/2023 01:57	Kenneth H Lee	2450186