

Chemical Analysis Report

NW-DIST-2022-09-20-02

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

Event Description: **Lake Powell**
Request ID: **RQ-2022-09-12-57**
Customer: **NW-DIST**
Project ID: **DISTRICT**

Send Reports to:
FL Dept. of Environmental Protection
160 W Government Street
Suite 308
Pensacola, FL 32502-5794
Attn: Stopher Slade

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Certified by: Dr. rer. nat. Bettina Steinbock, Environmental Administrator

Date Certified: 04-OCT-2022 17:04



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 group are included in this report: 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: Lake Powel cove E. of Origins 8

Collection Date/Time: 09/19/2022 16:10

Field ID: G3NW0243

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357706	EPA 8270E	Acenaphthene	0.026	U	ug/L	P419991	
		Acenaphthylene	0.026	U	ug/L	P419991	
		Acetophenone	0.21	U	ug/L	P419991	
		2-Acetylaminofluorene	1.0	U	ug/L	P419991	
		4-Aminobiphenyl	4.2	U	ug/L	P419991	
		Aniline	1.0	U	ug/L	P419991	
		Anthracene	0.052	U	ug/L	P419991	
		Azobenzene/1,2-Diphenylhydrazine**	0.052	U	ug/L	P419991	
		Benzidine	10	U	ug/L	P419991	
		Benzo(a)anthracene	0.026	U	ug/L	P419991	
		Benzo(a)pyrene	0.026	U	ug/L	P419991	
		Benzo(b)fluoranthene	0.026	U	ug/L	P419991	
		Benzo(k)fluoranthene	0.026	U	ug/L	P419991	
		Benzo(g,h,i)perylene	0.026	U	ug/L	P419991	
		Benzyl alcohol	0.21	U	ug/L	P419991	
		Bis(2-chloroethoxy)methane	0.052	U	ug/L	P419991	
		Bis(2-chloroethyl)ether	0.052	U	ug/L	P419991	
		Bis(2-chloroisopropyl)ether	0.052	U	ug/L	P419991	
		Bis(2-ethylhexyl)phthalate	5.2	U	ug/L	P419991	
		Butyl benzyl phthalate	1.0	U	ug/L	P419991	
		4-Bromophenyl phenyl ether	0.052	U	ug/L	P419991	
		2-Chloronaphthalene	0.052	U	ug/L	P419991	
		4-Chlorophenyl phenyl ether	0.052	U	ug/L	P419991	
		Carbazole	0.052	U	ug/L	P419991	
		Chrysene	0.026	U	ug/L	P419991	
		m,p-Cresols	0.052	U	ug/L	P419991	
		o-Cresol	0.052	U	ug/L	P419991	
		Di-n-butyl phthalate	2.1	U	ug/L	P419991	
		Di-n-octyl phthalate	0.052	U	ug/L	P419991	
		Dibenzo(a,h)anthracene	0.026	U	ug/L	P419991	
		Dibenzofuran	0.052	U	ug/L	P419991	
		3,3'-Dichlorobenzidine	10	U	ug/L	P419991	
		Diethyl phthalate	2.1	U	ug/L	P419991	
		Dimethyl phthalate	0.21	U	ug/L	P419991	
		Dimethylaminoazobenzene	0.052	U	ug/L	P419991	
		7,12-Dimethylbenz(a)anthracene	0.10	U	ug/L	P419991	
		1,3-Dinitrobenzene	0.21	U	ug/L	P419991	
		2,4-Dinitrotoluene	0.052	U	ug/L	P419991	
		2,6-Dinitrotoluene	0.052	U	ug/L	P419991	
		Dinoseb**	4.2	U	ug/L	P419991	
		Ethyl methanesulfonate	1.0	U	ug/L	P419991	
		Fluoranthene	0.052	U	ug/L	P419991	
		Fluorene	0.026	U	ug/L	P419991	
		Hexachlorobenzene	0.052	U	ug/L	P419991	

Field ID: G3NW0243

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357706	EPA 8270E	Hexachlorobutadiene	0.052	U	ug/L	P419991	
		Hexachlorocyclopentadiene	0.052	U	ug/L	P419991	
		Hexachloroethane	0.052	U	ug/L	P419991	
		Hexachloropropene	0.052	U	ug/L	P419991	
		Indeno(1,2,3-cd)pyrene	0.026	U	ug/L	P419991	
		Isophorone	0.052	U	ug/L	P419991	
		Isosafrole	0.052	U	ug/L	P419991	
		3-Methylcholanthrene	0.10	U	ug/L	P419991	
		2-Methylnaphthalene	0.10	U	ug/L	P419991	
		Naphthalene	0.10	U	ug/L	P419991	
		1-Naphthylamine	10	U	ug/L	P419991	
		2-Naphthylamine	10	U	ug/L	P419991	
		2-Nitroaniline	0.052	U	ug/L	P419991	
		Nitrobenzene	0.052	U	ug/L	P419991	
		5-Nitro-o-toluidine	0.10	U	ug/L	P419991	
		N-Nitrosodi-n-butylamine	0.052	U	ug/L	P419991	
		N-Nitrosodiethylamine	1.0	U	ug/L	P419991	
		N-Nitrosodimethylamine	2.1	U	ug/L	P419991	
		N-Nitrosodi-n-propylamine	0.052	U	ug/L	P419991	
		N-Nitrosomethylethylamine	2.1	U	ug/L	P419991	
		N-Nitrosomorpholine	0.052	U	ug/L	P419991	
		N-Nitrosopiperidine	0.052	U	ug/L	P419991	
		N-Nitrosopyrrolidine	0.10	U	ug/L	P419991	
		Pentachlorobenzene	0.052	U	ug/L	P419991	
		Pentachloroethane	0.052	U	ug/L	P419991	
		Pentachloronitrobenzene	0.052	U	ug/L	P419991	
		Phenacetin	1.0	U	ug/L	P419991	
		Phenanthrene	0.10	U	ug/L	P419991	
		2-Picoline	1.0	U	ug/L	P419991	
		Pyrene	0.10	U	ug/L	P419991	
		Pyridine	4.2	U	ug/L	P419991	
		Safrole	0.052	U	ug/L	P419991	
		1,2,4,5-Tetrachlorobenzene	0.052	U	ug/L	P419991	
		o-Toluidine	0.10	U	ug/L	P419991	
		1,2,4-Trichlorobenzene	0.052	U	ug/L	P419991	
		1,3,5-Trinitrobenzene	0.21	U	ug/L	P419991	
		4-Chloro-3-methylphenol	0.052	U	ug/L	P419991	
		2-Chlorophenol	0.052	U	ug/L	P419991	
		2,4-Dichlorophenol	0.052	U	ug/L	P419991	
		2,6-Dichlorophenol	0.052	U	ug/L	P419991	
		2,4-Dimethylphenol	0.052	U	ug/L	P419991	
		2,4-Dinitrophenol	10	U	ug/L	P419991	
		2-Methyl-4,6-dinitrophenol	3.1	U	ug/L	P419991	
		2-Nitrophenol	0.052	U	ug/L	P419991	
		4-Nitrophenol	10	U	ug/L	P419991	

Field ID: G3NW0243

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357706	EPA 8270E	Pentachlorophenol	0.52	U	ug/L	P419991	
		Phenol	0.052	U	ug/L	P419991	
		2,3,4,6-Tetrachlorophenol	0.10	U	ug/L	P419991	
		2,4,5-Trichlorophenol	0.052	U	ug/L	P419991	
		2,4,6-Trichlorophenol	0.052	U	ug/L	P419991	
		1-Methylnaphthalene	0.10	U	ug/L	P419991	
		N-Nitrosodiphenylamine/ Diphenylamine	0.10	U	ug/L	P419991	
2357709	FL-PRO 2018	TRPH	0.52	I	mg/L	P420047	

Sample Location: Lake Powel cove E. of Origins 8

Collection Date/Time: 09/19/2022 16:15

Field ID: G3NW0243

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357703	EPA 8270E	Acenaphthene	42	U	ug/kg	P419836	
		Acenaphthylene	42	U	ug/kg	P419836	
		Anthracene	42	U	ug/kg	P419836	
		Azobenzene/1,2-Diphenylhydrazine	380	U	ug/kg	P419836	
		Benzidine	8.3E+03	U	ug/kg	P419836	MS
		Benzo(a)anthracene	42	U	ug/kg	P419836	
		Benzo(a)pyrene	42	U	ug/kg	P419836	
		Benzo(b)fluoranthene	81	I	ug/kg	P419836	
		Benzo(k)fluoranthene	42	U	ug/kg	P419836	
		Benzo(g,h,i)perylene	42	U	ug/kg	P419836	
		Bis(2-chloroethoxy)methane	380	U	ug/kg	P419836	
		Bis(2-chloroethyl)ether	380	U	ug/kg	P419836	
		Bis(2-chloroisopropyl)ether	380	U	ug/kg	P419836	
		Bis(2-ethylhexyl)phthalate	2.3E+03	U	ug/kg	P419836	
		Butyl benzyl phthalate	380	U	ug/kg	P419836	
		4-Bromophenyl phenyl ether	380	U	ug/kg	P419836	
		2-Chloronaphthalene	380	U	ug/kg	P419836	
		4-Chlorophenyl phenyl ether	380	U	ug/kg	P419836	
		Chrysene	42	U	ug/kg	P419836	
		Di-n-butyl phthalate	2.3E+03	U	ug/kg	P419836	
		Di-n-octyl phthalate	380	U	ug/kg	P419836	
		Dibenzo(a,h)anthracene	42	U	ug/kg	P419836	
		3,3'-Dichlorobenzidine	2.3E+04	U	ug/kg	P419836	
		Diethyl phthalate	380	U	ug/kg	P419836	
		Dimethyl phthalate	380	U	ug/kg	P419836	
		2,4-Dinitrotoluene	380	U	ug/kg	P419836	
		2,6-Dinitrotoluene	380	U	ug/kg	P419836	
		Fluoranthene	42	U	ug/kg	P419836	
		Fluorene	42	U	ug/kg	P419836	
		Hexachlorobenzene	380	U	ug/kg	P419836	
		Hexachlorobutadiene	1.1E+03	U	ug/kg	P419836	
		Hexachlorocyclopentadiene	380	U	ug/kg	P419836	MS
		Hexachloroethane	1.1E+03	U	ug/kg	P419836	
		Indeno(1,2,3-cd)pyrene	42	U	ug/kg	P419836	
		Isophorone	380	U	ug/kg	P419836	
		Naphthalene	42	U	ug/kg	P419836	
		Nitrobenzene	380	U	ug/kg	P419836	
		N-Nitrosodimethylamine	2.3E+03	U	ug/kg	P419836	
		N-Nitrosodi-n-propylamine	380	U	ug/kg	P419836	
		Phenanthrene	42	U	ug/kg	P419836	
		Pyrene	42	U	ug/kg	P419836	
		1,2,4-Trichlorobenzene	1.1E+03	U	ug/kg	P419836	
		4-Chloro-3-methylphenol	380	U	ug/kg	P419836	
		2-Chlorophenol	1.1E+03	U	ug/kg	P419836	

Field ID: G3NW0243

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357703	EPA 8270E	2,4-Dichlorophenol	380	U	ug/kg	P419836	
		2,4-Dimethylphenol	2.3E+03	U	ug/kg	P419836	
		2,4-Dinitrophenol	2.3E+03	U	ug/kg	P419836	
		2-Methyl-4,6-dinitrophenol	380	U	ug/kg	P419836	
		2-Nitrophenol	380	U	ug/kg	P419836	
		4-Nitrophenol	380	U	ug/kg	P419836	
		Pentachlorophenol	380	U	ug/kg	P419836	
		Phenol	380	U	ug/kg	P419836	
		2,4,6-Trichlorophenol	380	U	ug/kg	P419836	
		N-Nitrosodiphenylamine/ Diphenylamine	380	U	ug/kg	P419836	
		TRPH	230	U	mg/Kg	P420336	
2357713	SM 2540 G (20th)						
		% Solid	15.6		%	P419972	

Ref. Method and Comment:

EPA 8270E: Precision for benzidine is not available due to low recoveries in one or both of the duplicate matrix spikes.

Sample Location: Lake Powell N. of North Walton Lakeshore Dr. Collection Date/Time: 09/19/2022 16:40

Field ID: G3NW0242

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357707	EPA 8270E	Acenaphthene	0.028	U	ug/L	P419991	
		Acenaphthylene	0.028	U	ug/L	P419991	
		Acetophenone	0.22	U	ug/L	P419991	
		2-Acetylaminofluorene	1.1	U	ug/L	P419991	
		4-Aminobiphenyl	4.4	U	ug/L	P419991	
		Aniline	1.1	U	ug/L	P419991	
		Anthracene	0.056	U	ug/L	P419991	
		Azobenzene/1,2-Diphenylhydrazine**	0.056	U	ug/L	P419991	
		Benzidine	11	U	ug/L	P419991	
		Benzo(a)anthracene	0.028	U	ug/L	P419991	
		Benzo(a)pyrene	0.028	U	ug/L	P419991	
		Benzo(b)fluoranthene	0.028	U	ug/L	P419991	
		Benzo(k)fluoranthene	0.028	U	ug/L	P419991	
		Benzo(g,h,i)perylene	0.028	U	ug/L	P419991	
		Benzyl alcohol	0.22	U	ug/L	P419991	
		Bis(2-chloroethoxy)methane	0.056	U	ug/L	P419991	
		Bis(2-chloroethyl)ether	0.056	U	ug/L	P419991	
		Bis(2-chloroisopropyl)ether	0.056	U	ug/L	P419991	
		Bis(2-ethylhexyl)phthalate	5.6	U	ug/L	P419991	
		Butyl benzyl phthalate	1.1	U	ug/L	P419991	
		4-Bromophenyl phenyl ether	0.056	U	ug/L	P419991	
		2-Chloronaphthalene	0.056	U	ug/L	P419991	
		4-Chlorophenyl phenyl ether	0.056	U	ug/L	P419991	
		Carbazole	0.056	U	ug/L	P419991	
		Chrysene	0.028	U	ug/L	P419991	
		m,p-Cresols	0.056	U	ug/L	P419991	
		o-Cresol	0.056	U	ug/L	P419991	
		Di-n-butyl phthalate	2.2	U	ug/L	P419991	
		Di-n-octyl phthalate	0.056	U	ug/L	P419991	
		Dibenzo(a,h)anthracene	0.028	U	ug/L	P419991	
		Dibenzofuran	0.056	U	ug/L	P419991	
		3,3'-Dichlorobenzidine	11	U	ug/L	P419991	
		Diethyl phthalate	2.2	U	ug/L	P419991	
		Dimethyl phthalate	0.22	U	ug/L	P419991	
		Dimethylaminoazobenzene	0.056	U	ug/L	P419991	
		7,12-Dimethylbenz(a)anthracene	0.11	U	ug/L	P419991	
		1,3-Dinitrobenzene	0.22	U	ug/L	P419991	
		2,4-Dinitrotoluene	0.056	U	ug/L	P419991	
		2,6-Dinitrotoluene	0.056	U	ug/L	P419991	
		Dinoseb**	4.4	U	ug/L	P419991	
		Ethyl methanesulfonate	1.1	U	ug/L	P419991	
		Fluoranthene	0.056	U	ug/L	P419991	
		Fluorene	0.028	U	ug/L	P419991	
		Hexachlorobenzene	0.056	U	ug/L	P419991	

Field ID: G3NW0242

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357707	EPA 8270E	Hexachlorobutadiene	0.056	U	ug/L	P419991	
		Hexachlorocyclopentadiene	0.056	U	ug/L	P419991	
		Hexachloroethane	0.056	U	ug/L	P419991	
		Hexachloropropene	0.056	U	ug/L	P419991	
		Indeno(1,2,3-cd)pyrene	0.028	U	ug/L	P419991	
		Isophorone	0.056	U	ug/L	P419991	
		Isosafrole	0.056	U	ug/L	P419991	
		3-Methylcholanthrene	0.11	U	ug/L	P419991	
		2-Methylnaphthalene	0.11	U	ug/L	P419991	
		Naphthalene	0.11	U	ug/L	P419991	
		1-Naphthylamine	11	U	ug/L	P419991	
		2-Naphthylamine	11	U	ug/L	P419991	
		2-Nitroaniline	0.056	U	ug/L	P419991	
		Nitrobenzene	0.056	U	ug/L	P419991	
		5-Nitro-o-toluidine	0.11	U	ug/L	P419991	
		N-Nitrosodi-n-butylamine	0.056	U	ug/L	P419991	
		N-Nitrosodiethylamine	1.1	U	ug/L	P419991	
		N-Nitrosodimethylamine	2.2	U	ug/L	P419991	
		N-Nitrosodi-n-propylamine	0.056	U	ug/L	P419991	
		N-Nitrosomethylethylamine	2.2	U	ug/L	P419991	
		N-Nitrosomorpholine	0.056	U	ug/L	P419991	
		N-Nitrosopiperidine	0.056	U	ug/L	P419991	
		N-Nitrosopyrrolidine	0.11	U	ug/L	P419991	
		Pentachlorobenzene	0.056	U	ug/L	P419991	
		Pentachloroethane	0.056	U	ug/L	P419991	
		Pentachloronitrobenzene	0.056	U	ug/L	P419991	
		Phenacetin	1.1	U	ug/L	P419991	
		Phenanthrene	0.11	U	ug/L	P419991	
		2-Picoline	1.1	U	ug/L	P419991	
		Pyrene	0.18	I	ug/L	P419991	
		Pyridine	4.4	U	ug/L	P419991	
		Safrole	0.056	U	ug/L	P419991	
		1,2,4,5-Tetrachlorobenzene	0.056	U	ug/L	P419991	
		o-Toluidine	0.11	U	ug/L	P419991	
		1,2,4-Trichlorobenzene	0.056	U	ug/L	P419991	
		1,3,5-Trinitrobenzene	0.22	U	ug/L	P419991	
		4-Chloro-3-methylphenol	0.056	U	ug/L	P419991	
		2-Chlorophenol	0.056	U	ug/L	P419991	
		2,4-Dichlorophenol	0.056	U	ug/L	P419991	
		2,6-Dichlorophenol	0.056	U	ug/L	P419991	
		2,4-Dimethylphenol	0.056	U	ug/L	P419991	
		2,4-Dinitrophenol	11	U	ug/L	P419991	
		2-Methyl-4,6-dinitrophenol	3.3	U	ug/L	P419991	
		2-Nitrophenol	0.056	U	ug/L	P419991	
		4-Nitrophenol	11	U	ug/L	P419991	

Field ID: G3NW0242

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357707	EPA 8270E	Pentachlorophenol	0.56	U	ug/L	P419991	
		Phenol	0.056	U	ug/L	P419991	
		2,3,4,6-Tetrachlorophenol	0.11	U	ug/L	P419991	
		2,4,5-Trichlorophenol	0.056	U	ug/L	P419991	
		2,4,6-Trichlorophenol	0.056	U	ug/L	P419991	
		1-Methylnaphthalene	0.11	U	ug/L	P419991	
		N-Nitrosodiphenylamine/ Diphenylamine	0.11	U	ug/L	P419991	
2357710	FL-PRO 2018	TRPH	0.47	U	mg/L	P420047	

Sample Location: Lake Powell N. of North Walton Lakeshore Dr. Collection Date/Time: 09/19/2022 16:45

Field ID: G3NW0242

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357704	EPA 8270E	Acenaphthene	40	U	ug/kg	P419836	
		Acenaphthylene	40	U	ug/kg	P419836	
		Anthracene	40	U	ug/kg	P419836	
		Azobenzene/1,2-Diphenylhydrazine	360	U	ug/kg	P419836	
		Benzidine	7.8E+03	U	ug/kg	P419836	MS
		Benzo(a)anthracene	40	U	ug/kg	P419836	
		Benzo(a)pyrene	40	U	ug/kg	P419836	
		Benzo(b)fluoranthene	76	I	ug/kg	P419836	
		Benzo(k)fluoranthene	40	U	ug/kg	P419836	
		Benzo(g,h,i)perylene	40	U	ug/kg	P419836	
		Bis(2-chloroethoxy)methane	360	U	ug/kg	P419836	
		Bis(2-chloroethyl)ether	360	U	ug/kg	P419836	
		Bis(2-chloroisopropyl)ether	360	U	ug/kg	P419836	
		Bis(2-ethylhexyl)phthalate	2.2E+03	U	ug/kg	P419836	
		Butyl benzyl phthalate	360	U	ug/kg	P419836	
		4-Bromophenyl phenyl ether	360	U	ug/kg	P419836	
		2-Chloronaphthalene	360	U	ug/kg	P419836	
		4-Chlorophenyl phenyl ether	360	U	ug/kg	P419836	
		Chrysene	40	U	ug/kg	P419836	
		Di-n-butyl phthalate	2.2E+03	U	ug/kg	P419836	
		Di-n-octyl phthalate	360	U	ug/kg	P419836	
		Dibenzo(a,h)anthracene	40	U	ug/kg	P419836	
		3,3'-Dichlorobenzidine	2.2E+04	U	ug/kg	P419836	
		Diethyl phthalate	360	U	ug/kg	P419836	
		Dimethyl phthalate	360	U	ug/kg	P419836	
		2,4-Dinitrotoluene	360	U	ug/kg	P419836	
		2,6-Dinitrotoluene	360	U	ug/kg	P419836	
		Fluoranthene	40	U	ug/kg	P419836	
		Fluorene	40	U	ug/kg	P419836	
		Hexachlorobenzene	360	U	ug/kg	P419836	
		Hexachlorobutadiene	1.1E+03	U	ug/kg	P419836	
		Hexachlorocyclopentadiene	360	U	ug/kg	P419836	MS
		Hexachloroethane	1.1E+03	U	ug/kg	P419836	
		Indeno(1,2,3-cd)pyrene	40	U	ug/kg	P419836	
		Isophorone	360	U	ug/kg	P419836	
		Naphthalene	40	U	ug/kg	P419836	
		Nitrobenzene	360	U	ug/kg	P419836	
		N-Nitrosodimethylamine	2.2E+03	U	ug/kg	P419836	
		N-Nitrosodi-n-propylamine	360	U	ug/kg	P419836	
		Phenanthrene	40	U	ug/kg	P419836	
		Pyrene	40	U	ug/kg	P419836	
		1,2,4-Trichlorobenzene	1.1E+03	U	ug/kg	P419836	
		4-Chloro-3-methylphenol	360	U	ug/kg	P419836	
		2-Chlorophenol	1.1E+03	U	ug/kg	P419836	

Field ID: G3NW0242

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357704	EPA 8270E	2,4-Dichlorophenol	360	U	ug/kg	P419836	
		2,4-Dimethylphenol	2.2E+03	U	ug/kg	P419836	
		2,4-Dinitrophenol	2.2E+03	U	ug/kg	P419836	
		2-Methyl-4,6-dinitrophenol	360	U	ug/kg	P419836	
		2-Nitrophenol	360	U	ug/kg	P419836	
		4-Nitrophenol	360	U	ug/kg	P419836	
		Pentachlorophenol	360	U	ug/kg	P419836	
		Phenol	360	U	ug/kg	P419836	
		2,4,6-Trichlorophenol	360	U	ug/kg	P419836	
		N-Nitrosodiphenylamine/ Diphenylamine	360	U	ug/kg	P419836	
		TRPH	220	U	mg/Kg	P420336	
2357715	SM 2540 G (20th)						
		% Solid	16.3		%	P419972	

Ref. Method and Comment:

EPA 8270E: Precision for benzidine is not available due to low recoveries in one or both of the duplicate matrix spikes.

Sample Location: Lake Powell inlet middle

Collection Date/Time: 09/19/2022 17:25

Field ID: G3NW0244

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357708	EPA 8270E	Acenaphthene	0.028	U	ug/L	P419991	
		Acenaphthylene	0.028	U	ug/L	P419991	
		Acetophenone	0.23	U	ug/L	P419991	
		2-Acetylaminofluorene	1.1	U	ug/L	P419991	
		4-Aminobiphenyl	4.5	U	ug/L	P419991	
		Aniline	1.1	U	ug/L	P419991	
		Anthracene	0.057	U	ug/L	P419991	
		Azobenzene/1,2-Diphenylhydrazine**	0.057	U	ug/L	P419991	
		Benzidine	11	U	ug/L	P419991	
		Benzo(a)anthracene	0.028	U	ug/L	P419991	
		Benzo(a)pyrene	0.028	U	ug/L	P419991	
		Benzo(b)fluoranthene	0.028	U	ug/L	P419991	
		Benzo(k)fluoranthene	0.028	U	ug/L	P419991	
		Benzo(g,h,i)perylene	0.028	U	ug/L	P419991	
		Benzyl alcohol	0.23	U	ug/L	P419991	
		Bis(2-chloroethoxy)methane	0.057	U	ug/L	P419991	
		Bis(2-chloroethyl)ether	0.057	U	ug/L	P419991	
		Bis(2-chloroisopropyl)ether	0.057	U	ug/L	P419991	
		Bis(2-ethylhexyl)phthalate	5.7	U	ug/L	P419991	
		Butyl benzyl phthalate	1.1	U	ug/L	P419991	
		4-Bromophenyl phenyl ether	0.057	U	ug/L	P419991	
		2-Chloronaphthalene	0.057	U	ug/L	P419991	
		4-Chlorophenyl phenyl ether	0.057	U	ug/L	P419991	
		Carbazole	0.057	U	ug/L	P419991	
		Chrysene	0.028	U	ug/L	P419991	
		m,p-Cresols	0.057	U	ug/L	P419991	
		o-Cresol	0.057	U	ug/L	P419991	
		Di-n-butyl phthalate	2.3	U	ug/L	P419991	
		Di-n-octyl phthalate	0.057	U	ug/L	P419991	
		Dibenzo(a,h)anthracene	0.028	U	ug/L	P419991	
		Dibenzofuran	0.057	U	ug/L	P419991	
		3,3'-Dichlorobenzidine	11	U	ug/L	P419991	
		Diethyl phthalate	2.3	U	ug/L	P419991	
		Dimethyl phthalate	0.23	U	ug/L	P419991	
		Dimethylaminoazobenzene	0.057	U	ug/L	P419991	
		7,12-Dimethylbenz(a)anthracene	0.11	U	ug/L	P419991	
		1,3-Dinitrobenzene	0.23	U	ug/L	P419991	
		2,4-Dinitrotoluene	0.057	U	ug/L	P419991	
		2,6-Dinitrotoluene	0.057	U	ug/L	P419991	
		Dinoseb**	4.5	U	ug/L	P419991	
		Ethyl methanesulfonate	1.1	U	ug/L	P419991	
		Fluoranthene	0.057	U	ug/L	P419991	
		Fluorene	0.028	U	ug/L	P419991	
		Hexachlorobenzene	0.057	U	ug/L	P419991	

Field ID: G3NW0244

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357708	EPA 8270E	Hexachlorobutadiene	0.057	U	ug/L	P419991	
		Hexachlorocyclopentadiene	0.057	U	ug/L	P419991	
		Hexachloroethane	0.057	U	ug/L	P419991	
		Hexachloropropene	0.057	U	ug/L	P419991	
		Indeno(1,2,3-cd)pyrene	0.028	U	ug/L	P419991	
		Isophorone	0.057	U	ug/L	P419991	
		Isosafrole	0.057	U	ug/L	P419991	
		3-Methylcholanthrene	0.11	U	ug/L	P419991	
		2-Methylnaphthalene	0.11	U	ug/L	P419991	
		Naphthalene	0.11	U	ug/L	P419991	
		1-Naphthylamine	11	U	ug/L	P419991	
		2-Naphthylamine	11	U	ug/L	P419991	
		2-Nitroaniline	0.057	U	ug/L	P419991	
		Nitrobenzene	0.057	U	ug/L	P419991	
		5-Nitro-o-toluidine	0.11	U	ug/L	P419991	
		N-Nitrosodi-n-butylamine	0.057	U	ug/L	P419991	
		N-Nitrosodiethylamine	1.1	U	ug/L	P419991	
		N-Nitrosodimethylamine	2.3	U	ug/L	P419991	
		N-Nitrosodi-n-propylamine	0.057	U	ug/L	P419991	
		N-Nitrosomethylethylamine	2.3	U	ug/L	P419991	
		N-Nitrosomorpholine	0.057	U	ug/L	P419991	
		N-Nitrosopiperidine	0.057	U	ug/L	P419991	
		N-Nitrosopyrrolidine	0.11	U	ug/L	P419991	
		Pentachlorobenzene	0.057	U	ug/L	P419991	
		Pentachloroethane	0.057	U	ug/L	P419991	
		Pentachloronitrobenzene	0.057	U	ug/L	P419991	
		Phenacetin	1.1	U	ug/L	P419991	
		Phenanthrene	0.11	U	ug/L	P419991	
		2-Picoline	1.1	U	ug/L	P419991	
		Pyrene	0.11	U	ug/L	P419991	
		Pyridine	4.5	U	ug/L	P419991	
		Safrole	0.057	U	ug/L	P419991	
		1,2,4,5-Tetrachlorobenzene	0.057	U	ug/L	P419991	
		o-Toluidine	0.11	U	ug/L	P419991	
		1,2,4-Trichlorobenzene	0.057	U	ug/L	P419991	
		1,3,5-Trinitrobenzene	0.23	U	ug/L	P419991	
		4-Chloro-3-methylphenol	0.057	U	ug/L	P419991	
		2-Chlorophenol	0.057	U	ug/L	P419991	
		2,4-Dichlorophenol	0.057	U	ug/L	P419991	
		2,6-Dichlorophenol	0.057	U	ug/L	P419991	
		2,4-Dimethylphenol	0.057	U	ug/L	P419991	
		2,4-Dinitrophenol	11	U	ug/L	P419991	
		2-Methyl-4,6-dinitrophenol	3.4	U	ug/L	P419991	
		2-Nitrophenol	0.057	U	ug/L	P419991	
		4-Nitrophenol	11	U	ug/L	P419991	

Field ID: G3NW0244

Matrix: W-SURF-SLT

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357708	EPA 8270E	Pentachlorophenol	0.57	U	ug/L	P419991	
		Phenol	0.057	U	ug/L	P419991	
		2,3,4,6-Tetrachlorophenol	0.11	U	ug/L	P419991	
		2,4,5-Trichlorophenol	0.057	U	ug/L	P419991	
		2,4,6-Trichlorophenol	0.057	U	ug/L	P419991	
		1-Methylnaphthalene	0.11	U	ug/L	P419991	
		N-Nitrosodiphenylamine/ Diphenylamine	0.11	U	ug/L	P419991	
2357711	FL-PRO 2018	TRPH	0.48	U	mg/L	P420047	

Sample Location: Lake Powell inlet middle

Collection Date/Time: 09/19/2022 17:30

Field ID: G3NW0244

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357705	EPA 8270E	Acenaphthene	8.5	U	ug/kg	P419836	
		Acenaphthylene	8.5	U	ug/kg	P419836	
		Anthracene	8.5	U	ug/kg	P419836	
		Azobenzene/1,2-Diphenylhydrazine	77	U	ug/kg	P419836	
		Benzidine	1.7E+03	U	ug/kg	P419836	MS
		Benzo(a)anthracene	8.5	U	ug/kg	P419836	
		Benzo(a)pyrene	8.5	U	ug/kg	P419836	
		Benzo(b)fluoranthene	8.5	U	ug/kg	P419836	
		Benzo(k)fluoranthene	8.5	U	ug/kg	P419836	
		Benzo(g,h,i)perylene	8.5	U	ug/kg	P419836	
		Bis(2-chloroethoxy)methane	77	U	ug/kg	P419836	
		Bis(2-chloroethyl)ether	77	U	ug/kg	P419836	
		Bis(2-chloroisopropyl)ether	77	U	ug/kg	P419836	
		Bis(2-ethylhexyl)phthalate	460	U	ug/kg	P419836	
		Butyl benzyl phthalate	77	U	ug/kg	P419836	
		4-Bromophenyl phenyl ether	77	U	ug/kg	P419836	
		2-Chloronaphthalene	77	U	ug/kg	P419836	
		4-Chlorophenyl phenyl ether	77	U	ug/kg	P419836	
		Chrysene	8.5	U	ug/kg	P419836	
		Di-n-butyl phthalate	460	U	ug/kg	P419836	
		Di-n-octyl phthalate	77	U	ug/kg	P419836	
		Dibenzo(a,h)anthracene	8.5	U	ug/kg	P419836	
		3,3'-Dichlorobenzidine	4.6E+03	U	ug/kg	P419836	
		Diethyl phthalate	77	U	ug/kg	P419836	
		Dimethyl phthalate	77	U	ug/kg	P419836	
		2,4-Dinitrotoluene	77	U	ug/kg	P419836	
		2,6-Dinitrotoluene	77	U	ug/kg	P419836	
		Fluoranthene	8.5	U	ug/kg	P419836	
		Fluorene	8.5	U	ug/kg	P419836	
		Hexachlorobenzene	77	U	ug/kg	P419836	
		Hexachlorobutadiene	230	U	ug/kg	P419836	
		Hexachlorocyclopentadiene	77	U	ug/kg	P419836	MS
		Hexachloroethane	230	U	ug/kg	P419836	
		Indeno(1,2,3-cd)pyrene	8.5	U	ug/kg	P419836	
		Isophorone	77	U	ug/kg	P419836	
		Naphthalene	8.5	U	ug/kg	P419836	
		Nitrobenzene	77	U	ug/kg	P419836	
		N-Nitrosodimethylamine	460	U	ug/kg	P419836	
		N-Nitrosodi-n-propylamine	77	U	ug/kg	P419836	
		Phenanthrene	8.5	U	ug/kg	P419836	
		Pyrene	8.5	U	ug/kg	P419836	
		1,2,4-Trichlorobenzene	230	U	ug/kg	P419836	
		4-Chloro-3-methylphenol	77	U	ug/kg	P419836	
		2-Chlorophenol	230	U	ug/kg	P419836	

Field ID: G3NW0244

Matrix: S-MARINESD

Sample ID	Ref. Method	Component	Result	Code	Units	Batch ID	QC Codes
2357705	EPA 8270E	2,4-Dichlorophenol	77	U	ug/kg	P419836	
		2,4-Dimethylphenol	460	U	ug/kg	P419836	
		2,4-Dinitrophenol	460	U	ug/kg	P419836	
		2-Methyl-4,6-dinitrophenol	77	U	ug/kg	P419836	
		2-Nitrophenol	77	U	ug/kg	P419836	
		4-Nitrophenol	77	U	ug/kg	P419836	
		Pentachlorophenol	77	U	ug/kg	P419836	
		Phenol	77	U	ug/kg	P419836	
		2,4,6-Trichlorophenol	77	U	ug/kg	P419836	
		N-Nitrosodiphenylamine/ Diphenylamine	77	U	ug/kg	P419836	
		TRPH	45	U	mg/Kg	P420336	
2357717	SM 2540 G (20th)						
		% Solid	77.6		%	P419972	

Ref. Method and Comment:

EPA 8270E: Precision for benzidine is not available due to low recoveries in one or both of the duplicate matrix spikes.

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P419836

Component	Result	Code	Units
1,2,4-Trichlorobenzene	180	U	ug/kg
2-Chloronaphthalene	60	U	ug/kg
2-Chlorophenol	180	U	ug/kg
2-Methyl-4,6-dinitrophenol	60	U	ug/kg
2-Nitrophenol	60	U	ug/kg
2,4-Dichlorophenol	60	U	ug/kg
2,4-Dimethylphenol	360	U	ug/kg
2,4-Dinitrophenol	360	U	ug/kg
2,4-Dinitrotoluene	60	U	ug/kg
2,4,6-Trichlorophenol	60	U	ug/kg
2,6-Dinitrotoluene	60	U	ug/kg
3,3'-Dichlorobenzidine	3.6E+03	U	ug/kg
4-Bromophenyl phenyl ether	60	U	ug/kg
4-Chloro-3-methylphenol	60	U	ug/kg
4-Chlorophenyl phenyl ether	60	U	ug/kg
4-Nitrophenol	60	U	ug/kg
Acenaphthene	6.7	U	ug/kg
Acenaphthylene	6.7	U	ug/kg
Anthracene	6.7	U	ug/kg
Azobenzene/1,2-Diphenylhydrazine	60	U	ug/kg
Benzidine	1.3E+03	U	ug/kg
Benzo(a)anthracene	6.7	U	ug/kg
Benzo(a)pyrene	6.7	U	ug/kg
Benzo(b)fluoranthene	6.7	U	ug/kg
Benzo(g,h,i)perylene	6.7	U	ug/kg
Benzo(k)fluoranthene	6.7	U	ug/kg
Bis(2-chloroethoxy)methane	60	U	ug/kg
Bis(2-chloroethyl)ether	60	U	ug/kg
Bis(2-chloroisopropyl)ether	60	U	ug/kg
Bis(2-ethylhexyl)phthalate	360	U	ug/kg
Butyl benzyl phthalate	60	U	ug/kg
Chrysene	6.7	U	ug/kg
Di-n-butyl phthalate	360	U	ug/kg
Di-n-octyl phthalate	60	U	ug/kg
Dibenzo(a,h)anthracene	6.7	U	ug/kg
Diethyl phthalate	60	U	ug/kg
Dimethyl phthalate	60	U	ug/kg
Fluoranthene	6.7	U	ug/kg
Fluorene	6.7	U	ug/kg
Hexachlorobenzene	60	U	ug/kg
Hexachlorobutadiene	180	U	ug/kg
Hexachlorocyclopentadiene	60	U	ug/kg
Hexachloroethane	180	U	ug/kg
Indeno(1,2,3-cd)pyrene	6.7	U	ug/kg
Isophorone	60	U	ug/kg
N-Nitrosodi-n-propylamine	60	U	ug/kg
N-Nitrosodimethylamine	360	U	ug/kg
N-Nitrosodiphenylamine/ Diphenylamine	60	U	ug/kg
Naphthalene	6.7	U	ug/kg
Nitrobenzene	60	U	ug/kg
Pentachlorophenol	60	U	ug/kg
Phenanthrene	6.7	U	ug/kg

Quality Assurance Report Method Blank Results

Reference Method: EPA 8270E

Batch ID: P419836

Component	Result	Code	Units
Phenol	60	U	ug/kg
Pyrene	6.7	U	ug/kg

Reference Method: EPA 8270E

Batch ID: P419991

Component	Result	Code	Units
1-Methylnaphthalene	0.10	U	ug/L
1-Naphthylamine	10	U	ug/L
1,2,4-Trichlorobenzene	0.050	U	ug/L
1,2,4,5-Tetrachlorobenzene	0.050	U	ug/L
1,3-Dinitrobenzene	0.20	U	ug/L
1,3,5-Trinitrobenzene	0.20	U	ug/L
2-Acetylaminofluorene	1.0	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-Methylnaphthalene	0.10	U	ug/L
2-Naphthylamine	10	U	ug/L
2-Nitroaniline	0.050	U	ug/L
2-Nitrophenol	0.050	U	ug/L
2-Picoline	1.0	U	ug/L
2,3,4,6-Tetrachlorophenol	0.10	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
2,4,5-Trichlorophenol	0.050	U	ug/L
2,4,6-Trichlorophenol	0.050	U	ug/L
2,6-Dichlorophenol	0.050	U	ug/L
2,6-Dinitrotoluene	0.050	U	ug/L
3-Methylcholanthrene	0.10	U	ug/L
3,3'-Dichlorobenzidine	10	U	ug/L
4-Aminobiphenyl	4.0	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
5-Nitro-o-toluidine	0.10	U	ug/L
7,12-Dimethylbenz(a)anthracene	0.10	U	ug/L
Acenaphthene	0.025	U	ug/L
Acenaphthylene	0.025	U	ug/L
Acetophenone	0.20	U	ug/L
Aniline	1.0	U	ug/L
Anthracene	0.050	U	ug/L
Azobenzene/1,2-Diphenylhydrazine	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

Quality Assurance Report

Method Blank Results

Reference Method: EPA 8270E

Batch ID: P419991

Component	Result	Code	Units
Benzyl alcohol	0.20	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
Carbazole	0.050	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
Dibenzofuran	0.050	U	ug/L
Diethyl phthalate	2.0	U	ug/L
Dimethyl phthalate	0.20	U	ug/L
Dimethylaminoazobenzene	0.050	U	ug/L
Dinoseb	4.0	U	ug/L
Ethyl methanesulfonate	1.0	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
Hexachloropropene	0.050	U	ug/L
Indeno(1,2,3-cd)pyrene	0.025	U	ug/L
Isophorone	0.050	U	ug/L
Isosafrole	0.050	U	ug/L
m,p-Cresols	0.050	U	ug/L
N-Nitrosodi-n-butylamine	0.050	U	ug/L
N-Nitrosodi-n-propylamine	0.050	U	ug/L
N-Nitrosodiethylamine	1.0	U	ug/L
N-Nitrosodimethylamine	2.0	U	ug/L
N-Nitrosodiphenylamine/ Diphenylamine	0.10	U	ug/L
N-Nitrosomethylethylamine	2.0	U	ug/L
N-Nitrosomorpholine	0.050	U	ug/L
N-Nitrosopiperidine	0.050	U	ug/L
N-Nitrosopyrrolidine	0.10	U	ug/L
Naphthalene	0.10	U	ug/L
Nitrobenzene	0.050	U	ug/L
o-Cresol	0.050	U	ug/L
o-Toluidine	0.10	U	ug/L
Pentachlorobenzene	0.050	U	ug/L
Pentachloroethane	0.050	U	ug/L
Pentachloronitrobenzene	0.050	U	ug/L
Pentachlorophenol	0.50	U	ug/L
Phenacetin	1.0	U	ug/L
Phenanthrene	0.10	U	ug/L
Phenol	0.050	U	ug/L
Pyrene	0.10	U	ug/L
Pyridine	4.0	U	ug/L
Safrole	0.050	U	ug/L

Quality Assurance Report

Method Blank Results

Reference Method: FL-PRO 2018
Batch ID: P420047

Component	Result	Code	Units
TRPH	0.45	U	mg/L

Reference Method: FL-PRO 2018
Batch ID: P420336

Component	Result	Code	Units
TRPH	35	U	mg/Kg

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P419836

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1,2,4-Trichlorobenzene	77.4		P	40 - 140
2-Chloronaphthalene	78.1		P	40 - 140
2-Chlorophenol	74.2		P	40 - 140
2-Methyl-4,6-dinitrophenol	76.7		P	40 - 140
2-Nitrophenol	73.1		P	40 - 140
2,4-Dichlorophenol	81.5		P	40 - 140
2,4-Dimethylphenol	76.7		P	40 - 140
2,4-Dinitrophenol	54.2		P	40 - 140
2,4-Dinitrotoluene	84.6		P	40 - 140
2,4,6-Trichlorophenol	81.4		P	40 - 140
2,6-Dinitrotoluene	84.6		P	40 - 140
3,3'-Dichlorobenzidine	103		P	5.0 - 200
4-Bromophenyl phenyl ether	88.5		P	40 - 140
4-Chloro-3-methylphenol	80.6		P	40 - 140
4-Chlorophenyl phenyl ether	86.3		P	40 - 140
4-Nitrophenol	80.2		P	40 - 140
Acenaphthene	81.4		P	40 - 140
Acenaphthylene	77.1		P	40 - 140
Anthracene	87.6		P	40 - 140
Azobenzene/1,2-Diphenylhydrazine	93.8		P	40 - 140
Benzidine	117		P	5.0 - 200
Benzo(a)anthracene	87.2		P	40 - 140
Benzo(a)pyrene	83.6		P	40 - 140
Benzo(b)fluoranthene	88.4		P	40 - 140
Benzo(g,h,i)perylene	82.7		P	40 - 140
Benzo(k)fluoranthene	62.7		P	40 - 140
Bis(2-chloroethoxy)methane	76.3		P	40 - 140
Bis(2-chloroethyl)ether	55.1		P	40 - 140
Bis(2-chloroisopropyl)ether	83.7		P	40 - 160
Bis(2-ethylhexyl)phthalate	145		P	40 - 160
Butyl benzyl phthalate	84.6		P	40 - 140
Chrysene	87.1		P	40 - 140
Di-n-butyl phthalate	89.3		P	40 - 140
Di-n-octyl phthalate	83.4		P	40 - 140
Dibenzo(a,h)anthracene	84.9		P	40 - 140
Diethyl phthalate	98.0		P	40 - 140
Dimethyl phthalate	85.7		P	40 - 140
Fluoranthene	88.3		P	40 - 140
Fluorene	88.8		P	40 - 140
Hexachlorobenzene	90.0		P	40 - 140
Hexachlorobutadiene	83.8		P	40 - 140
Hexachlorocyclopentadiene	86.8		P	40 - 140
Hexachloroethane	74.6		P	40 - 140
Indeno(1,2,3-cd)pyrene	83.6		P	40 - 140
Isophorone	77.0		P	40 - 140
N-Nitrosodi-n-propylamine	86.0		P	40 - 140
N-Nitrosodimethylamine	74.2		P	40 - 140
N-Nitrosodiphenylamine/ Diphenylamine	115		P	40 - 140
Naphthalene	76.1		P	40 - 140
Nitrobenzene	78.4		P	40 - 140
Pentachlorophenol	87.1		P	40 - 140
Phenanthrene	86.6		P	40 - 140

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E
Batch ID: P419836

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Phenol	68.8		P	40 - 140
Pyrene	85.3		P	40 - 140

Reference Method: EPA 8270E
Batch ID: P419991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
1-Methylnaphthalene	88.3		P	50 - 130
1-Naphthylamine	54.0		P	20 - 130
1,2,4-Trichlorobenzene	78.0		P	50 - 130
1,2,4,5-Tetrachlorobenzene	84.8		P	50 - 130
1,3-Dinitrobenzene	94.0		P	50 - 130
1,3,5-Trinitrobenzene	110		P	50 - 150
2-Acetylaminofluorene	102		P	50 - 130
2-Chloronaphthalene	85.7		P	50 - 130
2-Chlorophenol	78.2		P	50 - 130
2-Methyl-4,6-dinitrophenol	106		P	50 - 150
2-Methylnaphthalene	86.7		P	50 - 130
2-Naphthylamine	53.5		P	20 - 130
2-Nitroaniline	93.4		P	50 - 130
2-Nitrophenol	86.0		P	50 - 130
2-Picoline	78.7		P	40 - 130
2,3,4,6-Tetrachlorophenol	98.0		P	50 - 130
2,4-Dichlorophenol	84.1		P	50 - 130
2,4-Dimethylphenol	86.0		P	50 - 130
2,4-Dinitrophenol	38.9		P	30 - 160
2,4-Dinitrotoluene	95.2		P	50 - 130
2,4,5-Trichlorophenol	80.0		P	50 - 130
2,4,6-Trichlorophenol	86.0		P	50 - 130
2,6-Dichlorophenol	94.4		P	50 - 130
2,6-Dinitrotoluene	96.6		P	50 - 130
3-Methylcholanthrene	73.6		P	50 - 130
3,3'-Dichlorobenzidine	87.1		P	0.0 - 200
4-Aminobiphenyl	84.0		P	30 - 130
4-Bromophenyl phenyl ether	90.7		P	50 - 130
4-Chloro-3-methylphenol	84.0		P	50 - 130
4-Chlorophenyl phenyl ether	97.2		P	50 - 130
4-Nitrophenol	44.1		P	15 - 110
5-Nitro-o-toluidine	107		P	50 - 130
7,12-Dimethylbenz(a)anthracene	92.3		P	50 - 130
Acenaphthene	92.6		P	50 - 130
Acenaphthylene	91.2		P	50 - 130
Acetophenone	99.7		P	50 - 130
Aniline	81.8		P	30 - 130
Anthracene	84.8		P	50 - 130
Azobenzene/1,2-Diphenylhydrazine	97.0		P	50 - 130
Benzidine	43.6		P	0.0 - 240
Benzo(a)anthracene	95.9		P	50 - 130
Benzo(a)pyrene	84.4		P	50 - 130
Benzo(b)fluoranthene	94.1		P	50 - 130
Benzo(g,h,i)perylene	68.6		P	50 - 130
Benzo(k)fluoranthene	97.1		P	50 - 130

Quality Assurance Report Laboratory Control Sample Accuracy

Reference Method: EPA 8270E

Batch ID: P419991

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
Benzyl alcohol	80.6		P	50 - 130
Bis(2-chloroethoxy)methane	86.5		P	50 - 130
Bis(2-chloroethyl)ether	84.1		P	50 - 160
Bis(2-chloroisopropyl)ether	81.2		P	50 - 130
Bis(2-ethylhexyl)phthalate	119		P	50 - 160
Butyl benzyl phthalate	108		P	50 - 160
Carbazole	119		P	50 - 130
Chrysene	97.4		P	50 - 130
Di-n-butyl phthalate	100		P	50 - 160
Di-n-octyl phthalate	104		P	50 - 130
Dibenzo(a,h)anthracene	69.9		P	50 - 130
Dibenzofuran	92.9		P	50 - 130
Diethyl phthalate	106		P	50 - 130
Dimethyl phthalate	100		P	50 - 130
Dimethylaminoazobenzene	104		P	50 - 130
Dinoseb	123		P	50 - 150
Ethyl methanesulfonate	92.2		P	50 - 130
Fluoranthene	91.6		P	50 - 130
Fluorene	97.1		P	50 - 130
Hexachlorobenzene	91.6		P	50 - 130
Hexachlorobutadiene	78.2		P	20 - 130
Hexachlorocyclopentadiene	49.4		P	20 - 130
Hexachloroethane	73.7		P	40 - 130
Hexachloropropene	91.5		P	50 - 130
Indeno(1,2,3-cd)pyrene	69.5		P	50 - 130
Isophorone	91.2		P	50 - 130
Isosafrole	93.3		P	50 - 130
m,p-Cresols	75.8		P	50 - 130
N-Nitrosodi-n-butylamine	97.0		P	50 - 130
N-Nitrosodi-n-propylamine	82.6		P	50 - 130
N-Nitrosodiethylamine	85.1		P	50 - 130
N-Nitrosodimethylamine	88.0		P	30 - 130
N-Nitrosodiphenylamine/ Diphenylamine	90.9		P	50 - 150
N-Nitrosomethylethylamine	87.4		P	50 - 130
N-Nitrosomorpholine	113		P	50 - 150
N-Nitrosopiperidine	95.9		P	50 - 130
N-Nitrosopyrrolidine	85.5		P	50 - 130
Naphthalene	85.7		P	50 - 130
Nitrobenzene	89.9		P	50 - 130
o-Cresol	79.8		P	50 - 130
o-Toluidine	94.5		P	50 - 130
Pentachlorobenzene	91.3		P	50 - 130
Pentachloroethane	81.8		P	50 - 130
Pentachloronitrobenzene	120		P	50 - 130
Pentachlorophenol	90.4		P	50 - 130
Phenacetin	118		P	50 - 130
Phenanthrene	92.8		P	50 - 130
Phenol	52.3		P	15 - 110
Pyrene	98.4		P	50 - 130
Pyridine	62.1		P	20 - 130
Safrole	96.2		P	50 - 130

Quality Assurance Report

Laboratory Control Sample Accuracy

Reference Method: FL-PRO 2018
Batch ID: P420047

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TRPH	101		P	66 - 116

Reference Method: FL-PRO 2018
Batch ID: P420336

Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
TRPH	66.6		P	65 - 117

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P419836

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2356498	1,2,4-Trichlorobenzene	78.6	82.3	P/P	40 - 140
2356498	2-Chloronaphthalene	79.2	82.4	P/P	40 - 140
2356498	2-Chlorophenol	73.6	80.1	P/P	40 - 140
2356498	2-Methyl-4,6-dinitrophenol	83.5	73.8	P/P	40 - 140
2356498	2-Nitrophenol	77.0	78.7	P/P	40 - 140
2356498	2,4-Dichlorophenol	86.4	89.2	P/P	40 - 140
2356498	2,4-Dimethylphenol	81.6	84.7	P/P	40 - 140
2356498	2,4-Dinitrophenol	77.2	63.7	P/P	40 - 140
2356498	2,4-Dinitrotoluene	88.5	87.1	P/P	40 - 140
2356498	2,4,6-Trichlorophenol	89.4	89.4	P/P	40 - 140
2356498	2,6-Dinitrotoluene	87.8	87.9	P/P	40 - 140
2356498	3,3'-Dichlorobenzidine	60.8	76.7	P/P	5.0 - 200
2356498	4-Bromophenyl phenyl ether	93.7	92.3	P/P	40 - 140
2356498	4-Chloro-3-methylphenol	85.8	88.0	P/P	40 - 140
2356498	4-Chlorophenyl phenyl ether	93.0	92.3	P/P	40 - 140
2356498	4-Nitrophenol	93.2	88.3	P/P	40 - 140
2356498	Acenaphthene	84.2	85.7	P/P	40 - 140
2356498	Acenaphthylene	78.5	82.0	P/P	40 - 140
2356498	Anthracene	90.8	88.8	P/P	40 - 140
2356498	Azobenzene/1,2-Diphenylhydrazine	96.1	93.0	P/P	40 - 140
2356498	Benzidine	0.0	0.0	F/F	5.0 - 200
2356498	Benzo(a)anthracene	91.2	92.3	P/P	40 - 140
2356498	Benzo(a)pyrene	85.2	83.4	P/P	40 - 140
2356498	Benzo(b)fluoranthene	94.1	89.9	P/P	40 - 140
2356498	Benzo(g,h,i)perylene	79.6	74.6	P/P	40 - 140
2356498	Benzo(k)fluoranthene	74.0	74.8	P/P	40 - 140
2356498	Bis(2-chloroethoxy)methane	78.3	82.3	P/P	40 - 140
2356498	Bis(2-chloroethyl)ether	56.2	58.7	P/P	40 - 140
2356498	Bis(2-chloroisopropyl)ether	84.0	91.5	P/P	40 - 160
2356498	Bis(2-ethylhexyl)phthalate	104	99.9	P/P	40 - 160
2356498	Butyl benzyl phthalate	88.6	89.0	P/P	40 - 140
2356498	Chrysene	91.6	92.4	P/P	40 - 140
2356498	Di-n-butyl phthalate	93.2	89.9	P/P	40 - 140
2356498	Di-n-octyl phthalate	87.9	85.1	P/P	40 - 140
2356498	Dibenzo(a,h)anthracene	85.4	82.2	P/P	40 - 140
2356498	Diethyl phthalate	105	119	P/P	40 - 140
2356498	Dimethyl phthalate	90.9	92.0	P/P	40 - 140
2356498	Fluoranthene	92.0	90.4	P/P	40 - 140
2356498	Fluorene	94.3	95.0	P/P	40 - 140
2356498	Hexachlorobenzene	94.6	92.0	P/P	40 - 140
2356498	Hexachlorobutadiene	83.1	86.8	P/P	40 - 140
2356498	Hexachlorocyclopentadiene	44.0	30.6	P/F	40 - 140
2356498	Hexachloroethane	62.8	63.3	P/P	40 - 140
2356498	Indeno(1,2,3-cd)pyrene	82.6	78.8	P/P	40 - 140
2356498	Isophorone	78.6	81.9	P/P	40 - 140
2356498	N-Nitrosodi-n-propylamine	87.6	97.2	P/P	40 - 140
2356498	N-Nitrosodimethylamine	72.1	78.4	P/P	40 - 140
2356498	N-Nitrosodiphenylamine/ Diphenylamine	117	118	P/P	40 - 140
2356498	Naphthalene	78.0	81.6	P/P	40 - 140
2356498	Nitrobenzene	79.7	83.0	P/P	40 - 140
2356498	Pentachlorophenol	103	97.0	P/P	40 - 140
2356498	Phenanthrene	93.4	89.0	P/P	40 - 140

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P419836

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2356498	Phenol	71.6	78.6	P/P	40 - 140
2356498	Pyrene	90.0	90.1	P/P	40 - 140

Reference Method: EPA 8270E

Batch ID: P419991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357707	1-Methylnaphthalene	82.7	82.1	P/P	50 - 130
2357707	1-Naphthylamine	46.5	46.7	P/P	20 - 130
2357707	1,2,4-Trichlorobenzene	77.9	75.0	P/P	50 - 130
2357707	1,2,4,5-Tetrachlorobenzene	85.0	82.6	P/P	50 - 130
2357707	1,3-Dinitrobenzene	88.6	91.8	P/P	50 - 130
2357707	1,3,5-Trinitrobenzene	107	106	P/P	50 - 150
2357707	2-Acetylaminofluorene	104	106	P/P	50 - 130
2357707	2-Chloronaphthalene	80.6	80.7	P/P	50 - 130
2357707	2-Chlorophenol	78.0	73.7	P/P	50 - 130
2357707	2-Methyl-4,6-dinitrophenol	110	110	P/P	50 - 150
2357707	2-Methylnaphthalene	81.5	81.4	P/P	50 - 130
2357707	2-Naphthylamine	43.7	45.0	P/P	20 - 130
2357707	2-Nitroaniline	90.1	88.2	P/P	50 - 130
2357707	2-Nitrophenol	87.2	76.8	P/P	50 - 130
2357707	2-Picoline	74.9	79.9	P/P	40 - 130
2357707	2,3,4,6-Tetrachlorophenol	94.0	95.7	P/P	50 - 130
2357707	2,4-Dichlorophenol	85.8	77.1	P/P	50 - 130
2357707	2,4-Dimethylphenol	87.4	80.4	P/P	50 - 130
2357707	2,4-Dinitrophenol	46.1	48.8	P/P	30 - 160
2357707	2,4-Dinitrotoluene	86.6	88.9	P/P	50 - 130
2357707	2,4,5-Trichlorophenol	79.6	74.0	P/P	50 - 130
2357707	2,4,6-Trichlorophenol	79.5	78.7	P/P	50 - 130
2357707	2,6-Dichlorophenol	96.3	88.1	P/P	50 - 130
2357707	2,6-Dinitrotoluene	94.6	92.3	P/P	50 - 130
2357707	3-Methylcholanthrene	87.2	80.1	P/P	50 - 130
2357707	3,3'-Dichlorobenzidine	73.2	78.8	P/P	0.0 - 200
2357707	4-Aminobiphenyl	79.4	76.2	P/P	30 - 130
2357707	4-Bromophenyl phenyl ether	88.5	89.5	P/P	50 - 130
2357707	4-Chloro-3-methylphenol	85.5	82.0	P/P	50 - 130
2357707	4-Chlorophenyl phenyl ether	90.2	93.2	P/P	50 - 130
2357707	4-Nitrophenol	49.5	43.7	P/P	15 - 110
2357707	5-Nitro-o-toluidine	97.5	97.5	P/P	50 - 130
2357707	7,12-Dimethylbenz(a)anthracene	88.5	85.5	P/P	50 - 130
2357707	Acenaphthene	87.7	88.8	P/P	50 - 130
2357707	Acenaphthylene	86.7	86.7	P/P	50 - 130
2357707	Acetophenone	97.9	93.8	P/P	50 - 130
2357707	Aniline	79.5	74.3	P/P	30 - 130
2357707	Anthracene	91.6	92.0	P/P	50 - 130
2357707	Azobenzene/1,2-Diphenylhydrazine	95.8	96.6	P/P	50 - 130
2357707	Benzdine	29.8	29.6	P/P	0.0 - 240
2357707	Benzo(a)anthracene	94.2	94.1	P/P	50 - 130
2357707	Benzo(a)pyrene	89.6	94.1	P/P	50 - 130
2357707	Benzo(b)fluoranthene	96.3	95.4	P/P	50 - 130
2357707	Benzo(g,h,i)perylene	72.0	76.1	P/P	50 - 130
2357707	Benzo(k)fluoranthene	91.2	94.1	P/P	50 - 130

Quality Assurance Report Matrix Spike Accuracy

Reference Method: EPA 8270E

Batch ID: P419991

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357707	Benzyl alcohol	79.1	78.5	P/P	50 - 130
2357707	Bis(2-chloroethoxy)methane	87.2	77.9	P/P	50 - 130
2357707	Bis(2-chloroethyl)ether	83.3	77.3	P/P	50 - 160
2357707	Bis(2-chloroisopropyl)ether	80.3	76.9	P/P	50 - 130
2357707	Bis(2-ethylhexyl)phthalate	115	116	P/P	50 - 160
2357707	Butyl benzyl phthalate	106	106	P/P	50 - 160
2357707	Carbazole	123	124	P/P	50 - 130
2357707	Chrysene	94.0	94.2	P/P	50 - 130
2357707	Di-n-butyl phthalate	96.7	99.0	P/P	50 - 160
2357707	Di-n-octyl phthalate	105	110	P/P	50 - 130
2357707	Dibenzo(a,h)anthracene	73.2	78.2	P/P	50 - 130
2357707	Dibenzofuran	88.2	87.6	P/P	50 - 130
2357707	Diethyl phthalate	98.5	98.8	P/P	50 - 130
2357707	Dimethyl phthalate	94.9	93.8	P/P	50 - 130
2357707	Dimethylaminoazobenzene	101	102	P/P	50 - 130
2357707	Dinoseb	124	122	P/P	50 - 150
2357707	Ethyl methanesulfonate	90.9	86.3	P/P	50 - 130
2357707	Fluoranthene	89.7	90.6	P/P	50 - 130
2357707	Fluorene	91.7	92.7	P/P	50 - 130
2357707	Hexachlorobenzene	87.1	88.8	P/P	50 - 130
2357707	Hexachlorobutadiene	76.0	78.5	P/P	20 - 130
2357707	Hexachlorocyclopentadiene	44.0	49.8	P/P	20 - 130
2357707	Hexachloroethane	71.0	75.4	P/P	40 - 130
2357707	Hexachloropropene	87.8	80.3	P/P	50 - 130
2357707	Indeno(1,2,3-cd)pyrene	74.6	79.4	P/P	50 - 130
2357707	Isophorone	93.0	84.7	P/P	50 - 130
2357707	Isosafrole	89.4	96.3	P/P	50 - 130
2357707	m,p-Cresols	76.2	74.5	P/P	50 - 130
2357707	N-Nitrosodi-n-butylamine	96.3	88.8	P/P	50 - 130
2357707	N-Nitrosodi-n-propylamine	82.6	79.0	P/P	50 - 130
2357707	N-Nitrosodiethylamine	88.2	81.6	P/P	50 - 130
2357707	N-Nitrosodimethylamine	85.9	89.7	P/P	30 - 130
2357707	N-Nitrosodiphenylamine/ Diphenylamine	92.1	93.7	P/P	50 - 150
2357707	N-Nitrosomethylethylamine	80.0	78.3	P/P	50 - 130
2357707	N-Nitrosomorpholine	111	109	P/P	50 - 150
2357707	N-Nitrosopiperidine	95.0	91.4	P/P	50 - 130
2357707	N-Nitrosopyrrolidine	81.5	79.3	P/P	50 - 130
2357707	Naphthalene	86.0	79.5	P/P	50 - 130
2357707	Nitrobenzene	91.1	78.9	P/P	50 - 130
2357707	o-Cresol	79.2	76.4	P/P	50 - 130
2357707	o-Toluidine	91.1	87.6	P/P	50 - 130
2357707	Pentachlorobenzene	86.2	86.3	P/P	50 - 130
2357707	Pentachloroethane	81.6	82.2	P/P	50 - 130
2357707	Pentachloronitrobenzene	121	114	P/P	50 - 130
2357707	Pentachlorophenol	90.7	84.8	P/P	50 - 130
2357707	Phenacetin	116	114	P/P	50 - 130
2357707	Phenanthrene	91.9	93.2	P/P	50 - 130
2357707	Phenol	55.2	56.6	P/P	15 - 110
2357707	Pyrene	94.8	94.9	P/P	50 - 130
2357707	Pyridine	61.5	65.3	P/P	20 - 130
2357707	Safrole	98.2	87.4	P/P	50 - 130

Quality Assurance Report

Matrix Spike Accuracy

Reference Method: FL-PRO 2018
Batch ID: P420047

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357710	TRPH	99.7	114	P/P	65 - 123

Reference Method: FL-PRO 2018
Batch ID: P420336

Spiked Sample	Component	% Rec.1	% Rec.2	Pass/Fail	Control Limits
2357705	TRPH	71.2	72.6	P/P	39 - 140

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P419836

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2356498	1,2,4-Trichlorobenzene	4.57	Spike	P	0 - 40
2356498	2-Chloronaphthalene	4.06	Spike	P	0 - 40
2356498	2-Chlorophenol	8.43	Spike	P	0 - 40
2356498	2-Methyl-4,6-dinitrophenol	12.3	Spike	P	0 - 40
2356498	2-Nitrophenol	2.16	Spike	P	0 - 40
2356498	2,4-Dichlorophenol	3.19	Spike	P	0 - 40
2356498	2,4-Dimethylphenol	3.75	Spike	P	0 - 40
2356498	2,4-Dinitrophenol	19.1	Spike	P	0 - 40
2356498	2,4-Dinitrotoluene	1.59	Spike	P	0 - 40
2356498	2,4,6-Trichlorophenol	0.0448	Spike	P	0 - 40
2356498	2,6-Dinitrotoluene	0.137	Spike	P	0 - 40
2356498	3,3'-Dichlorobenzidine	23.2	Spike	P	0 - 40
2356498	4-Bromophenyl phenyl ether	1.51	Spike	P	0 - 40
2356498	4-Chloro-3-methylphenol	2.49	Spike	P	0 - 40
2356498	4-Chlorophenyl phenyl ether	0.734	Spike	P	0 - 40
2356498	4-Nitrophenol	5.46	Spike	P	0 - 40
2356498	Acenaphthene	1.69	Spike	P	0 - 40
2356498	Acenaphthylene	4.29	Spike	P	0 - 40
2356498	Anthracene	2.27	Spike	P	0 - 40
2356498	Azobenzene/1,2-Diphenylhydrazine	3.30	Spike	P	0 - 40
2356498	Benzo(a)anthracene	1.25	Spike	P	0 - 40
2356498	Benzo(a)pyrene	2.10	Spike	P	0 - 40
2356498	Benzo(b)fluoranthene	4.43	Spike	P	0 - 40
2356498	Benzo(g,h,i)perylene	6.34	Spike	P	0 - 40
2356498	Benzo(k)fluoranthene	1.00	Spike	P	0 - 40
2356498	Bis(2-chloroethoxy)methane	4.93	Spike	P	0 - 40
2356498	Bis(2-chloroethyl)ether	4.46	Spike	P	0 - 40
2356498	Bis(2-chloroisopropyl)ether	8.52	Spike	P	0 - 40
2356498	Bis(2-ethylhexyl)phthalate	3.62	Spike	P	0 - 40
2356498	Butyl benzyl phthalate	0.450	Spike	P	0 - 40
2356498	Chrysene	0.855	Spike	P	0 - 40
2356498	Di-n-butyl phthalate	3.54	Spike	P	0 - 40
2356498	Di-n-octyl phthalate	3.19	Spike	P	0 - 40
2356498	Dibenzo(a,h)anthracene	3.91	Spike	P	0 - 40
2356498	Diethyl phthalate	11.9	Spike	P	0 - 40
2356498	Dimethyl phthalate	1.22	Spike	P	0 - 40
2356498	Fluoranthene	1.71	Spike	P	0 - 40
2356498	Fluorene	0.676	Spike	P	0 - 40
2356498	Hexachlorobenzene	2.79	Spike	P	0 - 40
2356498	Hexachlorobutadiene	4.38	Spike	P	0 - 40
2356498	Hexachlorocyclopentadiene	35.9	Spike	P	0 - 40
2356498	Hexachloroethane	0.698	Spike	P	0 - 40
2356498	Indeno(1,2,3-cd)pyrene	4.60	Spike	P	0 - 40
2356498	Isophorone	4.04	Spike	P	0 - 40
2356498	N-Nitrosodi-n-propylamine	10.3	Spike	P	0 - 40
2356498	N-Nitrosodimethylamine	8.45	Spike	P	0 - 40
2356498	N-Nitrosodiphenylamine/ Diphenylamine	1.06	Spike	P	0 - 40
2356498	Naphthalene	4.46	Spike	P	0 - 40
2356498	Nitrobenzene	4.13	Spike	P	0 - 40
2356498	Pentachlorophenol	5.69	Spike	P	0 - 40
2356498	Phenanthrene	4.87	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E

Batch ID: P419836

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2356498	Phenol	9.43	Spike	P	0 - 40
2356498	Pyrene	0.131	Spike	P	0 - 40

Reference Method: EPA 8270E

Batch ID: P419991

Replicated

Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357707	1-Methylnaphthalene	0.728	Spike	P	0 - 40
2357707	1-Naphthylamine	0.429	Spike	P	0 - 40
2357707	1,2,4-Trichlorobenzene	3.79	Spike	P	0 - 40
2357707	1,2,4,5-Tetrachlorobenzene	2.86	Spike	P	0 - 40
2357707	1,3-Dinitrobenzene	3.60	Spike	P	0 - 40
2357707	1,3,5-Trinitrobenzene	0.842	Spike	P	0 - 40
2357707	2-Acetylaminofluorene	1.52	Spike	P	0 - 40
2357707	2-Chloronaphthalene	0.124	Spike	P	0 - 40
2357707	2-Chlorophenol	5.67	Spike	P	0 - 40
2357707	2-Methyl-4,6-dinitrophenol	0.273	Spike	P	0 - 40
2357707	2-Methylnaphthalene	0.123	Spike	P	0 - 40
2357707	2-Naphthylamine	2.93	Spike	P	0 - 40
2357707	2-Nitroaniline	2.13	Spike	P	0 - 40
2357707	2-Nitrophenol	12.7	Spike	P	0 - 40
2357707	2-Picoline	6.46	Spike	P	0 - 40
2357707	2,3,4,6-Tetrachlorophenol	1.74	Spike	P	0 - 40
2357707	2,4-Dichlorophenol	10.7	Spike	P	0 - 40
2357707	2,4-Dimethylphenol	8.34	Spike	P	0 - 40
2357707	2,4-Dinitrophenol	5.69	Spike	P	0 - 40
2357707	2,4-Dinitrotoluene	2.62	Spike	P	0 - 40
2357707	2,4,5-Trichlorophenol	7.29	Spike	P	0 - 40
2357707	2,4,6-Trichlorophenol	1.01	Spike	P	0 - 40
2357707	2,6-Dichlorophenol	8.89	Spike	P	0 - 40
2357707	2,6-Dinitrotoluene	2.46	Spike	P	0 - 40
2357707	3-Methylcholanthrene	8.49	Spike	P	0 - 40
2357707	3,3'-Dichlorobenzidine	7.30	Spike	P	0 - 40
2357707	4-Aminobiphenyl	4.11	Spike	P	0 - 40
2357707	4-Bromophenyl phenyl ether	1.12	Spike	P	0 - 40
2357707	4-Chloro-3-methylphenol	4.18	Spike	P	0 - 40
2357707	4-Chlorophenyl phenyl ether	3.27	Spike	P	0 - 40
2357707	4-Nitrophenol	12.4	Spike	P	0 - 40
2357707	5-Nitro-o-toluidine	0.0	Spike	P	0 - 40
2357707	7,12-Dimethylbenz(a)anthracene	3.45	Spike	P	0 - 40
2357707	Acenaphthene	1.25	Spike	P	0 - 40
2357707	Acenaphthylene	0.0	Spike	P	0 - 40
2357707	Acetophenone	4.28	Spike	P	0 - 40
2357707	Aniline	6.76	Spike	P	0 - 40
2357707	Anthracene	0.436	Spike	P	0 - 40
2357707	Azobenzene/1,2-Diphenylhydrazine	0.832	Spike	P	0 - 40
2357707	Benzidine	1.01	Spike	P	0 - 40
2357707	Benzo(a)anthracene	0.106	Spike	P	0 - 40
2357707	Benzo(a)pyrene	4.90	Spike	P	0 - 40
2357707	Benzo(b)fluoranthene	0.939	Spike	P	0 - 40

Quality Assurance Report

Precision

Reference Method: EPA 8270E

Batch ID: P419991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357707	Benzo(g,h,i)perylene	5.54	Spike	P	0 - 40
2357707	Benzo(k)fluoranthene	3.13	Spike	P	0 - 40
2357707	Benzyl alcohol	0.761	Spike	P	0 - 40
2357707	Bis(2-chloroethoxy)methane	11.3	Spike	P	0 - 40
2357707	Bis(2-chloroethyl)ether	7.47	Spike	P	0 - 40
2357707	Bis(2-chloroisopropyl)ether	4.33	Spike	P	0 - 40
2357707	Bis(2-ethylhexyl)phthalate	1.04	Spike	P	0 - 40
2357707	Butyl benzyl phthalate	0.661	Spike	P	0 - 40
2357707	Carbazole	1.29	Spike	P	0 - 40
2357707	Chrysene	0.213	Spike	P	0 - 40
2357707	Di-n-butyl phthalate	2.35	Spike	P	0 - 40
2357707	Di-n-octyl phthalate	4.74	Spike	P	0 - 40
2357707	Dibenzo(a,h)anthracene	6.61	Spike	P	0 - 40
2357707	Dibenzofuran	0.683	Spike	P	0 - 40
2357707	Diethyl phthalate	0.304	Spike	P	0 - 40
2357707	Dimethyl phthalate	1.17	Spike	P	0 - 40
2357707	Dimethylaminoazobenzene	0.591	Spike	P	0 - 40
2357707	Dinoseb	0.813	Spike	P	0 - 40
2357707	Ethyl methanesulfonate	5.19	Spike	P	0 - 40
2357707	Fluoranthene	0.998	Spike	P	0 - 40
2357707	Fluorene	1.08	Spike	P	0 - 40
2357707	Hexachlorobenzene	1.93	Spike	P	0 - 40
2357707	Hexachlorobutadiene	3.24	Spike	P	0 - 40
2357707	Hexachlorocyclopentadiene	12.4	Spike	P	0 - 40
2357707	Hexachloroethane	6.01	Spike	P	0 - 40
2357707	Hexachloropropene	8.92	Spike	P	0 - 40
2357707	Indeno(1,2,3-cd)pyrene	6.23	Spike	P	0 - 40
2357707	Isophorone	9.34	Spike	P	0 - 40
2357707	Isosafrole	7.43	Spike	P	0 - 40
2357707	m,p-Cresols	2.24	Spike	P	0 - 40
2357707	N-Nitrosodi-n-butylamine	8.02	Spike	P	0 - 40
2357707	N-Nitrosodi-n-propylamine	4.46	Spike	P	0 - 40
2357707	N-Nitrosodiethylamine	7.77	Spike	P	0 - 40
2357707	N-Nitrosodimethylamine	4.33	Spike	P	0 - 40
2357707	N-Nitrosodiphenylamine/ Diphenylamine	1.72	Spike	P	0 - 40
2357707	N-Nitrosomethylethylamine	2.15	Spike	P	0 - 40
2357707	N-Nitrosomorpholine	1.45	Spike	P	0 - 40
2357707	N-Nitrosopiperidine	3.86	Spike	P	0 - 40
2357707	N-Nitrosopyrrolidine	2.74	Spike	P	0 - 40
2357707	Naphthalene	7.85	Spike	P	0 - 40
2357707	Nitrobenzene	14.4	Spike	P	0 - 40
2357707	o-Cresol	3.60	Spike	P	0 - 40
2357707	o-Toluidine	3.92	Spike	P	0 - 40
2357707	Pentachlorobenzene	0.116	Spike	P	0 - 40
2357707	Pentachloroethane	0.733	Spike	P	0 - 40
2357707	Pentachloronitrobenzene	5.71	Spike	P	0 - 40
2357707	Pentachlorophenol	6.72	Spike	P	0 - 40
2357707	Phenacetin	2.43	Spike	P	0 - 40
2357707	Phenanthrene	1.40	Spike	P	0 - 40
2357707	Phenol	2.50	Spike	P	0 - 40
2357707	Pyrene	0.104	Spike	P	0 - 40

Quality Assurance Report Precision

Reference Method: EPA 8270E
Batch ID: P419991

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357707	Pyridine	5.99	Spike	P	0 - 40
2357707	Safrole	11.6	Spike	P	0 - 40

Reference Method: FL-PRO 2018
Batch ID: P420047

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357710	TRPH	13.7	Spike	P	0 - 20

Reference Method: FL-PRO 2018
Batch ID: P420336

Replicated Lab Sample	Component	% RSD/RPD	Sample/Spike/LCS*	Pass/Fail	Control Limits
2357705	TRPH	1.90	Spike	P	0 - 25

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

Quality Assurance Report Surrogates

Lab Sample ID: 2357703

Field Sample ID: G3NW0243

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	94.1	P	30 - 150
EPA 8270E	2-Fluorophenol	75.8	P	20 - 150
EPA 8270E	2,4,6-Tribromophenol	98.5	P	30 - 150
EPA 8270E	Nitrobenzene-d5	91.2	P	30 - 150
EPA 8270E	Phenol-d5	94.8	P	20 - 150
EPA 8270E	Terphenyl-d14	105	P	30 - 150
FL-PRO 2018	Nonatriacontane(C39)	56.4	P	36 - 132
FL-PRO 2018	o-Terphenyl	71.1	P	66 - 136

Lab Sample ID: 2357704

Field Sample ID: G3NW0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	94.6	P	30 - 150
EPA 8270E	2-Fluorophenol	73.5	P	20 - 150
EPA 8270E	2,4,6-Tribromophenol	96.2	P	30 - 150
EPA 8270E	Nitrobenzene-d5	97.0	P	30 - 150
EPA 8270E	Phenol-d5	89.9	P	20 - 150
EPA 8270E	Terphenyl-d14	106	P	30 - 150
FL-PRO 2018	Nonatriacontane(C39)	74.9	P	36 - 132
FL-PRO 2018	o-Terphenyl	87.2	P	66 - 136

Lab Sample ID: 2357705

Field Sample ID: G3NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	101	P	30 - 150
EPA 8270E	2-Fluorophenol	74.9	P	20 - 150
EPA 8270E	2,4,6-Tribromophenol	94.6	P	30 - 150
EPA 8270E	Nitrobenzene-d5	93.6	P	30 - 150
EPA 8270E	Phenol-d5	89.8	P	20 - 150
EPA 8270E	Terphenyl-d14	109	P	30 - 150
FL-PRO 2018	Nonatriacontane(C39)	84.0	P	36 - 132
FL-PRO 2018	o-Terphenyl	97.7	P	66 - 136

Lab Sample ID: 2357706

Field Sample ID: G3NW0243

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	107	P	30 - 150
EPA 8270E	2-Fluorophenol	89.0	P	20 - 150
EPA 8270E	2,4,6-Tribromophenol	93.4	P	30 - 150
EPA 8270E	Nitrobenzene-d5	114	P	30 - 150
EPA 8270E	Phenol-d5	66.0	P	20 - 150
EPA 8270E	Terphenyl-d14	129	P	30 - 150

Lab Sample ID: 2357707

Field Sample ID: G3NW0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	100	P	30 - 150
EPA 8270E	2-Fluorophenol	86.1	P	20 - 150

Quality Assurance Report Surrogates

Lab Sample ID: 2357707
Field Sample ID: G3NW0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2,4,6-Tribromophenol	91.8	P	30 - 150
EPA 8270E	Nitrobenzene-d5	111	P	30 - 150
EPA 8270E	Phenol-d5	63.5	P	20 - 150
EPA 8270E	Terphenyl-d14	129	P	30 - 150

Lab Sample ID: 2357708
Field Sample ID: G3NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
EPA 8270E	2-Fluorobiphenyl	108	P	30 - 150
EPA 8270E	2-Fluorophenol	87.1	P	20 - 150
EPA 8270E	2,4,6-Tribromophenol	96.2	P	30 - 150
EPA 8270E	Nitrobenzene-d5	119	P	30 - 150
EPA 8270E	Phenol-d5	65.3	P	20 - 150
EPA 8270E	Terphenyl-d14	133	P	30 - 150

Lab Sample ID: 2357709
Field Sample ID: G3NW0243

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
FL-PRO 2018	Nonatriacontane(C39)	75.7	P	36 - 132
FL-PRO 2018	o-Terphenyl	92.3	P	66 - 136

Lab Sample ID: 2357710
Field Sample ID: G3NW0242

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
FL-PRO 2018	Nonatriacontane(C39)	86.7	P	36 - 132
FL-PRO 2018	o-Terphenyl	104	P	66 - 136

Lab Sample ID: 2357711
Field Sample ID: G3NW0244

Reference Method	Surrogate	% Rec.	Pass/Fail	Control Limits
FL-PRO 2018	Nonatriacontane(C39)	92.6	P	36 - 132
FL-PRO 2018	o-Terphenyl	131	P	66 - 136

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114875

Included Lab Sample IDs: 2357703, 2357704, 2357705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1,2,4-Trichlorobenzene	107		P	70 - 130
2-Chloronaphthalene	109		P	70 - 130
2-Chlorophenol	101		P	70 - 130
2-Methyl-4,6-dinitrophenol	96.8		P	70 - 130
2-Nitrophenol	99.4		P	70 - 130
2,4-Dichlorophenol	106		P	70 - 140
2,4-Dimethylphenol	100		P	70 - 130
2,4-Dinitrophenol	98.6		P	70 - 130
2,4-Dinitrotoluene	109		P	70 - 130
2,4,6-Trichlorophenol	109		P	70 - 130
2,6-Dinitrotoluene	107		P	70 - 130
3,3'-Dichlorobenzidine	94.5		P	50 - 130
4-Bromophenyl phenyl ether	109		P	70 - 130
4-Chloro-3-methylphenol	108		P	70 - 130
4-Chlorophenyl phenyl ether	111		P	70 - 130
4-Nitrophenol	85.9		P	70 - 130
Acenaphthene	108		P	70 - 130
Acenaphthylene	107		P	70 - 130
Anthracene	109		P	70 - 130
Azobenzene/1,2-Diphenylhydrazine	114		P	70 - 130
Benzidine	54.5		P	50 - 130
Benzo(a)anthracene	105		P	70 - 130
Benzo(a)pyrene	119		P	70 - 130
Benzo(b)fluoranthene	116		P	70 - 130
Benzo(g,h,i)perylene	117		P	70 - 130
Benzo(k)fluoranthene	105		P	70 - 130
Bis(2-chloroethoxy)methane	103		P	70 - 130
Bis(2-chloroethyl)ether	102		P	70 - 130
Bis(2-chloroisopropyl)ether	118		P	70 - 130
Bis(2-ethylhexyl)phthalate	105		P	70 - 130
Butyl benzyl phthalate	101		P	70 - 130
Chrysene	104		P	70 - 130
Di-n-butyl phthalate	110		P	70 - 130
Di-n-octyl phthalate	122		P	70 - 130
Dibenzo(a,h)anthracene	117		P	70 - 130
Diethyl phthalate	117		P	70 - 130
Dimethyl phthalate	113		P	70 - 130
Fluoranthene	110		P	70 - 130
Fluorene	110		P	70 - 130
Hexachlorobenzene	109		P	70 - 130
Hexachlorobutadiene	117		P	70 - 130
Hexachlorocyclopentadiene	117		P	70 - 130
Hexachloroethane	118		P	70 - 130
Indeno(1,2,3-cd)pyrene	117		P	70 - 130
Isophorone	106		P	70 - 130
N-Nitrosodi-n-propylamine	122		P	70 - 130
N-Nitrosodimethylamine	109		P	70 - 130
N-Nitrosodiphenylamine/ Diphenylamine	99.6		P	70 - 130
Naphthalene	105		P	70 - 130
Nitrobenzene	109		P	70 - 130
Pentachlorophenol	90.9		P	70 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A114875

Included Lab Sample IDs: 2357703, 2357704, 2357705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenanthrene	109		P	70 - 130
Phenol	100		P	70 - 130
Pyrene	104		P	70 - 130

Reference Method: FL-PRO 2018

Run ID: A114992

Included Lab Sample IDs: 2357710, 2357711

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
TRPH	112	125	P/P	75 - 125

Reference Method: FL-PRO 2018

Run ID: A114993

Included Lab Sample IDs: 2357709

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
TRPH	112	122	P/P	75 - 125

Reference Method: FL-PRO 2018

Run ID: A115051

Included Lab Sample IDs: 2357703, 2357704, 2357705

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
TRPH	96.7	102	P/P	75 - 125

Reference Method: EPA 8270E

Run ID: A115058

Included Lab Sample IDs: 2357706, 2357707, 2357708

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1-Naphthylamine	90.2		P	60 - 130
2-Acetylaminofluorene	81.6		P	70 - 150
2-Methyl-4,6-dinitrophenol	119		P	70 - 130
2-Naphthylamine	68.4		P	60 - 130
2-Picoline	95.4		P	70 - 130
2,4-Dinitrophenol	82.0		P	70 - 130
3,3'-Dichlorobenzidine	125		P	50 - 130
4-Aminobiphenyl	70.2		P	70 - 130
4-Nitrophenol	89.4		P	70 - 130
Aniline	108		P	70 - 130
Benidine	72.6		P	50 - 130
Bis(2-ethylhexyl)phthalate	121		P	70 - 130
Butyl benzyl phthalate	118		P	70 - 130
Di-n-butyl phthalate	108		P	70 - 130
Diethyl phthalate	106		P	70 - 130
Dinoseb	93.1		P	70 - 130
Ethyl methanesulfonate	94.1		P	70 - 130
N-Nitrosodiethylamine	97.6		P	70 - 130
N-Nitrosodimethylamine	119		P	70 - 130
N-Nitrosomethylethylamine	97.0		P	70 - 130
Pentachlorophenol	97.1		P	70 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A115058

Included Lab Sample IDs: 2357706, 2357707, 2357708

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Phenacetin	94.4		P	70 - 130
Pyridine	110		P	70 - 130

Reference Method: EPA 8270E

Run ID: A115059

Included Lab Sample IDs: 2357706, 2357707, 2357708

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
1-Methylnaphthalene	84.4		P	70 - 130
1,2,4-Trichlorobenzene	101		P	70 - 130
1,2,4,5-Tetrachlorobenzene	82.9		P	70 - 130
1,3-Dinitrobenzene	71.9		P	70 - 130
1,3,5-Trinitrobenzene	75.2		P	70 - 130
2-Chloronaphthalene	102		P	70 - 130
2-Chlorophenol	91.7		P	70 - 130
2-Methylnaphthalene	109		P	70 - 130
2-Nitroaniline	76.7		P	70 - 130
2-Nitrophenol	94.0		P	70 - 130
2,3,4,6-Tetrachlorophenol	72.3		P	70 - 130
2,4-Dichlorophenol	99.6		P	70 - 130
2,4-Dimethylphenol	105		P	70 - 130
2,4-Dinitrotoluene	87.7		P	70 - 130
2,4,5-Trichlorophenol	111		P	70 - 130
2,4,6-Trichlorophenol	104		P	70 - 130
2,6-Dichlorophenol	91.3		P	70 - 130
2,6-Dinitrotoluene	99.8		P	70 - 130
3-Methylcholanthrene	86.6		P	70 - 130
4-Bromophenyl phenyl ether	99.6		P	70 - 130
4-Chloro-3-methylphenol	78.8		P	70 - 130
4-Chlorophenyl phenyl ether	104		P	70 - 130
5-Nitro-o-toluidine	75.7		P	70 - 130
7,12-Dimethylbenz(a)anthracene	90.7		P	70 - 130
Acenaphthene	102		P	70 - 130
Acenaphthylene	101		P	70 - 130
Acetophenone	84.0		P	70 - 130
Anthracene	96.6		P	70 - 130
Azobenzene/1,2-Diphenylhydrazine	107		P	70 - 130
Benzo(a)anthracene	102		P	70 - 130
Benzo(a)pyrene	110		P	70 - 130
Benzo(b)fluoranthene	109		P	70 - 130
Benzo(g,h,i)perylene	110		P	70 - 130
Benzo(k)fluoranthene	109		P	70 - 130
Benzyl alcohol	70.8		P	70 - 130
Bis(2-chloroethoxy)methane	93.0		P	70 - 130
Bis(2-chloroethyl)ether	94.1		P	70 - 130
Bis(2-chloroisopropyl)ether	107		P	70 - 130
Carbazole	89.6		P	70 - 130
Chrysene	104		P	70 - 130
Di-n-octyl phthalate	109		P	70 - 130
Dibenzo(a,h)anthracene	117		P	70 - 130
Dibenzofuran	102		P	70 - 130

Quality Assurance Report Calibration Verification

Reference Method: EPA 8270E

Run ID: A115059

Included Lab Sample IDs: 2357706, 2357707, 2357708

Component	% Rec.1	% Rec.2	Pass/Fail*	Control Limits
Dimethyl phthalate	99.7		P	70 - 130
Dimethylaminoazobenzene	74.2		P	70 - 130
Fluoranthene	102		P	70 - 130
Fluorene	104		P	70 - 130
Hexachlorobenzene	97.2		P	70 - 130
Hexachlorobutadiene	99.0		P	70 - 130
Hexachlorocyclopentadiene	107		P	70 - 130
Hexachloroethane	100		P	70 - 130
Hexachloropropene	86.2		P	70 - 130
Indeno(1,2,3-cd)pyrene	116		P	70 - 130
Isophorone	105		P	70 - 130
Isosafrole	89.3		P	70 - 130
m,p-Cresols	102		P	70 - 130
N-Nitrosodi-n-butylamine	71.3		P	70 - 130
N-Nitrosodi-n-propylamine	92.1		P	70 - 130
N-Nitrosodiphenylamine/ Diphenylamine	101		P	70 - 130
N-Nitrosomorpholine	76.1		P	70 - 130
N-Nitrosopiperidine	80.4		P	70 - 130
N-Nitrosopyrrolidine	70.8		P	70 - 130
Naphthalene	102		P	70 - 130
Nitrobenzene	76.3		P	70 - 130
o-Cresol	103		P	70 - 130
o-Toluidine	91.2		P	70 - 130
Pentachlorobenzene	83.8		P	70 - 130
Pentachloroethane	79.8		P	70 - 130
Pentachloronitrobenzene	81.0		P	70 - 130
Phenanthrene	95.9		P	70 - 130
Phenol	93.1		P	70 - 130
Pyrene	103		P	70 - 130
Safrole	77.8		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	MS
						SMP	
EPA 8270E	1-Methylnaphthalene	88.3	82.1	82.7			0.728
	1-Naphthylamine	54.0	46.7	46.5			0.429
	1,2,4-Trichlorobenzene	77.4	82.3	78.6			4.57
	1,2,4-Trichlorobenzene	78.0	75.0	77.9			3.79
	1,2,4,5-Tetrachlorobenzene	84.8	82.6	85.0			2.86
	1,3-Dinitrobenzene	94.0	91.8	88.6			3.60
	1,3,5-Trinitrobenzene	110	106	107			0.842
	2-Acetylaminofluorene	102	106	104			1.52
	2-Chloronaphthalene	78.1	79.2	82.4			4.06
	2-Chloronaphthalene	85.7	80.7	80.6			0.124
	2-Chlorophenol	74.2	80.1	73.6			8.43
	2-Chlorophenol	78.2	73.7	78.0			5.67
	2-Methyl-4,6-dinitrophenol	76.7	83.5	73.8			12.3
	2-Methyl-4,6-dinitrophenol	106	110	110			0.273
	2-Methylnaphthalene	86.7	81.4	81.5			0.123
	2-Naphthylamine	53.5	45.0	43.7			2.93
	2-Nitroaniline	93.4	88.2	90.1			2.13
	2-Nitrophenol	73.1	78.7	77.0			2.16
	2-Nitrophenol	86.0	76.8	87.2			12.7
	2-Picoline	78.7	79.9	74.9			6.46
	2,3,4,6-Tetrachlorophenol	98.0	95.7	94.0			1.74
	2,4-Dichlorophenol	81.5	89.2	86.4			3.19
	2,4-Dichlorophenol	84.1	77.1	85.8			10.7
	2,4-Dimethylphenol	76.7	84.7	81.6			3.75
	2,4-Dimethylphenol	86.0	80.4	87.4			8.34
	2,4-Dinitrophenol	54.2	77.2	63.7			19.1
	2,4-Dinitrophenol	38.9	48.8	46.1			5.69
	2,4-Dinitrotoluene	84.6	88.5	87.1			1.59
	2,4-Dinitrotoluene	95.2	88.9	86.6			2.62
	2,4,5-Trichlorophenol	80.0	74.0	79.6			7.29
	2,4,6-Trichlorophenol	81.4	89.4	89.4			0.0448
	2,4,6-Trichlorophenol	86.0	78.7	79.5			1.01
	2,6-Dichlorophenol	94.4	88.1	96.3			8.89
	2,6-Dinitrotoluene	84.6	87.8	87.9			0.137
	2,6-Dinitrotoluene	96.6	92.3	94.6			2.46
	3-Methylcholanthrene	73.6	80.1	87.2			8.49
	3,3'-Dichlorobenzidine	103	60.8	76.7			23.2
	3,3'-Dichlorobenzidine	87.1	78.8	73.2			7.30
	4-Aminobiphenyl	84.0	76.2	79.4			4.11
	4-Bromophenyl phenyl ether	88.5	93.7	92.3			1.51
	4-Bromophenyl phenyl ether	90.7	89.5	88.5			1.12
	4-Chloro-3-methylphenol	80.6	85.8	88.0			2.49
	4-Chloro-3-methylphenol	84.0	82.0	85.5			4.18
	4-Chlorophenyl phenyl ether	86.3	93.0	92.3			0.734
	4-Chlorophenyl phenyl ether	97.2	93.2	90.2			3.27
	4-Nitrophenol	80.2	93.2	88.3			5.46
	4-Nitrophenol	44.1	43.7	49.5			12.4
	5-Nitro-o-toluidine	107	97.5	97.5			0.0
	7,12-Dimethylbenz(a)anthracene	92.3	85.5	88.5			3.45
	Acenaphthene	81.4	84.2	85.7			1.69
	Acenaphthene	92.6	88.8	87.7			1.25
	Acenaphthylene	77.1	78.5	82.0			4.29
	Acenaphthylene	91.2	86.7	86.7			0.0
	Acetophenone	99.7	93.8	97.9			4.28

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Aniline	81.8	74.3	79.5			6.76
	Anthracene	87.6	90.8	88.8			2.27
	Anthracene	84.8	92.0	91.6			0.436
	Azobenzene/1,2-Diphenylhydrazine	93.8	96.1	93.0			3.30
	Azobenzene/1,2-Diphenylhydrazine	97.0	96.6	95.8			0.832
	Benzidine	117	0.0	0.0			
	Benzidine	43.6	29.6	29.8			1.01
	Benzo(a)anthracene	87.2	91.2	92.3			1.25
	Benzo(a)anthracene	95.9	94.1	94.2			0.106
	Benzo(a)pyrene	83.6	85.2	83.4			2.10
	Benzo(a)pyrene	84.4	94.1	89.6			4.90
	Benzo(b)fluoranthene	88.4	94.1	89.9			4.43
	Benzo(b)fluoranthene	94.1	95.4	96.3			0.939
	Benzo(g,h,i)perylene	82.7	79.6	74.6			6.34
	Benzo(g,h,i)perylene	68.6	76.1	72.0			5.54
	Benzo(k)fluoranthene	62.7	74.0	74.8			1.00
	Benzo(k)fluoranthene	97.1	94.1	91.2			3.13
	Benzyl alcohol	80.6	78.5	79.1			0.761
	Bis(2-chloroethoxy)methane	76.3	82.3	78.3			4.93
	Bis(2-chloroethoxy)methane	86.5	77.9	87.2			11.3
	Bis(2-chloroethyl)ether	55.1	58.7	56.2			4.46
	Bis(2-chloroethyl)ether	84.1	77.3	83.3			7.47
	Bis(2-chloroisopropyl)ether	83.7	91.5	84.0			8.52
	Bis(2-chloroisopropyl)ether	81.2	76.9	80.3			4.33
	Bis(2-ethylhexyl)phthalate	145	104	99.9			3.62
	Bis(2-ethylhexyl)phthalate	119	116	115			1.04
	Butyl benzyl phthalate	84.6	88.6	89.0			0.450
	Butyl benzyl phthalate	108	106	106			0.661
	Carbazole	119	124	123			1.29
	Chrysene	87.1	91.6	92.4			0.855
	Chrysene	97.4	94.2	94.0			0.213
	Di-n-butyl phthalate	89.3	93.2	89.9			3.54
	Di-n-butyl phthalate	100	99.0	96.7			2.35
	Di-n-octyl phthalate	83.4	87.9	85.1			3.19
	Di-n-octyl phthalate	104	110	105			4.74
	Dibenzo(a,h)anthracene	84.9	85.4	82.2			3.91
	Dibenzo(a,h)anthracene	69.9	78.2	73.2			6.61
	Dibenzofuran	92.9	87.6	88.2			0.683
	Diethyl phthalate	98.0	105	119			11.9
	Diethyl phthalate	106	98.8	98.5			0.304
	Dimethyl phthalate	85.7	90.9	92.0			1.22
	Dimethyl phthalate	100	93.8	94.9			1.17
	Dimethylaminoazobenzene	104	102	101			0.591
	Dinoseb	123	122	124			0.813
	Ethyl methanesulfonate	92.2	86.3	90.9			5.19
	Fluoranthene	88.3	92.0	90.4			1.71
	Fluoranthene	91.6	90.6	89.7			0.998
	Fluorene	88.8	94.3	95.0			0.676
	Fluorene	97.1	92.7	91.7			1.08
	Hexachlorobenzene	90.0	94.6	92.0			2.79
	Hexachlorobenzene	91.6	88.8	87.1			1.93
	Hexachlorobutadiene	83.8	83.1	86.8			4.38
	Hexachlorobutadiene	78.2	78.5	76.0			3.24
	Hexachlorocyclopentadiene	86.8	44.0	30.6			35.9

Quality Assurance Report Summary

Ref. Method	Analyte	LCS % Recovery	MS % Recovery		LCS	Precision	MS
						SMP	
EPA 8270E	Hexachlorocyclopentadiene	49.4	49.8	44.0			12.4
	Hexachloroethane	74.6	63.3	62.8			0.698
	Hexachloroethane	73.7	75.4	71.0			6.01
	Hexachloropropene	91.5	80.3	87.8			8.92
	Indeno(1,2,3-cd)pyrene	83.6	82.6	78.8			4.60
	Indeno(1,2,3-cd)pyrene	69.5	79.4	74.6			6.23
	Isophorone	77.0	81.9	78.6			4.04
	Isophorone	91.2	84.7	93.0			9.34
	Isosafrole	93.3	96.3	89.4			7.43
	m,p-Cresols	75.8	74.5	76.2			2.24
	N-Nitrosodi-n-butylamine	97.0	88.8	96.3			8.02
	N-Nitrosodi-n-propylamine	86.0	97.2	87.6			10.3
	N-Nitrosodi-n-propylamine	82.6	79.0	82.6			4.46
	N-Nitrosodiethylamine	85.1	81.6	88.2			7.77
	N-Nitrosodimethylamine	74.2	78.4	72.1			8.45
	N-Nitrosodimethylamine	88.0	89.7	85.9			4.33
	N-Nitrosodiphenylamine/ Diphenylamine	115	117	118			1.06
	N-Nitrosodiphenylamine/ Diphenylamine	90.9	93.7	92.1			1.72
	N-Nitrosomethylethylamine	87.4	78.3	80.0			2.15
	N-Nitrosomorpholine	113	109	111			1.45
	N-Nitrosopiperidine	95.9	91.4	95.0			3.86
	N-Nitrosopyrrolidine	85.5	79.3	81.5			2.74
	Naphthalene	76.1	78.0	81.6			4.46
	Naphthalene	85.7	79.5	86.0			7.85
	Nitrobenzene	78.4	83.0	79.7			4.13
	Nitrobenzene	89.9	78.9	91.1			14.4
	o-Cresol	79.8	76.4	79.2			3.60
	o-Toluidine	94.5	87.6	91.1			3.92
	Pentachlorobenzene	91.3	86.3	86.2			0.116
	Pentachloroethane	81.8	82.2	81.6			0.733
	Pentachloronitrobenzene	120	114	121			5.71
	Pentachlorophenol	87.1	103	97.0			5.69
	Pentachlorophenol	90.4	84.8	90.7			6.72
	Phenacetin	118	114	116			2.43
	Phenanthrene	86.6	93.4	89.0			4.87
	Phenanthrene	92.8	93.2	91.9			1.40
	Phenol	68.8	78.6	71.6			9.43
	Phenol	52.3	56.6	55.2			2.50
	Pyrene	85.3	90.0	90.1			0.131
	Pyrene	98.4	94.9	94.8			0.104
	Pyridine	62.1	65.3	61.5			5.99
	Safrole	96.2	87.4	98.2			11.6
FL-PRO 2018	TRPH	101	99.7	114			13.7
	TRPH	66.6	71.2	72.6			1.90

Reference Method Descriptions

Method	Description	Associated Samples
EPA 8270E	EPA Method 8270, Semi-volatile organic pollutants including PAHs, excluding PCBs and Toxaphene, in water matrices by GC/MS.	2357706, 2357707, 2357708
EPA 8270E	Semi-volatile organic pollutants, excluding PCBs and Toxaphene, in soil/sediments by GC/MS.	2357703, 2357704, 2357705

Reference Method Descriptions

Method	Description	<u>Associated Samples</u>
FL-PRO 2018	Total recoverable petroleum hydrocarbons in sediment/soil samples by GC-FID.	2357703, 2357704, 2357705
FL-PRO 2018	Total recoverable petroleum hydrocarbons in water samples by GC-FID.	2357709, 2357710, 2357711
SM 2540 G (20th)	Percent solid determination before the other sample preparations.	2357713, 2357715, 2357717

Preparation and Analysis Log

Ref. Method	Received Date	Prep Date/Time	Prepared By	Analysis Date/Time	Analyzed By	Associated Samples
EPA 8270E	09/20/2022	09/20/2022 13:00	Hoor Shaik	09/21/2022 15:49	Juyoung Kim	2357703
	09/20/2022	09/20/2022 13:00	Hoor Shaik	09/21/2022 16:23	Juyoung Kim	2357704
	09/20/2022	09/20/2022 13:00	Hoor Shaik	09/21/2022 16:56	Juyoung Kim	2357705
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 10:26	Juyoung Kim	2357706
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 10:53	Juyoung Kim	2357707
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 11:19	Juyoung Kim	2357708
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 11:47	Juyoung Kim	2357707
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 12:12	Juyoung Kim	2357706
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 12:37	Juyoung Kim	2357708
	09/20/2022	09/26/2022 09:00	Hoor Shaik	09/30/2022 12:37	Juyoung Kim	2357708
FL-PRO 2018	09/20/2022	09/23/2022 08:19	Lipi Saha	09/26/2022 14:55	Lipi Saha	2357710
	09/20/2022	09/23/2022 08:19	Lipi Saha	09/26/2022 16:13	Lipi Saha	2357711
	09/20/2022	09/23/2022 08:19	Lipi Saha	09/27/2022 08:59	Lipi Saha	2357709
	09/20/2022	09/27/2022 09:00	Julie Wi	09/29/2022 13:58	Julie Wi	2357705
	09/20/2022	09/27/2022 09:00	Julie Wi	09/29/2022 14:37	Julie Wi	2357703
	09/20/2022	09/27/2022 09:00	Julie Wi	09/29/2022 15:15	Julie Wi	2357704