

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Acetaldehyde by HPLC				
w/ww	250 ml G	4°C	3/3 days	SW-846 8315A
s/sw	4 oz. G	4°C	14/3/3 days	SW-846 8315A
Acetic Acid by IC				
w/ww	2 x 40 ml G	4°C	N/A	IHM
Acetone by GC				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Acetone by GC/MS				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Heated Purge and Trap				
Acid Extractable				
w/ww	1000 ml AG	4°C, Na ₂ S ₂ O ₃	7/40 days	EPA 625/SW-846 8270C
s/sw	4oz. G	4°C	14/40 days	SW-846 8270C
Acidity				
w/ww	500 ml P/G	4°C	14 days	EPA 305.1
s/sw	4oz. G	4°C	14 days	EPA 305.1
Acrolein & Acrylonitrile by HPLC				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 603/SW-846 8030
Air (Mini Canister)				
air	Canister	N/A	N/A	TO-15
Includes 38 target compounds plus max. of 10 TICs.				
Air (Summa Canister)				
air	Canister	N/A	N/A	TO-15
Includes 38 target compounds plus max. of 10 TICs.				
Air (Thermal Desorption Tube)				
air	Canister	N/A	N/A	TO-17
Includes 38 target compounds plus max. of 10 TICs.				
Alcohols (5)				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Includes n-Butanol, tert-Butanol, Ethanol, Methanol, and 2-Propanol.				
Aldehydes (Group Profile, 7 Compounds)				
Air		IMP 225-36-, IT 225-22		EPA TO-5
Acetaldehyde, Benzaldehyde, Butyraldehyde, Formaldehyde, Glutaraldehyde, Isovaleraldehyde, Propionaldehyde				
Aldehydes (Individual Compounds)				

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Air		IMP 225-36-, IT 225-22		EPA TO-5
Alkalinity				
w/ww	250 ml P/G	4°C	14 days	EPA 310.1/SM 2320B
Ammonia Nitrogen				
w/ww	250 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 350.3
s/sw	4 oz. G	4°C	28 days	EPA 350.3
Anion, Individual				
w/ww	150 ml P/G	4°C	28 d/48 hr NO2/NO3	EPA 300
s/sw	4 oz. G	4°C	28 d/48 hr NO2/NO3	EPA 300
Available anions: Br, Cl, F, NO2, NO3, PO4 and SO4				
Anions Scan				
w/ww	150 ml P/G	4°C	28 d/48 hr NO2/NO3	EPA 300
s/sw	4 oz. G	4°C	28 d/48 hr NO2/NO3	EPA 300
Includes 7 anions: Br, Cl, F, NO2, NO3, PO4 and SO4.				
Appendix IX, Chlorinated Herbicides				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	SW-846 8151A
s/sw	4 oz. G	4°C	14/40 days	SW-846 8151A
Appendix IX, Cyanide				
w/ww	500 ml P/G	4°C, NaOH to pH>12	14 days	SW-846 9012A
s/sw	4 oz. G	4°C	14 days	SW-846 9012A
Appendix IX, Metals				
w/ww	1000 ml P	HNO3 to pH<2	6 months (Hg 28 days)	SW-846 6010C/6020
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-846 6010C/6020
Appendix IX, Organochlorine Pesticides				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	SW-846 8081A/8082
s/sw	4 oz. G	4°C	14/40 days	SW-846 8081A/8082
Appendix IX, Organophosphorous Pesticides				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	SW-846 8141A
s/sw	4 oz. G	4°C	14/40 days	SW-846 8141A
Appendix IX, Semivolatiles				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	SW-846 8270C
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C
Appendix IX, Sulfide				
w/ww	500 ml P/G	4°C, NaOH/ZnAc to pH>9	7 days	EPA 376.1
s/sw	4 oz. G	4°C	7 days	SW-846 9030BM/9034

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Appendix IX, Volatiles				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Asbestos Bulk ID				
solids	Double Plastic Ba	N/A	N/A	EPA 600/R-93/116
Asbestos Bulk Point Count				
solids	Double Plastic Ba	N/A	N/A	EPA 600/R-93/116
Asbestos Fiber Count				
air	SKC 225-32	N/A	N/A	NOISH 7400
Ash				
w/ww	4oz. G	N/A	N/A	ASTM D482-95
s/sw	150 ml P/G	N/A	N/A	ASTM D482-95
Base/Neutral Extractables				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C, Na2S2O3	7/40 days	SW-846 8270C
Bicarbonate (See Alkalinity)				
BNA (Base/Neutral Extractables & Acid)				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C, Na2S2O3	7/40 days	SW-846 8270C
BOD (Biological Oxygen Demand)				
w/ww	1000 ml P/G	4°C	48 hours	EPA 405.1
Bromide				
w/ww	150 ml P/G	4°C	28 days	EPA 300
s/sw	4 oz. G	4°C	28 days	EPA 300
BTEX				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 602/SW-846 8021B
s/sw	4 oz. G	4°C	14 days	SW-846 8021B
BTEX + MTBE				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 602/SW-846 8021B
s/sw	4 oz. G	4°C	14 days	SW-846 8021B

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
BTEX by GC/MS				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
BTU (British Thermal Units)				
w/ww	100 ml or g P/G	N/A	N/A	ASTM D-240
s/sw	4 oz. G	N/A	N/A	ASTM D-240
Carbon (see TOC and DOC)				
w/ww	150 ml P	4°C, HCl to pH<2	28 days	EPA 415.2
Carbonate (See Alkalinity)				
CBOD (Carbonaceous Biological Oxygen Demand)				
w/ww	1000 ml P/G	4°C	48 hours	EPA 405.1
Chloride				
w/ww	150 ml P/G	4°C	28 days	EPA 300
w/ww	500 ml P/G	4°C	N/A	SM 4500-Cl B/SW-846 921
s/sw	4 oz. G	4°C	N/A	SW-846 9212
s/sw	4 oz. G	4°C	28 days	EPA 300
Chlorinated Volatiles				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Chlorine, Residual				
w/ww	250 ml P/G	No HS	Immediately	EPA 330.5
Chromium, Hexavalent				
w/ww	250 ml P/G	4°C	24 hours	SM 3500 Cr-B
w/ww	250 ml P/G	4°C	24 hours	SW-846 7196A
s/sw	4 oz. G	4°C	24 hours	SW-846 3060A/7196A
Chromium, Trivalent				
w/ww	250 ml P/G	4°C	24 hours	SW-846 7196A
w/ww	250 ml P/G	4°C	24 hours	SM 3500 Cr-B
s/sw	4 oz. G	4°C	24 hours	SW-846 3060A/7196A
Requires Total and Hexavalent Chromium.				
COD (Chemical Oxygen Demand)				
w/ww	150 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 410.4
s/sw	4 oz. G	4°C	28 days	EPA 410.4

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Color				
w/ww	100 ml P/G	4°C	48 hours	EPA 110.2
Conductance, Specific				
w/ww	100 ml P/G	4°C	28 days	EPA 120.1
s/sw	4 oz. G	4°C	28 days	EPA 120.1
Corrosivity, pH				
w/ww	125 ml P/G	N/A	N/A	SW-846 Chapter 7
s/sw	4 oz. G	N/A	N/A	SW-846 Chapter 7
Cresols				
w/ww	1000 ml AG	4°C, Na ₂ S ₂ O ₃	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C
Air		IMP 225-36-1, IT 225-22		EPA TO-8
Cyanide, Amenable				
w/ww	1000 ml P/G	4°C, NaOH to pH>12	14 days	SW-846 9014
w/ww	1000 ml P/G	4°C, NaOH to pH>12	14 days	EPA 335.1
s/sw	4 oz. G	4°C	14 days	SW-846 9014
Cyanide, Total				
w/ww	500 ml P/G	4°C, NaOH to pH>12	14 days	SW-846 9010B/9014
w/ww	500 ml P/G	4°C, NaOH to pH>12	14 days	EPA 335.2
s/sw	4 oz. G	4°C	14 days	SW-846 9010B/9014
Density/Specific Gravity				
w/ww	250 ml P/G	N/A	N/A	SM 2710F
s/sw	4 oz. G	N/A	N/A	SM 2710F
Dissolved Oxygen				
w/ww	300 ml G	No HS	Immediately	EPA 360.1
DOC, (Dissolved Organic Carbon)				
w/ww	150 ml P	4°C	28 days	EPA 415.2
Drinking Water Package (Partial List) (See Drinking Water Profile)				
w		Refer to relevant tests	Various	EPA
Coliform, HPC, TDS, Primary & Secondary Metals and Minerals				
Drinking Water Primary Anions				
w	500 ml P/G	4°C	48 hours	EPA 300
Fluoride, Nitrate Nitrogen, Nitrite Nitrogen				

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Drinking Water Primary Total Coliform				
w Microorganisms	500 ml P/G	4°C	6 hours	SM 9222B/9223B
Drinking Water Primary Metals				
w As, Ba, Be, Cd, Cr, Cu, Hg, Pb, Sb, Se, Tl	500 ml P	Cool 4°C, HNO ₃ to pH<2	6 months (Hg 28 days)	EPA 200.7/245.1
Drinking Water Secondary Anions				
w Chloride, and Sulfate.	250 ml P/G	4°C	28 days	EPA 300
Drinking Water Secondary Metals				
w Al, Ag, Fe, Mn, Zn.	250 ml P/G	4°C	6 months	EPA 200.7
Drinking Water Secondary pH				
w	150 ml P/G	4°C	Immediately	EPA 150.1
Drinking Water Secondary TDS				
w Dissolved (Filterable)	500 ml P/G	4°C	7 days	EPA 160.1
Drinking Water TTHM				
w Trihalomethanes: Chloroform, Dichlorobromomethane, Dibromochloromethane, Bromoform	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 524
DRO (Diesel Range Organics)				
w/ww	1000 ml AG	4°C, HCl to pH<2	7/40 days	SW-846 8015B
s/sw	4 oz. G	4°C	14/40 days	SW-846 8015B
EOX, (Extractable Organic Halide)				
w/ww	2 x 250 ml G	4°C, Na ₂ S ₂ O ₃ , H ₂ SO ₄ to pH<2	28 days	SW-846 9020B
sw/oil/solvent	4 oz. G	4°C	28 days	SW-846 9023
Ethanol				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	Cool 4°C	14 days	SW-846 8015B
Ethylene Glycol				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Ferric Iron				
w/ww	125 ml AG	4°C	Immediately	SM 3500-Fe B
Ferrous Iron				
w/ww	125 ml AG	4°C	Immediately	SM 3500-Fe B

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Finger Print by GC Scan				
s/sw	4 oz. G	N/A	N/A	SW-846 8015B
liquids/sw	40 - 500 ml G	N/A	N/A	SW-846 8015B
Used for reference materials and unknowns in conjunction with TPH by GC				
Flash Point (Ignitability)				
sw	8 oz. G	N/A	30 days	SW-846 1010
liquids	500 ml G	N/A	30 days	SW-846 1010
Fluoride				
w/ww	125 ml P/G	4°C	28 days	EPA 300
s/sw	4 oz. G	4°C	28 days	EPA 300
Formaldehyde				
w/ww	250 ml P/G	4°C	3/3 days	NIOSH 3500
w/ww	1000ml G	4°C	3/3 days	SW-846 8315A
s/sw	4 oz. G	4°C	14/3/3 days	SW-846 8315A
Air	7 days	PS 500-100		EPA IP-6C
Air		ST 226-119		EPA TO-11A
Air	5 min to 24 Hours	ST 226-119 or ST 226-120		EPA IP-6A
Air	15 min to 24 hour	PS 500-100		EPA IP-6C
Formic Acid by IC				
w/ww	2 x 40 ml G	4°C	N/A	IHM
w/ww	2 x 40 ml G	4°C	N/A	IHM
Glycols (4)				
w/ww	2 x 40 ml G	4°C	7 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Ethylene Glycol, Diethylene Glycol, Propylene Glycol, Triethylene Glycol				
GRO (Gasoline Range Organics)				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
HAA (Haloacetic Acids)				
w/ww	3 x 60 ml G	4°C, NH4Cl (No HS)	14 days	EPA 552.2
w	3 x 60 ml G	4°C, NH4Cl (No HS)	14 days	EPA 552.2
Halogenated Volatiles				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 601/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Hardness, Calcium Hardness				
w/ww	150 ml P/G	N/A	N/A	EPA 215.2

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Hardness, Total				
w/ww	150 ml P/G	4°C, HNO ₃ to pH<2	N/A	EPA 130.2
Hazardous Waste Characteristics Package				
ww/sw		4°C	Various	SW-846
Includes RCI and Full TCLP. See TCLP section				
Herbicides, Chlorinated				
w/ww	1000 ml AG	4°C, Na ₂ S ₂ O ₃	7/40 days	EPA 615/SW-8151A
s/sw	4 oz. G	4°C	14/40 days	SW-8151A
w/ww	1000 ml AG	4°C, Na ₂ S ₂ O ₃	7/40 days	SW-8151A
s/sw	4 oz. G	4°C	14/40 days	SW-8151A
Appendix IX				
Herbicides, Priority Pollutants				
w/ww	1000 ml AG	4°C, Na ₂ S ₂ O ₃	7/40 days	EPA 615/SW-8151A
s/sw	4 oz. G	4°C	14/40 days	SW-8151A
Hexane Extractable Materials (HEM)				
w/ww	1000 ml G	4°C, HCl to pH<2	28 days	EPA 1664A
HEM (Oil & Grease)				
w/ww	1000 ml G	4°C, HCl to pH<2	28 days	EPA 1664A
SGT-HEM (TPH only)				
w/ww	1000 ml G	4°C, HCl to pH<2	28 days	EPA 1664A
Silica Gel Treated and HEM				
Hexavalent Chromium				
w/ww	250 ml P/G	4°C	24 hours	SW-846 7196A
w/ww	250 ml P/G	4°C	24 hours	SM 3500 Cr-B
s/sw	4 oz. G	4°C	24 hours	SW-846 3060A/7196A
Hydroxide (See Alkalinity)				
Ignitability (Flash Point)				
s/sw	8 oz. G	N/A	N/A	SW-846 1010
liquids	500 ml G	N/A	N/A	SW-846 1010
Inorganic Carbon (IC)				
w/ww	150 ml P	4°C	28 days	EPA 415.1
IC = TC - TOC				
Karl Fisher-Water Content				
oil	4 oz. G	4°C	N/A	ASTM D-1744
Ketones (Individual Compounds)				
Air		IMP 225-36-1, IT 225-22		EPA TO-5

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Land Application Package				
ww/sw	2 Vials, 2L GJ	4°C	14/7 days	SW-846
Includes: TCLP Full Package, Land Applic. Metals, PCB in Soil, Fecal Coliform w 7 replicates, Moisture, pH, TKN, SOUR				
Leachate, 7 Day Distilled Water				
ww/sw	8 oz. G	N/A	14 days	Texas
Leachate, SPLP Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1312
Non-volatile Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1312
Zero Headspace Extraction				
Leachate, TCLP Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1311
Non-volatile Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1311
Zero Headspace Extraction				
Lead				
w/ww	500 ml P	HNO3 to pH<2	6 months	EPA 200.7/200.8
s/sw	4 oz. G	4°C	6 months	SW-846 6010C/6020
Lead in Paint				
paint chips	3 g in P or G	N/A	6 months	SW-846 6010C/6020
Library Search/TICs for BNA (Only available in addition to GC/MS Analysis)				
w/ww/sw		N/A	N/A	EPA 625/SW-846 8270B
per peak				
Library Search/TICs for VOC (Only available in addition to GC/MS Analysis)				
w/ww/sw		N/A	N/A	EPA 624/SW-846 8260B
per peak				
Mercury				
w/ww	500 ml P	HNO3 to pH<2	28 days	EPA 245.1/SW-846 7470A
s/sw	4 oz. G	4°C	28 days	SW-846 7470A/7471A
Metals RCRA (8)				
w/ww	500 ml P	HNO3 to pH<2	6 months (Hg 28 days)	EPA 200.7/200.8/245.1
w/ww	500 ml P	HNO3 to pH<2	6 months (Hg 28 days)	SW-6010C/6020/7470A
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-6010C/6020/7470A
Ag, As, Ba, Cd, Cr, Hg, Pb, Se				
Metals, Appendix IX (18)				
w/ww	1000 ml P	HNO3 to pH<2	6 months (Hg 28 days)	SW-846 6010C/6020
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-846 6010C/6020

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
Metals, Individual				
w/ww	500 ml P	HNO ₃ to pH<2	6 months	EPA 200.7/200.8
s/sw	4 oz. G	4°C	6 months	SW-846 6010C/6020
Available: Al, As, Ag, B, Ba, Be, Ca, Cd, Co, Cr, Cu, Fe, Mg, Mn, Mo, Na, Ni, K, Pb, Se, Si, Sb, Ti, V, Zn				
Metals, Individual, Special				
w/ww	500 ml P	HNO ₃ to pH<2	6 months	EPA 200.7/200.8
s/sw	4 oz. G	4°C	6 months	SW-846 6010C/6020
Available: Au, Bi, Li, Pd, Pt, Sr, S, Sn, W, Zr				
Metals, Land Application				
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-846 6010C/7471A
As, Cd, Cr, Cu, Pb, Mo, Ni, P, K, Se, Zn and Hg (Phosphorus can be analyzed in metals group)				
Metals, Priority Pollutant (13)				
w/ww	1000 ml P/G	HNO ₃ to pH<2	6 months (Hg 28 days)	200.7/8 /6010C/6020
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-846 6010C/6020
Ag, As, Be, Cd, Cr, Cu, Ni, Pb, Se, Sb, Ti, Zn and Hg				
Metals, Scan (Semiquantitative) (26)				
w/ww	1000 ml P	HNO ₃ to pH<2	6 months	EPA 200.7/200.8
s/sw	4 oz. G	4°C	6 months	SW-846 6010C/6020
Al, As, Ag, B, Ba, Be, Cd, Co, Cr, Cu, Fe, Mn, Mo, Ni, K, Pb, Se, Sb, Ti, V, Zn				
Methanol				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
MLSS (Mixed Liquor Suspended Solids)				
w/ww	500 ml P/G	4°C	7 days	EPA 160.2
Moisture				
s/sw	4 oz. G	4°C	28 days	EPA 160.3 modified
s/sw	4 oz. G	4°C	N/A	EPA 160.3 modified
MTBE (Methyl tert-butyl ether)				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 602/SW-846 8021B
s/sw	2 x 40 ml G	4°C	14 days	SW-846 8021B
Naphthalene				
w/ww	1000 ml AG	4°C, HCl to pH<2	14 days	EPA 624/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
n-Butanol				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Nitrate + Nitrite Nitrogen				

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
w/ww	125 ml P/G	4°C	28 days	EPA 300
w/ww	125 ml P/G	4°C	28 days	EPA 353.3
Nitrate Nitrogen by IC				
w/ww	125 ml P/G	4°C	28 days	EPA 300
s/sw	4 oz. G	4°C	28 days	EPA 300
Nitrite Nitrogen (Colorimetric)				
w/ww	125 ml P/G	4°C	48 hours	EPA 354.1
Nitrite Nitrogen by IC				
w/ww	125 ml P/G	4°C	48 hours	EPA 300
s/sw	4 oz. G	4°C	48 hours	EPA 300
Nitrogen, Ammonia				
w/ww	250 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 350.3
s/sw	4 oz. G	4°C	28 days	EPA 350.3
Ion Selective Electrode				
Nitrogen, Organic				
w/ww	500 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 351.4/350.3
s/sw	4 oz. G	4°C	28 days	EPA 351.4/350.3
TKN - (NH3-N)				
Nitrogen, TKN				
w/ww	500 ml P/G	Cool 4°C, H2SO4 to pH<2	28 days	EPA 351.4
s/sw	4 oz. G	Cool 4°C	28 days	EPA 351.4
Nitrogen, Total				
w/ww	500 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 351.4/300
s/sw	4 oz. G	4°C	28 days	EPA 351.4/300
TKN + (NO2-N) + (NO3-N)				
Oil & Grease, HEM				
w/ww	1000 ml G	4°C, HCl to pH<2	28 days	EPA 1664A
Hexane Extractable Materials				
Oil & Grease, SGT-HEM				
w/ww	1000 ml G	4°C, HCl to pH<2	28 days	EPA 1664A
Silica Gel Treated-HEM				
Ortho-Phosphate, as P				
w/ww	250 ml P/G	4°C	48 hours	EPA 365.2
w/ww	150 ml P/G	4°C	28 days	EPA 300
PAH by GC/MS				
w/ww	1000 ml AG	4°C, Na2S2O3	7/40 days	SW-846 8270C
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
PAH by HPLC				
w/ww	1000 ml AG	4°C	7/40 days	EPA 610/SW-846 8310
s/sw	4 oz. G	4°C	14/40 days	SW-846 8310
oil	40 ml G	4°C	14/40 days	SW-846 8310
Paint Filter Liquids Test/Free Liquids				
liquids/sw	8 oz. G	N/A	N/A	SW-846 9095A
PCB (Polychlorinated Biphenyls)				
Air	24 Hours	PUF 226-131, PUF 225-1821		EPA TO-4A
PCB in Oil				
oil	40 ml G	unpreserved	14/40 days	SW-846 3580A/8082
PCB in Soil				
s/sw	40 ml G	4°C	14/40 days	SW-846 3580A/8082
PCB in Water				
w/ww	1000 ml AG	4°C	7/40 days	EPA 608/SW-846 8082
PCB in Wipe				
wipe		4°C	14/40 days	SW-846 8082
Percent Moisture				
s/sw	4 oz.G	4°C	N/A	EPA 160.3 modified
Percent Solids				
w/ww	150 ml P/G	4°C	ASAP	EPA 160.3/SM 2540B
s/sw	4 oz. G	4°C	ASAP	SM 2540B
Perchloroethylene				
Air	8 to 24 Hour	PS 590-100 or PS-590-101 or P		EPA TO-17
Pesticides				
Air	4 to 24 Hours	PUF 226-92, PUF 226-124		EPA TO-10A
Air	4 to 24 Hours	PUF 226-92, PUF 226-124		EPA IP-8
Pesticides, Organochlorine				
w/ww	1000ml AG	4°C	7/40 days	EPA 608/SW-846 8081A
s/sw	4 oz. G	4°C	14/40 days	SW-846 8081A
Air	24 Hours	PUF 226-131, PUF 225-1821		EPA TO-4A

Pesticides, Organophosphorus

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
w/ww	1000 ml AG	4°C	7/40 days	SW-846 8141A
s/sw	4 oz. G	4°C	14/40 days	SW-846 8141A
Pesticides, Priority Pollutant				
w/ww	1000 ml AG	4°C	7/40 days	EPA 608/SW-846 8081A
s/sw	4 oz. G	4°C	14/40 days	SW-846 8081A
Chlorinated, Priority Pollutant				
pH				
w/ww	150 ml P/G	4°C	Immediately	EPA 150.1
s/sw	4 oz. G	4°C	N/A	SW-846 9045C
s/sw	4 oz. G	4°C	ASAP	SW-846 9045
Phenolics (Total Phenols)				
w/ww	1000 ml G	4°C, H2SO4 to pH<2	28 days	EPA 420.1/SW-846 9066
s/sw	4 oz. G	4°C	28 days	SW-846 9066
Phenols				
Air		IMP 225-36-1, IT 225-22		EPA TO-8
Phenols by GC/MS				
w/ww	2 x 1000 ml AG	4°C	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C	7/40 days	SW-846 8270C
Phosphorus, Total				
w/ww	500 ml P/G	4°C, H2SO4 to pH<2	28 days	EPA 365.2
PM2.5				
Air	24 Hours	CI 225-370, FLT 225-1708, FLT		EPA IP-10A
Air	24 Hours	PEM 761-203B, FLT 225-1709		EPA IP-10A
Polycyclic Aromatic Hydrocarbons (PAHs)				
Air	24 Hours	PUF 226-131, FLT 225-1821		EPA TO-13A
Primary Drinking Water Anions				
w	500 ml P/G	4°C	48 hours	EPA 300
Fluoride, Nitrate Nitrogen, Nitrite Nitrogen				
Primary Drinking Water Metals				
w	500 ml P	Cool 4°C, HNO3 to pH<2	6 months (Hg 28 days)	EPA 200.7/245.1
As, Ba, Be, Cd, Cr, Cu, Hg, Pb, Sb, Se, Tl				
Primary Drinking Water Total Coliform				
w	500 ml P/G	4°C	6 hours	SM 9222B/9223B
Microorganisms				
Priority Pollutants Package (See Priority Pollutants Profile)				

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
s/sw				SW-846
w/ww				EPA/SW-846
s/sw				EPA/SW-846
Cyanide, Metals, PCBs, Pesticides, Phenols, Semivolatiles and Volatiles				
RCI				
w/ww		Refer to relevant tests	Various	SW-846
s/sw		Refer to relevant tests	Various	SW-846
Reactive Cyanide & Sulfide, Corrosivity (pH), and Ignitability				
RCRA Metals (8)				
w/ww	500 ml P	HNO ₃ to pH<2	6 months (Hg 28 days)	SW-6010C/6020/7470A
w/ww	500 ml P	HNO ₃ to pH<2	6 months (Hg 28 days)	EPA 200.7/200.8/245.1
s/sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-6010C/6020/7470A
Ag, As, Ba, Cd, Cr, Hg, Pb, Se				
Reactive Cyanide				
s/sw	4 oz. G	4°C	N/A	SW-846 Chapter 7.3.4
liquids	500 ml G	4°C, NaOH to pH>12	N/A	SW-846 Chapter 7.3.4
Reactive Sulfide				
s/sw	4 oz. G	4°C	N/A	SW-846 Chapter 7.3.4
liquids	500 ml G	4°C, NaOH to pH>12	N/A	SW-846 Chapter 7.3.4
Resistivity				
w/ww	100 ml P/G	4°C	28 days	EPA 120.1
s/sw	4 oz. G	4°C	28 days	EPA 120.1
Secondary Drinking Water Anions				
w	250 ml P/G	4°C	28 days	EPA 300
Chloride, and Sulfate.				
Secondary Drinking Water Metals				
w	250 ml P/G	4°C	6 months	EPA 200.7
Al, Ag, Fe, Mn, Zn.				
Secondary Drinking Water pH				
w	150 ml P/G	4°C	Immediately	EPA 150.1
Secondary Drinking Water TDS				
w	500 ml P/G	4°C	7 days	EPA 160.1
Dissolved (Filterable)				
Semivolatiles by GC/MS				
w/ww	1000 ml AG	4°C	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C
Semivolatiles Scan by GC/MS				
w/ww	1000 ml AG	4°C	7/40 days	EPA 625/SW-846 8270C

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C
Regular semivolatile compounds plus max. 10 TICs				
Semivolatiles, Priority Pollutants				
w/ww	1000ml AG	4°C	7/40 days	EPA 625/SW-846 8270C
s/sw	4 oz. G	4°C	14/40 days	SW-846 8270C
Silica (Dissolved)				
w/ww	250 ml P	4°C	28 days	EPA 370.1
SOUR (Specific Oxygen Uptake Ratio)				
s/sw	1000 ml P/G	N/A	ASAP	EPA 1683
Specific Conductance				
w/ww	250 ml P/G	4°C	28 days	EPA 120.1
s/sw	4 oz. G	4°C	28 days	EPA 120.1 modified
Specific Gravity - Density				
w/ww	250 ml P/G	N/A	N/A	SM 2710F
s/sw	4 oz. G	N/A	N/A	SM 2710F
SPLP Extraction (Synthetic Precipitation Leachate Procedure)				
sw	8 oz. G	4°C	14 days	SW-846 1312
Non-volatile Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1312
Zero Headspace Extraction				
Sulfate				
w/ww	125 ml P/G	4°C	28 days	EPA 300
s/sw	4 oz. G	4°C	28 days	EPA 300
Sulfide				
s/sw	4 oz. G	4°C	7 days	SW-846 9030B/9034
s/sw	250 ml P/G	4°C, NaOH+ZnAc	7 days	EPA 376.1/376.2
Sulfite				
w/ww	250 ml P/G	4°C	7 days	SM 4500B
TCLP Benzene				
w/ww	2 x 40 ml G	4°C	14/7 days	SW-846 /1311/8021B
s/sw	4 oz. G	4°C	14/7 days	SW-846 /1311/8021B
TCLP BTEX				
w/ww	2 x 40 ml G	4°C	14/7 days	SW-846 /1311/8021B
s/sw	4 oz. G	4°C	14/7 days	SW-846 /1311/8021B

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
TCLP Extraction: Non-volatile Extraction				
sw	8 oz. G	4°C	14 days	SW-846 1311
TCLP Extraction: ZHE				
sw	8 oz. G	4°C, (No HS)	14 days	SW-846 1311
TCLP Full Package				
ww/sw	2 Vials, 2L GJ	4°C	14/7 days	SW-846
sw	8 oz. G	4°C	14/7 days	SW-846
TCLP VOC, TCLP SV, TCLP Pesticides, TCLP Herbicides, TCLP Metals				
TCLP Grit Trap				
w/ww	2 Vials, 2L GJ	4°C	7/7 days	SW-846
sw	8 oz. G	4°C	14/7 days	SW-846
TCLP VOC, TCLP Metals and RCI				
TCLP Herbicides				
w/ww	1000 ml AG	4°C	7/40 days	SW-846 1311/8151A
sw	4 oz. G	4°C	7/40 days	SW-846 1311/8151A
TCLP Mercury				
w/ww	500 ml P	4°C	Hg 28 days	SW-846 1311/7470A
s/sw	4 oz. G	4°C	Hg 28 days	SW-846 1311/7470A
TCLP Metals (8)				
w/ww	1000 ml P		6 months (Hg 28 days)	SW-846 1311/6010C/7470
sw	4 oz. G		6 months (Hg 28 days)	SW-846 1311/6010C/7470
As, Ba, Cd, Cr, Pb, Se, Ag, and Hg.				
TCLP Metals, Individual				
w/ww	500 ml P	4°C	6 months	SW-846 1311/6010C/6020
s/sw	4 oz. G	4°C	6 months	SW-846 1311/6010C/6020
Ag, As, Ba, Cd, Cr, Pb, Se				
TCLP Metals, Texas (11)				
w/ww	1000 ml P	4°C	6 months (Hg 28 days)	SW-846 1311/6010C/6020/
sw	4 oz. G	4°C	6 months (Hg 28 days)	SW-846 1311/6010C/6020/
Ag, As, Ba, Be, Cd, Cr, Ni, Pb, Sb, Se, and Hg.				
TCLP Package, w/o Pesticides and Herbicides				
w/ww	2 Vials, 2L GJ	4°C	14/7 days	SW-846
sw	8 oz. G	4°C	14/7 days	SW-846
TCLP Metals, TCLP VOC, TCLP SVOC				
TCLP Pesticides				
w/ww	1000 ml AG	4°C	7/40 days	SW-846 1311/8081A
sw	4 oz. G	4°C	7/40 days	SW-846 1311/8081A
TCLP Semivolatiles				

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
w/ww	1000 ml AG	4°C	7/40 days	SW-846 1311/8270C
sw	4 oz. G	4°C	7/40 days	SW-846 1311/8270C
TCLP Volatiles				
w/ww	2 x 40 ml G	4°C, (No HS)	14 days	SW-846 1311/8260B
sw	4 oz. G	4°C	14 days	SW-846 1311/8260B
TDS (Total Dissolved Solids)				
w/ww	500 ml P/G	4°C	7 days	EPA 160.1
w/ww	500 ml P/G	4°C	7 days	EPA 160.1
Dissolved (Filterable)				
Temperature				
w/ww	125 ml P/G	N/A	Immediately	EPA 170.1
THAA (Total Haloacetic Acids)				
w/ww	3 x 60 ml G	4°C, NH ₄ Cl (No HS)	14 days	EPA 552.2
w	3 x 60 ml G	4°C, NH ₄ Cl (No HS)	14 days	EPA 552.2
TKN, (Total Kjeldahl Nitrogen)				
w/ww	500 ml P/G	4°C, H ₂ SO ₄ to pH<2	28 days	EPA 351.4
s/sw	4 oz. G	Cool 4°C	28 days	EPA 351.4
TOC, (Total Organic Carbon)				
w/ww	150 ml P	4°C, H ₂ SO ₄ to pH<2	28 days	EPA 415.2
Total Carbon				
w/ww	150 ml P	4°C	28 days	EPA 415.2
Total Solids				
w/ww	500 ml P/G	4°C	7 days	EPA 160.3
TS = TSS + TDS				
TOX / TOH (Total Organic Halide)				
w/ww	2 x 250 ml G	4°C, Na ₂ S ₂ O ₃ , H ₂ SO ₄ to pH<2	28 days	SW-846 9020B
sw/oil/solvent	4 oz. G	4°C	28 days	SW-846 9023
TPH by GC (DRO & GRO)				
w/ww	2 x 40ml G, 1L G	4°C, HCl to pH<2	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
TPH, Texas 1005				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	Texas 1005
s/sw	4 oz. G	4°C	14 days	Texas 1005

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
TPH, Texas 1006				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	Texas 1006
s/sw	4 oz. G	4°C	14 days	Texas 1006
TPH-DRO				
w/ww	1000 ml AG	4°C, HCl to pH<2	7/40 days	SW-846 8015B
s/sw	4 oz. G	4°C	14/40 days	SW-846 8015B
TPH-GRO				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	SW-846 8015B
s/sw	4 oz. G	4°C	14 days	SW-846 8015B
Trivalent Chromium				
w/ww	250 ml P/G	4°C	24 hours	SW-846 7196A
w/ww	250 ml P/G	4°C	24 hours	SM 3500 Cr-B
s/sw	4 oz. G	4°C	24 hours	SW-846 3060A/7196A
Requires Total and Hexavalent Chromium.				
TSS (Total Suspended Solids)				
w/ww	500 ml P/G	4°C	7 days	EPA 160.2
Suspended (Non-filterable)				
TTHM (Trihaloamethanes)				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624/SW-846 8260B
Trihalomethanes: Chloroform, Dichlorobromomethane, Dibromochloromethane, Bromoform				
TTHM, for Drinking Water				
w	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 524
Trihalomethanes: Chloroform, Dichlorobromomethane, Dibromochloromethane, Bromoform				
Turbidity				
w/ww	150 ml P/G	4°C	48 hours	EPA 180.1
Volatile Organic Compounds (VOCs) (Canister)				
Air	Varies	CAN 228 Series PK 228 Series		EPA TO-15
Volatile Organic Compounds (VOCs) (Sample Air Bag)				
Air	1 to 2 Hour	VAC 231-939 with SB 232-08		EPA 40
Volatile Organic Compounds (VOCs) (Thermal Desorption Tube)				
Air	1 to 2 Hour	ST refer to method		EPA TO-17
Volatiles (VOC)				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B

Volatiles (VOC) in Air (Mini Canister)

Environmental Testing Service Guide

Analytical Test

Matrix	Sample Size Container	Preservation	Holding Time Leach/Extr/Analy	Method
air	Canister	N/A	N/A	TO-15
Includes 38 target compounds plus max. of 10 TICs.				
Volatiles (VOC) in Air (Summa Canister)				
air	Canister	N/A	N/A	TO-15
Includes 38 target compounds plus max. of 10 TICs.				
Volatiles (VOC) in Air (Thermal Desorption Tube)				
air	Tube	N/A	N/A	TO-17
Includes 38 target compounds plus max. of 10 TICs.				
Volatiles (VOC) Scan by GC/MS				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Regular VOC plus max. 10 TICs				
Volatiles (VOC), Chlorinated				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
Volatiles (VOC), Priority Pollutants				
w/ww	2 x 40 ml G	4°C, HCl to pH<2 (No HS)	14 days	EPA 624/SW-846 8260B
s/sw	4 oz. G	4°C	14 days	SW-846 8260B
VSS (Volatile Suspended Solids)				
w/ww	500 ml P/G	4°C	7 days	EPA 160.4