RJ Lee Group

2025 Laboratory Testing Guide




Chemical Analysis and Characterization Services

Industrial Hygiene (Inorganics)
Industrial Hygiene (Organics)
Industrial Hygiene (Profiles)
Environmental and Wet Chemistry (Inorganics)
- Non-potable and Drinking Water
- Solids and Hazardous Waste

Environmental and Wet Chemistry (Organics)
- Non-potable and Drinking Water
- Solids and Hazardous Waste
- Air and Emissions (TO Methods)

Mineral Identification and Characterization
Silica
Sample Preparation
- General Sample Prep Techniques
- Extraction and Leachable Methods

Product Testing and Raw Materials
- Granular Activated Carbon
- Gypsum, Gypsum Products, Anhydride (CaSO4) and FGD Byproducts
- Calcium Carbonate, Limestone, Dolomite, and Related Products
- Coal and Ash (CCR – Coal Combustion Residuals)
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- Talc
- Kaolin/Kaolinite
- Detrimental Materials
- Glasses Bioactive Glasses (Bioglass), Borosilicate Glasses and Ceramics
- Perlite
- Diatomaceous Earth

Sample Shipping Address:

350 Hochberg Road
Monroeville, PA 15146

Industrial Hygiene (Inorganics)

Industrial Hygiene (Inorganics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Aluminum (Al)	7429-90-5	NIOSH 7300 mod./NIOSH 7303	ICP-AES	MCE/PVC	1 - 4	5 - 100	Air
Aluminum Oxide (Al2O3)	1344-28-1	NIOSH 7300 mod(special digestion)	ICP-AES	MCE/PVC	1 - 4	5 - 100	Air
Antimony (Sb)	7440-36-0	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	50-2000	Air
Arsenic (As)	7440-38-2	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5-00	Air
Barium (Ba)	7440-39-3	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	50 - 2000	Air
Beryllium (Be)	7440-41-7	NIOSH 7300 mod./NIOSH 7303	ICP-MS	MCE/PVC	1 - 4	1250 - 2000	Air
Beryllium Oxide (BeO)	1304-56-9	NIOSH 7300 mod(special digestion)	ICP-MS	MCE/PVC	1 - 4	1250 - 2000	Air
Bismuth (Bi)	1304-43-4	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	480 - 960	Air
Boron (B)	7440-42-8	NIOSH 7303	ICP-AES	MCE	1 - 4	480 - 960	Air
Cadmium (Cd)	7440-43-9	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	13 - 2000	Air
Calcium (Ca)	7440-70-2	NIOSH 7300 mod./NIOSH 7303	ICP-AES	MCE/PVC	1 - 4	5 - 200	Air
Calcium Hydroxide (CaOH)	1305-62-0	NIOSH 7303	ICP-AES	MCE	1 - 4		Air
Calcium Oxide (CaO)	1305-78-8	NIOSH 7303	ICP-AES	MCE	1 - 4		Air
Carbon Black	1333-86-4	NIOSH 5000	Gravimetric	PVC -pre-weighed	1 - 4	30 - 570	Air
Chromium (Cr)	7440-47-3	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 1000	Air
Chromium, Hexavalent (CrVI) Paint	18540-29-9	OSHA 215	IC-UV	PVC	2	960	Air
Chromium, Hexavalent (CrVI) Welding Fume/ Plating Operation	18540-29-9	OSHA 215	IC-UV	PVC	2	960	Air
Cobalt (Co)	7440-48-4	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	25 - 2000	Air
Compendium IO-3.4		Compendium IO-3.1 / IO-3.4	ICP-AES				Air
Compendium IO-3.5		Compendium IO-3.1 / IO-3.5	ICP-MS				Air
Copper (Cu)	7440-50-8	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC		5 - 1000	Air
Diesel Particulate Matter-DPM		NIOSH 5040	Thermal Optic EC/OC	Quartz fiber	2 - 4	142 - 1920	Air

Industrial Hygiene (Inorganics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Diesel Particulate Matter-DPM		NIOSH 5040	Thermal Optic EC/OC	Jeweled impactor cassette	1.7 - 2.0	142 - 1920	Air
Dust, Respirable		NIOSH 0600	Gravimetric	PVC -pre-weighed	1.7 - 8.0 (size selective sampler dependent)	20 - 1200	Air
Dust, Total		NIOSH 0500	Gravimetric	PVC -pre-weighed	1 -2	20 - 1200	Air
Elemental Carbon		NIOSH 5040	Thermal Optic EC/OC	Quartz fiber	2 - 4	142 - 1920	Air
Gallium (Ga)	7440-55-3	NIOSH 7303	ICP-AES/ ICP-MS	MCE			Air
Gold (Au)	7440-57-5	NIOSH 7303	ICP-AES/ ICP-MS	MCE	1 - 4	1 - 2	Air
Hafnium (Hf)	7440-65-5	NIOSH 7300 mod(special digestion)	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Hydrochloric Acid (Hydrogen Chloride, HCl)	7647-01-0	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Hydrogen Bromide (HBr, Hydrobromic Acid)	10035-10-6	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Hydrogen Fluoride (HF)	7664-39-3	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Indium (In)	7440-74-6	NIOSH 7303	ICP-AES/ ICP-MS	MCE			Air
Iron (Fe)	7439-89-6	NIOSH 7300 mod./NIOSH 7303	ICP-AES	MCE/PVC	1 - 4	5 - 100	Air
Iron Oxide Fume (Fe)	1309-37-16	NIOSH 7303	ICP-AES	MCE/PVC	1 - 4	5 - 100	Air
Lanthanum (La)	7439-91-0	NIOSH 7300 mod.	ICP-AES/ ICP-MS	MCE/PVC			Air
Lead (Pb)	7439-92-1	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	50 - 2000	Air
Lead oxide (Pb)	1317-36-8	NIOSH 7303	ICP-AES/ ICP-MS	MCE	1 - 4	50 - 2000	Air
Lead (Pb)	7439-92-1	EPA 3050/EPA 6010C	ICP-AES	Soil			Solid/ Bulk
Lead (Pb)	7439-92-1	EPA 3050/EPA 6010C	ICP-AES	Paint			Solid/ Bulk
Lead (Pb) (Determination of surface contamination by lead and its compounds)	7439-92-1	EPA 3050/EPA 6010C	ICP-AES	ASTM certified wipe		1 - 2	Wipe

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Lithium (Li)	7439-93-2	NIOSH 7300 mod.	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	100 - 2000	Air
Magnesium (Mg)	7439-95-4	NIOSH 7300 mod./NIOSH 7303	ICP-AES	MCE/PVC			Air
Manganese (Mn)	7439-96-5	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Mercury (Hg) Particulate	7439-97-6	OSHA 145	CVAA	MCE	2	10	Air
Mercury (Hg) Passive	7439-97-6	OSHA 140	CVAA	SKC 520-02A/520-03	0.02	9.6	Air
Mercury (Hg) Vapor or Particulate	7439-97-6	NIOSH 6009	CVAA	226-17-1A	0.15 - 0.25	2 - 100	Air
Mercury (Hg) Wipes	7439-97-6	OSHA 145	CVAA	Wipe			Wipe
Molybdenum (Mo)	7439-98-7	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	???	Air
Neodymium (Nd)	7440-00-8	NIOSH 7303	ICP-AES/ ICP-MS	MCE			Air
Nickel (Ni)	7440-02-0	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 1000	Air
Nitric Acid (HNO3)	7697-37-2	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Nuisance Dust, Respirable		NIOSH 0600	Gravimetric	PVC -pre-weighed	1.7 - 8.0 (Size selective sampler dependant)	20 - 1200	Air
Nuisance Dust, Total		NIOSH 0500	Gravimetric	PVC -pre-weighed	1 - 2	20 - 1200	Air
Ozone	10028-15-6	OSHA 214	IC	SKC 225-9014	1.5	90	Air
Palladium (Pd)	5/3/7440	NIOSH 7303	ICP-AES/ ICP-MS	MCE			Air
Particulates not otherwise regulated, Respirable		NIOSH 0600	Gravimetric	PVC -pre-weighed	1.7 - 8.0 (Size selective sampler dependant)	20 - 1200	Air
Particulates not otherwise regulated, Total		NIOSH 0500	Gravimetric	PVC -pre-weighed	1.5 - 2.0	20 - 1200	Air
Phosphoric Acid (H3PO4)	7664-38-2	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Phosphorus (P)	7723-14-0	NIOSH 7300 mod./ NIOSH 7303	ICP-AES	MCE/PVC			Air
Potassium (K)	9/7/7440	NIOSH 7300 mod./NIOSH 7303	ICP-AES	MCE/PVC	1 - 4	5 - 1000	Air

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Selenium (Se)	7782-49-2	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	13 - 2000	Air
Silica, Respirable Crystalline(~5 ug nominal reporting limit for Quartz - Cristobalite and Tridymite) and Dust	Various	NIOSH 7500/0600	XRD/Grav	PVC, pre-weighed	1.7 - 8.0 (Size selective sampler dependant)	400 - 1000	Air
Silica, Respirable Crystalline (~2.5 ug nominal reporting limit for Quartz ~5 ug nominal reporting limit for Cristobalite and Tridymite) and Dust	Various	NIOSH 7500/0600	XRD/Grav	PVC -pre-weighed	1.7 - 8.0 (Size selective sampler dependant)	400 - 1000	Air
Silver (Ag)	7440-22-4	NIOSH 7300 mod.	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	250 - 2000	Air
Sodium (Na)	7440-23-5	NIOSH 7303	ICP-AES	MCE	1 - 4	13 - 2000	Air
Strontium (Sr)	7440-24-6	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	10 - 1000	Air
Sulfuric Acid (H2SO4)	7664-93-9	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.5	3 - 100	Air
Tantalum (Ta)	7440-25-7	NIOSH 7300 mod(special digestion)	ICP-AES	MCE/PVC	1 - 4	200 - 400	Air
Tellurium (Te)	13494-80-9	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	25 - 2000	Air
Thallium (Tl)	7440-28-0	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	25 - 2000	Air
Tin (Sn)	7440-31-5	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 500	Air
Titanium (Ti)	7440-32-6	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC			Air
Titanium Dioxide (TiO2)	13463-67-7	NIOSH 7300 mod(special digestion)	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	100 - 1000	Air
Total Particulate		NIOSH 0500	Gravimetric	PVC -pre-weighed	1 - 2	20 - 1200	Air
Tungsten (W)	7440-33-7	NIOSH 7300 mod(special digestion)	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 1000	Air
Vanadium (V)	7440-62-6	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 1000	Air

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Welding Fume Particulate		NIOSH 0500	Gravimetric	PVC - pre-weighed or Matched-wight MCE	1 - 4	200 - 1200	Air
Yttrium (Y)	7440-65-5	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Zinc (Zn)	7646-85-7	NIOSH 7300 mod./NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Zinc Oxide (ZnO)	1314-13-2	NIOSH 7303	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Zirconium (Zr)	7440-67-7	NIOSH 7300 mod.	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Zirconium Oxide (ZrO2)	1314-23-4	NIOSH 7300 mod(special digestion)	ICP-AES/ ICP-MS	MCE/PVC	1 - 4	5 - 200	Air
Lead (Pb)	7439-92-1	EPA 3050/ EPA 6010C	ICP-AES	Soil			Solid/ Bulk
Lead (Pb)	7439-92-1	EPA 3050/ EPA 6010C	ICP-AES	Paint			Solid/ Bulk
Lead (Pb) (Determination of surface contamination by lead and i compounds)	7439-92-1ts	EPA 3050/ EPA 6010C	ICP-AES	ASTM certified wipe			Wipe

Industrial Hygiene (Organics)

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
2-Butoxyethanol (Butyl Cellosolve)	111-76-2	OSHA 83	GC-FID	SKC 226-01	0.1	48	Air
2-Butoxyethanol (Butyl Cellosolve)	111-76-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
2-Butoxyethanol (Butyl Cellosolve)	111-76-2	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	2 -10	Air
2-Butoxyethyl acetate (Butyl Cellosolve Acetate)	112-07-2	OSHA 83	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
2-Butoxyethyl acetate (Butyl Cellosolve Acetate)	112-07-2	OSHA 83	GC-FID	SKC 226-01	0.1	48	Air
2-Ethoxyethoxy Ethanol (Carbitol)	111-90-0	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	10	Air
2-Ethoxyethoxy Ethanol (Carbitol)	111-90-0	NIOSH1403 mod.	GC-FID	POVM SKC 575-001 or 002		8 hrs	Air
2-Heptanone (Methyl n-Amyl ketone)	110-43-0	NIOSH 1301	GC-FID	SKC 226-01	0.01 - 0.2	1 - 25	Air
2-Heptanone (Methyl n-Amyl ketone)	110-43-0	NIOSH 2553	GC-FID	SKC 225-121	0.01 - 0.2	1 - 25	Air
2-Heptanone (Methyl n-Amyl ketone)	110-43-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
2-Methoxyethanol	109-86-4	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	1 - 6	Air
2-Methoxyethanol	109-86-4	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	6 - 50	Air
4-Vinyl Toluene, 3-vinyl Toluene	39294-88-7	NIOSH 1501	GC-FID	AT Passive Sampler**, POVM SKC 575-001		8 hrs	Air
4,4 - Methylene diphenyl diisocycanate	101-68-8	OSHA 42	HPLC	SKC 225-9002	1	15	Air
5-Methyl-3-Heptanone	541-85-5	NIOSH 1301	GC-FID	SKC 226-01	0.01 - 0.2	1 - 25	Air
5-Methyl-3-Heptanone	541-85-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Acenaphthylene	208-96-8	NIOSH 5506	HPLC-UV/ FL	PTFE + SKC 226-30-04	2	200 - 5000	Air
Acenapthene	83-32-9	NIOSH 5506	HPLC-UV/ FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Acetaldehyde	75-07-0	NIOSH 2539	HPLC-UV	SKC 226-118	0.01 - 0.05	5	Air
Acetone	67-64-1	NIOSH 1300	GC-FID	SKC 226-01	0.01 - 0.20	0.5 - 3.0	Air
Acetone	67-64-1	OSHA 69	GC-FID	ORBO 91	0.05	3	Air
Acetonitrile	75-05-8	NIOSH 1606	GC-FID	SKC 226-09	0.01 - 0.20	1 - 25	Air

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Acetonitrile	75-05-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		2 hrs	Air
Acrolein	107-02-8	NIOSH 2539	GC-FID & GC-MS	SKC 226-118	0.01 - 0.05	48	Air
Acrylonitrile	107-13-1	NIOSH 1604	GC-FID	SKC 226-01	0.01 - 0.2	3.5 - 20	Air
Allyl Alcohol	107-18-6	NIOSH 1402	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Allyl Alcohol	107-18-6	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
a-Methyl Styrene	98-83-9	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	1 - 30	Air
a-Methyl Styrene	98-83-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Aniline	62-53-3	NIOSH 2002	GC-FID	SKC 226-10	0.02 - 0.20	5.0 - 30	Air
Aniline	62-53-3	NIOSH 2017	GC-FID	SKC 225-9004 & SKC 226-15	0.1 - 0.2	5 - 50	Air
Aniline	62-53-3	OSHA PV2079	GC-FID	SKC 226-98	0.2	30	Air
Anthracene	120-12-7	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benz (a) anthracene	56-55-3	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benzene	71-43-2	OSHA 1005	GC-FID	AT Passive Samper**, SKC 575-001,002		8 hrs	Air
Benzene	71-43-2	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	5 - 30	Air
Benzene Sol (Coal Tar Pit Vol, Asphalt Fumes)	8052-42-4	NIOSH 5042 / 0500	Grav. / BZSOL	PTFE - Preweighed	1 - 4	28 - 400	Air
Benzene Sol (Coal Tar Pit Vol, Asphalt Fumes) Additional characterization by HPLC available	Various	OSHA 58	Grav. / BZSOL	GFF	2	960	Air
Benzene, Ethyl Benzene, Toluene and Xylene, Total Hydrocarbon (VOC as Hexane)	Various	NIOSH 1501	GC-FID	SKC 226-01, AT Passive Sampler**, POVM or SKC 575-001 or 002	0.1 - 0.5	10	Air
Benzo (a) pyrene	50-32-8	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benzo (b) fluoranthene	205-99-2	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benzo (e) pyrene	192-97-2	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benzo (ghi) perylene	191-24-2	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air

Industrial Hygiene (Organics)

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Benzo (k) fluoranthene	207-08-9	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Benzyl Acetate	140-11-4	OSHA PV2124	GC-FID	SKC 226-73	0.02 - 0.05	10	Air
Benzyl Chloride	100-44-7	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.20	8 - 50	Air
Benzyl Chloride	100-44-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Biphenyl (Diphenyl)	92-52-4	NIOSH 2530	GC-FID	SKC 226-35-01	0.01 - 0.5	15 - 30	Air
Bromoform	75-25-2	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	4 - 70	Air
Bromoform	75-25-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001		8 hrs	Air
Butyl Acrylate	141-32-2	NIOSH 1450 Mod	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Butyl Carbitol (Diethylene Glycol Monobutyl Ether)	112-34-5	NIOSH 1403 Mod	GC-FID	SKC 226-01	0.01 - 0.05	2 - 10	Air
Butyl Carbitol (Diethylene Glycol Monobutyl Ether)	112-34-5	NIOSH 1403 Mod	GC-FID	SKC 575-002		8 hrs	Air
Butyl Cellosolve (2-Butoxyethanol)	111-76-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Butyl Cellosolve (2-Butoxyethanol)	111-76-2	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	2 - 10	Air
Butyraldehyde	123-72-8	NIOSH 2539 Mod	HPLC-UV	SKC 226-118	0.01 - 0.05	5	Air
Camphor	76-22-2	NIOSH 1301	GC-FID	SKC 226-01	0.01 - 0.2	1 - 25	Air
Camphor	76-22-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Carbitol(2-Ethoxyethoxy Ethanol)	111-90-0	NIOSH 1403 Mod	GC-FID	SKC 226-01	0.01 - 0.05	10	Air
Carbon Tetrachloride	56-23-5	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	3 - 150	Air
Carbon Tetrachloride	56-23-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Cellosolve(2-Ethoxyethanol)	110-80-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Cellosolve Acetate (2-Ethoxyethyl Acetate)	111-15-9	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Cellosolve Acetate (2-Ethoxyethyl Acetate)	111-15-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Chlorobenzene	108-90-7	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1.5 - 40	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Chlorobenzene	108-90-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Chlorobromomethane	74-97-5	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	0.5 - 60	Air
Chlorobromomethane	74-97-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Chloroform	67-66-3	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1.0 - 50	Air
Chloroform	67-66-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001		8 hrs	Air
Chloroprene (2-Chloro-1,3-butadiene)	126-99-8	OSHA 112	GC-FID	SKC 226-111A	0.05	6	Air
Chloroprene (2-Chloro-1,3-butadiene)	126-99-8	NIOSH 1002	GC-FID	SKC 226-01	0.01 - 0.10	1.5 - 8	Air
Chrysene	218-01-9	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Coal Tar Naphtha	Various	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.2	1.3 - 20	Air
Coal Tar Naphtha	Various	NIOSH 1550	GC-FID	AT Passive Sampler**, POVM SKC		8 hrs	Air
Coal Tar Pitch Volatiles Additional characterization by HPLC available	65996-93-2	OSHA 58	Grav. / BZSOL	GFF	2	960	Air
Cumene	92-82-8	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	1 - 30	Air
Cumene	92-82-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Cyclohexane	110-82-7	NIOSH 1500	GC-FID	SKC 226-01	0.01 - 0.20	2.5 - 5	Air
Cyclohexane	110-82-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		6 hrs	Air
Cyclohexanol	108-93-0	NIOSH 1402	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Cyclohexanol	108-93-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Cyclohexanone	108-94-1	NIOSH 1300	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Cyclohexanone	108-94-1	OSHA 01	GC-FID	SKC 226-110	0.02-0.05	10	Air
Cyclohexanone	108-94-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Cyclohexene	110-83-8	NIOSH 1500	GC-FID	SKC 226-01	0.01- 0.2	5 - 7	Air
Cyclohexene	110-83-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Cyclopentane	287-92-3	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.2	5	Air
Cyclopentane	287-92-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001		8 hrs	Air
Diacetone Alcohol	123-42-2	NIOSH 1402	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Diacetone Alcohol	123-42-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Dibenz (a,h) anthracene	53-70-3	NIOSH 5506	HPLC-UV/FL	PTFE & SKC 226-30-04	2	200 - 1000	Air
Dibutylphthalate	84-74-2	NIOSH 5020	GC-FID	MCE/PVC	1 - 3	6 - 200	Air
Dibutylphthalate	84-74-2	OSHA 104	GC-FID	SKC 226-56	1	240	Air
Dichlorofluoromethane	75-43-4	NIOSH 2516	GC-FID	(2) SKC 226- 09	0.01 - 0.05	0.25 - 3.0	Air
Dichloromethane (Methylene Chloride)	75-09-2	NIOSH 1005	GC-FID	(2) SKC 226- 01	0.01 - 0.2	0.5 - 2.5	Air
Dichloromethane (Methylene Chloride)	75-09-2	OSHA 80	GC-FID	ORBO 91	0.05	3	Air
Dichloromethane (Methylene Chloride)	75-09-2	NIOSH 1005 Mod	GC-FID	SKC 575-001		8 hrs	Air
Diesel Fuel		NIOSH 1550	GC-FID	SKC 226-01Send reference material in separateshipment	0.01 - 0.2	1.3 - 20	Air
Diethyl Ether (Ethyl Oxide)	60-29-7	NIOSH 1610 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Diethyl Ether (Ethyl Oxide)	60-29-7	NIOSH 1610	GC-FID	SKC 226-01	0.01 - 0.2	0.25 - 3.0	Air
Diethyl Ether (Ethyl Oxide)	60-29-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		4 hrs	Air
Diethylene Glycol	111-46-6	NIOSH 5523	GC-FID	GFF & SKC 226-57	0.5 - 2.0	5 - 60	Air
Diethylene Glycol Monoethyl Ether	111-90-0	NIOSH 1403 Mod	GC-FID	POVM SKC 575-002		4 - 8 hrs	Air
Diisobutyl Ketone	108-83-8	NIOSH 1300	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Diisobutyl Ketone	108-83-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Diisooctylphthalate (bis (2-ethylhexyl)- phthalate)	117-81-7	NIOSH 5020	GC-FID	MCE/PVC	1 - 3	10 - 200	Air
Dimethoxymethane (Methylal)	109-87-5	NIOSH 1611	GC-FID	SKC 226-01	0.01 - 0.2	1 - 3	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Dimethoxymethane (Methylal)	109-87-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		1 hrs	Air
Dimethylacetamide	127-19-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Dimethylacetamide (N,N-dimethylacetamide)	127-19-5	NIOSH 2004	GC-FID	SKC 226-10	0.01 - 1	15 - 80	Air
Dimethylformamide	68-12-2	NIOSH 2004	GC-FID	SKC 226-10	0.01 - 1.0	15 - 80	Air
Dimethylformamide	68-12-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Di-n-Octyl Phthalate (DNOP)	117-84-0	OSHA 104	GC-FID	SKC 226-56	1.0 - 3.0	10 - 240	Air
Dipropylene Glycol Methyl Ether	34590-94-8	NIOSH 1403 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Dipropylene Glycol Methyl Ether	34590-94-8	NIOSH 1403 Mod	GC-FID	SKC 226-01	0.01 - 0.05	5 - 10	Air
Divinylbenzene	1321-74-0	OSHA 89	GC-FID	SKC 226-73	0.05	12	Air
Divinylbenzene	1321-74-0	OSHA 89	GC-FID	AT Passive Sampler**		8 hrs	Air
Epichlorohydrin	106-89-8	NIOSH 1010	GC-FID	SKC 226-01	0.01 - 0.2	2 - 30	Air
Epichlorohydrin	106-89-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Esters 1 (one analyte)	Various	NIOSH 1450	GC-FID	SKC 226-01	0.01-0.2	1.0 - 10	Air
Ethanol (Ethyl Alcohol)	64-17-5	NIOSH 1400	GC-FID	SKC 226-01	0.01 - 0.2	0.1 - 1	Air
Ethanol (Ethyl Alcohol)	64-17-5	OSHA 5001	GC-FID	SKC 226-82(Two Tubes in Series)	0.05	12	Air
Ethanol (Ethyl Alcohol)	64-17-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		1 hrs	Air
Ethanol (Ethyl Alcohol)	64-17-5	NIOSH 1400 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Ethyl Acetate	141-78-6	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		6 hrs	Air
Ethyl Acetate	141-78-6	NIOSH 1457	GC-FID	SKC 226-01	0.01 - 0.2	0.1 - 10.0	Air
Ethyl Acrylate	140-88-5	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Ethyl Acrylate	140-88-5	OSHA 92	GC-FID	SKC 226-73	0.05	12	Air
Ethyl Acrylate	140-88-5	OSHA 92	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
1, 1, 2 - Trichloroethane	79-00-5	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	2 - 60	Air
1, 1, 2 - Trichloroethane	79-00-5	OSHA 11	GC-FID	SKC 226-01	0.2	10	Air
1, 1, 2 - Trichloroethane	79-00-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
1, 1, 1 - Trichloroethane (methyl chloroform)	71-55-6	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	0.1 - 8	Air
1, 1, 1 - Trichloroethane (methyl chloroform)	71-55-6	OSHA 14	GC-FID	SKC 226-01	0.2	3	Air
1, 1, 1 - Trichloroethane (methyl chloroform)	71-55-6	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
1, 1, 2 - Trichloro -1 , 2 , 2-trifluoroethane (Refrigerant 113)	76-13-1	OSHA 113 Mod	GC-FID	POVM SKC 575-001			Air
1, 1, 2 -Trichloro-1 , 2 , 2-trifluoroethane (Refrigerant 113)	76-13-1	NIOSH 1020	GC-FID	(2) SKC 226- 01	0.01 - 0.05	0.1 - 3	Air
1, 1-Dichloroethane	75-34-3	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	0.5 - 15	Air
1, 1-Dichloroethane	75-34-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
1, 2, 3 - Trichloropropane	96-18-4	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	0.6 - 60	Air
1, 2, 3 - Trichloropropane	96-18-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
1, 2, 3 - Trimethylbenzene	526-73-8	NIOSH 1502	GC-FID	SKC 226-01	0.01 - 0.2	10 - 30	Air
1, 2-Dichloroethylene	540-59-0	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	0.2 - 5	Air
1, 2-Dichloroethylene	540-59-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		6 hrs	Air
1, 3 Butylene Glycol(1,3 Butanediol)	107-88-0	NIOSH 5523	GC-FID	GFF & SKC 226-57	0.5 - 2.0	5 -60	Air
1,6-Hexamethylene Diisocyanate (HDI)	822-06-0	OSHA 42	HPLC	SKC 225-9002	1	15	Air
1-Methoxy-2-Propanol (Propylene glycol methylether)	107-98-2	OSHA 99	GC-FID	SKC 226-01	0.1	5 -10	Air
1-Methoxy-2-Propanol Acetate (Propylene glycol methyl ether acetate)	108-65-6	OSHA 99	GC-FID	POVM SKC 575-002			Air
2-Butanone (MEK)	78-93-3	OSHA 1004	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
2-Butanone (MEK)	78-93-3	NIOSH 2500	GC-FID	SKC 226-81A	0.01 - 0.2	0.25 - 12	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Ethyl Amyl Ketone (3-Octanone)	106-68-3	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.2	25	Air
Ethyl Bromide (Bromoethane)	74-96-4	OSHA PV2061	GC-FID	SKC 226-01	0.1	12	Air
Ethyl Bromide (Bromoethane)	74-96-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Ethyl Bromide (Bromoethane)	74-96-4	NIOSH 1011	GC-FID	SKC 226-01	0.01 - 0.2	0.5 - 4	Air
Ethyl Butyl Ketone	106-35-4	NIOSH 1301	GC-FID	SKC 226-01	0.01 - 0.2	1 - 25	Air
Ethyl Butyl Ketone	106-35-4	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.02 - 0.05	10	Air
Ethyl Butyl Ketone	106-35-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Ethyl Cellosolve (2-Ethoxyethanol)	110-80-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Ethyl Cellosolve (2-Ethoxyethanol)	110-80-5	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	1 - 6	Air
Ethyl Cellosolve (2-Ethoxyethanol)	110-80-5	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Ethyl Chloride (Chloroethane)	75-00-3	NIOSH 2519	GC-FID	(2) SKC-226-25	0.02 - 0.05	0.3 - 3	Air
Ethyl Methacrylate	97-63-2	NIOSH 2537	GC-FID	SKC 226-30-06	0.01 - 0.05	1 - 8	Air
Ethylbenzene	100-41-4	OSHA 1002	GC-FID	POVM SKC 575-002	240 min	50	Air
Ethylbenzene	100-41-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler** SKC575- 001,002		4 hours	Air
Ethylbenzene	100-41-4	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	1 - 24	Air
Ethylene Chlorohydrin (2-Chloroethanol)	107-07-3	NIOSH 2513 Mod	GC-FID	SKC 226-81A	0.01 - 0.2	2 - 35	Air
Ethylene Chlorohydrin (2-Chloroethanol)	107-07-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		15 min (STEL),8 hrs (TWA)	Air
Ethylene Dichloride (1, 2 Dichloroethane)	107-06-2	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1 - 50	Air
Ethylene Dichloride (1, 2 Dichloroethane)	107-06-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Ethylene Glycol	107-21-1	NIOSH 5523	GC-FID	GFF & SKC 226-57	0.5 - 2	5 - 60	Air
Ethylene Glycol Monobutyl Ether (Butyl Cellosolve,2-butoxyethanol)	111-76-2	NIOSH 1403	GC-FID	SKC 226-01	0.01 - 0.05	2 - 10	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Fluoranthene	206-44-0	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Fluorene	86-73-7	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Formaldehyde	50-00-0	NIOSH 2016	HPLC	POVM SKC UMEX 100		15 min - 24 hrs	Air
Formaldehyde	50-00-0	NIOSH 2016	HPLC	SKC 226-119	0.3 - 1.5	1 - 15	Air
Furfural	98-01-1	NIOSH 2529	GC-FID	SKC 226-118	0.01 - 0.05	12	Air
Furfural	98-01-1	OSHA 72 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Furfuryl Alcohol	98-00-0	NIOSH 2505	GC-FID	SKC 226-115	0.01 - 0.05	3 - 25	Air
Furfuryl Alcohol	98-00-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Gasoline		NIOSH 1500 Mod	GC-FID	SKC 226-01	0.01 - 0.2	2.0 - 4.0	Air
Gasoline		NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Glutaraldehyde	111-30-6	OSHA 64	HPLC-UV	SKC 225-9003	0.05 - 0.5	1 - 30	Air
Heptane	142-82-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Heptyl Alcohol (1-Heptanol)	111-70-6	NIOSH 402 Mod	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Hexachloroethane	67-72-1	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	3 - 70	Air
Hexachloroethane	67-72-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Hexone (MIBK-- Methyl-isobutylketone)	108-10-1	NIOSH 1300	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Hexone (MIBK-- Methyl-isobutylketone)	108-10-1	OSHA 1004	GC-FID	POVM SKC 575-002		8 hrs	Air
Hexone (MIBK-- Methyl-isobutylketone)	108-10-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Hydrocarbons - Aromatic		NIOSH 1501 Personnel Sampler	GC-FID	SKC-226-01	See method	See method	Air
Hydrocarbons, Total (Hydrocarbons, BP 36-216 Degrees C)		NIOSH 1500 Mod	GC-FID	SKC 226-01	0.2	5 - 20	Air
Indeno (1,2,3cd) pyrene	193-39-5	NIOSH 5506	HPLC-UV/FL	PTFE + SKC 226-30-04	2	200 - 1000	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Isoamyl Acetate	123-92-2	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Isoamyl Acetate	123-92-2	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Isoamyl Alcohol	123-51-3	NIOSH 1402	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Isoamyl Alcohol	123-51-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Isobutyl Acetate	110-19-0	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Isobutyl Acetate	110-19-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Isobutyl Alcohol	78-83-1	NIOSH 1401	GC-FID	SKC 226-01	0.01 - 0.2	2 - 10	Air
Isobutyl Alcohol	78-83-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Isooctane(2,2,4-Trimethylpen- tane)	540-84-1	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Isooctane(2,2,4-Trimethylpen- tane)	540-84-1	NIOSH 1500 Mod	GC-FID	POVM SKC 575-001		8 hrs	Air
Isophorone	78-59-1	NIOSH 2508 Mod	GC-FID	SKC 226-81A	0.01 - 1.0	25	Air
Isophorone	78-59-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Isophrone Di- Isocyanate (IPDI)	4098-71-9	OSHA PV2034	HPLC	SKC 225-9002	1	60	Air
Isophrone Di- Isocyanate (IPDI)	4098-71-9	OSHA 42 Mod	HPLC	SKC 225-9002	1	15 - 30	Air
Isopropyl Acetate	108-21-4	NIOSH 1454	GC-FID	SKC 226-01	0.02 - 0.2	0.1 - 9	Air
Isopropyl Acetate	108-21-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		7 hrs	Air
Isopropyl Alcohol (2-Propanol)	67-63-0	NIOSH 1400	GC-FID	SKC 226-01	0.01 - 0.2	0.3 - 3	Air
Isopropyl Alcohol (2-Propanol)	67-63-0	OSHA 5001	GC-FID	SKC 226-82(Two Tubes in Series)	0.05	12	Air
Isopropyl Alcohol (2-Propanol)	67-63-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Isovaleraldehyde	590-86-3	NIOSH 2539 Mod	HPLC	SKC 226-118	0.01 - 0.05	5	Air
Kerosene (Diesel Fuel)	8008-20-6	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Limonene	138-86-3	NIOSH 1552	GC-FID	SKC 226-01	0.01 - 0.2	2 - 30	Air
Limonene	138-86-3	OSHA PV2036	GC-FID	SKC 226-01	0.2	10	Air
MDI Methylene bisphenyl isocyanate	101-68-8	OSHA 47	HPLC-UV	SKC 225-9002	1	15	Air
Mesityl Oxide	141-79-7	NIOSH 1301	GC-FID	SKC 226-01	0.01 - 0.2	1 - 25	Air
Mesityl Oxide	141-79-7	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.02 - 0.05	10	Air
Mesityl Oxide	141-79-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC		8 hrs	Air
Methanol (Methyl Alcohol)	67-56-1	OSHA 5001	GC-FID	SKC 226-82(Two Tubes in Series)	0.05	3-5 based on relative humidity	Air
Methanol (Methyl Alcohol)	67-56-1	NIOSH 2000	GC-FID	SKC 226-51	0.02 - 0.2	1 - 5	Air
Methyl Acetate	79-20-9	NIOSH 1458	GC-FID	SKC 226-01	0.01 - 0.20	0.2 - 10	Air
Methyl Acetate	79-20-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, SKC 575-002		2 hrs	Air
Methyl Acrylate	96-33-3	NIOSH 1459	GC-FID	SKC 226-01	0.01 - 0.20	1.0 - 5.0	Air
Methyl Acrylate	96-33-3	OSHA 92	GC-FID	SKC 226-73	0.05	12	Air
Methyl Acrylate	96-33-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Methyl Cellosolve (2-Methoxyethanol)	109-86-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Methyl Cellosolve Acetate(2-MethoxyethylAcetate)	110-49-6	NIOSH 1451	GC-FID	SKC 226-01	0.01 - 0.20	0.20 - 20	Air
Methyl Cellosolve Acetate(2-MethoxyethylAcetate)	110-49-6	OSHA 53	GC-FID	SKC 226-01	0.1	10	Air
Methyl Ethyl Ketone (MEK) (2-Butanone)	78-93-3	NIOSH 2500	GC-FID	SKC 226-81A	0.01 - .20	0.25 - 12	Air
Methyl Isoamyl Acetate	108-84-9	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
Methyl Isoamyl Ketone (5-methyl-2-hexanone)	110-12-3	NIOSH 1500 Mod	GC-FID	SKC 226-01	0.05	10	Air
Methyl Isoamyl Ketone (5-methyl-2-hexanone)	110-12-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Methyl Isobutyl Carbinol (Methyl Amyl Alcohol)	108-11-2	NIOSH 1402	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air

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Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
n-Amyl Acetate	628-63-7	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.20	1 - 10	Air
n-Amyl Acetate	628-63-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Naphtha (Coal Tar/ Petroleum)		NIOSH 1550	GC-FID	SKC 226-01Send reference material in separate shipment	0.01 - 0.2	1.3 - 20	Air
Naphthalene	91-20-3	NIOSH 5506	HPLC-UV/ FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Naphthalene	91-20-3	OSHA 35	GC-FID	SKC 226-110	0.2	10	Air
Naphthalene	91-20-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**		8 hrs	Air
Naphthalene	91-20-3	NIOSH 1501 Mod	GC-FID	SKC 226-01	0.01	100 - 200	Air
n-Butyl Acetate	123-86-4	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
n-Butyl Acetate	123-86-4	OSHA 1009	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
n-Butyl Alcohol (1-Butanol)	71-36-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
n-Butyl Alcohol (1-Butanol)	71-36-3	NIOSH 1401	GC-FID	SKC 226-01	0.01 - 0.2	2 - 10	Air
n-Butyl Glycidyl Ether	192337	NIOSH 1616	GC-FID	SKC 226-01	0.01 - 0.2	15 - 30	Air
n-Butyl Glycidyl Ether	192337	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 002		8 hrs	Air
n-Butyl Methacrylate	97-88-1	NIOSH 2537 Mod	GC-FID	SKC 226-30-06	0.01 - 0.5	1 - 8	Air
n-Decane	124-18-5	NIOSH 1500	GC-FID	SKC 226-01	0.01- 0.2	5	Air
n-Decane	124-18-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 002		8 hrs	Air
n-Heptane	142-82-5	NIOSH 1500	GC-FID	SKC 226-01	0.01-0.2	4	Air
n-Hexane	110-54-3	NIOSH 1500	GC-FID	SKC 226-01	0.01 - 0.2	4	Air
n-Hexane	110-54-3	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Nicotine	54-11-5	NIOSH 2551	GC-NPD	SKC 226-93	0.1 - 1.0	0.5 -6 00	Air
Nitrobenzene	98-95-3	NIOSH 2005	GC-FID	SKC 226-10	0.01 - 1.0	10 - 150	Air
Nitromethane	75-52-5	NIOSH 2527 Mod	GC-NPD	SKC 226-111A	0.01 - 0.05	1.2 - 3	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
NMP (n-Methy-2-Pyrrolidone)	872-50-4	NIOSH 1302	GC-FID	SKC 226-01	0.05 - 0.2	0.5 - 125	Air
n-Octane	111-65-9	NIOSH 1500	GC-FID	SKC 226-01	0.01 - 0.2	4	Air
n-Octane	111-65-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
n-Pentane	109-66-0	NIOSH 1500	GC-FID	SKC 226-01	0.01 - 0.2	4	Air
n-Pentane	109-66-0	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		3 hrs	Air
n-Propyl Acetate	109-60-4	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
n-Propyl Acetate	109-60-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
n-Propyl Alcohol	71-23-8	NIOSH 1401	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
n-Propyl Alcohol	71-23-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		6 hrs	Air
n-Vinyl 2-Pyrrolidone	88-12-0	NIOSH 1302	GC-FID	SKC 226-01	0.05 - 0.2	12	Air
Oil Mist (Metalworking Fluids (MWF) All Categories)	8012-95-1	NIOSH 5026	FTIR	MCE, PCV or GFFSend referencematerial in separate shipment. Oil must be solvent soluble.	1 - 3	20 - 500	Air
ortho-Dichlorobenzene (1,2-Dichlorobenzene)	95-50-1	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
ortho-Dichlorobenzene (1,2-Dichlorobenzene)	95-50-1	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
ortho-Dichlorobenzene (1,2-Dichlorobenzene)	95-50-1	NIOSH 1501	GC-FID	SKC 226-01	0.2	2 - 30	Air
para-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	NIOSH 1501	GC-FID	SKC 226-01	0.2	2 - 30	Air
para-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
para-Dichlorobenzene (1,4-Dichlorobenzene)	106-46-7	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1 - 8	Air
Paraffin Wax Fume	8002-74-2	OSHA CSI	GC-FID	GFF	1	200 - 600	Air
Perchloroethylene (Tetrachloroethylene)	127-18-4	NIOSH 1003	GC-FID	SKC 226-01	0.01 - 0.2	1 - 40	Air
Perchloroethylene (Tetrachloroethylene)	127-18-4	OSHA 1001	GC-FID	POVM SKC 575-002		8 hrs	Air
Perchloroethylene (Tetrachloroethylene)	127-18-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Petroleum Distillate		NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air
Petroleum Ether (VM&P Naphtha, Ligroin)	8032-32-4	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air
Petroleum Naphtha	5/9/8002	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air
Phenanthrene	85-01-8	NIOSH 5506	HPLC-UV/ FL	PTFE & SKC 226-30-04	2	200 - 1000	Air
Phenol	108-95-2	OSHA 32	HPLC	226-95	0.1	24	Air
Phenyl Ether	101-84-8	NIOSH 1617	GC-FID	SKC 226-01	0.01 - 0.2	1 - 50	Air
Phenyl Ether	101-84-8	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Phenylethylene (Styrene)	100-42-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Phenylethylene (Styrene)	100-42-5	NIOSH 1501	GC-FID	SKC 226-01	0.05 - 1.0	1 - 14	Air
Propylene Glycol	57-55-6	NIOSH 5523	GC-FID	GFF & SKC 226-57	0.5 - 2.0	5 - 60	Air
Propylene Glycol Methyl Ether (PGME) (Propylene Glycol Monomethyl Ethers/ Acetates)	107-98-2, 1589-47-5	OSHA 99	GC-FID	SKC 226-01	0.1	5 -10	Air
Propylene Oxide	75-56-9	NIOSH 1612	GC-FID	SKC 226-01	0.01 - 0.2	0.5 - 5	Air
Propylene Oxide	75-56-9	OSHA 88	GC-FID	SKC 226-81A	0.1	5	Air
Propylene Oxide	75-56-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Pseudocumene (1, 2, 4-Trimethylbenzene)	95-63-6	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	30	Air
p-tert-Butyl Toluene	98-51-1	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	1 - 29	Air
Pyrene	129-00-0	NIOSH 5506	HPLC-UV/ FL	PTFE + SKC 226-30-04	2	200 - 1000	Air
Pyridine	110-86-1	NIOSH 1613	GC-FID	SKC 226-01	0.01 - 1.0	18 - 150	Air
Refrigerant 113 (1,1,2-Trichloro-2,2,1-trifluoroethane)	76-13-1	NIOSH 1020	GC-FID	SKC 226-01	0.01 - 0.05	0.1 - 3	Air
Rubber Solvent	8030-30-6	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
sec-Amyl Acetate	626-38-0	NIOSH 1450	GC-FID	SKC 226-01 or POVM SKC 575-001	0.01 - 0.20	1 - 10	Air
sec-Amyl Acetate	626-38-0	NIOSH 1500 Mod	GC-FID	POVM SKC 575-001		8 hrs	Air
sec-Butyl Acetate	105-46-4	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
sec-Butyl Acetate	105-46-4	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
sec-Butyl Alcohol (2-Butanol)	78-92-2	NIOSH 1401	GC-FID	SKC 226-01	0.01 - 0.2	2 - 10	Air
sec-Butyl Alcohol (2-Butanol)	78-92-2	NIOSH 1401	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Stoddard Solvent (Mineral Spirits)	8052-41-3	NIOSH 1550	GC-FID	SKC 226-01	0.01 - 0.20	1.3 - 20	Air
Styrene	100-42-5	NIOSH 1501	GC-FID	SKC 226-01	0.01- 1	1 - 14	Air
Styrene	100-42-5	NIOSH 1501 Mod	GC-FID	AT Passive Sampler**, SKC 575-002 or 575-006		8 hrs	Air
t-Butyl Glycidyl Ether	7665-72-7	OSHA CSI	GC-FID	SKC 226-01	0.2	10	Air
TDI as mixture (2,4-Toluene Diisocyanate and/ or 2,6-Toluene Diisocyanate)	584-84-9, 91-08-7	OSHA 42	HPLC-UV	SKC 225-9002	1	15	Air
tert-Butyl Acetate	540-88-5	NIOSH 1450	GC-FID	SKC 226-01	0.01 - 0.2	1 - 10	Air
tert-Butyl Acetate	540-88-5	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
tert-Butyl Alcohol(2-methyl-2-propanol)	75-65-0	NIOSH 1400	GC-FID	SKC 226-01	0.01 - 0.2	1.0 - 9.0	Air
tert-Butyl Alcohol(2-methyl-2-propanol)	75-65-0	NIOSH 1400 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Tetrahydrofuran	109-99-9	NIOSH 1609	GC-FID	SKC 226-01	0.01 - 0.20	1.0 - 9.0	Air
Tetrahydrofuran	109-99-9	NIOSH 1500 Mod	GC-FID	AT Passive Sampler**, POVM SKC 575-002		8 hrs	Air
Toluene	108-88-3	OSHA 111	GC-FID	POVM SKC 575-002		12L/240 min	Air
Toluene	108-88-3	OSHA 1005	GC-FID	AT Passive Sampler**, POVM SKC 575-001 or 002		8 hrs	Air
Toluene	108-88-3	NIOSH 1501	GC-FID	SKC 226-01	0.01 - 0.2	1 - 8	Air
Total Hydrocarbons		NIOSH 1500 Mod	GC-FID	SKC 226-01	0.2	4	Air

Industrial Hygiene (Organics)

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Tri(ethylene) Glycol	112-27-6	NIOSH 5523	GC-FID	GFF & SKC 226-57	0.5 - 1.0	5 - 60	Air
Trichloroethylene	79-01-6	NIOSH 1022	GC-FID	SKC 226-01	0.01 - 0.2	1 - 30	Air
Silica, Quartz (Respirable Coal Mine Dust)		NIOSH 7603 (P7)	FTIR/Grav.	PVC-MSHA	2	480 - 960	Air

Industrial Hygiene (Profiles)

Industrial Hygiene (Profiles)

Test	Analyte	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix
Aldehyde Profile (4)	Acetaldehyde, Acrolein, Butyraldehyde, Formaldehyde,	NIOSH 2016 Mod	HPLC	SKC 226-119	0.1-1.5	15	Air
BTEX Profile	Benzene, Ethyl Benzene, Toluene and Xylene, Total Hydrocarbon (VOC as Hexane)	NIOSH 1501	GC-FID	SKC 226-01 or AT Passive Sampler**, or SKC 575-001 or 002	0.1 - 0.5	10	Air
Diisocyanate Profile	HDI, MDI, 2,4-TDI, 2,6,-TDI	OSHA 42 & 47	HPLC-UV/ FL	Trtd. GFF	0.2 - 1.0	15 - 30	Air
Inorganic Acid Profile	Hydrobromic Acid, Hydrochloric Acid, Hydofluoric Acid, Nitric Acid, Phosphoric Acid, Sulfuric Acid	NIOSH 7903	IC	SKC 226-10-03	0.2 - 0.4	100	Air
MSHA Welding Fume Profile (14 metals)	Arsenic, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Molybdenum, Nickel, Vanadium, Zinc	NIOSH 7300 / OSHA ID 125	ICP-AES/ ICP-MS	MCE or PVC	1.0 - 2.0	200 - 1000	Air
OSHA 58 Benzene Soluble Fraction by HPLC (5 PAH'sProfile)	Anthracene, Benzo(a)pyrene, Chrysene, Phenanathrene, Pyrene	NIOSH 5506	HPLC-UV/ FL	PTFE Benzene, Soluble Fraction	2	200 - 960	Air
Polynuclear Aromatic Hydrocarbons Profile (PAH's also known as PNA's)	Acenaphthene, Acenapththylene, Anthracene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k) fluoranthene, Benzo(ghi) perylene, Benzo(a)pyrene, Chrysene, Dibenz(a,h) anthracene, Fluoranthene, Fluorene, Indeno(1,2,3-cd)pyrene, Naphthalene, Phenanthrene, Pyrene	NIOSH 5506	HPLC-UV/ FL	PTFE + SKC 26-30-04 Transfer filters to glass vials after sam- pling; wrap to protect from light. Ship sample refrigerated overnight delivery.	2	200 - 1000	Air
Welding Fume Profile (15 metals)	Aluminum, Antimony, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Molybdenum, Nickel, Titanium, Vanadium, Zinc	NIOSH 7300 / OSHA ID 125	ICP-AES/ ICP-MS	MCE or PVC	1.0 - 2.0	200 - 1000	Air
Welding Fume Profile+As (16 metals)	Arsenic, Aluminum, Antimony, Beryllium, Cadmium, Chromium, Cobalt, Copper, Iron, Lead, Manganese, Molybdenum, Nickel, Titanium, Vanadium, Zinc	NIOSH 7300 / OSHA ID 125	ICP-AES/ ICP-MS	MCE or PVC	1.0 - 2.0	200 - 1000	Air

Environmental and Wet Chemistry (Inorganics)

Environmental and Wet Chemistry

Inorganics: Non-Potable and Drinking Water

Test	Analyte	Method	Technique	Matrix
Drinking Water - Asbestos	Asbestos	EPA 100.2	TEM	Water
Drinking Water - Determination of Inorganic Anions	Chloride, Fluoride, Nitrate, Nitrite, Orthophosphate, Sulfate	EPA 300.0	IC	Water
Drinking Water - Determination of Inorganic Anions	Chloride, Fluoride, Nitrate, Orthophosphate, Sulfate	EPA 300.0	IC	Water
Drinking Water - Determination of Trace Elements and Metals	Al, Ba, B, Ca, Cr, Cu, Fe, Mg, Mn, Mo, Ni, K, Ag, Na, V, Zn	EPA 200.7	ICP-AES	Water
Drinking Water - Determination of Trace Elements and Metals	Al, Sb, As, Ba, Be, B, Cd, Cr,Cu, Pb, Mn, Hg, Mo, Ni, Se Ag, Tl, V, Zn	EPA 200.8	ICP-MS	Water
Drinking Water - Lead (Pb) and Copper (Cu)	Lead (Pb) and Copper (Cu)	EPA 200.8/ EPA 200.7	ICP-MS/ICP-AES	Water
Drinking Water - Mercury	Hg	EPA 245.1	CVAA	Water
Non-potable Water - Asbestos	Asbestos	EPA 100.1	TEM	Water
Non-potable water - Chromium (VI)	Chromium, Hexavalent (CrVI)	EPA 7199	IC	Water
Non-potable water - Determination of Inorganic Anions	Bromide, Chloride, Fluoride, Nitrate, Orthophosphate, Sulfate	EPA 300.0/ EPA 9056A	IC	Water
Non-potable water - Determination of Inorganic Anions	Bromide, Chloride, Fluoride, Nitrate, Nitrite, Orthophosphate, Sulfate	EPA 300.0/ EPA 9056A	IC	Water
Non-potable water - Determination of Trace Elements and Metals	Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn	EPA 200.7/ EPA 6010C	ICP-AES	Water
Non-potable water - Determination of Trace Elements and Metals	Al, Sb, As, Ba, Be, B, Cd, Cr, Co, Cu, Fe, Pb, Li, Mn, Hg, Mo, Ni, Se, Ag, Sr, Tl, Sn, Ti, V, Zn	EPA 200.8/ EPA 6020	ICP-MS	Water
Non-potable water - Determination of Rare Earth Metals (REE, Lanthanides and Actinides)	Sc, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu	EPA 200.8/ EPA 6020	ICP-MS	Water
Non-potable water - Mercury	Hg	EPA 245.1/7470A	CVAA	Water
Non-potable water or Drinking Water - Conductivity	Conductivity	SM 2510B	Conductivity Meter	Water
Non-potable water or Drinking Water - Hardness (calc.)	Hardness (calc)(Ca, Mg by ICP-AES)	EPA 200.7/ SM2340B 6010C	ICP-AES	Water

Environmental and Wet Chemistry
Inorganics: Non-Potable and Drinking Water

Test	Analyte	Method	Technique	Matrix
Non-Potable Water or Drinking Water - Lead (Pb)	Lead (Pb)	EPA 6020/ 200.8	ICP-MS	Water
Non-potable water or Drinking Water - pH (Corrosivity)	pH	SM 4500-H+B	Electrode	Water
Non-potable water or Drinking Water - Residue, Filterable (TDS)	Residue, Filterable (TDS)	SM 2540C	Gravimetric	Water
Non-potable water or Drinking Water - Residue, Non-Filterable (TSS)	Residue, Non-Filterable (TSS)	SM 2540D	Gravimetric	Water
Non-potable water or Drinking Water - Residue, Total (TS)	Residue, Total (TS)	SM 2540B	Gravimetric	Water
Non-potable water or Drinking Water- Turbidity	Turbidity	SM 2130B	Turbidimeter	Water
Non-Potable Water or Drinking Water - Lead (Pb)	Lead (Pb)	EPA 6020/ 200.8	ICP-MS	Water
Non-potable water or Drinking Water - pH (Corrosivity)	pH	SM 4500-H+B	Electrode	Water
Non-potable water or Drinking Water - Residue, Filterable (TDS)	Residue, Filterable (TDS)	SM 2540C	Gravimetric	Water
Non-potable water or Drinking Water - Residue, Non-Filterable (TSS)	Residue, Non-Filterable (TSS)	SM 2540D	Gravimetric	Water
Non-potable water or Drinking Water - Residue, Total (TS)	Residue, Total (TS)	SM 2540B	Gravimetric	Water
Non-potable water or Drinking Water- Turbidity	Turbidity	SM 2130B	Turbidimeter	Water

Environmental and Wet Chemistry
Inorganics: Solids and Hazardous Waste

Test	Analyte	Method	Technique	Matrix
Solids & Hazardous Waste - Bulk Asbestos Analysis	Asbestos	EPA 600/R-93/116	PLM	Solid/ Bulk (building)
Solids & Hazardous Waste - Bulk Asbestos Analysis	Asbestos	EPA 600/R-93/116	PLM	Solid/ Bulk (Soil/ Rock/ Raw)
Solids & Hazardous Waste-Chemical/Elemental Composition, Quantitative (w/ construction of calibration curve)	Quantification of calibrated elements	In-house	XRF	Solid/ Bulk
Solids & Hazardous Waste-Chemical/Elemental Composition, Semi-Quant	Scan-Quantification of major elements	Semi-Quant	XRF	Solid/ Bulk
Solids & Hazardous Waste - Chromium (VI)	Chromium, Hexavalent (CrVI)	EPA 3060A/EPA 7199	IC	Solid/ Bulk
Solids & Hazardous Waste - Determination of Inorganic Anions	Bromide, Chloride, Fluoride, Nitrate, Orthophosphate, Sulfate	EPA 9056A	IC	Solid/ Bulk
Solids & Hazardous Waste - Determination of Inorganic Anions	Bromide, Chloride, Fluoride, Nitrate, Nitrite, Orthophosphate, Sulfate	EPA 9056A	IC	Solid/ Bulk
Solids & Hazardous Waste - Mercury	Hg	EPA 7471A	CVAA	Solid/ Bulk
Solids & Hazardous Waste - pH	pH	EPA 9045D	Electrode	Solid/ Bulk
Solids & Hazardous Waste - Qualitative Phase ID	Scan - Phase ID of Major Crystalline Materials	Search & Match (using ICDD PDF 4+ Database)	XRD	Solid/ Bulk
Solids & Hazardous Waste - Qualitative Phase ID and Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	Scan - Phase ID of Major Crystalline Materials and Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7500 ModSearch & Match (using ICDD PDF 4+ Database)	XRD	Solid/ Bulk
Solids & Hazardous Waste - Quantitative Phase ID	Scan - Phase ID and Quantification o of Major Crystalline Materials. Total Amorphous quantification is also possible	By Rietveld Method, limitations apply, additional analyses might be needed, please call for more information	XRD	Solid/ Bulk
Solids & Hazardous Waste - Silica, Amorphous and Total Crystalline	Silica, Amorphous and Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7501 & NIOSH 7500 Mod	XRD	Solid/ Bulk
Solids & Hazardous Waste - Silica, Amorphous Only	Silica, Amorphous Only	NIOSH 7501 Mod	XRD	Solid/ Bulk

Environmental and Wet Chemistry
Inorganics: Solids and Hazardous Waste

Test	Analyte	Method	Technique	Matrix
Solids & Hazardous Waste- Silica, Total Crystalline & Respirable (CCSEM)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Si Rich by CCSEM < 10 um)	NIOSH 7500 Mod and Size Separation	XRD/ CCSEM	Solid/ Bulk
Solids & Hazardous Waste- Silica, Total Crystalline & Respirable (Stokes)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Stokes Settling < 10 um)	NIOSH 7500 Mod and Size Separation	XRD/Stokes Settling	Solid/ Bulk
Solids & Hazardous Waste - Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7500 Mod	XRD	Solid/ Bulk
Solids & Hazardous Waste - Trace Elements	Al, Sb, As, Ba, Be, B, Cd, Ca, Cr, Co, Cu, Fe, Pb, Li, Mg, Mn, Mo, Ni, P, K, Se, Ag, Na, Sr, Tl, Sn, Ti, V, Zn	EPA 6010C	ICP-AES	Solid/ Bulk
Solids & Hazardous Waste - Determination of Rare Earth Metals (REE, Lanthanides and Actinides)	Sc, Y, La, Ce, Pr, Nd, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb, Lu	EPA 6020	ICP-MS	Solid/ Bulk
Solids & Hazardous Waste - Trace Elements	As, Cd, Hg, Pb	EPA 6020	ICP-MS	Solid/ Bulk
Dinnerware Extraction from Glazed Ceramic Surfaces	Pb, Cd	ASTM C738	ICP-MS	Solid/ Bulk
Dinnerware Extraction from the Lip and Rim Area of Glass Tumblers	Pb, Cd	ASTM C927	ICP-MS	Solid/ Bulk

Environmental and Wet Chemistry (Organics)

Environmental and Wet Chemistry

Organics: Non-Potable and Drinking Water

Test	Method	Technique
Volatile Aromatics	EPA 524.3	GC-MS
Volatile Halocarbons	EPA 524.3	GC-MS
Fuel Oxygenates	EPA 8260C	GC-MS
Polychlorinated Biphenyls	EPA 608 / 8082	GC
Polynuclear Aromatics	EPA 625 / 8270D	GC-MS
Purgeable Aromatics	EPA 625 / 8260B / 8270D	GC-MS
Purgeable Halocarbons	EPA 624 / 8260C	GC-MS
Purgeable Organics	EPA 8260C	GC-MS
Volatile Chlorinated Organics	EPA 8260C	GC-MS

Environmental and Wet Chemistry
Organics: Solids and Hazardous Waste

Test	Method	Technique
Acrylates	EPA 8260B	GC-MS
Chlorinated Hydrocarbons	EPA 8260B / 8270C	GC-MS
Haloethers	EPA 8270C	GC-MS
Polychlorinated Biphenyls	EPA 8082	GC
Polynuclear Aromatics	EPA 8260B	GC-MS
Purgeable Halocarbons	EPA 8260B	GC-MS
Purgeable Organics	EPA 8260B	GC-MS
Volatile Chlorinated Organics	EPA 8260B	GC-MS
Acrylates	EPA 8260B	GC-MS

Environmental and Wet Chemistry
Organics: Air and Emissions

Test	Method	Technique
Acrylates	EPA TO-17 / TO-15	GC-MS
Air Analysis	TO-11	HPLC-DAD
Amines	Internal Method	LC/MS/MS
Chlorinated Hydrocarbons	EPA TO-14A / TO-15	GC / GC-MS
Polychlorinated Biphenyls	EPA TO-10A	GC-MS
Polynuclear Aromatics	EPA TO-13	GC-MS
Purgeable Aromatics	EPA TO-14A / TO-13	GC / GC-MS
Purgeable Halocarbons	EPA TO-14A / TO-15 / TO-17	GC / GC-MS
Volatile Chlorinated Organics	EPA TO-14A / TO-15	GC / GC-MS
Volatile Organics	EPA TO-14A / TO-15 / TO-17	GC / GC-MS

Mineral Identification and Characterization

Mineral Identification and Characterization
X-ray Diffraction (XRD) and X-ray Fluorescence Testing

Test	Analyte	Method	Matrix
Qualitative Phase ID	Scan - Phase ID of Major Crystalline Materials	Search & Match (using ICDD PDF 4+ Database)	Solid/Bulk
Quantitative Phase ID	Scan - Phase ID and Quantification of Major Crystalline Materials. Total Amorphous Quantification is also possible.	By Rietveld Method. Limitations apply, additional analysis might be needed; please call for more information.	Solid/Bulk
Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7500 Mod	Solid/Bulk
Silica, Amorphous Only	Silica, Amorphous Only	NIOSH 7501 Mod	Solid/Bulk
Silica, Amorphous and Total Crystalline	Silica, Amorphous and Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7501 & NIOSH 7500 Mod	Solid/Bulk
Silica, Total Crystalline & Respirable (Stokes)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) and Respirable (Stokes Settling <10 um)	NIOSH 7500 Mod and Size Separation	Solid/Bulk
Silica, Total Crystalline & Respirable (Size-Weighted Fine Fraction SWeRF, SWFFcs)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Size-Weighted Fine Fraction SWeRF, SWFFcs)	NIOSH 7500 Mod and Size Separation	Solid/Bulk
Characterization of unknown material (XRD and XRF only)	Scan - Phase ID of Major Crystalline Materials by XRD, Semi-Quantitative chemical composition by XRF	Search & Match (using ICDD PDF 4+ Database)/Semi-Quant chemical composition	Solid/Bulk
Silica, Total Crystalline & Respirable (CCSEM)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (SiRich by CCSEM < 10um)	NIOSH 7500 Mod and Size Separation	Solid/Bulk
Qualitative Clay Phase ID (Expansive / Full)	Scan - Phase ID of Major Crystalline Materials plus Phase ID of Clays (i.e. Bentonite)	USGS Mineral ID	
Chemical/Elemental Composition, Semi-Quant	Scan-Quantification of major elements	Semi-Quant	Solid/Bulk
Chemical/Elemental Composition, Quantitative (w/construction of calibration curve)	Quantification of calibrated elements	In-house	Solid/Bulk

Mineral Identification and Characterization

Microscopy – 5-10 Day Turnaround Time

Test	Method	Technique
PLM	Call for pricing	Solid/Bulk
SEM	Call for pricing	Solid/Bulk

Other Services

Test	Analyte	Method	Matrix
Total Incombustible Content (Rock Dust) - Bulk	MH 102		Solid/Bulk
MSHA Welding Fume Profile-14 analytes (As, Be, Cd, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, V, Zn)	OSHA ID 125 / NIOSH 7300	ICP-AES	Air

Silica Analysis

Silica Analysis

Analyte	CAS#	Method	Technique	Sampling Media	Sampling Rate	Suggested Volume	Matrix	Unit
Silica, Respirable Crystalline (~5 ug nominal reporting limit for Quartz - Cristobalite and Tridymite) and Dust	Various	NIOSH 7500/0600	XRD/Grav	PVC, pre-weighed	1.7-8.0 (Size selective sampler dependent)	400 - 1000	Air	Each
Silica, Respirable Crystalline (~2.5 ug nominal reporting limit for Quartz ~5 ug nominal reporting limit for Cristobalite and Tridymite) and Dust	Various	NIOSH 7500/0600	XRD/Grav	PVC -pre-weighed	1.7-8.0 (Size selective sampler dependent)	400 - 1000	Air	Each
Silica, Quartz (Respirable Coal Mine Dust)		NIOSH 7603 (P7)	FTIR/Grav.	PVC-MSHA	2	480 - 960	Air	Each

Test	Analyte	Method	Technique	Matrix	Unit
Solids & Hazardous Waste - Qualitative Phase ID and Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	Scan - Phase ID of Major Crystalline Materials and Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7500 Mod Search & Match (using ICDD PDF 4+ Database)	XRD	Solid/ Bulk	Each
Solids & Hazardous Waste - Silica, Amorphous and Total Crystalline	Silica, Amorphous and Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7501 & NIOSH 7500 Mod	XRD	Solid/ Bulk	Each
Solids & Hazardous Waste - Silica, Amorphous Only	Silica, Amorphous Only	NIOSH 7501 Mod	XRD	Solid/ Bulk	Each
Solids & Hazardous Waste- Silica, Total Crystalline & Respirable (CCSEM)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Si Rich by CCSEM < 10 um)	NIOSH 7500 Mod and Size Separation	XRD/ CCSEM	Solid/ Bulk	Each
Solids & Hazardous Waste- Silica, Total Crystalline & Respirable (Stokes)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Stokes Settling < 10 um)	NIOSH 7500 Mod and Size Separation	XRD/ Stokes Settling	Solid/ Bulk	Each
Solids & Hazardous Waste - Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite)	NIOSH 7500 Mod	XRD	Solid/ Bulk	Each
Silica, Total Crystalline & Respirable (Size-Weighted Fine Fraction SWeRF, SWFFcs)	Silica, Total Crystalline (Quartz, Cristobalite, Tridymite) & Respirable (Size-Weighted Fine Fraction SWeRF, SWFFcs)	NIOSH 7500 Mod and Size Separation	XRD	Solid/ Bulk	Each

Environmental and Wet Chemistry
Sample Preparation

Environmental and Wet Chemistry
Sample Preparation

Test	Method	Technique
Acid digestion of solids	EPA 3050B or Acid Digestion	Digestion
Dissolved metals	EPA3005A	Digestion
Hot plate acid digestion (HNO3 + HCl)	EPA 3010A	Digestion
Microwave digestion - solids (HNO3 + HF)	EPA 3052 or Microwave Digestion	Digestion
Microwave digestion - solids (HNO3 only)	EPA 3051	Digestion
Acid digestion prep with HF	Acid Digestion	Digestion
Microwave-assisted acid digestion	EPA 3015	Digestion
Lithium Borate Fusion		Digestion
Water Leach	Water Leach	Digestion
Organic Continuous Liquid-Liquid Extraction	EPA 3520C	
Separatory Funnel Liquid-Liquid Extraction	EPA 3510C	
Solids & Hazardous Waste - synthetic precipitation leaching procedure (SPLP)-Inorganic	EPA 1312	Extraction
Solids & Hazardous Waste - Toxicity characteristic leaching procedure (TCLP) -Inorganic	EPA 1311	Extraction
Solids & Hazardous Waste - Waste Extraction Test (WET) STLC	CCR Chapter 11, Article 5, Appendix II	Extraction

Product Testing and Raw Materials

RJ Lee Group's accredited laboratory offers carbon analysis capabilities to help provide quality assurance across your product line. Our experts' approach for activated carbon is to duplicate the analytical procedures our customers have instituted for their products using their exact methodologies, e.g., in-house methods, as well as traditional methodologies.

We have summarized product testing in the pages below. These tests are listed throughout previous sections in the guide. Product testing may not be routine, please call for a quote.

Granular Activated Carbon (GAC)

Test	Analyte	Method
Grinding	As required by method	--
Moisture	Moisture (oven)	ASTM D2867 (TGA Leco)
Particle Size Test By Sieving	Apparent Density	ASTM D2854
	Particle Size Distribution (PSD)	ASTM D2862
	Mean Particle Diameter, mm	AWWA B-604/ASTM D2862
	Effective Size	AWWA B-604/ASTM D2862
	Uniformity Coefficient	AWWA B-604/ASTM D2862
Hardness Number	Hardness Number	ASTM D3802
Abrasion Number	Abrasion Number	AWWA B-604/ASTM D3802
Particle Size By Laser Diffraction	Particle Size Distribution (PSD)	In house (wet analysis)
Apparent Density	Apparent Density	ASTM D2854
BET Surface Analysis	Specific Area	In house
Volatile Matter	Volatile Matter	ASTM D3175 (TGA Leco)
Total Ash	Total Ash	ASTM D2866 (TGA Leco)
pH	pH	ASTM D3838
Contact pH	pH	ASTM D6851-02

Granular Activated Carbon (GAC)

Test	Analyte	Method
Water Solubles	Water Solubles	ASTM D5029-98
Halides and Sulfur	Br, Cl, F and S	Solid via Combustion & IC
Iodine Number	Iodine Number	AWWA B-604/ ASTM D4607/ USP/FCC
Acid -soluble Ash	Total Ash	ASTM D-2866 (TGA Leco)
	Acid -soluble Ash	ASTM D6385
Acid-soluble Iron	Acid-soluble Iron	ASTM D6647 mod (ICP-AES)
Acid-soluble Ash and Iron	Total Ash	ASTM D2866 (TGA Leco)
	Acid -soluble Ash	ASTM D6385
	Acid-soluble Iron	ASTM D6647 mod (ICP-AES)
Board of Water Supply	Metals/Anions/pH	BWS 102.7
Prop 65 Sec 1.4	Column – As, Al, Sb	Prop 65 Sec 1.4
GAC CA Prop 65 Section 1.5	Beaker – As, Al, Sb	Prop 65 Sec 1.5
Block CA Prop 65 Section 1.6	Beaker Block – As, Al, Sb	Prop 65 Section 1.6
Silver Extraction	Ag content	Call lab

RJLG is able to analyze powdered and pelletized activated carbon samples with the techniques listed above. Please call for more information and specific capabilities.

Gypsum, Gypsum Products, Anhydride (CaSO4) and FGD Byproducts

Test
Elemental Analysis By borate fusion / XRF (majors) - ASTM E1621 By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
XRD analysis for crystalline phase identification
XRD Rietveld Analysis for crystalline phase quantification (plus total amorphous component concentration if necessary)
Total and Respirable Crystalline SIlica by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
Free-water, Combined water, Gypsum purity by ASTM C471
Silicon Dioxide and Other Acid Insoluble Matter by ASTM C471
Thermogravimetric analysis studies (TGA) / Loss on ignition (LOI) / Moisture
Soluble Salts by IC/ICP (Halogens, Alkali and Alkaline Earth Metals)
Water-Soluble Chloride by ASTM C1218/C114
Acid-Soluble Chloride by ASTM C1152/C114 or ASTM C471M
Elemental Sulfur (S8) by GC-ECD (ASTM C471M mod)
Sulfite (SO3) by Iodine titration (EPRI M2) or TGA
Total Sulfur (S) (multiple techniques including EPRI M4, ASTM D4239)
Calcium Carbonate (CCE-Calcium Carbonate Equivalent by ASTM C25)
Free lime (CaO) by ASTM C25
Gypsum USP and FCC monographs Identification Assay Impurities (Flouride by ISE, Lead and Selenium by ICPMS, Iron by ICP-AES) LOD - Loss on Dying
Whiteness
Particle Size Distribution (PSD) by laser diffraction or microscopy

Calcium Carbonate, Limestone, Dolomite and Related Products

Test
Elemental Analysis By borate fusion / XRF (majors) - ASTM E1621 By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
XRD analysis for crystalline phase identification
XRD Rietveld Analysis for crystalline phase quantification (plus total amorphous component concentration if necessary)
Total and Respirable Crystalline SIlica by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
Calcium Carbonate Equivalent by ASTM C25
Free lime by ASTM C25
Thermogravimetric analysis studies (TGA) / Loss on ignition (LOI)
Purity
Current USP and FCC monographs Identification Calcium Carbonate Assay Acid Insolubles Substances Mg/Alkali Salts Heavy metals and metal impurities by ICP-AES / ICP-MS (Lead, Arsenic, Mercury, Iron, Barium) Fluoride by ISE LOD - Loss on Dying
Water-Soluble Chloride by ASTM C1218/C114
Acid-Soluble Chloride by ASTM C1152/C114
Whiteness
Particle Size Distribution (PSD) by laser diffraction or microscopy

Coal and Ash (CCR - Coal Combustion Residuals)

Test
Elemental Analysis By borate fusion / XRF (majors) - ASTM D4326 By acid digestion / ICP-AES (major, minors, trace) - ASTM D6349 and D6357 Hg by CVAA - ASTM D6414
Moisture, Ash, Volatile Matter by ASTM D7582
Sulfur by ASTM D4239
Chlorine by ASTM D4208

Talc

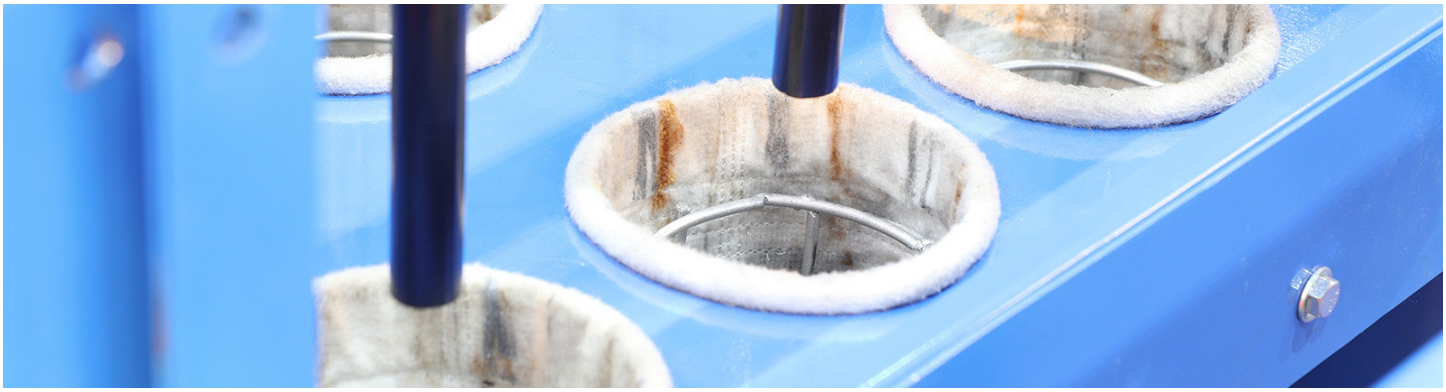
Test
Elemental Analysis By borate fusion / XRF (majors) - ASTM E1621 By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
XRD analysis for crystalline phase identification
Total and Respirable Crystalline SIlica by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
Current USP and foreign Pharmacopeia Monographs Identification (FTIR) Mg, Fe, Ca, Al content Water and Acid Soluble Substances Acidity / Alkalinity Absence of Asbestos (FTIR/XRD) Loss on Ignition (LOI) Heavy metals
Thermogravimetric analysis studies (TGA) / Loss on ignition (LOI)
Whiteness
Particle Size Distribution (PSD) by laser diffraction or microscopy

Kaolin/Kaolinite

Test
Elemental Analysis By borate fusion / XRF (majors) - ASTM E1621 By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
XRD analysis for crystalline phase identification
XRD Rietveld Analysis for crystalline phase quantification (plus total amorphous component concentration if necessary)
Total and Respirable Crystalline SIlica by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
Current USP monographs Identification LOI - Loss on ignition Heavy metals and metal impurities by ICP-AES / ICP-MS) Acid Soluble Substances Carbonate Thermogravimetric analysis studies (TGA) / Loss on ignition (LOI) Whiteness
Whiteness
Particle Size Distribution (PSD) by laser diffraction or microscopy

Detrimental Materials / Military Standards

Test
Shop Products Mercury by CVAA Antimony, Bismuth, Cadmium, Lead, Tin, Zinc by ICP Halides (Bromide, Chloride, Fluoride) by IC Sulfur by ICP Phosphorous by ICP
Solid nonmetallic materials Mercury by CVAA Halides (Bromide, Chloride, Fluoride) by IC Sulfur by ICP



Bag House Dust

Test
S-Sulfur by special digestion/ICP analysis (EPA 6010C)
Total Hex Chromium by IC (EPA 3060/7199)
Al,Be,Cd,Cr,Co,Mn,Mo,Ni,Se,Ti,V,Zn,As,Pb by special digestion ICP-AES/MS analysis (EPA 6010C, EPA 6020)

Glasses, bioactive glasses, (bioglass), borosilicate glasses, and ceramics

Test
Elemental Analysis By borate fusion/XRF (majors) - ASTM E1621 By acid digestion /ICP-AES / ICP-MS (major, minors, trace including heavy metals) Microwave Cold HF B
Other minerals and compounds

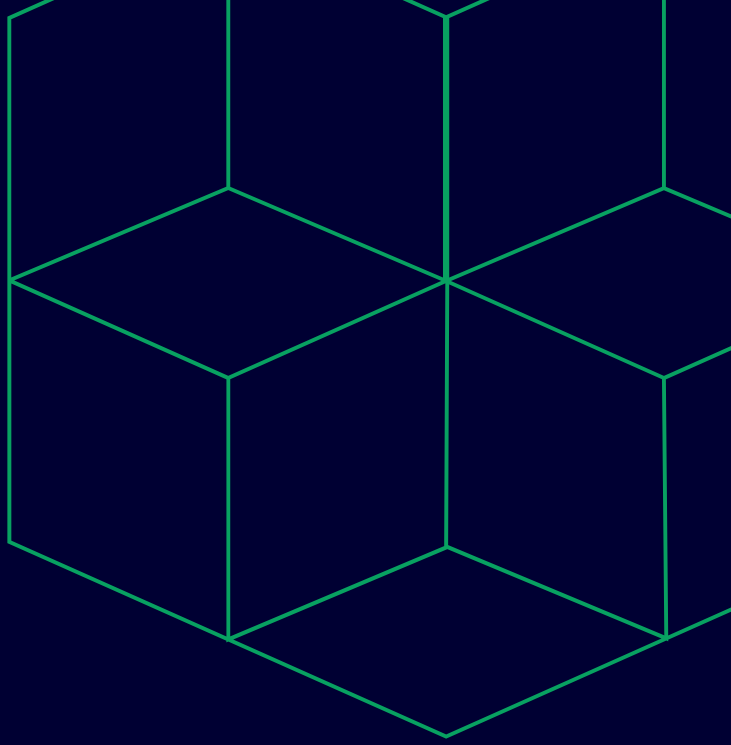
RJLG offer analytical services for other materials such as perlite, clays (including bentonite), quartz/sand, garnets, diatomaceous earth, alumina, rutile, calcium citrate, hydroxyapatite, sodium and magnesium chloride etc. Please call for additional information.

Diatomaceous Earth

Elemental Analysis
By borate fusion / XRF (majors) -ASTM E1621
By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
Hexavalent Chromium (Cr6) By UV-VIS/IC
Mercury Analysis (Hg) by CVAA
XRD analysis for crystalline phase identification
XRD Rietveld Analysis for crystalline phase quantification (plus total amorphous component concentration if necessary)
Total and Respirable Crystalline Silica (quartz, cristobalite and tridymite) by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
FCC testing
Identification (microscopy)
As, Pb by HCl digestion/ICP-MS analysis
LOD -Loss on Dying
LOI –Loss on Ignition
Non SiliceousSubstances
pH
Fluoride Analysis by Digestion/ISE

Perlite

Elemental Analysis
By borate fusion / XRF (majors) -ASTM E1621
By acid digestion / ICP-AES / ICP-MS (major, minors, trace including heavy metals)
XRD analysis for crystalline phase identification
XRD Rietveld Analysis for crystalline phase quantification (plus total amorphous component concentration if necessary)
Hexavalent Chromium (Cr6) By UV-VIS/IC
Mercury Analysis (Hg) by CVAA
Total and Respirable Crystalline Silica (quartz, cristobalite and tridymite) by NIOSH 7500 mod (XRD)
Asbestos by PLM or TEM
FCC Testing
Identification (Al,K,Na, Silica)
As, Pb by HCl digestion/ICP-MS analysis
LOD -Loss on Dying
LOI –Loss on Ignition
pH
Fluoride Analysis by Digestion/ISE



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