

# SOIL

Matrices designed to fulfill requirements for monitoring soil and solid matrices. Dried and homogenized standards of soil and sewage sludge designed to meet the United States Resource Conservation and Recovery Act and may be used to satisfy PT requirements worldwide.

2015 Soil PT Scheme Schedule			
	Scheme #	Opens	Closes
Q	SOIL 89	Jan 19	Mar 5
Q	SOIL 90	Apr 20	Jun 4
Q	SOIL 91	Jul 20	Sep 3
Q	SOIL 92	Oct 19	Dec 3

Schedule subject to change – see ERA’s website at [www.eraqc.com](http://www.eraqc.com)

2016 Soil PT Scheme Schedule			
	Scheme #	Opens	Closes
Q	SOIL 93	Jan 25	Mar 10
Q	SOIL 94	Apr 18	Jun 2
Q	SOIL 95	Jul 25	Sep 8
Q	SOIL 96	Oct 17	Dec 1

Schedule subject to change – see ERA’s website at [www.eraqc.com](http://www.eraqc.com)

Description	CRM	PT	QR	Page
Anions in Soil	543	873 <b>Q</b>	543QR	45
Base/Neutrals & Acids in Soil	727	467 <b>Q</b>	727QR	48
BTEX & MTBE in Soil	761	633 <b>Q</b>	761QR	46
Carbamate Pesticides in Soil	926	879 <b>Q</b>	926QR	49
Chlordane in Soil	725	628 <b>Q</b>	725QR	49
Chlorinated Acid Herbicides in Soil	723	626 <b>Q</b>	723QR	48
Corrosivity/pH in Soil	914	875 <b>Q</b>	914QR	45
Cyanide in Soil	541	621 <b>Q</b>	541QR	45
Diesel Range Organics (DRO) in Soil	765	631 <b>Q</b>	765QR	48
Gasoline Range Organics (GRO) in Soil	763	630 <b>Q</b>	763QR	46
Glycols in Soil	928	463 <b>Q</b>	928QR	48
Hexavalent Chromium in Soil	921	876 <b>Q</b>	921QR	44
Ignitability/Flash Point	979	874 <b>Q</b>	979QR	45
Low-Level PAHs in Soil	722	625 <b>Q</b>	722QR	48
Metals & Cyanide Blank Sand	058	—	—	51
Metals & Cyanide Blank Soil	057	—	—	51
Metals in Sewage Sludge	160	619 <b>Q</b>	160QR	44

**CRM** – Certified Reference Material

**PT** – Proficiency Testing

**QR** – QuiK Response

All ERA Soil PTs open quarterly (**Q**) unless otherwise noted.

Description	CRM	PT	QR	Page
Metals in Soil	540	620 <b>Q</b>	540QR	44
Nitroaromatics & Nitramines in Soil	920	871 <b>Q</b>	920QR	48
Nutrients in Sludge	545	—	—	45
Nutrients in Soil	542	869 <b>Q</b>	542QR	45
Oil & Grease in Soil	549	867 <b>Q</b>	549QR	45
Organochlorine Pesticides in Soil	728	468 <b>Q</b>	728QR	49
Organophosphorus Pesticides (OPP) in Soil	925	878 <b>Q</b>	925QR	49
PCBs in Soil	726	624 <b>Q</b>	726QR	48
PCBs in Oil	see page 50 for options			
PCBs in Soil	see page 50 for options			
PCBs in Water	see page 50 for options			
Ready-to-use VOAs in Soil	924	870 <b>Q</b>	924QR	46
TCLP Metals in Soil	544	629 <b>Q</b>	544QR	44
TCLP Organochlorine Pesticides	732	—	732QR	47
TCLP Semivolatiles	737	—	737QR	47
TCLP Volatiles	730	—	730QR	47
Toxaphene in Soil	724	627 <b>Q</b>	724QR	49
TPH in Soil	570/571	632 <b>Q</b>	572QR	47
Volatiles in Soil	721	623 <b>Q</b>	721QR	46

### ▶▶▶ QuiK Response PT

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# METALS

## Metals in Soil

CRM Cat. #540	PT Q Cat. #620	QR Cat. #540QR
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One 40 g soil sample in a screw-cap bottle for all ICP and AA, RCRA and Superfund methods including EPA digestion methods 3050 hot plate and 3051 microwave, or other applicable methods. Includes all metals shown below.

Aluminum	1,000-25,000 mg/kg
Antimony	80-300 mg/kg
Arsenic	40-400 mg/kg
Barium	100-1,000 mg/kg
Beryllium	40-400 mg/kg
Boron	80-800 mg/kg
Cadmium	40-400 mg/kg
Calcium	1,500-25,000 mg/kg
Chromium	40-400 mg/kg
Cobalt	40-400 mg/kg
Copper	40-400 mg/kg
Iron	1,000-50,000 mg/kg
Lead	40-400 mg/kg
Magnesium	1,200-25,000 mg/kg
Manganese	100-2,000 mg/kg
Mercury	1-35 mg/kg
Molybdenum	30-300 mg/kg
Nickel	40-500 mg/kg
Potassium	1,400-25,000 mg/kg
Selenium	40-400 mg/kg
Silver	20-100 mg/kg
Sodium	150-15,000 mg/kg
Strontium	40-400 mg/kg
Thallium	40-400 mg/kg
Tin	75-250 mg/kg
Titanium	10-2,000 mg/kg
Uranium	1.0-250 mg/kg
Vanadium	40-400 mg/kg
Zinc	100-1,000 mg/kg

## Hexavalent Chromium in Soil

CRM Cat. #921	PT Q Cat. #876	QR Cat. #921QR
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One 40 g standard in a screw-cap bottle for use with all promulgated hexavalent chromium methods.

Hexavalent chromium	40-300 mg/kg
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## TCLP Metals in Soil

CRM Cat. #544	PT Q Cat. #629	QR Cat. #544QR
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One 105 g soil standard in a screw-cap bottle designed specifically to meet all state requirements for TCLP extraction and analysis for the metals listed below.

Antimony	Cadmium	Nickel
Arsenic	Chromium	Selenium
Barium	Lead	Silver
Beryllium	Mercury	Zinc

## Metals in Sewage Sludge

CRM Cat. #160	PT Q Cat. #619	QR Cat. #160QR
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One 40 g sludge standard in a screw-cap bottle to be analyzed for the metals listed below.

Aluminum	1,000-50,000 mg/kg
Antimony	80-300 mg/kg
Arsenic	50-400 mg/kg
Barium	250-2,000 mg/kg
Beryllium	30-200 mg/kg
Cadmium	40-300 mg/kg
Calcium	5,000-70,000 mg/kg
Chromium	40-300 mg/kg
Cobalt	5-50 mg/kg
Copper	40-1,000 mg/kg
Iron	1,000-50,000 mg/kg
Lead	50-250 mg/kg
Magnesium	1,200-25,000 mg/kg
Manganese	100-2,000 mg/kg
Mercury	1-50 mg/kg
Molybdenum	5-250 mg/kg
Nickel	40-250 mg/kg
Potassium	1,400-25,000 mg/kg
Selenium	50-250 mg/kg
Silver	50-250 mg/kg
Sodium	150-15,000 mg/kg
Strontium	200-2,000 mg/kg
Thallium	50-250 mg/kg
Vanadium	5-250 mg/kg
Zinc	70-1,500 mg/kg



## PHYSICAL PARAMETERS

### Corrosivity/pH in Soil

CRM	PT 	QR
Cat. #914	Cat. #875	Cat. #914QR

One 100 g soil standard in a screw-cap bottle. Use to measure corrosivity.

Corrosivity/pH ..... 2-12 S.U.

### Ignitability/Flash Point


CRM	PT 	QR
Cat. #979	Cat. #874	Cat. #979QR

One standard packaged in three 30 mL bottles. Use to measure ignitability.

Ignitability/Flashpoint ..... 100-200°F

## OIL & GREASE

### Oil & Grease in Soil


CRM	PT 	QR
Cat. #549	Cat. #867	Cat. #549QR

One screw-cap bottle containing 50 g of soil ready to analyze. Use with gravimetric method 9071B or infrared spectrometric analysis.

n-Hexane Extractable Material (O&G) (Gravimetric) ..... 300-3,000 mg/kg  
n-Hexane Extractable Material (O&G) (Infrared) ..... 300-3,000 mg/kg

## INORGANICS


### Anions in Soil

CRM	PT 	QR
Cat. #543	Cat. #873	Cat. #543QR

One 40 g soil standard in a screw-cap bottle designed for a DI water extraction procedure for all the anions listed below.

Bromide ..... 10-100 mg/kg  
Chloride ..... 200-1,000 mg/kg  
Fluoride ..... 25-500 mg/kg  
Nitrate as N ..... 25-500 mg/kg  
Phosphate as P ..... 25-500 mg/kg  
Sulfate ..... 25-2,000 mg/kg

### Cyanide in Soil

CRM	PT 	QR
Cat. #541	Cat. #621	Cat. #541QR

One 40 g soil standard in a screw-cap bottle for all distillation/colorimetric methods.

Total Cyanide ..... 20-200 mg/kg  
Amenable Cyanide ..... 0-100 mg/kg

### Nutrients in Soil

CRM	PT 	QR
Cat. #542	Cat. #869	Cat. #542QR

One 40 g soil standard in a screw-cap bottle. Use to analyze for all the nutrients listed below.

Ammonia as N ..... 300-3,000 mg/kg  
Total Kjeldahl Nitrogen as N ..... 400-4,000 mg/kg  
Total Organic Carbon (TOC) ..... 1,000-20,000 mg/kg  
Total phosphorus as P ..... 300-3,000 mg/kg

### Nutrients in Sludge

CRM
Cat. #545

One 40 g sludge standard in a screw-cap bottle is ready for analysis.

Ammonia as N ..... 0.1-5% (w/w)  
Total Kjeldahl Nitrogen as N ..... 2-10% (w/w)  
Total Organic Carbon (TOC) ..... 5-50% (w/w)  
Total phosphorus as P ..... 0.5-10% (w/w)

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# VOLATILES

## Volatiles in Soil

CRM Cat. #721	PT Q Cat. #623	QR Cat. #721QR
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One 2 mL flame-sealed ampule in methanol requires spiking onto the provided ten grams of solid matrix before analysis. Use with EPA methods 8021, 8260, or other applicable methods. Includes a subset of the analytes listed below at 20-200 µg/kg (40-400 µg/kg for total xylenes, 80-1000 for selected ketones, and 200-1,000 µg/kg for acetonitrile).

Acetone	1,2-Dibromoethane (EDB)	Methylene chloride
Acetonitrile	Dibromomethane	Naphthalene
Acrolein	1,2-Dichlorobenzene	Nitrobenzene
Benzene	1,3-Dichlorobenzene	n-Propylbenzene
Bromobenzene	1,4-Dichlorobenzene	Styrene
Bromochloromethane	Dichlorodifluoromethane	1,1,1,2-Tetrachloroethane
Bromodichloromethane	1,1-Dichloroethane	1,1,2,2-Tetrachloroethane
Bromoform	1,2-Dichloroethane	Tetrachloroethene
Bromomethane	1,1-Dichloroethylene	Toluene
2-Butanone (MEK)	cis-1,2-Dichloroethylene	1,2,3-Trichlorobenzene
n-Butylbenzene	trans-1,2-Dichloroethylene	1,2,4-Trichlorobenzene
sec-Butylbenzene	1,2-Dichloropropane	1,1,1-Trichloroethane
tert-Butylbenzene	1,3-Dichloropropane	1,1,2-Trichloroethane
Carbon disulfide	2,2-Dichloropropane	Trichloroethene
Carbon tetrachloride	1,1-Dichloropropene	Trichlorofluoromethane
Chlorobenzene	cis-1,3-Dichloropropylene	1,2,3-Trichloropropane
Chlorodibromomethane	trans-1,3-Dichloropropylene	1,2,4-Trimethylbenzene
Chloroethane	Ethylbenzene	1,3,5-Trimethylbenzene
2-Chloroethyl vinyl ether	Hexachlorobutadiene	Vinyl acetate
Chloroform	Hexachloroethane	Vinyl chloride
Chloromethane	2-Hexanone	m&p-Xylene
2-chlorotoluene	Isopropylbenzene	o-Xylene
4-chlorotoluene	p-Isopropyltoluene	Xylenes, total
1,2-Dibromo-3-chloropropane (DBCP)	Methyl tert-butyl ether (MTBE)	
	4-Methyl-2-pentanone (MIBK)	

This standard is not compliant with the NELAC concentration for Hexachloroethane, Hexachlorobutadiene and Nitrobenzene. If a NELAC compliant sample is required for these analytes, use Ready-to-use VOAs in Soil, or Base/Neutrals and Acids in Soil.

## Gasoline Range Organics (GRO) in Soil

CRM Cat. #763	PT Q Cat. #630	QR Cat. #763QR
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One flame-sealed ampule with 20 g of soil spiked with unleaded regular gasoline in the range 100-2,000 mg/kg. Use with purge and trap and modified EPA 8015 GC/FID methods, or other applicable methods. Also use to test for BTEX in gasoline.

## BTEX & MTBE in Soil

CRM Cat. #761	PT Q Cat. #633	QR Cat. #761QR
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One 2 mL flame-sealed ampule requires spiking onto the ten grams of provided certified clean soil. Includes the analytes below at 20-200 µg/kg (40-400 µg/kg for Total Xylenes). Use with EPA method 8021, or other applicable methods.

Benzene	Methyl tert-butyl ether (MTBE)	Xylenes, total
Ethylbenzene	Toluene	

## Ready-to-Use VOAs in Soil

CRM Cat. #924	PT Q Cat. #870	QR Cat. #924QR
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One 20 mL flame-sealed ampule containing 10 g of soil and 10 mL of methanol is ready to analyze. Use with methods 8021, 8260, or other applicable methods. Includes a subset of the analytes listed below at 1,000-20,000 µg/kg.

Acetone	1,2-Dibromoethane (EDB)	Methylene chloride
Acetonitrile	Dibromomethane	Naphthalene
Acrolein	1,2-Dichlorobenzene	Nitrobenzene
Benzene	1,3-Dichlorobenzene	n-Propylbenzene
Bromobenzene	1,4-Dichlorobenzene	Styrene
Bromochloromethane	Dichlorodifluoromethane	1,1,1,2-Tetrachloroethane
Bromodichloromethane	1,1-Dichloroethane	1,1,2,2-Tetrachloroethane
Bromoform	1,2-Dichloroethane	Tetrachloroethene
Bromomethane	1,1-Dichloroethene	Toluene
2-Butanone (MEK)	cis-1,2-Dichloroethylene	1,2,3-Trichlorobenzene
n-Butylbenzene	trans-1,2-Dichloroethylene	1,2,4-Trichlorobenzene
sec-Butylbenzene	1,2-Dichloropropane	1,1,1-Trichloroethane
tert-Butylbenzene	1,3-Dichloropropane	1,1,2-Trichloroethane
Carbon disulfide	2,2-Dichloropropane	Trichloroethene
Carbon tetrachloride	1,1-Dichloropropene	Trichlorofluoromethane
Chlorobenzene	cis-1,3-Dichloropropylene	1,2,3-Trichlorobenzene
Chlorodibromomethane	trans-1,3-Dichloropropylene	1,2,4-Trimethylbenzene
Chloroethane	Ethylbenzene	1,3,5-Trimethylbenzene
2-Chloroethyl vinyl ether	Hexachlorobutadiene	Vinyl acetate
Chloroform	Hexachloroethane	Vinyl chloride
Chloromethane	2-Hexanone	m&p-Xylene
2-chlorotoluene	Isopropylbenzene	o-Xylene
4-chlorotoluene	p-Isopropyltoluene	Xylenes, total
1,2-Dibromo-3-chloropropane (DBCP)	Methyl tert-butyl ether (MTBE)	
	4-Methyl-2-pentanone (MIBK)	



# TOTAL PETROLEUM HYDROCARBONS

## Total Petroleum Hydrocarbons (TPH) in Soil

CRM Cat. #570	PT <b>Q</b> Cat. #632	QR Cat. #572QR
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One screw-top bottle with 50 g of soil to be analyzed for TPH. Use with EPA IR or gravimetric methods 8440, 9071B, or other applicable methods.

Non-polar Extractable Material (TPH) (Gravimetric).....	300-3,000 mg/kg
Non-polar Extractable Material (TPH) (IR).....	300-3,000 mg/kg

## Total Petroleum Hydrocarbons (TPH) in Soil

CRM Cat. #571	PT <b>Q</b> Cat. #632	QR Cat. #572QR
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One screw-top bottle with 50 g of soil to be analyzed for TPH in the presence of *interfering fatty acids*. Use with EPA IR or gravimetric methods 8440, 9071B, or other applicable methods.

Non-polar Extractable Material (TPH) (Gravimetric).....	300-3,000 mg/kg
Non-polar Extractable Material (TPH) (IR).....	300-3,000 mg/kg

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# TCLP

## TCLP Volatiles

CRM Cat. #730	QR Cat. #730QR
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One 2 mL flame-sealed ampule containing a subset of the analytes listed below, each at a concentration of 0.05-2.0 mg/L.

Benzene	Chloroform	Tetrachloroethylene
2-Butanone (MEK)	1,4-Dichlorobenzene	Trichloroethylene
Carbon tetrachloride	1,2-Dichloroethane	Vinyl chloride
Chlorobenzene	1,1-Dichloroethylene	

## TCLP Semivolatiles

CRM Cat. #737	QR Cat. #737QR
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One 2 mL flame-sealed ampule containing a subset of the analytes listed below, each at a concentration of 0.1-2.0 mg/L after dilution. All unspiked analytes are certified at <0.5 mg/L.

1,4-dichlorobenzene	Hexachloroethane	Pentachlorophenol
2,4-Dinitrotoluene	2-Methylphenol	Pyridine
Hexachlorobenzene	3 & 4-Methylphenol	2,4,5-Trichlorophenol
Hexachlorobutadiene	Nitrobenzene	2,4,6-Trichlorophenol

## TCLP Organochlorine Pesticides

CRM Cat. #732	QR Cat. #732QR
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One 2 mL flame-sealed ampule containing a subset of the analytes listed below, each at a concentration of 0.01-0.2 mg/L after dilution. All unspiked analytes are certified at <0.01 mg/L.

Endrin	Heptachlor epoxide	Methoxychlor
Heptachlor	gamma-BHC (Lindane)	

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## SEMIVOLATILES

## Nitroaromatics &amp; Nitramines in Soil

CRM Cat. #920	PT Q Cat. #871	QR Cat. #920QR
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Two flame-sealed ampules each containing 30 g of soil are ready to analyze. Use for EPA methods 8330, 8091, or other applicable methods. Includes a subset of the analytes listed below at 1,500-15,000 µg/kg.

4-Amino-2,6-dinitrotoluene	HMX	RDX
2-Amino-4,6-dinitrotoluene	Nitrobenzene	Tetryl
1,3-Dinitrobenzene	2-Nitrotoluene	1,3,5-Trinitrobenzene
2,4-Dinitrotoluene	3-Nitrotoluene	2,4,6-Trinitrotoluene
2,6-Dinitrotoluene	4-Nitrotoluene	

## Low-Level PAHs in Soil

CRM Cat. #722	PT Q Cat. #625	QR Cat. #722QR
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Two flame-sealed ampules each containing 30 g are ready to analyze. Use for EPA HPLC method 8310, 8270 SIM, or other applicable method. Includes a subset of the analytes listed below at 50-1,000 µg/kg.

Acenaphthene	Benzo(g,h,i)perylene	Fluorene
Acenaphthylene	Benzo(a)pyrene	Indeno(1,2,3-cd)pyrene
Anthracene	Chrysene	Naphthalene
Benzo(a)anthracene	Dibenz(a,h)anthracene	Phenanthrene
Benzo(b)fluoranthene	Fluoranthene	Pyrene
Benzo(k)fluoranthene		

## Diesel Range Organics (DRO) in Soil

CRM Cat. #765	PT Q Cat. #631	QR Cat. #765QR
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One flame-sealed ampule with 20 g of soil spiked with #2 Diesel fuel in the range 300-3,000 mg/kg. Use with modified EPA 8015, or other applicable GC/FID methods.

## HERBICIDES

## Chlorinated Acid Herbicides in Soil

CRM Cat. #723	PT Q Cat. #626	QR Cat. #723QR
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Two flame-sealed ampules, each containing 30 g of soil are ready-to-use. Use with EPA method 8151, or other applicable methods. Includes a subset of the analytes listed below at 100-1,000 µg/kg (MCPA & MCPP 1,000-10,000 µg/kg).

Acifluorfen	Dalapon	MCPP
Bentazone	Dicamba	4-Nitrophenol
Chloramben	3,5-Dichlorobenzoic acid	Pentachlorophenol
2,4-D	Dichlorprop	Picloram
2,4-DB	Dinoseb	2,4,5-T
Dacthal diacid (DCPA)	MCPA	2,4,5-TP (Silvex)

*This standard is not compliant with the NELAC concentration for 4-Nitrophenol and Pentachlorophenol. If a NELAC compliant sample is required for these analytes, use Base/Neutrals and Acids in Soil.*

## Glycols in Soil

RM Cat. #928	PT Q Cat. #463	QR Cat. #928QR
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Two flame-sealed ampules each containing 30 g of soil are ready-to-use. Use with EPA methods 8015B, 8430, 1671, or other applicable method.

Diethylene glycol	Propylene glycol	Triethylene glycol
Ethylene glycol	Tetraethylene glycol	

## Base/Neutrals &amp; Acids in Soil

CRM Cat. #727	PT Q Cat. #467	QR Cat. #727QR
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Two flame-sealed ampules each containing 30 g of soil are ready-to-use. Use with EPA method 8270, or other applicable method. Includes a subset of the analytes listed below at 1,000-15,000 µg/kg.

Acenaphthene	Chrysene	2-Methyl-4,6-dinitrophenol
Acenaphthylene	Dibenz(a,h)anthracene	2-Methylnaphthalene
2-Amino-1-methylbenzene (o-Toluidine)	Dibenzofuran	2-Methylphenol
Aniline	Di-n-butyl phthalate	3 & 4-Methylphenol
Anthracene	1,2-Dichlorobenzene	Naphthalene
Benzdine	1,3-Dichlorobenzene	2-Nitroaniline
Benzoic acid	1,4-Dichlorobenzene	3-Nitroaniline
Benzo(a)anthracene	3,3'-Dichlorobenzidine	4-Nitroaniline
Benzo(b)fluoranthene	2,4-Dichlorophenol	Nitrobenzene
Benzo(k)fluoranthene	2,6-Dichlorophenol	2-Nitrophenol
Benzo(g,h,i)perylene	Diethyl phthalate	4-Nitrophenol
Benzo(a)pyrene	2,4-Dimethylphenol	N-Nitrosodiethylamine
Benzyl alcohol	Dimethyl phthalate	N-Nitrosodimethylamine
4-Bromophenyl phenyl ether	2,4-Dinitrophenol	N-Nitrosodiphenylamine
Butyl benzyl phthalate	2,4-Dinitrotoluene	N-Nitroso-di-n-propylamine
Carbazole	2,6-Dinitrotoluene	Pentachlorobenzene
4-Chloroaniline	Di-n-octyl phthalate	Pentachlorophenol
bis(2-Chloroethyl)ether	bis(2-Ethylhexyl)phthalate	Phenanthrene
bis(2-Chloroethoxy)methane	Fluoranthene	Phenol
bis(2-Chloroisopropyl)ether	Fluorene	Pyrene
4-Chloro-3-methylphenol	Hexachlorobenzene	Pyridine
1-Chloronaphthalene	Hexachlorobutadiene	1,2,4,5-Tetrachlorobenzene
2-Chloronaphthalene	Hexachlorocyclopentadiene	2,3,4,6-Tetrachlorophenol
2-Chlorophenol	Hexachloroethane	1,2,4-Trichlorobenzene
4-Chlorophenyl phenyl ether	Indeno(1,2,3-cd)pyrene	2,4,5-Trichlorophenol
	Isophorone	2,4,6-Trichlorophenol

## PCBS

## PCBs in Soil


CRM Cat. #726	PT Q Cat. #624	QR Cat. #726QR
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One screw-top bottle containing 50 grams of standard is ready to analyze. Use with EPA method 8082, or other applicable methods. Each standard includes a different Aroclor randomly selected from the list below at 1-50 mg/kg.

Aroclor 1016	Aroclor 1242	Aroclor 1254
Aroclor 1221	Aroclor 1248	Aroclor 1260
Aroclor 1232		

## PESTICIDES


## Organochlorine Pesticides in Soil

CRM	PT 	QR
Cat. #728	Cat. #468	Cat. #728QR

Two flame-sealed ampules each containing 30 g of soil are ready-to-use. Use with EPA method 8081, or other applicable methods. Includes a subset of the analytes listed below at 50-500 µg/kg.


Aldrin	4,4'-DDD	Endrin
alpha-BHC	4,4'-DDE	Endrin aldehyde
beta-BHC	4,4'-DDT	Endrin ketone
delta-BHC	Dieldrin	Heptachlor
gamma-BHC (Lindane)	Endosulfan I	Heptachlor epoxide
alpha-Chlordane	Endosulfan II	Methoxychlor
gamma-Chlordane	Endosulfan sulfate	

## Chlordane in Soil

CRM	PT 	QR
Cat. #725	Cat. #628	Cat. #725QR


One screw-top bottle containing 50 g of soil is ready to analyze. Use with EPA method 8081, or other applicable methods. The standard contains technical chlordane at 200-1,000 µg/kg.

## Toxaphene in Soil

CRM	PT 	QR
Cat. #724	Cat. #627	Cat. #724QR

One screw-top bottle containing 50 g of soil is ready to analyze. Use with method 8081, or other applicable methods. The standard contains toxaphene at 200-2,000 µg/kg.

## Carbamate Pesticides in Soil

CRM	PT 	QR
Cat. #926	Cat. #879	Cat. #926QR

Two flame-sealed ampules, each containing 30 g of soil are ready to analyze. Use with EPA methods 8318, 8321, or other applicable methods. Each standard contains a subset of the analytes listed below at 250-2,500 µg/kg.

Aldicarb	Dioxacarb	Oxamyl
Aldicarb sulfone	Diuron	Promecarb
Aldicarb sulfoxide	3-Hydroxycarbofuran	Propham
Carbaryl	Methiocarb	Propoxur
Carbofuran	Methomyl	

## Organophosphorus Pesticides (OPP) in Soil

CRM	PT 	QR
Cat. #925	Cat. #878	Cat. #925QR

Two flame-sealed ampules, each containing 30 g of soil are ready to analyze. Use with EPA method 8141, or other applicable methods. Each standard contains a subset of the analytes listed below at 100-1,000 µg/kg.

Azinphos-methyl (Guthion)	Disulfoton	Phorate
Chlorpyrifos	Ethyl parathion (Parathion)	Ronnel
Demeton O & S	Malathion	Stirophos (tetrachlorovinphos)
Diazinon	Methyl parathion	Terbufos
Dichlorvos (DDVP)		



With over 200 years of collective experience, our technical experts are here to help you improve PT results and deliver more defensible data to your customers.

All ERA Soil PTs open quarterly () unless otherwise noted.



## SOIL

## PCBs in Soil

PCBs in soil standards are sold individually in screw-top bottles containing 50 g of soil. Use with EPA methods 8082, 4020, or other applicable methods. LOW LEVEL standards contain an Aroclor in the range 0.5-50 ppm. HIGH LEVEL standards contain an Aroclor in the range 51-500 ppm.

Cat. #	Concentration	Aroclor	Range
490	LOW	1242	0.5-50 ppm
491	HIGH	1242	51-500 ppm
496	LOW	1248	0.5-50 ppm
497	HIGH	1248	51-500 ppm
492	LOW	1254	0.5-50 ppm
493	HIGH	1254	51-500 ppm
494	LOW	1260	0.5-50 ppm
495	HIGH	1260	51-500 ppm

## OIL

## PCBs in Oil

PCBs in oil standards are sold individually in ready-to-use flame-sealed ampules with 5 g of oil. Use with EPA methods 8082, EPA-600/4-81-045, Sept. 1982, or other applicable methods. LOW LEVEL standards contain an Aroclor in the range 10-50 ppm. HIGH LEVEL standards contain an Aroclor in the range 51-500 ppm.

Cat. #	Concentration	Aroclor	Range
820	LOW	1242	10-50 ppm
821	HIGH	1242	51-500 ppm
826	LOW	1248	10-50 ppm
827	HIGH	1248	51-500 ppm
822	LOW	1254	10-50 ppm
823	HIGH	1254	51-500 ppm
824	LOW	1260	10-50 ppm
825	HIGH	1260	51-500 ppm

## WATER

## PCBs in Water

PCBs in water standards are sold individually in 2 mL flame-sealed ampules that yield 1 liter after dilution. Use with EPA methods 608, 8082, or other applicable methods. Each standard contains an Aroclor at 1-15 µg/L after dilution.

Cat. #	Aroclor	Range
860	1016	1-15 µg/L
861	1221	1-15 µg/L
862	1232	1-15 µg/L
863	1242	1-15 µg/L
864	1248	1-15 µg/L
865	1254	1-15 µg/L
866	1260	1-15 µg/L

The Industry Standard



## BLANK SOIL



### Metals & Cyanide Blank Sand

#### CRM

Cat. #058

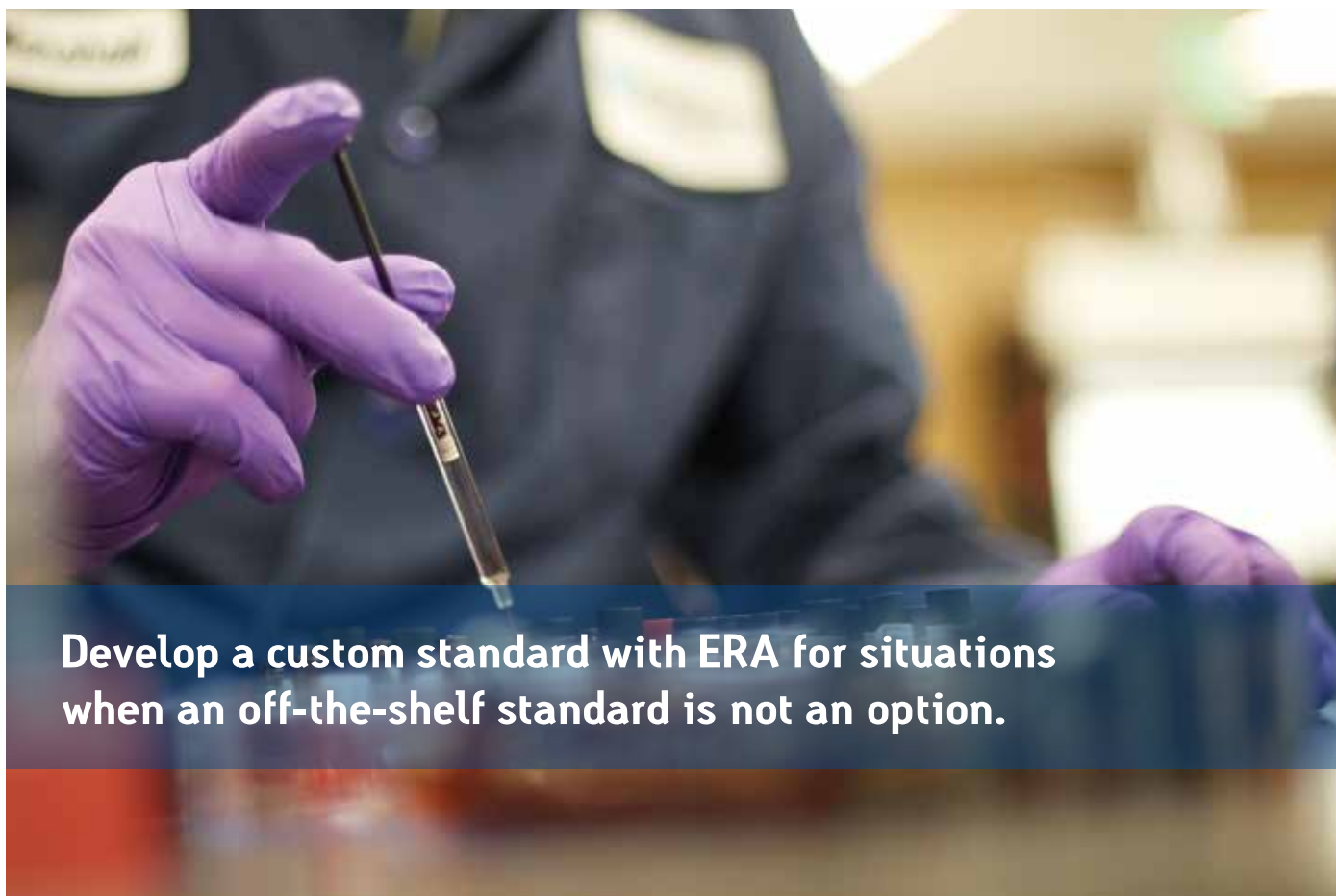
One 40 g sand sample in a screw-cap bottle. The concentrations of all EPA/NELAC including the Priority Pollutant metal and cyanide analytes are below the CLP Required Detection Limits (CRDLs) except iron, which is <250 mg/kg.

### Metals & Cyanide Blank Soil

#### CRM

Cat. #057

One 40 g soil sample in a screw-cap bottle. The concentrations of all of the following analytes are below the CLP CRDL's: antimony, arsenic, beryllium, cadmium, cobalt, mercury, nickel, selenium, silver, sodium, thallium and cyanide. The concentrations of the following analytes are below 10X the CLP CRDL's: barium, chromium, copper, lead, magnesium, potassium and vanadium. The concentrations of manganese and zinc are <750 mg/kg. The concentration range for aluminum, calcium, and iron is 3,000-25,000 mg/kg.



**Develop a custom standard with ERA for situations when an off-the-shelf standard is not an option.**