

# 2018

Environmental Proficiency  
Testing Standards

Certified Quality  
Control Standards





# Table of Contents

<b>Quality Control – PT Data Management</b>	<b>3-4</b>
<b>Proficiency Testing Programs/QC Standards</b>	<b>5-40</b>
NPW Organics Proficiency Testing & Quality Control Samples	5-10
NPW Inorganics Proficiency Testing & Quality Control Samples	11-14
NPW Microbiological Proficiency Testing & Quality Control Samples	15-16
DMRQA-38	17-19
WS Organics Proficiency Testing & Quality Control Samples	20-24
WS Inorganics Proficiency Testing & Quality Control Samples	25-27
WS Microbiological Proficiency Testing & Quality Control Samples	28-29
UST Proficiency Testing & Quality Control Samples	30-31
Soil/Hazardous Waste Proficiency Testing & Quality Control Samples	32-40
PT Express	41
<b>Custom PT/QC Materials</b>	<b>41</b>
<b>Custom Solution Request Form</b>	<b>42</b>
<b>DMRQA-38 Order Form</b>	<b>43</b>
<b>Order Form</b>	<b>44</b>
<b>How To Do Business With NSI</b>	<b>45</b>
<b>Index</b>	<b>46</b>

## Certified Accurate. Certified Homogeneous. Certified Stable. Every Analyte. Every Time.

PT samples have to be right. Your laboratory's accreditation is at stake, so anything less than 100% confidence is just not good enough.

That's why we bring over 25 years of multidisciplinary reference material manufacturing and certification experience into every step of our process. And that's why our analytical validation specifications are more stringent than the current NELAC standards.

We start by certifying the purity of analyte source materials and then correcting sample assigned values for this certified purity. This correction increases the certainty of the assigned value.

We document the accuracy of each formulation and the homogeneity of each batch by instrumental analyses of each analyte in each of the samples taken from the production run. No sample is ever released into a PT study unless the results of this analytical process meet our acceptance limits, limits more stringent by 30% than the current NELAC standards.

We close the PT study by documenting the stability of every analyte in every sample. This is your assurance that the sample was still right when your lab analyzed it. We are a TNI approved PT provider holding the following accreditations: ISO 34, ISO 17025, ISO 17043, and ISO 9001.

## Exceptional Value with Zero Defects

Sure, this QA process is intensive, but it works. In the years since PT privatization:

- We have never issued a PT report to a customer or accrediting agency containing inaccurately entered, reported, or assigned values.
- We have never released a PT sample into a study with an inaccurate assigned value.

That's our track record, and we provide this performance at an exceptional value. All NPW and WS quantitative PT samples are always supplied in duplicate for prices comparable to other industry providers' single-sample pricing.

## PT Datalink

### Much More Than On-Line Data Entry

---

- Simplified on-line data entry and modification screens.
- Drop-down screens for NELAC method and technology codes.
- Download your PT reports as .pdf files.
- Monitor, sort, and review your PT results over time by methods and analytes in each FOT.
- Electronically report results to accrediting authorities.
- Direct upload of PT results from your LIMS.
- Analyte statistical summaries for each study.

## PT Reports

### As Many As You Need! When You Need Them!

---

Have PT reports sent to as many accrediting authorities as you need without being "nickel and dimed." We do not charge for multiple reports.

Make PT planning easier by accessing preliminary results on-line within 24 hours of the study close.

Rest assured your reports will be delivered to your accrediting authority securely and on time. We use only overnight express service to provide PT results to your accrediting authority. This provides traceability and proof your reports were delivered on time!

## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

Our studies include all analytes required by the NELAC NPW fields of testing. Provided in duplicate, each ampule produces at least one liter of sample (with the exception of VOC's).

### NPW – Volatiles

A 1.5 mL concentrate in Methanol for use with Methods 601/602, 8010/8020, 624, 8240, and 8260. The sample design will satisfy PT requirements for any of the following analytes:

1,1-Dichloroethane	10-150 ug/L	Carbon tetrachloride	15-150 ug/L
1,1-Dichloroethene	10-150 ug/L	Chlorobenzene	10-120 ug/L
1,1,1-Trichloroethane	10-100 ug/L	Chloroethane	20-120 ug/L
1,1,1,2-Tetrachloroethane	15-150 ug/L	Chloroform	10-100 ug/L
1,1,2-Trichloroethane	15-150 ug/L	Chloromethane	20-120 ug/L
1,1,2,2-Tetrachloroethane	15-150 ug/L	cis-1,2-Dichloroethene	10-150 ug/L
1,2-Dibromo-3-chloropropane	15-150 ug/L	cis-1,3-Dichloropropene	10-120 ug/L
1,2-Dichlorobenzene	10-120 ug/L	Dibromochloromethane	10-100 ug/L
1,2-Dichloroethane	15-150 ug/L	Dibromomethane	10-120 ug/L
1,2-Dichloropropane	10-150 ug/L	Dichlorodifluoromethane	20-100 ug/L
1,2,3-Trichlorobenzene	15-150 ug/L	Ethylbenzene	10-120 ug/L
1,2,3-Trichloropropane	15-150 ug/L	Ethylene dibromide	10-120 ug/L
1,2,4-Trichlorobenzene	15-150 ug/L	Methyl acetate	5-500 ug/L
1,2,4-Trimethylbenzene	10-120 ug/L	Methyl cyclohexane	20-100 ug/L
1,3,5-Trimethylbenzene	10-120 ug/L	Methylene chloride	10-120 ug/L
1,3-Dichlorobenzene	10-120 ug/L	m+p-Xylene	10-150 ug/L
1,4-Dichlorobenzene	10-120 ug/L	MTBE	15-150 ug/L
1,4-Dioxane	20-500 ug/L	Naphthalene	15-150 ug/L
2-Butanone	5-500 ug/L	n-Hexane	10-150 ug/L
2-Chloroethyl vinyl ether	5-500 ug/L	o-Xylene	10-150 ug/L
2-Hexanone	20-200 ug/L	Styrene	20-120 ug/L
4-Methyl-2-pentanone	20-200 ug/L	Tetrachloroethene	10-150 ug/L
Acetone	20-200 ug/L	Toluene	10-120 ug/L
Acetonitrile	5-500 ug/L	Total Xylenes	20-300 ug/L
Acrolein	5-500 ug/L	trans-1,2-Dichloroethene	10-120 ug/L
Acrylonitrile	5-500 ug/L	trans-1,3-Dichloropropene	10-120 ug/L
Benzene	10-120 ug/L	Trichloroethene	10-100 ug/L
Bromodichloromethane	10-100 ug/L	Trichlorofluoromethane	20-120 ug/L
Bromoform	10-100 ug/L	Vinyl acetate	5-500 ug/L
Bromomethane	20-120 ug/L	Vinyl chloride	20-120 ug/L
Carbon disulfide	5-500 ug/L		

PEO-120 **\$108.00**  
 QCO-120 QC Known **\$95.00**

### NPW – PCB in Water

A 1.5 mL concentrate in Acetone for use with Methods 608/8080/8081.

Arochlor 1016	2.0-10 ug/L	Arochlor 1254	2.0-10 ug/L
Arochlor 1221	2.0-10 ug/L	Arochlor 1260	2.0-10 ug/L
Arochlor 1232	2.0-10 ug/L	Arochlor 1262	2.0-10 ug/L
Arochlor 1242	2.0-10 ug/L	Arochlor 1268	2.0-10 ug/L
Arochlor 1248	2.0-10 ug/L		

PEO-020 **\$92.00**  
 QCO-020 QC Known **\$65.00**

## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

### NPW – Base/Neutrals

A 2 x 1.5 mL concentrate set for use with Methods 625/8270. The sample design will satisfy PT requirements for any of the following analytes:

1,1-Biphenyl	30-200 ug/L	Anthracene	10-200 ug/L	Isodrin	20-200 ug/L
1,2,4,5-Tetrachlorobenzene	20-200 ug/L	Atrazine	30-200 ug/L	Isophorone	20-200 ug/L
1,2,4-Trichlorobenzene	20-200 ug/L	Benzaldehyde	30-200 ug/L	Isosafrole	20-200 ug/L
1,2-Dichlorobenzene	20-200 ug/L	Benzidine	200-1000 ug/L	Kepone	20-200 ug/L
1,2-Diphenylhydrazine	30-200 ug/L	Benzo(a)anthracene	10-200 ug/L	m-Dinitrobenzene	10-200 ug/L
1,3,5-Trinitrobenzene	20-200 ug/L	Benzo(a)pyrene	10-200 ug/L	Methapyrilene	20-200 ug/L
1,3-Dichlorobenzene	20-200 ug/L	Benzo(b)fluoranthene	20-200 ug/L	Methyl methanesulfonate	10-200 ug/L
1,3-Dinitrobenzene	20-200 ug/L	Benzo(g,h,i)perylene	10-200 ug/L	Methyl parathion	20-200 ug/L
1,4-Dichlorobenzene	20-200 ug/L	Benzo(k)fluoranthene	20-200 ug/L	n-Decane	20-200 ug/L
1,4-Dioxane	20-200 ug/L	Benzyl alcohol	30-200 ug/L	N-Nitroso-di-n-butylamine	20-200 ug/L
1,4-Naphthoquinone	20-200 ug/L	Benzyl butyl phthalate	50-200 ug/L	N-Nitroso-di-n-propylamine	30-200 ug/L
1-Chloronaphthalene	20-200 ug/L	bis(2-Chloroethoxy)methane	20-200 ug/L	N-Nitrosodiethylamine	20-200 ug/L
1-Methylnaphthalene	30-200 ug/L	bis(2-Chloroethyl)ether	20-200 ug/L	N-Nitrosodimethylamine	75-200 ug/L
1-Naphthylamine	20-200 ug/L	2,2'-Oxybis(1-Chloropropane)		N-Nitrosodiphenylamine	30-200 ug/L
2,3-Dichloroaniline	20-200 ug/L	bis(2-Ethylhexyl)phthalate	20-200 ug/L	N-Nitrosomethylethylamine	20-200 ug/L
2,4-Dinitrotoluene	20-200 ug/L	Caprolactam	30-200 ug/L	N-Nitrosomorpholine	20-200 ug/L
2,6-Dinitrotoluene	20-200 ug/L	Carbazole	20-200 ug/L	N-Nitrosopiperidine	20-200 ug/L
2-Acetylaminofluorene	20-200 ug/L	Chlorobenzilate	20-200 ug/L	N-Nitrosopyrrolidine	20-200 ug/L
2-Chloronaphthalene	20-200 ug/L	Chrysene	10-200 ug/L	n-Octadecane	20-200 ug/L
2-Methylcholanthrene	10-200 ug/L	Di-n-butyl phthalate	40-200 ug/L	Naphthalene	20-200 ug/L
2-Methylnaphthalene	20-200 ug/L	Di-n-octyl phthalate	30-200 ug/L	Nitrobenzene	20-200 ug/L
2-Naphthylamine	20-200 ug/L	Diallate	20-200 ug/L	o,o,o-Triethylphosphorothioate	20-200 ug/L
2-Nitroaniline	10-200 ug/L	Dibenz(a,h)anthracene	20-200 ug/L	o-Dinitrobenzene	10-200 ug/L
2-Picoline	20-200 ug/L	Dibenzofuran	30-200 ug/L	o-Toluidine	20-200 ug/L
3,3-Dimethylbenzidine	20-200 ug/L	Diethyl phthalate	50-200 ug/L	p-Dimethylaminoazobenzene	20-200 ug/L
3,3'-Dichlorobenzidine	50-200 ug/L	Dimethoate	20-200 ug/L	p-Dinitrobenzene	10-200 ug/L
3-Methylcholanthrene	20-200 ug/L	Dimethyl phthalate	50-200 ug/L	p-Phenylenediamine	20-200 ug/L
3-Nitroaniline	30-200 ug/L	Dinoseb	20-200 ug/L	Parathion	20-200 ug/L
4-Aminobiphenyl	20-200 ug/L	Diphenyl ether	20-200 ug/L	Pentachlorobenzene	20-200 ug/L
4-Bromophenyl phenyl ether	20-200 ug/L	Disulfoton	20-200 ug/L	Pentachlorohexane	20-200 ug/L
4-Chloroaniline	10-200 ug/L	Ethyl methanesulfonate	30-200 ug/L	Pentachloronitrobenzene	20-200 ug/L
4-Chlorophenyl phenyl ether	20-200 ug/L	Famphur	20-200 ug/L	Phenacetin	20-200 ug/L
4-Nitroaniline	10-200 ug/L	Fluoranthene	30-200 ug/L	Phenanthrene	10-200 ug/L
4-Nitroquinoline-1-oxide	20-200 ug/L	Fluorene	10-200 ug/L	Phorate	20-200 ug/L
5-Nitro-o-toluidine	20-200 ug/L	Hexachlorobenzene	20-200 ug/L	Pronamide	20-200 ug/L
7,12-Dimethylbenz(a)anthracene	20-200 ug/L	Hexachlorobutadiene	50-200 ug/L	Pyrene	10-200 ug/L
a,a-Dimethylphenylamine	20-200 ug/L	Hexachlorocyclopentadiene	50-200 ug/L	Pyridine	10-200 ug/L
Acenaphthene	10-200 ug/L	Hexachloroethane	50-200 ug/L	Safrole	20-200 ug/L
Acenaphthylene	10-200 ug/L	Hexachlorophene	20-200 ug/L	Sulfotepp	20-200 ug/L
Acetophenone	20-200 ug/L	Hexachloropropene	20-200 ug/L	Thionazin	20-200 ug/L
Aniline	30-200 ug/L	Indeno(1,2,3-c,d)pyrene	30-200 ug/L		

PEO-121

QCO-121

QC Known

\$114.00

\$105.00

NOTE: This sample is provided in a two-ampule set. The Benzidine and 3,3'-Dichlorobenzidine are segregated to assure stability throughout the PT study.

## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

### NPW – Acids

A 1.5 mL concentrate in Acetone for use with Methods 604/8040/8041 or 625/8270. The sample design will satisfy PT requirements for any of the following analytes:

2-Chlorophenol	30-200 ug/L
2-Cyclohexyl-4,6-dinitrophenol	50-200 ug/L
2-Methyl-4,6-dinitrophenol	40-200 ug/L
2-Methylphenol	40-200 ug/L
2-Nitrophenol	50-200 ug/L
2,3,4,5-Tetrachlorophenol	50-200 ug/L
2,3,4,6-Tetrachlorophenol	50-200 ug/L
2,4-Dichlorophenol	30-200 ug/L
2,4-Dimethylphenol	40-200 ug/L
2,4-Dinitrophenol	100-200 ug/L
2,4,5-Trichlorophenol	30-200 ug/L
2,4,6-Trichlorophenol	30-200 ug/L
2,6-Dichlorophenol	30-200 ug/L
4-Chloro-3-methylphenol	30-200 ug/L
4-Methylphenol	50-200 ug/L
4-Nitrophenol	100-200 ug/L
Benzoic acid	50-200 ug/L
Pentachlorophenol	40-200 ug/L
Phenol	100-200 ug/L

PEO-022		\$60.00
QCO-022	QC Known	\$50.00

### NPW – OP Pesticides

A 1.5 mL concentrate in Acetone for determination of:

Azinphos-methyl (Guthion)	3.6-13.8 ug/L
Bolstar	2.0-20 ug/L
Chlorpyrifos	2.0-20 ug/L
Demeton-o	2.0-20 ug/L
Demeton-s	2.0-20 ug/L
Diazinon	2.0-15 ug/L
Dichlofenthion	2.0-20 ug/L
Dichlorvos	2.0-20 ug/L
Disulfoton	2.0-15 ug/L
Ethion	2.0-20 ug/L
Ethoprop	2.0-20 ug/L
Malathion	2.0-20 ug/L
Parathion, ethyl	3.0-20 ug/L
Stirophos	2.0-20 ug/L
Tokuthion	2.0-20 ug/L
Trichloronate	2.0-20 ug/L

NOTE: This sample is not listed in the NELAC NPW Field of Testing.

PEO-100		\$82.00
QCO-100	QC Known	\$75.00

### NPW – Organochlorine Pesticides

A 1.5 mL concentrate in Ethyl Acetate for use with Methods 608/8080/8081. Each sample contains at least 80% of the following:

Aldrin	1.0-15 ug/L
alpha-BHC	2.0-20 ug/L
alpha-Chlordane	1.0-10 ug/L
beta-BHC	2.0-20 ug/L
gamma-BHC	2.0-20 ug/L
gamma-Chlordane	1.0-10 ug/L
delta-BHC	2.0-20 ug/L
4,4'-DDD	2.0-10 ug/L
4,4'-DDT	1.0-10 ug/L
4,4'-DDE	1.0-10 ug/L
Dieldrin	1.0-15 ug/L
Endosulfan I	4.0-20 ug/L
Endosulfan II	4.0-20 ug/L
Endosulfan sulfate	4.0-20 ug/L
Endrin	2.0-20 ug/L
Endrin ketone	4.0-20 ug/L
Endrin aldehyde	4.0-20 ug/L
Heptachlor	1.0-10 ug/L
Heptachlor epoxide (B)	1.0-10 ug/L
Isodrin	2.0-20 ug/L
Kepone	2.0-20 ug/L
Methoxychlor	2.0-20 ug/L

PEO-122		\$114.00
QCO-122	QC Known	\$95.00

### NPW – Herbicides

A 1.5 mL concentrate in MTBE for determination of Dicamba, 2,4-D, 2,4,5-T, Silvex, 2,4-DB, Dalapon, Dichloroprop, Dinoseb, MCPA, MCPP, and Pentachlorophenol. Formulated in the NELAC range of 2.00-10.0 ug/L.

PEO-094		\$57.00
QCO-094	QC Known	\$45.00

### NPW – Chlordane (Total)

A 1.5 mL concentrate in Acetone for use with Methods 608/8080/8081. Formulated in the NELAC range of 3.00-25.0 ug/L.

PEO-024-2		\$55.00
QCO-024-2	QC Known	\$42.00



## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

### NPW – Low Level PAHs

A 1.5 mL concentrate in Acetonitrile for determination of PAHs by Methods 610 or 8310. The sample will contain at least 80% of the analytes drawn from the following list:

1-Methylnaphthalene	2-20 ug/L	Benzo(a)pyrene	0.5-5 ug/L
2-Methylnaphthalene	2-20 ug/L	Chrysene	0.5-5 ug/L
Acenaphthene	2-20 ug/L	Dibenzo(a,h)anthracene	0.5-5 ug/L
Acenaphthylene	2-20 ug/L	Fluoranthene	0.5-5 ug/L
Anthracene	0.5-5 ug/L	Fluorene	2-10 ug/L
Benzo(a)anthracene	0.5-5 ug/L	Indeno(1,2,3-c,d)pyrene	0.5-5 ug/L
Benzo(b)fluoranthene	0.5-5 ug/L	Naphthalene	2-10 ug/L
Benzo(k)fluoranthene	0.5-5 ug/L	Phenanthrene	0.5-5 ug/L
Benzo(g,h,i)perylene	0.5-5 ug/L	Pyrene	0.5-5 ug/L

PEO-135		\$70.00
QCO-135	QC Known	\$65.00

### NPW – Nitroaromatics/Nitramines in Water

A 1.5 mL concentrate in Acetonitrile for determination of explosive residues in water. The sample contains at least 80% of the following analytes formulated in the range of 1.0–20.0 ug/L.

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

NOTE: This sample is not listed in the NELAC NPW Field of Testing.

PEO-136		\$107.00
QCO-136	QC Known	\$98.00

### NPW – PCBs in Oil

A 2 x 2 g set in Transformer Oil for determination of:

Arochlor 1016	17-50 mg/kg
Arochlor 1242	17-50 mg/kg
Arochlor 1254	16-50 mg/kg
Arochlor 1260	12-50 mg/kg

NOTE: This sample is not listed in the NELAC NPW Field of Testing.

PEO-072		\$85.00
QCO-072	QC Known	\$55.00

### NPW – BTEX by PID

A 1.5 mL concentrate in Methanol for determination of:

Benzene	10-120 ug/L
Ethylbenzene	10-120 ug/L
Toluene	10-120 ug/L
m+p-Xylene	10-150 ug/L
o-Xylene	10-150 ug/L
Total Xylenes	20-300 ug/L
MTBE	15-150 ug/L
Naphthalene	15-150 ug/L

PEO-150		\$92.00
QCO-150	QC Known	\$75.00

### NPW – Toxaphene

A 1.5 mL concentrate in Acetone for determination of Toxaphene. Formulated in the NELAC range of 20-100 ug/L.

PEO-093		\$55.00
QCO-093	QC Known	\$45.00

### NPW – Low Level Halocarbons

A 1.5 mL concentrate in P/T Methanol for determination of 1,2-Dibromoethane (EDB) 1,2-Dibromo-3-chloropropane (DBCP), and 1,2,3-Trichloropropane. Formulated in the NELAC range of 0.2-2.0 ug/L.

PEO-103		\$57.00
QCO-103	QC Known	\$50.00

## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

### NPW – Supplemental Volatiles

A 1.5 mL concentrate in Methanol for determination of Supplemental Volatiles. This sample will contain a subset of analytes from the following list:

1-Chlorohexane	10–200 ug/L	Diisopropyl ether	5–200 ug/L
1,1-Dichloropropene	10–200 ug/L	Ethanol	500–5000 ug/L
1,1,1,2-Tetrachloroethane	10–200 ug/L	Ethyl methacrylate	10–200 ug/L
1,1,2-Trichloro-1,2,2-trifluoroethane	10–200 ug/L	Ethyl-tert-butyl ether	5–200 ug/L
1,2-Dibromo-3-chloropropane	10–200 ug/L	Hexachlorobutadiene	10–200 ug/L
1,2-Dibromoethane	10–200 ug/L	Iodomethane	10–200 ug/L
1,2,3-Trichlorobenzene	10–200 ug/L	Isobutyl alcohol	10–1000 ug/L
1,2,3-Trichloropropane	10–200 ug/L	Isopropylbenzene	10–200 ug/L
1,2,4-Trimethylbenzene	10–200 ug/L	Methacrylonitrile	10–200 ug/L
1,3-Dichloropropane	10–200 ug/L	Methyl methacrylate	10–200 ug/L
1,3,5-Trichlorobenzene	10–200 ug/L	n-Butylbenzene	10–200 ug/L
1,3,5-Trimethylbenzene	10–200 ug/L	n-Hexane	10–200 ug/L
1,4-Dioxane	10–1000 ug/L	n-Propylbenzene	10–200 ug/L
2-Chlorotoluene	10–200 ug/L	p-Isopropyltoluene	10–200 ug/L
2,2-Dichloropropane	10–200 ug/L	Pentachloroethane	10–200 ug/L
3,3-Dimethyl-1-butanol	5–500 ug/L	Propionitrile	10–200 ug/L
4-Chlorotoluene	10–200 ug/L	sec-Butylbenzene	10–200 ug/L
Allyl chloride	10–200 ug/L	t-Amyl alcohol	5–500 ug/L
Bromobenzene	10–200 ug/L	t-Amyl methyl ether	5–500 ug/L
Bromochloromethane	10–200 ug/L	t-Butyl alcohol	5–500 ug/L
Chloroprene	10–200 ug/L	t-Butyl formate	50–500 ug/L
Cyclohexanone	10–200 ug/L	tert-Butylbenzene	10–200 ug/L
cis-1,4-Dichloro-2-butene	10–200 ug/L	Tetrahydrofuran	20–200 ug/L
Diethyl ether	5–500 ug/L	trans-1,4-Dichloro-2-butene	10–200 ug/L

NOTE: This sample is not listed in the NELAC NPW Field of Testing.

PEO-119		\$120.00
QCO-119	QC Known	\$100.00

### NPW – Diesel Range Organics (DRO)

A 1.5 mL concentrate in Methanol for determination of DRO. Formulated in the NELAC range of 800–6000 ug/L.

PEO-101		\$82.00
QCO-101	QC Known	\$75.00

### NPW – Gasoline Range Organics (GRO)

A 1.5 mL concentrate in Methanol for determination of GRO. Formulated in the NELAC range of 400–4000 ug/L.

PEO-102		\$82.00
QCO-102	QC Known	\$75.00

## NPW Organics Proficiency Testing Studies (Available: January, March, April, July, September, October)

### EPA Organics Set

NPW-Volatiles	NPW-PCB in Water
NPW-Base/Neutrals	NPW-Acids
NPW-Pesticides	NPW-Chlordane
NPW-Toxaphene	NPW-Herbicides

PEO-025K	Semi-Annually	\$490.00
	One-Time Set	\$525.00
QCO-025K	QC Known	
	Semi-Annually	\$434.00
	One-Time Set	\$460.00

### Full Organics Set

NPW-Volatiles	NPW-PCB in Water
NPW-Base/Neutrals	NPW-Acids
NPW-Pesticides	NPW-Chlordane
NPW-Nitroaromatics/Nitramines	NPW-Toxaphene
NPW-Herbicides	NPW-GRO
NPW-DRO	NPW-OP Pesticides
NPW-Low Level PAHs	

PEO-062K	Semi-Annually	\$862.00
	One-Time Set	\$916.00
QCO-062K	QC Known	
	Semi-Annually	\$744.00
	One-Time Set	\$790.00

### 2018 NPW Study Schedule

Study Number	Study Opens	Study Closes
WP-243*	Jan. 15	Feb. 28
WP-244*	March 7	April 20
WP-245*	April 10	May 24
WP-246	May 2	June 15
WP-247*	July 17	Aug. 30
WP-248	Aug. 7	Sept. 20
WP-249*	Sept. 11	Oct. 25
WP-250*	Oct. 10	Nov. 23
WP-251	Nov. 7	Dec. 21

**\*Denotes Full Organic & Inorganic PT Studies. The others are Inorganic Only PT Studies.**

*Dates are subject to change based on regulatory requirements.*

## NPW Inorganics Proficiency Testing Studies

### NPW – Demand

A 21 mL concentrate for determination of Demand. Each ampule produces 2 liters of sample.

TOC	6-100 mg/L
COD	30-250 mg/L
BOD	18-230 mg/L
CBOD	18-230 mg/L
PEI-026	\$51.00
QCI-026	QC Known \$45.00

### NPW – Minerals

A 500 mL ready-to-use sample packaged in a HDPE bottle to be analyzed for:

Potassium	4.0-40 mg/L
Sodium	10-100 mg/L
Chloride	35-275 mg/L
Sulfate	5.0-125 mg/L
Fluoride	0.4-4 mg/L
TDS at 180°C	140-800 mg/L
Conductivity	200-1200 umhos/cm
Alkalinity	25-400 mg/L
PEI-136	\$71.00
QCI-136	QC Known \$64.00

### NPW – Hardness

A 250 mL ready-to-use sample packaged in a HDPE bottle to be analyzed for:

Calcium	10-100 mg/L
Magnesium	4.0-40 mg/L
Total Hardness	40-415 mg/L
Calcium Hardness	25-250 mg/L
PEI-137	\$54.00
QCI-137	QC Known \$49.00

### NPW – Total Residual Chlorine

A 2.2 mL concentrate for determination of Total Residual Chlorine. Formulated in the NELAC range of 0.5-3.0 mg/L. Each ampule produces 2 liters of sample.

PEI-033	\$45.00
QCI-033	QC Known \$40.00

### NPW – Simple Nutrients

A 21 mL concentrate to be analyzed for Simple Nutrients. Each ampule produces 2 liters of sample.

Ammonia as N	1.0-20 mg/L
Orthophosphate as P	0.5-5.5 mg/L
Nitrate as N	2.0-25 mg/L
Nitrate/Nitrite-N	2.5-25 mg/L
PEI-138	\$45.00
QCI-138	QC Known \$40.00

### NPW – Complex Nutrients

A 21 mL concentrate to be analyzed for Complex Nutrients. Each ampule produces 2 liters of sample.

TKN	3.0-35 mg/L
Total Phosphorus	0.5-10 mg/L
PEI-139	\$43.00
QCI-139	QC Known \$40.00

### NPW – Oil and Grease

A 3.2 mL concentrate for determination of Oil and Grease. Formulated in the NELAC range of 20-200 mg/L. Each ampule produces 3 liters of sample.

PEI-029	\$45.00
QCI-029	QC Known \$40.00

### NPW – Amenable and Total Cyanide

A 21 mL concentrate for determination of Amenable Cyanide and Total Cyanide. Formulated in the NELAC range of 0.1-1 mg/L. Each ampule produces 2 liters of sample.

PEI-031	\$50.00
QCI-031	QC Known \$45.00

### NPW – Total Phenolics

A 5.0 mL concentrate for determination of Total Phenolics. Formulated in the NELAC range of 0.5-5 mg/L. Each ampule produces 5 liters of sample.

PEI-032	\$44.00
QCI-032	QC Known \$40.00

## NPW Inorganics Proficiency Testing Studies

### NPW – Trace Metals

A 2 x 21 mL amber vial set for analysis of the following elements. Each ampule produces 2 liters of sample.

Aluminum	200-4000 ug/L	Manganese	200-2000 ug/L
Antimony	90-900 ug/L	Molybdenum	60-600 ug/L
Arsenic	90-900 ug/L	Nickel	200-2000 ug/L
Barium	100-2500 ug/L	Selenium	100-1000 ug/L
Beryllium	50-500 ug/L	Silver	100-1000 ug/L
Cadmium	100-1000 ug/L	Strontium	50-500 ug/L
Chromium	100-1000 ug/L	Thallium	80-800 ug/L
Cobalt	100-1000 ug/L	Tin	200-2000 ug/L
Copper	100-1000 ug/L	Titanium	60-300 ug/L
Iron	200-4000 ug/L	Vanadium	50-2000 ug/L
Lead	100-1500 ug/L	Zinc	300-2000 ug/L

PEI-034		\$63.00
QCI-034	QC Known	\$52.00

### NPW – Mercury

A 21 mL concentrate for determination of Mercury. Formulated in the NELAC range of 3.0-30 ug/L. Each ampule produces 2 liters of sample.

PEI-087		\$43.00
QCI-087	QC Known	\$39.00

### NPW – Residue

A 500 mL ready-to-use whole volume sample to be analyzed for Total Suspended Solids in the NELAC range of 20-100 mg/L and Total Solids formulated in the NELAC range of 140-800 mg/L.

PEI-079		\$58.00
QCI-079	QC Known	\$50.00

### NPW – Turbidity

A 21 mL concentrate for determination of Turbidity in the NELAC range of 2.0-30 NTU. Formazin based. Each container produces 2 liters of sample.

PEI-092		\$50.00
QCI-092	QC Known	\$45.00

### NPW – pH

A 250 mL whole volume sample to be analyzed for pH without dilution. Formulated in the NELAC range of 5.0-10 units.

PEI-035		\$42.00
QCI-035	QC Known	\$35.00

### NPW – Hexavalent Chromium

A 10.5 mL concentrate for determination of Hexavalent Chromium. Formulated in the NELAC range of 90-900 ug/L. Each ampule produces 2 liters of sample.

PEI-095		\$51.00
QCI-095	QC Known	\$46.00

### NPW – Settleable Solids

A natural solid for quantitative transfer to a 1 liter Class A volumetric flask with dilution to 1 liter in reagent water. Formulated in the NELAC range of 5.0-50 mL/L. Each vial produces 1 liter of sample.

PEI-126		\$49.00
QCI-126	QC Known	\$45.00

### NPW – Nitrite

A 21 mL concentrate for determination of Nitrite. Formulated in the NELAC range of 0.4-4.0 mg/L. Each ampule produces 2 liters of sample.

PEI-100		\$47.00
QCI-100	QC Known	\$40.00

## NPW Inorganics Proficiency Testing Studies

### NPW – Bromide

A 21 mL concentrate for determination of Bromide. Formulated in the NELAC range of 1.0-10 mg/L. Each ampule produces 2 liters of sample.

PEI-110		\$47.00
QCI-134	QC Known	\$45.00

### NPW – Boron

A 21 mL concentrate for determination of Boron. Formulated in the NELAC range of 800-2000 ug/L. Each ampule produces 2 liters of sample.

PEI-125		\$47.00
QCI-125	QC Known	\$40.00

### NPW – Volatile Solids

A screw-cap vial containing a solid material for dilution to 1000 mL. Formulated in the NELAC range of 100-500 mg/L. Each vial produces at least 1 liter of sample.

PEI-127		\$49.00
QCI-127	QC Known	\$47.00

### NPW – Sulfide

A 10.5 mL concentrate for determination of Sulfide. Formulated in the NELAC range of 2.0-10 mg/L. Each ampule produces 2 liters of sample.

PEI-086		\$62.00
QCI-086	QC Known	\$55.00

### NPW – Silica

A 21 mL concentrate for determination of Silica. Formulated in the NELAC range of 50-250 mg/L. Each vial produces 2 liters of sample.

PEI-101		\$47.00
QCI-101	QC Known	\$40.00

### NPW – MBAs

A 10.5 mL concentrate for determination of MBAs. Formulated in the NELAC range of 0.2-1.0 mg/L. Each ampule produces 2 liters of sample.

PEI-124		\$53.00
QCI-124	QC Known	\$50.00

### NPW – Acidity

A whole volume sample for determination of Acidity. Formulated in the NELAC range of 650-1800 mg/L.

PEI-099		\$47.00
QCI-099	QC Known	\$40.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – TOX

A 5.5 mL concentrate in Methanol for determination of TOX. Formulated in the range of 300-1500 ug/L. Each ampule produces 3 liters of sample.

PEI-104		\$47.00
QCI-104	QC Known	\$38.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Color

A 100 mL whole-volume sample for determination of Color. Formulated in the NELAC range of 10-75 CU.

PEI-130		\$63.00
QCI-130	QC Known	\$50.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Ignitability

A 110 mL sample for Ignitability in the range of 100-200° F. Ground Shipping Only. Not supplied in duplicate.

PEI-191		\$113.00
QCI-191	QC Known	\$108.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Dissolved Oxygen

A 125 mL ready-to-use bottle for determination of Dissolved Oxygen in the range of 0-20 mg/L.

PEI-192		\$55.00
QCI-192	QC Known	\$50.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

## NPW Inorganics Proficiency Testing Studies

### NPW – Perchlorate

A 5.0 mL concentrate for determination of Perchlorate. Formulated in the range of 4.0-20 ug/L. Each ampule produces 2 liters of sample.

PEI-146		\$47.00
QCI-146	QC Known	\$40.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – SGT – HEM (TPH)

A single sample for dilution to 1000 mL. Can be used for IR Methods as well as Gravimetric Methods. Formulated in the NELAC range of 20-200 mg/L. Each ampule produces 1 liter of sample.

PEI-129		\$65.00
QCI-129	QC Known	\$55.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Low-Level Total Residual Chlorine

A single sample for determination of Low-Level Total Residual Chlorine in the range of 50-250 ug/L.

PEI-096		\$58.00
QCI-096	QC Known	\$48.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Trace Level Mercury

Sample contains both organic and inorganic mercury in the range of 20-100 ng/L. Provided as a concentrate for dilution to 1000 mL.

PEO-137		\$74.00
QCO-137	QC Known	\$65.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### NPW – Uranium

A 21 mL concentrate for determination of uranium. Formulated in the range of 3.0-104 ug/L. Each ampule produces 2 liters of sample.

PEI-180		\$68.00
QCI-190	QC Known	\$60.00

NOTE: Available in studies WP-243, WP-244, WP-245, WP-247, WP-249, WP-250

### Full NELAC Inorganics Set

Demand	Oil and Grease	Trace Metals
Minerals	Bromide	Volatile Solids
Residue	Total Cyanide	Mercury
Hardness	MBA's	Sulfide
Simple Nutrients	Total Phenolics	pH
Nitrite	Boron	Hexavalent Chromium
Silica	Total Residual Chlorine	Turbidity
Complex Nutrients	Settleable Solids	

PEI-035K	Semi-Annually	\$946.00
	One-Time Set	\$1,018.00
QCI-036K	QC Known	
	Semi-Annually	\$793.00
	One-Time Set	\$853.00

### EPA Inorganics NPW Set

Demand	Trace Metals	Oil and Grease
Total Phenolics	Simple Nutrients	Residue
Minerals	Mercury	Total Cyanide
Total Residual Chlorine	Complex Nutrients	Hexavalent Chromium
Hardness	pH	

PEI-037K	Semi-Annually	\$564.00
	One-Time Set	\$600.00
QCI-035K	QC Known	
	Semi-Annually	\$500.00
	One-Time Set	\$531.00

### 2018 NPW Study Schedule

Study Number	Study Opens	Study Closes
WP-243*	Jan. 15	Feb. 28
WP-244*	March 7	April 20
WP-245*	April 10	May 24
WP-246	May 2	June 15
WP-247*	July 17	Aug. 30
WP-248	Aug. 7	Sept. 20
WP-249*	Sept. 11	Oct. 25
WP-250*	Oct. 10	Nov. 23
WP-251	Nov. 7	Dec. 21

\*Denotes Full Organic & Inorganic PT Studies. The others are Inorganic Only PT Studies.

Dates are subject to change based on regulatory requirements.

# An NSI Lab Solutions Exclusive!

All Quantitative Micro PT Samples are Supplied in Duplicate.

## Microbiological PT Standards

### NPW – Coliforms/*E. coli*

Designed for use with all MPN and MF procedures. Sample supplied as a dehydrated gel sample in the NELAC range of 20-2400 CFU/MPN per 100 mL. Sterile hydration buffer included. Evaluated for Total Coliform, Fecal Coliform, and *E. coli*. Store in freezer.

MIC-003		\$111.00
MIC-QC2	QC Known	\$105.00

### NPW – Enterococcus/Fecal Strep

Designed for use with all MPN and MF procedures. Sample supplied as a dehydrated gel sample in the NELAC range of 20-1000 CFU/MPN per 100 mL. Sterile hydration buffer included. Store in freezer.

MIC-004		\$111.00
MIC-QC5	QC Known	\$105.00

### NPW – Standard Plate Count

One stabilized gel sample containing a heterotrophic bacteria in the range of 5-500 MPN per 100 mL. Sterile hydration buffer included. Store in freezer.

MIC-010		\$111.00
MIC-QC15	QC Known	\$105.00

### Quantitative Legionella PT

Designed for use with Legiolert™ or BCYE plate count methods. Sample supplied as a dehydrated gel sample in the range of 20-2400 CFU. Supplied in duplicate for convenience with sterile hydration buffer.

MIC-014		\$225.00
MIC-QC16		\$200.00

### NPW – Fecal Coliform in Sludge

A 1 gram lyophilized sludge sample containing fecal coliforms from 10E3 mpn/g to 10E6 mpn/g. Designed for use with EPA 1680/1681.

MIC-015	\$125.00
MIC-QC17	\$110.00

NOTE: Available in studies MP-166, MP-168, MP-169, MP-171

### 2018 NPW Microbiological Study Schedule

Study Number	Study Opens	Study Closes
MP-166	Jan. 2	Feb. 15
MP-167	March 6	April 19
MP-168	April 4	May 18
MP-169	July 10	Aug. 23
MP-170	Sept. 5	Oct. 19
MP-171	Oct. 3	Nov. 16

Dates are subject to change based on regulatory requirements.

### 2018 Legionella Study Schedule

Study Number	Study Opens	Study Closes
LP-005	Jan. 8	Feb. 21
LP-006	April 17	May 31
LP-007	July 2	Aug. 15
LP-008	Oct. 16	Nov. 29

Dates are subject to change based on regulatory requirements.

NOTE: Overnight shipping and HAZMAT fees apply to each order and are prepaid and added to your invoice. All microbiological samples are shipped in a cold pack to maintain integrity.



## Product Listings—Microbiological CRMs

Except where noted, standards are formulated at 1000-2000 CFU. Actual certified values are listed on an accompanying COA.

Single Organisms – High Level	5 Vials Catalog#/Price	20 Vials Catalog#/Price
<i>P. aeruginosa</i> (NCTC 12951)	10662-5X/\$80.00	10662-20X/\$180.00
<i>E. aerogenes</i> (NCTC 10006)	10006-5X/\$80.00	10006-20X/\$180.00
<i>E. coli</i> (NCTC 9001)	9001-5X/\$80.00	9001-20X/\$180.00
<i>Klebsiella</i> spp (NCTC 8167)	8167-5X/\$80.00	8167-20X/\$180.00
<i>E. faecalis</i> (NCTC 775) - High (1000-1500)	775H-5X/\$80.00	775H-20X/\$180.00
HPC Control* (5-500)	HPCQC-5X/\$80.00	HPCQC-20X/\$180.00

Except where noted, standards are formulated at < 200 CFU. Actual certified values are listed on an accompanying COA.

Single Organisms – Low Level	5 Vials Catalog#/Price	20 Vials Catalog#/Price
<i>P. aeruginosa</i> (NCTC 12951)	10662L-5X/\$80.00	10662L-20X/\$180.00
<i>E. aerogenes</i> (NCTC 10006)	10006L-5X/\$80.00	10006L-20X/\$180.00
<i>E. coli</i> (NCTC 9001)	9001L-5X/\$80.00	9001L-20X/\$180.00
<i>Klebsiella</i> spp (NCTC 8167)	8167L-5X/\$80.00	8167L-20X/\$180.00
<i>E. faecalis</i> (NCTC 775)	775L-5X/\$80.00	775L-20X/\$180.00
<i>S.bovis</i> (NCTC 8177)	8177L-5X/\$80.00	8177L-20X/\$180.00

### Drinking Water Coliform CRM – Microbe Cocktail

Certified by IDEXX Colilert®, Quanti-Tray®, Colilert-18®, SM 9222B, SM 9222D, and SM 9222I. Contains 3 different organisms for realistic assessment of your analytical system. Total Coliform < 200 CFU.

MIC-DWCOL-5	5 vials	\$85.00
MIC-DWCOL-20	20 vials	\$210.00

### Wastewater Coliform CRM – Microbe Cocktail

Certified by IDEXX Colilert®, Quanti-Tray®, Colilert-18®, SM 9222B, SM 9222D, and SM 9222I. Contains 3 different organisms for realistic assessment of your analytical system. Total Coliform < 2000 CFU.

MIC-WWCOL-5	5 vials	\$85.00
MIC-WWCOL-20	20 vials	\$210.00

### Coliform QC Check Kit

4 Each of *E. coli*, *E.aerogenes*, and *P. aeruginosa* (1000-2000 CFU of each).

COL-QCK	12 vials	\$150.00
---------	----------	----------

### Fecal Coliform in Sludge QC

A pack of 5 individual 1 gram vials of lyophilized sludge with fecal coliform set at 10E3 to 10E6 mpn/g.

MIC-SLUDGE-5		\$125.00
--------------	--	----------

*Colilert®*, *Quanti-Tray®*, *Colilert-18®*, and *SimPlate®* are registered trademarks of IDEXX Laboratories, Inc.

## DMRQA-38

### Demand

A 21 mL concentrate for determination of Demand. Each ampule produces 2 liters of sample.

TOC	6-100 mg/L
COD	30-250 mg/L
BOD	18-230 mg/L
CBOD	18-230 mg/L
PEI-026	\$51.00
QCI-026	QC Known \$45.00

### Hardness

A 250 mL ready-to-use sample packaged in a HDPE bottle to be analyzed for:

Calcium	10-100 mg/L
Magnesium	4.0-40 mg/L
Total Hardness	40-415 mg/L
Calcium Hardness	25-250 mg/L
PEI-137	\$54.00
QCI-137	QC Known \$49.00

### Complex Nutrients

A 21 mL concentrate to be analyzed for Complex Nutrients. Each ampule produces 2 liters of sample.

TKN	3.0-35 mg/L
Total Phosphorus	0.5-10 mg/L
PEI-139	\$43.00
QCI-139	QC Known \$40.00

### Amenable and Total Cyanide

A 21 mL concentrate for determination of Amenable Cyanide and Total Cyanide. Formulated in the NELAC range of 0.1-1 mg/L. Each ampule produces 2 liters of sample.

PEI-031	\$50.00
QCI-031	QC Known \$45.00

### Minerals

A 500 mL ready-to-use sample packaged in a HDPE bottle to be analyzed for:

Potassium	4.0-40 mg/L
Sodium	10-100 mg/L
Chloride	35-275 mg/L
Sulfate	5.0-125 mg/L
Fluoride	0.4-4 mg/L
TDS at 180°C	140-800 mg/L
Conductivity	200-1200 umhos/cm
Alkalinity	25-400 mg/L

PEI-136	\$71.00
QCI-136	QC Known \$64.00

### Simple Nutrients

A 21 mL concentrate to be analyzed for Simple Nutrients. Each ampule produces 2 liters of sample.

Ammonia as N	1.0-20 mg/L
Orthophosphate as P	0.5-5.5 mg/L
Nitrate as N	2.0-25 mg/L
Nitrate/Nitrite-N	2.5-25 mg/L

PEI-138	\$45.00
QCI-138	QC Known \$40.00

### Oil and Grease

A 3.2 mL concentrate for determination of Oil and Grease. Formulated in the NELAC range of 20-200 mg/L. Each ampule produces 3 liters of sample.

PEI-029	\$45.00
QCI-029	QC Known \$40.00

### Total Phenolics

A 5.0 mL concentrate for determination of Total Phenolics. Formulated in the NELAC range of 0.5-5 mg/L. Each ampule produces 3 liters of sample.

PEI-032	\$44.00
QCI-032	QC Known \$40.00

## DMRQA-38

### Coliforms/*E. coli*

Designed for use with all MPN and MF procedures. Sample supplied as a stabilized gel sample in the NELAC range of 20-2400 CFU/MPN per 100 mL. Sterile diluent included. Evaluated for Total Coliform, Fecal Coliform, and *E. coli*.

**Supplied in duplicate. Overnight shipping only.**

MIC-003		\$111.00
MIC-QC2	QC Known	\$105.00

### Total Residual Chlorine

A 2.2 mL concentrate for determination of Total Residual Chlorine. Formulated in the NELAC range of 0.5-3.0 mg/L. Each ampule produces 2 liters of sample.

PEI-033		\$45.00
QCI-033	QC Known	\$40.00

### Trace Metals

A 2 x 21 mL amber vial set for analysis of the following elements. Each ampule produces 2 liters of sample.

Aluminum	200-4000 ug/L	Copper	100-1000 ug/L	Strontium	50-500 ug/L
Antimony	90-900 ug/L	Iron	200-4000 ug/L	Thallium	80-800 ug/L
Arsenic	90-900 ug/L	Lead	100-1500 ug/L	Tin	200-2000 ug/L
Barium	100-2500 ug/L	Manganese	200-2000 ug/L	Titanium	60-300 ug/L
Beryllium	50-500 ug/L	Molybdenum	60-600 ug/L	Vanadium	50-2000 ug/L
Cadmium	100-1000 ug/L	Nickel	200-2000 ug/L	Zinc	300-2000 ug/L
Chromium	100-1000 ug/L	Selenium	100-1000 ug/L		
Cobalt	100-1000 ug/L	Silver	100-1000 ug/L		

PEI-034		\$63.00
QCI-034	QC Known	\$52.00

### Residue

A 500 mL ready-to-use whole volume sample to be analyzed for Total Suspended Solids in the NELAC range of 20-100 mg/L and Total Solids formulated in the NELAC range of 140-800 mg/L.

PEI-079		\$58.00
QCI-079	QC Known	\$50.00

### Mercury

A 21 mL concentrate for determination of Mercury. Contains both organic and inorganic Mercury. Formulated in the NELAC range of 3.0-30 ug/L. Each ampule produces 2 liters of sample.

PEI-087		\$43.00
QCI-087	QC Known	\$39.00

### pH

A 250 mL whole volume sample to be analyzed for pH without dilution. Formulated in the NELAC range of 5.0-10 units.

PEI-035		\$42.00
QCI-035	QC Known	\$35.00

### Hexavalent Chromium

A 10.5 mL concentrate for determination of Hexavalent Chromium. Formulated in the NELAC range of 90-900 ug/L. Each ampule produces 2 liters of sample.

PEI-095		\$51.00
QCI-095	QC Known	\$46.00

## DMRQA-38

### Nitrite

A 21 mL concentrate for determination of Nitrite. Formulated in the NELAC range of 0.4-4.0 mg/L. Each ampule produces 2 liters of sample.

PEI-100		\$47.00
QCI-100	QC Known	\$40.00

### Settleable Solids

A natural solid for quantitative transfer to a 1 liter Class A volumetric flask with dilution to 1 liter in reagent water. Formulated in the NELAC range of 5.0-50 mL/L. Each vial produces 1 liter of sample.

PEI-126		\$49.00
QCI-126	QC Known	\$45.00

### Turbidity

A 21 mL concentrate for determination of Turbidity in the NELAC range of 2.0-30 NTU. Formazin based. Each container produces 2 liters of sample.

PEI-092		\$50.00
QCI-092	QC Known	\$45.00

### Trace Level Mercury

Sample contains both organic and inorganic Mercury in the range of 20-100 ng/L. Provided as a concentrate for dilution to 1000 mL.

PEO-137		\$74.00
QCO-137	QC Known	\$65.00

### Low-Level Total Residual Chlorine

A single sample for determination of Low-Level Total Residual Chlorine in the range of 50-250 ug/L.

PEI-096		\$58.00
QCI-096	QC Known	\$48.00

### Full DMRQA Set

Trace Metals	Residue
Mercury	Oil and Grease
Demand	Total Cyanide
Simple Nutrients	pH
Complex Nutrients	Total Phenolics
Total Residual Chlorine	

PEI-082K		\$529.00
QCI-082K	QC Known	\$466.00

### DMRQA Set 1

Residue
pH
Total Residual Chlorine

PEI-083K		\$145.00
QCI-083K	QC Known	\$125.00

### DMRQA Set 2

Residue
pH
Demand

PEI-084K		\$151.00
QCI-084K	QC Known	\$130.00

### DMRQA Set 3

Residue	pH
Demand	Total Residual Chlorine

PEI-085K		\$196.00
QCI-085K	QC Known	\$170.00

## DMRQA-38 Study Schedule

Study Number	Study Opens	Study Closes
DMRQA-38	TBA	TBA

NOTE: DMRQA-38 study schedule will be posted on the website when announced by the US EPA.

## WS Organics Proficiency Testing Studies

Our studies include all analytes required by the NELAC WS fields of testing. Provided in duplicate, each ampule produces at least 2 liters of sample.

### WS – Carbamate Pesticides

A 1.5 mL concentrate in Methanol for use with Method 531.1. The sample design will satisfy PT requirements for the following analytes:

Aldicarb	15-100 ug/L	Baygon	30-140 ug/L
Aldicarb sulfone	15-100 ug/L	Carbaryl	15-100 ug/L
Aldicarb sulfoxide	15-80 ug/L	3-Hydroxy carbofuran	15-80 ug/L
Carbofuran	15-150 ug/L	Methiocarb	30-140 ug/L
Methomyl	15-100 ug/L	Oxamyl	15-100 ug/L

PEO-001		\$68.00
QCO-001	QC Known	\$58.00

### WS – Chlordane (Total)

A 1.5 mL concentrate in Acetone for use with Methods 505/508/525. Formulated in the NELAC range of 2-20 ug/L.

PEO-005-5		\$55.00
QCO-005-5	QC Known	\$50.00

### WS – Toxaphene (Total)

A 1.5 mL concentrate in Acetone for use with Methods 505/508/525. Formulated in the NELAC range of 2-20 ug/L.

PEO-005-6		\$55.00
QCO-005-6	QC Known	\$50.00

### WS – Chlorinated Acid Herbicides

A 1.5 mL concentrate in MTBE for determination of Herbicides. The sample design will satisfy PT requirements for the following analytes:

Acifluorfen	10-100 ug/L	Dichloroprop	10-100 ug/L
Bentazon	10-140 ug/L	Dinoseb	7-70 ug/L
Chloramben	20-100 ug/L	Dicamba	20-100 ug/L
2,4-D	10-100 ug/L	3,5-Dichlorobenzoic acid	10-100 ug/L
2,4-DB	20-120 ug/L	Pentachlorophenol	1-25 ug/L
DCPA	20-100 ug/L	Picloram	10-100 ug/L
Dalapon	10-100 ug/L	2,4,5-T	10-100 ug/L
2,4,5-TP	10-100 ug/L		

PEO-123		\$70.00
QCO-123	QC Known	\$60.00

## WS Organics Proficiency Testing Studies

### WS – Organochlorine Pesticides

A 1.5 mL concentrate in Acetone set for use with Methods 505/507/508.

Aldrin	0.2-2.5 ug/L	Hexachlorocyclopentadiene	2-20 ug/L
Dieldrin	0.5-2.5 ug/L	Lindane	0.2-2.5 ug/L
Endrin	0.2-2.5 ug/L	Methoxychlor	2-20 ug/L
Heptachlor	0.2-2.5 ug/L	Propachlor	1-10 ug/L
Heptachlor epoxide (B)	0.2-2.5 ug/L	Trifluralin	1-10 ug/L
Hexachlorobenzene	0.5-5 ug/L		

PEO-005-12		\$70.00
QCO-005-12	QC Known	\$55.00

### WS – Organonitrogen Pesticides

A 1.5 mL concentrate in Acetone set for use with Methods 505/507/508.

Alachlor	2-20 ug/L
Atrazine	2-20 ug/L
Simazine	2-20 ug/L

PEO-005-3		\$53.00
QCO-005-3	QC Known	\$45.00

### WS – Trihalomethanes

A 1.5 mL concentrate in P/T Methanol for use with Methods 501/502/524. Each sample contains:

Bromodichloromethane	5-50 ug/L
Bromoform	5-50 ug/L
Chloroform	5-50 ug/L
Dibromochloromethane	5-50 ug/L
Total Trihalomethanes	20-200 ug/L

PEO-002		\$62.00
QCO-002	QC Known	\$50.00

### WS – Regulated SOCs

A 1.5 mL concentrate in Acetone for use with Methods 506/525/550. Each sample includes Benzo(a)pyrene—0.2-2.5 ug/L, bis(2-Ethylhexyl)phthalate—5-50 ug/L, bis(2-Ethylhexyl)adipate—8-50 ug/L, plus a subset of analytes drawn from the following list:

Diethyl phthalate	10-50 ug/L	Benzo(b)fluoranthene	1-10 ug/L
Butyl benzyl phthalate	10-50 ug/L	Benzo(k)fluoranthene	1-10 ug/L
Dimethyl phthalate	10-50 ug/L	Benzo(g,h,i)perylene	1-10 ug/L
Di-n-butyl phthalate	10-50 ug/L	Chrysene	1-10 ug/L
Di-n-octyl phthalate	10-50 ug/L	Dibenz(a,h)anthracene	1-10 ug/L
Acenaphthene	1-10 ug/L	Fluoranthene	1-10 ug/L
Acenaphthylene	1-10 ug/L	Fluorene	1-10 ug/L
Anthracene	1-10 ug/L	Indeno(1,2,3-c,d)pyrene	1-10 ug/L
Benzo(a)anthracene	1-10 ug/L	Naphthalene	5-50 ug/L
Phenanthrene	1-10 ug/L	Pyrene	1-10 ug/L
1-Methylnaphthalene	1-10 ug/L	2-Methylnaphthalene	1-10 ug/L

PEO-006		\$84.00
QCO-006	QC Known	\$70.00

## WS Organics Proficiency Testing Studies

### WS – Regulated VOCs

A 1.5 mL concentrate in Methanol for use with Methods 502.1/502.2/524.2. Each sample contains:

Benzene	2-20 ug/L	Styrene	2-20 ug/L
Carbon tetrachloride	2-20 ug/L	Tetrachloroethylene	2-20 ug/L
Chlorobenzene	2-20 ug/L	Toluene	2-20 ug/L
1,2-Dichlorobenzene	2-20 ug/L	1,1,1-Trichloroethane	2-20 ug/L
1,4-Dichlorobenzene	2-20 ug/L	1,1,2-Trichloroethane	2-20 ug/L
1,2-Dichloroethane	2-20 ug/L	Trichloroethylene	2-20 ug/L
1,1-Dichloroethylene	2-20 ug/L	1,2,4-Trichlorobenzene	2-20 ug/L
cis-1,2-Dichloroethylene	2-20 ug/L	Vinyl chloride	2-50 ug/L
trans-1,2-Dichloroethylene	2-20 ug/L	Total Xylenes	2-50 ug/L
Dichloromethane	2-20 ug/L	1,2-Dichloropropane	2-20 ug/L
Ethylbenzene	2-20 ug/L		

PEO-007-12		\$84.00
QCO-007-12	QC Known	\$75.00

### WS – Unregulated VOCs

A 1.5 mL concentrate in Methanol for use with Methods 502.1/502.2/524.2. Sample includes  $\geq$  60% of analytes listed.

1,1-Dichloroethane	2-20 ug/L	Dibromomethane	2-20 ug/L
1,1-Dichloropropene	2-20 ug/L	1,3-Dichloropropane	2-20 ug/L
2,2-Dichloropropane	2-20 ug/L	1,1,1,2-Tetrachloroethane	2-20 ug/L
1,2,3-Trichloropropane	2-20 ug/L	1,1,2,2-Tetrachloroethane	2-20 ug/L
1,3-Dichlorobenzene	2-20 ug/L	Bromobenzene	2-20 ug/L
Chloromethane	5-50 ug/L	Bromomethane	5-50 ug/L
Chloroethane	5-50 ug/L	2-Chlorotoluene	2-20 ug/L
4-Chlorotoluene	2-20 ug/L	1,2,4-Trimethylbenzene	2-20 ug/L
n-Propylbenzene	2-20 ug/L	1,2,3-Trichlorobenzene	5-50 ug/L
n-Butylbenzene	2-20 ug/L	Hexachlorobutadiene	5-50 ug/L
4-Isopropyltoluene	2-20 ug/L	1,3,5-Trimethylbenzene	2-20 ug/L
Isopropylbenzene	2-20 ug/L	tert-Butylbenzene	2-20 ug/L
sec-Butylbenzene	2-20 ug/L	Trichlorofluoromethane	5-50 ug/L
Bromochloromethane	2-20 ug/L	Dichlorodifluoromethane	5-50 ug/L
cis-1,3-Dichloropropylene	2-20 ug/L	MTBE	5-50 ug/L
trans-1,3-Dichloropropylene	2-20 ug/L	Naphthalene	5-50 ug/L

PEO-007-3		\$84.00
QCO-007-3	QC Known	\$70.00

## WS Organics Proficiency Testing Studies

### WS – PCBs

A 1.5 mL concentrate in Acetone for use with Methods 505/508. Report as Decachlorobiphenyl and/or the actual Arochlor. Contains one of the following Arochlors: 1016, 1221, 1232, 1242, 1248, 1254, 1260.

PEO-003		\$55.00
QCO-003	QC Known	\$50.00

### WS – EDB/DBCP/TCP

A 1.5 mL concentrate in P/T Methanol for use with Methods 504/551. Each sample contains:

1,2-Dibromo-3-chloropropane	0.100-2.00 ug/L
1,2-Dibromoethane (EDB)	0.050-2.00 ug/L
1,2,3-Trichloropropane	0.200-2.00 ug/L

PEO-007-4		\$53.00
QCO-007-4	QC Known	\$45.00

### WS – Diquat/Endothall/Glyphosate/Paraquat

A 5 mL concentrate for determination of:

Diquat	8-40.0 ug/L
Endothall	80-500 ug/L
Glyphosate	375-800 ug/L
Paraquat	8-100 ug/L

PEO-097		\$68.00
QCO-097	QC Known	\$55.00

### WS – Organic Disinfection By-Products

A 1.5 mL concentrate in MTBE for determination of:

Bromochloroacetic Acid	5-50 ug/L
Dibromoacetic Acid	5-50 ug/L
Dichloroacetic Acid	5-50 ug/L
Monobromoacetic Acid	5-50 ug/L
Monochloroacetic Acid	10-50 ug/L
Trichloroacetic Acid	5-50 ug/L

PEO-098		\$74.00
QCO-098	QC Known	\$65.00

### WS – Chloral Hydrate

A 1.5 mL concentrate in Acetonitrile for determination of Chloral Hydrate. Formulated in the range of 4.00-30.0 ug/L.

PEO-077		\$56.00
QCO-077	QC Known	\$45.00

### WS – Pesticides

A 1.5 mL concentrate in Acetone for determination of:

Bromacil	2-20 ug/L
Butachlor	2-20 ug/L
Metribuzin	2-20 ug/L
Metolachlor	2-20 ug/L
Prometon	2-60 ug/L
Cyanazine	2-60 ug/L
Molinate	5-50 ug/L

PEO-099		\$63.00
QCO-099	QC Known	\$52.00

### WS – Oxygenates

A 1.5 mL concentrate in PT Methanol for determination of ETBE, TAME, DIPE, Trichlorotrifluoroethane, 1-Phenylpropane, and tert-Butyl alcohol. Formulated in the range of 5-50 ug/L.

PEO-075		\$66.00
QCO-075	QC Known	\$58.00

### 2018 WS Study Schedule

Study Number	Study Opens	Study Closes
WS-113	Jan. 8	Feb. 21
WS-114	April 17	May 31
WS-115	July 3	Aug. 16
WS-116	Oct. 16	Nov. 29

*Dates are subject to change based on regulatory requirements.*



## WS Organics Proficiency Testing Studies

### EPA WS Organics Kit

WS-Carbamate Pesticides  
 WS-PCBs  
 WS-Organochlorine Pesticides  
 WS-Diquat/Endothall/Glyphosate/Paraquat  
 WS-Chlordane  
 WS-Regulated SOCs  
 WS-Unregulated VOCs  
 WS-Chloral Hydrate

WS-Trihalomethanes  
 WS-Herbicides  
 WS-Organonitrogen Pesticides  
 WS-Organic Disinfection By-Products  
 WS-Toxaphene  
 WS-Regulated VOCs  
 WS-EDB/DBCP/TCP

<b>PEO-010K</b>	<b>One-Time Set</b>	<b>\$850.00</b>
	<b>Semi-Annually</b>	<b>\$790.00</b>
<b>QCO-010K</b>	<b>QC Known</b>	
	<b>One-Time Set</b>	<b>\$716.00</b>
	<b>Semi-Annually</b>	<b>\$675.00</b>

### Full WS Organics Kit

WS-Carbamate Pesticides  
 WS-PCBs  
 WS-Organochlorine Pesticides  
 WS-Diquat/Endothall/Glyphosate/Paraquat  
 WS-Chlordane  
 WS-Regulated SOCs  
 WS-Unregulated VOCs  
 WS-Pesticides  
 WS-Oxygenates

WS-Trihalomethanes  
 WS-Herbicides  
 WS-Organonitrogen Pesticides  
 WS-Organic Disinfection By-Products  
 WS-Toxaphene  
 WS-Regulated VOCs  
 WS-EDB/DBCP/TCP  
 WS-Chloral Hydrate

<b>PEO-009K</b>	<b>One-Time Set</b>	<b>\$961.00</b>
	<b>Semi-Annually</b>	<b>\$893.00</b>
<b>QCO-009K</b>	<b>QC Known</b>	
	<b>One-Time Set</b>	<b>\$810.00</b>
	<b>Semi-Annually</b>	<b>\$762.00</b>

## WS Inorganics Proficiency Testing Studies

### WS – Residual Free Chlorine

A 2.2 mL concentrate for determination of Residual Free Chlorine and Total Residual Chlorine. Formulated in the NELAC range of 0.5-3.0 mg/L. Each ampule produces 2 liters of sample.

PEI-012		\$50.00
QCI-012	QC Known	\$45.00

### WS – Cyanide

A 21 mL concentrate for determination of Total Cyanide. Formulated in the NELAC range of 0.1-0.5 mg/L. Each ampule produces 2 liters of sample.

PEI-015		\$47.00
QCI-015	QC Known	\$40.00

### WS – Trace Metals

A 2 x 21 mL ampule set for determination of the following elements. Each ampule produces 2 liters of sample.

Aluminum	130-1000 ug/L
Antimony	6-50 ug/L
Arsenic	5-50 ug/L
Barium	500-3000 ug/L
Beryllium	2-20 ug/L
Boron	800-2000 ug/L
Cadmium	2-50 ug/L
Chromium	10-200 ug/L
Copper	50-2000 ug/L
Iron	100-1800 ug/L

PEI-016		\$64.00
QCI-016	QC Known	\$58.00

### WS – Inorganic Disinfection By-Products

A 2 x 5 mL concentrate set for determination of the following. Each ampule produces 2 liters of sample.

Chlorate	60-180 ug/L
Chlorite	100-1000 ug/L
Bromate	7-50 ug/L
Bromide	50-300 ug/L

PEI-017		\$58.00
QCI-017	QC Known	\$51.00

### WS – TOC/DOC

A 21 mL concentrate to be analyzed for TOC and DOC. Each ampule produces 2 liters of sample.

TOC	1.3-13 mg/L
DOC	1.3-13 mg/L

PEI-013		\$47.00
QCI-013	QC Known	\$40.00

### WS – Turbidity

A 21 mL concentrate for determination of Turbidity in the NELAC range of 0.5-8 NTU. Each container produces 2 liters of sample.

PEI-014		\$50.00
QCI-014	QC Known	\$46.00

Lead	5-100 ug/L
Manganese	40-900 ug/L
Molybdenum	15-130 ug/L
Nickel	10-500 ug/L
Selenium	10-100 ug/L
Silver	20-300 ug/L
Thallium	2-10 ug/L
Vanadium	50-1000 ug/L
Zinc	200-2000 ug/L

### WS – pH

A 250 mL whole-volume sample for determination of pH without dilution. Formulated in the NELAC range of 5.0-10 units.

PEI-083		\$42.00
QCI-083	QC Known	\$35.00

## WS Inorganics Proficiency Testing Studies

### WS – Mercury

A 21 mL concentrate for determination of Mercury. Formulated in the NELAC range of 0.5-10 ug/L. Each ampule produces 2 liters of sample.

PEI-088		\$43.00
QCI-088	QC Known	\$39.00

### WS – Nitrite

A 21 mL concentrate for determination of Nitrite. Formulated in the NELAC range of 0.4-2.0 mg/L. Each ampule produces 2 liters of sample.

PEI-140		\$45.00
QCI-140	QC Known	\$40.00

### WS – Hardness

A 250 mL whole-volume sample for determination of:

Calcium	30-90 mg/L
Magnesium	2.0-20 mg/L
Sodium	12-50 mg/L
Calcium Hardness	75-225 mg/L
Total Hardness	83-307 mg/L

PEI-145		\$61.00
QCI-145	QC Known	\$55.00

### WS – Corrosivity

A 500 mL whole-volume sample for determination of Corrosivity. Formulated in the NELAC range of -4 to +4 SI units.

PEI-142		\$95.00
QCI-142	QC Known	\$90.00

### WS – Vanadium

A 21 mL concentrate for determination of Vanadium. Formulated in the CA-ELAP range of 5-50 ug/L. Each ampule produces 2 liters of sample.

PEI-144		\$62.00
QCI-144	QC Known	\$50.00

### WS – Nitrate

A 21 mL concentrate for determination of Nitrate. Formulated in the range of 3-10 mg/L.

PEI-195		\$45.00
QCI-195	QC Known	\$40.00

### WS – MBAs

A 10.5 mL concentrate for determination of LAS as MBAs. Formulated in the NELAC range of 0.1-1.0 mg/L. Each ampule produces 2 liters of sample.

PEI-091		\$58.00
QCI-091	QC Known	\$50.00

### WS – Orthophosphate

A 21 mL concentrate for determination of Orthophosphate. Formulated in the NELAC range of 0.5-5.5 mg/L. Each ampule produces 2 liters of sample.

PEI-141		\$45.00
QCI-141	QC Known	\$40.00

### WS – Inorganics

A 500 mL whole-volume sample for determination of:

Chloride	20-160 mg/L
Conductivity	130-1300 umhos/cm
Fluoride	1-8 mg/L
Nitrate as N	3-10 mg/L
Nitrate/Nitrite-N	3-10 mg/L
Potassium	10-40 mg/L
Sulfate	25-250 mg/L
Total Dissolved Solids	100-1000 mg/L
Alkalinity	25-200 mg/L

PEI-041		\$74.00
QCI-041	QC Known	\$67.00

### WS – Uranium

A 21 mL concentrate for determination of Uranium. Formulated in the range of 3-104 ug/L.

PEI-143		\$68.00
QCI-143	QC Known	\$60.00

### WS – Fluoride

A 125 mL whole volume sample for determination of Fluoride. Formulated in the NELAC range of 1-8 mg/L.

PEI-193		\$49.00
QCI-193	QC Known	\$47.00

## WS Inorganics Proficiency Testing Studies

### WS – Silica

A 21 mL concentrate for dilution to 1 liter for determination of Silica. Formulated in the NELAC range of 5.0-75 mg/L. Each vial produces 2 liters of sample.

PEI-073		\$47.00
QCI-073	QC Known	\$40.00

### WS – UV254 Absorbance

A 21 mL concentrate for determination of UV254 absorbance. Formulated in the NELAC range of 0.05-0.7 cm<sup>-1</sup>.

PEI-085		\$53.00
QCI-085	QC Known	\$49.00

### WS – Hexavalent Chromium

A 10.5 mL concentrate to be diluted to 1 liter and analyzed for Cr(VI) at drinking water levels. Formulated in the NELAC range of 5.0-50 ug/L. Each ampule produces 2 liters of sample.

PEI-128		\$58.00
QCI-128	QC Known	\$46.00

### WS – Perchlorate – Whole Volume

A 500 mL whole volume sample for determination of Perchlorate in an aqueous mixed common anion matrix with conductivity at 500 umhos/cm. Formulated in the range of 4.0-20 ug/L.

PEI-194		\$68.00
QCI-194	QC Known	\$60.00

### 2018 WS Study Schedule

Study Number	Study Opens	Study Closes
WS-113	Jan. 8	Feb. 21
WS-114	April 17	May 31
WS-115	July 3	Aug. 16
WS-116	Oct. 16	Nov. 29

Dates are subject to change based on regulatory requirements.

### WS – Perchlorate

A 5.0 mL concentrate for determination of Perchlorate. Formulated in the NELAC range of 4.0-20 ug/L. Each ampule produces 2 liters of sample.

PEI-108		\$47.00
QCI-108	QC Known	\$40.00

### WS – Color

A 100 mL whole-volume sample for determination of Color. Formulated in the range of 1-25 CU.

PEI-131		\$63.00
QCI-131	QC Known	\$60.00

### Full NELAC WS Inorganics Kit

Inorganic Disinfection By-Products	Corrosivity
Hardness	Turbidity
Inorganics	Nitrite
TOC/DOC	Silica
pH	Hexavalent Chromium
Cyanide	MBAs
Trace Metals	UV254 Absorbance
Residual Free Chlorine	Perchlorate
Mercury	Orthophosphate

PEI-018K	One-Time Set	\$836.00
	Semi-Annually	\$787.00
QCI-019K	QC Known	
	One-Time Set	\$740.00
	Semi-Annually	\$696.00

### EPA WS Inorganics Kit

Inorganics	Trace Metals
Turbidity	Residual Free Chlorine
Hardness	Mercury
TOC/DOC	Orthophosphate
pH	Inorganic Disinfection By-Products
Cyanide	Nitrite

PEI-020K	One-Time Set	\$530.00
	Semi-Annually	\$499.00
QCI-018K	QC Known	
	One-Time Set	\$473.00
	Semi-Annually	\$445.00

# An NSI Lab Solutions Exclusive!

All Quantitative Micro PT Samples are Supplied in Duplicate.

## WS Microbiological Proficiency Testing

### WS – Microbiological PT

A ten standard set for determination of Total/Fecal Coliforms and *E. coli*. The standards are designed to be compatible with all promulgated methods including MF, MTF, IDEXX Quanti-Tray®, Colilert®, and Colisure®. With this set, you can report presence/absence and quantitative\* results. All samples are cultured in the range of 20–200 CFU. Sterile hydration buffer included.

MIC-001		\$205.00
MIC-QC4	QC Known	\$190.00

\*Please note you can only report quantitative results quarterly (MS-168, MS-171, MS-174, and MS-177).

### WS – Standard Plate Count

One stabilized gel sample containing a heterotrophic bacteria. Sterile hydration buffer included.

MIC-002		\$107.00
MIC-QC3	QC Known	\$97.00

### WS – Quantitative Coliforms

One stabilized gel sample in the range of 20–200 CFU per 100 mL designed for LT2 Enhanced Surface Water Treatment Rule. Evaluated for *E. coli*, Fecal Coliform, and Total Coliform. Applicable for all SDWA quantitative methods. Sterile hydration buffer included.

MIC-006		\$111.00
MIC-QC6	QC Known	\$105.00

### WS – Microbiological PT-Enterococci

The PT set includes 10 samples and 10 vials of sterile hydration buffer. This set will satisfy the requirements for the detection of Enterococci.

MIC-007		\$205.00
MIC-QC13	QC Known	\$190.00

**NOTE: Overnight shipping and HAZMAT fees apply to each order and are prepaid and added to your invoice. All microbiological samples are shipped in a cold pack to maintain integrity. Store in freezer.**

### WS – Quantitative Enterococcus

Designed for use with all MPN and MF procedures. Sample supplied as a dehydrated gel sample in the range of 20–1000 CFU/MPN per 100 mL. Sterile hydration buffer included. Store in freezer.

MIC-009		\$111.00
MIC-QC14	QC Known	\$105.00

### 2018 WS Microbiological Study Schedule

Study Number	Study Opens	Study Closes
MS-168	Jan. 3	Feb. 1
MS-169*	Feb. 6	March 7
MS-170*	March 7	April 5
MS-171	April 2	May 1
MS-172*	May 1	May 30
MS-173*	June 4	July 3
MS-174	July 2	July 31
MS-175*	Aug. 1	Aug. 30
MS-176*	Sept. 4	Oct. 3
MS-177	Oct. 2	Oct. 31
MS-178*	Nov. 5	Dec. 4
MS-179*	Dec. 4	Jan. 2, 2019

\*MIC-002, MIC-006 & MIC-007 are not available in these studies.

*Dates are subject to change based on regulatory requirements.*

*Quanti-Tray®, Colilert®, and Colisure® are registered trademarks of IDEXX Laboratories, Inc.*

# Certified Reference Materials for Microbiological Analysis of Water and Wastewater ISO Guide 34 Accredited

## Product Listings

Except where noted, standards are formulated at 1000-2000 CFU. Actual certified values are listed on an accompanying COA.

Single Organisms – High Level	5 Vials Catalog#/Price	20 Vials Catalog#/Price
P. aeruginosa (NCTC 12951)	10662-5X/\$80.00	10662-20X/\$180.00
E. aerogenes (NCTC 10006)	10006-5X/\$80.00	10006-20X/\$180.00
E. coli (NCTC 9001)	9001-5X/\$80.00	9001-20X/\$180.00
Klebsiella spp (NCTC 8167)	8167-5X/\$80.00	8167-20X/\$180.00
E. faecalis (NCTC 775) - High (1000-1500)	775H-5X/\$80.00	775H-20X/\$180.00
HPC Control* (5-500)	HPCQC-5X/\$80.00	HPCQC-20X/\$180.00

\*Certified for HPC by Pour Plate and SimPlate®

Except where noted, standards are formulated at < 200 CFU. Actual certified values are listed on an accompanying COA.

Single Organisms – Low Level	5 Vials Catalog#/Price	20 Vials Catalog#/Price
P. aeruginosa (NCTC 12951)	10662L-5X/\$80.00	10662L-20X/\$180.00
E. aerogenes (NCTC 10006)	10006L-5X/\$80.00	10006L-20X/\$180.00
E. coli (NCTC 9001)	9001L-5X/\$80.00	9001L-20X/\$180.00
Klebsiella spp (NCTC 8167)	8167L-5X/\$80.00	8167L-20X/\$180.00
E. faecalis (NCTC 775)	775L-5X/\$80.00	775L-20X/\$180.00
S.bovis (NCTC 8177)	8177L-5X/\$80.00	8177L-20X/\$180.00

### Drinking Water Coliform CRM – Microbe Cocktail

Certified by IDEXX Colilert®, Quanti-Tray®, Colilert-18®, SM 9222B, SM 9222D, and SM 9222I. Contains 3 different organisms for realistic assessment of your analytical system. Total Coliform < 200 CFU.

MIC-DWCOL-5	5 vials	\$85.00
MIC-DWCOL-20	20 vials	\$210.00

### Wastewater Coliform CRM – Microbe Cocktail

Certified by IDEXX Colilert®, Quanti-Tray®, Colilert-18®, SM 9222B, SM 9222D, and SM 9222I. Contains 3 different organisms for realistic assessment of your analytical system. Total Coliform < 2000 CFU.

MIC-WWCOL-5	5 vials	\$85.00
MIC-WWCOL-20	20 vials	\$210.00

### Coliform QC Check Kit

4 Each of E. coli, E.aerogenes and P. aeruginosa (1000-2000 CFU of each).

COL-QCK	12 vials	\$150.00
---------	----------	----------

### Fecal Coliform in Sludge QC

A pack of 5 individual 1 gram vials of lyophilized sludge with fecal coliform set at 10E3 to 10E6 mpn/g.

MIC-SLUDGES-5		\$125.00
---------------	--	----------

Colilert®, Quanti-Tray®, Colilert-18®, and SimPlate® are registered trademarks of IDEXX Laboratories, Inc.

## UST Proficiency Testing Program

Meet your requirements of State Accreditation for UST analysis.

### PVOC in Water

---

A single blind sample for dilution in water with analysis for Benzene, Toluene, Ethylbenzene, m+p-Xylene, o-Xylene, MTBE, Naphthalene, and Total Xylenes.

PE-113		\$85.00
QC-113	QC Known	\$75.00

### Gasoline in Water

---

A single blind sample for dilution in water with analysis for Gasoline Range Organics by Purge and Trap, Modified 8015, and NWTPH-Gx Methods in the range of 400-4000 ug/L.

PE-114		\$85.00
QC-114	QC Known	\$75.00

### Diesel in Water

---

A single blind sample for dilution in water with analysis for Diesel by Modified 8015 and NWTPH-Dx Methods in the range of 800-6000 ug/L.

PE-115		\$85.00
QC-115	QC Known	\$75.00

### TPH in Water

---

A single sample concentrate for analysis of TPH in water by IR or Gravimetric Methods.

PE-116		\$85.00
QC-116	QC Known	\$75.00

### VPH in Water

---

A single sample concentrate for analysis of various VPH ranges and selected gasoline components. Please specify the state when ordering. Designed for Washington, Massachusetts, and North Carolina specific hydrocarbon methods.

PE-117		\$85.00
QC-117	QC Known	\$65.00

### EPH in Water

---

A single sample concentrate for analysis of various EPH ranges and selected diesel components. Please specify the state when ordering. Designed for Washington, Massachusetts, and North Carolina specific hydrocarbon methods.

PE-118		\$85.00
QC-118	QC Known	\$65.00

### Texas TPH in Water

---

A two sample (high and low range) concentrate set for analysis of TPH by TNRCC 1005.

TX-1005WPT		\$175.00
TX-1005WQC	QC Known	\$150.00

## UST Proficiency Testing Program

### PVOC in Soil

Sample includes a 15 gram clean soil matrix and concentrate in Methanol containing the BTEX analytes plus MTBE and Naphthalene.

SPE-113		\$150.00
SQC-113	QC Known	\$125.00

### Gasoline in Soil

Supplied as a 15 gram blank soil and a 2 mL ampule containing GRO spike in Methanol. Applicable to Purge and Trap and Methanol Extraction Techniques in the range of 100-2000 mg/kg.

SPE-114		\$150.00
SQC-114	QC Known	\$135.00

### Diesel in Soil

Supplied as two 20 gram samples for analysis of Diesel Range Organics in the range of 300-3000 mg/kg.

SPE-115		\$150.00
SQC-115	QC Known	\$135.00

### TPH in Soil

A 50 gram fortified soil sample for determination of TPH by IR or Gravimetric Methods.

SPE-116		\$150.00
SQC-116	QC Known	\$135.00

### VPH in Soil

Supplied as 15 grams of clean blank soil and 2 mL unleaded gasoline containing VPH analytes of interest in Methanol. Designed for use with Massachusetts, North Carolina, and Washington specific hydrocarbon methods.

SPE-117		\$150.00
SQC-117	QC Known	\$145.00

### EPH in Soil

Supplied as two 20 gram samples for analysis of EPH by Massachusetts, North Carolina, and Washington specific hydrocarbon methods.

SPE-118		\$150.00
SQC-118	QC Known	\$145.00

### Texas TPH in Soil

A two sample (high and low range) set for analysis of TPH by TNRCC 1005.

TX-1005SPT		\$235.00
TX-1005SQC	QC Known	\$200.00

### 2018 UST Study Schedule

Study Number	Study Opens	Study Closes
UST-091	Feb. 7	March 23
UST-092	April 18	June 1
UST-093	Aug. 14	Sept. 27
UST-094	Oct. 23	Dec. 6

*Dates are subject to change based on regulatory requirements.*



## Soil/Hazardous Waste Proficiency Testing

### Metals in Soil

A 40 gram sample supplied ready to use. Applicable to all ICP & AA – SW-846 and CLP Methods. Contains all of the metals listed below in the NELAC required range.

Aluminum	Antimony	Arsenic	Barium
Beryllium	Boron	Cadmium	Calcium
Chromium	Cobalt	Copper	Iron
Lead	Magnesium	Manganese	Mercury
Molybdenum	Nickel	Potassium	Selenium
Silver	Sodium	Strontium	Thallium
Titanium	Tin	Vanadium	Zinc

Concentrations of each element comply with NELAC standards. Use for ICP, AA, RCRA, and CLP Methods.

SPEI-001		\$202.00
SQCI-001	QC Known	\$156.00

### Hexavalent Chromium

A 40 gram sample applicable to all Cr(VI) Methods. Contains Hexavalent Chromium within the NELAC required range.

SPEI-003		\$127.00
SQCI-003	QC Known	\$103.00

### TCLP Metals in Soil

Supplied as a 100 gram blank soil and a 21 mL spiking solution. Contains a subset of the metals listed below.

Antimony - 0.2-20 mg/L	Lead - 0.5-150 mg/L
Arsenic - 0.5-40 mg/L	Mercury - 0.05-10 mg/L
Barium - 0.5-500 mg/L	Selenium - 0.5-10 mg/L
Beryllium - 0.1-5 mg/L	Silver - 0.2-40 mg/L
Cadmium - 0.5-50 mg/L	Zinc - 0.5-30 mg/L
Chromium - 0.5-50 mg/L	

SPEI-005		\$222.00
SQCI-005	QC Known	\$181.00

### Flash Point

A 110 mL sample for Ignitability in the NELAC range of 100–200°F. Ground Shipping Only.

SPEI-014		\$108.00
SQCI-014	QC Known	\$88.00

### Anions in Soil

A 40 gram sample designed for the DI water extraction procedure followed by analyses for all anions listed below. Formulated in the NELAC required range where applicable.

Bromide	Nitrate as N
Chloride	Sulfate
Fluoride	Orthophosphate as P
Nitrite as N	Nitrate/Nitrite-N

SPEI-015		\$139.00
SQCI-015	QC Known	\$99.00

### Cyanide in Soil

Supplied as a 50 gram matrix blank and a 5 mL spiking solution for the determination of Total Cyanide.

SPEI-017		\$132.00
SQCI-017	QC Known	\$113.00

### Reactive Cyanide

Supplied as a 50 gram matrix blank and a 5 mL spiking solution for determination of Reactive Cyanide.

SPEI-013		\$127.00
SQCI-013	QC Known	\$99.00

## Soil/Hazardous Waste Proficiency Testing

### Nutrients in Soil

Supplied as a 40 gram sample for determination of Nutrients listed below in the NELAC required range.

Ammonia as N	300-3000 mg/kg
Total Kjeldahl-Nitrogen	400-4000 mg/kg
Total Organic Carbon	1000-15000 mg/kg
Total Phosphorus	300-3000 mg/kg

SPEI-019		\$171.00
SQCO-019	QC Known	\$134.00

### Chlordane in Soil

A 30 gram sample supplied ready to use. Designed for use with EPA Method 8081. Contains Technical Chlordane in the NELAC required range. Supplied in duplicate.

SPEI-009		\$152.00
SQCO-009	QC Known	\$132.00

### Corrosivity

A 40 gram soil sample for determination of Corrosivity/pH in the range of 2-12 su.

SPEI-012		\$108.00
SQCI-012	QC Known	\$88.00

### Oil and Grease in Soil

Supplied as a 50 gram sample for determination of n-Hexane extractable material at 300-3000 mg/kg.

SPEI-037		\$158.00
SQCI-037	QC Known	\$124.00

### Toxaphene in Soil

A 30 gram sample supplied ready to use. Designed for use by EPA Method 8081. Formulated in the NELAC required range. Supplied in duplicate.

SPEI-004		\$152.00
SQCO-004	QC Known	\$137.00

### PCB in Soil

A 30 gram sample supplied ready to use. Designed for use by EPA Method 8081. Contains one Arochlor per study. Formulated in the NELAC required range. Supplied in duplicate.

SPEI-005		\$152.00
SQCO-005	QC Known	\$137.00

## Soil/Hazardous Waste Proficiency Testing

### Organochlorine Pesticides

A 30 gram sample supplied ready to use. Each study contains at least 80% of the NELAC analytes in the required range. Designed for use by EPA Method 8081. Supplied in duplicate.

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

**SPEO-003** **\$198.00**  
**SQCO-003** **QC Known** **\$178.00**

### Acid Herbicides in Soil

A 30 gram sample supplied ready to use. Designed for use by EPA Method 8151. Contains all NELAC analytes plus a subset of the other analytes listed below. Supplied in duplicate.

Dicamba (NELAC)	DCPA
Picloram	2,4-D (NELAC)
Dinoseb (NELAC)	Dichloroprop
MCPA	MCPP
2,4,5-T (NELAC)	4-Nitrophenol
Acifluorfen	Dalapon
2,4,5-TP (NELAC)	Chloramben
Bentazon	2,4-DB (NELAC)
Pentachlorophenol (NELAC)	3,5-Dichlorobenzoic acid

**SPEO-006** **\$191.00**  
**SQCO-006** **QC Known** **\$156.00**



## Soil/Hazardous Waste Proficiency Testing

### VOCs in Soil – Low Level

Supplied as a 2 mL ampule concentrate and a 15 gram matrix blank. To use, spike the concentrate onto the matrix blank prior to analysis. Designed for use by EPA Methods 8021 or 8260. Each study contains at least 60% of the NELAC analytes plus a subset of the other analytes listed below.

1-Chlorohexane	Acrolein	Isopropylbenzene
1,1-Dichloroethane	Acrylonitrile	Methacrylonitrile
1,1-Dichloroethene	Allyl chloride	Methyl acetate
1,1-Dichloropropene	Benzene	Methyl cyclohexane
1,1,1-Trichloroethane	Bromobenzene	Methyl methacrylate
1,1,1,2-Tetrachloroethane	Bromochloromethane	Methylene chloride
1,1,2-Trichloro-1,2,2-trifluoroethane	Bromodichloromethane	MTBE
1,1,2-Trichloroethane	Bromoform	n-Butylbenzene
1,1,2,2-Tetrachloroethane	Bromomethane	n-Propylbenzene
1,2-Dibromo-3-chloropropane	Carbon disulfide	Naphthalene
1,2-Dibromoethane	Carbon tetrachloride	p-Isopropyltoluene
1,2-Dichlorobenzene	Chlorobenzene	Pentachloroethane
1,2-Dichloroethane	Chlorodibromomethane	Propionitrile
1,2-Dichloropropane	Chloroethane	sec-Butylbenzene
1,2,3-Trichloropropane	Chloroform	Styrene
1,2,4-Trichlorobenzene	Chloromethane	t-Amyl alcohol
1,2,4-Trimethylbenzene	Chloroprene	t-Amylmethylether (TAME)
1,3-Dichlorobenzene	Cyclohexanone	t-Butyl alcohol
1,3-Dichloropropane	cis-1,2-Dichloroethene	tert-Butylbenzene
1,3,5-Trichlorobenzene	cis-1,3-Dichloropropene	Tetrachloroethene
1,3,5-Trimethylbenzene	cis-1,4-Dichloro-2-butene	Tetrahydrofuran
1,4-Dichlorobenzene	Dibromomethane	Toluene
1,4-Dioxane	Dichlorodifluoromethane	Total Xylenes
2-Butanone	Diethyl ether	trans-1,2-Dichloroethene
2-Chloroethyl vinyl ether	Diisopropylether (DIPE)	trans-1,3-Dichloropropene
2-Chlorotoluene	Ethanol	trans-1,4-Dichloro-2-butene
2-Hexanone	Ethyl methacrylate	Trichloroethene
2,2-Dichloropropane	Ethyl-tert-butyl ether	Trichlorofluoromethane
3,3-Dimethyl-1-butanol	Ethylbenzene	Trichlorotrifluoroethane
4-Chlorotoluene	Hexachlorobutadiene	Vinyl acetate
4-Methyl-2-pentanone	Hexachloroethane	Vinyl chloride
Acetone	Iodomethane	
Acetonitrile	Isobutyl alcohol	

**SPEO-008L** **\$212.00**

**SQCO-008L** **QC Known**

**\$191.00**

## Soil/Hazardous Waste Proficiency Testing

### VOCs in Soil – Mid Level

Supplied as a 10 gram sample in 10 mL of Methanol. Ready to analyze as received. Each study contains at least 60% of the NELAC analytes in the NELAC required range plus a subset of the other analytes listed below.

1-Chlorohexane	Acrolein	Isopropylbenzene
1,1-Dichloroethane	Acrylonitrile	Methacrylonitrile
1,1-Dichloroethene	Allyl chloride	Methyl acetate
1,1-Dichloropropene	Benzene	Methyl cyclohexane
1,1,1-Trichloroethane	Bromobenzene	Methyl methacrylate
1,1,1,2-Tetrachloroethane	Bromochloromethane	Methylene chloride
1,1,2-Trichloro-1,2,2-trifluoroethane	Bromodichloromethane	MTBE
1,1,2-Trichloroethane	Bromoform	n-Butylbenzene
1,1,2,2-Tetrachloroethane	Bromomethane	n-Propylbenzene
1,2-Dibromo-3-chloropropane	Carbon disulfide	Naphthalene
1,2-Dibromoethane	Carbon tetrachloride	p-Isopropyltoluene
1,2-Dichlorobenzene	Chlorobenzene	Pentachloroethane
1,2-Dichloroethane	Chlorodibromomethane	Propionitrile
1,2-Dichloropropane	Chloroethane	sec-Butylbenzene
1,2,3-Trichloropropane	Chloroform	Styrene
1,2,4-Trichlorobenzene	Chloromethane	t-Amyl alcohol
1,2,4-Trimethylbenzene	Chloroprene	t-Amylmethylether (TAME)
1,3-Dichlorobenzene	Cyclohexanone	t-Butyl alcohol
1,3-Dichloropropane	cis-1,2-Dichloroethene	tert-Butylbenzene
1,3,5-Trichlorobenzene	cis-1,3-Dichloropropene	Tetrachloroethene
1,3,5-Trimethylbenzene	cis-1,4-Dichloro-2-butene	Tetrahydrofuran
1,4-Dichlorobenzene	Dibromomethane	Toluene
1,4-Dioxane	Dichlorodifluoromethane	Total Xylenes
2-Butanone	Diethyl ether	trans-1,2-Dichloroethene
2-Chloroethyl vinyl ether	Diisopropylether (DIPE)	trans-1,3-Dichloropropene
2-Chlorotoluene	Ethanol	trans-1,4-Dichloro-2-butene
2-Hexanone	Ethyl methacrylate	Trichloroethene
2,2-Dichloropropane	Ethyl-tert-butyl ether	Trichlorofluoromethane
3,3-Dimethyl-1-butanol	Ethylbenzene	Trichlorotrifluoroethane
4-Chlorotoluene	Hexachlorobutadiene	Vinyl acetate
4-Methyl-2-pentanone	Hexachloroethane	Vinyl chloride
Acetone	Iodomethane	
Acetonitrile	Isobutyl alcohol	

SPEO-008H

SQCO-008H

QC Known

\$217.00

\$195.00

## Soil/Hazardous Waste Proficiency Testing

### Nitroaromatics

A 10 gram sample supplied ready to use. Each study contains at least 80% of the analytes listed below in the required range. Supplied in duplicate.

Tetryl	2-Amino-4,6-dinitrotoluene (2-am-DNT)
2-Nitrotoluene	2,4-Dinitrotoluene (2,4-DNT)
2,4,6-Trinitrotoluene	4-Nitrotoluene
Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	Nitrobenzene
4-Amino-2,6-dinitrotoluene (4-am-DNT)	1,3,5-Trinitrobenzene
3-Nitrotoluene	2,6-Dinitrotoluene (2,6-DNT)
Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	Nitroglycerin
Pentaerythritol tetranitrate	1,3-Dinitrobenzene
Nitroguanidine	3,5-Dinitroaniline

<b>SPEI-011</b>		<b>\$229.00</b>
<b>SQCI-011</b>	<b>QC Known</b>	<b>\$206.00</b>

### Low Level PAHs in Soil

A 30 gram sample supplied ready to use. Each study contains all analytes listed below in the NELAC required range. Supplied in duplicate.

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

<b>SPEI-016</b>		<b>\$222.00</b>
<b>SQCI-016</b>	<b>QC Known</b>	<b>\$181.00</b>

# Soil/Hazardous Waste Proficiency Testing

## Organophosphorus Pesticides

A 30 gram sample supplied ready to use. All are formulated in the range of 100-1000 ug/kg. Supplied in duplicate.

Azinophos methyl (Guthion)	Malathion	Chlorpyrifos
Naled	Demeton-s	Parathion, ethyl
Diazinon	Parathion, methyl	Dichlorvos (DDVP)
Phorate	Disulfoton	Ronnel
EPN	Stirophos	Ethoprop
Sulfotepp	Famphur	TEPP
Fenthion	Demeton-o	Chlorfenvinphos
Trichlorfon		

SPEO-021		\$222.00
SQCO-021	QC Known	\$200.00

## TCLP Base/Neutrals

Supplied as a 100 gram blank soil and a 21 mL spiking solution. Each sample contains a subset of each analyte class at concentrations exceeding regulatory levels.

1,4-Dichlorobenzene	2-Methylphenol
Hexachlorobutadiene	4-Methylphenol
Hexachloroethane	3+4-Methylphenol
Nitrobenzene	Total Cresol
Pyridine	Pentachlorophenol
2,4-Dinitrotoluene	2,4,5-Trichlorophenol
Hexachlorobenzene	2,4,6-Trichlorophenol

SPEO-015-BN		\$145.00
SQCO-015-BN	QC Known	\$145.00

## TCLP Herbicides

Supplied as a 100 gram blank soil and a 21 mL spiking solution. Each sample contains each analyte at concentrations exceeding regulatory levels.

Silvex (2,4,5-TP)
2,4-D

SPEO-015-HERB		\$145.00
SQCO-015-HERB	QC Known	\$145.00

## TCLP Pesticides

Supplied as a 100 gram blank soil and a 21 mL spiking solution. Each sample contains a subset of each analyte class at concentrations exceeding regulatory levels.

gamma-BHC (Lindane)
Chlordane, total
Endrin
Heptachlor
Heptachlor epoxide
Methoxychlor
Toxaphene

SPEO-015-PEST		\$145.00
SQCO-015-PEST	QC Known	\$145.00



## Soil/Hazardous Waste Proficiency Testing

### TOX in Soil

A 100 gram sample supplied ready to use. Designed for use with EPA Methods 9020B, 9065, 9066, and 9067. Contains Total Phenolics and TOX in the range of 0.5-100 mg/kg.

SPEO-038		\$127.00
SQCO-038	QC Known	\$103.00

### PCBs in Transformer Oil

A 1.5 gram concentrate for determination of PCBs in Transformer Oil.

SPEO-072		\$81.00
SQCO-072	QC Known	\$70.00

### Perchlorate in Soil

Supplied as a 40 gram sample for determination of Perchlorate in the range of 200-2000 mg/kg.

SPEI-141		\$130.00
SQCI-141	QC Known	\$111.00

### Full NELAC Set

Semivolatiles	Pesticides
Chlordane	Hexavalent Chromium
Corrosivity	Cyanide
Flash Point	Acid Herbicides
PCBs	Trace Metals
Toxaphene	Low Level PAHs
Anions	Nitroaromatics
Nutrients	VOCs in Soil - Mid Level
Organophosphorus Pesticides	VOCs in Soil - Low Level

SPEO-015K		\$2,857.00
SQCO-015K	QC Known	\$2,452.00

### Sulfide in Soil

Supplied as a fortifying spike and a blank soil to be analyzed for Sulfide.

SPEI-018		\$114.00
SQCI-018	QC Known	\$113.00

### TPH in Soil

Supplied as a 50 gram sample for determination of non-polar extractable material (TPH) in the range of 300-3000 mg/kg.

SPEI-140		\$95.00
SQCI-140	QC Known	\$90.00

### 2018 Soil Study Schedule

Study Number	Study Opens	Study Closes
SM-116	Feb. 7	March 23
SM-117	April 18	June 1
SM-118	Aug. 14	Sept. 27
SM-119	Oct. 23	Dec. 6

*Dates are subject to change based on regulatory requirements.*

## PT Express

Maybe you need to demonstrate corrective action to your accrediting authority as a result of a poor result on a formal PT sample. Maybe you need to demonstrate proficiency for an initial accreditation. Perhaps you want to demonstrate the proficiency of an analyst so you can assign him or her to new, important projects.

Whatever your reasons, when you need PT results NOW, look to NSI Lab Solutions PT Express<sup>sm</sup> to meet your needs.

To participate, simply call NSI Lab Solutions at 1-800-234-7837 to place your order. We'll review our records to assure the sample you receive has

never been received by your lab or one of your network labs (a NELAC requirement). If required, we can ship your samples the same day by overnight priority service so that you'll have them the next morning. Just like our regularly scheduled PT studies, now all quantitative PT Express samples are supplied in duplicate.

Report your results back to us on the PT Express<sup>sm</sup> reporting forms that accompany your samples, or submit them online, and we'll generate your PT report within 24 hours. We will also submit your PT report to one or multiple accreditation agencies at no additional charge.

## Custom PT/QC Materials When one size doesn't fit all...

Let's face it. The NELAC analyte list and concentration ranges are pretty narrow. So, if you need something you can't find in our catalog, call us and we'll work with you to design a solution.

Custom formulation represents a significant part of our business. We do it very well, and we do it very fast. We always quote your requests within 24 hours, and depending on the complexity of the

project, turnaround times can be less than 48 hours. Using the same expert craftsmanship and attention to detail used in manufacturing our line of stock products, we will draw on our inventory of over 2000 chemicals to formulate a product just for you. To request a quote, call us at 1-800-234-7837 or fill out the form on page 42 and fax it to 919-789-3019.

# Custom Solution Request - 2018 PT

To: **Production Manager**  
NSI Lab Solutions  
7212 ACC Blvd.  
Raleigh, NC 27617

Phone: 800-234-7837

Fax: (919) 789-3019

E-Mail: nsi@nsilabsolutions.com

From: Name: \_\_\_\_\_  
Company: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Phone: \_\_\_\_\_  
Email: \_\_\_\_\_  
Fax: \_\_\_\_\_  
Page \_\_\_\_\_ of \_\_\_\_\_

## Package Options:

### Screw Cap Bottles:

Glass HPDE (Circle One)

- 10 mL     250 mL  
 25 mL     500 mL  
 100 mL     1000 mL  
 4 L

### Ampules:

- 2 mL     10 mL  
 5 mL     20 mL

No. of Analytes \_\_\_\_\_

Product Description \_\_\_\_\_

Concentration \_\_\_\_\_ Required Number of Units \_\_\_\_\_

Solvent/Matrix \_\_\_\_\_ Requested Delivery Date \_\_\_\_\_

Analyte	CAS No. (optional)	Concentration (if varied)
1. _____		
2. _____		
3. _____		
4. _____		
5. _____		
6. _____		
7. _____		
8. _____		
9. _____		
10. _____		
11. _____		
12. _____		
13. _____		
14. _____		
15. _____		

### Concentration Units:

- ng/mL     ug/kg  
 ug/mL     mg/kg  
 mg/mL  
 mg/L  
 wt. %  
 vol. %

### Validation/Documentation Required:

Gravimetric (Level 1)

Analytical (Level 2)

Other

Photocopy this form  
for future requests.

(Please, one solution per request form.  
Copy this form for multiple custom solutions.)

TEAR ALONG PERFORATION

# DMRQA-38 Order Form

To Determine Proper Shipping, Please Check One of the Following:

Is Your Company:

Contract Lab

Permittee

USEPA Labcode \_\_\_\_\_

Permittee # \_\_\_\_\_

/USEPA Labcode \_\_\_\_\_

## Fill in Shipping and Billing Information

Shipping \_\_\_\_\_

Billing \_\_\_\_\_

Co/Organization \_\_\_\_\_

Co/Organization \_\_\_\_\_

Contact Name \_\_\_\_\_

Contact Name \_\_\_\_\_

Address \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_

Fax \_\_\_\_\_

## Complete Order Section (All PT Samples Are Supplied in Duplicate)

NSI Lab Solutions Standard	DMRQA			QC Standards			Total Price
	Catalog #	Price	Qty.	Catalog #	Price	Qty.	
Trace Metals	PEI-034	\$63.00		QCI-034	\$52.00		
Nitrite as N	PEI-100	\$47.00		QCI-100	\$40.00		
Settleable Solids	PEI-126	\$49.00		QCI-126	\$45.00		
Turbidity	PEI-092	\$50.00		QCI-092	\$45.00		
Hexavalent Chromium	PEI-095	\$51.00		QCI-095	\$46.00		
Mercury	PEI-087	\$43.00		QCI-087	\$39.00		
Demand – BOD, CBOD, COD, TOC	PEI-026	\$51.00		QCI-026	\$45.00		
Simple Nutrients – NO <sub>3</sub> as N, NH <sub>3</sub> as N, Ortho-PO <sub>4</sub>	PEI-138	\$45.00		QCI-138	\$40.00		
Complex Nutrients – TKN, Total Phosphorus	PEI-139	\$43.00		QCI-139	\$40.00		
Total Cyanide	PEI-031	\$50.00		QCI-031	\$45.00		
Residue TSS and Total Solids	PEI-079	\$58.00		QCI-079	\$50.00		
Oil and Grease	PEI-029	\$45.00		QCI-029	\$40.00		
Total Residual Chlorine	PEI-033	\$45.00		QCI-033	\$40.00		
pH	PEI-035	\$42.00		QCI-035	\$35.00		
Total Phenolics	PEI-032	\$44.00		QCI-032	\$40.00		
Minerals – K, Cl, F, Na, SO <sub>4</sub> , TDS, Conductivity, Alkalinity	PEI-136	\$71.00		QCI-136	\$64.00		
Hardness – Ca, Mg, Ca Hardness, Total Hardness	PEI-137	\$54.00		QCI-137	\$49.00		
Trace Level Mercury	PEO-137	\$74.00		QCO-137	\$65.00		
Low Level Total Residual Chlorine	PEI-096	\$58.00		QCI-096	\$48.00		
DMRQA Set Not including Nitrite as N, Minerals, Hardness, Trace Level Mercury, Low Level Total Residual Chlorine, Hexavalent Chromium, Turbidity, Settleable Solids, & Total/Fecal Coliform.	PEI-082K	\$529.00		QCI-082K	\$466.00		
DMRQA Set 1 – Residue, pH, & Total Residual Chlorine	PEI-083K	\$145.00		QCI-083K	\$125.00		
DMRQA Set 2 – Residue, pH, & Demand	PEI-084K	\$151.00		QCI-084K	\$130.00		
DMRQA Set 3 – Residue, pH, Demand, & Total Residual Chlorine	PEI-085K	\$196.00		QCI-085K	\$170.00		
Coliforms / <i>E.coli</i> Supplied in Duplicate/Overnight shipping only	MIC-003	\$111.00		MIC-QC2	\$105.00		

\*Shipping charges are subject to change based location and weight.

Subtotal	
Shipping & Handling Charge	+ \$27.00*
Overnight Charge (Micro Only)	+ \$68.00*
NC Sales Tax	
<b>TOTAL</b>	

## Complete Payment Information

PO#:

Charge:  Visa  MasterCard  AmEX  Discover

Account #:

Exp. Date:

Security Code (3-Digits on Back of Card):

Name of Card Holder:

Signature:

Fax this form to NSI Lab Solutions (919) 789-3019. We will contact you to confirm receipt of your fax. Questions? Call NSI toll-free at (800) 234-7837.

# Order Form

**To:** NSI Lab Solutions  
 7212 ACC Blvd.  
 Raleigh, NC 27617  
 (800) 234-7837

**Fax:** (919) 789-3019

**From:** Acct. # \_\_\_\_\_  
**Ship to:** Company \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_  
 Email \_\_\_\_\_

**Bill to:** Company \_\_\_\_\_  
 Attn: \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_

Photocopy this form for future use.

**FedEx:** Priority Overnight  Standard Overnight  Economy  International

**UPS:** Red  Blue  Third Day  Ground  International

TEAR ALONG PERFORATION

Catalog#	Description	Unit Price	Quantity	Extended Price <small>(Price x Qty.)</small>

Freight is prepaid and added, unless otherwise indicated.

Subtotal	
NC Sales Tax	
<b>TOTAL</b>	

**Complete Payment Information**

PO#: \_\_\_\_\_  
 Charge:  Visa  MasterCard  AmEX  Discover  
 Account #: \_\_\_\_\_ Exp. Date: \_\_\_\_\_ Security Code (3-Digits on Back of Card): \_\_\_\_\_  
 Name of Card Holder: \_\_\_\_\_ Signature: \_\_\_\_\_

**Fax this form to NSI Lab Solutions (919) 789-3019. We will contact you to confirm receipt of your fax. Questions? Call NSI toll-free at (800) 234-7837.**

# How To Do Business With NSI Lab Solutions

## ORDERING INFORMATION

---

**Phone:** (800) 234-7837 Hours: 8:00 a.m. – 5:00 p.m. Eastern Time, Monday – Friday  
(919) 789-3000

---

**To Order:** Please provide Account No., Purchase Order No., Catalog No., and Item Description and Quantity.  
NSI Lab Solutions accepts MasterCard, Visa, American Express, and Discover.

---

**Fax:** (919) 789-3019 24 hours a day

---

**Mail:** NSI Lab Solutions  
7212 ACC Blvd.  
Raleigh, NC 27617

---

**E-Mail:** [nsi@nsilabsolutions.com](mailto:nsi@nsilabsolutions.com) Please include all relevant ordering information.

---

**On-line:** [www.nsilabsolutions.com](http://www.nsilabsolutions.com)

---

**Technical Service:** (919) 789-3000 or (800) 234-7837 Hours: 8:00 a.m. – 5:00 p.m. Eastern Time, Monday – Friday

---

Shipping: Orders for stock items received before 4:00 p.m. EST can be shipped for next-day delivery. Emergency requests will be accommodated if possible. Orders are shipped via UPS or FedEx. Freight charges are prepaid and added to your invoice.

---

## Unconditional Guarantee

If you are not satisfied with the performance of any NSI Lab Solutions product, we will resolve the problem within 24 hours of your call by immediately replacing in-stock products or refunding the full purchase price.

### Conditions of Sale:

Net 30 days – FOB Raleigh, NC. Any taxes, duties, fees, or other charges imposed by any governmental body are to be paid by the buyer. Prices subject to change without notice.

### Limitation of Liability:

NSI Lab Solutions makes no warranty, express or implied, with respect to products. NSI Lab Solutions' maximum liability for any reason will be replacement of the product or refund of the purchase price. NSI Lab Solutions will not be liable for any loss or damage resulting from the use of its products. Environmental Reference Materials purchased from NSI Lab Solutions are intended for laboratory use only by qualified, trained personnel.

# Index

<b>Product Category</b>	<b>Page #</b>	<b>Product Category</b>	<b>Page #</b>
Acids	7	Nitroaromatics	8, 38
Acidity	12	NPW	5-15
Alkalinity	11, 17, 26	NPDES	See DMRQA
Ammonia	11, 17, 33	Nutrients	11, 17, 33
Arochlors	5, 8, 23, 33, 40	Oil and Grease	11, 17, 33
Anions	32	Ordering Information	45
Base/Neutrals	6, 35	Orthophosphate	11, 17, 26, 32
BOD	11, 17	PAHs	8, 38
Boron	13, 25, 32	PCBs	5, 8, 23, 33, 40
Bromate	25	Perchlorate	14, 27, 40
Bromide	13, 25, 32	Pesticides	7, 20, 21, 34
BTEX	8, 30-31	Petroleum Hydrocarbons	30-31
Carbamates	20	pH	12, 18, 25, 33
CBOD	11, 17	Phenolics	11, 17, 40
Chlordane	7, 20, 33	Proficiency Testing	5-40
Chloride	11, 17, 26, 32	PT Express Services	41
Chloral Hydrate	23	Proficiency Testing–Microbiological	15-16, 28-29
Chlorate	25	Proficiency Testing – RCRA	32-40
Chlorite	25	Proficiency Testing – UST	30-31
COD	11, 17	Proficiency Testing – NPW	5-16
Color	13, 27	Proficiency Testing – WS	20-29
Coliform–Microbiological	15-16, 28-29	Semi-VOAs	6, 35
Conductivity	11, 17, 26	Residual Chlorine	11, 18, 25
Corrosivity	26, 33	Residue	12, 18
Custom Standards	41-42	Reactivity	32
Cyanide	11, 25, 32	Settleable Solids	13, 19
Demand	11, 17	Shipping Information	45
Diesel	9, 30, 31	Single Blind	See Proficiency Testing
Disinfection By-products	23, 25	Silica	13, 27
Dissolved Solids	11, 17, 26	Sulfate	26, 32
DMRQA	17-19	Sulfide	13, 40
Drinking Water	20-29	Surfactants	13, 26
DRO	9, 30, 31	Suspended Solids	12, 18
EDB/DBCP/TCP	5, 23	TDS	12, 18
Enterococcus	15-16	Technical Information	Call 1-800-234-7837
Fax Order Form	44	Terms	45
Fecal Coliform–Microbiological	15-16, 28-29	TKN	11, 17, 33
Fluoride	11, 17, 26, 32	TOC	11, 17, 25, 33
Flash Point	32	Trihalomethanes	21
Gasoline	9, 30-31	Total Petroleum Hydrocarbons	30-31
GRO	9, 30-31	Total Phosphorus	11, 17, 33
Guarantee	45	Total Residual Chlorine	11, 18
Haloacetic Acids	23	Total Solids	12, 18
Hardness	11, 17, 26	Toxaphene	8, 20, 33
Herbicides	7, 20, 34	TOX	13, 40
Hexavalent Chromium	12, 18, 27, 32	TPH	14, 30, 31, 40
LAS	13, 26	Turbidity	12, 19, 25
MBAs	13, 26	Uranium	26
Metals	12, 18, 25, 32	UV254	27
Minerals	11, 17	Volatile Solids	13
Nitrite	13, 19, 26		



7212 ACC Blvd  
Raleigh, NC 27617

800.234.7837  
[www.nsilabsolutions.com](http://www.nsilabsolutions.com)