

Water Sciences Laboratory

Analyte/Protocol Price List

2024



**Nebraska
Water Center**
Daugherty Water for Food Global Institute

Nebraska Water Center, a part of the
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Environmental :: Direct Injection

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>Municipal Wastewater/Illicit Compounds (Direct Injection) Protocol ID: 20_01_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>References: Kasprzyk-Hordern, B.; Dinsdal, R. M.; Guwy, A. J. (2007), "Multi-residue method for the determination of basic/neutral pharmaceuticals and illicit drugs in surface water by solid-phase extraction and ultra performance liquid chromatography–positive electrospray ionisation tandem mass spectrometry", <i>J. Chromatogr. A</i> 1161(1-2), 132-145.</p> <p>Berset, J.; Brenneisen, R.; Mathieu, C. (2010), "Analysis of Illicit and illicit drugs in waste, surface and lake water samples using large volume direct injection high performance liquid chromatography – electrospray tandem mass spectrometry (HPLC–MS/MS)", <i>Chemosphere</i> 81(7), 859-866.</p>	1,7-Dimethylxanthine	2 µg/L	\$115.50	\$92.40
	Acetaminophen	0.1 µg/L		
	Amphetamine	0.1 µg/L		
	Azithromycin	0.7 µg/L		
	Carbamazepine	0.05 µg/L		
	Cotinine	0.02 µg/L		
	Diphenhydramine	0.2 µg/L		
	Hydrocodone	0.2 µg/L		
	MDA	0.10 µg/L		
	MDA	0.08 µg/L		
	Metaxalone	0.1 µg/L		
	Methadone	0.06 µg/L		
	Methamphetamine	0.07 µg/L		
	Morphine	0.09 µg/L		
	Oxycodone	0.1 µg/L		
	Phenazone	0.09 µg/L		
	Phenazone	0.3 µg/L		
	Sulfadiazine	0.1 µg/L		
	Sulfadimethoxine	0.07 µg/L		
	Sulfamethazine	0.1 µg/L		
Sulfamethoxazole	0.1 µg/L			
Temazepam	0.08 µg/L			
Thiabendazole	0.09 µg/L			
Trimethoprim	0.10 µg/L			

Turnaround times are subject to existing sample queues Reporting Limits are subject to verification

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>Neonicotinoid/Strobularin Pesticides (Direct Injection) Protocol ID: 20_02_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p>	<p>6-Chloronicotinic acid 6-Chloronicotinic aldehyde 6-Chloro-N-methylnicotinamide Acetamiprid Azoxystrobin Clothianidin Dimethoate Dinotefuran Imidacloprid Imidacloprid desnitro Imidacloprid olefin Imidacloprid urea Indoxacarb Metalaxyl Picoxystrobin Pyraclostrobin Sulfoxaflor Thiacloprid Thiamethoxam Thiamethoxam urea Trifloxystrobin</p>	<p>0.5 µg/L 0.3 µg/L 0.2 µg/L 0.1 µg/L 0.2 µg/L 0.2 µg/L 0.08 µg/L 0.1 µg/L 0.3 µg/L 0.1 µg/L 0.5 µg/L 0.2 µg/L 0.3 µg/L 0.07 µg/L 0.10 µg/L 0.08 µg/L 0.2 µg/L 0.2 µg/L 0.2 µg/L 0.2 µg/L 0.1 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>
<p>Oxanilic Acids/Ethanesulfonic Acids (OAESA) (Direct Injection) Protocol ID: 20_06_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p>	<p>Hydroxychlorthalonil Acetochlor ESA Acetochlor OA Alachlor ESA Alachlor OA Metolachlor ESA Metolachlor OA Propachlor ESA</p>	<p>4 µg/L 5 µg/L 0.5 µg/L 0.4 µg/L 0.2 µg/L 0.7 µg/L 0.6 µg/L 0.08 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>
<p>Municipal Wastewater - Ethanol Sulfates/Glucuronides (Direct Injection) Protocol ID: 20_07_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL</p>	<p>Ethyl glucuronide Ethyl sulfate</p>	<p>0.9 µg/L 0.2 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>

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Preservation: Cool, < 6°C Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks				
<p>Perfluorinated Acids (PFAS) EPA 537.1 (Direct Injection) Protocol ID: 20_08_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2018), "EPA 537.1 Determination of Selected Per- and Polyfluorinated Alkyl Substances in Drinking Water by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)".</p>	11CI-PF3OUdS 9CI-PF3ONS ADONA HFPO-DA NEtFOSAA NMeFOSAA PFBS PFDA PFDoA PFHpA PFHxA PFHxS PFNA PFOA PFOS PFTA PFTrDA PFUnA	0.07 µg/L 0.02 µg/L 0.04 µg/L 0.05 µg/L 0.2 µg/L 0.03 µg/L 0.04 µg/L 0.09 µg/L 0.05 µg/L 0.03 µg/L 0.04 µg/L 0.1 µg/L 0.03 µg/L 0.06 µg/L 0.09 µg/L 0.04 µg/L 0.03 µg/L 0.09 µg/L	\$115.50	\$92.40
<p>Azole Fungicides and Abamectin (Direct Injection) Protocol ID: 20_09_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p>	Abamectin NH4 Brassinazole Cyproconazole Desthio-Prothioconazole Difenoconazole Fluconazole Iaconazole Isavuconazole Itraconazole Metconazole Posaconazole Propiconazole Prothioconazole Tebuconazole Thiabendazole	4 µg/L 0.03 µg/L 0.02 µg/L 0.02 µg/L 0.1 µg/L 0.02 µg/L 0.02 µg/L 0.06 µg/L 0.9 µg/L 0.05 µg/L 0.3 µg/L 0.04 µg/L 0.5 µg/L 0.03 µg/L 0.01 µg/L	\$115.50	\$92.40

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>EPA 1694 Group 1 (Human Usage) (Direct Injection)</p> <p>Protocol ID: 20_11_13</p> <p>Sample Container: 2 mL GC Vial</p> <p>Sample Size: 2 mL</p> <p>Preservation: Frozen</p> <p>Holding Time: 30 Days</p> <p>Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	<p>1,7-Dimethylxanthine</p> <p>Acetaminophen</p> <p>Ampicillin</p> <p>Azithromycin</p> <p>Caffeine</p> <p>Carbamazepine</p> <p>Ciprofloxacin</p> <p>Clarithromycin</p> <p>Clinafloxacin</p> <p>Codeine</p> <p>Cotinine</p> <p>Danofloxacin</p> <p>Dehydronifedipine</p> <p>Digoxigenin</p> <p>Digoxin</p> <p>Diltiazem</p> <p>Diphenhydramine</p> <p>Enrofloxacin</p> <p>Erythromycin</p> <p>Flumequine</p> <p>Fluoxetine</p> <p>Lincomycin</p> <p>Lomefloxacin</p> <p>Miconazole</p> <p>Norfloxacin</p> <p>Norgestimate</p> <p>Ofloxacin</p> <p>Ormetoprim</p> <p>Oxacillin</p> <p>Penicillin G</p> <p>Penicillin V</p> <p>Penillic Acid</p> <p>Phenazone</p> <p>Roxithromycin</p> <p>Sarafloxacin</p> <p>Sucralose</p> <p>Sulfachlorpyridazine</p> <p>Sulfadiazine</p> <p>Sulfadimethoxine</p>	<p>14 µg/L</p> <p>1 µg/L</p> <p>1 µg/L</p> <p>1 µg/L</p> <p>14 µg/L</p> <p>1 µg/L</p> <p>3 µg/L</p> <p>2 µg/L</p> <p>3 µg/L</p> <p>1 µg/L</p> <p>0.1 µg/L</p> <p>2 µg/L</p> <p>1 µg/L</p> <p>4 µg/L</p> <p>5 µg/L</p> <p>7 µg/L</p> <p>0.5 µg/L</p> <p>3 µg/L</p> <p>3 µg/L</p> <p>0.5 µg/L</p> <p>1.0 µg/L</p> <p>0.9 µg/L</p> <p>1 µg/L</p> <p>0.8 µg/L</p> <p>2 µg/L</p> <p>5 µg/L</p> <p>3 µg/L</p> <p>0.5 µg/L</p> <p>12 µg/L</p> <p>22 µg/L</p> <p>175 µg/L</p> <p>9 µg/L</p> <p>0.7 µg/L</p> <p>1 µg/L</p> <p>2 µg/L</p> <p>21 µg/L</p> <p>2 µg/L</p> <p>0.8 µg/L</p> <p>1 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>

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	Sulfamerazine Sulfamethazine Sulfamethiazole Sulfamethoxazole Sulfanilamide Sulfathiazole Thiabendazole Trimethoprim	1 µg/L 1 µg/L 3 µg/L 2 µg/L 4 µg/L 1 µg/L 0.3 µg/L 1 µg/L		
<p>EPA 1694 Group 2 (Direct Injection) Protocol ID: 20_12_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	Anhydrochlortetracycline (ACTC) Anhydrotetracycline (ATC) Chlortetracycline (CTC) Demeclocycline Doxycycline Epianhydrochlortetracycline (EACTC) Epichlortetracycline (ECTC) Epioxytetracycline (EOTC) Epitetracycline Isochlortetracycline (ICTC) Minocycline Oxytetracycline (OTC) Tetracycline (TC)	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40
<p>EPA 1694 Group 3 (Direct Injection) Protocol ID: 20_13_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	Gemfibrozil Ibuprofen Naproxen Triclocarban Triclosan Warfarin	Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40

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<p>EPA 1694 Group 4 (Direct Injection) Protocol ID: 20_14_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	<p>Albuterol Cimetidine Metformin Ranitidine</p>	<p>Pending Pending Pending Pending</p>	<p>\$115.50</p>	<p>\$92.40</p>
<p>Atrazine Metabolites and Nitrosoatrazine (Direct Injection) Protocol ID: 20_16_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p>	<p>Atrazine Atrazine Mercapturate DDA DEA DIA N-Nitrosoatrazine</p>	<p>0.04 µg/L 0.2 µg/L 0.1 µg/L 0.01 µg/L 0.03 µg/L 0.008 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>
<p>Perfluorinated Acids (PFAS) EPA 1633 (Direct Injection) Protocol ID: 20_17_13</p> <p>Sample Container: 2 mL Polypropylene GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>References: (2023), "EPA 1633 Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS".</p> <p>"Method developed internally at WSL",</p>	<p>11Cl-PF3OUdS 3:3FTCA 4:2FTS 5:3FTCA 6:2FTS 7:3FTCA 8:2FTS 9Cl-PF3ONS ADONA HFPO-DA NEtFOSA NEtFOSAA NEtFOSE NFDHA NMeFOSA NMeFOSAA NMeFOSE</p>	<p>0.04 µg/L 0.08 µg/L 0.1 µg/L 0.3 µg/L 0.09 µg/L 0.6 µg/L 0.1 µg/L 0.05 µg/L 0.05 µg/L 0.09 µg/L 0.02 µg/L 0.04 µg/L 0.09 µg/L 0.05 µg/L 0.01 µg/L 0.02 µg/L 0.1 µg/L</p>	<p>\$115.50</p>	<p>\$92.40</p>

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	PFBA PFBS PFDA PFDaA PFDoS PFDS PFEESA PFHpA PFHpS PFHxA PFHxS PFMBA PFMPA PFNA PFNS PFOA PFOS PFOSA PFPeA PFPeS PFTeDA PFTrDA PFUnA	0.03 µg/L 0.02 µg/L 0.02 µg/L 0.02 µg/L 0.03 µg/L 0.02 µg/L 0.04 µg/L 0.01 µg/L 0.03 µg/L 0.01 µg/L 0.02 µg/L 0.06 µg/L 0.03 µg/L 0.02 µg/L 0.04 µg/L 0.01 µg/L 0.03 µg/L 0.009 µg/L 0.01 µg/L 0.02 µg/L 0.02 µg/L 0.01 µg/L 0.02 µg/L		
Fenitrothion (Direct Injection) Protocol ID: 20_18_13 Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks	4-nitro-3-cresol Fenitrothion Fenitrothion-oxon	0.2 µg/L 0.4 µg/L 0.003 µg/L	\$115.50	\$92.40
EPA 1694 Group 1 (Veterinary Usage) (Direct Injection) Protocol ID: 20_21_13 Sample Container: 2 mL GC Vial Sample Size: 2 mL	Ampicillin Azithromycin Carbadox Cefotaxime Ceftiofur Ciprofloxacin	0.5 µg/L 0.4 µg/L 0.4 µg/L 7 µg/L 6 µg/L 1 µg/L	\$115.50	\$92.40

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
<p>Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	<p>Clarithromycin Danofloxacin DCCD Erythromycin Florfenicol Lincomycin Monensin Novobiocin Ormetoprim Oxacillin Oxolinic acid Penicillin G Penicillin V Penillic Acid Roxithromycin Sulfachlorpyridazine Sulfadiazine Sulfadimethoxine Sulfamerazine Sulfamethazine Sulfamethiazole Sulfamethoxazole Sulfanilamide Sulfathiazole Thiabendazole Tiamulin Trimethoprim Tylosin Virginiamycin</p>	<p>0.6 µg/L 0.7 µg/L 5 µg/L 0.2 µg/L 4 µg/L 0.3 µg/L 3 µg/L 44 µg/L 0.2 µg/L 4 µg/L 0.2 µg/L 7 µg/L 58 µg/L 3 µg/L 0.4 µg/L 0.7 µg/L 0.3 µg/L 0.5 µg/L 0.5 µg/L 0.5 µg/L 0.8 µg/L 0.5 µg/L 1 µg/L 0.5 µg/L 0.1 µg/L 0.2 µg/L 0.4 µg/L 0.5 µg/L 4 µg/L</p>		
<p>Neonicotinoid Mammalian Metabolites (Direct Injection) Protocol ID: 20_22_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p>	<p>5-hydroxy imidacloprid 6-chloronicotinic acid Acetamiprid Acetamiprid n-desmethyl Clothianidin Clothianidin n-desmethyl Clothianidin urea Dinotefuran Imidacloprid</p>	<p>Pending Pending Pending Pending Pending Pending Pending Pending Pending</p>	<p>\$115.50</p>	<p>\$92.40</p>

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
	Imidacloprid desnitro Imidacloprid olefin Imidacloprid urea Nitenpyram Thiacloprid Thiacloprid amide Thiamethoxam Thiamethoxam n-desmethyl Thiamethoxam urea	Pending Pending Pending Pending Pending Pending Pending Pending Pending		
<p>Negative Ion Agrochemicals (Direct Injection) Protocol ID: 20_23_13</p> <p>Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks</p> <p>Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".</p>	2,4-D (2,4-Dichlorophenoxyacetic acid) 6-Chloropicolinic acid Dicamba	Pending Pending Pending	\$115.50	\$92.40