Water Sciences Laboratory Analyte/Protocol Price List 2022



Previously Offered Protocols

Nebraska Water Center, a part of the

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Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Bisphenol A in water by HPLC UV/Fluorescence Protocol ID: 09_13_01 Sample Container: Pending Sample Size: Pending Preservation: Pending Holding Time: 30 Days Estimated Turnaround Time: 2-3 Weeks	ВРА	5 μg/L	\$42.00	\$33.60
Macrolides/Penicillin Pharmaceuticals in water Protocol ID: 15_05_01 Sample Container: 250 mL glass bottle Sample Size: 250 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks	Ampicillin Ceftiofur DCCD Enrofloxacin Erythromycin Erythromycin Anhydro- Florfenicol Monensin Novobiocin Penicillin G Penillic acid Tiamulin Tildipirosin Tulathromycin Tylosin Virginiamycin M1	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$231.00	\$184.80

Previously Offered Protocols are available with 6 months lead time.

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Microcystins in water Protocol ID: 15_09_01 Sample Container: 250 mL glass bottle Sample Size: 250 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks	Anatoxin A Cylindrospermopsin Microcystin LA Microcystin LF Microcystin LR Microcystin LW Microcystin RR Microcystin YR Saxitoxin	Pending Pending Pending Pending Pending Pending Pending Pending	\$231.00	\$184.80
Sulfas, TCs, macrolides in water/wastewater Protocol ID: 15_10_01 Sample Container: 250 mL glass bottle Sample Size: 250 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: Yang, S.; Cha, J.; Carlson, K. (2004), "Quantitative determination of trace concentrations of tetracycline and sulfonamide antibiotics in surface water using solid-phase extraction and liquid chromatography/ion trap tandem mass spectrometry", <i>Rapid</i> <i>Commun. Mass Sp.</i> 18, 2131-2145.	Azithromycin Chlortetracycline Erythromycin Erythromycin Anhydro- Lincomycin Monensin Oxytetracycline Ractopamine Sulfachloropyridazine Sulfachloropyridazine Sulfadimethoxine Sulfadimethoxine Sulfamethazine Sulfamethazine Sulfamethizole Sulfamethizole Sulfamethizole Sulfathiazole Tetracycline Tiamulin Tylosin Virginiamycin	Pending 0.02 µg/L 0.02 µg/L	\$200.00	\$160.00
Perfluoronated acids (PFAS) in water Protocol ID: 15_13_01 Sample Container: Pending Sample Size: Pending Preservation: Pending Holding Time: 60 Days Estimated Turnaround Time: 2-3 Weeks Reference:	6:2 FTS PFBA PFBS PFHA PFHxA PFHxS PFOA PFOS	Pending Pending Pending Pending Pending Pending Pending	\$231.00	\$184.80

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
(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)".				
EPA 1694 Group 2 in water Protocol ID: 20_12_01 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Anhydrochlortetracycline (ACTC) Anhydrotetracycline (ATC) Chlortetracycline (CTC) Demeclocycline Doxycycline Epianhydrochlortetracycline (EACTC) Epichlortetracycline (ECTC) Epichlortetracycline (EOTC) Epitetracycline Isochlortetracycline (ICTC) Minocycline Oxytetracycline (OTC) Tetracycline (TC)	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$283.50	\$226.80
EPA 1694 Group 3 in water Protocol ID: 20_13_01 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Gemfibrozil Ibuprofen Naproxen Triclocarban Triclosan Warfarin	Pending Pending Pending Pending Pending	\$283.50	\$226.80
EPA 1694 Group 4 in water Protocol ID: 20_14_01 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference:	Albuterol Cimetidine Metformin Ranitidine	Pending Pending Pending	\$283.50	\$226.80

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
(2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".				
Macrolides/Penicillin Pharmaceuticals in soil Protocol ID: 15_05_02 Sample Container: 125 mL wide mouth amber glass bottle Sample Size: 50 gm Preservation: Frozen Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks	Ampicillin Ceftiofur DCCD Enrofloxacin Erythromycin Erythromycin Anhydro- Florfenicol Monensin Novobiocin Penicillin G Penillic acid Tiamulin Tildipirosin Tulathromycin Tylosin Virginiamycin M1	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$288.80	\$231.04
Perfluoronated acids (PFAS) in solids Protocol ID: 15_13_02 Sample Container: Passive sampler (POCIS) Sample Size: Pending Preservation: Pending Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks	6:2 FTS PFBA PFBS PFHA PFHxA PFHxS PFOA PFOS	Pending Pending Pending Pending Pending Pending Pending Pending	\$288.80	\$231.04
EPA 1694 Group 2 in solids Protocol ID: 20_12_02 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products	Anhydrochlortetracycline (ACTC) Anhydrotetracycline (ATC) Chlortetracycline (CTC) Demeclocycline Doxycycline Epianhydrochlortetracycline (EACTC) Epichlortetracycline (ECTC) Epioxytetracycline (EOTC) Epitetracycline Isochlortetracycline (ICTC)	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$283.50	\$226.80

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Minocycline Oxytetracycline (OTC) Tetracycline (TC)	Pending Pending Pending		
EPA 1694 Group 3 in solids Protocol ID: 20_13_02 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Gemfibrozil Ibuprofen Naproxen Triclocarban Triclosan Warfarin	Pending Pending Pending Pending Pending	\$283.50	\$226.80
EPA 1694 Group 4 in solids Protocol ID: 20_14_02 Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Albuterol Cimetidine Metformin Ranitidine	Pending Pending Pending	\$283.50	\$226.80
Macrolides/Penicillin Pharmaceuticals in extracts Protocol ID: 15_05_05 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample If sample weights in grams are supplied, the units will become 'ng/g' Sample Container: 125 mL wide mouth amber glass bottle Sample Size: 50 gm	Ampicillin Ceftiofur DCCD Enrofloxacin Erythromycin Erythromycin Anhydro- Florfenicol Monensin Novobiocin Penicillin G Penillic acid	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks	Tiamulin Tildipirosin Tulathromycin Tylosin Virginiamycin M1	Pending Pending Pending Pending Pending		
 Veterinarian pharmaceuticals in extracts Protocol ID: 15_10_13 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample If sample weights in grams are supplied, the units will become 'ng/g' Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: Yang, S.; Cha, J.; Carlson, K. (2004), "Quantitative determination of trace concentrations of tetracycline and sulfonamide antibiotics in surface water using solid-phase extraction and liquid chromatography/ion trap tandem mass spectrometry", <i>Rapid Commun. Mass Sp.</i> 18, 2131-2145. 	Chlortetracycline Erythromycin Erythromycin Anhydro- Lincomycin Monensin Oxytetracycline Ractopamine Sulfachloropyridazine Sulfadimethoxine Sulfadimethoxine Sulfamerazine Sulfamethazine Sulfamethizole Sulfamethizole Sulfamethoxazole Sulfathiazole Tetracycline Tiamulin Tylosin Virginiamycin	0.1 ng 0.1 ng	\$115.50	\$92.40
Neonicotinoid degradation in extracts Protocol ID: 15_12_05 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample If sample weights in grams are supplied, the units will become 'ng/g' Sample Container: 2 mL GC Vial Sample Size: 2 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks	6-Chloronicotinic acid 6-Chloronicotinic aldehyde 6-Chloro-N-methylnicotinamide 6-Hydroxynicotinic acid Clothianidin Imidacloprid Imidacloprid desnitro Imidacloprid olefin Imidacloprid urea Thiamethoxam	Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
EPA 1694 Group 2 in extracts Protocol ID: 20_12_05 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample For samples on cartridges, add processing charge of \$30/sample If sample weights in grams are supplied, the units will become 'ng/g' Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Anhydrochlortetracycline (ACTC) Anhydrotetracycline (ATC) Chlortetracycline (CTC) Demeclocycline Doxycycline Epianhydrochlortetracycline (EACTC) Epichlortetracycline (ECTC) Epitetracycline (EOTC) Epitetracycline Isochlortetracycline (ICTC) Minocycline Oxytetracycline (OTC) Tetracycline (TC)	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40
EPA 1694 Group 3 in extracts Protocol ID: 20_13_05 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample For samples on cartridges, add processing charge of \$30/sample for sample weights in grams are supplied, the units will become 'ng/g' Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Gemfibrozil Ibuprofen Naproxen Triclocarban Triclosan Warfarin	Pending Pending Pending Pending Pending	\$115.50	\$92.40

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
EPA 1694 Group 4 in extracts Protocol ID: 20_14_05 For POCIS samples, add processing charge of \$60/sample For samples on cartridges, add processing charge of \$30/sample If sample weights in grams are supplied, the units will become 'ng/g' Sample Container: Pending Sample Size: Pending Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: (2007), "EPA 1694 Pharmaceuticals and Personal Care Products in Water, Soil, Sediment, and Biosolids by HPLC/MS/MS".	Albuterol Cimetidine Metformin Ranitidine	Pending Pending Pending	\$115.50	\$92.40
Sulfas, TCs, macrolides in water/wastewater Protocol ID: 15_10_06 Sample Container: 250 mL glass bottle Sample Size: 250 mL Preservation: Cool, < 6°C Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks Reference: Yang, S.; Cha, J.; Carlson, K. (2004), "Quantitative determination of trace concentrations of tetracycline and sulfonamide antibiotics in surface water using solid-phase extraction and liquid chromatography/ion trap tandem mass spectrometry", <i>Rapid</i> <i>Commun. Mass Sp.</i> 18, 2131-2145.	Azithromycin Chlortetracycline Erythromycin Erythromycin Anhydro- Lincomycin Monensin Oxytetracycline Ractopamine Sulfachloropyridazine Sulfachloropyridazine Sulfadimethoxine Sulfamerazine Sulfamethazine Sulfamethazine Sulfamethizole Sulfamethoxazole Sulfathiazole Tetracycline Tiamulin Tylosin Virginiamycin	Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$231.00	\$184.80

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Neonicotinoid degradation in extracts Protocol ID: 15_12_06 Sample Container: Pending Sample Size: 10 gm Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks	6-Chloronicotinic acid 6-Chloronicotinic aldehyde 6-Chloro-N-methylnicotinamide 6-Hydroxynicotinic acid Clothianidin Imidacloprid Imidacloprid desnitro Imidacloprid olefin Imidacloprid urea Thiamethoxam	Pending Pending Pending Pending Pending Pending Pending Pending Pending	\$288.80	\$231.04
Perfluoronated acids (PFAS) in extractsProtocol ID:15_13_13Sample Container: PendingSample Size: PendingPreservation: PendingHolding Time:60 DaysEstimated Turnaround Time:6-8 Weeks	6:2 FTS PFBA PFBS PFHA PFHxS PFOA PFOS	Pending Pending Pending Pending Pending Pending Pending	\$115.50	\$92.40

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
δ15N in NO3- by silver nitrate precipitationProtocol ID: 12_03_01_07Minimum elemental mass required for analysis	δ18O-Nitrate	N/A	\$98.20	\$78.56
Sample Container: 125 mL polyethylene bottle Sample Size: 900 mL Preservation: Frozen Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks				
Reference: Chang, C. C. Y.; Langston, J.; Riggs, M.; Campbell, D. H.; Silva, S. R.; Kendall, C. (1999), "A Method for Nitrate Collection for 15N and 18O Analysis from Waters with Low Nitrate Concentrations", <i>Can.</i> <i>J. Fish. Aquat. Sci</i> 56 , 1856-1864.				
 	δ15N TKN	N/A N/A	\$173.20	\$138.56
Minimum elemental mass required for analysis = 0.2 mg				
Sample Container: 125 mL polyethylene bottle Sample Size: 250 mL Preservation: Frozen Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks				
References: Gormly, J. R.; Spalding, R. F. (1979), "Sources and Concentrations of Nitrate-Nitrogen in Ground Water of the Central Platte Region, Nebraska", <i>Ground Water</i> 17 (3), 291-301.				
Sadayappan Mariappan , Mary E. Exner , Glen E. Martin , Roy F. Spalding (2009), "Variability of Anaerobic Animal Waste Lagoon delta15N Source Signatures", <i>Environmental Forensics</i> 10 (1), 19-26.				

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
δ15N in NO3- by precipitation of silver nitrate in soilsProtocol ID: 12_03_02_02Minimum elemental mass required for analysisSample Container: 125 mL wide mouth amber glass bottle Sample Size: Pending Preservation: FrozenHolding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks	δ18O-Nitrate	N/A	\$115.50	\$92.40
δ180 in organicsProtocol ID: 12_03_08_01Minimum elemental mass required for analysisSample Container: 125 mL wide mouth amber glass bottleSample Size: 10 gmPreservation: FrozenHolding Time: 60 DaysEstimated Turnaround Time: 6-8 WeeksReference:Wassenaar, L. I.; Koehler, G. (1999), "An On-Line Technique for the Determination of the δ180 and δ170 of Gaseous and Dissolved Oxygen", Anal. Chem. 71, 4965-4968.	Oxygen-18	N/A	\$27.80	\$22.24
δ13C, δ18O in carbonate by dual inlet Protocol ID: 12_05_02_12 Minimum elemental mass required for analysis Sample Container: 125 mL wide mouth amber glass bottle Sample Size: 10 gm Preservation: Frozen Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks Reference:	δ13C (‰) δ18O (‰)	N/A N/A	\$40.40	\$32.32

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
McCrea, J. M. (1950), "On the isotopic chemistry of carbonates and a paleotemperature scale.", <i>The Journal of Chemical Physics</i> 18 (6), 849-857.				
Statistic Statistic St	δ15N TKN	N/A N/A	\$173.20	\$138.56
<section-header><section-header><section-header><section-header><text><text></text></text></section-header></section-header></section-header></section-header>	CO CO2 H N2O	N/A N/A N/A	\$28.90	\$23.12

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
Deuterium in biological tissue Protocol ID: 12_03_08_02	δD-H2O	N/A	\$17.30	\$13.84
Minimum elemental mass required for analysis				
Minimum elemental mass required for analysis Sample Container: Paper bag for plants or 125 mL glass amber bottle for other types Sample Size: 50 gm Preservation: Frozen Holding Time: 60 Days Estimated Turnaround Time: 6-8 Weeks				

Protocol	Analyte	Reporting Limit	Protocol Cost	NU Cost (20% discount)
UV - HOP STORAGE INDEX (6 and 12) Protocol ID: 04_02_01	Alpha Acids Beta Acids HSI	Pending Pending Pending	\$34.60	\$27.68
Sample Container: 125 mL wide mouth amber glass bottle Sample Size: 5 gm Preservation: Frozen Holding Time: 30 Days Estimated Turnaround Time: 6-8 Weeks		U		
References: (2008), " α - AND β -ACIDS IN HOPS AND HOP PELLETS BY SPECTROPHOTOMETRY AND BY CONDUCTOMETRIC TITRATION",				
(2008), "HOP STORAGE INDEX (HIS)",				