June 28, 2016

Alicia Wilson
Water Quality Assessment Program
Florida Department of Environmental Protection
2600 Blair Stone Rd. MS 3525
Tallahassee, FL 32399

Subject: AXYS Pricing for Sole Source FLDEP Emerging Contaminants Project

Dear Ms. Wilson:

Per your request, AXYS Analytical Services Ltd. (AXYS) is pleased to provide pricing for our existing sole source contract for analytical services in support of Florida DEP's Emerging Substances of Concern (ESOC) study. Pricing is provided for analyses of compounds listed in Exhibits B, C, D, E, F and G in the SOW-ESOC Chem Analysis from FLDEP.

Please note that the analytes listed in the exhibits above represent a minimum list of analytes to be reported. In cases where the AXYS default analyte lists contain more than the compounds listed in the Exhibits from the SOW, FLDEP will receive data for the full compound list. Full compound lists, with associated detection limits are included as Appendix 1 of this document. The exhibits listed in the FLDEP SOW-ESOC Chem Analysis are:

Exhibit B - Pharmaceutical and Personal Care Products (PPCPs), AXYS lists 1,3,4,5 and 6
Exhibit C – Perfluorinated Compounds (PFCs)
Exhibit D – Hormones and Sterols
Exhibit E – Alkylphenols
Exhibit F – Polybrominated Diphenyl Ether (PBDE) Flame Retardants
Exhibit G – Multiresidue Pesticides plus Organonitrogen (ON) Pesticides

Pricing will be supplied for the following matrices as requested:

- Environmental samples that are aqueous whole water/effluents, soil, sediment, tissue and biosolids as determined by the analytical method
- Extracts and dialysis, respectively, from the integrative devices, polar organic compound integrative sampler (POCIS) and semipermeable membrane device (SPMD).

Please note the pricing supplied is a guideline and should be used as such. Please contact me for a detailed price quotation for each new scope of work as they are issued over the life of the contract.

Pricing is presented in separate tables (by matrix) for all analyses needed to analyze for all compounds listed in Exhibits B-G above. Pricing Tables are listed beginning on the following page. Each table shows a sub-total assuming that all analyses are performed on a given sample; however, if FL DEP wants only a subset of the analyses listed for a given sample, the individual unit prices will still apply for each method. Additionally, some of the methods are normally subject to minimum batch size requirements of 8 samples per batch; however, these requirements change over time and thus will be addressed on a scope-specific basis.

Water Analyses:

Whole Water Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols[1]	MLA-068 / EPA 1698	GC/HRMS	925
PPCPs (Lists 1, 3, 4, 5, 6)	MLA-075 / EPA 1694	LC/HRMS	1,500
MRES 1699 with ONs	MLA-035 / EPA 1699	GC/HRMS	1,200
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	385
Alkylphenols	MLA-004 / In-house	GC/MS	500
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	650

Whole Water Sub-Total unit Cost: $5,160

Effluent Water Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols[1]	MLA-068 / EPA 1698	GC/HRMS	925
PPCPs (Lists 1, 3, 4, 5, 6)	MLA-075 / EPA 1694	LC/HRMS	1,500
MRES 1699 with ONs	MLA-035 / EPA 1699	GC/HRMS	1,200
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	360
Alkylphenols	MLA-004 / In-house	GC/MS	500
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	650

Effluent Water Sub-Total unit Cost: $5,135

Influent Water Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols[1]	MLA-068 / EPA 1698	GC/HRMS	1,075
PPCPs (Lists 1, 3, 4, 5, 6)	MLA-075 / EPA 1694	LC/HRMS	1,600
MRES 1699 with ONs	MLA-035 / EPA 1699	GC/HRMS	1,300
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	360
Alkylphenols	MLA-004 / In-house	GC/MS	575
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	750

Influent Water Sub-Total unit Cost: $5,660

Soil/Sediment Analyses:

Soil/Sediment Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols[1]	MLA-068 / EPA 1698	GC/HRMS	975
PPCPs (Lists 1, 3, 4, 5, 6)	MLA-075 / EPA 1694	LC/HRMS	1,600
MRES 1699 with ONs	MLA-035 / EPA 1699	GC/HRMS	1,225
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	375
Alkylphenols	MLA-004 / In-house	GC/MS	550
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	675

Soil/Sediment Sub-Total unit Cost: $5,400

[1]Product is normally subject to minimum batch size of 8 samples. Minimum batch sizes will be addressed on a scope-specific basis

Biosolids Analyses:

Biosolids Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols[1]	MLA-068 / EPA 1698	GC/HRMS	1,125
PPCPs (Lists 1, 3, 4, 5, 6)	MLA-075 / EPA 1694	LC/HRMS	1,600
MRES 1699 with ONs	MLA-035 / EPA 1699	GC/HRMS	1,300
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	475
Alkylphenols	MLA-004 / In-house	GC/MS	575
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	750

Biosolids Sub-Total unit Cost: $5,825

[1]Product is normally subject to minimum batch size of 8 samples. Minimum batch sizes will be addressed on a scope-specific basis

Tissue Analyses:

Tissue Analyses	AXYS Method/ Reference Method	Technique	Unit Cost $
Hormones and Sterols	MLA-068 / EPA 1698	GC/HRMS	Not Currently Available
PPCPs (Lists 1, 3, 4, 5, 6)[1]	MLA-075 / EPA 1694	LC/HRMS	1,750
MRES 1699 (without ONs)[1,2]	MLA-035 / EPA 1699	GC/HRMS	1,150
PFCs	MLA-060 / Mod EPA 537	LC/HRMS	425
Alkylphenols[1]	MLA-004 / In-house	GC/MS	550
PBDEs (short list)	MLA-033 / EPA 1614	GC/HRMS	700
Tissue Prep Charges[3]			
Fish Filleting	SLA-012	-	15
Tissue Homogenization	SLA-013	-	25

Tissue Sub-Total unit Cost (excluding tissue prep and hormones) $4,575

[1]Product is normally subject to minimum batch size of 8 samples. Minimum batch sizes will be addressed on a scope-specific basis
[2]Organonitrogen pesticides are not validated for tissue matrix but all other MLA-035 MRES pesticides are.
[3]These are representative charges for tissue prep. Actual charges may be slightly different depending on size of fish or other organisms and other factors such as if dissection is needed for specific organs, whether sexing or aging is required, etc.

Passive Sampler Analyses:

POCIS Analyses[6]	AXYS Method/ Reference Method	Technique	Unit Cost[4] $
Hormones and PPCPs (Lists 1, 3, 4, 5, 6)[5, 6]	MLA-075 / EPA 1694	LC/HRMS	2,300
MRES 1699 with ONs[6]	MLA-035 / EPA 1699	GC/HRMS	1,350
PFCs[6]	MLA-060 / Mod EPA 537	LC/HRMS	425
POCIS Elution/Preparation for Biology Labs	MLA-075	N/A	275

POCIS Sub-Total Unit Cost (with extra elution for Biology samples): $4,075

SPMD Analyses	AXYS Method/ Reference Method	Technique	Unit Cost[4] $
MRES 1699 with ONs[6]	MLA-035 / EPA 1699	GC/HRMS	1,350
Alkylphenols[6]	MLA-004 / In-house	GC/MS	550
PBDEs (short list)[1, 6]	MLA-033 / EPA 1614	GC/HRMS	700
SPMD Dialysis/Preparation for Biology Labs	SLA-118	N/A	275
PRC (Performance Reference Compounds) analysis (PAHs) [6]	MLA-021 / Mod EPA 8270	GC/MS	425

SPMD Sub-Total Unit Cost (with extra dialysis for Biology samples): $3,300

[1]Product is normally subject to minimum batch size of 8 samples. Minimum batch sizes will be addressed on a scope-specific basis
[4]Unit Cost does not included shipping to biology lab. Shipping using AXYS' FedEx account will be charged at cost plus 10%. Alternatively, extracts can be shipped using FLDEP's FedEx account.
[5]Hormones and PPCPs are reported using the combined method as opposed to using AXYS MLA-068 because AXYS Method MLA-068 for Hormones and Sterols has not been validated for POCIS but MLA-075 has.
[6]Elution/Dialysis of passive samplers is included in the costs for analysis.

Other Charges:

- EDD, if needed, is $10 per sample. AXYS offers several excel-based template styles to choose from.
- Level IV data package is $35 per sample per analysis.
- Turnaround time is 30 business days for report, 35 business days for data package.

Thank you for this opportunity to provide this pricing information. Should you have any questions please do not hesitate to contact me at (941) 592-8049 or tfitzpatrick@axys.com.

Sincerely,

Timothy J. Fitzpatrick
Business Development Manager, Environmental Services

Appendices:
Appendix 1: AXYS Compound Lists and Detection Limits

APPENDIX 1 – Compound Lists and Reporting Limits

AXYS Analytical Services Ltd.

USEPA 1694 plus Extended List of Analytes
METHOD DETECTION LIMIT AND REPORTING LIMITS
for Pharmaceuticals and Personal Care Products by LC-MS/MS

AXYS Method: MLA-075 (see MLA-104 tab for "list 7" pharmaceuticals)
Instrument Type: LC-MS/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification: Linear regression with 1/x weighting

Matrix		**WATER/EFFLUENT**		**INFLUENT**		**SOIL/SEDIMENT**		**BIOSOLIDS**		**TISSUE - Acid extractions**	**TISSUE - Basic extraction**	**POCIS**
Units/Sample Size		ng/L based on 1 L sample		ng/L based on 0.250 L sample		ng/g based on 1g sample		ng/g based on 0.5g sample		ng/g based on 2.5g	ng/g based on 1g	ng/sample based on 1 sample
Default Extract Volume		4000uL		4000uL		4000uL		4000uL		4000uL	4000uL	4000uL
Analyte ***List 1 - Acid Extraction in Positive Ionization***		**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**RL based on Low cal**	**RL based on Low cal**	**RL based on Low cal**
Acetaminophen		1.7	15.0	6.8	60.0	2.5	15.0	5.0	30.0	6.0		15.0
Azithromycin		1.8	1.5	7.1	6.0	1.2	1.5	2.5	3.0	0.6		1.5
Caffeine		14.0	15.0	56	60.0	18.0	15.0	36.0	30.0	6.0		15.0
Carbadox		0.6	1.5	2.5	6.0	1.4	1.5	2.8	3.0	0.6		1.5
Carbamazepine		1.5	1.5	6.0	6.0	0.8	1.5	1.5	3.0	0.6		1.5
Cefotaxime		24.0	6.0	96.0	24.0	7.8	6.0	15.6	12.0	2.4		6.0
Ciprofloxacin		3.4	6.0	13.6	24.0	3.7	6.0	7.4	12.0	2.4		6.0
Clarithromycin		0.8	1.5	3.3	6.0	0.8	1.5	1.6	3.0	0.6		1.5
Clinafloxacin		27.0	6.0	108	24.0	6.3	6.0	12.6	12.0	2.4		6.0
Cloxacillin [1]		8.6	3.0	34.4	12.0	1.8	3.0	3.6	6.0	1.2		3.0
Dehydronifedipine		0.8	0.6	3.3	2.4	0.4	0.6	0.8	1.2	0.2		0.6
Digoxigenin		14.0	6.0	56.0	24.0	39.0	6.0	78.0	12.0	2.4		6.0
Digoxin		5.4	6.0	21.6	24.0	11.0	6.0	22.0	12.0	2.4		6.0
Diltiazem		0.5	0.3	2.0	1.2	0.2	0.3	0.3	0.6	0.1		0.3
1,7-Dimethylxanthine		82	60.0	328	240	37	60.0	73.8	120	24.0		60.0
Diphenhydramine		0.1	0.6	0.6	2.4	0.8	0.6	1.6	1.2	0.2		0.6
Enrofloxacin		9.0	3.0	36.1	12.0	2.9	3.0	5.8	6.0	1.2		3.0
Erythromycin-H20		0.6	0.3	2.4	1.2	0.8	0.3	1.6	0.6	0.1		0.3
Flumequine		1.1	1.5	4.4	6.0	2.4	1.5	4.8	3.0	0.6		1.5
Fluoxetine		1.4	1.5	5.6	6.0	0.9	1.5	1.8	3.0	0.6		1.5
Lincomycin		0.5	3.0	2.1	12.0	2.8	3.0	5.6	6.0	1.2		3.0
Lomefloxacin		15.0	3.0	60.0	12.0	5.9	3.0	11.8	6.0	1.2		3.0
Miconazole		0.7	1.5	3.0	6.0	0.4	1.5	0.8	3.0	0.6		1.5
Norfloxacin		12.0	15.0	48	60.0	7.6	15.0	15.1	30.0	6.0		15.0
Norgestimate		2.4	3.0	9.6	12.0	1.7	3.0	3.4	6.0	1.2		3.0
Ofloxacin		3.6	1.5	14.4	6.0	1.9	1.5	3.8	3.0	0.6		1.5
Ormetoprim		0.4	0.6	1.7	2.4	0.1	0.6	0.3	1.2	0.2		0.6
Oxacillin [1]		7.1	3.0	28.4	12.0	1.4	3.0	2.9	6.0	1.2		3.0
Oxolinic acid		1.2	0.6	4.8	2.4	3.8	0.6	7.6	1.2	0.2		0.6
Penicillin G [1]		3.3	3.0	13.2	12.0	0.6	3.0	1.1	6.0	1.2		3.0
Penicillin V		8.4	3.0	33.6	12.0	1.9	3.0	3.8	6.0	1.2		3.0
Roxithromycin		0.2	0.3	0.7	1.2	0.3	0.3	0.5	0.6	0.1		0.3
Sarafloxacin		17.0	15.0	68	60.0	20.9	15.0	41.8	30.0	6.0		15.0
Sulfachloropyridazine		2.0	1.5	8.0	6.0	1.6	1.5	3.2	3.0	0.6		1.5
Sulfadiazine		0.6	1.5	2.2	6.0	0.7	1.5	1.5	3.0	0.6		1.5
Sulfadimethoxine		0.2	0.3	0.9	1.2	0.3	0.3	0.6	0.6	0.1		0.3
Sulfamerazine		0.6	0.6	2.6	2.4	0.5	0.6	0.9	1.2	0.2		0.6
Sulfamethazine		1.7	0.6	6.8	2.4	1.2	0.6	2.4	1.2	0.2		0.6
Sulfamethizole		1.4	0.6	5.6	2.4	2.2	0.6	4.4	1.2	0.2		0.6
Sulfamethoxazole		2.2	0.6	8.8	2.4	2.1	0.6	4.2	1.2	0.2		0.6
Sulfanilamide		7.7	15.0	30.8	60.0	16.0	15.0	32.0	30.0	6.0		15.0
Sulfathiazole		2.6	1.5	10.4	6.0	2.3	1.5	4.6	3.0	0.6		1.5
Thiabendazole		0.8	1.5	3.1	6.0	1.1	1.5	2.2	3.0	0.6		1.5
Trimethoprim		0.7	1.5	3.0	6.0	0.6	1.5	1.1	3.0	0.6		1.5
Tylosin		4.1	6.0	16.4	24.0	5.6	6.0	11.2	12.0	2.4		6.0
Virginiamycin		2.9	3.0	11.6	12.0	1.3	3.0	2.6	6.0	1.2		3.0
List 3 - Acid Extraction in Negative Ionization		**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**		**RL based on Low Cal.**
Bisphenol A		340	500	1360	2000	348	500	696	1000	200		500.0
Furosemide		15.0	40.0	60	160	77.0	40.0	154	80.0	16		40.0
Gemfibrozil		0.6	1.5	2.3	6.0	1.2	1.5	2.4	3.0	0.6		1.5
Glipizide		3.7	6.0	14.8	24.0	2.7	6.0	5.4	12.0	2.4		6.0
Glyburide		0.9	3.0	3.5	12.0	3.7	3.0	7.4	6.0	1.2		3.0
Hydroclorothiazide		4.9	20.0	20	80.0	10.0	20.0	20.0	40.0	8		20.0
2-hydroxy-ibuprofen		49.0	80.0	196	320	125	80.0	250	160	32		80.0
Ibuprofen		5.6	15.0	22.4	60.0	20.0	15.0	40.0	30.0	6		15.0
Naproxen		3.4	3.0	13.5	12.0	12.0	3.0	24.0	6.0	1.2		3.0
Triclocarban		0.9	3.0	3.6	12.0	2.5	3.0	5.0	6.0	1.2		3.0
Triclosan		36.0	60.0	144	240	45	60.0	90	120	24		60.0
Warfarin		1.0	1.5	4.0	6.0	1.5	1.5	3.0	3.0	0.6		1.5

Matrix		**WATER/EFFLUENT**		**INFLUENT**		**SOIL/SEDIMENT**		**BIOSOLIDS**		**TISSUE - Acid extractions**	**TISSUE - Basic extraction**	**POCIS**
Units/Sample Size		ng/L based on 1 L sample		ng/L based on 0.250 L sample		ng/g based on 1g sample		ng/g based on 0.5g sample		ng/g based on 2.5g	ng/g based on 1g	ng/sample based on 1 sample
Default Extract Volume		4000uL		4000uL		4000uL		4000uL		4000uL	4000uL	4000uL
List 4 - Basic Extraction in Positive Ionization		**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**		**RL based on Low Cal.**	**RL based on Low Cal.**
Albuterol	[4]	0.4	0.3	1.4	1.2	0.8	0.3	1.6	0.6		2.4	0.3
Amphetamine		0.5	1.5	2.0	6.0	0.0	1.5	0.0	3.0		12.0	1.5
Atenolol		0.7	0.6	2.8	2.4	0.0	0.6	0.0	1.2		4.8	0.6
Atorvastatin		0.3	1.5	1.3	6.0	0.7	1.5	1.4	3.0		12.0	1.5
Cimetidine		0.3	0.6	1.2	2.4	0.4	0.6	0.8	1.2		4.8	0.6
Clonidine		2.4	1.5	9.6	6.0	0.0	1.5	0.0	3.0		12.0	1.5
Codeine		2.1	3.0	8.4	12.0	0.0	3.0	0.0	6.0		24.0	3.0
Cotinine		0.6	1.5	2.4	6.0	0.0	1.5	0.0	3.0		12.0	1.5
Enalapril		0.2	0.3	0.8	1.2	0.0	0.3	0.0	0.6		2.4	0.3
Hydrocodone		0.9	1.5	3.6	6.0	0.0	1.5	0.0	3.0		12.0	1.5
Metformin		2.8	3.0	11.2	12.0	0.0	3.0	0.0	6.0		24.0	3.0
Oxycodone		0.4	0.6	1.8	2.4	0.0	0.6	0.0	1.2		4.8	0.6
Ranitidine	[4]	0.4	0.6	1.6	2.4	0.9	0.6	1.7	1.2		4.8	0.6
Triamterene		0.2	0.3	0.8	1.2	0.0	0.3	0.0	0.6		2.4	0.3
List 5 - Acid Extraction in Positive Ionization		**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**		**RL based on Low Cal.**
Alprazolam		0.2	0.3	1.0	1.2	0.2	0.3	0.3	0.6	0.1		0.3
Amitriptyline		0.4	0.3	1.5	1.2	0.4	0.3	0.7	0.6	0.1		0.3
Amlodipine		0.7	1.5	2.7	6.0	0.8	1.5	1.6	3.0	0.6		1.5
Benzoylecgonine		0.1	0.3	0.5	1.2	0.2	0.3	0.4	0.6	0.1		0.3
Benztropine		0.2	0.3	0.6	1.2	0.2	0.3	0.3	0.6	0.1		0.3
Betamethasone		3.4	1.5	13.6	6.0	11.0	1.5	22.0	3.0	0.6		1.5
Cocaine		0.1	0.2	0.3	0.6	0.2	0.2	0.4	0.3	0.1		0.2
DEET		0.7	0.2	2.7	0.6	0.3	0.2	0.6	0.3	0.1		0.2
Desmethyldiltiazem		0.1	0.2	0.4	0.6	0.2	0.2	0.3	0.3	0.1		0.2
Diazepam		0.2	0.3	1.0	1.2	0.2	0.3	0.3	0.6	0.1		0.3
Fluocinonide		3.4	6.0	13.6	24.0	3.1	6.0	6.1	12.0	2.4		6.0
Fluticasone propionate		0.4	2.0	1.4	8.0	1.5	2.0	3.1	4.0	0.8		2.0
Hydrocortisone		21	60.0	84	240	95.5	60.0	191	120	24.0		60.0
10-hydroxy-amitriptyline		0.1	0.2	0.4	0.6	0.1	0.2	0.3	0.3	0.1		0.2
Meprobamate		1.2	4.0	4.8	16.0	2.1	4.0	4.1	8.0	1.6		4.0
Methylprednisolone		2.0	4.0	8.0	16.0	4.0	4.0	8.1	8.0	1.6		4.0
Metoprolol		1.1	1.5	4.4	6.0	1.1	1.5	2.1	3.0	0.6		1.5
Norfluoxetine		0.5	1.5	2.2	6.0	1.4	1.5	2.8	3.0	0.6		1.5
Norverapamil		0.1	0.2	0.3	0.6	0.1	0.2	0.2	0.3	0.1		0.2
Paroxetine		2.2	4.0	8.8	16.0	1.8	4.0	3.7	8.0	1.6		4.0
Prednisolone		4.0	6.0	16.0	24.0	6.4	6.0	12.7	12.0	2.4		6.0
Prednisone		12.0	20.0	48	80.0	33.4	20.0	66.9	40.0	8.0		20.0
Promethazine		0.2	0.4	0.9	1.6	0.3	0.4	0.6	0.8	0.2		0.4
Propoxyphene		0.1	0.3	0.6	1.2	0.1	0.3	0.3	0.6	0.1		0.3
Propranolol		0.8	2.0	3.2	8.0	1.3	2.0	2.6	4.0	0.8		2.0
Sertraline		0.2	0.4	0.7	1.6	0.2	0.4	0.4	0.8	0.2		0.4
Simvastatin		10.2	20.0	40.8	80.0	9.5	20.0	19.0	40.0	8.0		20.0
Theophylline		73	60.0	292	240	205	60.0	409	120	24.0		60.0
Trenbolone		2.9	4.0	11.6	16.0	2.8	4.0	5.5	8.0	1.6		4.0
Trenbolone acetate		0.2	0.3	0.6	1.2	0.3	0.3	0.6	0.6	0.1		0.3
Valsartan		3.4	4.0	13.6	16.0	5.1	4.0	10.2	8.0	1.6		4.0
Verapamil		0.1	0.2	0.2	0.6	0.2	0.2	0.4	0.3	0.1		0.2

Matrix		WATER/EFFLUENT		INFLUENT	SOIL/SEDIMENT		BIOSOLIDS		TISSUE - Acid extractions	TISSUE - Basic extraction	POCIS
Units/Sample Size		ng/L based on 1 L sample		ng/L based on 0.250 L sample	ng/g based on 1g sample		ng/g based on 0.5g sample		ng/g based on 2.5g	ng/g based on 1g	ng/sample based on 1 sample
Default Extract Volume		4000uL		4000uL	4000uL		4000uL		4000uL	4000uL	4000uL
List 6 - Acid Extraction in Positive Ionization		MDL	RL based on Low Cal.	RL based on Low Cal.	MDL	RL based on Low Cal.	Estimated MDL	RL based on Low Cal.	RL based on Low Cal.		RL based on Low Cal.
Amsacrine		0.4	0.8	3.2	0.1	0.8	0.24	1.6	0.3		0.8
Azathioprine		5.5	8	32.0	3.2	8.0	6.4	16.0	3.2		8.0
Busulfan		7.1	24	96.0	7.8	24.0	15.6	48.0	9.6		24.0
Citalopram		0.6	0.4	1.6	1.6	0.4	3.2	0.8	0.2		0.4
Clotrimazole		0.4	2	8.0	0.7	2.0	1.48	4.0	0.8		2.0
Colchicine		1.9	2	8.0	1.6	2.0	3.2	4.0	0.8		2.0
Cyclophosphamide		1.7	1.6	6.4	2.2	1.6	4.4	3.2	0.6		1.6
Daunorubicin		11.5	16	64.0	N/A	16.0	N/A	32.0	6.4		16.0
Diatrizoic acid		26.0	40	160	N/A	40.0	N/A	80.0	16.0		40.0
Doxorubicin		46.3	24	96.0	N/A	24.0	N/A	48.0	9.6		24.0
Drospirenone		10.1	8	32.0	7.2	8.0	14.4	16.0	3.2		8.0
Etoposide		3.4	4	16.0	3.5	4.0	7	8.0	1.6		4.0
Iopamidol		132	80	320	270	80.0	540	160	32.0		80.0
Medroxyprogesterone acetate		3.7	4	16.0	5.3	4.0	10.6	8.0	1.6		4.0
Melphalan		64.9	64	256	57	64.0	114	128	25.6		64.0
Metronidazole		5.6	4	16.0	3.4	4.0	6.8	8.0	1.6		4.0
Moxifloxacin [3]		4.8	4	16.0	N/A	4.0	N/A	8.0	1.6		4.0
Oxazepam		7.9	16	64.0	5.9	16.0	11.8	32.0	6.4		16.0
Rosuvastatin		5.6	16	64.0	4.1	16.0	8.2	32.0	6.4		16.0
Tamoxifen		0.3	0.4	1.6	0.5	0.4	1	0.8	0.2		0.4
Teniposide		3.1	8	32.0	9.4	8.0	18.8	16.0	3.2		8.0
Venlafaxine		3.0	0.4	1.6	1.3	0.4	2.6	0.8	0.2		0.4
Zidovudine		24.7	48	192	21	48.0	42	96.0	19.2		48.0

Notes:

[1] Data for compound is for information only. Concentration is estimated.

[2] Concentration of compound is an estimated maximum value

[3] Data for Moxifloxacin in solid samples is for information only. Concentration is estimated.

[4] Results are NOT recovery corrected.

[5] Analysis of List 2 analytes in tissues is not routinely offered and the tissue method is not validated for List 2.

AXYS Analytical Services Ltd.

US EPA 1614
TYPICAL DETECTION LIMITS, METHOD DETECTION LIMITS, LOW CALIBRATION LIMITS, AND LOWER REPORTING LIMITS for PBDEs (Short List) by GC/HRMS

AXYS Method: MLA-033
Instrument Type: High Resolution GC/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification: Linearity

Matrix	WATER/EFFLUENT				INFLUENT				SOIL/SEDIMENT				BIOSOLIDS				TISSUE				PASSIVE SAMPLING (SPMD, PED)			
Units/Sample Size	pg/L based on 1L sample				pg/L based on 0.250L sample				pg/g based on 10g sample				pg/g based on 0.5g sample				pg/g based on 10g sample				pg/sample			
Default Extract Volume	50uL				50uL				50uL				50uL				50uL				50uL			
Analyte	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**RL[1]**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**RL[1]**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**RL[1]**	**Typical SDL**	**Esimated MDL**	**LMCL based on Low Cal.**	**RL[1]**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**RL[1]**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**RL[1]**
BR3-DPE-28/33	10.0	9.2	50.0	1.0	40.0	36.9	200	4.0	1.0	1.4	5.0	0.10	40.0	27.8	100	2.0	1.0	1.2	5.0	0.10	10.0	13.9	50.0	1.0
BR4-DPE-47	10.0	16.5	50.0	1.0	40.0	66.1	200	4.0	1.0	2.8	5.0	0.10	20.0	55.3	100	2.0	1.0	3.9	5.0	0.10	10.0	27.6	50.0	1.0
BR5-DPE-99	10.0	18.6	50.0	1.0	40.0	74.3	200	4.0	1.0	2.6	5.0	0.10	20.0	51.5	100	2.0	1.0	4.2	5.0	0.10	10.0	25.8	50.0	1.0
BR5-DPE-100	10.0	6.6	50.0	1.0	40.0	26.6	200	4.0	1.0	0.9	5.0	0.10	20.0	18.7	100	2.0	1.0	0.89	5.0	0.10	10.0	9.4	50.0	1.0
BR6-DPE-153	10.0	6.7	50.0	1.0	40.0	26.8	200	4.0	1.0	0.6	5.0	0.10	20.0	12.5	100	2.0	1.0	0.93	5.0	0.10	10.0	6.3	50.0	1.0
BR6-DPE-154	10.0	8.3	50.0	1.0	40.0	33.1	200	4.0	1.0	0.8	5.0	0.10	20.0	16.6	100	2.0	1.0	0.91	5.0	0.10	10.0	8.3	50.0	1.0
BR7-DPE-183	20.0	7.7	50.0	1.0	80.0	30.9	200	4.0	2.0	0.5	5.0	0.10	40.0	10.5	100	2.0	2.0	1.5	5.0	0.10	20.0	5.2	50.0	1.0
BR10-DPE-209	200	569	500.0	1.0	800	2276	2000	4.0	20.0	124	50.0	0.10	400	2470	1000	2.0	20.0	23	50.0	0.10	200	1235	500	1.0

Notes: [1] Reporting Limit (RL) is the lowest concentration routinely reported for the method.
RLs are set to minimize potential for false positive detection
or the requirement to qualify
results very close to detection limit and in some cases
may exceed the sample specific detection limit (SDL) achieved.

AXYS Analytical Services Ltd.

METHOD DETECTION LIMITS AND REPORTING LIMITS
for PFCs

Instrument Type: LC-MS/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification (Water): Linear regression with 1/x weighting
Quantification (Solid, Tissue, Serum, Urine, Air): Linear regression with $1/x^2$ weighting

AXYS Method:	**MLA-060**		**MLA-060**	**MLA-060**		**MLA-041**		**MLA-043**		
Matrix	**WATER/EFFLUENT**		**WATER/EFFLUENT**	**WATER/EFFLUENT**		**SOIL/SEDIMENT/BIOSOLIDS**		**TISSUE**		
Method Option	**1 (filtered)**		**2 (unfiltered)**	**3 (unfiltered, direct injection)**				**Option B - 2g sample, no extract split**		**Option C - 2g sample with 1/2 extract split, for effective sample size of 1g**
Units/Sample Size	ng/L based on 0.5L sample		ng/L based on 0.5L sample	ng/L based on 0.75mL sample		ng/g based on 5g sample		ng/g		
Default Extract Volume	4000uL		4000uL	1000uL		4000uL		4000uL		
Analyte	**MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**
Carboxylic Acids										
Perfluorobutanoate (PFBA)	0.35	1.00	1.00	0.10	160	0.027	0.10	0.21	0.25	0.5
Perfluoropentanoate (PFPeA)	0.16	1.00	1.00	0.11	160	0.025	0.10	0.24	0.25	0.5
Perfluorohexanoate (PFHxA)	0.09	1.00	1.00	0.08	160	0.011	0.10	0.13	0.25	0.5
Perfluoroheptanoate (PFHpA)	0.09	1.00	1.00	0.05	160	0.027	0.10	0.13	0.25	0.5
Perfluorooctanoate (PFOA)	0.25	1.00	1.00	0.11	160	0.036	0.10	0.23	0.25	0.5
Perfluorononanoate (PFNA)	0.40	1.00	1.00	0.07	160	0.016	0.10	0.12	0.25	0.5
Perfluorodecanoate (PFDA)	0.16	1.00	1.00	0.08	160	0.071	0.10	0.16	0.25	0.5
Perfluoroundecanoate (PFUnA)	0.32	1.00	1.00	0.09	160	0.071	0.10	0.17	0.25	0.5
Perfluorododecanoate (PFDoA)	0.18	1.00	1.00	0.12	160	0.057	0.10	0.09	0.25	0.5
Sulphonic Acids										
Perfluorobutanesulfonate (PFBS)	0.44	2.00	2.00	0.33	330	0.040	0.20	0.36	0.5	1.0
Perfluorohexanesulfonate (PFHxS)	0.74	2.00	2.00	0.36	330	0.058	0.20	0.63	0.5	1.0
Perfluorooctanesulfonate (PFOS)	0.66	2.00	2.00	0.31	330	0.097	0.20	0.52	0.5	1.0
Perfluorooctane sulfonamide (PFOSA)	0.40	1.00	1.00	0.07	160	0.080	0.10	0.13	0.25	0.5

AXYS Analytical Services Ltd.

USEPA 1698
LOW CALIBRATION LIMIT
for Sterols and Hormones by GC/HRMS

AXYS Method: MLA-068
Instrument Type: High Resolution GC/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification: EPA 1698 is linearity, AXYS default is bracketing

Matrix		**WATER/EFFLUENT**		**INFLUENT**		**SOIL/SEDIMENT**		**BIOSOLIDS**	
Units/Sample Size		ng/L based on 1 L sample		ng/L based on 0.5 L sample		ng/g based on 1g sample		ng/g based on 0.25g sample	
Default Extract Volume		800uL		500uL		800uL		500uL	
Analyte ***Sterols***		**MDL**	**LMCL based on Low Cal.**	**Estimated MDL**	**LMCL based on Low Cal.**	**MDL**	**LMCL based on Low Cal.**	**Estimated MDL**	**LMCL based on Low Cal.**
Campesterol		8.5	40	1070	5000	24	40	6000	10000
Cholestanol		7.1	40	890	5000	8.8	40	2200	10000
Cholesterol		159	100 [3]	19800	12500 [3]	90.8	100 [3]	22700	25000 [3]
Coprostanol		19.7	100	2460	12500	31.8	100	7950	25000
Desmosterol		9.8	100	1230	12500	19.5	100	4880	25000
Epicoprostanol		9.8	100	1230	12500	33.1	100	8380	25000
Ergosterol [1]		(26)	100	163	12500	(18)	100	4500	25000
ß-Sitosterol [2]		23.3	100 [3]	2910	12500 [3]	1414	100 [3]	354000	25000 [3]
ß-Stigmastanol [2]		18.4	100	2300	12500	48.4	100	12100	25000
Stigmasterol [2]		11.4	40	1430	5000	349	40	87300	10000
Hormones		**MDL**	**LMCL based on Low Cal.**	**Estimated MDL**	**LMCL based on Low Cal.**	**MDL**	**LMCL based on Low Cal.**	**Estimated MDL**	**LMCL based on Low Cal.**
17ß-Estradiol (E2)		0.7	8.0	4.7	50	1.1	8.0	13	100
17α-Estradiol (E2)		0.9	8.0	5.9	50	1.4	8.0	17	100
17α-Ethinyl Estradiol (EE2)		1.3	8.0	8.1	50	1.9	8.0	24	100
ß-Estradiol-3-Benzoate		6.0	8.0	38	50	11.8	8.0	148	100
17α-Dihydroequilin		3.8	8.0	24	50	3.0	8.0	37	100
Androstenedione	[4]	9.4	20.0	58	125	14.9	20.0	186	250
cis-Androsterone	[4]	3.0	8.0	19	50	1.9	8.0	24	100
Desogestrel	[4]	2.2	8.0	14	50	4.6	8.0	58	100
Equilenin		5.6	8.0	35	50	4.1	8.0	51	100
Equilin		4.9	8.0	30	50	2.0	8.0	25	100
Estriol (E3)		16.2	8.0	102	50	18.8	8.0	235	100
Estrone (E1)		4.0	8.0	25	50	2.6	8.0	32	100
Mestranol		0.4	8.0	2.7	50	4.0	8.0	50	100
Norethindrone		1.0	8.0	6.0	50	1.5	8.0	19	100
Norgestrel		3.2	8.0	20	50	1.5	8.0	19	100
Progesterone		3.5	20.0	22	125	3.6	20.0	45	250
Testosterone	[4]	2.3	8.0	15	50	3.2	8.0	41	100

Notes: Samples will generally be reported below the LMCL levels above.

[1] Compound may exhibit instability under test conditions and result is for information only. Concentration is estimated.
[2] Lab background levels may contribute significantly to response and concentration reported is an estimated maximum value.
[3] Lab blank background levels
[4] Results are NOT recovery corrected

AXYS Analytical Services Ltd.

METHOD DETECTION LIMIT AND REPORTING LIMITS
for Hormones by LC-MS/MS

AXYS Method: MLA-075
Instrument Type: LC-MS/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification: Linear regression with 1/x weighting

Matrix	**WATER/EFFLUENT**		**INFLUENT**		**SOIL/SEDIMENT**		**BIOSOLIDS**		**POCIS**
Units/Sample Size	ng/L based on 1 L sample		ng/L based on 0.250 L sample		ng/g based on 1g sample		ng/g based on 0.5g sample		ng/sample based on 1 sample
Default Extract Volume	4000uL		4000uL		4000uL		4000uL		4000uL
Analyte ***ESI Positive***	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**
Allyl Trenbolone	0.66	0.8	2.64	3.2	0.66	0.8	1.32	1.6	0.8
Androstenedione	0.44	2.0	1.76	8.0	0.44	2.0	0.88	4.0	2.0
Androsterone	7.6	20.0	30.3	80.0	7.6	20.0	15.1	40.0	20.0
Desogestrel [1]	NA	60.0	NA	240	NA	60.0	NA	120.0	60.0
Estriol (E3)	44	16.0	175	64.0	44	16.0	88	32.0	16.0
Mestranol	25	20.0	100	80.0	25	20.0	50	40.0	20.0
Norethindrone	0.64	4.0	2.58	16.0	0.64	4.0	1.29	8.0	4.0
Norgestrel	1.5	4.0	6.1	16.0	1.5	4.0	3.1	8.0	4.0
Progesterone	0.75	0.8	3.02	3.2	0.75	0.8	1.51	1.6	0.8
Testosterone	0.39	0.8	1.57	3.2	0.39	0.8	0.79	1.6	0.8
ESI Negative	**MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**Estimated MDL**	**RL based on Low Cal.**	**RL based on Low Cal.**
17α-Dihydroequilin	2.1	4.0	8.3	16.0	2.1	4.0	4.1	8.0	4.0
Equilenin	0.66	0.8	2.64	3.2	0.66	0.8	1.32	1.6	0.8
Equilin	2.9	8.0	11.7	32.0	2.9	8.0	5.9	16.0	8.0
17α-Estradiol (E2)	1.7	4.0	6.6	16.0	1.7	4.0	3.3	8.0	4.0
17ß-Estradiol (E2)	3.7	4.0	14.9	16.0	3.7	4.0	7.4	8.0	4.0
Estrone (E1)	2.9	4.0	11.7	16.0	2.9	4.0	5.9	8.0	4.0
17α-Ethinylestradiol (EE2)	9.6	5.0	38.5	20.0	9.6	5.0	19.25	10.0	5.0

Notes: [1] Low recovey through the method and the potential for interference have been noted. Compound identity and concentration are estimated.

AXYS Analytical Services Ltd.

EPA 1699 with Addition of ON Pesticides
TYPICAL DETECTION LIMITS, METHOD DETECTION LIMITS AND LOW CALIBRATION LIMITS
for Multi-Residue Pesticides by GC/HRMS

AXYS Method: MLA-035
Instrument Type: High Resolution GC/MS
MDL Protocol: Federal Register 40 CFR Part 136, Appendix B, no iteration
Quantification: EPA 1699 is linearity, AXYS default is bracketing calibration

Grey = D Product

Matrix		WATER/EFFLUENT			SOIL/SEDIMENT/BIOSOLIDS			PASSIVE SAMPLING (SPMD, PED)			TISSUE		
Units/Sample Size		ng/L based on 1L sample			ng/g based on 5g sample			ng/sample			ng/g based on a 5g sample		
Default Extract Volume		400uL			400uL			400uL			500uL		
Analyte		**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**
OC Analytes													
TECNAZENE		0.1	0.3	2.0	0.07	0.26	0.4	0.07	1.32	2.0	0.05	0.40	1.0
HEXACHLOROBENZENE (HCB)		0.03	0.033	1.6	0.01	0.04	0.3	0.01	0.22	1.6	0.01	0.14	0.8
QUINTOZENE		0.1	1.1	4.0	0.06	0.50	0.8	0.06	2.52	4.0	0.04	0.96	2.0
HEPTACHLOR		0.02	0.5	1.6	0.02	0.16	0.3	0.02	0.79	1.6	0.02	0.30	0.8
HCH, ALPHA		0.03	0.2	3.2	0.01	0.12	0.6	0.01	0.58	3.2	0.02	0.09 [10]	1.6
HCH, GAMMA		0.04	0.2	3.2	0.01	0.06	0.6	0.01	0.29	3.2	0.03	0.50	1.6
HCH, BETA		0.04	0.2	3.2	0.01	0.10	0.6	0.01	0.50	3.2	0.03	0.26	1.6
HCH, DELTA		0.03	0.2	3.2	0.01	0.08	0.6	0.01	0.40	3.2	0.03	0.43	1.6
CHLOROTHALONIL.	[5]	0.1	0.4	2.0	0.02	0.18	0.4	0.02	0.88	2.0	0.04	0.33	1.0
ALDRIN		0.04	0.3	3.2	0.01	0.22	0.6	0.01	1.11	3.2	0.02	0.49	1.6
DACTHAL.	[5]	0.1	0.2	1.0	0.04	0.18	0.2	0.04	0.88	1.0	0.04	0.32	0.5
OCTACHLOROSTYRENE		0.06	0.2	1.6	0.01	0.12	0.3	0.01	0.61	1.6	0.02	0.25	0.8
OXYCHLORDANE		0.06	0.3	3.2	0.01	0.12	0.6	0.01	0.61	3.2	0.2	0.88	1.6
HEPTACHLOR-EPOXIDE		0.05	0.1	1.6	0.01	0.06	0.3	0.01	0.31	1.6	0.08	0.32	0.8
T-CHLORDANE		0.05	0.2	1.6	0.01	0.14	0.3	0.01	0.68	1.6	0.1	0.46	0.8
C-CHLORDANE		0.05	0.2	1.6	0.01	0.16	0.3	0.01	0.81	1.6	0.1	0.48	0.8
T-NONACHLOR		0.06	0.2	1.6	0.01	0.09	0.3	0.01	0.43	1.6	0.1	0.28	0.8
C-NONACHLOR		0.04	0.1	1.6	0.01	0.06	0.3	0.01	0.30	1.6	0.06	0.48	0.8
ALPHA-ENDOSULPHAN		0.5	0.2	1.6	0.1	0.09	0.3	0.10	0.44	1.6	0.4	0.42	0.8
BETA-ENDOSULPHAN		0.4	0.4	1.6	0.1	0.18	0.3	0.10	0.88	1.6	0.3	0.81	0.8
DIELDRIN		0.03	0.1	1.6	0.01	0.05	0.3	0.01	0.27	1.6	0.05	0.41	0.8
2,4'-DDD [1]		0.1	0.5	1.6	0.01	0.19	0.3	0.01	0.94	1.6	0.1	0.25	0.8
4,4'-DDD [1]		0.1	0.5	1.6	0.01	0.29	0.3	0.01	1.45	1.6	0.1	0.31	0.8
2,4'-DDE [1]		0.1	0.1	1.6	0.01	0.07	0.3	0.01	0.34	1.6	0.2	0.12	0.8
4,4'-DDE [1]		0.2	0.1	1.6	0.01	0.02	0.3	0.01	0.10	1.6	0.2	0.13	0.8
2,4'-DDT		0.2	0.1	1.6	0.02	0.04	0.3	0.02	0.19	1.6	0.1	0.13	0.8
4,4'-DDT		0.1	0.039	1.6	0.01	0.05	0.3	0.01	0.25	1.6	0.1	0.17	0.8
CAPTAN.	[5]	0.6	2.4	10.0	0.2	0.51 [7]	2.0	0.20	2.53 [7]	10.0	0.6	2.23	5.0
PERTHANE	[5]	0.8	5.7	1.6	0.1	3.04	0.3	0.10	15.2	1.6	0.5	0.71	0.8
ENDRIN		0.04	0.1	1.6	0.01	0.10	0.3	0.01	0.49	1.6	0.04	0.22	0.8
ENDOSULPHAN-SULPHATE		0.1	0.4	1.6	0.02	0.26	0.3	0.02	1.32	1.6	0.3	0.67	0.8
MIREX		0.02	0.6	1.6	0.02	0.09	0.3	0.02	0.46	1.6	0.01	0.29	0.8
METHOXYCHLOR		0.2	0.1	1.6	0.03	0.05	0.3	0.03	0.25	1.6	0.6	0.37	0.8
ENDRIN-KETONE		0.1	1.1	1.6	0.03	0.38	0.3	0.03	1.88	1.6	0.1	0.53	0.8
Triazine Pesticides		**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**
SIMAZINE		0.5	0.5	4.0	0.3	0.49	0.8	0.30	2.45	4.0	0.5	1.04	2.0
ATRAZINE		1	0.3	4.0	0.4	0.14	0.8	0.40	0.72	4.0	0.9	Note [10]	2.0
AMETRYN [2]	[5]	0.1	1.1	4.0	0.1	1.12	0.8	0.10	5.60	4.0	0.05	1.12	2.0
DESETHYLATRAZINE		0.1	0.2	2.0	0.1	0.98	0.4	0.10	4.91	2.0	0.1	0.49	1.0
METRIBUZIN.	[5]	0.4	0.4	1.0	0.1	0.36	0.2	0.10	1.79	1.0	0.5	Note [10]	0.5
CYANAZINE.	[5]	2	2.4	4.0	0.4	2.14	0.8	0.40	10.7	4.0	1	Note [10]	2.0
HEXAZINONE.	[5]	0.5	4.0	5.0	0.1	0.30 [8]	1.0	0.10	1.50 [8]	5.0	0.4	1.92	2.5
OP Analytes		**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**
PHORATE [3]	[5]	0.3	1.8	4.0	0.1	0.25 [9]	0.8	0.10	1.27 [9]	4.0	0.5	1.06	2.0
TERBUFOS. [3]	[5]	0.2	0.5	1.0	0.1	0.086 [9]	0.2	0.10	0.43 [9]	1.0	0.2	0.36	0.5
DIAZINON-OXON		0.6	2.2	4.0	0.3	0.12 [8]	0.8	0.30	0.61 [8]	4.0	0.7	1.00	2.0
DIAZINON		0.5	0.4	4.0	0.1	0.23	0.8	0.10	1.16	4.0	0.4	0.89	2.0
DISULFOTON. [3]	[5]	0.6	2.2	20.0	0.1	N/A [9]	4.0	0.10	N/A [9]	20.0	0.8	6.77	10.0
FONOFOS		0.1	0.2	4.0	0.1	0.19	0.8	0.10	0.94	4.0	0.04	0.46	2.0
DIMETHOATE.	[5]	5	6.5	20.0	0.4	8.9	4.0	0.40	44.5	20.0	6	8.38	10.0
CHLORPYRIPHOS-METHYL.	[5]	0.1	1.5	5.0	0.1	1.0	1.0	0.10	4.77	5.0	0.04	1.83	2.5
PARATHION-METHYL.		3	3.9	12.0	0.3	2.4	2.4	0.30	11.8	12.0	3	2.89	6.0
PIRIMIPHOS-METHYL.	[5]	0.1	1.2	4.0	0.1	1.3	0.8	0.10	6.57	4.0	0.08	1.09	2.0
CHLORPYRIPHOS.	[5]	0.1	1.3	4.0	0.1	0.87	0.8	0.10	4.37	4.0	0.08	1.53	2.0
FENITROTHION.	[5]	0.3	1.4	4.0	0.1	1.0	0.8	0.10	5.02	4.0	0.2	1.20	2.0
MALATHION.	[5]	1	16	52.0	0.5	10.1	10.4	0.50	50.3	52.0	2	10.33	26.0
PARATHION-ETHYL.	[5]	0.5	1.3	4.0	0.1	0.78	0.8	0.10	3.90	4.0	0.4	1.51	2.0
CHLORPYRIPHOS-OXON.	[5]	0.2	1.4	4.0	0.1	0.15 [9]	0.8	0.10	0.73 [9]	4.0	0.2	1.16	2.0
DISULFOTON SULFONE [3]	[5]	0.1	3.2	0.3	0.1	N/A [9]	0.1	0.10	N/A [9]	0.3	0.1	0.10	0.2
ETHION.	[5]	0.2	0.5	0.8	0.1	0.23	0.2	0.10	1.17	0.8	0.1	Note [10]	0.4
PHOSMET.	[5]	0.3	5.5	10.0	0.1	1.4	2.0	0.10	6.81	10.0	0.3	4.88	5.0
AZINPHOS-METHYL		0.8	1.0	5.0	0.1	0.41	1.0	0.10	2.04	5.0	2	0.96	2.5
Pyrethroid Analytes		**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**Estimated MDL**	**LMCL based on Low Cal.**	**Typical SDL**	**MDL**	**LMCL based on Low Cal.**
TOTAL-PERMETHRINS		0.2	0.3	2.0	0.1	0.04	0.4	0.10	0.21	2.0	0.4	0.50	1.0
TOTAL-CYPERMETHRINS		0.7	2.7	10.0	0.3	0.58	2.0	0.30	2.89	10.0	2	2.66	5.0

Matrix		WATER/EFFLUENT			SOIL/SEDIMENT/BIOSOLIDS			PASSIVE SAMPLING (SPMD, PED)			TISSUE		
Units/Sample Size		ng/L based on 1L sample			ng/g based on 5g sample			ng/sample			ng/g based on a 5g sample		
Default Extract Volume		400uL			400uL			400uL			500uL		
Analyte *OC Analytes*		Typical SDL	MDL	LMCL based on Low Cal.	Typical SDL	MDL	LMCL based on Low Cal.	Typical SDL	Estimated MDL	LMCL based on Low Cal.	Typical SDL	MDL	LMCL based on Low Cal.
ON Pesticides		Typical SDL	MDL	LMCL based on Low Cal.	Typical SDL	MDL	LMCL based on Low Cal.	Typical SDL	Estimated MDL	LMCL based on Low Cal.			
ALACHLOR		0.2	0.24	4.8	0.1	0.12	1.0	0.10	0.62	4.8			
BUTRALIN	[5]	1	1.52	4.0	0.4	0.63	0.8	0.40	3.17	4.0			
BUTYLATE	[5]	0.1	0.42	2.0	0.1	0.20	0.4	0.10	0.98	2.0			
DIMETHENAMID	[5]	0.1	0.61	2.0	0.1	0.74	0.4	0.10	3.70	2.0			
ETHALFLURALIN	[5]	0.2	5.82	22.0	0.1	2.6	4.4	0.10	13.1	22.0			
FLUFENACET	[5]	0.2	1.48	3.2	0.1	1.3	0.6	0.10	6.28	3.2			
FLUTRIAFOL	[5]	1	9.41	20.0	0.1	13.3	4.0	0.10	66.7	20.0			
LINURON	[11]	2	1.31	8.0	0.3	0.61	1.6	0.30	3.03	8.0			
METHOPRENE	[5]	7	2.70	10.0	4	3.8	2.0	4.00	19.2	10.0			
METOLACHLOR	[11]	0.5	0.18	1.0	0.4	0.46	0.2	0.40	2.31	1.0			
PENDIMETHALIN	[5]	1	5.41	16.0	0.2	2.1	3.2	0.20	10.3	16.0			
TEBUCONAZOL	[5]	0.8	4.68	10.0	0.1	6.3	2.0	0.10	31.5	10.0			
TRIALLATE	[5]	0.1	0.47	2.0	0.1	0.28	0.4	0.10	1.40	2.0			
TRIFLURALIN	[5]	0.1	0.53	2.0	0.1	0.26	0.4	0.10	1.29	2.0			

Notes:

[1] Concentration of compound is an estimated maximum value due to potential formation of low levels from DDT breakdown.

[2] Recovery may be low for tissue matrix and result is for information only. Concentration is estimated.

[3] Compound may exhibit instability under test conditions and result is for information only. Concentration is estimated.

[5] Final results are NOT recovery corrected

[6] Disulfoton may convert to Disulfoton sulfone under the test conditions.

[7] Due to breakdown in the GC injector and column captan was not recovered.

[8] The oxon metabolites of chlorpyrifos and diazinon were either not recovered or showed low recovery in the MDL experiment. Hexazinone was also similarly affected.

[9] Due to possible oxidation during sample preparation phorate, terbufos, and disulfoton showed low recovery values. This has also resulted in high recovery of disulfoton sulfone .

[10] Outside of 40CFR MDL protocol requirements due to less than 7 data points available, or spike level not within 1-10 times MDL, or USM blank level is higher than the calculated MDL.

N/A = not available