

Analytical Research Laboratory

Certified Submission Checklist

(Please read this form carefully before submitting solution samples to the ARL)

ARL Goal: Our primary goal at the ARL is to provide IFAS researchers with quality analyses. Additionally, we strive to provide these services in a friendly and timely manner and at a modest fee. However, quality, timeliness, and cost of analyses are all adversely affected when samples are submitted improperly to the ARL.

Sample Vials You can help by providing standard containers for all of your solution samples.

1. Use only 20-mL scintillation vials with plastic lined lids (Fisher catalog # 03-337-23C) submitted in the cardboard containers provided by the manufacturer. Each vial must be labeled with an indelible ink marker.
2. The ARL does not recommend scintillation vial reuse due to contamination issues.
3. The diagram to the right demonstrates the acceptable organization of scintillation vials. If samples do not arrive in the order shown and ARL personnel are available, your samples will be reorganized for an additional charge of **\$10.00 per 100 samples**.

91	92	93	94	95	96	97	98	99	100		
81	82	83	84	85	86	87	88	89	90		
71	72	73	74	75	76	77	78	79	80		
61	62	63	64	65	66	67	68	69	70		
51	52	53	54	55	56	57	58	59	60		
41	42	43	44	45	46	47	48	49	50		
31	32	33	34	35	36	37	38	39	40		
21	22	:	FRONT OF BOX					:	8	29	30
11	12	13	14	15	16	17	18	19	20		
1	2	3	4	5	6	7	8	9	10		

Sample Debris Materials such as ash, suspended solids, molds, algae, etc. cause clogging of aspirators and pump tubes thereby resulting in considerable instrument "down-time" as well as a need to rerun samples.

1. The ARL reserves the right to refuse to analyze samples containing debris.
2. **If ARL personnel are available**, an additional **\$1.00 per sample** will be charged to your account to cover filter paper and time costs associated with the filtration process for samples containing debris.

Sample Concentration and Method Selection The ARL recommends that whenever possible, sample concentrations be controlled so that they fall within the linear working range of the ARL's instrumentation through dilutions, and/or sample weight to volume ratios prior to the arrival of the samples at the lab. While the ARL can and does perform dilutions at the bench, we cannot guarantee to match the exact matrix in which you prepared your samples. Dissimilar matrices may introduce error. In addition, there will be a fee of **\$1.00 per dilution per sample** charged to your account.

A list of current PQL's, linear working ranges, and method references can be found on our website. Please check these ranges and methods to insure that the analysis you have selected is applicable to the sample matrix that you are submitting and will provide you with the information you want. **The ARL is not responsible for incorrect method selection on the part of the researcher and you will be charged for all analyses that you have selected and that the ARL has performed.**

Sample Matrix Solvents or solutions with elevated salt concentrations, excessive acid/base concentrations, or highly organic matrices can cause instrumentation damage and/or destroy delicate instrument parts.

1. If you have samples with an unusual matrix, please contact the ARL prior to submitting your samples. This includes samples with salt or acid concentrations exceeding 1.0 M, extracts with organic chelating agents, samples of a basic nature, and samples processed using hydrofluoric acid. This information should also be included in writing on your sample analysis request form.
2. If you do not contact the ARL and instrumentation is damaged during the analysis of your samples, and it is determined that the damage was due to the sample matrix, your account will be charged for the parts necessary to repair the instrument.

Quality Control The ARL requests that an additional 20 mL of sample volume be provided for 10% of the total samples submitted for each requested analysis (1 out of every 10 or fraction of 10 for each analyte). This additional sample volume allows the ARL to provide the appropriate QC data required by NELAP certification. Sample vials should be marked as being provided for QC analyses as well as referencing the original sample ID.

Please note: Many IFAS researchers have already incorporated the above requests with little or no disruption to their sample preparation/submission program. Unfortunately, additional charges, lost productivity, and the return of unanalyzed samples are all potential consequences of improperly prepared samples. Please do not hesitate to contact the ARL if you are unclear about any of the above instructions, or if you have any other questions or comments.