

Re: Filtration of samples prior to analysis for Microcystins

Filtration of samples prior to analysis for Microcystins is required by many testing methods and laboratory standard operating procedures, including Ohio EPA method 701.0, EPA method 544 (for LC/MS/MS analysis), and EPA method 546. Testing performed as part of Eurofins Abraxis' Microcystins assay validations showed that different filter types can bias sample results, either through toxin binding to the filters and producing biased low results, or through the release of interfering compounds from the filters producing biased high results. Based on these data, Eurofins Abraxis had in the past recommended the use of glass fiber filters from Environmental Express (part number SF012G), as these filters did not cause any positive or negative bias in recoveries. However, a recent change in the manufacturing of these filters now results in interference when low sample volumes are filtered. After conducting additional testing to determine the extent of the issue, new recommendations are being made to ensure that no bias in sample results will occur due to sample filtration. Information regarding these new recommendations can be found in the updated test kit user's guides and the newly released technical bulletin for sample filtration that are included in each test kit. A separate notice will also appear in each kit, to alert users when the test kit is opened as to the updated content in the kit documents.

Although not all labs using the Environmental Express glass fiber filters are experiencing a problem with recoveries, we are contacting all laboratories that may be using these filters. We are also available to assist in making any necessary changes to sample filtration protocols. Contact Eurofins Abraxis by phone at 215-357-3911, or by email at info.ET.Warminster@eurofinsus.com.