

Toxin Analysis Analytical Methods (Questions 6 - 7)

Qualitative

Please indicate the analytical method(s) used to characterize the HAB toxins. If you use a pre-prepared kit, please indicate the manufacture of the kit

Category	Count	Cumulative Count	Percent	Cumulative Percent
ELISA (Envirologix), LC/MS, HPLC, GC/MS, SELDI	1	1	5.56	5.56
HPLC	1	2	5.56	11.11
SPE extract by LC/MS	1	3	5.56	16.67
ELISA for microcystins, Envirologix; HPLC/MS for microcystins	1	4	5.56	22.22
Protein phosphatase inhibition assay	1	5	5.56	27.78
Missing	13	18	72.22	100.00

Please provide a brief description of how MDLs & PQLs were derived

Category	Count	Cumulative Count	Percent	Cumulative Percent
According to "Standard Methods"	1	1	5.56	5.56
MDL = 3.14 x std. dev. of 7 low stds.	1	2	5.56	11.11
Missing	16	18	88.89	100.00

Have you derived methods to assess precision & accuracy?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Y	3	3	16.67	16.67
N	1	4	5.56	22.22
Missing	14	18	77.78	100.00

If yes, what are they?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Check standards at known concentrations and duplicate sample analyses no acceptance crit	1	1	5.56	5.56
Missing	17	18	94.44	100.00

Have you developed acceptance criteria?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Y	1	1	5.56	5.56
N	3	4	16.67	22.22
Missing	14	18	77.78	100.00

If yes, what are they?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Missing	18	18	100.0000	100.0000

Quantitative

Please indicate the analytical method(s) used to characterize the HAB toxins. If you use a pre-prepared kit, please indicate the manufacture of the kit

Category	Count	Cumulative Count	Percent	Cumulative Percent
ELISA	2	2	11.11	11.11
SPE extract by LC/MS	1	3	5.56	16.67
ELISA: EnviroLogix QuantiPlate	1	4	5.56	22.22
ELISA for microcystins, Envirologix; HPLC/MS for microcystins	1	5	5.56	27.78
ELISA, Envirologix Kit	1	6	5.56	33.33
ELISA (Abraxis), HPLC	1	7	5.56	38.89
ELISA (Abraxis) and LC-MS-MS	1	8	5.56	44.44
Missing	10	18	55.56	100.00

Please provide a brief description of how MDLs & PQLs were derived

Category	Count	Cumulative Count	Percent	Cumulative Percent
EPA 40 CFR Part 136 Appx B	1	1	5.56	5.56
procedure outlined at 40 CFR Part 136, using seven replicates of standard sol	1	2	5.56	11.11
MDL = 3.14 x std. dev. of 7 low stds.	1	3	5.56	16.67
40CFR13 Pt 136 Ap B	1	4	5.56	22.22
kit specs	1	5	5.56	27.78
ELISA is provided by manufacturer, LC-MS-MS by experimentation with comn	1	6	5.56	33.33
Missing	12	18	66.67	100.00

Have you derived methods to assess precision & accuracy?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Y	7	7	38.89	38.89
N	2	9	11.11	50.00
Missing	9	18	50.00	100.00

If yes, what are they?

Category	Count	Cumulative Count	Percent	Cumulative Percent
lab fortified blanks and matrix spikes	1	1	5.56	5.56
four aliquots of the diluted PAR	1	2	5.56	11.11
LCS/MS/RS	1	3	5.56	16.67
Standard recoveries and coefficient of variations	1	4	5.56	22.22
Missing	14	18	77.78	100.00

Have you developed acceptance criteria?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Y	4	4	22.22	22.22
N	4	8	22.22	44.44
Missing	10	18	55.56	100.00

If yes, what are they?

Category	Count	Cumulative Count	Percent	Cumulative Percent
Recovery 40 to 130%, Precision 40%	1	1	5.56	5.56
80 - 100% recovery; less than 20% relative standard deviation	1	2	5.56	11.11
80-120%, 10% RPD	1	3	5.56	16.67
kit specs, std error of dups.	1	4	5.56	22.22
Missing	14	18	77.78	100.00