Initial MDL Determination

GC/Pesticides Group

Enter a Title: Example TRPH in Water by Liquid/Liquid Extraction Followed by GC/FID Analysis

Method: _____ Analysis Files: _____

Matrix: _____ Spiking Procedure: _____

Extraction Dates: _____

Analysis Dates: _____ Analyst(s): _____

Instruments(s): _____

Vol. of Sample (mL): 1000

Note: For a 99% confidence level (α = 0.01) and 10 replicates (*df* = 9), Vol. of Extract (mL): 2.0

the upper or one-tail Student's t-value is 2.821. *t* = 2.821 Concentration factor: 500

BLANKS

Analyte	Column: Rxi-5HT, 30 m, 0.25 mm, 0.25 um										AVG	SD	Calc. MDL	Reported in Extract		Reported in Sample	
	BLK-1 SH	BLK-2 SH	BLK-3 AG	BLK-4 AG	BLK-5 SH	BLK-6 SH	BLK-7 SH	BLK-8 AG	BLK-9 AG	BLK-10 AG				MDL	PQL	MDL	PQL
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analyte 1	118.8	118.9	102.3	110.8	102.4	112.6	103.4	74.3	76.2	57.0	97.7	21.2	157.4	**160**	**640**	0.32	1.28
Analyte 2											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 3											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 4											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 5											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 6											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 7											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 8											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 9											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 10											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 11											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 12											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 13											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0
Analyte 14											#DIV/0!	#DIV/0!	#DIV/0!		**0**	0	0

Initial MDL Determination

GC/Pesticides Group

SPIKES

Analyte	Spike Level	Column: Rxi-5HT, 30 m, 0.25 mm, 0.25 um										AVG	AVG. Rec.	SD	Calc. MDL	Reported in Extract		Reported in Sample	
		SPK-1 SH	SPK-2 AG	SPK-3 AG	SPK-4 SH	SPK-5 SH	SPK-6 SH	SPK-7 AG	SPK-8 AG	SPK-9 AG	SPK-10 AG					MDL	PQL	MDL	PQL
	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
Analyte 1	425.0	472.8	434.4	415.9	449.4	434.0	423.9	380.0	415.2	330.5	348.2	410.4	96.6	44.67	126.0	160	640	0.32	1.3
Analyte 2												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 3												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 4												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 5												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 6												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 7												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 8												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 9												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 10												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 11												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 12												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 13												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0
Analyte 14												#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!		0	0	0.0

* The calculated MDLs based on Spikes and Blanks analyses are compared. Practical MDLs are set to the greater of the calculated MDLs.

The nominal or reported MDL may be further elevated due to practical considerations.