

Supplementary Material

Quantitative analysis of arsenic containing hydrocarbons in marine samples by GC-MS

Georg Raber^{A,}, Sonja Weishaupt^A, Fabian Lappi^A, Michael Stiboller^A and Joerg Feldmann^A*

^AUniversity of Graz, Institute of Chemistry-Analytical Chemistry, Universitätsplatz 1, A-8010 Graz, Austria

*Correspondence to: Email: georg.raber@uni-graz.at

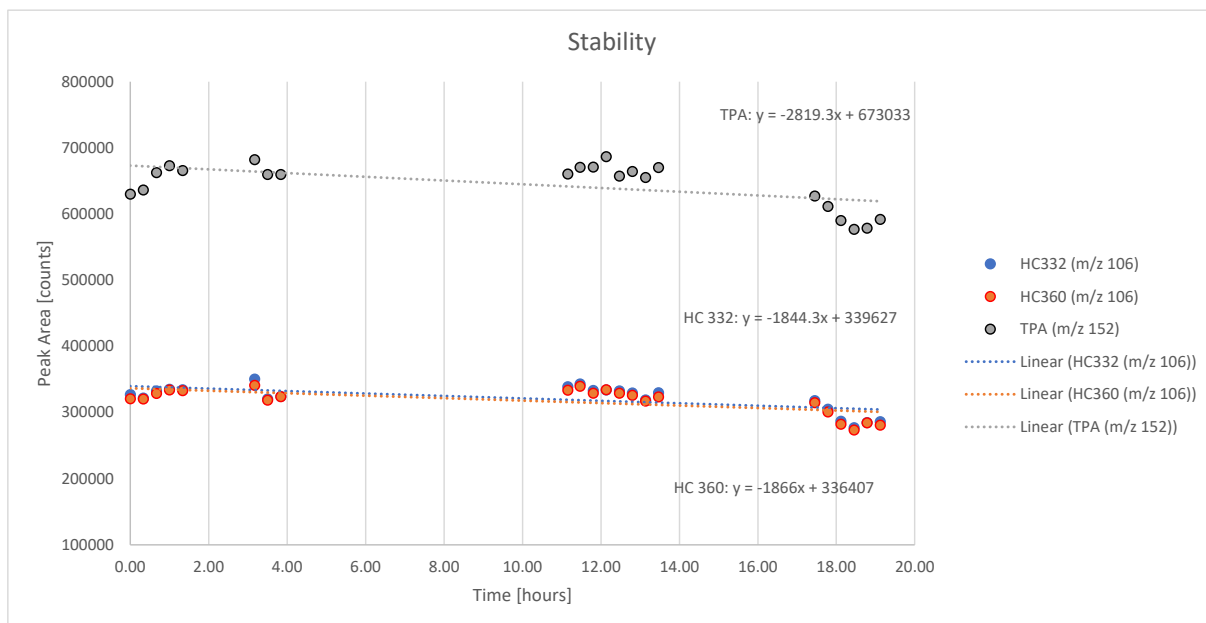
Supporting Information: Quantitative analysis of arsenic containing hydrocarbons in marine samples by GC-MS

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University of Graz, Institute of Chemistry-Analytical Chemistry, Universitätsplatz 1, A-8010
Graz, Austria

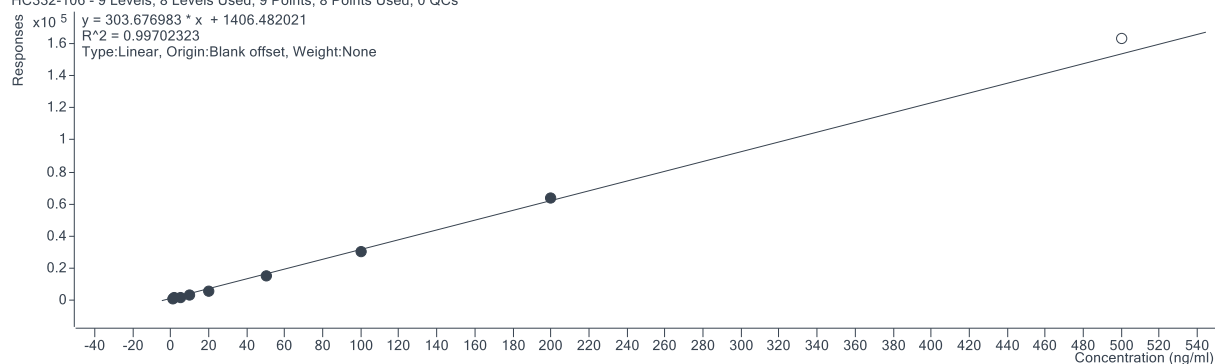
* Corresponding author: georg.raber@uni-graz.at

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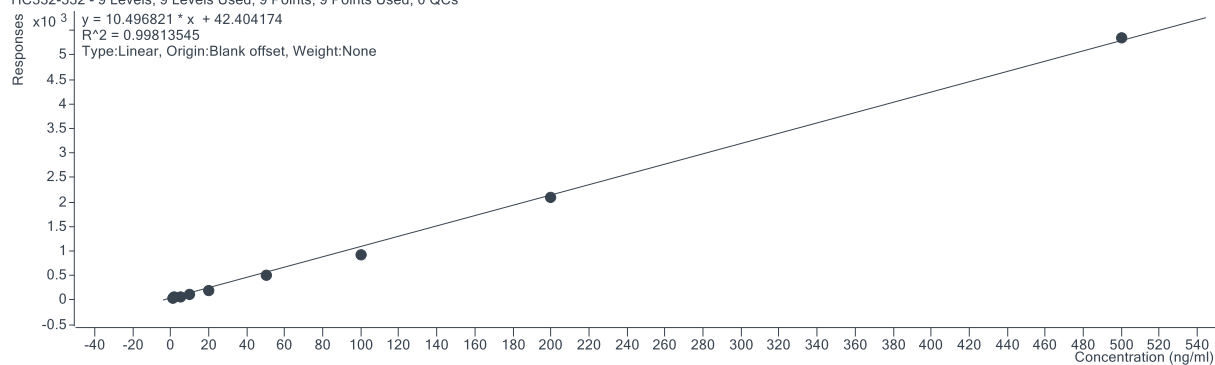


SI 1: Stability of GCMS signals of standard solutions AsHCs and TPA ($500 \mu\text{g As}\cdot\text{L}^{-1}$ each). Peak areas of quantifier (m/z 106 for AsHCs and m/z 152 for TPA)

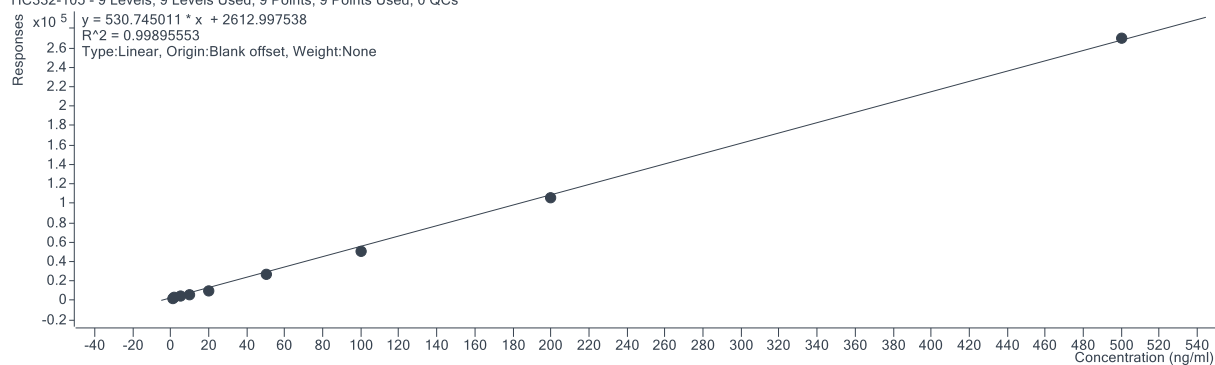
HC332-106 - 9 Levels, 8 Levels Used, 9 Points, 8 Points Used, 0 QCs



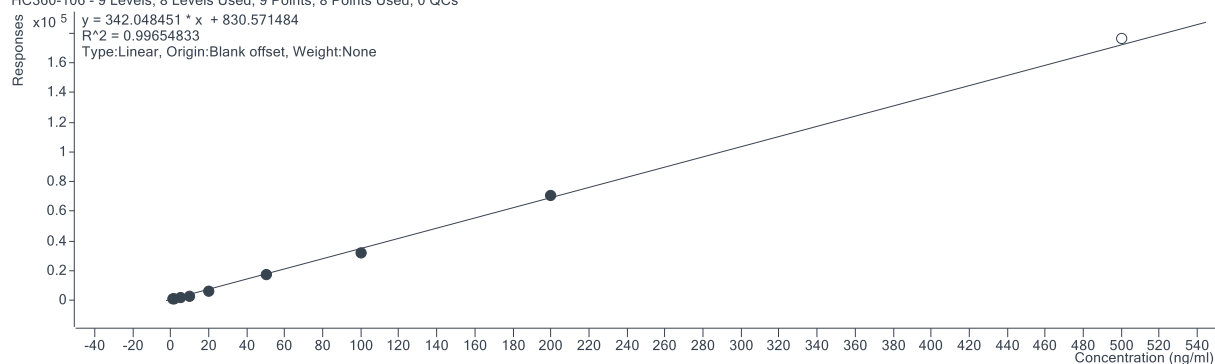
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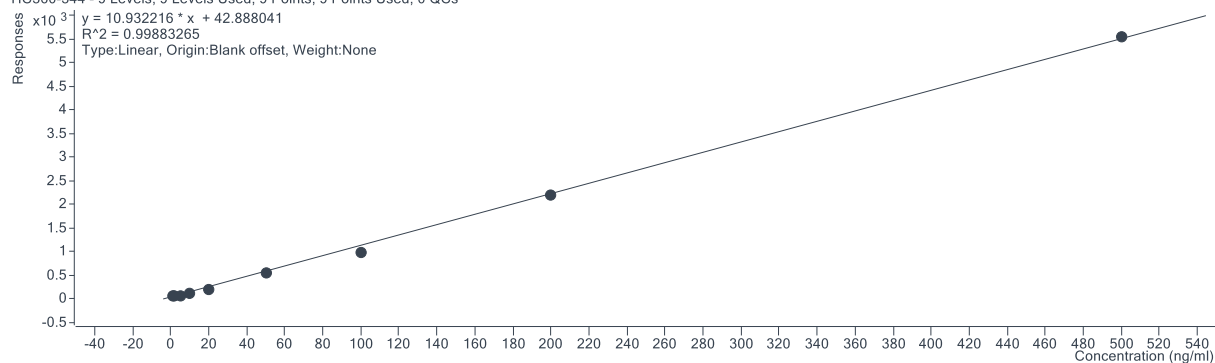
HC332-105 - 9 Levels, 9 Levels Used, 9 Points, 9 Points Used, 0 QCs



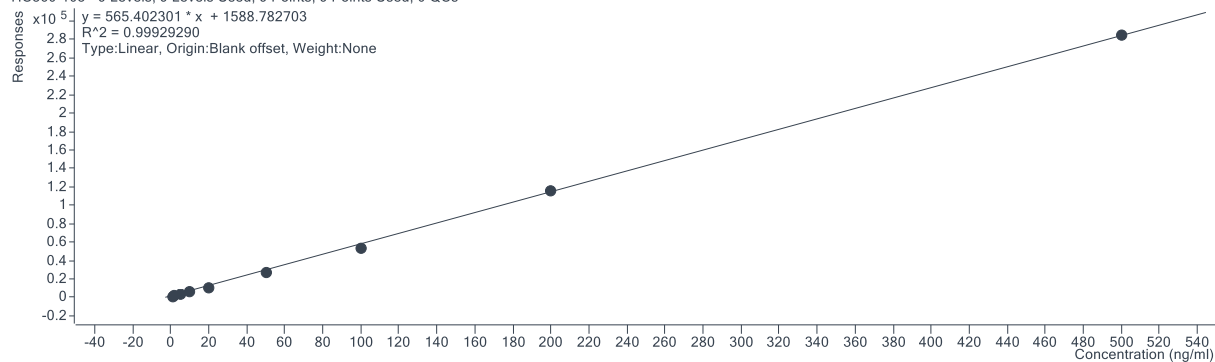
HC360-106 - 9 Levels, 8 Levels Used, 9 Points, 8 Points Used, 0 QCs

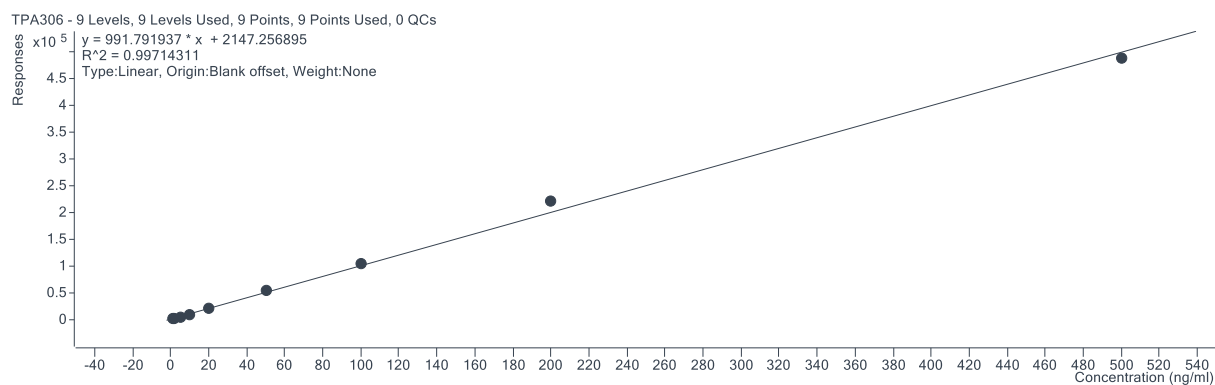
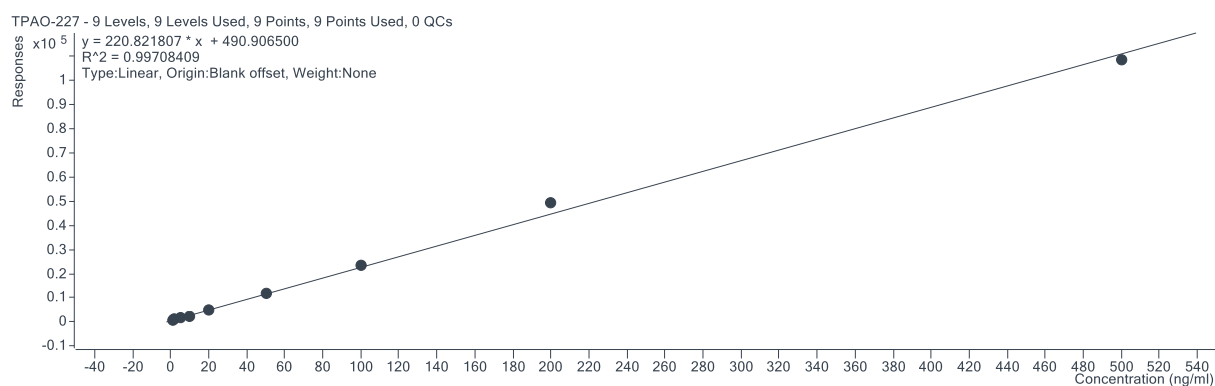
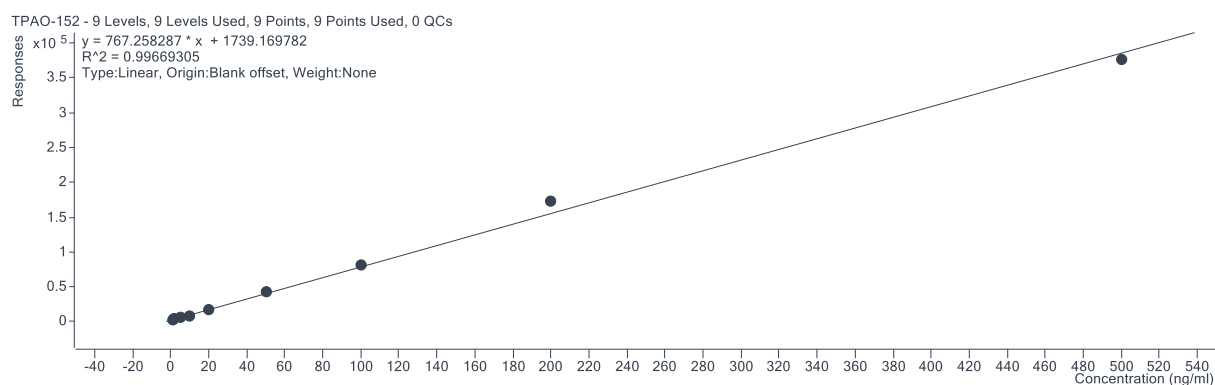


HC360-344 - 9 Levels, 9 Levels Used, 9 Points, 9 Points Used, 0 QCs



HC360-105 - 9 Levels, 9 Levels Used, 9 Points, 9 Points Used, 0 QCs

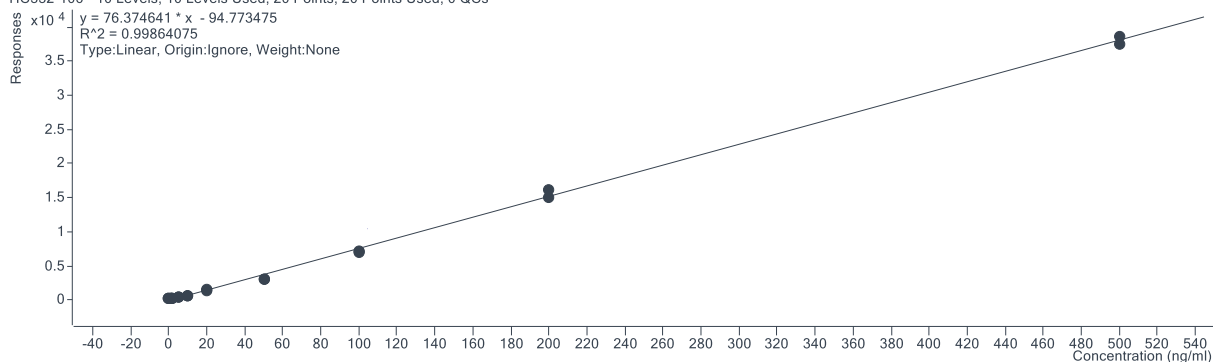




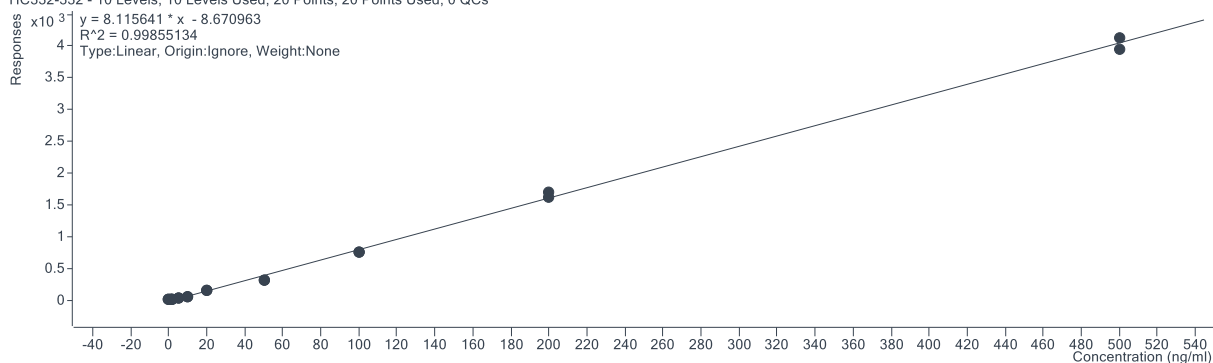
SI 2: Calibration plots of AsHCs and TPA with single ion monitoring in a concentration range of 1-500 $\mu\text{g As}\cdot\text{L}^{-1}$

MRM

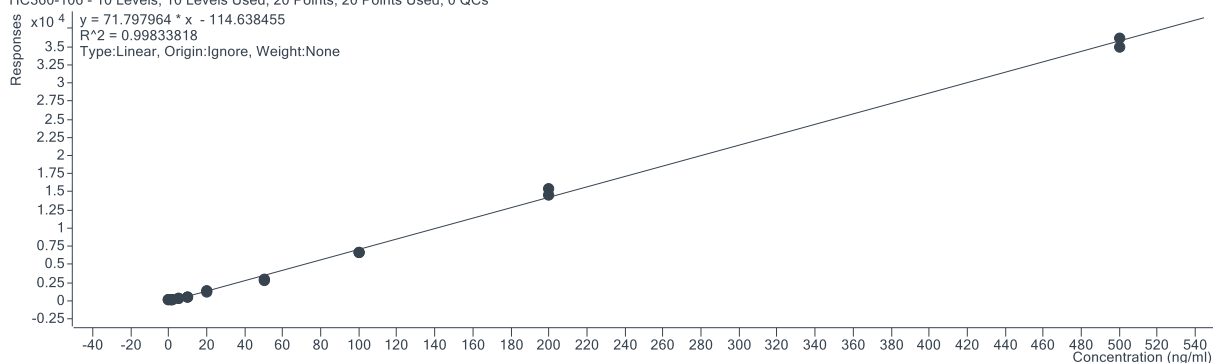
HC332-106 - 10 Levels, 10 Levels Used, 20 Points, 20 Points Used, 0 QCs



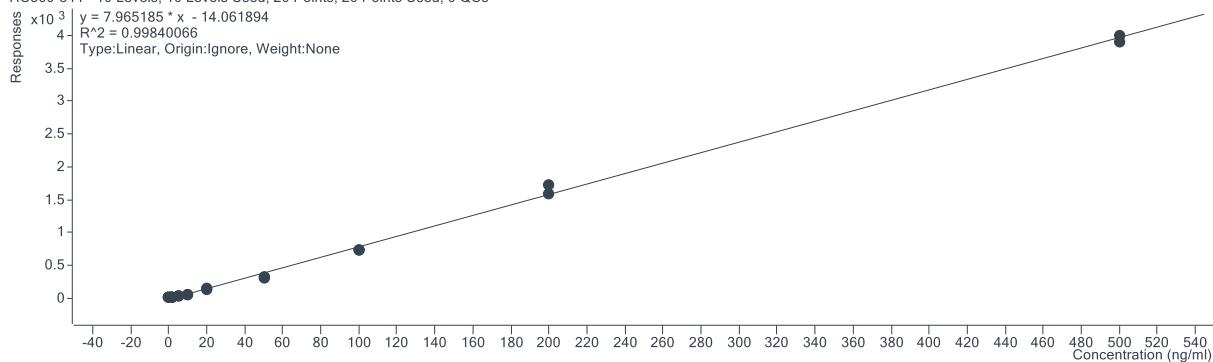
HC332-332 - 10 Levels, 10 Levels Used, 20 Points, 20 Points Used, 0 QCs

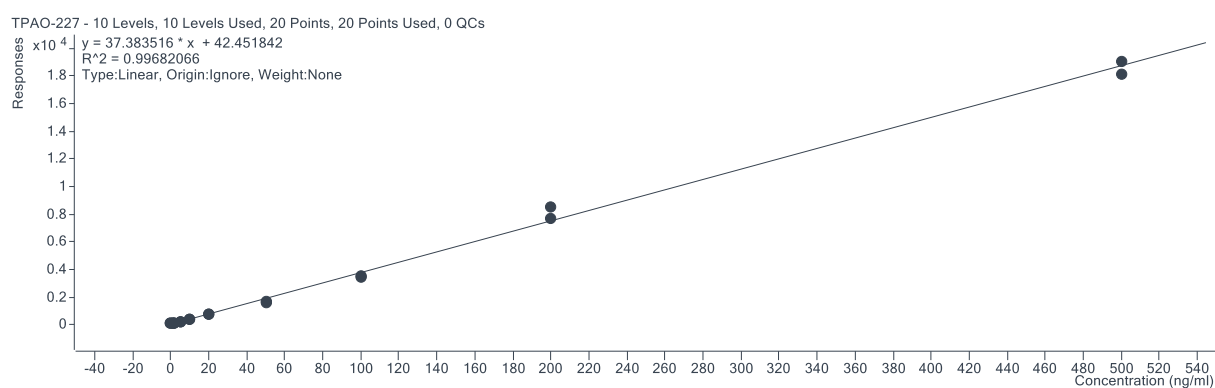
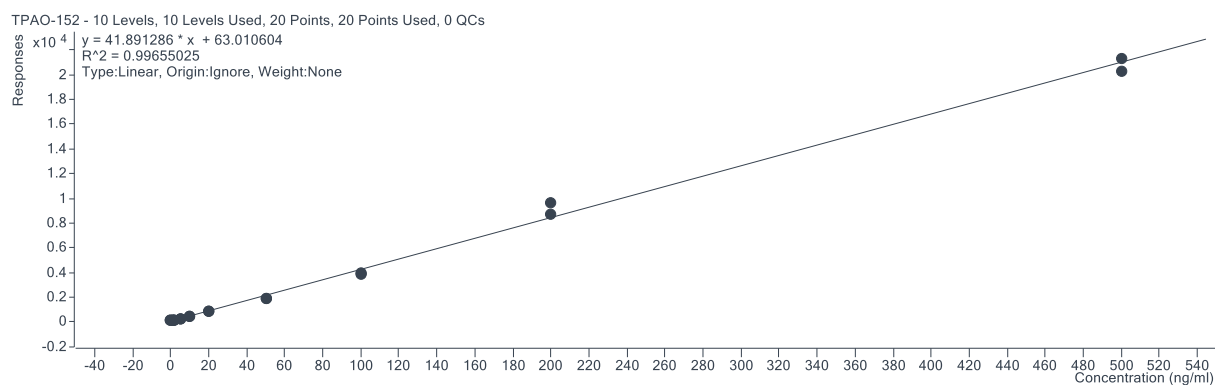


HC360-106 - 10 Levels, 10 Levels Used, 20 Points, 20 Points Used, 0 QCs



HC360-344 - 10 Levels, 10 Levels Used, 20 Points, 20 Points Used, 0 QCs

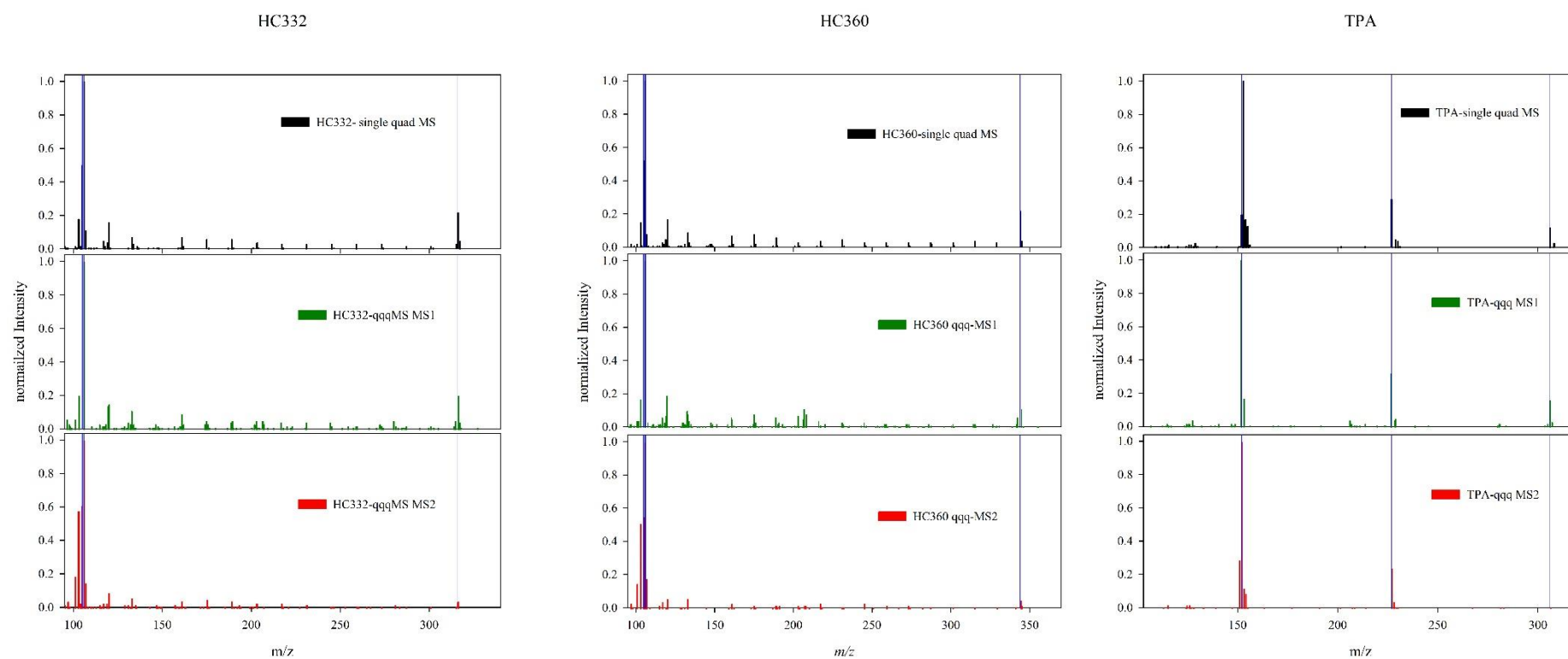




SI 3: Calibration plots of AsHCs and TPA with multiple reaction monitoring (MRM) in a concentration range of 1-500 $\mu\text{g As}\cdot\text{L}^{-1}$

	Ratio to base peak	Single quad MS	MS/MS 1	MS/MS 2
AsHC332	<i>m/z</i> 105 - <i>m/z</i> 106	50%	20%	61%
	<i>m/z</i> 316- <i>m/z</i> 106	22%	20%	4%
AsHC360	<i>m/z</i> 105 - <i>m/z</i> 106	52%	45%	55%
	<i>m/z</i> 344- <i>m/z</i> 106	22%	15%	5%
TPA	<i>m/z</i> 227 - <i>m/z</i> 152	29%	32%	24%
	<i>m/z</i> 306- <i>m/z</i> 152	12%	16%	1%

SI 4: Normalized ratios of fragments under three different MS conditions



SI 5: MS spectra of AshCs and TPA under three different MS conditions. Spectra were recorded with solutions containing $500 \mu\text{g}\cdot\text{L}^{-1}$ of each species.