2023



As 5+ As 3+

MMA DMA AsB

As 5+ As 3+

0.01 0.05g 0.76

1.95mg/kg

As

LC-AFS

01

a.

DMA: 0.706umol/g

As 3+: 1.011umol/g

MMA: 0.335umol/g

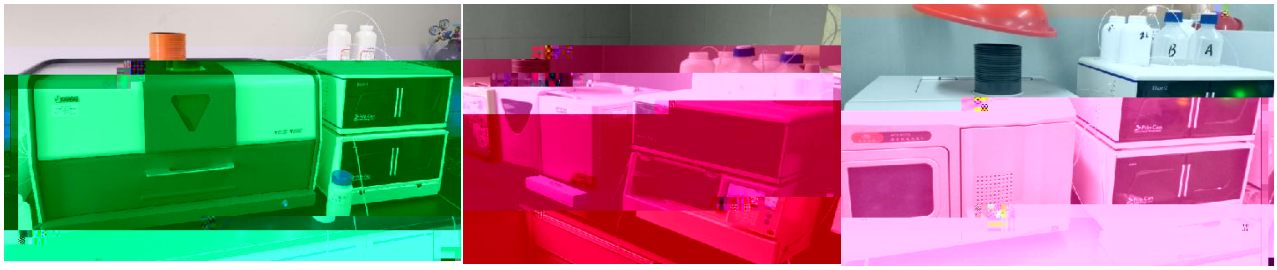
As 5+:0.233umol/g

b. HNO3

c. 5

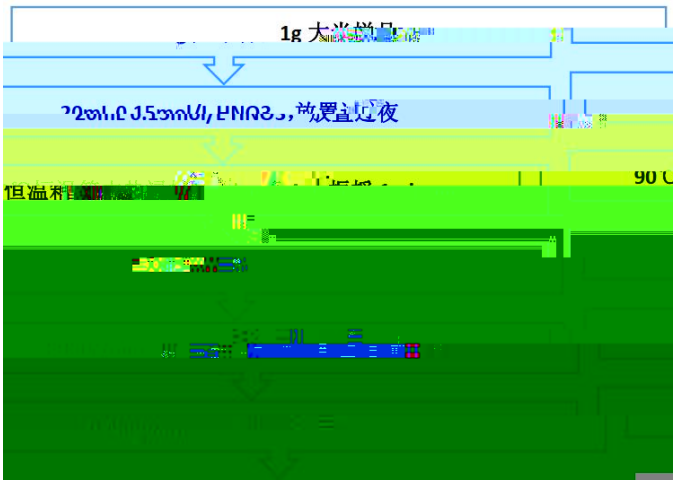
	5.5min		5.5min

b.



ELSPE-2 LC-AFS

03

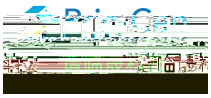


04

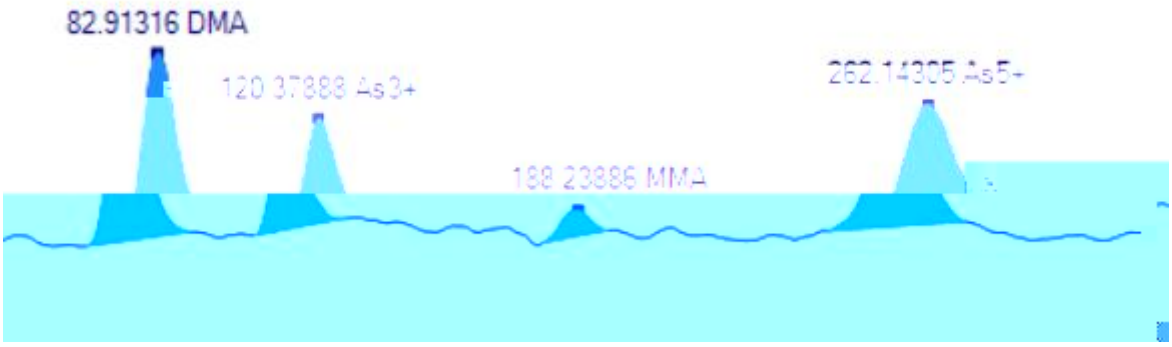
0.15mol/L 4 1ppm 1ppm 200ppb

200ppb 0.15mol/L 0ppb 2ppb 5ppb 10ppb

20ppb



06



07

3

	ppb	uAU		(ppb)
DMA	2	240.93662	57.497	0.1044
As3+	2	72.89806	25.684	0.2336
MMA	2	204.16395	48.721	0.1231
As5+	2	82.72684	19.742	0.3039

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LC-ICP-MS

01

a.

AsB: 0.518umol/g

DMA: 0.706umol/g

As 3+: 1.011umol/g

MMA: 0.335umol/g

As 5+:0.233umol/g

b. HNO3

c. 50ml 15ml 0.45um 5ml 1.5mlPP

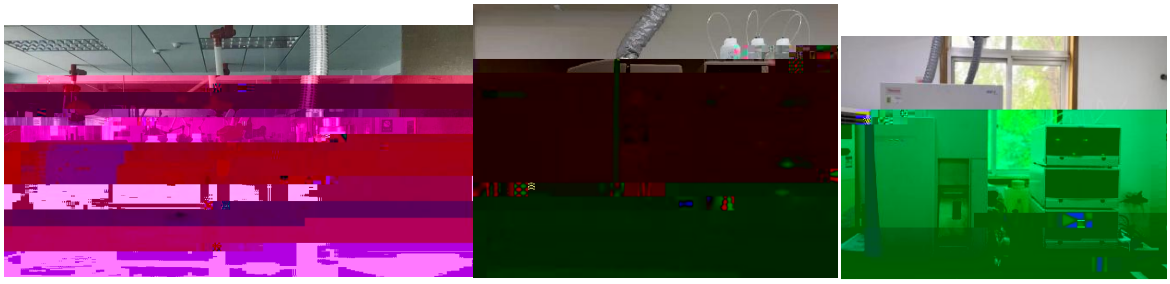
02

a.

		ICP-MS	
	As Spec Guard Cloumn+As Spec Fast Cloumn		As^{75} Cl^{35}
	ONLY WATER KIT for ICPMS 10X Mobile Phase 10 (		No Gas He **A s Spec column Cl ArCl**

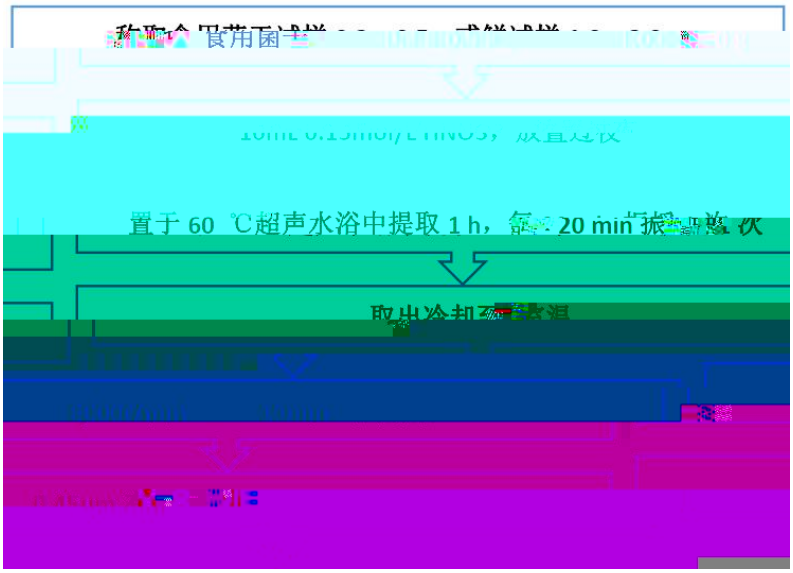
	1.2mL/min		1.0L/min
	20 μ L		0.5
	5.5min		5.5min

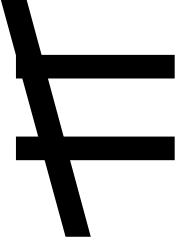
b.

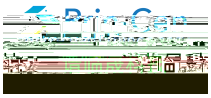


ELSPE-2 ICP-MS

03



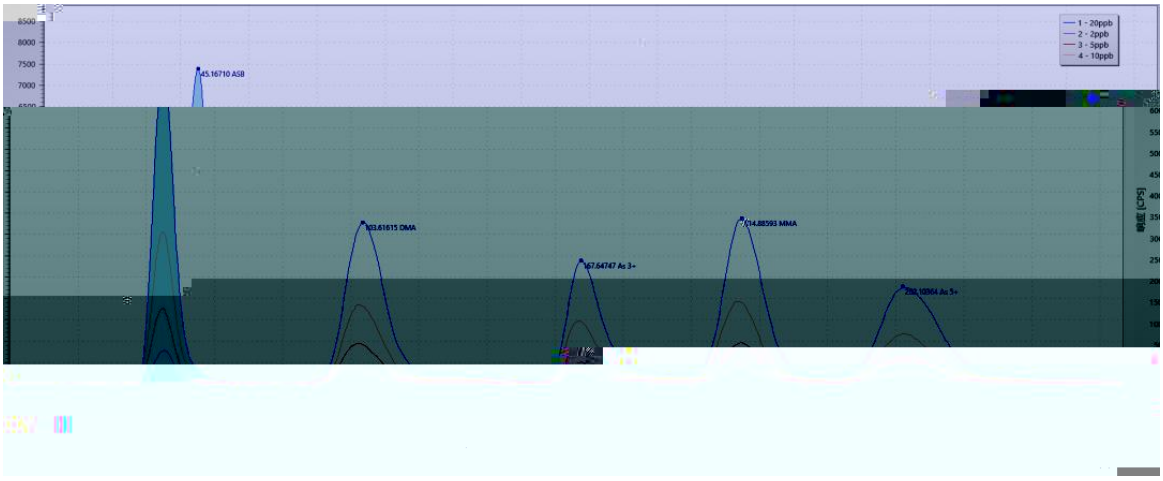




04

0.01 3mol/L  5 m

b.

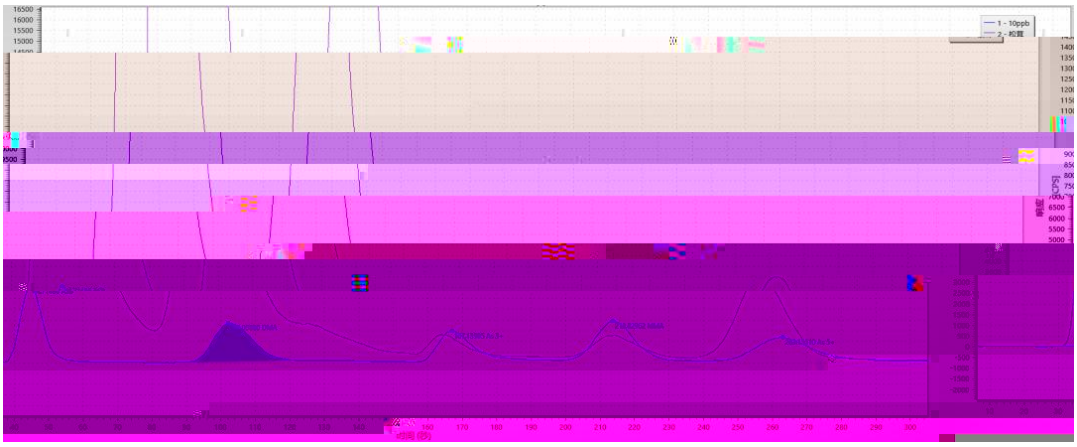


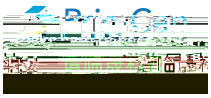
06

a. **10ppb**



b. **10ppb**





07

	ppb	CPS		(ppb)
AsB	2	760.43221	231.377	0.0259
DMA	2	324.92433	155.769	0.0385
As3+	2	303.59815	108.797	0.0551
MMA	2	359.65021	107.88	0.0556
As5+	2	248.78078	122.607	0.0489

1.LC-AFS PRP-X

400 As 3+ DMA

2.LC-ICP-MS

1. ICP-MS

2. AFS LC-AFS :DMA 0.

10ppb As 3+ 0.23ppb MMA 0.12ppb As 5+ 0.30ppb ICP-MS

LC-ICP-MS

AsB 0.03ppb DMA 0.04ppb As 3+ MMA 0.06ppb As 5+ 0.

05ppb

3. 6min

4. “ ”