

Supporting Information
for
Mechanism of a Novel Carrier Buffer in Arc Atomic Emission Spectroscopy

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After several months of expanded experiments, considering the sensitivity and applicability of the main analytical elements Ag, B, and Sn, the buffer formula was fine-tuned to: Al₂O₃, K₂S₂O₇, BaCO₃, NaF, and auxiliary components SiO₂, settled S, CaCO₃, C. The ratio of Fe₂O₃ and PTFE is 40+20+10+5+8+4+3.7+6+1.8+1.5 (the content of the internal standard GeO₂ accounts for 0.007%), achieving a more ideal detection limit and precision, as well as accuracy (see attached table).

Scan point 39 (Figure 12) - EDX analysis results of a fused material in final carrier buffer and GBW07105 (1:1) after reaction.

Elements	Contents(%)	Calibration contents(%)	Atomic ratios	Converted into oxide contents(%)
O	49.15	47.05	59.97	/ /
Mg	0.18	0.18	0.15	MgO 0.30
Al	55.12	52.77	39.88	Al ₂ O ₃ 99.70
合计	104.45	100.00	100.00	/ 100.00

Scan point 40 (Figure 12) - EDX analysis results of a fused material in final carrier buffer and GBW07105 (1:1) after reaction.

Elements	Contents(%)	Calibration contents(%)	Atomic ratios	Converted into oxide contents(%)
O	46.87	47.04	59.98	/ /
Mg	0.15	0.16	0.12	MgO 0.27
Al	52.59	52.80	39.90	Al ₂ O ₃ 99.73
合计	99.61	100.00	100.00	/ 100.00

Scan point 41 (Figure 12) - EDX analysis results of a fused material in final carrier buffer and GBW07105 (1:1) after reaction.

Elements	Contents(%)	Calibration contents(%)	Atomic ratios	Converted into oxide contents(%)
O	37.03	34.13	57.70	/ /
Mg	0.37	0.38	0.28	MgO 0.63

Al	31.61	29.02	29.17	Al ₂ O ₃	54.82
Si	0.58	0.59	0.46	SiO ₂	1.26
Ca	11.79	10.84	7.26	CaO	15.18
Fe	0.95	0.88	0.38	FeO	1.13
Ba	26.31	24.16	4.75	BaO	26.98
合计	108.64	100.00	100.00	/	100.00

Schedule 1. CCD-1 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	B	Sn
KB-1	0.036	4.13	0.55
KB-2	0.04	3.6	0.52
KB-3	0.035	3.64	0.58
KB-4	0.035	3.81	0.62
KB-5	0.033	3.51	0.52
KB-6	0.037	4.29	0.66
KB-7	0.037	3.92	0.67
KB-8	0.039	3.73	0.63
KB-9	0.037	3.95	0.72
KB-10	0.036	3.56	0.57
KB-11	0.036	4.4	0.73
KB-12	0.036	4.34	0.69
average value	0.036	3.91	0.62
standard deviation	0.002	0.32	0.07

Sample	Ag	B	Sn
GBW07106-1	0.073	37.1	1.41
GBW07106-2	0.072	32.5	1.51
GBW07106-3	0.069	33.9	1.34
GBW07106-4	0.079	33.9	1.54
GBW07106-5	0.078	35.6	1.61
GBW07106-6	0.073	34.2	1.42
GBW07106-7	0.071	34.6	1.38
GBW07106-8	0.075	34	1.42
GBW07106-9	0.087	27.9	1.47
GBW07106-10	0.074	36.5	1.61
GBW07106-11	0.073	36.9	1.47
GBW07106-12	0.077	35.4	1.43
average value	0.075	34.4	1.47
standard deviation	0.005	2.45	0.086

3S	0.006	0.96	0.21
The detection limit (6S)	0.012	1.92	0.42
Detection lower limit	0.028	4.77	0.75

RSD%	6.31	7.14	5.84
standard value	0.062	34	1.3
$\Delta\log C$	0.083	0.005	0.053

Sample	Ag	B	Sn
GBW07108-1	0.04	10.2	0.89
GBW07108-2	0.039	11.22	0.67
GBW07108-3	0.04	9.62	0.76
GBW07108-4	0.037	7.63	0.81
GBW07108-5	0.052	10.1	1.05
GBW07108-6	0.042	10.3	0.71
GBW07108-7	0.043	10.6	0.84
GBW07108-8	0.046	11.7	0.86
GBW07108-9	0.054	13.5	0.93
GBW07108-10	0.041	8.75	0.72
GBW07108-11	0.048	11.7	0.94
GBW07108-12	0.036	10.5	0.73
average value	0.043	10.5	0.83
standard deviation	0.006	1.5	0.11
RSD%	13.2	14.3	13.8
standard value	0.043	12	0.98
$\Delta\log C$	0.002	-0.06	-0.07

Sample	Ag	B	Sn
GBW07427-1	0.086	61.3	2.83
GBW07427-2	0.074	58.3	2.93
GBW07427-3	0.074	56.7	3.13
GBW07427-4	0.078	53	3.17
GBW07427-5	0.074	51.3	2.92
GBW07427-6	0.071	53.7	3.6
GBW07427-7	0.078	59.3	3.87
GBW07427-8	0.078	54.3	3.21
GBW07427-9	0.08	51.5	3.16
GBW07427-10	0.076	60.7	3.02
GBW07427-11	0.083	52.6	2.96
GBW07427-12	0.082	60	3.49
average value	0.078	56.1	3.19
standard deviation	0.004	3.74	0.31
RSD%	5.61	6.68	9.8
standard value	0.067	53	3.3
$\Delta\log C$	0.065	0.024	-0.015

Note: 1. The formula for calculating the detection limit in the table is $X = \text{blank average measurement} - \text{matrix blank} + 3S$; the same formula applies to other annex tables.

2. Due to the high background of the selected buffer's composition, attributed to the blank of potassium pyrosulfate reagent, the blank measurement values in the table were elevated. In subsequent batches of buffer preparation, the potassium pyrosulfate manufacturer was changed.

3. GBW07108 is a marl with a carbonate content exceeding 70%.

Schedule 2. CCD-1 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	B	Sn
GBW07307a-1	0.91	201	2.16
GBW07307a-2	0.96	184	2.11
GBW07307a-3	0.89	194	1.94
GBW07307a-4	1.03	184	1.97
GBW07307a-5	1.07	188	2.02
GBW07307a-6	0.97	195	1.92
GBW07307a-7	1.11	194	2.09
GBW07307a-8	0.94	244	2.03
GBW07307a-9	0.97	228	2.13
GBW07307a-10	1.05	180	2.17
GBW07307a-11	1.12	165	2.15
GBW07307a-12	1.00	180	1.99

Sample	Ag	B	Sn
GBW07449-1	0.067	184	1.42
GBW07449-2	0.073	160	1.41
GBW07449-3	0.058	173	1.24
GBW07449-4	0.070	153	1.43
GBW07449-5	0.064	181	1.30
GBW07449-6	0.068	147	1.33
GBW07449-7	0.065	172	1.21
GBW07449-8	0.062	187	1.31
GBW07449-9	0.067	166	1.38
GBW07449-10	0.075	162	1.48
GBW07449-11	0.063	152	1.38
GBW07449-12	0.067	177	1.34

average value	1.00	195	2.06
standard deviation	0.07	21.8	0.09
RSD%	7.42	11.2	4.35
standard value	1.20	195	2.50
$\Delta\log C$	-0.079	-0.001	-0.085

average value	0.067	168	1.35
standard deviation	0.005	13.2	0.080
RSD%	7.06	7.9	5.89
standard value	0.068	143	1.40
$\Delta\log C$	-0.009	0.070	-0.015

Sample	Ag	B	Sn
GBW07309-1	0.087	63.8	2.59
GBW07309-2	0.089	55.2	2.37
GBW07309-3	0.088	63.2	2.19
GBW07309-4	0.083	53.5	2.60
GBW07309-5	0.082	59.6	2.39
GBW07309-6	0.095	66.4	2.06
GBW07309-7	0.088	60.7	2.65
GBW07309-8	0.088	61.3	2.98
GBW07309-9	0.084	62.8	2.45
GBW07309-10	0.084	56.8	2.85
GBW07309-11	0.094	63.9	2.50
GBW07309-12	0.085	63.6	2.64
average value	0.087	60.9	2.52
standard deviation	0.004	3.93	0.26
RSD%	4.67	6.46	10.20
standard value	0.089	54.0	2.60
$\Delta\log C$	-0.009	0.052	-0.013

Sample	Ag	B	Sn
GBW07132	0.019	3.16	0.39
GBW07132	0.019	3.31	0.47
GBW07132	0.019	3.00	0.36
GBW07132	0.026	3.76	0.45
GBW07132	0.029	3.10	0.44
GBW07132	0.029	3.04	0.44
GBW07132	0.019	3.30	0.46
GBW07132	0.019	2.38	0.48
GBW07132	0.017	2.76	0.48
GBW07132	0.017	4.68	0.31
GBW07132	0.019	3.81	0.48
GBW07132	0.019	2.77	0.55
average value	0.021	3.25	0.44
standard deviation	0.005	0.60	0.06
RSD%	21.7	18.5	14.5
standard value	0.03	4.00	0.60
$\Delta\log C$	-0.16	-0.090	-0.13

Note: GBW07132 is a carbonate rock with a carbonate content exceeding 90%; its certified value is below the detection limit of the buffer solution.

Schedule 3. CCD-1 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	B	Sn
GBW07318-1	0.17	32.9	9.23
GBW07318-2	0.17	34.3	8.83
GBW07318-3	0.17	31.5	7.98
GBW07318-4	0.15	29.0	9.34
GBW07318-5	0.15	27.4	9.64
GBW07318-6	0.17	28.6	11.1
GBW07318-7	0.16	31.3	9.46
GBW07318-8	0.15	30.5	11.1
GBW07318-9	0.15	28.3	8.96
GBW07318-10	0.16	27.2	9.21
GBW07318-11	0.18	28.6	9.20
GBW07318-12	0.16	25.8	8.01
average value	0.16	29.6	9.34
standard deviation	0.01	2.51	0.98
RSD%	6.88	8.5	10.5
standard value	0.15	29.0	9.50
$\Delta \log C$	0.030	0.009	-0.007

Sample	Ag	B	Sn
GBW07134	0.044	1.87	0.70
GBW07134	0.040	1.97	0.73
GBW07134	0.042	2.00	0.71
GBW07134	0.038	1.90	0.56
GBW07134	0.045	1.99	0.75
GBW07134	0.031	1.70	0.72
GBW07134	0.046	1.89	0.71
GBW07134	0.030	2.34	0.76
GBW07134	0.049	1.81	0.70
GBW07134	0.041	2.00	0.69
GBW07134	0.047	1.60	0.50
GBW07134	0.046	2.01	0.73
average value	0.041	1.92	0.69
standard deviation	0.006	0.18	0.08
RSD%	14.4	9.6	11.3
standard value	0.050	2.30	0.90
$\Delta \log C$	-0.08	-0.08	-0.12

Sample	Ag	B	Sn
GBW07360-1	0.58	78.6	10.00
GBW07360-2	0.71	72.7	6.96
GBW07360-3	0.79	81.5	9.06
GBW07360-4	0.74	66.7	7.61
GBW07360-5	0.82	79	7.02
GBW07360-6	0.62	69.2	7.16

Sample	Ag	B	Sn
GBW07329	0.073	19.5	2.13
GBW07329	0.066	22.1	2.09
GBW07329	0.068	19.7	2.16
GBW07329	0.078	18.1	2.09
GBW07329	0.072	16.9	2.07
GBW07329	0.078	20.5	2.13

GBW07360-7	0.71	77	6.85	
GBW07360-8	0.58	76.6	6.90	
GBW07360-9	0.72	71.2	6.58	
GBW07360-10	0.90	102	6.50	
GBW07360-11	0.83	83.4	6.71	
GBW07360-12	0.79	65.8	6.90	
average value	0.73	76.9	7.35	
standard deviation	0.10	9.6	1.07	
RSD%	13.7	12.5	14.6	
standard value	0.74	68.0	7.20	
$\Delta \log C$	-0.005	0.053	0.009	
GBW07329	0.066	21.0	2.21	
GBW07329	0.075	22.7	2.03	
GBW07329	0.076	16.7	2.39	
GBW07329	0.076	23.0	2.27	
GBW07329	0.077	21.8	2.80	
GBW07329	0.067	17.6	2.12	
average value	0.073	20.0	2.21	
standard deviation	0.005	2.25	0.21	
RSD%	6.52	11.3	9.54	
standard value	0.067	20.0	3.30	
$\Delta \log C$	0.035	-0.001	-0.17	

Note: GBW07134 is a carbonate rock with a carbonate content exceeding 90%.

Schedule 4. AES-7200 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	Sn	B	Sample	Ag	Sn	B
KB-1	0.027	0.85	3.15	GBW07108-1	0.040	0.66	20.8
KB-2	0.027	0.73	3	GBW07108-2	0.045	1.01	17.2
KB-3	0.026	0.73	3.67	GBW07108-3	0.042	0.88	12.8
KB-4	0.026	0.72	3.34	GBW07108-4	0.048	0.84	13.4
KB-5	0.033	0.71	3.08	GBW07108-5	0.043	0.71	12.5
KB-6	0.032	0.72	3.24	GBW07108-6	0.045	0.76	15.1
KB-7	0.031	0.71	3.06	GBW07108-7	0.054	0.78	15.2
KB-8	0.032	0.7	3.02	GBW07108-8	0.046	0.71	12.0
KB-9	0.031	0.7	4.05	GBW07108-9	0.048	0.76	19.5

KB-10	0.031	0.69	3.52	GBW07108-10	0.052	1.02	17.6
KB-11	0.031	0.69	3.01	GBW07108-11	0.046	0.69	13.5
KB-12	0.03	0.69	3.69	GBW07108-12	0.053	0.84	13.5
standard deviation	0.0025	0.043	0.34	standard value	0.043	0.98	16.0
average value	0.03	0.72	3.32	average value	0.047	0.81	15.3
3S	0.008	0.13	1.02	standard deviation	0.004	0.12	2.88
The detection limit (6S)	0.016	0.26	2.04	RSD%	9.37	14.7	18.9
Detection lower limit	0.024	0.75	4.22	ΔLogC	0.037	-0.085	-0.021

Sample	Ag	Sn	B
GBW07408-1	0.065	2.47	65.1
GBW07408-2	0.052	2.31	51.4
GBW07408-3	0.056	2.31	62.1
GBW07408-4	0.064	2.64	51.8
GBW07408-5	0.053	2.47	61.4
GBW07408-6	0.052	2.34	58.8
GBW07408-7	0.058	2.45	59.8
GBW07408-8	0.051	2.37	57.5
GBW07408-9	0.077	3.08	66.7
GBW07408-10	0.067	2.40	56.4
GBW07408-11	0.070	2.56	62.4
GBW07408-12	0.058	2.12	61.6
average value	0.060	2.46	59.6
standard deviation	0.008	0.24	4.71
RSD%	13.97	9.60	7.91
standard value	0.060	2.80	54.0
ΔlogC	0.002	-0.056	0.043

Sample	Ag	Sn	B
GBW07450-1	0.088	1.99	60
GBW07450-2	0.094	2.46	54
GBW07450-3	0.094	2.41	54
GBW07450-4	0.11	2.57	53
GBW07450-5	0.093	2.22	61
GBW07450-6	0.11	2.73	55
GBW07450-7	0.10	2.45	52
GBW07450-8	0.11	2.62	55
GBW07450-9	0.10	2.30	61
GBW07450-10	0.090	1.85	60
GBW07450-11	0.094	2.18	53
GBW07450-12	0.10	2.01	57
average value	0.10	2.32	56.1
standard deviation	0.007	0.27	3.26
RSD%	7.32	11.80	5.80
standard value	0.08	2.40	48.0
ΔlogC	0.082	-0.016	0.07

Schedule 5. AES-7200 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	Sn	B
GBW07423-1	0.092	3.27	60.2
GBW07423-2	0.090	3.54	55.8
GBW07423-3	0.12	4.03	61.1
GBW07423-4	0.11	4.09	54.8
GBW07423-5	0.090	3.57	63.8
GBW07423-6	0.11	4.04	54.5
GBW07423-7	0.10	3.71	49.1
GBW07423-8	0.10	3.76	51.7
GBW07423-9	0.10	3.43	59.5
GBW07423-10	0.10	3.63	54.9
GBW07423-11	0.11	3.68	49.3
GBW07423-12	0.10	3.36	47.7
average value	0.10	3.68	55.2
standard deviation	0.008	0.27	5.17
RSD%	8.38	7.31	9.37
standard value	0.083	3.40	52.0
$\Delta \log C$	0.086	0.034	0.026

Sample	Ag	Sn	B
GBW07451-1	0.066	2.31	63
GBW07451-2	0.076	2.58	65
GBW07451-3	0.077	2.51	62
GBW07451-4	0.079	2.44	66
GBW07451-5	0.073	2.24	65
GBW07451-6	0.074	3.05	62
GBW07451-7	0.081	2.43	64
GBW07451-8	0.077	2.18	64
GBW07451-9	0.073	2.35	64
GBW07451-10	0.078	2.70	60
GBW07451-11	0.08	2.64	64
GBW07451-12	0.083	2.47	59
average value	0.08	2.49	63
standard deviation	0.005	0.23	2.22
RSD%	5.92	9.42	3.51
standard value	0.074	2.60	52
$\Delta \log C$	0.014	-0.018	0.085

Sample	Ag	Sn	B
GBW07424-1	0.090	2.80	35.9
GBW07424-2	0.091	2.86	34.1

Sample	Ag	Sn	B
GBW07453-1	0.093	6.65	92.8
GBW07453-2	0.095	7.32	89.7

GBW07424-3	0.10	3.14	34.4		GBW07453-3	0.076	6.58	92.8
GBW07424-4	0.10	3.28	37.4		GBW07453-4	0.089	7.05	95.2
GBW07424-5	0.10	2.95	39.1		GBW07453-5	0.085	7.06	82.0
GBW07424-6	0.10	3.02	36.0		GBW07453-6	0.088	6.68	83.7
GBW07424-7	0.12	2.85	35.2		GBW07453-7	0.074	6.56	91.3
GBW07424-8	0.10	3.22	34.2		GBW07453-8	0.087	6.97	89.3
GBW07424-9	0.088	2.85	39.4		GBW07453-9	0.091	7.81	86.4
GBW07424-10	0.12	2.91	37.4		GBW07453-10	0.078	6.27	90.4
GBW07424-11	0.09	2.74	31.4		GBW07453-11	0.073	6.30	102
GBW07424-12	0.10	3.33	39.1		GBW07453-12	0.081	6.19	89.1
average value	0.10	3.00	36.1		average value	0.08	6.79	90.4
standard deviation	0.010	0.20	2.44		standard deviation	0.01	0.48	5.18
RSD%	9.78	6.66	6.74		RSD%	9.00	7.02	5.73
standard value	0.083	3.40	35		standard value	0.092	6.20	83.0
$\Delta \log C$	0.086	-0.055	0.014		$\Delta \log C$	-0.039	0.039	0.037

Schedule 6. AES-7200 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	Sn	B	Sample	Ag	Sn	B
GBW07425-1	0.097	2.74	37.5	GBW07454-1	0.066	2.32	69.6
GBW07425-2	0.099	3.61	34.0	GBW07454-2	0.094	3.29	66.6
GBW07425-3	0.10	2.76	40.2	GBW07454-3	0.072	2.76	75.0
GBW07425-4	0.11	2.76	38.1	GBW07454-4	0.065	2.39	75.4
GBW07425-5	0.11	3.31	31.8	GBW07454-5	0.076	2.86	60.8

GBW07425-6	0.12	3.55	31.6	
GBW07425-7	0.097	3.52	41.2	
GBW07425-8	0.10	2.91	39.6	
GBW07425-9	0.12	3.02	39.0	
GBW07425-10	0.11	3.11	44.4	
GBW07425-11	0.10	3.11	34.9	
GBW07425-12	0.13	3.17	42.6	
average value	0.11	3.13	37.9	
standard deviation	0.010	0.31	4.12	
RSD%	9.092	10.01	10.9	
standard value	0.098	3.1	36.0	
$\Delta\log C$	0.042	0.004	0.022	
GBW07454-6	0.085	2.76	67.7	
GBW07454-7	0.087	3.11	71.5	
GBW07454-8	0.081	2.65	69.1	
GBW07454-9	0.072	2.44	68.5	
GBW07454-10	0.076	2.67	68.7	
GBW07454-11	0.10	2.92	67.3	
GBW07454-12	0.075	2.42	71.6	
average value	0.079	2.72	69.3	
standard deviation	0.011	0.30	3.90	
RSD%	13.6	11.01	5.62	
standard value	0.070	2.90	54.0	
$\Delta\log C$	0.053	-0.028	0.11	

Sample	Ag	Sn	B
GBW07426-1	0.11	2.71	73.8
GBW07426-2	0.12	2.80	61.9
GBW07426-3	0.12	2.93	65.6
GBW07426-4	0.11	2.84	59.0
GBW07426-5	0.12	3.10	58.4
GBW07426-6	0.10	2.70	58.7
GBW07426-7	0.093	2.38	73.9
GBW07426-8	0.11	2.35	67.6
GBW07426-9	0.10	2.76	62.0
GBW07426-10	0.11	2.85	64.3
GBW07426-11	0.11	2.58	60.6
GBW07426-12	0.12	3.23	58.8
average value	0.11	2.77	63.7

Sample	Ag	Sn	B
GBW07455-1	0.068	2.59	69.7
GBW07455-2	0.066	2.51	65.6
GBW07455-3	0.072	2.70	66.0
GBW07455-4	0.063	2.67	64.0
GBW07455-5	0.065	2.42	65.9
GBW07455-6	0.068	2.56	66.8
GBW07455-7	0.074	2.77	61.3
GBW07455-8	0.061	2.34	67.0
GBW07455-9	0.082	3.12	65.8
GBW07455-10	0.071	2.91	64.5
GBW07455-11	0.071	2.22	67.2
GBW07455-12	0.079	2.64	62.2
average value	0.070	2.62	65.5

standard deviation	0.008	0.26	5.55	standard deviation	0.006	0.25	2.26
RSD%	7.70	9.31	8.71	RSD%	8.89	9.35	3.46
standard value	0.09	2.80	55.0	standard value	0.070	2.8	52.0
$\Delta\log C$	0.11	-0.005	0.064	$\Delta\log C$	0.000	-0.029	0.100

Schedule7. AES-7200 direct-reading emission spectrometer tests experimental data for newly developed carrier buffer agents

Sample	Ag	Sn	B
GBW07448-1	0.058	2.62	55
GBW07448-2	0.055	2.52	55
GBW07448-3	0.065	2.37	53
GBW07448-4	0.063	2.42	52
GBW07448-5	0.054	2.38	58
GBW07448-6	0.056	2.61	55
GBW07448-7	0.065	2.85	51
GBW07448-8	0.048	1.97	52
GBW07448-9	0.052	2.48	56
GBW07448-10	0.06	2.69	52
GBW07448-11	0.065	2.81	52
GBW07448-12	0.072	2.94	49
average value	0.059	2.56	53
Standard deviation	0.007	0.26	2.54
RSD%	11.4	10.3	4.78
standard value	0.05	2.3	51

Sample	Ag	Sn	B
GBW07456-1	0.11	3.74	74
GBW07456-2	0.14	3.45	77
GBW07456-3	0.16	4.54	79
GBW07456-4	0.14	4.02	84
GBW07456-5	0.14	3.47	84
GBW07456-6	0.16	3.9	80
GBW07456-7	0.16	4.19	83
GBW07456-8	0.14	3.42	78
GBW07456-9	0.15	3.42	83
GBW07456-10	0.15	3.57	85
GBW07456-11	0.15	4.13	80
GBW07456-12	0.14	4.01	82
average value	0.14	3.82	81
standard deviation	0.014	0.37	3.28
RSD%	9.42	9.61	4.06
standard value	0.14	4	64

$\Delta\log C$	0.07	0.046	0.02	$\Delta\log C$	0.011	-0.02	0.1
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Sample	Ag	Sn	B
GBW07449-1	0.077	1.82	181
GBW07449-2	0.083	1.94	171
GBW07449-3	0.068	1.53	174
GBW07449-4	0.083	1.81	174
GBW07449-5	0.064	1.62	179
GBW07449-6	0.085	1.78	178
GBW07449-7	0.081	1.54	182
GBW07449-8	0.081	1.76	168
GBW07449-9	0.073	1.75	194
GBW07449-10	0.088	2.16	174
GBW07449-11	0.084	2.04	174
GBW07449-12	0.092	2.45	168
average value	0.08	1.85	176
standard deviation	0.01	0.27	7.21
RSD%	10.2	14.4	4.09
standard value	0.07	1.8	143
$\Delta\log C$	0.07	0.012	0.091

Sample	Ag	Sn	B
GBW07457-1	0.14	9.74	95.8
GBW07457-2	0.11	9.69	93.3
GBW07457-3	0.12	9.58	99.6
GBW07457-4	0.12	9.09	88.5
GBW07457-5	0.12	8.71	93.4
GBW07457-6	0.11	9.54	90.2
GBW07457-7	0.11	9.02	87.9
GBW07457-8	0.11	9.36	79.1
GBW07457-9	0.1	8.86	101.4
GBW07457-10	0.1	8.79	95.4
GBW07457-11	0.12	9.14	94.1
GBW07457-12	0.11	9.84	90.8
average value	0.11	9.28	92.5
standard deviation	0.01	0.4	5.85
RSD%	8.04	4.26	6.33
standard value	0.13	8.7	80
$\Delta\log C$	-0.062	0.028	0.063