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Level IV Data Package

MWH Group 240233

Method: EPA 9056 Chlorate

2805090137
2805090138

DBP QC Checklist

Analysis Date: 5/1/08 **Analyst:** CW

QC'd by lm **Date** 14 May 08

Instrument: IC12

Calibration including QCS(Secondary Source)

✓ Correlation Coefficient of calibration curve for linear curve is 0.995 or better. (0.99 for quadratic)

✓ CLO2 ✓ CLO3 ✓ BR

Initial QC Check Samples (MCV, CCB,MBLANK, MRL) to be analyzed with every batch (up to 20 samples) or part thereof

✓ MCV is analyzed before samples:

✓ CLO2/CLO3: 90-110% (180-220ppb) ✓ BR: 90-110% (90-110ppb)

✓ CCB is analyzed before samples and after MCV and HCV

✓ MLBANK is analyzed before samples. ✓ CLO2/CLO3 ✓ BR , if present, is < or = half of the MRL.

✓ *CLO2:* MRL at 10ppb is within 75%-125% (7.5-12.5ppb)

✓ *CLO3:* MRL at 10ppb is within 75%-125% (7.5-12.5ppb)

✓ *BR:* MRL at 5.0ppb is within 75%-125% (3.75-6.25ppb)

LCS/LCSD: Accepted criteria are between 90-110% recovery

✓ CLO2: 180-220ppb for 200ppb

✓ CLO3: 180-220ppb for 200ppb

✓ BR: 90-110ppb for 100ppb

✓ One pair analyzed per batch (up to 20 samples) or part thereof

MS/MSD: Acceptance criteria are between 80%-120% recovery.

✓ CLO2: 80-120ppb for 100ppb spike

✓ CLO3: 80-120ppb for 100ppb spike

✓ BR: 40.0-60.0ppb for 50ppb spike

✓ RPD between MS/MSD is within 15%

✓ One pair, and one MS is analyzed per batch (up to 20 samples) or part thereof

Continuing Calibration Verification (MCV and HCV) are required

✓ MCV recovery is between 90-110%

✓ CLO2 (180-220ppb) ✓ CLO3 (180-220ppb) ✓ BR (90-110ppb)

✓ HCV recovery is between 90-110%

✓ CLO2 (720-880ppb) ✓ CLO3 (720-880ppb) ✓ BR (360-440ppb)

Samples

✓ All samples for CLO3 and BR are analyzed within 28 days of collection.

✓ All samples for CLO2are analyzed within 14 days of collection.

QIR

5/1/8 QIR needed for failed QC

QIR needed for samples analyzed outside of hold time

No. ,	Sample Name ,	Comment	Time	Dil.Fac.	Amount ppb ClO2 CD_1	
1,	autocal1,		04/29/08 12:13,	1.0,	n.a.	
2,	autocal2,	S1-10/5/10	04/29/08 12:38,	1.0,	9.8463,	
3,	autocal3,	S2-20/10/20	04/29/08 13:04,	1.0,	20.2354,	
4,	autocal4,	S3-100/50/100	04/29/08 13:29,	1.0,	90.6714,	
5,	autocal5,	S4-200/100/200	04/29/08 13:55,	1.0,	188.1011,	
6,	autocal6,	S5-400/200/400	04/29/08 14:20,	1.0,	376.7346,	
7,	autocal7,	S6-800/400/800	04/29/08 14:45,	1.0,	815.7695,	
8,	MCV,	200/100/200	05/11/08 19:14,	1.0,	188.3320,	94.2 %
9,	CCB,		05/11/08 19:39,	1.0,	n.a.	
10,	MRLCHK,	S1-10/5/10	05/11/08 20:05,	1.0,	10.5760,	106 %
11,	MBLK,		05/11/08 20:30,	1.0,	n.a.	
12,	MRLCHK,	S1-10/5/10	05/11/08 20:56,	1.0,	11.8182,	DNR
13,	LCS1,	200/100/200	05/11/08 21:21,	1.0,	192.5026,	96.2 %
14,	LCS2,	200/100/200	05/11/08 21:46,	1.0,	197.4575,	98.7 %
15,	2805090137_1/50000,	CLO39056	05/11/08 22:12,	50000.0,	n.a.	
16,	2805090138_1/1000,	CLO39056	05/11/08 22:37,	1000.0,	n.a.	
17,	2805090181_1/500,	CLO39056	05/11/08 23:03,	500.0,	n.a.	
18,	2805090184_1/100,	CLO39056	05/11/08 23:28,	100.0,	n.a.	
19,	2805090185_1/100,	CLO39056	05/11/08 23:53,	100.0,	n.a.	
20,	2805080422,	BR	05/12/08 00:19,	1.0,	6.7634, not ClO_2.	
21,	2805080422-MS,	100/50/100	05/12/08 00:44,	1.0,	82.3535,	DNR 82.4 %
22,	2805080422-MSD,	100/50/100	05/12/08 01:10,	1.0,	84.4400,	84.4 %
23,	2805090058,	BR/CLO2	05/12/08 01:35,	1.0,	n.a.	
24,	2805080993_1/500 DN	CLO39056	05/12/08 02:00,	500.0,	n.a.	DNR
25,	2805080999,	CLO39056	05/12/08 02:26,	1.0,	n.a.	
26,	2805080167,	BR	05/12/08 02:51,	1.0,	n.a.	
27,	MCV,	200/100/200	05/12/08 03:17,	1.0,	189.3832,	94.7 %
28,	CCB,		05/12/08 03:42,	1.0,	n.a.	
29,	2805090077 DNR,	BR	05/12/08 04:07,	1.0,	n.a.	DNR
30,	2805090085,	BR	05/12/08 04:33,	1.0,	n.a.	
31,	2805090085-MS,	100/50/100	05/12/08 04:58,	1.0,	91.2400,	91.2 %
32,	2805090085-MSD,	100/50/100	05/12/08 05:24,	1.0,	92.4222,	92.4 %
33,	HCV,	800/400/800	05/12/08 05:49,	1.0,	785.1253,	98.1 %
34,	CCB,		05/12/08 06:14,	1.0,	n.a.	
35,	STOP,		05/12/08 06:40,	1.0,	n.a.	

VB MM5/14/08

No. ,	Sample Name ,	Comment	Time	Dil.Fac.	Amount ppb ClO3 CD_1	
1,	autocal1,		04/29/08 12:13,	1.0,	n.a.	
2,	autocal2,	S1-10/5/10	04/29/08 12:38,	1.0,	9.9844	
3,	autocal3,	S2-20/10/20	04/29/08 13:04,	1.0,	18.9759	
4,	autocal4,	S3-100/50/100	04/29/08 13:29,	1.0,	96.8114	
5,	autocal5,	S4-200/100/200	04/29/08 13:55,	1.0,	201.7633	
6,	autocal6,	S5-400/200/400	04/29/08 14:20,	1.0,	406.7933	
7,	autocal7,	S6-800/400/800	04/29/08 14:45,	1.0,	796.5869	
8,	MCV,	200/100/200	05/11/08 19:14,	1.0,	205.4258	103%
9,	CCB,		05/11/08 19:39,	1.0,	n.a.	
10,	MRLCHK,	S1-10/5/10	05/11/08 20:05,	1.0,	7.6457	DNR
11,	MBLK,		05/11/08 20:30,	1.0,	n.a.	
12,	MRLCHK,	S1-10/5/10	05/11/08 20:56,	1.0,	12.0412	120%
13,	LCS1,	200/100/200	05/11/08 21:21,	1.0,	199.4332	99.7%
14,	LCS2,	200/100/200	05/11/08 21:46,	1.0,	200.7258	100%
15,	2805090137_1/50000,	CLO39056	05/11/08 22:12,	50000.0,	8149250	
16,	2805090138_1/1000,	CLO39056	05/11/08 22:37,	1000.0,	233088.1	
17,	2805090181_1/500,	CLO39056	05/11/08 23:03,	500.0,	82142.75	
18,	2805090184_1/100,	CLO39056	05/11/08 23:28,	100.0,	22219.63	
19,	2805090185_1/100,	CLO39056	05/11/08 23:53,	100.0,	28677.6	
20,	2805080422,	BR	05/12/08 00:19,	1.0,	n.a.	
21,	2805080422-MS,	100/50/100	05/12/08 00:44,	1.0,	99.9819	100%
22,	2805080422-MSD,	100/50/100	05/12/08 01:10,	1.0,	90.9699	91.0%
23,	2805090058,	BR/CLO2	05/12/08 01:35,	1.0,	n.a.	
24,	2805080993_1/500 DN	CLO39056	05/12/08 02:00,	500.0,	n.a.	DNR
25,	2805080999,	CLO39056	05/12/08 02:26,	1.0,	n.a.	
26,	2805080167,	BR	05/12/08 02:51,	1.0,	n.a.	
27,	MCV,	200/100/200	05/12/08 03:17,	1.0,	207.6118	104%
28,	CCB,		05/12/08 03:42,	1.0,	n.a.	
29,	2805090077 DNR,	BR	05/12/08 04:07,	1.0,	n.a.	DNR
30,	2805090085,	BR	05/12/08 04:33,	1.0,	n.a.	
31,	2805090085-MS,	100/50/100	05/12/08 04:58,	1.0,	90.962	91.0%
32,	2805090085-MSD,	100/50/100	05/12/08 05:24,	1.0,	90.5409	90.5%
33,	HCV,	800/400/800	05/12/08 05:49,	1.0,	831.0244	104%
34,	CCB,		05/12/08 06:14,	1.0,	n.a.	
35,	STOP,		05/12/08 06:40,	1.0,	n.a.	

JB MM
5/14/08

Sequence: 051208-DBP-IC12
Operator: clv

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2008\MAY
Timebase: IC12
#Samples: 35

Created: 5/11/2008 4:49:40 PM by clv
Last Update: 5/12/2008 5:51:24 PM by clv

No.	Name	Sample ID	Dil. Factor	Type	Comment	Program
1	autocal1		1.0000	Standard		IC12 test Program
2	autocal2	CLV080429-1	1.0000	Standard	S1-10/5/10	IC12 test Program
3	autocal3	CLV080429-2	1.0000	Standard	S2-20/10/20	IC12 test Program
4	autocal4	CLV080429-3	1.0000	Standard	S3-100/50/100	IC12 test Program
5	autocal5	CLV080429-4	1.0000	Standard	S4-200/100/200	IC12 test Program
6	autocal6	CLV080429-5	1.0000	Standard	S5-400/200/400	IC12 test Program
7	autocal7	CLV080429-6	1.0000	Standard	S6-800/400/800	IC12 test Program
8	MCV	200/100/200	1.0000	Unknown	200/100/200	IC12 test Program
9	CCB		1.0000	Unknown		IC12 test Program
10	MRLCHK	S1-10/5/10	1.0000	Unknown	S1-10/5/10	IC12 test Program
11	MBLK		1.0000	Unknown		IC12 test Program
12	MRLCHK	S1-10/5/10	1.0000	Unknown	S1-10/5/10	IC12 test Program
13	LCS1	CLV080415	1.0000	Unknown	200/100/200	IC12 test Program
14	LCS2	200/100/200	1.0000	Unknown	200/100/200	IC12 test Program
15	2805090137_1/50000	KM M36	50000.0000	Unknown	CLO39056	IC12 test Program
16	2805090138_1/1000	KM M10	1000.0000	Unknown	CLO39056	IC12 test Program
17	2805090181_1/500	KM PC4	500.0000	Unknown	CLO39056	IC12 test Program
18	2805090184_1/100	KM PC2	100.0000	Unknown	CLO39056	IC12 test Program
19	2805090185_1/100	KM PC2D	100.0000	Unknown	CLO39056	IC12 test Program
20	2805080422	[redacted]	1.0000	Unknown	BR	IC12 test Program
21	2805080422-MS	100/50/100	1.0000	Unknown	100/50/100	IC12 test Program
22	2805080422-MSD	100/50/100	1.0000	Unknown	100/50/100	IC12 test Program
23	2805090058	[redacted]	1.0000	Unknown	BR/CLO2	IC12 test Program
24	2805080993_1/500 DNR	KM PC82	500.0000	Unknown	CLO39056	IC12 test Program
25	2805080999	KM EB	1.0000	Unknown	CLO39056	IC12 test Program
26	2805080167	[redacted]	1.0000	Unknown	BR	IC12 test Program
27	MCV	200/100/200	1.0000	Unknown	200/100/200	IC12 test Program
28	CCB		1.0000	Unknown		IC12 test Program
29	2805090077 DNR	[redacted]	1.0000	Unknown	BR	IC12 test Program
30	2805090085	[redacted]	1.0000	Unknown	BR	IC12 test Program
31	2805090085-MS	100/50/100	1.0000	Unknown	100/50/100	IC12 test Program
32	2805090085-MSD	100/50/100	1.0000	Unknown	100/50/100	IC12 test Program
33	HCV	800/400/800	1.0000	Unknown	800/400/800	IC12 test Program
34	CCB		1.0000	Unknown		IC12 test Program
35	STOP		1.0000	Unknown		DPB Stop Program

Sequence: 051208-DBP-IC12
Operator: clv

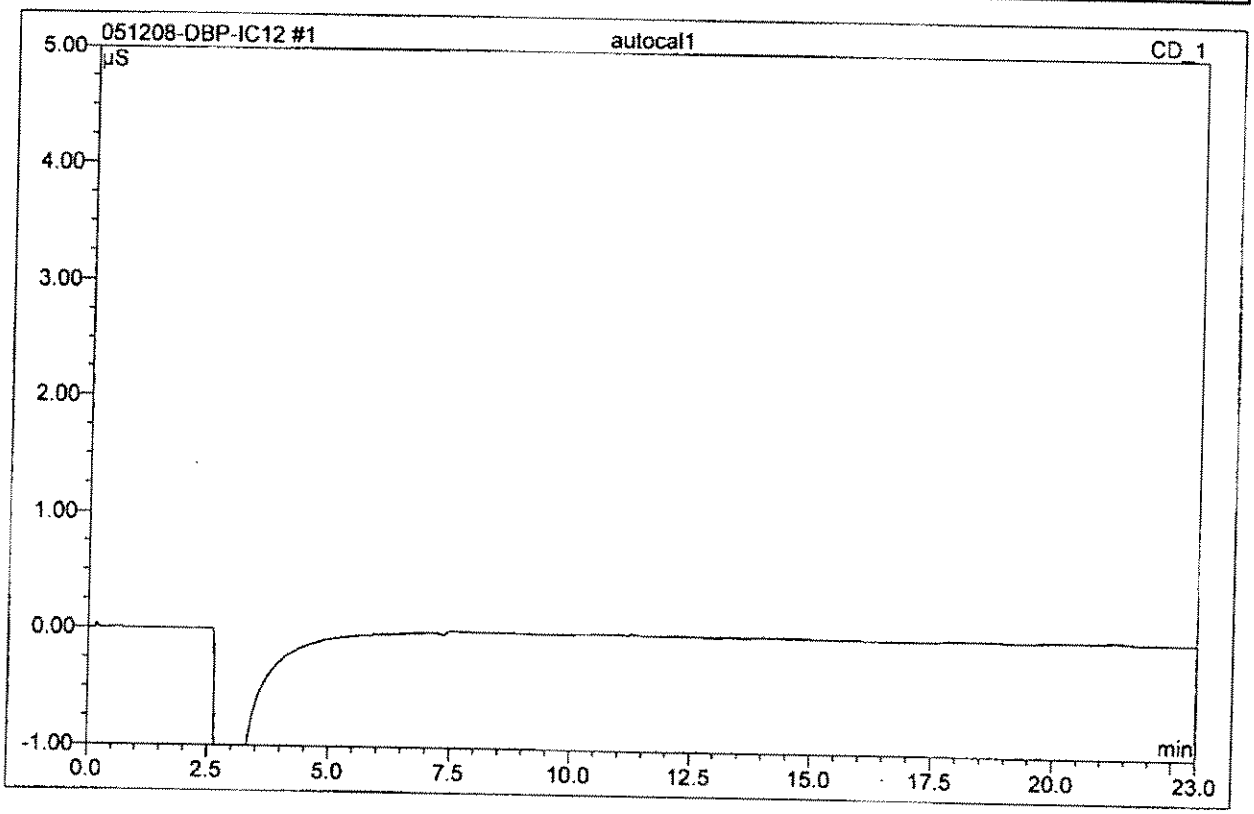
Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2008\MAY
Timebase: IC12
#Samples: 35

Created: 5/11/2008 4:49:40 PM by clv
Last Update: 5/12/2008 5:51:24 PM by clv

No.	Name	Method	Status	Inj. Date/Time	*Analyst
1	autocal1	DBP-Method	Finished	4/29/2008 12:13:30 PM	clv
2	autocal2	DBP-Method	Finished	4/29/2008 12:38:54 PM	clv
3	autocal3	DBP-Method	Finished	4/29/2008 1:04:17 PM	clv
4	autocal4	DBP-Method	Finished	4/29/2008 1:29:44 PM	clv
5	autocal5	DBP-Method	Finished	4/29/2008 1:55:07 PM	clv
6	autocal6	DBP-Method	Finished	4/29/2008 2:20:32 PM	clv
7	autocal7	DBP-Method	Finished	4/29/2008 2:45:56 PM	clv
8	MCV	DBP-Method	Finished	5/11/2008 7:14:34 PM	clv
9	CCB	DBP-Method	Finished	5/11/2008 7:39:58 PM	clv
10	MRLCHK	DBP-Method	Finished	5/11/2008 8:05:22 PM	clv
11	MBLK	DBP-Method	Finished	5/11/2008 8:30:45 PM	clv
12	MRLCHK	DBP-Method	Finished	5/11/2008 8:56:09 PM	clv
13	LCS1	DBP-Method	Finished	5/11/2008 9:21:33 PM	clv
14	LCS2	DBP-Method	Finished	5/11/2008 9:46:57 PM	clv
15	2805090137_1/50000	DBP-Method	Finished	5/11/2008 10:12:21 PM	clv
16	2805090138_1/1000	DBP-Method	Finished	5/11/2008 10:37:45 PM	clv
17	2805090181_1/500	DBP-Method	Finished	5/11/2008 11:03:09 PM	clv
18	2805090184_1/100	DBP-Method	Finished	5/11/2008 11:28:32 PM	clv
19	2805090185_1/100	DBP-Method	Finished	5/11/2008 11:53:56 PM	clv
20	2805080422	DBP-Method	Finished	5/12/2008 12:19:20 AM	clv
21	2805080422-MS	DBP-Method	Finished	5/12/2008 12:44:44 AM	clv
22	2805080422-MSD	DBP-Method	Finished	5/12/2008 1:10:08 AM	clv
23	2805090058	DBP-Method	Finished	5/12/2008 1:35:31 AM	clv
24	2805080993_1/500 DNR	DBP-Method	Finished	5/12/2008 2:00:55 AM	clv
25	2805080999	DBP-Method	Finished	5/12/2008 2:26:18 AM	clv
26	2805080167	DBP-Method	Finished	5/12/2008 2:51:42 AM	clv
27	MCV	DBP-Method	Finished	5/12/2008 3:17:06 AM	clv
28	CCB	DBP-Method	Finished	5/12/2008 3:42:30 AM	clv
29	2805090077 DNR	DBP-Method	Finished	5/12/2008 4:07:54 AM	clv
30	2805090085	DBP-Method	Finished	5/12/2008 4:33:17 AM	clv
31	2805090085-MS	DBP-Method	Finished	5/12/2008 4:58:41 AM	clv
32	2805090085-MSD	DBP-Method	Finished	5/12/2008 5:24:05 AM	clv
33	HCV	DBP-Method	Finished	5/12/2008 5:49:29 AM	clv
34	CCB	DBP-Method	Finished	5/12/2008 6:14:53 AM	clv
35	STOP	DBP-Method	Interrupted	5/12/2008 6:40:17 AM	clv

1 autocal1

Sample Name:	**autocal1**	*Injection Volume:*	**1000.0**
Vial Number:	**334**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 12:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

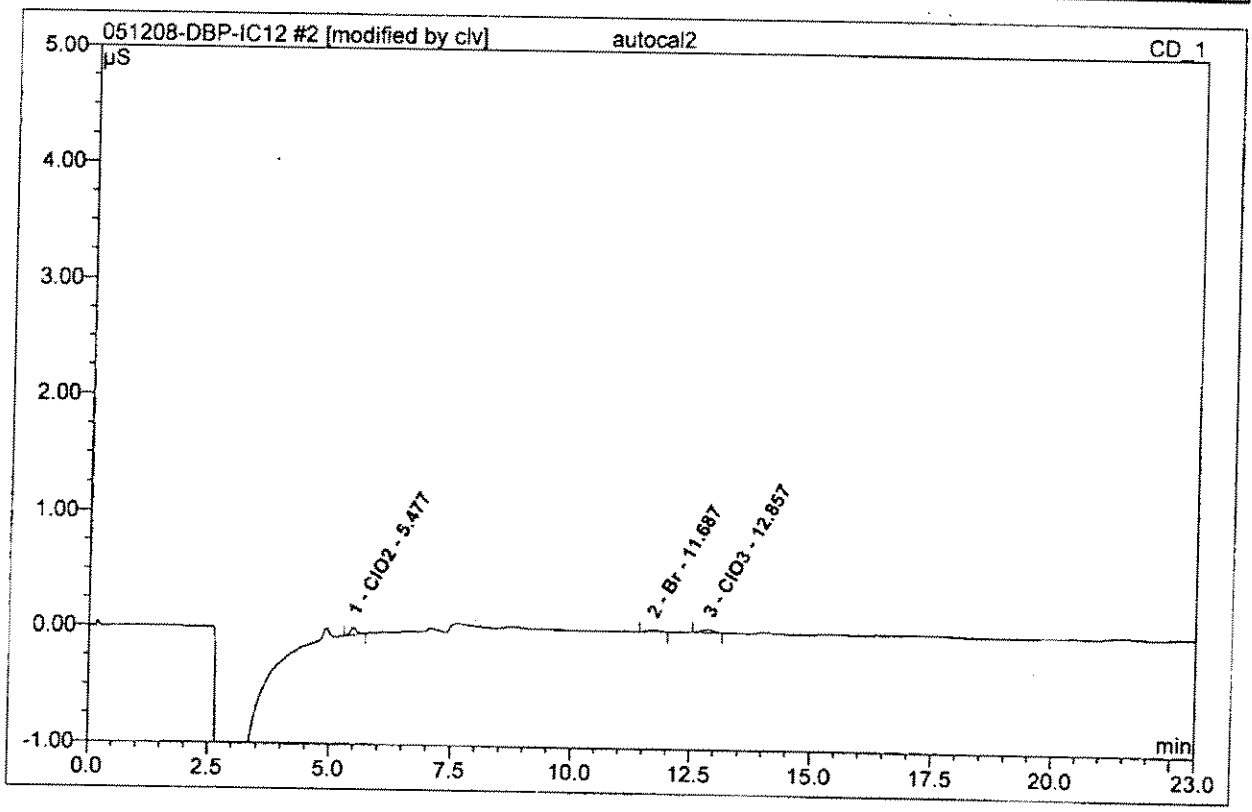


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

2 autocal2

S1-10/5/10

Sample Name:	**autocal2**	*Injection Volume:*	**1000.0**
Vial Number:	**335**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

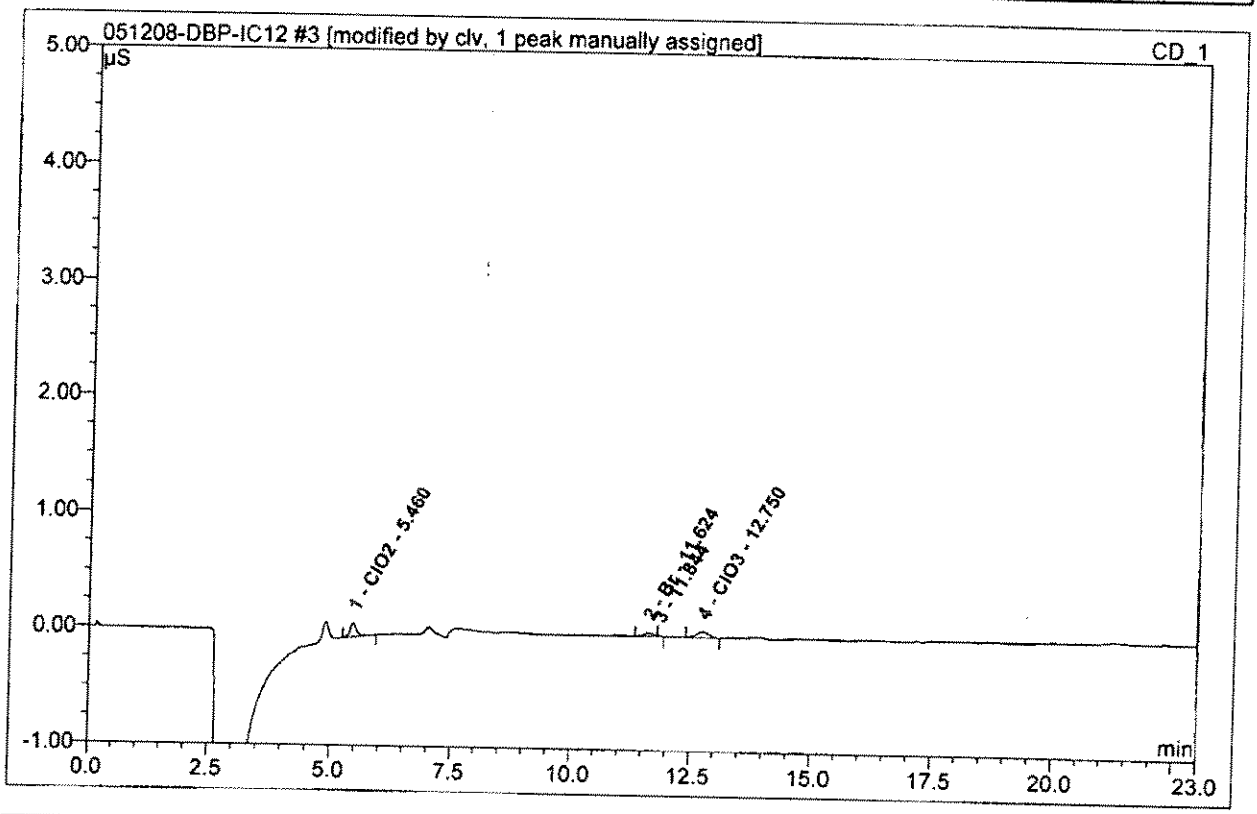


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.48	ClO2	0.061	0.009	43.11	9.846	BMB
2	11.69	Br	0.017	0.004	21.27	5.460	BMB*
3	12.86	ClO3	0.026	0.007	35.62	9.984	BMB*
Total:			0.104	0.021	100.00	25.290	

3 autocal3

S2-20/10/20

Sample Name:	**autocal3**	*Injection Volume:*	**1000.0**
Vial Number:	**336**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 13:04**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

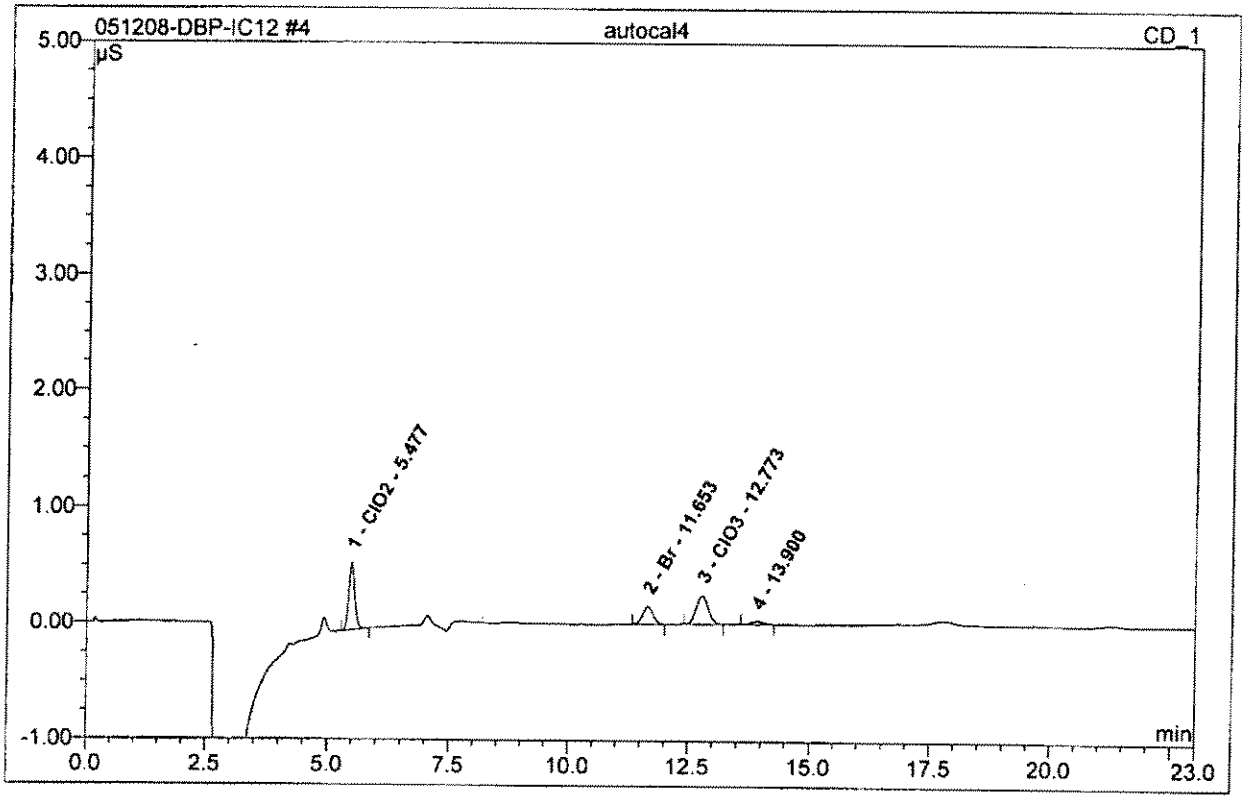


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.46	ClO2	0.119	0.019	45.70	20.235	BMB
2	11.62	Br	0.031	0.007	18.30	9.108	BMB*^
3	11.84	n.a.	0.011	0.000	1.09	n.a.	Rd*
4	12.75	ClO3	0.050	0.014	34.91	18.976	BMB
Total:			0.210	0.041	100.00	48.319	

4 autocal4

S3-100/50/100

Sample Name:	**autocal4**	*Injection Volume:*	**1000.0**
Vial Number:	**337**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 13:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

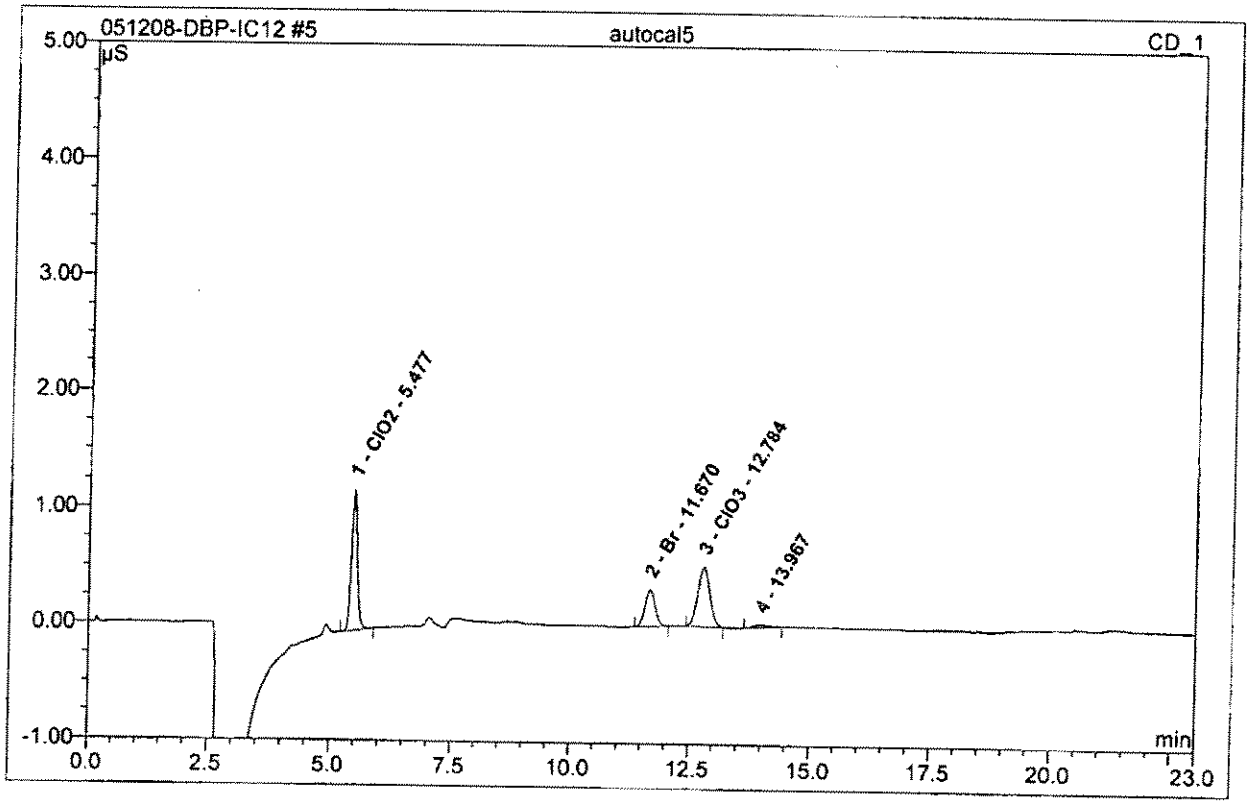


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.48	ClO2	0.583	0.083	40.98	90.671	BMB
2	11.65	Br	0.156	0.040	19.53	48.567	BMB
3	12.77	ClO3	0.249	0.073	35.65	96.811	BMB
4	13.90	n.a.	0.026	0.008	3.84	n.a.	BMB
Total:			1.014	0.204	100.00	236.050	

5 autocal5

S4-200/100/200

Sample Name:	**autocal5**	*Injection Volume:*	**1000.0**
Vial Number:	**338**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 13:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

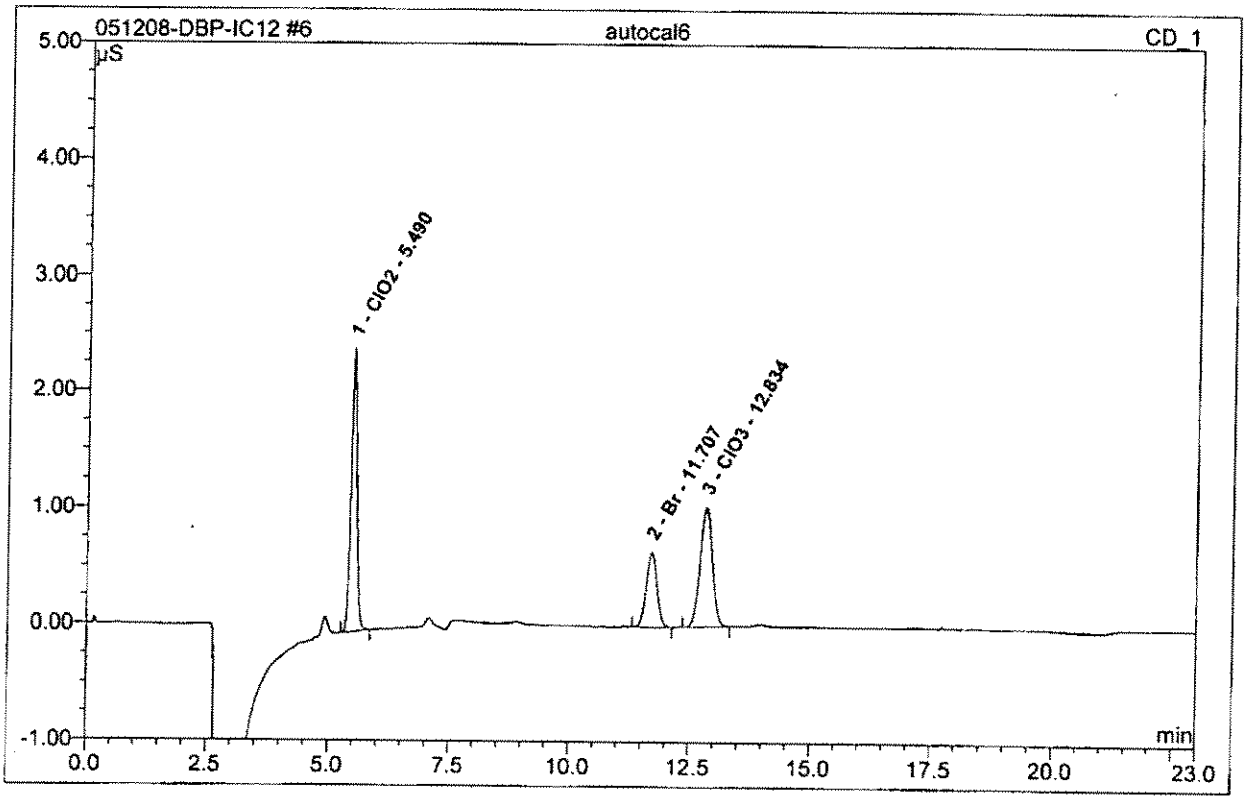


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.48	ClO2	1.211	0.173	41.76	188.101	BMB
2	11.67	Br	0.319	0.081	19.65	99.493	BMB
3	12.78	ClO3	0.516	0.151	36.50	201.763	BMB
4	13.97	n.a.	0.024	0.009	2.09	n.a.	BMB
Total:			2.071	0.414	100.00	489.357	

6 autocal6

S5-400/200/400

Sample Name:	**autocal6**	*Injection Volume: .*	**1000.0**
Vial Number:	**338**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 14:20**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

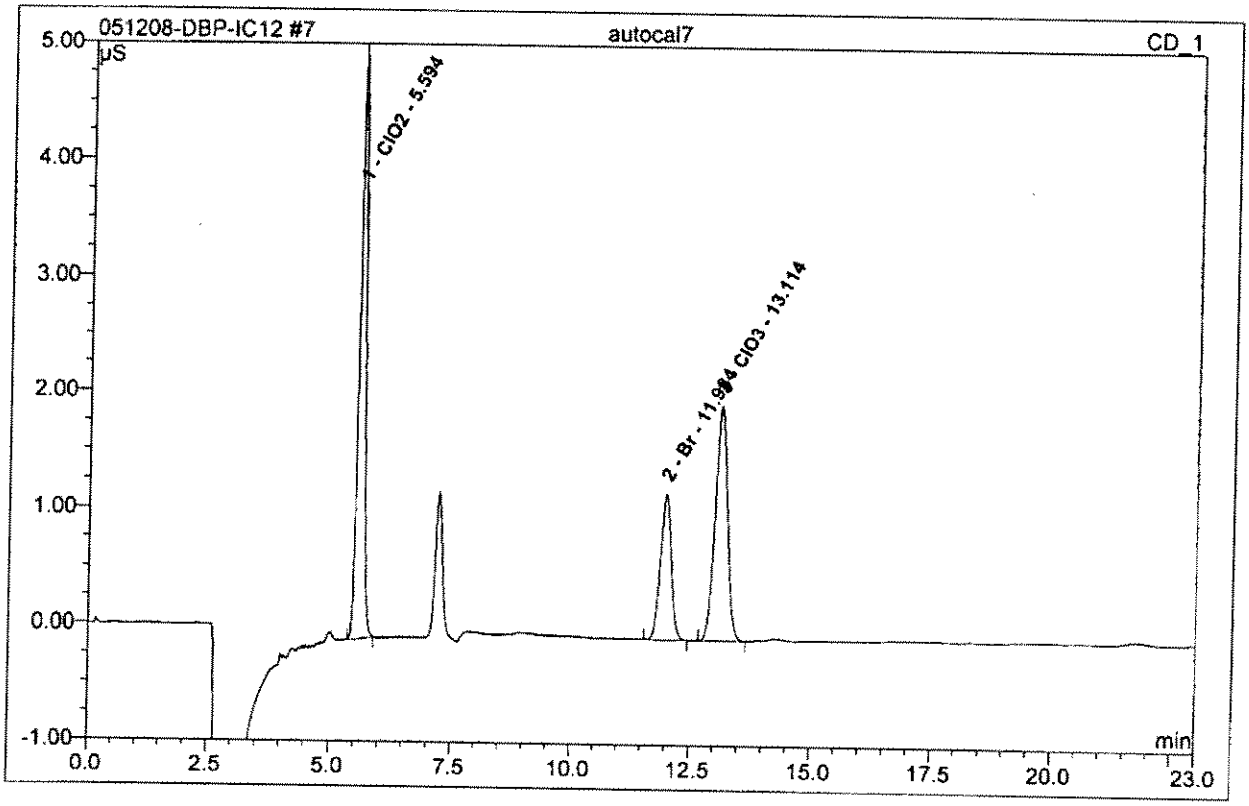


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.49	ClO2	2.430	0.347	42.32	376.735	BMB
2	11.71	Br	0.641	0.168	20.45	204.620	BMB
3	12.83	ClO3	1.030	0.305	37.23	406.793	BMB
Total:			4.101	0.819	100.00	988.148	

7 autocal7

S6-800/400/800

Sample Name:	**autocal7**	*Injection Volume:*	**1000.0**
Vial Number:	**334**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 14:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

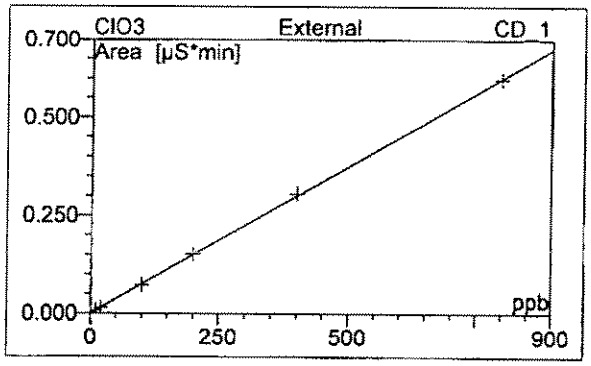


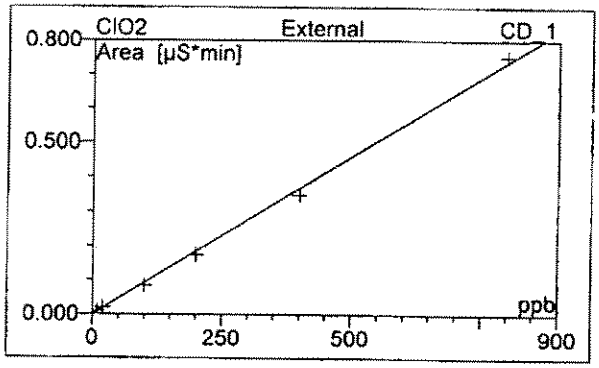
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.59	ClO2	5.102	0.751	44.85	815.770	BMB
2	11.98	Br	1.250	0.326	19.47	398.012	BMB
3	13.11	ClO3	2.018	0.597	35.68	796.587	BMB
Total:			8.371	1.674	100.00	2010.369	

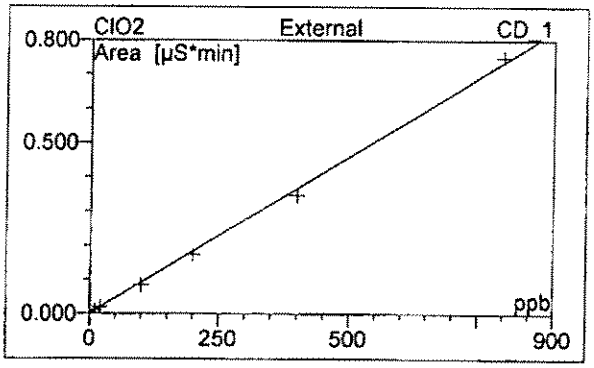
7 autocal7

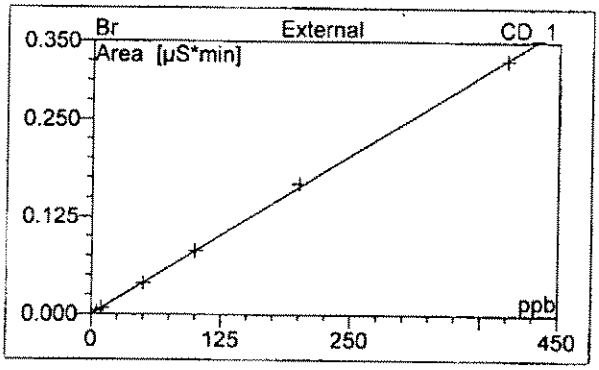
S6-800/400/800

Sample Name:	**autocal7**	*Injection Volume:*	**1000.0**
Vial Number:	**334**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**4/29/2008 14:45**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**







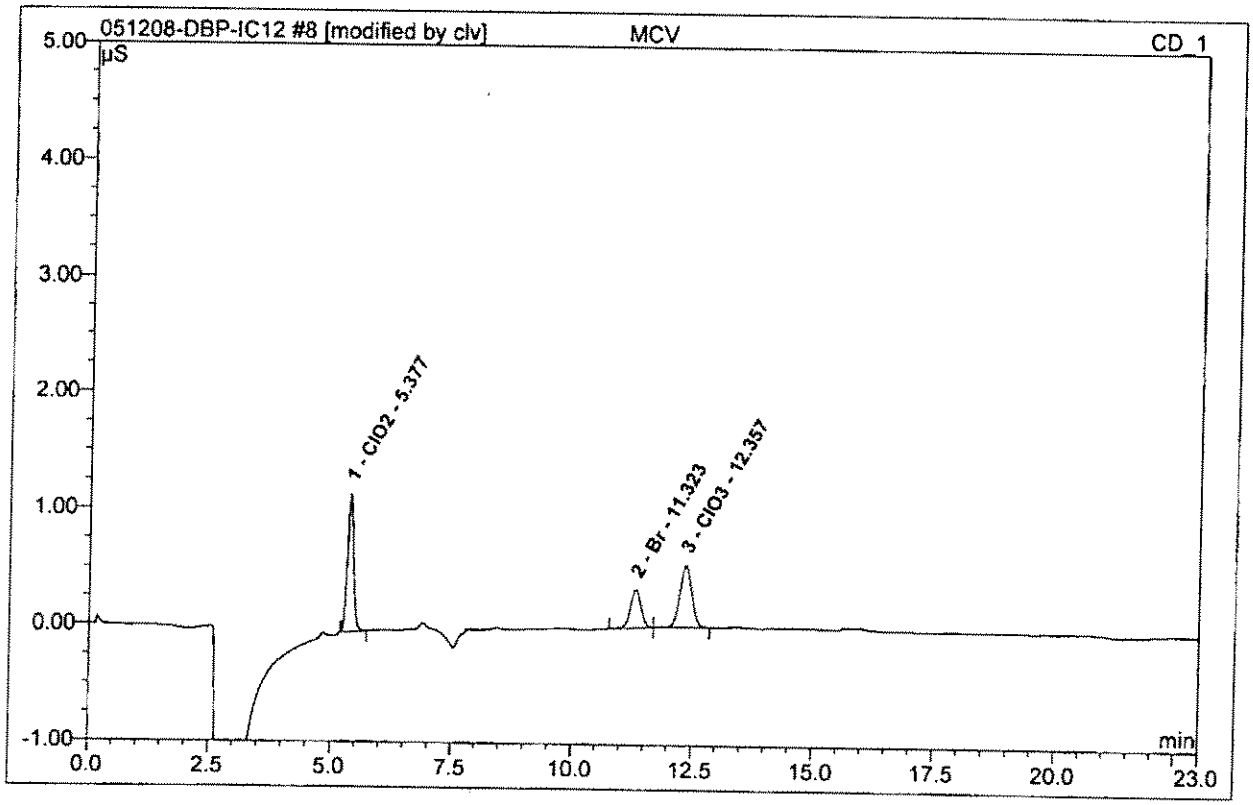


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	5.59	ClO2	Lin	6	99.9195	0.0000	0.0009	0.0000
2	11.98	Br	Lin	6	99.9876	0.0000	0.0008	0.0000
3	13.11	ClO3	Lin	6	99.9922	0.0000	0.0007	0.0000
Average:					99.9664	0.0000	0.0008	0.0000

8 MCV

200/100/200

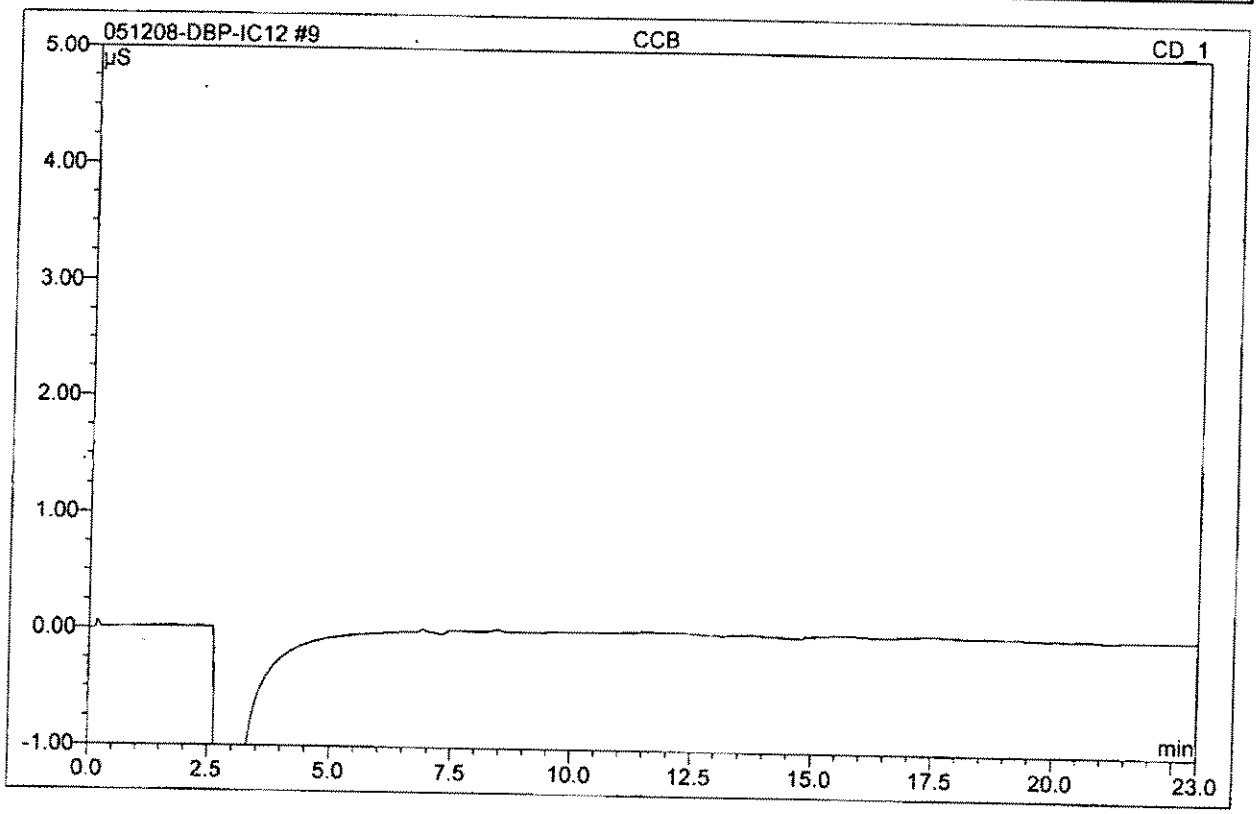
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**342**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 19:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.38	ClO2	1.185	0.173	41.93	188.332	BMB
2	11.32	Br	0.332	0.086	20.82	105.104	BMb*
3	12.36	ClO3	0.536	0.154	37.26	205.426	bMB*
Total:			2.053	0.413	100.00	498.862	

9 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**335**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 19:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

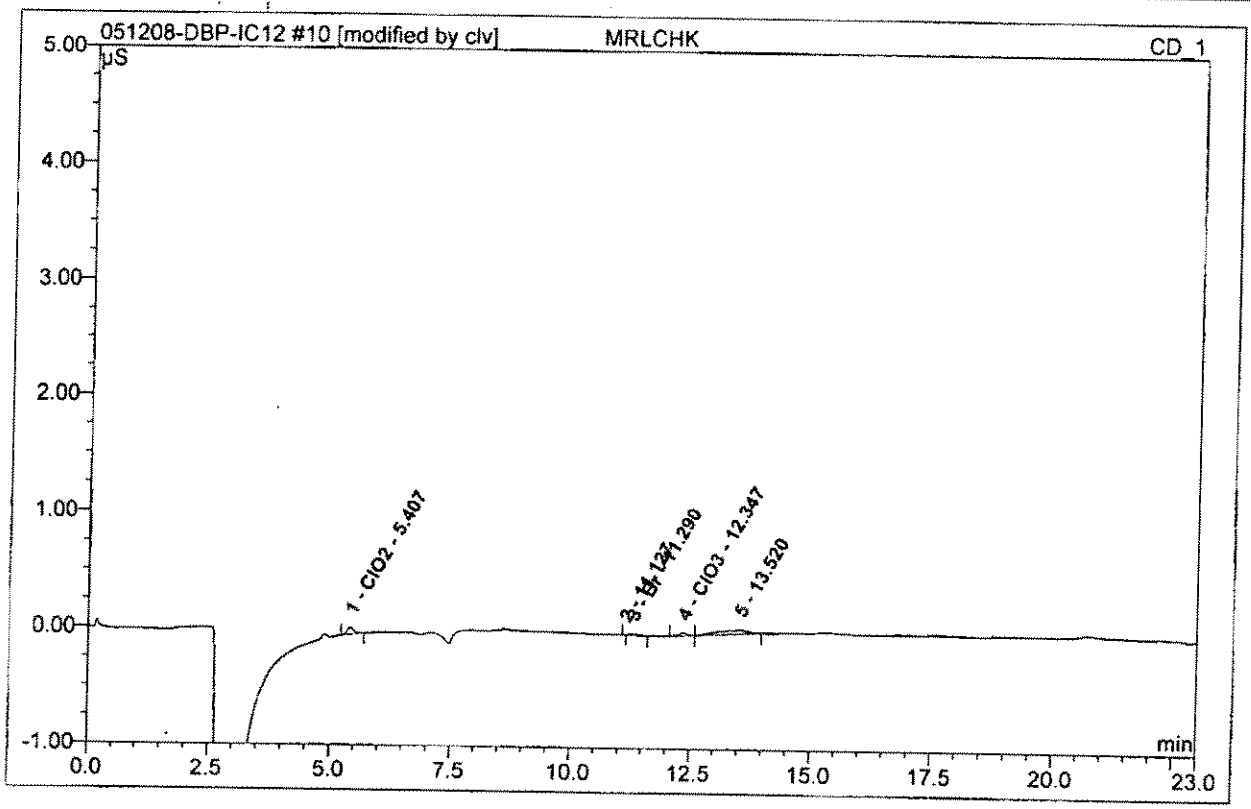


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

10 MRLCHK

S1-10/5/10

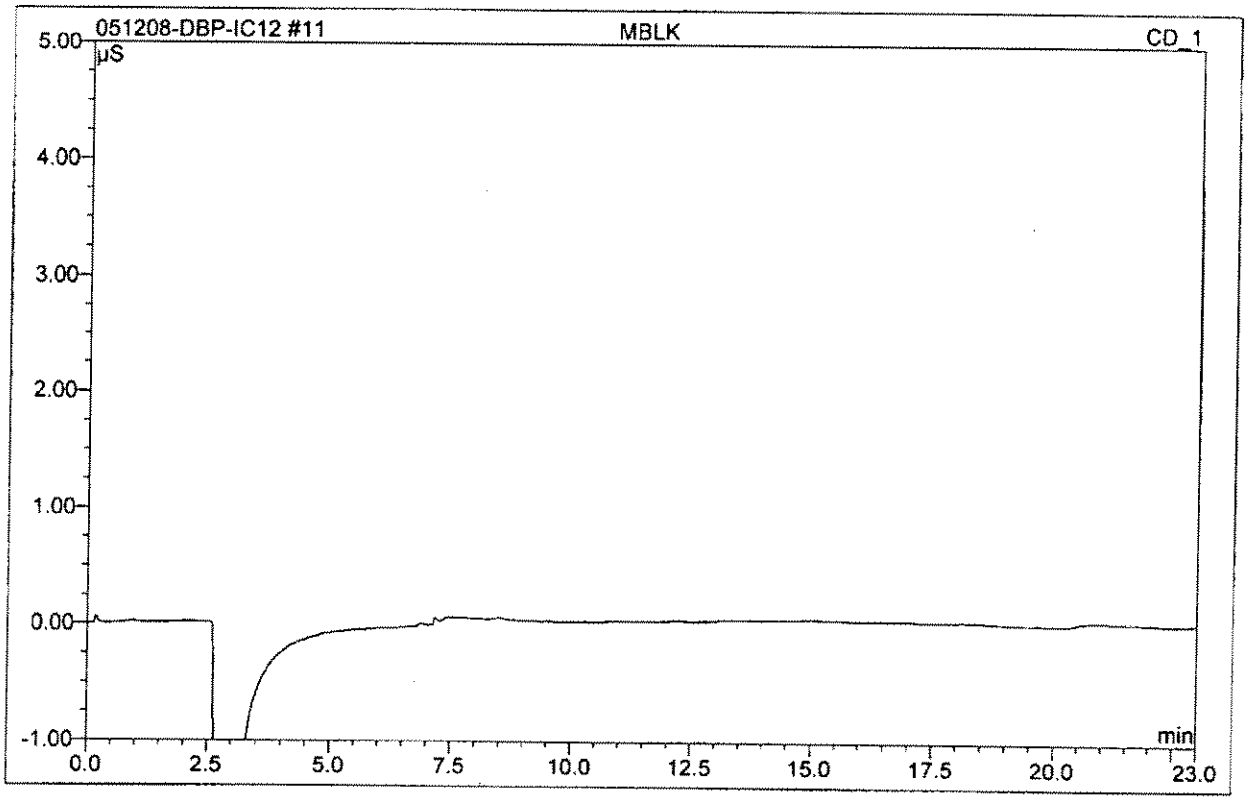
Sample Name:	**MRLCHK**	*Injection Volume:*	**1000.0**
Vial Number:	**336**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 20:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.41	ClO2	0.062	0.010	21.36	10.576	BMB
2	11.13	n.a.	0.002	0.000	0.25	n.a.	Ru*
3	11.29	Br	0.014	0.004	8.28	4.611	BMB*
4	12.35	ClO3	0.026	0.006	12.58	7.646	BMB*
5	13.52	n.a.	0.037	0.026	57.53	n.a.	BMB
Total:			0.141	0.046	100.00	22.833	

11 MBLK

Sample Name:	**MBLK**	*Injection Volume:*	**1000.0**
Vial Number:	**340**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 20:30**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

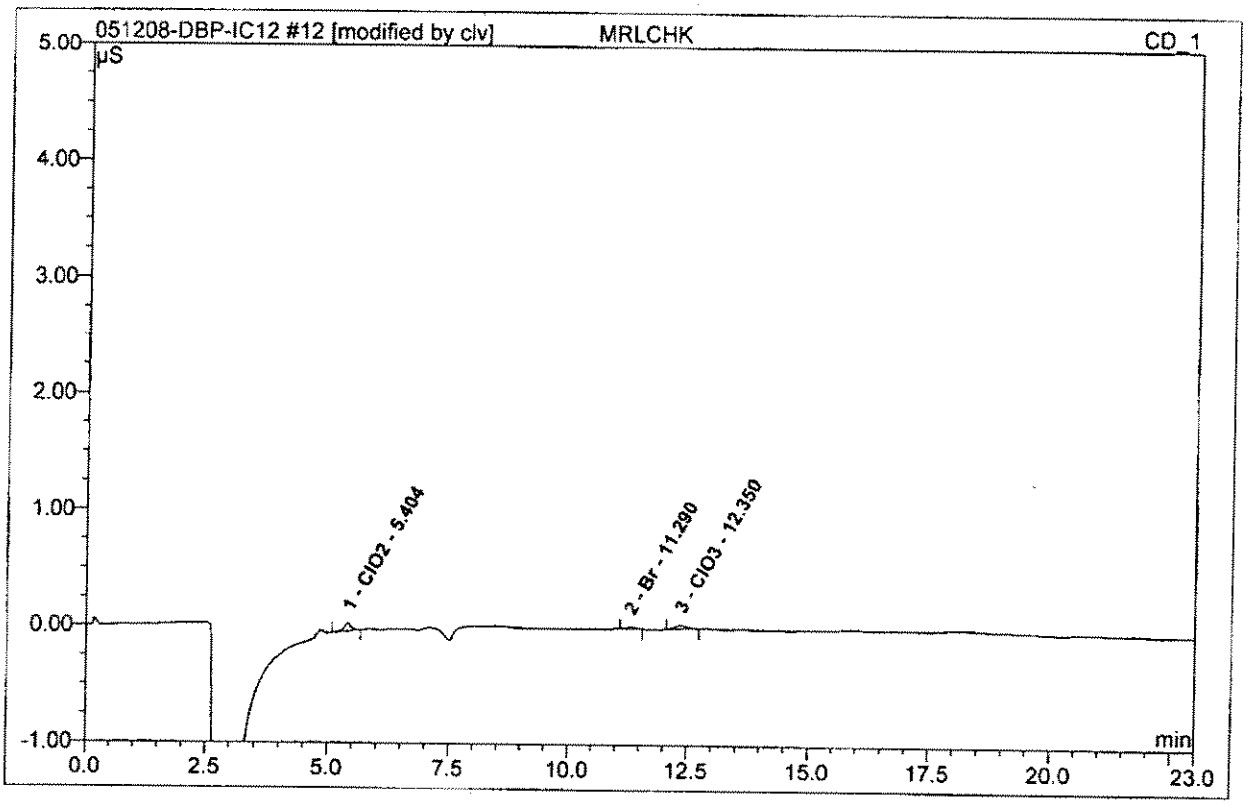


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

12 MRLCHK

S1-10/5/10

Sample Name:	**MRLCHK**	*Injection Volume:*	**1000.0**
Vial Number:	**336**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 20:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

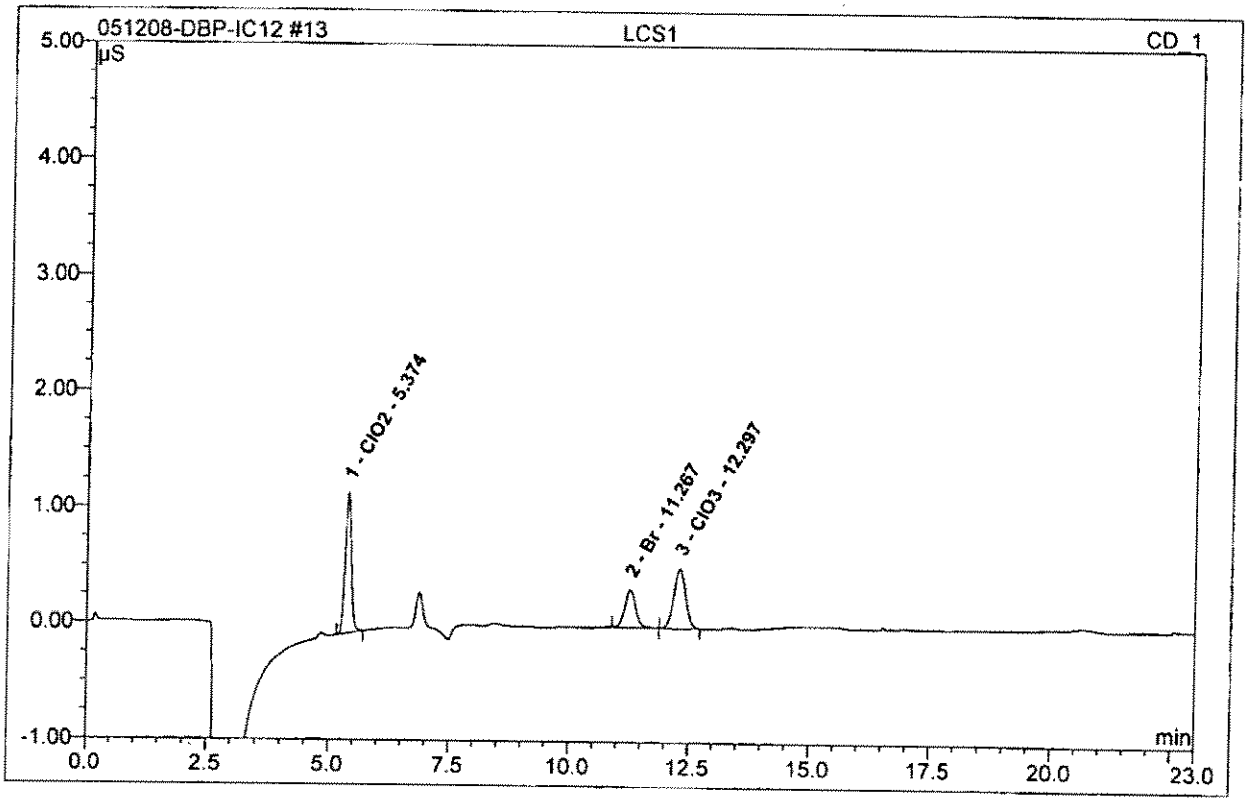


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.40	ClO2	0.064	0.011	44.55	11.818	BMB
2	11.29	Br	0.019	0.005	18.47	5.508	BMB*
3	12.35	ClO3	0.030	0.009	36.98	12.041	BMB
Total:			0.113	0.024	100.00	29.367	

13 LCS1

200/100/200

Sample Name:	**LCS1**	*Injection Volume:*	**1000.0**
Vial Number:	**336**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 21:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

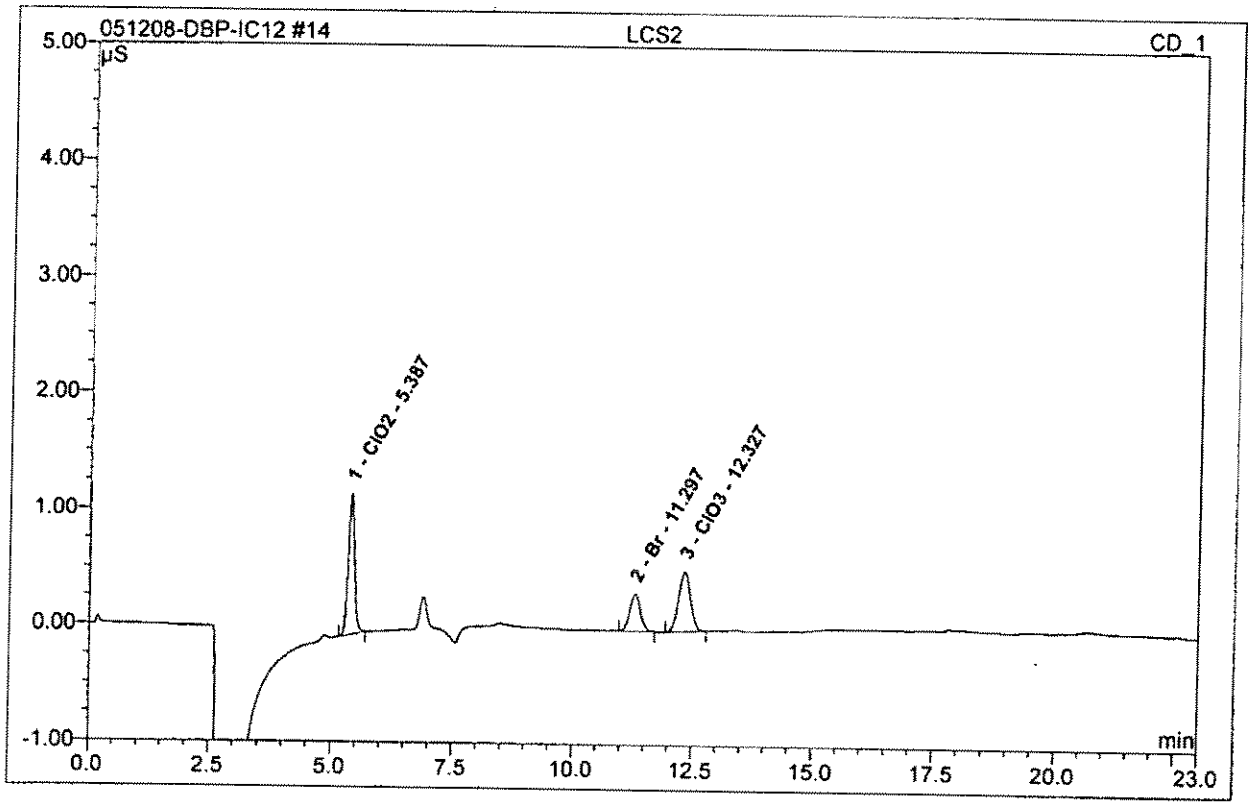


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.37	ClO2	1.213	0.177	42.77	192.503	BMB
2	11.27	Br	0.330	0.087	21.13	106.863	BM
3	12.30	ClO3	0.521	0.149	36.10	199.433	MB
Total:			2.064	0.414	100.00	498.799	

14 LCS2

200/100/200

Sample Name:	**LCS2**	*Injection Volume:*	**1000.0**
Vial Number:	**523**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/11/2008 21:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

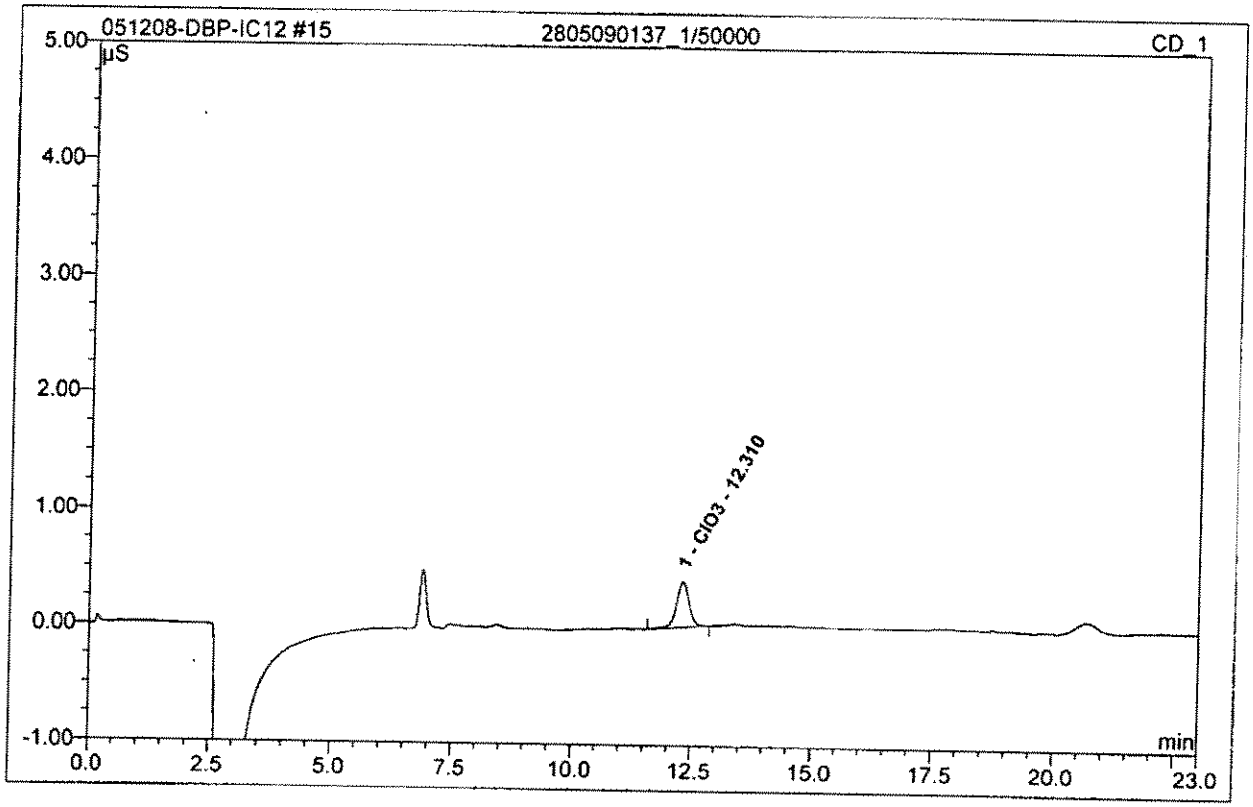


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.39	ClO2	1.215	0.182	43.81	197.458	BMB
2	11.30	Br	0.325	0.083	19.91	100.855	BMB
3	12.33	ClO3	0.522	0.150	36.28	200.726	BMB
Total:			2.061	0.415	100.00	499.039	

15 2805090137_1/50000

CLO39056

Sample Name:	**2805090137_1/50000**	*Injection Volume:*	**1000.0**
Vial Number:	**573**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**50000.0000**
Recording Time:	**5/11/2008 22:12**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

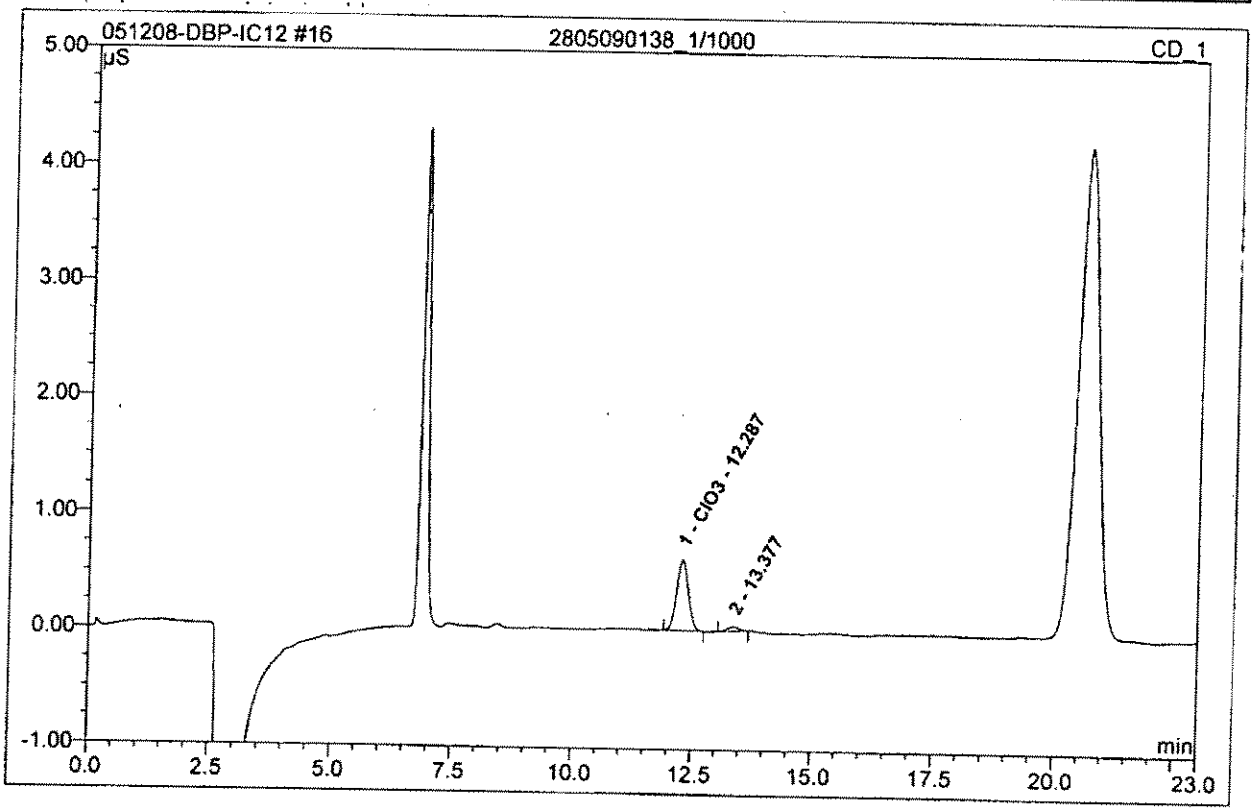


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	12.31	ClO3	0.397	0.122	100.00	8149250.258	BMB
Total:			0.397	0.122	100.00	8149250.258	

16 2805090138_1/1000

CLO39056

Sample Name:	**2805090138_1/1000**	*Injection Volume:*	**1000.0**
Vial Number:	**574**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1000.0000**
Recording Time:	**5/11/2008 22:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

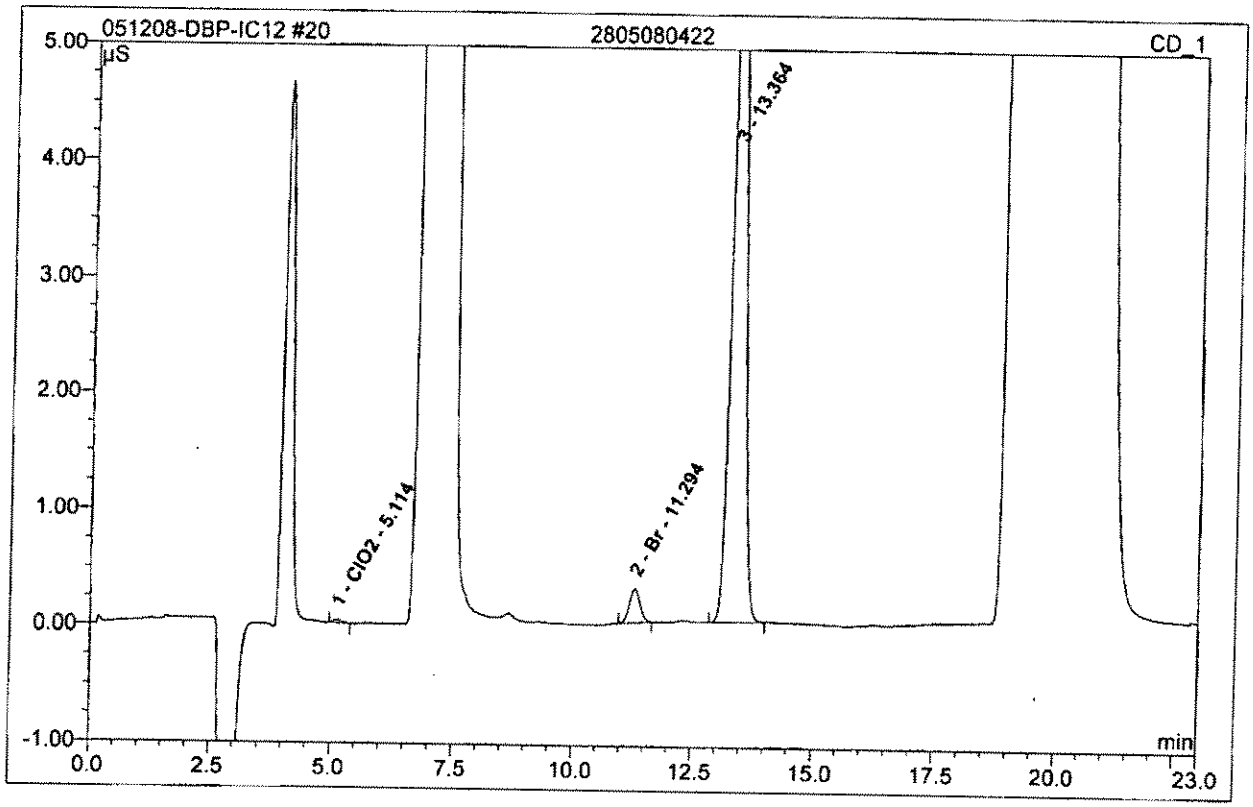


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	12.29	ClO3	0.615	0.175	94.30	233088.125	BMB
2	13.38	n.a.	0.038	0.011	5.70	n.a.	BMB
Total:			0.653	0.185	100.00	233088.125	

20 2805080422

BR

Sample Name:	**2805080422**	*Injection Volume:*	**1000.0**
Vial Number:	**573**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 0:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

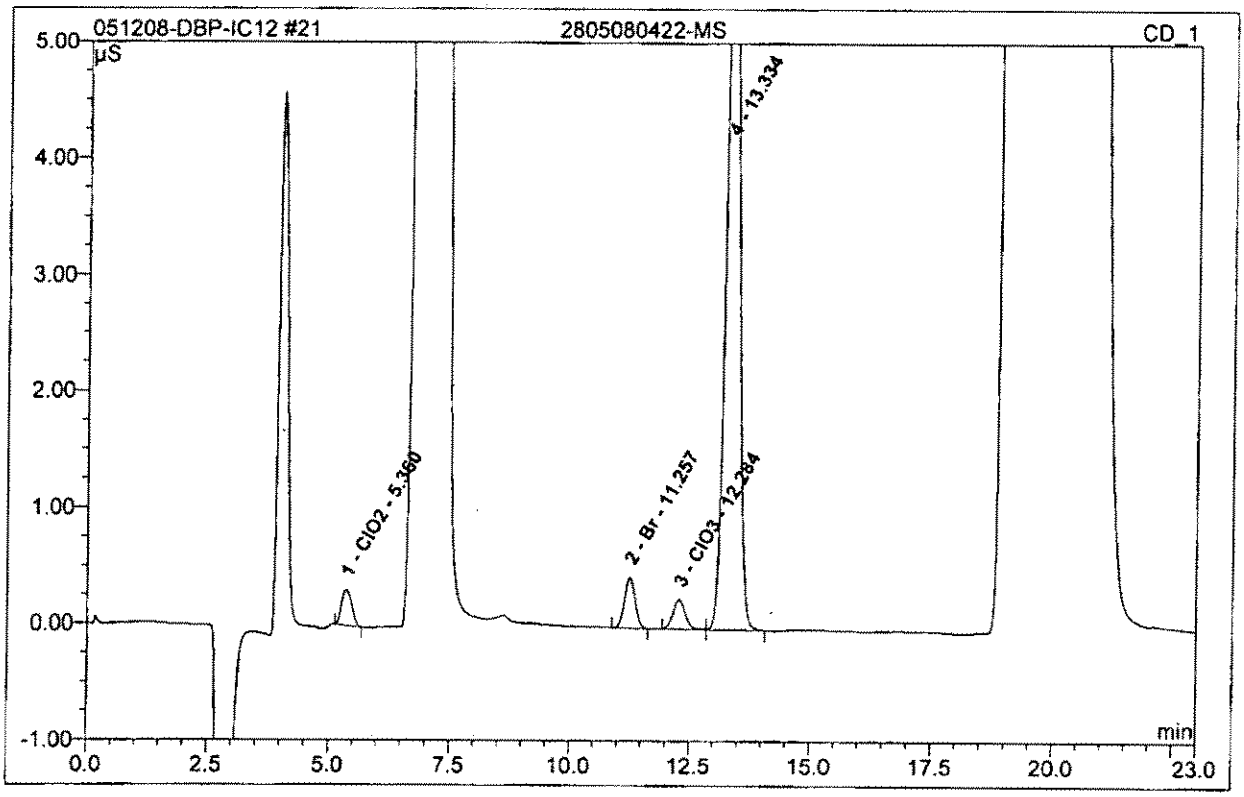


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.11	ClO2	0.030	0.006	0.28	6.763	BMB
2	11.29	Br	0.293	0.075	3.44	92.072	BMB
3	13.36	n.a.	7.074	2.108	96.27	n.a.	BMB
Total:			7.397	2.189	100.00	98.835	

21 2805080422-MS

100/50/100

Sample Name:	**2805080422-MS**	*Injection Volume:*	**1000.0**
Vial Number:	**574**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 0:44**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

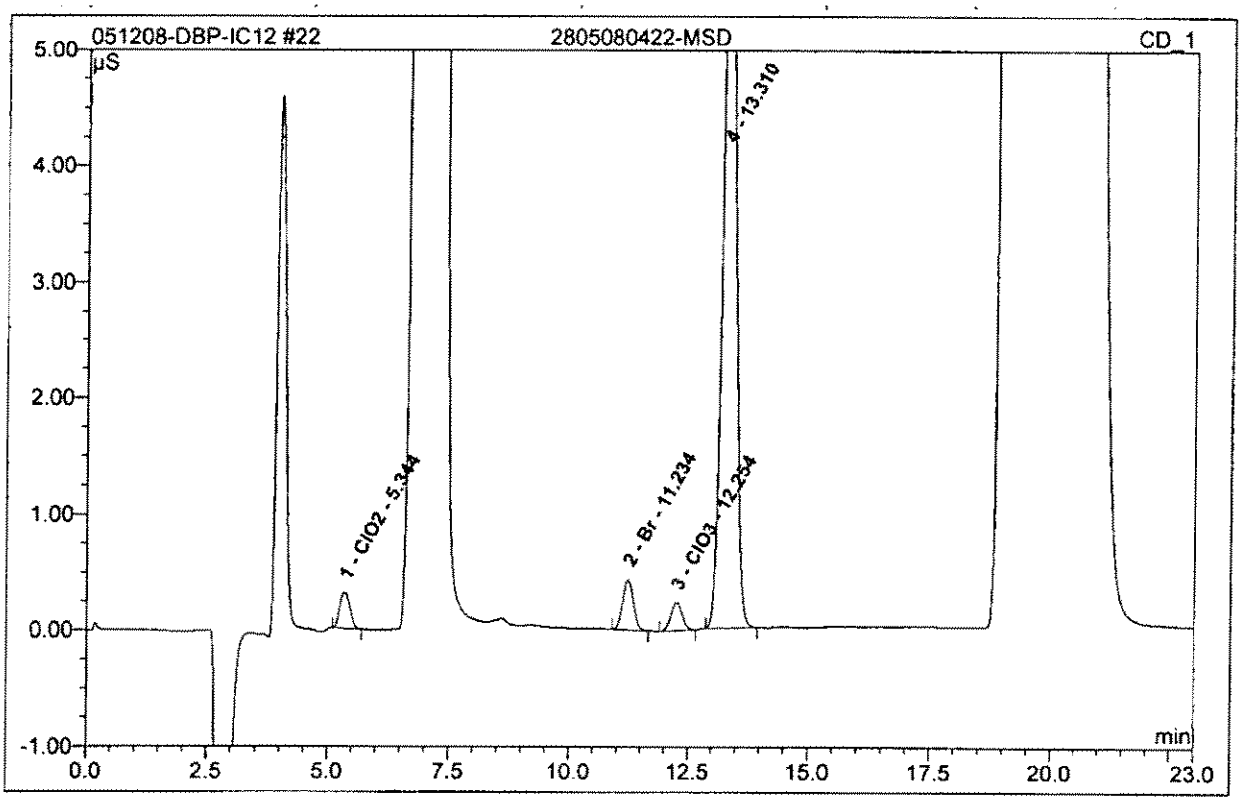


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.36	ClO2	0.310	0.076	3.21	82.354	BMB
2	11.26	Br	0.439	0.113	4.78	137.611	BMB
3	12.28	ClO3	0.256	0.075	3.18	99.982	BM
4	13.33	n.a.	6.993	2.094	88.83	n.a.	MB
Total:			7.997	2.357	100.00	319.947	

22 2805080422-MSD

100/50/100

Sample Name:	**2805080422-MSD**	*Injection Volume:*	**1000.0**
Vial Number:	**574**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 1:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

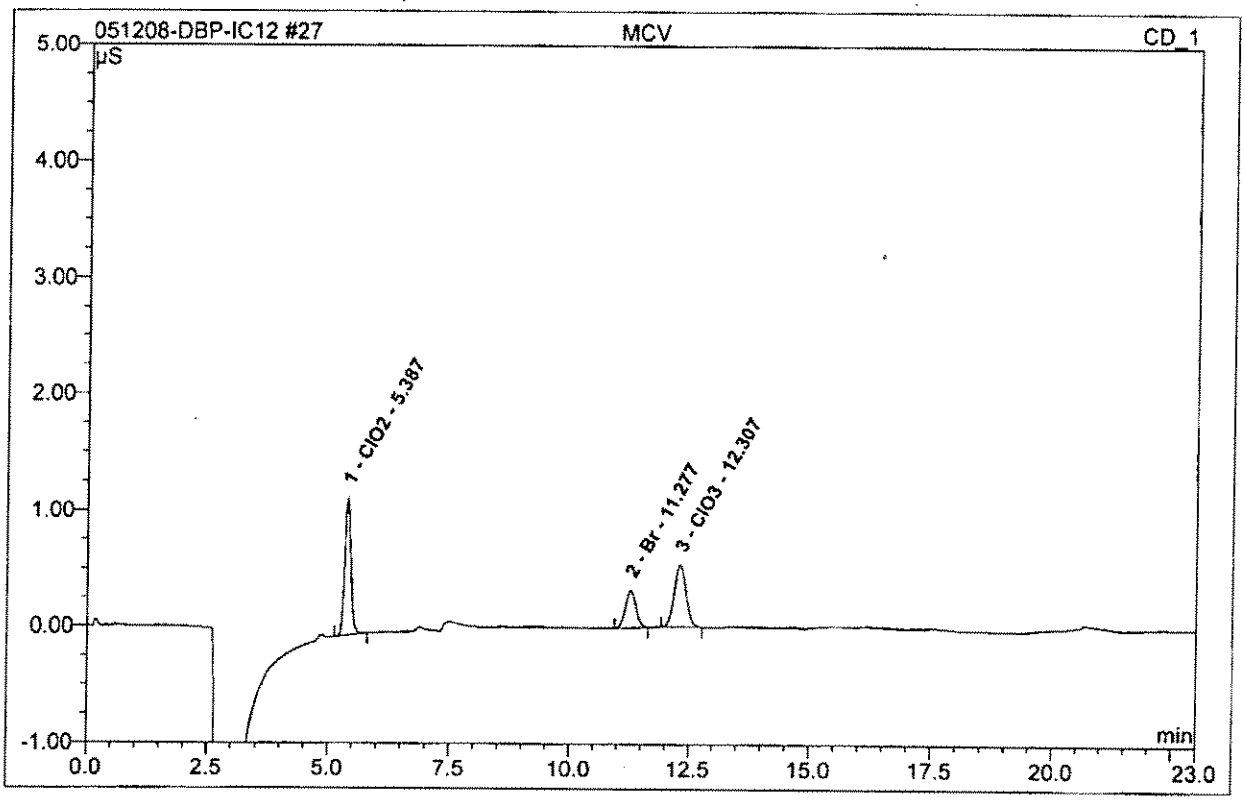


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.34	ClO2	0.314	0.078	3.29	84.440	BMB
2	11.23	Br	0.440	0.113	4.80	138.281	BMB
3	12.25	ClO3	0.244	0.068	2.89	90.970	BMB
4	13.31	n.a.	6.998	2.101	89.02	n.a.	BMB
Total:			7.997	2.360	100.00	313.691	

27 MCV

200/100/200

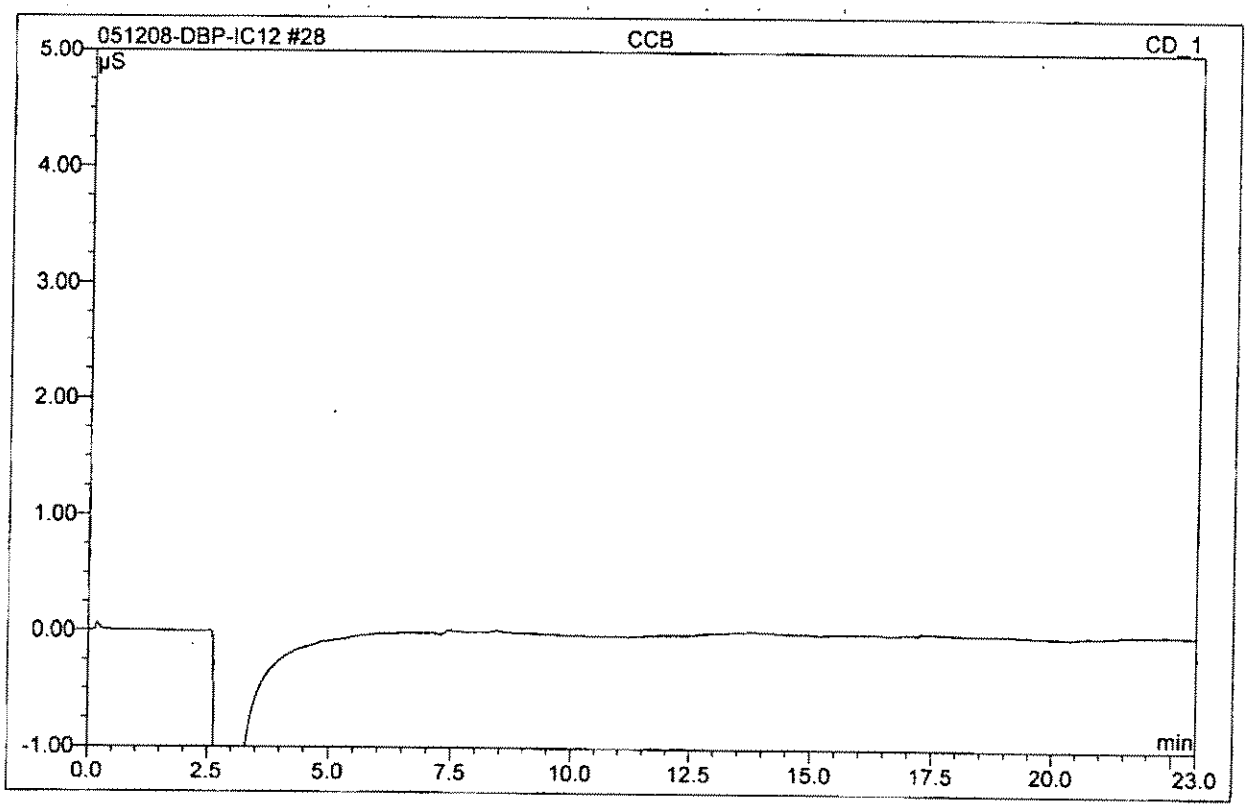
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**339**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 3:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.39	ClO2	1.188	0.174	42.14	189.383	BMB
2	11.28	Br	0.328	0.084	20.23	102.167	BMB
3	12.31	ClO3	0.537	0.156	37.64	207.612	BMB
Total:			2.053	0.414	100.00	499.162	

28 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**335**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 3:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

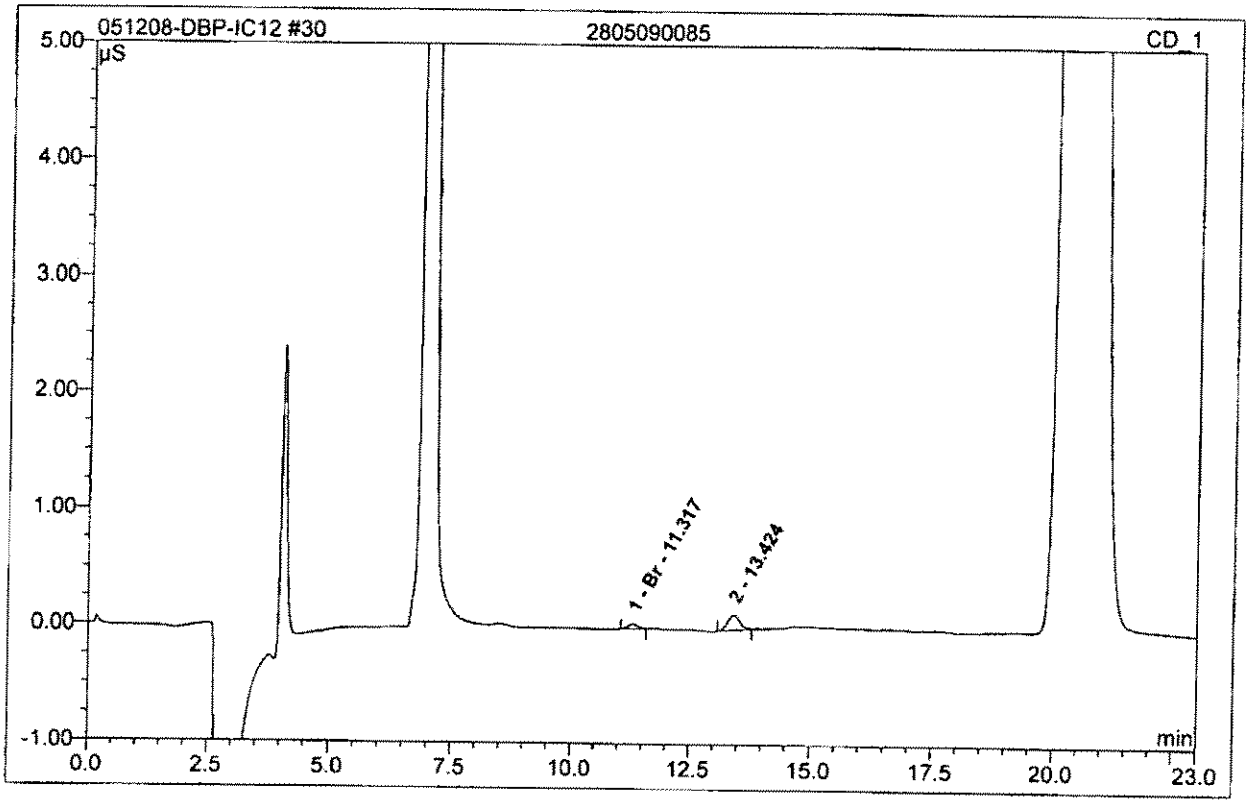


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

30 2805090085

BR

Sample Name:	**2805090085**	*Injection Volume:*	**1000.0**
Vial Number:	**571**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 4:33**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

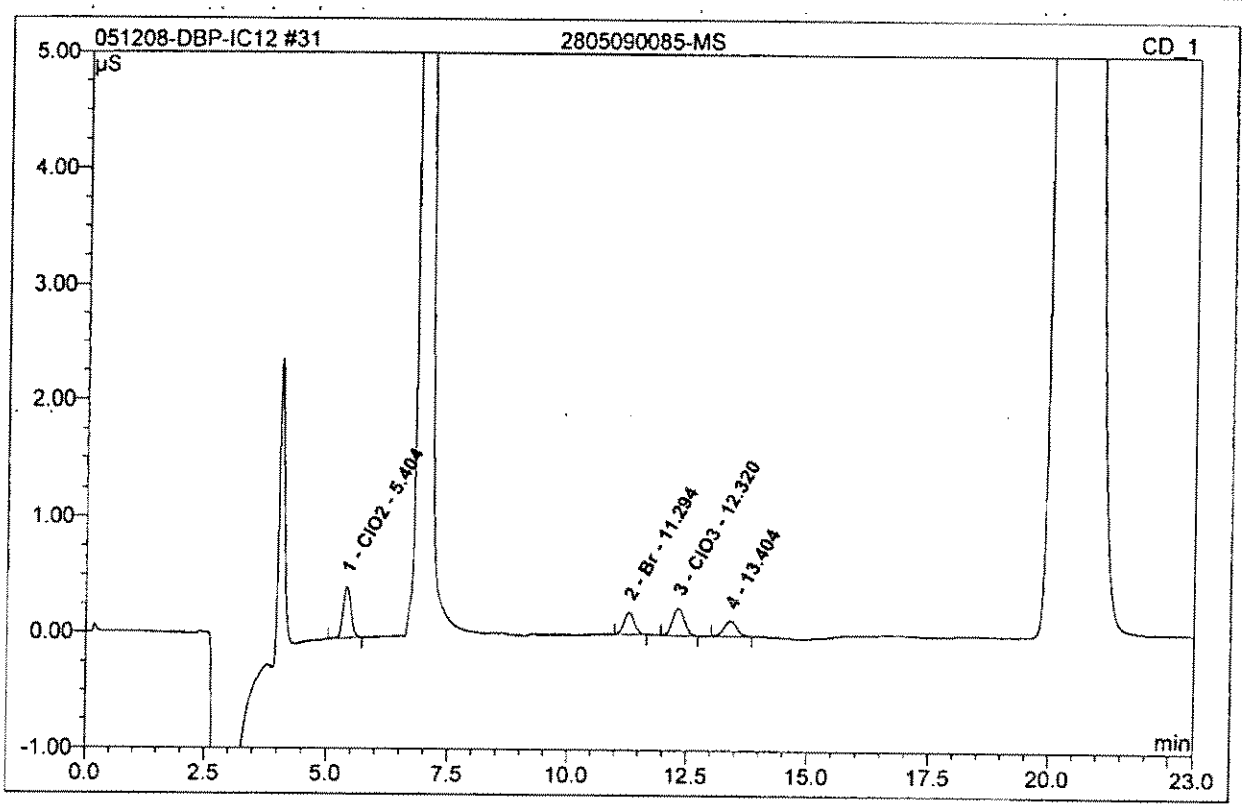


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	11.32	Br	0.040	0.010	20.79	12.189	BMB
2	13.42	n.a.	0.130	0.038	79.21	n.a.	BMB
Total:			0.170	0.048	100.00	12.189	

31 2805090085-MS

100/50/100

Sample Name:	**2805090085-MS**	*Injection Volume:*	**1000.0**
Vial Number:	**572**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 4:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

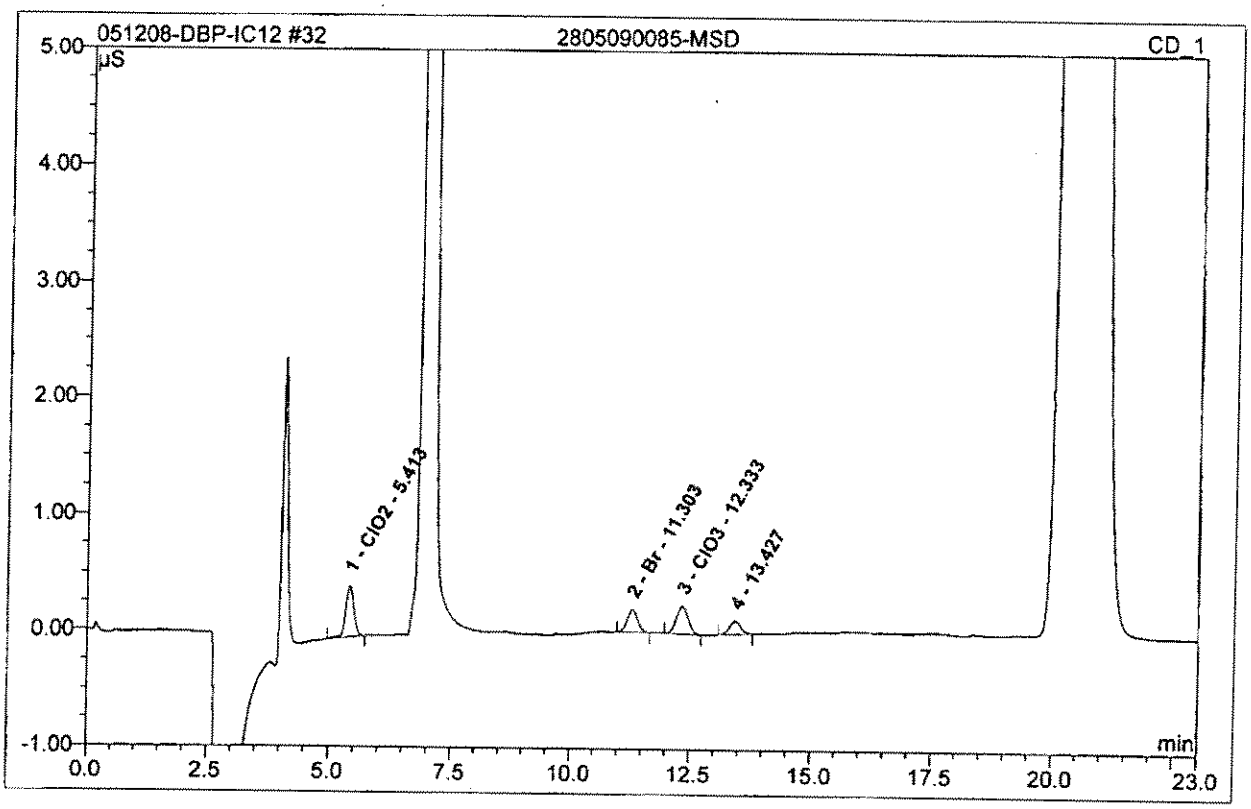


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.40	ClO2	0.447	0.084	34.88	91.240	BMB
2	11.29	Br	0.190	0.048	19.94	58.636	BMB
3	12.32	ClO3	0.240	0.068	28.33	90.962	BMB
4	13.40	n.a.	0.132	0.041	16.85	n.a.	BMB
Total:			1.009	0.241	100.00	240.838	

32 2805090085-MSD

100/50/100

Sample Name:	**2805090085-MSD**	*Injection Volume:*	**1000.0**
Vial Number:	**572**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 5:24**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

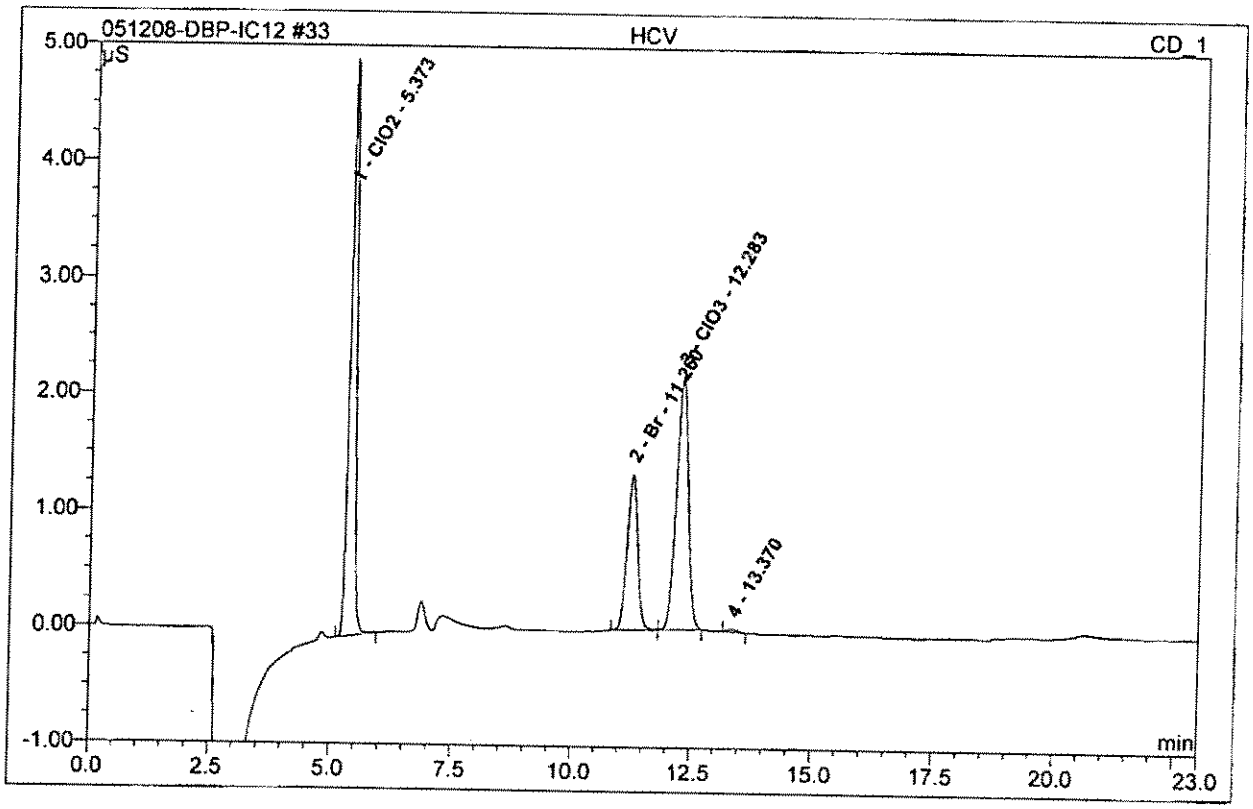


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.41	ClO2	0.445	0.085	36.54	92.422	BMB
2	11.30	Br	0.193	0.049	20.95	59.566	BMB
3	12.33	ClO3	0.239	0.068	29.16	90.541	BMB
4	13.43	n.a.	0.111	0.031	13.35	n.a.	BMB
Total:			0.988	0.233	100.00	242.529	

33 HCV

800/400/800

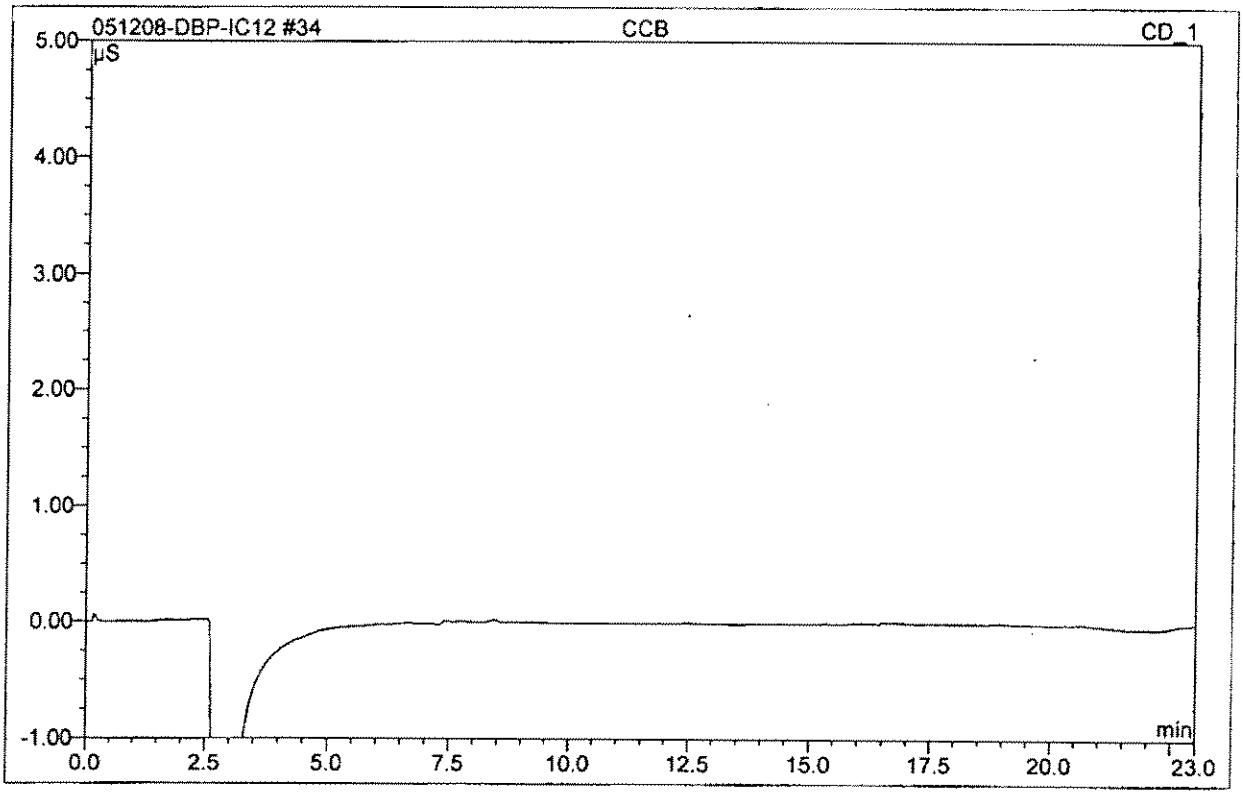
Sample Name:	**HCV**	*Injection Volume:*	**1000.0**
Vial Number:	**339**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 5:49**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.37	ClO2	4.950	0.722	42.62	785.125	BMB
2	11.26	Br	1.331	0.344	20.30	420.429	BM
3	12.28	ClO3	2.161	0.623	36.75	831.024	MB
4	13.37	n.a.	0.023	0.006	0.33	n.a.	BMB
Total:			8.464	1.695	100.00	2036.579	

34 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**335**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 6:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

35 STOP

Sample Name:	**STOP**	*Injection Volume:*	**1000.0**
Vial Number:	**589**	*Channel:*	**n.a.**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**DPB Stop Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/12/2008 6:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**n.a.**	*Sample Amount:*	**1.0000**

051208-DBP-IC12 #35 STOP CD_1

Can't open raw data file "\\USPAS2SDIO1\RawData$\IC\IC12_DBP\2008\MAY\051208-DBP-IC12.SEQ\CD_1.CHL\43.acd".
The system cannot find the file specified.

n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
	n.a.		n.a.	n.a.	n.a.	n.a.	
Total:			0.000	0.000	0.00	0.000	

Standard Preparation Worksheet & Certificate of Analysis

A 27 07

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201369
exp 27 Oct 07

CERTIFICATE OF ANALYSIS

P/N 4400-IC8M

Ion Chromatography Bromide Standard
Br in H_2O
1000 µg/mL ± 0.5%

Lot # 06C265

Material Source: Sodium bromide (NaBr)
Source Purity: 99.99%

This standard solution was prepared using a high-purity starting material and 18-megaohm deionized water. The starting material was weighed to five significant figures and diluted in a Class A volumetric glassware calibrated in accordance with National Bureau of Standards Circular 602. All balances are routinely calibrated using Class F NIST traceable weights.

This solution was certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series.

Accuracy and stability are guaranteed to within plus or minus 0.5% of the certified value for 18 months after the date of shipment. The solution should be kept tightly capped and stored under normal laboratory conditions. See attached MSDS for proper handling information.

For questions or comments please call 1-800-878-7654.

ABSOLUTE STANDARDS, INC • 44 ROSSOTTO DRIVE • HAMDEN, CT 06514 • (800)-368-1131

ISO 9001:2000 Quality System Registered
ISO/IEC Guide 17025 ANSI Z540 Compliant
DLS ANSI/RAB Accredited

CERTIFIED WEIGHT REPORT:

Part Number: 54110
Lot Number: 053106
Description: Chlorate (ClO_3^-)
Expiration Date: 053109
Nominal Concentration (µg/mL): 1000

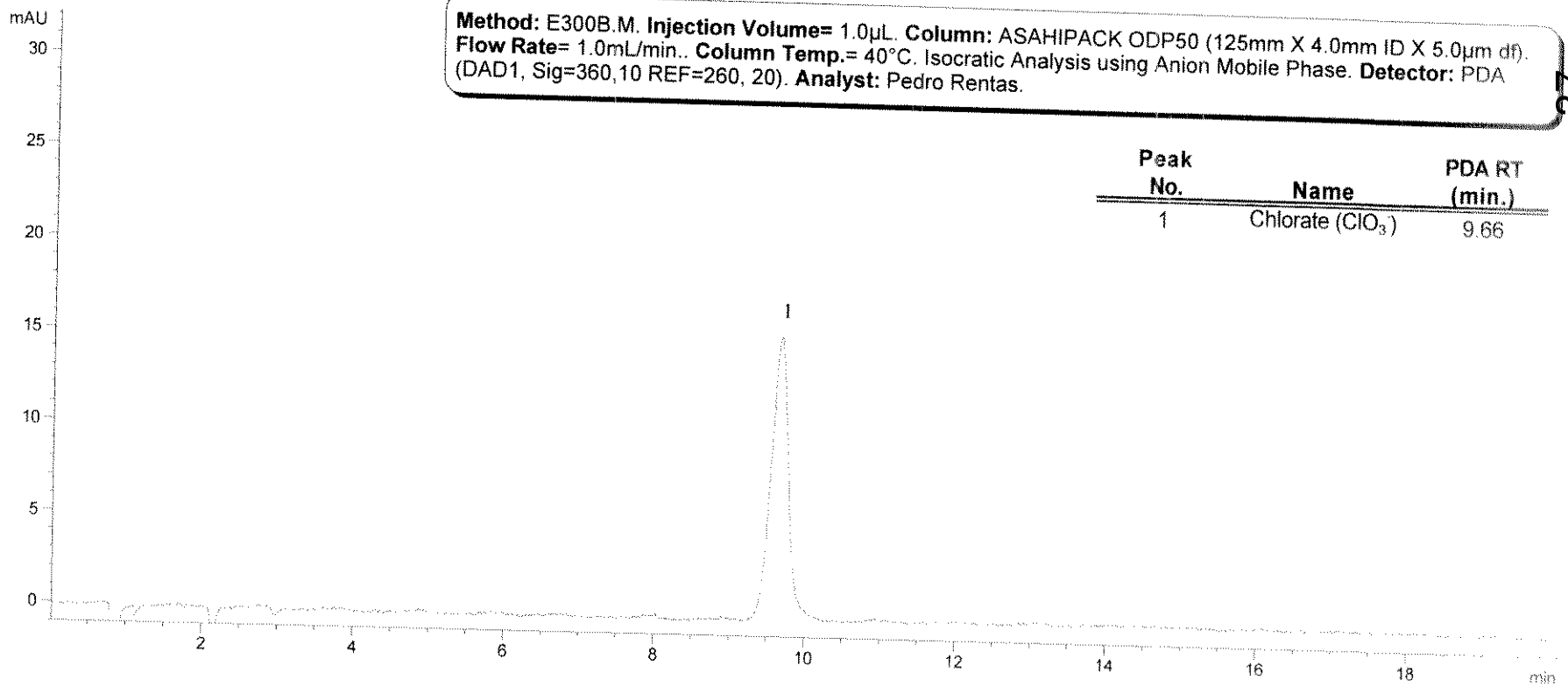
Lot #
Solvent(s): 053106 ASTM Type 1 Water

R201400

5E-05 Balance Uncertainty
Weight(s) shown below were combined and diluted to (mL) 1000.55 0.084 Flask Uncertainty

Formulated By: Lawrence Barry 053106
Reviewed By: Pedro L. Rentas 053106

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity	Uncertainty Purity	Assay (%)	Target Weight(g)	Actual Weight(g)	*Actual Conc (µg/mL)	Expanded Uncertainty (+/-)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium chlorate (ClO3)	IN096	JS05801ES	1000.0	99.0	0.10	78.4	1.2760	1.27614	1000.1	0.00203	07775-09-9	N/A	orl-rat 120mg/kg	N/A



Method: E300B.M. **Injection Volume=** 1.0µL. **Column:** ASAHIPACK ODP50 (125mm X 4.0mm ID X 5.0µm df). **Flow Rate**= 1.0mL/min.. **Column Temp.**= 40°C. Isocratic Analysis using Anion Mobile Phase. **Detector:** PDA (DAD1, Sig=360,10 REF=260, 20). **Analyst:** Pedro Rentas.

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Peak No.	Name	PDA RT (min.)
1	Chlorate (ClO_3^-)	9.66

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R201578 rec'd 3-2-07

ISO 9001:2000 Quality System Registered
ISO/IEC Guide 17025 ANSI Z540 Compliant
DLS ANSI/RAB Accredited

CERTIFIED WEIGHT REPORT:

Part Number: 54166
Lot Number: 060506
Description: UV 254 Absorbance / DOC

Expiration Date: 060509

Nominal Concentration (µg/mL): 100

Solvent(s): Lot # 060506 ASTM Type 1 Water

Formulated By:	Lawrence Barry	060506
Reviewed By:	Pedro L. Rentas	060506

Weight(s) shown below were combined and diluted to (mL) 1000.55 | 5E-05 Balance Uncertainty | 0.084 Flask Uncertainty

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity	Uncertainty Purity	Assay (%)	*Target Weight(g)	Actual Weight(g)	*Actual Conc (µg/mL)	Expanded Uncertainty	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Potassium Hydrogen Phthalate	IN170	MS11230HS	100.0	99.95	0.10	47.1	0.2127	0.21276	100.0	(+/-) 0.00206	00877-24-7	N/A	orl-rat >3200 mg/kg	N/A
Dissolved Organic Carbon (DOC)									100.0					
UV 254 Absorbance									1.44	cm^{-1}				

38

Reagent Documentation

Reagent: Bromide 1000 ppm std
Date Received: 2 May 06
Date Expired: 27 Oct 07
Manufacturer: CPI
Storage Condition: refrigerate 4±2°C

Reagent #: 201369
By: LMR
Matrix: aq
Amount: 100 ml
Lot #: Ø16C265

Component	Comment	Standard	Concentration
	CPI #4400-IC8M		

Comment:

Reagent: Orthophosphate 1000 ppm (as P) std
Date Received: 2 May 06
Date Expired: 28 Oct 07
Manufacturer: CPI
Storage Condition: refrigerate 4±2°C

Reagent #: 201370
By: LMR
Matrix: aq
Amount: 100 ml
Lot #: 05H158

Component	Comment	Standard	Concentration
	CPI #4400-IC14M		

Comment:

Reagent: Orthophosphate 1000 ppm (as P) std
Date Received: 2 May 06
Date Expired: 1 May 07
Manufacturer: Inorganic Ventures
Storage Condition: room temp 20±4°C (per C of A)

Reagent #: 201371
By: LMR
Matrix: aq
Amount: 125 ml
Lot #: Y-POX0107-1

Component	Comment	Standard	Concentration
	IV # ICP0414		

Comment:

Reagent Documentation

Reagent: Ultrex Nitric Acid
Date Received: 6/15/06 | 6.19.06 | 8.16.06 | 9.6.06 (2x500ml) | 10-17-06 (2x500mL)
Date Expired: 6/13/07
Manufacturer: JT BAKER
Storage Condition: Room Temp

Reagent #: 201399
By: WBM
Matrix: SQ
Amount: 2x 500ml + 2x 500ml + 1x 500ml
Lot #: B50420

6/19/06

Component	Comment	Standard	Concentration
	MWR # JT6901-05		

Comment:

Reagent: Chlorate 1000 ppm std
Date Received: 13 Jun 06
Date Expired: 31 May 09
Manufacturer: Absolute Stds
Storage Condition: refrigerate

Reagent #: 201400
By: LMR
Matrix: aq
Amount: 100 ml
Lot #: 053106

Component	Comment	Standard	Concentration
	AS# 54110		

Comment:

Reagent: Chlorite 1000 ppm std
Date Received: 13 Jun 06
Date Expired: 24 Mar 07
Manufacturer: Absolute stds
Storage Condition: refrigerate

Reagent #: 201401
By: LMR
Matrix: aq
Amount: 100 ml
Lot #: 032406

Component	Comment	Standard	Concentration
	AS# 54109		

Comment:

Reagent Documentation

Reagent: Chloramine-T trihydrate
Date Received: 16 March 07
Date Expired: March 2012
Manufacturer: Acros
Storage Condition:

Reagent #: 201585
By: RH
Matrix: Solid
Amount: 2x25g
Lot #: A0209989 0001

Component	Comment	Standard	Concentration
	Acros #227850250		

Comment:

Reagent: Ascorbic Acid, Crystalline Powder
Date Received: 19 March 07
Date Expired: March 2012
Manufacturer: JT Baker
Storage Condition: room temperature

Reagent #: 201586
By: RH
Matrix: Solid
Amount: 2x500g
Lot #: C42596

Component	Comment	Standard	Concentration
	JT Baker #0936-07		

Comment:

Reagent: Chlorite Standard 1000µg/mL
Date Received: 19 March 07
Date Expired: Jan 31 2008
Manufacturer: Absolute Standards
Storage Condition: refrigerate - keep out of light

Reagent #: 201587
By: RH
Matrix: aq
Amount: 100mL
Lot #: 013107

Component	Comment	Standard	Concentration

Comment:

Reagent Documentation

Reagent: StablCal Turbidity Stds.
Date Received: 18 Oct 07
Date Expired: Sept 09
Manufacturer: Hach
Storage Condition: 5-25°C

Reagent #: 201726
By: RLH
Matrix: aq
Amount: 6 vials
Lot #:

Component	Comment	Standard	Concentration
	Hach # 26595-05		

Comment:

Reagent: Bromate 1000µg/mL Standard
Date Received: 18 October 07
Date Expired: 01 November 08
Manufacturer: Inorganic Ventures
Storage Condition: room temperature

Reagent #: 201727
By: RLH
Matrix: aq
Amount: 125mL
Lot #: ZBR01061

Component	Comment	Standard	Concentration
	Inorganic Ventures # ICBR031-1		

Comment:

Reagent: Ethylenediamine
Date Received: 23 October 07
Date Expired: October 2010
Manufacturer: JT Baker
Storage Condition:

Reagent #: 201728
By: RLH
Matrix: aq
Amount: 500mL
Lot #: E16585

Component	Comment	Standard	Concentration
	JT Baker # 9299-01		

Comment:

Reagent Preparation Documentation

Page: _____

Reagent: DBP S1/MRL 10/5/10 ppb
Date Received/Prepped: 42908 / / / / /
Date Expired: 102908 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080429-1
By: CLV
Matrix: A
Amount: 150 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml Soln.	TLH-071029-1	100,000 ppm
0.1 ml 10/5/10 ppm	Init Cal	CLV070717-4	10/5/10 ppm

Comment:

Reagent: DBP S2 20/10/20 ppb
Date Received/Prepped: 42908 / / / / /
Date Expired: 102908 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080429-2
By: CLV
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml Soln.	TLH 071029-1	100,000 ppm
0.2 ml 10/5/10 ppm	Init Cal	CLV070717-4	10/5/10 ppm

Comment:

Reagent: DBP S3 100/50/100 ppb
Date Received/Prepped: 42908 / / / / /
Date Expired: 102908 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080429-3
By: CLV
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100 ppm	EDA > 100 ml Soln.	TLH 071029-1	100,000 ppm
1.0 ml 10/5/10 ppm	Init Cal	CLV070717-4	10/5/10 ppm

Comment:

Reagent Preparation Documentation

Page:_____

Reagent: DBP S4/MCV 200/100/200 ppb
Date Received/Prepped: 42908 / 50308 / 51108 / / /
Date Expired: 102908 / 110308 / 11408 / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080929-4
By: CLV
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA → 100 ml Soln.	JLH071029-1	100,000 ppm
2.0 ml 10/5/10 ppm	Int. Cal →	CLV070717-9	10/5/10 ppm

Comment:

Reagent: DBP S5 400/200/400 ppb
Date Received/Prepped: 42908 / / / / /
Date Expired: 102908 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080929-5
By: CLV
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppb	EDA → 100 ml Soln.	JLH071029-1	100,000 ppm
4.0 ml 10/5/10 ppm	Int Cal →	CLV070717-4	10/5/10 ppm

Comment:

Reagent: DBP S6/MCV 800/400/800 ppb
Date Received/Prepped: 42908 / / / / /
Date Expired: 102908 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP

MW #: CLV080929-6
By: CLV
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA → 100 ml Soln.	JLH071029-1	100,000 ppm
8.0 ml 10/5/10 ppm	Int. Cal →	CLV070717-9	10/5/10 ppm

Comment:

Reagent Preparation Documentation

Page:_____

Reagent: DBP Init. Cal. ~~Std~~ 10/5/10 ppb
Date Received/Prepped: 081707 / / / / /
Date Expired: 081709 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-3
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA	EDA	100,000 ppm
0.5 ml 1,000 ppm	Br EXP 060108 > 100 ml Soln.	R201650	1,000 ppm
1.0 ml 1,000 ppm	ClO_2 EXP 060108	R201648	1,000 ppm
1.0 ml 1,000 ppm	ClO_3 EXP 060108	R201649	1,000 ppm

Comment:

Reagent: DBP 2nd ~~Source~~ 10/5/10 ppb
Date Received/Prepped: 081707 / / / / /
Date Expired: 081709 / / / / /
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-4
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA	EDA	100,000 ppm
0.5 ml 1,000 ppm	Br EXP 102707	R201369	1,000 ppm
1.0 ml 1,000 ppm	ClO_2 EXP 013108 > 100 ml Soln.	R201587	1,000 ppm
1.0 ml 1,000 ppm	ClO_3 EXP 093109	R201400	1,000 ppm

Comment:

Reagent: DBP SI / MDL/MRL 10/5/10 ppb
Date Received/Prepped: 081707 / 080607 / 090507 / 092107 / 101607 / 102307
Date Expired: 081709 / 090607 / 100509 / 102107 / 111607 / 112307
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-5
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml Soln.	EDA	100,000 ppm
0.1 ml 10/5/10 ppb	Init. Cal	CLV070717-3	10/5/10 ppb

Comment:

Reagent Preparation Documentation

Page: 11

Reagent: 300.1 Multi-element Calibration Std 3
Date Received/Prepped: 10/25/07
Date Expired: 12/25/07
Manufacturer:
Storage Condition: room temperature

MW #: 9H0711025-1
By: RH
Matrix: aq
Amount: 100mL
Lot #:

Component	Comment	Standard	Concentration (ppb)
BrO_3-1000ppb	500µL		
ClO_2/ClO_3-1ppm	100µL		
Anion Cal Mix	100µL	Combine & dilute to 100mL w/ DI H_2O	
EDA (100,000ppm)	50µL		

Standard	Concentration (ppb)
IK7090910-5	5
IK7090910-6	10 each
IK7090910-7	NO_3-10 NO_2-10 Cl-100
	Br-4 SO_4-200 PO_4-50
KAP060629-12	50ppm

Comment:

Reagent: DBP Stock Eluent Soln.
Date Received/Prepped: 10/25/07 | 12/12/07 | 1/25/08 | 2/19/08 | 3/21/08 | 4/30/08 | 6/4/08 | 7/4/08 | 8/13/08 | 9/18/08 | 10/24/08
Date Expired:
Manufacturer:
Storage Condition: room temperature

MW #: 9H071025-2
By: RH
Matrix: aq
Amount: 1L
Lot #:

Component	Comment	Standard	Concentration
Na_2CO_3	52.8g to 1L NH_2O total vol.	R201472	

Comment: Use 31mL & dilute to 2L w/ DI H_2O for working eluent soln.

Reagent: Ethylenediamine - 100,000ppm (EDA)
Date Received/Prepped: 10/29/07
Date Expired:
Manufacturer:
Storage Condition: room temperature

MW #: 9H071029-1
By: RH
Matrix: aq
Amount: 100mL
Lot #:

Component	Comment	Standard	Concentration
Ethylenediamine Lot# F116585	11.2mL diluted to 100mL w/ DI H_2O	R201728	100,000ppm
Exp Oct 2010			

Comment: Use 50µL per 100mL