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Level IV Data Package

MWH Group 216651

Method: EPA 300.1B

2709180347
2709180348

DBP QC Checklist

Analysis Date: 09/18/07 **Analyst:** ch **QC'd by** MME **Date** 09207

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

N/A QIR needed for failed QC

✓ QIR needed for samples analyzed outside of hold time

No.	Sample Name	Comment	Time	Dil.Fac.	Amount	
,	,				ppb Br CD_1	
1,	autocal1,		08/09/07 15:07,	1.0,	n.a.	
2,	autocal2,	S1-10/5/10	08/09/07 15:32,	1.0,	4.6341,	
3,	autocal3,	S2-20/10/20	08/09/07 15:58,	1.0,	9.3421,	
4,	autocal4,	S3-100/50/100	08/09/07 16:23,	1.0,	49.3528,	
5,	autocal5,	S4-200/100/200	08/09/07 16:48,	1.0,	98.2869,	
6,	autocal6,	S5-400/200/400	08/09/07 17:14,	1.0,	203.0208,	
7,	autocal7,	S6-800/400/800	08/09/07 17:39,	1.0,	399.0198,	
8,	MCV,	200/100/200	09/18/07 09:54,	1.0,	98.5191,	98.5%
9,	CCB,		09/18/07 10:19,	1.0,	n.a.	
10,	MRLCHK,	S1-10/5/10	09/18/07 10:45,	1.0,	4.8461, ✓	96.9%
11,	MBLK,		09/18/07 11:10,	1.0,	n.a.	
12,	LCS1,	200/100/200	09/18/07 11:36,	1.0,	98.7376, ✓	98.7%
13,	LCS2,	200/100/200	09/18/07 12:01,	1.0,	97.9585, ✓	98.0%
14,	2709180045,	BR	09/18/07 12:26,	1.0,	162.0336, ✓	
15,	2709180045-MS,	100/50/100	09/18/07 12:52,	1.0,	212.2859, ✓	502/100%
16,	2709180045-MSD,	100/50/100	09/18/07 13:17,	1.0,	213.0911, ✓	511/102%
17,	2709180046,	BR	09/18/07 13:43,	1.0,	92.1171, ✓	
18,	2709140219_1/50000DNI	CLO3	09/18/07 14:08,	50000.0,	n.a.	— DNR
19,	2709140219_1/10000,	CLO3	09/18/07 14:33,	10000.0,	n.a.	
20,	2709170182,	CLO2	09/18/07 14:59,	1.0,	38.3198,	
21,	2709170183,	CLO2	09/18/07 15:24,	1.0,	12.2407,	
22,	2709170185,	CLO2	09/18/07 15:50,	1.0,	33.7908,	
23,	2709180347_1/5,	CLO3	09/18/07 16:15,	5.0,	1158.4998,	
24,	2709180348_1/5000,	CLO3	09/18/07 16:40,	5000.0,	n.a.	
25,	2709180319,	CLO2/CLO3	09/18/07 17:06,	1.0,	n.a.	
26,	MCV,	200/100/200	09/18/07 17:31,	1.0,	92.3993,	92.4%
27,	CCB,		09/18/07 17:57,	1.0,	n.a.	
28,	2709180381,	CLO2/CLO3	09/18/07 18:22,	1.0,	n.a.	
29,	2709180389,	CLO2/CLO3	09/18/07 18:47,	1.0,	25.7097,	
30,	2709180389-MS,	100/50/100	09/18/07 19:13,	1.0,	75.5254, ✓	49.8/99%
31,	2709180389-MSD,	100/50/100	09/18/07 19:38,	1.0,	77.9383, ✓	522/104%
32,	2709180221,	BR	09/18/07 20:04,	1.0,	2.0206, ✓	
33,	2709180227,	BR	09/18/07 20:29,	1.0,	2.2788, ✓	
34,	2709180233_1/10,	BR	09/18/07 20:54,	10.0,	1041.0280, ✓	
35,	2709180234_1/500,	BR	09/18/07 21:20,	500.0,	66035.4203, ✓	
36,	2709180235_1/500,	BR	09/18/07 21:45,	500.0,	67750.6641, ✓	
37,	2709180236_1/10,	BR	09/18/07 22:10,	10.0,	1042.1258, ✓	
38,	2709180237_1/500,	BR	09/18/07 22:36,	500.0,	65356.7563, ✓	
39,	2709180238_1/500,	BR	09/18/07 23:01,	500.0,	68560.1993, ✓	
40,	HCV,	800/400/800	09/18/07 23:27,	1.0,	405.3410,	101%
41,	CCB,		09/18/07 23:53,	1.0,	n.a.	
42,	STOP,		09/19/07 00:19,	1.0,	n.a.	

No.	Sample Name	Comment	Time	Dil.Fac.	Amount	
,	,				ppb ClO3 CD_1	
1,	autocal1,		08/09/07 15:07,	1.0,	n.a.	
2,	autocal2,	S1-10/5/10	08/09/07 15:32,	1.0,	9.9436	
3,	autocal3,	S2-20/10/20	08/09/07 15:58,	1.0,	19.7922	
4,	autocal4,	S3-100/50/100	08/09/07 16:23,	1.0,	98.258	
5,	autocal5,	S4-200/100/200	08/09/07 16:48,	1.0,	194.2893	
6,	autocal6,	S5-400/200/400	08/09/07 17:14,	1.0,	403.5412	
7,	autocal7,	S6-800/400/800	08/09/07 17:39,	1.0,	799.8807	
8,	MCV,	200/100/200	09/18/07 09:54,	1.0,	199.7798	99.9%
9,	CCB,		09/18/07 10:19,	1.0,	n.a.	
10,	MRLCHK,	S1-10/5/10	09/18/07 10:45,	1.0,	10.894 ✓	109%
11,	MBLK,		09/18/07 11:10,	1.0,	n.a.	
12,	LCS1,	200/100/200	09/18/07 11:36,	1.0,	197.4449 ✓	98.7%
13,	LCS2,	200/100/200	09/18/07 12:01,	1.0,	197.042 ✓	98.5%
14,	2709180045,	BR	09/18/07 12:26,	1.0,	n.a.	
15,	2709180045-MS,	100/50/100	09/18/07 12:52,	1.0,	99.6928 ✓	99.7%
16,	2709180045-MSD,	100/50/100	09/18/07 13:17,	1.0,	100.2369 ✓	100%
17,	2709180046,	BR	09/18/07 13:43,	1.0,	n.a.	
18,	2709140219_1/50000DN	CLO3	09/18/07 14:08,	50000.0,	3718104.283 ✓	DNR
19,	2709140219_1/10000,	CLO3	09/18/07 14:33,	10000.0,	3460404.676 ✓	
20,	2709170182,	CLO2	09/18/07 14:59,	1.0,	n.a.	
21,	2709170183,	CLO2	09/18/07 15:24,	1.0,	6.143	
22,	2709170185,	CLO2	09/18/07 15:50,	1.0,	n.a.	
23,	2709180347_1/5,	CLO3	09/18/07 16:15,	5.0,	n.a. ✓	
24,	2709180348_1/5000,	CLO3	09/18/07 16:40,	5000.0,	421351.7803 ✓	
25,	2709180319,	CLO2/CLO3	09/18/07 17:06,	1.0,	16.5534 ✓	
26,	MCV,	200/100/200	09/18/07 17:31,	1.0,	198.9233	99.5%
27,	CCB,		09/18/07 17:57,	1.0,	n.a.	
28,	2709180381,	CLO2/CLO3	09/18/07 18:22,	1.0,	75.405 ✓	
29,	2709180389,	CLO2/CLO3	09/18/07 18:47,	1.0,	7.714 ✓	
30,	2709180389-MS,	100/50/100	09/18/07 19:13,	1.0,	105.4132	97.7%
31,	2709180389-MSD,	100/50/100	09/18/07 19:38,	1.0,	106.1422	98.4%
32,	2709180221,	BR	09/18/07 20:04,	1.0,	322.983	
33,	2709180227,	BR	09/18/07 20:29,	1.0,	263.4436	
34,	2709180233_1/10,	BR	09/18/07 20:54,	10.0,	124.9638	
35,	2709180234_1/500,	BR	09/18/07 21:20,	500.0,	n.a.	
36,	2709180235_1/500,	BR	09/18/07 21:45,	500.0,	n.a.	
37,	2709180236_1/10,	BR	09/18/07 22:10,	10.0,	133.102	
38,	2709180237_1/500,	BR	09/18/07 22:36,	500.0,	n.a.	
39,	2709180238_1/500,	BR	09/18/07 23:01,	500.0,	4624.4446	
40,	HCV,	800/400/800	09/18/07 23:27,	1.0,	819.1831	102%
41,	CCB,		09/18/07 23:53,	1.0,	n.a.	
42,	STOP,		09/19/07 00:19,	1.0,	n.a.	

No.	Sample Name	Comment	Time	Dil.Fac.	Amount	
,	,				ppb ClO2 CD_1	
1,	autocal1,		08/09/07 15:07,	1.0,	n.a.	
2,	autocal2,	S1-10/5/10	08/09/07 15:32,	1.0,	10.1996,	
3,	autocal3,	S2-20/10/20	08/09/07 15:58,	1.0,	18.9154,	
4,	autocal4,	S3-100/50/100	08/09/07 16:23,	1.0,	95.0787,	
5,	autocal5,	S4-200/100/200	08/09/07 16:48,	1.0,	188.7513,	
6,	autocal6,	S5-400/200/400	08/09/07 17:14,	1.0,	398.9173,	
7,	autocal7,	S6-800/400/800	08/09/07 17:39,	1.0,	803.9933,	
8,	MCV,	200/100/200	09/18/07 09:54,	1.0,	184.7449,	92.4%
9,	CCB,		09/18/07 10:19,	1.0,	n.a.	
10,	MRLCHK,	S1-10/5/10	09/18/07 10:45,	1.0,	8.9862, ✓	89.9%
11,	MBLK,		09/18/07 11:10,	1.0,	n.a.	
12,	LCS1,	200/100/200	09/18/07 11:36,	1.0,	198.4608, ✓	99.2%
13,	LCS2,	200/100/200	09/18/07 12:01,	1.0,	196.7170, ✓	98.4%
14,	2709180045,	BR	09/18/07 12:26,	1.0,	n.a.	
15,	2709180045-MS,	100/50/100	09/18/07 12:52,	1.0,	99.7250,	99.7% ✓
16,	2709180045-MSD,	100/50/100	09/18/07 13:17,	1.0,	100.4110,	100% ✓
17,	2709180046,	BR	09/18/07 13:43,	1.0,	n.a.	
18,	2709140219_1/50000DN	CLO3	09/18/07 14:08,	50000.0,	n.a.	— DNR —
19,	2709140219_1/10000,	CLO3	09/18/07 14:33,	10000.0,	n.a.	
20,	2709170182,	CLO2	09/18/07 14:59,	1.0,	n.a. ✓	
21,	2709170183,	CLO2	09/18/07 15:24,	1.0,	n.a. ✓	
22,	2709170185,	CLO2	09/18/07 15:50,	1.0,	n.a. ✓	
23,	2709180347_1/5,	CLO3	09/18/07 16:15,	5.0,	n.a.	
24,	2709180348_1/5000,	CLO3	09/18/07 16:40,	5000.0,	n.a.	
25,	2709180319,	CLO2/CLO3	09/18/07 17:06,	1.0,	n.a. ✓	
26,	MCV,	200/100/200	09/18/07 17:31,	1.0,	186.1109,	93.1%
27,	CCB,		09/18/07 17:57,	1.0,	n.a.	
28,	2709180381,	CLO2/CLO3	09/18/07 18:22,	1.0,	n.a. ✓	
29,	2709180389,	CLO2/CLO3	09/18/07 18:47,	1.0,	n.a. ✓	
30,	2709180389-MS,	100/50/100	09/18/07 19:13,	1.0,	92.2133,	92.2%
31,	2709180389-MSD,	100/50/100	09/18/07 19:38,	1.0,	94.2025,	94.2%
32,	2709180221,	BR	09/18/07 20:04,	1.0,	n.a.	
33,	2709180227,	BR	09/18/07 20:29,	1.0,	n.a.	
34,	2709180233_1/10,	BR	09/18/07 20:54,	10.0,	n.a.	
35,	2709180234_1/500,	BR	09/18/07 21:20,	500.0,	n.a.	
36,	2709180235_1/500,	BR	09/18/07 21:45,	500.0,	n.a.	
37,	2709180236_1/10,	BR	09/18/07 22:10,	10.0,	n.a.	
38,	2709180237_1/500,	BR	09/18/07 22:36,	500.0,	n.a.	
39,	2709180238_1/500,	BR	09/18/07 23:01,	500.0,	n.a.	
40,	HCV,	800/400/800	09/18/07 23:27,	1.0,	799.0363,	99.9%
41,	CCB,		09/18/07 23:53,	1.0,	n.a.	
42,	STOP,		09/19/07 00:19,	1.0,	n.a.	

Sequence: 091807-DBP-IC12
Operator: clv
Printed: 9/19/2007 2:20:03 PM

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2007\SEP
Timebase: IC12
#Samples: 42
Created: 9/18/2007 9:18:31 AM by clv
Last Update: 9/19/2007 10:51:39 AM by clv

No.	Name	Sample ID	Dil. Factor	Type	Comment	Program
1	autocal1		1.0000	Standard		IC12 test Program
2	autocal2	CLV070717-5	1.0000	Standard	S1-10/5/10	IC12 test Program
3	autocal3	CLV070717-6	1.0000	Standard	S2-20/10/20	IC12 test Program
4	autocal4	CLV070717-7	1.0000	Standard	S3-100/50/100	IC12 test Program
5	autocal5	CLV070717-8	1.0000	Standard	S4-200/100/200	IC12 test Program
6	autocal6	CLV070717-9	1.0000	Standard	S5-400/200/400	IC12 test Program
7	autocal7	CLV070717-10	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	LCS1	CLV070717-11	1.0000	Unknown	200/100/200	IC12 test Program
13	LCS2	200/100/200	1.0000	Unknown	200/100/200	IC12 test Program
14	2709180045	[redacted]	1.0000	Unknown	BR	IC12 test Program
15	2709180045-MS	[redacted]	1.0000	Unknown	100/50/100	IC12 test Program
16	2709180045-MSD	[redacted]	1.0000	Unknown	100/50/100	IC12 test Program
17	2709180046	[redacted]	1.0000	Unknown	BR	IC12 test Program
18	2709140219_1/50000DNR	[redacted]	50000.0000	Unknown	CLO3	IC12 test Program
19	2709140219_1/10000	[redacted]	10000.0000	Unknown	CLO3	IC12 test Program
20	2709170182	[redacted]	1.0000	Unknown	CLO2	IC12 test Program
21	2709170183	[redacted]	1.0000	Unknown	CLO2	IC12 test Program
22	2709170185	[redacted]	1.0000	Unknown	CLO2	IC12 test Program
23	2709180347_1/5	KM EFF	5.0000	Unknown	CLO3	IC12 test Program
24	2709180348_1/5000	KM INF	5000.0000	Unknown	CLO3	IC12 test Program
25	2709180319	[redacted]	1.0000	Unknown	CLO2/CLO3	IC12 test Program
26	MCV	[redacted]	1.0000	Unknown	200/100/200	IC12 test Program
27	CCB		1.0000	Unknown		IC12 test Program
28	2709180381	[redacted]	1.0000	Unknown	CLO2/CLO3	IC12 test Program
29	2709180389	[redacted]	1.0000	Unknown	CLO2/CLO3	IC12 test Program
30	2709180389-MS	[redacted]	1.0000	Unknown	100/50/100	IC12 test Program
31	2709180389-MSD	[redacted]	1.0000	Unknown	100/50/100	IC12 test Program
32	2709180221	[redacted]	1.0000	Unknown	BR	IC12 test Program
33	2709180227	[redacted]	1.0000	Unknown	BR	IC12 test Program
34	2709180233_1/10	[redacted]	10.0000	Unknown	BR	IC12 test Program
35	2709180234_1/500	[redacted]	500.0000	Unknown	BR	IC12 test Program
36	2709180235_1/500	[redacted]	500.0000	Unknown	BR	IC12 test Program
37	2709180236_1/10	[redacted]	10.0000	Unknown	BR	IC12 test Program
38	2709180237_1/500	[redacted]	500.0000	Unknown	BR	IC12 test Program
39	2709180238_1/500	[redacted]	500.0000	Unknown	BR	IC12 test Program
40	HCV	[redacted]	1.0000	Unknown	800/400/800	IC12 test Program
41	CCB		1.0000	Unknown		IC12 test Program
42	STOP		1.0000	Unknown		DPB Stop Program

Sequence: 091807-DBP-IC12
Operator: clv
Printed: 9/19/2007 2:20:03 PM

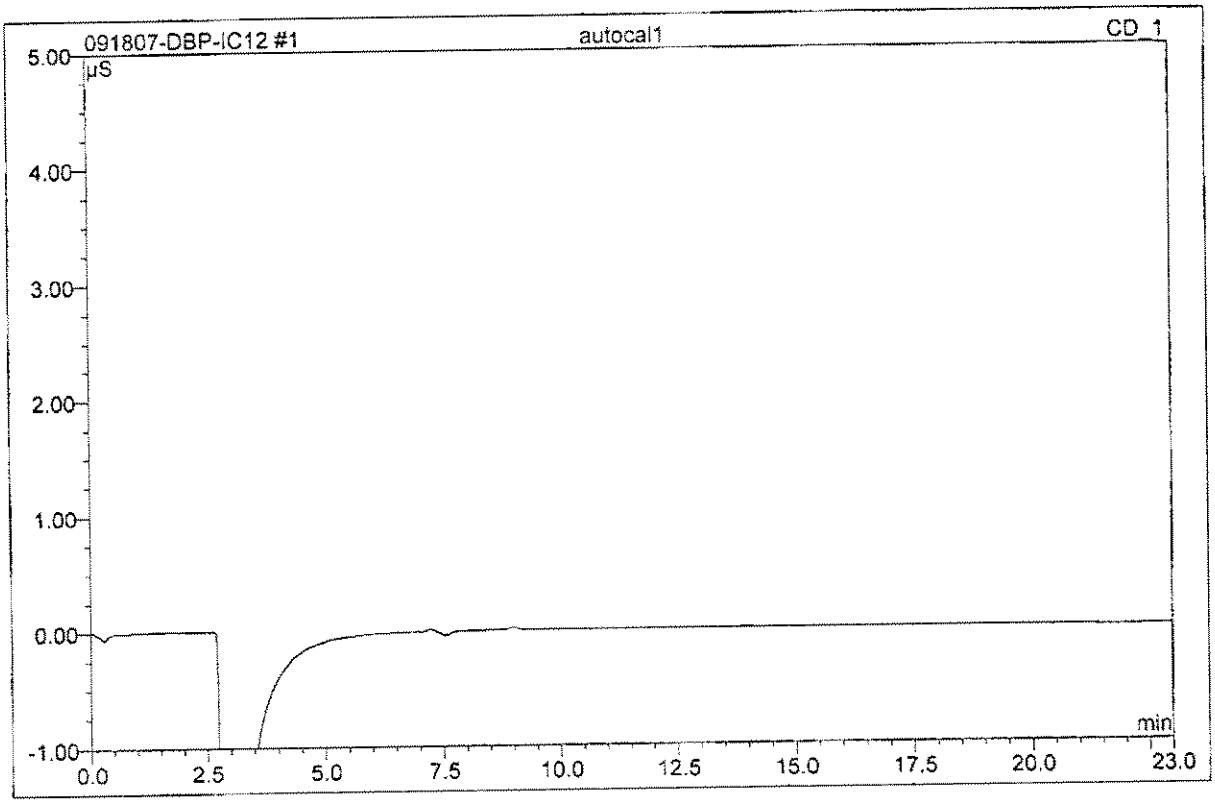
Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2007\SEP
Timebase: IC12
#Samples: 42

Created: 9/18/2007 9:18:31 AM by clv
Last Update: 9/19/2007 10:51:39 AM by clv

No.	Name	Method	Status	Inj. Date/Time	*Analyst
1	autocal1	DBP-Method	Finished	8/9/2007 3:07:20 PM	clv
2	autocal2	DBP-Method	Finished	8/9/2007 3:32:43 PM	clv
3	autocal3	DBP-Method	Finished	8/9/2007 3:58:08 PM	clv
4	autocal4	DBP-Method	Finished	8/9/2007 4:23:33 PM	clv
5	autocal5	DBP-Method	Finished	8/9/2007 4:48:57 PM	clv
6	autocal6	DBP-Method	Finished	8/9/2007 5:14:21 PM	clv
7	autocal7	DBP-Method	Finished	8/9/2007 5:39:45 PM	clv
8	MCV	DBP-Method	Finished	9/18/2007 9:54:28 AM	clv
9	CCB	DBP-Method	Finished	9/18/2007 10:19:52 AM	clv
10	MRLCHK	DBP-Method	Finished	9/18/2007 10:45:16 AM	clv
11	MBLK	DBP-Method	Finished	9/18/2007 11:10:40 AM	clv
12	LCS1	DBP-Method	Finished	9/18/2007 11:36:04 AM	clv
13	LCS2	DBP-Method	Finished	9/18/2007 12:01:28 PM	clv
14	2709180045	DBP-Method	Finished	9/18/2007 12:26:51 PM	clv
15	2709180045-MS	DBP-Method	Finished	9/18/2007 12:52:16 PM	clv
16	2709180045-MSD	DBP-Method	Finished	9/18/2007 1:17:40 PM	clv
17	2709180046	DBP-Method	Finished	9/18/2007 1:43:04 PM	clv
18	2709140219_1/50000DNR	DBP-Method	Finished	9/18/2007 2:08:27 PM	clv
19	2709140219_1/10000	DBP-Method	Finished	9/18/2007 2:33:51 PM	clv
20	2709170182	DBP-Method	Finished	9/18/2007 2:59:15 PM	clv
21	2709170183	DBP-Method	Finished	9/18/2007 3:24:39 PM	clv
22	2709170185	DBP-Method	Finished	9/18/2007 3:50:03 PM	clv
23	2709180347_1/5	DBP-Method	Finished	9/18/2007 4:15:26 PM	clv
24	2709180348_1/5000	DBP-Method	Finished	9/18/2007 4:40:50 PM	clv
25	2709180319	DBP-Method	Finished	9/18/2007 5:06:13 PM	clv
26	MCV	DBP-Method	Finished	9/18/2007 5:31:36 PM	clv
27	CCB	DBP-Method	Finished	9/18/2007 5:57:00 PM	clv
28	2709180381	DBP-Method	Finished	9/18/2007 6:22:24 PM	clv
29	2709180389	DBP-Method	Finished	9/18/2007 6:47:48 PM	clv
30	2709180389-MS	DBP-Method	Finished	9/18/2007 7:13:12 PM	clv
31	2709180389-MSD	DBP-Method	Finished	9/18/2007 7:38:36 PM	clv
32	2709180221	DBP-Method	Finished	9/18/2007 8:04:00 PM	clv
33	2709180227	DBP-Method	Finished	9/18/2007 8:29:24 PM	clv
34	2709180233_1/10	DBP-Method	Finished	9/18/2007 8:54:47 PM	clv
35	2709180234_1/500	DBP-Method	Finished	9/18/2007 9:20:11 PM	clv
36	2709180235_1/500	DBP-Method	Finished	9/18/2007 9:45:35 PM	clv
37	2709180236_1/10	DBP-Method	Finished	9/18/2007 10:10:59 PM	clv
38	2709180237_1/500	DBP-Method	Finished	9/18/2007 10:36:23 PM	clv
39	2709180238_1/500	DBP-Method	Finished	9/18/2007 11:01:46 PM	clv
40	HCV	DBP-Method	Finished	9/18/2007 11:27:10 PM	clv
41	CCB	DBP-Method	Finished	9/18/2007 11:53:49 PM	clv
42	STOP	DBP-Method	Interrupted	9/19/2007 12:19:12 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:	**8/9/2007 15:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

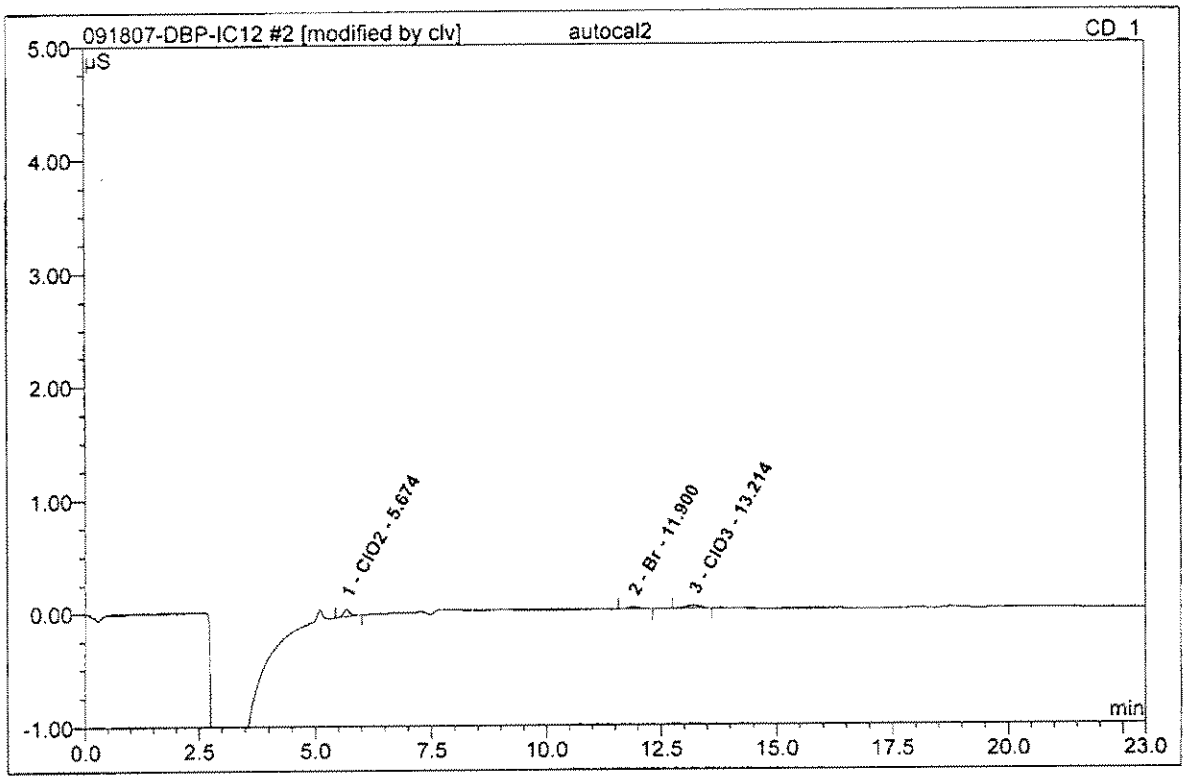


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

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:	**8/9/2007 15:32**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

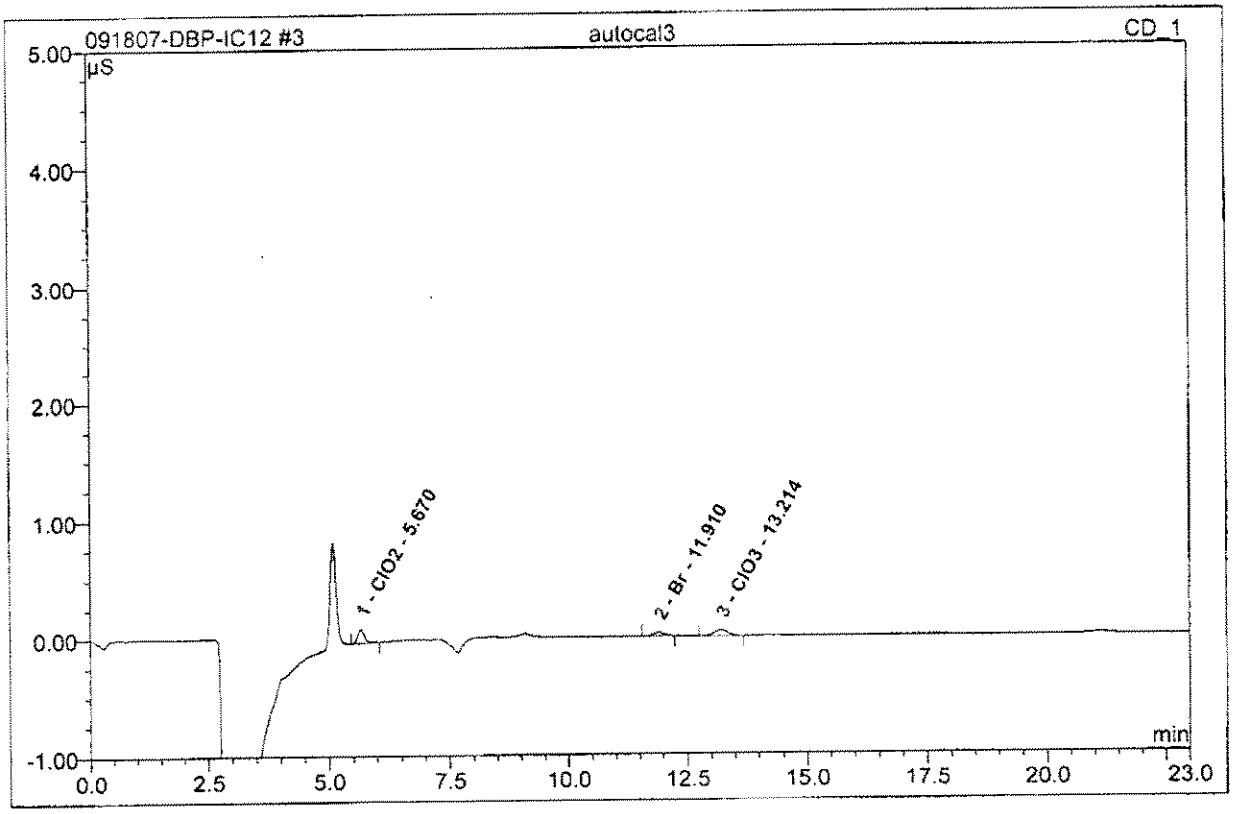


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	0.065	0.010	43.87	10.200	BMB*
2	11.90	Br	0.015	0.004	18.86	4.634	BMB*
3	13.21	ClO3	0.024	0.009	37.26	9.944	BMB
Total:			0.104	0.023	100.00	24.777	

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:	**8/9/2007 15:58**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

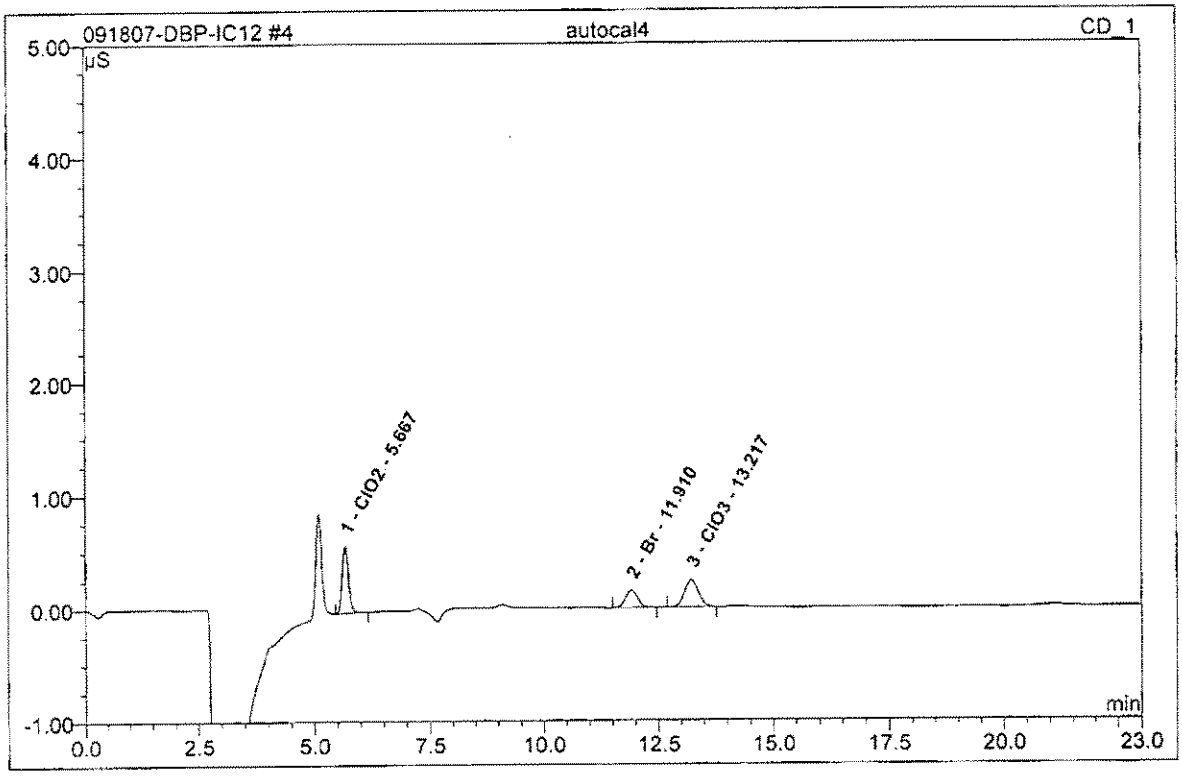


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	0.118	0.019	42.04	18.915	BMB
2	11.91	Br	0.030	0.009	19.65	9.342	BMB
3	13.21	ClO3	0.049	0.017	38.32	19.792	BMB
Total:			0.197	0.045	100.00	48.050	

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:	**8/9/2007 16:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

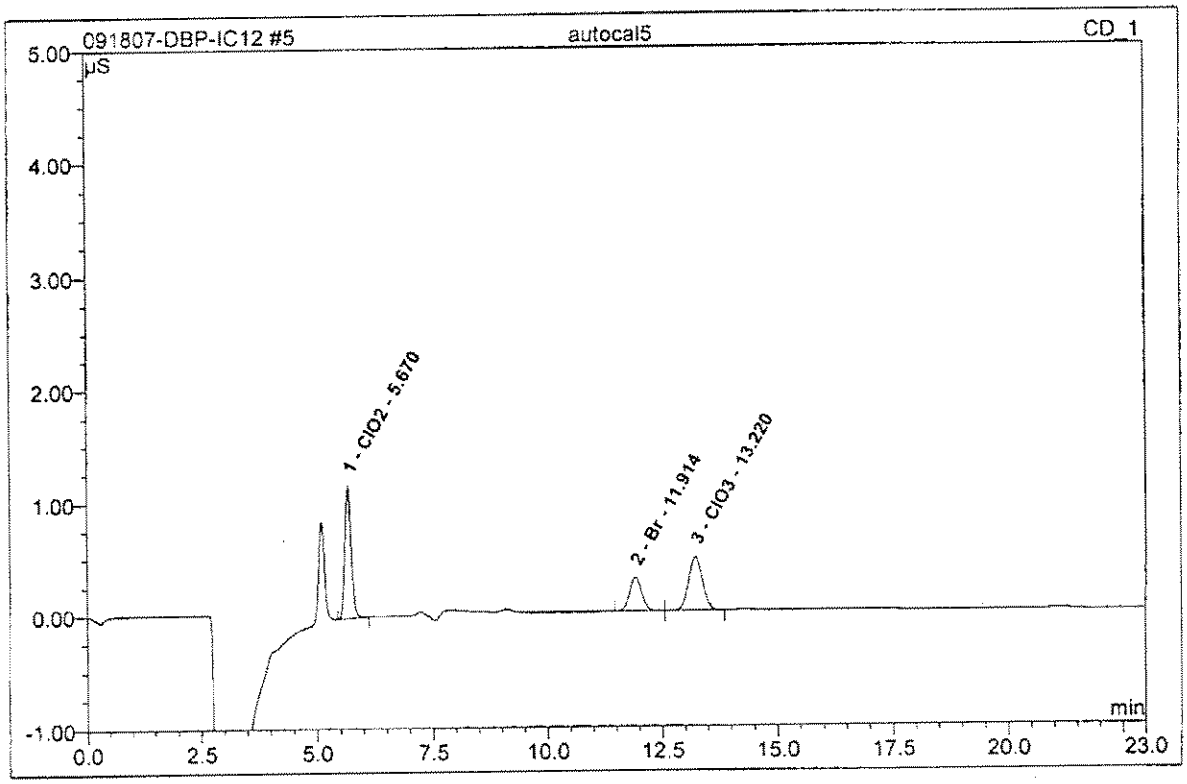


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	0.594	0.095	41.81	95.079	BMB
2	11.91	Br	0.152	0.047	20.54	49.353	BMB
3	13.22	ClO3	0.243	0.085	37.65	98.258	BMB
Total:			0.989	0.227	100.00	242.689	

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:	**8/9/2007 16:48**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

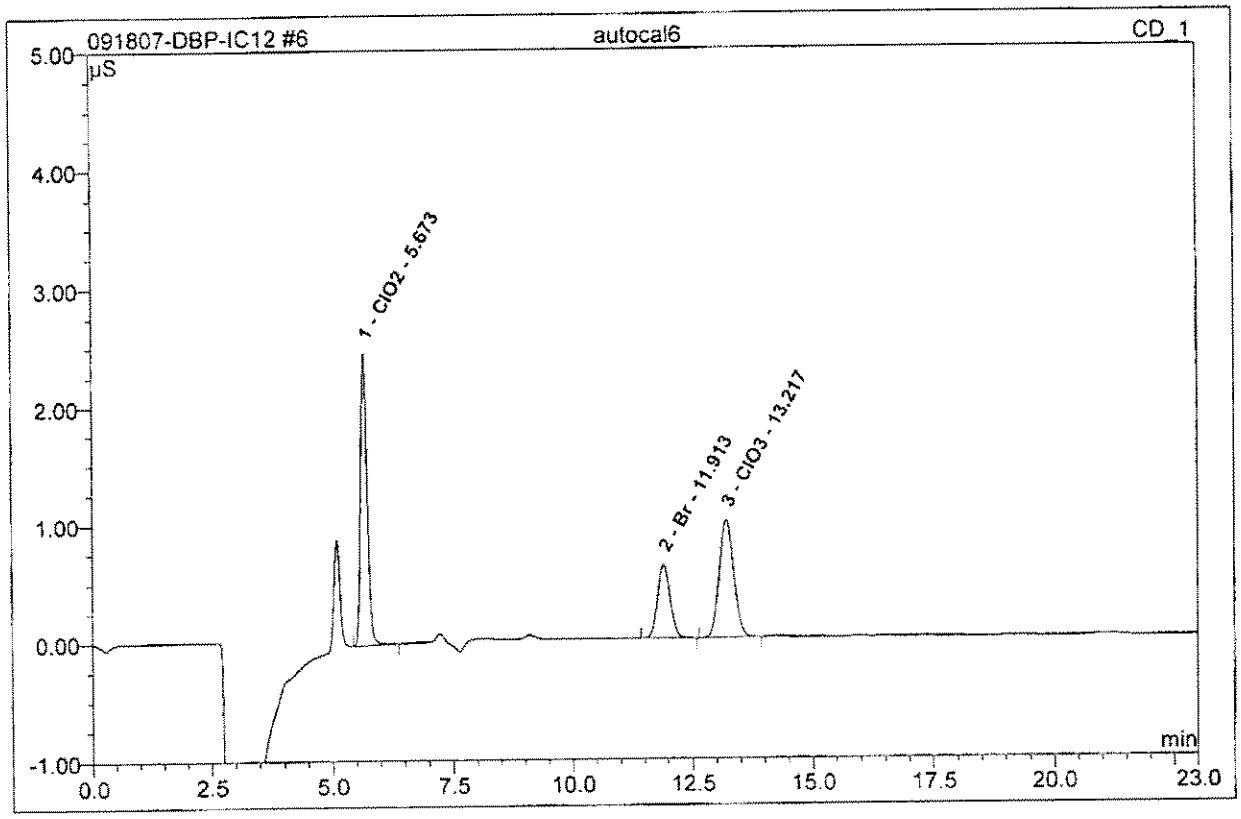


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	1.182	0.188	41.85	188.751	BMB
2	11.91	Br	0.301	0.093	20.62	98.287	BM
3	13.22	ClO3	0.478	0.169	37.53	194.289	MB
Total:			1.961	0.450	100.00	481.328	

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:	**8/9/2007 17:14**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

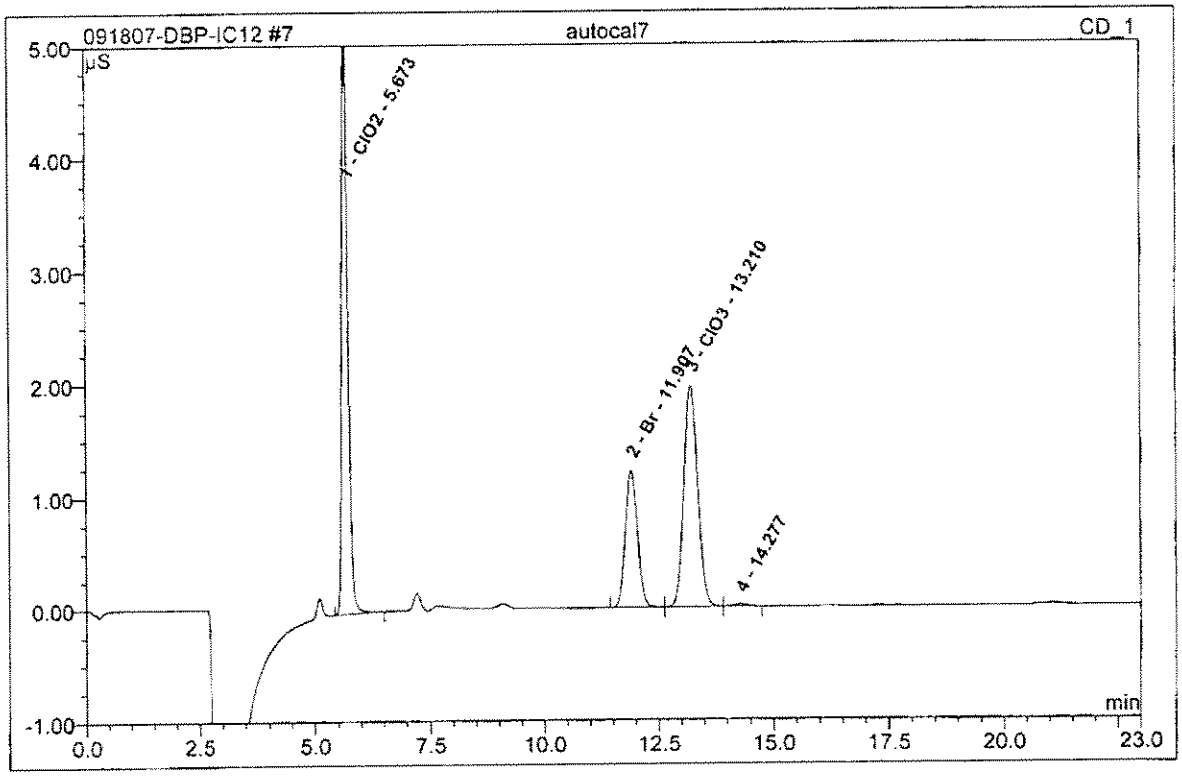


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	2.491	0.398	42.32	398.917	BMB
2	11.91	Br	0.623	0.192	20.38	203.021	BMB
3	13.22	ClO3	0.997	0.351	37.30	403.541	BMB
Total:			4.111	0.941	100.00	1005.479	

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:	**8/9/2007 17:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

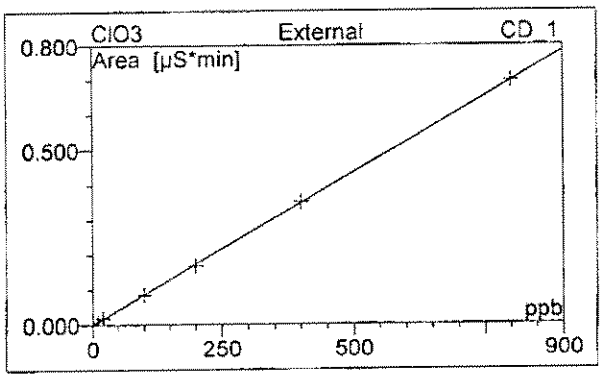


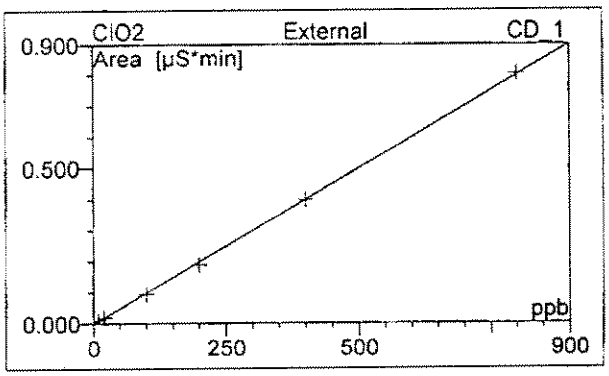
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.67	ClO2	5.355	0.803	42.61	803.993	BMB
2	11.91	Br	1.227	0.377	20.01	399.020	BM
3	13.21	ClO3	1.976	0.696	36.94	799.881	M
4	14.28	n.a.	0.021	0.008	0.44	n.a.	MB
Total:			8.578	1.884	100.00	2002.894	

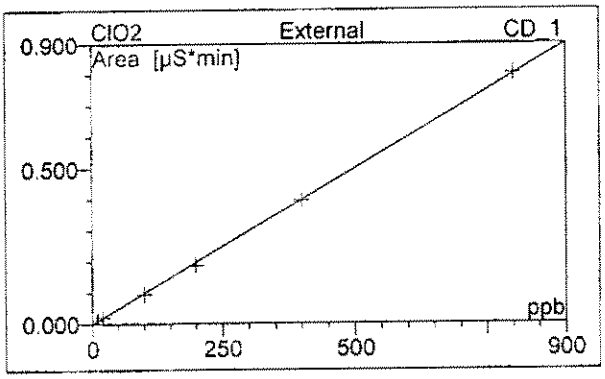
7 autocal7

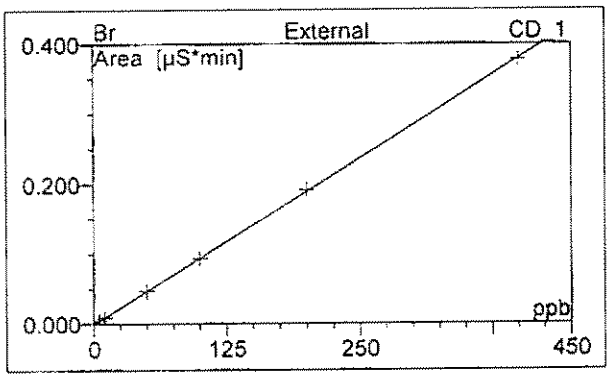
S6-800/400/800

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:	**8/9/2007 17:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**







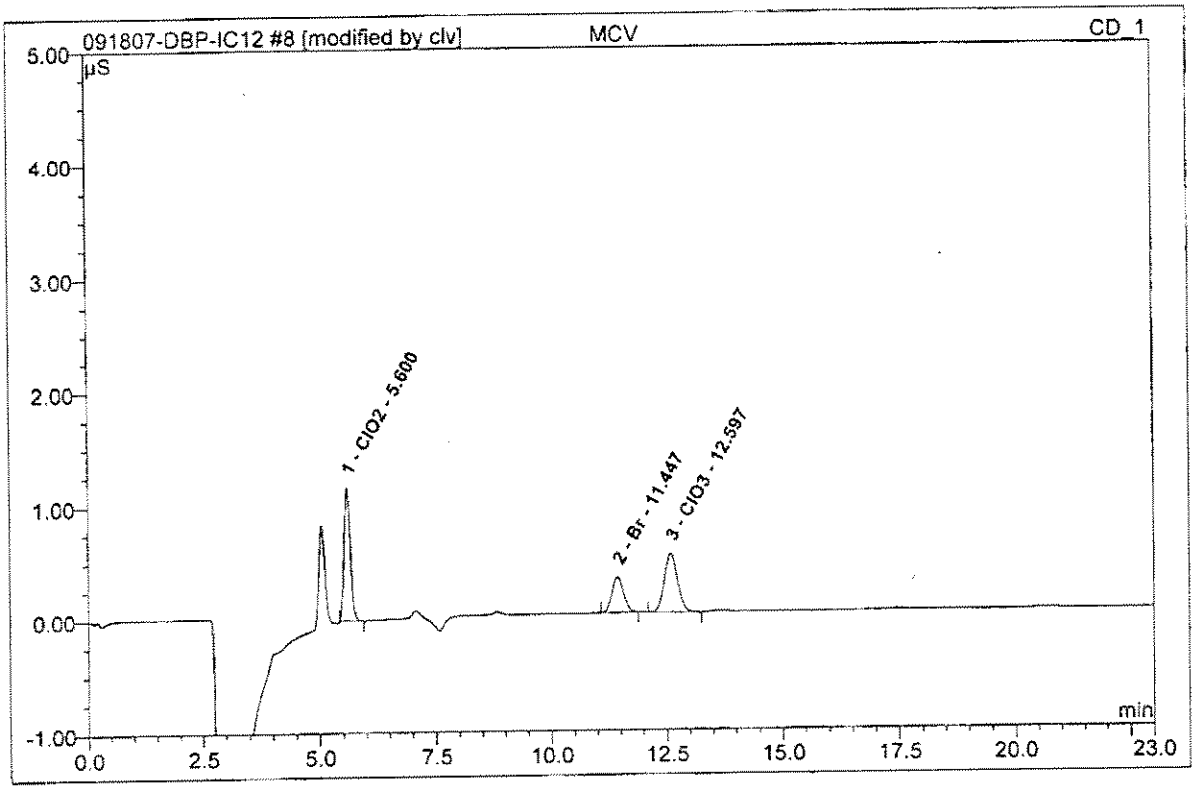


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	5.67	ClO2	Lin	6	99.9885	0.0000	0.0010	0.0000
2	11.91	Br	Lin	6	99.9942	0.0000	0.0009	0.0000
3	13.21	ClO3	Lin	6	99.9954	0.0000	0.0009	0.0000
4	14.28	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Average:					99.9927	0.0000	0.0009	0.0000

8 MCV

200/100/200

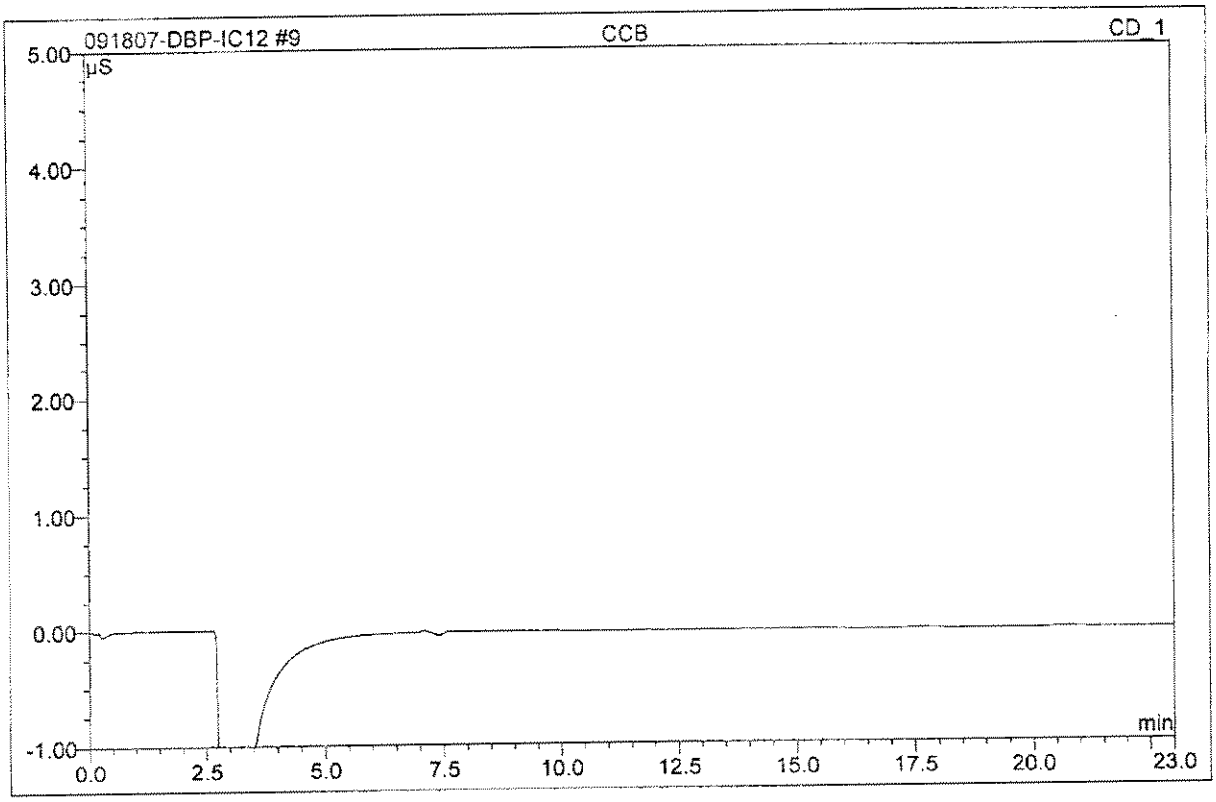
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**336**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/18/2007 9:54**	*Sample 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	5.60	ClO2	1.174	0.184	40.87	184.745	BMB
2	11.45	Br	0.318	0.093	20.62	98.519	BMB*
3	12.60	ClO3	0.519	0.174	38.50	199.780	BMB
Total:			2.011	0.451	100.00	483.044	

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:	**9/18/2007 10:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

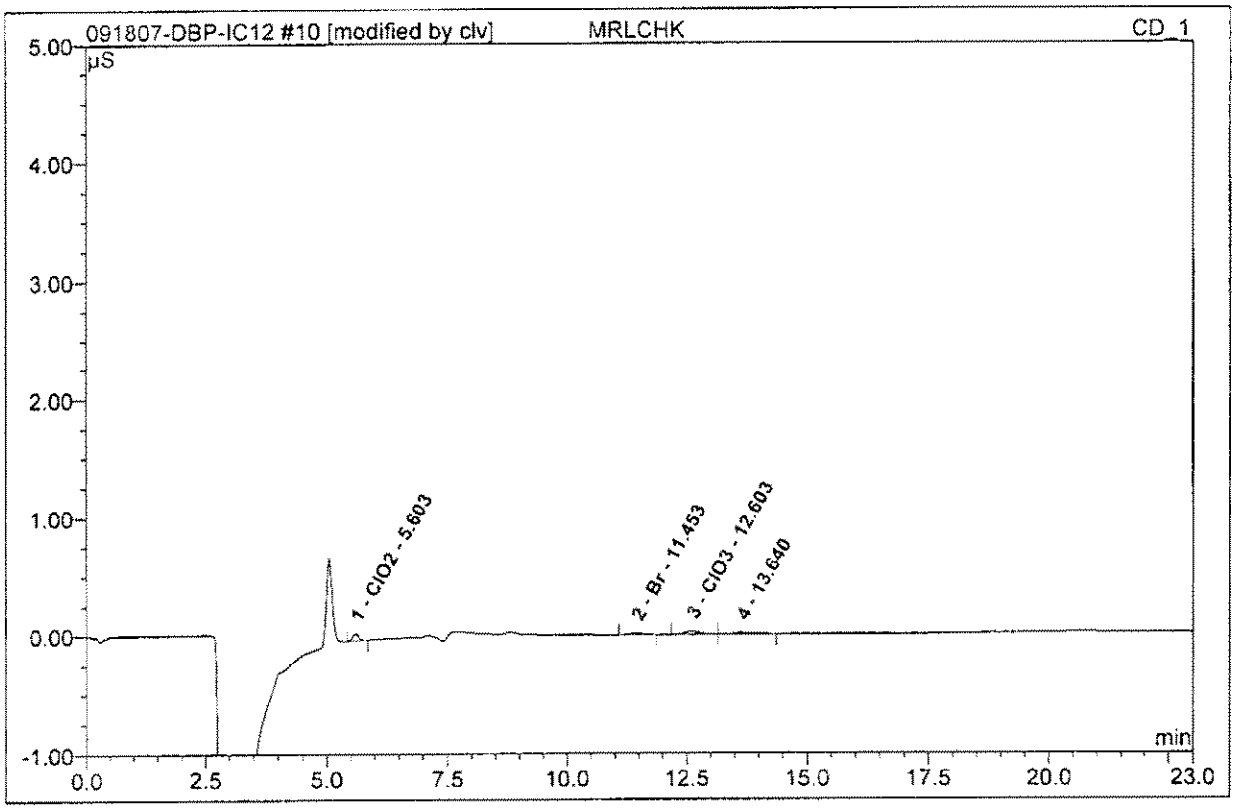


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

10 MRLCHK

S1-10/5/10

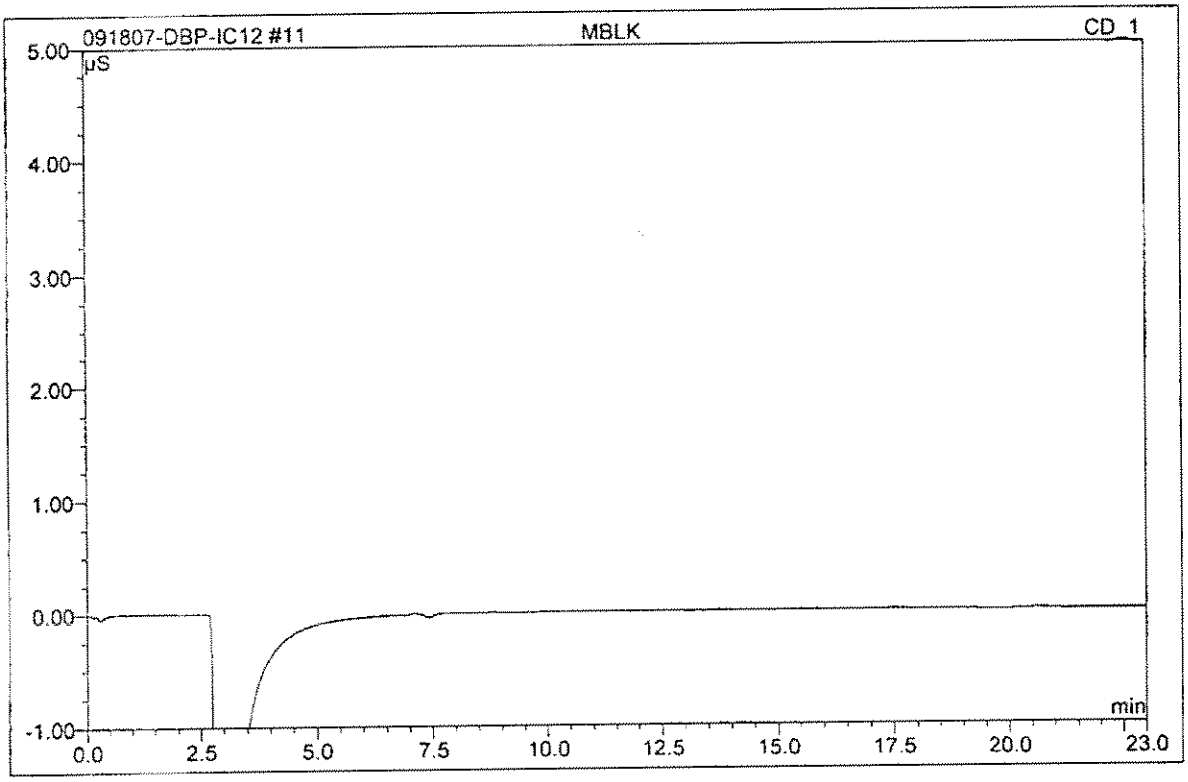
Sample Name:	**MRLCHK**	*Injection Volume:*	**1000.0**
Vial Number:	**339**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/18/2007 10:45**	*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	5.60	ClO2	0.059	0.009	31.26	8.986	BMB
2	11.45	Br	0.016	0.005	15.95	4.846	BMB*
3	12.60	ClO3	0.028	0.009	33.01	10.894	BM
4	13.64	n.a.	0.012	0.006	19.78	n.a.	MB
Total:			0.115	0.029	100.00	24.726	

11 MBLK

Sample Name:	**MBLK**	*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:	**9/18/2007 11:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

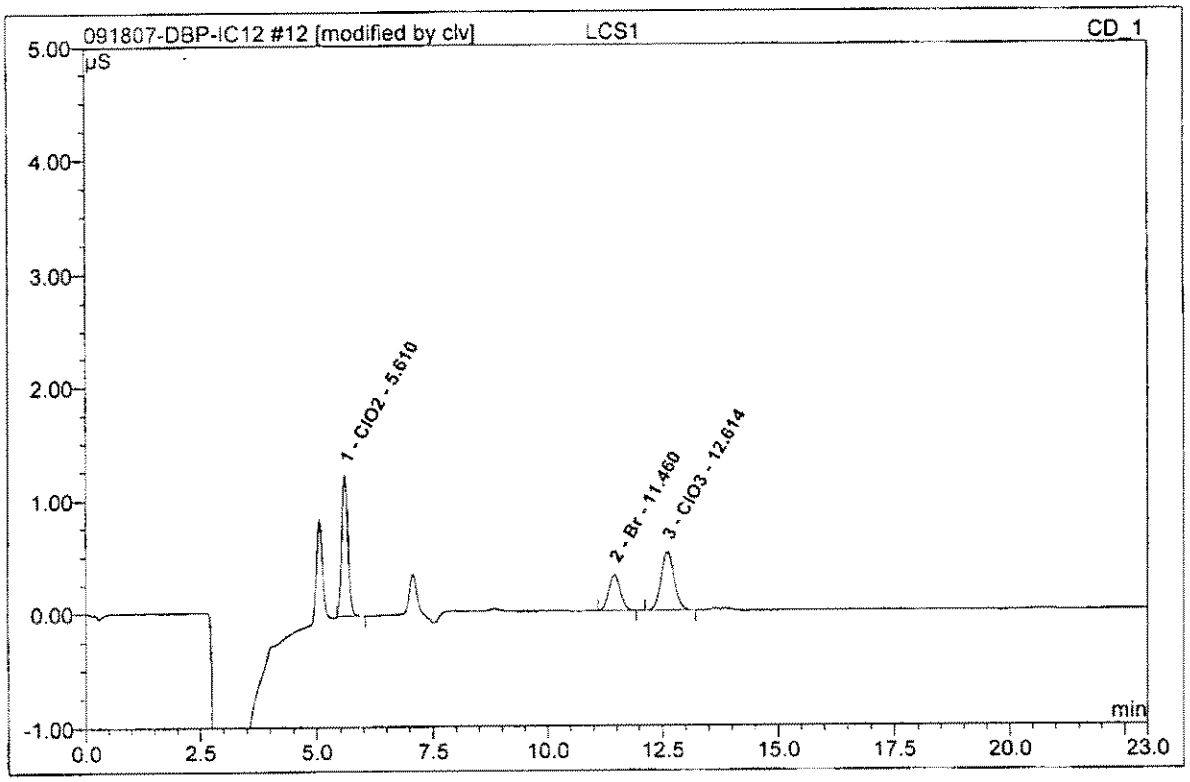


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

12 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:	**9/18/2007 11:36**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

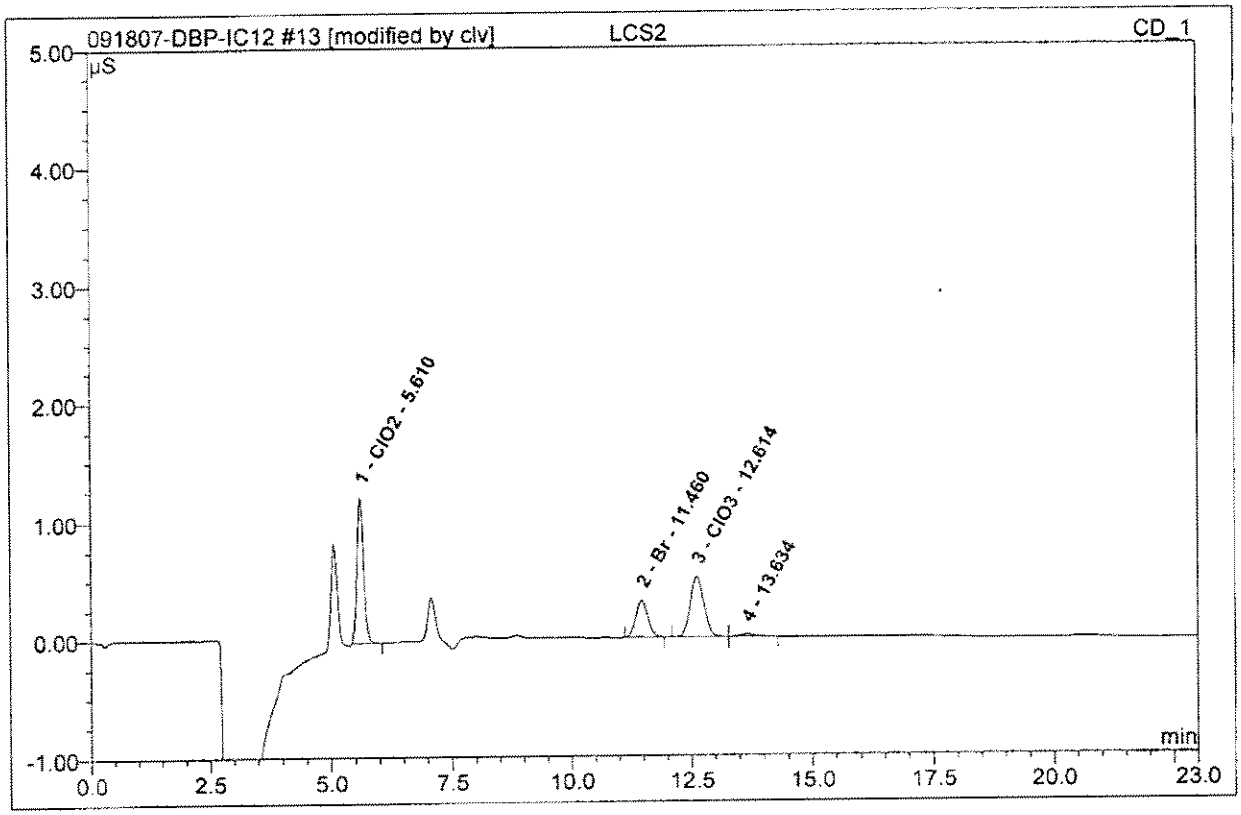


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.61	ClO2	1.248	0.198	42.78	198.461	BMB
2	11.46	Br	0.318	0.093	20.14	98.738	BMB*
3	12.61	ClO3	0.515	0.172	37.08	197.445	BMB
Total:			2.081	0.463	100.00	494.643	

13 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:	**9/18/2007 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

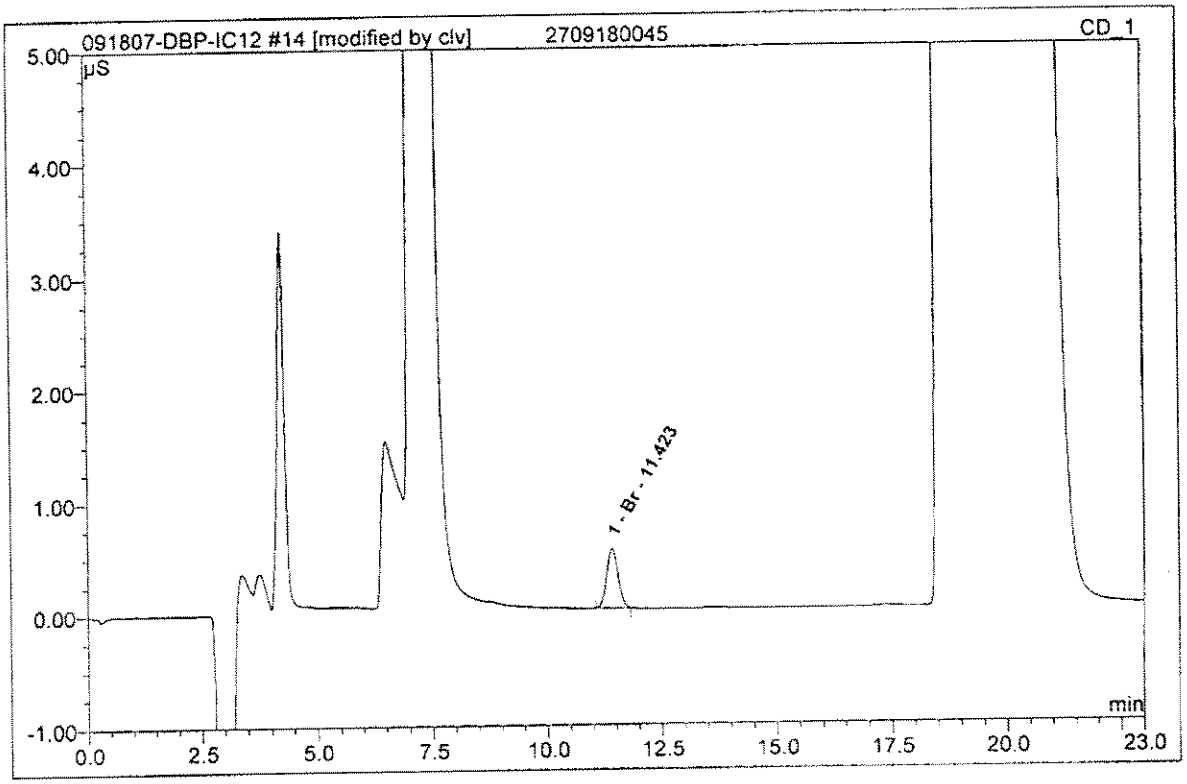


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.61	ClO2	1.238	0.196	41.94	196.717	BMB
2	11.46	Br	0.315	0.093	19.76	97.959	BMB*
3	12.61	ClO3	0.512	0.171	36.60	197.042	BM
4	13.63	n.a.	0.020	0.008	1.70	n.a.	MB
Total:			2.085	0.468	100.00	491.718	

14 2709180045

BR

Sample Name:	**2709180045**	*Injection Volume:*	**1000.0**
Vial Number:	**524**	*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:	**9/18/2007 12:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

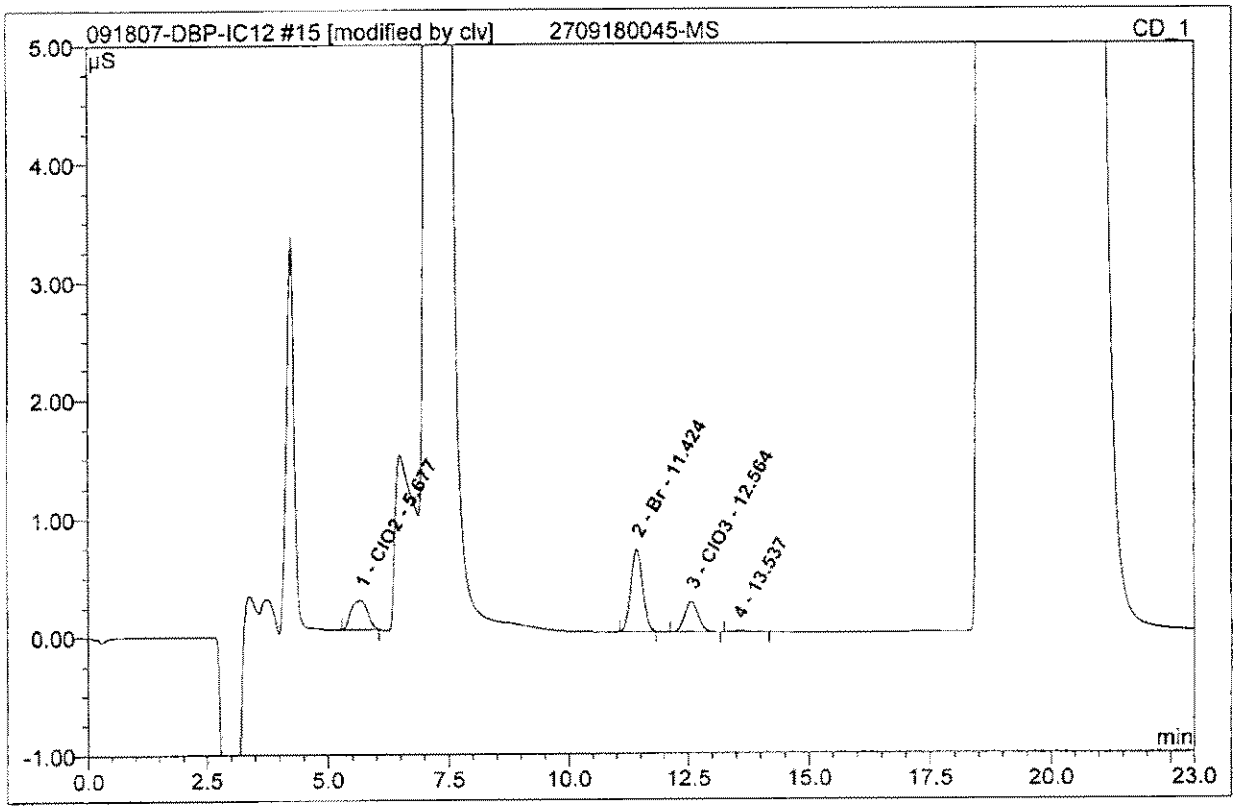


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	11.42	Br	0.530	0.153	100.00	162.034	BMB*
Total:			0.530	0.153	100.00	162.034	

15 2709180045-MS

100/50/100

Sample Name:	**2709180045-MS**	*Injection Volume:*	**1000.0**
Vial Number:	**525**	*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:	**9/18/2007 12:52**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

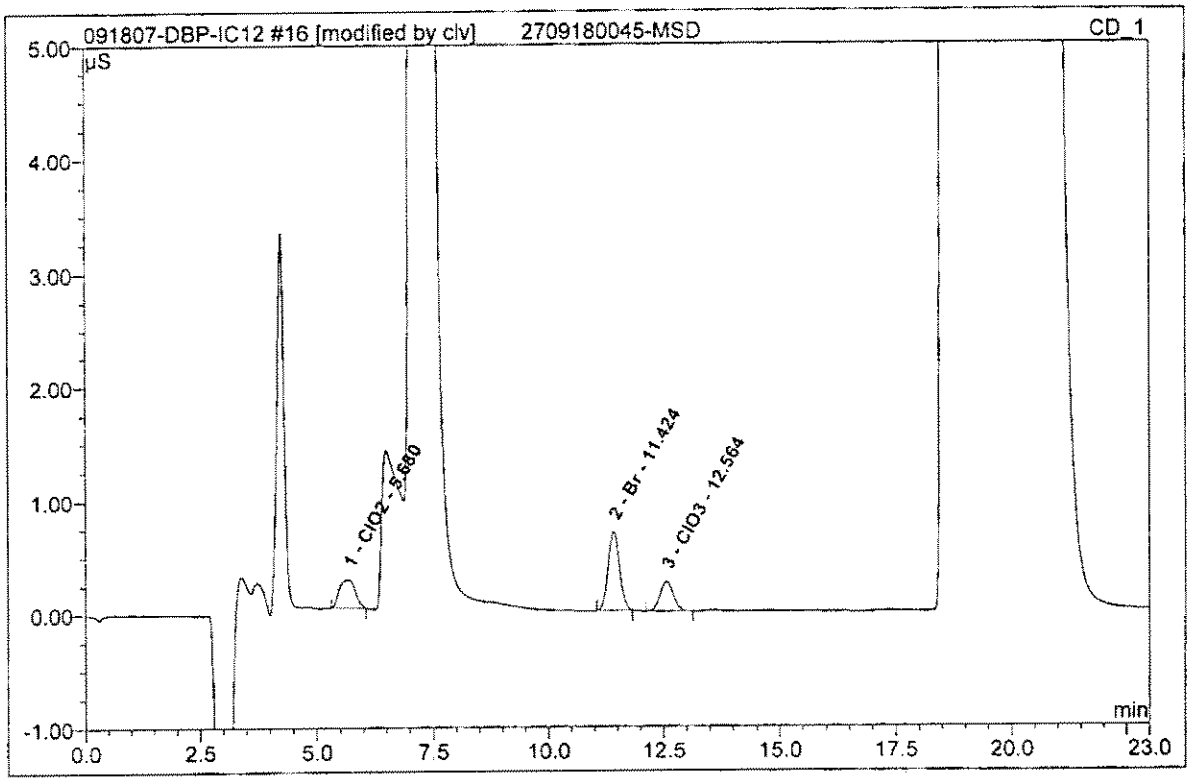


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.68	ClO2	0.251	0.100	25.41	99.725	BMB*
2	11.42	Br	0.695	0.201	51.18	212.286	BMB*
3	12.56	ClO3	0.262	0.087	22.13	99.693	BMB
4	13.54	n.a.	0.012	0.005	1.29	n.a.	BMB
Total:			1.220	0.392	100.00	411.704	

16 2709180045-MSD

100/50/100

Sample Name:	**2709180045-MSD**	*Injection Volume:*	**1000.0**
Vial Number:	**525**	*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:	**9/18/2007 13:17**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

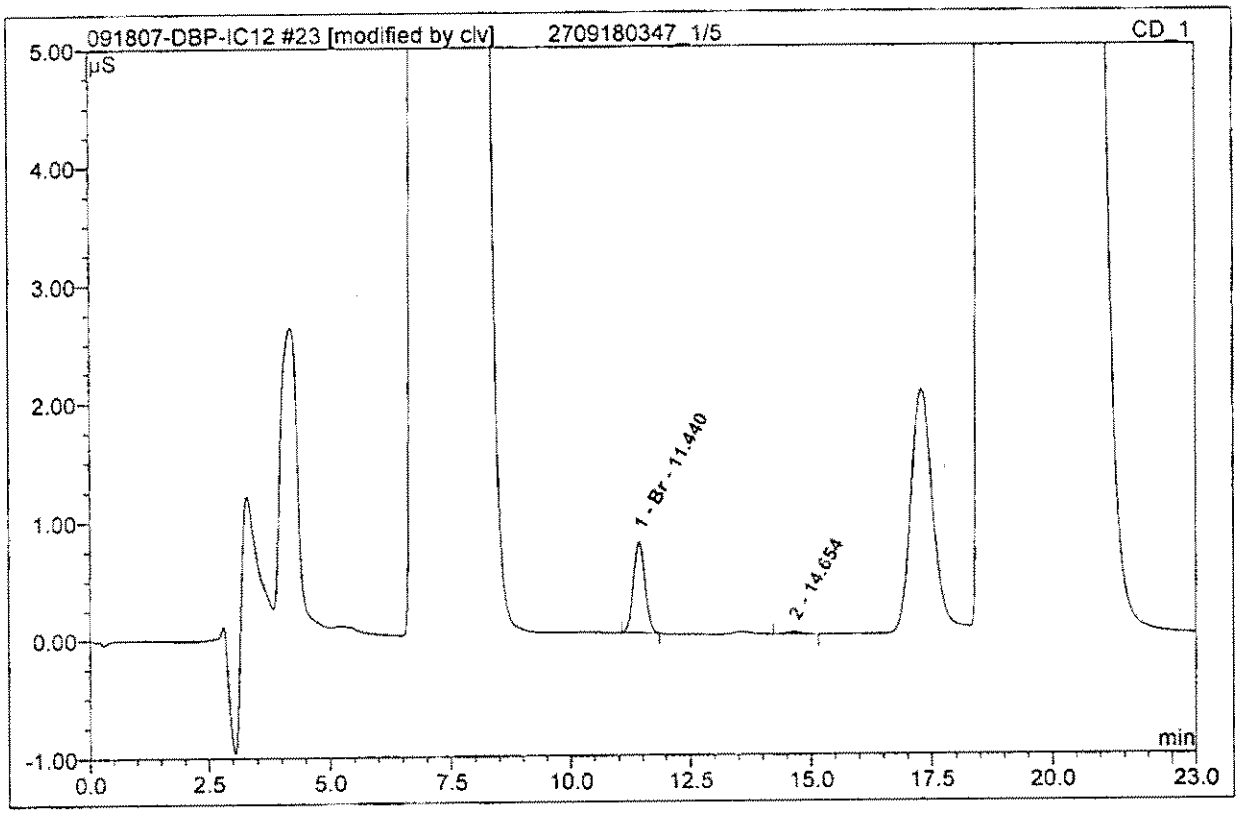


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.68	ClO2	0.253	0.100	25.79	100.411	BMB*
2	11.42	Br	0.696	0.201	51.79	213.091	BMB*
3	12.56	ClO3	0.264	0.087	22.43	100.237	BMB
Total:			1.213	0.389	100.00	413.739	

23 2709180347_1/5

CLO3

Sample Name:	**2709180347_1/5**	*Injection Volume:*	**1000.0**
Vial Number:	**526**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**5.0000**
Recording Time:	**9/18/2007 16:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

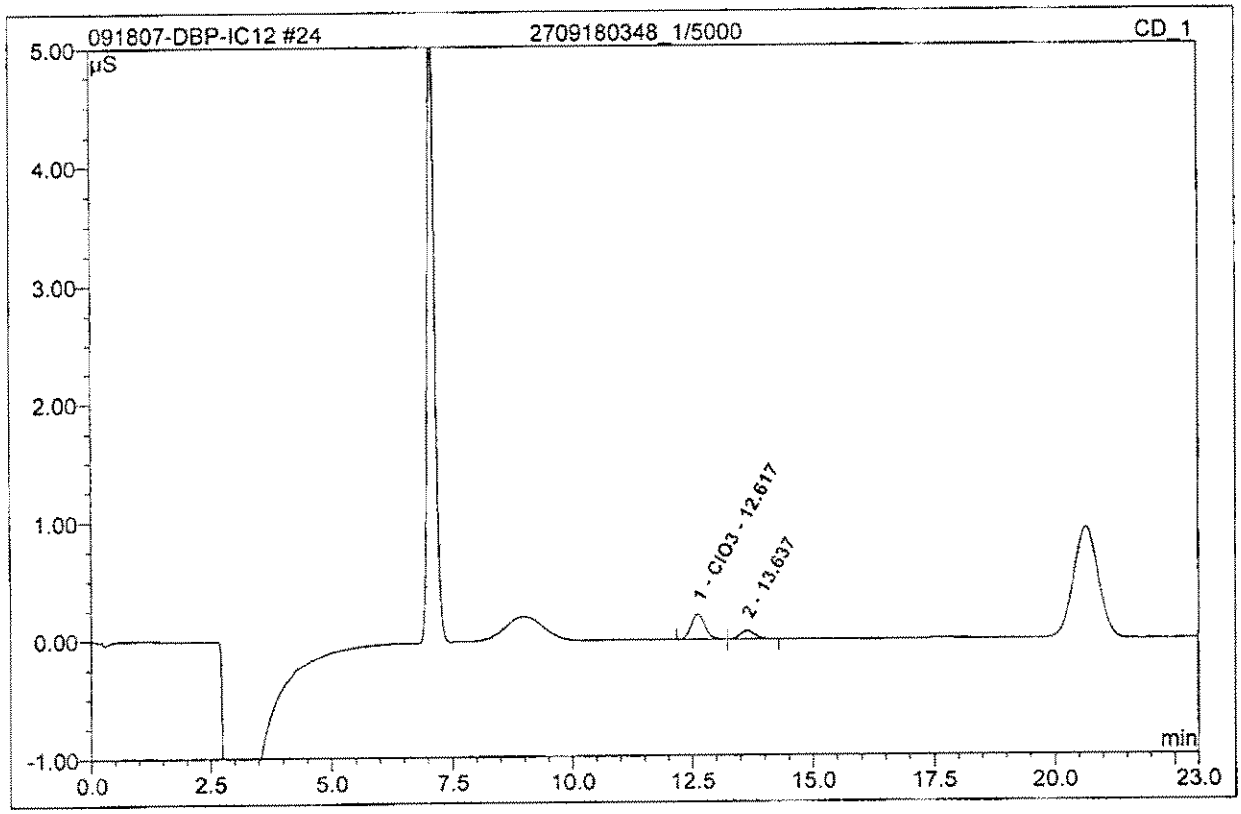


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	11.44	Br	0.773	0.219	96.18	1158.500	BMB*
2	14.65	n.a.	0.021	0.009	3.82	n.a.	BMB
Total:			0.794	0.228	100.00	1158.500	

24 2709180348_1/5000

CLO3

Sample Name:	**2709180348_1/5000**	*Injection Volume:*	**1000.0**
Vial Number:	**526**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**5000.0000**
Recording Time:	**9/18/2007 16:40**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**



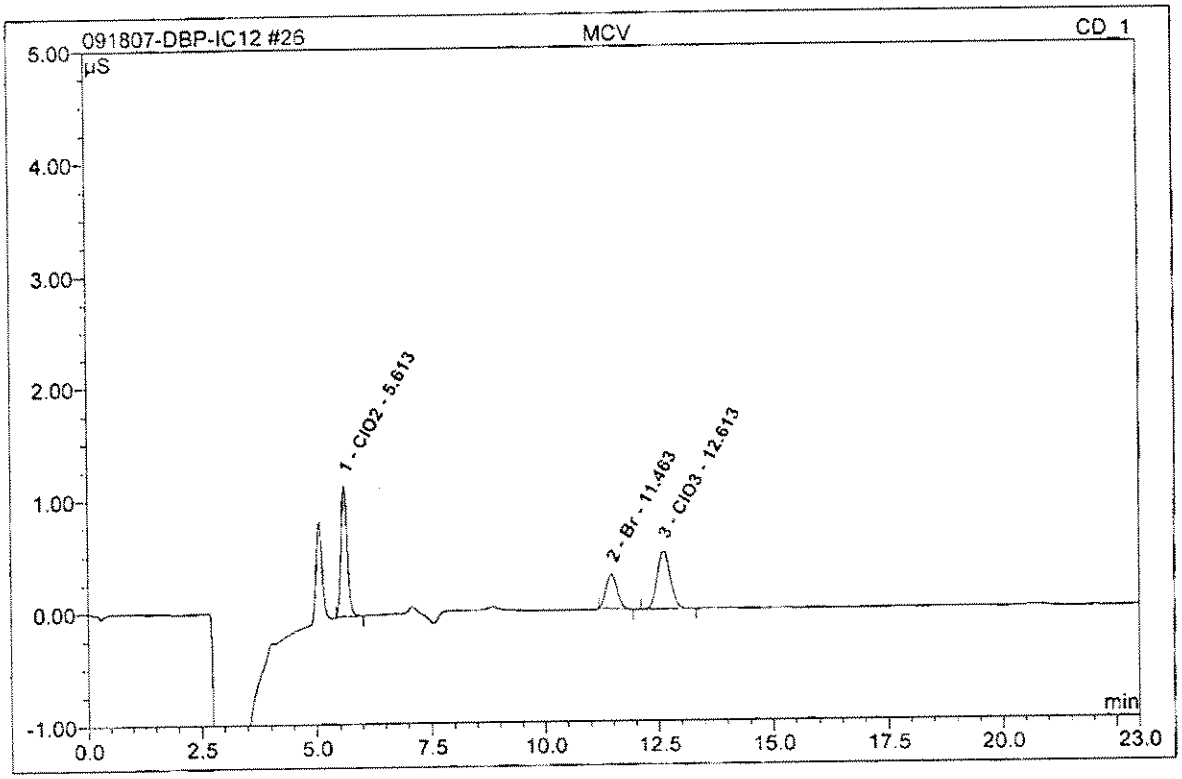
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	12.62	ClO3	0.217	0.073	73.61	#########	BMB
2	13.64	n.a.	0.072	0.026	26.39	n.a.	BMB
Total:			0.290	0.100	100.00	##########	

42.139

26 MCV

200/100/200

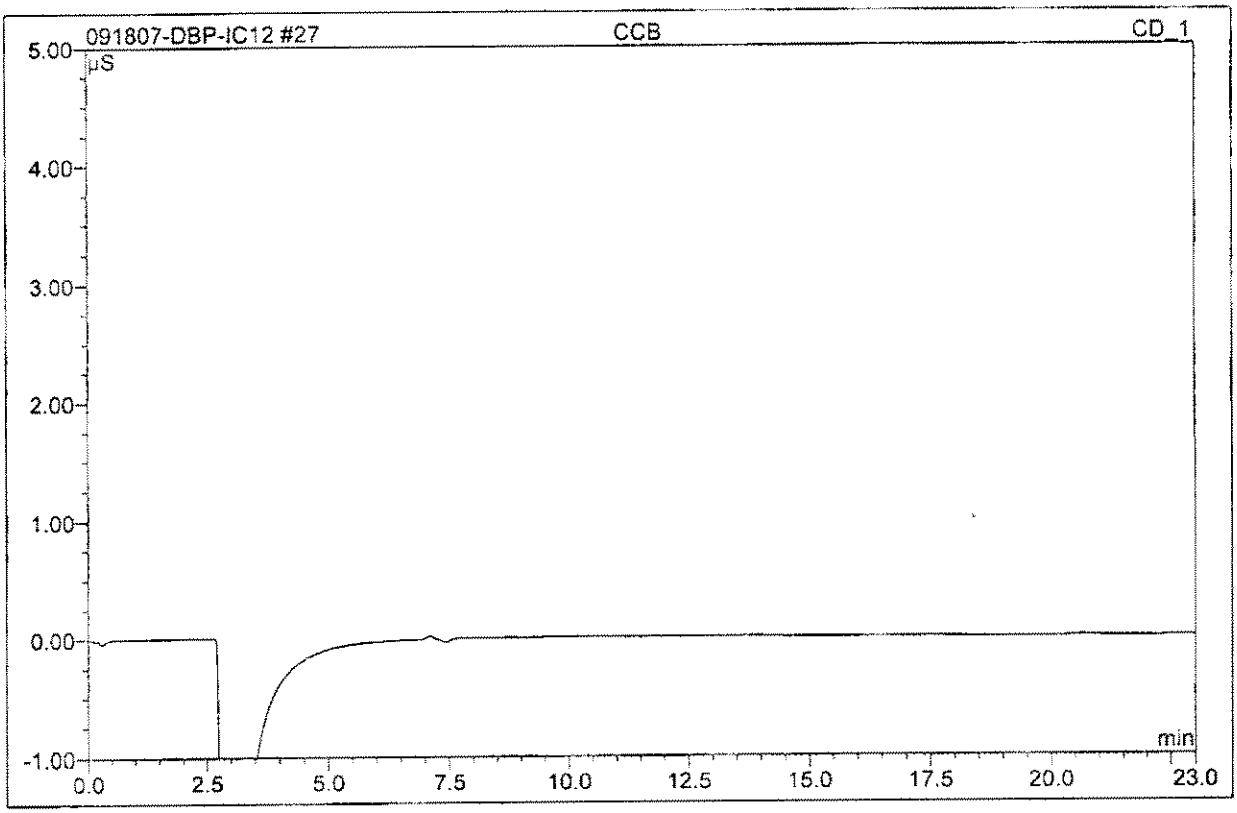
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**528**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/18/2007 17:31**	*Sample 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	5.61	ClO2	1.167	0.186	41.65	186.111	BMB
2	11.46	Br	0.307	0.087	19.57	92.399	BMB
3	12.61	ClO3	0.515	0.173	38.78	198.923	BMB
Total:			1.988	0.446	100.00	477.434	

27 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**526**	*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:	**9/18/2007 17:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

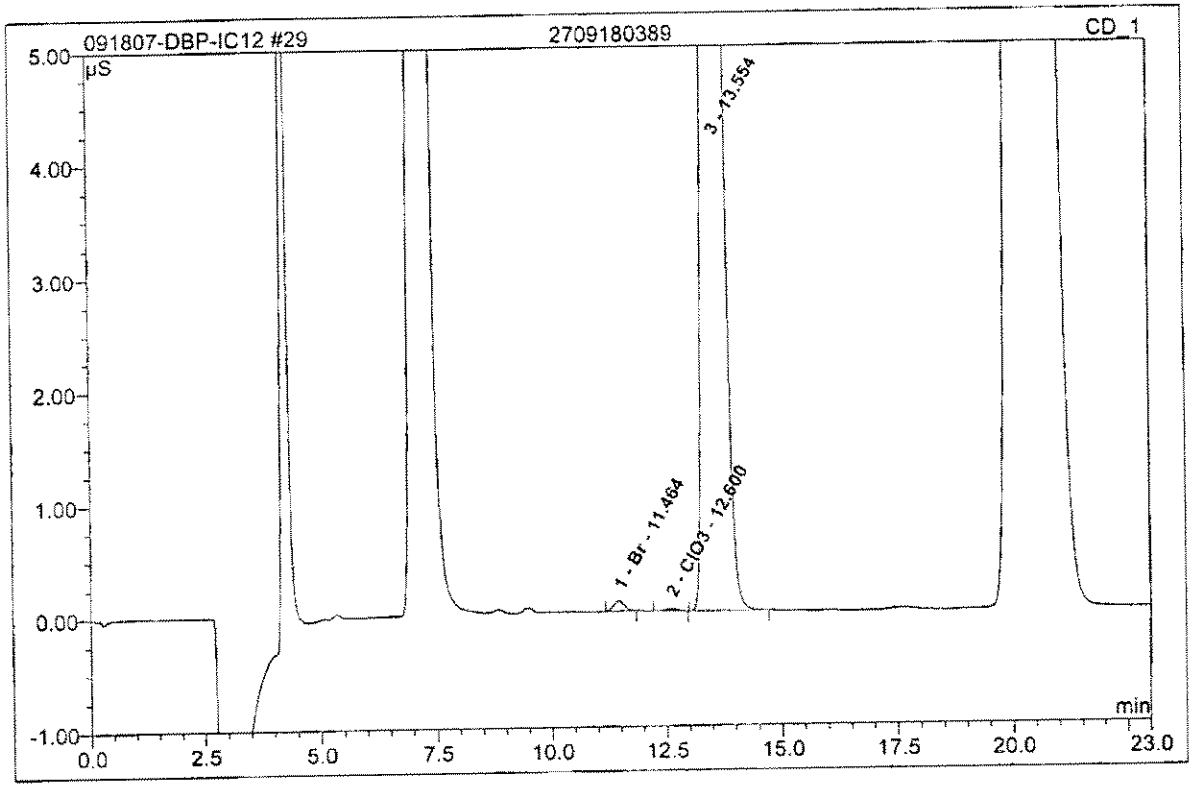


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

29 2709180389

CLO2/CLO3

Sample Name:	**2709180389**	*Injection Volume:*	**1000.0**
Vial Number:	**525**	*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:	**9/18/2007 18:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

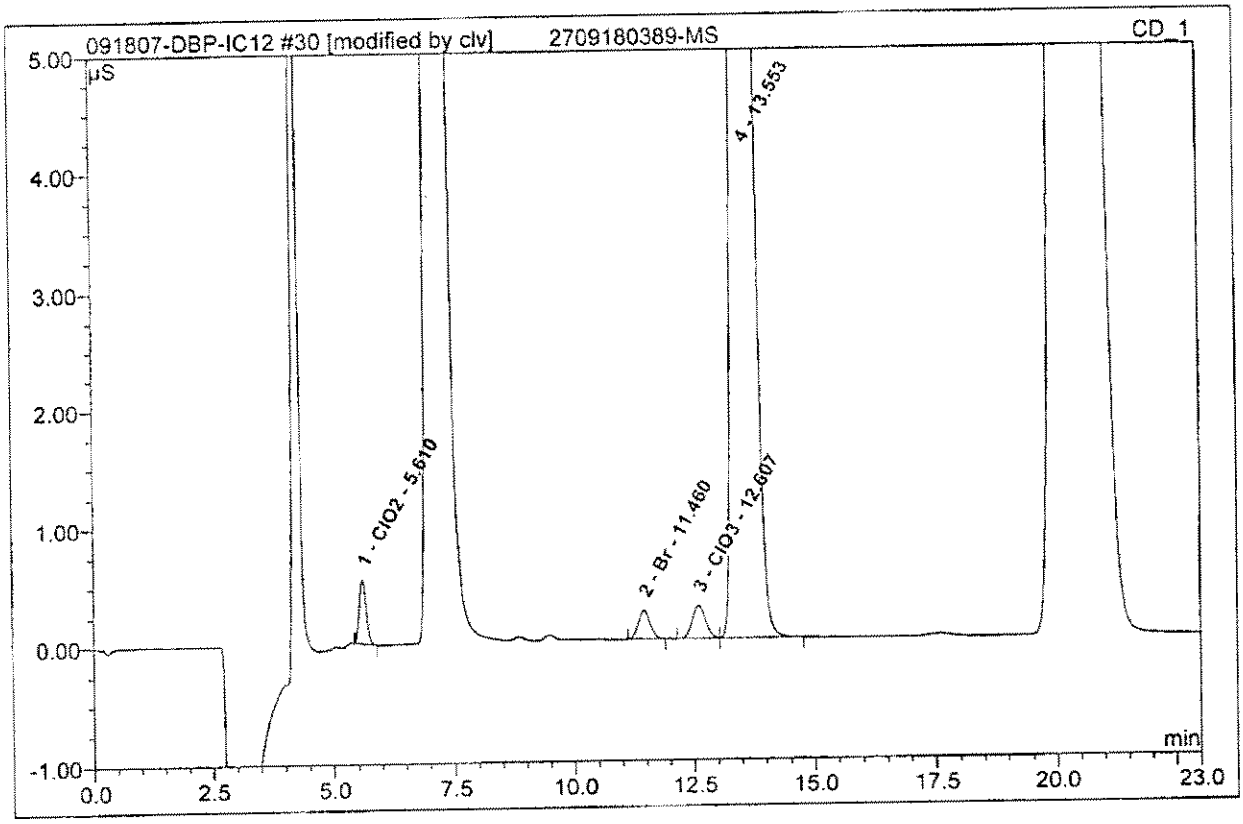


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	11.46	Br	0.087	0.024	0.24	25.710	BMB
2	12.60	ClO3	0.021	0.007	0.07	7.714	BMB
3	13.55	n.a.	29.949	10.119	99.69	n.a.	BMB
Total:			30.057	10.150	100.00	33.424	

30 2709180389-MS

100/50/100

Sample Name:	**2709180389-MS**	*Injection Volume:*	**1000.0**
Vial Number:	**526**	*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:	**9/18/2007 19:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

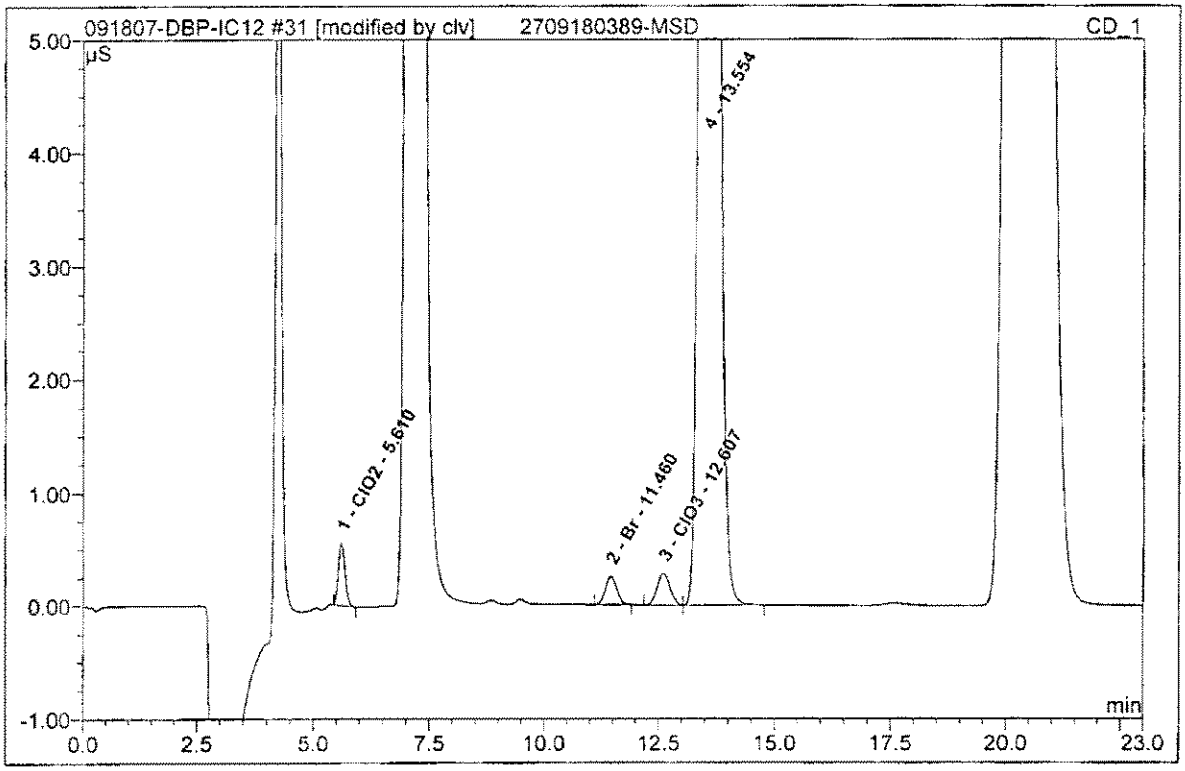


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.61	ClO2	0.546	0.092	0.92	92.213	BMB
2	11.46	Br	0.248	0.071	0.71	75.525	BMB*
3	12.61	ClO3	0.282	0.092	0.91	105.413	BM
4	13.55	n.a.	28.972	9.793	97.46	n.a.	MB
Total:			30.048	10.048	100.00	273.152	

31 2709180389-MSD

100/50/100

Sample Name:	**2709180389-MSD**	*Injection Volume:*	**1000.0**
Vial Number:	**526**	*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:	**9/18/2007 19:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

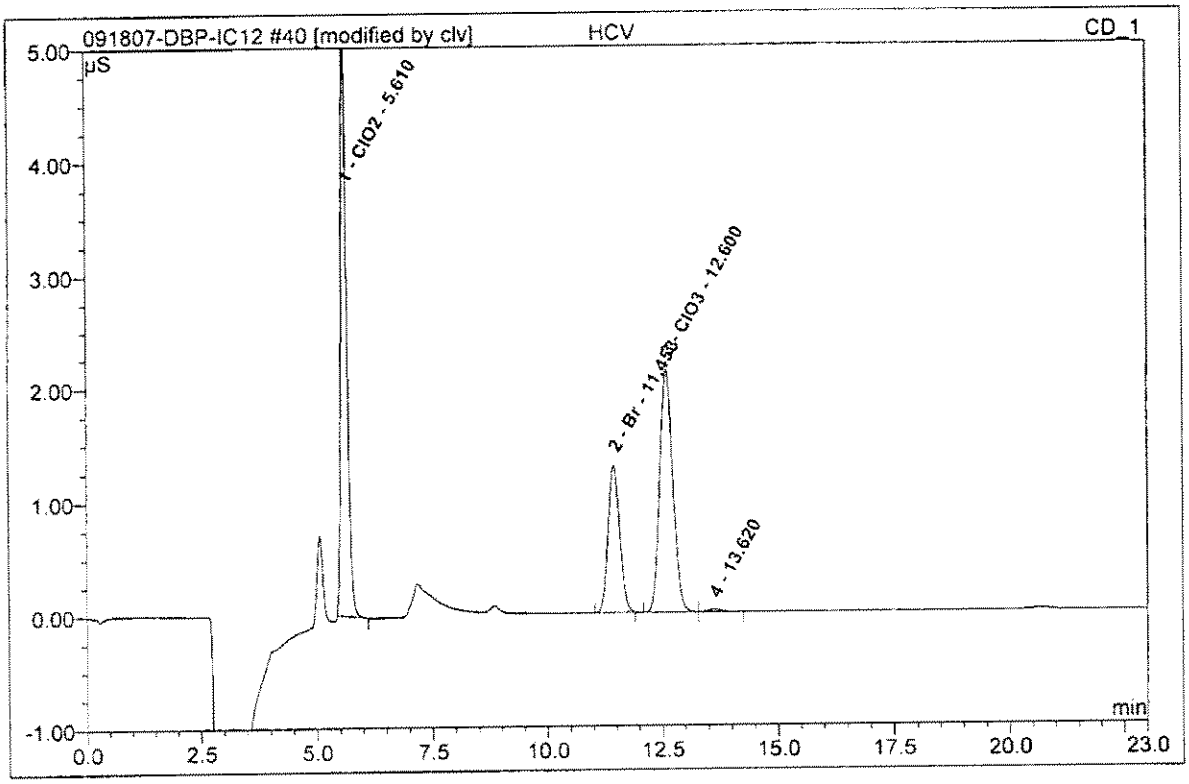


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.61	ClO2	0.555	0.094	0.92	94.202	BMB
2	11.46	Br	0.255	0.074	0.72	77.938	BMB*
3	12.61	ClO3	0.286	0.092	0.90	106.142	BM
4	13.55	n.a.	29.532	9.978	97.46	n.a.	MB
Total:			30.629	10.238	100.00	278.283	

40 HCV

800/400/800

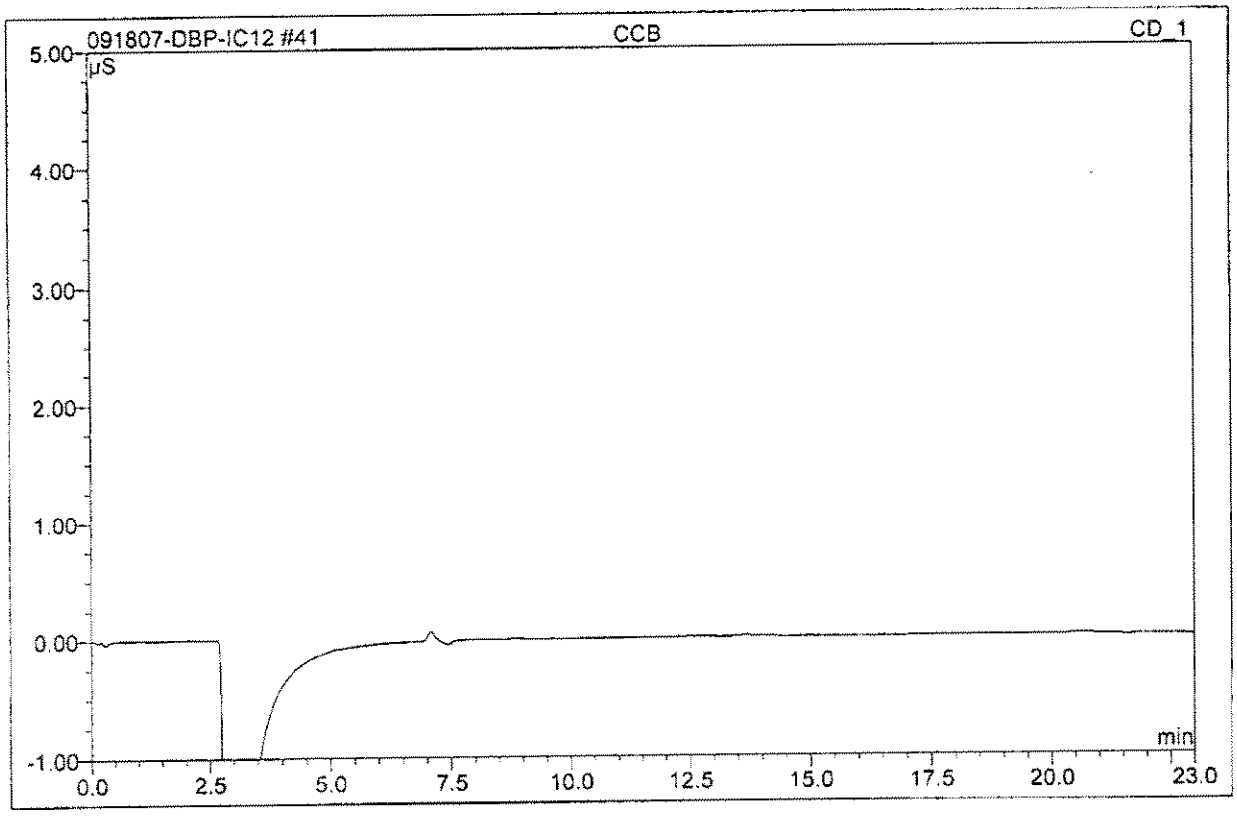
Sample Name:	**HCV**	*Injection Volume:*	**1000.0**
Vial Number:	**529**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**9/18/2007 23:27**	*Sample 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	5.61	ClO2	5.175	0.798	41.94	799.036	BMB
2	11.45	Br	1.300	0.383	20.13	405.341	BMB*
3	12.60	ClO3	2.138	0.713	37.46	819.183	BM
4	13.62	n.a.	0.023	0.009	0.46	n.a.	MB
Total:			8.636	1.902	100.00	2023.560	

41 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**583**	*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:	**9/18/2007 23:53**	*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	

42 STOP

Sample Name:	**STOP**	*Injection Volume:*	**1000.0**
Vial Number:	**588**	*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:	**9/19/2007 0:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**n.a.**	*Sample Amount:*	**1.0000**

091807-DBP-IC12 #42 STOP CD_1

Can't open raw data file "\\USPAS2SD\O1\RawData$\IC\IC12_DBP\2007\SEP\091807-DBP-IC12.SEQ\CD_1.CHL\37.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

Reagent Preparation Documentation

Page:_____

Reagent: DBP Init. Cal. Std. 10/5/10 ppb
Date Received/Prepped: 091707 / / / / /
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	LME090129-12 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_2 EXP 060108	R201649	1,000 ppm

Comment:

Reagent: DBP 2nd Source 10/5/10 ppb
Date Received/Prepped: 091707 / / / / /
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	LME090129-12 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_2 EXP 093109	R201400	1,000 ppm

Comment:

Reagent: DBP SI / MDL/MRV 10/5/10 ppb
Date Received/Prepped: 091707 / 100607 / 090507 / 092107 / 101607 / 102307
Date Expired: 081709 / 090607 / 100507 / 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.	LME090129-12 EDA	100,000 ppm
0.1 ml 10/5/10 ppb	Init. Cal	CLV070717-3	10/5/10 ppb

Comment:

Reagent Preparation Documentation

Page:_____

Reagent: DBP S2/MRL 20/10/20 ppb
Date Received/Prepped: 081707 / 080607 / 092607 / 092007 / /
Date Expired: 081707 / 090607 / 100507 / 100307 / /
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-6
By: Clv
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA / 100 ml Soln.	LMEDA040229-12 EDA	100,000 ppm
0.2 ml 10/5/10 ppb	Init. Cal Std	CLV070717-3	10/5/10 ppm

Comment:

Reagent: DBP S3 100/50/100 ppb
Date Received/Prepped: 081707 / 091207 / / / /
Date Expired: 081707 / 091207 / / / /
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-7
By: Clv
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA / 100 ml Soln.	LMEDA040229-12 EDA	100,000 ppm
1.0 ml 10/5/10 ppm	Init. Cal Std	CLV070717-3	10/5/10 ppm

Comment:

Reagent: DBP S4/MCV 200/100/500 ppb
Date Received/Prepped: 081707 / 072707 / 080907 / 082507 / 091007 / 092507 / 101107 / 101907
Date Expired: 081707 / 082707 / 090907 / 100507 / 101007 / 102507 / 111107 / 111907
Manufacturer: 102607 / 110207
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-8
By: Clv
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA / 100 ml Soln.	LMEDA040229-12	100,000 ppm
2.0 ml 10/5/10 ppm	Init. Cal Std	CLV070717-3	10/5/10 ppm

Comment:

Reagent Preparation Documentation

Page:_____

Reagent: DBP 55 400/200/400 ppb
Date Received/Prepped: 07/17/07 / 09/20/07 / / / /
Date Expired: 08/17/07 / 10/20/07 / / / /
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070709 - 9
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml stk	LMR040229-12	100,000 ppm
40 ml 10/5/10 ppm	Int. Cal Std /	CLV070717-3	10/5/10 ppm

Comment:

Reagent: DBP 56/HCV 800/400/800 ppb
Date Received/Prepped: 07/17/07 / 08/06/07 / 09/05/07 / 09/21/07 / 10/16/07 / 10/26/07
Date Expired: 08/17/07 / 09/06/07 / 10/05/07 / 10/21/07 / 11/16/07 / 11/26/07
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717-10
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml Stk	LMR040229-12	100,000 ppm
40 ml 10/5/10 ppm	Int. Cal Std /	CLV070717-3	10/5/10 ppm

Comment:

Reagent: DBP LCS/LCSD 200/100/200 ppb
Date Received/Prepped: 07/17/07 / 07/27/07 / 08/10/07 / 09/10/07 / 09/21/07 / 10/04/07 / 10/16/07
Date Expired: 08/17/07 / 08/27/07 / 09/10/07 / 10/10/07 / 10/21/07 / 11/04/07 / 11/16/07
/ 10/23/07 / 10/25/07
/ 11/23/07 / 11/26/07
Manufacturer:
Storage Condition: ROOM TEMP / BROWN BOTTLE

MW #: CLV070717 - 11
By: ch
Matrix: A
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
50 ml 100,000 ppm	EDA > 100 ml Stk	LMR040229-12	100,000 ppm
20 ml 10/5/10 ppm	Int Std Soln /	CLV070717-9	10/5/10 ppm

Comment:

INORGANIC VENTURES
195 Lenigh Avenue, Suite 4
Lakewood, New Jersey 08701 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 - 732.901.1900
fax: 732.901.1999
info@inorganicventures.com

I-CAL ION CHROMATOGRAPHY SOLUTION 1000 µg/mL Chlorite in H_2O

Catalog No: ICCLO21-1and ICCLO21-5

Lot Number: **Z-CLOX01041**

Starting Material:	Sodium Chlorite
Starting Material Lot No:	E02F39

CERTIFIED CONCENTRATION: 975 ± 2 µg/mL

* **The Certified Concentration for Lot No. Z-CLOX01041 is only the ClO_2^-. The value of Cl^- is 12 ± 1 µg/mL, and the value of ClO_3^- is 12 ± 1 µg/mL. This was determined by Ion Chromatography vs an in-house standard solutions traceable to NIST SRM 3182. The value of Unknown 1 is 7 ± 1 µg/mL, and the value of Unknown 2 is 4 ± 1 µg/mL.**

The Certified Value is based upon the wet assay value. The following equations are used in the calculation of the certified value and the uncertainty:

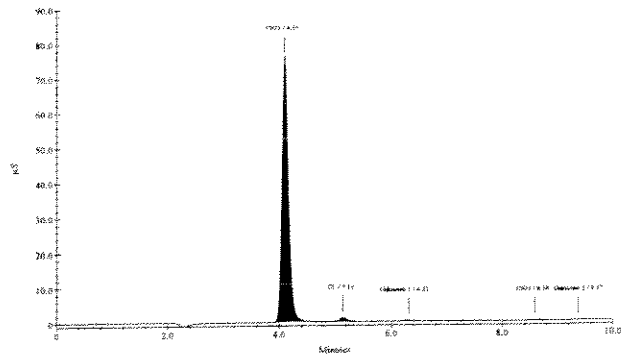
$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n} \qquad \text{Uncertainty } (\pm) = \frac{2[(\sum s_i)^2]^{1/2}}{(n)^{1/2}}$$

$(\bar{x})$ = mean x_i = individual results n = number of measurements $\sum S_i$ = The summation of all significant estimated errors.

Instrument Value: 994 ± 2 µg/mL
Method:Ion Chromatography vs NIST SRM 136e Lot number 980702.

Wet Analysis: 975 ± 2 µg/mL
Method: Iodometric Titration NIST SRM 136e Lot number 980702.

ClO_2^- Z-CLOX01041



DIONEX DX-120 Ion Chromatograph
Anal. Column: IonPac AS9-HC 4 x 250mm
Guard Column: IonPac AG9-HC 4 x 50mm
Anion self Generating Suppressor:
ASRS-ULTRA II 4mm
Suppressor Current: 100mA
Eluent: 9 mM Na_2CO_3
Eluent Flow Rate: 1.00 mL/min
Cell Temp.: 35 °C
Scale:Y-axis = 90µS scale
X-axis = minutes
Concentration: 100µg/g

ANALYZED DENSITY OF SOLUTION (measured at 22°C): 0.998 g/mL

QA:KL Rev.120406NTM

Paul R. Haines

Quality Assurance Manager Expires:

EXPIRES 1 Yr 2008

INORGANIC VENTURES
195 Lehigh Avenue, Suite 4
Lakewood, New Jersey 08701 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 732.901.1900
fax: 732.901.1909
info@inorganicventures.com

1.0 **INORGANIC VENTURES** is an ISO Guide 34:2000 registered Certified Reference Material (CRM) Manufacturer (Certificate #883-02). The certificate is designed and the data is determined in accordance with ISO Guide 31:2000 (Reference Materials-Contents of Certificates and Labels), ISO Guide 34:2000 "Quality System Guidelines for the Production of Reference Materials," and ISO Guide 35:1989 "Certification of Reference Materials - General and Statistical Principals."

2.0 **DESCRIPTION OF CRM** **Ion Chromatography 1000 µg/mL Chlorate in Water**

Catalog Number:	ICCLO31-1 and ICCLO31-5
Lot Number:	**A2-CLOX01043**
Starting Material:	Potassium Chlorate
Starting Material Purity (%):	99.0000
Starting Material Lot No.:	02407TF
Matrix:	Water

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 1000 ± 3 µg/mL

Certified Density: 0.999 g/mL (measured at 22° C)

The Certified Value is based upon the most precise method used to analyze this CRM. The following equations are used in the calculation of the certified value and the uncertainty:

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = \frac{2[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$$

($\bar{x}$) = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors (Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

The independent samples t-test was used to determine if there is agreement between the above assay methods at the 95% confidence interval. Both methods were compared and showed agreement within the stated uncertainties. This agreement is a confirmation of the accuracy of this CRM.

4.0 **TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties." (ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

Assay Method #1 **999 ± 6 µg/mL**
ICP Assay NIST SRM 3182 Lot Number: 990506

Assay Method #2 **1000 ± 3 µg/mL**
IC Assay NIST SRM Lot Number: in-house std

INORGANIC VENTURES
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CERTIFICATE OF ANALYSIS

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1.0 **INORGANIC VENTURES** is an ISO Guide 34:2000 registered Certified Reference Material (CRM) Manufacturer (Certificate #883-02). The certificate is designed and the data is determined in accordance with ISO Guide 31:2000 (Reference Materials-Contents of Certificates and Labels), ISO Guide 34:2000 "Quality System Guidelines for the Production of Reference Materials," and ISO Guide 35:1989 "Certification of Reference Materials - General and Statistical Principals."

2.0 **DESCRIPTION OF CRM** **Ion Chromatography 1000 µg/mL Bromide in Water**

Catalog Number:	ICBR1-1 and ICBR1-5
Lot Number:	**Z-BR01060**
Starting Material:	Potassium Bromide
Starting Material Purity (%):	99.0000
Starting Material Lot No.:	09014BY
Matrix:	Water

3.0 **CERTIFIED VALUES AND UNCERTAINTIES**

Certified Concentration: 995 ± 2 µg/mL

Certified Density: 0.997 g/mL (measured at 22° C)

The Certified Value is based upon the most precise method used to analyze this CRM. The following equations are used in the calculation of the certified value and the uncertainty:

$$\text{Certified Value } (\bar{x}) = \frac{\Sigma x_i}{n}$$

$$\text{Uncertainty } (\pm) = \frac{2[(\Sigma s_i)^2]^{1/2}}{(n)^{1/2}}$$

$(\bar{x})$ = mean
x_i = individual results
n = number of measurements
Σs_i = The summation of all significant estimated errors
(Most common are the errors from instrumental measurement, weighing, dilution to volume, and the fixed error reported on the NIST SRM certificate of analysis.)

The independent samples t-test was used to determine if there is agreement between the above assay methods at the 95% confidence interval. Both methods were compared and showed agreement within the stated uncertainties. This agreement is a confirmation of the accuracy of this CRM.

4.0 **TRACEABILITY TO NIST AND VALUES OBTAINED BY INDEPENDENT METHODS**

- "Property of the result of a measurement or the value of a standard whereby it can be related to stated references, usually national or international standards, through an unbroken chain of comparisons all having stated uncertainties."
(ISO VIM, 2nd ed., 1993, definition 6.10)
- This product is Traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRMs are available, the term 'in-house std.' is specified.

Assay Method #1	**995 ± 2 µg/mL** IC Assay NIST SRM 3184 Lot Number: 020701
Assay Method #2	**1002 ± 7 µg/mL** Volhard NIST SRM 999a Lot Number: 999a

Reagent Documentation

Reagent: Chloride Standard 975±2µg/mL
Date Received: 23 May 07
Date Expired: 01 Jun 08
Manufacturer: Inorganic Ventures
Storage Condition: room temp

Reagent #: 201648
By: TLH
Matrix: aq
Amount: 125mL
Lot #: Z-CLOX01041

Component	Comment	Standard	Concentration
	IV# ICCL021-1		

Comment:

Reagent: Chlorate Standard 1000±3µg/mL
Date Received: 23 May 07
Date Expired: 01 Jun 08
Manufacturer: Inorganic Ventures
Storage Condition: room temp

Reagent #: 201649
By: TLH
Matrix: aq
Amount: 125mL
Lot #: A2-CLOX01043

Component	Comment	Standard	Concentration
	IV# ICCL031-1		

Comment:

Reagent: Bromide Standard 995±2µg/mL
Date Received: 23 May 07
Date Expired: 01 Jun 08
Manufacturer: Inorganic Ventures
Storage Condition: room temp

Reagent #: 201650
By: TLH
Matrix: aq
Amount: 125mL
Lot #: Z-BR01000

Component	Comment	Standard	Concentration
	IV# ICBR1-1		

Comment: