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Level IV Data Package

MWH Group 229554

Method: EPA 300.1B

2802050696
2802050697

DBP QC Checklist

Analysis Date: 02/19/08 Analyst: JKZ QC'd by [illegible] Date 28 Feb 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

none 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,	WASH,	NEW SUPPRESS	02/18/08 09:40,	1.0,	n.a.	
2,	autocal1,		02/18/08 10:06,	1.0,	n.a.	
3,	autocal2,	S1-10/5/10	02/18/08 10:31,	1.0,	5.1086,	
4,	autocal3,	S2-20/10/20	02/18/08 10:56,	1.0,	9.0874,	
5,	autocal4,	S3-100/50/100	02/18/08 11:22,	1.0,	46.8202,	
6,	autocal5,	S4-200/100/200	02/18/08 11:47,	1.0,	97.3950,	
7,	autocal6,	S5-400/200/400	02/18/08 12:13,	1.0,	197.2389,	
8,	autocal7,	S6-800/400/800	02/18/08 12:38,	1.0,	402.4507,	
9,	MCV,		02/19/08 08:59,	1.0,	105.4110,	105 %
10,	CCB,		02/19/08 09:25,	1.0,	n.a.	
11,	MRLCHK,		02/19/08 09:50,	1.0,	4.7646,	95.3 %
12,	MBLK,		02/19/08 10:16,	1.0,	n.a.	
13,	MBLK,		02/19/08 11:17,	1.0,	n.a.	
14,	LCS1,		02/19/08 11:43,	1.0,	94.9700,	95.0 %
15,	LCS2,	-	02/19/08 12:08,	1.0,	95.9645,	96.0 %
16,	2802150282,	BR	02/19/08 12:34,	1.0,	21.3741,	
17,	2802150284,	BR	02/19/08 12:59,	1.0,	22.5095,	
18,	2802150286,	BR	02/19/08 13:24,	1.0,	18.5710,	
19,	2802150288,	BR	02/19/08 13:50,	1.0,	19.4669,	
20,	2802150291DNR,	CLO2/CLO3-REG	02/19/08 14:15,	1.0,	n.a.	
21,	MCV,		02/19/08 17:12,	1.0,	94.5734,	94.6 %
22,	CCB,		02/19/08 17:37,	1.0,	n.a.	
23,	2802120752_1/2,	CLO2	02/19/08 18:02,	2.0,	353.9205,	
24,	2802080152,	CLO2/CLO3	02/19/08 18:28,	1.0,	76.5522,	
25,	2802080154,	CLO2/CLO3	02/19/08 18:53,	1.0,	85.2917,	
26,	2802050345,	CLO3	02/19/08 19:19,	1.0,	59.6510,	
27,	2802121018,	CLO2/CLO3	02/19/08 19:44,	1.0,	32.1139,	
28,	2802121018MS,		02/19/08 20:09,	1.0,	82.5498,	50.4/101 %
29,	2802121018MSD,		02/19/08 20:35,	1.0,	80.1318,	48.0/96.0 %
30,	MCV,		02/19/08 21:00,	1.0,	99.5901,	99.6 %
31,	CCB,		02/19/08 21:26,	1.0,	n.a.	
32,	2802150027,	CLO2/CLO3	02/19/08 21:51,	1.0,	n.a.	
33,	2802150027MS,		02/19/08 22:16,	1.0,	47.3151,	94.6 %
34,	2802150027MSD,		02/19/08 22:42,	1.0,	47.6584,	95.3 %
35,	2802050696_1/5,	CLO3	02/19/08 23:07,	5.0,	1083.2040,	
36,	2802050697_1/5000,	CLO3	02/19/08 23:33,	5000.0,	n.a.	
37,	2802050200,	BR	02/19/08 23:58,	1.0,	33.3362,	
38,	2802050201,	BR	02/20/08 00:23,	1.0,	n.a.	
39,	2802150019,	CLO2/CLO3	02/20/08 00:49,	1.0,	40.6707,	
40,	2802140200,	BR	02/20/08 01:14,	1.0,	184.1668,	
41,	2802150279,	CLO2/CLO3	02/20/08 01:40,	1.0,	30.0460,	
42,	2802150280,	CLO2/CLO3	02/20/08 02:05,	1.0,	10.7372,	
43,	2802150291,	CLO2/CLO3	02/20/08 02:30,	1.0,	n.a.	
44,	HCV,		02/20/08 02:56,	1.0,	409.9360,	102 %
45,	CCB,		02/20/08 03:21,	1.0,	n.a.	
46,	STOP,		02/20/08 03:47,	1.0,	n.a.	

VB: MM 3/1/08

No. ,	Sample Name ,	Comment	Time	Dil.Fac.	Amount ppb ClO2 CD_1	
1,	WASH,	NEW SUPPRESS	02/18/08 09:40,	1.0,	n.a.	
2,	autocal1,		02/18/08 10:06,	1.0,	n.a.	
3,	autocal2,	S1-10/5/10	02/18/08 10:31,	1.0,	9.3356,	
4,	autocal3,	S2-20/10/20	02/18/08 10:56,	1.0,	18.4739,	
5,	autocal4,	S3-100/50/100	02/18/08 11:22,	1.0,	93.1036,	
6,	autocal5,	S4-200/100/200	02/18/08 11:47,	1.0,	192.6972,	
7,	autocal6,	S5-400/200/400	02/18/08 12:13,	1.0,	392.4298,	
8,	autocal7,	S6-800/400/800	02/18/08 12:38,	1.0,	806.5193,	
9,	MCV,		02/19/08 08:59,	1.0,	207.2905,	104 %
10,	CCB,		02/19/08 09:25,	1.0,	n.a.	
11,	MRLCHK,		02/19/08 09:50,	1.0,	10.4239,	104 %
12,	MBLK,		02/19/08 10:16,	1.0,	~~36.8638,~~	~~not a peak~~ ND 28Feb08
13,	MBLK,		02/19/08 11:17,	1.0,	n.a.	
14,	LCS1,		02/19/08 11:43,	1.0,	199.2578,	99.6 %
15,	LCS2,	-	02/19/08 12:08,	1.0,	197.7342,	98.9 %
16,	2802150282,	BR	02/19/08 12:34,	1.0,	n.a.	
17,	2802150284,	BR	02/19/08 12:59,	1.0,	7.9626,	
18,	2802150286,	BR	02/19/08 13:24,	1.0,	n.a.	
19,	2802150288,	BR	02/19/08 13:50,	1.0,	n.a.	
20,	2802150291DNR,	CLO2/CLO3-REG	02/19/08 14:15,	1.0,	n.a.	
21,	MCV,		02/19/08 17:12,	1.0,	~~180.3199.4061,~~	~~95.7~~ % 90.4 %
22,	CCB,		02/19/08 17:37,	1.0,	n.a.	
23,	2802120752_1/2,	CLO2	02/19/08 18:02,	2.0,	978.3015,	✓
24,	2802080152,	CLO2/CLO3	02/19/08 18:28,	1.0,	n.a.	
25,	2802080154,	CLO2/CLO3	02/19/08 18:53,	1.0,	n.a.	
26,	2802050345,	CLO3	02/19/08 19:19,	1.0,	10.7436,	
27,	2802121018,	CLO2/CLO3	02/19/08 19:44,	1.0,	n.a.	
28,	2802121018MS,		02/19/08 20:09,	1.0,	~~112.5781,~~	~~112~~ % 93.7319 / 94%
29,	2802121018MSD,		02/19/08 20:35,	1.0,	~~114.4580,~~	~~114.9~~ % 95.9897 / 94%
30,	MCV,		02/19/08 21:00,	1.0,	191.1210,	95.6 %
31,	CCB,		02/19/08 21:26,	1.0,	n.a.	
32,	2802150027,	CLO2/CLO3	02/19/08 21:51,	1.0,	n.a.	
33,	2802150027MS,		02/19/08 22:16,	1.0,	~~107.3745,~~	~~107~~ % 94.0435 / 94%
34,	2802150027MSD,		02/19/08 22:42,	1.0,	~~107.4550,~~	~~107~~ % 97.2312 / 97%
35,	2802050696_1/5,	CLO3	02/19/08 23:07,	5.0,	41.4213,	
36,	2802050697_1/5000,	CLO3	02/19/08 23:33,	5000.0,	n.a.	
37,	2802050200,	BR	02/19/08 23:58,	1.0,	11.0705,	
38,	2802050201,	BR	02/20/08 00:23,	1.0,	n.a.	
39,	2802150019,	CLO2/CLO3	02/20/08 00:49,	1.0,	n.a.	
40,	2802140200,	BR	02/20/08 01:14,	1.0,	7.5136,	
41,	2802150279,	CLO2/CLO3	02/20/08 01:40,	1.0,	n.a.	
42,	2802150280,	CLO2/CLO3	02/20/08 02:05,	1.0,	n.a.	
43,	2802150291,	CLO2/CLO3	02/20/08 02:30,	1.0,	n.a.	
44,	HCV,		02/20/08 02:56,	1.0,	840.5956,	105 %
45,	CCB,		02/20/08 03:21,	1.0,	n.a.	
46,	STOP,		02/20/08 03:47,	1.0,	n.a.	

No.	Sample Name	Comment	Time	Dil.Fac.	Amount ppb ClO3 CD_1	
1,	WASH,	NEW SUPPRESS	02/18/08 09:40,	1.0,	n.a.	
2,	autocal1,		02/18/08 10:06,	1.0,	n.a.	
3,	autocal2,	S1-10/5/10	02/18/08 10:31,	1.0,	9.2983,	
4,	autocal3,	S2-20/10/20	02/18/08 10:56,	1.0,	18.785	
5,	autocal4,	S3-100/50/100	02/18/08 11:22,	1.0,	93.4395	
6,	autocal5,	S4-200/100/200	02/18/08 11:47,	1.0,	193.453	
7,	autocal6,	S5-400/200/400	02/18/08 12:13,	1.0,	398.9951	
8,	autocal7,	S6-800/400/800	02/18/08 12:38,	1.0,	802.9984	
9,	MCV,		02/19/08 08:59,	1.0,	213.0978	106 %
10,	CCB,		02/19/08 09:25,	1.0,	n.a.	
11,	MRLCHK,		02/19/08 09:50,	1.0, ✓	8.7995	88.0 %
12,	MBLK,		02/19/08 10:16,	1.0,	n.a.	
13,	MBLK,		02/19/08 11:17,	1.0,	n.a.	
14,	LCS1,		02/19/08 11:43,	1.0, ✓	192.8893	96.4 %
15,	LCS2,	-	02/19/08 12:08,	1.0, ✓	187.8657	93.9 %
16,	2802150282,	BR	02/19/08 12:34,	1.0,	n.a.	
17,	2802150284,	BR	02/19/08 12:59,	1.0,	n.a.	
18,	2802150286,	BR	02/19/08 13:24,	1.0,	21.4697	
19,	2802150288,	BR	02/19/08 13:50,	1.0,	n.a.	
20,	2802150291DNR,	CLO2/CLO3-REG	02/19/08 14:15,	1.0,	n.a.	
21,	MCV,		02/19/08 17:12,	1.0,	184.6995	92.3 %
22,	CCB,		02/19/08 17:37,	1.0,	n.a.	
23,	2802120752_1/2,	CLO2	02/19/08 18:02,	2.0,	196.0563	
24,	2802080152,	CLO2/CLO3	02/19/08 18:28,	1.0, ✓	71.8692	
25,	2802080154,	CLO2/CLO3	02/19/08 18:53,	1.0, ✓	52.1318	
26,	2802050345,	CLO3	02/19/08 19:19,	1.0,	186.6638	→ rerun w/dilution DNR
27,	2802121018,	CLO2/CLO3	02/19/08 19:44,	1.0, ✓	61.1176	
28,	2802121018MS,		02/19/08 20:09,	1.0, ✓	154.1715	93.0
29,	2802121018MSD,		02/19/08 20:35,	1.0, ✓	147.3211	86.2
30,	MCV,		02/19/08 21:00,	1.0,	199.989	100 %
31,	CCB,		02/19/08 21:26,	1.0, ✓	n.a.	
32,	2802150027,	CLO2/CLO3	02/19/08 21:51,	1.0, ✓	n.a.	
33,	2802150027MS,		02/19/08 22:16,	1.0,	96.3754	96.4 %
34,	2802150027MSD,		02/19/08 22:42,	1.0,	96.1096	96.1 %
35,	2802050696_1/5,	CLO3	02/19/08 23:07,	5.0, ✓	~~n.a.~~ 18.32	(ND)
36,	2802050697_1/5000,	CLO3	02/19/08 23:33,	5000.0, ✓	339336.9	
37,	2802050200,	BR	02/19/08 23:58,	1.0,	11.4125	
38,	2802050201,	BR	02/20/08 00:23,	1.0,	n.a.	
39,	2802150019,	CLO2/CLO3	02/20/08 00:49,	1.0,	n.a.	
40,	2802140200,	BR	02/20/08 01:14,	1.0,	n.a.	
41,	2802150279,	CLO2/CLO3	02/20/08 01:40,	1.0, ✓	53.7767	
42,	2802150280,	CLO2/CLO3	02/20/08 02:05,	1.0, ✓	59.4645	
43,	2802150291,	CLO2/CLO3	02/20/08 02:30,	1.0,	8.3206 ✓	
44,	HCV,		02/20/08 02:56,	1.0,	821.4505	103 %
45,	CCB,		02/20/08 03:21,	1.0,	n.a.	
46,	STOP,		02/20/08 03:47,	1.0,	n.a.	

Sequence: 021908-DBP-IC12
Operator: jkz
Printed: 2/21/2008 9:58:06 AM

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2008\FEB
Timebase: IC12
#Samples: 46
Created: 2/19/2008 8:58:00 AM by jkz
Last Update: 2/19/2008 5:29:55 PM by jkz

No.	Name	Sample ID	Dil. Factor	Type	Comment
1	WASH		1.0000	Unknown	NEW SUPPRESSOR
2	autocal1		1.0000	Standard	
3	autocal2	JKZ080114-1	1.0000	Standard	S1-10/5/10
4	autocal3	JKZ080114-2	1.0000	Standard	S2-20/10/20
5	autocal4	JKZ080114-3	1.0000	Standard	S3-100/50/100
6	autocal5	JKZ080114-4	1.0000	Standard	S4-200/100/200
7	autocal6	JKZ080114-5	1.0000	Standard	S5-400/200/400
8	autocal7	JKZ080114-6	1.0000	Standard	S6-800/400/800
9	MCV	200/100/200	1.0000	Unknown	
10	CCB		1.0000	Unknown	
11	MRLCHK	S1-10/5/10	1.0000	Unknown	
12	MBLK		1.0000	Unknown	
13	MBLK		1.0000	Unknown	
14	LCS1	JKZ080114-7	1.0000	Unknown	
15	LCS2	200/100/200	1.0000	Unknown	-
16	2802150282	[redacted]	1.0000	Unknown	BR
17	2802150284	[redacted]2	1.0000	Unknown	BR
18	2802150286	[redacted]3	1.0000	Unknown	BR
19	2802150288	[redacted]4	1.0000	Unknown	BR
20	2802150291DNR	[redacted]CSD	1.0000	Unknown	CLO2/CLO3-REGENERANT OUT
21	MCV		1.0000	Unknown	
22	CCB		1.0000	Unknown	
23	2802120752_1/2	[redacted]	2.0000	Unknown	CLO2
24	2802080152	[redacted]	1.0000	Unknown	CLO2/CLO3
25	2802080154	[redacted]	1.0000	Unknown	CLO2/CLO3
26	2802050345	[redacted]RAW	1.0000	Unknown	CLO3
27	2802121018	[redacted]2	1.0000	Unknown	CLO2/CLO3
28	2802121018MS	100/50/100	1.0000	Unknown	
29	2802121018MSD	100/50/100	1.0000	Unknown	
30	MCV		1.0000	Unknown	
31	CCB		1.0000	Unknown	
32	2802150027	[redacted]	1.0000	Unknown	CLO2/CLO3
33	2802150027MS	[redacted]	1.0000	Unknown	
34	2802150027MSD	[redacted]	1.0000	Unknown	
35	2802050696_1/5	KERR-EFFLUENT	5.0000	Unknown	CLO3
36	2802050697_1/5000	KERR-INFLUENT	5000.0000	Unknown	CLO3
37	2802050200	[redacted]01	1.0000	Unknown	BR
38	2802050201	[redacted]02	1.0000	Unknown	BR
39	2802150019	[redacted]	1.0000	Unknown	CLO2/CLO3
40	2802140200	[redacted]RAW	1.0000	Unknown	BR
41	2802150279	[redacted]	1.0000	Unknown	CLO2/CLO3
42	2802150280	[redacted]	1.0000	Unknown	CLO2/CLO3

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2008\FEB
Timebase: IC12
#Samples: 46
Created: 2/19/2008 8:58:00 AM by jkz
Last Update: 2/19/2008 5:29:55 PM by jkz

No.	Name	Program	Method	Status	Inj. Date/Time	*Analyst
1	WASH	IC12 test Program	DBP-Method	Finished	2/18/2008 9:40:41 AM	jkz
2	autocal1	IC12 test Program	DBP-Method	Finished	2/18/2008 10:06:04 AM	jkz
3	autocal2	IC12 test Program	DBP-Method	Finished	2/18/2008 10:31:28 AM	jkz
4	autocal3	IC12 test Program	DBP-Method	Finished	2/18/2008 10:56:53 AM	jkz
5	autocal4	IC12 test Program	DBP-Method	Finished	2/18/2008 11:22:16 AM	jkz
6	autocal5	IC12 test Program	DBP-Method	Finished	2/18/2008 11:47:41 AM	jkz
7	autocal6	IC12 test Program	DBP-Method	Finished	2/18/2008 12:13:05 PM	jkz
8	autocal7	IC12 test Program	DBP-Method	Finished	2/18/2008 12:38:30 PM	jkz
9	MCV	IC12 test Program	DBP-Method	Finished	2/19/2008 8:59:55 AM	jkz
10	CCB	IC12 test Program	DBP-Method	Finished	2/19/2008 9:25:19 AM	jkz
11	MRLCHK	IC12 test Program	DBP-Method	Finished	2/19/2008 9:50:43 AM	jkz
12	MBLK	IC12 test Program	DBP-Method	Finished	2/19/2008 10:16:07 AM	jkz
13	MBLK	IC12 test Program	DBP-Method	Finished	2/19/2008 11:17:52 AM	jkz
14	LCS1	IC12 test Program	DBP-Method	Finished	2/19/2008 11:43:16 AM	jkz
15	LCS2	IC12 test Program	DBP-Method	Finished	2/19/2008 12:08:40 PM	jkz
16	2802150282	IC12 test Program	DBP-Method	Finished	2/19/2008 12:34:04 PM	jkz
17	2802150284	IC12 test Program	DBP-Method	Finished	2/19/2008 12:59:28 PM	jkz
18	2802150286	IC12 test Program	DBP-Method	Finished	2/19/2008 1:24:52 PM	jkz
19	2802150288	IC12 test Program	DBP-Method	Finished	2/19/2008 1:50:16 PM	jkz
20	2802150291DNR	IC12 test Program	DBP-Method	Finished	2/19/2008 2:15:40 PM	jkz
21	MCV	IC12 test Program	DBP-Method	Finished	2/19/2008 5:12:07 PM	jkz
22	CCB	IC12 test Program	DBP-Method	Finished	2/19/2008 5:37:31 PM	jkz
23	2802120752_1/2	IC12 test Program	DBP-Method	Finished	2/19/2008 6:02:55 PM	jkz
24	2802080152	IC12 test Program	DBP-Method	Finished	2/19/2008 6:28:19 PM	jkz
25	2802080154	IC12 test Program	DBP-Method	Finished	2/19/2008 6:53:43 PM	jkz
26	2802050345	IC12 test Program	DBP-Method	Finished	2/19/2008 7:19:07 PM	jkz
27	2802121018	IC12 test Program	DBP-Method	Finished	2/19/2008 7:44:31 PM	jkz
28	2802121018MS	IC12 test Program	DBP-Method	Finished	2/19/2008 8:09:55 PM	jkz
29	2802121018MSD	IC12 test Program	DBP-Method	Finished	2/19/2008 8:35:19 PM	jkz
30	MCV	IC12 test Program	DBP-Method	Finished	2/19/2008 9:00:42 PM	jkz
31	CCB	IC12 test Program	DBP-Method	Finished	2/19/2008 9:26:06 PM	jkz
32	2802150027	IC12 test Program	DBP-Method	Finished	2/19/2008 9:51:30 PM	jkz
33	2802150027MS	IC12 test Program	DBP-Method	Finished	2/19/2008 10:16:54 PM	jkz
34	2802150027MSD	IC12 test Program	DBP-Method	Finished	2/19/2008 10:42:18 PM	jkz
35	2802050696_1/5	IC12 test Program	DBP-Method	Finished	2/19/2008 11:07:41 PM	jkz
36	2802050697_1/5000	IC12 test Program	DBP-Method	Finished	2/19/2008 11:33:05 PM	jkz
37	2802050200	IC12 test Program	DBP-Method	Finished	2/19/2008 11:58:29 PM	jkz
38	2802050201	IC12 test Program	DBP-Method	Finished	2/20/2008 12:23:53 AM	jkz
39	2802150019	IC12 test Program	DBP-Method	Finished	2/20/2008 12:49:17 AM	jkz
40	2802140200	IC12 test Program	DBP-Method	Finished	2/20/2008 1:14:40 AM	jkz
41	2802150279	IC12 test Program	DBP-Method	Finished	2/20/2008 1:40:05 AM	jkz
42	2802150280	IC12 test Program	DBP-Method	Finished	2/20/2008 2:05:29 AM	jkz

Title:
Datasource: Dionex_USPAS2SD!O2
Location: IC\IC12_DBP\2008\FEB
Timebase: IC12
#Samples: 46
Created: 2/19/2008 8:58:00 AM by jkz
Last Update: 2/19/2008 5:29:55 PM by jkz

No.	Name	Sample ID	Dil. Factor	Type	Comment
43	2802150291	CCE-MASPETH-CSD	1.0000	Unknown	CLO2/CLO3
44	HCV	800/400/800	1.0000	Unknown	
45	CCB		1.0000	Unknown	
46	STOP		1.0000	Unknown	

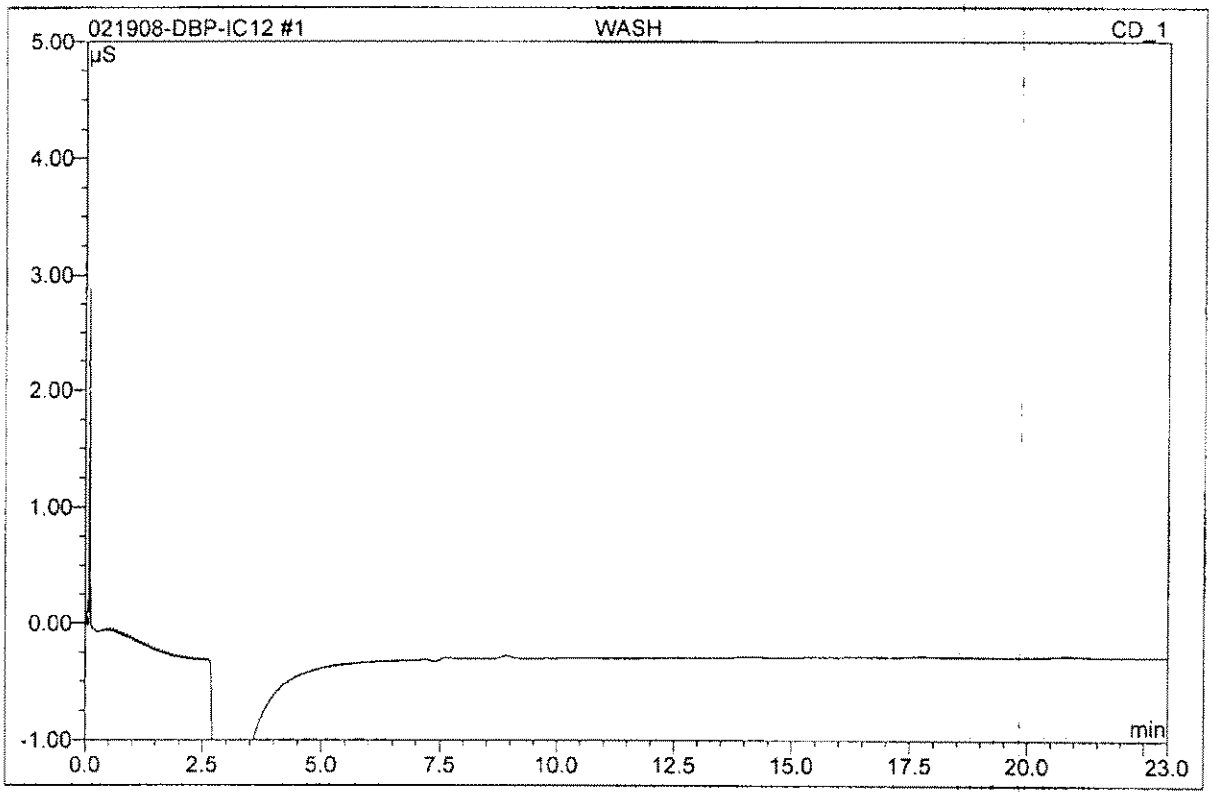
Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC12_DBP\2008\FEB
Timebase: IC12 Created: 2/19/2008 8:58:00 AM by jkz
#Samples: 46 Last Update: 2/19/2008 5:29:55 PM by jkz

No.	Name	Program	Method	Status	Inj. Date/Time	*Analyst
43	2802150291	IC12 test Program	DBP-Method	Finished	2/20/2008 2:30:53 AM	jkz
44	HCV	IC12 test Program	DBP-Method	Finished	2/20/2008 2:56:17 AM	jkz
45	CCB	IC12 test Program	DBP-Method	Finished	2/20/2008 3:21:41 AM	jkz
46	STOP	DPB Stop Program	DBP-Method	Finished	2/20/2008 3:47:05 AM	jkz

1 WASH

NEW SUPPRESSOR

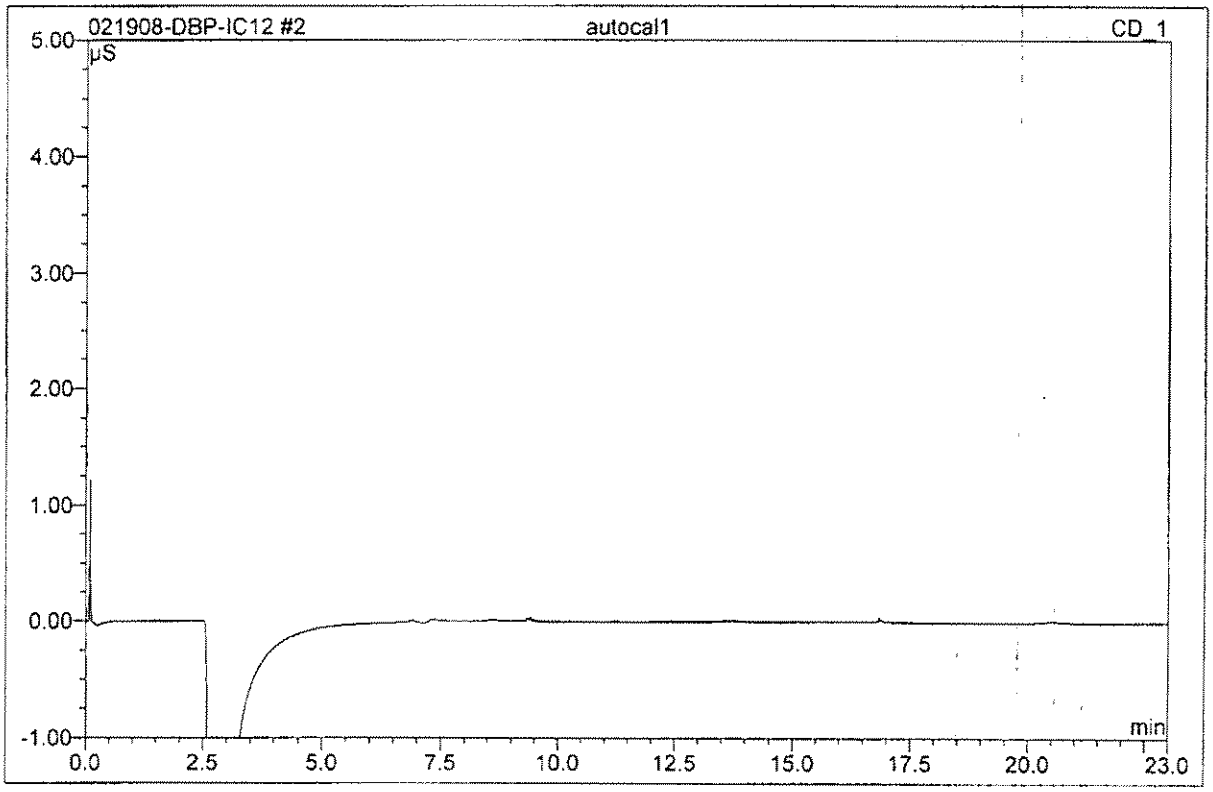
Sample Name:	**WASH**	*Injection Volume:*	**1000.0**
Vial Number:	**551**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/18/2008 9:40**	*Sample 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
Total:			0.000	0.000	0.00	0.000	

2 autocal1

Sample Name:	**autocal1**	*Injection Volume:*	**1000.0**
Vial Number:	**552**	*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:	**2/18/2008 10:06**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

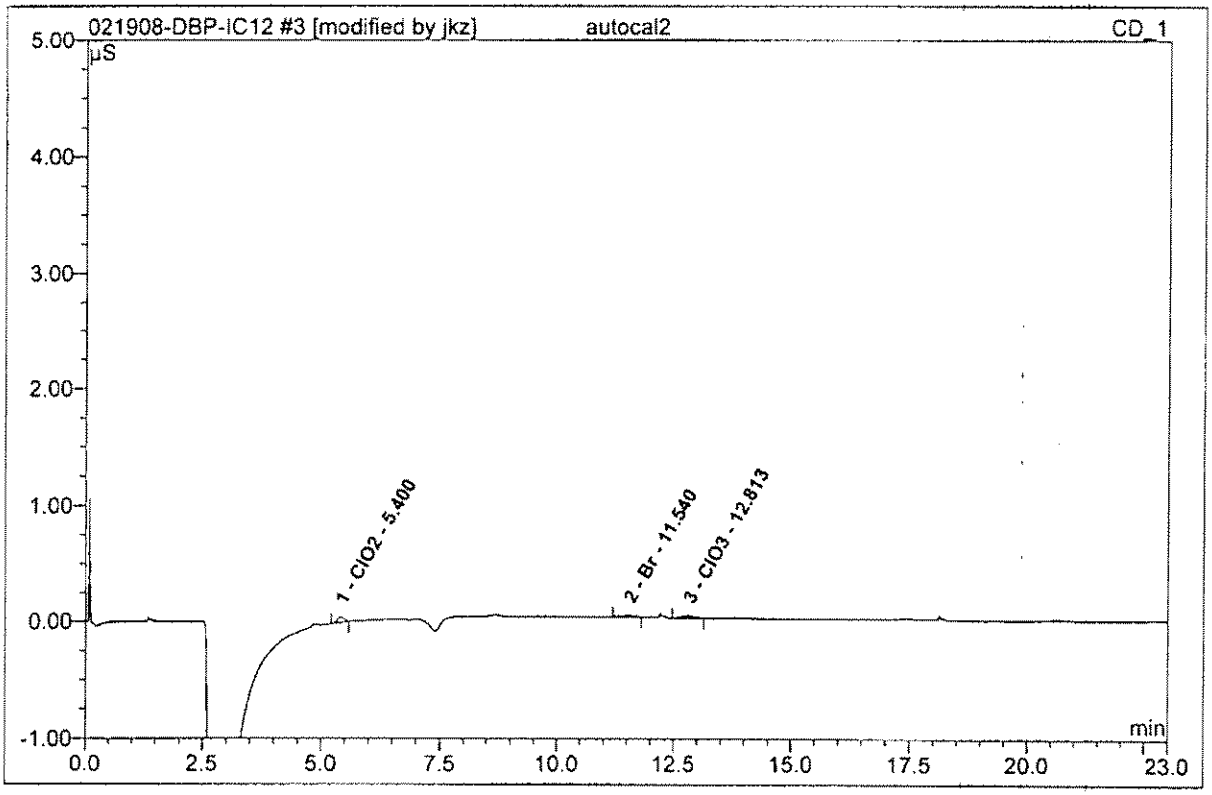


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

3 autocal2

S1-10/5/10

Sample Name:	**autocal2**	*Injection Volume:*	**1000.0**
Vial Number:	**551**	*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:	**2/18/2008 10:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

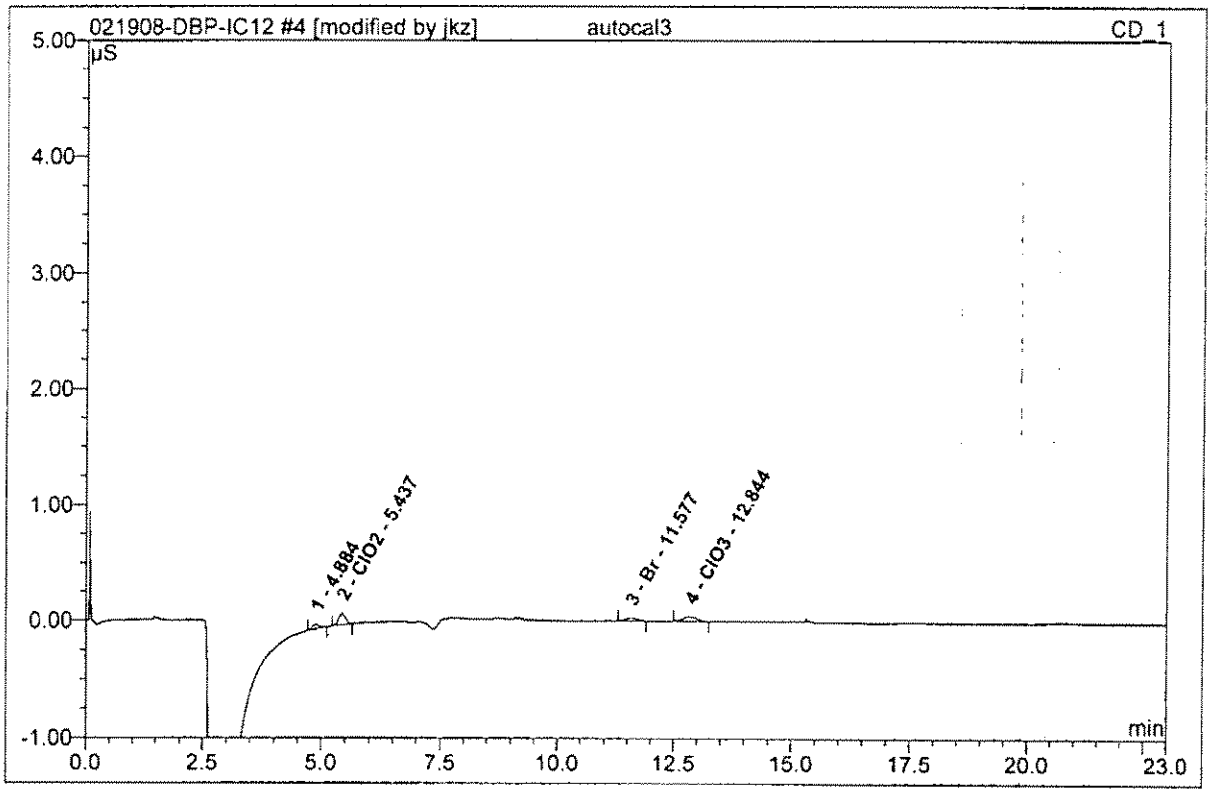


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.40	ClO2	0.050	0.008	41.97	9.336	BMB
2	11.54	Br	0.015	0.004	21.75	5.109	BMB*
3	12.81	ClO3	0.022	0.007	36.29	9.298	BMB*
Total:			0.087	0.019	100.00	23.742	

4 autocal3

S2-20/10/20

Sample Name:	**autocal3**	*Injection Volume:*	**1000.0**
Vial Number:	**551**	*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:	**2/18/2008 10:56**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

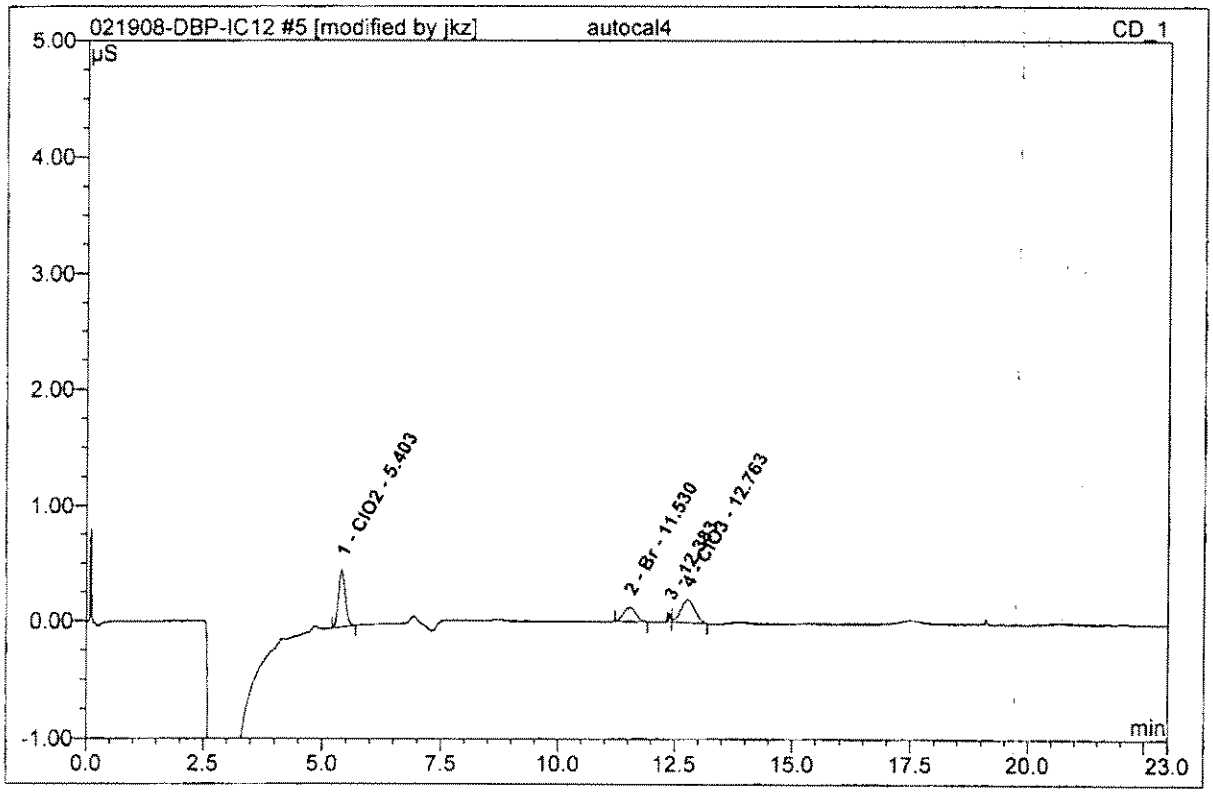


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	4.88	n.a.	0.040	0.007	15.41	n.a.	BMB
2	5.44	ClO2	0.099	0.016	36.02	18.474	BMB
3	11.58	Br	0.025	0.007	16.78	9.087	BMB*
4	12.84	ClO3	0.041	0.014	31.79	18.785	BMB*
Total:			0.205	0.044	100.00	46.346	

5 autocal4

S3-100/50/100

Sample Name:	**autocal4**	*Injection Volume:*	**1000.0**
Vial Number:	**552**	*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:	**2/18/2008 11:22**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

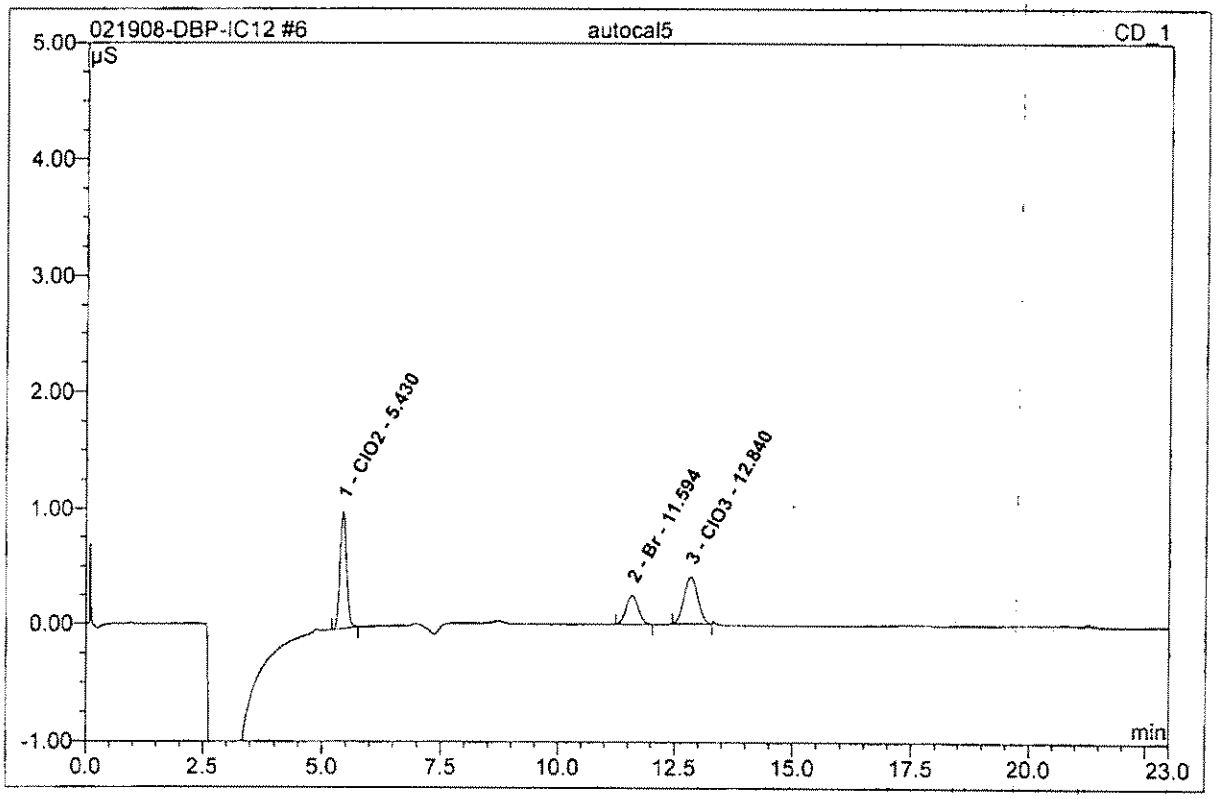


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.40	ClO2	0.493	0.079	41.85	93.104	BMB
2	11.53	Br	0.124	0.038	19.93	46.820	BMB
3	12.38	n.a.	0.084	0.003	1.75	n.a.	BM *
4	12.76	ClO3	0.200	0.069	36.46	93.439	MB*
Total:			0.900	0.189	100.00	233.363	

6 autocal5

S4-200/100/200

Sample Name:	**autocal5**	*Injection Volume:*	**1000.0**
Vial Number:	**553**	*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:	**2/18/2008 11:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

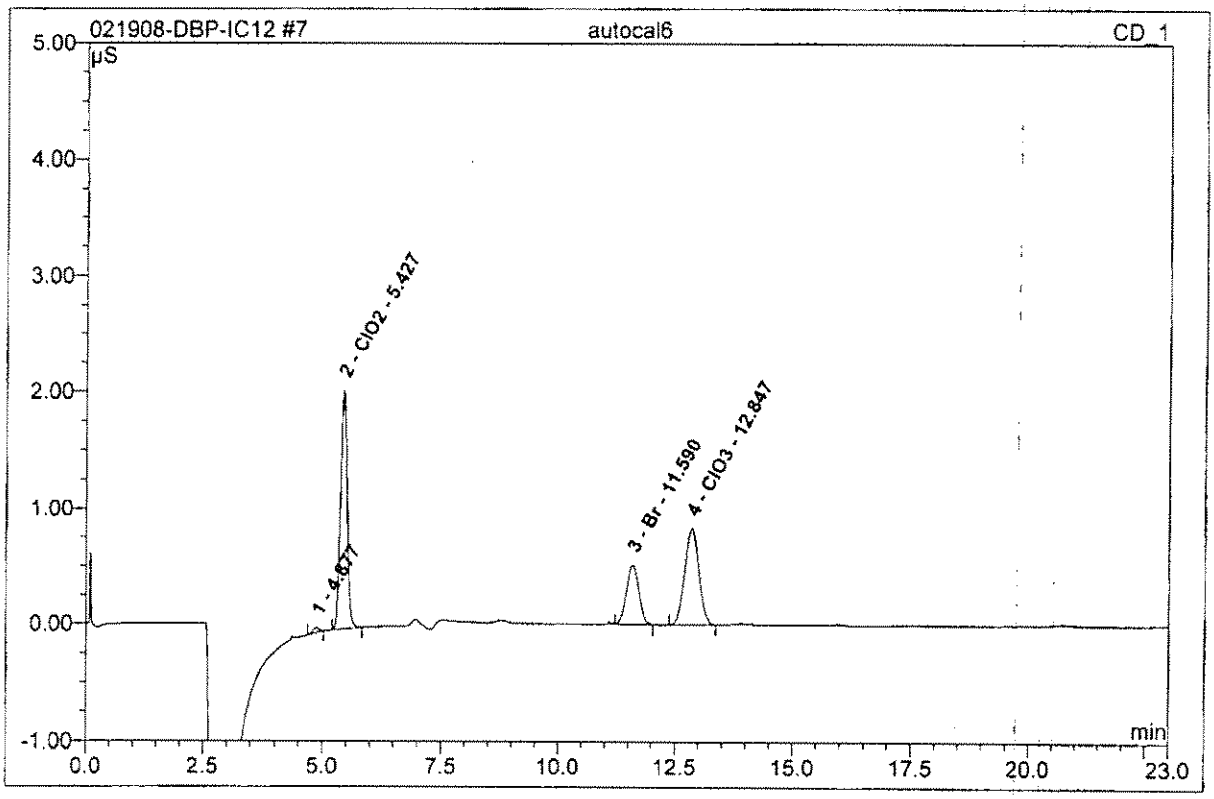


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.43	ClO2	1.014	0.164	42.55	192.697	BMB
2	11.59	Br	0.254	0.078	20.37	97.395	BMB
3	12.84	ClO3	0.411	0.143	37.08	193.453	BMB
Total:			1.680	0.385	100.00	483.545	

7 autocal6

S5-400/200/400

Sample Name:	**autocal6**	*Injection Volume:*	**1000.0**
Vial Number:	**555**	*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:	**2/18/2008 12:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

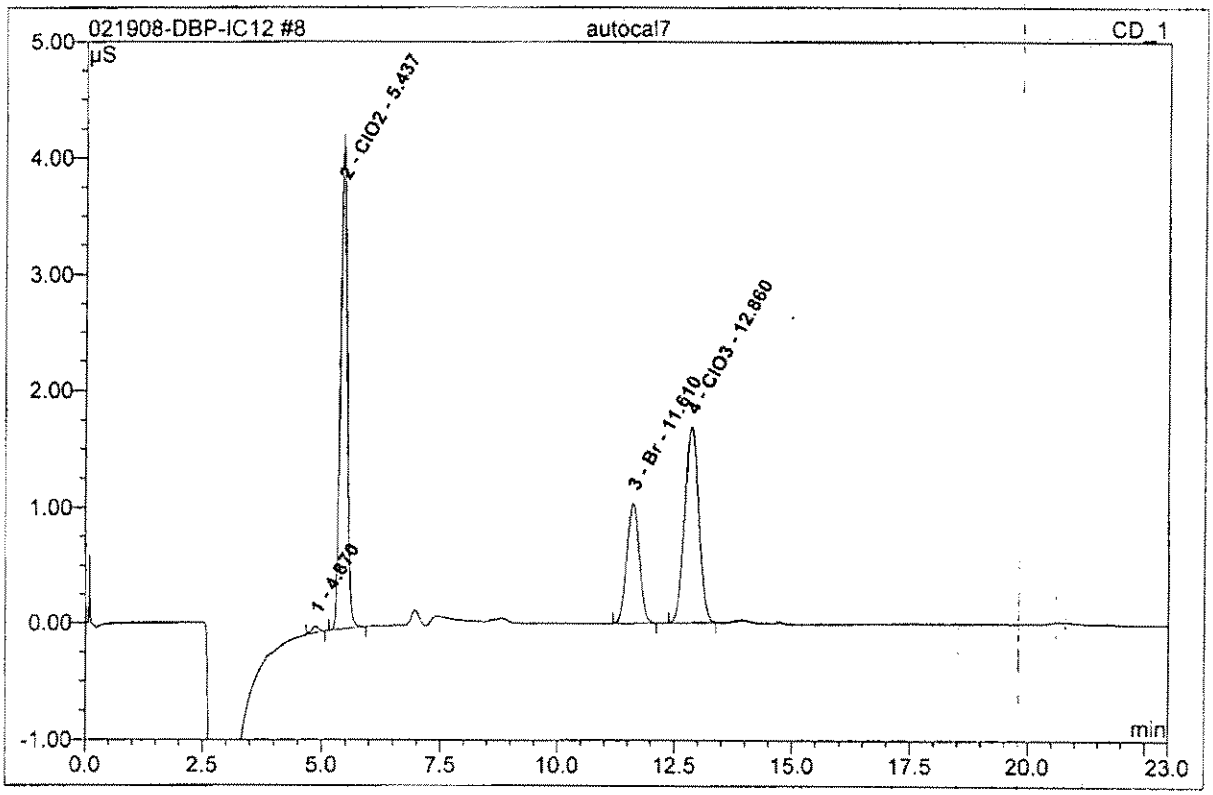


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	4.88	n.a.	0.045	0.007	0.85	n.a.	BMB
2	5.43	ClO2	2.059	0.334	42.04	392.430	BMB
3	11.59	Br	0.512	0.159	20.01	197.239	BMB
4	12.85	ClO3	0.834	0.294	37.10	398.995	BMB
Total:			3.450	0.794	100.00	988.664	

8 autocal7

S6-800/400/800

Sample Name:	**autocal7**	*Injection Volume:*	**1000.0**
Vial Number:	**555**	*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:	**2/18/2008 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

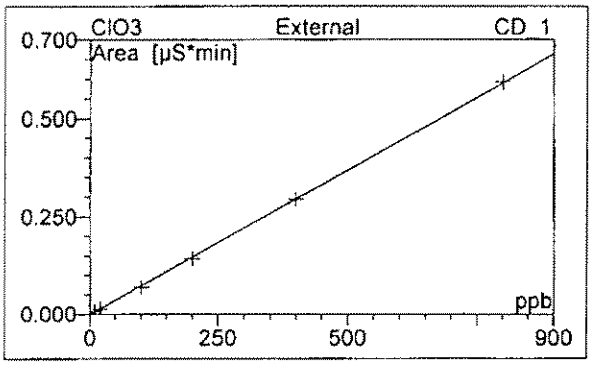


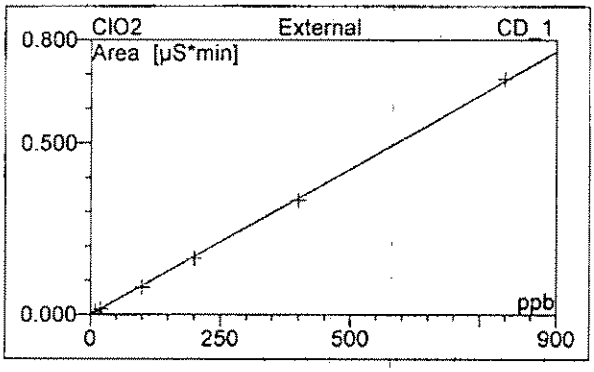
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	4.87	n.a.	0.059	0.010	0.62	n.a.	BMB
2	5.44	ClO2	4.257	0.686	42.53	806.519	BMB
3	11.61	Br	1.041	0.324	20.10	402.451	BMB
4	12.86	ClO3	1.691	0.593	36.76	802.998	BMB
Total:			7.048	1.612	100.00	2011.968	

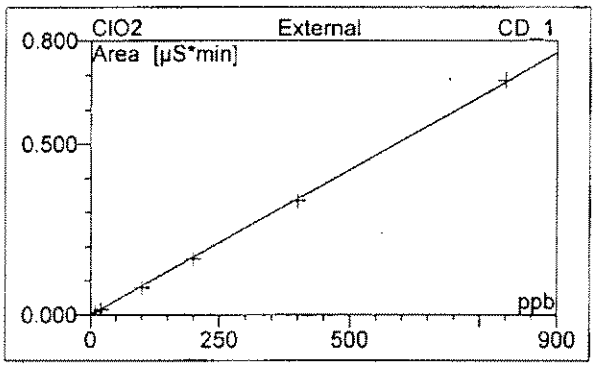
8 autocal7

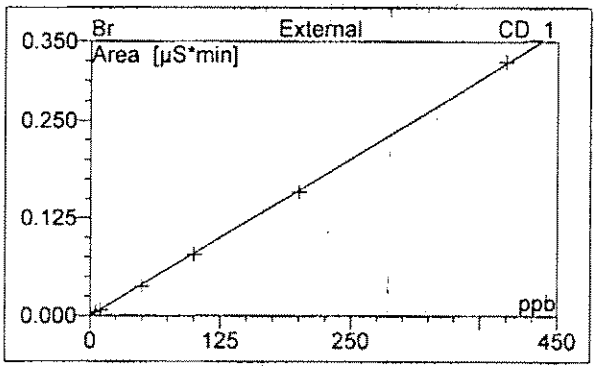
S6-800/400/800

Sample Name:	**autocal7**	*Injection Volume:*	**1000.0**
Vial Number:	**555**	*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:	**2/18/2008 12:38**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**





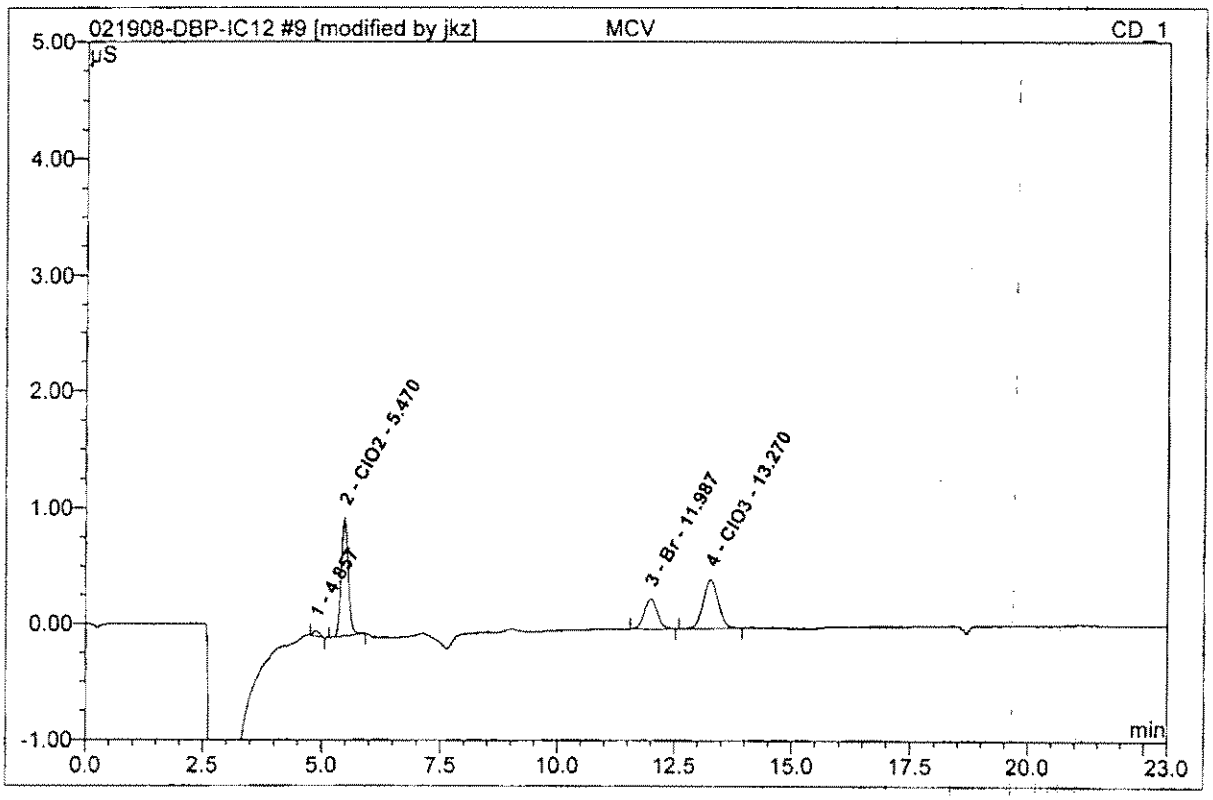




No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	4.87	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2	5.44	ClO2	Lin	6	99.9883	0.0000	0.0009	0.0000
3	11.61	Br	Lin	6	99.9928	0.0000	0.0008	0.0000
4	12.86	ClO3	Lin	6	99.9951	0.0000	0.0007	0.0000
Average:					99.9921	0.0000	0.0008	0.0000

9 MCV

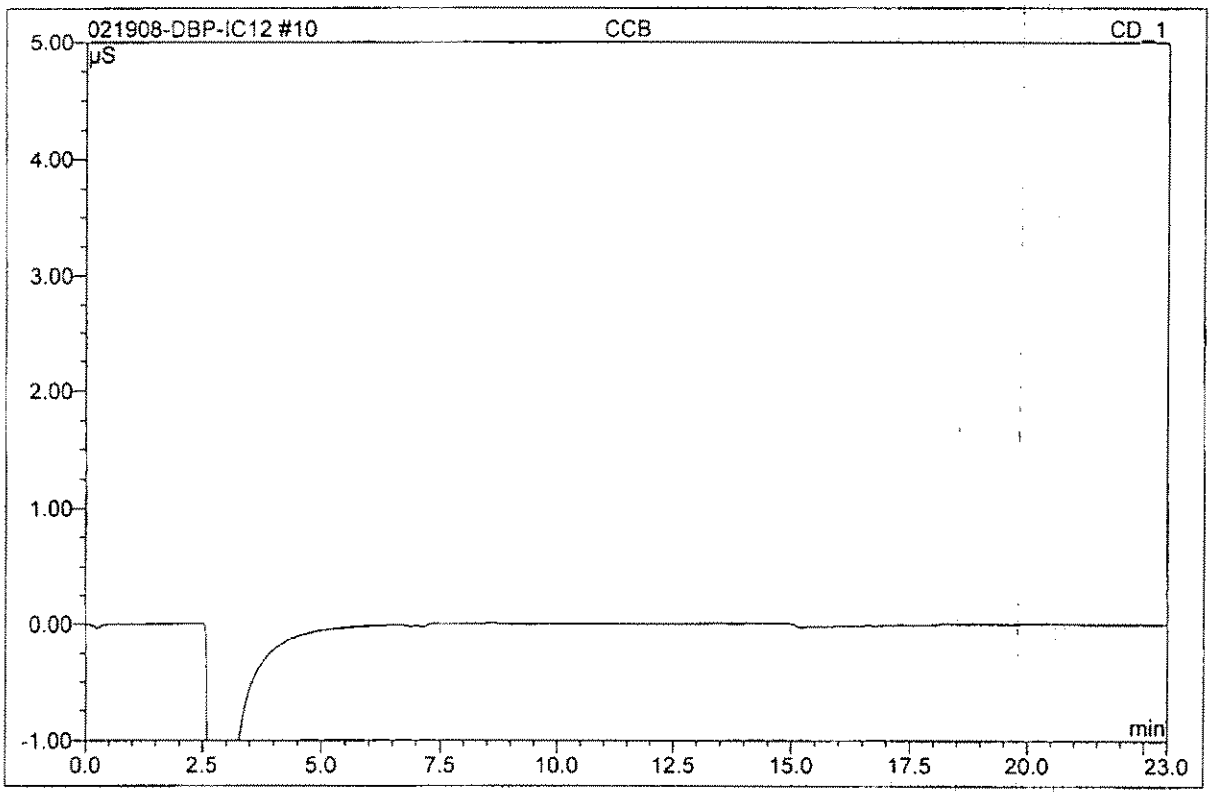
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**561**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 8:59**	*Sample 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	4.86	n.a.	0.049	0.007	1.74	n.a.	BMB
2	5.47	ClO2	1.019	0.176	41.39	207.291	BMB*
3	11.99	Br	0.261	0.085	19.93	105.411	BMB
4	13.27	ClO3	0.425	0.157	36.94	213.098	BMB
Total:			1.754	0.426	100.00	525.799	

10 CCB

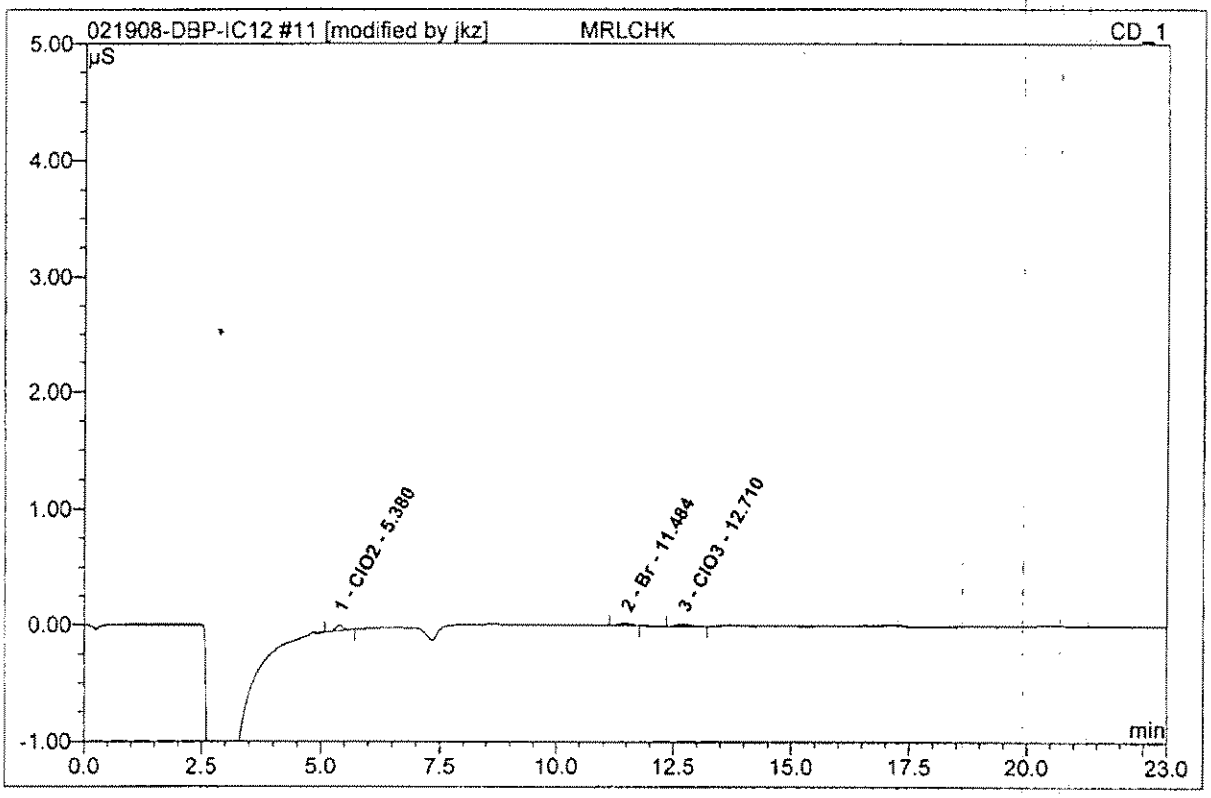
Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**558**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 9:25**	*Sample 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	

11 MRLCHK

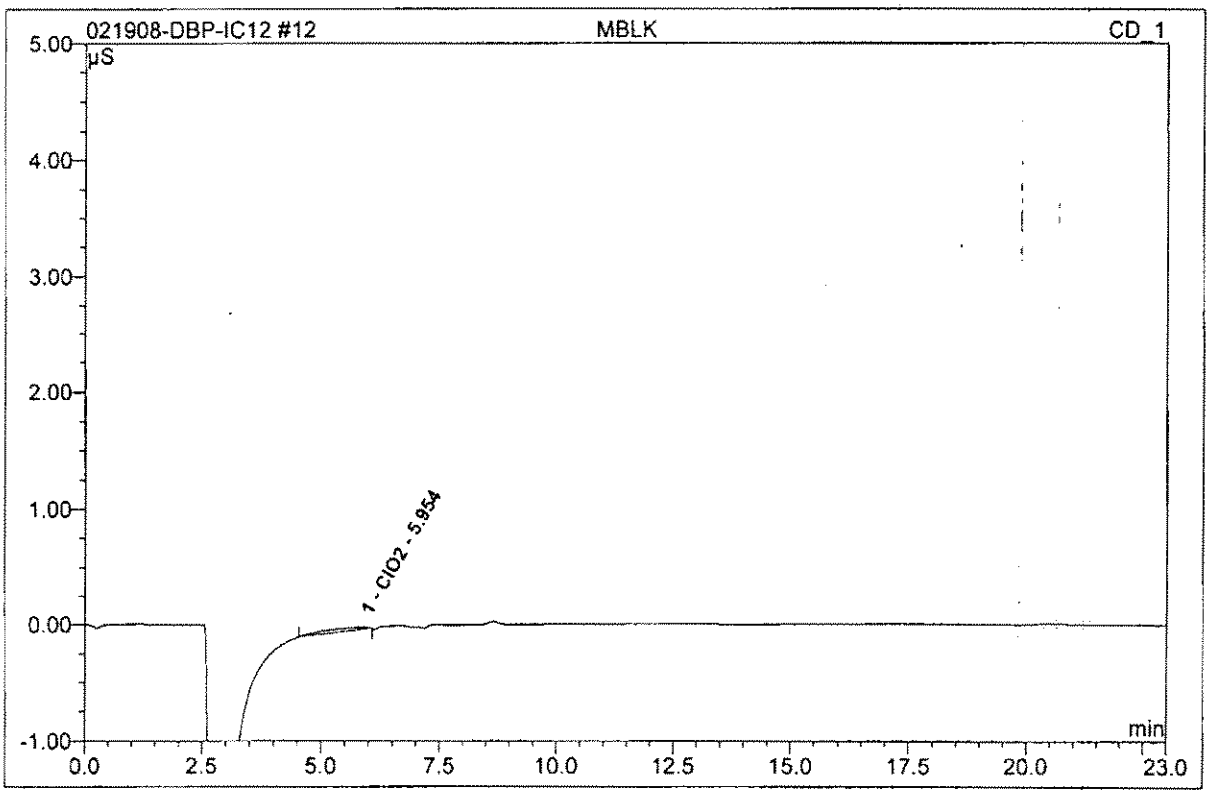
Sample Name:	**MRLCHK**	*Injection Volume:*	**1000.0**
Vial Number:	**559**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 9:50**	*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	0.051	0.009	46.17	10.424	BMB
2	11.48	Br	0.013	0.004	19.99	4.765	BMB*
3	12.71	ClO3	0.019	0.006	33.84	8.799	BMB
Total:			0.082	0.019	100.00	23.988	

12 MBLK

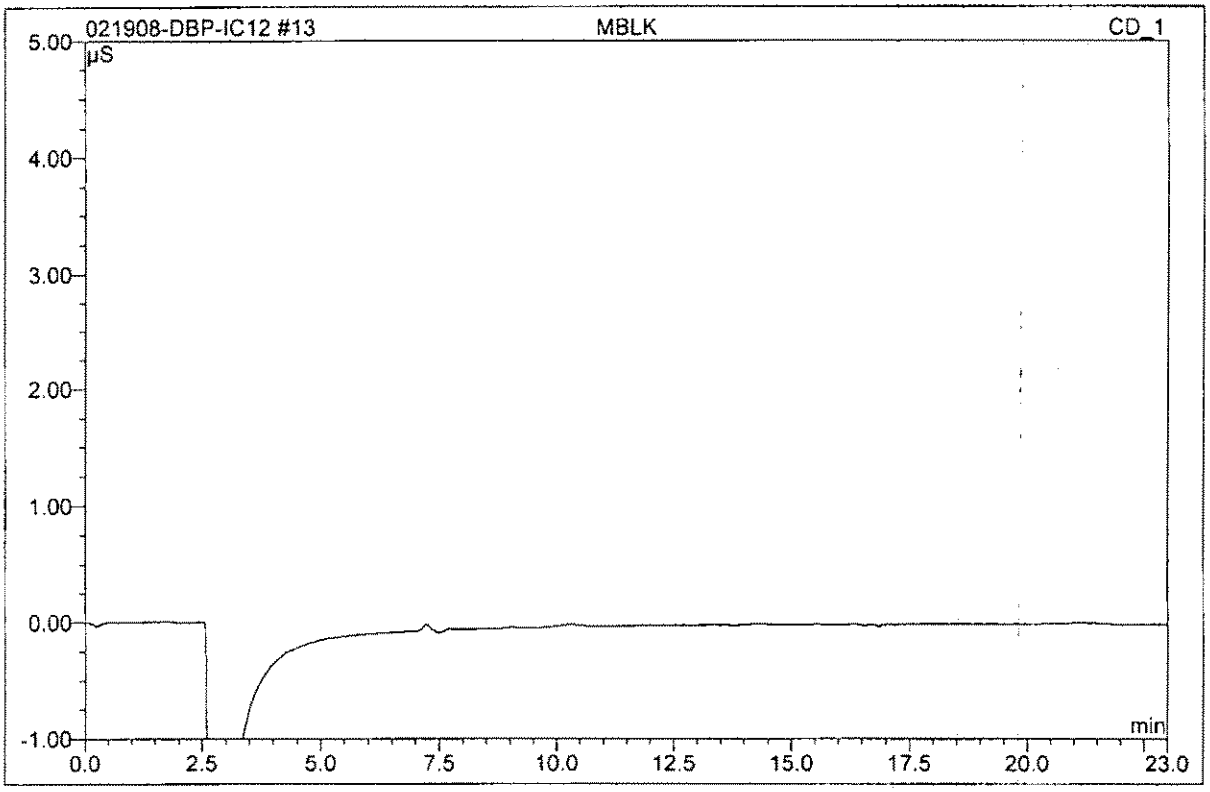
Sample Name:	**MBLK**	*Injection Volume:*	**1000.0**
Vial Number:	**560**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 10:16**	*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	5.95	ClO2	0.017	0.031	100.00	36.864	BMB
Total:			0.017	0.031	100.00	36.864	

13 MBLK

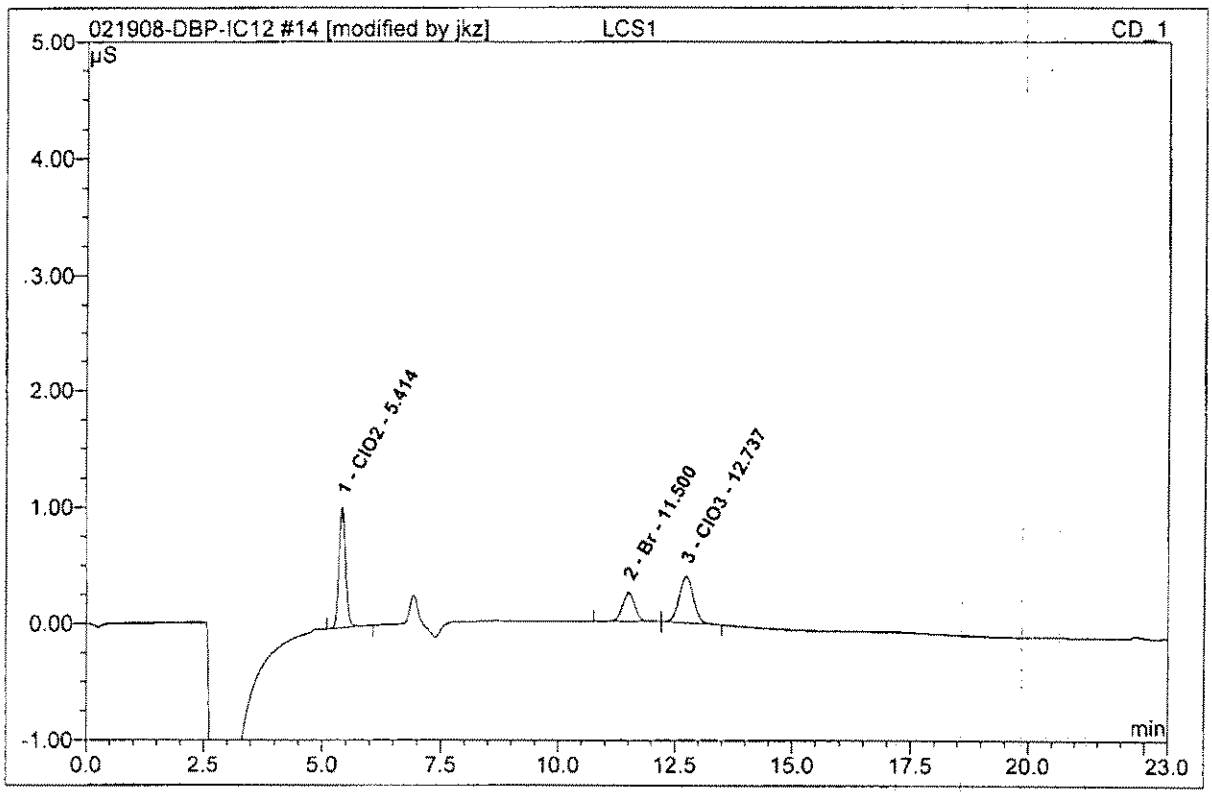
Sample Name:	**MBLK**	*Injection Volume:*	**1000.0**
Vial Number:	**562**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 11:17**	*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
Total:			0.000	0.000	0.00	0.000	

14 LCS1

Sample Name:	**LCS1**	*Injection Volume:*	**1000.0**
Vial Number:	**562**	*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:	**2/19/2008 11:43**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

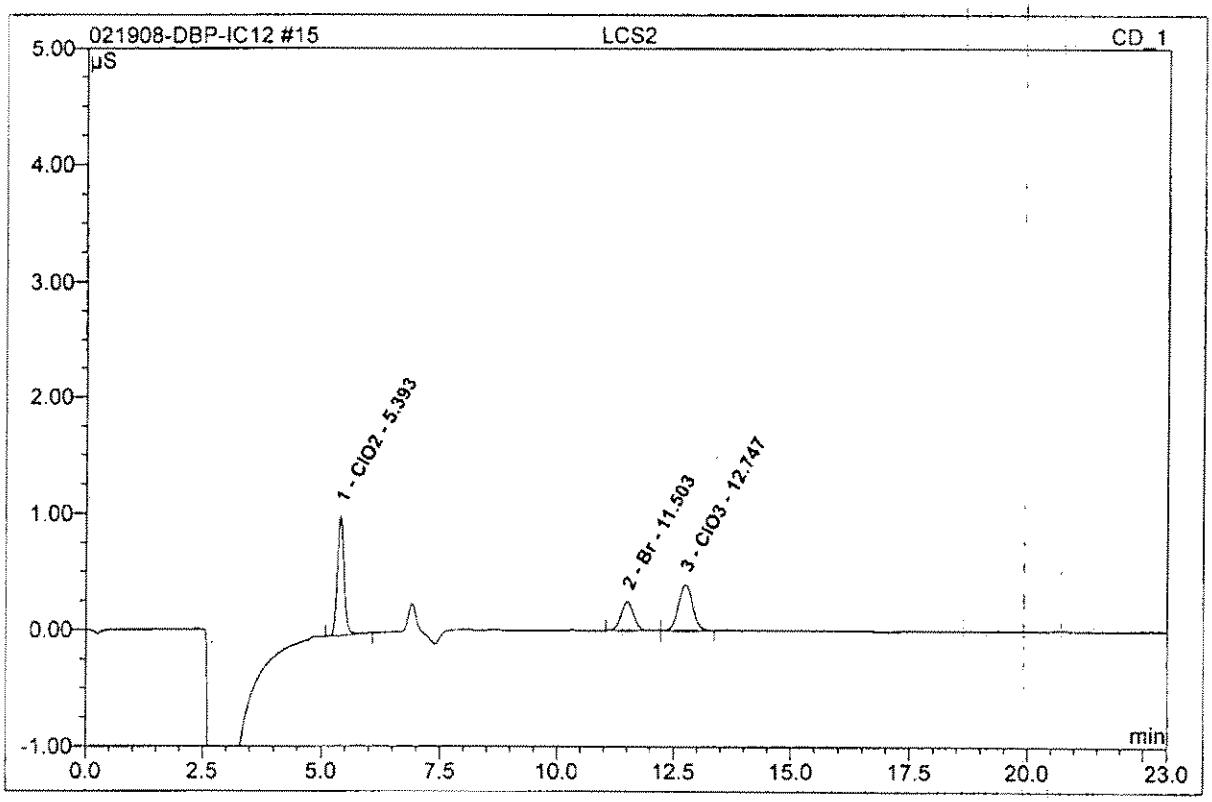


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.41	ClO2	1.034	0.169	43.64	199.258	BMB
2	11.50	Br	0.249	0.076	19.70	94.970	BMb*
3	12.74	ClO3	0.402	0.142	36.67	192.889	bMB*
Total:			1.685	0.388	100.00	487.117	

15 LCS2

-

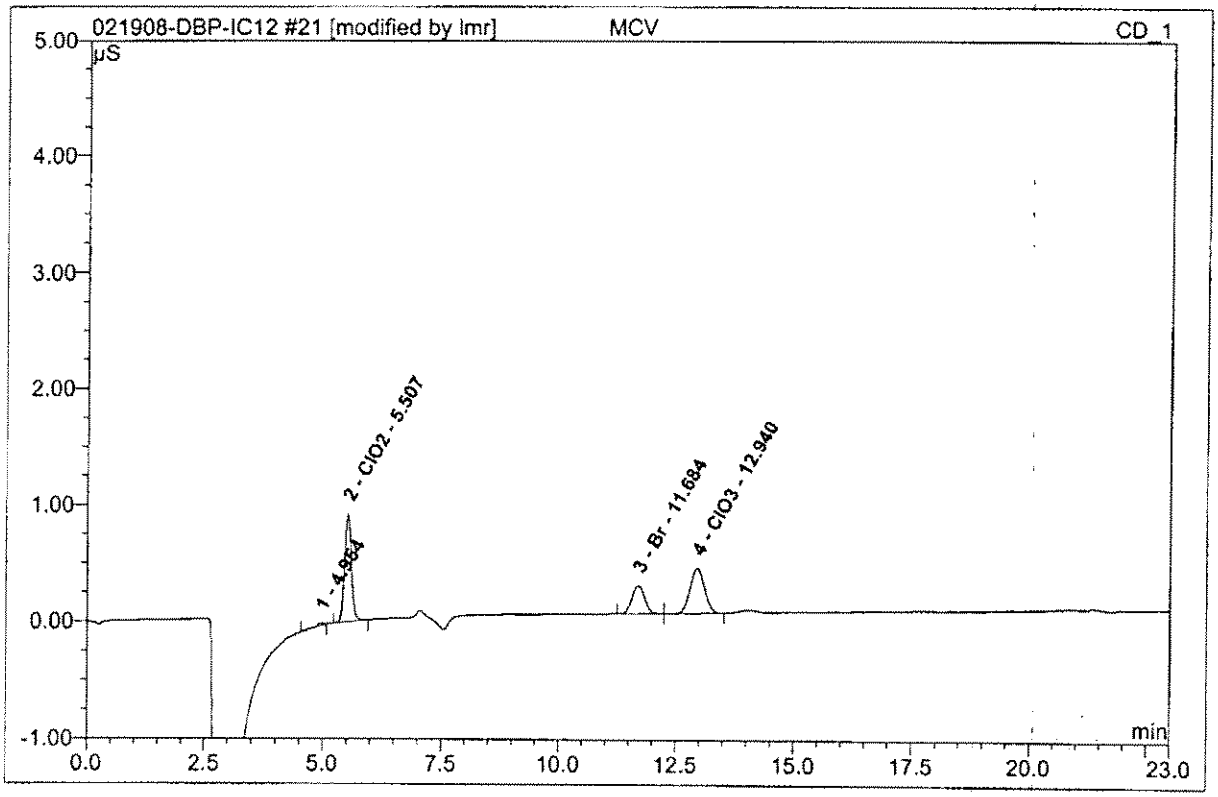
Sample Name:	**LCS2**	*Injection Volume:*	**1000.0**
Vial Number:	**563**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 12:08**	*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	1.027	0.168	43.78	197.734	BMB
2	11.50	Br	0.247	0.077	20.12	95.965	BM
3	12.75	ClO3	0.394	0.139	36.11	187.866	MB
Total:			1.668	0.384	100.00	481.564	

21 MCV

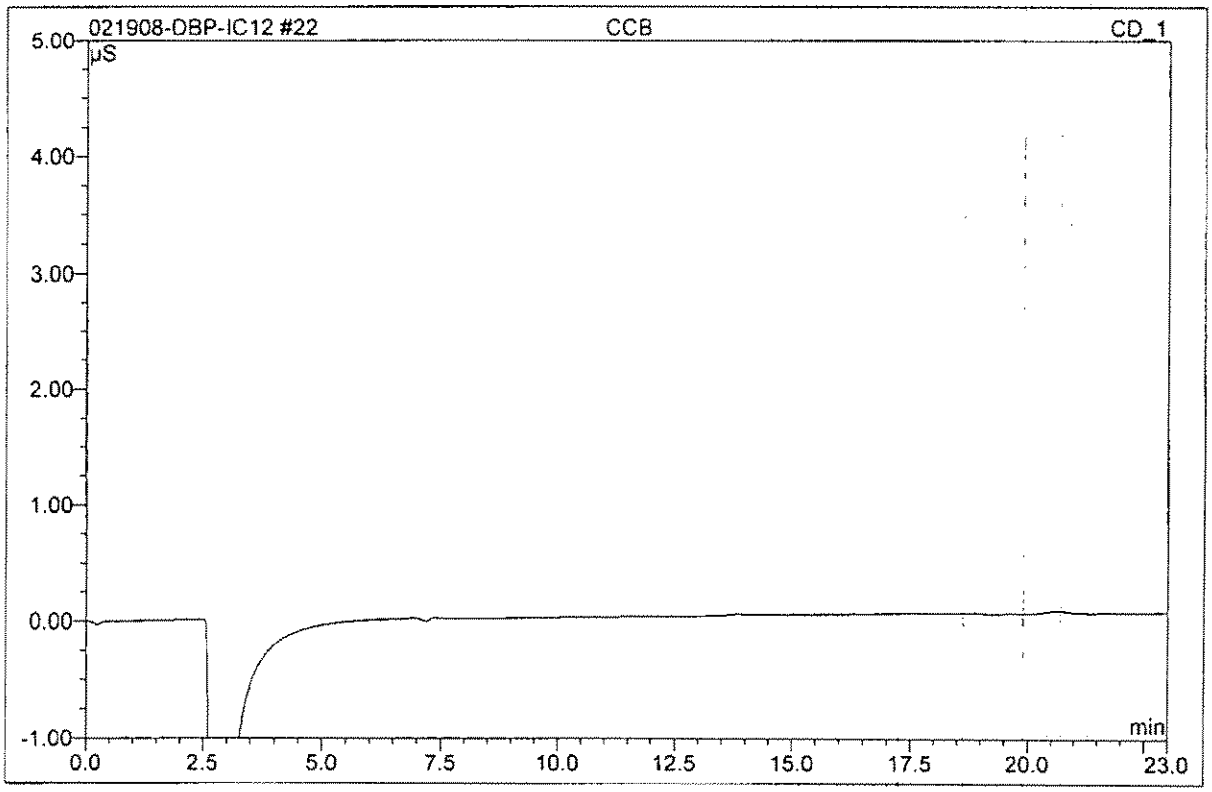
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**567**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 17:12**	*Sample 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	4.95	n.a.	0.021	0.004	0.98	n.a.	BMB*
2	5.51	ClO2	0.926	0.154	41.58	180.877	BMB*
3	11.68	Br	0.241	0.076	20.59	94.573	BM
4	12.94	ClO3	0.385	0.136	36.86	184.700	MB
Total:			1.572	0.370	100.00	460.150	

22 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**568**	*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:	**2/19/2008 17:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

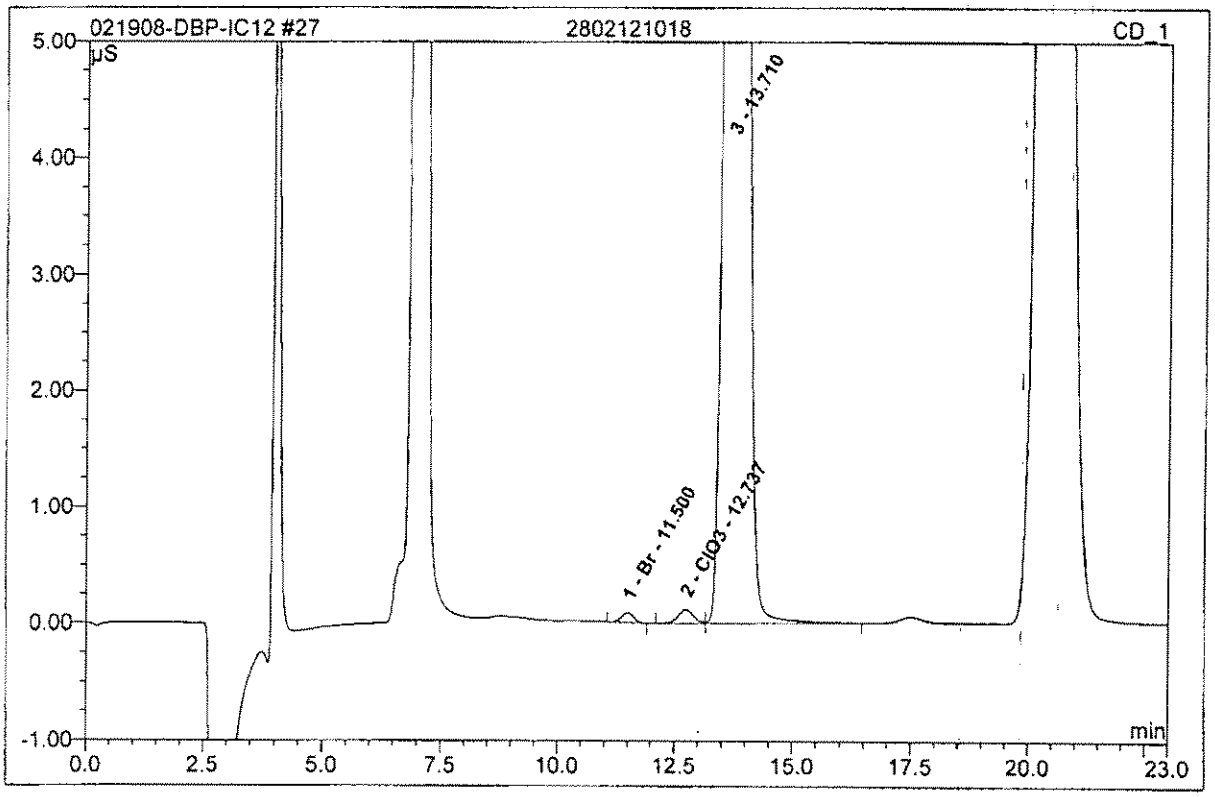


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

27 2802121018

CLO2/CLO3

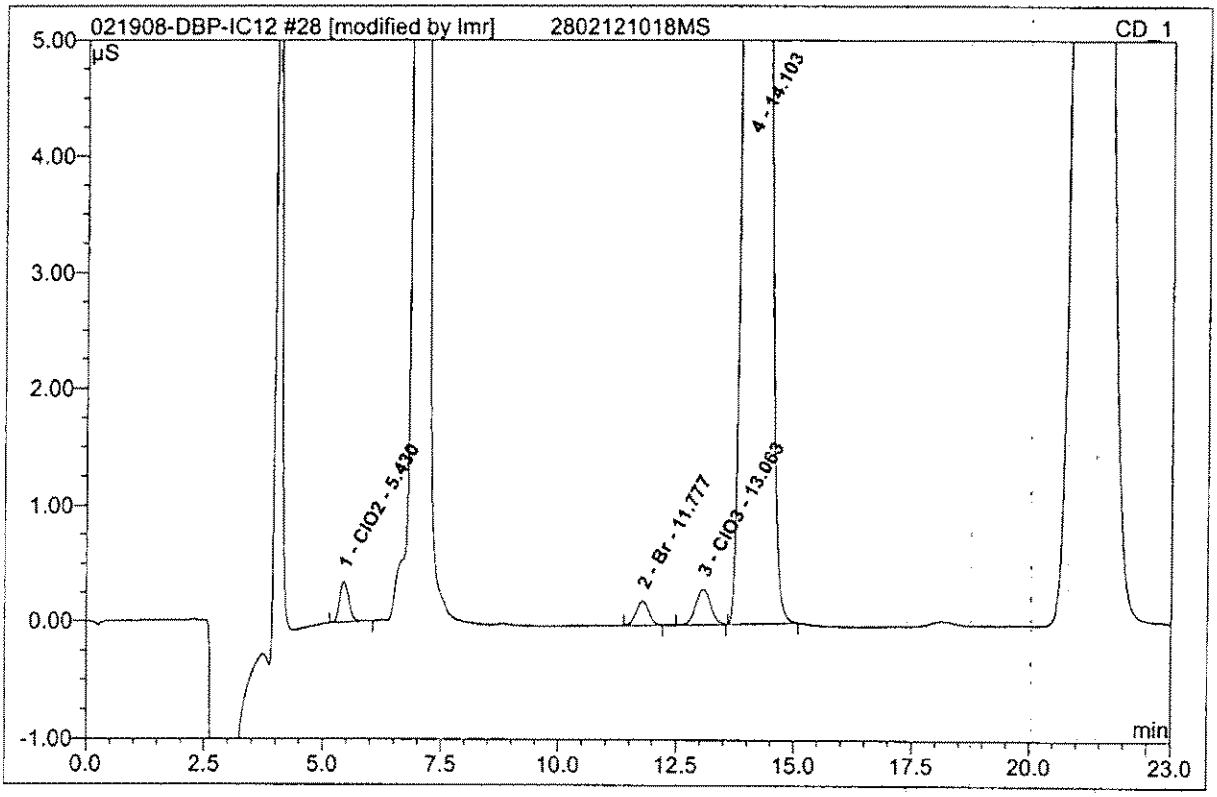
Sample Name:	**2802121018**	*Injection Volume:*	**1000.0**
Vial Number:	**565**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 19:44**	*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	11.50	Br	0.084	0.026	0.18	32.114	BMB
2	12.74	ClO3	0.119	0.045	0.32	61.118	BM
3	13.71	n.a.	38.406	13.983	99.50	n.a.	MB
Total:			38.608	14.054	100.00	93.231	

28 2802121018MS

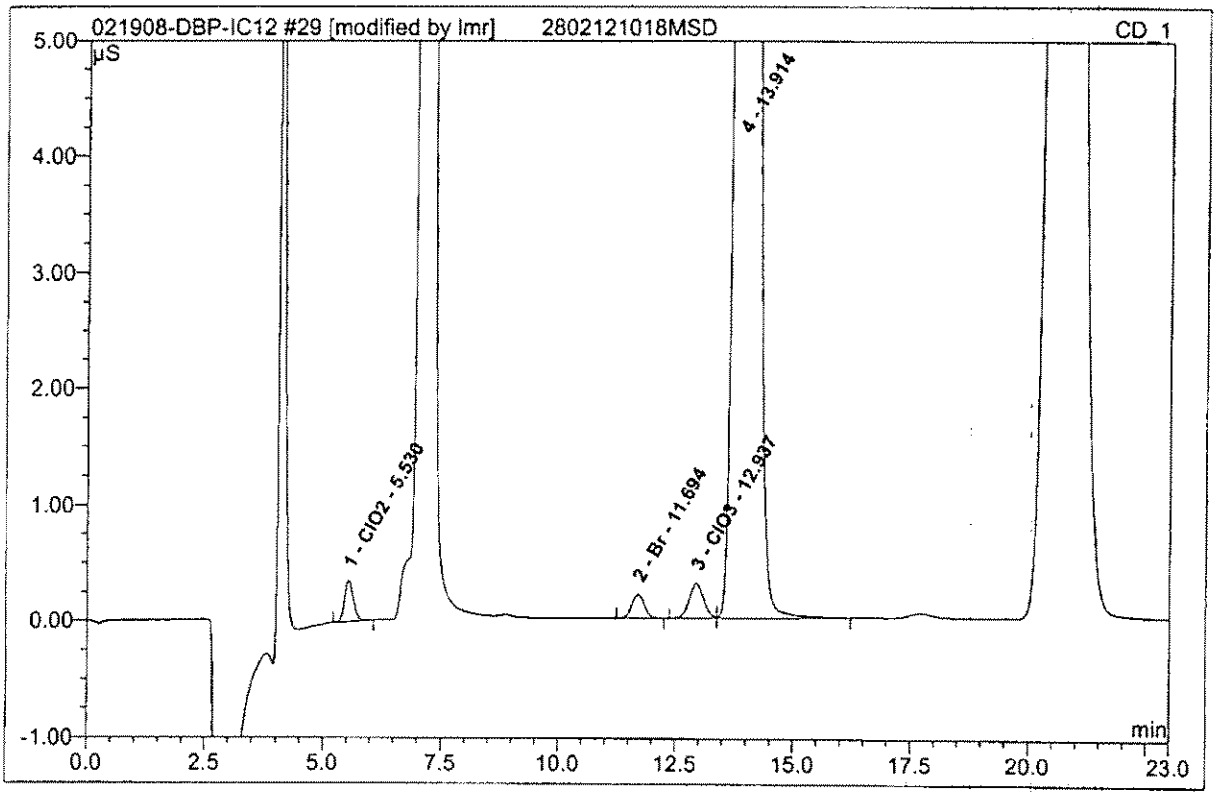
Sample Name:	**2802121018MS**	*Injection Volume:*	**1000.0**
Vial Number:	**566**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 20:09**	*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	5.43	ClO2	0.357	0.080	0.53	93.732	BMB*
2	11.78	Br	0.209	0.066	0.44	82.550	BMB
3	13.06	ClO3	0.309	0.114	0.75	154.172	BMB
4	14.10	n.a.	38.271	14.856	98.28	n.a.	BMB
Total:			39.145	15.115	100.00	330.453	

29 2802121018MSD

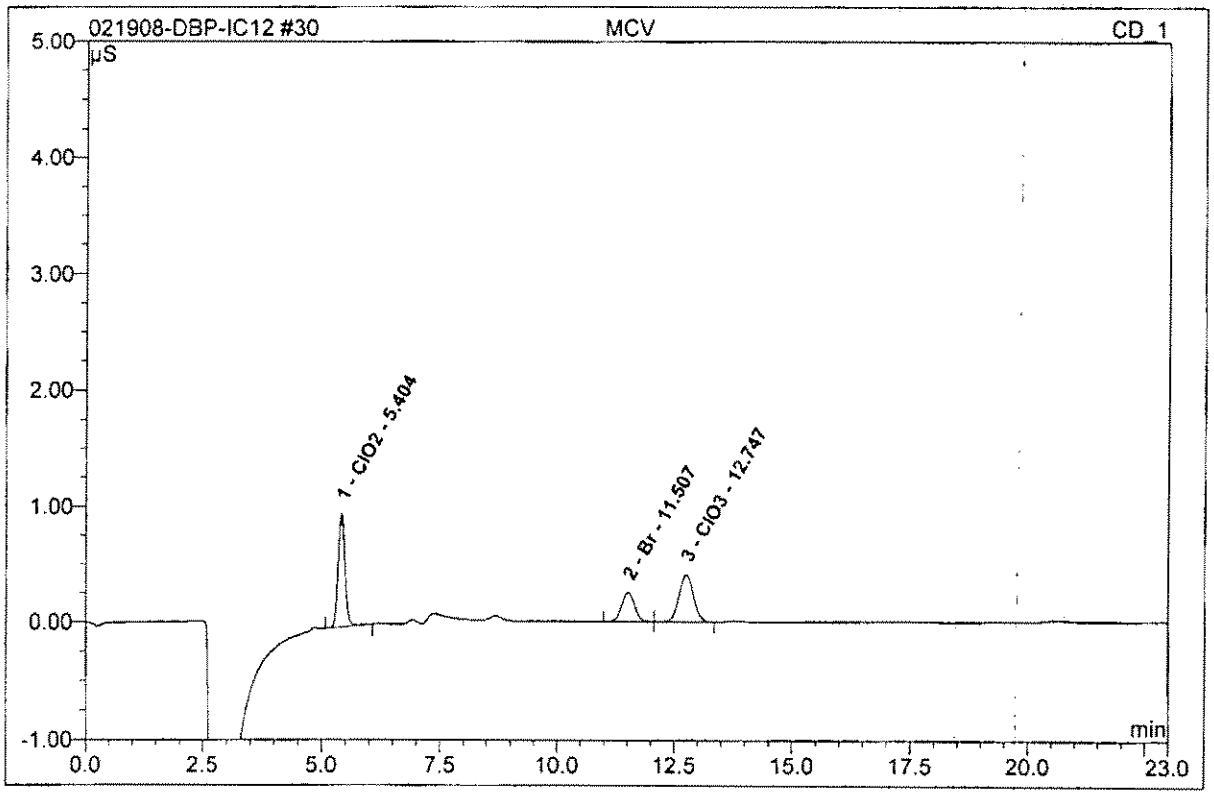
Sample Name:	**2802121018MSD**	*Injection Volume:*	**1000.0**
Vial Number:	**568**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 20:35**	*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	5.53	ClO2	0.357	0.080	0.57	93.990	BMB*
2	11.69	Br	0.207	0.065	0.46	80.132	BMB
3	12.94	ClO3	0.305	0.109	0.77	147.321	BM
4	13.91	n.a.	37.937	13.800	98.20	n.a.	MB
Total:			38.807	14.053	100.00	321.443	

30 MCV

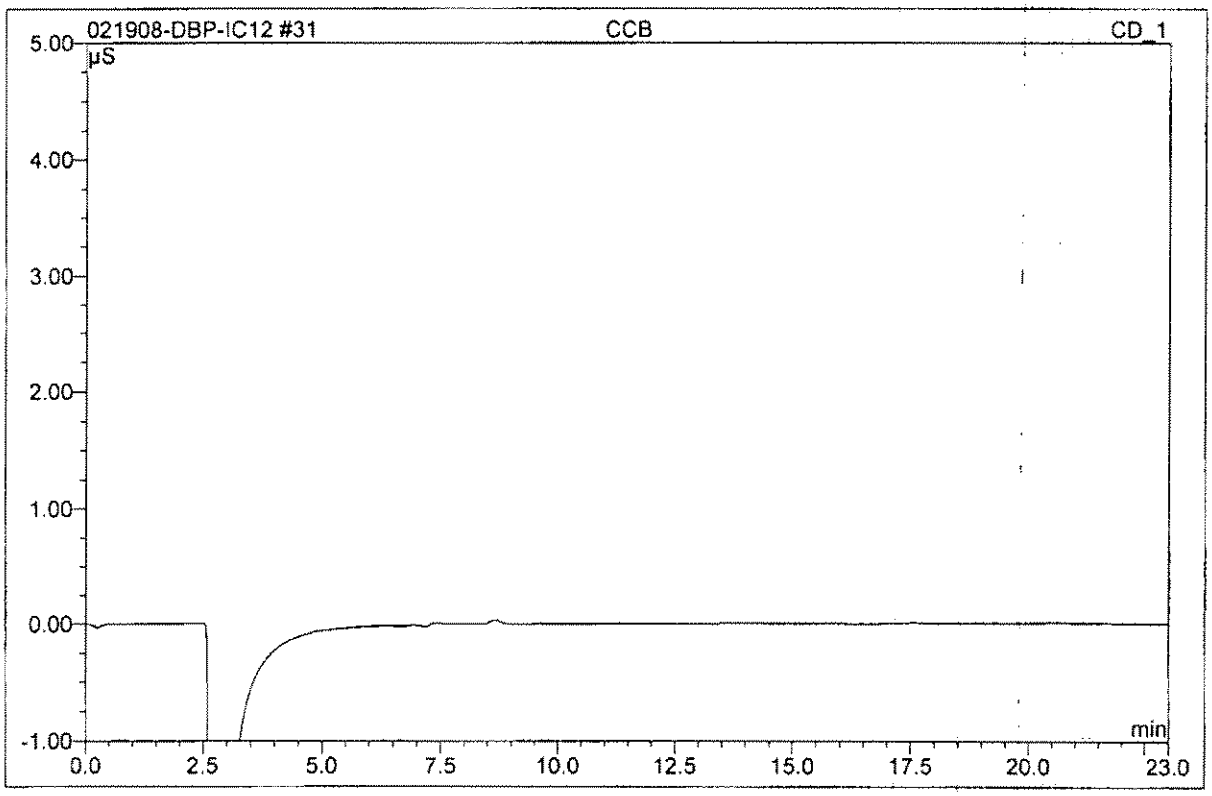
Sample Name:	**MCV**	*Injection Volume:*	**1000.0**
Vial Number:	**567**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 21:00**	*Sample 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	0.982	0.162	41.63	191.121	BMB
2	11.51	Br	0.253	0.080	20.55	99.590	BM
3	12.75	ClO3	0.410	0.148	37.82	199.989	MB
Total:			1.644	0.390	100.00	490.700	

31 CCB

Sample Name:	**CCB**	*Injection Volume:*	**1000.0**
Vial Number:	**568**	*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:	**2/19/2008 21:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

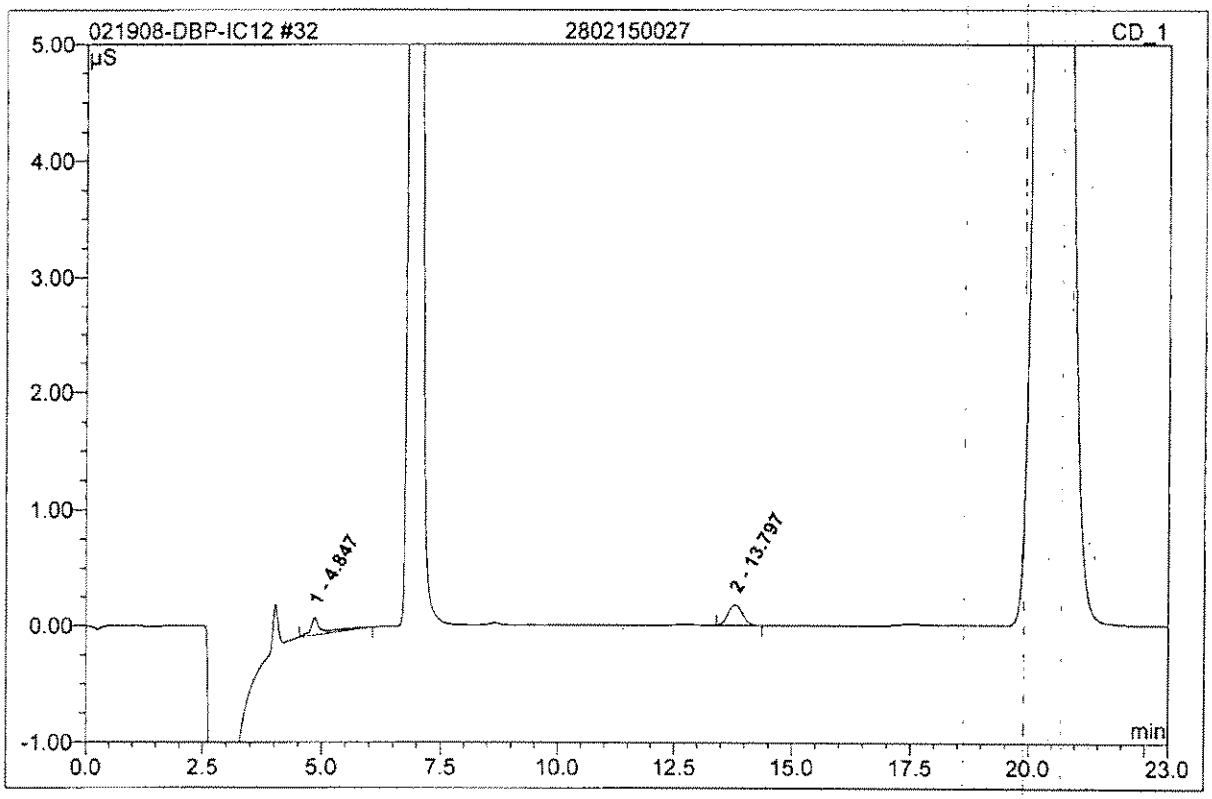


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
Total:			0.000	0.000	0.00	0.000	

32 2802150027

CLO2/CLO3

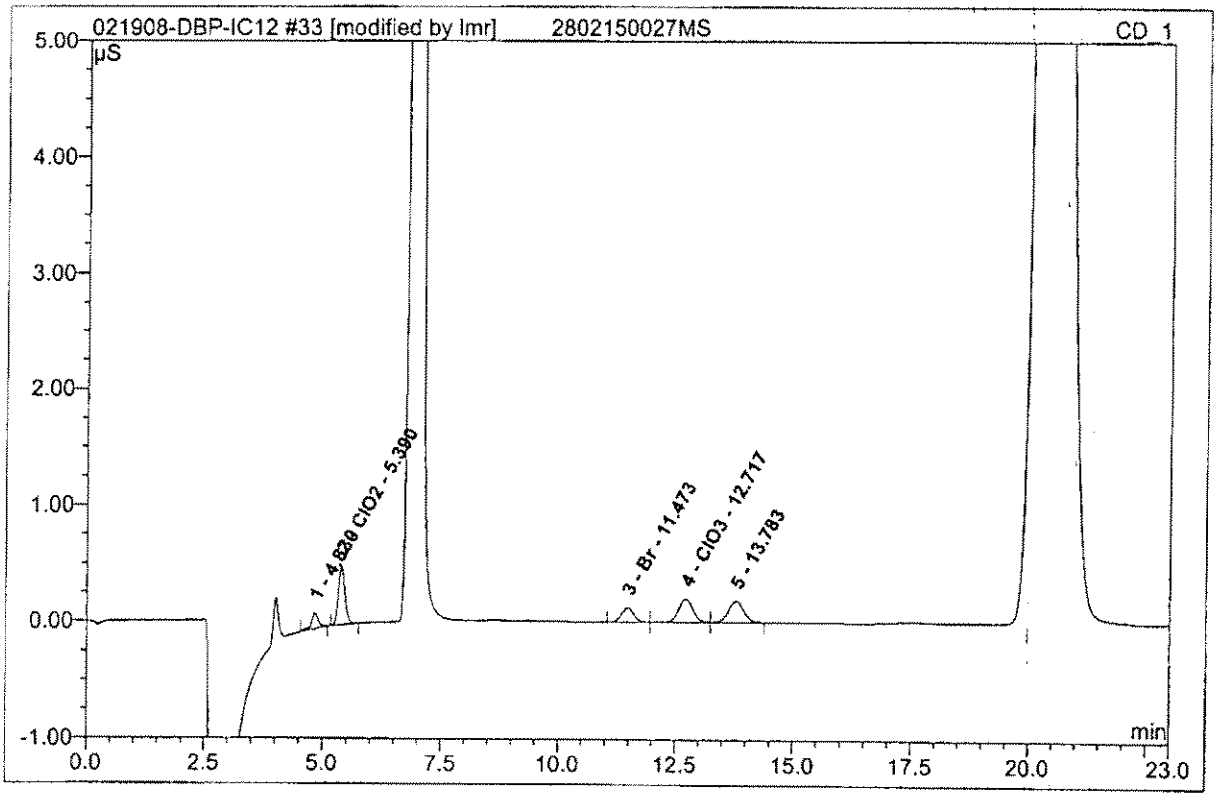
Sample Name:	**2802150027**	*Injection Volume:*	**1000.0**
Vial Number:	**569**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 21:51**	*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	4.85	n.a.	0.150	0.043	39.43	n.a.	BMB
2	13.80	n.a.	0.178	0.066	60.57	n.a.	BMB
Total:			0.328	0.109	100.00	0.000	

33 2802150027MS

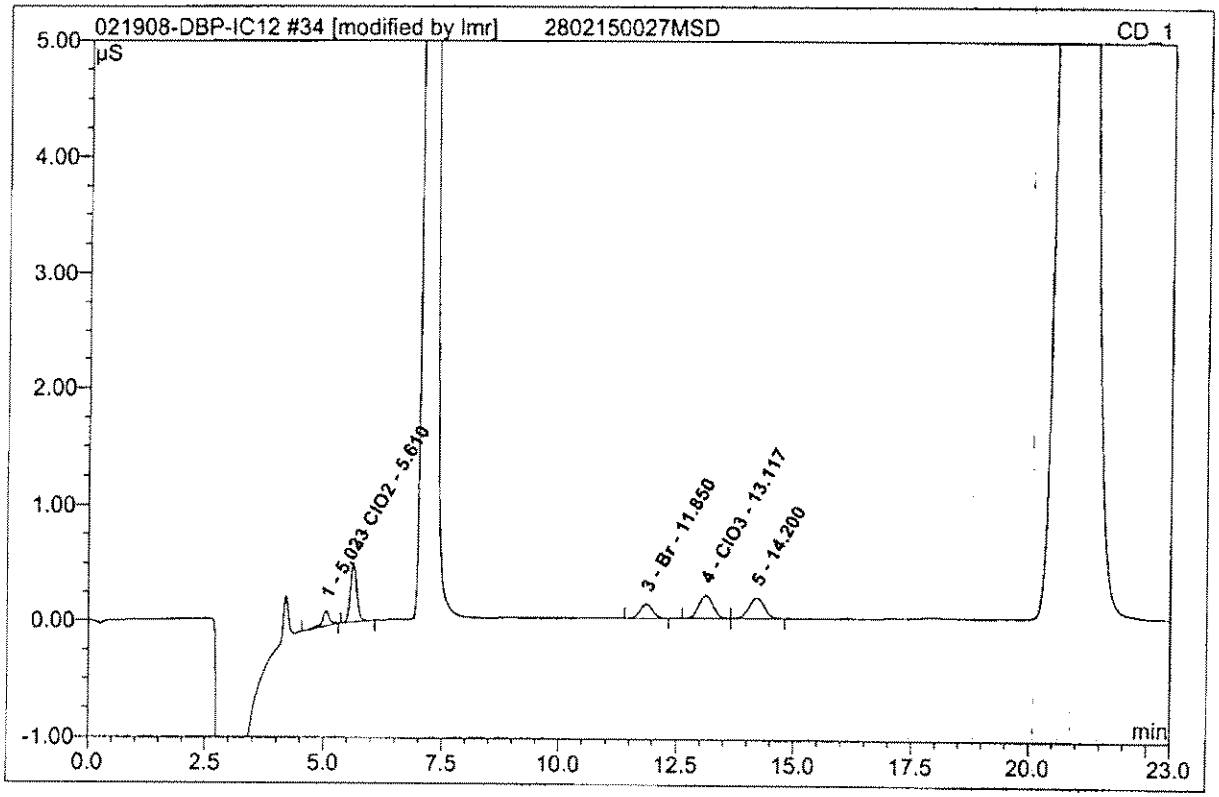
Sample Name:	**2802150027MS**	*Injection Volume:*	**1000.0**
Vial Number:	**570**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/19/2008 22:16**	*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	4.83	n.a.	0.134	0.022	7.96	n.a.	BMB*
2	5.39	ClO2	0.505	0.080	28.52	94.043	BMB*
3	11.47	Br	0.122	0.038	13.59	47.315	BM
4	12.72	ClO3	0.199	0.071	25.37	96.375	M
5	13.78	n.a.	0.181	0.069	24.57	n.a.	MB
Total:			1.141	0.280	100.00	237.734	

34 2802150027MSD

Sample Name:	**2802150027MSD**	*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:	**2/19/2008 22:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

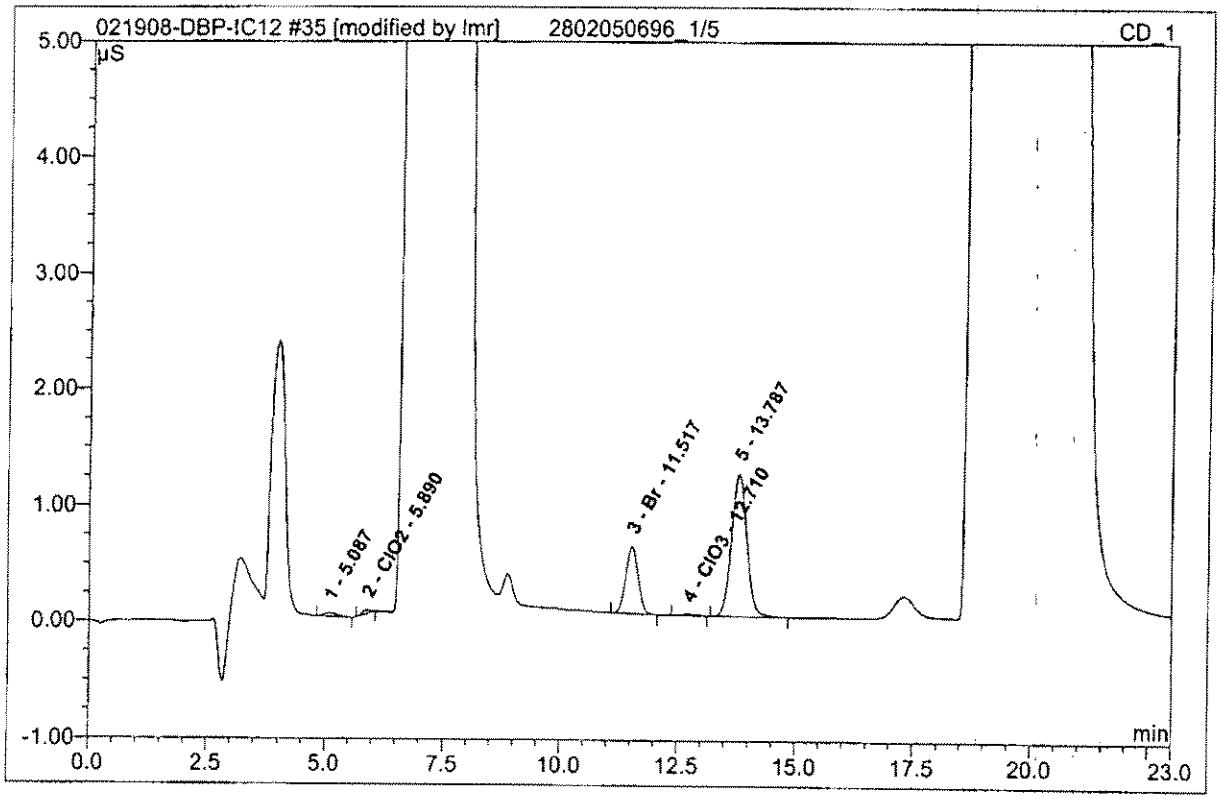


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.03	n.a.	0.133	0.023	8.19	n.a.	BMB*
2	5.61	ClO2	0.512	0.083	29.10	97.231	BMB*
3	11.85	Br	0.122	0.038	13.51	47.658	BMB
4	13.12	ClO3	0.199	0.071	24.97	96.110	BM
5	14.20	n.a.	0.179	0.069	24.23	n.a.	MB
Total:			1.144	0.284	100.00	240.999	

35 2802050696_1/5

CLO3

Sample Name:	**2802050696_1/5**	*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:*	**5.0000**
Recording Time:	**2/19/2008 23:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**23.00**	*Sample Amount:*	**1.0000**

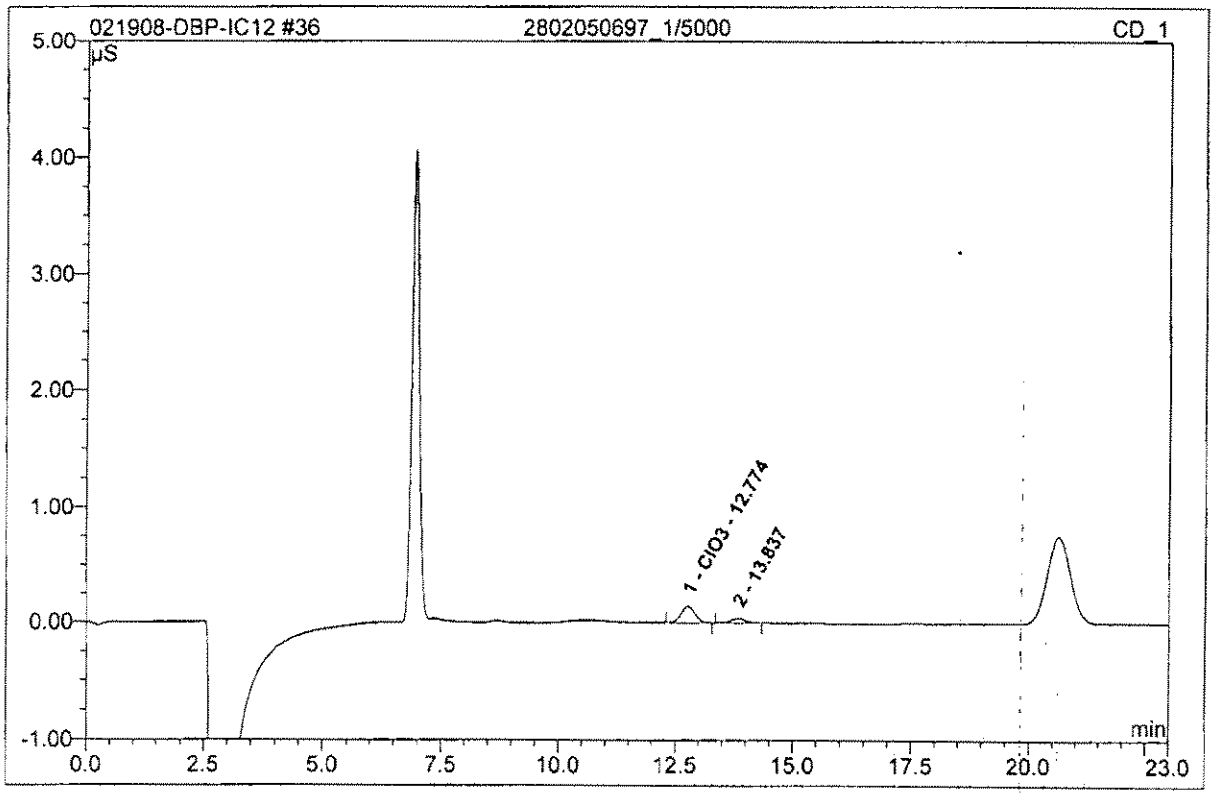


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ppb	Type
1	5.09	n.a.	0.032	0.011	1.72	n.a.	BMB
2	5.89	ClO2	0.029	0.007	1.06	41.421	BMB
3	11.52	Br	0.570	0.174	26.34	1083.204	BMB
4	12.71	ClO3	0.008	0.003	0.41	18.325	BMB*
5	13.79	n.a.	1.221	0.467	70.47	n.a.	BMB
Total:			1.860	0.662	100.00	1142.950	

36 2802050697_1/5000

CLO3

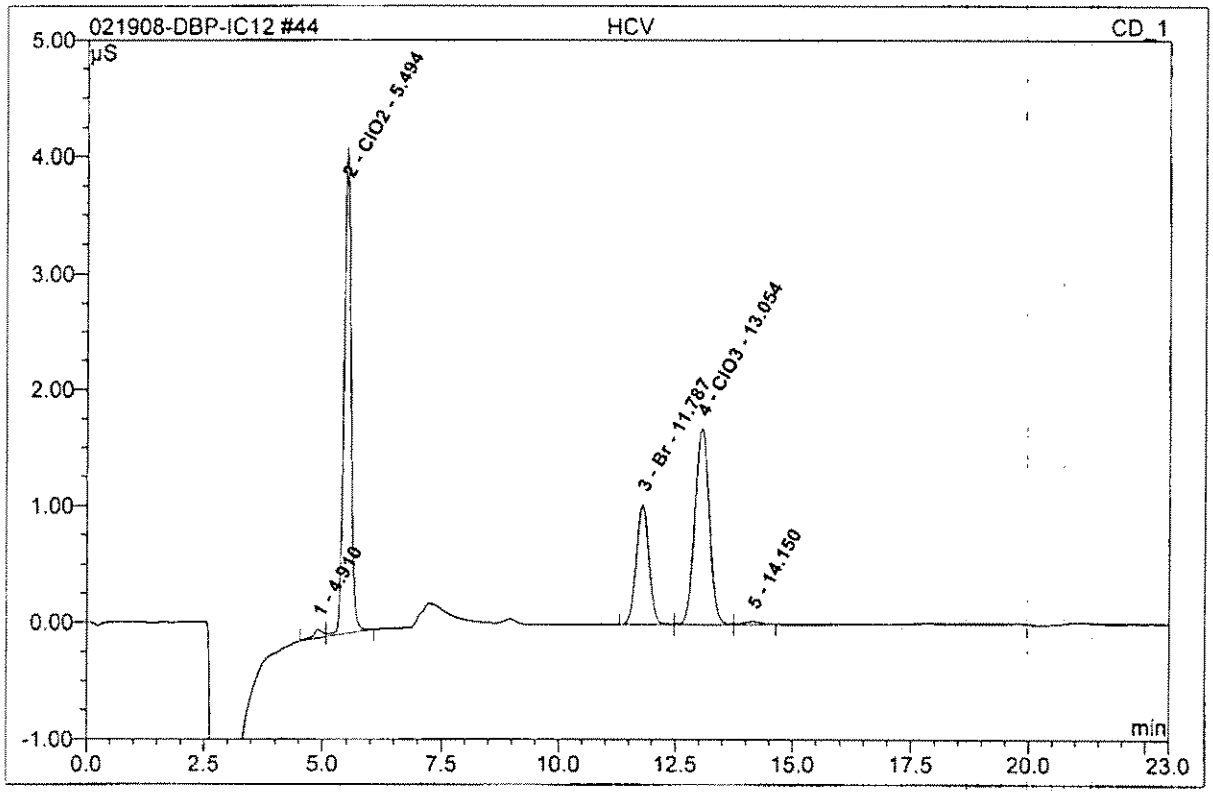
Sample Name:	**2802050697_1/5000**	*Injection Volume:*	**1000.0**
Vial Number:	**573**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**5000.0000**
Recording Time:	**2/19/2008 23:33**	*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	12.77	ClO3	0.143	0.050	78.64	#########	BMB
2	13.84	n.a.	0.036	0.014	21.36	n.a.	BMB
Total:			0.179	0.064	100.00	#########	

44 HCV

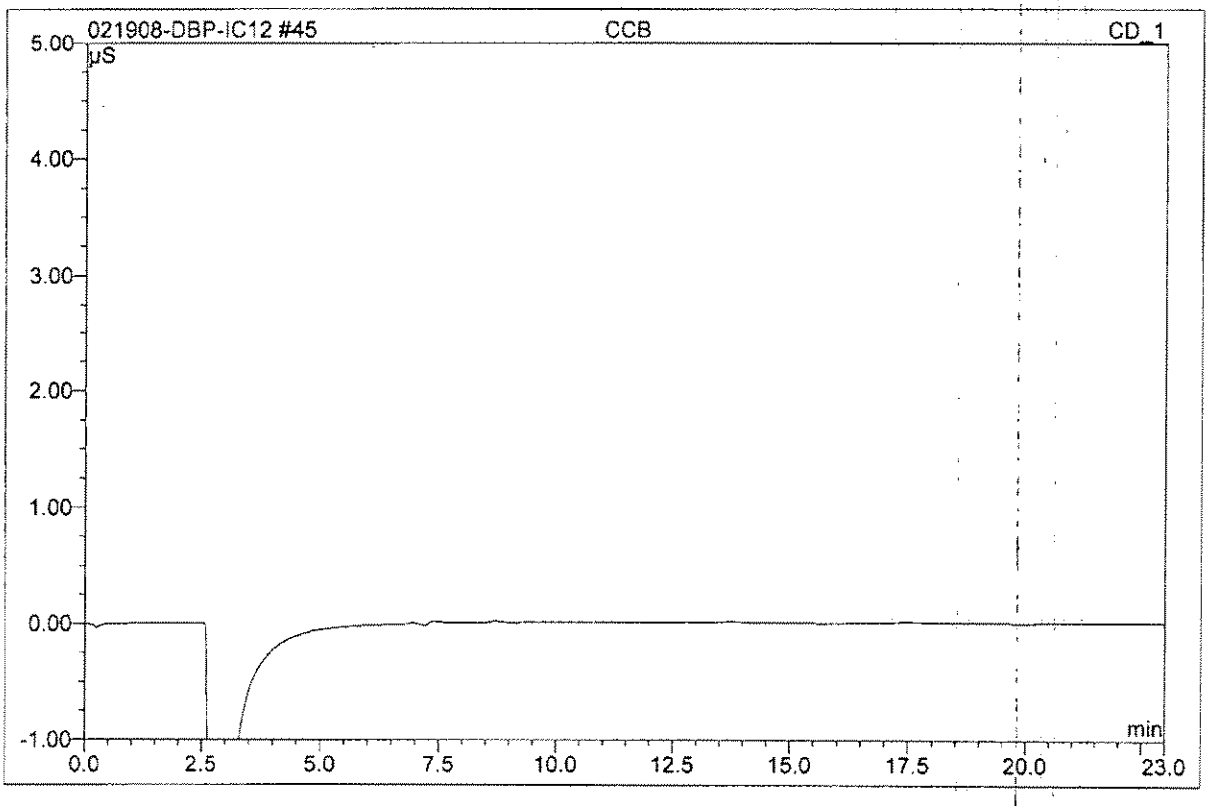
Sample Name:	**HCV**	*Injection Volume:*	**1000.0**
Vial Number:	**583**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**IC12 test Program**	*Bandwidth:*	**n.a.**
Quantif. Method:	**DBP-Method**	*Dilution Factor:*	**1.0000**
Recording Time:	**2/20/2008 2:56**	*Sample 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	4.91	n.a.	0.071	0.015	0.92	n.a.	BM
2	5.49	ClO2	4.176	0.715	42.63	840.596	MB
3	11.79	Br	1.031	0.330	19.69	409.936	BM
4	13.05	ClO3	1.685	0.606	36.17	821.450	M
5	14.15	n.a.	0.024	0.010	0.59	n.a.	MB
Total:			6.986	1.676	100.00	2071.982	

45 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:	**2/20/2008 3:21**	*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
Total:			0.000	0.000	0.00	0.000	

46 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:	**2/20/2008 3:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**n.a.**	*Sample Amount:*	**1.0000**

021908-DBP-IC12 #46 STOP CD_1

Can't open raw data file "\\USPAS2SDIO1\RawData$\IC\IC12_DBP\2008\FEB\021908-DBP-IC12.SEQ\CD_1.CHL\32340.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: 25

Reagent: DBP Init. Cal std. 10/5/10 ppm
Date Received/Prepped: 01/13/08 / / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room temp / Brown bottle

MW #: JKZ080113-1
By: JKZ
Matrix: aq
Amount: 100 mL
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL	TLH071029-1	5 ppm
1000 ppm Br	0.5 mL exp. 060108	R201658	5 ppb Br
1000 ppm ClOx	1.0 mL exp: 060108	R201648	10 ppb ClOx
1000 ppm ClO_3	1.0 mL exp: 060108	R201649	10 ppb ClO_3

100 mL soln

Comment:

Reagent: DBP 2nd Source 10/5/10 ppb
Date Received/Prepped: 01/22/08 / / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room temp / brown bottle

MW #: JKZ080122-1
By: JKZ
Matrix: aq
Amount: 100 mL
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL	TLH071029-1	5 ppm
1000 ppm Br	0.50 mL exp:	R201369	Br = 5 ppb
1000 ppm ClOx	1.00 mL exp: 121908	R201797	ClO2 = 10
1000 ppm ClO_3	1.00 mL exp: 053109	R201400	ClO3 = 10

100 mL soln

Comment:

Reagent: DBP S1 / MDL / MRL 10/5/10 ppb
Date Received/Prepped: 01/14/08 / 01/29/08 / 02/15/08 / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room temp / Brown bott

MW #: JKZ080114-1
By: JKZ
Matrix: aq
Amount: 100 mL
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL	TLH071029-1	50 ppm
10/5/10 Init. Cal	0.10 mL	JKZ050113-1	10/5/10 ppb

100 mL soln

Comment:

Reagent Preparation Documentation

Page: 26

Reagent: DBP S2 / 1m 20/10/20 ppb
Date Received/Prepped: 01/14/08 / / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown Bottle

MW #: JKZ080114-2
By: JKZ
Matrix: Aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL } 100 ml each	TLH 071029-1	50 ppm
10/5/1 ppm	0.20 ml	JKZ 080113-1	20/10/20 ppb
Dirt cal Std			

Comment:

Reagent: DBP S3 1m / 50 / 100 ppb
Date Received/Prepped: 01/14/08 / / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown bot.

MW #: JKZ080114-3
By: JKZ
Matrix: Aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL } dilute to 100 ml	TLH 071029-1	50 ppm
10/5/1 ppm	1.0 ml } w/ DI H2O	JKZ 080113-1	~~100/50/100~~ ppb
Dirt. cal Std.			100/50/100

Comment:

Reagent: DBP S4 / MCV 200/100/200 ppb
Date Received/Prepped: 01/14/08 / 01/29/08 / 02/18/08 / 02/15/08 / 02/28/08
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown bottle

MW #: JKZ080114-4
By: JKZ
Matrix: Aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm	50 µL } dilute to 100 ml	TLH 071029-1	50 ppm
10/5/1 ppm	2.0 ml } w/ DI H2O	JKZ 080113-1	~~200/100~~ ppb
Dirt Cal Std			200/100/200 ppb

Comment:

Reagent Preparation Documentation

Page: 27

Reagent: DBP S5 400/200/400 ppb
Date Received/Prepped: 01/14/08 / / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown bottle

MW #: JKZ080114-5
By: JKZ
Matrix: aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL } dilute to 100 ml	TLH 071029-1	50 ppm
10/5/10 ppm Drift Cal Std	4.0 ml } w/ DI H2O	JKZ080113-1	400/200/400 ppb

Comment:

Reagent: DBP S6/HCV 800/400/800
Date Received/Prepped: 01/14/08 / 01/29/08 / / / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown bottle

MW #: JKZ080114-6
By: JKZ
Matrix: aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL }	TLH 071029-1	50 ppm
10/5/10 ppm Drift Cal Std	8.0 ml } dilute to 100 ml w/ DI H2O	JKZ 080113-1	800/400/800 ppb

Comment:

Reagent: DBP LCS/LCSd 200/100/200 ppb
Date Received/Prepped: 01/22/08 / 02/07/08 / 02/15/08 / 03/03/08 / /
Date Expired: / / / / /
Manufacturer:
Storage Condition: Room Temp / Brown Bottle

MW #: JKZ080114-7 JKZ080122-2
By: JKZ
Matrix: aq
Amount: 100 ml
Lot #:

Component	Comment	Standard	Concentration
100,000 ppm EDA	50 µL } dilute to 100 ml	TLH 071029-1	50 ppm
10/5/10 ppm 2nd Source Drift Cal Std	2.0 ml } w/ DI H2O	~~JKZ 080113-1~~	200/100/200
		JKZ 080122-1	

Comment:

Reagent Documentation

Reagent: Chlorite Standard 975±2µg/mL **Reagent #:** 201648
Date Received: 23 May 07 **By:** TLH
Date Expired: 01 Jun 08 **Matrix:** aq
Manufacturer: Inorganic Ventures **Amount:** 125mL
Storage Condition: room temp **Lot #:** Z-CLOX010041

Component	Comment	Standard	Concentration
	IV# ICCLO21-1		

Comment:

Reagent: Chlorate Standard 1000±3µg/mL **Reagent #:** 201649
Date Received: 23 May 07 **By:** TLH
Date Expired: 01 Jun 08 **Matrix:** aq
Manufacturer: Inorganic Ventures **Amount:** 125mL
Storage Condition: room temp **Lot #:** A2-CLOX010043

Component	Comment	Standard	Concentration
	IV# ICCLO31-1		

Comment:

Reagent: Bromide Standard 995±2µg/mL **Reagent #:** 201650
Date Received: 23 May 07 **By:** TLH
Date Expired: 01 Jun 08 **Matrix:** aq
Manufacturer: Inorganic Ventures **Amount:** 125mL
Storage Condition: room temp **Lot #:** Z-BRO10060

Component	Comment	Standard	Concentration
	IV# ICBR1-1		

Comment:

INORGANIC VENTURES
1995 Lehigh Avenue, Suite 4
Lakewood, New Jersey 08701 - USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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

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CERTIFICATE OF ANALYSIS

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:

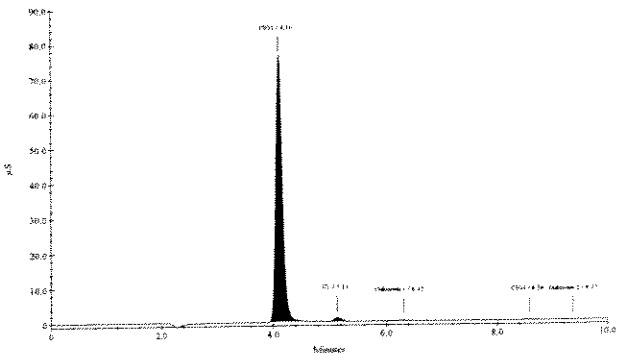
$$\text{Certified Value } (\bar{x}) = \frac{\sum x_i}{n} \qquad \text{Uncertainty } (\pm) = \frac{2[(\sum s_i)^2]^{1/2}}{(n)^{1/2}}$$

$(\bar{x})$ = 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 1/2008

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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:

Certified Value $(\bar{x}) = \frac{\Sigma x_i}{n}$ $(\bar{x})$ = mean, x_i = individual results, n = number of measurements

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