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Level IV Data Package

MWH Group 203746

Method: 314

Sample No.:

2705080213
2705080214
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2705080220
2705080221
2705080222
2705080223
2705080224
2705080225
2705080226
2705080227
2705080228
2705080229
2705080230
2705080231

Perchlorate QC Checklist

rev: 27 Mar 03

Analysis Date: 5-10-07 Analyst: Raja QC'd by VL Date 16 May 07

Instrument: IC 8 Calculated MCT Level: 876 umhos/cm

Original IPC conductance: 876 umhos/cm Daily IPC conductance: 870 umhos/cm

Calibration including QCS

✓ QCS (20ppb) recovery is within 90% - 110% (18-22ppb) to verify that the calibration curve (minimum 5 points) still holds.

✓ Calibration curve is reanalyzed if QCS fails. Correlation Coefficient is 0.995 or better.

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

✓ MLBANK is analyzed before samples. Perchlorate, if present, is < or = half of the MRL.

N/A *L-ClO4 only*: ICCSCV at 2ppb is within 50%-150% (1-3ppb)

✓ *ClO4 only*: MRL at 4ppb is within 75%-125% (3-5ppb)

✓ IPC (25ppb) recovery is between 80%-120% (20-30ppb)

✓ IPC retention time is within 5% of the retention time of the standards

✓ IPC Conductance level is within 10% of the original

PDA/H = ~~15.8%~~ RR ~~16%~~ 18.8% (D) 16 May 07

LCS/LCSD (25ppb)

✓ Recoveries are between 90%-110% (22.5 – 27.5ppb)

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

MS/MSD (25ppb) NOTE: For UCMR, MS/MSD concentrations alternate between 4ppb and 25ppb

✓ Recoveries are within 80%-120% (20-30ppb) for 25ppb spike N/A (3.2-4.8ppb) for 4ppb spike

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

✓ RPD between MS and MSD is within 15%.

Continuing Calibration Verification (MCV, HCV) NOTE: For UCMR ECV and MCV are required

✓ Verification Checks alternate between mid- and high-level during the analysis (low- and mid-level for UCMR)

✓ MCV (25ppb) recovery is between 85%-115% (21.25 – 28.75ppb)

✓ HCV (100ppb) recovery is between 85%-115% (85-115ppb) N/A ECV (4ppb) recovery is between 75%-125% (3.0-5.0)

Pretreat and include the following QC parameters for any batch or part thereof containing samples requiring pretreatment

N/A One Laboratory Reagent Blank (LRB). Perchlorate is < or = half of MRL.

N/A One pair of Laboratory Control Samples (LCS/LCSD). Recovery of perchlorate is between 85%-115%.

N/A One Pair of Laboratory Fortified Matrices (MS/MSD). Recoveries are between 80%-120%

Samples

✓ All samples are analyzed within 28 days of collection.

✓ All samples are analyzed within MCT Conductance limit.

QIR

N/A QIR needed for failed QC

N/A QIR needed for samples analyzed outside of hold time

MWH Laboratories
750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

CONDUCTIVITY MW SOP REVISION 5
SM2510B

Analysis Date: 5-10-07
Analyst: Raja
Reviewed By:
LIMS Check By:

Was QC Criteria Met: Y N
Was QIR Needed: Y N

Time of Analysis Start: End:
MRL 2umhos/cm: R# exp of solution:
KCl Std 1412 R# 251556 exp of solution 08/07
TV = 1412 µmho/cm @ 25°C for 0.0100M
Reading: 1412
Instrument: YSI Model 3200 SN:01A0504, Year Aquired 2001 New

Run #	Sample Number	Sample ID	Client	Date Collected	Temp °C	pH	Scale (µmho/mmho)	Result: Instrument	Result: Reported (µmho/cm)	Comments
Blk	Blank						µs	0.5531		
STD	MRL 2umhos/cm							N/A		1-3——±50% of TV
STD	KCl - 1000 mhos/cm							985		950-1050——±5% of TV
1	2705090654	A	EMWD	05-090				650		
2	2705080213	Art-1	Kennedy	05-07-0				9999		
3	214	-2					ms	13.84		
4	215	-3					µs	9999		
5	216	-4						7993		
6	217	-6						9225		
7	218	-7					ms	13.45		
8	219	-8						11.77		
9	220	PC-91R3					µs	6606		
10	221	-115R						7474		
DUP								7474		RPD < 5%
11	222	-116R						7132		
12	223	PC seep						5361		
13	224	SF'1						9419		
14	225	PC-117						5468		
15	226	-118						6182		
16	227	-119						5210		
17	228	-120						4399		
18	229	-121						4095		
19	230	-133						5660		
20	231	Art-9						9467		
DUP								9467		RPD < 5%
STD	KCl - 10 mhos/cm							N/A		8-12—RPD < 20% of TV

% RPD = |S1-S2| * 100
(S1+S2)/2

S1 = reading of 1st sample
S2 = reading of 2nd sample

UB: NM 5/17/07

Sample No.	Sample Name	Dil.Fac.	Comment	Time	Amount ug/L Perchlorate ECD_1	
1	WASH	1.0		05.08.07 10:16	n.a.	
2	CAL1	1.0		05.08.07 10:37	n.a.	
3	CAL2	1.0	RAJA060913-2	05.08.07 10:58	2.2019	
4	CAL3	1.0	RAJA060913-3	05.08.07 11:20	3.7695	
5	CAL4	1.0	RAJA060913-4	05.08.07 11:41	9.4266	
6	CAL5	1.0	RAJA060913-5	05.08.07 12:03	24.8295	
7	CAL6	1.0	RAJA060913-6	05.08.07 12:24	50.3275	
8	CAL7	1.0	RAJA060913-7	05.08.07 12:46	99.9400	
9	WASH	1.0		05.10.07 18:57	n.a.	
10	QCS	1.0		05.10.07 19:19	19.3329	96.7%
11	IPC	1.0		05.10.07 19:40	22.8643	91.5%
12	MBLK	1.0		05.10.07 20:01	n.a.	
13	MRL-2	1.0		05.10.07 20:23	1.7884	89.4%
14	MRL-4	1.0		05.10.07 20:44	3.3553	83.9%
15	LCS1	1.0		05.10.07 21:06	23.3275	93.3%
16	LCS2	1.0		05.10.07 21:27	23.1100	92.4%
17	2705090654-DNR	1.0		05.10.07 21:49	n.a.	
18	2705090654MS	1.0		05.10.07 22:10	23.0510	23.1 – 92.4%
19	2705090654MSD	1.0		05.10.07 22:31	23.2790	23.3 – 93.2%
20	2705080213_1/5-DNR	5.0		05.10.07 22:53	102.4389	
21	2705080214_1/5000	5000.0		05.10.07 23:14	87105.8825	
22	2705080215_1/10000	10000.0		05.10.07 23:36	319139.2228	
23	2705080216_1/10000	10000.0		05.10.07 23:57	308755.0929	
24	2705080217_1/5000	5000.0		05.11.07 00:18	70725.6433	
25	2705080218_1/5000	5000.0		05.11.07 00:40	122946.0743	
26	2705080219_1/10000	10000.0		05.11.07 01:01	251538.0356	
27	2705080220_1/500	500.0		05.11.07 01:23	19919.9892	
28	2705080221_1/500	500.0		05.11.07 01:44	16325.9670	
29	CCV	1.0		05.11.07 02:05	23.8323	95.3%
30	2705080222_1/500	500.0		05.11.07 02:27	14175.8900	
31	2705080223_1/50	50.0		05.11.07 02:48	536.1928	
32	2705080224_1/5-DNR	5.0		05.11.07 03:10	n.a.	
33	2705080225_1/200	200.0		05.11.07 03:31	4693.2741	
34	2705080226_1/200	200.0		05.11.07 03:53	10854.7361	
35	2705080227_1/200	200.0		05.11.07 04:14	6954.0160	
36	2705080228_1/100	100.0		05.11.07 04:35	1959.2600	
37	2705080229_1/100	100.0		05.11.07 04:57	1399.8700	
38	2705080230_1/100	100.0		05.11.07 05:18	6812.9490	
39	2705080231_1/5000	5000.0		05.11.07 05:40	306661.4544	
40	HCV	1.0		05.11.07 06:01	97.9424	97.9%
41	STOP	1.0		05.11.07 06:22	n.a.	

Title: 0210A
Datasource: D7LW3831_local
Location: ICS-2000\CLO4-2007-MAY
Timebase: ICS-2000
#Samples: 41
Created: 5/10/2007 6:47:26 PM by raja
(Modified, not saved)

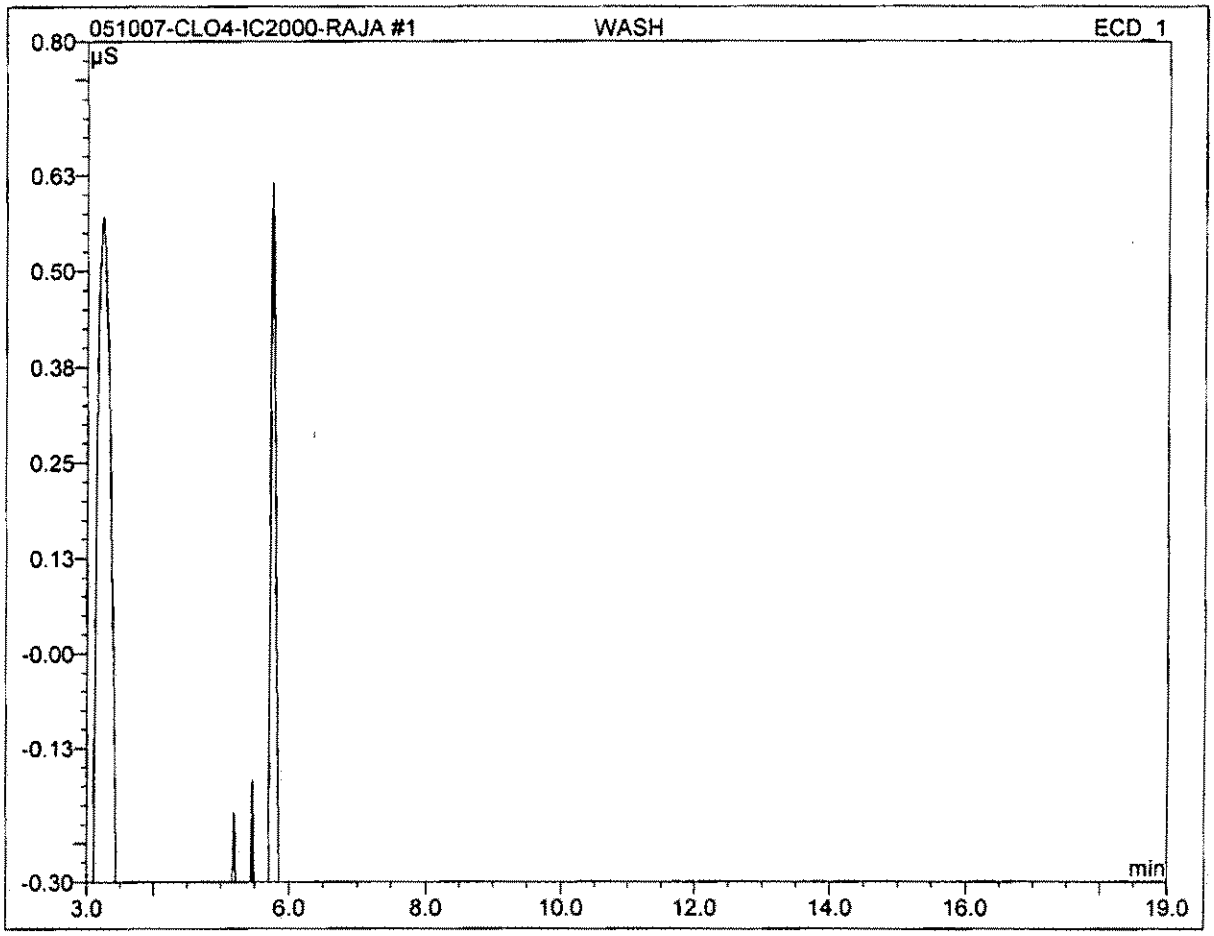
No.	Name	Comment	Dil. Factor	Type	Program	Method	Status
1	WASH		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
2	CAL1		1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
3	CAL2	RAJA060913-2	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
4	CAL3	RAJA060913-3	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
5	CAL4	RAJA060913-4	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
6	CAL5	RAJA060913-5	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
7	CAL6	RAJA060913-6	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
8	CAL7	RAJA060913-7	1.0000	Standard	PerchorateDX2	PerchlorateDX2	Finished
9	WASH		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
10	QCS		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
11	IPC		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
12	MBLK		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
13	MRL-2		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
14	MRL-4		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
15	LCS1		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
16	LCS2		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
17	2705090654-DNR		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
18	2705090654MS		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
19	2705090654MSD		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
20	2705080213_1/5-DNR		5.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
21	2705080214_1/5000		5000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
22	2705080215_1/10000		10000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
23	2705080216_1/10000		10000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
24	2705080217_1/5000		5000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
25	2705080218_1/5000		5000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
26	2705080219_1/10000		10000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
27	2705080220_1/500		500.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
28	2705080221_1/500		500.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
29	CCV		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
30	2705080222_1/500		500.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
31	2705080223_1/50		50.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
32	2705080224_1/5-DNR		5.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
33	2705080225_1/200		200.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
34	2705080226_1/200		200.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
35	2705080227_1/200		200.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
36	2705080228_1/100		100.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
37	2705080229_1/100		100.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
38	2705080230_1/100		100.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
39	2705080231_1/5000		5000.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
40	HCV		1.0000	Unknown	PerchorateDX2	PerchlorateDX2	Finished
41	STOP		1.0000	Unknown	STOP	PerchlorateDX2	Finished

Title: 0210A
Datasource: D7LW3831_local
Location: ICS-2000\CLO4-2007-MAY
Timebase: ICS-2000
#Samples: 41
Created: 5/10/2007 6:47:26 PM by raja
(Modified, not saved)

No.	Name	Inj. Date/Time	*Analyst
1	WASH	5/8/2007 10:16:06 AM	raja
2	CAL1	5/8/2007 10:37:31 AM	raja
3	CAL2	5/8/2007 10:58:56 AM	raja
4	CAL3	5/8/2007 11:20:22 AM	raja
5	CAL4	5/8/2007 11:41:47 AM	raja
6	CAL5	5/8/2007 12:03:13 PM	raja
7	CAL6	5/8/2007 12:24:39 PM	raja
8	CAL7	5/8/2007 12:46:05 PM	raja
9	WASH	5/10/2007 6:57:43 PM	raja
10	QCS	5/10/2007 7:19:08 PM	raja
11	IPC	5/10/2007 7:40:33 PM	raja
12	MBLK	5/10/2007 8:01:58 PM	raja
13	MRL-2	5/10/2007 8:23:22 PM	raja
14	MRL-4	5/10/2007 8:44:46 PM	raja
15	LCS1	5/10/2007 9:06:11 PM	raja
16	LCS2	5/10/2007 9:27:35 PM	raja
17	2705090654-DNR	5/10/2007 9:49:01 PM	raja
18	2705090654MS	5/10/2007 10:10:26 PM	raja
19	2705090654MSD	5/10/2007 10:31:50 PM	raja
20	2705080213_1/5-DNR	5/10/2007 10:53:16 PM	raja
21	2705080214_1/5000	5/10/2007 11:14:41 PM	raja
22	2705080215_1/10000	5/10/2007 11:36:05 PM	raja
23	2705080216_1/10000	5/10/2007 11:57:30 PM	raja
24	2705080217_1/5000	5/11/2007 12:18:55 AM	raja
25	2705080218_1/5000	5/11/2007 12:40:20 AM	raja
26	2705080219_1/10000	5/11/2007 1:01:44 AM	raja
27	2705080220_1/500	5/11/2007 1:23:09 AM	raja
28	2705080221_1/500	5/11/2007 1:44:33 AM	raja
29	CCV	5/11/2007 2:05:58 AM	raja
30	2705080222_1/500	5/11/2007 2:27:22 AM	raja
31	2705080223_1/50	5/11/2007 2:48:47 AM	raja
32	2705080224_1/5-DNR	5/11/2007 3:10:11 AM	raja
33	2705080225_1/200	5/11/2007 3:31:36 AM	raja
34	2705080226_1/200	5/11/2007 3:53:00 AM	raja
35	2705080227_1/200	5/11/2007 4:14:25 AM	raja
36	2705080228_1/100	5/11/2007 4:35:49 AM	raja
37	2705080229_1/100	5/11/2007 4:57:14 AM	raja
38	2705080230_1/100	5/11/2007 5:18:39 AM	raja
39	2705080231_1/5000	5/11/2007 5:40:03 AM	raja
40	HCV	5/11/2007 6:01:28 AM	raja
41	STOP	5/11/2007 6:22:53 AM	raja

1 WASH

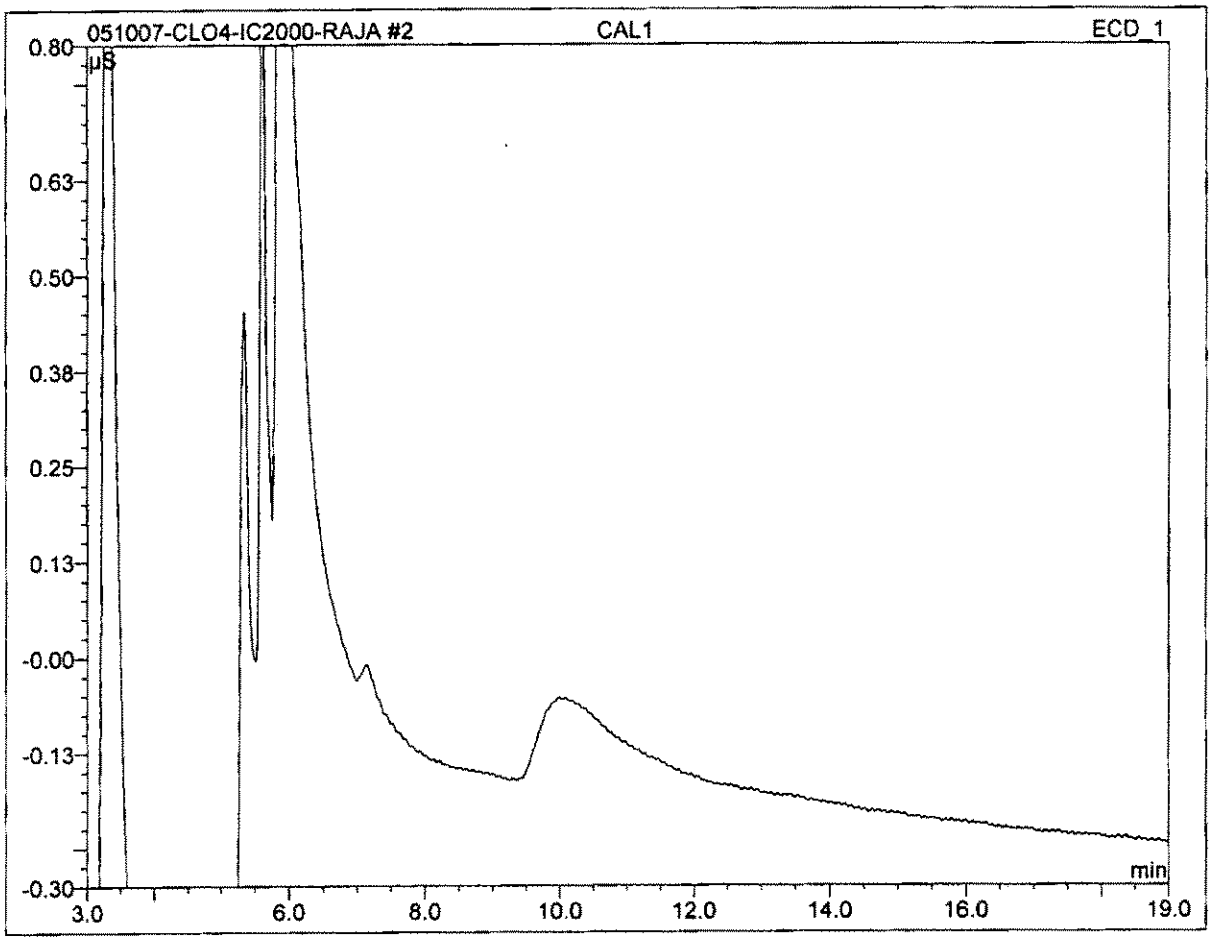
Sample Name:	**WASH**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 10:16**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



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

2 CAL1

Sample Name:	**CAL1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 10:37**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

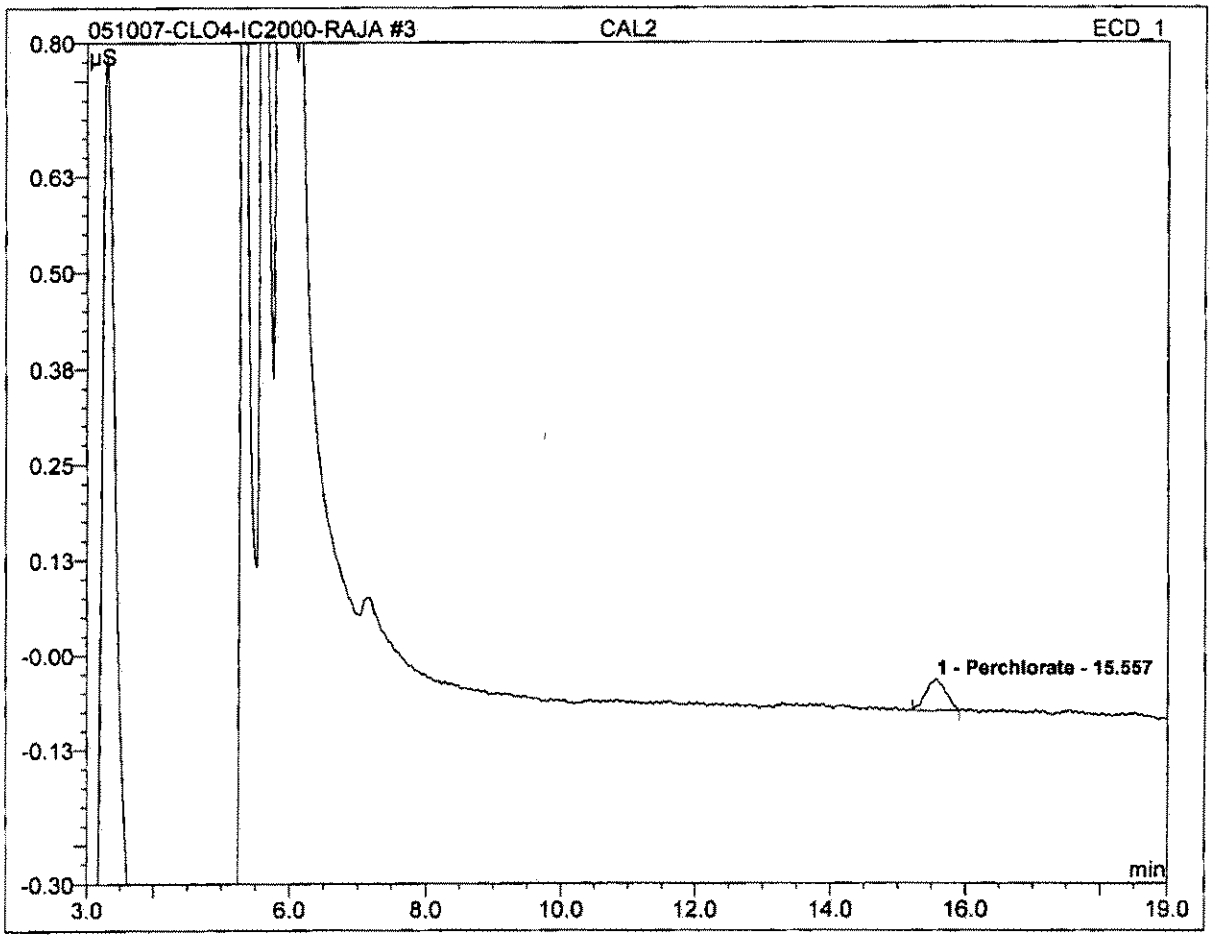


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
Total:			0.000	0.000	0.00	0.000	

3 CAL2

RAJA060913-2

Sample Name:	**CAL2**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 10:58**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

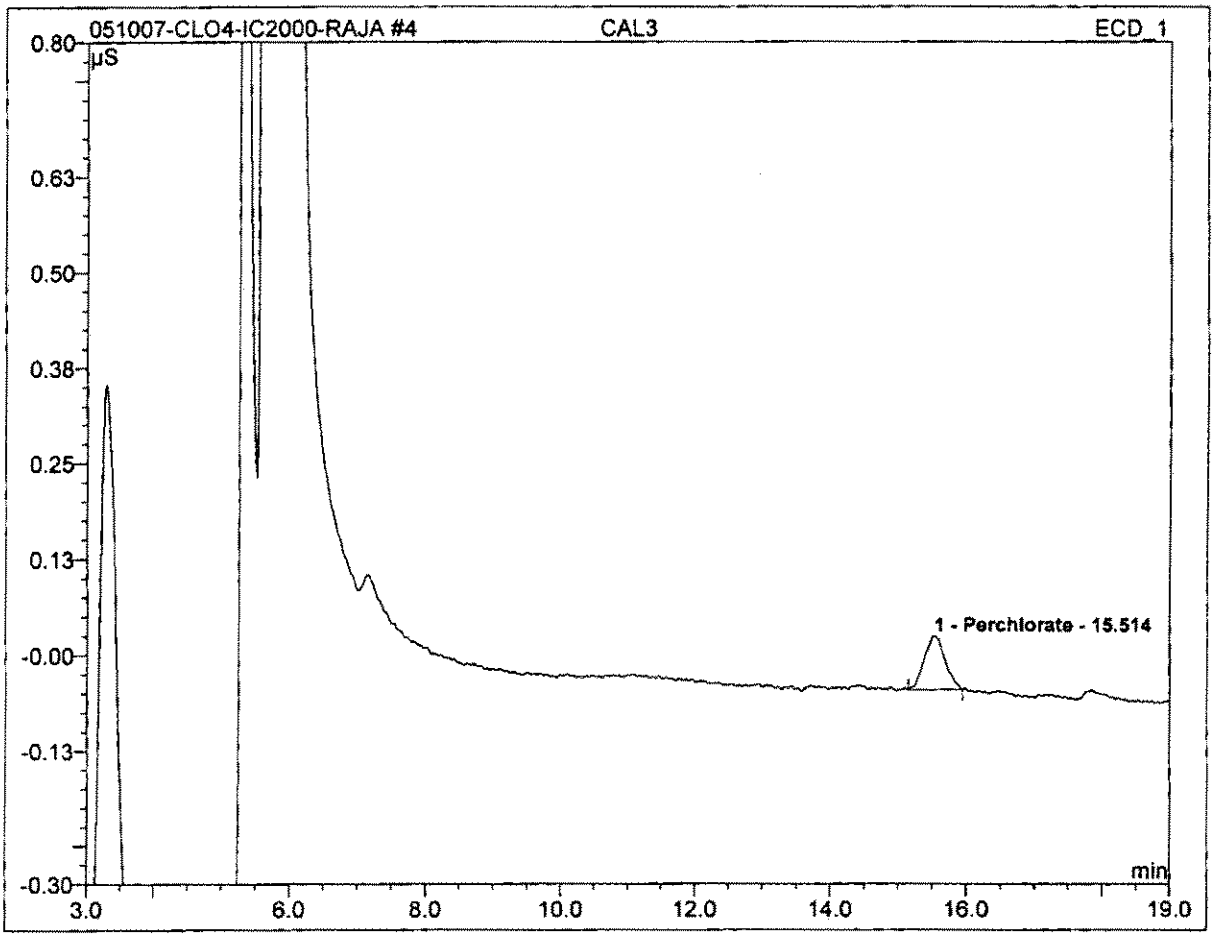


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.56	Perchlorate	0.042	0.014	100.00	2.202	BMB
Total:			0.042	0.014	100.00	2.202	

4 CAL3

RAJA060913-3

Sample Name:	**CAL3**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 11:20**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

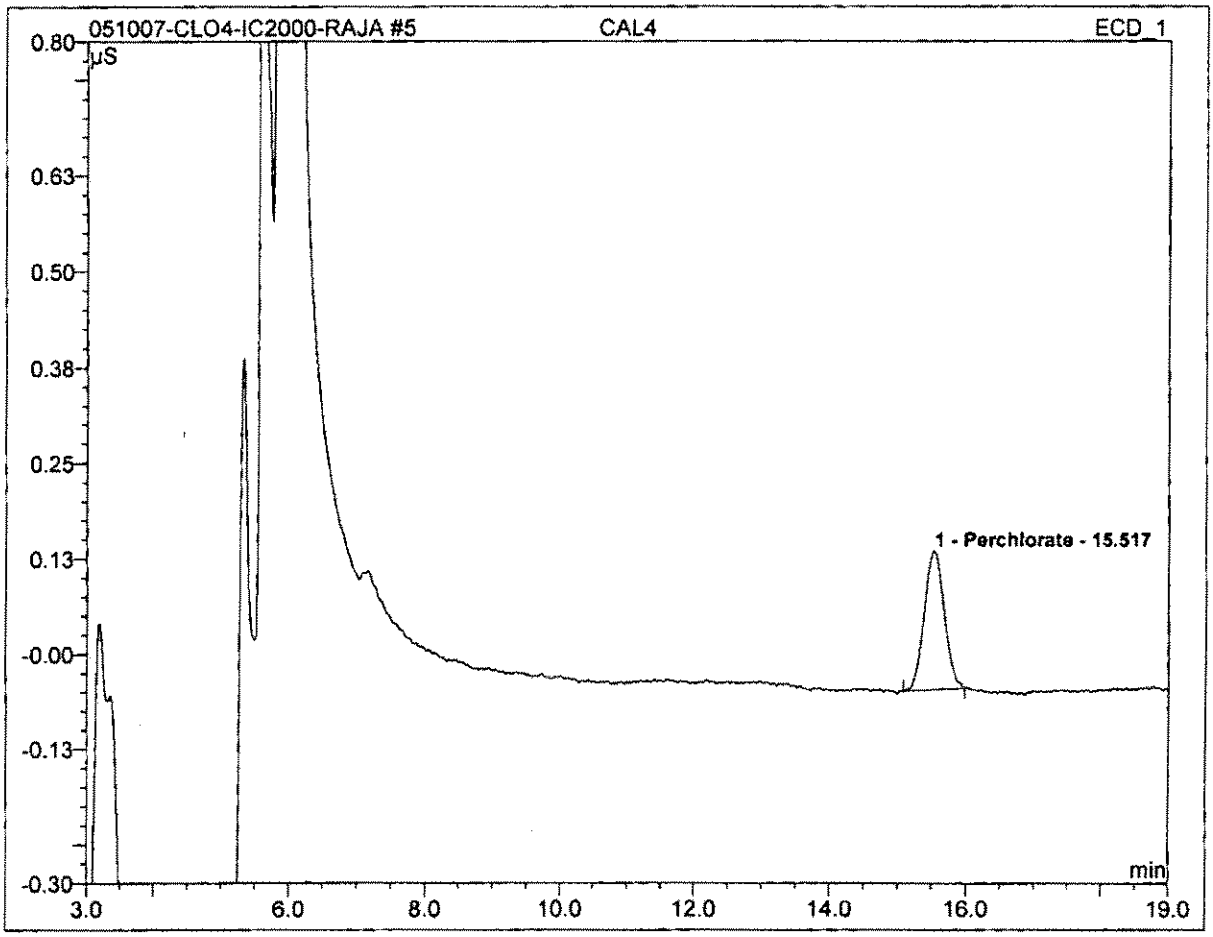


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.51	Perchlorate	0.069	0.024	100.00	3.770	BMB
Total:			0.069	0.024	100.00	3.770	

5 CAL4

RAJA060913-4

Sample Name:	**CAL4**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 11:41**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

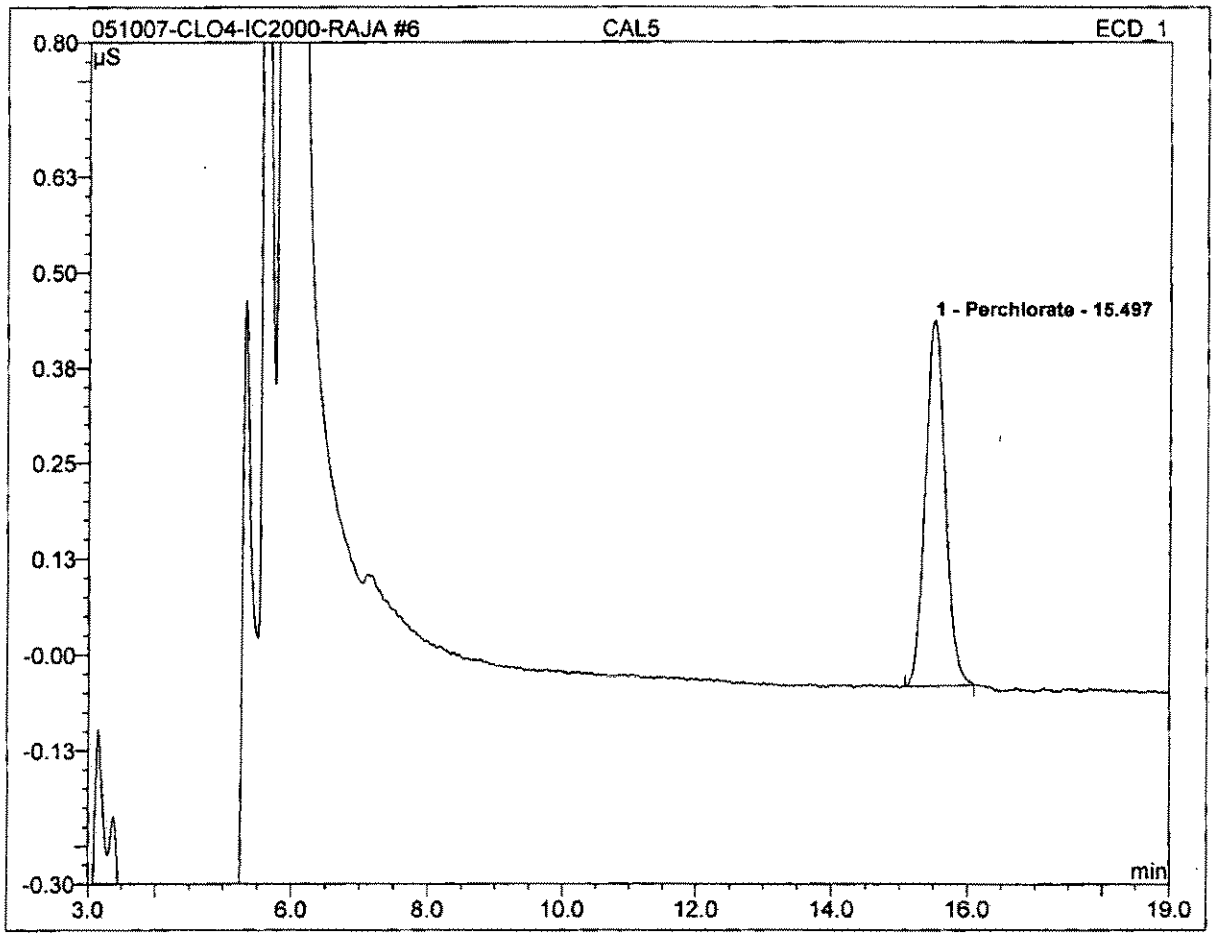


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.52	Perchlorate	0.182	0.061	100.00	9.427	BMB
Total:			0.182	0.061	100.00	9.427	

6 CAL5

RAJA060913-5

Sample Name:	**CAL5**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 12:03**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

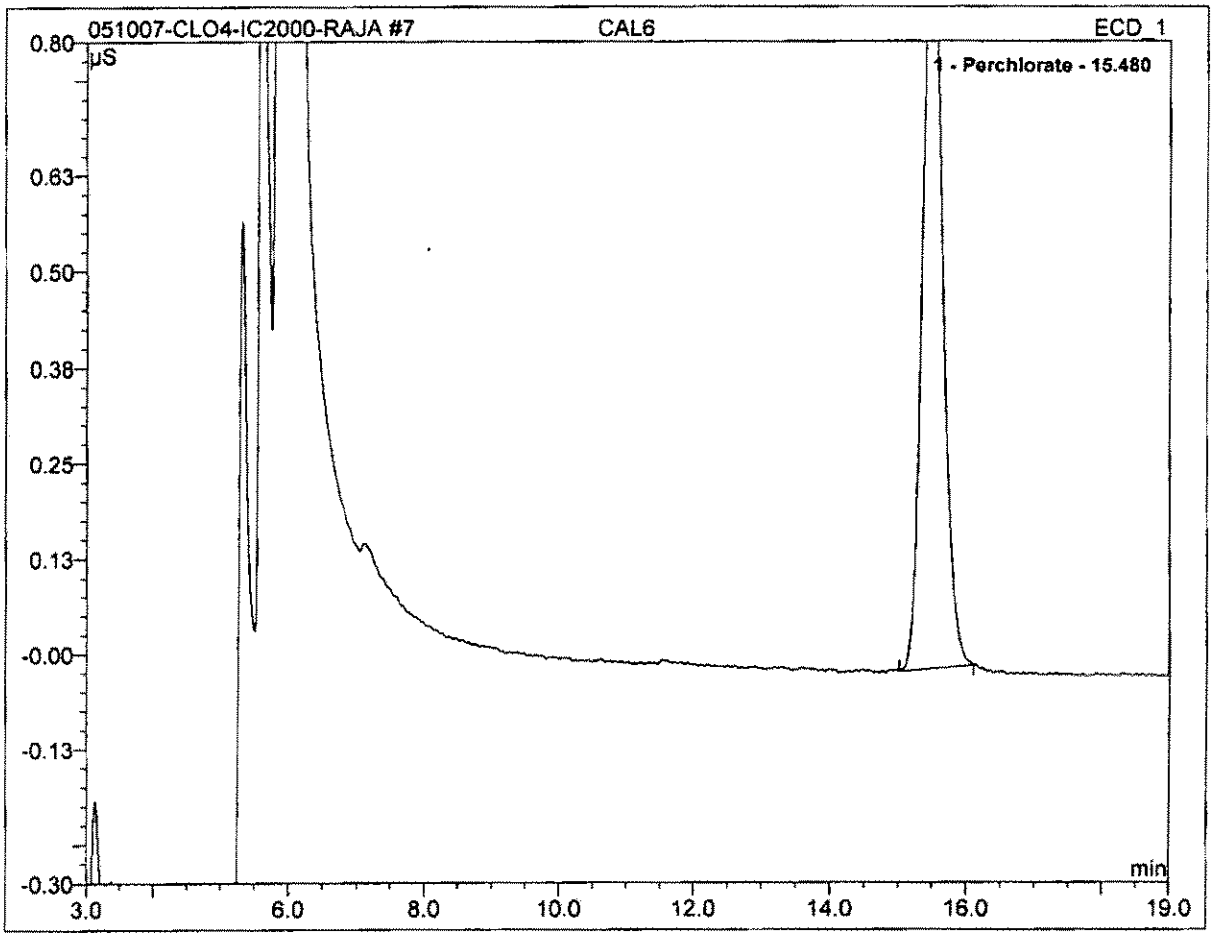


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.50	Perchlorate	0.477	0.164	100.00	24.830	BMB
Total:			0.477	0.164	100.00	24.830	

7 CAL6

RAJA060913-6

Sample Name:	**CAL6**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 12:24**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

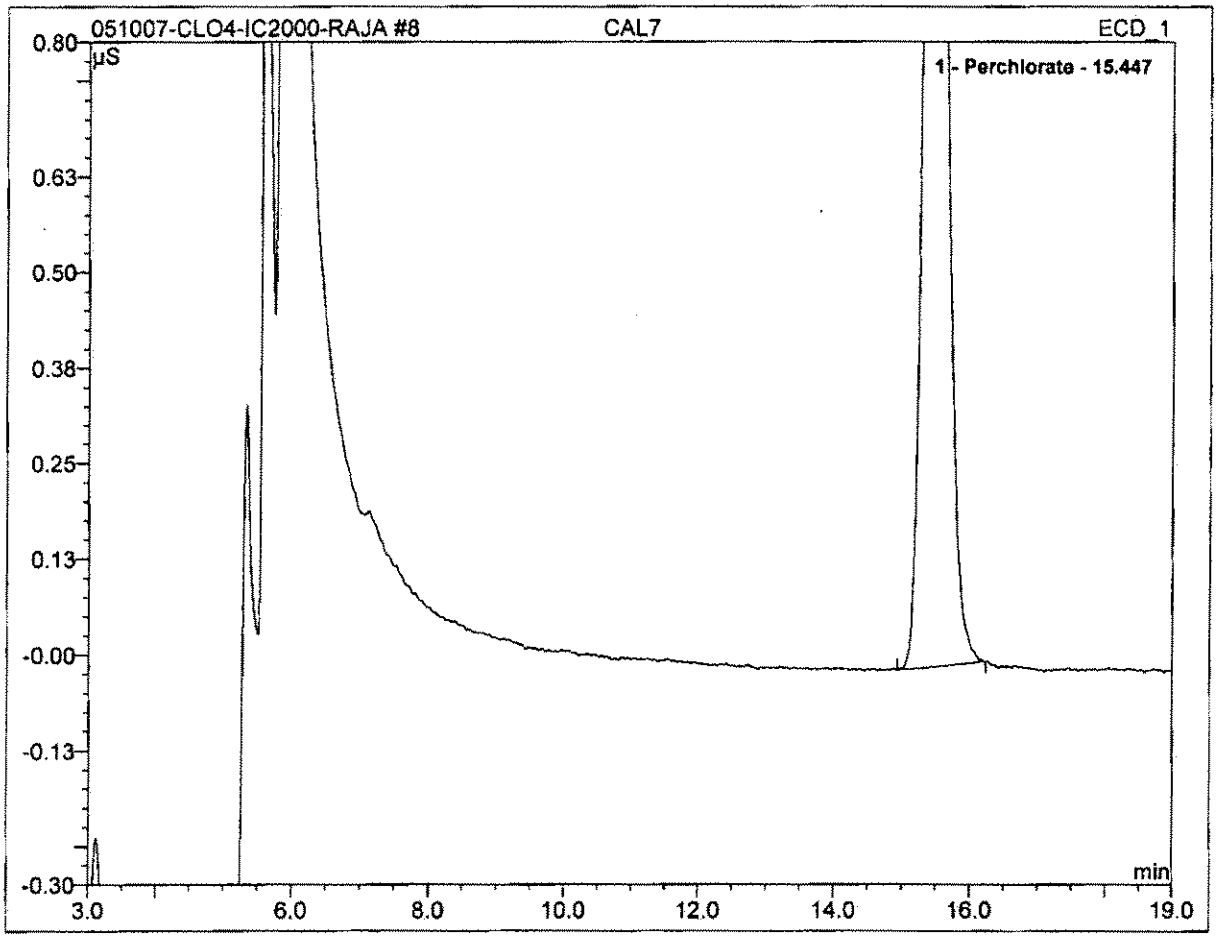


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.48	Perchlorate	1.002	0.343	100.00	50.328	BMB
Total:			1.002	0.343	100.00	50.328	

8 CAL7

RAJA060913-7

Sample Name:	**CAL7**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/08/2007 12:46**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**

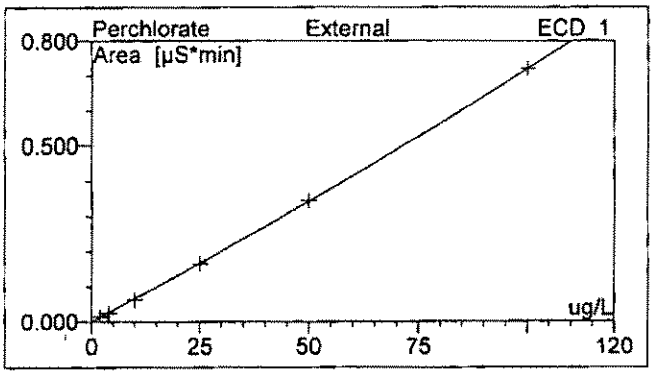


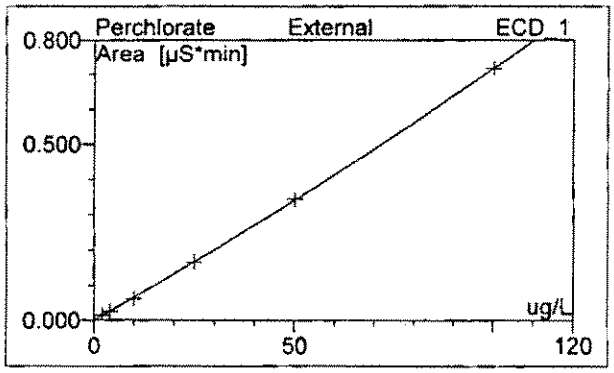
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.45	Perchlorate	2.073	0.718	100.00	99.940	BMB
Total:			2.073	0.718	100.00	99.940	

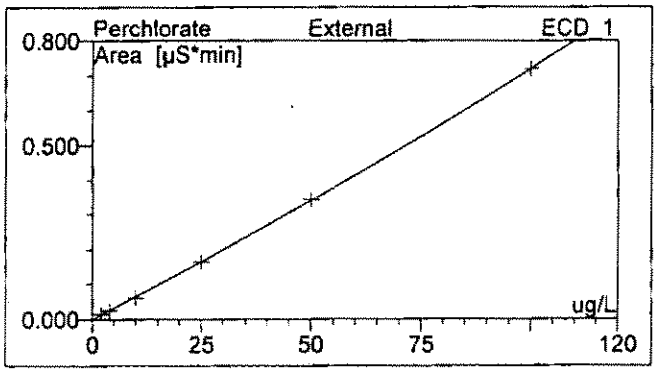
8 CAL7

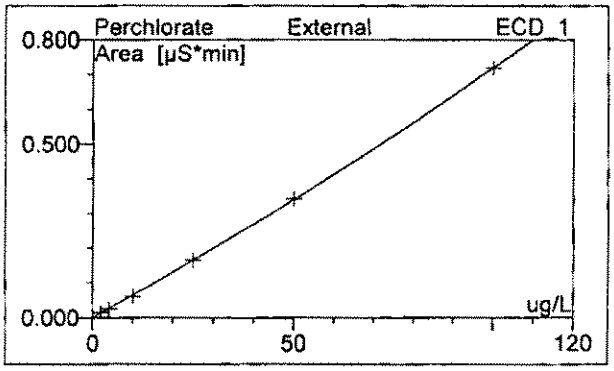
RAJA060913-7

Sample Name:	**CAL7**	*Injection Volume:*	**1000.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**PerchorateDX2**	*Bandwidth:*	**n.a.**
Quantif. Method:	**PerchlorateDX2**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/8/2007 12:46**	*Sample Weight:*	**1.0000**
Run Time (min):	**19.00**	*Sample Amount:*	**1.0000**





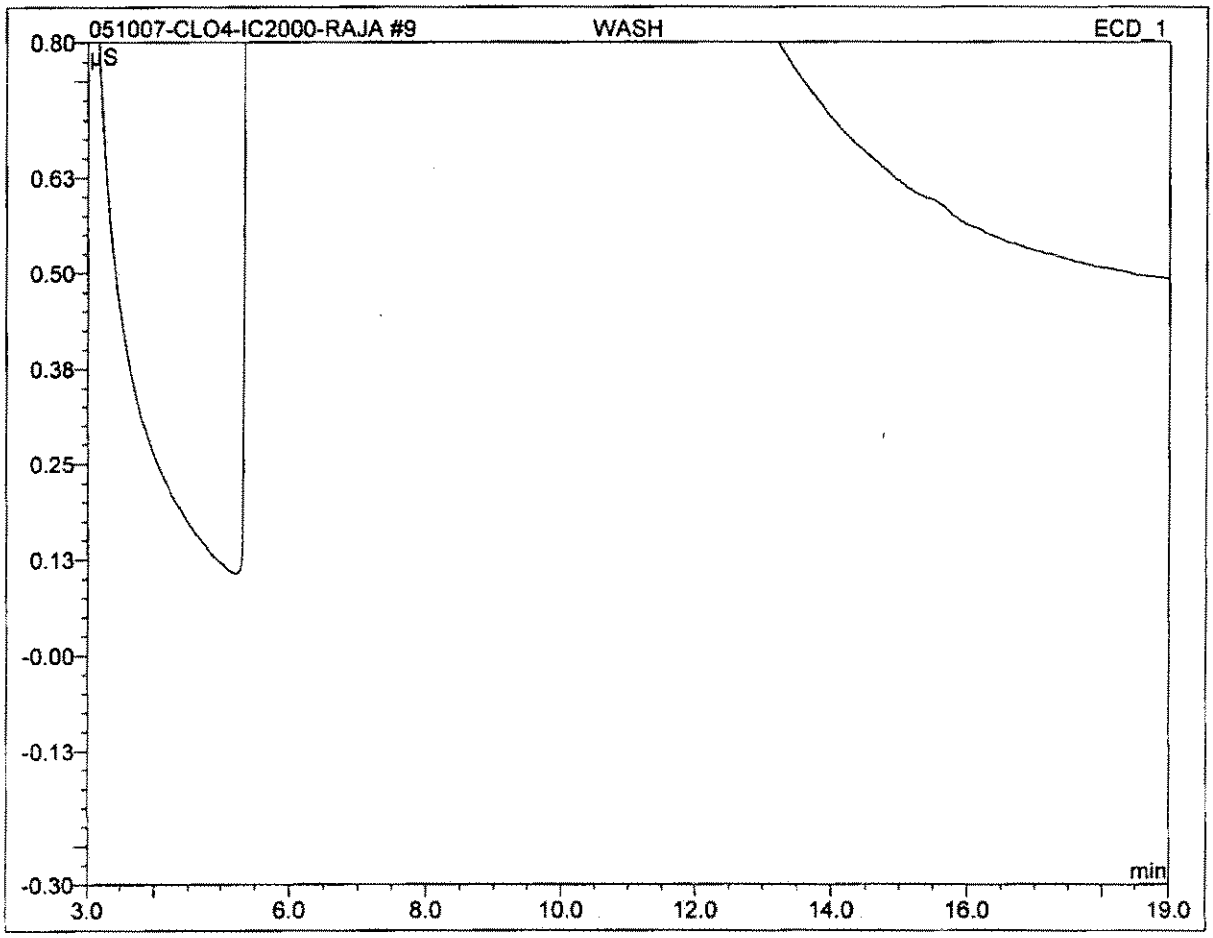




No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	15.45	Perchlorate	Quad	6	99.9645	0.0000	0.0064	0.0000
Average:					99.9645	0.0000	0.0064	0.0000

9 WASH

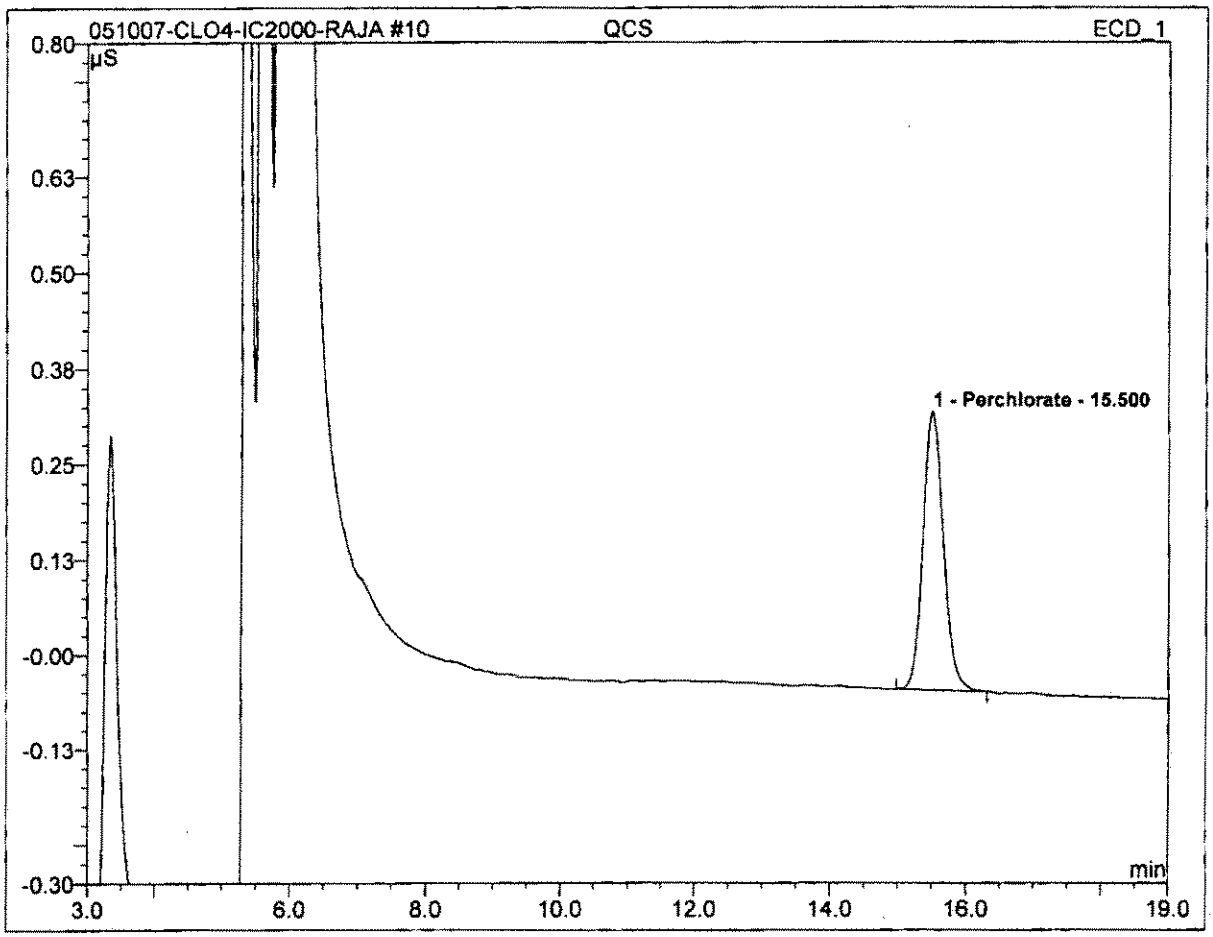
Sample Name:	**WASH**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 18:57**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



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

10 QCS

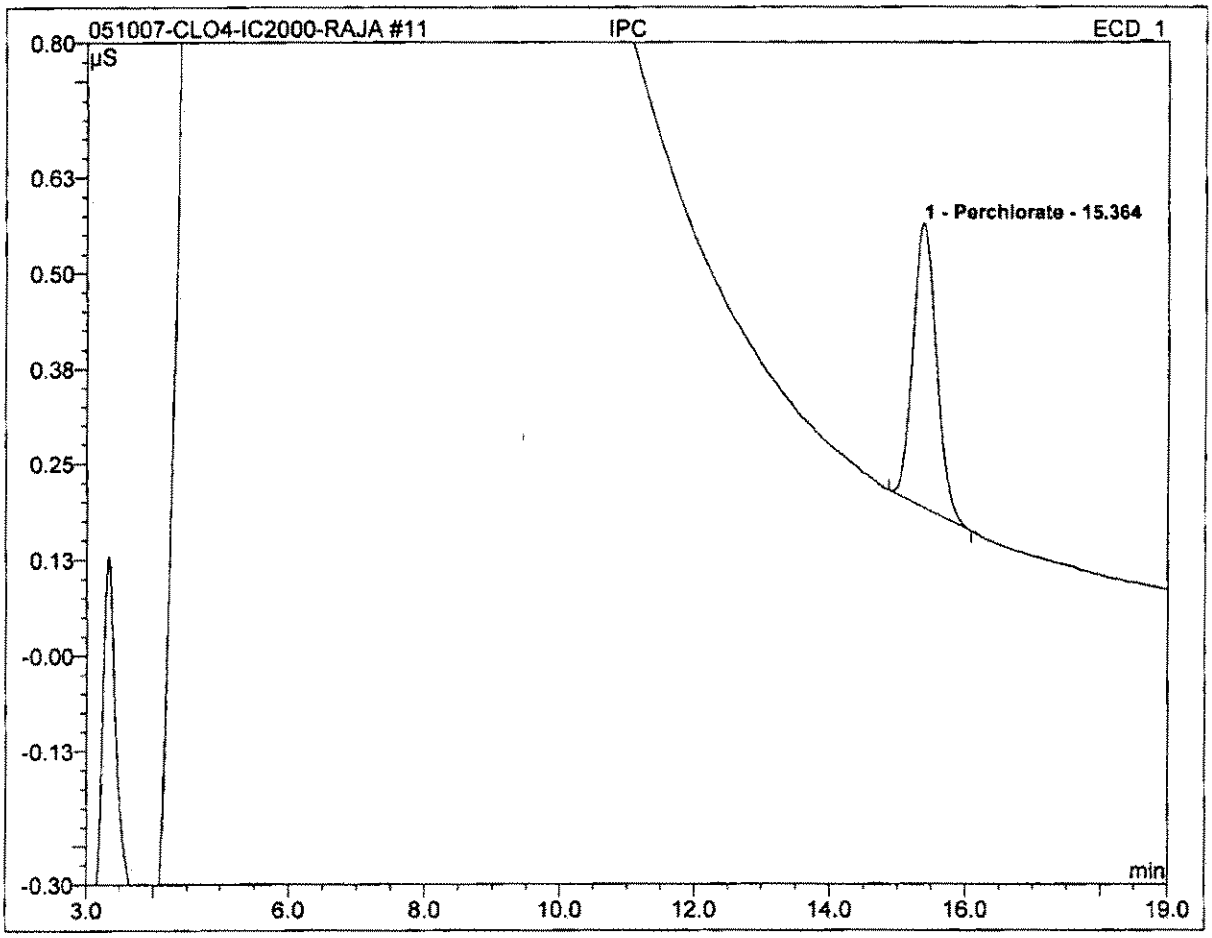
Sample Name:	**QCS**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 19:19**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.50	Perchlorate	0.366	0.127	100.00	19.333	BMB
Total:			0.366	0.127	100.00	19.333	

11 IPC

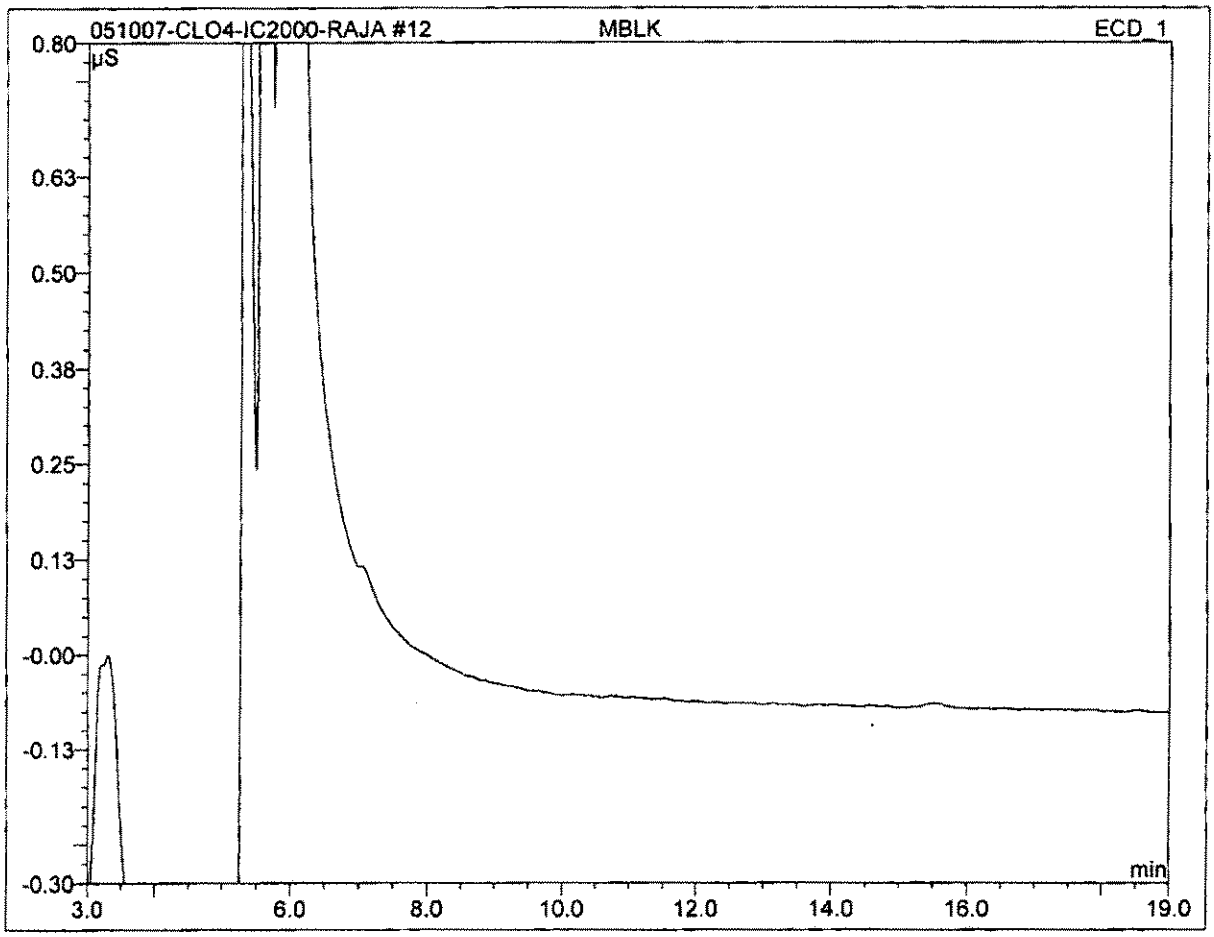
Sample Name:	**IPC**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 19:40**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.36	Perchlorate	0.373	0.151	100.00	22.864	BMB
Total:			0.373	0.151	100.00	22.864	

12 MBLK

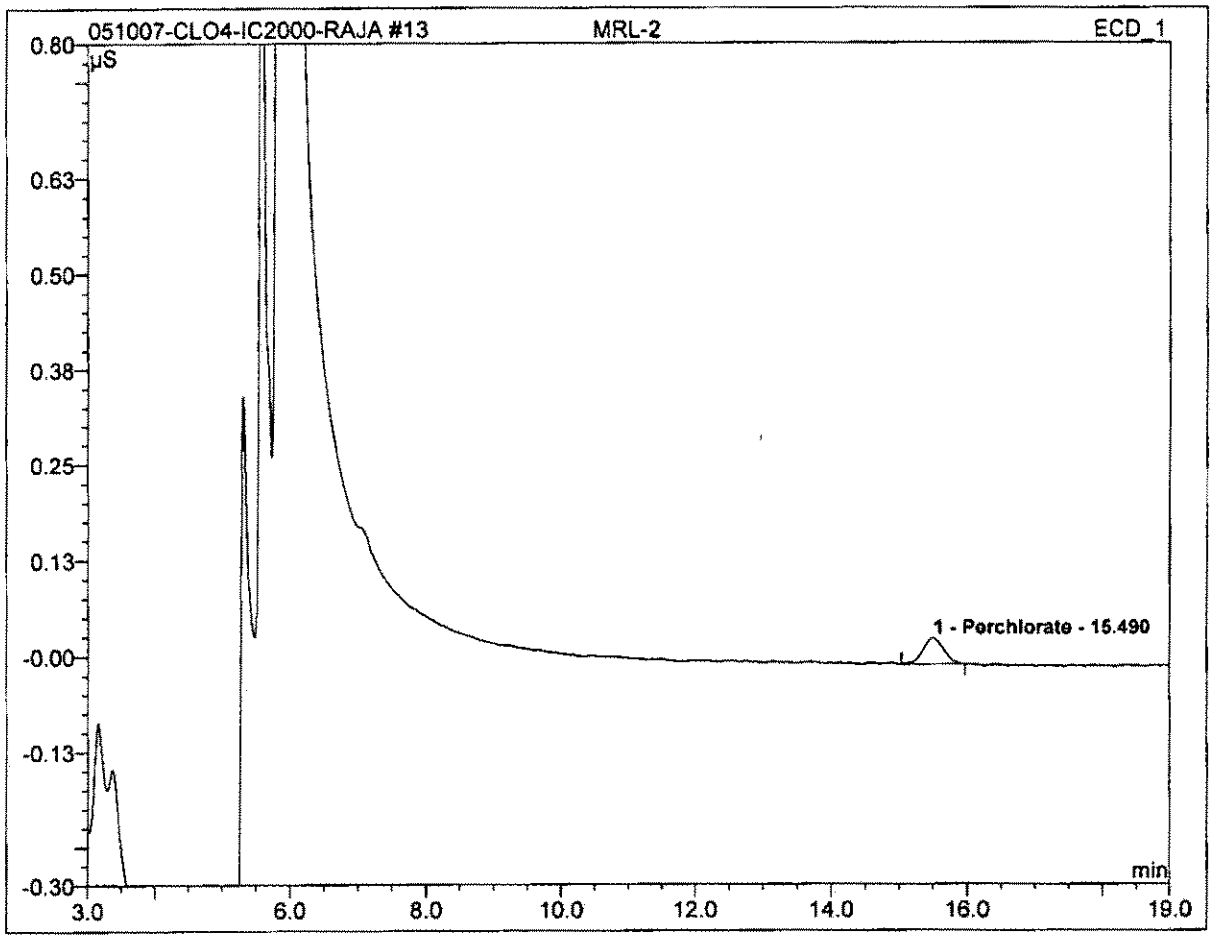
Sample Name:	**MBLK**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 20:01**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



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

13 MRL-2

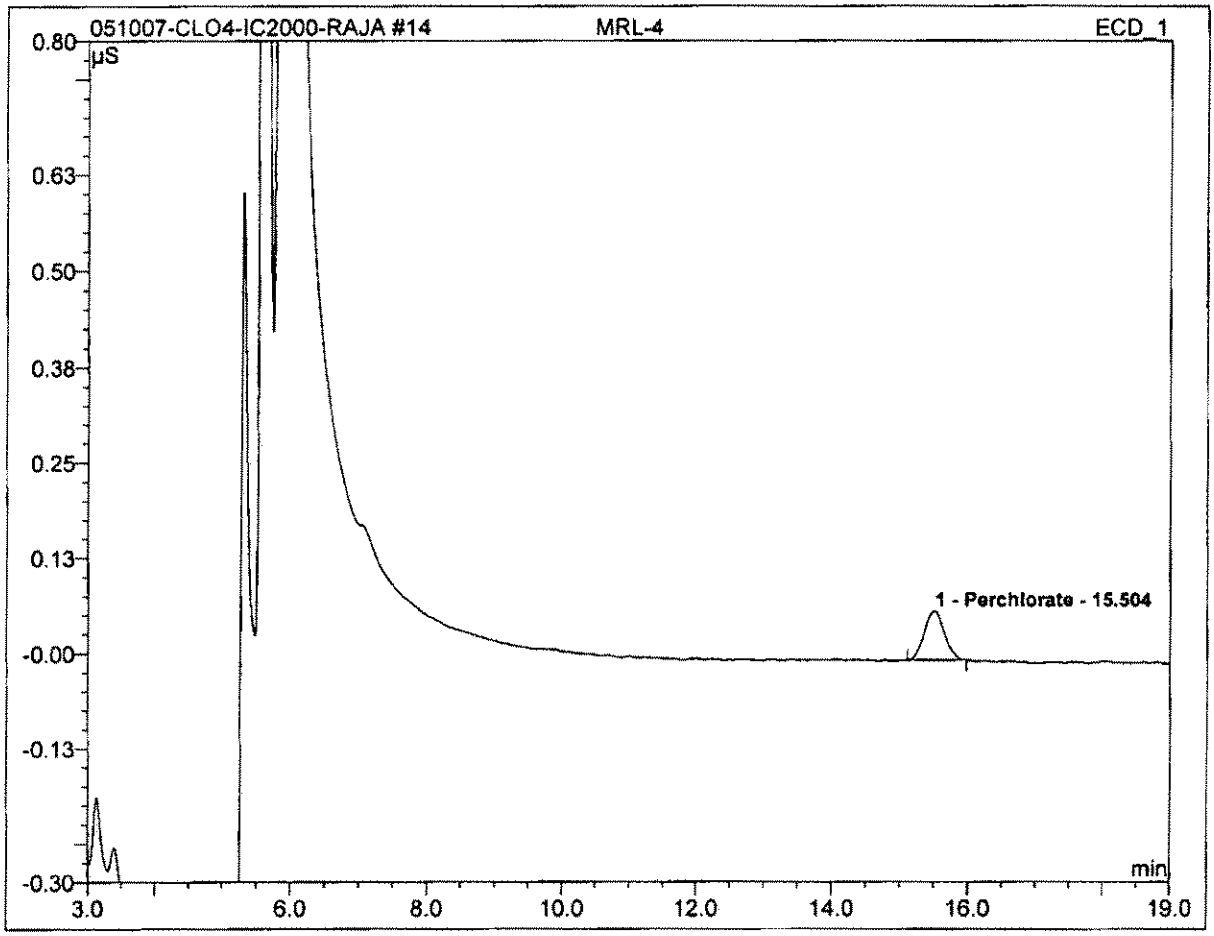
Sample Name:	**MRL-2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 20:23**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.49	Perchlorate	0.033	0.012	100.00	1.788	BMB
Total:			0.033	0.012	100.00	1.788	

14 MRL-4

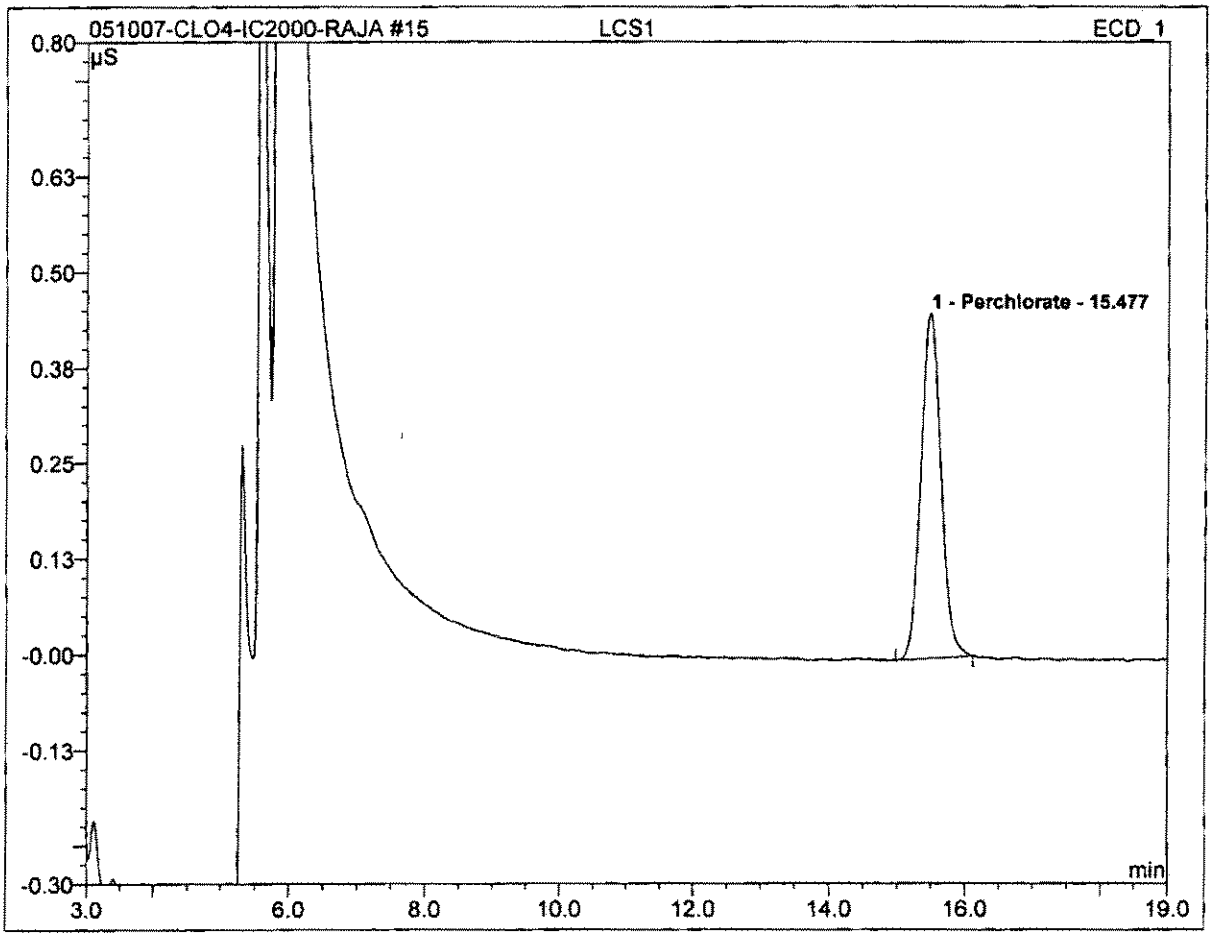
Sample Name:	**MRL-4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 20:44**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.50	Perchlorate	0.064	0.022	100.00	3.355	BMB
Total:			0.064	0.022	100.00	3.355	

15 LCS1

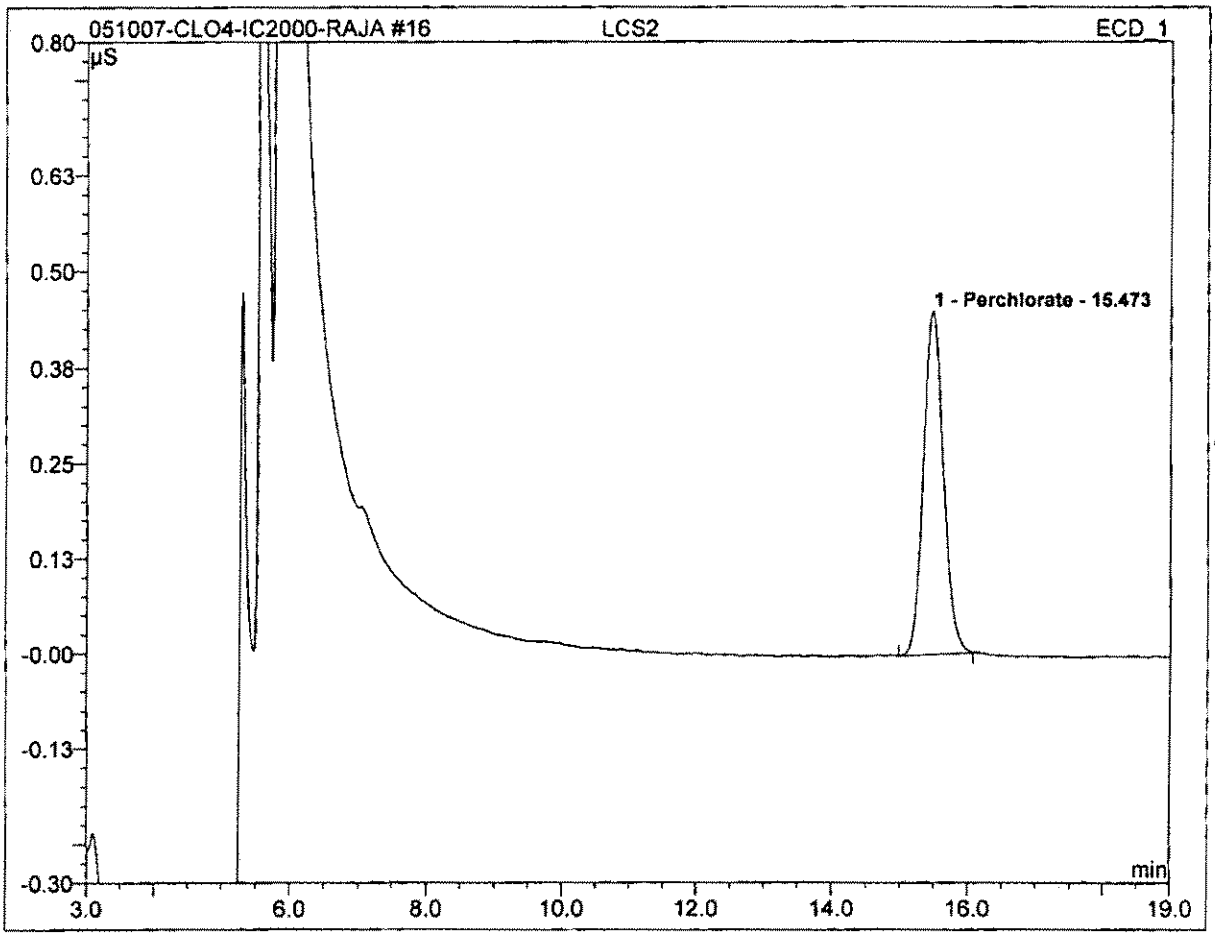
Sample Name:	**LCS1**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 21:06**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.48	Perchlorate	0.452	0.154	100.00	23.328	BMB
Total:			0.452	0.154	100.00	23.328	

16 LCS2

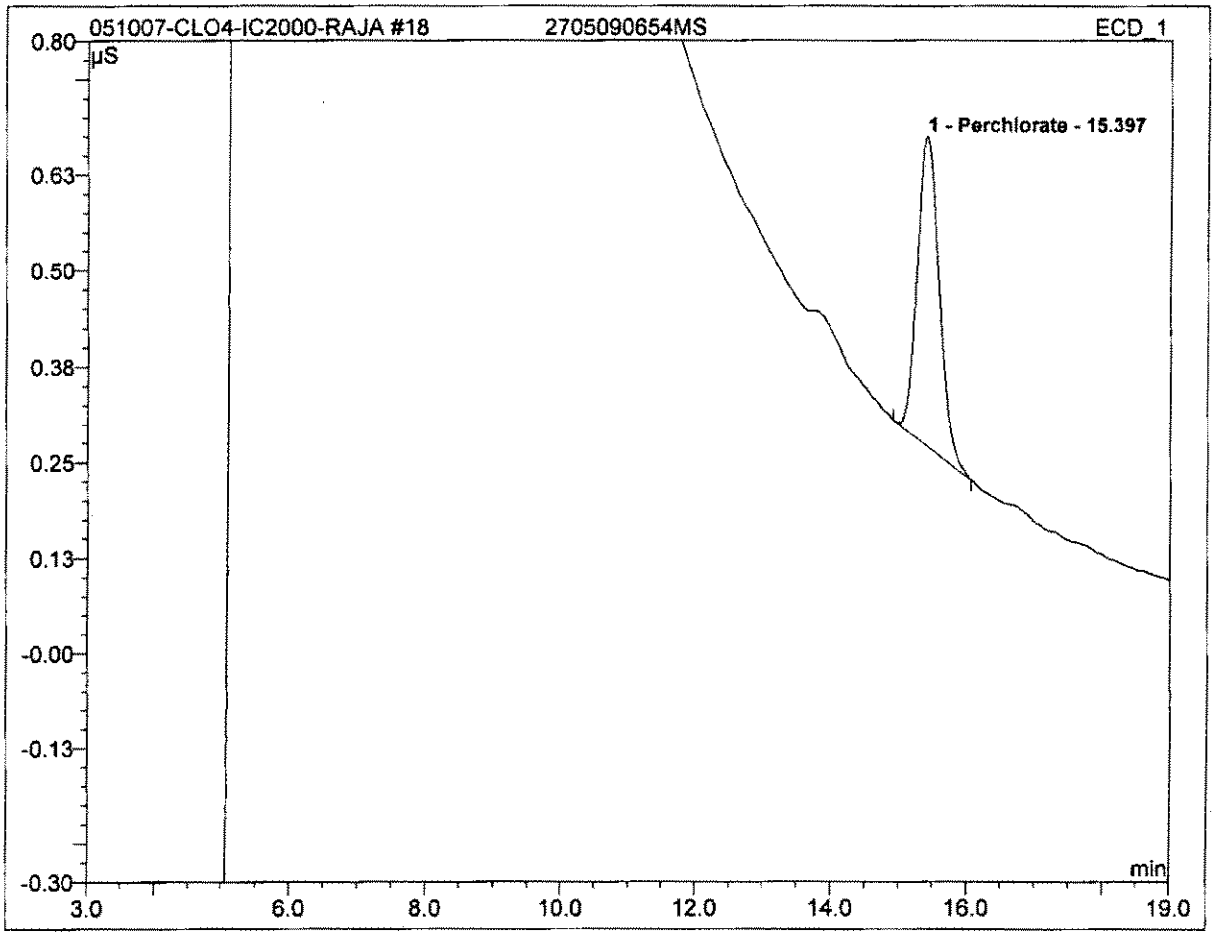
Sample Name:	**LCS2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 21:27**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.450	0.153	100.00	23.110	BMB
Total:			0.450	0.153	100.00	23.110	

18 2705090654MS

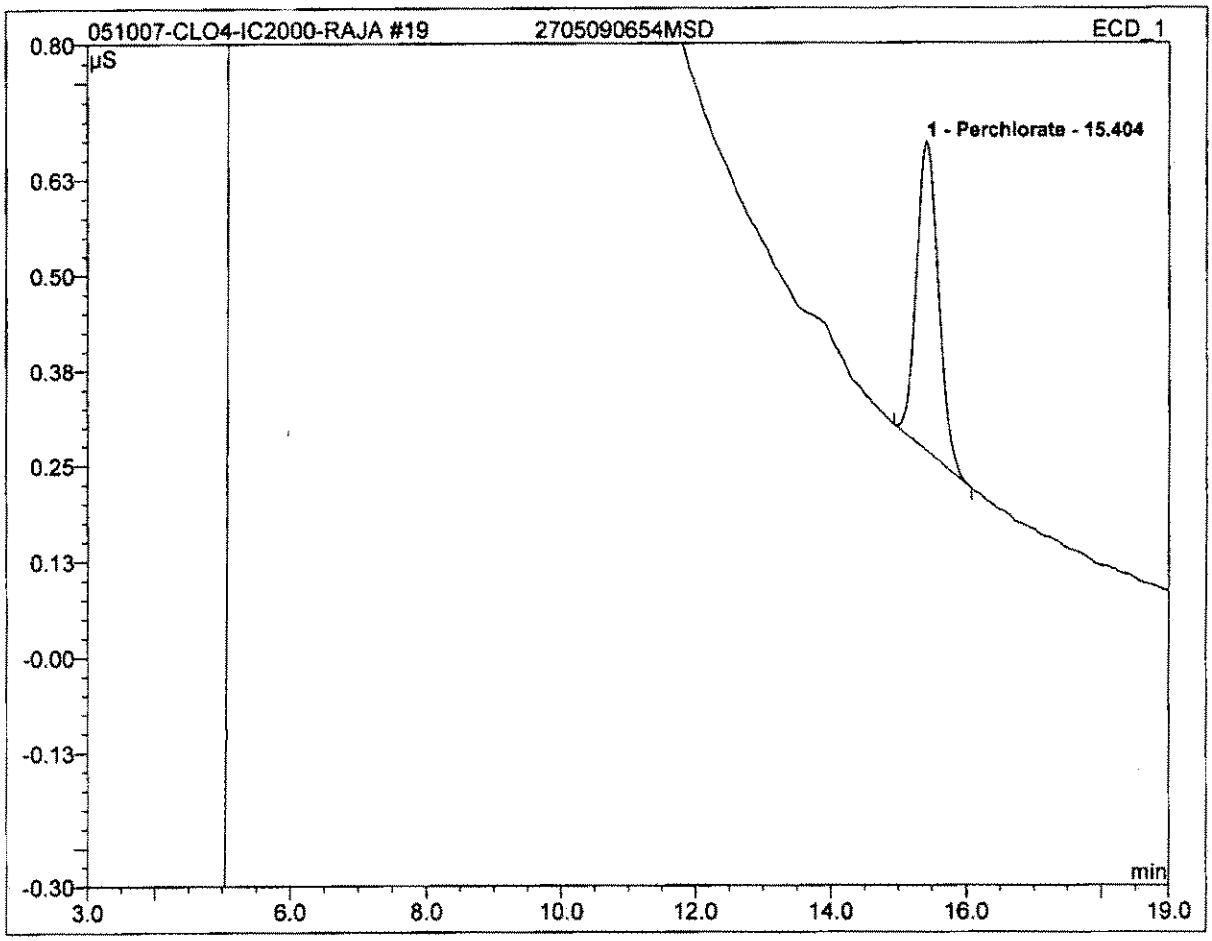
Sample Name:	**2705090654MS**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 22:10**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.40	Perchlorate	0.404	0.152	100.00	23.051	BMB
Total:			0.404	0.152	100.00	23.051	

19 2705090654MSD

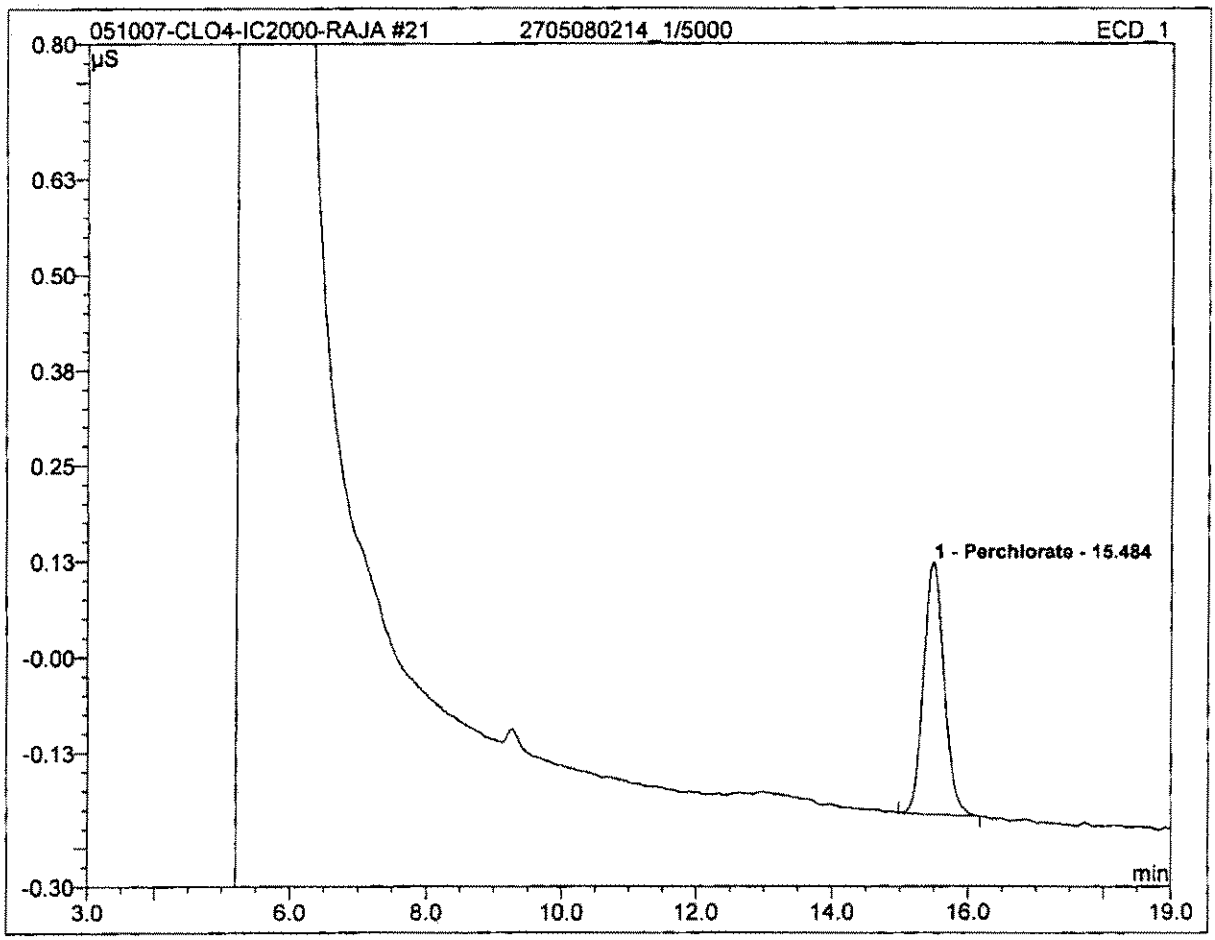
Sample Name:	**2705090654MSD**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 22:31**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.40	Perchlorate	0.407	0.154	100.00	23.279	BMB
Total:			0.407	0.154	100.00	23.279	

21 2705080214_1/5000

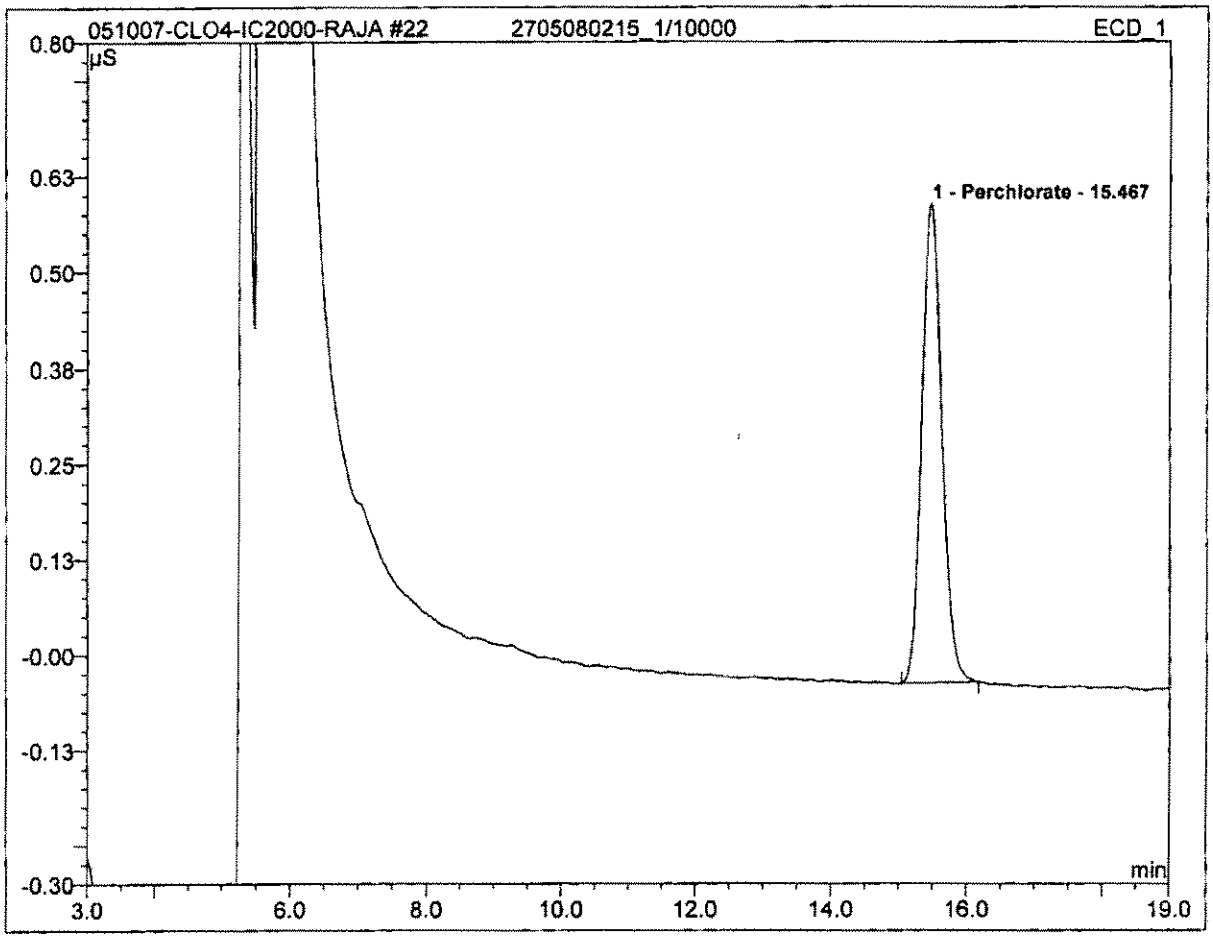
Sample Name:	**2705080214_1/5000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 23:14**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**5000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.48	Perchlorate	0.328	0.114	100.00	87105.882	BMB
Total:			0.328	0.114	100.00	87105.882	

22 2705080215_1/10000

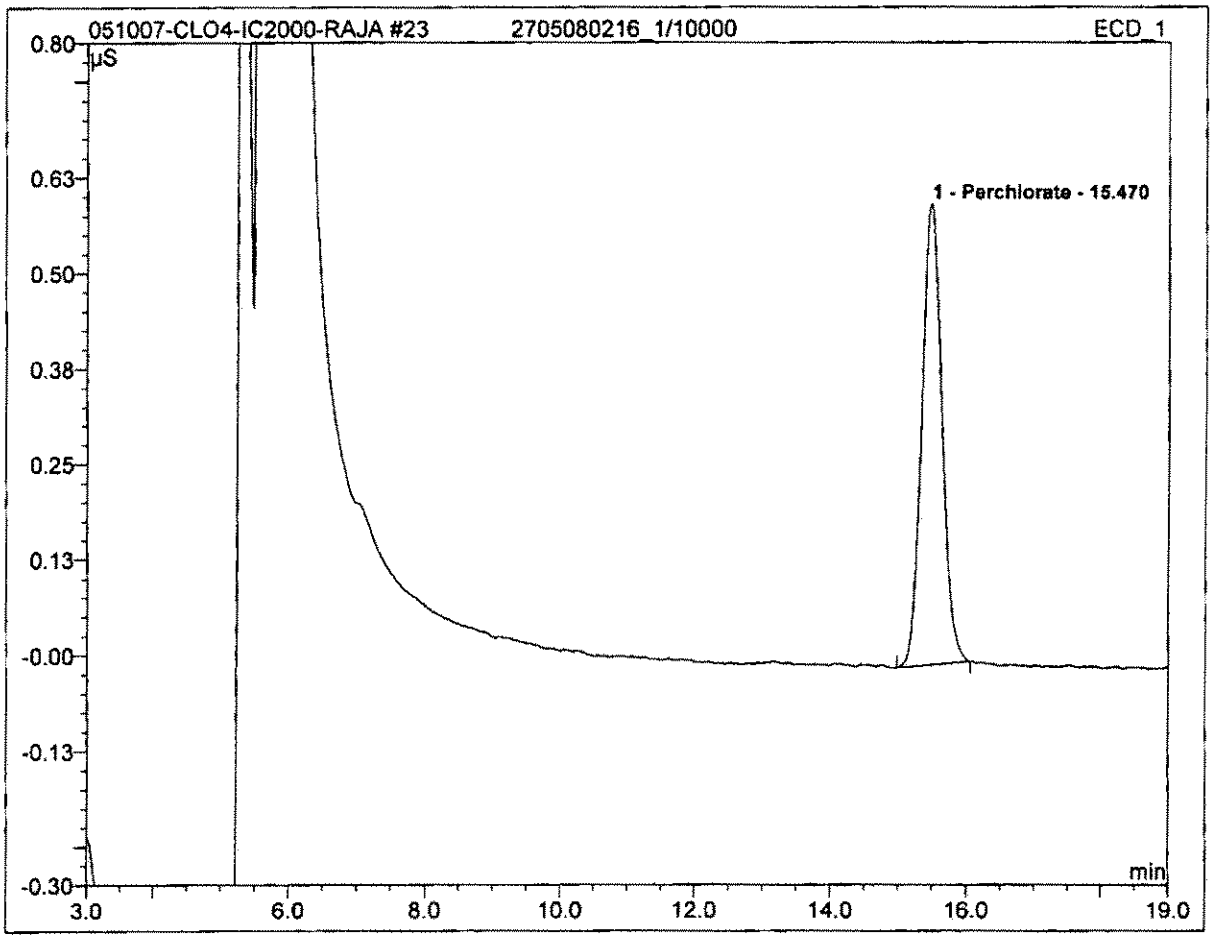
Sample Name:	**2705080215_1/10000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 23:36**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**10000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.625	0.213	100.00	319139.223	BMB
Total:			0.625	0.213	100.00	319139.223	

23 2705080216_1/10000

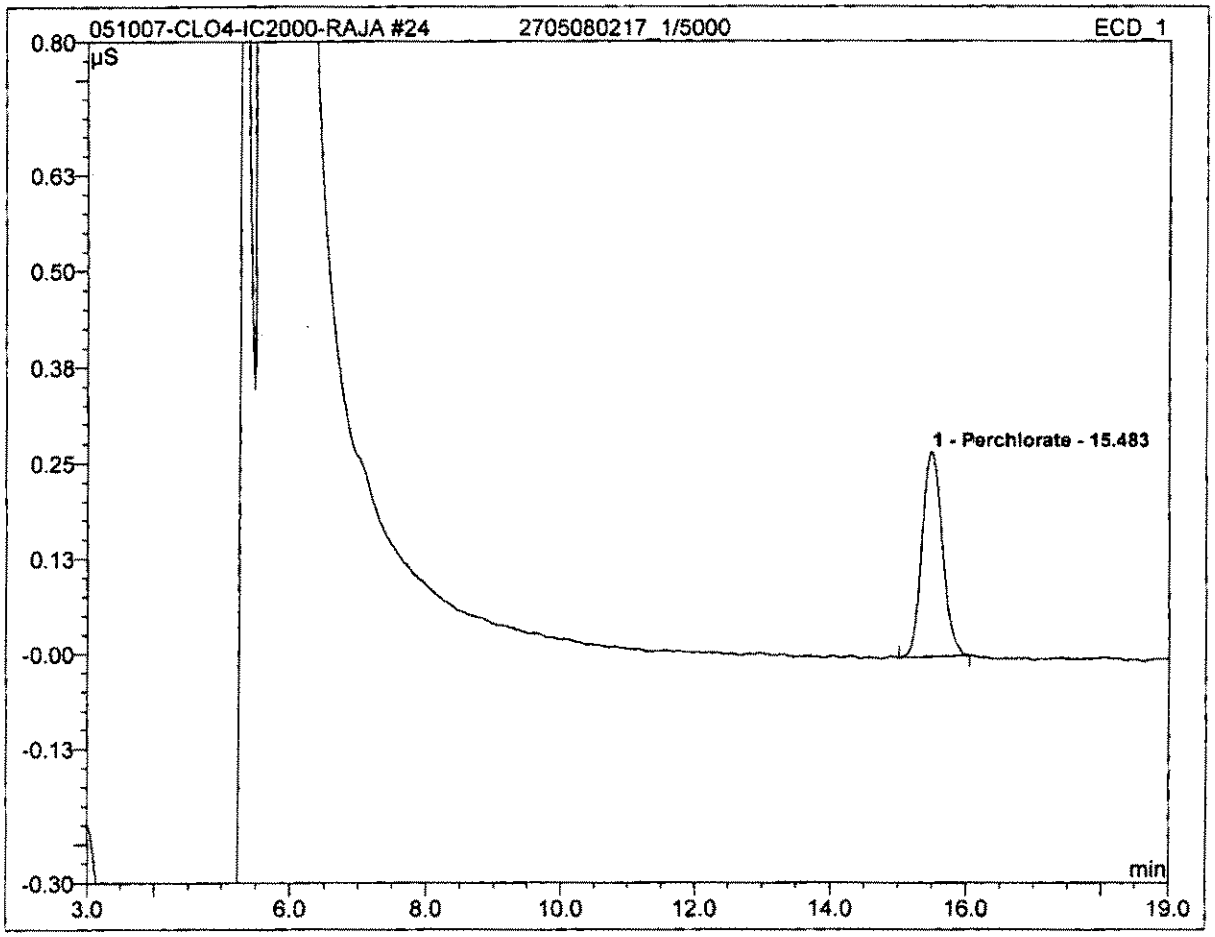
Sample Name:	**2705080216_1/10000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/10/2007 23:57**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**10000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.604	0.206	100.00	308755.093	BMB
Total:			0.604	0.206	100.00	308755.093	

24 2705080217_1/5000

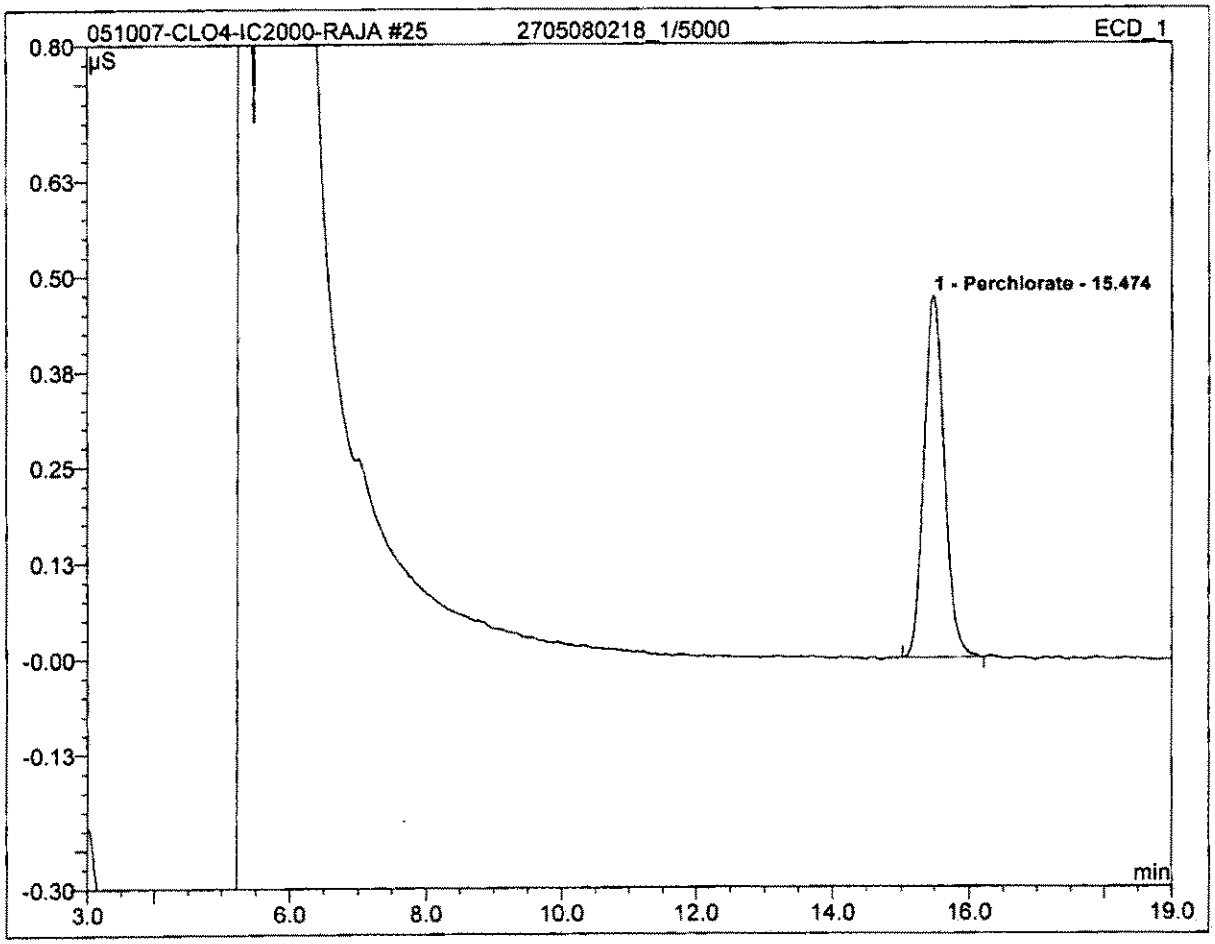
Sample Name:	**2705080217_1/5000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 00:18**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**5000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.48	Perchlorate	0.270	0.092	100.00	70725.643	BMB
Total:			0.270	0.092	100.00	70725.643	

25 2705080218_1/5000

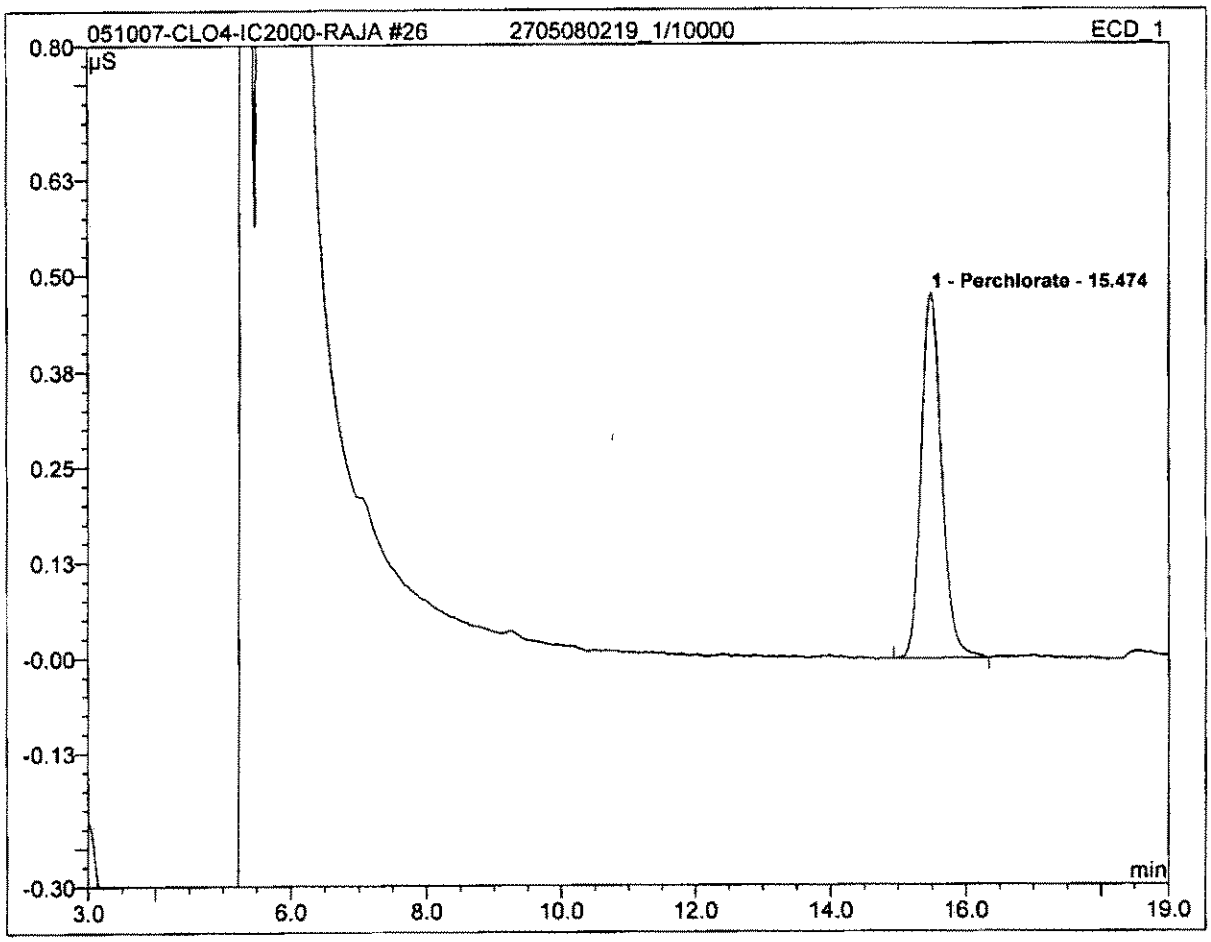
Sample Name:	**2705080218_1/5000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 00:40**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**5000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.473	0.163	100.00	122946.074	BMB
Total:			0.473	0.163	100.00	122946.074	

26 2705080219_1/10000

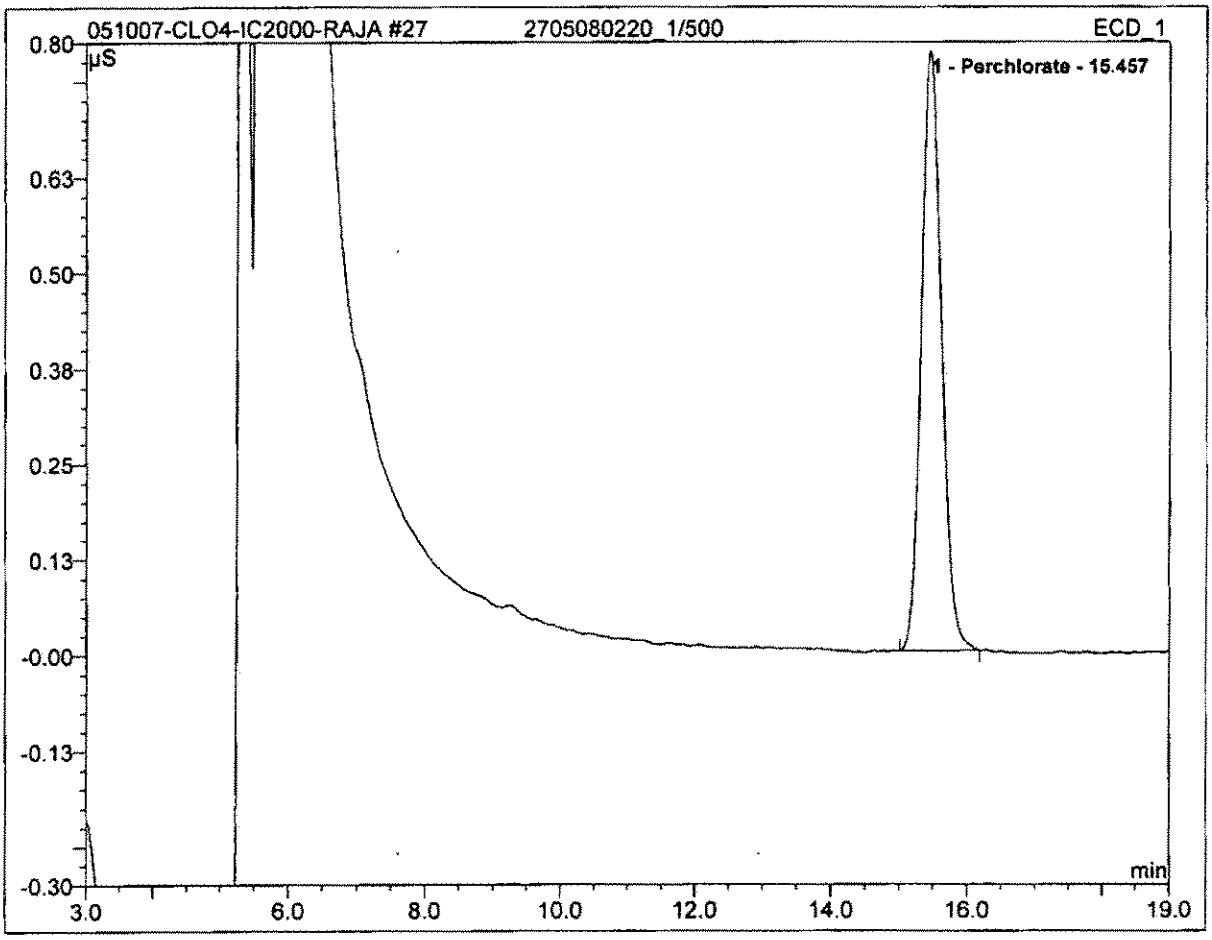
Sample Name:	**2705080219_1/10000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 01:01**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**10000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.477	0.166	100.00	251538.036	BMB
Total:			0.477	0.166	100.00	251538.036	

27 2705080220_1/500

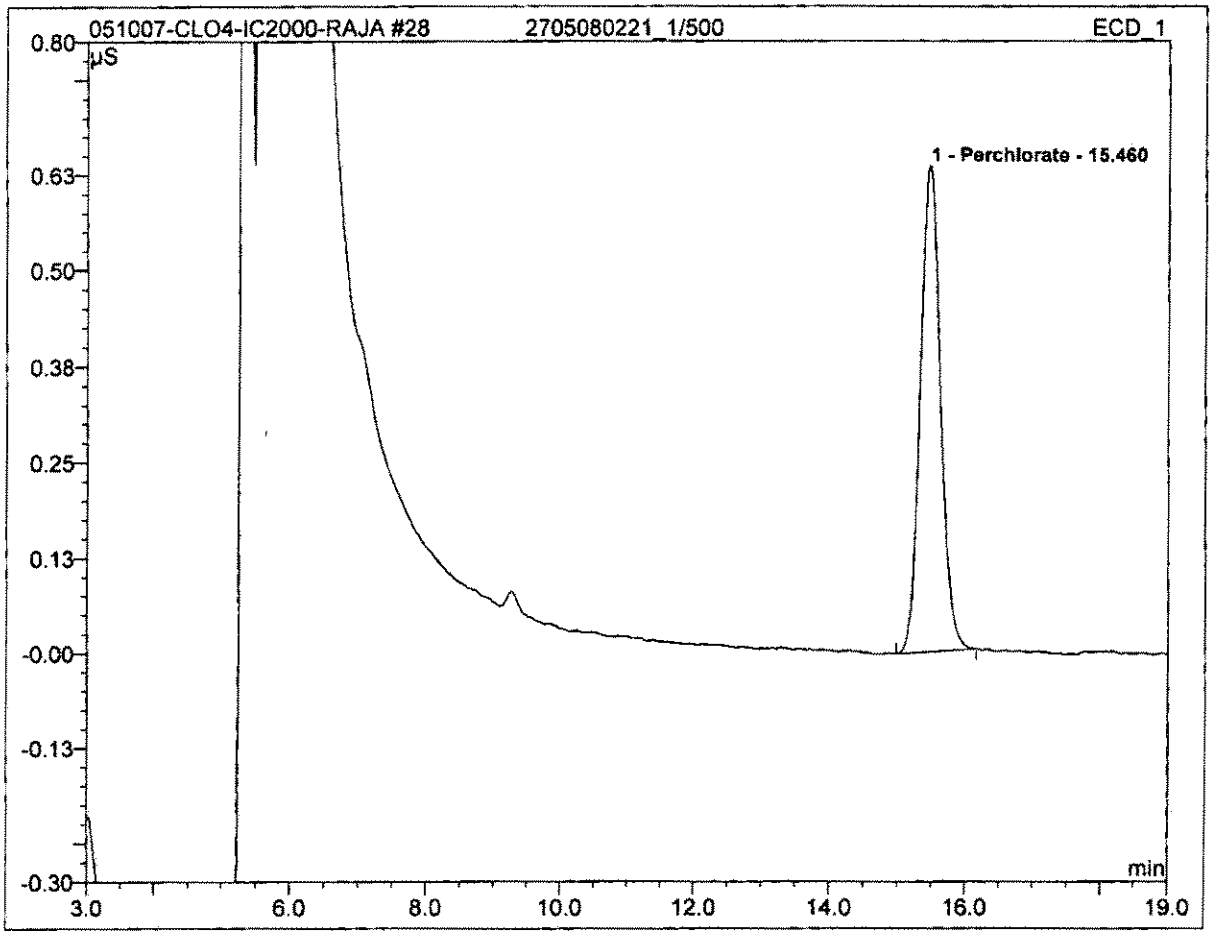
Sample Name:	**2705080220_1/500**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 01:23**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**500.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.783	0.268	100.00	19919.989	BMB
Total:			0.783	0.268	100.00	19919.989	

28 2705080221_1/500

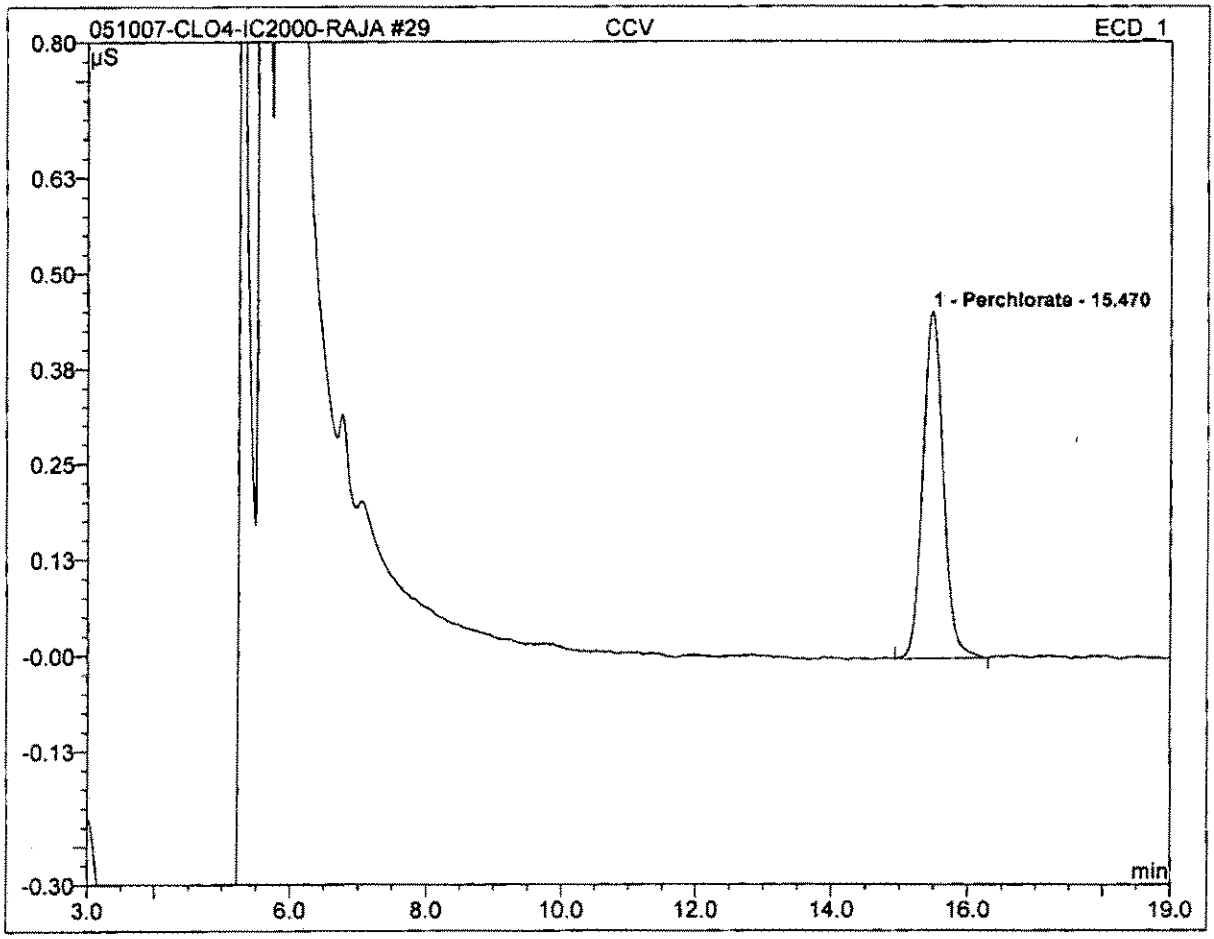
Sample Name:	**2705080221_1/500**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 01:44**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**500.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.635	0.218	100.00	16325.967	BMB
Total:			0.635	0.218	100.00	16325.967	

29 CCV

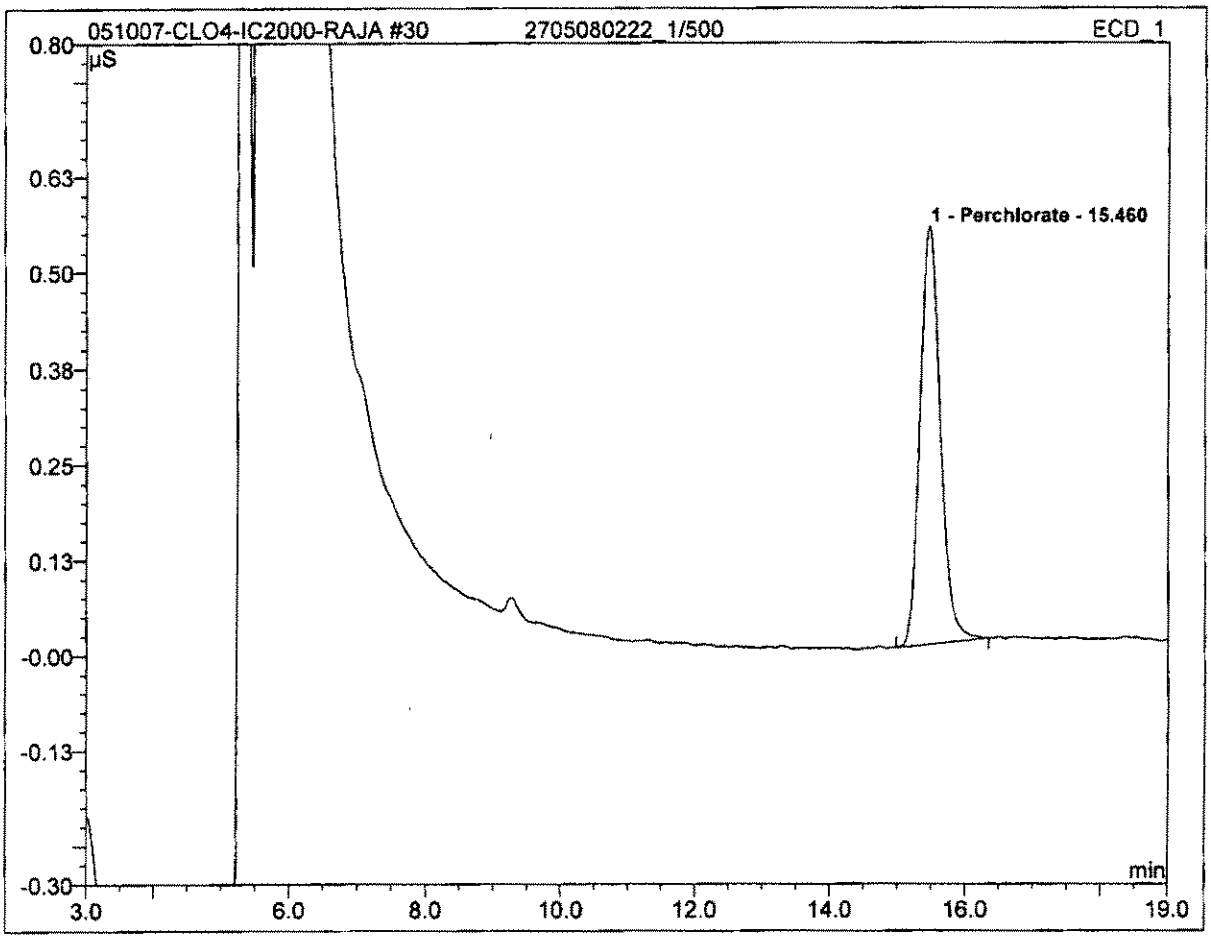
Sample Name:	**CCV**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 02:05**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.47	Perchlorate	0.454	0.157	100.00	23.832	BMB
Total:			0.454	0.157	100.00	23.832	

30 2705080222_1/500

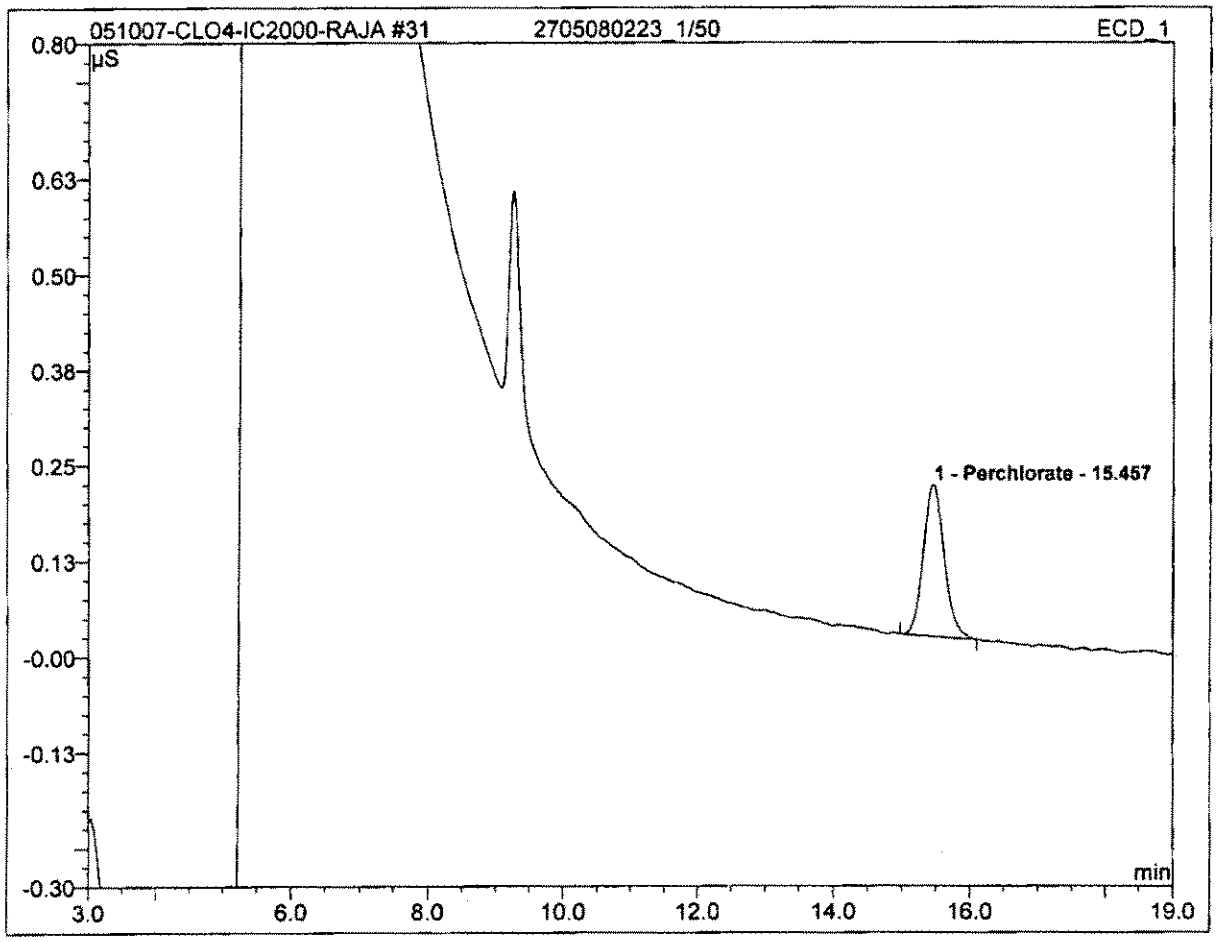
Sample Name:	**2705080222_1/500**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 02:27**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**500.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.545	0.188	100.00	14175.890	BMB
Total:			0.545	0.188	100.00	14175.890	

31 2705080223_1/50

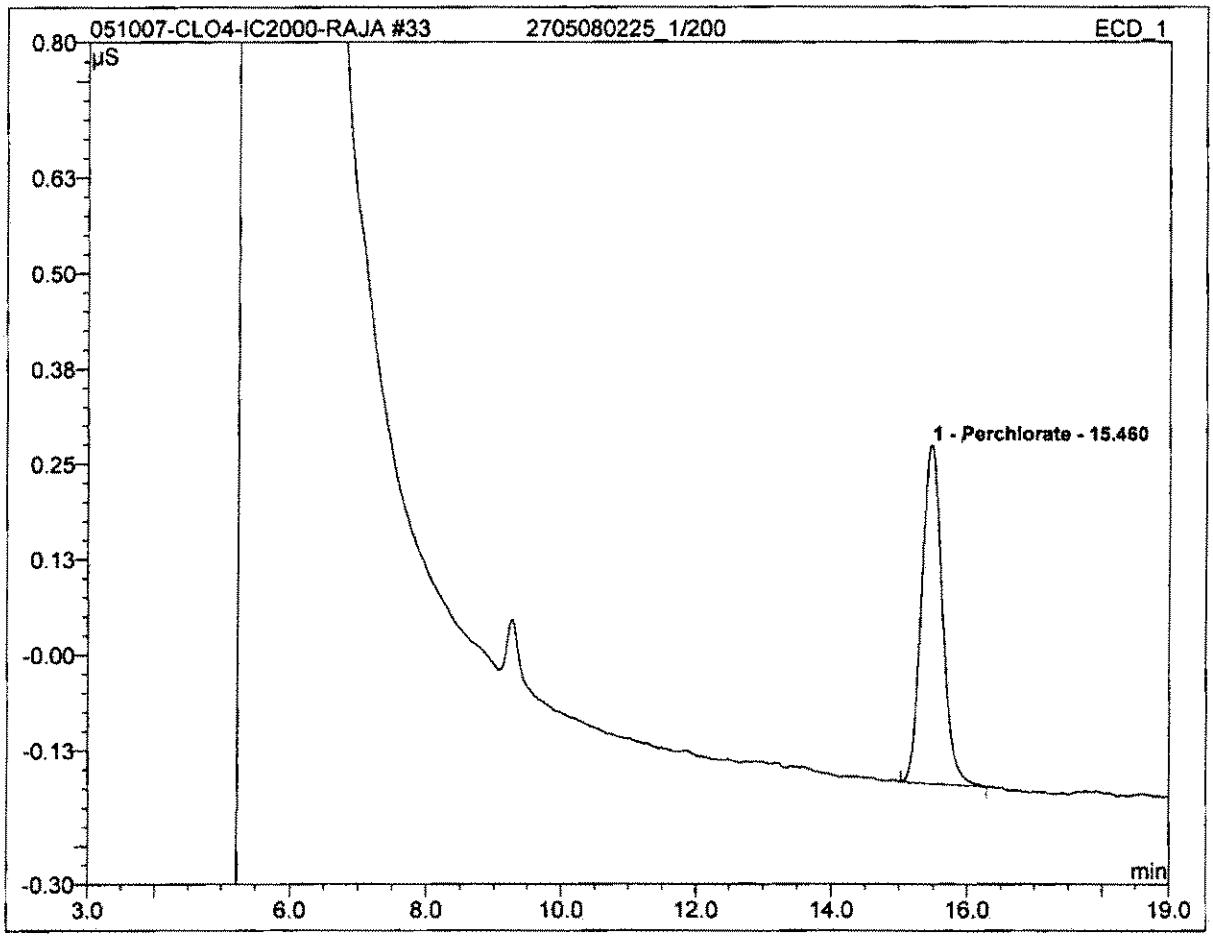
Sample Name:	**2705080223_1/50**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 02:48**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**50.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.197	0.070	100.00	536.193	BMB
Total:			0.197	0.070	100.00	536.193	

33 2705080225_1/200

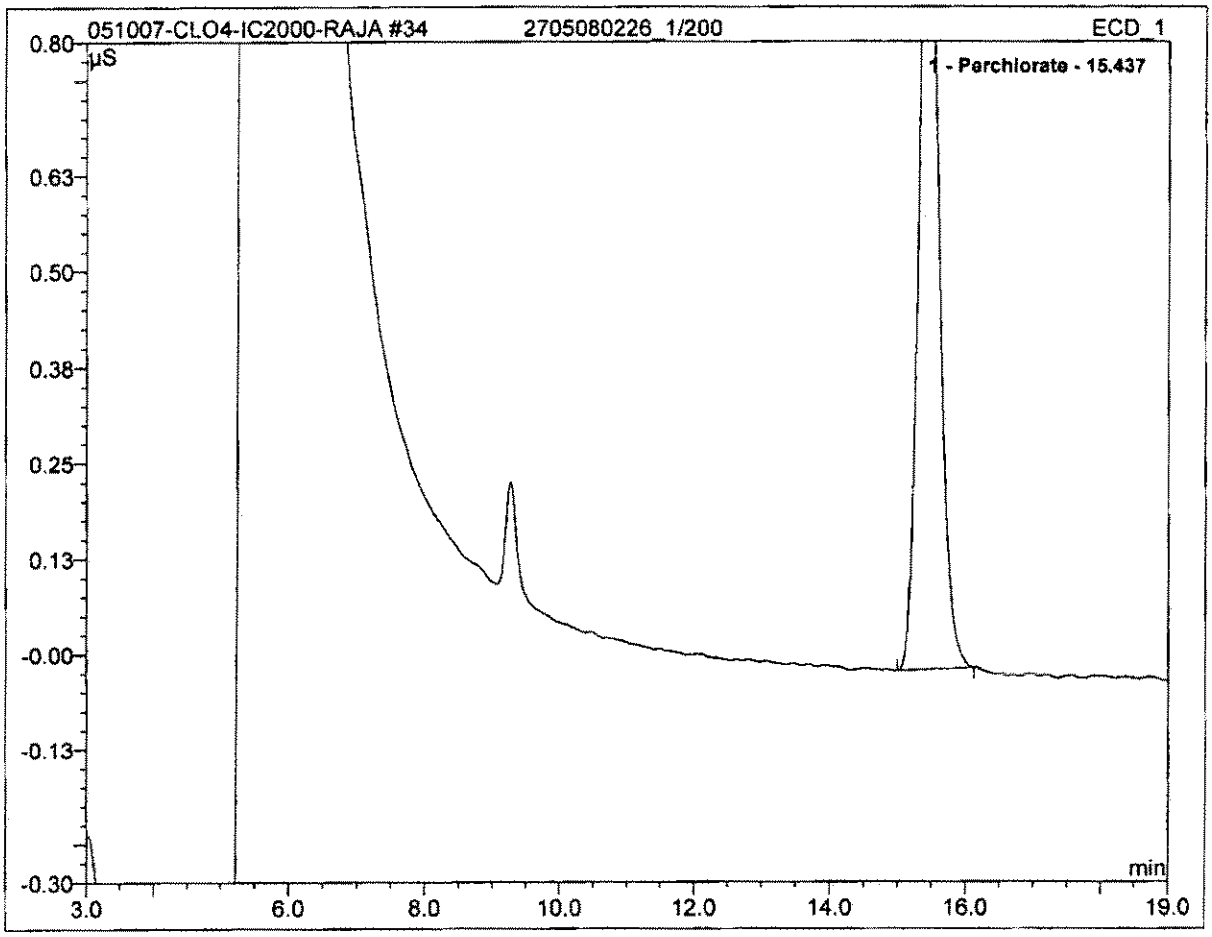
Sample Name:	**2705080225_1/200**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 03:31**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**200.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.443	0.155	100.00	4693.274	BMB
Total:			0.443	0.155	100.00	4693.274	

34 2705080226_1/200

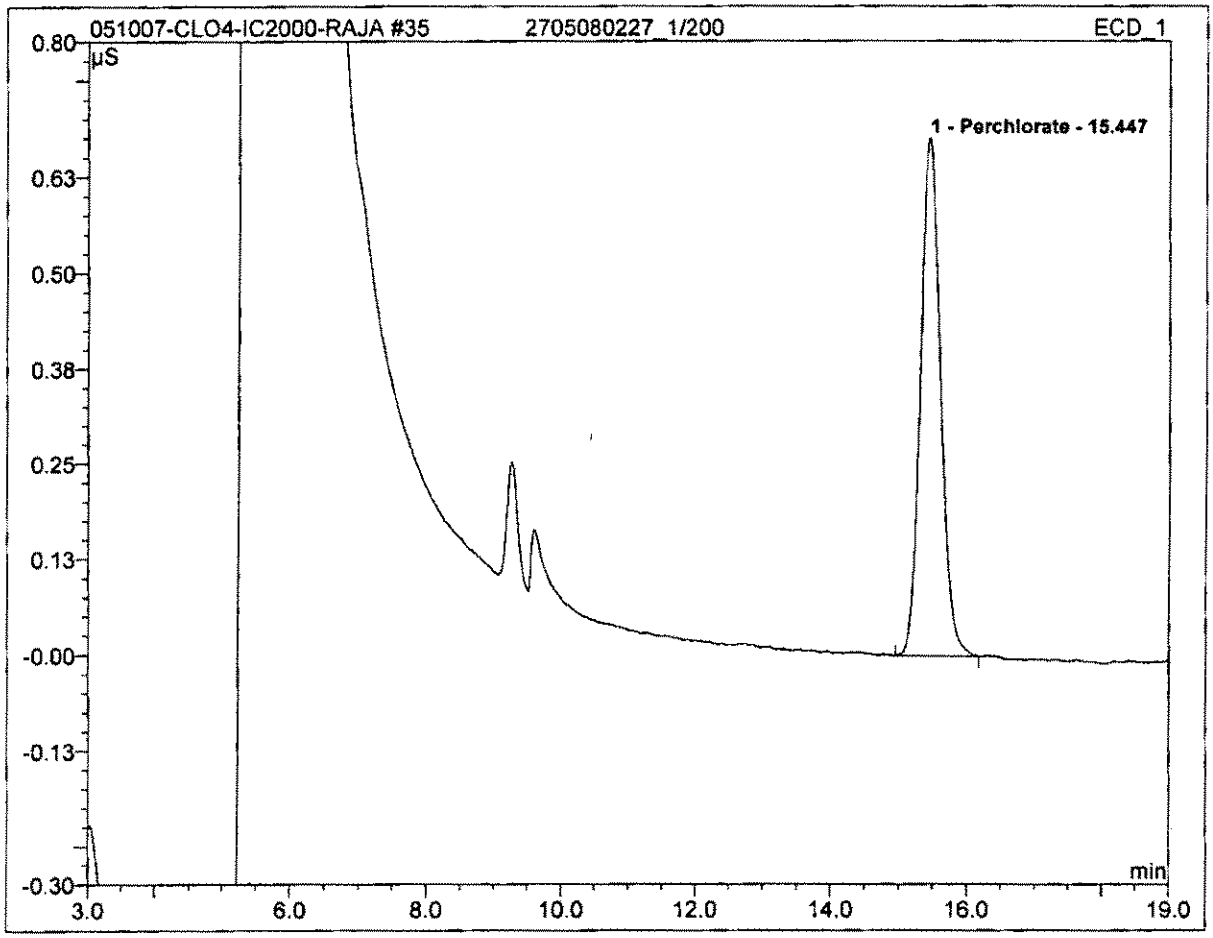
Sample Name:	**2705080226_1/200**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 03:53**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**200.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.44	Perchlorate	1.086	0.371	100.00	10854.736	BMB
Total:			1.086	0.371	100.00	10854.736	

35 2705080227_1/200

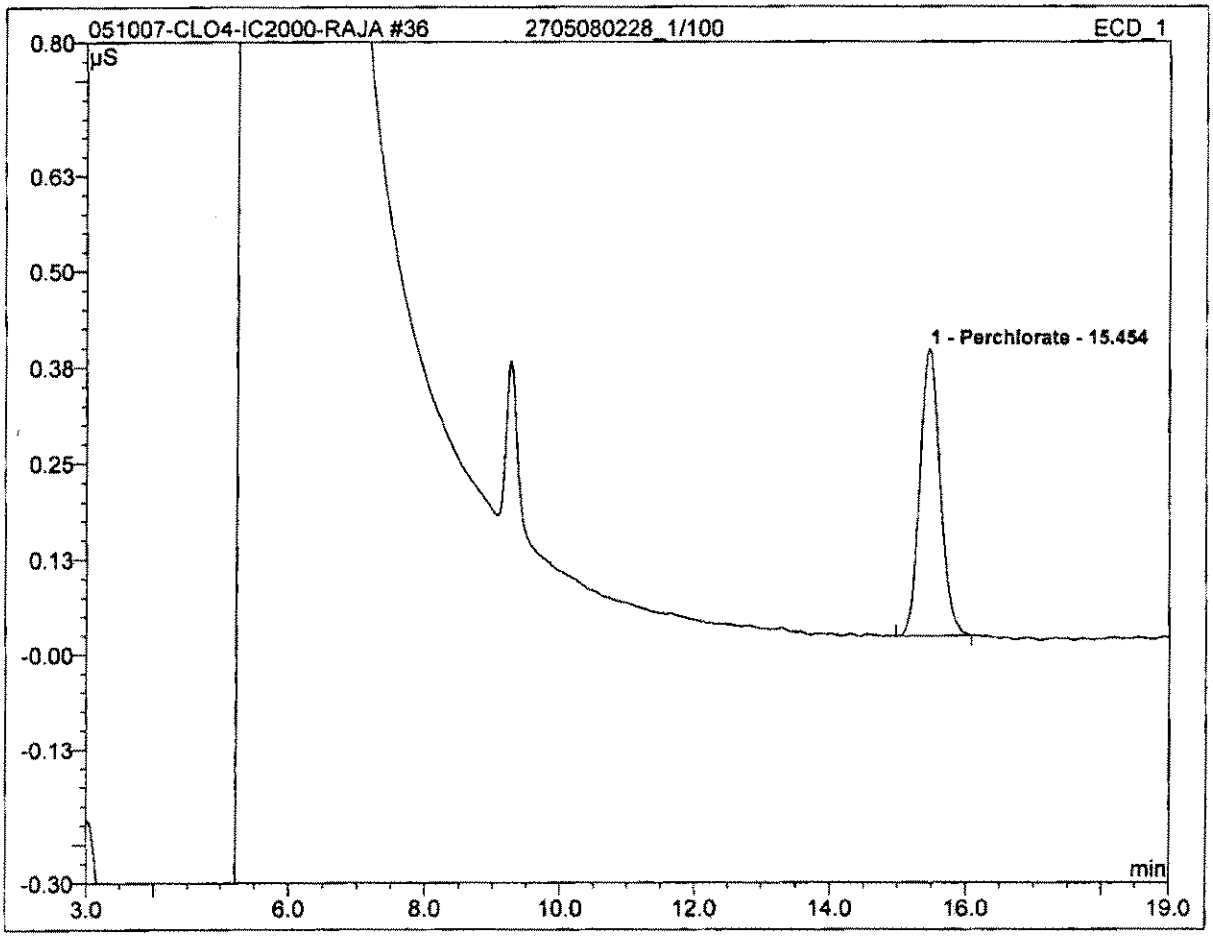
Sample Name:	**2705080227_1/200**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 04:14**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**200.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.45	Perchlorate	0.678	0.233	100.00	6954.016	BMB
Total:			0.678	0.233	100.00	6954.016	

36 2705080228_1/100

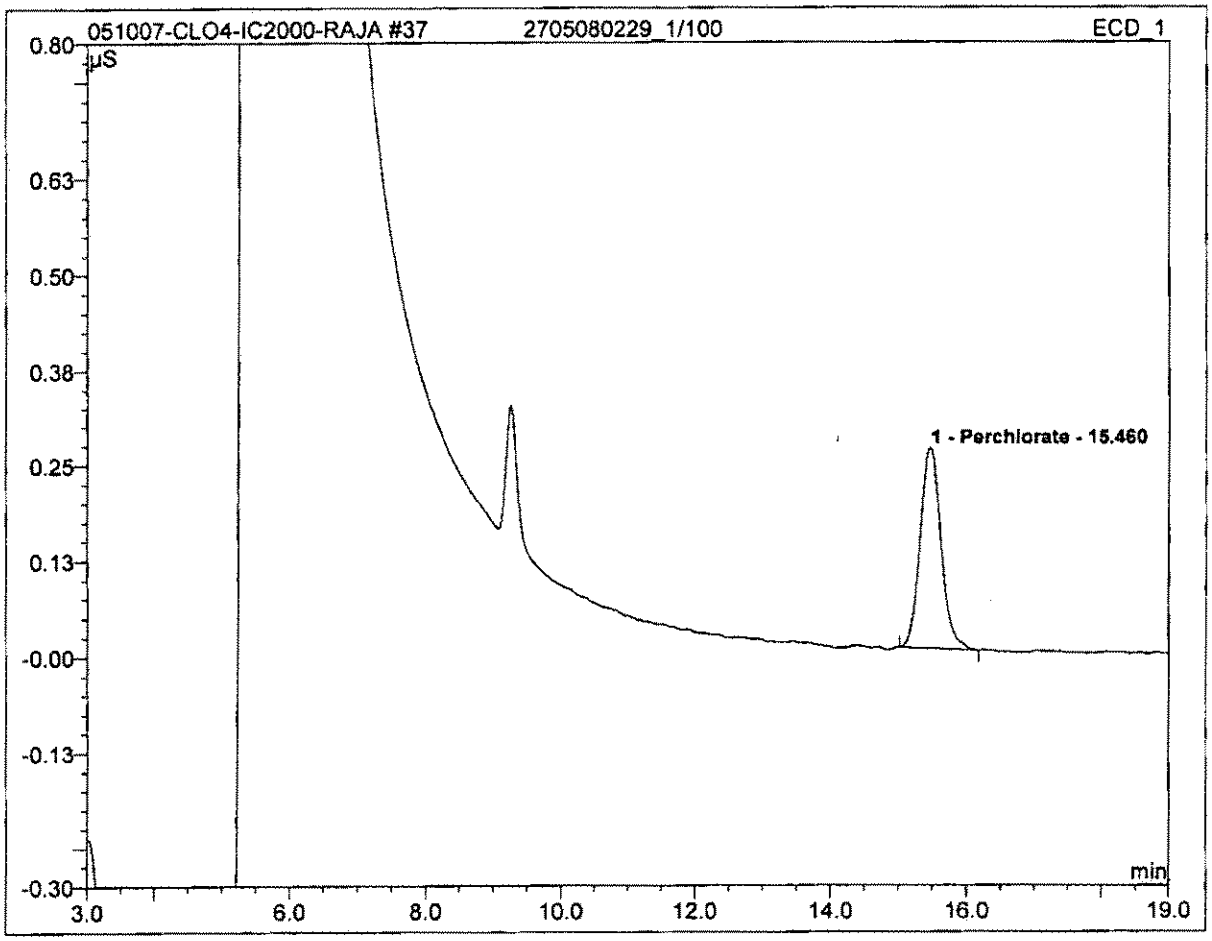
Sample Name:	**2705080228_1/100**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 04:35**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**100.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.45	Perchlorate	0.374	0.129	100.00	1959.260	BMB
Total:			0.374	0.129	100.00	1959.260	

37 2705080229_1/100

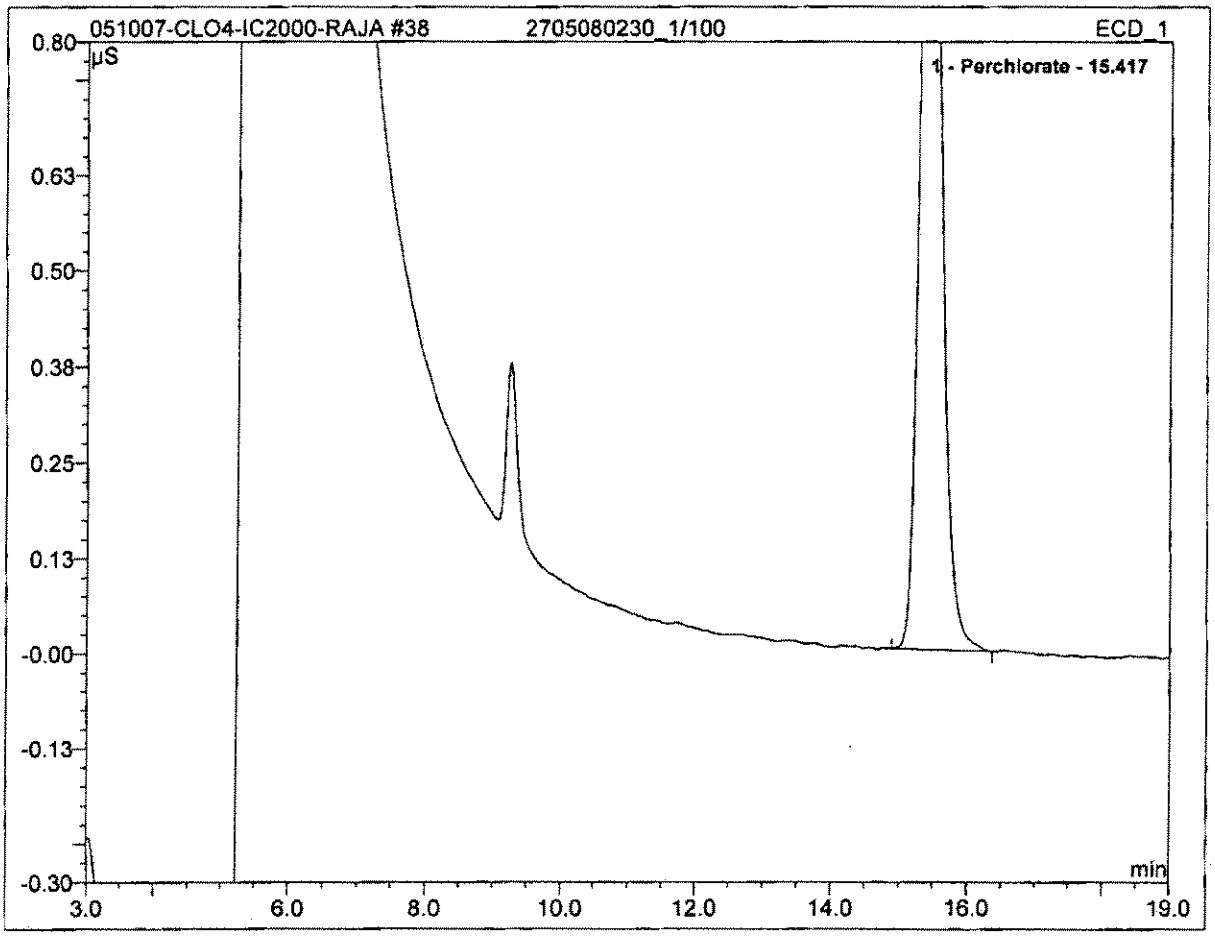
Sample Name:	**2705080229_1/100**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 04:57**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**100.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.46	Perchlorate	0.262	0.091	100.00	1399.870	BMB
Total:			0.262	0.091	100.00	1399.870	

38 2705080230_1/100

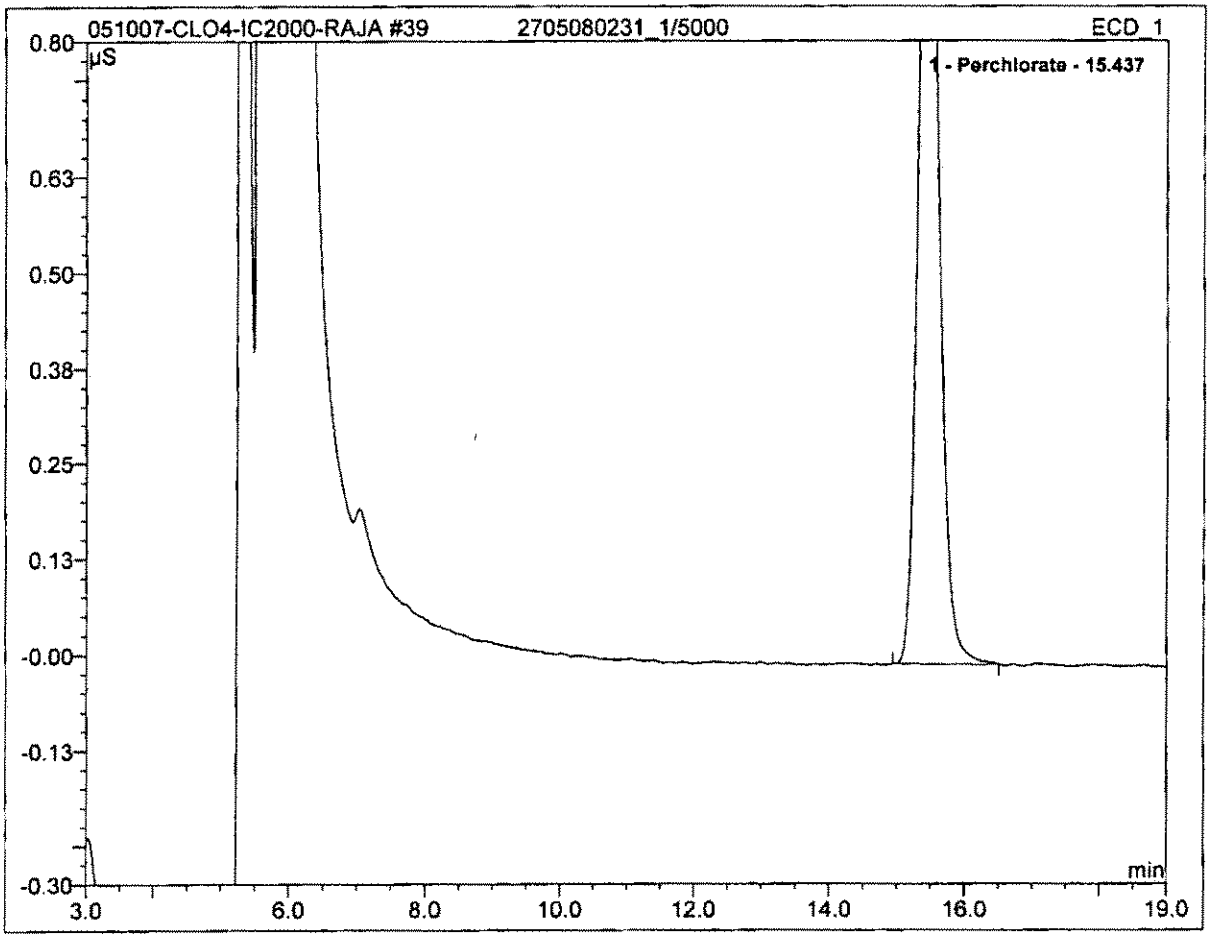
Sample Name:	**2705080230_1/100**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 05:18**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**100.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.42	Perchlorate	1.362	0.473	100.00	6812.949	BMB
Total:			1.362	0.473	100.00	6812.949	

39 2705080231_1/5000

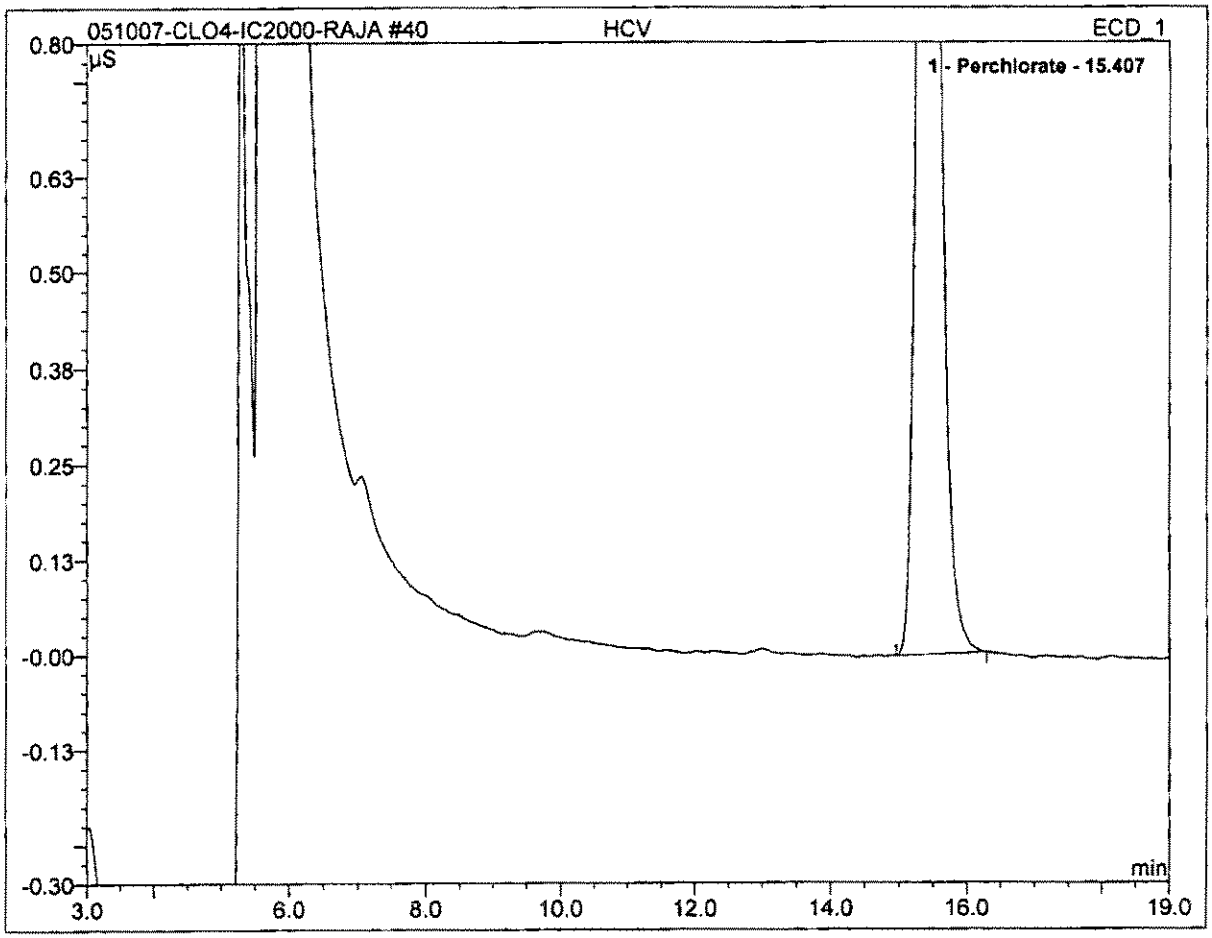
Sample Name:	**2705080231_1/5000**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 05:40**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**5000.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.44	Perchlorate	1.231	0.423	100.00	306661.454	BMB
Total:			1.231	0.423	100.00	306661.454	

40 HCV

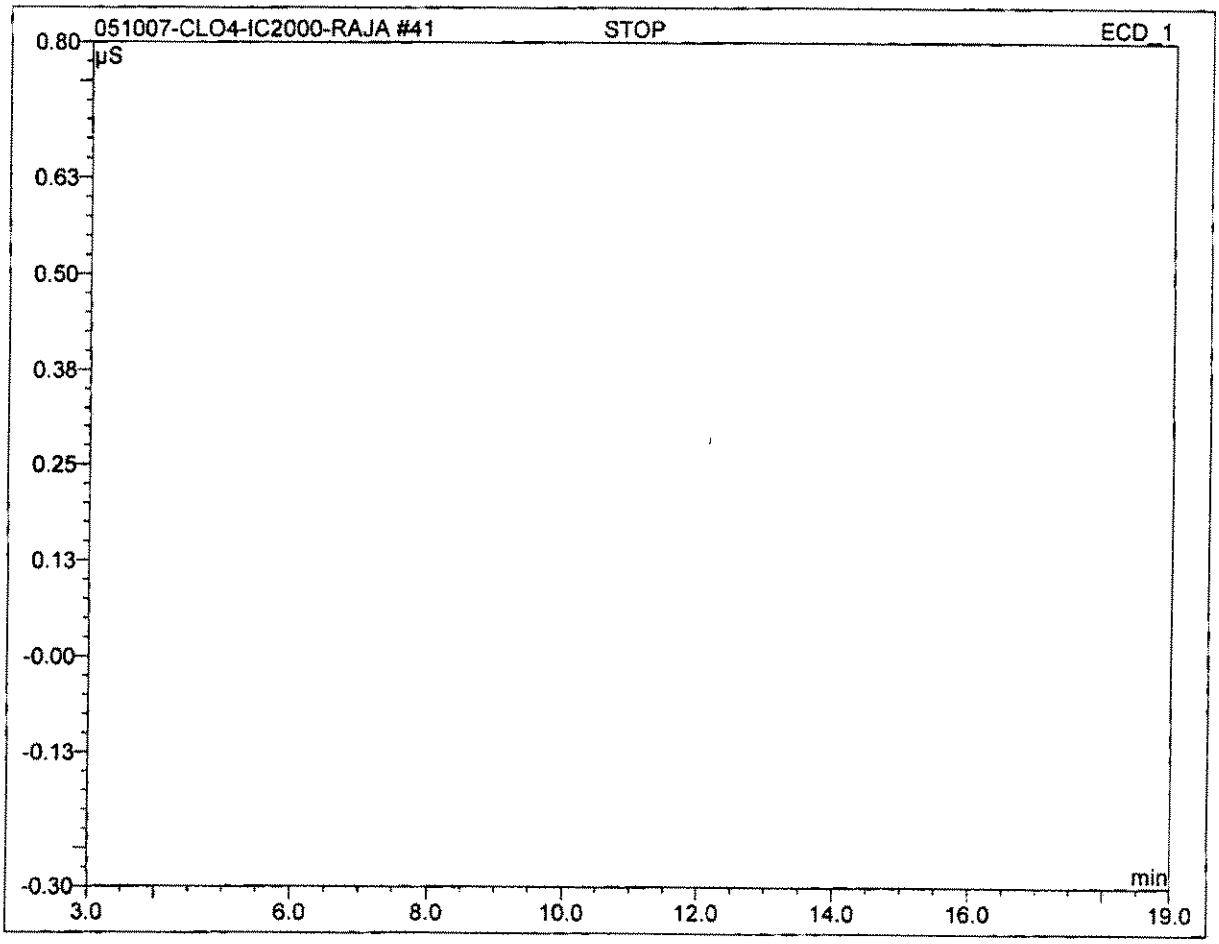
Sample Name:	**HCV**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**PerchorateDX2**
Recording Time:	**05/11/2007 06:01**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount ug/L	Type
1	15.41	Perchlorate	2.056	0.702	100.00	97.942	BMB
Total:			2.056	0.702	100.00	97.942	

41 STOP

Sample Name:	**STOP**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Control Program:*	**STOP**
Recording Time:	**05/11/2007 06:22**	*Quantif. Method:*	**PerchlorateDX2**
Analyst:	**raja**	*Dilution Factor:*	**1.0000**



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

Perchlorate QC Checklist

rev: 27 Mar 03

Analysis Date: 5-11-07 **Analyst:** Raja · **QC'd by** [signature] **Date** 14 May 07

Instrument: IC11 **Calculated MCT Level:** 3155 umhos/cm

Original IPC conductance: 3109 umhos/cm **Daily IPC conductance:** 3129 umhos/cm

Calibration including QCS

✓ QCS (20ppb) recovery is within 90% - 110% (18-22ppb) to verify that the calibration curve (minimum 5 points) still holds.

✓ Calibration curve is reanalyzed if QCS fails. Correlation Coefficient is 0.995 or better.

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

✓ MLBANK is analyzed before samples. Perchlorate, if present, is < or = half of the MRL.

N/A *L-ClO4 only*: ICCSCV at 2ppb is within 50%-150% (1-3ppb)

PDA/H = 0.0% ✓

✓ *ClO4 only*: MRL at 4ppb is within 75%-125% (3-5ppb)

✓ IPC (25ppb) recovery is between 80%-120% (20-30ppb)

✓ IPC retention time is within 5% of the retention time of the standards

✓ IPC Conductance level is within 10% of the original

LCS/LCSD (25ppb)

✓ Recoveries are between 90%-110% (22.5 – 27.5ppb)

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

MS/MSD (25ppb) NOTE: For UCMR, MS/MSD concentrations alternate between 4ppb and 25ppb

✓ Recoveries are within 80%-120% (20-30ppb) for 25ppb spike N/A (3.2-4.8ppb) for 4ppb spike

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

✓ RPD between MS and MSD is within 15%.

Continuing Calibration Verification (MCV, HCV) NOTE: For UCMR ECV and MCV are required

✓ Verification Checks alternate between mid- and high-level during the analysis (low- and mid-level for UCMR)

✓ MCV (25ppb) recovery is between 85%-115% (21.25 – 28.75ppb)

✓ HCV (100ppb) recovery is between 85%-115% (85-115ppb) N/A ECV (4ppb) recovery is between 75%-125% (3.0-5.0)

Pretreat and include the following QC parameters for any batch or part thereof containing samples requiring pretreatment

N/A One Laboratory Reagent Blank (LRB). Perchlorate is < or = half of MRL.

N/A One pair of Laboratory Control Samples (LCS/LCSD). Recovery of perchlorate is between 85%-115%.

N/A One Pair of Laboratory Fortified Matrices (MS/MSD). Recoveries are between 80%-120%

Samples

✓ All samples are analyzed within 28 days of collection.

✓ All samples are analyzed within MCT Conductance limit.

QIR

N/A QIR needed for failed QC

N/A QIR needed for samples analyzed outside of hold time

MWH Laboratories
750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

CONDUCTIVITY MW SOP REVISION 5
SM2510B

Analysis Date: 5-10-07
Analyst: Raja
Reviewed By: ____
LIMS Check By: ____

Was QC Criteria Met: Y N
Was QIR Needed: Y N

Time of Analysis Start: ____ End: ____
MRL 2umhos/cm: Rx# ____ exp of solution: ____
KCl Std 1412 Rx# 201556 exp of solution 08/07
TV = 1412 µmho/cm @ 25°C for 0.0100M
Reading: 1414
Instrument: YSI Model 3200 SN:01A0504, Year Aquired 2001 New

Run #	Sample Number	Sample ID	Client	Date Collected	Temp °C	pH	Scale (µmho/mmho)	Result: Instrument	Result: Reported (µmho/cm)	Comments
Blk	Blank									
STD	MRL 2umhos/cm						µS	0.6822		
STD	KCl - 1000 mhos/cm							N/A		1-3—±50% of TV
1	2705080462	592009	WRD	5-08-07				998		950-1050—±5% of TV
2	1018	591007						999		
3	2705090908	591001		5-09-07				760		
4	2705100532	592002		05-10-07				794		
5	303	004	Calwater	05-10-07				612		
6	304	048						834		
7	305	049						823		
8	306	050						811		
9	2705090719	F-11	Carollo	05-08-07				840		
10	722	F-111-Z						446		
DUP								0.999		
11	725	E-120						0.999		RPD < 5%
12	726	E-130						393		
13	804	121	Calwater					441		
14	2705040346	I-V	Kennedy	05-03-07			ms	536		
15	347	M-36						13.94		
16								17.21		
17										
18										
19										
20										
DUP	2705040347	M-36	Kennedy	5-03-07			ms	17.21		RPD < 5%
STD	KCl - 10 mhos/cm							N/A		8-12—RPD < 20% of TV

% RPD = $\frac{|S1-S2| * 100}{(S1+S2)/2}$

S1 = reading of 1st sample
S2 = reading of 2nd sample

MWH Laboratories
750 Royal Oaks Drive, Suite 100
Monrovia, CA 91016-3629

CONDUCTIVITY MW SOP REVISION 5
SM2510B

Analysis Date: 5-10-07
Analyst: Raja
Reviewed By:
LIMS Check By:

Was QC Criteria Met: Y N
Was QIR Needed: Y N

Time of Analysis Start: End:
MRL 2umhos/cm: R# exp of solution:
KCl Std 1412 R# 20165x exp of solution 05/07
TV = 1412 µmho/cm @ 25°C for 0.0100M
Reading: 1412
Instrument: YSI Model 3200 SN:01A0504, Year Aquired 2001 New

Run #	Sample Number	Sample ID	Client	Date Collected	Temp °C	pH	Scale (µmho/mmho)	Result: Instrument	Result: Reported (µmho/cm)	Comments
Blk	Blank						µs	0.553		
STD	MRL 2umhos/cm							N/A		1-3——±50% of TV
STD	KCl - 1000 mhos/cm							985		950-1050——±5% of TV
1	270504 0313	PC40	Kennagee	05-03-07			ms	18.56		
2	314	FB060307					µs	209		
3	315	H48						25.44		
4	316	PC73						8242		
5	317	MC65					ms	13.02		
6	318	93						11.37		
7	319	97						14.78		
8	320	29						35.72		
9										
10										
DUP	270504 0320	MC29	Kennagee	05-03-07			ms	35.72		RPD < 5%
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
DUP										RPD < 5%
STD	KCl - 10 mhos/cm									8-12——RPD < 20% of TV

% RPD = $\frac{|S1-S2| * 100}{(S1+S2)/2}$

S1 = reading of 1st sample
S2 = reading of 2nd sample

Sample No.	Sample Name	Dil.Fac.	Comment	Time	Amount CLO4 CD_1	
1	autocal1	1.0		05.08.07 09:46	n.a.	
2	autocal2	1.0	RAJA060913-2	05.08.07 10:09	2.1473	
3	autocal3	1.0	RAJA060913-3	05.08.07 10:31	4.1725	
4	autocal4	1.0	RAJA060913-4	05.08.07 10:53	9.6924	
5	autocal5	1.0	RAJA060913-5	05.08.07 11:16	24.5749	
6	autocal6	1.0	RAJA060913-6	05.08.07 11:38	50.3783	
7	autocal7	1.0	RAJA060913-7	05.08.07 12:01	99.9376	
8	WASH	1.0		05.11.07 11:30	n.a.	
9	QCS	1.0		05.11.07 11:53	21.3610	107%
10	IPC	1.0		05.11.07 12:15	25.7765	103%
11	MBLK	1.0		05.11.07 12:37	n.a.	
12	MRL-2	1.0		05.11.07 13:00	1.9507	97.5%
13	MRL-4	1.0		05.11.07 13:22	✓4.5474	114%
14	LCS1	1.0		05.11.07 13:45	✓25.7713	103%
15	LCS2	1.0		05.11.07 14:07	✓26.6337	107%
16	2705090654	1.0		05.11.07 14:29	✓n.a.	
17	2705080213_1/5	5.0		05.11.07 14:52	✓110.6349	
18	2705080224_1/5	5.0		05.11.07 15:14	✓n.a.	
19	2705030213_1/2	2.0		05.11.07 15:37	✓n.a.	
20	2705030215_1/2	2.0		05.11.07 15:59	✓27.7544	
21	2705030219	1.0		05.11.07 16:21	✓n.a.	
22	2705040314	1.0		05.11.07 16:44	✓n.a.	
23	2705080662	1.0		05.11.07 17:06	✓n.a.	
24	2705081018	1.0		05.11.07 17:29	✓n.a.	
25	2705090908	1.0		05.11.07 17:51	✓n.a.	
26	2705090908MS	1.0		05.11.07 18:13	✓23.7857	23.9 - 95.6%
27	2705090908MSD	1.0		05.11.07 18:36	✓22.5840	22.6 - 90.4%
28	CCV	1.0		05.11.07 18:58	26.7231	107%
29	2705100532	1.0		05.11.07 19:20	✓3.5078	
30	2705100303	1.0		05.11.07 19:43	✓7.5187	
31	2705100304	1.0		05.11.07 20:05	✓7.6176	
32	2705100305-DNR	1.0		05.11.07 20:28	1.9633	
33	2705100306	1.0		05.11.07 20:50	✓1.4016	
34	2705090719	1.0		05.11.07 21:12	✓51.4465	
35	2705090722	1.0		05.11.07 21:35	✓n.a.	
36	2705090725-DNR	1.0		05.11.07 21:57	8.9327	
37	2705090726	1.0		05.11.07 22:20	✓41.9143	
38	2705090804	1.0		05.11.07 22:42	✓n.a.	
39	HCV	1.0		05.11.07 23:04	101.0991	101%
40	STOP	1.0		05.11.07 23:27	n.a.	

RB-MMS/11/07

Sequence: 051107-CLO4-IC11
Operator: raja
Printed: 5/16/2007 1:11:32 PM

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC11_CLO4\MAY\MAY
Timebase: IC11
#Samples: 40

Created: 5/11/2007 11:19:45 AM by raja
Last Update: 5/16/2007 1:10:20 PM by raja

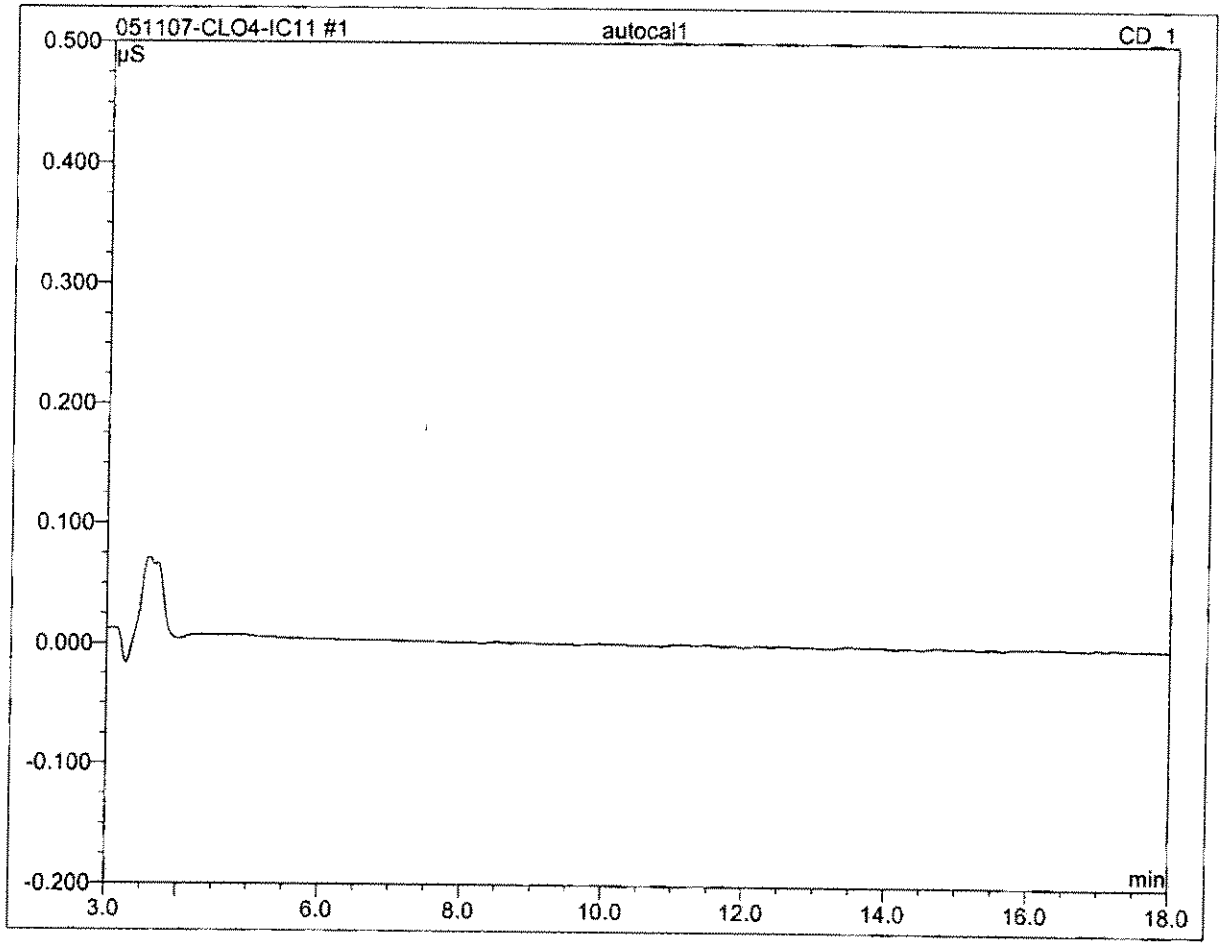
No.	Name	Dil. Factor	Type	Comment	Status	Program	Method
1	autocal1	1.0000	Standard		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
2	autocal2	1.0000	Standard	RAJA060913-2	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
3	autocal3	1.0000	Standard	RAJA060913-3	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
4	autocal4	1.0000	Standard	RAJA060913-4	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
5	autocal5	1.0000	Standard	RAJA060913-5	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
6	autocal6	1.0000	Standard	RAJA060913-6	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
7	autocal7	1.0000	Standard	RAJA060913-7	Finished	Perchlorate-IC11	IC#4-CLO4-LOW
8	WASH	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
9	QCS	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
10	IPC	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
11	MBLK	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
12	MRL-2	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
13	MRL-4	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
14	LCS1	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
15	LCS2	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
16	2705090654	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
17	2705080213_1/5	5.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
18	2705080224_1/5	5.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
19	2705030213_1/2	2.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
20	2705030215_1/2	2.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
21	2705030219	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
22	2705040314	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
23	2705080662	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
24	2705081018	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
25	2705090908	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
26	2705090908MS	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
27	2705090908MSD	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
28	CCV	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
29	2705100532	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
30	2705100303	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
31	2705100304	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
32	2705100305-DNR	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
33	2705100306	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
34	2705090719	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
35	2705090722	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
36	2705090725-DNR	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
37	2705090726	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
38	2705090804	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
39	HCV	1.0000	Unknown		Finished	Perchlorate-IC11	IC#4-CLO4-LOW
40	STOP	1.0000	Unknown		Interrupted	IC11 Stop	IC#4-CLO4-LOW

Title:
Datasource: Dionex_USPAS2SDIO2
Location: IC\IC11_CLO4\MAY\MAY
Timebase: IC11
#Samples: 40
Created: 5/11/2007 11:19:45 AM by raja
Last Update: 5/16/2007 1:10:20 PM by raja

No.	Name	Inj. Date/Time	*Analyst
1	autocal1	5/8/2007 9:46:41 AM	Raja
2	autocal2	5/8/2007 10:09:05 AM	Raja
3	autocal3	5/8/2007 10:31:28 AM	Raja
4	autocal4	5/8/2007 10:53:52 AM	Raja
5	autocal5	5/8/2007 11:16:15 AM	Raja
6	autocal6	5/8/2007 11:38:39 AM	Raja
7	autocal7	5/8/2007 12:01:03 PM	Raja
8	WASH	5/11/2007 11:30:42 AM	Raja
9	QCS	5/11/2007 11:53:06 AM	Raja
10	IPC	5/11/2007 12:15:29 PM	Raja
11	MBLK	5/11/2007 12:37:53 PM	Raja
12	MRL-2	5/11/2007 1:00:17 PM	Raja
13	MRL-4	5/11/2007 1:22:40 PM	Raja
14	LCS1	5/11/2007 1:45:04 PM	Raja
15	LCS2	5/11/2007 2:07:28 PM	Raja
16	2705090654	5/11/2007 2:29:51 PM	Raja
17	2705080213_1/5	5/11/2007 2:52:15 PM	Raja
18	2705080224_1/5	5/11/2007 3:14:39 PM	Raja
19	2705030213_1/2	5/11/2007 3:37:02 PM	Raja
20	2705030215_1/2	5/11/2007 3:59:26 PM	Raja
21	2705030219	5/11/2007 4:21:50 PM	Raja
22	2705040314	5/11/2007 4:44:13 PM	Raja
23	2705080662	5/11/2007 5:06:37 PM	Raja
24	2705081018	5/11/2007 5:29:00 PM	Raja
25	2705090908	5/11/2007 5:51:23 PM	Raja
26	2705090908MS	5/11/2007 6:13:47 PM	Raja
27	2705090908MSD	5/11/2007 6:36:11 PM	Raja
28	CCV	5/11/2007 6:58:34 PM	Raja
29	2705100532	5/11/2007 7:20:58 PM	Raja
30	2705100303	5/11/2007 7:43:22 PM	Raja
31	2705100304	5/11/2007 8:05:45 PM	Raja
32	2705100305-DNR	5/11/2007 8:28:09 PM	Raja
33	2705100306	5/11/2007 8:50:32 PM	Raja
34	2705090719	5/11/2007 9:12:56 PM	Raja
35	2705090722	5/11/2007 9:35:19 PM	Raja
36	2705090725-DNR	5/11/2007 9:57:43 PM	Raja
37	2705090726	5/11/2007 10:20:07 PM	Raja
38	2705090804	5/11/2007 10:42:30 PM	Raja
39	HCV	5/11/2007 11:04:54 PM	Raja
40	STOP	5/11/2007 11:27:17 PM	Raja

1 autocal1

Sample Name:	**autocal1**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 09:46**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

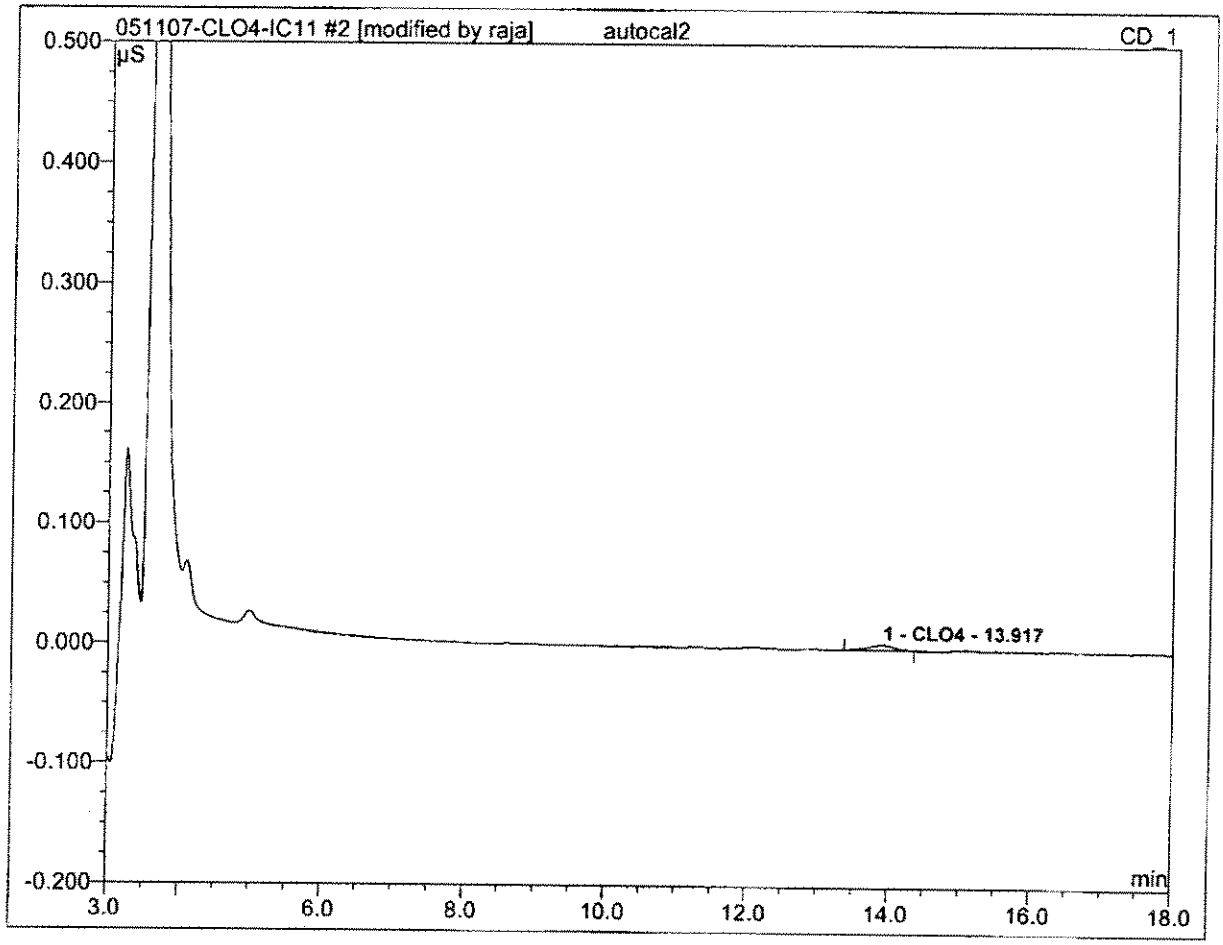


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

2 autocal2

RAJA060913-2

Sample Name:	**autocal2**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 10:09**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

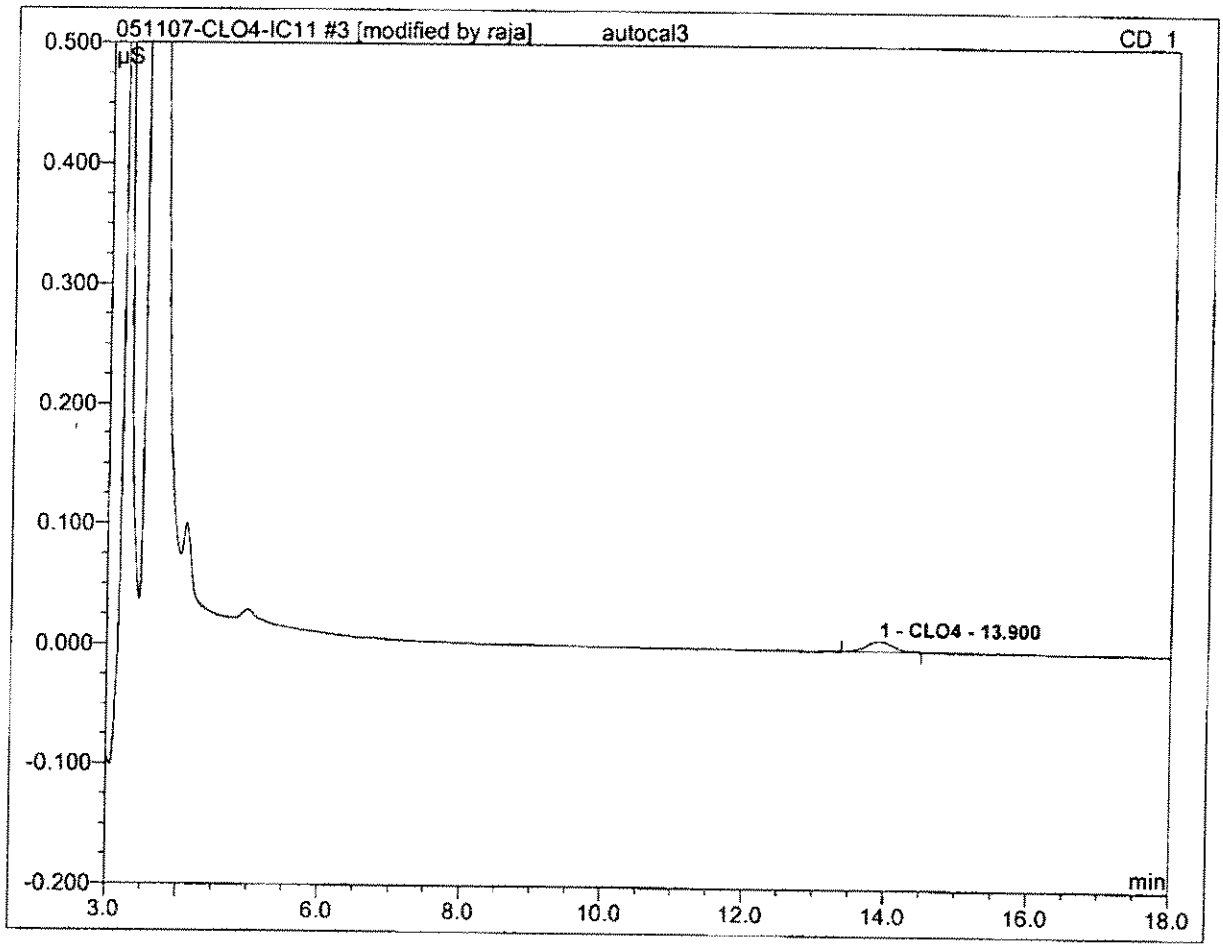


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.92	CLO4	0.004	0.002	100.00	2.147	BMB*
Total:			0.004	0.002	100.00	2.147	

3 autocal3

RAJA060913-3

Sample Name:	**autocal3**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 10:31**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

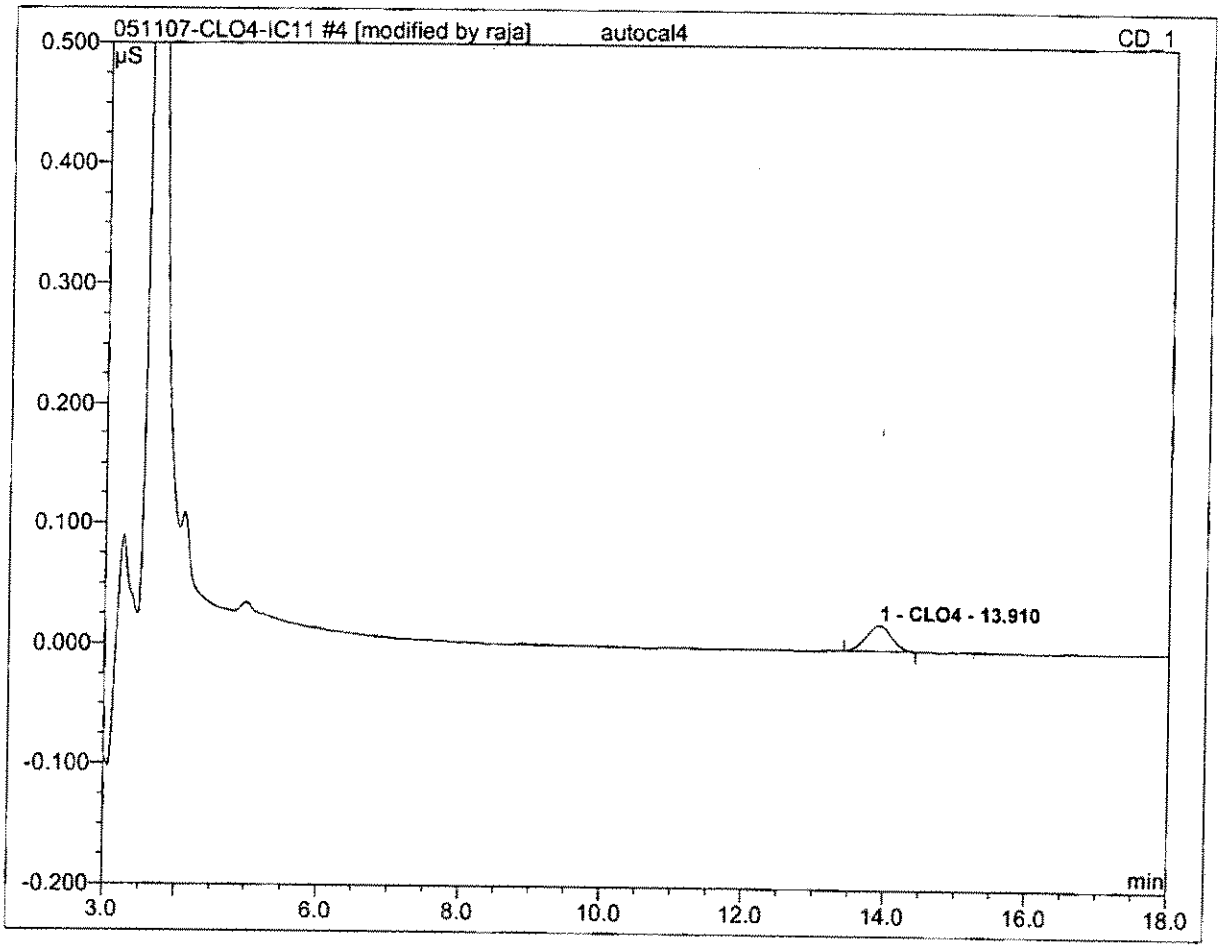


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.90	CLO4	0.009	0.004	100.00	4.173	BMB*
Total:			0.009	0.004	100.00	4.173	

4 autocal4

RAJA060913-4

Sample Name:	**autocal4**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 10:53**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

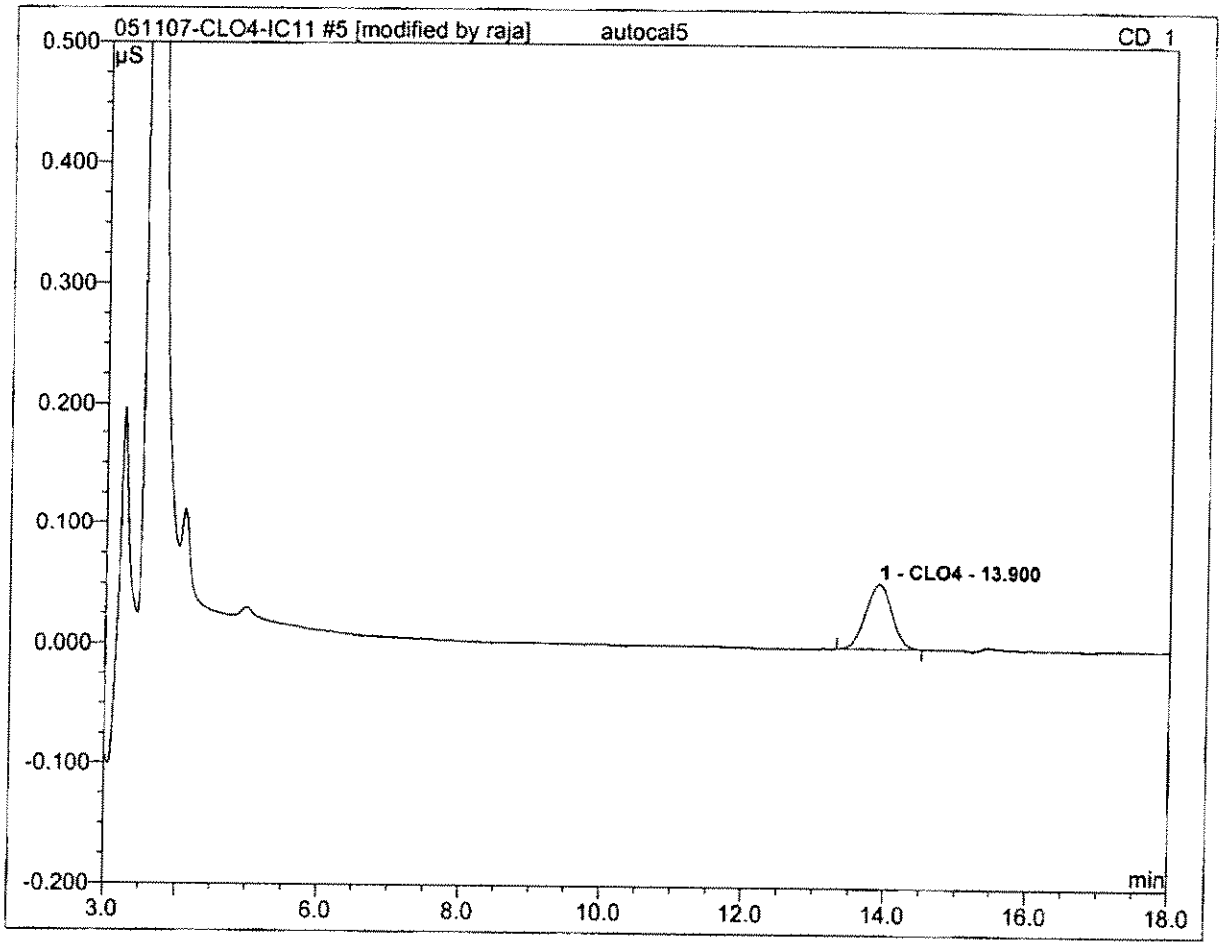


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.91	CLO4	0.021	0.009	100.00	9.692	BMB*
Total:			0.021	0.009	100.00	9.692	

5 autocal5

RAJA060913-5

Sample Name:	**autocal5**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 11:16**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

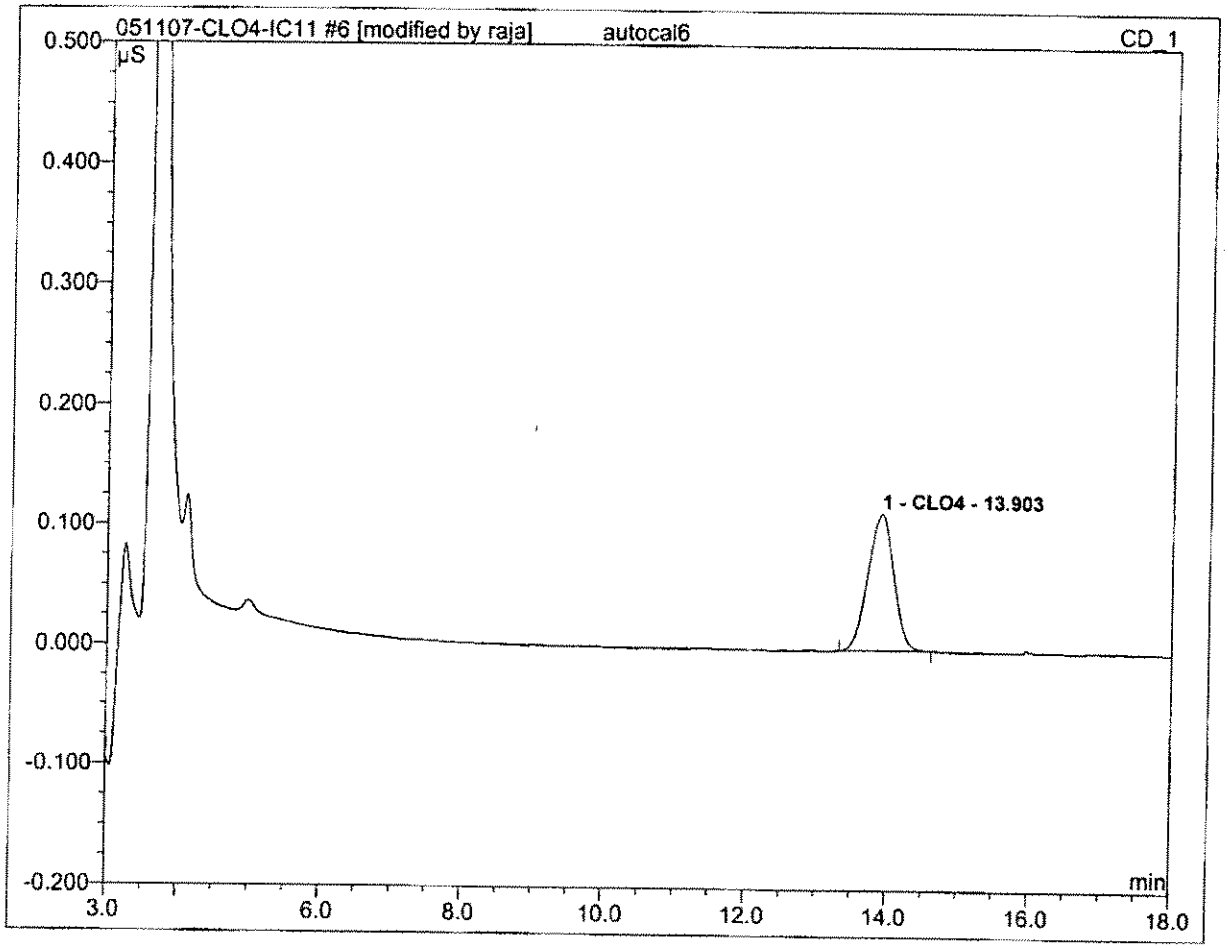


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.90	CLO4	0.054	0.023	100.00	24.575	BMB*
Total:			0.054	0.023	100.00	24.575	

6 autocal6

RAJA060913-6

Sample Name:	**autocal6**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 11:38**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

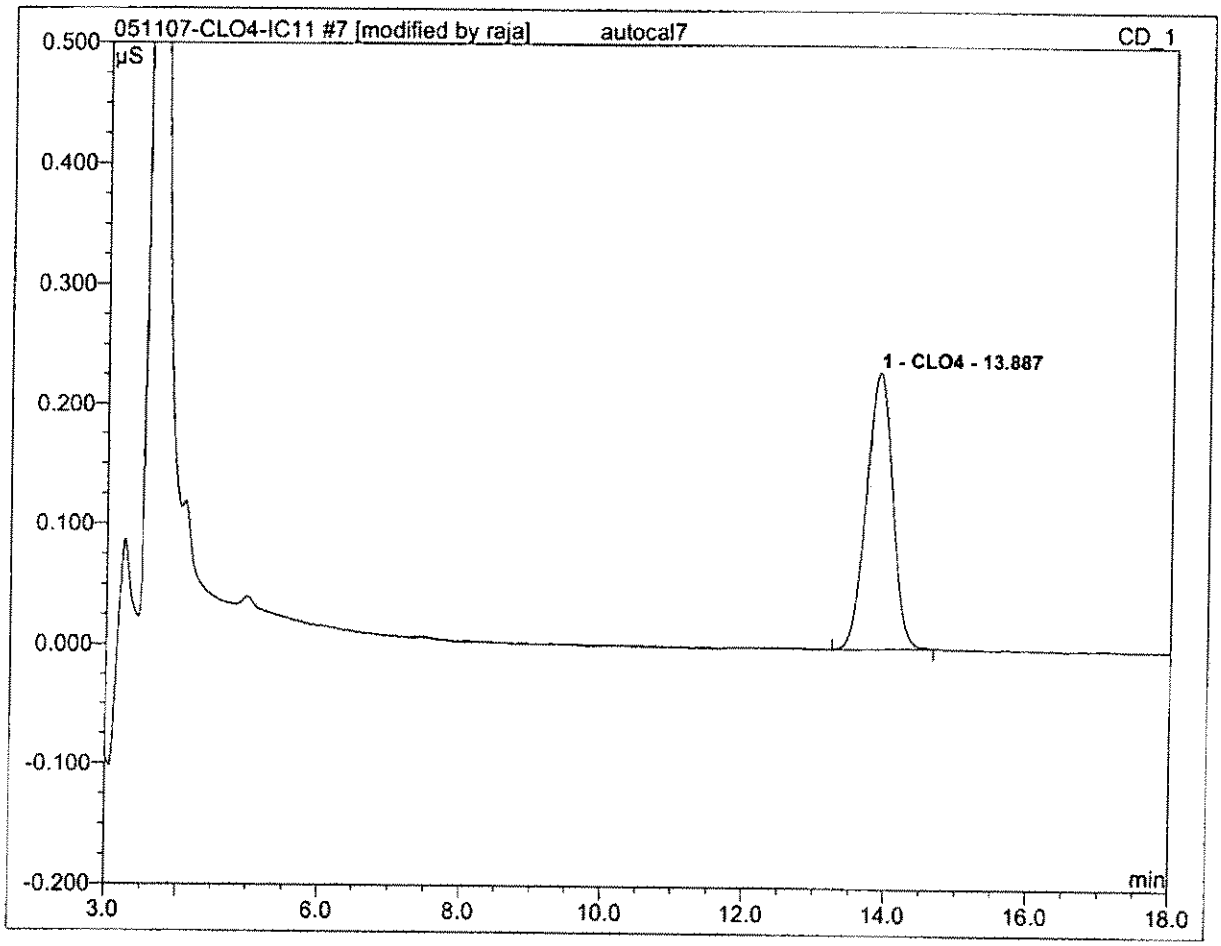


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.90	CLO4	0.114	0.048	100.00	50.378	BMB*
Total:			0.114	0.048	100.00	50.378	

7 autocal7

RAJA060913-7

Sample Name:	**autocal7**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/08/2007 12:01**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**

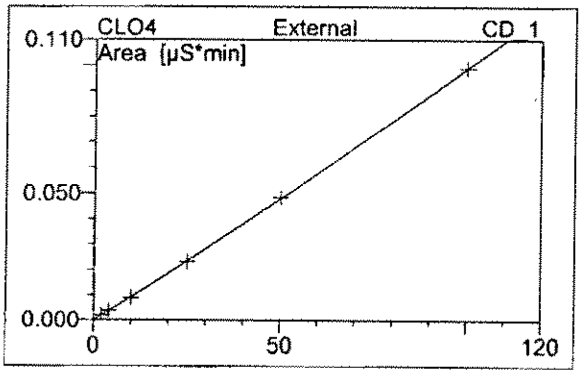


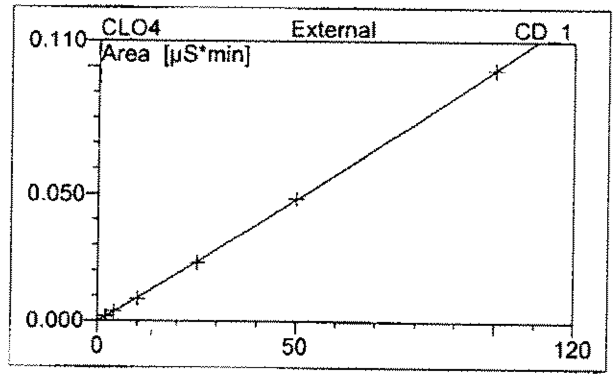
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.89	CLO4	0.231	0.099	100.00	99.938	BMB*
Total:			0.231	0.099	100.00	99.938	

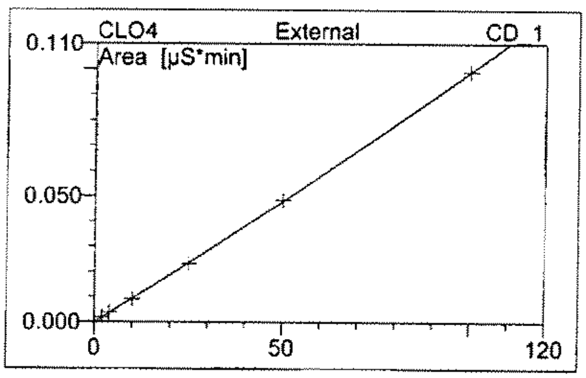
7 autocal7

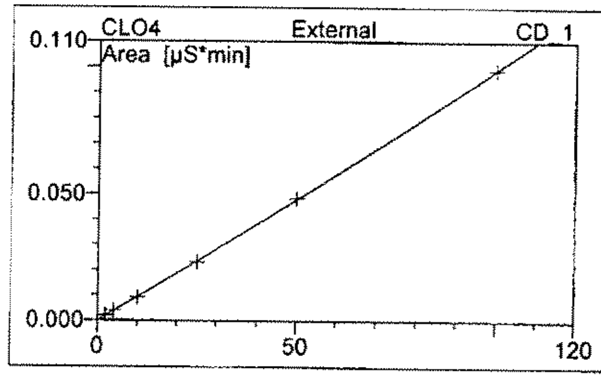
RAJA060913-7

Sample Name:	**autocal7**	*Injection Volume:*	**20.0**
Vial Number:	**109**	*Channel:*	**CD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**Perchlorate-IC11**	*Bandwidth:*	**n.a.**
Quantif. Method:	**IC#4-CLO4-LOW**	*Dilution Factor:*	**1.0000**
Recording Time:	**5/8/2007 12:01**	*Sample Weight:*	**1.0000**
Run Time (min):	**20.00**	*Sample Amount:*	**1.0000**





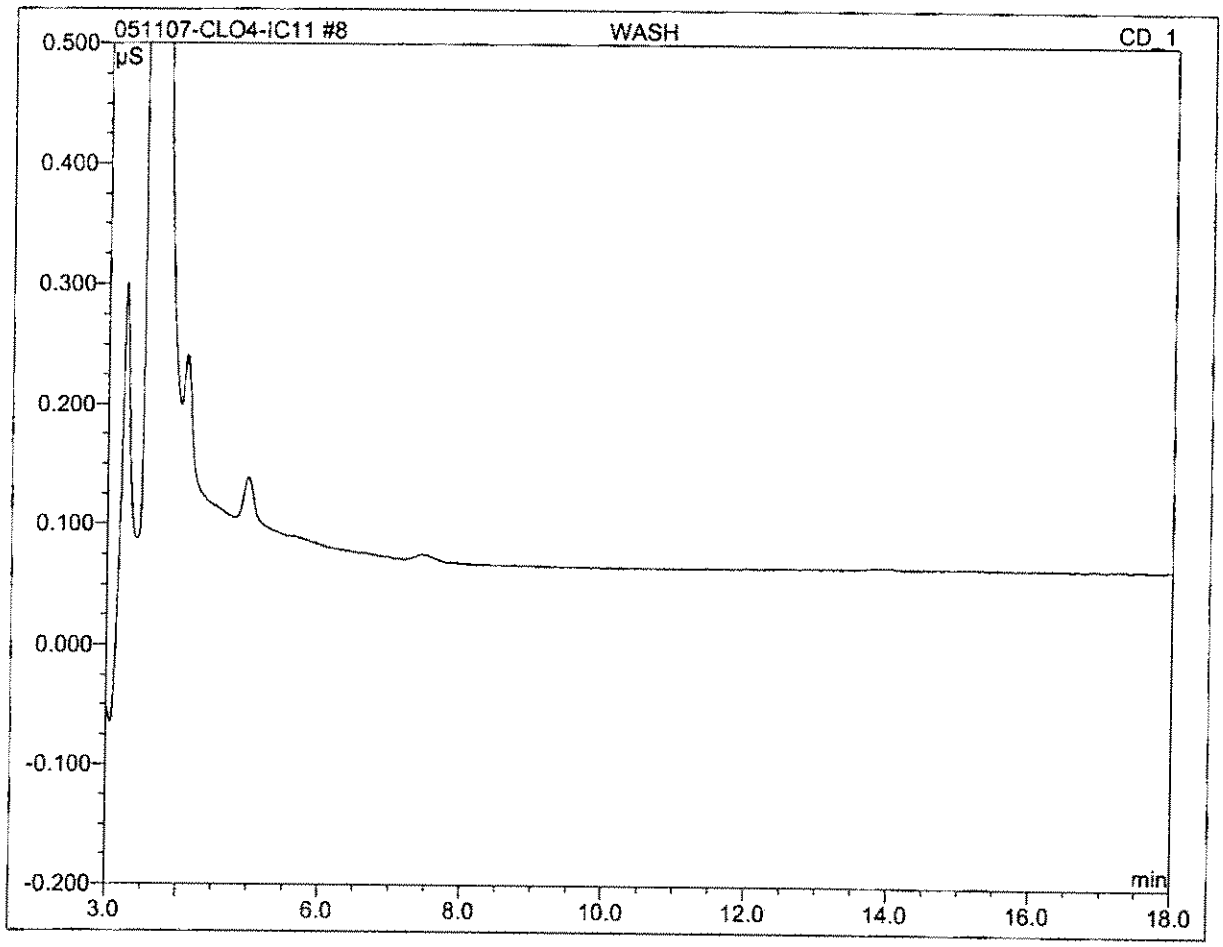




No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	13.89	CLO4	0QOff	6	99.9845	-0.0001	0.0009	0.0000
Average:					99.9845	-0.0001	0.0009	0.0000

8 WASH

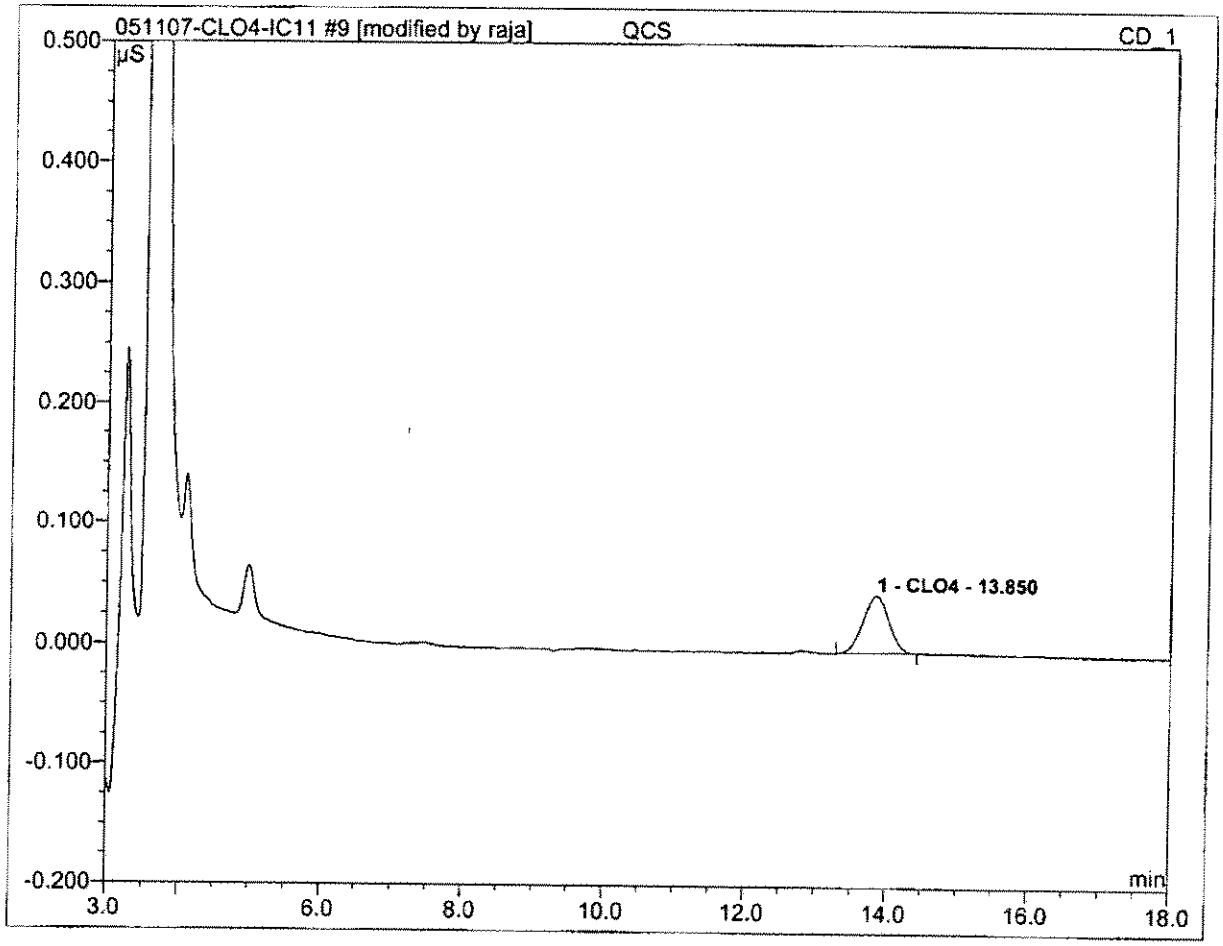
Sample Name:	**WASH**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 11:30**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



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

9 QCS

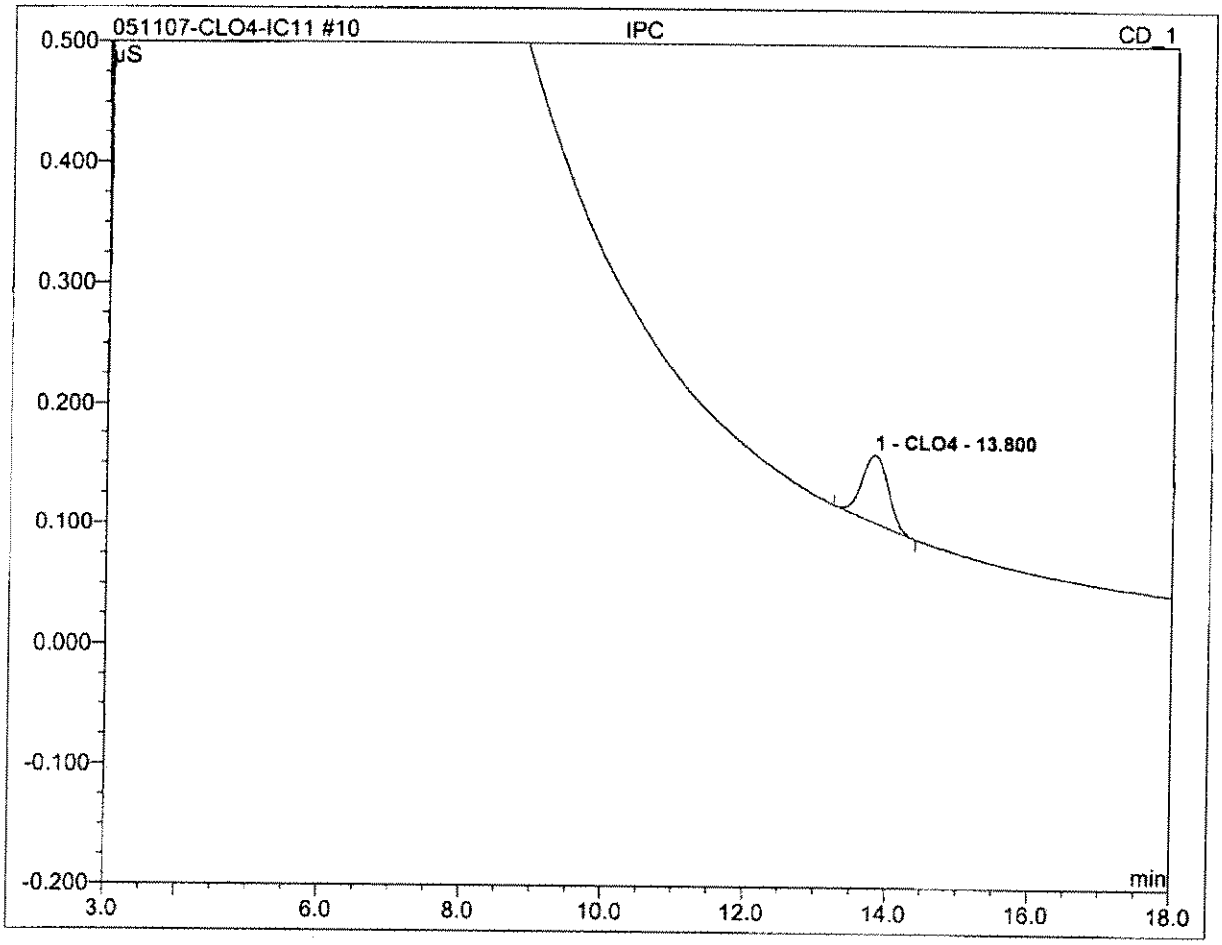
Sample Name:	**QCS**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 11:53**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	CLO4	0.047	0.020	100.00	21.361	BMB*
Total:			0.047	0.020	100.00	21.361	

10 IPC

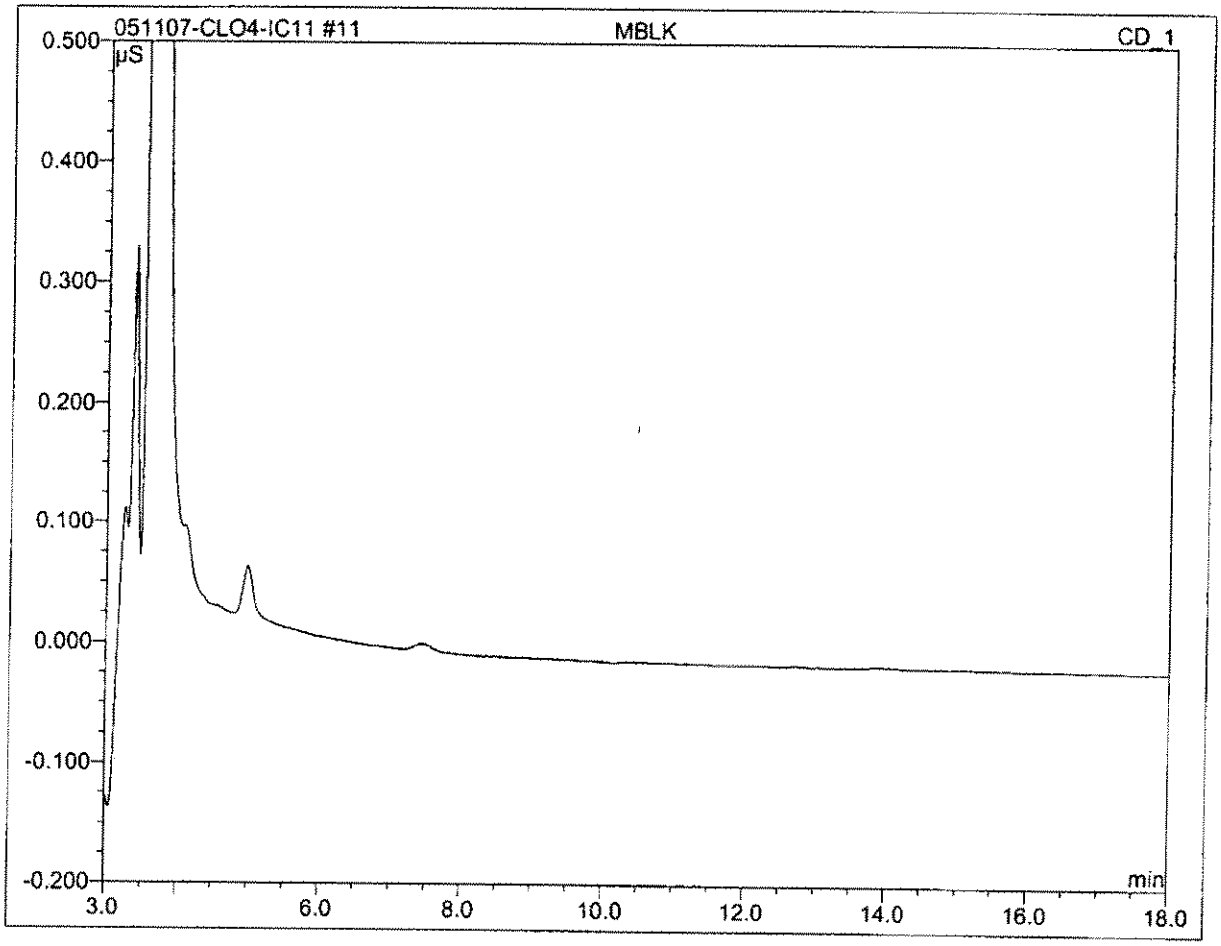
Sample Name:	**IPC**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 12:15**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.80	CLO4	0.057	0.024	100.00	25.777	BMB
Total:			0.057	0.024	100.00	25.777	

11 MBLK

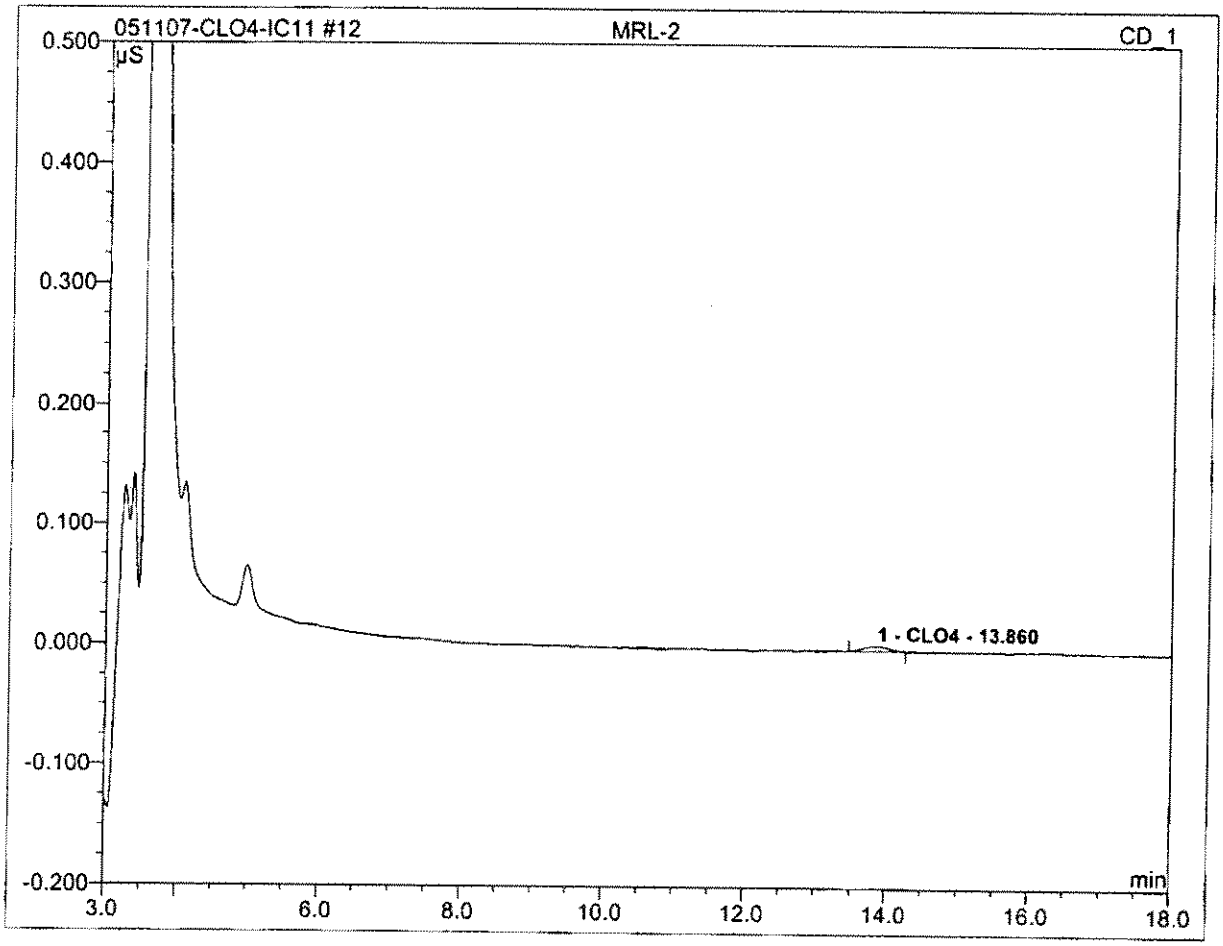
Sample Name:	**MBLK**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 12:37**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



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

12 MRL-2

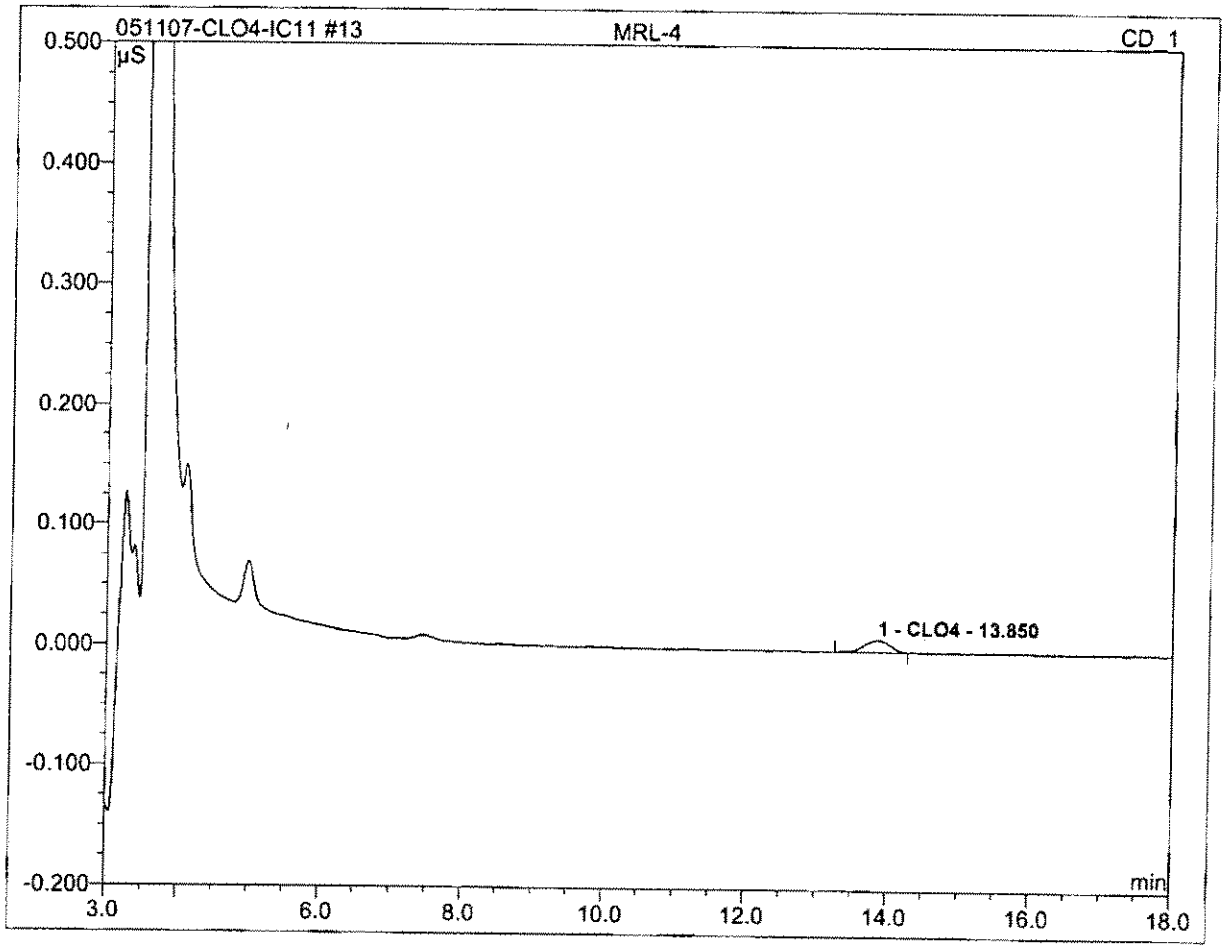
Sample Name:	**MRL-2**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 13:00**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.86	CLO4	0.004	0.002	100.00	1.951	BMB
Total:			0.004	0.002	100.00	1.951	

13 MRL-4

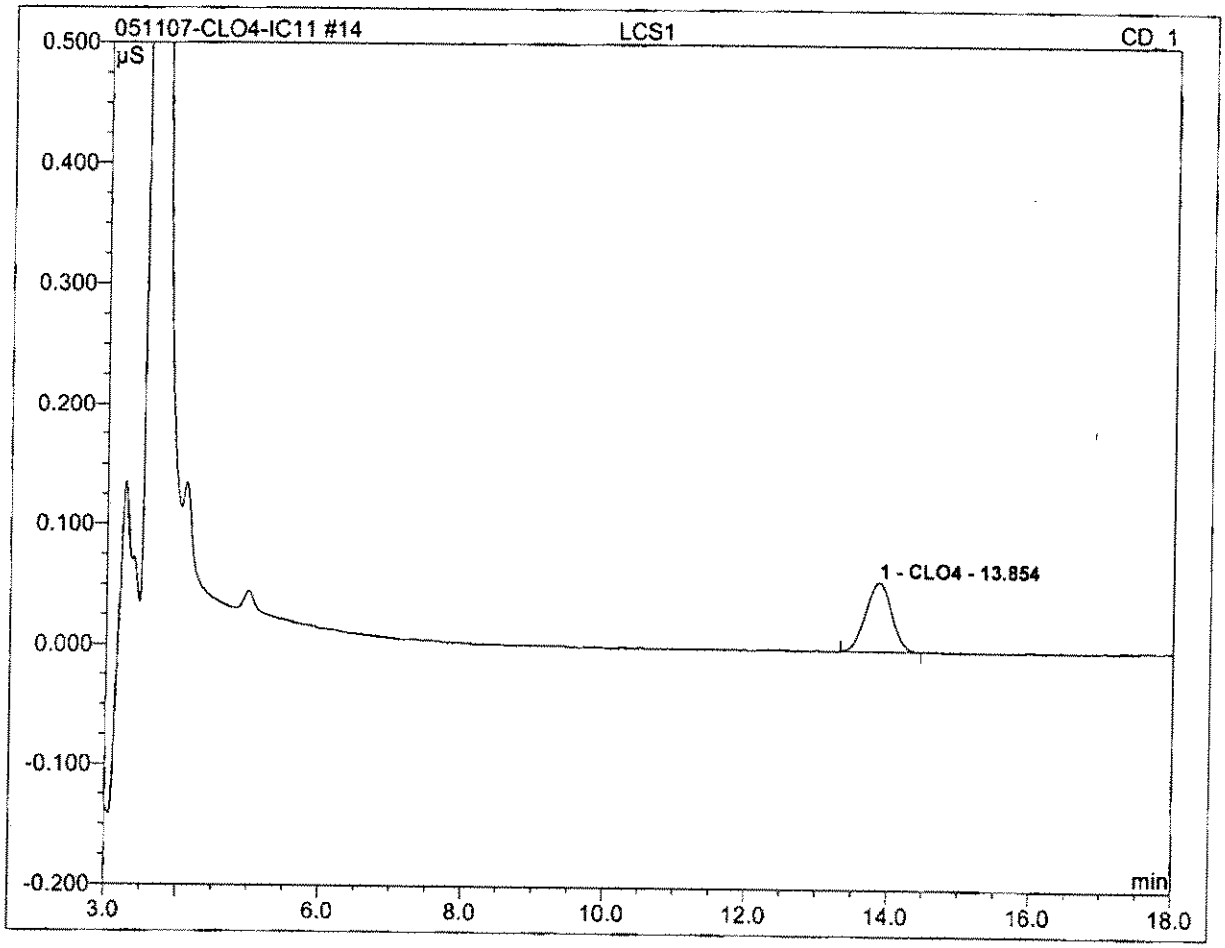
Sample Name:	**MRL-4**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 13:22**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	CLO4	0.010	0.004	100.00	4.547	BMB
Total:			0.010	0.004	100.00	4.547	

14 LCS1

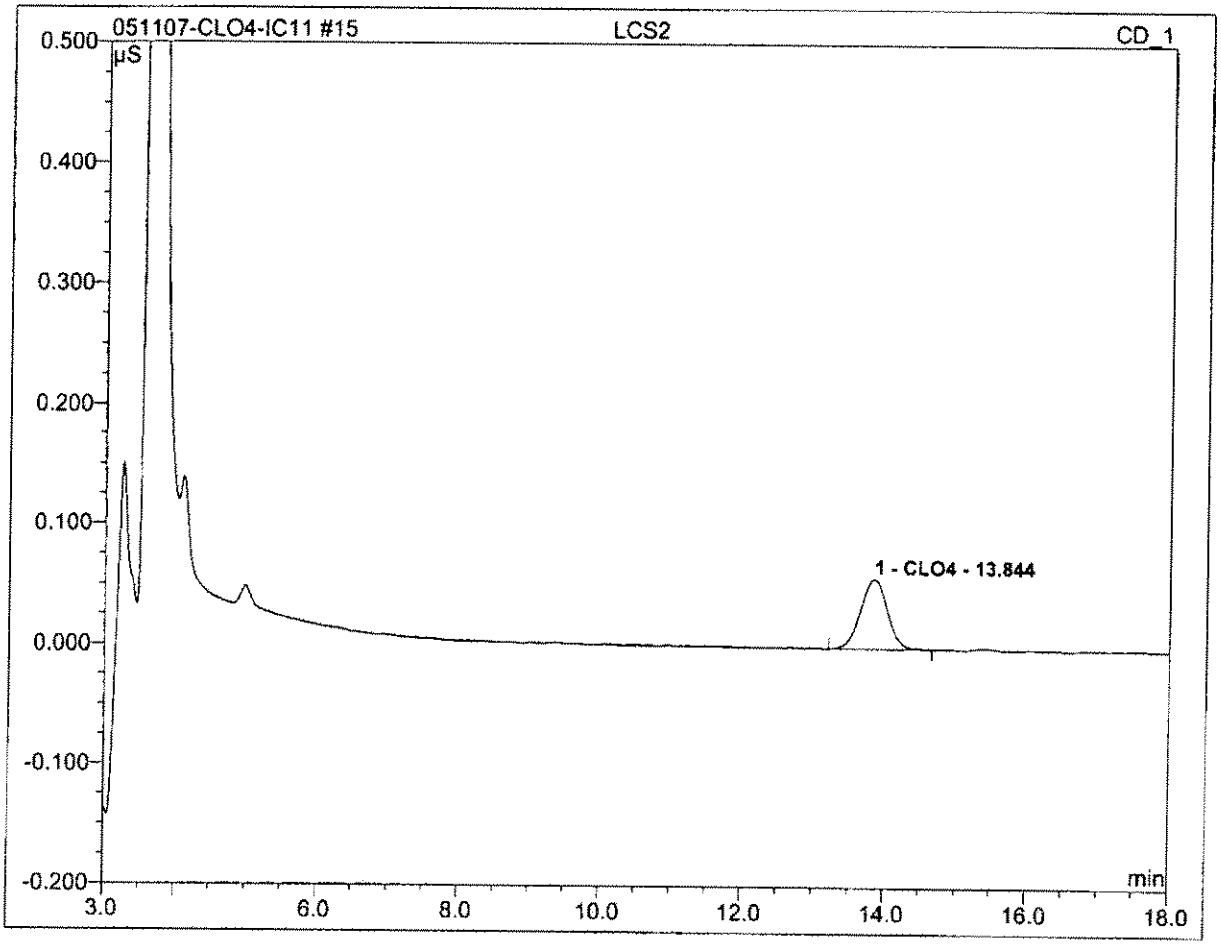
Sample Name:	**LCS1**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 13:45**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	CLO4	0.057	0.024	100.00	25.771	BMB
Total:			0.057	0.024	100.00	25.771	

15 LCS2

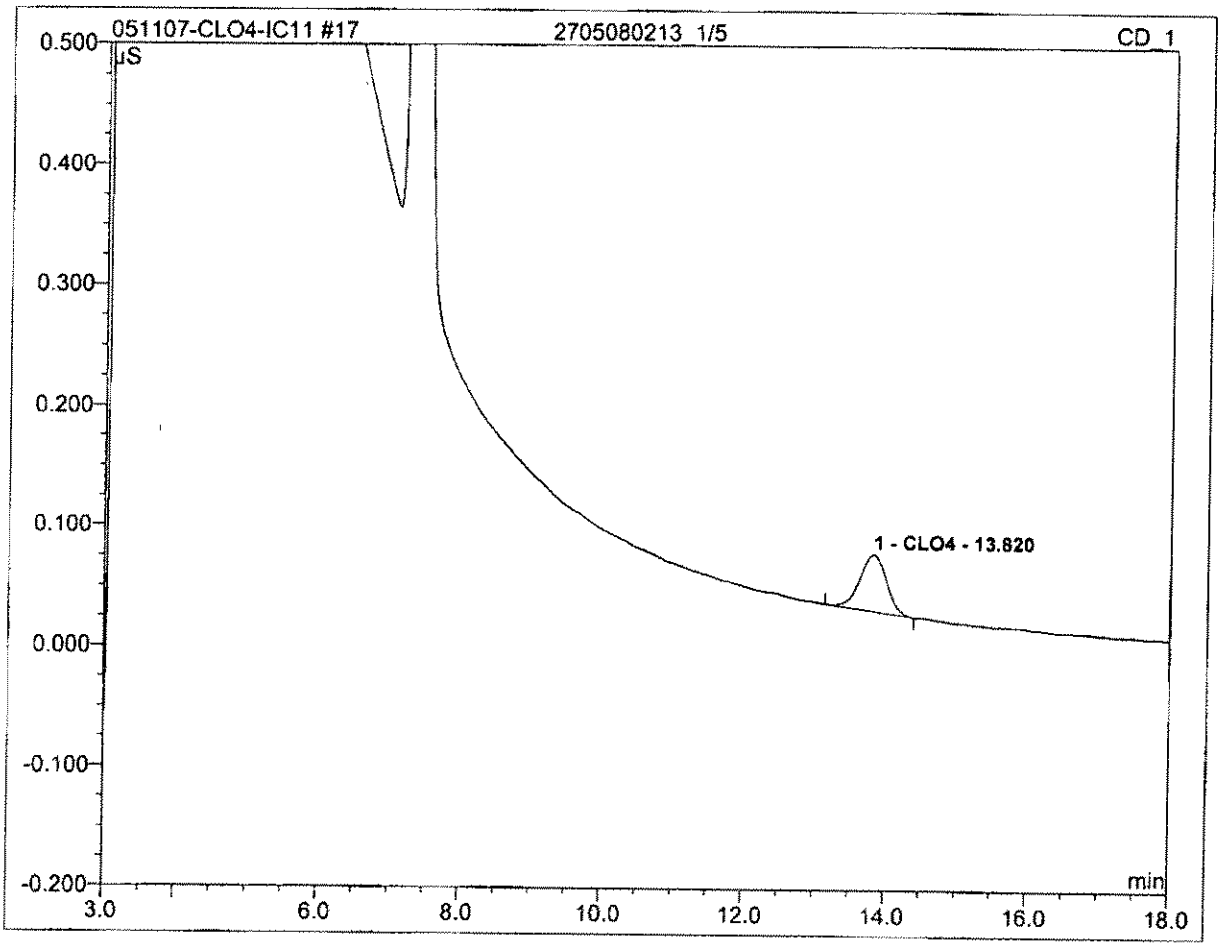
Sample Name:	**LCS2**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 14:07**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.84	CLO4	0.058	0.025	100.00	26.634	BMB
Total:			0.058	0.025	100.00	26.634	

17 2705080213_1/5

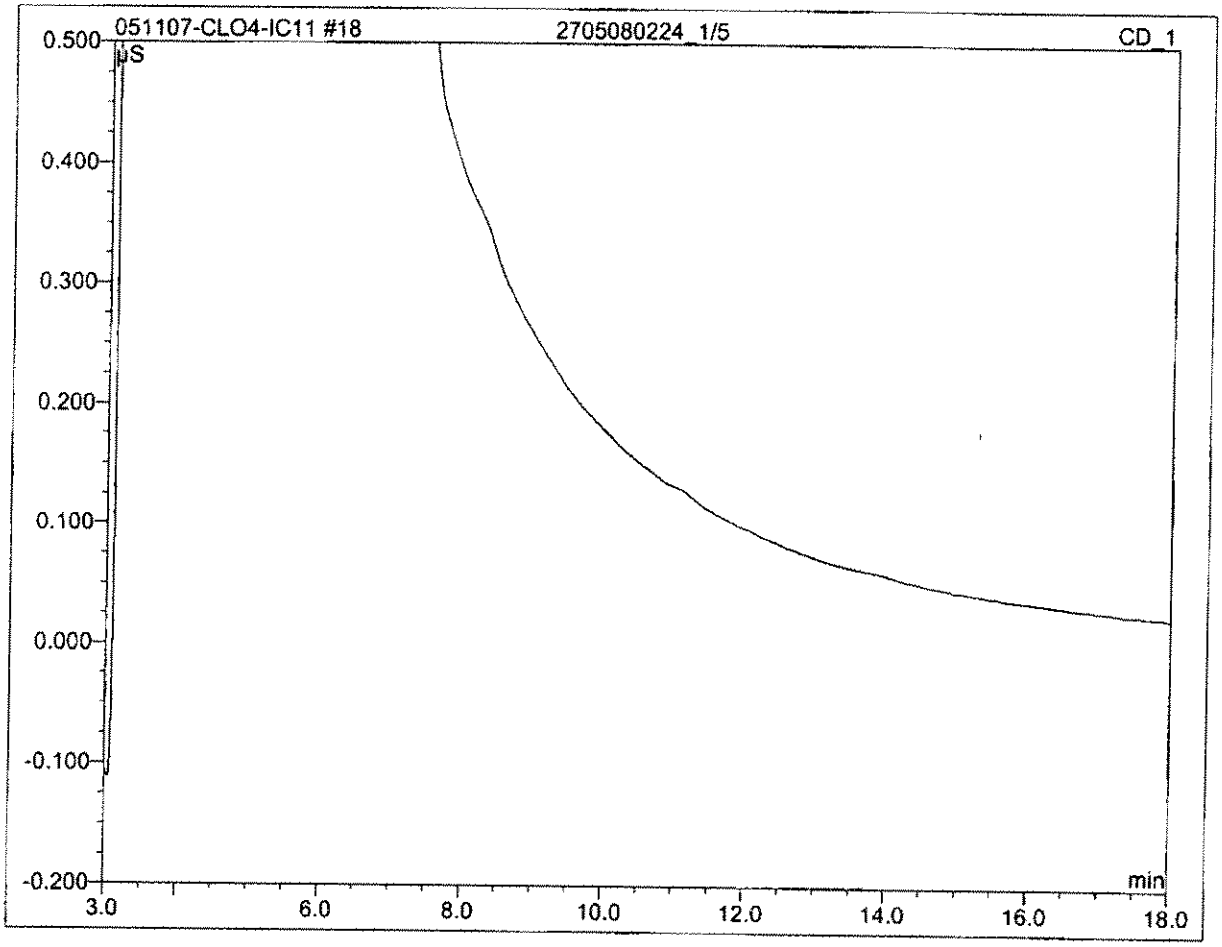
Sample Name:	**2705080213_1/5**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 14:52**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**5.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.82	CLO4	0.047	0.021	100.00	110.635	BMB
Total:			0.047	0.021	100.00	110.635	

18 2705080224_1/5

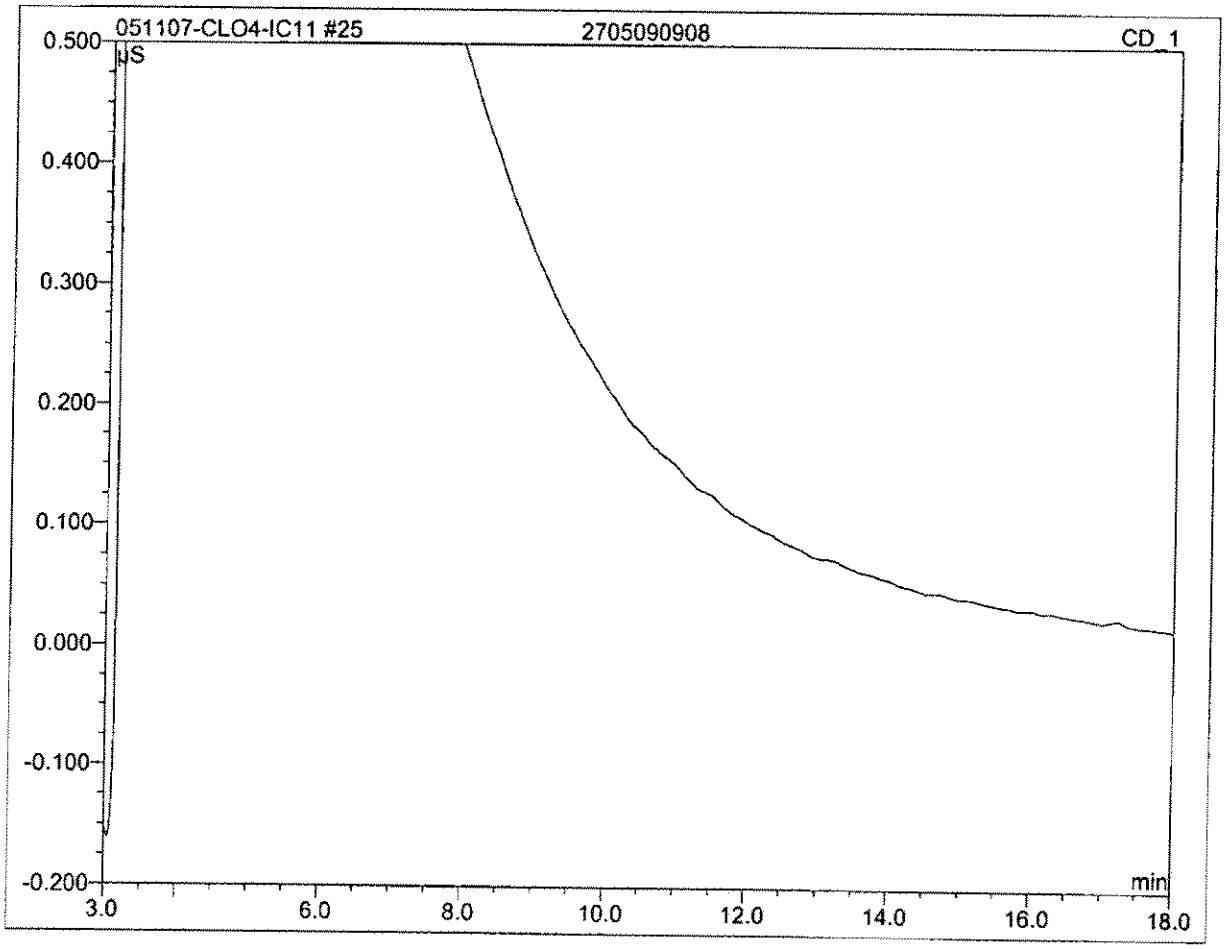
Sample Name:	**2705080224_1/5**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 15:14**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**5.0000**



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

25 2705090908

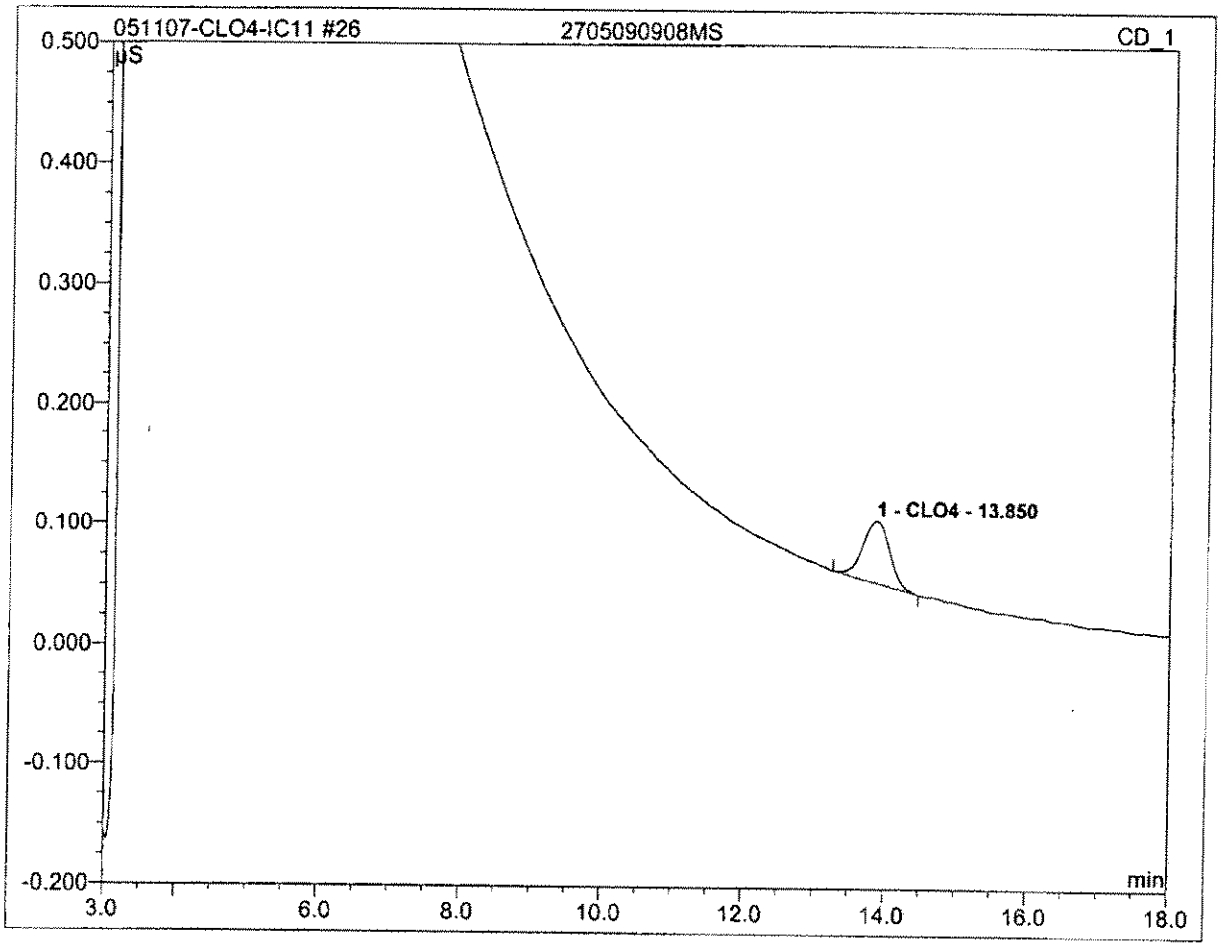
Sample Name:	**2705090908**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 17:51**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



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

26 2705090908MS

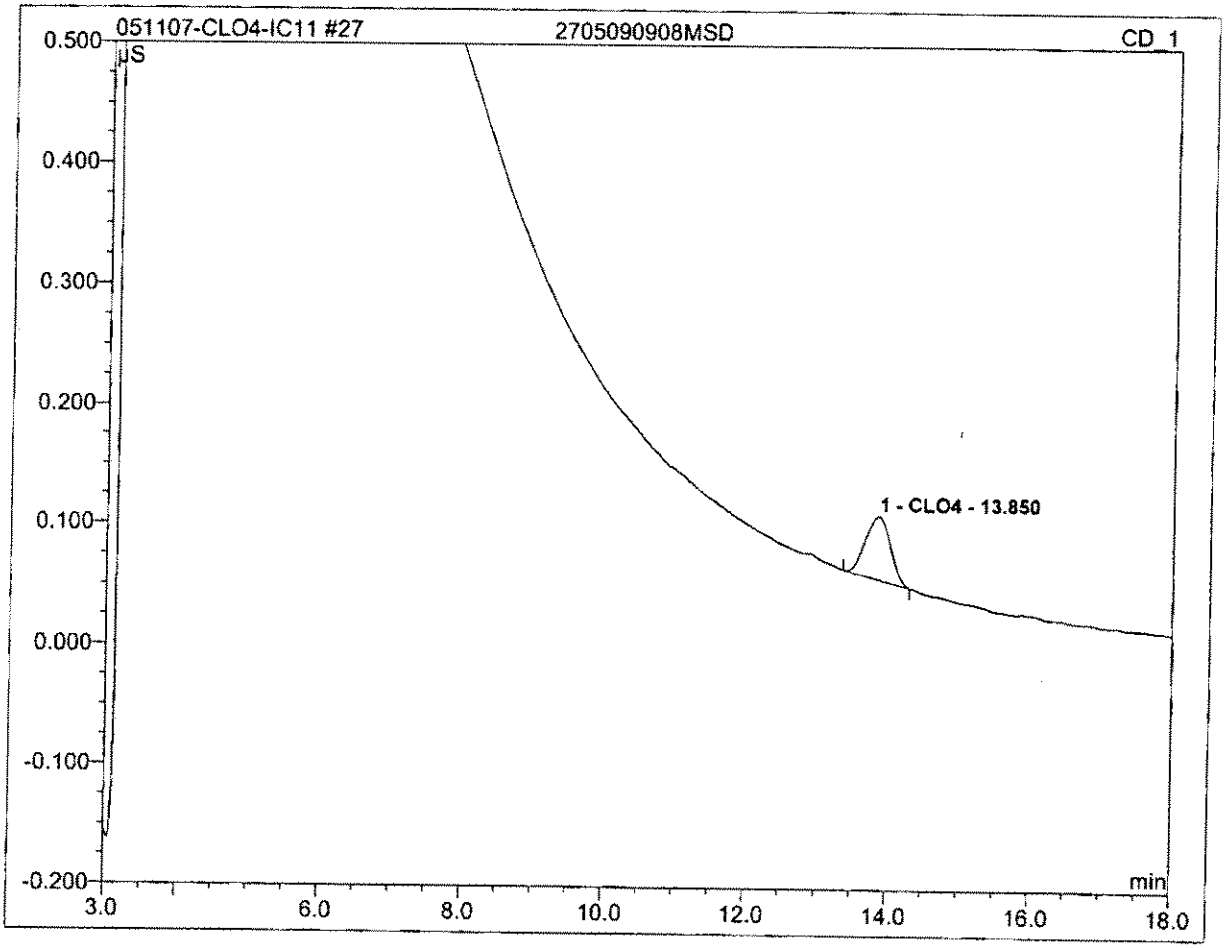
Sample Name:	**2705090908MS**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 18:13**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	CLO4	0.051	0.022	100.00	23.786	BMB
Total:			0.051	0.022	100.00	23.786	

27 2705090908MSD

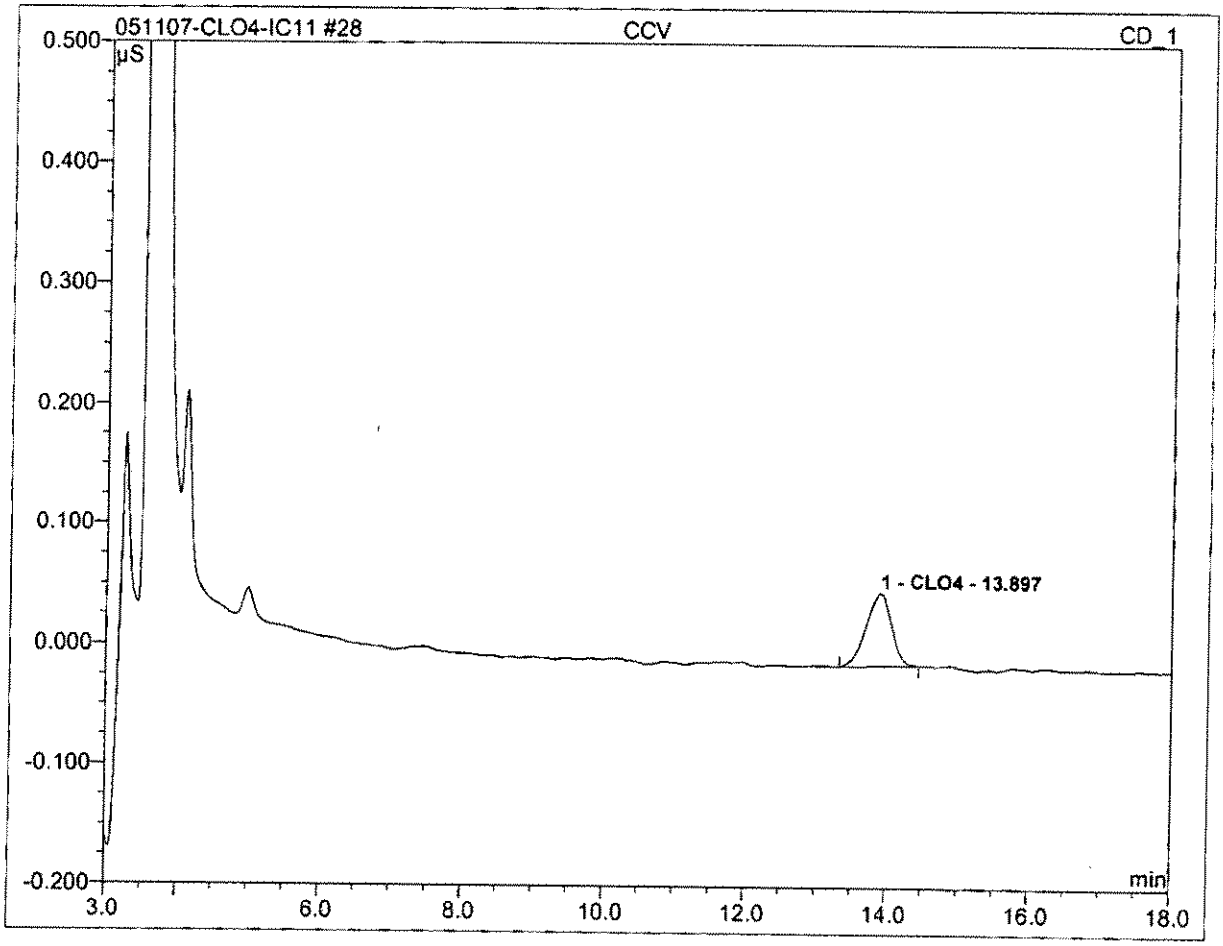
Sample Name:	**2705090908MSD**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 18:36**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.85	CLO4	0.052	0.021	100.00	22.584	BMB
Total:			0.052	0.021	100.00	22.584	

28 CCV

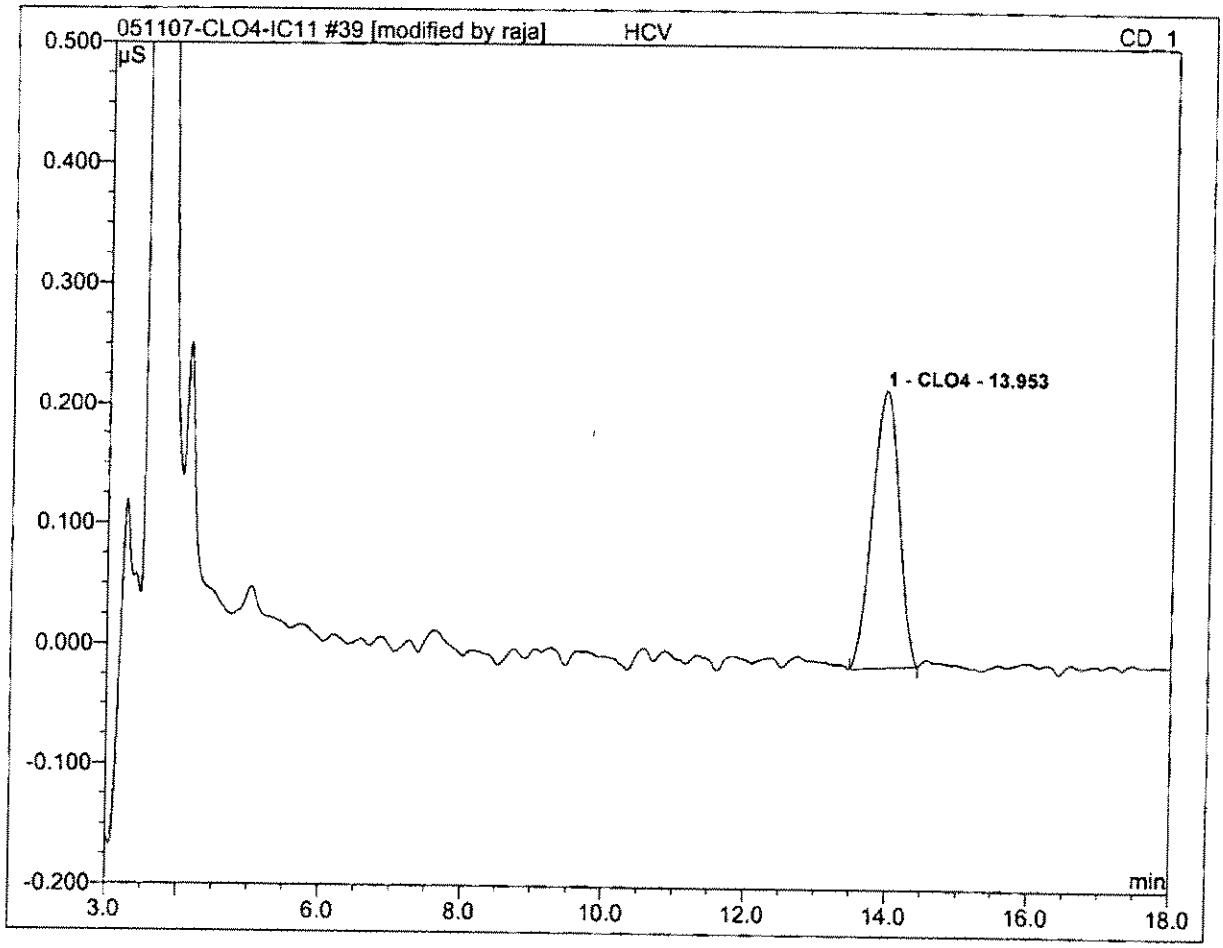
Sample Name:	**CCV**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 18:58**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.90	CLO4	0.061	0.025	100.00	26.723	BMB
Total:			0.061	0.025	100.00	26.723	

39 HCV

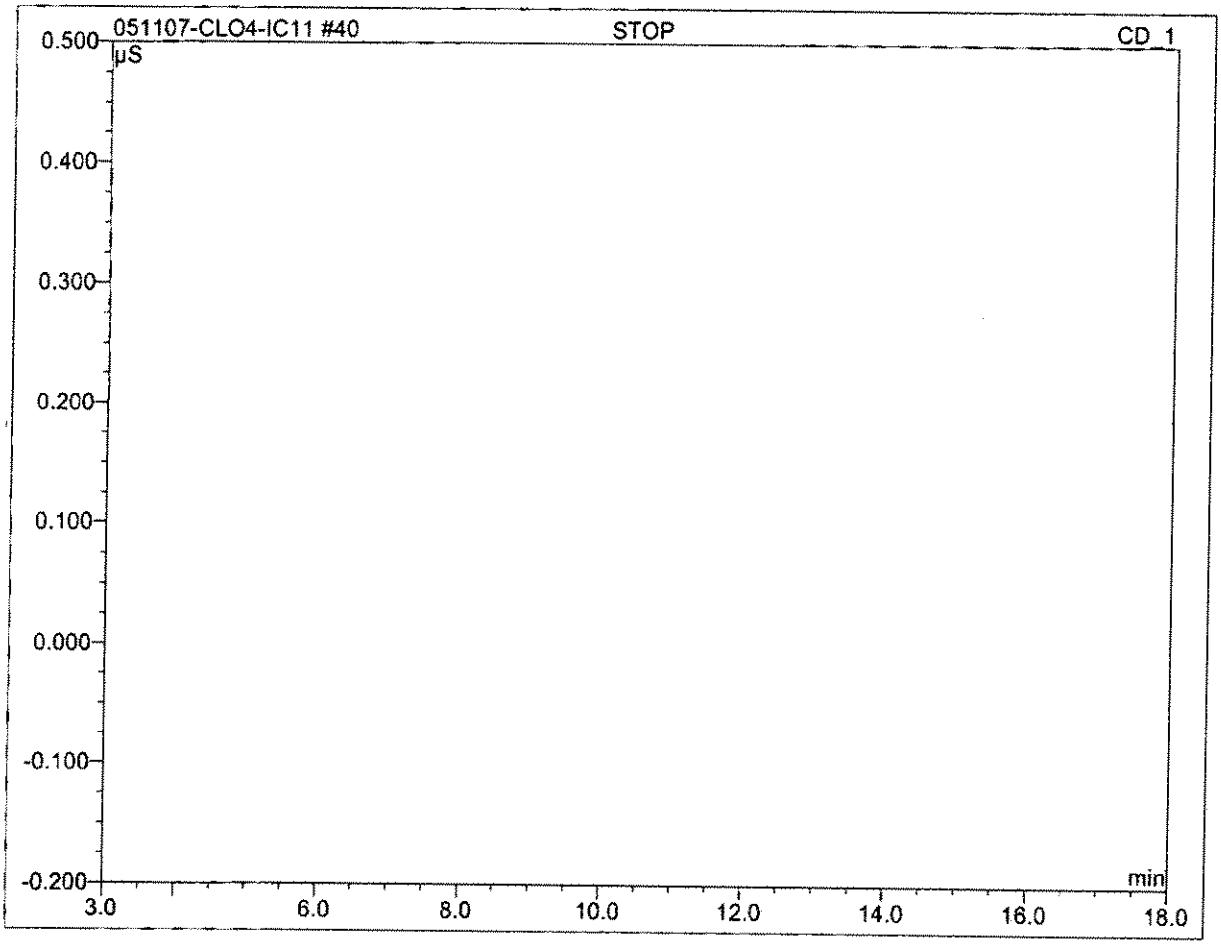
Sample Name:	**HCV**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**Perchlorate-IC11**
Recording Time:	**05/11/2007 23:04**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	13.95	CLO4	0.231	0.100	100.00	101.099	BMB*
Total:			0.231	0.100	100.00	101.099	

40 STOP

Sample Name:	**STOP**	*Channel:*	**CD_1**
Sample Type:	**unknown**	*Control Program:*	**IC11 Stop**
Recording Time:	**05/11/2007 23:27**	*Quantif. Method:*	**IC#4-CLO4-LOW**
Analyst:	**Raja**	*Dilution Factor:*	**1.0000**



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

Standard Preparation Worksheet & Certificate of Analysis

Reagent Preparation Documentation

Reagent: DBP LCS Stock Solution
Date Received/Prepped: 082706/100106/110106/111606/122006/010807/020607
Date Expired: 092706/110106/120106/121606/012007/020807/030607
Manufacturer:
Storage Condition:

MW #: Raja060827-1
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
Chlorite 1000ppm	1000 µL → Add 50 µL of EDA (LMR060129-12) the	R201401	10ppm
Exp:- 03-24-07			
Chlorate 1000ppm	1000 µL	R201400	10ppm
Exp:- 05-31-09	dilute to 100 ml ~~with~~ Raja with D.I. water		
Bromide	500 µL	R201369	5ppm
Exp:- 10-27-07			

Comment:

Reagent: DBP LCS Solution
Date Received/Prepped: 082706/100106/110106/111606/122006/010807/020607
Date Expired: 092706/110106 Raja/120106/121606/012007/020807/030607
Manufacturer:
Storage Condition:

MW #: Rajaa060827-2
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
DBP LCS stock soln	2ml → Dilute with D.I. water to 100 ml	Rajaa060827-1	ClO_2:-200ppb
			ClO_3:-200ppb
EDA Solution	50 µL	LMR060129-12	Br:-100ppb

Comment: Prepd:-
Expired:-

Reagent: Perchlorate Calibration Stock Solution
Date Received/Prepped: 091306/101106/113006/012107/~~020607~~ 020807/022807
Date Expired: 121306/011107/023007/042107/~~053007~~ 050807/052807
Manufacturer:
Storage Condition:

MW #: Rajaa060913-1
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
Perchlorate 1000ppm	100 µL → Dilute with D.I	R201449	1000ppb
Exp:- 072809	water to 100ml		
	MS/MSD		

Comment: 030407/042707/051607/061207/
060407/072707/081607/091207/

Reagent Preparation Documentation

Reagent: ClO4 Calibration Standard #1
Date Received/Prepped: 091306/101106/113006/012107/022807
Date Expired: 121306/011107/023007/042107/052807
Manufacturer:
Storage Condition:

MW #: Raja060913-2
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. Stock Soln	200 µL → Dilute to 100ml with D.I. water	Raja060913-1	2.0 ppb

Comment: 030407/042707/051607/061207/
060407/072707/081607/091207/

Reagent: ClO4 Calibration Standard #2
Date Received/Prepped: 091306/101106/113006/012107/022807
Date Expired: 121306/011107/023007/042107/052807
Manufacturer:
Storage Condition:

MW #: Raja060913-3
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. Stock Soln	400 µL → Raise to 100ml with D.I water	Raja060913-1	4.0 ppb

Comment: 030407/042707/051607/061207/
060407/072707/081607/091207/

Reagent: ClO4 Calibration Standard #3
Date Received/Prepped: 091306/101106/113006/012107/022807
Date Expired: 121306/011107/023007/042107/052807
Manufacturer:
Storage Condition:

MW #: Raja060913-4
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. stock soln	1ml → Dilute to 100ml with D.I. water	Raja060913-1	10.0 ppb

Comment: 030407/042707/051607/061207/
060407/072707/081607/091207/

Reagent Preparation Documentation

Reagent: ClO4 Calibration Standard #4
Date Received/Prepped: 091306/101106/113006/012107/022807/030407
Date Expired: 121306/011107/023007/042107/052807/060407
Manufacturer:
Storage Condition:

MW #: Raja060913-5
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. Stock Sol'n	2.5 ml → Dilute to 100 ml with D.I. water	Raja060913-1	25.0 ppb

Comment: 042707/051607/061207/072707/081607/091207/

Reagent: ClO4 Calibration Standard #5
Date Received/Prepped: 091306/101106/113006/012107/022807/030407
Date Expired: 121306/011107/023007/042107/052807/060407
Manufacturer:
Storage Condition:

MW #: Raja060913-6
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. Stock Sol'n	5.0 ml → Dilute to 100 ml with D.I. water	Raja060913-1	50.0 ppb

Comment: 042707/051607/072707/081607/

Reagent: ClO4 Calibration Standard #6
Date Received/Prepped: 091306/101106/113006/012107/022807/030407
Date Expired: 121306/011107/023007/042107/052807/060407
Manufacturer:
Storage Condition:

MW #: Raja060913-7
By: Raja
Matrix: aq
Amount: 100ml
Lot #:

Component	Comment	Standard	Concentration
ClO4 Cal. Stock Sol'n	10.0 ml → Dilute to 100 ml with D.I. water	Raja060913-1	100 ppb

Comment: 042707/051607/061207/072707/081607/091207/

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DLS ANSI/RAB Accredited

CERTIFIED WEIGHT REPORT:

Part Number: 57001
Lot Number: 072806
Description: Perchlorate

R201449

Expiration Date: 072809

Nominal Concentration (µg/mL): 1000

	Lot #	
Solvent(s):	072806	ASTM Type 1 Water

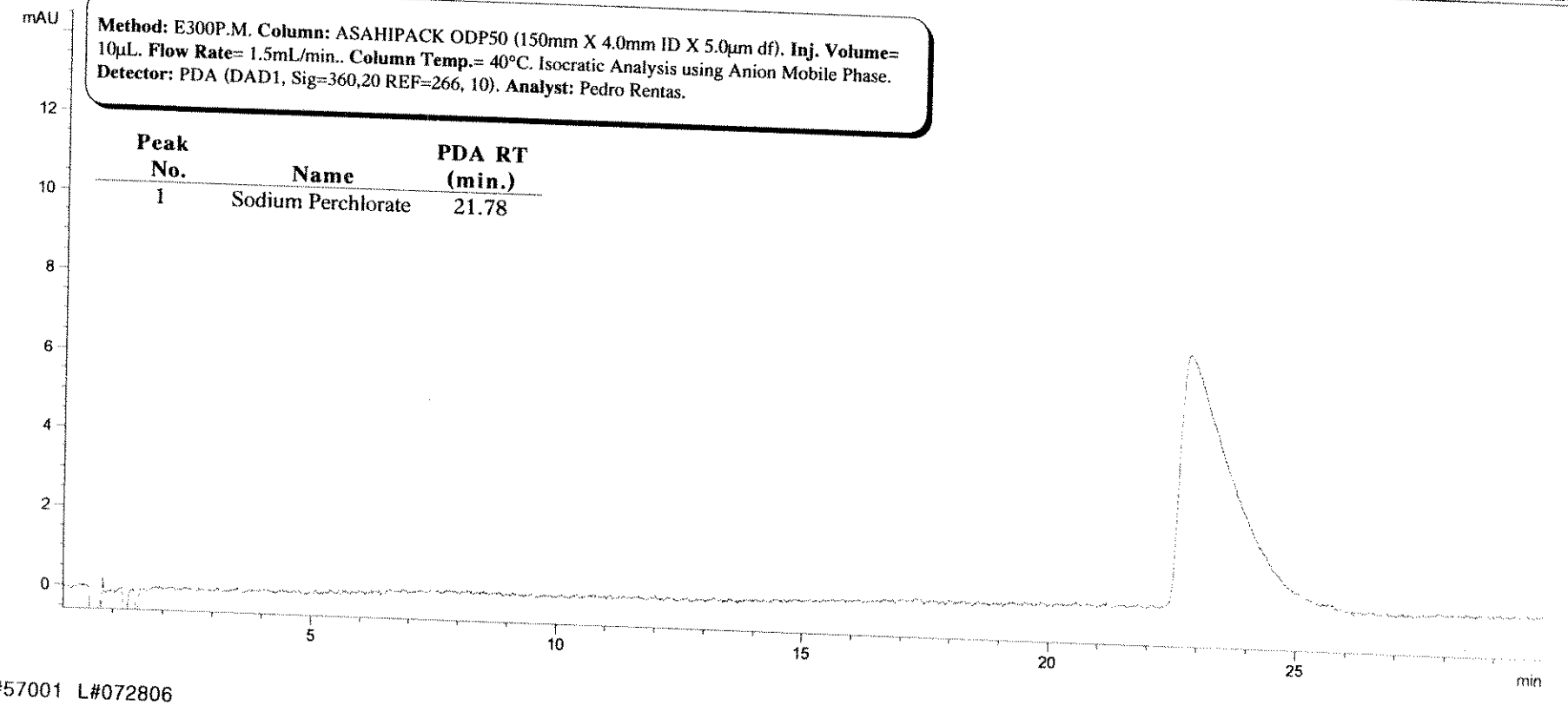
Weight(s) shown below were combined and diluted to (mL): 1000.55

5E-05 Balance Uncertainty
0.084 Flask Uncertainty

Formulated By: Lawrence Barry 072806

Reviewed By: Pedro L. Rentas 072806

Compound	RM#	Lot Number	Nominal Conc (µg/mL)	Purity	Uncertainty Purity	Assay (%)	Target Weight(g)	Actual Weight(g)	*Actual Conc (µg/mL)	Expanded Uncertainty (+/-)	MSDS Information (Solvent Safety Info. On Attached pg.) CAS#	OSHA PEL (TWA)	LD50	NIST SRM
1. Sodium Perchlorate (ClO4)	IN119	AR06730TQ	1000.0	99.0	0.10	81.2	1.2319	1.23216	1000.2	0.00203	07601-89-0	N/A	N/A	3152a



Method: E300P.M. **Column:** ASAHIPACK ODP50 (150mm X 4.0mm ID X 5.0µm df). **Inj. Volume=** 10µL. **Flow Rate=** 1.5mL/min.. **Column Temp.=** 40°C. Isocratic Analysis using Anion Mobile Phase. **Detector:** PDA (DAD1, Sig=360,20 REF=266, 10). **Analyst:** Pedro Rentas.

Peak No.	Name	PDA RT (min.)
1	Sodium Perchlorate	21.78

81

P#57001 L#072806

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