

## TABLE OF CONTENTS

<b>Cover Page</b> .....	<b>2</b>
<b>QC Checklist</b> .....	<b>3</b>
<b>Summary Sheet</b> .....	<b>4</b>
<b>Sequence Log</b> .....	<b>8</b>
<b>Initial Calibration</b> .....	<b>22</b>
<b>QC: (MRL Check; Method Blank; LCS/LCSD; Matrix Spike 2705010189 MS/MSD)</b> .....	<b>39</b>
<b>Periodic QC</b> .....	<b>46</b>
<b>Samples</b> .....	<b>48</b>
<b>Closing QC</b> .....	<b>51</b>
<b>Standards Preparation Worksheet and Certificates of Analysis</b> .....	<b>56</b>

# Level IV Data Package

MWH Group 203332

**Method:** SW 846 9056 Nitrate (as N)

Sample No.:

2705020860  
2705020862  
2705020864

## ANIONS QC Checklist (CHLORIDE, NITRITE, NITRATE & SULFATE)

Analysis Date: 05/02/07 Analyst: YH

QC'd by YH Date 7 May 07

Instrument: IC3

### Calibration including LCS/LCSD(Secondary Source)

- LCS/LCSD recovery is within 90% - 110% to verify that the calibration curve still holds.
- Correlation Coefficient of calibration curve for quadratic is 0.99 or better (0.995 for linear curve)

Initial QC Check (HCV2, HCV1, MCV, CCB, LOWRL, CLRL, MBLANK, ) to be analyzed with every batch (up to 20 samples) or part thereof

- MBLANK is analyzed before samples. Anions, if present, should be < or = half of the MRL (LOWRL or CLRL).
- LOWRL & CLRL are within 50% - 150%
- HCV2, HCV1, MCV, LCS & LCSD are within 90% - 110%

	CL	NO2-N	NO3	SO4
HCV2	80 (72 - 88)	8 (7.2 - 8.8)	8 (7.2 - 8.8)	160 (144 - 176)
HCV1	50 (45 - 55)	5 (4.5 - 5.5)	5 (4.5 - 5.5)	100 (90 - 110)
MCV	20 (18 - 22)	2 (1.8 - 2.2)	2 (1.8 - 2.2)	40 (36 - 44)
LOWRL	0.125	0.0125 (0.006 - 0.018)	0.0125 (0.006 - 0.018)	0.250 (0.125 - 0.375)
CLRL	0.50 (0.25 - 0.75)	0.050 (0.025 - 0.075)	0.050 (0.025 - 0.075)	1.00 (0.50 - 1.50)
LCS/LCSD	25 (22.5 - 27.5)	1.00 (0.90 - 1.10)	2.50 (2.25 - 2.75)	50 (45 - 55)

MS/MSD: Acceptance criteria for : CL=74%-126% NO3=80%-112% SO4=83%-115%

- RPD between MS/MSD is within 10%
- One MS per 10 samples, one MSD per 20 samples or part thereof

### Continuing Calibration Verification

- Verification checks alternate between mid-(MCV) and high- (HCV) levels during the analysis.
- Blank analyzed after each MCV and HCV

### Samples

- All samples should be unpreserved
- Samples for nitrate and nitrite are analyzed within 48 hours of collection.
- Samples for chloride and sulfate are analyzed within 28 days of collection.

YH NO3-LOWI  
YH SO4-LOWI  
 NO39056  
YH CL-LF  
YH SO4-LF

### QIR

- None QIR needed for failed QC
  - None QIR needed for samples analyzed outside of hold time
- None Change MDL for NO2-N & NO3 to 0.0125 for samples diluted more than 10X.

### Misc

Any sample with result above the MCL, inform the project manager

YH for NO2-N, MCL = 1 ppm      YH for NO3, MCL = 10 ppm

# SUMMARY SHEET

File ID: 050207AN  
Date Started: 04/23/07  
Analyst ID: jkz

## SAMPLE ID

autocal1	(10:21)	autocal2	(10:35)	autocal3	(10:48)
autocal4	(11:02)	autocal5	(11:16)	autocal6	(11:29)
autocal7	(11:43)	autocal8	(11:56)	autocal9	(12:10)
autocal10	(12:24)	autocal11	(12:37)	LOWRL	(10:06)
2705010189	(11:14)	2705010190_1	(11:55)	2705010193_1	(12:09)
2705010352_1	(12:22)	2705010353_1	(12:36)	2705010429_1	(12:50)
2705010192_1	(13:03)	2705010631_1	(13:22)	2705010632_1	(13:36)
2705010117_1	(13:50)	2705010123_1	(14:30)	2705010129_1	(14:44)
2705010132_1	(14:58)	2705010135_1	(15:11)	2705010140_1	(15:25)
2705020813	(15:39)	2705020862_1	(16:06)	2705020860_1	(16:20)
2705020864_1	(16:33)	2705020800_1	(16:47)	LOWRL	(17:41)
2705020258	(18:50)	2705020227_1	(19:30)	2705020801_1	(19:44)
2704270074_1	(19:58)	2704270075_1	(20:11)	2704270076_1	(20:25)
2704270077_1	(20:39)	2704270078_1	(20:52)	2705020726_1	(21:06)
2705020727_1	(21:19)	2705020139_1	(22:00)	2704180088_1	(22:28)
2704180090_1	(22:41)	2704180241_1	(22:55)	2704180242_1	(23:09)
2704180243_1	(23:22)	2704270130_1	(23:36)	( )	

COMMENT:

---

---

---

---

Analyst: jkz

Approved By: km

Sample ID	Date	Time	Dil
autocal1	04/23/07	10:21	1
autocal2	04/23/07	10:35	1
autocal3	04/23/07	10:48	1
autocal4	04/23/07	11:02	1
autocal5	04/23/07	11:16	1
autocal6	04/23/07	11:29	1
autocal7	04/23/07	11:43	1
autocal8	04/23/07	11:56	1
autocal9	04/23/07	12:10	1
autocal10	04/23/07	12:24	1
autocal11	04/23/07	12:37	1
HCV2	05/02/07	09:11	1
HCV1	05/02/07	09:25	1
MCV	05/02/07	09:38	1
CCB	05/02/07	09:52	1
LOWRL	05/02/07	10:06	1
MRL	05/02/07	10:19	1
MBLANK	05/02/07	10:33	1
LCS	05/02/07	10:47	1
LCSD	05/02/07	11:00	1
2705010189	05/02/07	11:14	2
2705010189MS	05/02/07	11:28	2
2705010189MSD	05/02/07	11:41	2
2705010190_1/2	05/02/07	11:55	2
2705010193_1/2	05/02/07	12:09	2
2705010352_1/2	05/02/07	12:22	2
2705010353_1/2	05/02/07	12:36	2
2705010429_1/2	05/02/07	12:50	2
2705010192_1/2	05/02/07	13:03	2
2705010631_1/2	05/02/07	13:22	2
2705010632_1/2	05/02/07	13:36	2
2705010117_1/25	05/02/07	13:50	25
MCV	05/02/07	14:03	1
CCB	05/02/07	14:17	1
2705010123_1/50	05/02/07	14:30	50
2705010129_1/50	05/02/07	14:44	50
2705010132_1/50	05/02/07	14:58	50
2705010135_1/50	05/02/07	15:11	50
2705010140_1/50	05/02/07	15:25	50
2705020813	05/02/07	15:39	1
2705020813MS	05/02/07	15:52	1
2705020862_1/10	05/02/07	16:06	10
2705020860_1/50	05/02/07	16:20	50
2705020864_1/25	05/02/07	16:33	25
2705020800_1/25	05/02/07	16:47	25
HCV2	05/02/07	17:00	1
HCV1	05/02/07	17:14	1
CCB	05/02/07	17:28	1
LOWRL	05/02/07	17:41	1

File ID: 050207AN

RUN - LOG

Sample ID	Date	Time	Dil
MRL	05/02/07	17:55	1
MBLANK	05/02/07	18:09	1
LCS	05/02/07	18:22	1
LCSD	05/02/07	18:36	1
2705020258	05/02/07	18:50	1
2705020258MS	05/02/07	19:03	1
2705020258MSD	05/02/07	19:17	1
2705020227	05/02/07	19:30	1
2705020801_1/25	05/02/07	19:44	25
2704270074_1/2DNR	05/02/07	19:58	2
2704270075_1/5	05/02/07	20:11	5
2704270076_1/5	05/02/07	20:25	5
2704270077_1/2	05/02/07	20:39	2
2704270078_1/500	05/02/07	20:52	500
2705020726_1/25	05/02/07	21:06	25
2705020727_1/25	05/02/07	21:19	25
MCV	05/02/07	21:33	1
CCB	05/02/07	21:47	1
2705020139	05/02/07	22:00	1
2705020139MS	05/02/07	22:14	1
2704180088_1/50	05/02/07	22:28	50
2704180090_1/50	05/02/07	22:41	50
2704180241_1/25	05/02/07	22:55	25
2704180242_1/25	05/02/07	23:09	25
2704180243_1/25	05/02/07	23:22	25
2704270130	05/02/07	23:36	1
HCV2	05/02/07	23:49	1
HCV1	05/03/07	00:03	1
CCB	05/03/07	00:17	1
			0

BATCH NUMBER for 050207AN

Test Parameter:

CL NO2-N NO3 SO4 NO3A

Batch ID: 2705010189

2705010189	2705010190_1/2	2705010193_1/2
2705010352_1/2	2705010353_1/2	2705010429_1/2
2705010192_1/2	2705010631_1/2	2705010632_1/2
2705010117_1/25	2705010123_1/50	2705010129_1/50
2705010132_1/50	2705010135_1/50	2705010140_1/50
2705020813	2705020862_1/10	2705020860_1/50
2705020864_1/25	2705020800_1/25	

Batch ID: 2705020258

2705020258	2705020227	2705020801_1/25
2704270074_1/2DNR	2704270075_1/5	2704270076_1/5
2704270077_1/2	2704270078_1/500	2705020726_1/25
2705020727_1/25	2705020139	2704180088_1/50
2704180090_1/50	2704180241_1/25	2704180242_1/25
2704180243_1/25	2704270130	

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
autocal1	04/23/07	10:21	1	0	ND		
autocal2	04/23/07	10:35	1	.01119077	ND		
autocal3	04/23/07	10:48	1	.02642006	ND		
autocal4	04/23/07	11:02	1	.04708525	ND		
autocal5	04/23/07	11:16	1	.09429577	.1		
autocal6	04/23/07	11:29	1	.19528	0.20		
autocal7	04/23/07	11:43	1	.50186	0.50		
autocal8	04/23/07	11:56	1	.96874	0.97		
autocal9	04/23/07	12:10	1	2.4848	2.5		
autocal10	04/23/07	12:24	1	5.0212	5.0		
autocal11	04/23/07	12:37	1	9.9962	10		
HCV2	05/02/07	09:11	1	8.1124	8.11	90-110	101%
HCV1	05/02/07	09:25	1	5.1404	5.14	90-110	102%
MCV	05/02/07	09:38	1	1.92	1.92	90-110	96%
CCB	05/02/07	09:52	1	0	ND		
LOWRL	05/02/07	10:06	1	.01006292	ND		
MRL	05/02/07	10:19	1	.04791984	ND	50-150	95.8%
MBLANK	05/02/07	10:33	1	0	ND		
LCS	05/02/07	10:47	1	2.4926	2.49	90-110	99.7%
LCSD	05/02/07	11:00	1	2.3766	2.38	90-110	95.0%
2705010189	05/02/07	11:14	2	5.2095	5.2		
2705010189MS	05/02/07	11:28	2	7.6202	7.62		
2705010189MSD	05/02/07	11:41	2	7.6089	7.61		
2705010189T	05/02/07	11:41	2		2.50	90 - 110	
2705010190_1/2	05/02/07	11:55	2	4.1828	4.2		
2705010193_1/2	05/02/07	12:09	2	5.2880	5.3		
2705010352_1/2	05/02/07	12:22	2	4.3165	4.3		
2705010353_1/2	05/02/07	12:36	2	2.2724	2.3		
2705010429_1/2	05/02/07	12:50	2	6.4166	6.4		
2705010192_1/2	05/02/07	13:03	2	7.1687	7.2		
2705010631_1/2	05/02/07	13:22	2	4.9673	5.0		
2705010632_1/2	05/02/07	13:36	2	1.9016	1.9		
2705010117_1/25	05/02/07	13:50	25	15.078	15		
MCV	05/02/07	14:03	1	1.9203	1.92	90-110	96.0%
CCB	05/02/07	14:17	1	0	ND		
2705010123_1/50	05/02/07	14:30	50	50.365	50		
2705010129_1/50	05/02/07	14:44	50	14.195	14		
2705010132_1/50	05/02/07	14:58	50	<del>23.514</del>	24		
2705010135_1/50	05/02/07	15:11	50	30.679	31		
2705010140_1/50	05/02/07	15:25	50	13.712	14		
2705020813	05/02/07	15:39	1	0	ND		

*Handwritten notes:*  
 TV=1.25, 1.21  
 [ 2.411 ] 96.4%  
 [ 2.399 ] 95.9%  
 jbs 05/04/07

*Handwritten notes:*  
 13.4192

*Handwritten note:*  
 jbs 05/03/07

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2705020813MS	05/02/07	15:52	1	1.1651	1.17	[ 1.165]	93.2%
2705020862_1/10	05/02/07	16:06	10	2.7221	2.7		
2705020860_1/50	05/02/07	16:20	50	11.867	12		
2705020864_1/25	05/02/07	16:33	25	84.134	84		
2705020800_1/25	05/02/07	16:47	25	9.7404	9.7		
HCV2	05/02/07	17:00	1	8.2886	8.29	90-110	103%
HCV1	05/02/07	17:14	1	4.9556	4.96	90-110	99.1%
CCB	05/02/07	17:28	1	0	ND		
LOWRL	05/02/07	17:41	1	.01091901	ND		
MRL	05/02/07	17:55	1	.04636857	ND	50-150	92.7%
MBLANK	05/02/07	18:09	1	0	ND		
LCS	05/02/07	18:22	1	2.4897	2.49	90-110	99.5%
LCSD	05/02/07	18:36	1	2.4056	2.41	90-110	96.2%
2705020258	05/02/07	18:50	1	.04819996	ND		
2705020258MS	05/02/07	19:03	1	1.2481	1.25	[ 1.200]	95.9% <i>by 05/04/07</i>
2705020258MSD	05/02/07	19:17	1	1.2446	1.24	[ 1.196]	95.7%
2705020258T	05/02/07	19:17	1		1.25	90 - 110	
2705020227	05/02/07	19:30	1	.03863216	ND		
2705020801_1/25	05/02/07	19:44	25	9.1373	9.1		
2704270074_1/2DNR	05/02/07	19:58	2	0	ND		
2704270075_1/5	05/02/07	20:11	5	0	ND		
2704270076_1/5	05/02/07	20:25	5	0	ND		
2704270077_1/2	05/02/07	20:39	2	0	ND		
2704270078_1/500	05/02/07	20:52	500	0	ND		
2705020726_1/25	05/02/07	21:06	25	0	ND		
2705020727_1/25	05/02/07	21:19	25	0	ND		
MCV	05/02/07	21:33	1	1.9413	1.94	90-110	97.0%
CCB	05/02/07	21:47	1	0	ND		
2705020139	05/02/07	22:00	1	.08470186	.1		
2705020139MS	05/02/07	22:14	1	1.2752	1.28	[ 1.191]	95.2% <i>by 05/04/07</i>
2704180088_1/50	05/02/07	22:28	50	15.170	15		
2704180090_1/50	05/02/07	22:41	50	0	ND		
2704180241_1/25	05/02/07	22:55	25	14.269	14		
2704180242_1/25	05/02/07	23:09	25	13.285	13		
2704180243_1/25	05/02/07	23:22	25	13.019	13		
2704270130	05/02/07	23:36	1	2.1894	2.2		
HCV2	05/02/07	23:49	1	8.1799	8.18	90-110	102%
HCV1	05/03/07	00:03	1	4.9243	4.92	90-110	98.4%
CCB	05/03/07	00:17	1	0	ND		
			0	N/A	ND		

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
autocal1	04/23/07	10:21	1	0	ND		
autocal2	04/23/07	10:35	1	.04923938	0		
autocal3	04/23/07	10:48	1	.11624	0.12		
autocal4	04/23/07	11:02	1	.20717	0.21		
autocal5	04/23/07	11:16	1	.41490	0.41		
autocal6	04/23/07	11:29	1	.85927	0.86		
autocal7	04/23/07	11:43	1	2.2082	2.2		
autocal8	04/23/07	11:56	1	4.2624	4.3		
autocal9	04/23/07	12:10	1	10.933	11		
autocal10	04/23/07	12:24	1	22.093	22		
autocal11	04/23/07	12:37	1	43.983	44		
HCV2	05/02/07	09:11	1	35.694	35.7	90-110	
HCV1	05/02/07	09:25	1	22.618	22.6	90-110	
MCV	05/02/07	09:38	1	8.448	8.45	90-110	
CCB	05/02/07	09:52	1	0	ND		
LOWRL	05/02/07	10:06	1	.04427686	0		
MRL	05/02/07	10:19	1	.21084	0.211	50-150	
MBLANK	05/02/07	10:33	1	0	ND		
LCS	05/02/07	10:47	1	10.967	11	90-110	
LCSD	05/02/07	11:00	1	10.457	10.5	90-110	
2705010189	05/02/07	11:14	2	22.921	23		
2705010189MS	05/02/07	11:28	2	33.528	33.5		
2705010189MSD	05/02/07	11:41	2	33.479	33.5		
2705010190_1/2	05/02/07	11:55	2	18.404	18		
2705010193_1/2	05/02/07	12:09	2	23.267	23		
2705010352_1/2	05/02/07	12:22	2	18.992	19		
2705010353_1/2	05/02/07	12:36	2	9.9987	10		
2705010429_1/2	05/02/07	12:50	2	28.233	28		
2705010192_1/2	05/02/07	13:03	2	31.542	32		
2705010631_1/2	05/02/07	13:22	2	21.856	22		
2705010632_1/2	05/02/07	13:36	2	8.3670	8.4		
2705010117_1/25	05/02/07	13:50	25	66.346	66		
MCV	05/02/07	14:03	1	8.4497	8.45	90-110	
CCB	05/02/07	14:17	1	0	ND		
2705010123_1/50	05/02/07	14:30	50	221.60	220		
2705010129_1/50	05/02/07	14:44	50	62.459	62		
2705010132_1/50	05/02/07	14:58	50	103.46	100	59	
2705010135_1/50	05/02/07	15:11	50	134.99	130		
2705010140_1/50	05/02/07	15:25	50	60.333	60		
2705020813	05/02/07	15:39	1	0	ND		

59.04

phy 05/03/07

Sample ID	Date	Time	Dil	Raw	Rept.	Limit	Comment
2705020813MS	05/02/07	15:52	1	5.1264	5.13		
2705020862_1/10	05/02/07	16:06	10	11.977	12		
2705020860_1/50	05/02/07	16:20	50	52.215	52		
2705020864_1/25	05/02/07	16:33	25	370.19	370		
2705020800_1/25	05/02/07	16:47	25	42.858	43		
HCV2	05/02/07	17:00	1	36.470	36.5	90-110	
HCV1	05/02/07	17:14	1	21.804	21.8	90-110	
CCB	05/02/07	17:28	1	0	ND		
LOWRL	05/02/07	17:41	1	.04804366	0		
MRL	05/02/07	17:55	1	.20402	0.204	50-150	
MBLANK	05/02/07	18:09	1	0	ND		
LCS	05/02/07	18:22	1	10.954	11	90-110	
LCS D	05/02/07	18:36	1	10.584	10.6	90-110	
2705020258	05/02/07	18:50	1	.21207	0.21		
2705020258MS	05/02/07	19:03	1	5.4918	5.49		
2705020258MSD	05/02/07	19:17	1	5.4765	5.48		
2705020227	05/02/07	19:30	1	.16998	0.17		
2705020801_1/25	05/02/07	19:44	25	40.204	40		
2704270074_1/2DNR	05/02/07	19:58	2	0	ND		
2704270075_1/5	05/02/07	20:11	5	0	ND		
2704270076_1/5	05/02/07	20:25	5	0	ND		
2704270077_1/2	05/02/07	20:39	2	0	ND		
2704270078_1/500	05/02/07	20:52	500	0	ND		
2705020726_1/25	05/02/07	21:06	25	0	ND		
2705020727_1/25	05/02/07	21:19	25	0	ND		
MCV	05/02/07	21:33	1	8.5418	8.54	90-110	
CCB	05/02/07	21:47	1	0	ND		
2705020139	05/02/07	22:00	1	.37268	0.37		
2705020139MS	05/02/07	22:14	1	5.6112	5.61		
2704180088_1/50	05/02/07	22:28	50	66.751	67		
2704180090_1/50	05/02/07	22:41	50	0	ND		
2704180241_1/25	05/02/07	22:55	25	62.784	63		
2704180242_1/25	05/02/07	23:09	25	58.457	58		
2704180243_1/25	05/02/07	23:22	25	57.284	57		
2704270130	05/02/07	23:36	1	9.6334	9.6		
HCV2	05/02/07	23:49	1	35.991	36	90-110	
HCV1	05/03/07	00:03	1	21.667	21.7	90-110	
CCB	05/03/07	00:17	1	0	ND		
			0	N/A	ND		

Sample ID	Time	CL	NO2-N	NO3	SO4	NO3A
autocal1	10:21	0.0000	0.0000	0.0000	0.0000	0.0000
autocal2	10:35	0.1165	0.0114	0.0112	0.3225	0.0492
autocal3	10:48	0.2205	0.0237	0.0264	0.5063	0.1162
autocal4	11:02	0.4621	0.0556	0.0471	0.9529	0.2072
autocal5	11:16	0.8911	0.1044	0.0943	1.921	0.4149
autocal6	11:29	1.772	0.2008	0.1953	3.864	0.8593
autocal7	11:43	4.702	0.4910	0.5019	10.02	2.208
autocal8	11:56	9.565	0.9958	0.9687	19.67	4.262
autocal9	12:10	25.37	2.485	2.485	50.21	10.93
autocal10	12:24	49.94	5.013	5.021	99.97	22.09
autocal11	12:37	90.05	9.998	9.996	186.5	43.98
HCV2	09:11	75.6/80	7.78	8.11	154	35.7
HCV1	09:25	51.6/50	5.15	5.14	98.6	22.6
MCV	09:38	19.3/20	1.94	1.92	38.8	8.45
CCB	09:52	0.0000	0.0000	0.0000	0.0000	0.0000
LOWRL	10:06	0.1081	0.0112	0.0101	0.2402	0.0443
MRL	10:19	0.435/.5	0.051	0.048	0.958	0.211
MBLANK	10:33	0.0000	0.0000	0.0000	0.0000	0.0000
LCS	10:47	25.4/25	0.996	2.49	51.0	11.0
LCSD	11:00	24.4/25	0.964	2.38	49.0	10.5
2705010189	11:14	27.64	0.0000	5.210	65.64	22.92
2705010189MS	11:28	53.10	0.9489	7.620	115.1	33.53
2705010189MSD	11:41	53.03	0.9564	7.609	115.0	33.48
2705010190_1/2	11:55	18.11	0.0000	4.183	69.10	18.40
2705010193_1/2	12:09	22.58	0.0000	5.288	67.66	23.27
2705010352_1/2	12:22	19.70	0.0000	4.317	40.99	18.99
2705010353_1/2	12:36	26.67	0.0000	2.272	43.34	9.999
2705010429_1/2	12:50	15.28	0.0000	6.417	84.09	28.23
2705010192_1/2	13:03	53.42	0.0000	7.169	63.41	31.54
2705010631_1/2	13:22	26.66	0.0000	4.967	35.09	21.86
2705010632_1/2	13:36	22.97	0.0000	1.902	26.43	8.367
2705010117_1/25	13:50	318.9	0.0000	15.08	927.1	66.35
MCV	14:03	19.3/20	1.91	1.92	38.5	8.45
CCB	14:17	0.0000	0.0000	0.0000	0.0000	0.0000
2705010123_1/50	14:30	692.9	0.0000	50.37	*1234.9	221.6
2705010129_1/50	14:44	*1489.8	0.0000	14.20	*2157.1	62.46
2705010132_1/50	14:58	906.3	0.0000	<del>23.51</del> 13.42	*2173.3	<del>103.5</del> 59.0
2705010135_1/50	15:11	*1345.1	0.0000	30.68	*2037.9	135.0
2705010140_1/50	15:25	*1449.3	0.0000	13.71	*2099.9	60.33
2705020813	15:39	0.0143	0.0000	0.0000	0.0360	0.0000
2705020813MS	15:52	11.51	0.4886	1.165	23.84	5.126
2705020862_1/10	16:06	360.6	0.0000	2.722	*1479.4	11.98
2705020860_1/50	16:20	*1708.2	0.0000	11.87	*1161.8	52.22
2705020864_1/25	16:33	745.8	19.02	84.13	*1198.2	370.2
2705020800_1/25	16:47	804.4	0.0000	9.740	*3091.6	42.86
HCV2	17:00	76.2/80	7.89	8.29	156	36.5
HCV1	17:14	48.7/50	4.86	4.96	97.7	21.8
CCB	17:28	0.0000	0.0000	0.0000	0.0000	0.0000
LOWRL	17:41	0.1184	0.0123	0.0109	0.2440	0.0480

Landscape Summary

File ID: 050207AN

Date: 04/23/07

Analyst: j

Sample ID	Time	CL	NO2-N	NO3	SO4	NO3A
MRL	17:55	0.446/.5	0.053	0.046	0.953	0.204
MBLANK	18:09	0.0000	0.0000	0.0000	0.0000	0.0000
LCS	18:22	25.5/25	0.989	2.49	51.2	11.0
LCSD	18:36	24.7/25	0.981	2.41	49.4	10.6
2705020258	18:50	0.5333	0.0000	0.0482	0.2933	0.2121
2705020258MS	19:03	12.53	0.4846	1.248	24.84	5.492
2705020258MSD	19:17	12.54	0.4841	1.245	24.75	5.477
2705020227	19:30	0.7031	0.0000	0.0386	0.9158	0.1700
2705020801_1/25	19:44	923.1	0.0000	9.137	33193.7	40.20
2704270074_1/2DNR	19:58	0.1069	0.0000	0.0000	0.3900	0.0000
2704270075_1/5	20:11	107.9	0.0000	0.0000	1.053	0.0000
2704270076_1/5	20:25	138.1	0.0000	0.0000	1.036	0.0000
2704270077_1/2	20:39	157.4	0.0000	0.0000	1.337	0.0000
2704270078_1/500	20:52	18933.3	0.0000	0.0000	2550.5	0.0000
2705020726_1/25	21:06	689.6	0.0000	0.0000	312.9	0.0000
2705020727_1/25	21:19	691.7	0.0000	0.0000	312.0	0.0000
MCV	21:33	19.6/20	1.95	1.94	39.1	8.54
CCB	21:47	0.0000	0.0000	0.0000	0.0000	0.0000
2705020139	22:00	4.627	0.0000	0.0847	11.92	0.3727
2705020139MS	22:14	17.08	0.4883	1.275	36.49	5.611
2704180088_1/50	22:28	1998.1	3.686	15.17	1667.2	66.75
2704180090_1/50	22:41	2180.9	0.0000	0.0000	1560.2	0.0000
2704180241_1/25	22:55	295.0	0.0000	14.27	661.1	62.78
2704180242_1/25	23:09	319.3	0.0000	13.29	621.3	58.46
2704180243_1/25	23:22	311.6	0.0000	13.02	613.6	57.28
2704270130	23:36	120.4	0.0000	2.189	25.66	9.633
HCV2	23:49	75.8/80	7.88	8.18	155	36.0
HCV1	00:03	48.6/50	4.87	4.92	97.3	21.7
CCB	00:17	0.0000	0.0000	0.0000	0.0000	0.0000
		N/A	N/A	N/A	N/A	N/A

No.,	Sample Name,	Time,	Dil.Fac.,	Amount,	Amount,	Amount,	Amount,
				CL, ECD 1,	NO2-N, ECD 1,	NO3, ECD 1,	SO4, ECD 1,
1,	autocal1,	04/23/07 10:21,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
2,	autocal2,	04/23/07 10:35,	1.0,	0.116504152,	0.011373243,	0.0111908,	0.32250473,
3,	autocal3,	04/23/07 10:48,	1.0,	0.220458642,	0.023690966,	0.0264201,	0.50629779,
4,	autocal4,	04/23/07 11:02,	1.0,	0.462083575,	0.055559044,	0.0470852,	0.95290282,
5,	autocal5,	04/23/07 11:16,	1.0,	0.891137569,	0.104380442,	0.0942958,	1.92120449,
6,	autocal6,	04/23/07 11:29,	1.0,	1.772321839,	0.200817315,	0.1952895,	3.86354051,
7,	autocal7,	04/23/07 11:43,	1.0,	4.70204277,	0.491013791,	0.501867,	10.0175509,
8,	autocal8,	04/23/07 11:56,	1.0,	9.565285325,	0.995768704,	0.9687499,	19.6650442,
9,	autocal9,	04/23/07 12:10,	1.0,	25.3709243,	2.484592288,	2.4848697,	50.209908,
10,	autocal10,	04/23/07 12:24,	1.0,	49.93761155,	5.013238137,	5.0212895,	99.9655545,
11,	autocal11,	04/23/07 12:37,	1.0,	90.05394873,	9.997941553,	9.9962529,	186.51482,
12,	HCV2,	05/02/07 09:11,	1.0,	75.62370621,	7.781360138,	8.1124884,	154.331569,
13,	HCV1,	05/02/07 09:25,	1.0,	51.58976572,	5.14563255,	5.1404886,	98.6218647,
14,	MCV,	05/02/07 09:38,	1.0,	19.34077717,	1.936917282,	1.9199999,	38.7547513,
15,	CCB,	05/02/07 09:52,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
16,	LOWRL,	05/02/07 10:06,	1.0,	0.108100218,	0.011233406,	0.0100629,	0.2402099,
17,	MRL,	05/02/07 10:19,	1.0,	0.435073864,	0.050959054,	0.0479198,	0.95827211,
18,	MBLANK,	05/02/07 10:33,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
19,	LCS,	05/02/07 10:47,	1.0,	25.37010578,	0.996491409,	2.4926277,	50.9965408,
20,	LCSD,	05/02/07 11:00,	1.0,	24.40736412,	0.963715873,	2.376662,	49.0244801,
21,	2705010189,	05/02/07 11:14,	2.0,	27.64164285,	n.a.,	5.2095144,	65.6372662,
22,	2705010189MS,	05/02/07 11:28,	2.0,	53.10104225,	0.948907943,	7.6202196,	115.083123,
23,	2705010189MSD,	05/02/07 11:41,	2.0,	53.02782193,	0.956420402,	7.6089463,	114.95533,
24,	2705010190_1/2,	05/02/07 11:55,	2.0,	18.11291548,	n.a.,	4.182833,	69.103982,
25,	2705010193_1/2,	05/02/07 12:09,	2.0,	22.57555367,	n.a.,	5.2880384,	67.6616693,
26,	2705010352_1/2,	05/02/07 12:22,	2.0,	19.7008434,	n.a.,	4.3165447,	40.9929292,
27,	2705010353_1/2,	05/02/07 12:36,	2.0,	26.66665965,	n.a.,	2.2724435,	43.3373557,
28,	2705010429_1/2,	05/02/07 12:50,	2.0,	15.28019646,	n.a.,	6.416689,	84.0906229,
29,	2705010192_1/2,	05/02/07 13:03,	2.0,	53.42026499,	n.a.,	7.1687235,	63.4089535,
30,	2705010631_1/2,	05/02/07 13:22,	2.0,	26.66098408,	n.a.,	4.9673363,	35.0946455,
31,	2705010632_1/2,	05/02/07 13:36,	2.0,	22.97270935,	n.a.,	1.9016091,	26.4331468,
32,	2705010117__1/25,	05/02/07 13:50,	25.0,	318.9314061,	n.a.,	15.078849,	927.101113,
33,	MCV,	05/02/07 14:03,	1.0,	19.34165348,	1.911017415,	1.9203962,	38.5309018,
34,	CCB,	05/02/07 14:17,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
35,	2705010123__1/50,	05/02/07 14:30,	50.0,	692.8598049,	n.a.,	50.365445,	1234.91813,
36,	2705010129__1/50,	05/02/07 14:44,	50.0,	1489.75501,	n.a.,	14.195374,	2157.08962,
37,	2705010132__1/50,	05/02/07 14:58,	50.0,	906.3046727,	n.a.,	13.419307,	2173.33543,
38,	2705010135__1/50,	05/02/07 15:11,	50.0,	1345.141376,	n.a.,	30.679575,	2037.92627,
39,	2705010140__1/50,	05/02/07 15:25,	50.0,	1449.348268,	n.a.,	13.71217,	2099.88945,
40,	2705020813,	05/02/07 15:39,	1.0,	0.014316713,	n.a.,	n.a.,	0.03603124,
41,	2705020813MS,	05/02/07 15:52,	1.0,	11.51366727,	0.488575297,	1.165107,	23.8421108,
42,	2705020862_1/10,	05/02/07 16:06,	10.0,	360.602704,	n.a.,	2.7221183,	1479.4328,
43,	2705020860_1/50,	05/02/07 16:20,	50.0,	1708.209547,	n.a.,	11.867195,	1161.84744,
44,	2705020864_1/25,	05/02/07 16:33,	25.0,	745.7974439,	19.01799831,	84.134547,	1198.22774,

anions\_no3A/Summary

45.	2705020800_1/25,	05/02/07 16:47,	25.0,	804.3590853,	n.a.,	9.7404858,	3091.55085,
46.	HCV2,	05/02/07 17:00,	1.0,	76.2222284,	7.885001431,	8.2886689,	155.804078,
47.	HCV1,	05/02/07 17:14,	1.0,	48.65365645,	4.862839866,	4.9556427,	97.6831971,
48.	CCB,	05/02/07 17:28,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
49.	LOWRL,	05/02/07 17:41,	1.0,	0.118440803,	0.012315393,	0.010919,	0.24399231,
50.	MRL,	05/02/07 17:55,	1.0,	0.446267513,	0.053363993,	0.0463686,	0.95256717,
51.	MBLANK,	05/02/07 18:09,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
52.	LCS,	05/02/07 18:22,	1.0,	25.54240258,	0.988931895,	2.4897239,	51.1668694,
53.	LCSD,	05/02/07 18:36,	1.0,	24.65409189,	0.980549563,	2.4056805,	49.424443,
54.	2705020258,	05/02/07 18:50,	1.0,	0.533347308,	n.a.,	0.0482,	0.29328348,
55.	2705020258MS,	05/02/07 19:03,	1.0,	12.52964872,	0.484647797,	1.2481422,	24.8375716,
56.	2705020258MSD,	05/02/07 19:17,	1.0,	12.53667542,	0.484123841,	1.2446772,	24.7503557,
57.	2705020227,	05/02/07 19:30,	1.0,	0.703098244,	n.a.,	0.0386322,	0.91576132,
58.	2705020801_1/25,	05/02/07 19:44,	25.0,	923.0796823,	n.a.,	9.1373253,	3193.66958,
59.	2704270074_1/2DNI	05/02/07 19:58,	2.0,	0.106864713,	n.a.,	n.a.,	0.3900078,
60.	2704270075_1/5,	05/02/07 20:11,	5.0,	107.8705408,	n.a.,	n.a.,	1.05305442,
61.	2704270076_1/5,	05/02/07 20:25,	5.0,	138.0654401,	n.a.,	n.a.,	1.03615337,
62.	2704270077_1/2,	05/02/07 20:39,	2.0,	157.4304247,	n.a.,	n.a.,	1.33691353,
63.	2704270078_1/500,	05/02/07 20:52,	500.0,	18933.26579,	n.a.,	n.a.,	2550.52157,
64.	2705020726_1/25,	05/02/07 21:06,	25.0,	689.5764476,	n.a.,	n.a.,	312.883856,
65.	2705020727_1/25,	05/02/07 21:19,	25.0,	691.6940312,	n.a.,	n.a.,	311.953267,
66.	MCV,	05/02/07 21:33,	1.0,	19.5682639,	1.945236086,	1.9413392,	39.1177222,
67.	CCB,	05/02/07 21:47,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
68.	2705020139,	05/02/07 22:00,	1.0,	4.626797482,	n.a.,	0.0847019,	11.9200276,
69.	2705020139MS,	05/02/07 22:14,	1.0,	17.08027934,	0.488340343,	1.2752888,	36.4890755,
70.	2704180088_1/50,	05/02/07 22:28,	50.0,	1998.07299,	3.685891677,	15.170897,	1667.22395,
71.	2704180090_1/50,	05/02/07 22:41,	50.0,	2180.932846,	n.a.,	n.a.,	1560.16445,
72.	2704180241_1/25,	05/02/07 22:55,	25.0,	294.9796359,	n.a.,	14.269194,	661.117097,
73.	2704180242_1/25,	05/02/07 23:09,	25.0,	319.261435,	n.a.,	13.285851,	621.266564,
74.	2704180243_1/25,	05/02/07 23:22,	25.0,	311.6362894,	n.a.,	13.019099,	613.647618,
75.	2704270130,	05/02/07 23:36,	1.0,	120.4412573,	n.a.,	2.1894153,	25.6572928,
76.	HCV2,	05/02/07 23:49,	1.0,	75.83735428,	7.881434561,	8.1799791,	154.991453,
77.	HCV1,	05/03/07 00:03,	1.0,	48.59055605,	4.872508705,	4.9243325,	97.3462256,
78.	CCB,	05/03/07 00:17,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,
79.	STOP,	05/03/07 00:30,	1.0,	n.a.,	n.a.,	n.a.,	n.a.,

Amount	jkz
NO3, A	<i>jkz</i>
ECD 1	
n.a.	<i>05/04/07</i>
0.04923938,	
0.11624825,	
0.20717509,	
0.41490138,	
0.85927391,	
2.20821477,	
4.26249942,	
10.9334266,	
22.0936737,	
43.983513,	
35.6949488,	
22.6181498,	
8.44799965,	
n.a.,	
0.04427686,	
0.2108473,	
n.a.,	
10.9675617,	
10.4573127,	
22.9218633,	
33.5289661,	
33.4793638,	
18.404465,	
23.2673691,	
18.9927966,	
9.99875123,	
28.2334317,	
31.5423836,	
21.8562797,	
8.3670801,	
66.3469346,	
8.44974336,	
n.a.,	
221.607959,	
62.4596476,	
59.0449494,	
134.990131,	
60.3335495,	
n.a.,	
5.12647077,	
11.9773207,	
52.2156601,	
370.192006,	

42.8581375,
36.470143,
21.8048281,
n.a.,
0.04804366,
0.2040217,
n.a.,
10.9547853,
10.5849943,
0.2120798,
5.49182585,
5.47657962,
0.16998149,
40.2042312,
n.a.,
n.a.,
n.a.,
n.a.,
n.a.,
n.a.,
n.a.,
8.54189236,
n.a.,
0.37268819,
5.6112706,
66.7519476,
n.a.,
62.784453,
58.4577448,
57.2840343,
9.63342743,
35.9919079,
21.6670631,
n.a.,
n.a.,

Sequence: 050207AN  
Operator: jkz

Title: Anion by EPA 300.0  
Datasource: Dionex\_USPAS2SDIO2  
Location: IC\IC3\_DX120\_Anions\2007\May  
Timebase: IC3  
#Samples: 79

Created: 5/2/2007 9:06:31 AM by jkz  
Last Update: 5/3/2007 11:13:44 AM by jkz

No.	Name	Sample ID	Dil. Factor	Type	Program	Method
1	autocal1		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
2	autocal2		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
3	autocal3		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
4	autocal4		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
5	autocal5		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
6	autocal6		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
7	autocal7		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
8	autocal8		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
9	autocal9		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
10	autocal10		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
11	autocal11		1.0000	Standard	IC#3-ANION TTL2	ANION-IC#3
12	HCV2		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
13	HCV1		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
14	MCV		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
15	CCB		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
16	LOWRL		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
17	MRL		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
18	MBLANK		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
19	LCS		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
20	LCSD		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
21	2705010189	RIV-7TH & CHICAGO_1/2	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
22	2705010189MS	RIV-7TH & CHICAGO_1/2	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
23	2705010189MSD	RIV-7TH & CHICAGO_1/2	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
24	2705010190_1/2	RIV-GRAND TERR	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
25	2705010193_1/2	RIV-GAGE	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
26	2705010352_1/2	RIV-DC-3	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
27	2705010353_1/2	RIV-DC-4	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
28	2705010429_1/2	RIV-RAUB GAC EFF	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
29	2705010192_1/2	RIV-NORTH ORANGE	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
30	2705010631_1/2	RPT-MONR-WELL # 3	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
31	2705010632_1/2	RPT-MONR-WELL # 5	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
32	2705010117__1/25	RPT-KERR-M-48	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
33	MCV		25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
34	CCB		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
35	2705010123__1/50	RPT-KERR-M-23	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
36	2705010129__1/50	RPT-KERR-PC-124	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
37	2705010132__1/50	RPT-KERR-PC-128	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
38	2705010135__1/50	RPT-KERR-PC-130	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
39	2705010140__1/50	RPT-KERR-MD-5	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
40	2705020813	KERR-EB050107	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
41	2705020813MS	KERR-EB050107	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
42	2705020862_1/10	KERR-M-10	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
			10.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3

Sequence: 050207AN  
Operator: jkz

Title: Anion by EPA 300.0  
Datasource: Dionex\_USPAS2SDIO2  
Location: IC1C3\_DX120\_Anions12007May  
Timebase: IC3  
#Samples: 79

Created: 5/2/2007 9:06:31 AM by jkz  
Last Update: 5/3/2007 11:13:44 AM by jkz

No.	Name	Status	Comment	Inj. Date/Time	*Analyst	*operator
1	autocal1	Finished		4/23/2007 10:21:32 AM	jkz	JKZ
2	autocal2	Finished	JKZ070423-1	4/23/2007 10:35:10 AM	jkz	JKZ
3	autocal3	Finished	JKZ070423-2	4/23/2007 10:48:48 AM	jkz	JKZ
4	autocal4	Finished	JKZ070423-3	4/23/2007 11:02:26 AM	jkz	JKZ
5	autocal5	Finished	JKZ070423-4	4/23/2007 11:16:03 AM	jkz	JKZ
6	autocal6	Finished	JKZ070423-5	4/23/2007 11:29:41 AM	jkz	JKZ
7	autocal7	Finished	JKZ070423-6	4/23/2007 11:43:19 AM	jkz	JKZ
8	autocal8	Finished	JKZ070423-7	4/23/2007 11:56:57 AM	jkz	JKZ
9	autocal9	Finished	JKZ070423-8	4/23/2007 12:10:35 PM	jkz	JKZ
10	autocal10	Finished	JKZ070423-9	4/23/2007 12:24:12 PM	jkz	JKZ
11	autocal11	Finished	JKZ070423-10	4/23/2007 12:37:50 PM	jkz	JKZ
12	HCV2	Finished		5/2/2007 9:11:33 AM	jkz	JKZ
13	HCV1	Finished		5/2/2007 9:25:11 AM	jkz	JKZ
14	MCV	Finished		5/2/2007 9:38:50 AM	jkz	JKZ
15	CCB	Finished		5/2/2007 9:52:28 AM	jkz	JKZ
16	LOWRL	Finished		5/2/2007 10:06:06 AM	jkz	JKZ
17	MRL	Finished		5/2/2007 10:19:44 AM	jkz	JKZ
18	MBLANK	Finished		5/2/2007 10:33:22 AM	jkz	JKZ
19	LCS	Finished		5/2/2007 10:47:11 AM	jkz	JKZ
20	LCSD	Finished		5/2/2007 11:00:55 AM	jkz	JKZ
21	2705010189	Finished		5/2/2007 11:14:33 AM	jkz	JKZ
22	2705010189MS	Finished		5/2/2007 11:28:11 AM	jkz	JKZ
23	2705010189MSD	Finished		5/2/2007 11:41:51 AM	jkz	JKZ
24	2705010190_1/2	Finished		5/2/2007 11:55:31 AM	jkz	JKZ
25	2705010193_1/2	Finished		5/2/2007 12:09:08 PM	jkz	JKZ
26	2705010352_1/2	Finished		5/2/2007 12:22:46 PM	jkz	JKZ
27	2705010353_1/2	Finished		5/2/2007 12:36:24 PM	jkz	JKZ
28	2705010429_1/2	Finished		5/2/2007 12:50:02 PM	jkz	JKZ
29	2705010192_1/2	Finished		5/2/2007 1:03:40 PM	jkz	JKZ
30	2705010631_1/2	Finished		5/2/2007 1:22:47 PM	jkz	JKZ
31	2705010632_1/2	Finished		5/2/2007 1:36:26 PM	jkz	JKZ
32	2705010117__1/25	Finished		5/2/2007 1:50:03 PM	jkz	JKZ
33	MCV	Finished		5/2/2007 2:03:41 PM	jkz	JKZ
34	CCB	Finished		5/2/2007 2:17:19 PM	jkz	JKZ
35	2705010123__1/50	Finished		5/2/2007 2:30:59 PM	jkz	JKZ
36	2705010129__1/50	Finished		5/2/2007 2:44:37 PM	jkz	JKZ
37	2705010132__1/50	Finished		5/2/2007 2:58:15 PM	jkz	JKZ
38	2705010135__1/50	Finished		5/2/2007 3:11:52 PM	jkz	JKZ
39	2705010140__1/50	Finished		5/2/2007 3:25:31 PM	jkz	JKZ
40	2705020813	Finished		5/2/2007 3:39:09 PM	jkz	JKZ
41	2705020813MS	Finished		5/2/2007 3:52:47 PM	jkz	JKZ
42	2705020862_1/10	Finished		5/2/2007 4:06:25 PM	jkz	JKZ

Sequence: 050207AN  
Operator: jkz

Title: Anion by EPA 300.0  
Datasource: Dionex\_USPAS2SDIO2  
Location: IC1C3\_DX120\_Anions2007May  
Timebase: IC3  
#Samples: 79

Created: 5/2/2007 9:06:31 AM by jkz  
Last Update: 5/3/2007 11:13:44 AM by jkz

No.	Name	Sample ID	Dil. Factor	Type	Program	Method
43	2705020860_1/50	KERR-M-25	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
44	2705020864_1/25	KERR-M-37	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
45	2705020800_1/25	KERR-PC 2	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
46	HCV2		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
47	HCV1		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
48	CCB		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
49	LOWRL		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
50	MRL		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
51	MBLANK		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
52	LCS		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
53	LCSD		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
54	2705020258	CMPL-SOPIAGO SPRING	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
55	2705020258MS	CMPL-SOPIAGO SPRING	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
56	2705020258MSD	CMPL-SOPIAGO SPRING	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
57	2705020227	CMPL-SUGAR SPRING	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
58	2705020801_1/25	KERR-PC 2D	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
59	2704270074_1/2DNR	CL-POSEIDON-RO-PERM-A	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
60	2704270075_1/5	CL-POSEIDON-RO-PERM-B	5.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
61	2704270076_1/5	CL-POSEIDON-RO-PERM-C	5.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
62	2704270077_1/2	CL-POSEIDON-RO-PERM-D	2.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
63	2704270078_1/500	CL-POSEIDON-RAW FEED	500.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
64	2705020726_1/25	WRD-MADRONA#2 8:40	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
65	2705020727_1/25	WRD-MADRONA#2 7:50	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
66	MCV		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
67	CCB		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
68	2705020139	DASANI	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
69	2705020139MS	DASANI	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
70	2704180088_1/50	CL&SO4-KERR-INFLUENT	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
71	2704180090_1/50	CL&SO4-KERR-EFFLUENT	50.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
72	2704180241_1/25	CL&SO4-KERR-LVW UPGRADIENT	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
73	2704180242_1/25	CL&SO4-KERR-LVW 5.5	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
74	2704180243_1/25	CL&SO4-KERR-LVW 6.05	25.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
75	2704270130	SO4-UNITED-NJ	1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
76	HCV2		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
77	HCV1		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
78	CCB		1.0000	Unknown	IC#3-ANION TTL2	ANION-IC#3
79	STOP		1.0000	Unknown	STOP JAN03	ANION-IC#3

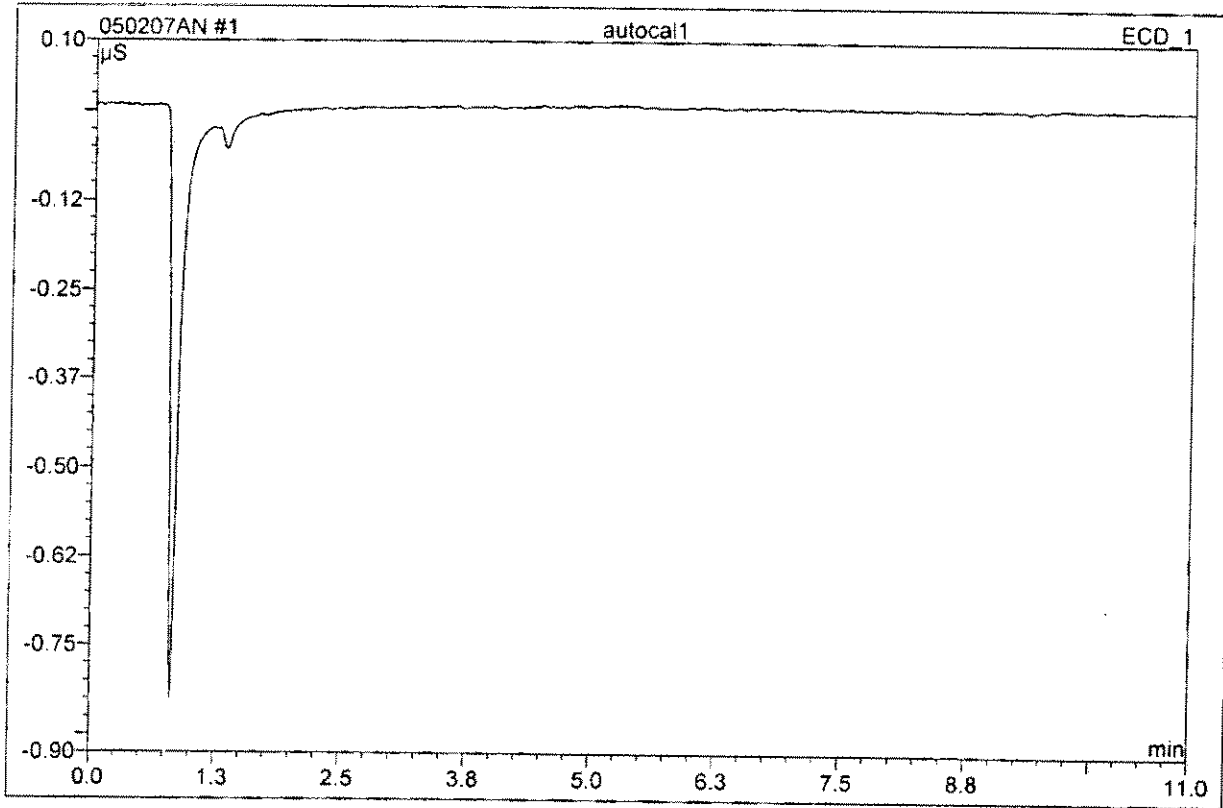
Sequence: 050207AN  
Operator: jkz

Title: Anion by EPA 300.0  
Datasource: Dionex\_USPAS2SDIO2  
Location: IC\IC3\_DX120\_Anions\2007\May  
Timebase: IC3  
#Samples: 79

Created: 5/2/2007 9:06:31 AM by jkz  
Last Update: 5/3/2007 11:13:44 AM by jkz

No.	Name	Status	Comment	Inj. Date/Time	*Analyst	*operator
43	2705020860_1/50	Finished		5/2/2007 4:20:04 PM	jkz	JKZ
44	2705020864_1/25	Finished		5/2/2007 4:33:42 PM	jkz	JKZ
45	2705020800_1/25	Finished		5/2/2007 4:47:20 PM	jkz	JKZ
46	HCV2	Finished		5/2/2007 5:00:58 PM	jkz	JKZ
47	HCV1	Finished		5/2/2007 5:14:36 PM	jkz	JKZ
48	CCB	Finished		5/2/2007 5:28:14 PM	jkz	JKZ
49	LOWRL	Finished		5/2/2007 5:41:52 PM	jkz	JKZ
50	MRL	Finished		5/2/2007 5:55:30 PM	jkz	JKZ
51	MBLANK	Finished		5/2/2007 6:09:07 PM	jkz	JKZ
52	LCS	Finished		5/2/2007 6:22:45 PM	jkz	JKZ
53	LCSD	Finished		5/2/2007 6:36:23 PM	jkz	JKZ
54	2705020258	Finished		5/2/2007 6:50:00 PM	jkz	JKZ
55	2705020258MS	Finished		5/2/2007 7:03:38 PM	jkz	JKZ
56	2705020258MSD	Finished		5/2/2007 7:17:16 PM	jkz	JKZ
57	2705020227	Finished		5/2/2007 7:30:54 PM	jkz	JKZ
58	2705020801_1/25	Finished		5/2/2007 7:44:31 PM	jkz	JKZ
59	2704270074_1/2DNR	Finished	MIS-INJECTED	5/2/2007 7:58:10 PM	jkz	JKZ
60	2704270075_1/5	Finished		5/2/2007 8:11:48 PM	jkz	JKZ
61	2704270076_1/5	Finished		5/2/2007 8:25:26 PM	jkz	JKZ
62	2704270077_1/2	Finished		5/2/2007 8:39:03 PM	jkz	JKZ
63	2704270078_1/500	Finished		5/2/2007 8:52:41 PM	jkz	JKZ
64	2705020726_1/25	Finished		5/2/2007 9:06:19 PM	jkz	JKZ
65	2705020727_1/25	Finished		5/2/2007 9:19:57 PM	jkz	JKZ
66	MCV	Finished		5/2/2007 9:33:35 PM	jkz	JKZ
67	CCB	Finished		5/2/2007 9:47:13 PM	jkz	JKZ
68	2705020139	Finished		5/2/2007 10:00:51 PM	jkz	JKZ
69	2705020139MS	Finished		5/2/2007 10:14:29 PM	jkz	JKZ
70	2704180088_1/50	Finished		5/2/2007 10:28:07 PM	jkz	JKZ
71	2704180090_1/50	Finished		5/2/2007 10:41:45 PM	jkz	JKZ
72	2704180241_1/25	Finished		5/2/2007 10:55:23 PM	jkz	JKZ
73	2704180242_1/25	Finished		5/2/2007 11:09:01 PM	jkz	JKZ
74	2704180243_1/25	Finished		5/2/2007 11:22:38 PM	jkz	JKZ
75	2704270130	Finished		5/2/2007 11:36:16 PM	jkz	JKZ
76	HCV2	Finished		5/2/2007 11:49:54 PM	jkz	JKZ
77	HCV1	Finished		5/3/2007 12:03:32 AM	jkz	JKZ
78	CCB	Finished		5/3/2007 12:17:10 AM	jkz	JKZ
79	STOP	Finished		5/3/2007 12:30:48 AM	jkz	JKZ

<b>1 autocal1</b>			
Sample Name:	autocal1	Injection Volume:	1000.0
Vial Number:	8	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 10:21	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000

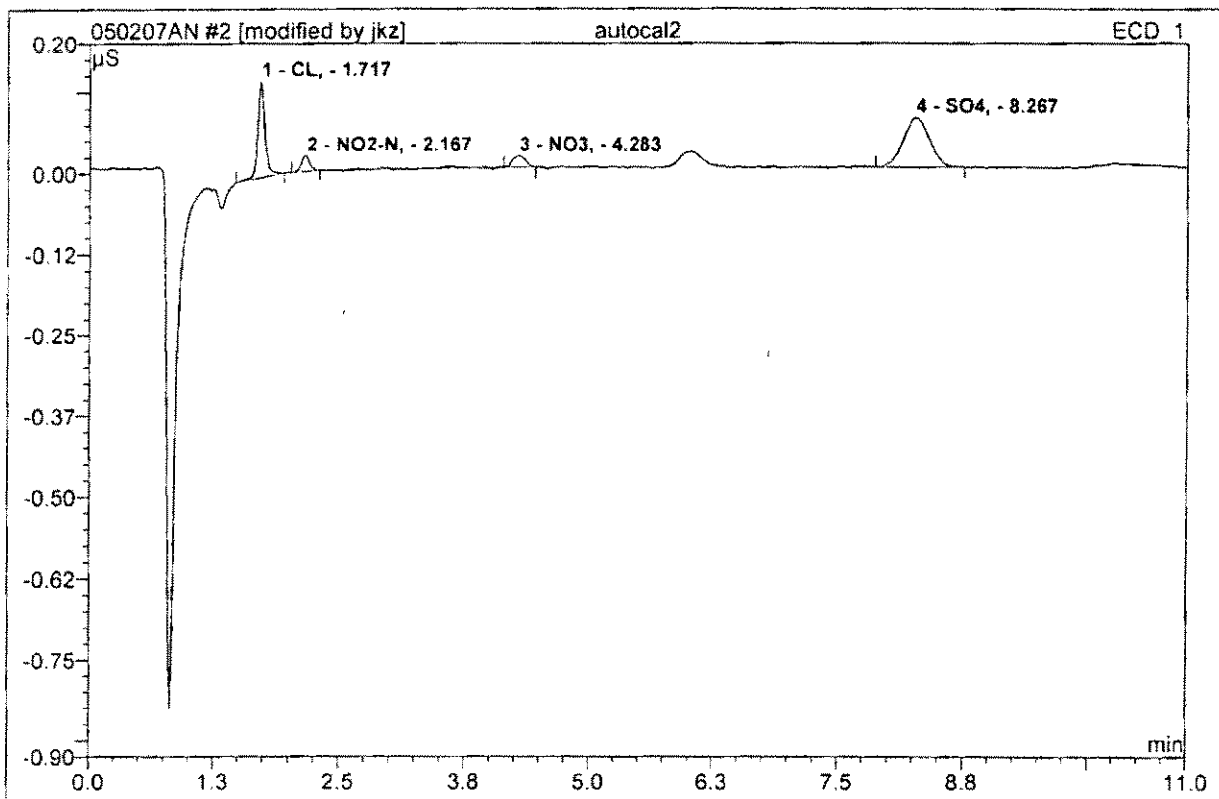


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

**2 autocal2**

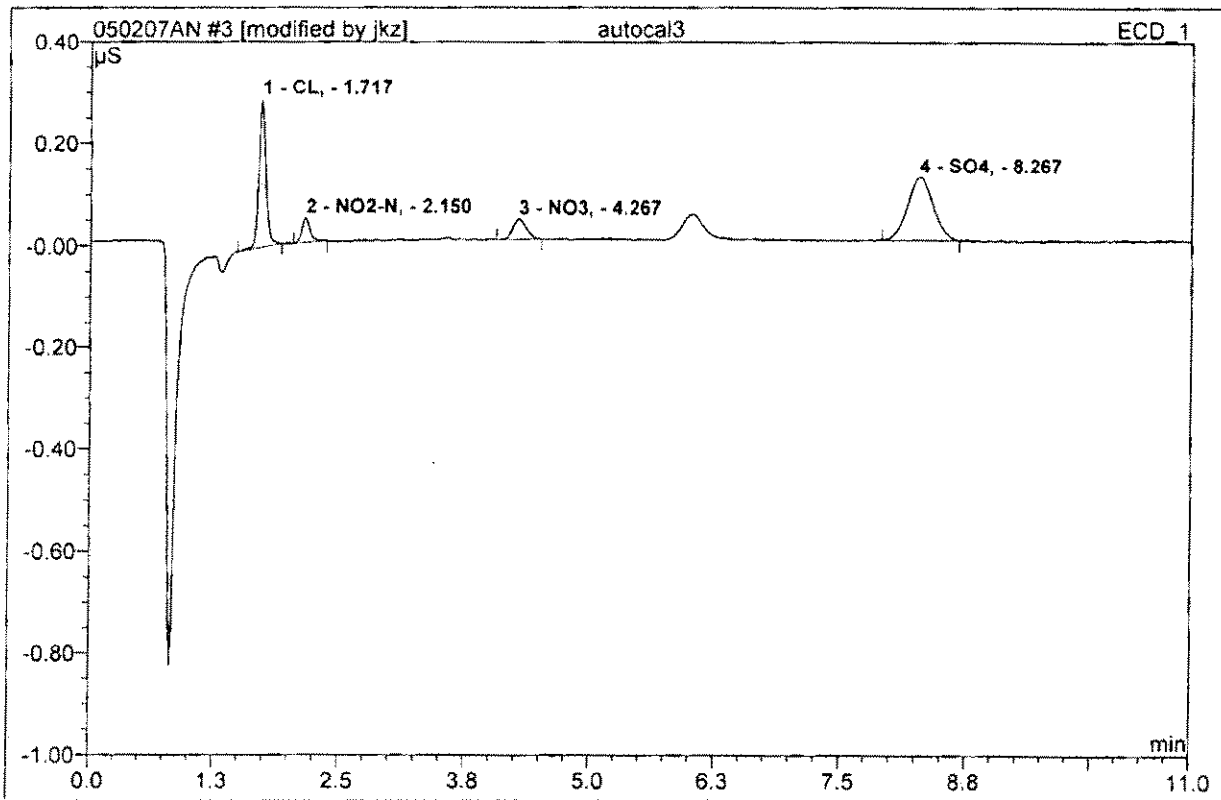
JKZ070423-1

Sample Name:	autocal2	Injection Volume:	1000.0
Vial Number:	4	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 10:35	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.72	CL,	0.148	0.013	31.05	0.117	BMB*
2	2.17	NO2-N,	0.023	0.002	5.52	0.011	BMB*
3	4.28	NO3,	0.018	0.003	6.46	0.011	BMB
4	8.27	SO4,	0.076	0.023	56.96	0.323	BMB
<b>Total:</b>			0.266	0.041	100.00	0.462	

<b>3 autocal3</b>		
<b>JKZ070423-2</b>		
Sample Name:	autocal3	Injection Volume: 1000.0
Vial Number:	2	Channel: ECD_1
Sample Type:	standard	Wavelength: n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth: n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor: 1.0000
Recording Time:	4/23/2007 10:48	Sample Weight: 1.0000
Run Time (min):	11.00	Sample Amount: 1.0000

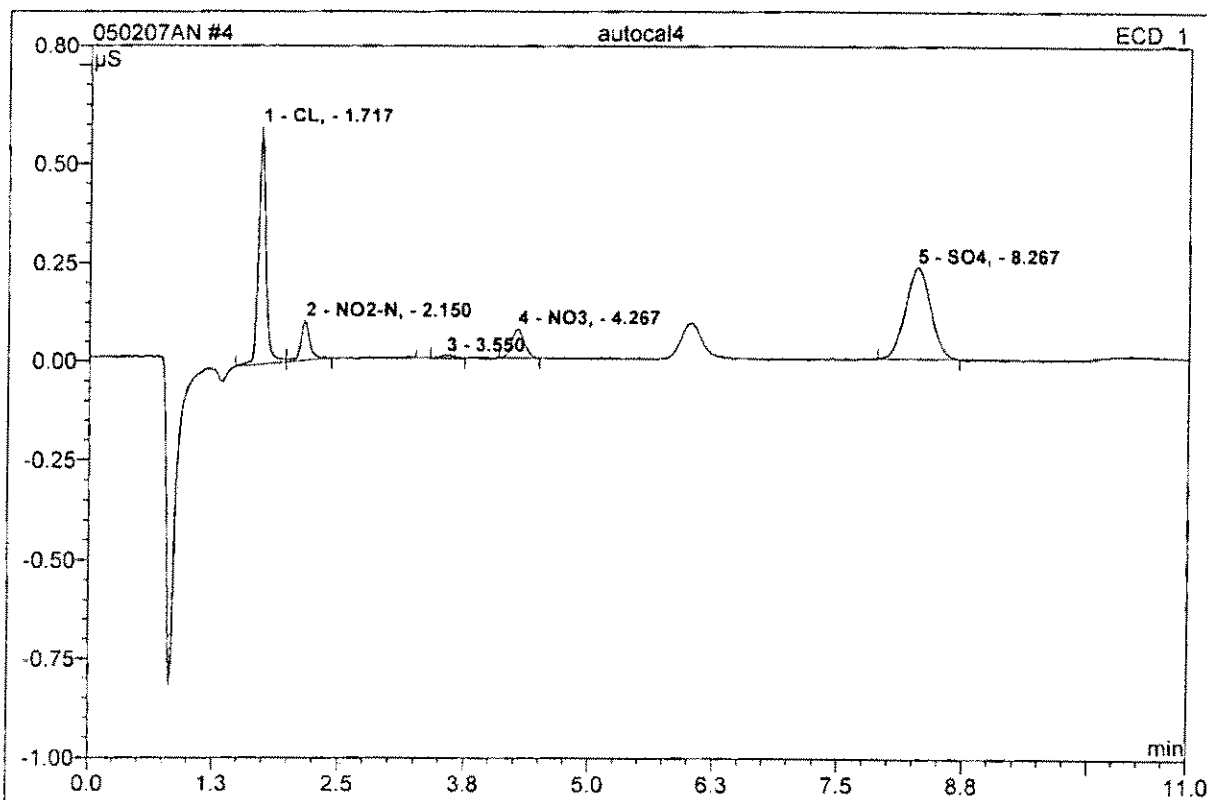


No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.72	CL,	0.291	0.024	33.59	0.220	BMB*
2	2.15	NO2-N,	0.048	0.005	6.58	0.024	BMB*
3	4.27	NO3,	0.039	0.006	8.72	0.026	BMB
4	8.27	SO4,	0.122	0.036	51.12	0.506	BMB
<b>Total:</b>			0.500	0.071	100.00	0.777	

**4 autocal4**

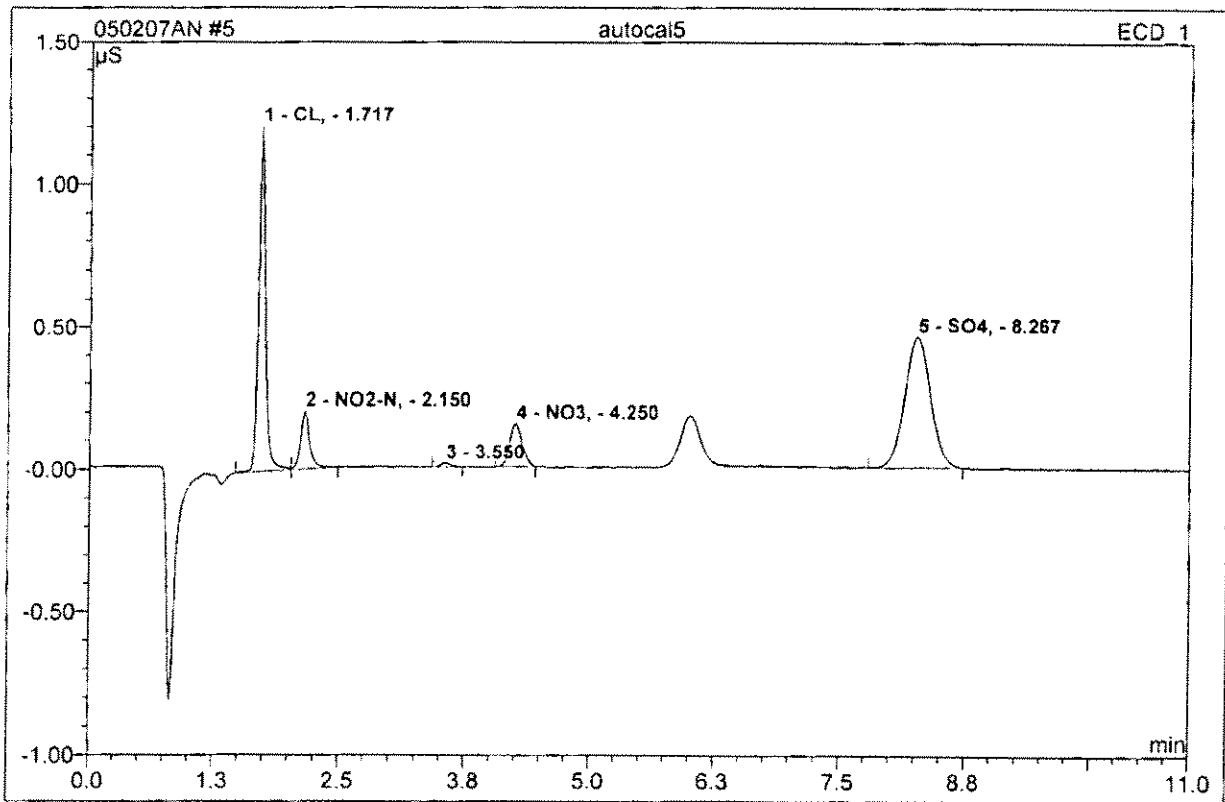
JKZ070423-3

Sample Name:	autocal4	Injection Volume:	1000.0
Vial Number:	3	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 11:02	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	CL,	0.602	0.050	35.32	0.462	BM
2	2.15	NO2-N,	0.102	0.011	7.73	0.056	MB
3	3.55	n.a.	0.007	0.001	0.89	n.a.	BMB
4	4.27	NO3,	0.076	0.011	7.79	0.047	BMB
5	8.27	SO4,	0.231	0.068	48.26	0.953	BMB
<b>Total:</b>			1.019	0.142	100.00	1.518	

<b>5 autocal5</b>			
<b>JKZ070423-4</b>			
Sample Name:	autocal5	Injection Volume:	1000.0
Vial Number:	4	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 11:16	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000

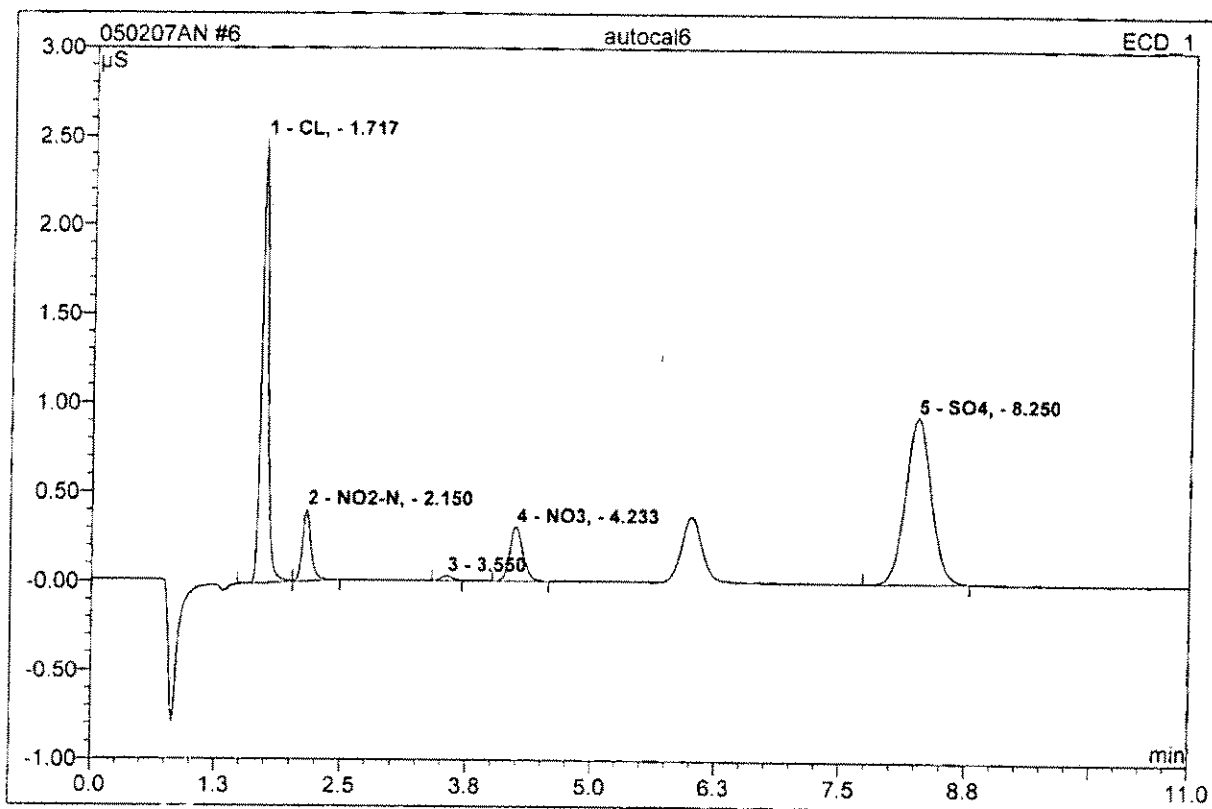


No.	Ret. Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Rel. Area %	Amount	Type
1	1.72	CL <sub>2</sub>	1.210	0.097	34.65	0.891	BM
2	2.15	NO <sub>2</sub> -N	0.202	0.021	7.38	0.104	MB
3	3.55	n.a.	0.013	0.002	0.55	n.a.	BMB
4	4.25	NO <sub>3</sub>	0.152	0.022	7.93	0.094	BMB
5	8.27	SO <sub>4</sub>	0.463	0.138	49.49	1.921	BMB
<b>Total:</b>			2.039	0.279	100.00	3.011	

**6 autocal6**

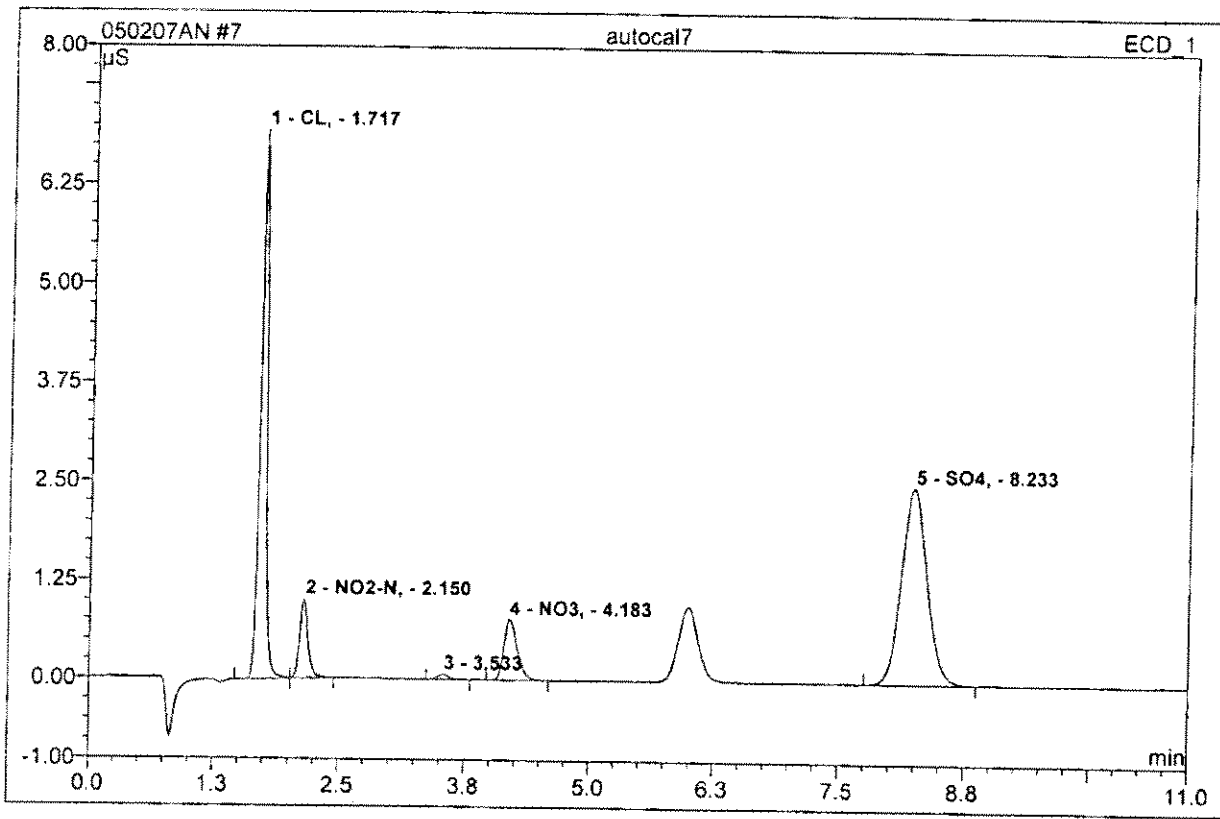
JKZ070423-5

Sample Name:	autocal6	Injection Volume:	1000.0
Vial Number:	5	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 11:29	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.72	CL,	2.490	0.193	34.43	1.772	BM
2	2.15	NO2-N,	0.403	0.040	7.08	0.201	MB
3	3.55	n.a.	0.027	0.003	0.60	n.a.	BMB
4	4.23	NO3,	0.304	0.046	8.18	0.195	BMB
5	8.25	SO4,	0.934	0.279	49.72	3.864	BMB
<b>Total:</b>			4.158	0.561	100.00	6.032	

<b>7 autocal7</b>			
<b>JKZ070423-6</b>			
Sample Name:	autocal7	Injection Volume:	1000.0
Vial Number:	6	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 11:43	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000

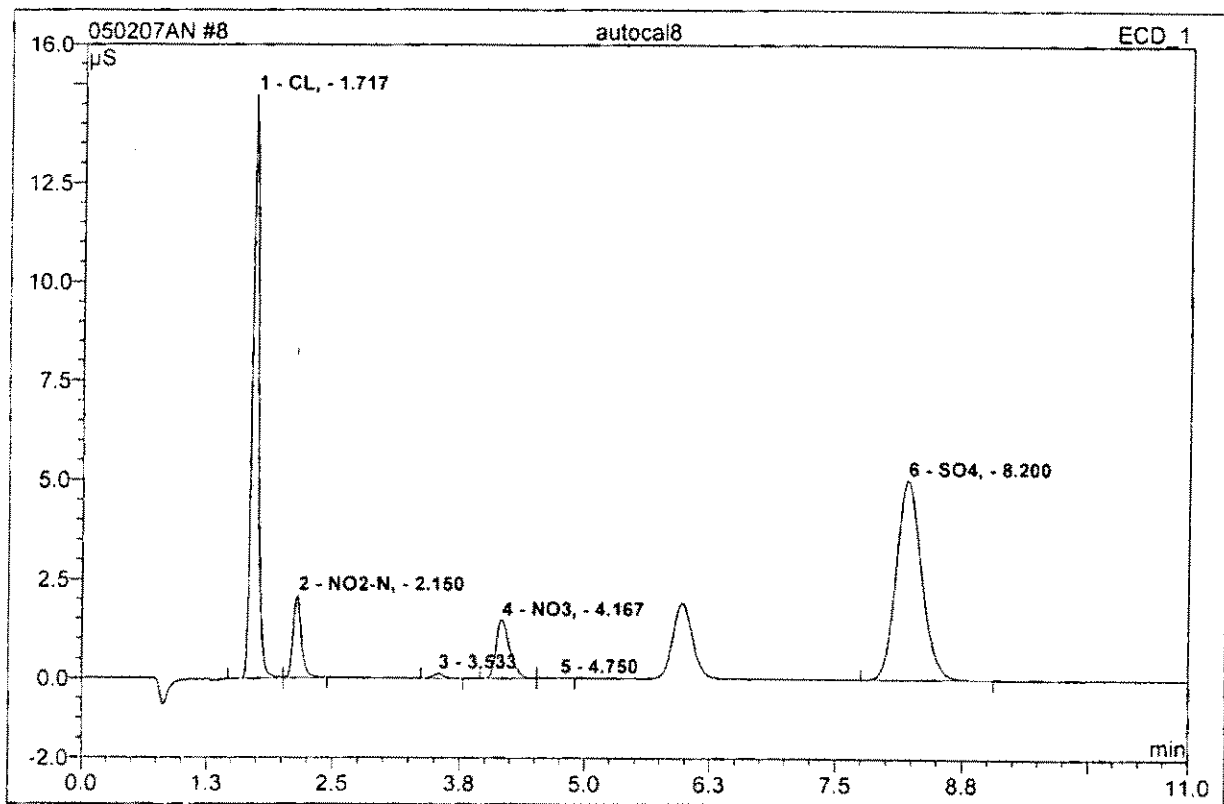


No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	CL,	6.947	0.520	35.20	4.702	BM
2	2.15	NO2-N,	1.008	0.098	6.61	0.491	MB
3	3.53	n.a.	0.067	0.009	0.59	n.a.	BMB
4	4.18	NO3,	0.771	0.118	8.01	0.502	BMB
5	8.23	SO4,	2.490	0.733	49.59	10.018	BMB
<b>Total:</b>			11.283	1.477	100.00	15.712	

**8 autocal8**

JKZ070423-7

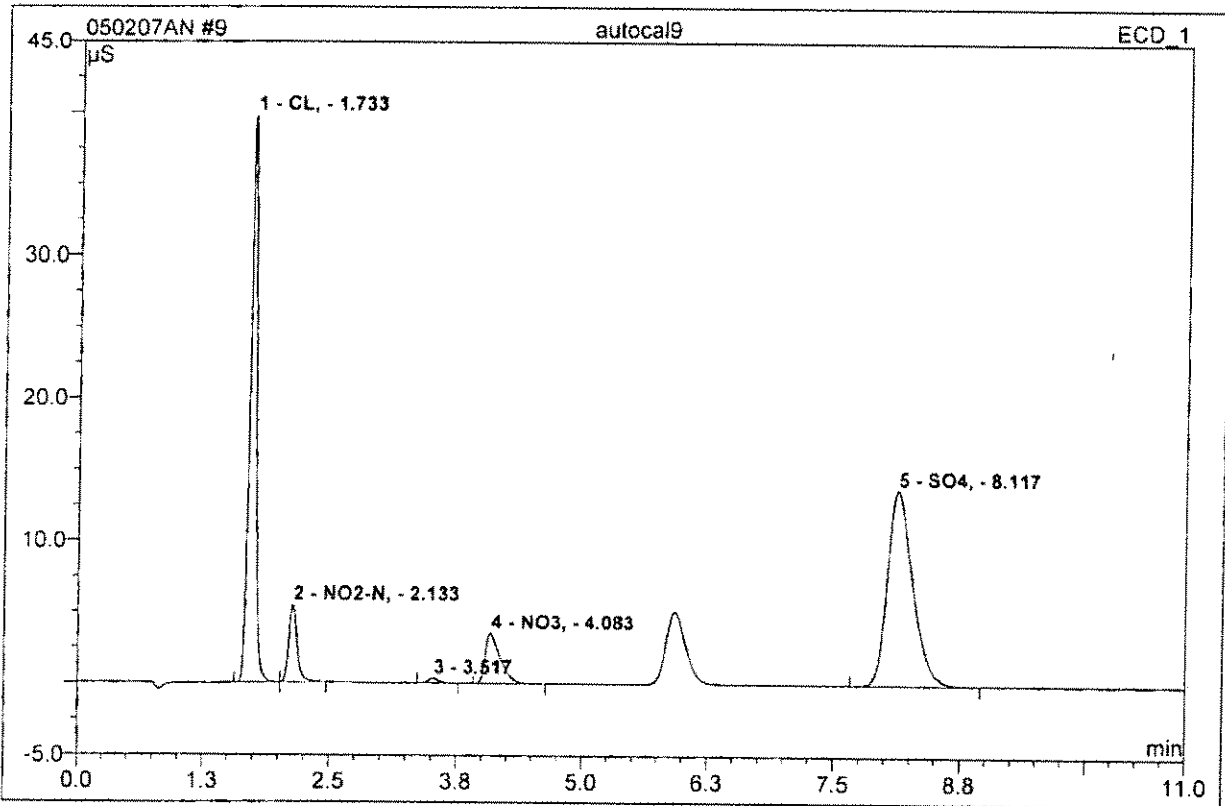
Sample Name:	autocal8	Injection Volume:	1000.0
Vial Number:	7	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 11:56	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.72	CL,	14.734	1.082	36.13	9.565	BM
2	2.15	NO2-N,	2.090	0.200	6.66	0.996	MB
3	3.53	n.a.	0.132	0.016	0.55	n.a.	BMB
4	4.17	NO3,	1.466	0.230	7.66	0.969	BMb
5	4.75	n.a.	0.007	0.001	0.04	n.a.	bMB
6	8.20	SO4,	5.031	1.467	48.95	19.665	BMB
<b>Total:</b>			23.460	2.996	100.00	31.195	

**9 autocal9****JKZ070423-8**

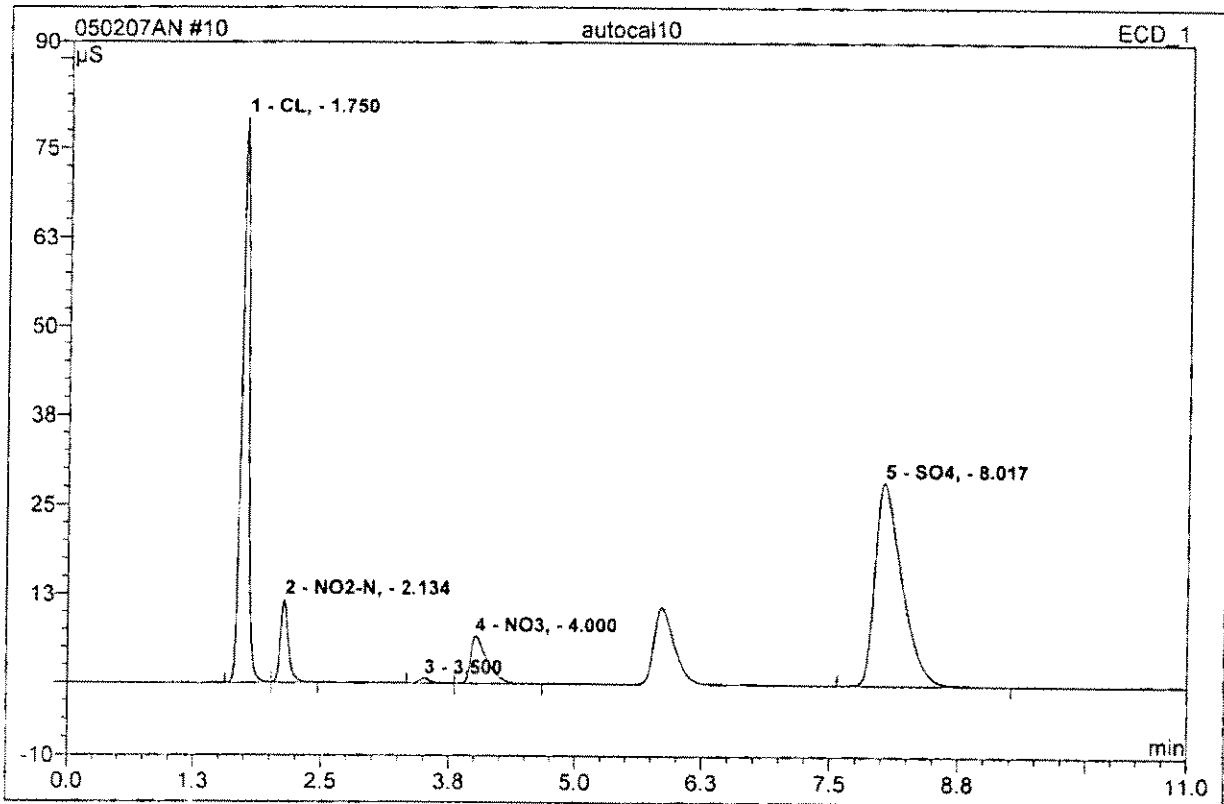
Sample Name:	autocal9	Injection Volume:	1000.0
Vial Number:	8	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 12:10	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.73	CL,	39.832	3.085	37.57	25.371	BM
2	2.13	NO2-N,	5.488	0.511	6.22	2.485	MB
3	3.52	n.a.	0.333	0.041	0.49	n.a.	BMB
4	4.08	NO3,	3.506	0.599	7.30	2.485	BMB
5	8.12	SO4,	13.720	3.977	48.42	50.210	BMB
<b>Total:</b>			62.879	8.213	100.00	80.550	

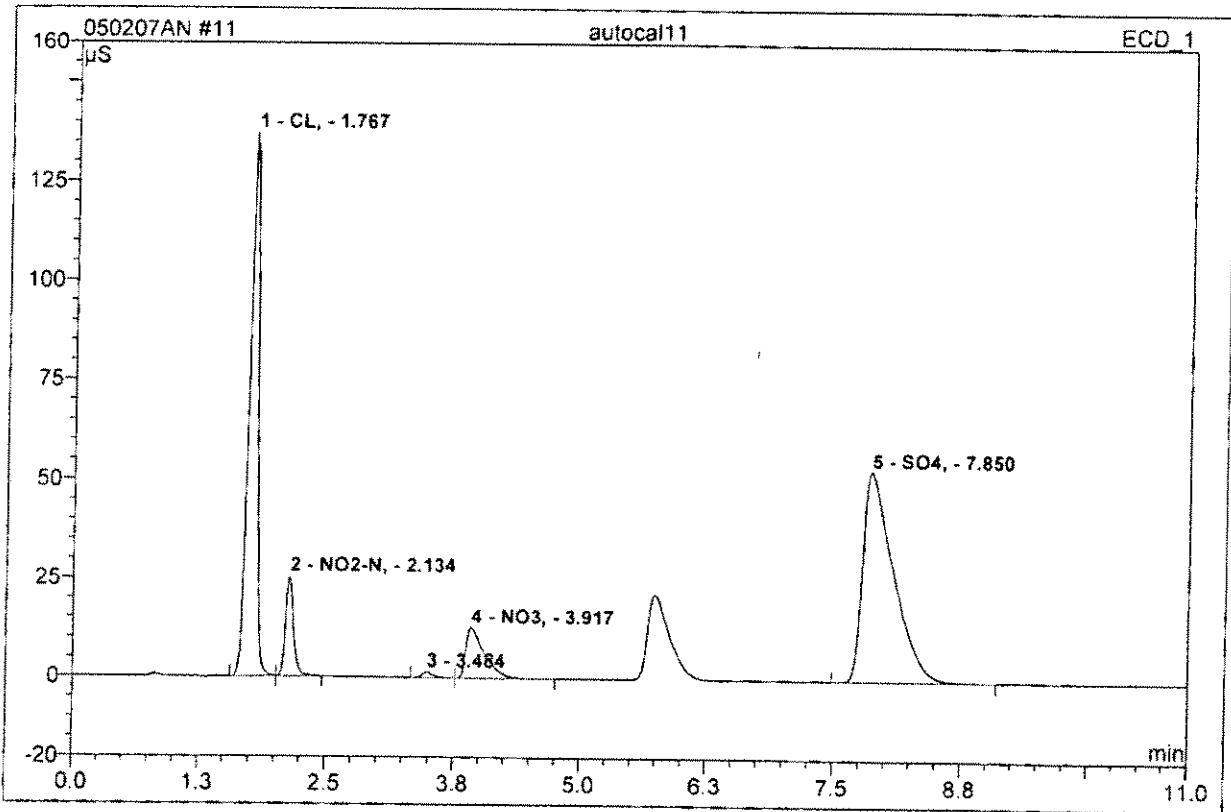
**10 autocal10****JKZ070423-9**

Sample Name:	autocal10	Injection Volume:	1000.0
Vial Number:	9	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 12:24	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



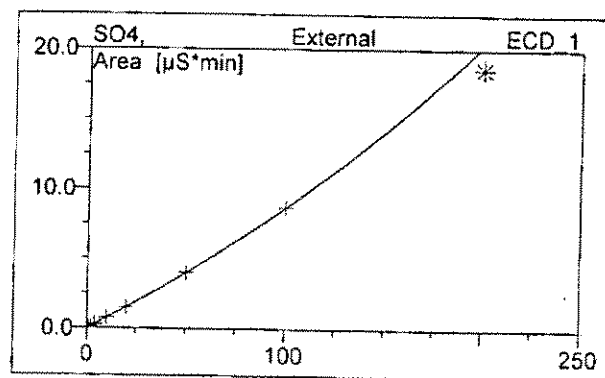
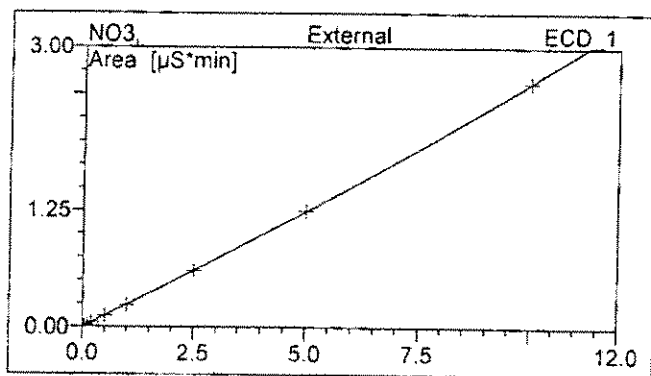
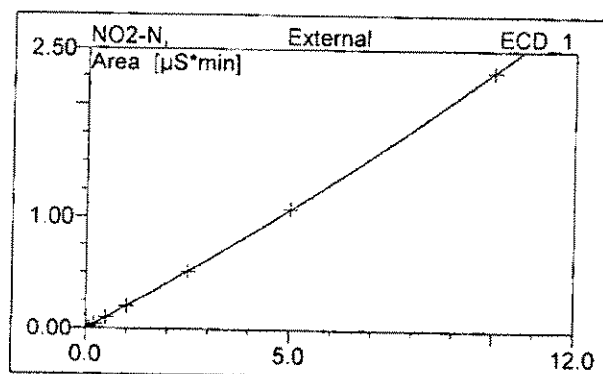
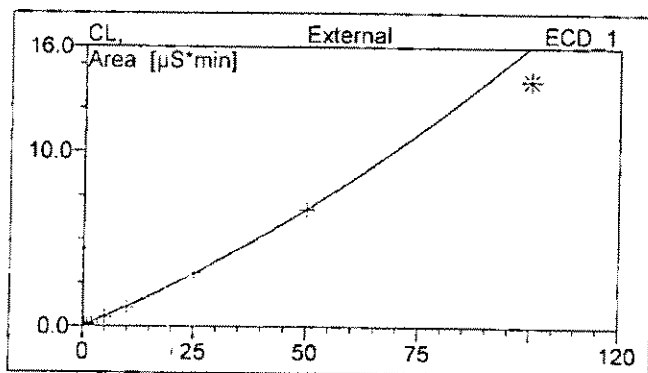
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	CL,	79.331	6.728	37.80	49.938	BM
2	2.13	NO2-N,	11.772	1.074	6.03	5.013	MB
3	3.50	n.a.	0.679	0.083	0.46	n.a.	BMb
4	4.00	NO3,	6.659	1.247	7.00	5.021	bMB
5	8.02	SO4,	28.495	8.669	48.70	99.966	BMB
<b>Total:</b>			126.936	17.800	100.00	159.938	

<b>11 autocal11</b>			
<b>JKZ070423-10</b>			
Sample Name:	autocal11	Injection Volume:	1000.0
Vial Number:	10	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	4/23/2007 12:37	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.77	CL,	137.208	14.063	37.23	90.054	BM
2	2.13	NO2-N,	25.421	2.312	6.12	9.998	MB
3	3.48	n.a.	1.400	0.165	0.44	n.a.	BMB
4	3.92	NO3,	12.779	2.620	6.94	9.996	bMB
5	7.85	SO4,	53.104	18.613	49.28	186.515	BMB
<b>Total:</b>			229.911	37.773	100.00	296.563	

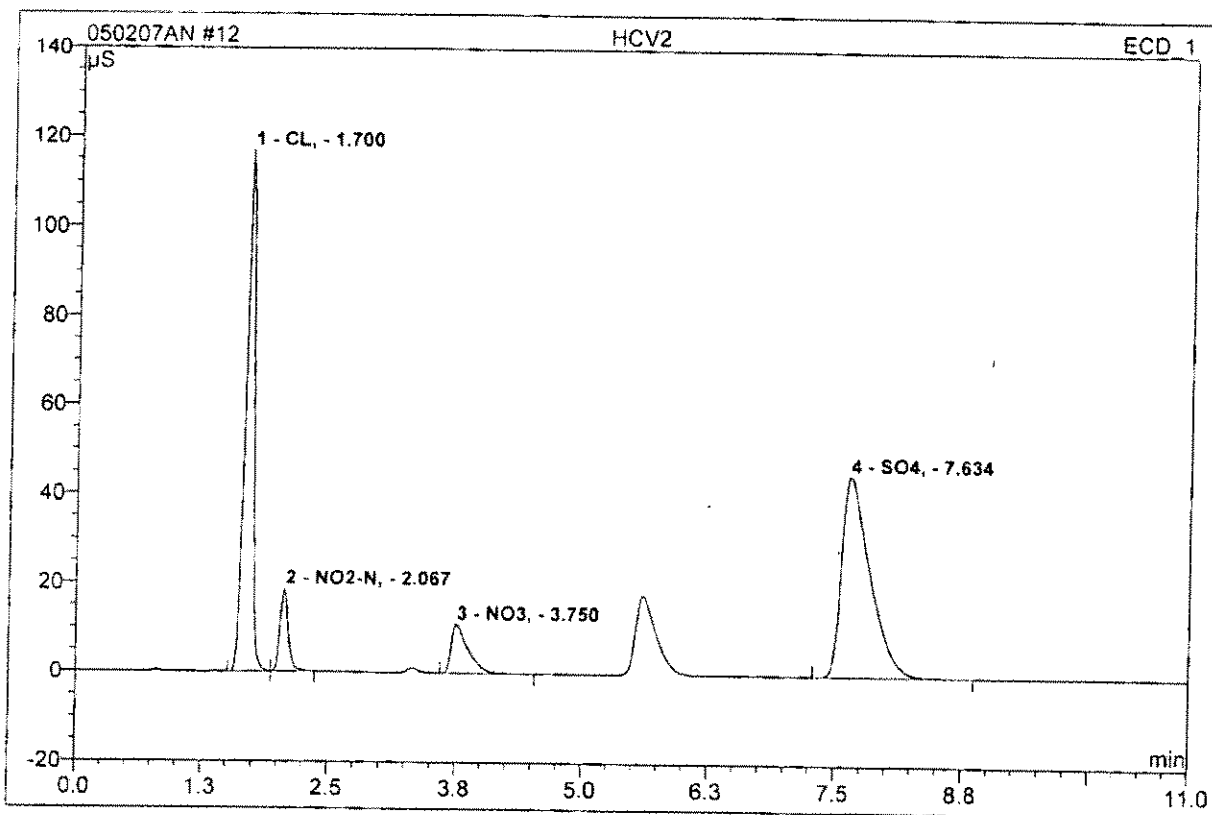
<b>11 autocal11</b>	
<b>JKZ070423-10</b>	
Sample Name:	autocal11
Vial Number:	10
Sample Type:	standard
Control Program:	IC#3-ANION TTL2
Quantif. Method:	ANION-IC#3
Recording Time:	4/23/2007 12:37
Run Time (min):	11.00
Injection Volume:	1000.0
Channel:	ECD_1
Wavelength:	n.a.
Bandwidth:	n.a.
Dilution Factor:	1.0000
Sample Weight:	1.0000
Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	1.77	CL-	Quad	7	99.8901	0.0000	0.1081	0.0005
2	2.13	NO2-N-	Quad	10	99.9224	0.0000	0.1971	0.0034
3	3.48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4	3.92	NO3-	Quad	10	99.9614	0.0000	0.2343	0.0028
5	7.85	SO4-	Quad	9	99.9023	0.0000	0.0716	0.0002
<b>Average:</b>					99.9190	0.0000	0.1528	0.0017

**12 HCV2**

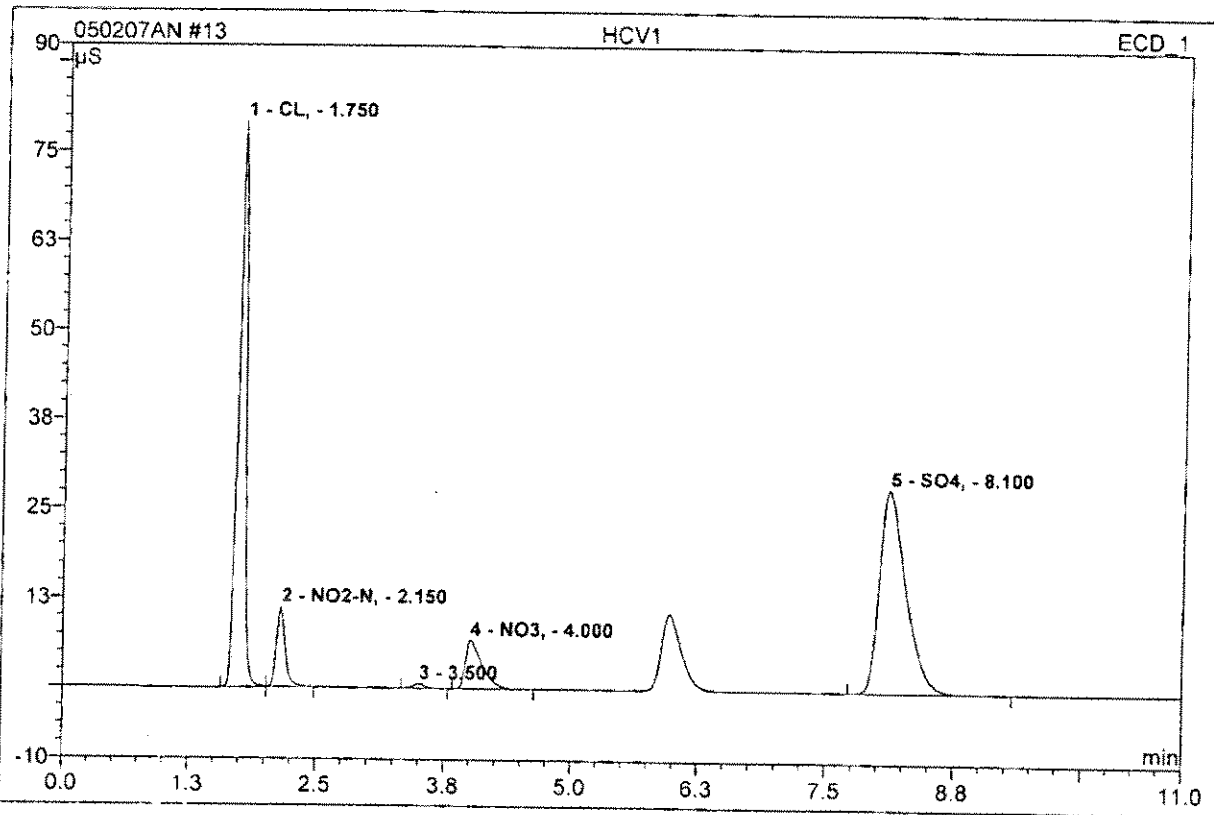
Sample Name:	HCV2	Injection Volume:	1000.0
Vial Number:	104	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 9:11	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	CL,	116.818	11.227	37.80	75.624	BM
2	2.07	NO2-N,	18.537	1.740	5.86	7.781	MB
3	3.75	NO3,	11.008	2.084	7.02	8.112	BMB
4	7.63	SO4,	45.094	14.651	49.33	154.332	BMB
<b>Total:</b>			191.457	29.702	100.00	245.849	

**13 HCV1**

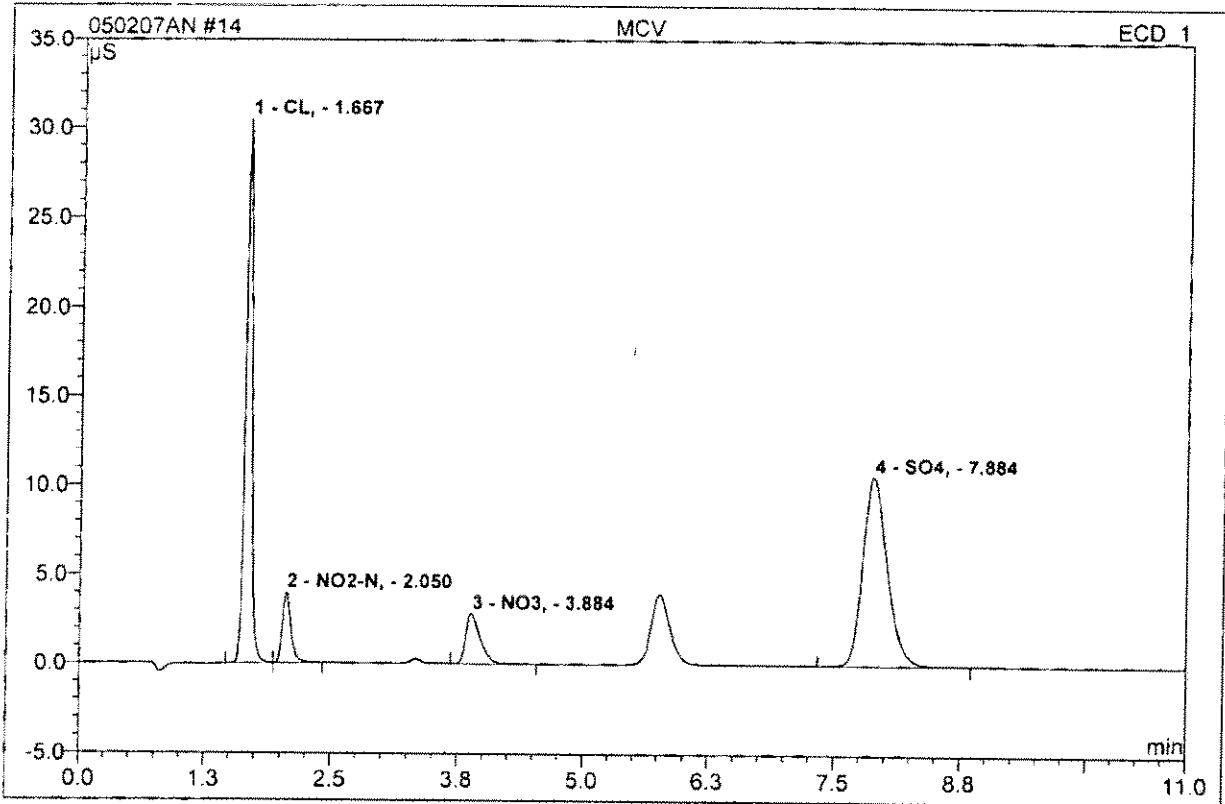
Sample Name:	HCV1	Injection Volume:	1000.0
Vial Number:	105	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 9:25	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.75	CL,	79.324	6.996	38.88	51.590	BM
2	2.15	NO2-N,	11.245	1.104	6.14	5.146	MB
3	3.50	n.a.	0.668	0.084	0.47	n.a.	BMB
4	4.00	NO3,	6.821	1.278	7.10	5.140	BMB
5	8.10	SO4,	28.496	8.532	47.41	98.622	BMB
<b>Total:</b>			126.554	17.995	100.00	160.498	

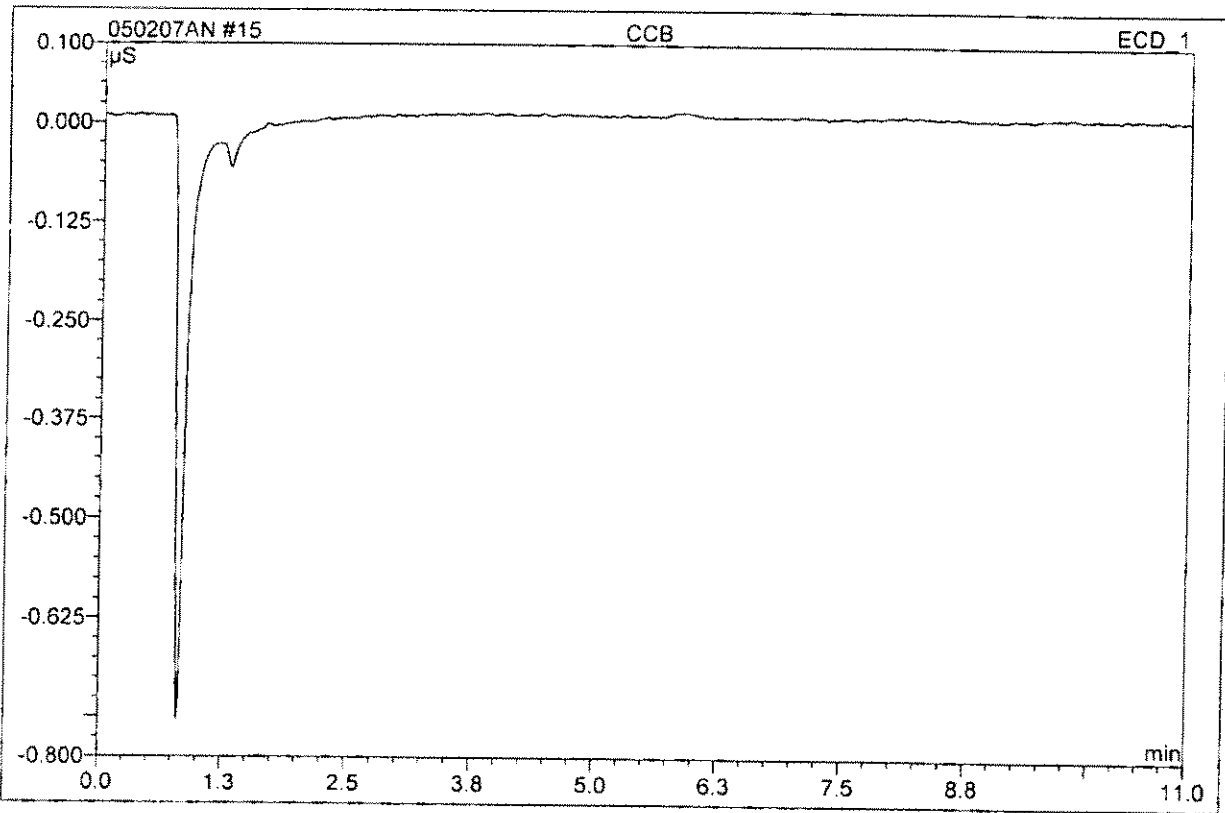
**14 MCV**

Sample Name:	MCV	Injection Volume:	1000.0
Vial Number:	106	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 9:38	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



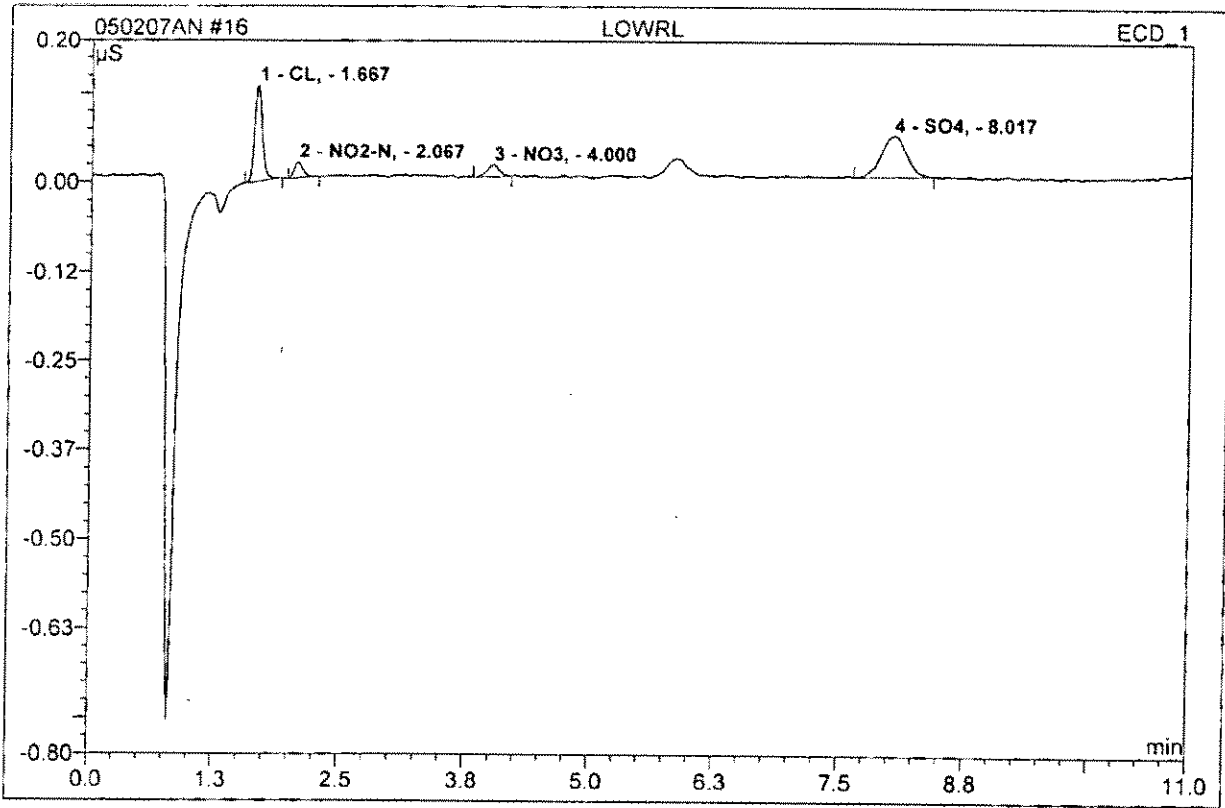
No.	Ret.Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Ref.Area %	Amount	Type
1	1.67	CL <sub>2</sub>	30.492	2.290	37.25	19.341	BM
2	2.05	NO <sub>2</sub> -N	3.973	0.395	6.42	1.937	MB
3	3.88	NO <sub>3</sub>	2.851	0.460	7.49	1.920	BMB
4	7.88	SO <sub>4</sub>	10.638	3.002	48.84	38.755	BMB
<b>Total:</b>			47.955	6.147	100.00	61.952	

<b>15 CCB</b>			
Sample Name:	CCB	Injection Volume:	1000.0
Vial Number:	107	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 9:52	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	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	

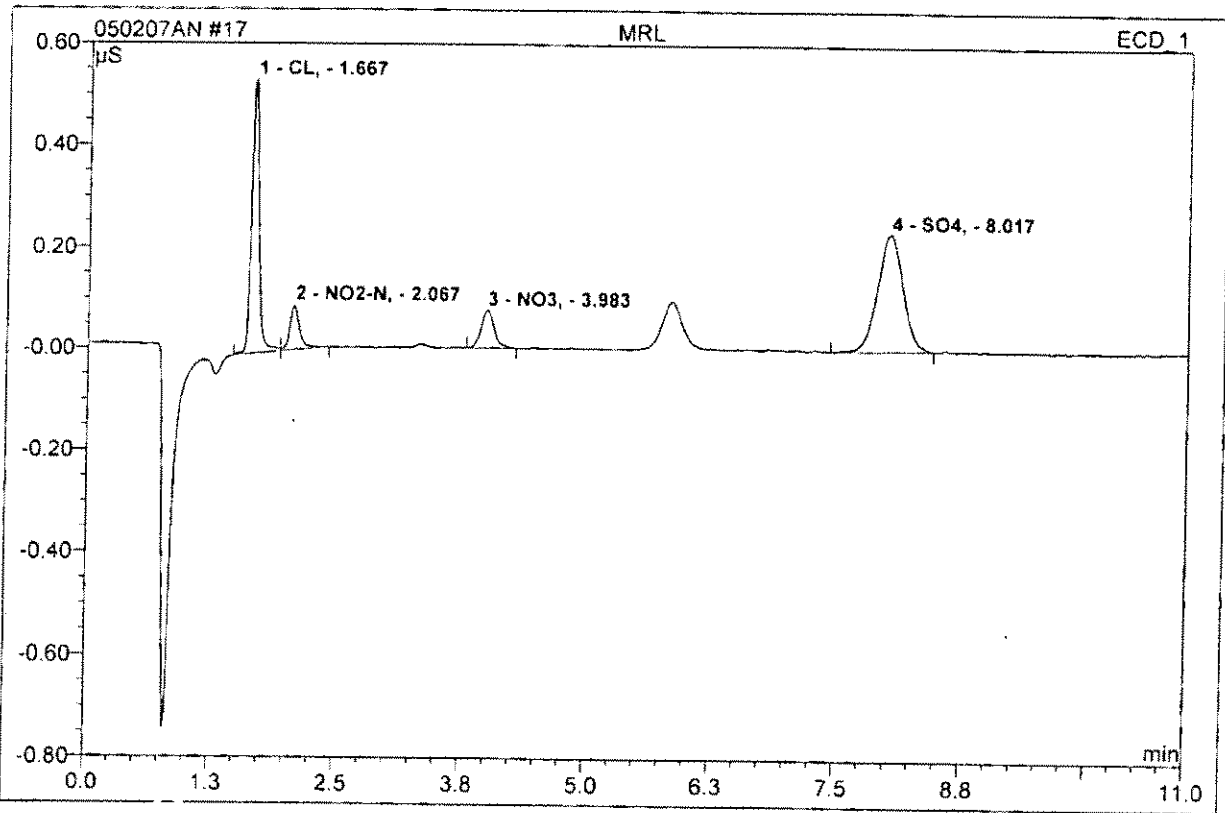
<b>16 LOWRL</b>			
Sample Name:	LOWRL	Injection Volume:	1000.0
Vial Number:	107	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 10:06	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Rel.Area %	Amount	Type
1	1.67	CL,	0.135	0.012	34.92	0.108	BMB
2	2.07	NO <sub>2</sub> -N,	0.022	0.002	6.61	0.011	BMB
3	4.00	NO <sub>3</sub> ,	0.016	0.002	7.05	0.010	BMB
4	8.02	SO <sub>4</sub> ,	0.058	0.017	51.42	0.240	BMB
<b>Total:</b>			0.231	0.033	100.00	0.370	

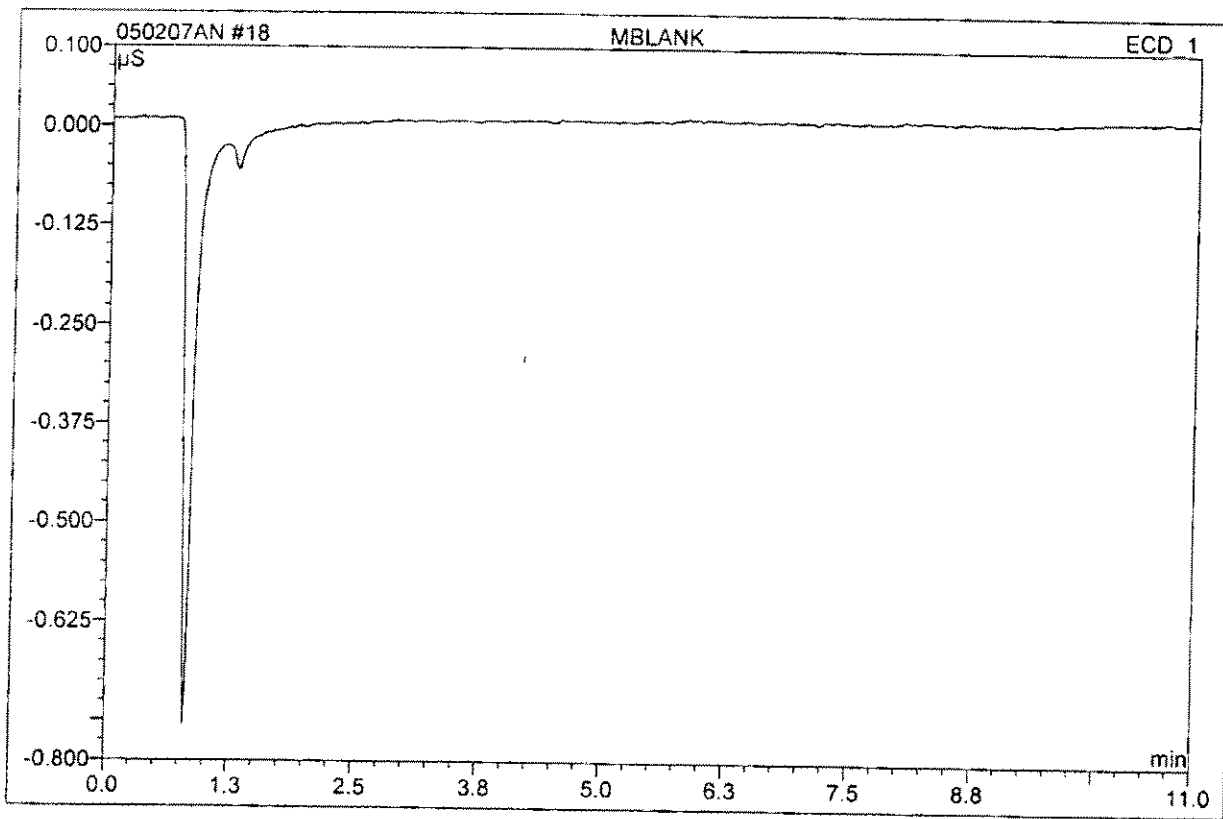
**17 MRL**

Sample Name:	MRL	Injection Volume:	1000.0
Vial Number:	107	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 10:19	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



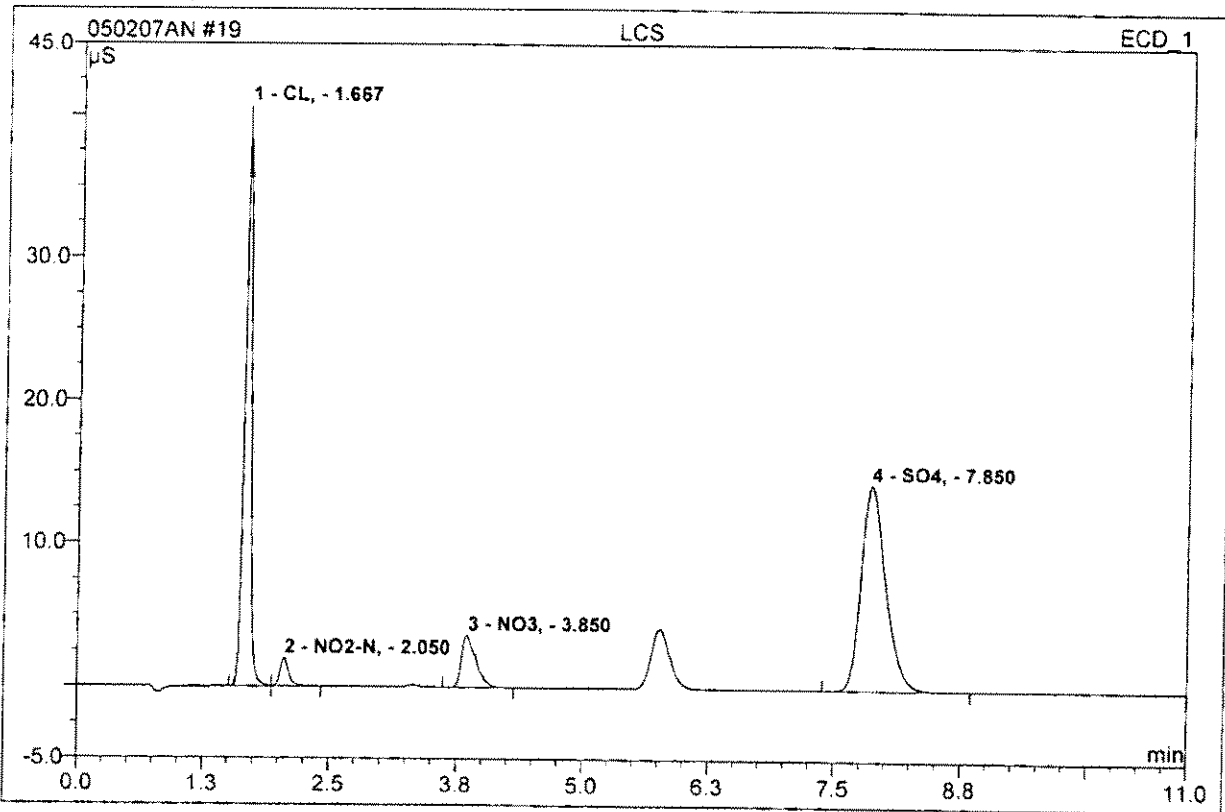
No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.67	CL,	0.539	0.047	34.35	0.435	BM
2	2.07	NO2-N,	0.090	0.010	7.33	0.051	MB
3	3.98	NO3,	0.074	0.011	8.19	0.048	BMB
4	8.02	SO4,	0.231	0.069	50.13	0.958	BMB
<b>Total:</b>			0.934	0.137	100.00	1.492	

18 MBLANK			
Sample Name:	MBLANK	Injection Volume:	1000.0
Vial Number:	106	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 10:33	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



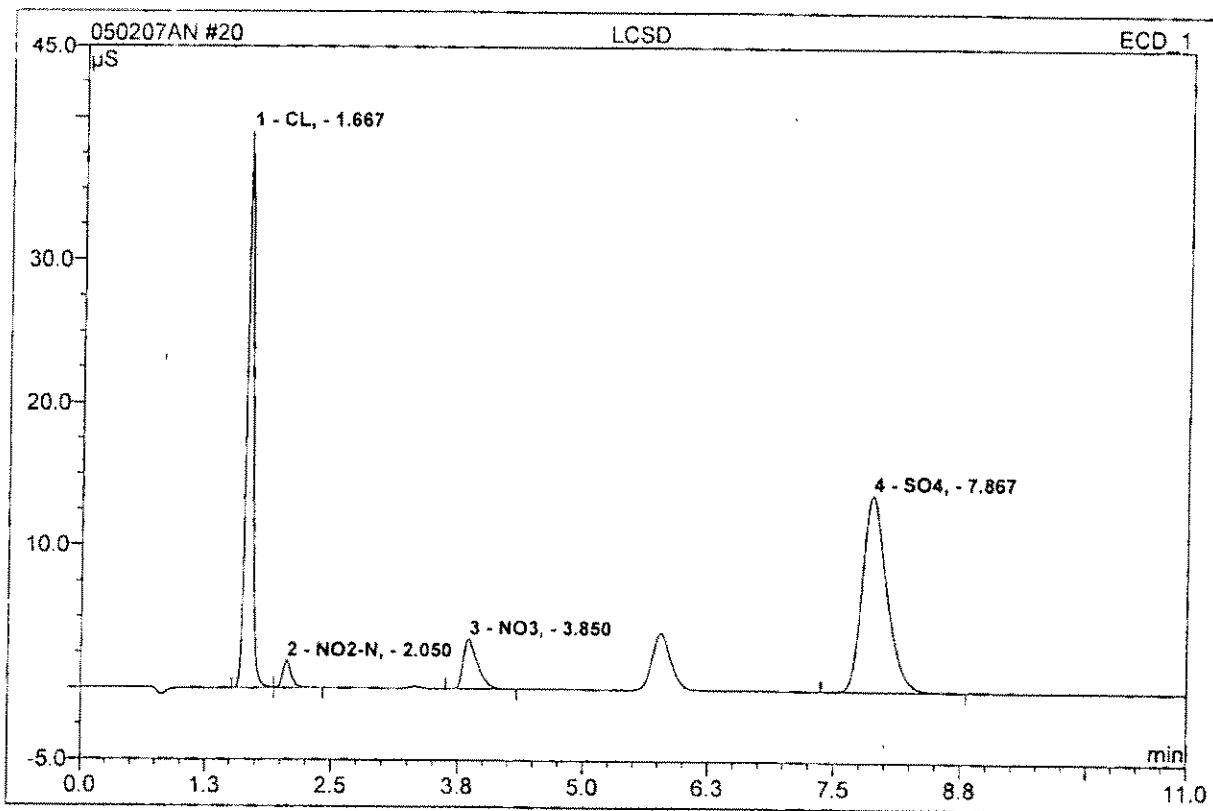
No.	Ret. Time min	Peak Name	Height μS	Area μS*min	Rel. Area %	Amount	Type
Total:			0.000	0.000	0.00	0.000	

<b>19 LCS</b>			
Sample Name:	LCS	Injection Volume:	1000.0
Vial Number:	156	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 10:47	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret. Time min	Peak Name	Height μS	Area μS*min	Rel. Area %	Amount	Type
1	1.67	CL,	40.656	3.085	38.90	25.370	BM
2	2.05	NO2-N,	1.964	0.200	2.52	0.996	MB
3	3.85	NO3,	3.630	0.601	7.58	2.493	BMB
4	7.85	SO4,	14.342	4.045	51.00	50.997	BMB
<b>Total:</b>			60.591	7.931	100.00	79.856	

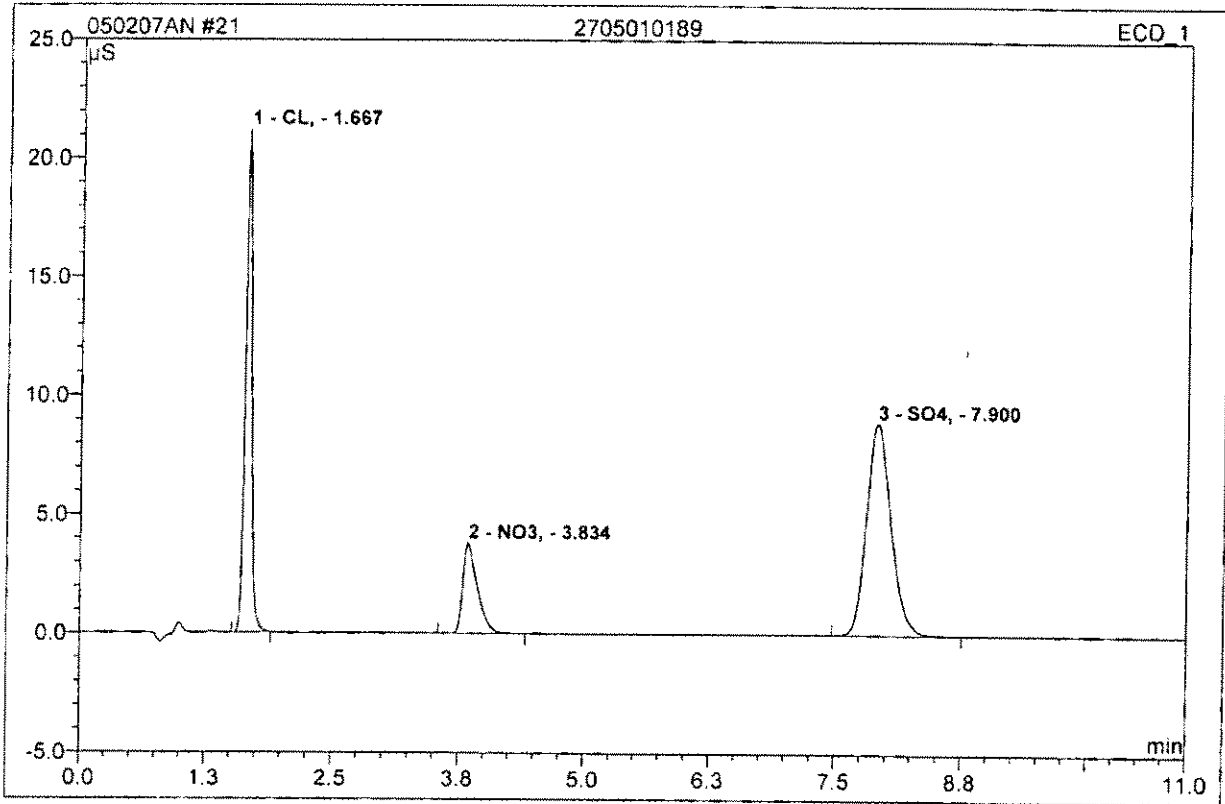
20 LCSD			
Sample Name:	LCSD	Injection Volume:	1000.0
Vial Number:	158	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 11:00	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	CL,	39.053	2.956	38.91	24.407	BM
2	2.05	NO2-N,	1.892	0.193	2.54	0.964	MB
3	3.85	NO3,	3.513	0.573	7.54	2.377	BMB
4	7.87	SO4,	13.766	3.874	51.00	49.024	BMB
<b>Total:</b>			58.223	7.595	100.00	76.772	

**21 2705010189**

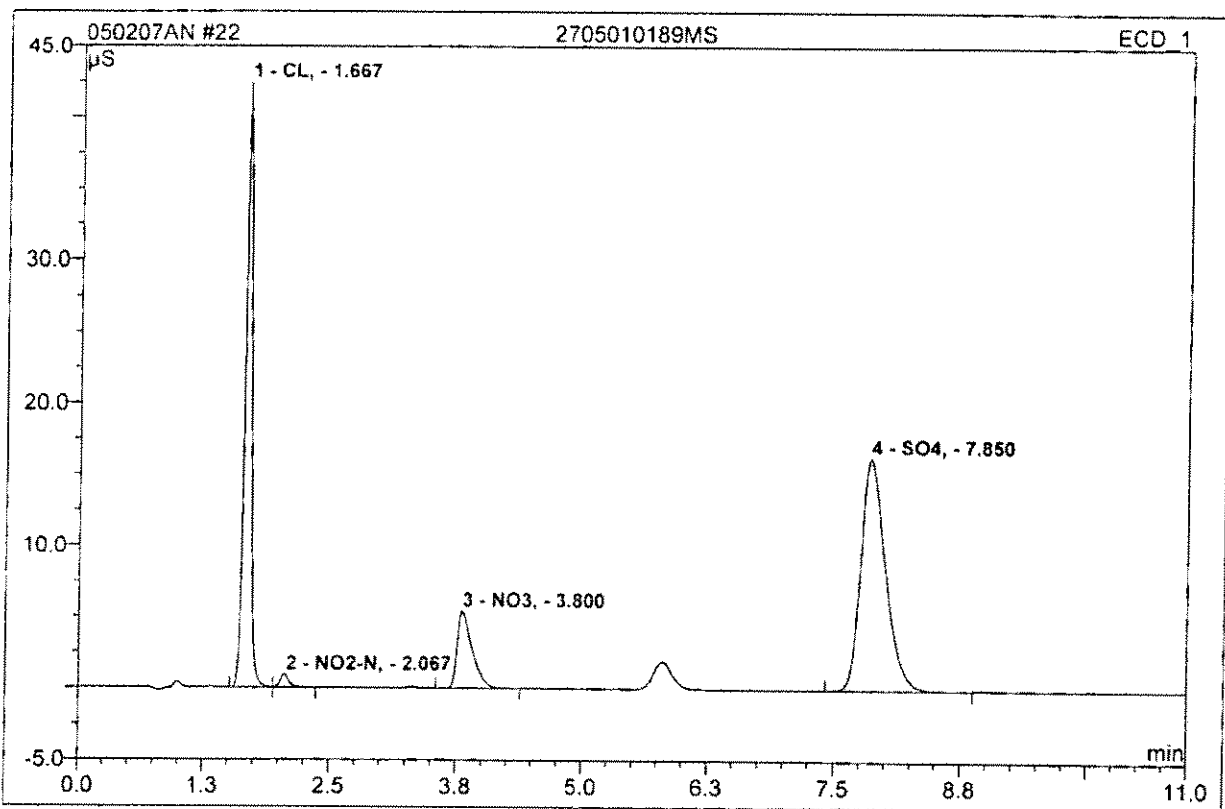
Sample Name:	2705010189	Injection Volume:	1000.0
Vial Number:	159	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	2.0000
Recording Time:	5/2/2007 11:14	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	CL,	21.211	1.596	33.68	27.642	BMB
2	3.83	NO3,	3.802	0.629	13.28	5.210	BMB
3	7.90	SO4,	8.912	2.513	53.04	65.637	BMB
<b>Total:</b>			33.925	4.738	100.00	98.488	

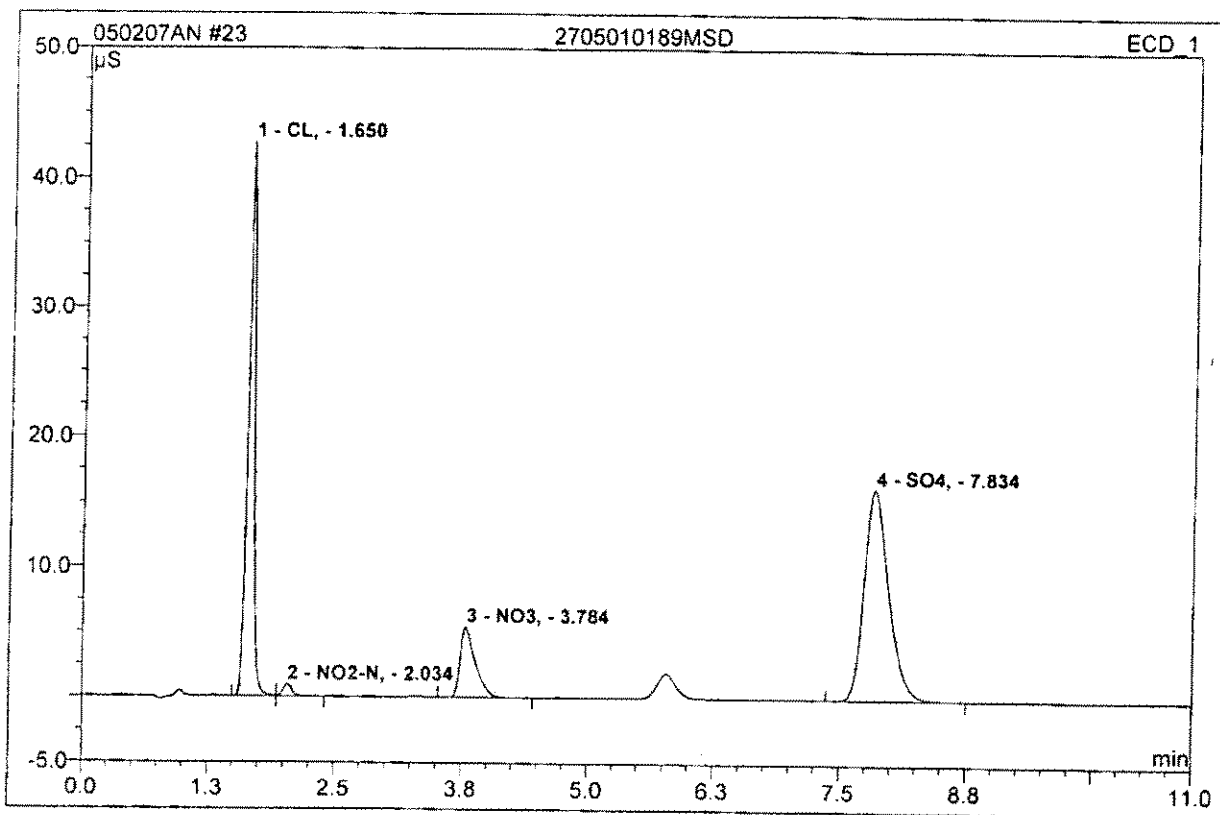
**22 2705010189MS**

Sample Name:	2705010189MS	Injection Volume:	1000.0
Vial Number:	160	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	2.0000
Recording Time:	5/2/2007 11:28	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



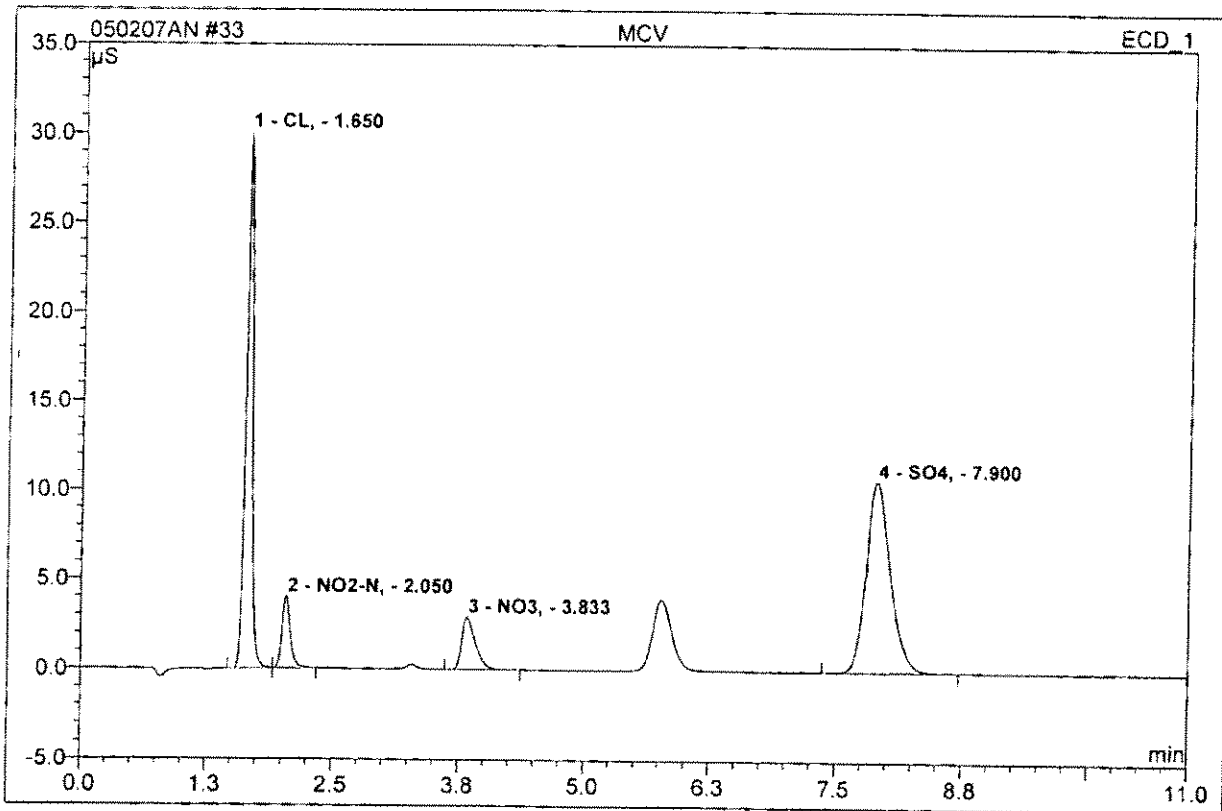
No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	1.67	CL,	42.414	3.246	36.49	53.101	BM
2	2.07	NO2-N,	0.918	0.094	1.06	0.949	MB
3	3.80	NO3,	5.441	0.933	10.49	7.620	BMB
4	7.85	SO4,	16.337	4.621	51.96	115.083	BMB
Total:			65.110	8.894	100.00	176.753	

<b>23 2705010189MSD</b>			
Sample Name:	2705010189MSD	Injection Volume:	1000.0
Vial Number:	161	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	2.0000
Recording Time:	5/2/2007 11:41	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



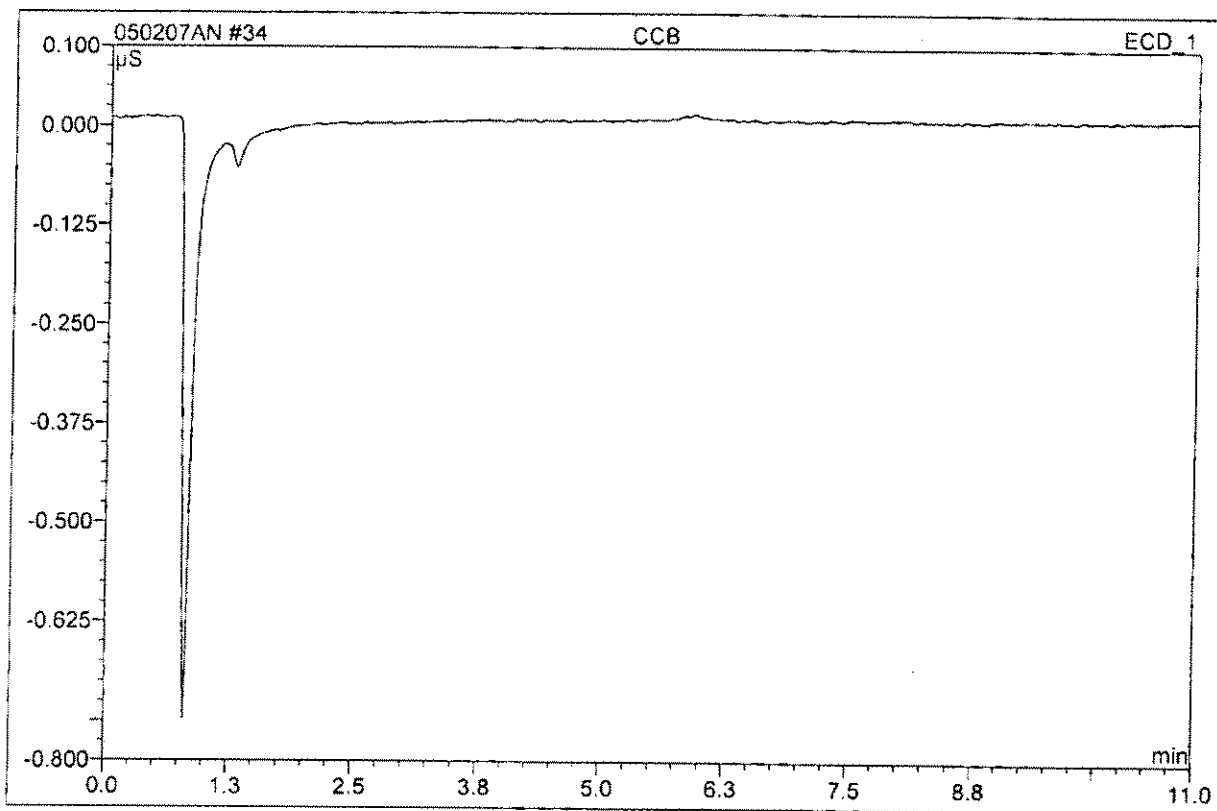
No.	Ret.Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Rel.Area %	Amount	Type
1	1.65	CL,	42.765	3.241	36.48	53.028	BM
2	2.03	NO <sub>2</sub> -N,	0.931	0.095	1.07	0.956	MB
3	3.78	NO <sub>3</sub> ,	5.444	0.932	10.49	7.609	BMB
4	7.83	SO <sub>4</sub> ,	16.287	4.615	51.96	114.955	BMB
<b>Total:</b>			65.427	8.883	100.00	176.549	

<b>33 MCV</b>			
Sample Name:	MCV	Injection Volume:	1000.0
Vial Number:	171	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 14:03	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.65	CL,	30.056	2.290	37.40	19.342	BM
2	2.05	NO2-N,	3.968	0.389	6.35	1.911	MB
3	3.83	NO3,	2.901	0.460	7.52	1.920	BMB
4	7.90	SO4,	10.678	2.984	48.73	38.531	BMB
<b>Total:</b>			47.603	6.123	100.00	61.704	

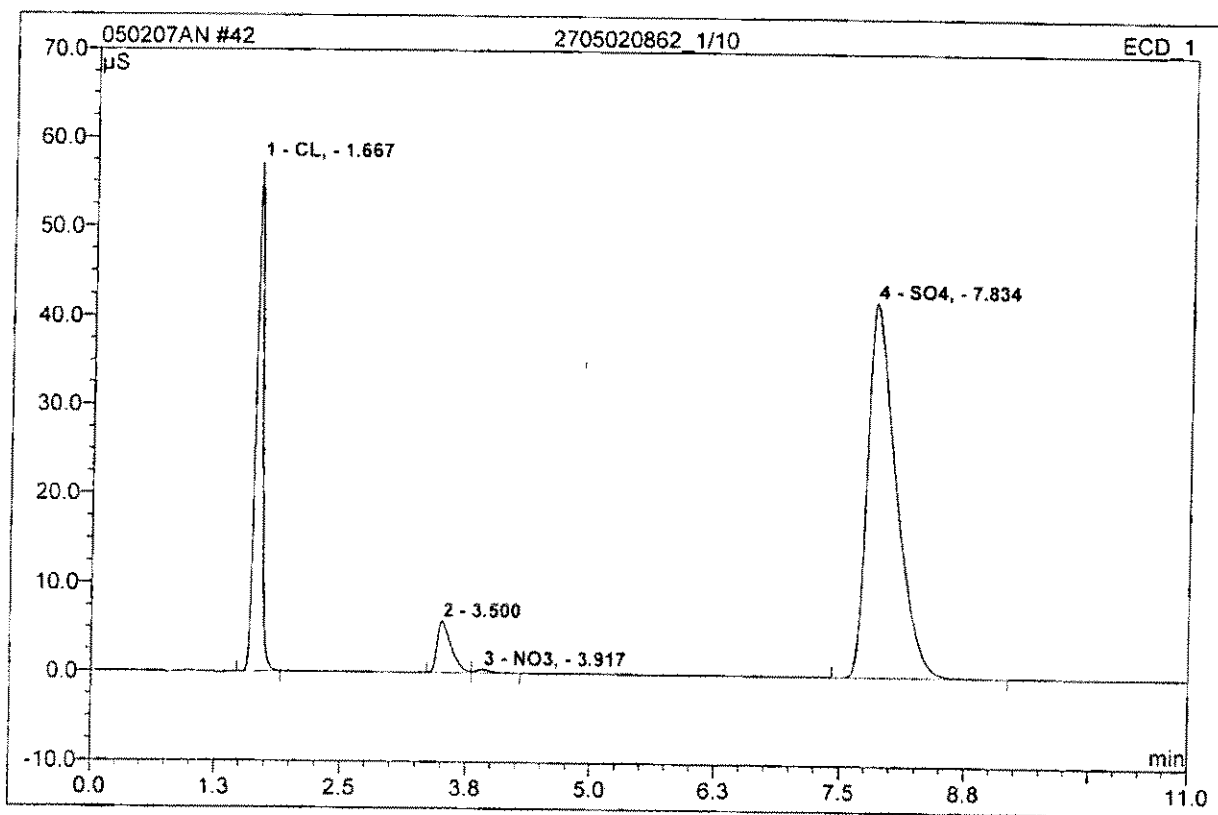
<b>34 CCB</b>			
Sample Name:	CCB	Injection Volume:	1000.0
Vial Number:	172	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 14:17	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	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	

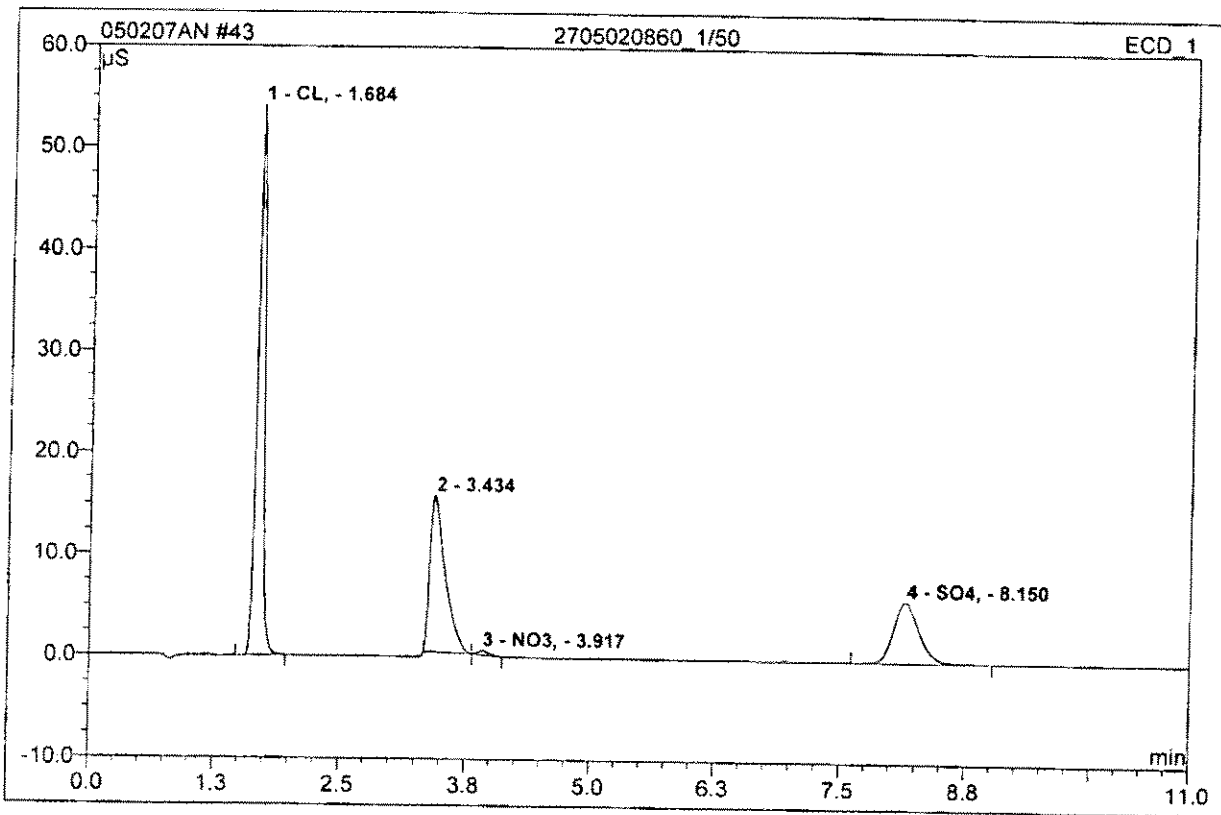
**42 2705020862\_1/10**

Sample Name:	2705020862_1/10	Injection Volume:	1000.0
Vial Number:	180	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	10.0000
Recording Time:	5/2/2007 16:06	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



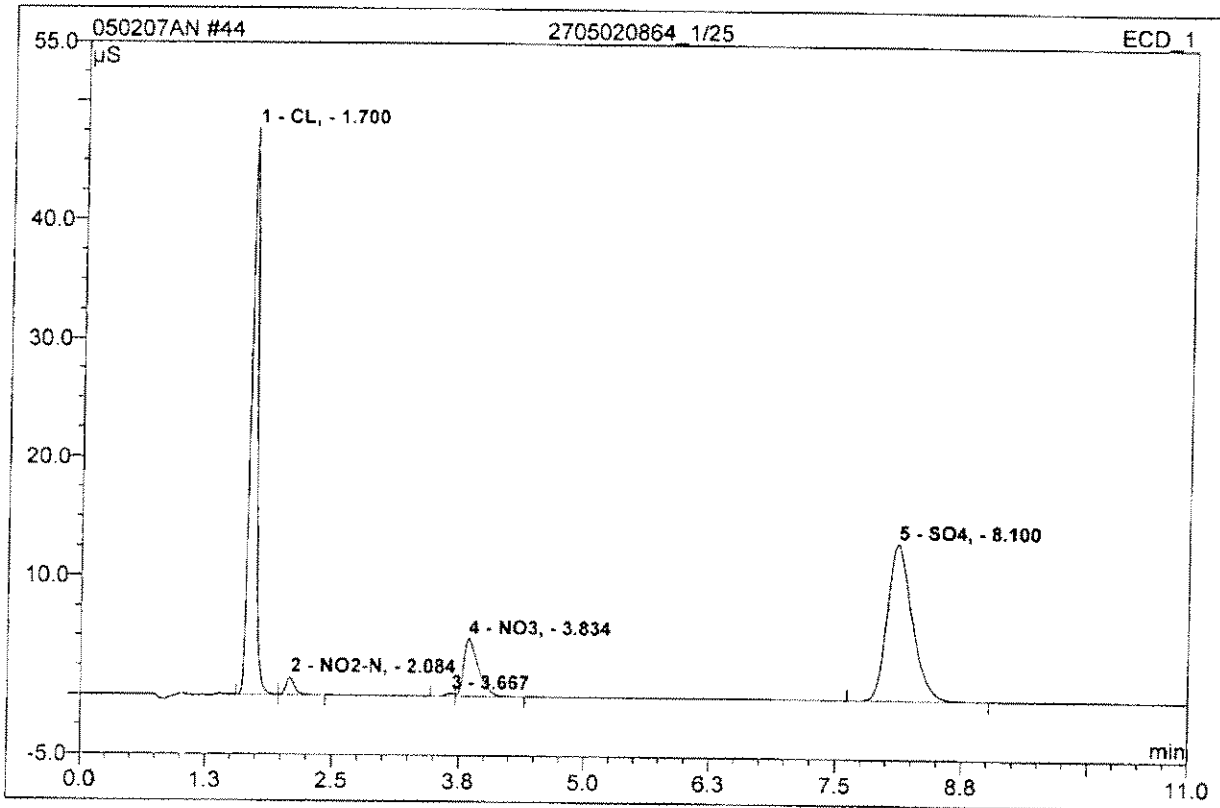
No.	Ret. Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Rel. Area %	Amount	Type
1	1.67	CL,	57.309	4.591	23.56	360.603	BMB
2	3.50	n.a.	5.802	0.929	4.77	n.a.	BM
3	3.92	NO3,	0.386	0.064	0.33	2.722	MB
4	7.83	SO4,	42.109	13.902	71.34	1479.433	BMB
<b>Total:</b>			105.607	19.486	100.00	1842.758	

<b>43 2705020860_1/50</b>			
Sample Name:	2705020860_1/50	Injection Volume:	1000.0
Vial Number:	181	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	50.0000
Recording Time:	5/2/2007 16:20	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



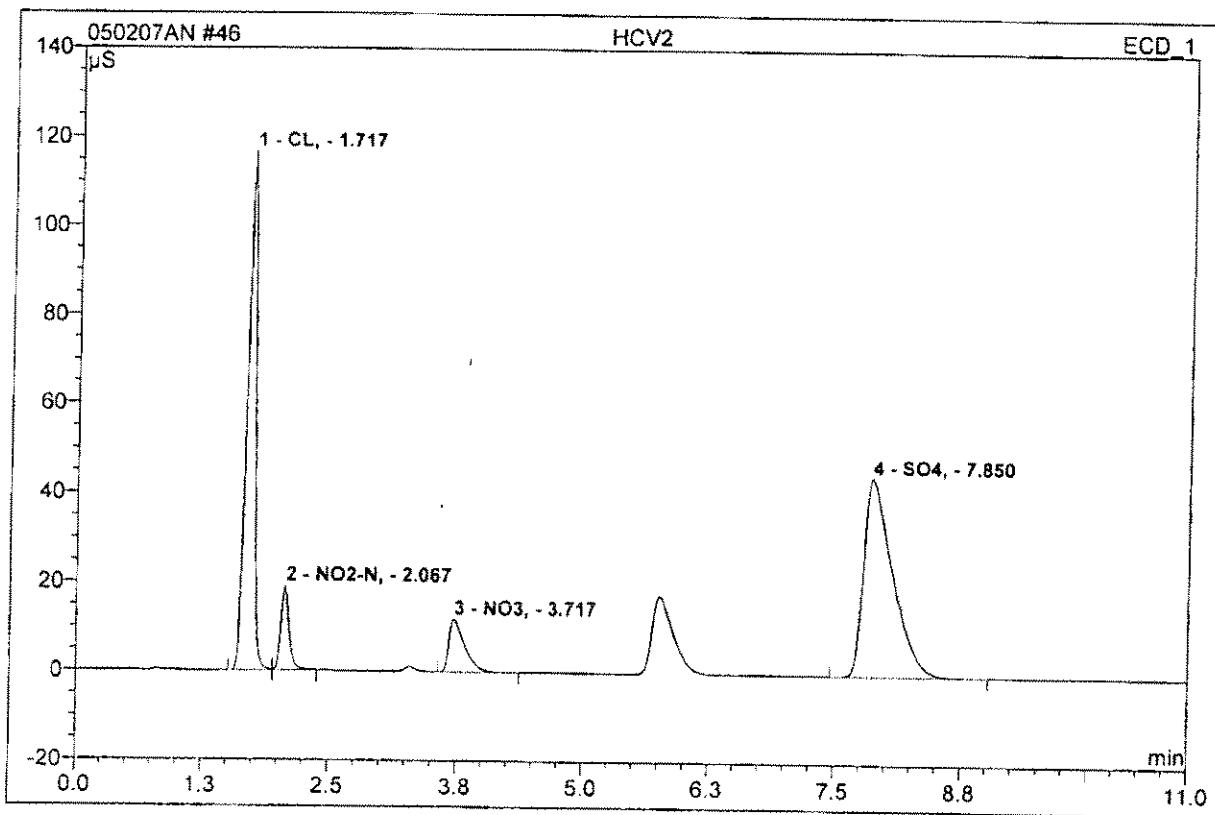
No.	Ret.Time min	Peak Name	Height $\mu\text{S}$	Area $\mu\text{S}\cdot\text{min}$	Rel.Area %	Amount	Type
1	1.68	CL,	54.156	4.315	48.87	1708.210	BMB
2	3.43	n.a.	15.386	2.713	30.72	n.a.	BMB
3	3.92	NO <sub>3</sub> ,	0.397	0.056	0.63	11.867	bMB
4	8.15	SO <sub>4</sub> ,	6.036	1.746	19.77	1161.847	BMB
<b>Total:</b>			75.976	8.829	100.00	2881.924	

<b>44 2705020864_1/25</b>			
Sample Name:	2705020864_1/25	Injection Volume:	1000.0
Vial Number:	182	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	25.0000
Recording Time:	5/2/2007 16:33	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



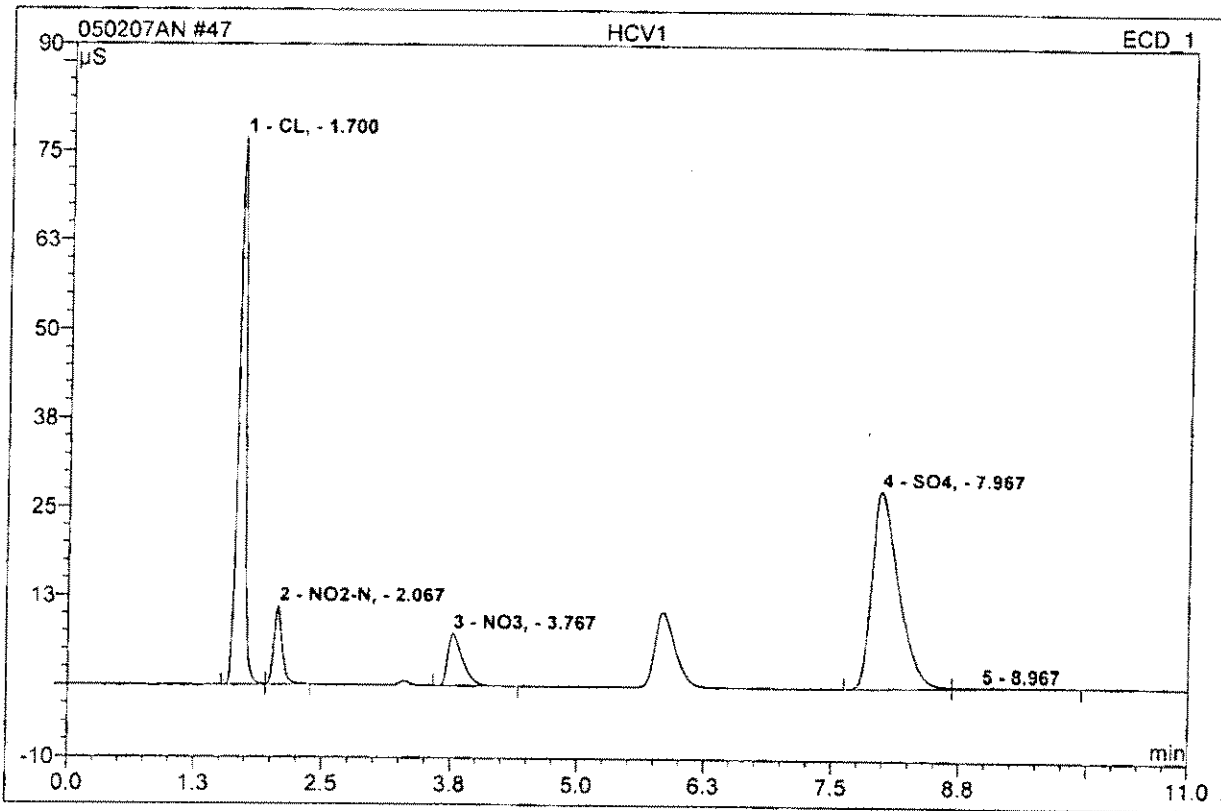
No.	Ret. Time min	Peak Name	Height µS	Area µS*min	Rel. Area %	Amount	Type
1	1.70	CL,	47.738	3.699	43.64	745.797	BM
2	2.08	NO2-N,	1.521	0.152	1.79	19.018	MB
3	3.67	n.a.	0.243	0.025	0.30	n.a.	BM
4	3.83	NO3,	4.850	0.820	9.68	84.135	MB
5	8.10	SO4,	13.161	3.779	44.59	1198.228	BMB
<b>Total:</b>			67.512	8.475	100.00	2047.178	

<b>46 HCV2</b>			
Sample Name:	HCV2	Injection Volume:	1000.0
Vial Number:	184	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 17:00	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



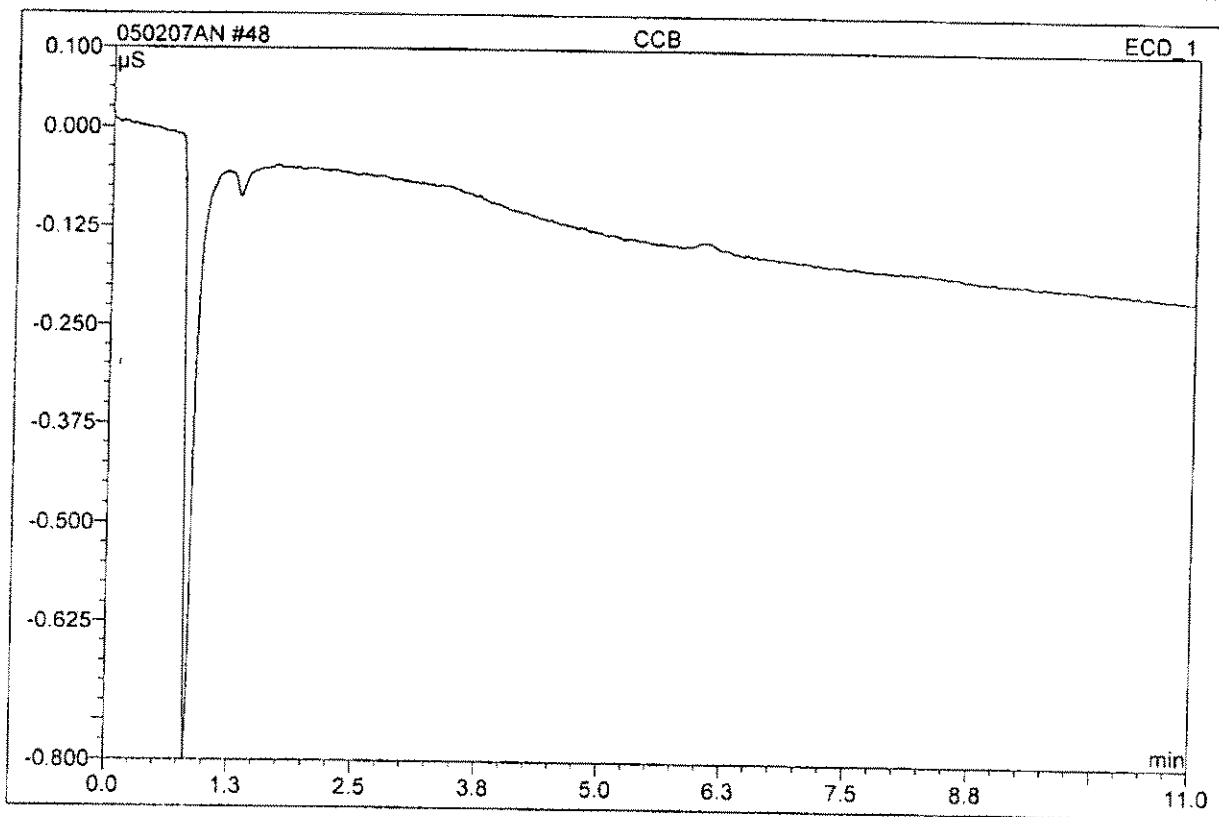
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.72	CL,	116.748	11.340	37.72	76.222	BM
2	2.07	NO2-N,	19.073	1.766	5.87	7.885	MB
3	3.72	NO3,	11.959	2.133	7.10	8.289	BMB
4	7.85	SO4,	44.350	14.825	49.31	155.804	BMB
<b>Total:</b>			192.130	30.065	100.00	248.200	

<b>47 HCV1</b>			
Sample Name:	HCV1	Injection Volume:	1000.0
Vial Number:	185	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 17:14	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



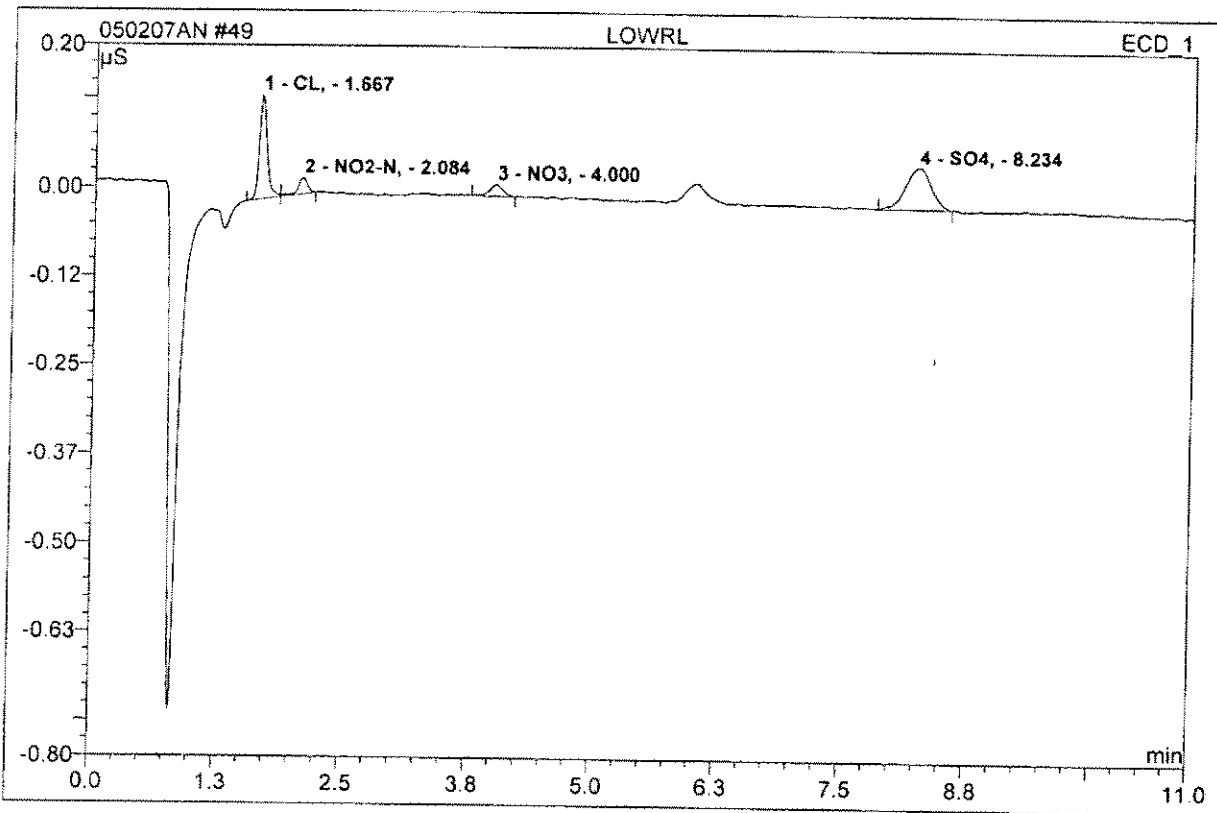
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.70	CL,	76.809	6.522	37.52	48.654	BM
2	2.07	NO2-N,	11.054	1.039	5.98	4.863	MB
3	3.77	NO3,	7.356	1.230	7.07	4.956	BMB
4	7.97	SO4,	27.778	8.437	48.54	97.683	BM
5	8.97	n.a.	0.198	0.154	0.89	n.a.	MB
<b>Total:</b>			123.194	17.382	100.00	156.155	

<b>48 CCB</b>			
Sample Name:	CCB	Injection Volume:	1000.0
Vial Number:	186	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 17:28	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	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	

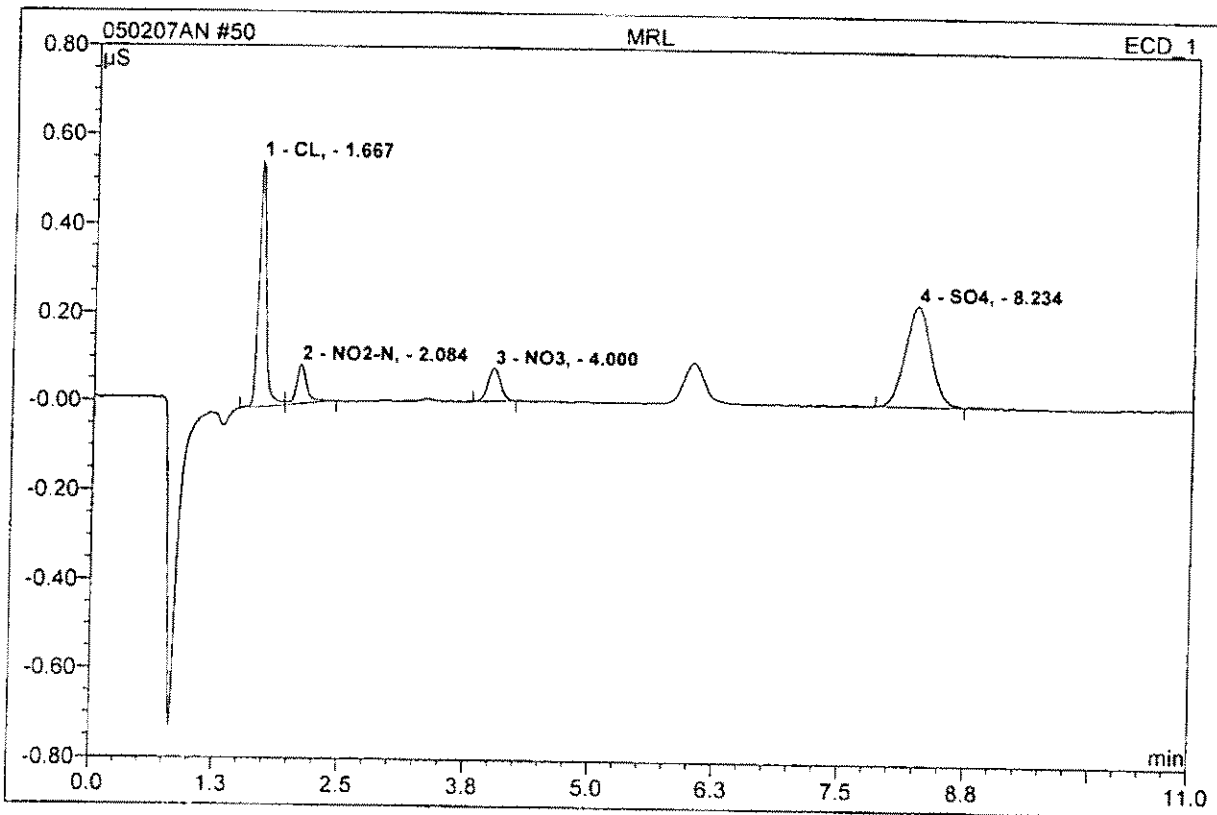
49 LOWRL			
Sample Name:	LOWRL	Injection Volume:	1000.0
Vial Number:	187	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 17:41	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount	Type
1	1.67	CL,	0.146	0.013	36.30	0.118	BM
2	2.08	NO2-N,	0.022	0.002	6.88	0.012	MB
3	4.00	NO3,	0.016	0.003	7.25	0.011	BMB
4	8.23	SO4,	0.059	0.017	49.56	0.244	BMB
<b>Total:</b>			0.243	0.035	100.00	0.386	

**50 MRL**

Sample Name:	MRL	Injection Volume:	1000.0
Vial Number:	188	Channel:	ECD_1
Sample Type:	unknown	Wavelength:	n.a.
Control Program:	IC#3-ANION TTL2	Bandwidth:	n.a.
Quantif. Method:	ANION-IC#3	Dilution Factor:	1.0000
Recording Time:	5/2/2007 17:55	Sample Weight:	1.0000
Run Time (min):	11.00	Sample Amount:	1.0000



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount	Type
1	1.67	CL,	0.555	0.048	35.00	0.446	BM
2	2.08	NO2-N,	0.090	0.011	7.62	0.053	MB
3	4.00	NO3,	0.074	0.011	7.87	0.046	BMB
4	8.23	SO4,	0.229	0.068	49.50	0.953	BMB
<b>Total:</b>			0.948	0.138	100.00	1.499	

**Standard  
Preparation  
Worksheet  
&  
Certificate of  
Analysis**

# Reagent Preparation Documentation

**Reagent:** Autocal II JKZ-070112-10  
**Date Received/Prepped:** 01/12 / 01/20 / 01/23 / JKZ-070120-10  
**Date Expired:** 01/31 / 02/06 / 02/13 / JKZ-070123-10  
**Manufacturer:** \_\_\_\_\_ JKZ-070131-10  
**Storage Condition:** Fresh every calibration, RT JKZ-070206-10  
 \_\_\_\_\_ JKZ-070213-10

**MW #:** JKZ 070112 - 10  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Anion Calib Soln A	10.0 ml	R 201531	
	} dilute to 100 ml DI H <sub>2</sub> O		Cl 100
			NO <sub>2</sub> 10.0
			NO <sub>3</sub> 10.0
Anion Calib Soln B	10.0 ml	R 201532	SO <sub>4</sub> 200
stds. prep: 06/05/08			

Comment:

**Reagent:** Fluent for Anions  
**Date Received/Prepped:** 03/02/07 | | | |  
**Date Expired:** 09/02/07 | | | |  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Room Temp

**MW #:** JKZ 070302 - 1  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 1 L  
**Lot #:** NA

Component	Comment	Standard	Concentration
Na <sub>2</sub> CO <sub>3</sub>	19.09 g	R 201472	
NaHCO <sub>3</sub>	14.28 g	R 201307	
} in 1 L DI H <sub>2</sub> O			

Comment:

**Reagent:** Autocal 2 - Low RL  
**Date Received/Prepped:** 04/23/07 | 04/09 | 04/23 | 04/30 | 05/07  
**Date Expired:** | | | | |  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

**MW #:** JKZ 070403 - 1 ✓  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 1 L  
**Lot #:** NA

Component	Comment	Standard	Concentration
Anion Calib Soln A	12.5 µL	R 201531	
Cl 1000 ppm	} dilute to 100 ml DI H <sub>2</sub> O		Cl = 0.125
NO <sub>2</sub> 100			NO <sub>2</sub> = 0.0125
SO <sub>4</sub> 200			NO <sub>3</sub> = 0.0125
Anion Calib Soln B	12.5 µL	R 201532	SO <sub>4</sub> = 0.25
NO <sub>2</sub> 100 ppm	stds. prep: 5/7/05/08		

Comment:

# Reagent Preparation Documentation

**Reagent:** Autocal 3  
**Date Received/Prepped:** 04/03 1 04/09 1 04/23 1 04/30 1 05/07  
**Date Expired:** 1 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT.

JKZ-070403-2 **MW #:** JKZ 070403-2  
 JKZ-070409-2 **By:** JKZ  
 JKZ-070423-2 ✓ **Matrix:** Aq  
 JKZ-070430-2 **Amount:** 100 ml  
 JKZ-070507-2 **Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Soln A	25 mL	R 20/531	
Cl 1000 ppm	} dilute to 100 ml in DI H <sub>2</sub> O		Cl = 0.25 ppm
NO <sub>2</sub> 100			NO <sub>2</sub> = 0.025
SO <sub>4</sub> 2000 ↓			NO <sub>3</sub> = 0.025
Amion Calib Soln B		25 mL	R 20/532
NO <sub>2</sub> 100 ppm	std. exp. 06/05/08		

Comment:

**Reagent:** Autocal 4 CRL  
**Date Received/Prepped:** 1 1 1  
**Date Expired:** 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

JKZ-070403-3 **MW #:** JKZ 070403-3  
 JKZ-070409-3 **By:** JKZ  
 JKZ-070423-3 ✓ **Matrix:** Aq  
 JKZ-070430-3 **Amount:** 100 ml  
 JKZ-070507-3 **Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Soln A	50 mL	R 20/531	
	} dilute to 100 ml in DI H <sub>2</sub> O		Cl = 0.50 ppm
			NO <sub>2</sub> = 0.050
			NO <sub>3</sub> = 0.050
Amion Calib Soln B		50 mL	R 20/532
	std. exp. 06/05/08		

Comment:

**Reagent:** Autocal 5  
**Date Received/Prepped:** 1 1 1 1  
**Date Expired:** 1 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

JKZ-070403-4 **MW #:** JKZ 070403-4  
 JKZ-070409-4 **By:** JKZ  
 JKZ-070423-4 ✓ **Matrix:** Aq  
 JKZ-070430-4 **Amount:** 100 ml  
 JKZ-070507-4 **Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Soln A	100 mL	R 20/531	
	} dilute to 100 ml in DI H <sub>2</sub> O		Cl = 1.00 ppm
			NO <sub>2</sub> = 0.10
			NO <sub>3</sub> = 0.10
Amion Calib Soln B		100 mL	R 20/532
	std. exp. 5/8/08		

Comment:

# Reagent Preparation Documentation

**Reagent:** Auto cal 6  
**Date Received/Prepped:** 1 1 1 1  
**Date Expired:** 1 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

JKZ-070403-5  
 JKZ-070409-5  
 JKZ-070423-5 ✓  
 JKZ-070430-5  
 JKZ-070507-5

**MW #:** JKZ 070403-5  
**By:** JKZ  
**Matrix:** Aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Adm A	200 µL	R201531	
Cl 1000 ppm	} dilute to 100 ml w DI H <sub>2</sub> O		Cl = 2.00 ppm
NO <sub>3</sub> 100			NO <sub>2</sub> = 0.20
SO <sub>4</sub> 2000 ↓			NO <sub>3</sub> = 0.20
Amion Calib Adm B		200 µL	R201532
NO <sub>2</sub> 100 ppm			

Comment:

**Reagent:** Auto cal 7  
**Date Received/Prepped:** 1 1 1 1  
**Date Expired:** 1 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

JKZ-070403-6  
 JKZ-070409-6  
 JKZ-070423-6 ✓  
 JKZ-070430-6  
 JKZ-070507-6

**MW #:** JKZ 070403-6  
**By:** JKZ  
**Matrix:** Aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Adm A	500 µL	R201531	
	} dilute to 100 ml w DI H <sub>2</sub> O		Cl = 5.00 ppm
			NO <sub>2</sub> = 0.50
			NO <sub>3</sub> = 0.50
Amion Calib Adm B		500 µL	R201532

Comment:

**Reagent:** Auto cal 8  
**Date Received/Prepped:** 1 1 1  
**Date Expired:** 1 1 1  
**Manufacturer:** \_\_\_\_\_  
**Storage Condition:** Fresh every calibration, RT

JKZ-070403-7 -  
 JKZ-070409-7  
 JKZ-070423-7 ✓  
 JKZ-070430-7  
 JKZ-070507-7 -

**MW #:** JKZ 070403-7  
**By:** JKZ  
**Matrix:** Aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Amion Calib Adm A	1.00 ml	R201531	
Cl 1000 ppm	} dilute to 100 ml w DI H <sub>2</sub> O		Cl = 10.0 ppm
NO <sub>3</sub> 100			NO <sub>2</sub> = 1.00
SO <sub>4</sub> 2000 ↓			NO <sub>3</sub> = 1.00
Amion Calib Adm B		1.00 ml	R201532
NO <sub>2</sub> 100 ppm			

Comment:

# Reagent Preparation Documentation

**Reagent:** Autocal 9 JKZ-070403-8  
**Date Received/Prepped:** 1 1 1 1 JKZ-070409-8  
**Date Expired:** 1 1 1 1 JKZ-070423-8 ✓  
**Manufacturer:** JKZ-070430-8 ✓  
**Storage Condition:** Fresh every calibration, RT JKZ-070507-8

**MW #:** JKZ 070403-8  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Ammon Calib Soln A	2.50 ml	R 201531	
Cl = 1000 ppm	} dilute to 100 ml of DI H <sub>2</sub> O		Cl = 25.0 ppm
NO <sub>3</sub> = 100			NO <sub>2</sub> = 2.50
SO <sub>4</sub> = 2000 ↓			NO <sub>3</sub> = 2.50
Ammon Calib Soln B	2.50 ml	R 201532	SO <sub>4</sub> = 50.0
NO <sub>2</sub> = 100 ppm			

Comment:

**Reagent:** Autocal 10 JKZ-070403-9  
**Date Received/Prepped:** 1 1 1 1 JKZ-070409-9  
**Date Expired:** 1 1 1 1 JKZ-070423-9 ✓  
**Manufacturer:** JKZ-070430-9 ✓  
**Storage Condition:** Fresh every calibration, RT JKZ-070507-9

**MW #:** JKZ 070403-9  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Ammon Calib Soln A	5.00 ml	R 201531	
	} dilute to 100 ml of DI H <sub>2</sub> O		Cl = 50.0 ppm
			NO <sub>2</sub> = 5.00
Ammon Calib Soln B	5.00 ml	R 201532	NO <sub>3</sub> = 5.00
	std. exp. 06/05/08		SO <sub>4</sub> = 100
	<u>Fresh every calibration, RT</u>		

Comment:

**Reagent:** Autocal 11 JKZ-070403-10  
**Date Received/Prepped:** 1 1 1 1 JKZ-070409-10  
**Date Expired:** 1 1 1 1 JKZ-070423-10 ✓  
**Manufacturer:** JKZ-070430-10 ✓  
**Storage Condition:** Fresh every calibration, RT JKZ-070507-10

**MW #:** JKZ 070403-10  
**By:** JKZ  
**Matrix:** aq  
**Amount:** 100 ml  
**Lot #:** NA

Component	Comment	Standard	Concentration
Ammon Calib Soln A	10.0 ml	R 201531	
	} dilute to 100 ml of DI H <sub>2</sub> O		Cl = 100 ppm
			NO <sub>2</sub> = 10
Ammon Calib Soln B	10.0 ml	R 201532	NO <sub>3</sub> = 10
	std. exp. 06/05/08		SO <sub>4</sub> = 200

Comment:



**USA**  
 5580 Skylane Boulevard 707.525.5788  
 Santa Rosa, CA 95403 800.878.7654  
 www.cpiinternational.com Fax 707.545.7901

**EUROPE**  
 P.O. Box 2704 +31 20 638 05 97  
 1000 CS Amsterdam Fax +31 20 420 28 36  
 The Netherlands www.cpiinternational.com

*Innovative Solutions  
 in Analytical Science and  
 Technology*

R201531

Expiry: 6/5/2008

# Certificate of Analysis

**Part Number:** 4400-050110rh03      **Solution A**  
**Lot Number:** 06L002  
**Shelf Life:** 18 months

MWH  
 Anion Calibration Stock Solution  
 H2O

Concentrations in ug/mL ± 0.5%

Cl	1000
N (NO3)	100
SO4	2000
Br	40
P	500

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

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

For questions or comments please call 1-800-878-7654 in the USA, +31 20 638 05 97 in Europe or visit our web-site at [www.cpiinternational.com](http://www.cpiinternational.com).

CPI International - MULTI-ELEMENT STANDARD - H<sub>2</sub>O  
MATERIAL SAFETY DATA SHEET  
NSN: N/A  
Manufacturer's CAGE: N/A  
Part No. Indicator: A  
Part Number/Trade Name: 4400-050110RH03 SOL.A&B

---

**SECTION 1. GENERAL INFORMATION**

---

Company's Name: CPI INTERNATIONAL  
Company's Street: 5580 SKYLANE BLVD.  
Company's City: SANTA ROSA  
Company's State: CA  
Company's Country: USA  
Company's Zip Code: 95403  
Company's Emergency Phone: (800) 451-8346 USA, (760) 602-8700 INT'L  
Company's General Information Phone #: (707) 525-5788  
Date MSDS Prepared: 12AUG99  
Date MSDS Revised: 25SEP03  
Author's Company: CPI INTERNATIONAL  
Authorized: CPI INTERNATIONAL  
Hazard Characteristic Code: UNK

---

**SECTION 2. INGREDIENTS/IDENTITY INFORMATION**

---

Proprietary: NO  
Ingredient: WATER  
Ingredient Sequence Number: 01  
Percent: <100  
NIOSH (RTECS) Number: ZC0110000  
CAS Number: 7732-18-5

---

**SECTION 3. PHYSICAL/CHEMICAL CHARACTERISTICS**

---

Appearance and Odor: CLEAR, ODORLESS LIQUID.  
Solubility in Water: COMPLETE  
Boiling Point: ~212 F  
Specific Gravity: ~1

---

**SECTION 4. FIRE EXPLOSION AND HAZARD DATA**

---

Extinguishing Media: USE APPROPRIATE MEDIA FOR SURROUNDING FIRE.  
Special Fire Fighting Procedure: WEAR PROPER PROTECTIVE EQUIPMENT AND SELFCONTAINED BREATHING APPARATUS WITH FULL FACE PIECE IN POSITIVE MODE.  
Unusual Fire and Explosion Hazards: NONE.

---

**SECTION 5. REACTIVITY DATA**

---

Stability: YES  
Materials to Avoid: STRONG REDUCING AGENTS, ACID CHLORIDES, PHOSPHORUS TRICHLORIDE, PHOSPHORUS PENTACHLORIDE, PHOSPHORUS OXYCHLORIDE.  
Hazardous Poly Occur: NO  
Hazardous Decomposition Products: NONE.

---

**SECTION 6. HEALTH HAZARD DATA**

---

Route of Entry-Inhalation: YES  
Route of Entry-Skin: YES  
Route of Entry-Ingestion: YES  
Health Hazard Acute and Chronic: INHALATION: NONE. INGESTION: NONE. SKIN/EYES: NONE.  
Carcinogenicity-NTP: NO  
Carcinogenicity-IARC: NO  
Carcinogenicity-OSHA: NO  
Explanation Carcinogenicity: NONE  
Signs/Symptoms of Over Exposure: EYES/SKIN: N/A. INHALATION: N/A. INGESTION: N/A.  
Emergency First Aid Procedure: INGESTION: DON'T INDUCE VOMITING. IF CONSCIOUS, GIVE WATER, MILK OR MILK OF MAGNESIA. EYES/SKIN: FLUSH WITH PLENTY OF WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

---

**SECTION 7. PRECAUTIONS FOR SAFE HANDLING**

---

Steps if material Released/Spilled: WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE FLUSHED TO SEWER. IF MATERIAL BECOMES CONTAMINATED DURING USE, DISPOSE OF ACCORDINGLY. DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.  
Precautions-Handling/Storing: NONE HAZARDOUS MATERIAL.

---

**SECTION 8. CONTROL MEASURES**

---

Respiratory Protection: WEAR A NIOSH/MSHA APPROVED RESPIRATOR WHEN VENTILATION IS INADEQUATE.  
Ventilation: LOCAL EXHAUST;  
Protective Gloves: IMPERVIOUS GLOVES  
Eye Protection: SAFETY GLASSES WITH SIDE SHIELDS  
Other Protective Equipment: LAB COAT OR APRON  
Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING AND SHOES BEFORE REUSE.

---

**SECTION 9. TRANSPORTATION DATA**

---

Domestic (D.O.T) Transportation Requirement: NOT REGULATED.

---



**USA**  
 5580 Skylane Boulevard 707.525.5788  
 Santa Rosa, CA 95403 800.878.7654  
 www.cpiinternational.com Fax 707.545.7901

**EUROPE**  
 P.O. Box 2704 +31 20 638 05 97  
 1000 CS Amsterdam Fax +31 20 420 28 36  
 The Netherlands www.cpiinternational.com

*Innovative Solutions  
 in Analytical Science and  
 Technology*

**R 201532**

Expiry: 6/5/2008

# Certificate of Analysis

**Part Number:** 4400-050110rh03 **Solution B**  
**Lot Number:** 06L002  
**Shelf Life:** 18 months

MWH  
 Anion Calibration Stock Solution  
 H2O

Concentrations in ug/mL ± 0.5%

N (NO2) 100

This standard solution was prepared using high-purity starting materials, high-purity acid (if required) and 18-megaohm de-ionized water. The starting materials were weighed to five significant figures and diluted in volumetric glassware calibrated to five significant figures.

Starting materials were analyzed at 1000µg/mL by ICP-MS for trace impurities. The standard solution concentrations were certified instrumentally against the National Institute of Standards and Technology's SRM 3100 series, NIST approved second source and/or gravimetrically.

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

For questions or comments please call 1-800-878-7654 in the USA, +31 20 638 05 97 in Europe or visit our web-site at [www.cpiinternational.com](http://www.cpiinternational.com).

CPI International - MULTI-ELEMENT STANDARD - H<sub>2</sub>O  
MATERIAL SAFETY DATA SHEET  
NSN: N/A  
Manufacturer's CAGE: N/A  
Part No. Indicator: A  
Part Number/Trade Name: 4400-050110RH03 SOL.A&B

---

**SECTION 1. GENERAL INFORMATION**

---

Company's Name: CPI INTERNATIONAL  
Company's Street: 5580 SKYLANE BLVD.  
Company's City: SANTA ROSA  
Company's State: CA  
Company's Country: USA  
Company's Zip Code: 95403  
Company's Emergency Phone: (800) 451-8346 USA, (760) 602-8700 INT'L  
Company's General Information Phone #: (707) 525-5788  
Date MSDS Prepared: 12AUG99  
Date MSDS Revised: 25SEP03  
Author's Company: CPI INTERNATIONAL  
Authorized: CPI INTERNATIONAL  
Hazard Characteristic Code: UNK

---

**SECTION 2. INGREDIENTS/IDENTITY INFORMATION**

---

Proprietary: NO  
Ingredient: WATER  
Ingredient Sequence Number: 01  
Percent: <100  
NIOSH (RTECS) Number: ZC0110000  
CAS Number: 7732-18-5

---

**SECTION 3. PHYSICAL/CHEMICAL CHARACTERISTICS**

---

Appearance and Odor: CLEAR, ODORLESS LIQUID.  
Solubility in Water: COMPLETE  
Boiling Point: ~212 F  
Specific Gravity: ~1

---

**SECTION 4. FIRE EXPLOSION AND HAZARD DATA**

---

Extinguishing Media: USE APPROPRIATE MEDIA FOR SURROUNDING FIRE.  
Special Fire Fighting Procedure: WEAR PROPER PROTECTIVE EQUIPMENT AND SELFCONTAINED BREATHING APPARATUS WITH FULL FACE PIECE IN POSITIVE MODE.  
Unusual Fire and Explosion Hazards: NONE.

---

**SECTION 5. REACTIVITY DATA**

---

Stability: YES  
Materials to Avoid: STRONG REDUCING AGENTS, ACID CHLORIDES, PHOSPHORUS TRICHLORIDE, PHOSPHORUS PENTACHLORIDE, PHOSPHORUS OXYCHLORIDE.  
Hazardous Poly Occur: NO  
Hazardous Decomposition Products: NONE.

---

**SECTION 6. HEALTH HAZARD DATA**

---

Route of Entry-Inhalation: YES  
Route of Entry-Skin: YES  
Route of Entry-Ingestion: YES  
Health Hazard Acute and Chronic: INHALATION: NONE. INGESTION: NONE. SKIN/EYES: NONE.  
Carcinogenicity-NTP: NO  
Carcinogenicity-IARC: NO  
Carcinogenicity-OSHA: NO  
Explanation Carcinogenicity: NONE  
Signs/Symptoms of Over Exposure: EYES/SKIN: N/A. INHALATION: N/A. INGESTION: N/A.  
Emergency First Aid Procedure: INGESTION: DON'T INDUCE VOMITING. IF CONSCIOUS, GIVE WATER, MILK OR MILK OF MAGNESIA. EYES/SKIN: FLUSH WITH PLENTY OF WATER. OBTAIN MEDICAL ATTENTION IN ALL CASES.

---

**SECTION 7. PRECAUTIONS FOR SAFE HANDLING**

---

Steps if material Released/Spilled: WHATEVER CANNOT BE SAVED FOR RECOVERY OR RECYCLING SHOULD BE FLUSHED TO SEWER. IF MATERIAL BECOMES CONTAMINATED DURING USE, DISPOSE OF ACCORDINGLY. DISPOSE OF CONTAINER AND UNUSED CONTENTS IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REQUIREMENTS.  
Precautions-Handling/Storing: NONE HAZARDOUS MATERIAL.

---

**SECTION 8. CONTROL MEASURES**

---

Respiratory Protection: WEAR A NIOSH/MSHA APPROVED RESPIRATOR WHEN VENTILATION IS INADEQUATE.  
Ventilation: LOCAL EXHAUST:  
Protective Gloves: IMPERVIOUS GLOVES  
Eye Protection: SAFETY GLASSES WITH SIDE SHIELDS  
Other Protective Equipment: LAB COAT OR APRON  
Work Hygienic Practices: REMOVE/LAUNDER CONTAMINATED CLOTHING AND SHOES BEFORE REUSE.

---

**SECTION 9. TRANSPORTATION DATA**

---

Domestic (D.O.T) Transportation Requirement: NOT REGULATED.

---

D.O.T Proper Shipping Name and UN Number: N/A.

---

**SECTION 10. DISPOSAL DATA**

Waste Disposal: DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS. (CORROSIVE WASTE)

---

**SECTION 11. LABEL DATA**

---

Label Required: YES  
Technical Review Date: 25SEP03  
Label Date: 12AUG99  
Label Status: G  
Common Name: MULTI-ELEMENT STANDARD  
Chronic Hazard: NO  
Signal Word: CAUTION!  
Acute Health Hazard-NONE: X  
Contact Hazard-NONE: X  
Fire Hazard-NONE: X  
Special Hazard Precautions: SEE HEALTH HAZARDS.  
Protect Eyes: Y  
Protect Skin: Y  
Protect Respiratory: Y  
Label Name: CPI INTERNATIONAL  
Label Street: 5580 SKYLANE BLVD.  
Label City: SANTA ROSA  
Label State: CA  
Label Zip Code: 95403  
Label Country: USA  
Label Emergency Number: (800) 451-8346 USA, (760) 602-8700 INT'L

---

**SECTION 12. ADDITIONAL INFORMATION**

---

CPI International makes no warranties, guarantees or representations of any kind or nature with respect to the product or this data, either expressed or implied, and whether arising by law or otherwise, including but not limited to any implied warranty of personal injury, property or other damages of any nature whatsoever, whether special, indirect, consequential or compensatory, directly or indirectly result in from the publication, use or reliance upon this data.