

November 27, 2009

TestAmerica Project Number: G9K190437

PO/Contract:

Cindy Arnold
Tronox LLC / AIU Henderson, NV
PO Box 268859
Oklahoma City, OK 73126-8859

Dear Ms. Arnold,

This report contains the analytical results for the samples received under chain of custody by TestAmerica on November 19, 2009. These samples are associated with your Tronox Henderson project.

The test results in this report meet all NELAC requirements for parameters that accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The case narrative is an integral part of this report.

If you have any questions, please feel free to call me at (916) 374-4383.

Sincerely,



DAVID R. ALLTUCKER
Project Manager

Table of Contents

TestAmerica West Sacramento Project Number G9K190437

Case Narrative

Quality Assurance Program

Sample Description Information

Chain of Custody Documentation

WATER, 314.0, Perchlorate

Samples: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12

 Sample Data Sheets

 Method Blank Report

 Laboratory QC Reports

Raw Data Package

Case Narrative

TestAmerica West Sacramento Project Number G9K190437

There are no anomalies associated with this project.

TestAmerica Laboratories West Sacramento Certifications/Accreditations

Certifying State	Certificate #	Certifying State	Certificate #
Alaska	UST-055	New York*	11666
Arizona	AZ0708	Oregon*	CA 200005
Arkansas	88-0691	Pennsylvania	68-1272
California*	01119CA	South Carolina	87014
Colorado	NA	Texas	T104704399-08-TX
Connecticut	PH-0691	Utah*	QUAN1
Florida*	E87570	Virginia	00178
Georgia	960	Washington	C1281
Hawaii	NA	West Virginia	9930C, 334
Illinois	200060	Wisconsin	998204680
Kansas*	E-10375	NFESC	NA
Louisiana*	30612	USACE	NA
Michigan	9947	USDA Foreign Plant	37-82605
Nevada	CA44	USDA Foreign Soil	P330-09-00055
New Jersey*	CA005	US Fish & Wildlife	LE148388-0
New Mexico	NA	Guam	09-014r

*NELAP accredited. A more detailed parameter list is available upon request. Updated 3/25/2009

QC Parameter Definitions

QC Batch: The QC batch consists of a set of up to 20 field samples that behave similarly (i.e., same matrix) and are processed using the same procedures, reagents, and standards at the same time.

Method Blank: An analytical control consisting of all reagents, which may include internal standards and surrogates, and is carried through the entire analytical procedure. The method blank is used to define the level of laboratory background contamination.

Laboratory Control Sample and Laboratory Control Sample Duplicate (LCS/LCSD): An aliquot of blank matrix spiked with known amounts of representative target analytes. The LCS (and LCSD as required) is carried through the entire analytical process and is used to monitor the accuracy of the analytical process independent of potential matrix effects. If an LCSD is performed, it may also be used to evaluate the precision of the process.

Duplicate Sample (DU): Different aliquots of the same sample are analyzed to evaluate the precision of an analysis.

Surrogates: Organic compounds not expected to be detected in field samples, which behave similarly to target analytes. These are added to every sample within a batch at a known concentration to determine the efficiency of the sample preparation and analytical process.

Matrix Spike and Matrix Spike Duplicate (MS/MSD): An MS is an aliquot of a matrix fortified with known quantities of specific compounds and subjected to an entire analytical procedure in order to indicate the appropriateness of the method for a particular matrix. The percent recovery for the respective compound(s) is then calculated. The MSD is a second aliquot of the same matrix as the matrix spike, also spiked, in order to determine the precision of the method.

Isotope Dilution: For isotope dilution methods, isotopically labeled analogs (internal standards) of the native target analytes are spiked into the sample at time of extraction. These internal standards are used for quantitation, and monitor and correct for matrix effects. Since matrix effects on method performance can be judged by the recovery of these analogs, there is little added benefit of performing MS/MSD for these methods. MS/MSD are only performed for client or QAPP requirements.

Control Limits: The reported control limits are either based on laboratory historical data, method requirements, or project data quality objectives. The control limits represent the estimated uncertainty of the test results.

Sample Summary

TestAmerica West Sacramento Project Number G9K190437

<u>WO#</u>	<u>Sample #</u>	<u>Client Sample ID</u>	<u>Sampling Date</u>	<u>Received Date</u>
LPQX9	1	M-141B	10/23/2009 10:00 AM	11/19/2009 09:40 AM
LPQ0C	2	M-141009B	10/23/2009 10:00 AM	11/19/2009 09:40 AM
LPQ0D	3	PB-102309-A3	10/23/2009	11/19/2009 09:40 AM
LPQ0E	4	M-139B	10/26/2009 12:55 PM	11/19/2009 09:40 AM
LPQ0F	5	M-145B	10/26/2009 10:15 AM	11/19/2009 09:40 AM
LPQ0N	6	M-144B	10/27/2009 12:25 PM	11/19/2009 09:40 AM
LPQ0V	7	M-146B	10/27/2009 09:30 AM	11/19/2009 09:40 AM
LPQ0W	8	M-138B	10/28/2009 11:15 AM	11/19/2009 09:40 AM
LPQ0X	9	M-138009B	10/28/2009 11:15 AM	11/19/2009 09:40 AM
LPQ01	10	M-148B	10/29/2009 09:10 AM	11/19/2009 09:40 AM
LPQ1H	11	M-137B	10/29/2009 01:30 PM	11/19/2009 09:40 AM
LPQ1M	12	EB103009-GWA4	10/30/2009 11:10 AM	11/19/2009 09:40 AM

Notes(s):

- The analytical results of the samples listed above are presented on the following pages.
- All calculations are performed before rounding to avoid round-off errors in calculated results.
- Results noted as "ND" were not detected at or above the stated limit.
- This report must not be reproduced, except in full, without the written approval of the laboratory.
- Results for the following parameters are never reported on a dry weight basis: color, corrosivity, density, flashpoint, ignitability, layers, odor, paint filter test, pH, porosity, pressure, reactivity, redox potential, specific gravity, spot tests, solids, solubility, temperature, viscosity, and weight.



CHAIN OF CUSTODY

SR#: ROP 0608

PAGE 1 OF 2 COC #

1317 South 13th Ave., Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

PROJECT NAME: Ironox LLC Henderson

PROJECT NUMBER: _____

PROJECT MANAGER: Ed Wallace

COMPANY/ADDRESS: See above

CITY/STATE/ZIP: _____

E-MAIL ADDRESS: _____

PHONE #: _____

FAX #: _____

SAMPLER'S SIGNATURE: _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS		REMARKS
					1	2	
M-141B	12/30/09	1000					
M-141009B	12/30/09	1000					
DB102397-A3	12/30/09	—					
M-139B	12/30/09	1255					
M-145B	12/30/09	1015					
M-144B	12/30/09	1225					
M-146B	12/31/09	0930					
M-138B	12/30/09	1115					
M-138009B	12/30/09	1115					
M-148B	12/31/09	0910					

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg
 Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

SPECIAL INSTRUCTIONS/COMMENTS:

REPORT REQUIREMENTS

I. Routine Report: Method Blank, Surrogate, as required

II. Report Dup., MS, MSD as required

III. Data Validation Report (includes all raw data)

IV. CLP Deliverable Report

V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

24 hr. _____ 48 hr. _____

5 Day _____

Standard (10-15 working days)

Provide FAX Results 12/30/09

Requested Report Date _____

RELINQUISHED BY: _____ Date/Time: 11/18/09 Firm: _____

Signature: _____ Printed Name: _____

RECEIVED BY: _____ Date/Time: 11/17/09 Firm: _____

Signature: Cheng Printed Name: Cheng



1317 South 13th Ave., Kelso, WA 98626 • (360) 577-7222 • (800) 695-7222x07 • FAX (360) 636-1068

CHAIN OF CUSTODY

SR#: 20906095 PAGE 2 OF 2 COC # _____

PROJECT NAME: Trax LLC Henderson

PROJECT NUMBER: _____

PROJECT MANAGER: ED WALLACE

COMPANY ADDRESS: _____

CITY/STATE/ZIP: _____

E-MAIL ADDRESS: _____

PHONE #: _____

FAX #: _____

SAMPLER'S SIGNATURE: _____

SAMPLE I.D.	DATE	TIME	LAB I.D.	MATRIX	NUMBER OF CONTAINERS	SEMIVOLATILE ORGANICS BY GC/MS		VOLATILE ORGANICS		HYDROCARBONS ("see below")		GAS		FUEL FINGERPRINT (FIO)		OIL & GREASE/TRPH		PCBS		AROCOLS		PESTICIDES/HERBICIDES		CHLOROPHENOLICS		TR		PAHS		METALS, TOTAL OR DISSOLVED (See list below)		CYANIDE		PH, COND., CL, SO4, PO4, F, NO2, NO3, BOD, TSS, TDS (circle)		NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3		TOX 9020		AOX 1650		506			
						625	8270	8270LL	8270LL	8021	8021	BTEX	Oil	NW-HCID Screen	1664 HEM	1664 SGT	PCBs	Aroclors	608	8081A	8141A	8151A	8141A	8151A	PAHS 8310	SIM	Metals, Total or Dissolved	Cyanide	Hex-Chrom	NO3, BOD, TSS, TDS (circle)	PO4, F, NO2, NH3-N, COD, Total-P, TKN, TOC, DOC (circle) NO2+NO3	TOX 9020	AOX 1650	506											
M-137B	10/16/09	1330																																											
EB 103009-GUAY 1004 1110																																													

REPORT REQUIREMENTS

I. Routine Report: Method Blank, Surrogate, as required

II. Report Dup., MS, MSD as required

III. Data Validation Report (includes all raw data)

IV. CLP Deliverable Report

V. EDD

INVOICE INFORMATION

P.O. # _____

Bill To: _____

TURNAROUND REQUIREMENTS

24 hr. _____ 48 hr. _____

5 Day _____

Standard (10-15 working days)

Provide FAX Results

11/2/09

Requested Report Date

SPECIAL INSTRUCTIONS/COMMENTS:

*INDICATE STATE HYDROCARBON PROCEDURE: AK CA WI NORTHWEST OTHER: _____ (CIRCLE ONE)

Circle which metals are to be analyzed:

Total Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg

Dissolved Metals: Al As Sb Ba Be B Ca Cd Co Cr Cu Fe Pb Mg Mn Mo Ni K Ag Na Se Sr Ti Sn V Zn Hg

RELINQUISHED BY:

Signature: [Signature] Date/Time: 11/18/09

Printed Name: [Name] Firm: _____

RECEIVED BY:

Signature: [Signature] Date/Time: 11/19/09-1000

Printed Name: [Name] Firm: _____

WATER, 314.0, Perchlorate

Northgate Environmental Management, Inc.

Client Sample ID: M-141B

General Chemistry

Lot-Sample #...: G9K190437-001
Date Sampled...: 10/23/09

Work Order #...: LPQX9
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	716000 Q	10000	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 10000		MDL.....: 3600		

NOTE (S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-141009B

General Chemistry

Lot-Sample #...: G9K190437-002
Date Sampled...: 10/23/09

Work Order #...: LPQ0C
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	714000 Q	10000	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 10000		MDL.....: 3600		

NOTE(S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: PB-102309-A3

General Chemistry

Lot-Sample #...: G9K190437-003
Date Sampled...: 10/23/09

Work Order #...: LPQ0D
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	6.6	1.0	ug/L	MCAWW 314.0	11/19/09	9328496

Dilution Factor: 1 MDL.....: 0.36

Northgate Environmental Management, Inc.

Client Sample ID: M-139B

General Chemistry

Lot-Sample #...: G9K190437-004
Date Sampled...: 10/26/09

Work Order #...: LPQ0E
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	1630 Q	100	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE(S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-145B

General Chemistry

Lot-Sample #...: G9K190437-005 Work Order #...: LPQ0F Matrix.....: WATER
Date Sampled...: 10/26/09 Date Received...: 11/19/09

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	499 Q	20.0	ug/L	MCAWW 314.0	11/19-11/20/09	9328496
		Dilution Factor: 20		MDL.....: 7.2		

NOTE (S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-144B

General Chemistry

Lot-Sample #...: G9K190437-006 Work Order #...: LPQ0N Matrix.....: WATER
Date Sampled...: 10/27/09 Date Received...: 11/19/09

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	2950 Q	100	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE (S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-146B

General Chemistry

Lot-Sample #...: G9K190437-007
Date Sampled...: 10/27/09

Work Order #...: LPQ0V
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	3100 Q	100	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE(S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-138B

General Chemistry

Lot-Sample #...: G9K190437-008
Date Sampled...: 10/28/09

Work Order #...: LPQ0W
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	1920 Q	100	ug/L	MCAWW 314.0	11/19-11/20/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE (S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-138009B

General Chemistry

Lot-Sample #...: G9K190437-009
Date Sampled...: 10/28/09

Work Order #...: LPQ0X
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	1890 Q	100	ug/L	MCAWW 314.0	11/19-11/20/09	9328496

Dilution Factor: 100 MDL.....: 36.0

NOTE(S):

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-148B

General Chemistry

Lot-Sample #...: G9K190437-010
Date Sampled...: 10/29/09

Work Order #...: LPQ01
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	1960 Q	100	ug/L	MCAWW 314.0	11/19-11/20/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE(S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: M-137B

General Chemistry

Lot-Sample #...: G9K190437-011
Date Sampled...: 10/29/09

Work Order #...: LPQ1H
Date Received...: 11/19/09

Matrix.....: WATER

PARAMETER	RESULT	RL	UNITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Perchlorate	1580 Q	100	ug/L	MCAWW 314.0	11/19-11/20/09	9328496
		Dilution Factor: 100		MDL.....: 36.0		

NOTE (S) :

RL Reporting Limit

Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Northgate Environmental Management, Inc.

Client Sample ID: EB103009-GWA4

General Chemistry

Lot-Sample #...: G9K190437-012
Date Sampled...: 10/30/09

Work Order #...: LPQ1M
Date Received...: 11/19/09

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>RL</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	ND	1.0	ug/L	MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 1		MDL.....: 0.36		

QC DATA ASSOCIATION SUMMARY

G9K190437

Sample Preparation and Analysis Control Numbers

<u>SAMPLE#</u>	<u>MATRIX</u>	<u>ANALYTICAL METHOD</u>	<u>LEACH BATCH #</u>	<u>PREP BATCH #</u>	<u>MS RUN#</u>
001	WATER	MCAWW 314.0		9328496	9328307
002	WATER	MCAWW 314.0		9328496	9328307
003	WATER	MCAWW 314.0		9328496	9328307
004	WATER	MCAWW 314.0		9328496	9328307
005	WATER	MCAWW 314.0		9328496	9328307
006	WATER	MCAWW 314.0		9328496	9328307
007	WATER	MCAWW 314.0		9328496	9328307
008	WATER	MCAWW 314.0		9328496	9328307
009	WATER	MCAWW 314.0		9328496	9328307
010	WATER	MCAWW 314.0		9328496	9328307
011	WATER	MCAWW 314.0		9328496	9328307
012	WATER	MCAWW 314.0		9328496	9328307

METHOD BLANK REPORT

General Chemistry

Client Lot #...: G9K190437

Matrix.....: WATER

<u>PARAMETER</u>	<u>RESULT</u>	<u>REPORTING LIMIT</u>	<u>UNITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	ND	Work Order #: LP4FG1AA 1.0	ug/L	MB Lot-Sample #: MCAWW 314.0	G9K240000-496 11/19/09	9328496
		Dilution Factor: 1				

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: G9K190437

Matrix.....: WATER

<u>PARAMETER</u>	<u>PERCENT RECOVERY</u>	<u>RECOVERY LIMITS</u>	<u>METHOD</u>	<u>PREPARATION- ANALYSIS DATE</u>	<u>PREP BATCH #</u>
Perchlorate	99	Work Order #: LP4FG1AC (85 - 115)	LCS Lot-Sample#: G9K240000-496 MCAWW 314.0	11/19/09	9328496
		Dilution Factor: 1			

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

LABORATORY CONTROL SAMPLE DATA REPORT

General Chemistry

Client Lot #...: G9K190437

Matrix.....: WATER

PARAMETER	SPIKE AMOUNT	MEASURED AMOUNT	UNITS	PERCENT RECVRY	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Perchlorate	50.0	49.7	ug/L	99	MCAWW 314.0	11/19/09	9328496
Work Order #: LP4FG1AC LCS Lot-Sample#: G9K240000-496							
Dilution Factor: 1							

NOTE (S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE EVALUATION REPORT

General Chemistry

Client Lot #...: G9K190437
 Date Sampled...: 10/26/09

Date Received...: 11/19/09

Matrix.....: WATER

PARAMETER	PERCENT RECOVERY	RECOVERY LIMITS	RPD	RPD LIMITS	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Perchlorate			WO#: LPQ0E1AC-MS/LPQ0E1AD-MSD		MS Lot-Sample #: G9K190437-004		
	95	(80 - 120)			MCAWW 314.0	11/19/09	9328496
	97	(80 - 120)	1.3	(0-20)	MCAWW 314.0	11/19/09	9328496
			Dilution Factor: 100				

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

MATRIX SPIKE SAMPLE DATA REPORT

General Chemistry

Client Lot #...: G9K190437

Matrix.....: WATER

Date Sampled...: 10/26/09

Date Received...: 11/19/09

PARAMETER	SAMPLE AMOUNT	SPIKE AMT	MEASRD AMOUNT	UNITS	PERCNT RECVRY	RPD	METHOD	PREPARATION- ANALYSIS DATE	PREP BATCH #
Perchlorate			WO#: LPQ0E1AC-MS/LPQ0E1AD-MSD				MS Lot-Sample #:	G9K190437-004	
	1630	5000	6380	ug/L	95		MCAWW 314.0	11/19/09	9328496
	1630	5000	6470	ug/L	97	1.3	MCAWW 314.0	11/19/09	9328496

Dilution Factor: 100

NOTE(S) :

Calculations are performed before rounding to avoid round-off errors in calculated results.

WATER, 314.0, Perchlorate

Perchlorate by IC

Lots: G9K190437

Analysis: Perchlorate
(EPA 314.0)

Date(s): 11.19.09,
11.20.09

Analyst: JOR

Level 1 Review:

1. Samples properly preserved/verified
2. Run setup meets std criteria (Curve, ICV, ICB, CCV, etc)
3. Calibration criteria met (R=0.995, R²=0.990)
4. Second source std in control
5. Batch QC in control (LCS, MB, MS/MSD, DCS-if necessary)
6. Calculations checked
7. QAS/QAPP consulted for client specific requirements
8. Standard tracking #'s recorded on runlog/benchsheet
9. Manual integration performed, documented & approved
10. Copy of run log included with data package
11. Copy of conductivity screen logbook (314.0 only)

YES	NO	N/A
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Level 1 Data Review:

1. Benchsheet complete
2. QAS/QAPP consulted for client specific data entry
3. Copy of prep sheet/checklist submitted
4. NCM(s) submitted

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Completed by and Date: JOR 11.24.09

Level 2 Review:

1. Level 1 checklist complete & verified
2. Deviations, NCM(s), holding times checked & approved
3. Reprep/Reanalysis documented and chemist notified
4. Client specific criteria met
5. Data entry checked and released in LIMS
6. Indication on benchsheet of review (dated and initialed)
7. Manual integration reviewed, approved (dated and initialed)
8. Copy of run log included with data package
9. Copy of conductivity screen logbook (314.0 only)

<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Completed by and Date: REV 11/25/09

Comments:

TestAmerica West Sacramen

PRODUCTION FIGURES - WET CHEM

TOTAL NUMBER	SAMPLE NUMBER	QC	RE-RUN MATRIX	RE-RUN OTHER	MISC NUMBER	TOTAL HOURS	EXPANDED DELIVERABLE
--------------	---------------	----	---------------	--------------	-------------	-------------	----------------------

METHOD: 1N Perchlorate (314.0, Ion Chromatography)
 QC BATCH #: 9328496
 PREP DATE: 11/19/09 17:12
 COMP DATE: 11/19/09 17:12
 USER: ROGERSJ

INITIALS:
 PREP _____
 ANAL _____

DATA ENTRY:
 INITIALS _____
 DATE _____

Work Order	Lab Number	Structured Analysis	Exp. Del.	Analysis Date	Sample ID:
LPQX9-1-AA	G-9K190437-001	XX I 88 1N 01	M	_____	M-141B
LPQ0C-1-AA	G-9K190437-002	XX I 88 1N 01	M	_____	M-141009B
LPQ0D-1-AA	G-9K190437-003	XX I 88 1N 01	M	_____	PB-102309-A3
LPQ0E-1-AA	G-9K190437-004	XX I 88 1N 01	M	_____	M-139B
LPQ0E-1-AD	G-9K190437-004-D	XX I 88 1N 01	M	_____	M-139B
LPQ0E-1-AC	G-9K190437-004-S	XX I 88 1N 01	M	_____	M-139B
LPQ0F-1-AA	G-9K190437-005	XX I 88 1N 01	M	_____	M-145B
LPQ0N-1-AA	G-9K190437-006	XX I 88 1N 01	M	_____	M-144B
LPQ0V-1-AA	G-9K190437-007	XX I 88 1N 01	M	_____	M-146B
LPQ0W-1-AA	G-9K190437-008	XX I 88 1N 01	M	_____	M-138B
LPQ0X-1-AA	G-9K190437-009	XX I 88 1N 01	M	_____	M-138009B
LPQ01-1-AA	G-9K190437-010	XX I 88 1N 01	M	_____	M-148B
LPQ1H-1-AA	G-9K190437-011	XX I 88 1N 01	M	_____	M-137B
LPQ1M-1-AA	G-9K190437-012	XX I 88 1N 01	M	_____	EB103009-GWA4
LP4FG-1-AA	G-9K240000-496-B	XX I 88 1N 01		_____	INTRA-LAB BLANK
LP4FG-1-AC	G-9K240000-496-C	XX I 88 1N 01		_____	INTRA-LAB CHECK

Control Limits

(80-120)

PDE115

TestAmerica Laboratories, Inc.
Inorganics Batch Review
QC Batch 9328496

Date 11/24/2009
Time 15:41:29

Method Code: IN Perchlorate (314.0, Ion Chromatography)

Analyst: Jeffery Rogers

Work Order	Result	Units	LDL/Dil	Prep. - Anal.	Total Solids	PSRL Flag	R/R	Rounded Result	Output LDL	Dil.
LPQX9-1-AA	715993 Q	ug/L	10000	11/19/09	.00	N		716,000 Q	10,000	10000.00
LPQ0C-1-AA	713883 Q	ug/L	10000	11/19/09	.00	N		714,000 Q	10,000	10000.00
LPQ0D-1-AA	6.58	ug/L	1	11/19/09	.00	N		6.6	1.0	1.00
LPQ0E-1-AA	1630.95Q	ug/L	100	11/19/09	.00	N		1,630 Q	100	100.00
LPQ0F-1-AA	499.25 Q	ug/L	20	11/19-11/20/09	.00	N		499 Q	20.0	20.00
LPQ0N-1-AA	2950.98Q	ug/L	100	11/19/09	.00	N		2,950 Q	100	100.00
LPQ0V-1-AA	3104.47Q	ug/L	100	11/19/09	.00	N		3,100 Q	100	100.00
LPQ0W-1-AA	1920.95Q	ug/L	100	11/19-11/20/09	.00	N		1,920 Q	100	100.00
LPQ0X-1-AA	1891.52Q	ug/L	100	11/19-11/20/09	.00	N		1,890 Q	100	100.00
LPQ01-1-AA	1963.48Q	ug/L	100	11/19-11/20/09	.00	N		1,960 Q	100	100.00
LPQ1H-1-AA	1580.57Q	ug/L	100	11/19-11/20/09	.00	N		1,580 Q	100	100.00
LPQ1M-1-AA	ND	ug/L	1	11/19/09	.00	N		ND	1.0	1.00
LP4FG-1-AA	ND	ug/L	1.0	11/19/09	.00	N		ND	1.0	1.00

Notes: Q Elevated reporting limit. The reporting limit is elevated due to high analyte levels.

Check Standard Exception Code True Spike Measured Spike Percent Recovered Measured Spike True Spike Measured Spike Pct. Recovered RPD Control Limits Dil.

LP4FG-1-AC 50 49.669 99.33 6470.98 5000 6384.26 95.06 96.80 1.34 (85-115) 1.00

Notes:

MS - MSD Exception Code Measured Sample Spike Measured Spike True Spike Measured Spike Dup. Measured Spike Pct. Recovered RPD Prep. - Anal. Dil.

LPQ0E-1-AC 1630.95Q 5000 6384.26 6470.98 5000 6384.26 95.06 96.80 1.34 11/19/09 100.00

Notes:

TEST TOTAL # SAMPLE # QC # MATRIX # OTHER # MISC # HOURS

0 0 0 0 0 0 .0

Perchlorate Screen Data

Date: 11.19.09 Reference Standard ID: 3745.WC.5.1
 Chemist: FOC Reference Standard Exp. Date: 11.25.09
 Conductivity Meter ID: COND3 Reference Standard Acceptance Criteria: ±15%
 Reference Standard TV: 1413 µS/cm @ 25° C Reference Standard Value: 1460 Pass (Y/N): Y

Sample ID	Sample #	Conductivity* (µS/cm)	Dilution Factor	Temp (°C)	Comments
MCT @ 200 ppm	NA	1,992	NA		
DI Water	NA	1.05	NA		
G9K190437	1	11,200.			ORIG ~ 2,020 µS/cm
	2	11,100.			
	3	3.2			
	4	3,950			
	5	1,930			
	6	5,100			
	7	5,800			
	8	5,200			
	9	3,450.			
	10	3,920.			
	11	2,800.			
	12	1.9			

* Conductivity meter automatically adjusts results to 25°C
 Comments: _____

Sequence: 111909A
Operator: rogersj

*Inst - ICS
Perchlorate Screens*

Title:
Datasource: SACP205B_local
Location: ICS-2000\2009\NOV2009
Timebase: ICS-2000
#Samples: 23

JUL 11-19-09
























Created: 11/19/2009 9:55:00 AM by rogersj
Last Update: 11/24/2009 3:22:19 PM by rogersj

No.	Name	Amount	Dil. Factor	Weight	Inj. Date/Time	Program	Method
		Perchlorate ECD_1					
1	BLANK	n.a.	1.0000	1.0000	11/9/2009 4:36:39 PM	ICS-2000	perchlorate
2	STD1	0.928	1.0000	1.0000	11/9/2009 4:52:03 PM	ICS-2000	perchlorate
3	STD2	3.799	1.0000	1.0000	11/9/2009 5:07:27 PM	ICS-2000	perchlorate
4	STD3	20.114	1.0000	1.0000	11/9/2009 5:22:52 PM	ICS-2000	perchlorate
5	STD4	40.114	1.0000	1.0000	11/9/2009 5:38:16 PM	ICS-2000	perchlorate
6	STD5	60.101	1.0000	1.0000	11/9/2009 5:53:41 PM	ICS-2000	perchlorate
7	STD6	79.640	1.0000	1.0000	11/9/2009 6:09:05 PM	ICS-2000	perchlorate
8	STD7	100.168	1.0000	1.0000	11/9/2009 6:24:29 PM	ICS-2000	perchlorate
9	BLANK	n.a.	1.0000	1.0000	11/19/2009 12:33:43 PM	ICS-2000	perchlorate
10	QCS/ICV/LCS 50 PPB	48.944	1.0000	1.0000	11/19/2009 12:49:09 PM	ICS-2000	perchlorate
11	ICB/MB	n.a.	1.0000	1.0000	11/19/2009 1:04:34 PM	ICS-2000	perchlorate
12	G9K190437-1	559211.344	1000.0000	1.0000	11/19/2009 1:19:58 PM	ICS-2000	perchlorate
13	G9K190437-2	556352.317	1000.0000	1.0000	11/19/2009 1:35:24 PM	ICS-2000	perchlorate
14	G9K190437-4	2143.205	1000.0000	1.0000	11/19/2009 1:50:48 PM	ICS-2000	perchlorate
15	G9K190437-5	n.a.	1000.0000	1.0000	11/19/2009 2:06:12 PM	ICS-2000	perchlorate
16	G9K190437-6	2780.870	1000.0000	1.0000	11/19/2009 2:21:37 PM	ICS-2000	perchlorate
17	G9K190437-7	3257.737	1000.0000	1.0000	11/19/2009 2:37:01 PM	ICS-2000	perchlorate
18	G9K190437-8	1898.718	1000.0000	1.0000	11/19/2009 2:52:25 PM	ICS-2000	perchlorate
19	G9K190437-9	2222.403	1000.0000	1.0000	11/19/2009 3:07:50 PM	ICS-2000	perchlorate
20	G9K190437-10	1727.737	1000.0000	1.0000	11/19/2009 3:23:15 PM	ICS-2000	perchlorate
21	G9K190437-11	2043.136	1000.0000	1.0000	11/19/2009 3:38:40 PM	ICS-2000	perchlorate
22	CCV 100 PPB	96.946	1.0000	1.0000	11/19/2009 3:54:04 PM	ICS-2000	perchlorate
23	CCB	n.a.	1.0000	1.0000	11/19/2009 4:09:29 PM	ICS-2000	perchlorate

Sequence: 111909A
Operator: rogersj

Title:
Datasource: SACP205B_local
Location: ICS-2000\2009\NOV2009
Timebase: ICS-2000
#Samples: 23

Created: 11/19/2009 9:55:00 AM by rogersj
Last Update: 11/24/2009 3:22:19 PM by rogersj

No.	Name	Status	Type	Inj. Vol.	Comment
1	 BLANK	Finished	Standard	1000.0	
2	 STD1	Finished	Standard	1000.0	3745-WC-39-1
3	 STD2	Finished	Standard	1000.0	3745-WC-39-2
4	 STD3	Finished	Standard	1000.0	3745-WC-39-3
5	 STD4	Finished	Standard	1000.0	3745-WC-39-4
6	 STD5	Finished	Standard	1000.0	3745-WC-39-5
7	 STD6	Finished	Standard	1000.0	3745-WC-39-6
8	 STD7	Finished	Standard	1000.0	3745-WC-39-7
9	 BLANK	Finished	Unknown	1000.0	
10	 QCS/ICV/LCS 50 PPB	Finished	Unknown	1000.0	3745-WC-39-8
11	 ICB/MB	Finished	Unknown	1000.0	
12	 G9K190437-1	Finished	Unknown	1000.0	
13	 G9K190437-2	Finished	Unknown	1000.0	
14	 G9K190437-4	Finished	Unknown	1000.0	
15	 G9K190437-5	Finished	Unknown	1000.0	
16	 G9K190437-6	Finished	Unknown	1000.0	
17	 G9K190437-7	Finished	Unknown	1000.0	
18	 G9K190437-8	Finished	Unknown	1000.0	
19	 G9K190437-9	Finished	Unknown	1000.0	
20	 G9K190437-10	Finished	Unknown	1000.0	
21	 G9K190437-11	Finished	Unknown	1000.0	
22	 CCV 100 PPB	Finished	Unknown	1000.0	3745-WC-39-7
23	 CCB	Finished	Unknown	1000.0	

Sample No.	Sample Name	Ret.Time min	Area $\mu\text{S} \cdot \text{min}$	Height μS	Amount	Area/Height	Noise μS
		Perchlorate ECD_1	Perchlorate ECD_1	Perchlorate ECD_1	Perchlorate ECD_1	Perchlorate ECD_1	Perchlorate ECD_1
9	BLANK	n.a.	n.a.	n.a.	n.a.	n.a.	0.0033
10	QCS/ICV/LCS 50 PPB	8.320	0.1091	0.40	49.6695	0.2698	0.0036
11	ICB/MB	n.a.	n.a.	n.a.	n.a.	n.a.	0.0025
12	IPC/MCT 25 PPB @ 20	8.313	0.0489	0.18	23.0096	0.2737	0.0018
13	ICCS 1 PPB	8.310	0.0014	0.01	0.8232	0.2211	0.0022
Average:		8.315	0.053	0.197	24.501		0
Rel.Std.Dev:		0.060 %	101.498 %	101.512 %	99.822 %		28.972 %

Perchlorate QC Check Sheet

File Name: 111909B
 Chemist: JDR
 Date: 11/19/09, 11/20/09

RL = 1 ug/L

<u>Sample ID</u>	<u>Criteria</u>	<u>True Value (ug/L)</u>	<u>Result</u>	<u>% Rec</u>	<u>Acceptance Criteria</u>	<u>Pass/Fail</u>
<i>Blank</i>	baseline noise	n/a	0.0033	n/a	noise < 0.005	PASS
<i>QCS/ICS</i>	% Recovery	50	49.6695	99%	90% - 110%	PASS
<i>ICB</i>	< 1/2 MRL	n/a	ND	n/a	< 1/2 MRL	PASS
<i>IPC/MCT</i>	% Recovery	25	23.0096	92%	80% - 120%	PASS
	PD _{A/H} (ICV vs MCT)	n/a	1.4%	n/a	< 25%	PASS
	A/H ICV	0.2698				
	A/H MCT	0.2737				
	Retention Time Shift	n/a	0.1%	n/a	< 5%	PASS
	RT ICV	8.32				
	RT MCT	8.313				
	Δ EC of IPC/MCT	<u>Original EC</u> 2020	<u>Daily EC</u> 1992	n/a	< 10%	PASS
		RPD =		1%		
<i>ICCS</i>	% Recovery	4	0.8232	82%	75% - 125%	PASS
	% Recovery	1			75% - 125%	PASS

Sequence: 111909B
Operator: rogersj

*First-ICS
Reporting Perchlorate
EPA 914.0
Joe 11-19-09*

Title:
Datasource: SACP205B_local
Location: ICS-2000\2009\NOV2009
Timebase: ICS-2000
#Samples: 47

Created: 11/19/2009 4:13:01 PM by rogersj
Last Update: 11/24/2009 3:21:46 PM by rogersj

No.	Name	Amount	Dil. Factor	Weight	Inj. Date/Time	Program
		Perchlorate ECD_1				
1	BLANK	n.a.	1.0000	1.0000	11/9/2009 4:36:39 PM	ICS-2000
2	STD1	0.928	1.0000	1.0000	11/9/2009 4:52:03 PM	ICS-2000
3	STD2	3.799	1.0000	1.0000	11/9/2009 5:07:27 PM	ICS-2000
4	STD3	20.114	1.0000	1.0000	11/9/2009 5:22:52 PM	ICS-2000
5	STD4	40.114	1.0000	1.0000	11/9/2009 5:38:16 PM	ICS-2000
6	STD5	60.101	1.0000	1.0000	11/9/2009 5:53:41 PM	ICS-2000
7	STD6	79.640	1.0000	1.0000	11/9/2009 6:09:05 PM	ICS-2000
8	STD7	100.168	1.0000	1.0000	11/9/2009 6:24:29 PM	ICS-2000
9	BLANK	n.a.	1.0000	1.0000	11/19/2009 4:57:21 PM	ICS-2000
10	QCS/ICV/LCS 50 PPB	49.669	1.0000	1.0000	11/19/2009 5:12:46 PM	ICS-2000
11	ICB/MB	n.a.	1.0000	1.0000	11/19/2009 5:28:10 PM	ICS-2000
12	IPC/MCT 25 PPB @ 200 PPM	23.010	1.0000	1.0000	11/19/2009 5:43:34 PM	ICS-2000
13	ICCS 1 PPB	0.823	1.0000	1.0000	11/19/2009 5:58:59 PM	ICS-2000
14	G9K190437-3 1X	6.580	1.0000	1.0000	11/19/2009 6:14:23 PM	ICS-2000
15	G9K190437-12 1X	n.a.	1.0000	1.0000	11/19/2009 6:29:48 PM	ICS-2000
16	G9K190437-1 10000X	715992.841	10000.0000	1.0000	11/19/2009 6:45:13 PM	ICS-2000
17	G9K190437-2 10000X	713882.745	10000.0000	1.0000	11/19/2009 7:00:37 PM	ICS-2000
18	G9K190437-4 100X	1630.947	100.0000	1.0000	11/19/2009 7:16:02 PM	ICS-2000
19	G9K190437-4 100X MS	6384.259	100.0000	1.0000	11/19/2009 7:31:26 PM	ICS-2000
20	G9K190437-4 100X SD	6470.981	100.0000	1.0000	11/19/2009 7:46:50 PM	ICS-2000
21	G9K190437-5 100X	489.268	100.0000	1.0000	11/19/2009 8:02:15 PM	ICS-2000
22	G9K190437-6 100X	2950.984	100.0000	1.0000	11/19/2009 8:17:39 PM	ICS-2000
23	G9K190437-7 100X	3104.466	100.0000	1.0000	11/19/2009 8:33:03 PM	ICS-2000
24	CCV 60 PPB	59.458	1.0000	1.0000	11/19/2009 8:48:28 PM	ICS-2000
25	CCB	n.a.	1.0000	1.0000	11/19/2009 9:03:52 PM	ICS-2000
26	G9K190437-8 100X	2073.213	100.0000	1.0000	11/19/2009 9:19:17 PM	ICS-2000
27	G9K190437-9 100X	2025.495	100.0000	1.0000	11/19/2009 9:34:42 PM	ICS-2000
28	G9K190437-10 100X	2008.994	100.0000	1.0000	11/19/2009 9:50:06 PM	ICS-2000
29	G9K190437-11 100X	1533.239	100.0000	1.0000	11/19/2009 10:05:31 PM	ICS-2000
30	G9K190437-3 1X	n.a.	1.0000	1.0000	11/19/2009 10:20:55 PM	ICS-2000
31	CCV 100 PPB	n.a.	1.0000	1.0000	11/19/2009 10:36:19 PM	ICS-2000
32	CCB	n.a.	1.0000	1.0000	11/19/2009 10:51:44 PM	ICS-2000
33	SHUTDOWN	n.a.	1.0000	1.0000	11/19/2009 11:07:08 PM	SHUTDOWN
34	BLANK	n.a.	1.0000	1.0000	11/20/2009 11:21:33 AM	ICS-2000
35	BLANK	n.a.	1.0000	1.0000	11/20/2009 11:36:58 AM	ICS-2000
36	ICCS 1 PPB	n.a.	1.0000	1.0000	11/20/2009 11:52:22 AM	ICS-2000
37	ICCS 1 PPB	1.016	1.0000	1.0000	11/20/2009 12:08:17 PM	ICS-2000
38	CCV 60 PPB	54.426	1.0000	1.0000	11/20/2009 12:23:41 PM	ICS-2000
39	CCB	n.a.	1.0000	1.0000	11/20/2009 12:39:07 PM	ICS-2000
40	G9K190437-3 1X	4.430	1.0000	1.0000	11/20/2009 12:54:31 PM	ICS-2000

*Ran out
of eluent
Do not use.*

*Confirmation
only*

Sequence: 111909B
Operator: rogersj

Printed: 11/24/2009 3:21:52 PM

Title:
Datasource: SACP205B_local
Location: ICS-2000\2009\NOV2009
Timebase: ICS-2000
#Samples: 47

Created: 11/19/2009 4:13:01 PM by rogersj
Last Update: 11/24/2009 3:21:46 PM by rogersj

No.	Name	Method	Status	Type	Inj. Vol.	Comment
1	BLANK	perchlorate	Finished	Standard	1000.0	
2	STD1	perchlorate	Finished	Standard	1000.0	3745-WC-39-1
3	STD2	perchlorate	Finished	Standard	1000.0	3745-WC-39-2
4	STD3	perchlorate	Finished	Standard	1000.0	3745-WC-39-3
5	STD4	perchlorate	Finished	Standard	1000.0	3745-WC-39-4
6	STD5	perchlorate	Finished	Standard	1000.0	3745-WC-39-5
7	STD6	perchlorate	Finished	Standard	1000.0	3745-WC-39-6
8	STD7	perchlorate	Finished	Standard	1000.0	3745-WC-39-7
9	BLANK	perchlorate	Finished	Unknown	1000.0	
10	QCS/ICV/LCS 50 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-8
11	ICB/MB	perchlorate	Finished	Unknown	1000.0	
12	IPC/MCT 25 PPB @ 200 PPM	perchlorate	Finished	Unknown	1000.0	3745-WC-39-9
13	ICCS 1 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-1
14	G9K190437-3 1X	perchlorate	Finished	Unknown	1000.0	
15	G9K190437-12 1X	perchlorate	Finished	Unknown	1000.0	
16	G9K190437-1 1000X	perchlorate	Finished	Unknown	1000.0	
17	G9K190437-2 1000X	perchlorate	Finished	Unknown	1000.0	
18	G9K190437-4 100X	perchlorate	Finished	Unknown	1000.0	
19	G9K190437-4 100X MS	perchlorate	Finished	Unknown	1000.0	3615-WC-50-1
20	G9K190437-4 100X SD	perchlorate	Finished	Unknown	1000.0	3615-WC-50-1
21	G9K190437-5 100X	perchlorate	Finished	Unknown	1000.0	
22	G9K190437-6 100X	perchlorate	Finished	Unknown	1000.0	
23	G9K190437-7 100X	perchlorate	Finished	Unknown	1000.0	
24	CCV 60 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-5
25	CCB	perchlorate	Finished	Unknown	1000.0	
26	G9K190437-8 100X	perchlorate	Finished	Unknown	1000.0	
27	G9K190437-9 100X	perchlorate	Finished	Unknown	1000.0	
28	G9K190437-10 100X	perchlorate	Finished	Unknown	1000.0	
29	G9K190437-11 100X	perchlorate	Finished	Unknown	1000.0	
30	G9K190437-3 1X	perchlorate	Finished	Unknown	1000.0	
31	CCV 100 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-7
32	CCB	perchlorate	Finished	Unknown	1000.0	
33	SHUTDOWN	perchlorate	Finished	Unknown	1000.0	
34	BLANK	perchlorate	Finished	Unknown	1000.0	
35	BLANK	perchlorate	Finished	Unknown	1000.0	
36	ICCS 1 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-1
37	ICCS 1 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-1
38	CCV 60 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-5
39	CCB	perchlorate	Finished	Unknown	1000.0	
40	G9K190437-3 1X	perchlorate	Finished	Unknown	1000.0	

Sequence: 111909B
 Operator: rogersj








Title:
 Datasource: SACP205B_local
 Location: ICS-2000\2009\NOV2009
 Timebase: ICS-2000
 #Samples: 47

Created: 11/19/2009 4:13:01 PM by rogersj
 Last Update: 11/24/2009 3:21:46 PM by rogersj

No.	Name	Amount	Dil. Factor	Weight	Inj. Date/Time	Program
		Perchlorate ECD_1				
41	G9K190437-5 20X	499.247	20.0000	1.0000	11/20/2009 1:09:55 PM	ICS-2000
42	G9K190437-8 100X	1920.954	100.0000	1.0000	11/20/2009 1:25:21 PM	ICS-2000
43	G9K190437-9 100X	1891.524	100.0000	1.0000	11/20/2009 1:40:45 PM	ICS-2000
44	G9K190437-10 100X	1963.483	100.0000	1.0000	11/20/2009 1:56:09 PM	ICS-2000
45	G9K190437-11 100X	1580.570	100.0000	1.0000	11/20/2009 2:11:34 PM	ICS-2000
46	CCV 100 PPB	95.627	1.0000	1.0000	11/20/2009 2:26:58 PM	ICS-2000
47	CCB	n.a.	1.0000	1.0000	11/20/2009 2:42:23 PM	ICS-2000

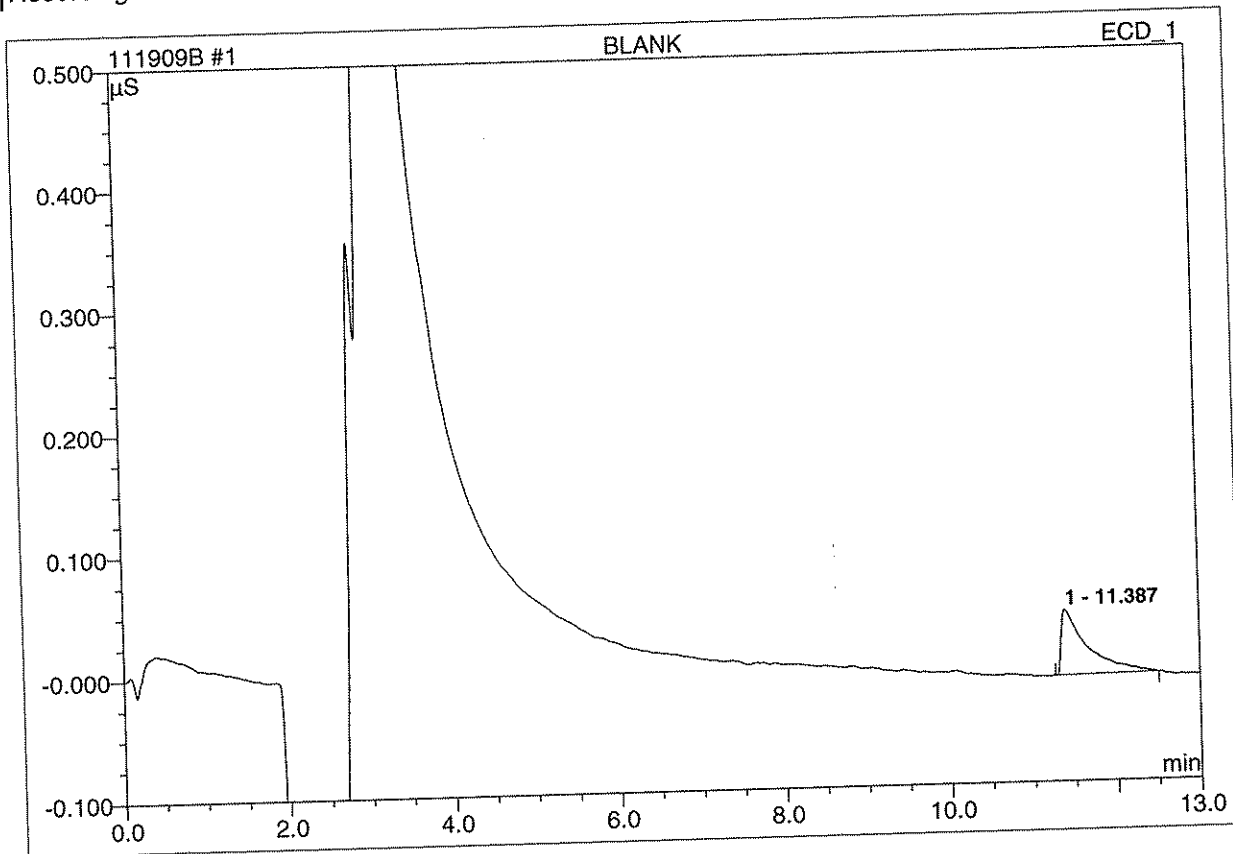
Sequence: 111909B
Operator: rogersj

Title:
Datasource: SACP205B_local
Location: ICS-2000\2009\NOV2009
Timebase: ICS-2000
#Samples: 47
Created: 11/19/2009 4:13:01 PM by rogersj
Last Update: 11/24/2009 3:21:46 PM by rogersj

No.	Name	Method	Status	Type	Inj. Vol.	Comment
41	 G9K190437-5 20X	perchlorate	Finished	Unknown	1000.0	
42	 G9K190437-8 100X	perchlorate	Finished	Unknown	1000.0	
43	 G9K190437-9 100X	perchlorate	Finished	Unknown	1000.0	
44	 G9K190437-10 100X	perchlorate	Finished	Unknown	1000.0	
45	 G9K190437-11 100X	perchlorate	Finished	Unknown	1000.0	
46	 CCV 100 PPB	perchlorate	Finished	Unknown	1000.0	3745-WC-39-7
47	 CCB	perchlorate	Finished	Unknown	1000.0	

Sample Name: **BLANK**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 16:36**

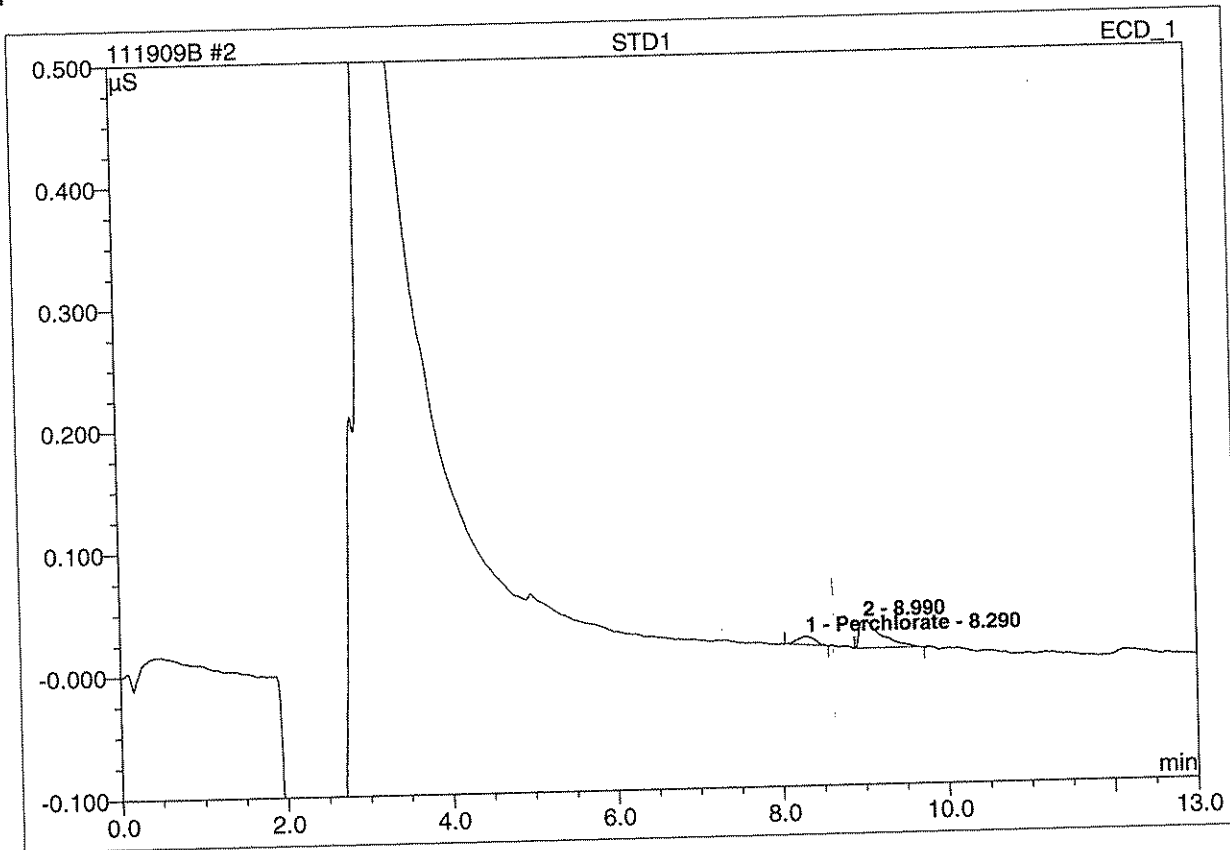
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	11.39	n.a.	0.054	0.01955	100.00	n.a.	BMB
Total:			0.054	0.020	100.00	0.000	

Sample Name: **STD1**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 16:52**

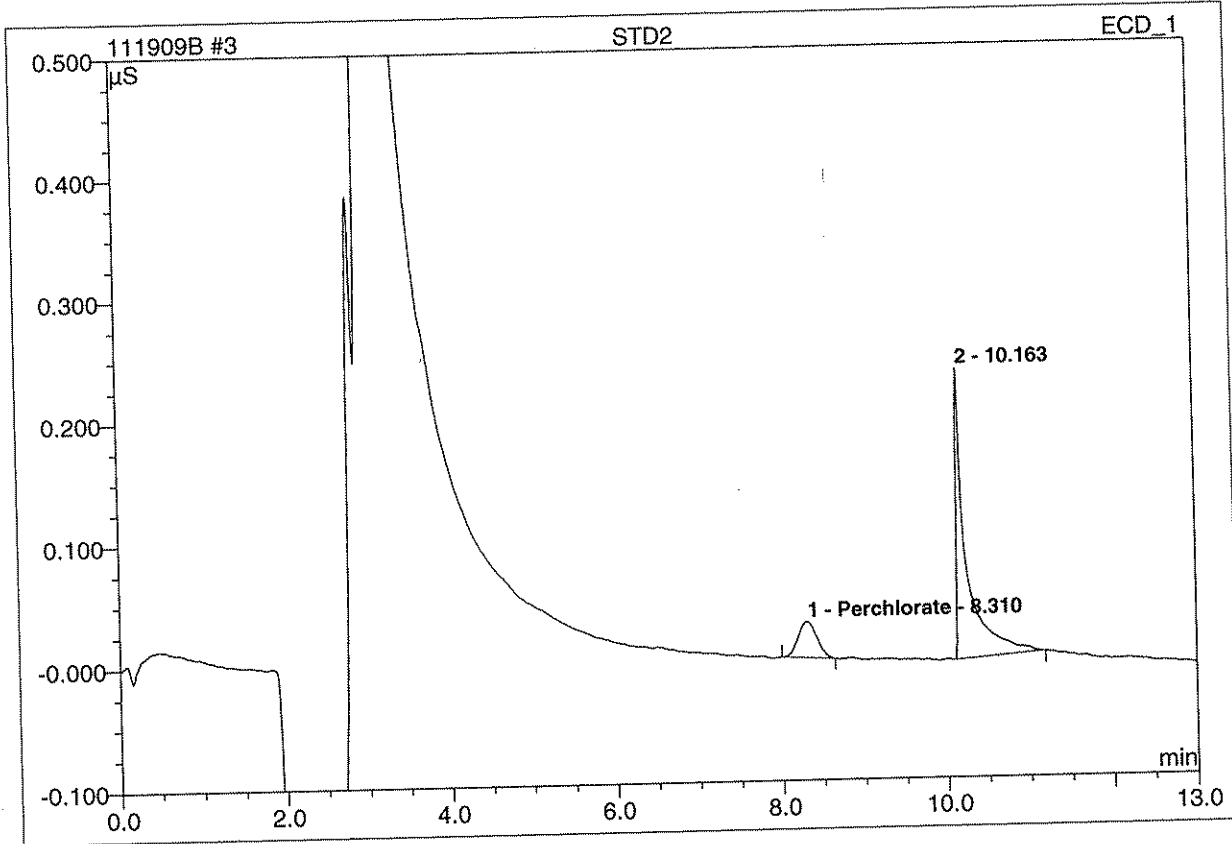
Comment: **3745-WC-39-1**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.29	Perchlorate	0.007	0.00166	19.28	0.928	BMB
2	8.99	n.a.	0.022	0.00694	80.72	n.a.	BMB
Total:			0.029	0.009	100.00	0.928	

Sample Name: **STD2**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 17:07**

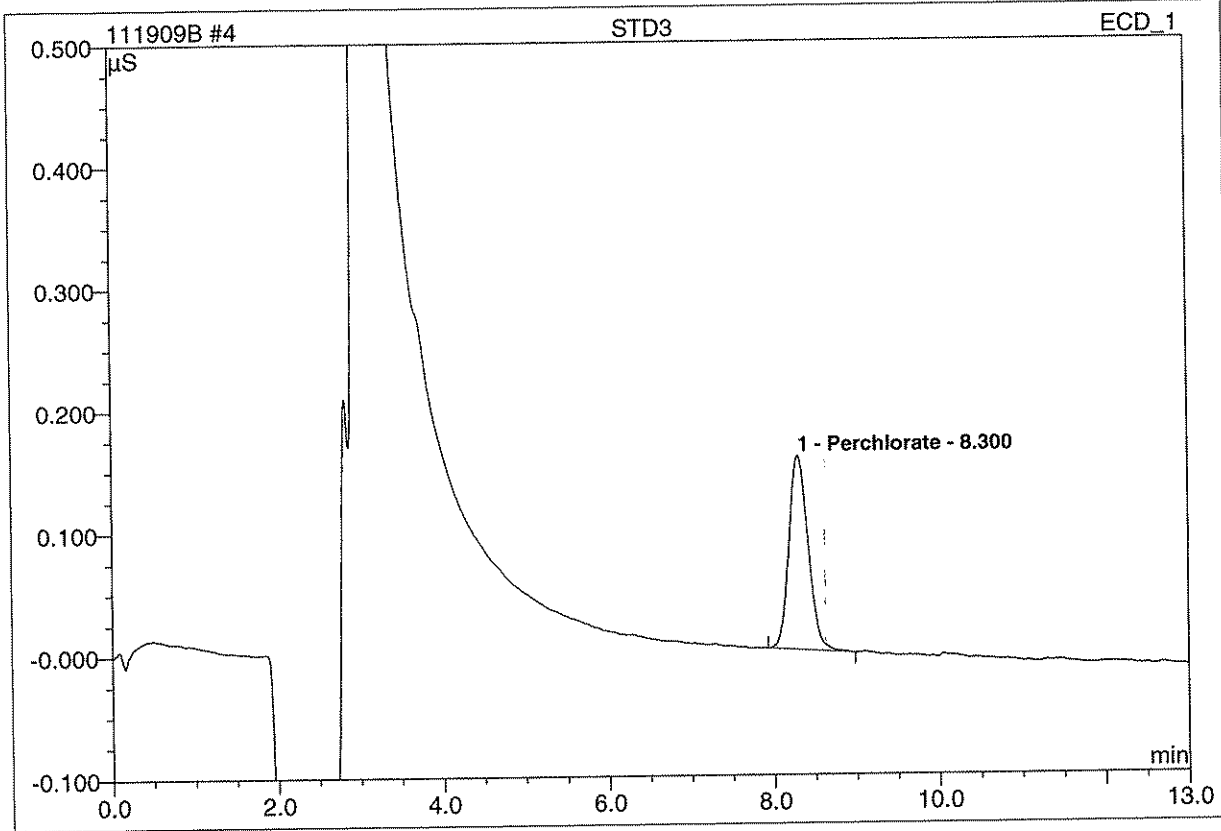
Comment: **3745-WC-39-2**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.31	Perchlorate	0.029	0.00767	19.09	3.799	BMB
2	10.16	n.a.	0.237	0.03253	80.91	n.a.	BMB
Total:			0.266	0.040	100.00	3.799	

Sample Name: **STD3**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 17:22**

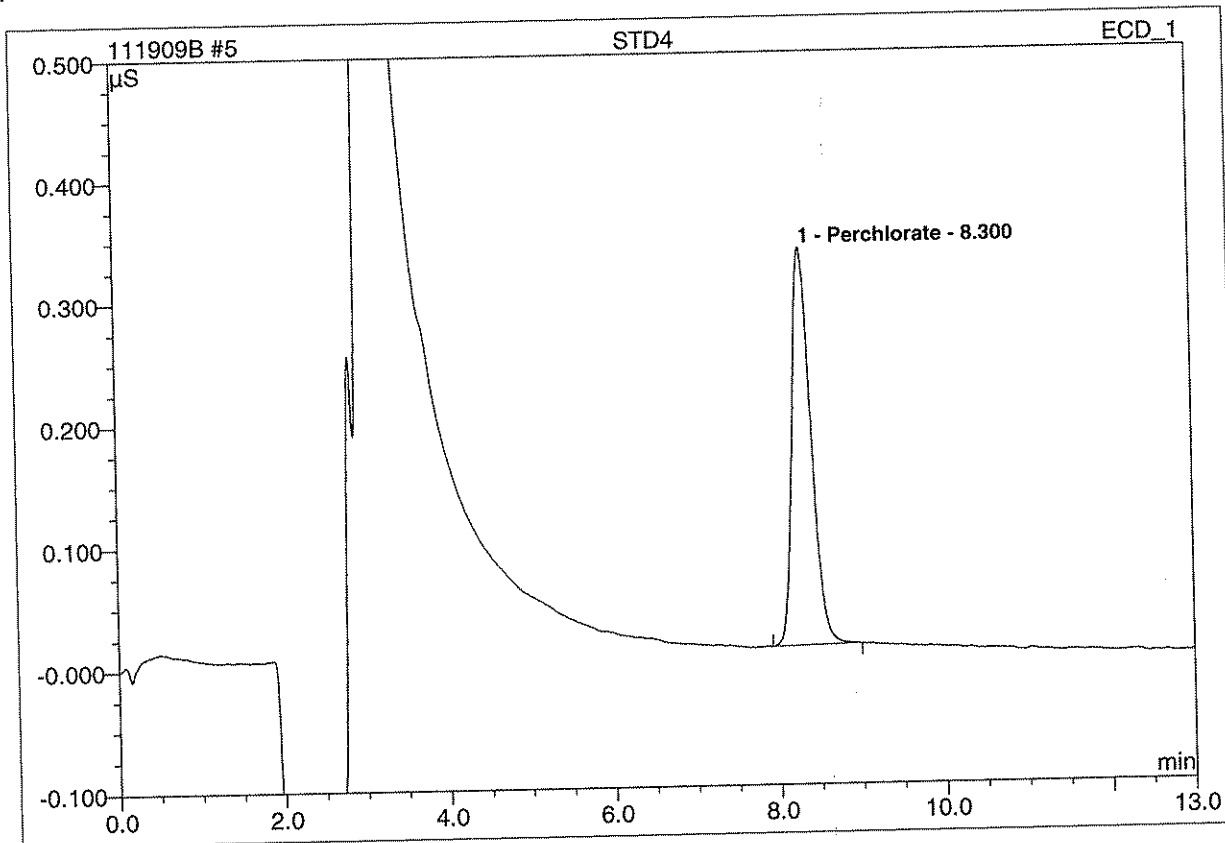
Comment: **3745-WC-39-3**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.30	Perchlorate	0.158	0.04261	100.00	20.114	BMB
Total:			0.158	0.043	100.00	20.114	

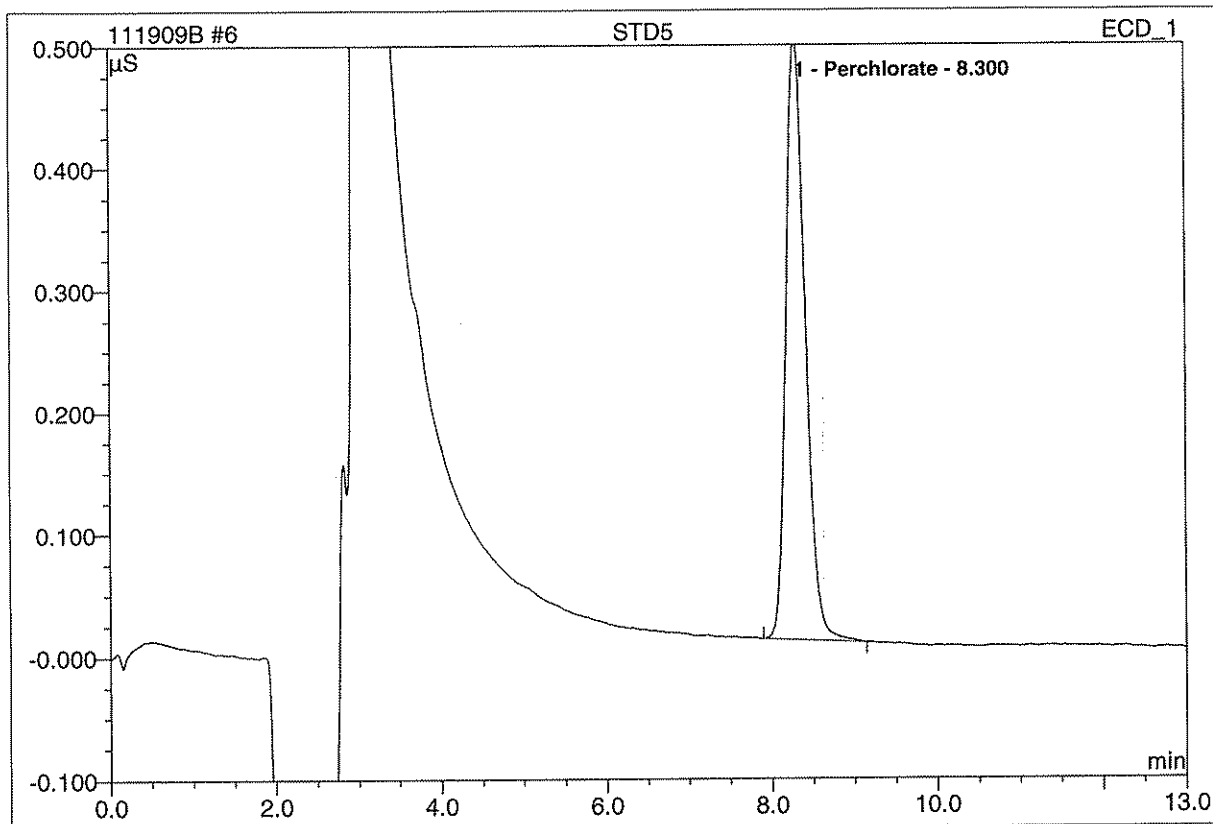
Sample Name: **STD4**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 17:38**

Comment: **3745-WC-39-4**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.30	Perchlorate	0.326	0.08716	100.00	40.114	BMB
Total:			0.326	0.087	100.00	40.114	

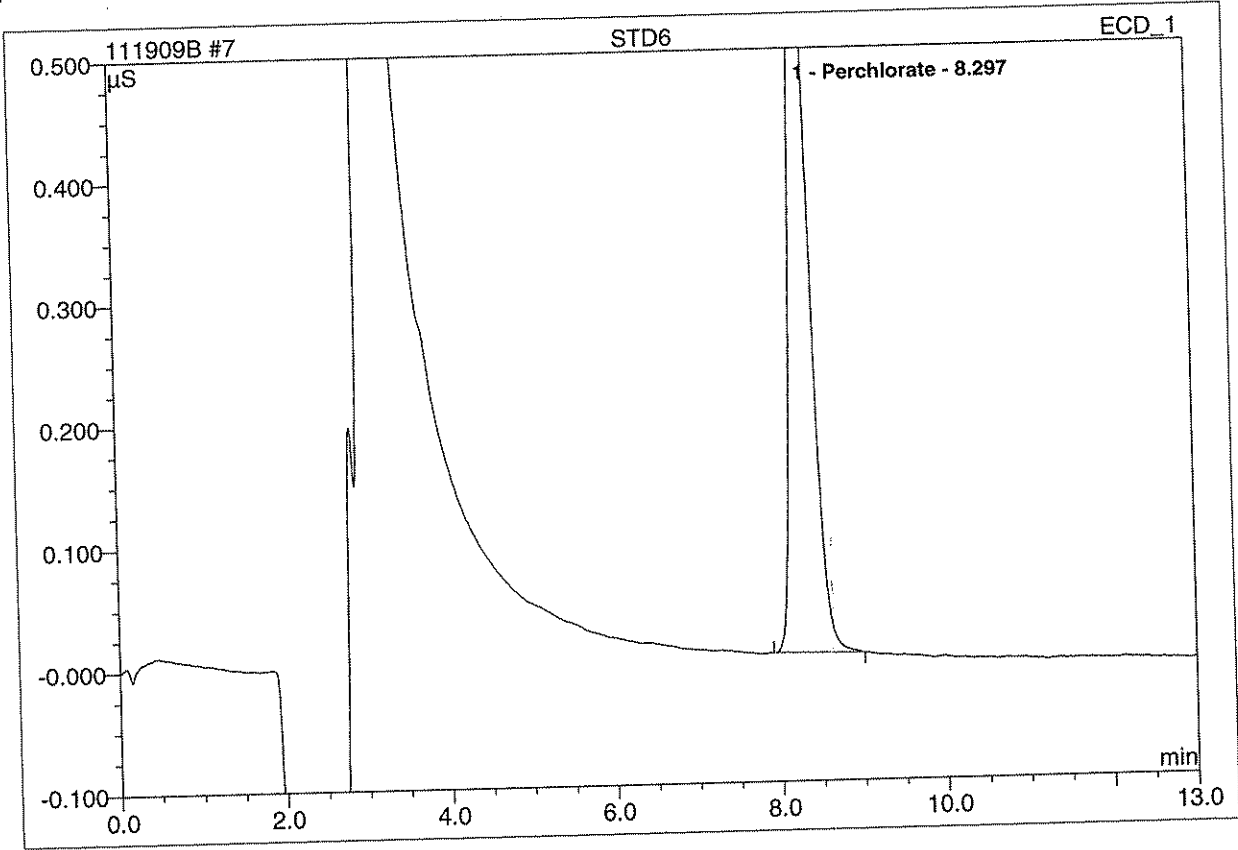
Sample Name:	STD5	Comment:	3745-WC-39-5
Sample Type:	standard	Injection Volume (uL):	1000.0
Control Program:	ICS-2000	Dilution Factor:	1.0000
Quantif. Method:	perchlorate	Sample Weight:	1.0000
Recording Time:	11/9/2009 17:53	Operator:	rogersj



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.30	Perchlorate	0.495	0.13357	100.00	60.101	BMB
Total:			0.495	0.134	100.00	60.101	

Sample Name: **STD6**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 18:09**

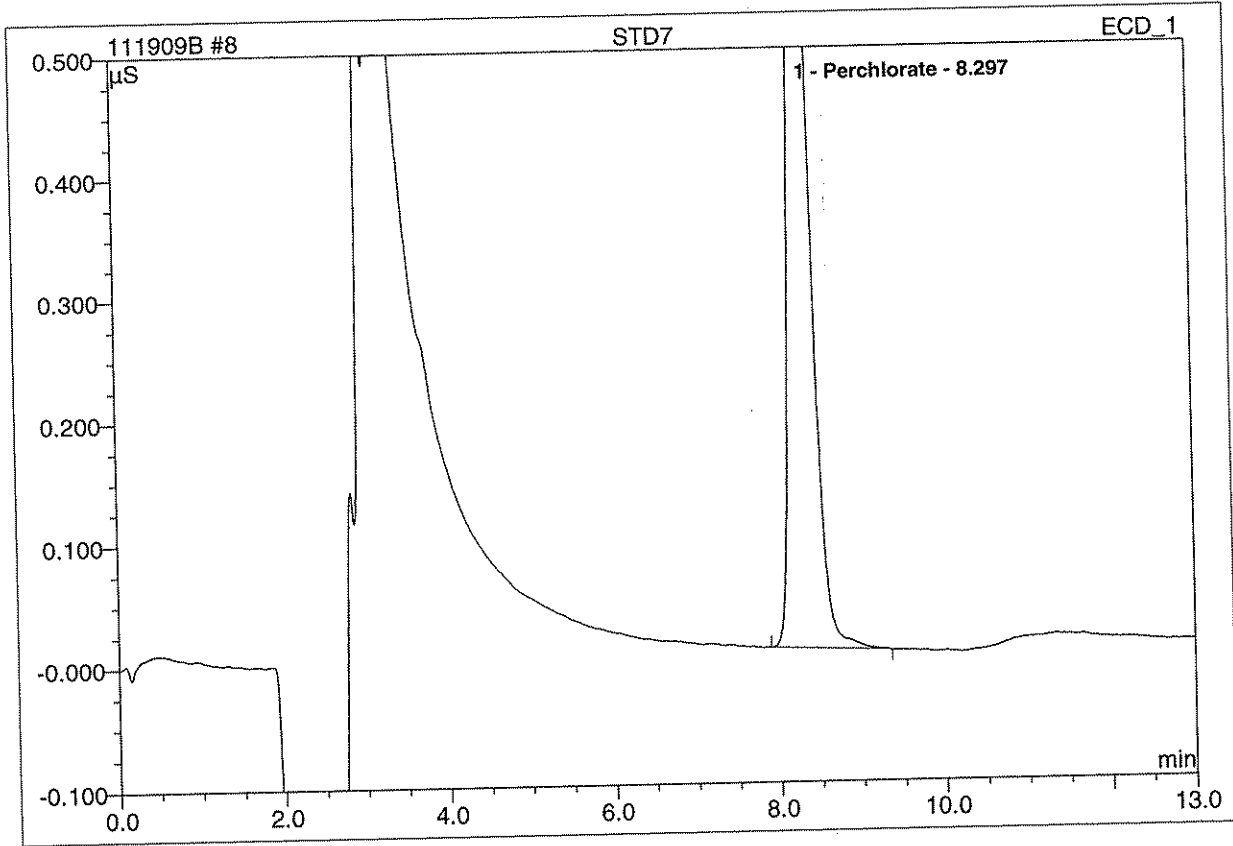
Comment: **3745-WC-39-6**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.30	Perchlorate	0.673	0.18076	100.00	79.640	BMB
Total:			0.673	0.181	100.00	79.640	

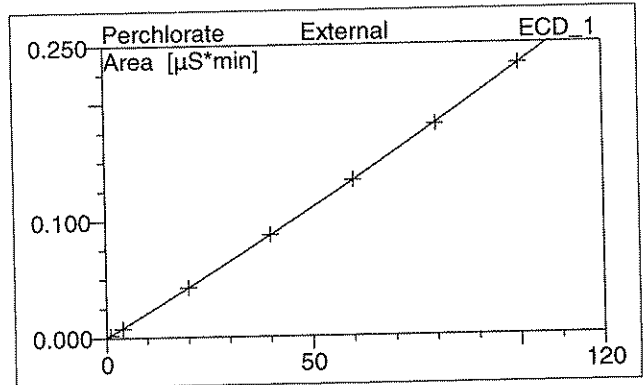
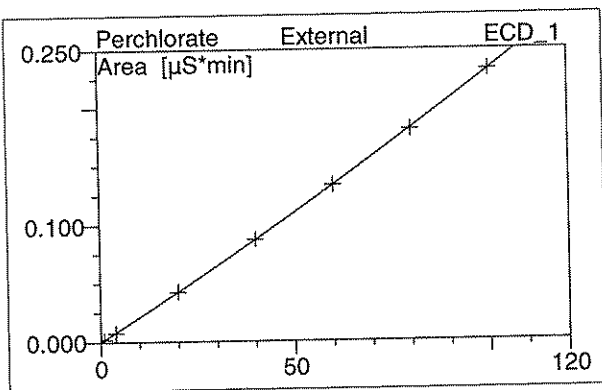
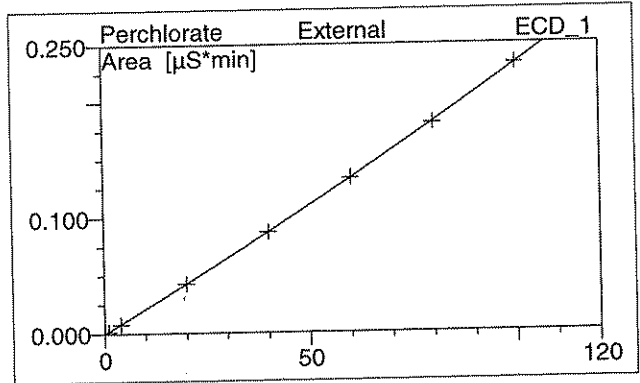
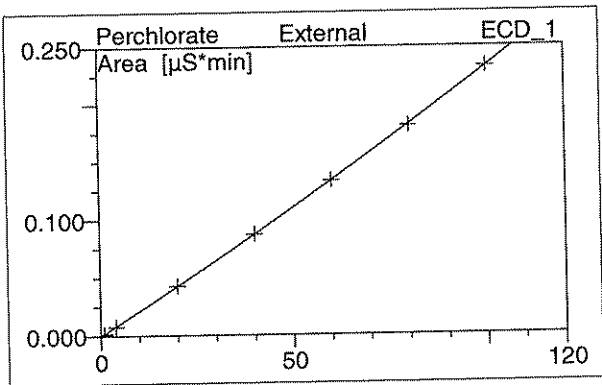
Sample Name: **STD7**
 Sample Type: **standard**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/9/2009 18:24**

Comment: **3745-WC-39-7**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.30	Perchlorate	0.856	0.23229	100.00	100.168	BMB
Total:			0.856	0.232	100.00	100.168	

8 STD7			
3745-WC-39-7			
Sample Name:	STD7	Injection Volume:	1000.0
Vial Number:	114	Channel:	ECD_1
Sample Type:	standard	Wavelength:	n.a.
Control Program:	ICS-2000	Bandwidth:	n.a.
Quantif. Method:	perchlorate	Dilution Factor:	1.0000
Recording Time:	11/9/2009 18:24	Sample Weight:	1.0000
Run Time (min):	13.00	Sample Amount:	1.0000

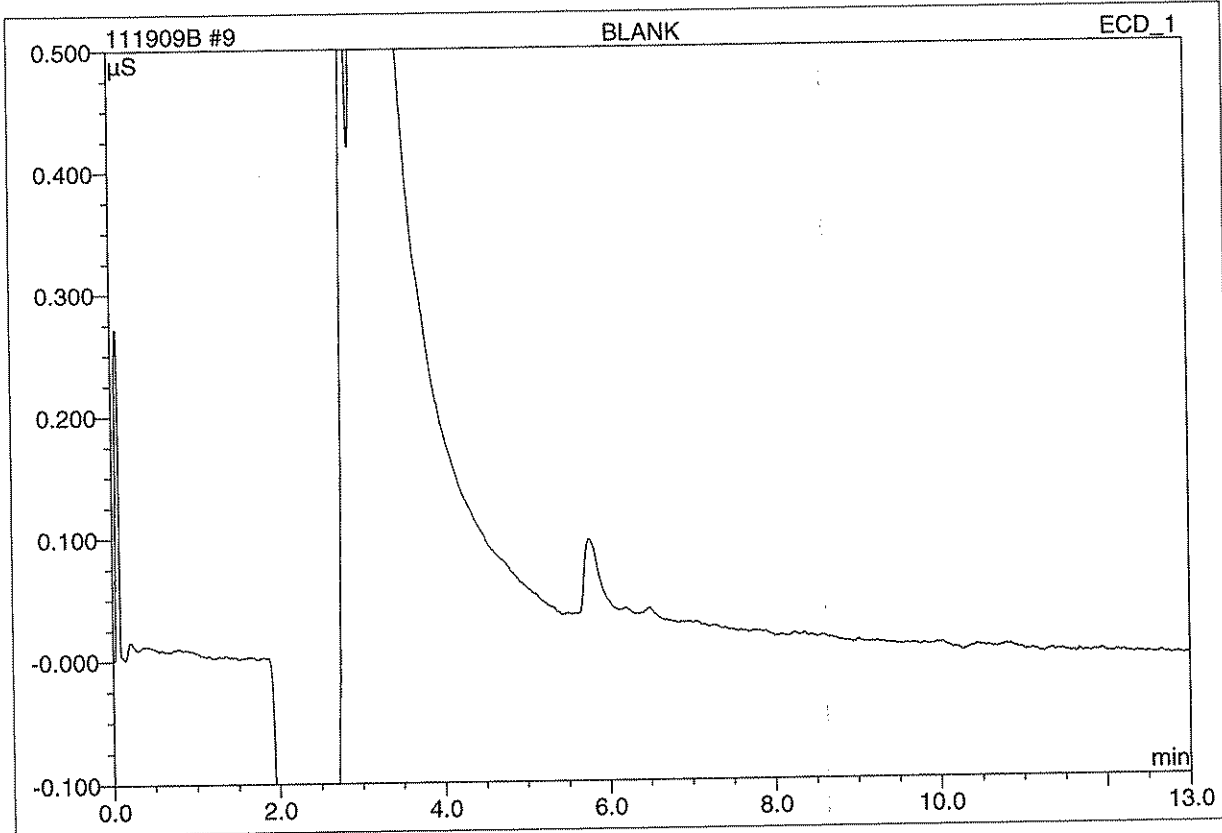


No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	8.30	Perchlorate	0QOff	7	99.9618	-0.0003	0.002085	0.0000024
Average:					99.9618	-0.0003	0.0021	0.0000

perchlorate/Calibration(Batch)

Sample Name: **BLANK**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 16:57**

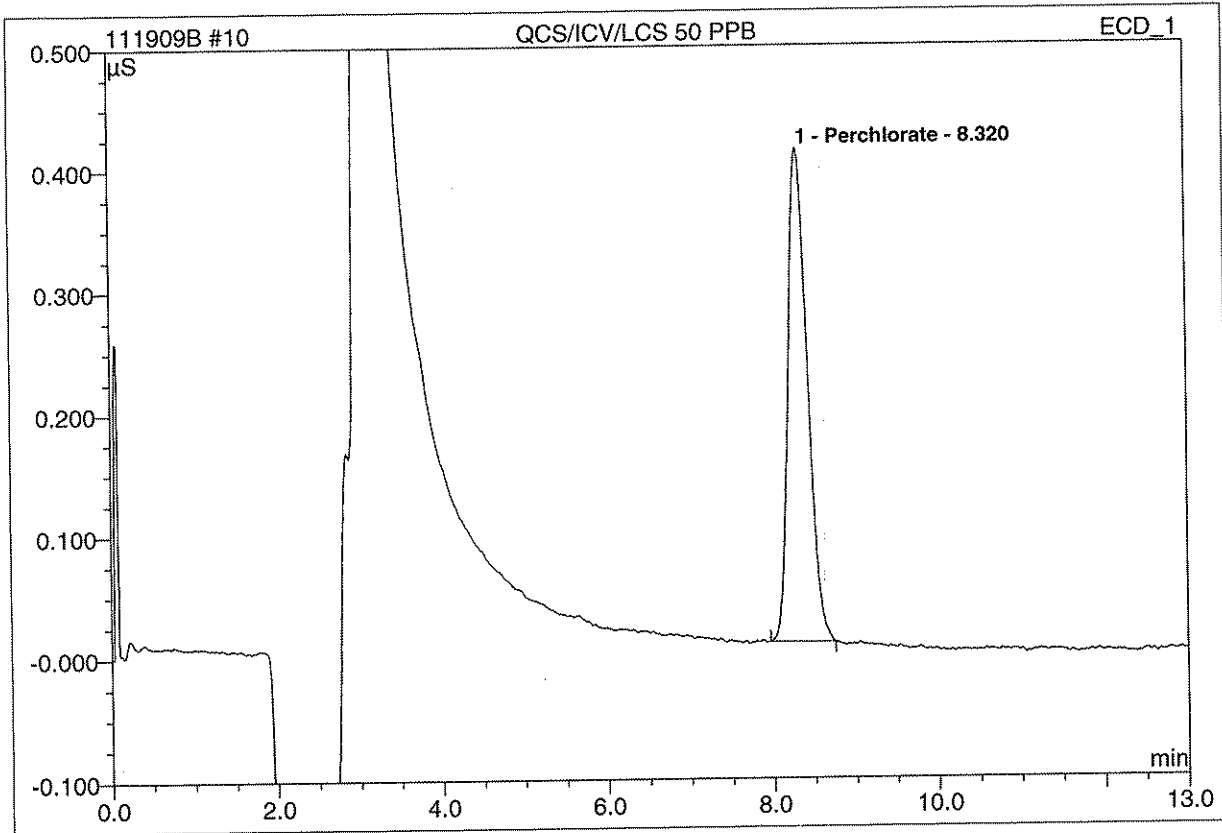
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: QCS/ICV/LCS 50 PPB
 Sample Type: unknown
 Control Program: ICS-2000
 Quantif. Method: perchlorate
 Recording Time: 11/19/2009 17:12

Comment: 3745-WC-39-8
 Injection Volume (uL): 1000.0
 Dilution Factor: 1.0000
 Sample Weight: 1.0000
 Operator: rogersj

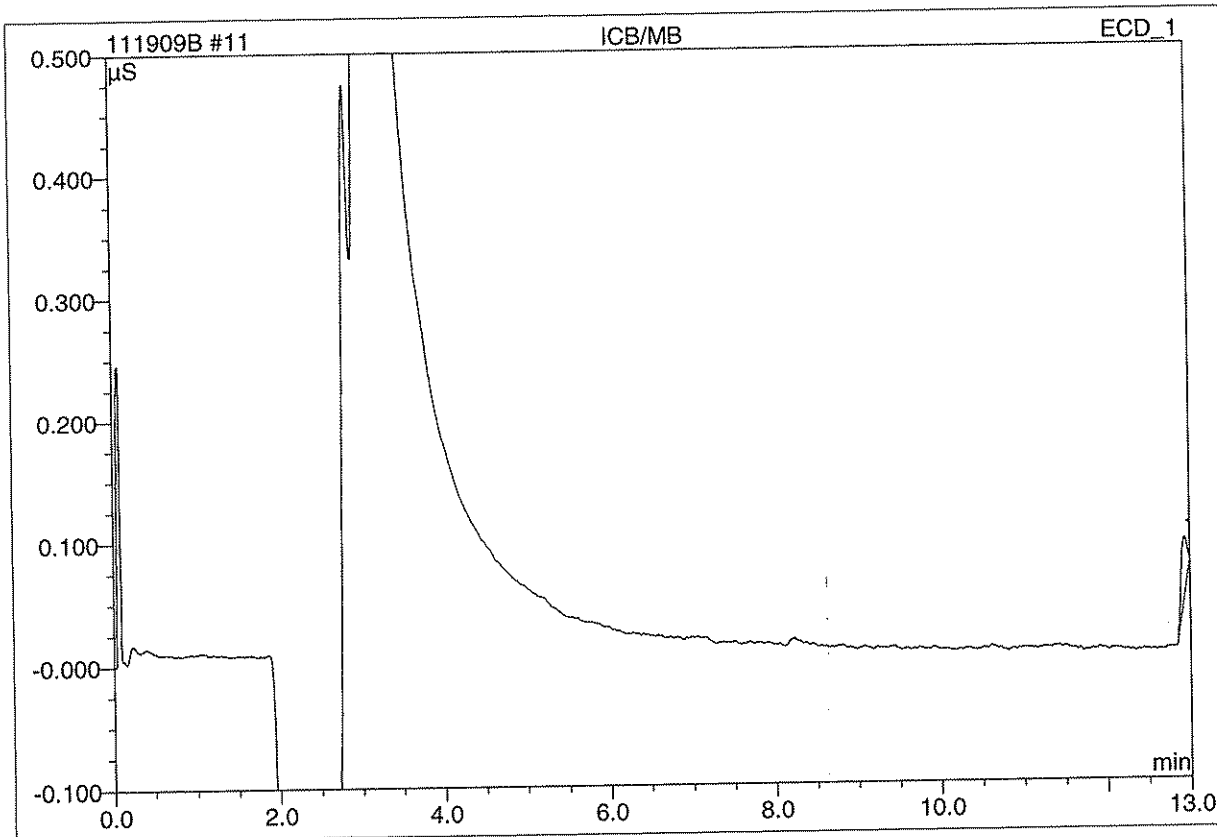


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.32	Perchlorate	0.404	0.10911	100.00	49.669	BMB
Total:			0.404	0.109	100.00	49.669	

99-1

Sample Name: **ICB/MB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 17:28**

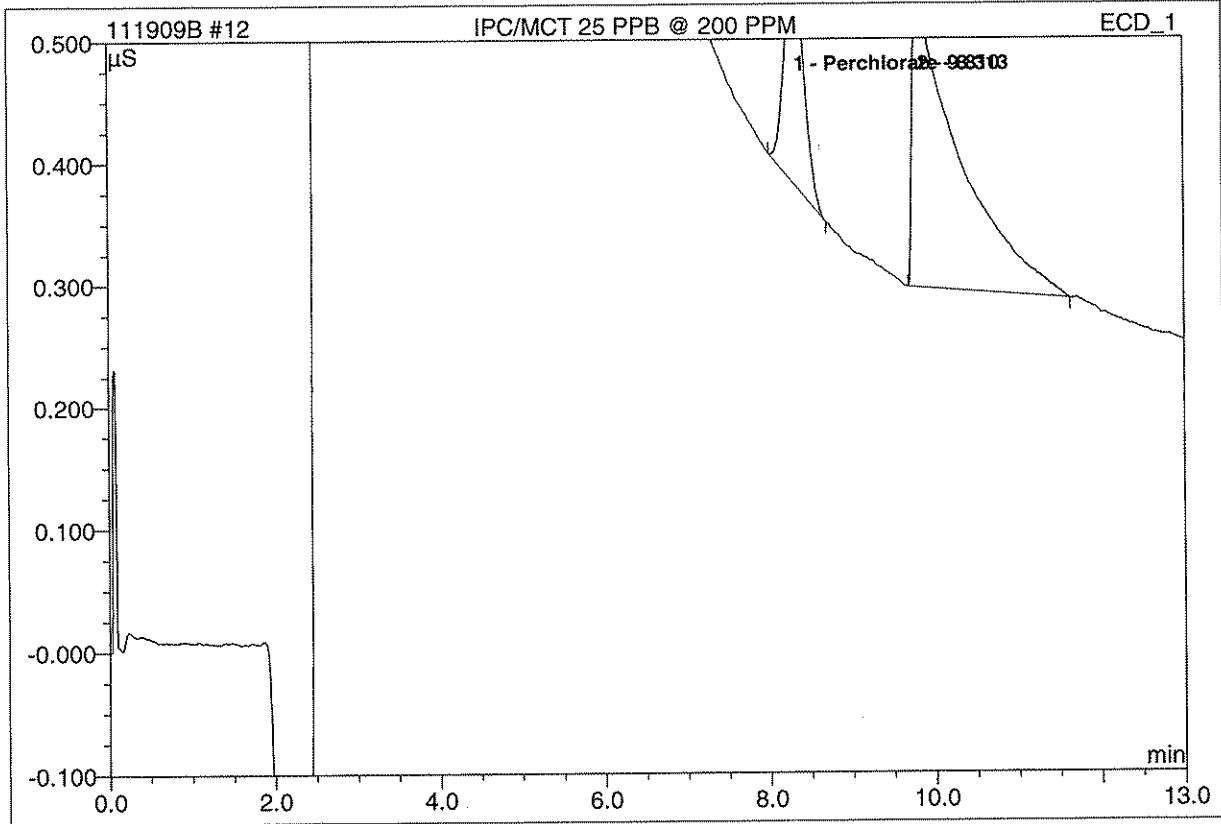
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount µg/L	Type
1	12.94	n.a.	0.045	0.00401	100.00	n.a.	BMB
Total:			0.045	0.004	100.00	0.000	

no

Sample Name:	IPC/MCT 25 PPB @ 200 PPM	Comment:	3745-WC-39-9
Sample Type:	unknown	Injection Volume (uL):	1000.0
Control Program:	ICS-2000	Dilution Factor:	1.0000
Quantif. Method:	perchlorate	Sample Weight:	1.0000
Recording Time:	11/19/2009 17:43	Operator:	rogersj

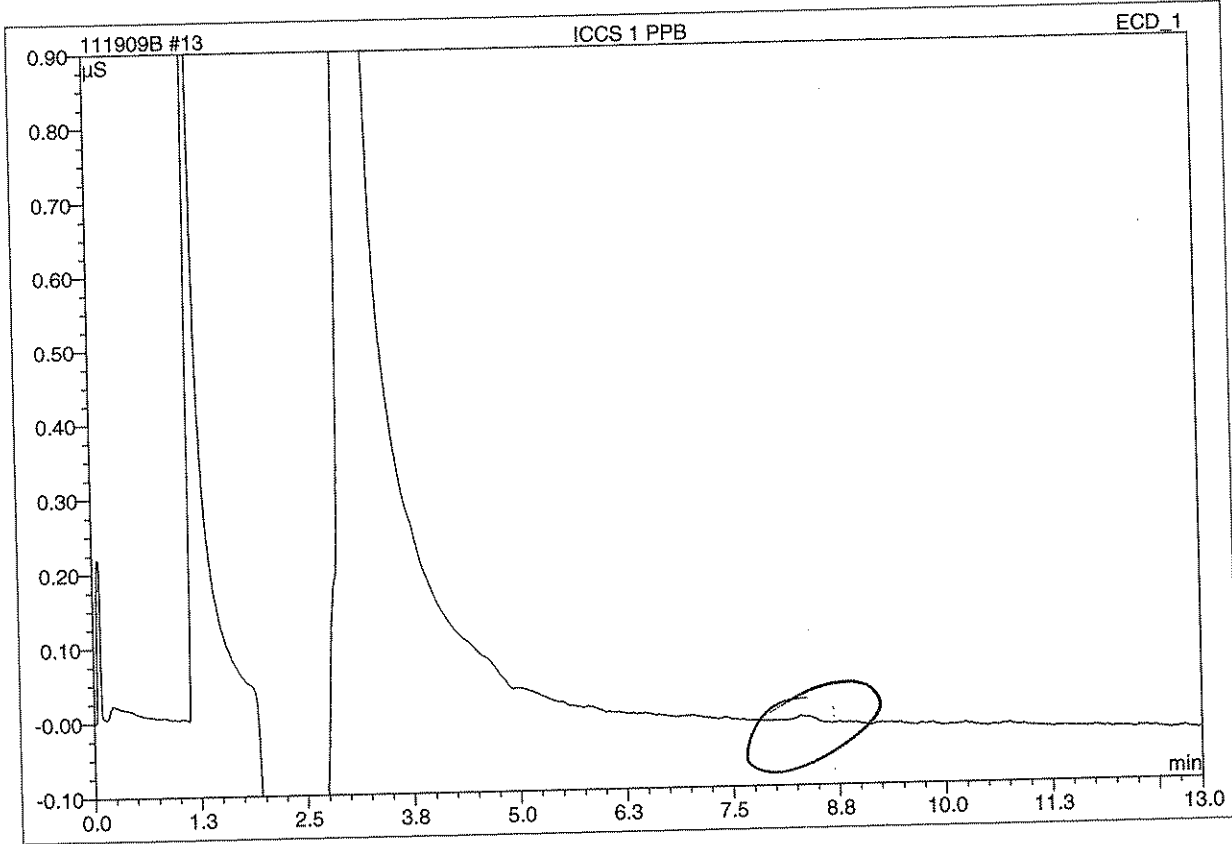


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.31	Perchlorate	0.179	0.04894	24.05	23.010	BMB
2	9.81	n.a.	0.231	0.15453	75.95	n.a.	BMB
Total:			0.410	0.203	100.00	23.010	

92%

Sample Name: **ICCS 1 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 17:58**

Comment: **3745-WC-39-1**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

RE-INTEGRATION CODES

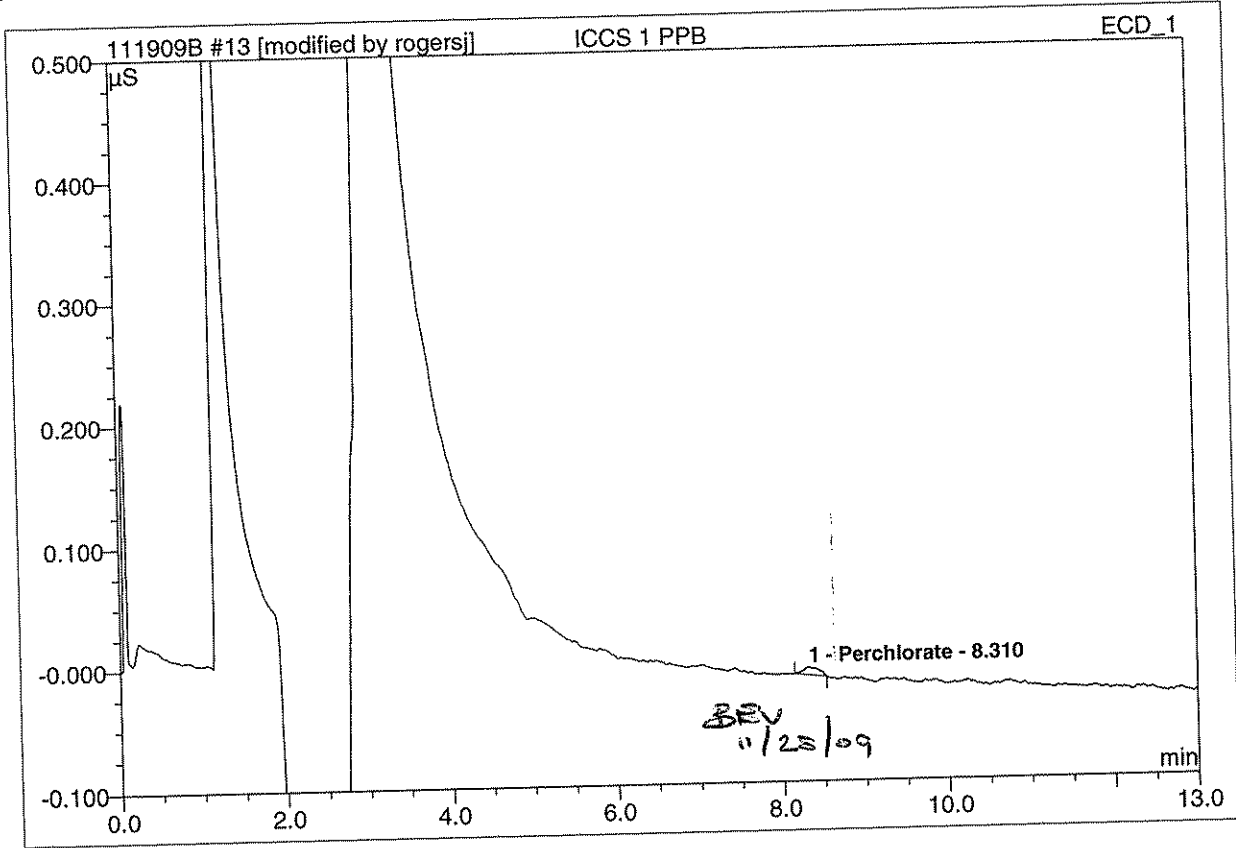
- 1 Poor Peak Shape
 - 2 Poor Peak Resolution
 - 3 Peak Not Integrated
 - 4 Sample Matrix Interference
 - 5 Column Bleed
 - 6 Instrument Noise
 - 7 Baseline Correction
 - 8 Other (reason must be stated)
- ALL RE-INTEGRATIONS MUST BE INITIALED,
DATED AND CODED

JRM
11/24/09

perchlorate/Integration

Sample Name: **ICCS 1 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 17:58**

Comment: **3745-WC-39-1**
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.31	Perchlorate	0.006	0.00144	100.00	0.823	BMB*
Total:			0.006	0.001	100.00	0.823	

821

RE-INTEGRATION CODES

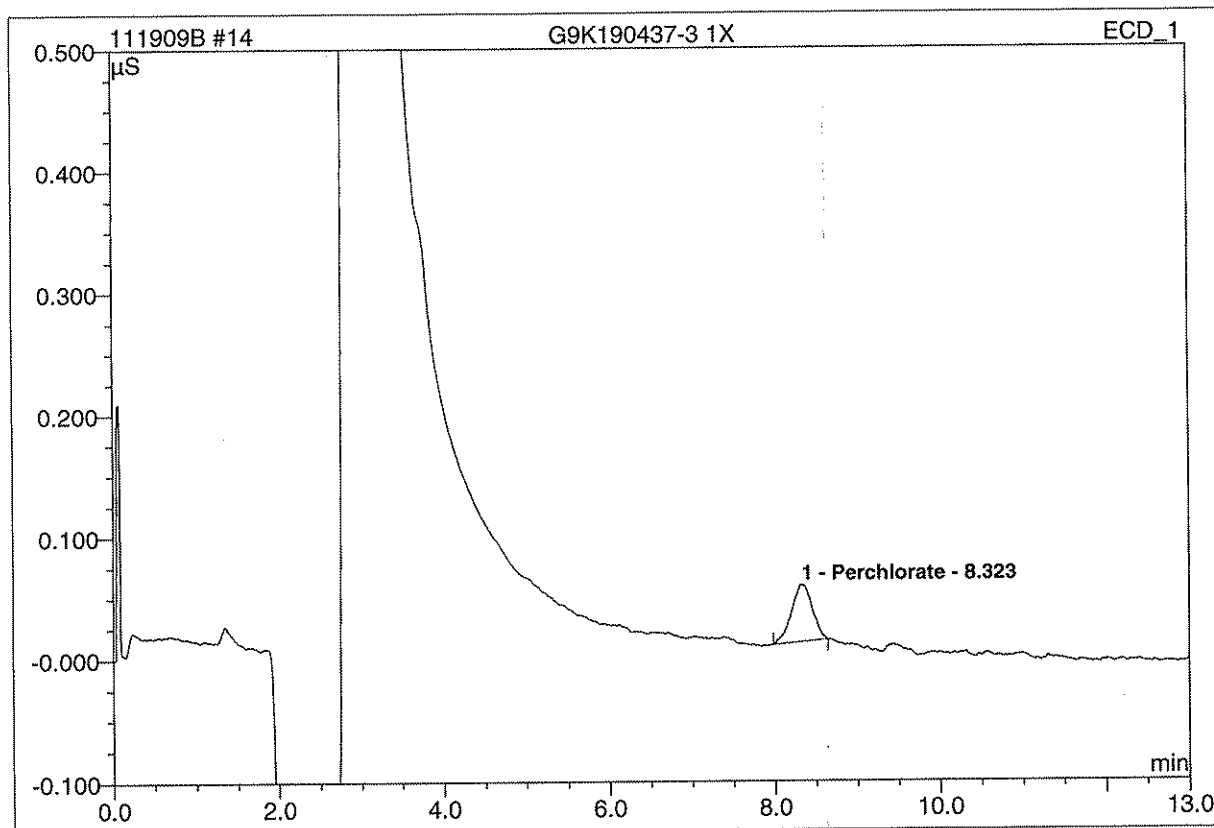
- 1 Poor Peak Shape
 - 2 Poor Peak Resolution
 - 3 Peak Not Integrated
 - 4 Sample Matrix Interference
 - 5 Column Bleed
 - 6 Instrument Noise
 - 7 Baseline Correction
 - 8 Other (reason must be stated)
- ALL RE-INTEGRATIONS MUST BE INITIALED,
DATED AND CODED

JOR
11/24/09

perchlorate/Integration

Sample Name: **G9K190437-3 1X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 18:14**

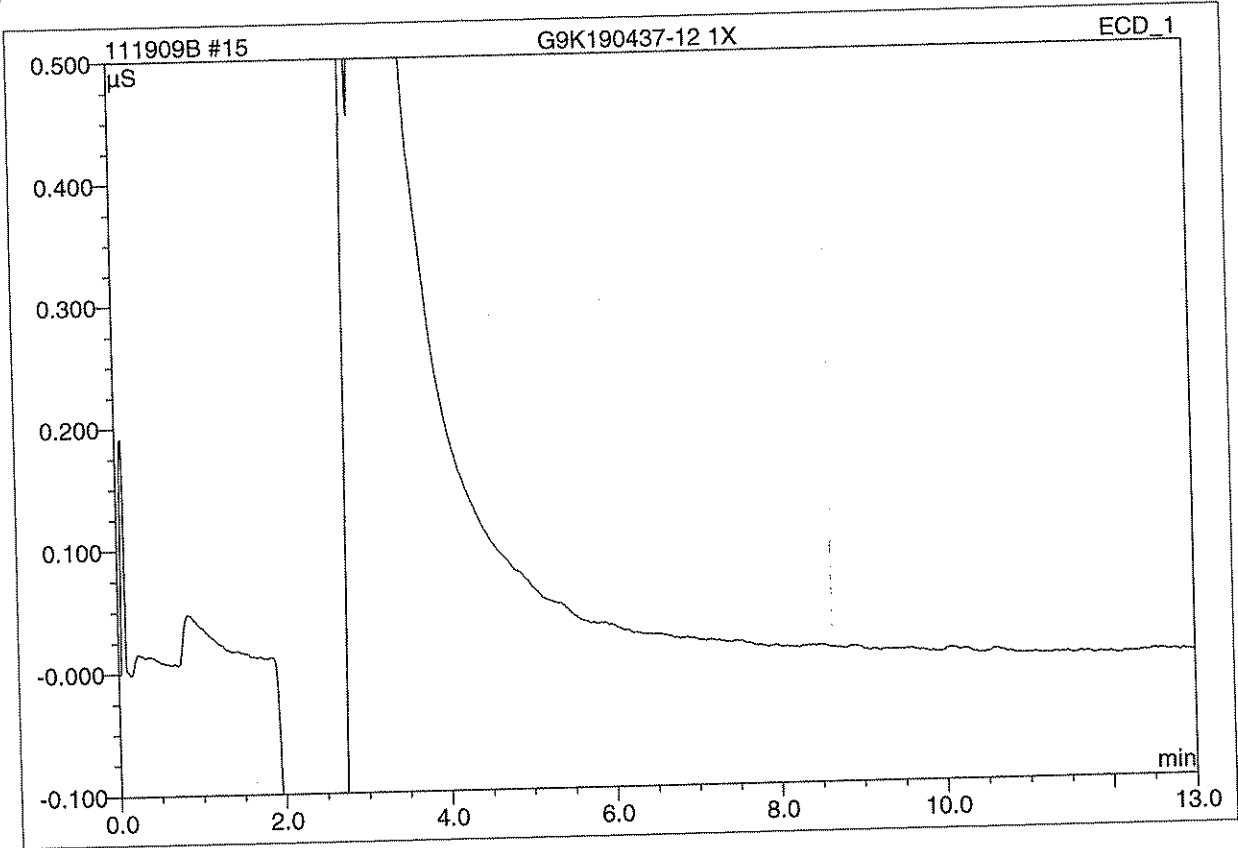
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.32	Perchlorate	0.047	0.01354	100.00	6.580	BMB ✓
Total:			0.047	0.014	100.00	6.580	

Sample Name: **G9K190437-12 1X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 18:29**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

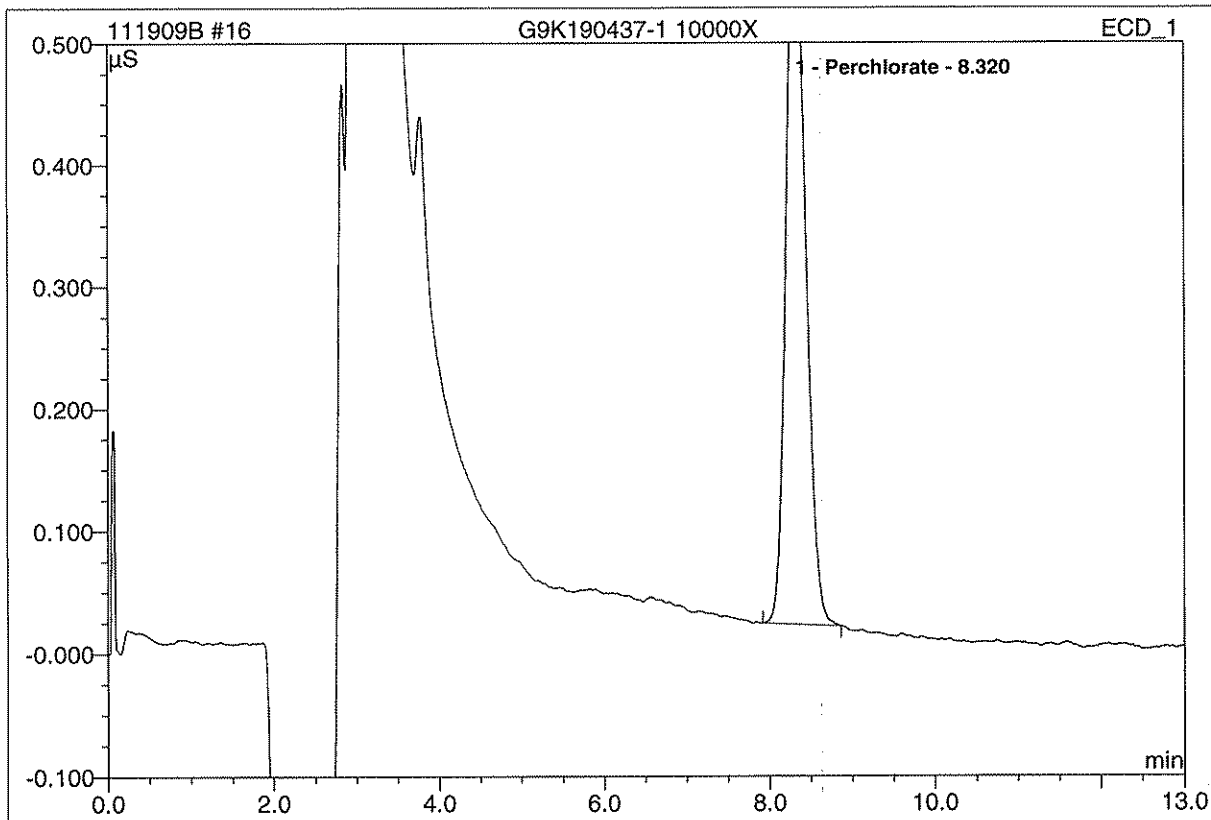


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
Total:			0.000	0.000	0.00	0.000	

(Handwritten signature)

Sample Name: **G9K190437-1 10000X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 18:45**

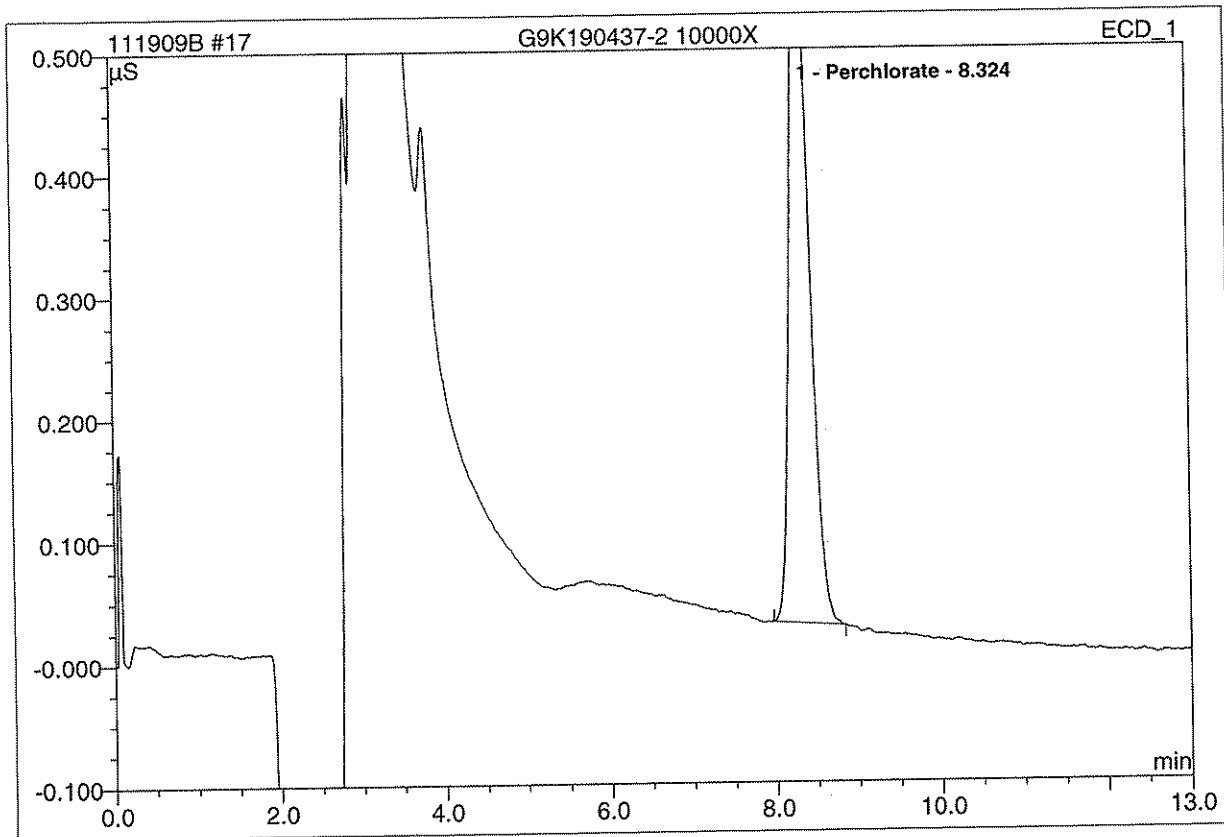
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **10000.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.32	Perchlorate	0.590	0.16112	100.00	715992.841	BMB
Total:			0.590	0.161	100.00	715992.841	

Sample Name: **G9K190437-2 10000X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 19:00**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **10000.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

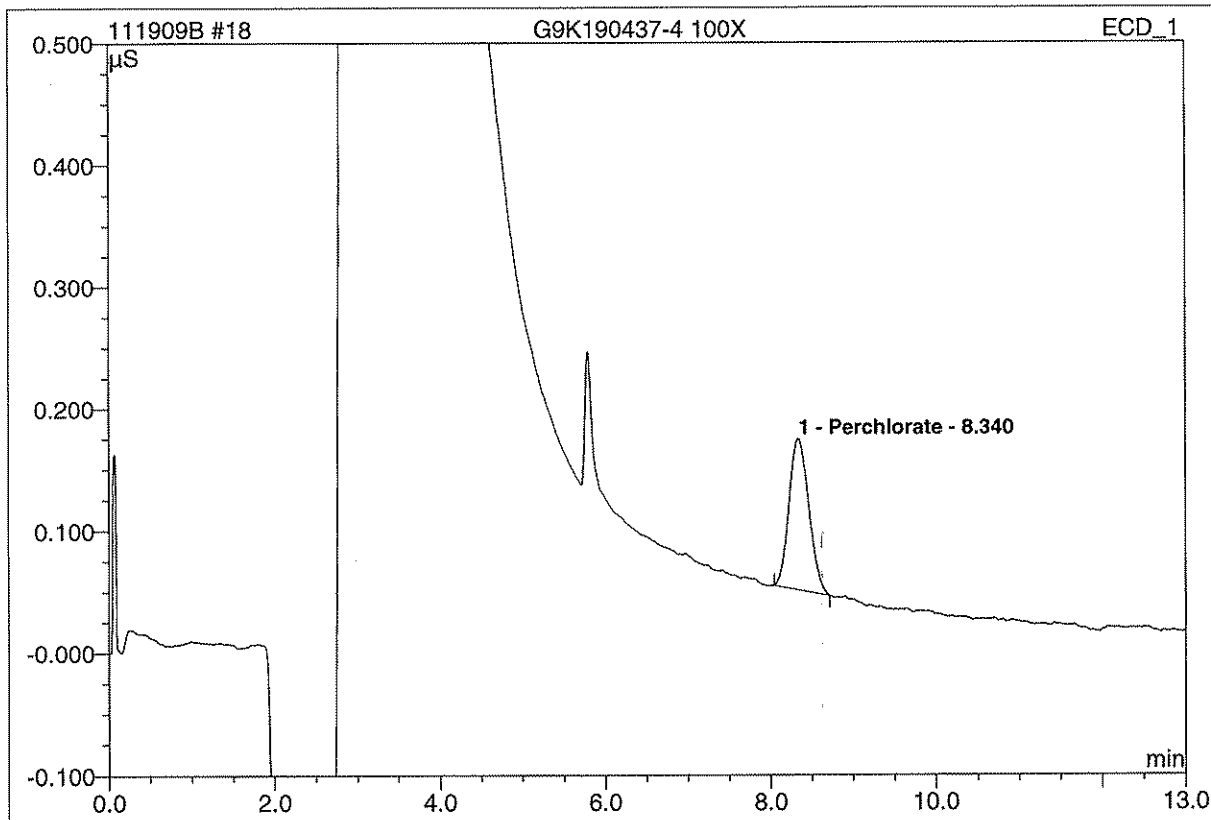


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.32	Perchlorate	0.585	0.16061	100.00	713882.745	BMB
Total:			0.585	0.161	100.00	713882.745	

Q

Sample Name: **G9K190437-4 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 19:16**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

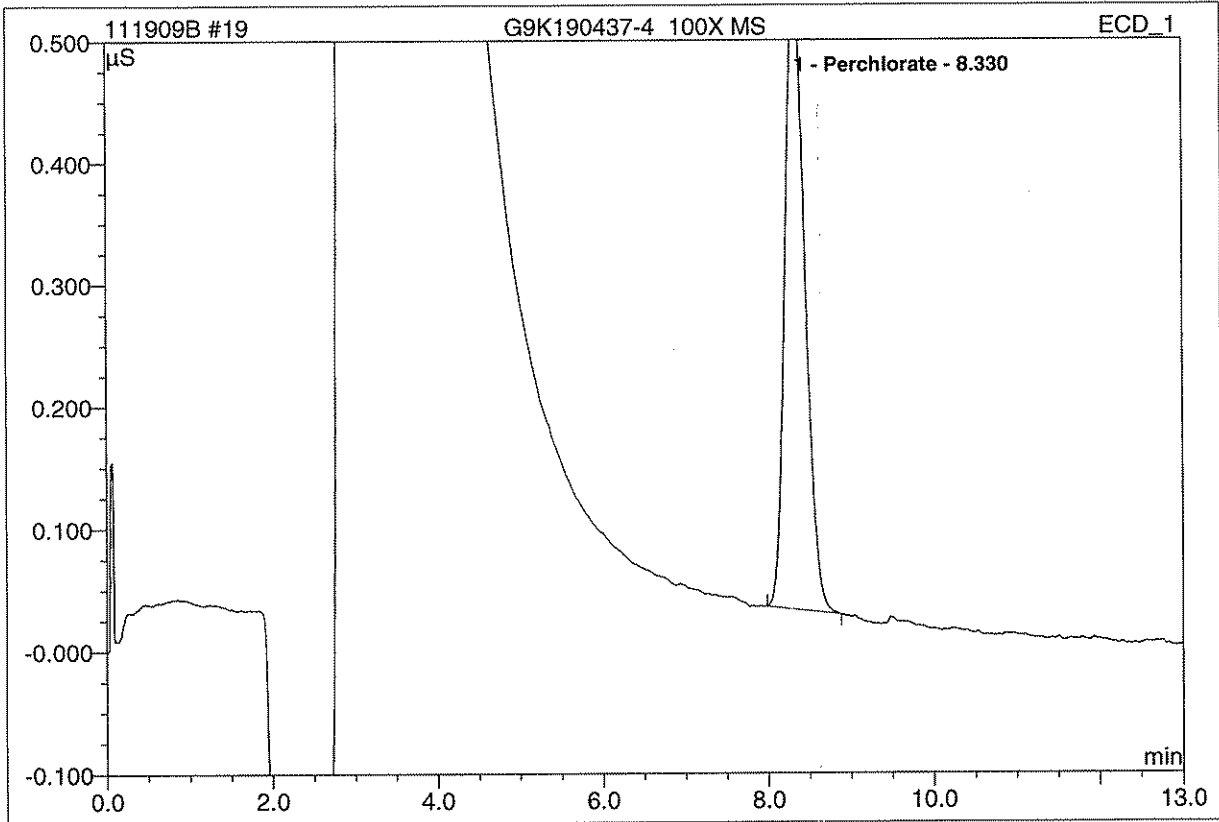


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.34	Perchlorate	0.124	0.03435	100.00	1630.947	BMB
Total:			0.124	0.034	100.00	1630.947	

Q

Sample Name: **G9K190437-4 100X MS**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 19:31**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

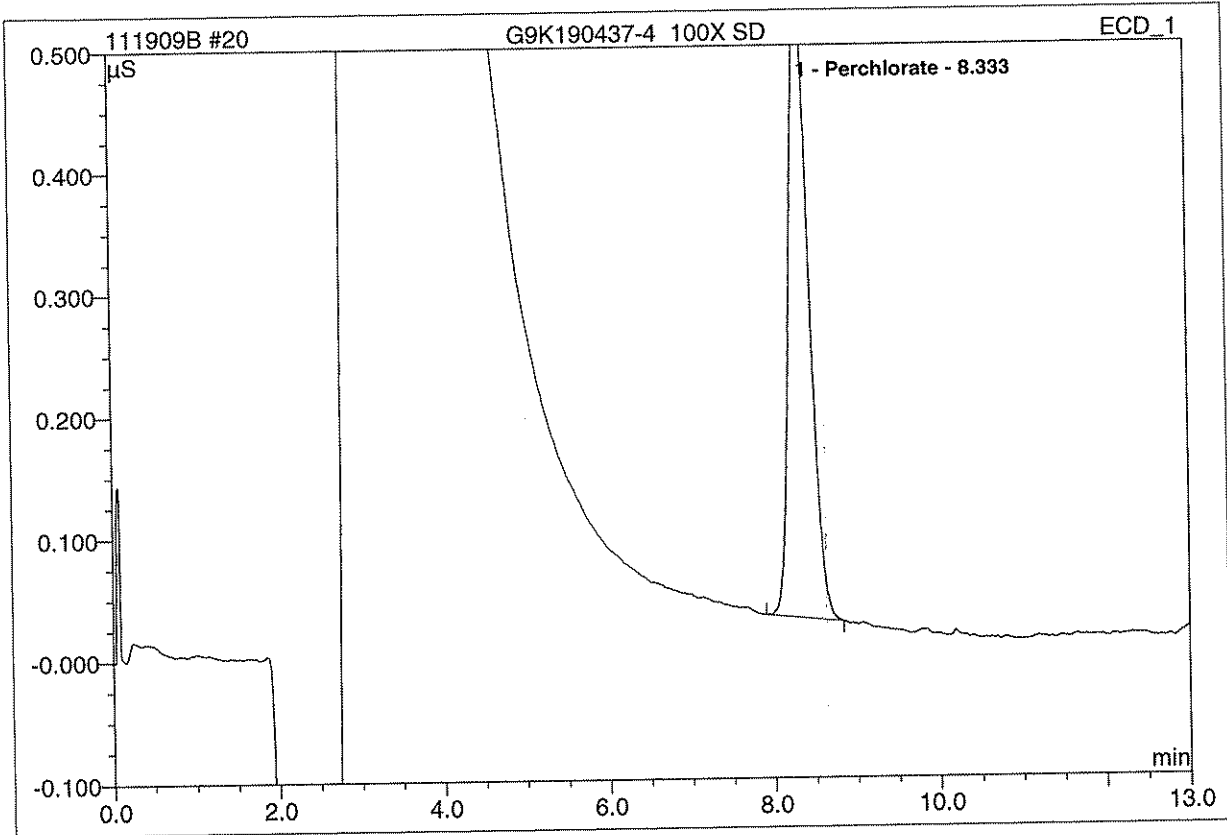


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.512	0.14246	100.00	6384.259	BMB
Total:			0.512	0.142	100.00	6384.259	

*95%
TV = 5,000 μg/L*

Sample Name: **G9K190437-4 100X SD**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 19:46**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

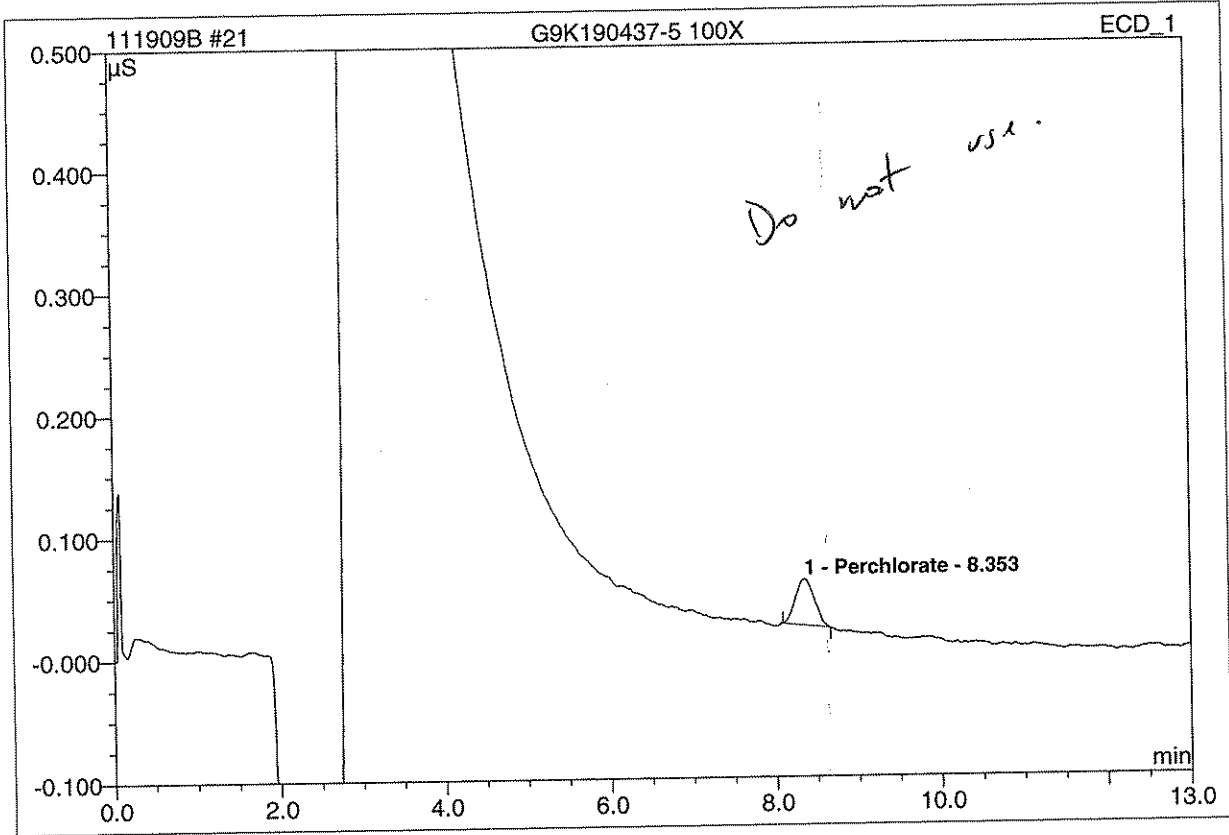


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.518	0.14453	100.00	6470.981	BMB
Total:			0.518	0.145	100.00	6470.981	

*97%
TV = 5,000 μg/L*

Sample Name: **G9K190437-5 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 20:02**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

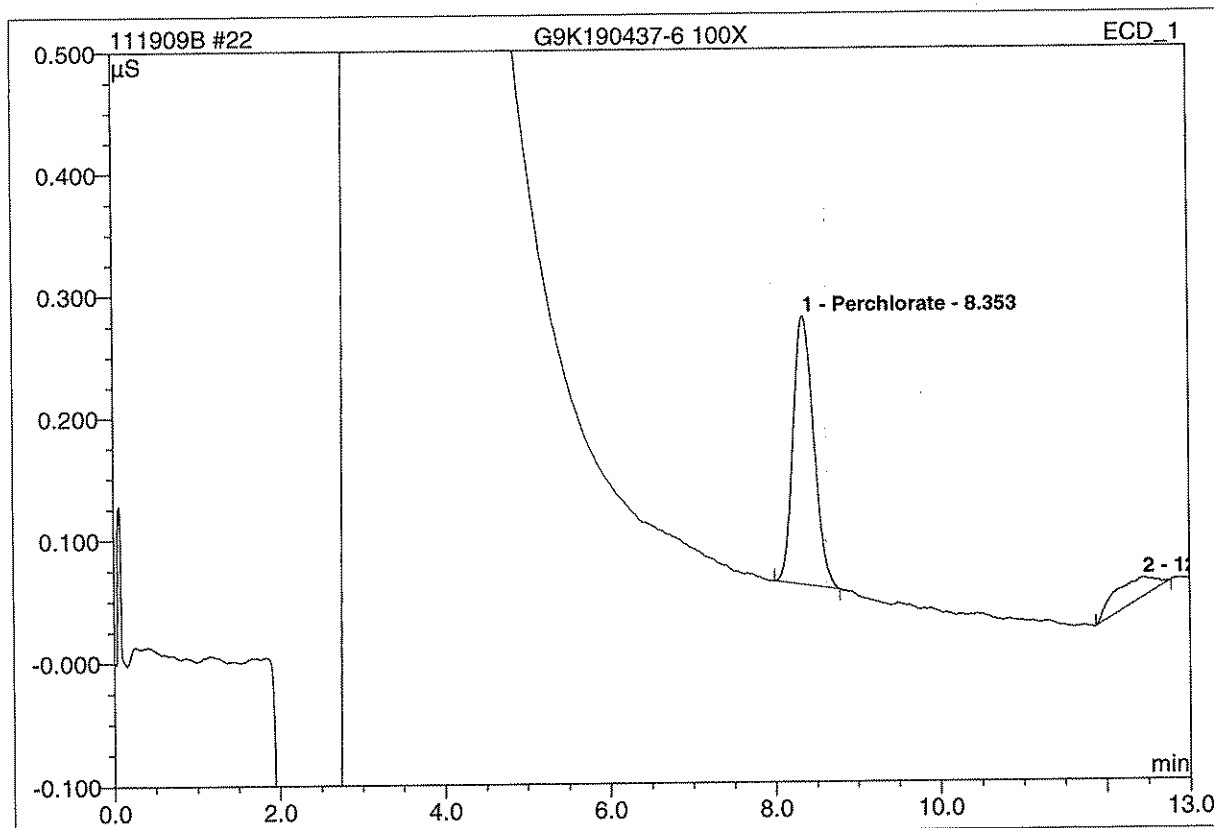


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.35	Perchlorate	0.038	0.00998	100.00	489.268	BMB
Total:			0.038	0.010	100.00	489.268	

*Repeat @
20X.*

Sample Name: **G9K190437-6 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 20:17**

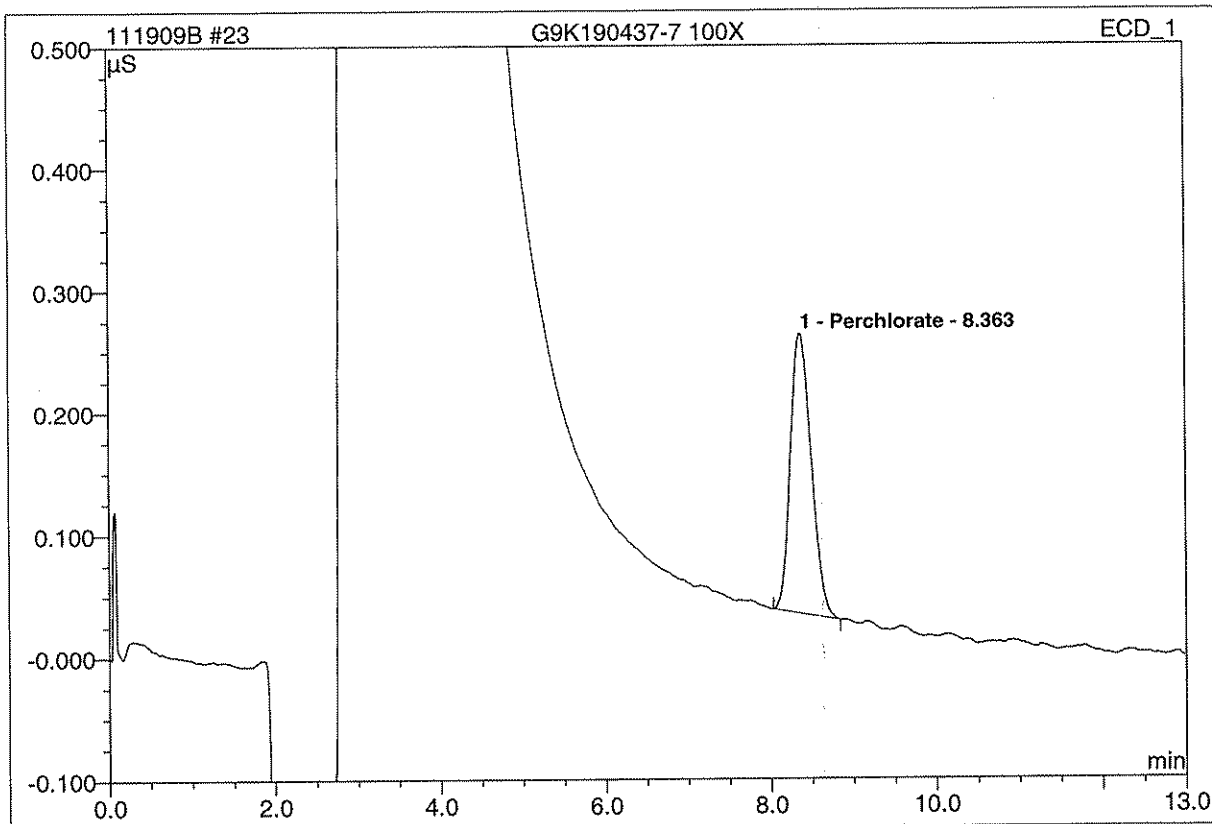
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.35	Perchlorate	0.220	0.06330	85.69	2950.984	BMB
2	12.45	n.a.	0.016	0.01057	14.31	n.a.	BMB
Total:			0.236	0.074	100.00	2950.984	

Sample Name: **G9K190437-7 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 20:33**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

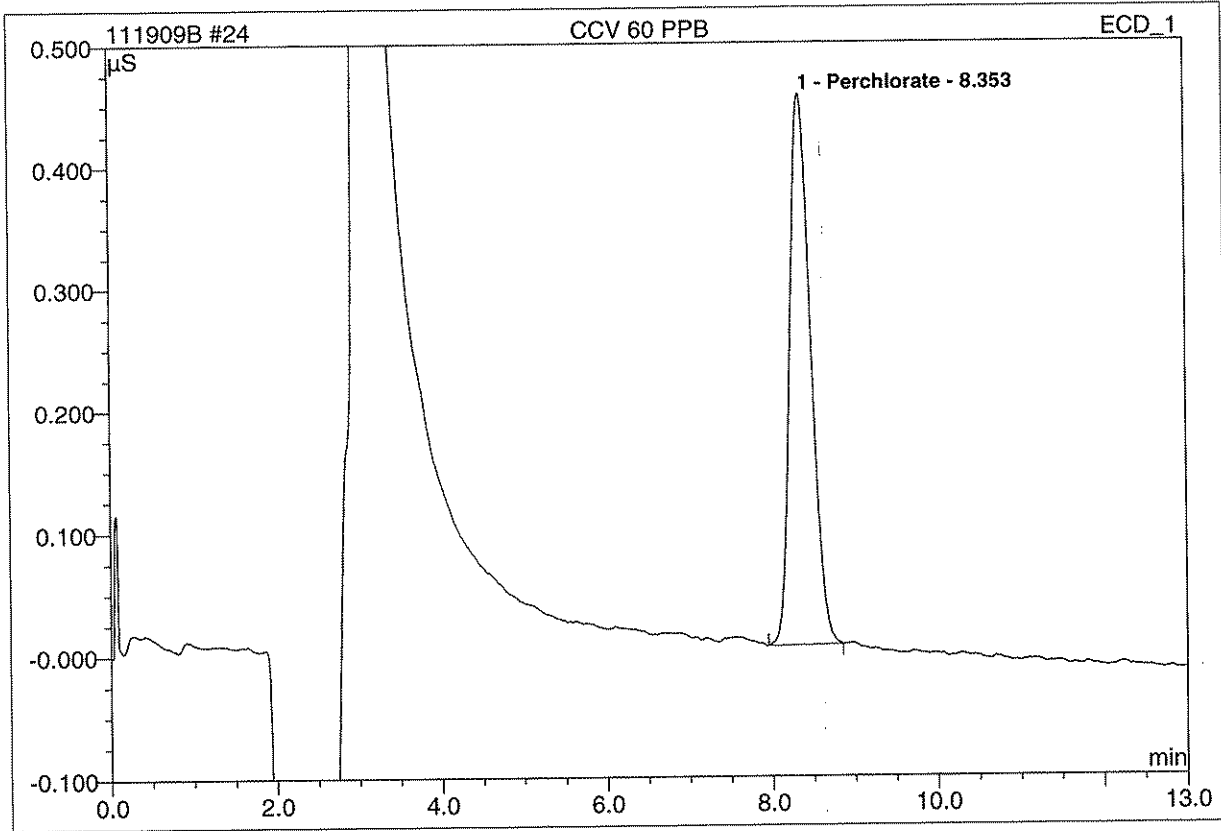


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.36	Perchlorate	0.229	0.06672	100.00	3104.466	BMB
Total:			0.229	0.067	100.00	3104.466	

Q

Sample Name: **CCV 60 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 20:48**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

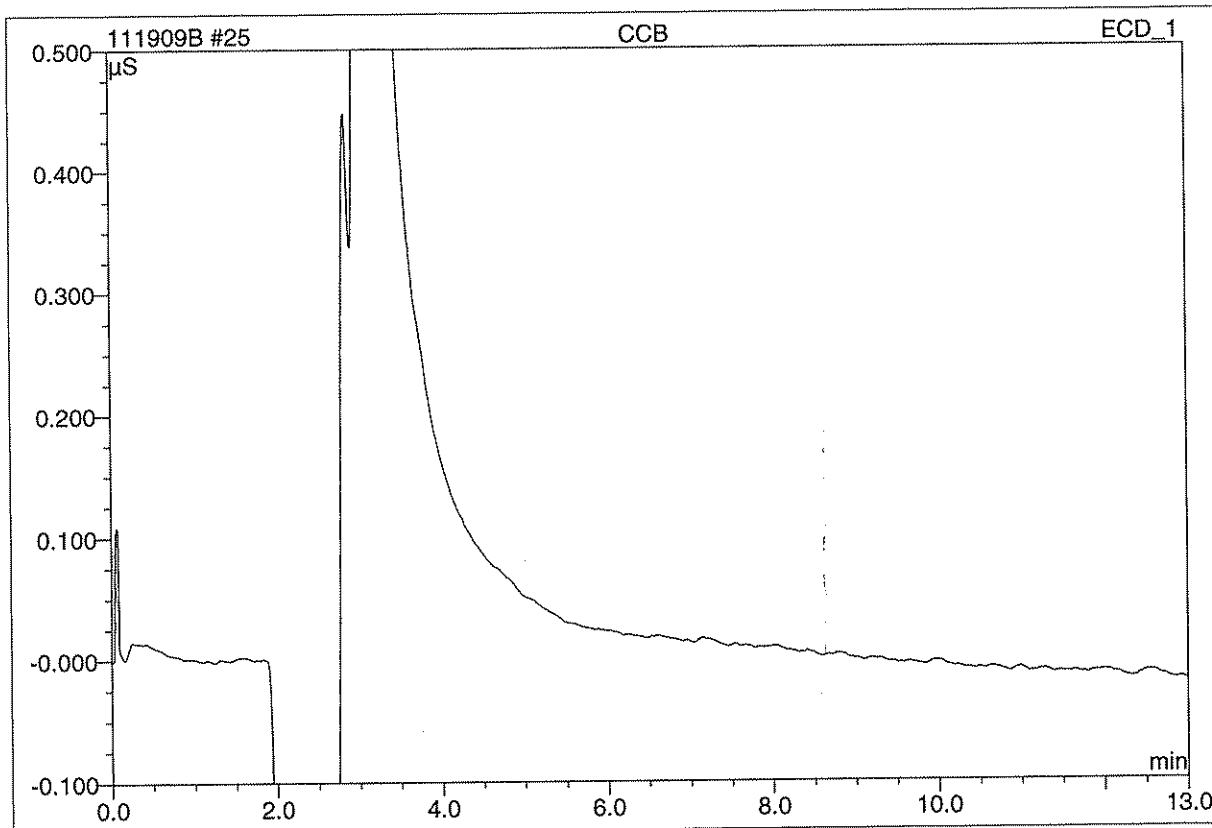


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.35	Perchlorate	0.451	0.13204	100.00	59.458	BMB
Total:			0.451	0.132	100.00	59.458	

99-1.

Sample Name: **CCB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 21:03**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

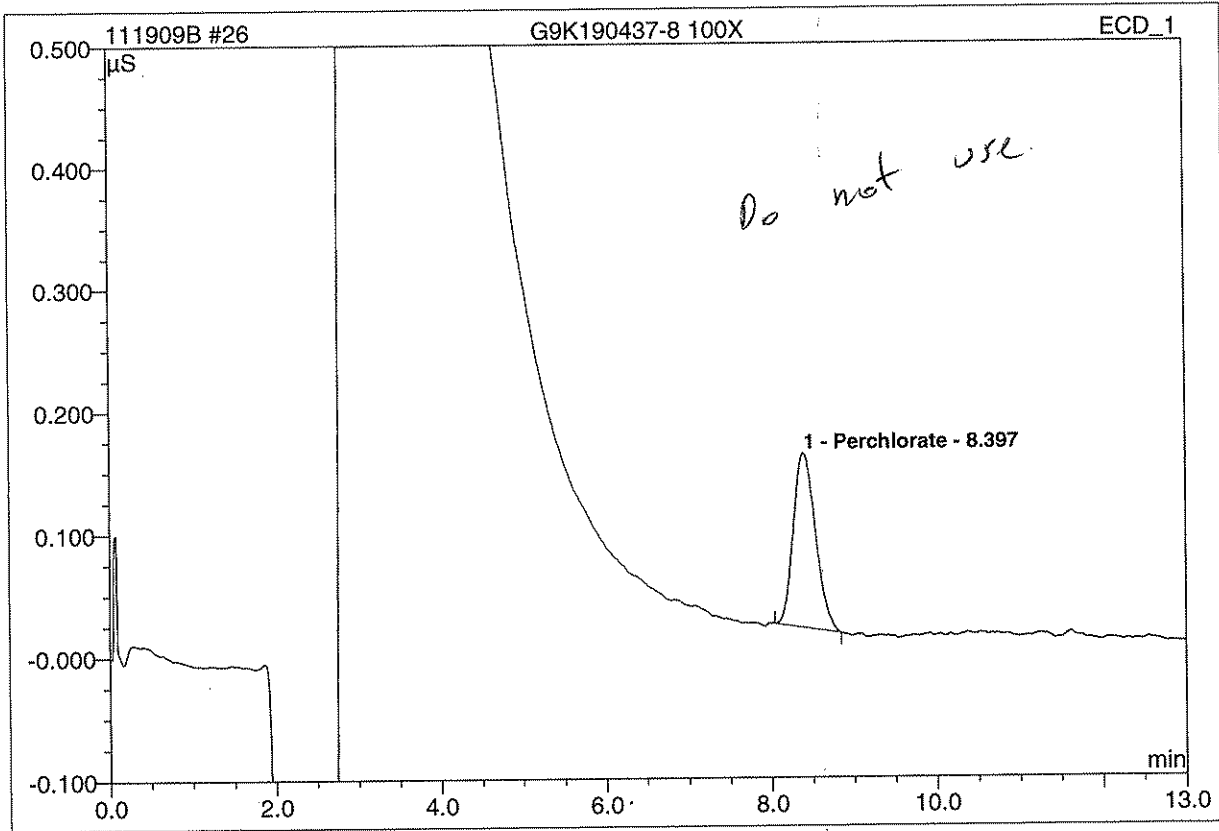


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
Total:			0.000	0.000	0.00	0.000	

ND

Sample Name: **G9K190437-8 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 21:19**

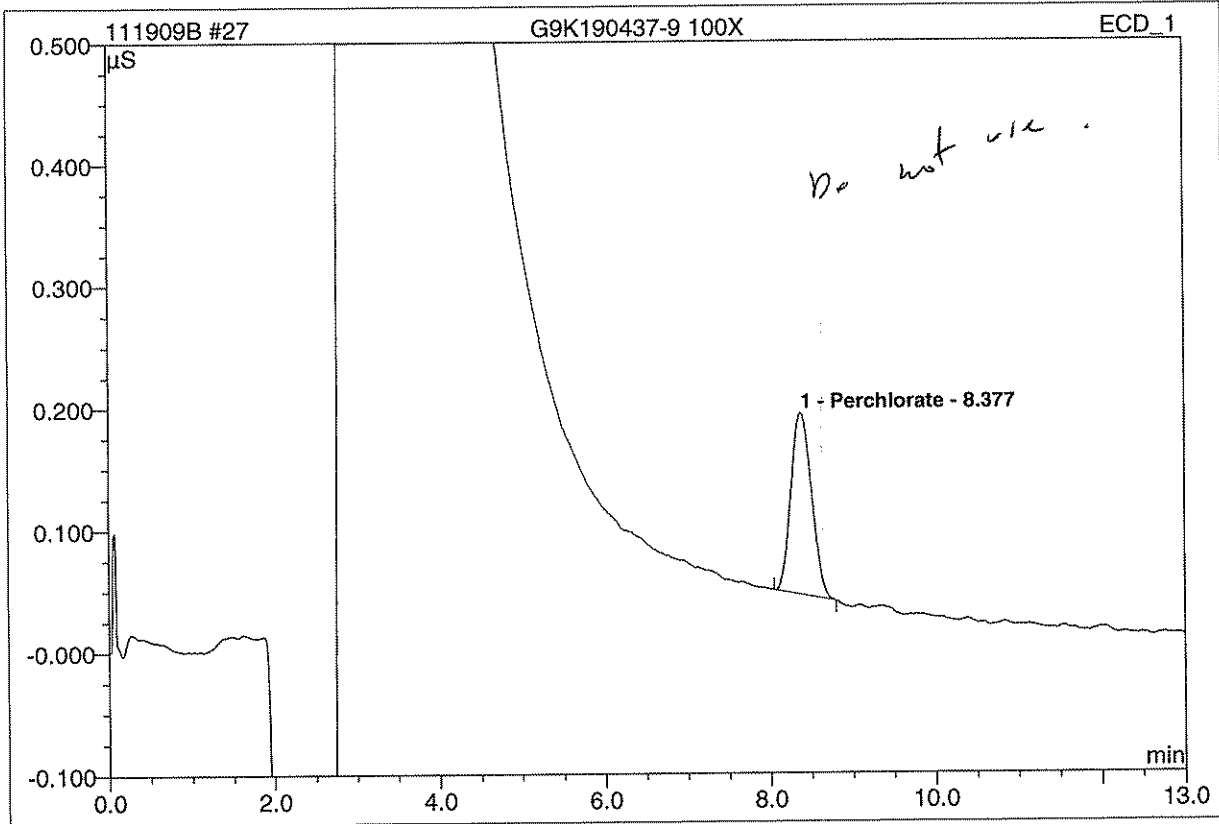
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.40	Perchlorate	0.142	0.04396	100.00	2073.213	BMB
Total:			0.142	0.044	100.00	2073.213	

Sample Name: **G9K190437-9 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 21:34**

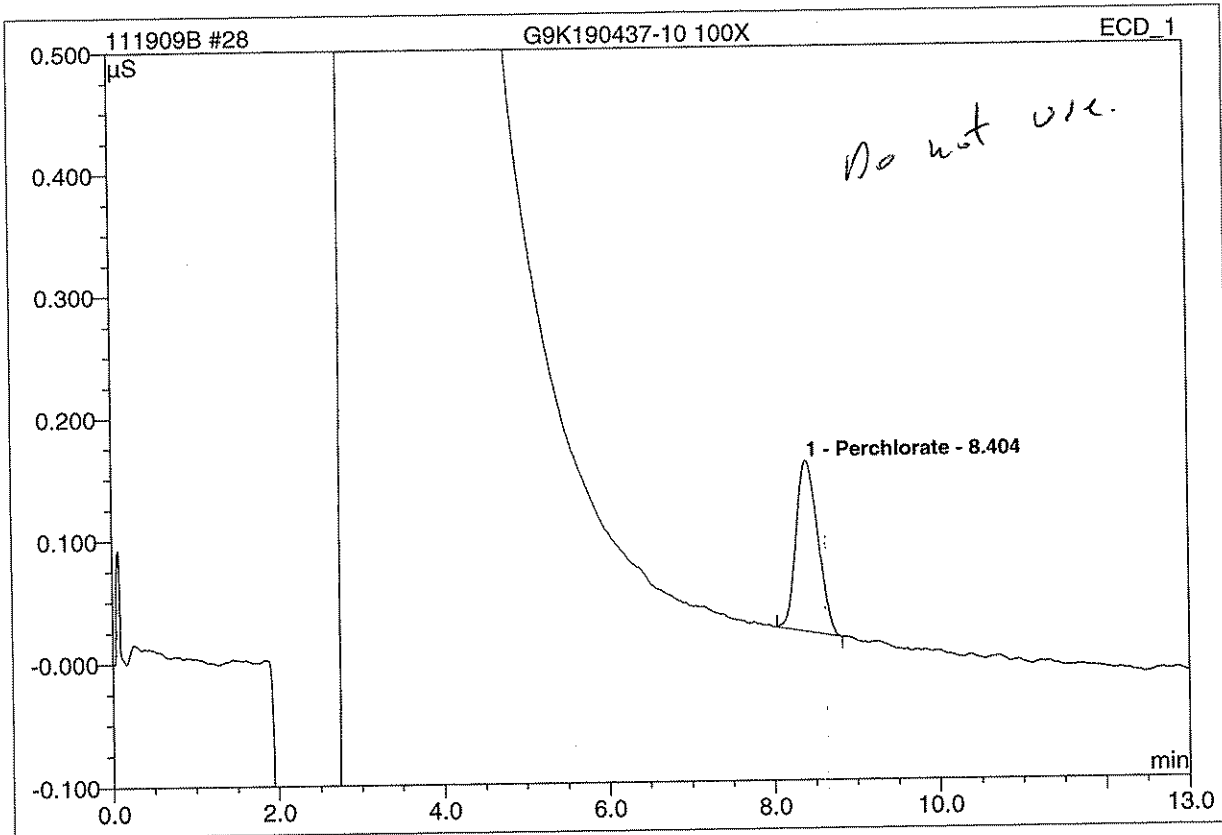
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.38	Perchlorate	0.149	0.04292	100.00	2025.495	BMB
Total:			0.149	0.043	100.00	2025.495	

Sample Name: **G9K190437-10 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 21:50**

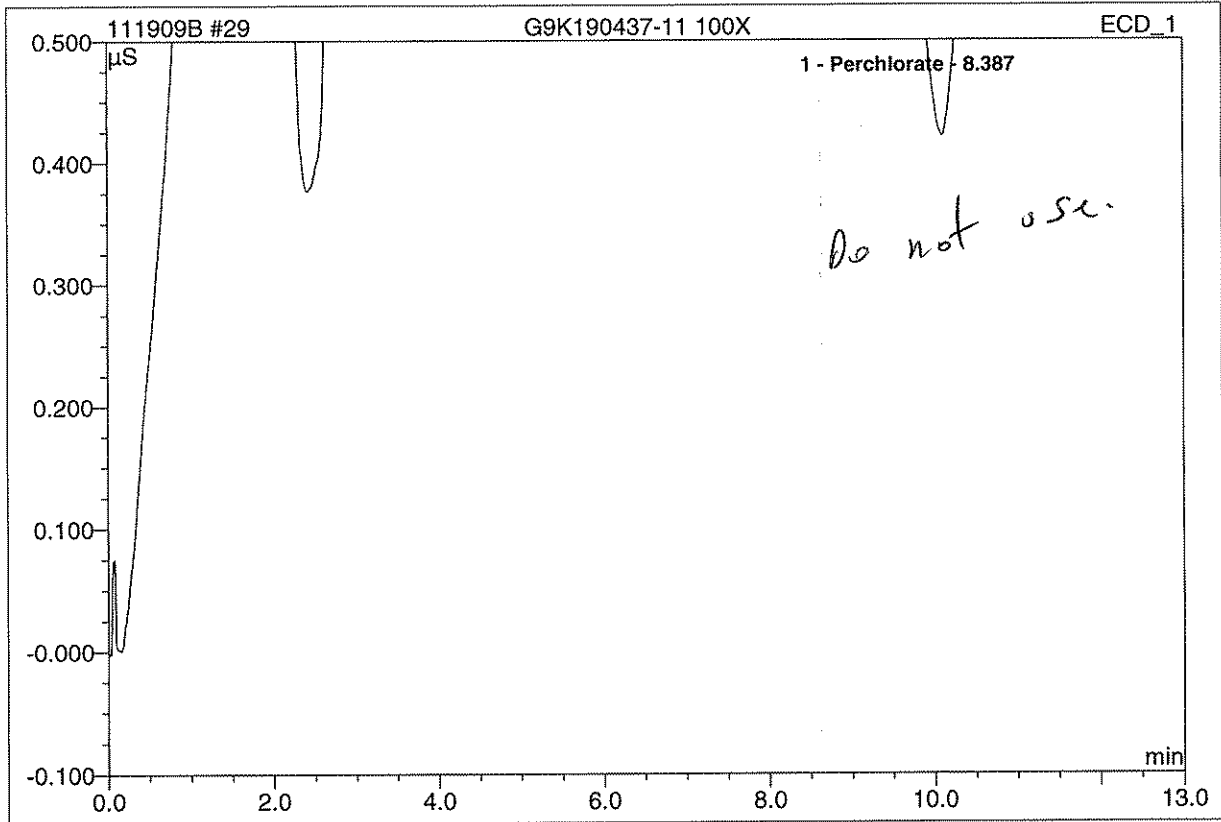
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.40	Perchlorate	0.139	0.04256	100.00	2008.994	BMB
Total:			0.139	0.043	100.00	2008.994	

Sample Name: **G9K190437-11 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 22:05**

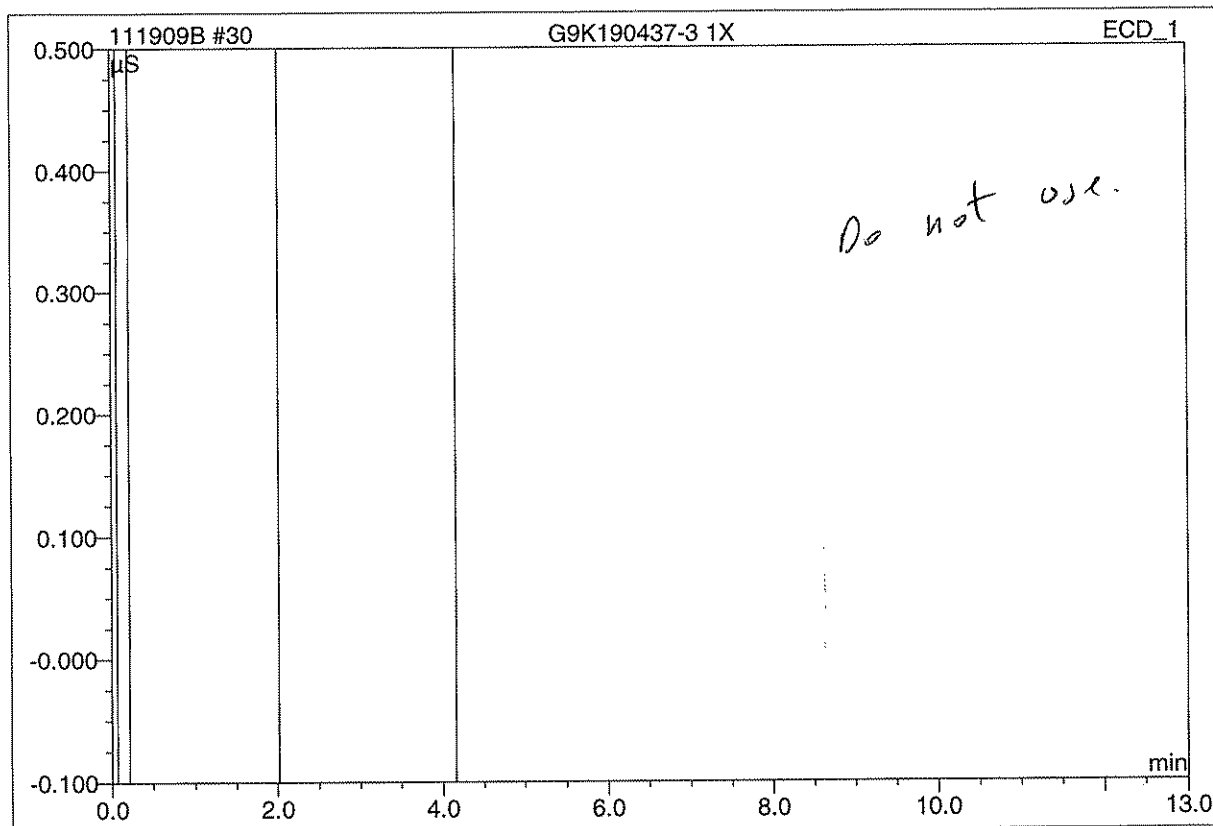
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.39	Perchlorate	0.089	0.03224	100.00	1533.239	BMB
Total:			0.089	0.032	100.00	1533.239	

Sample Name: **G9K190437-3 1X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 22:20**

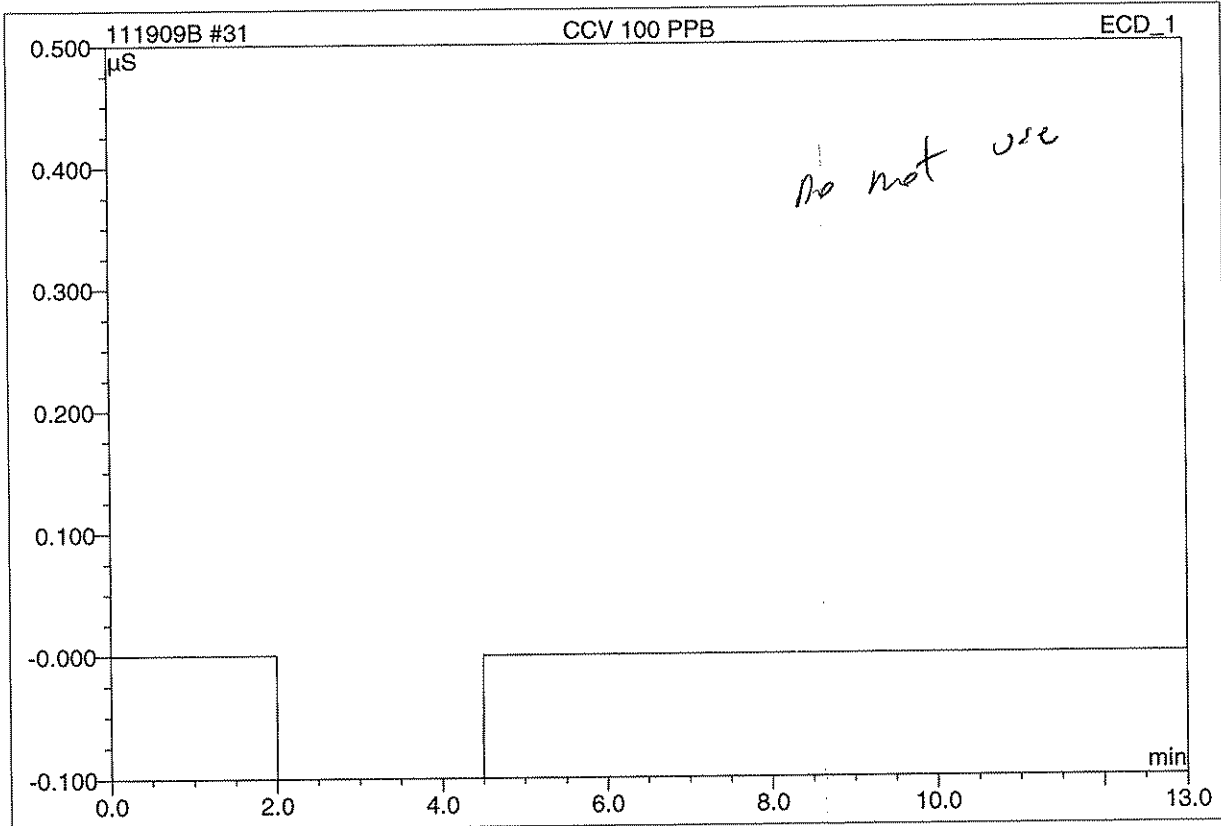
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: **CCV 100 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 22:36**

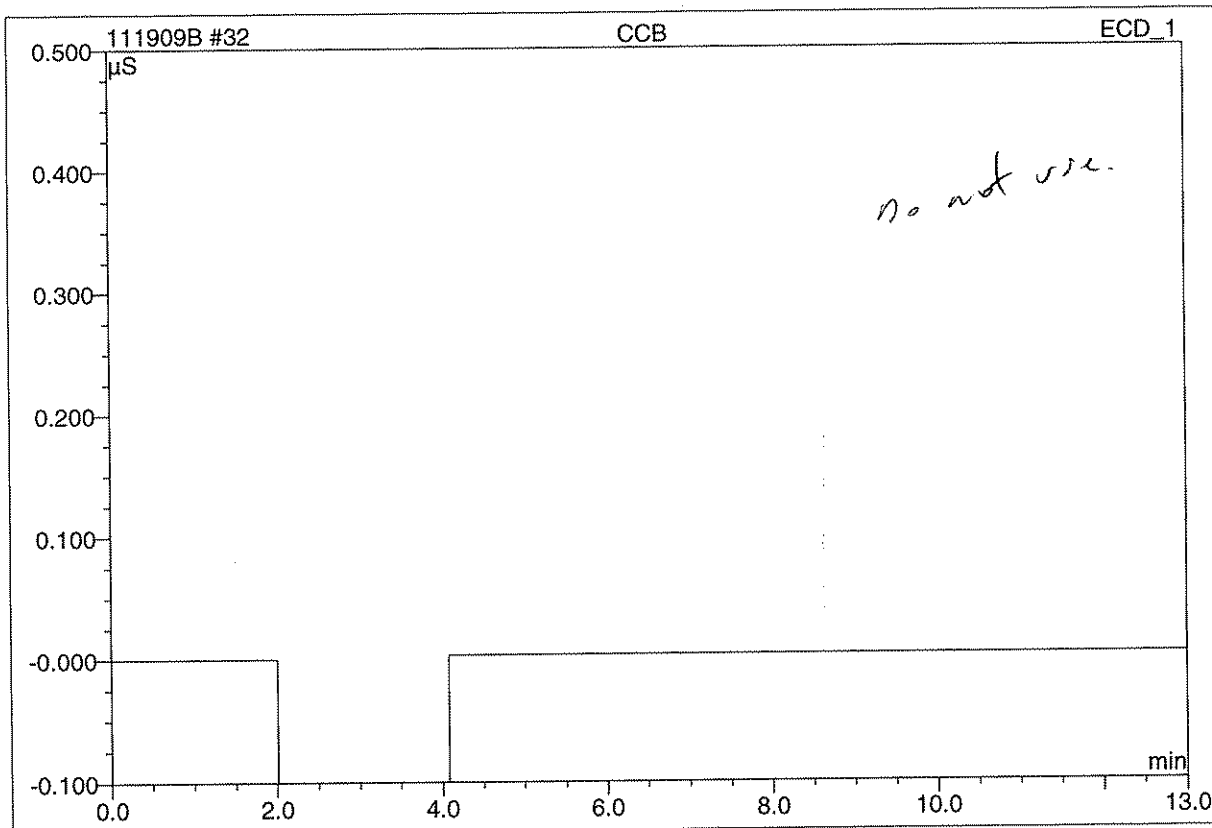
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: **CCB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/19/2009 22:51**

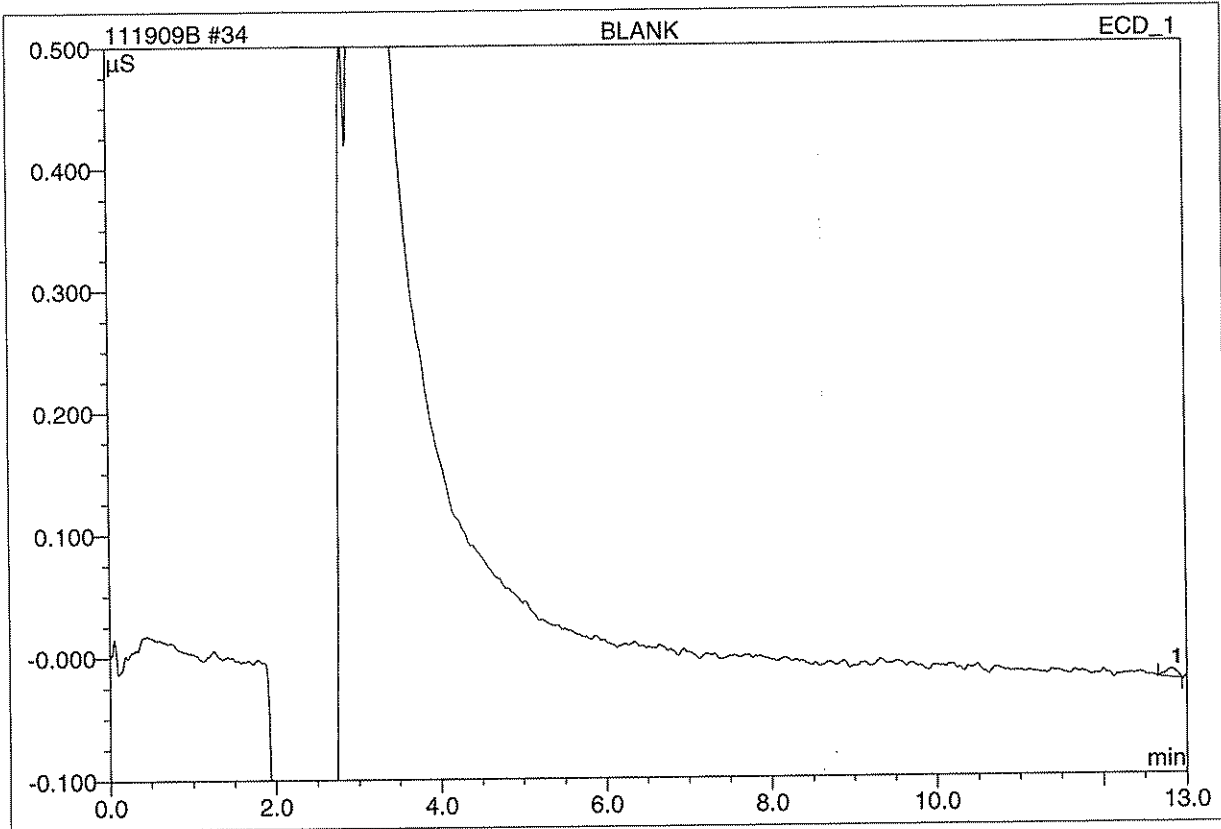
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: **BLANK**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 11:21**

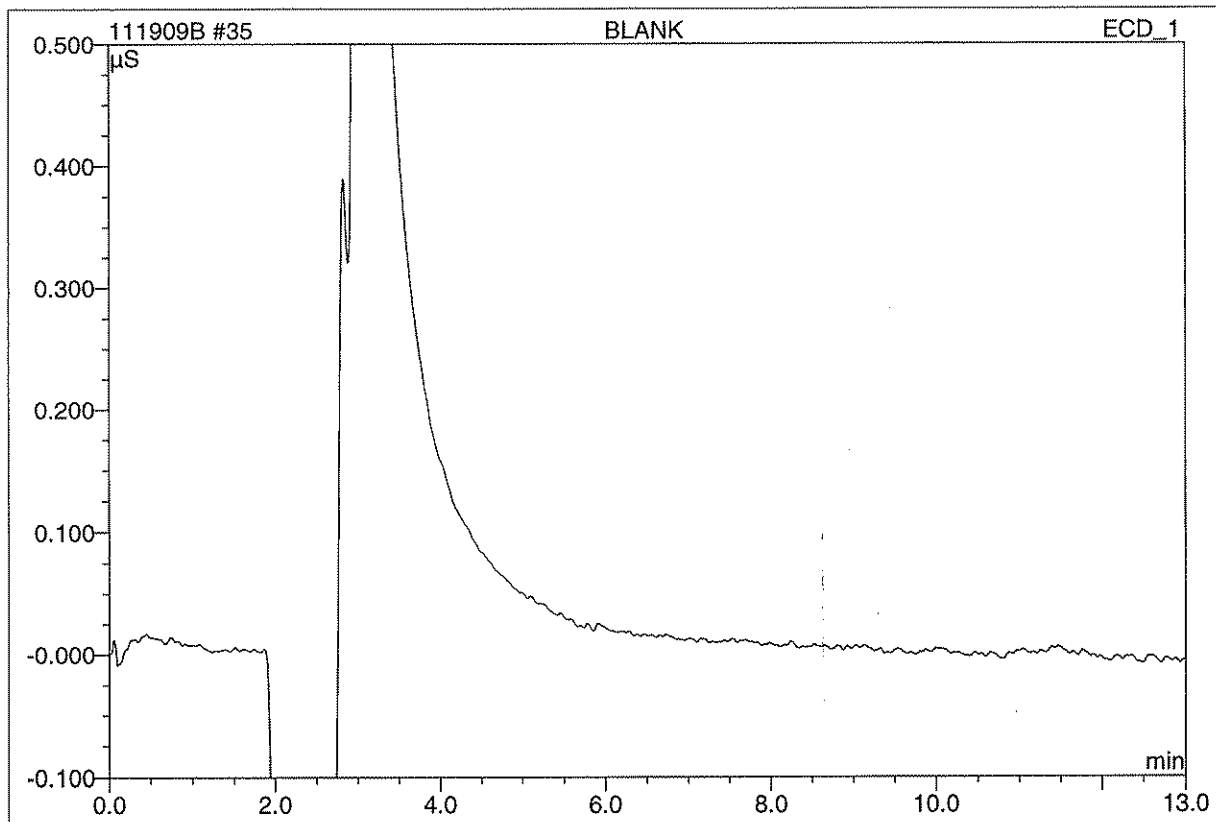
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	12.81	n.a.	0.007	0.00116	100.00	n.a.	BMB
Total:			0.007	0.001	100.00	0.000	

Sample Name: **BLANK**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 11:36**

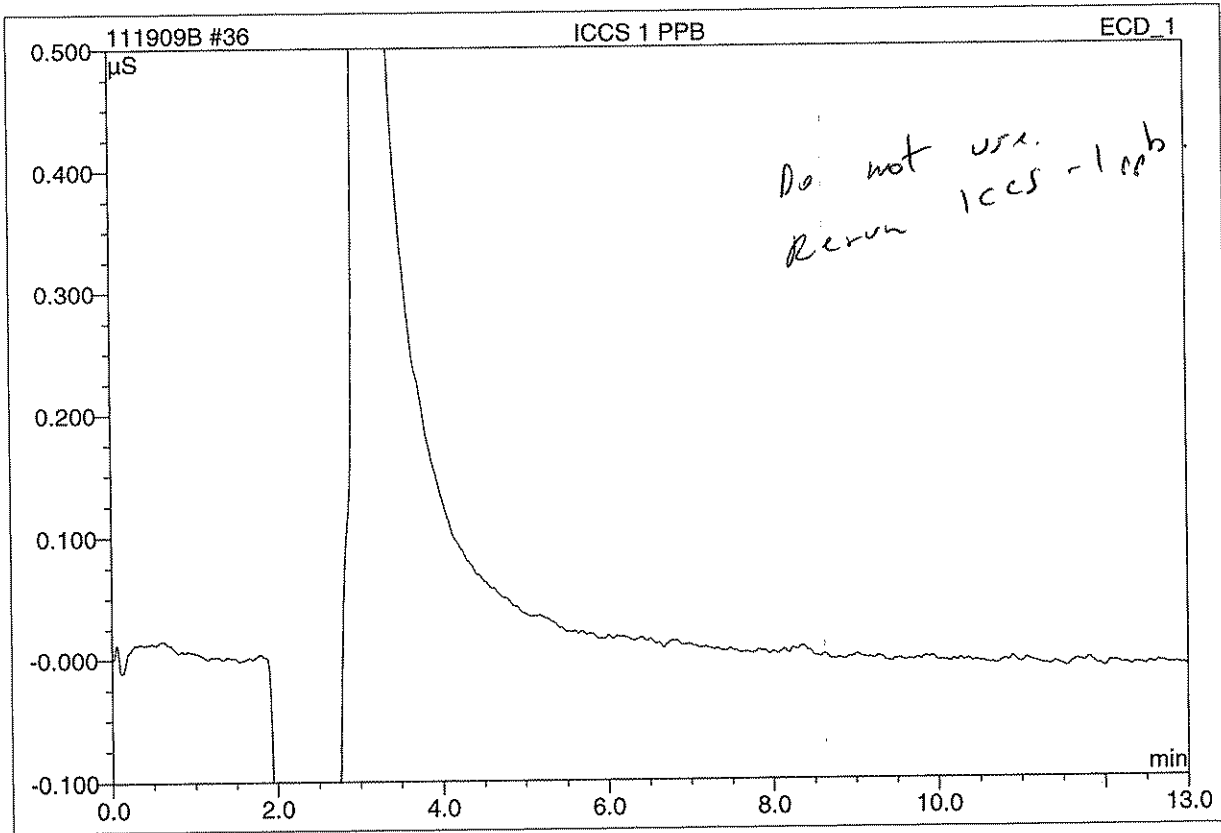
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: **ICCS 1 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 11:52**

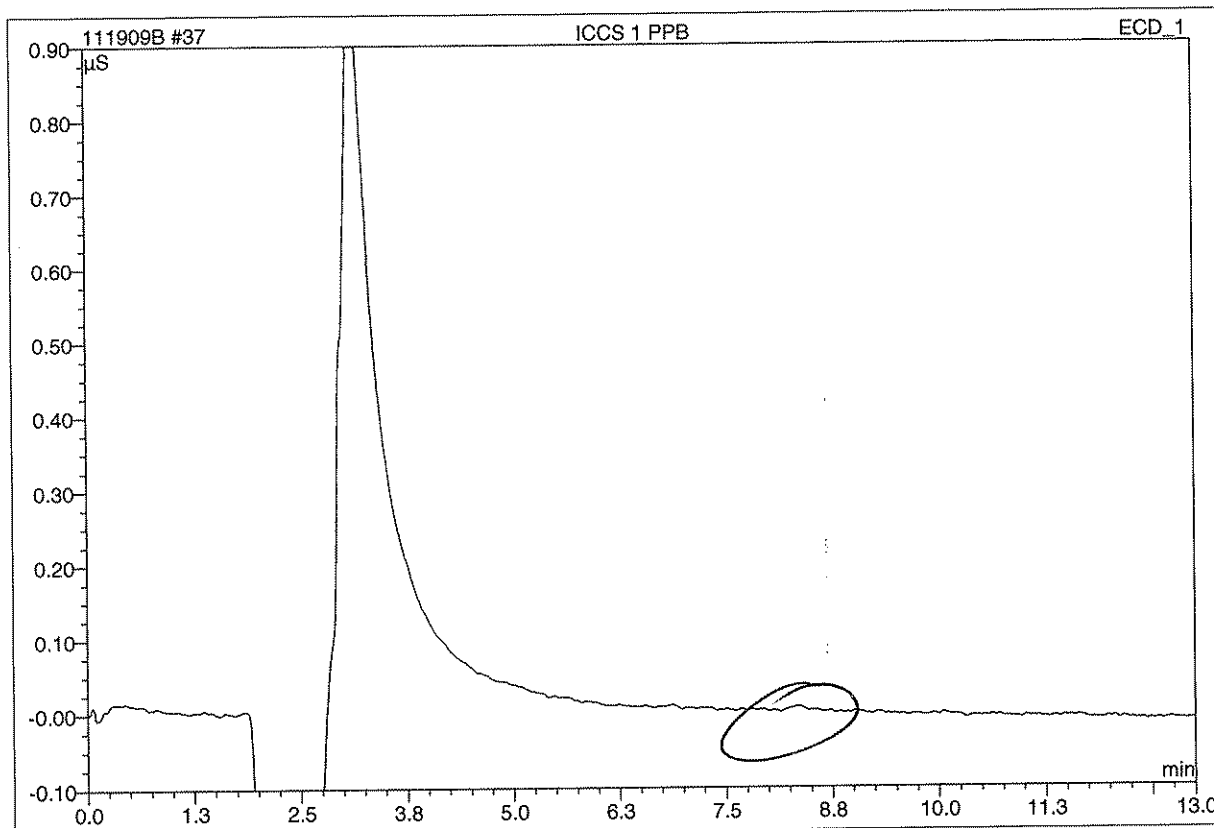
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

Sample Name: **ICCS 1 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 12:08**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



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

RE-INTEGRATION CODES

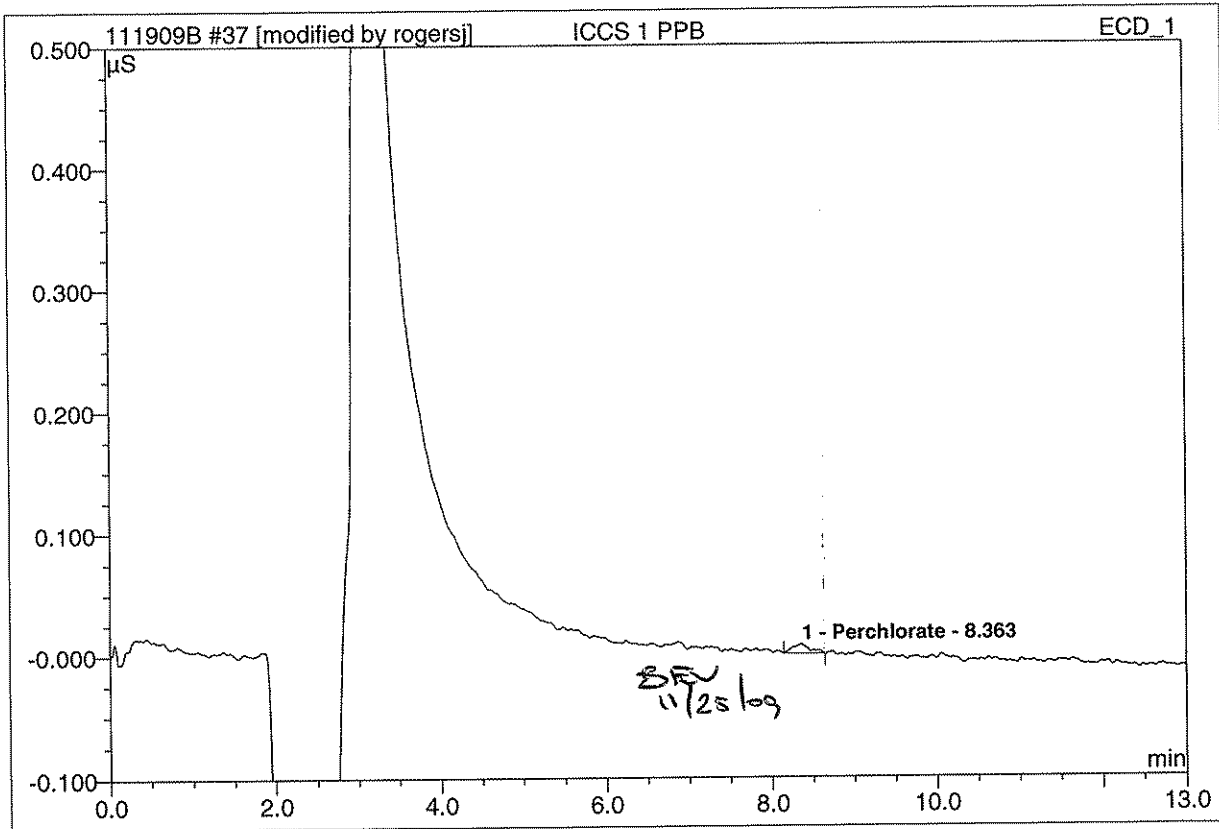
- 1 Poor Peak Shape
- 2 Poor Peak Resolution
- 3 Peak Not Integrated
- 4 Sample Matrix Interference
- 5 Column Bleed
- 6 Instrument Noise
- 7 Baseline Correction
- 8 Other (reason must be stated)

ALL RE-INTEGRATIONS MUST BE INITIALED,
DATED AND CODED

JDR
11-24-09

Sample Name: **ICCS 1 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 12:08**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount µg/L	Type
1	8.36	Perchlorate	0.007	0.00184	100.00	1.016	BMB*
Total:			0.007	0.002	100.00	1.016	

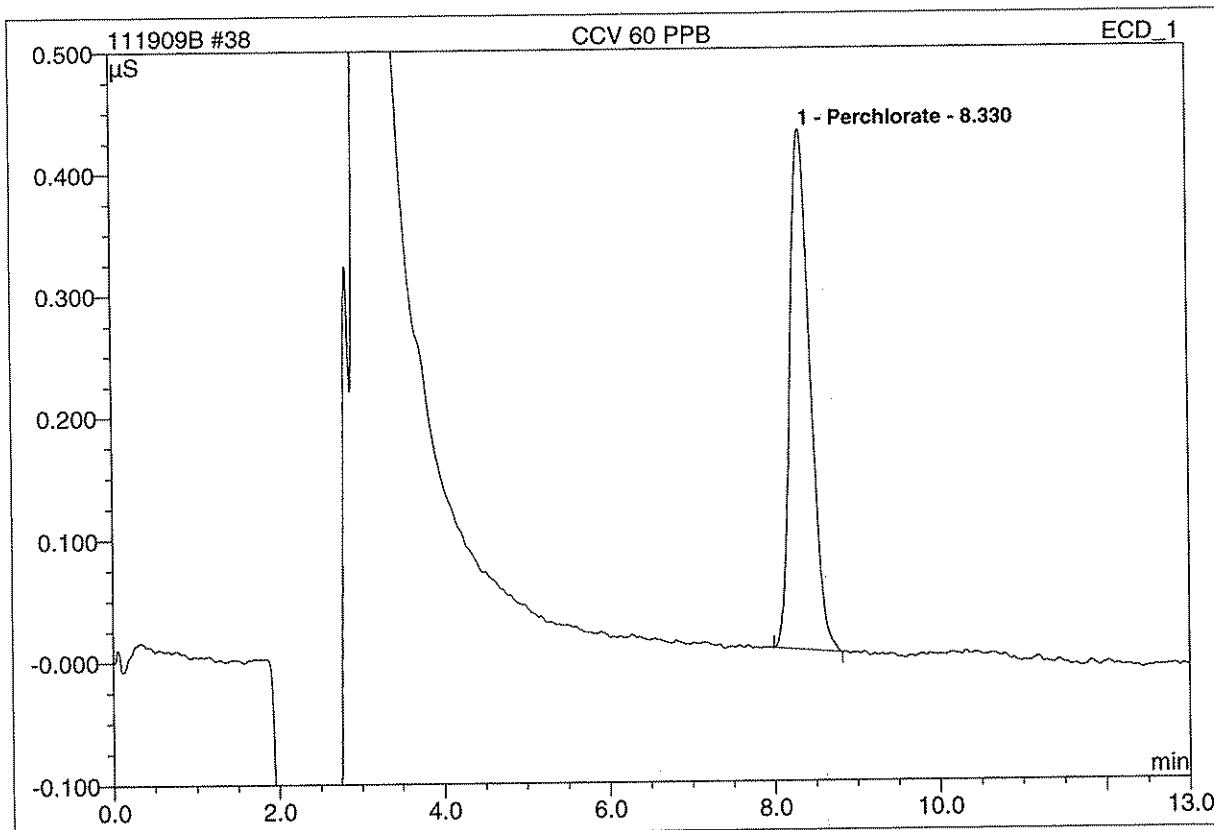
RE-INTEGRATION CODES

- 1 Poor Peak Shape
 - 2 Poor Peak Resolution
 - 3 Peak Not Integrated
 - 4 Sample Matrix Interference
 - 5 Column Bleed
 - 6 Instrument Noise
 - 7 Baseline Correction
 - 8 Other (reason must be stated)
- ALL RE-INTEGRATIONS MUST BE INITIALED,
DATED AND CODED

JOL
11-24-09

Sample Name: **CCV 60 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 12:23**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

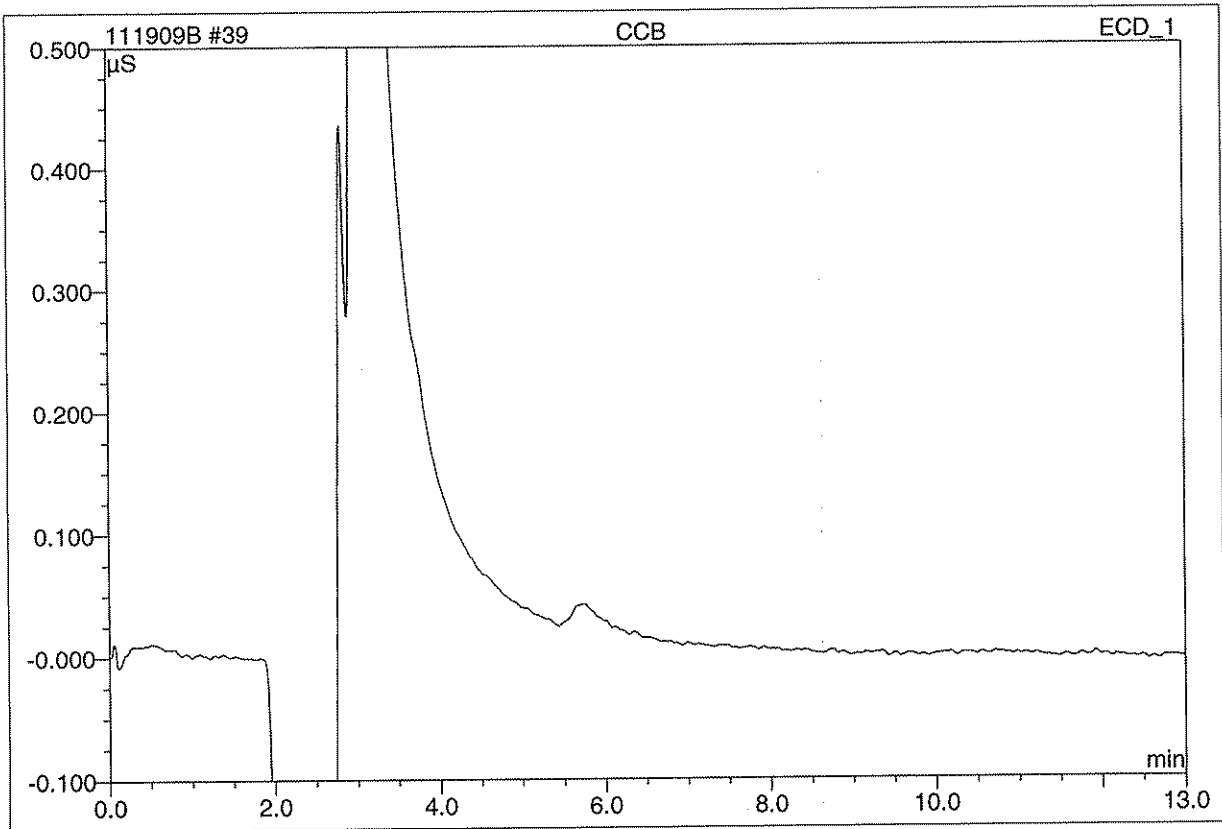


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.426	0.12020	100.00	54.426	BMB
Total:			0.426	0.120	100.00	54.426	

91%

Sample Name: **CCB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 12:39**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

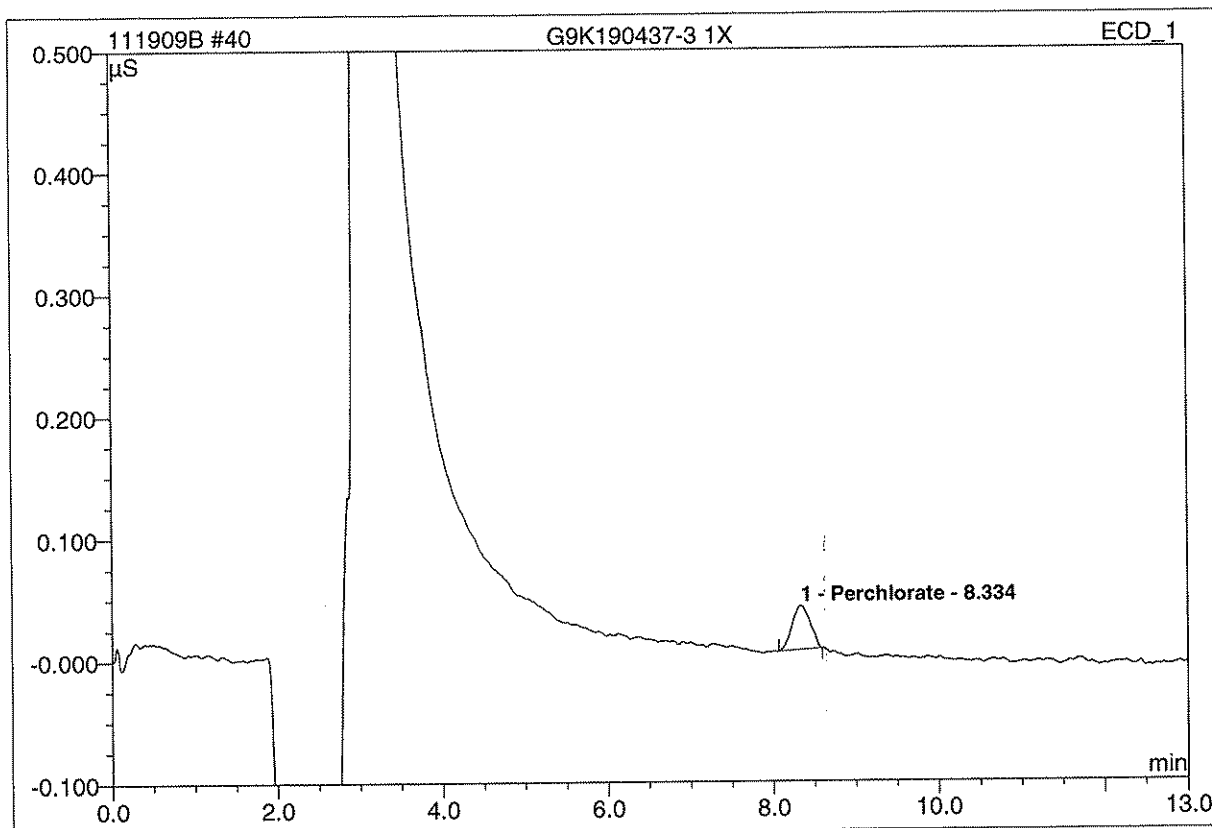


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
Total:			0.000	0.000	0.00	0.000	

ND

Sample Name: **G9K190437-3 1X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 12:54**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

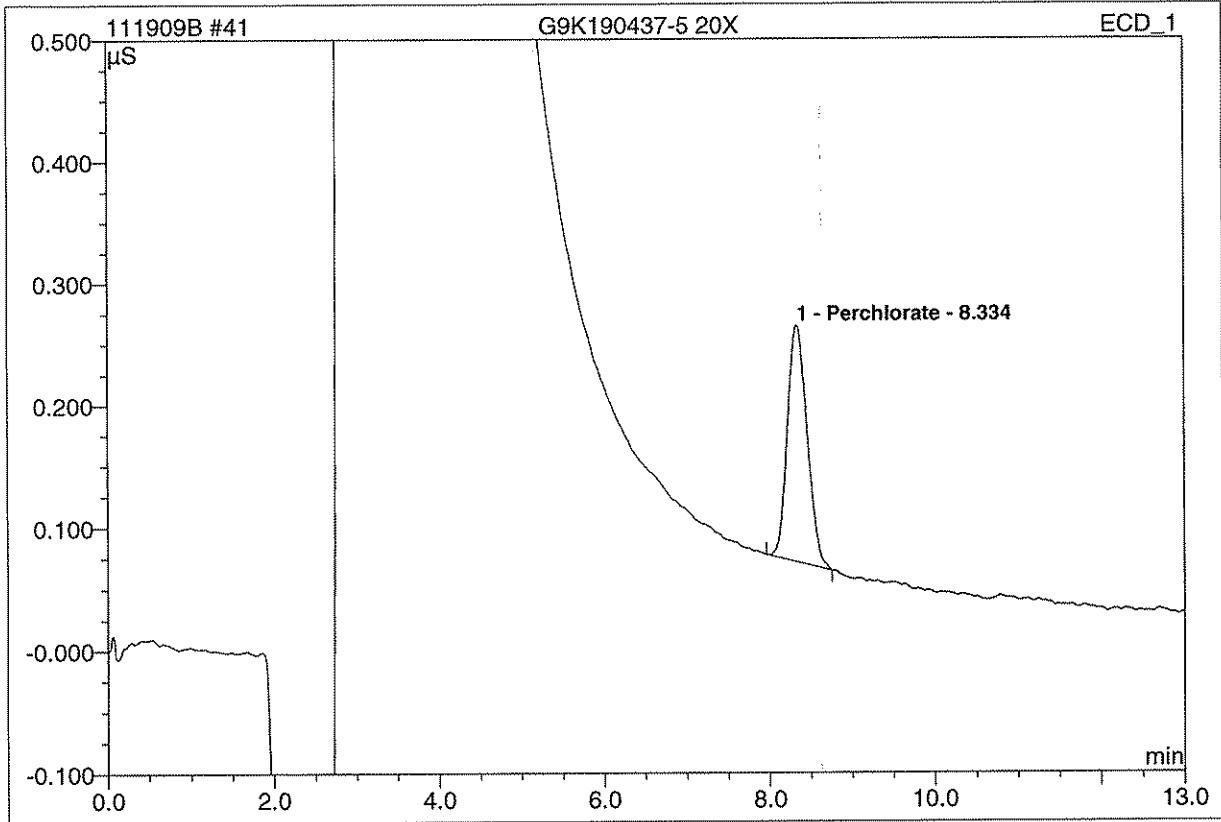


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.036	0.00900	100.00	4.430	BMB
Total:			0.036	0.009	100.00	4.430	

confirmation only.

Sample Name: **G9K190437-5 20X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 13:09**

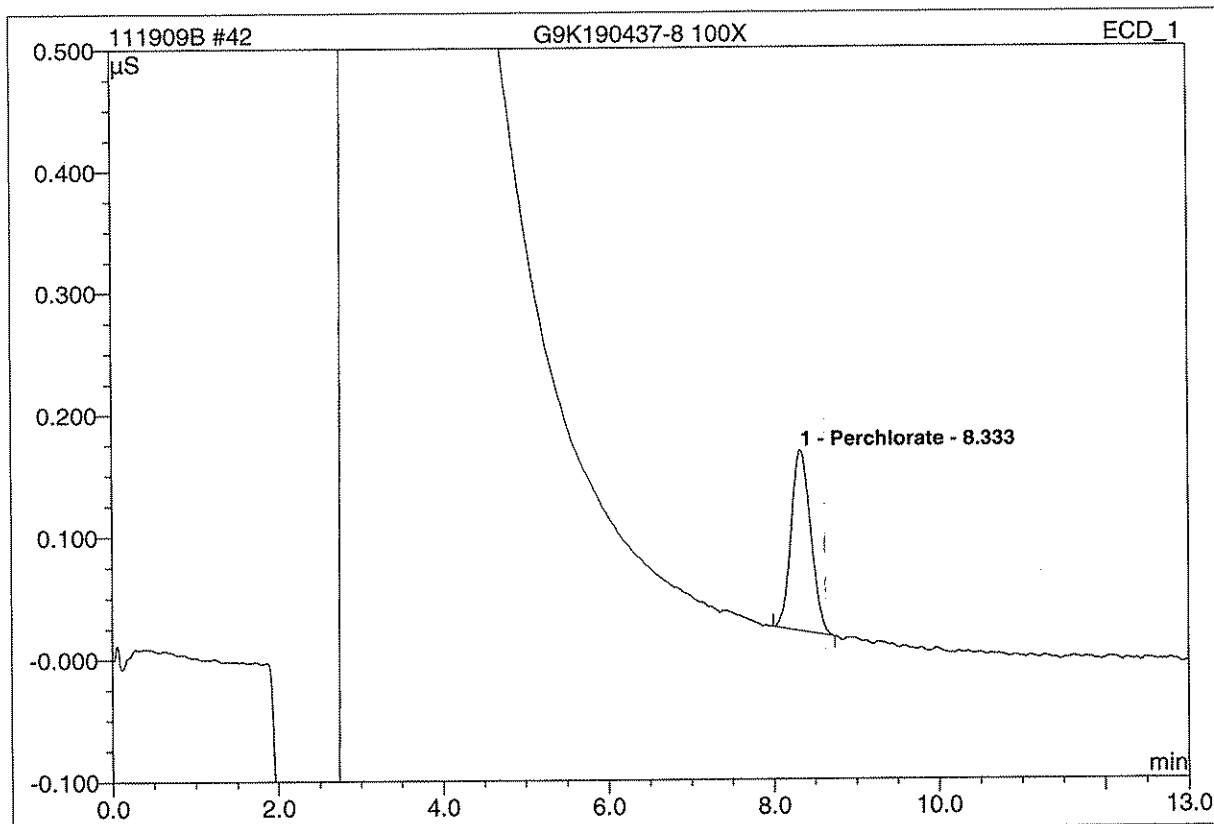
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **20.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.193	0.05324	100.00	499.247	BMB
Total:			0.193	0.053	100.00	499.247	

Sample Name: **G9K190437-8 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 13:25**

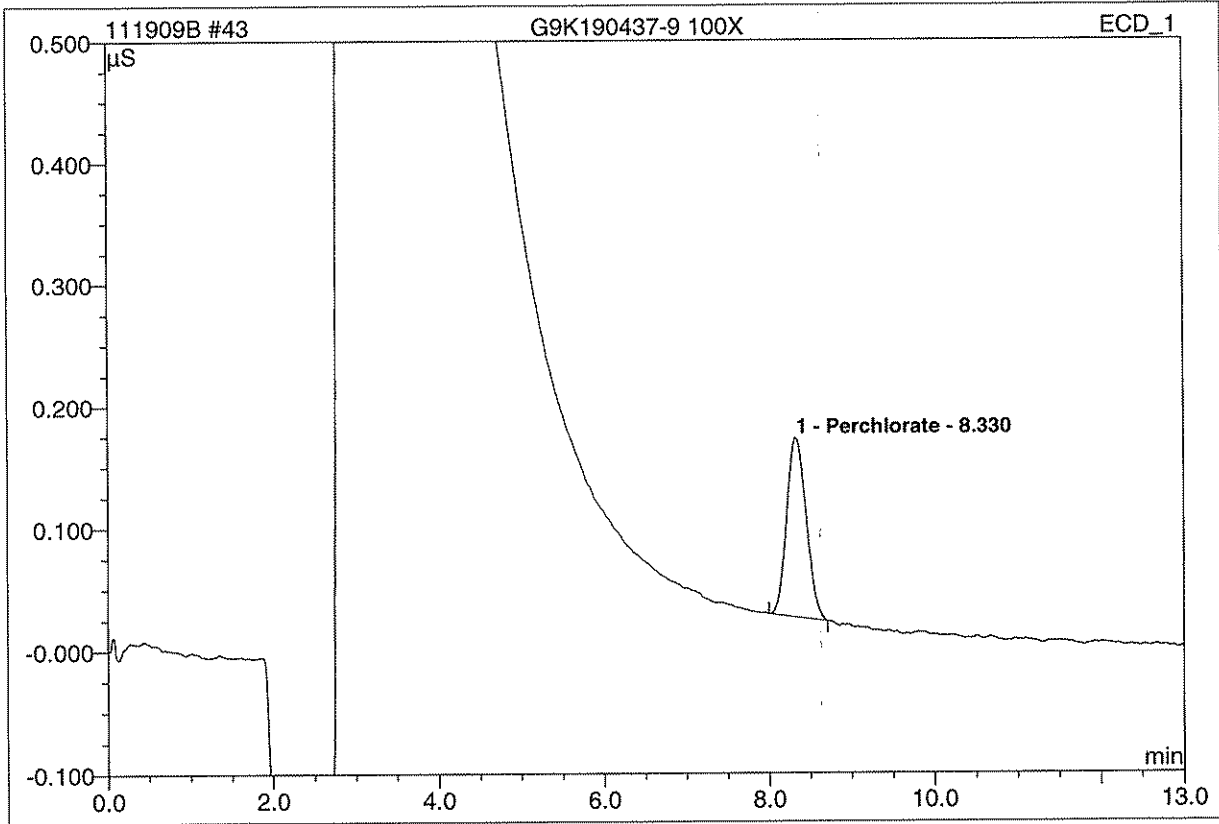
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.147	0.04064	100.00	1920.954	BMB <i>Q</i>
Total:			0.147	0.041	100.00	1920.954	

Sample Name: **G9K190437-9 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 13:40**

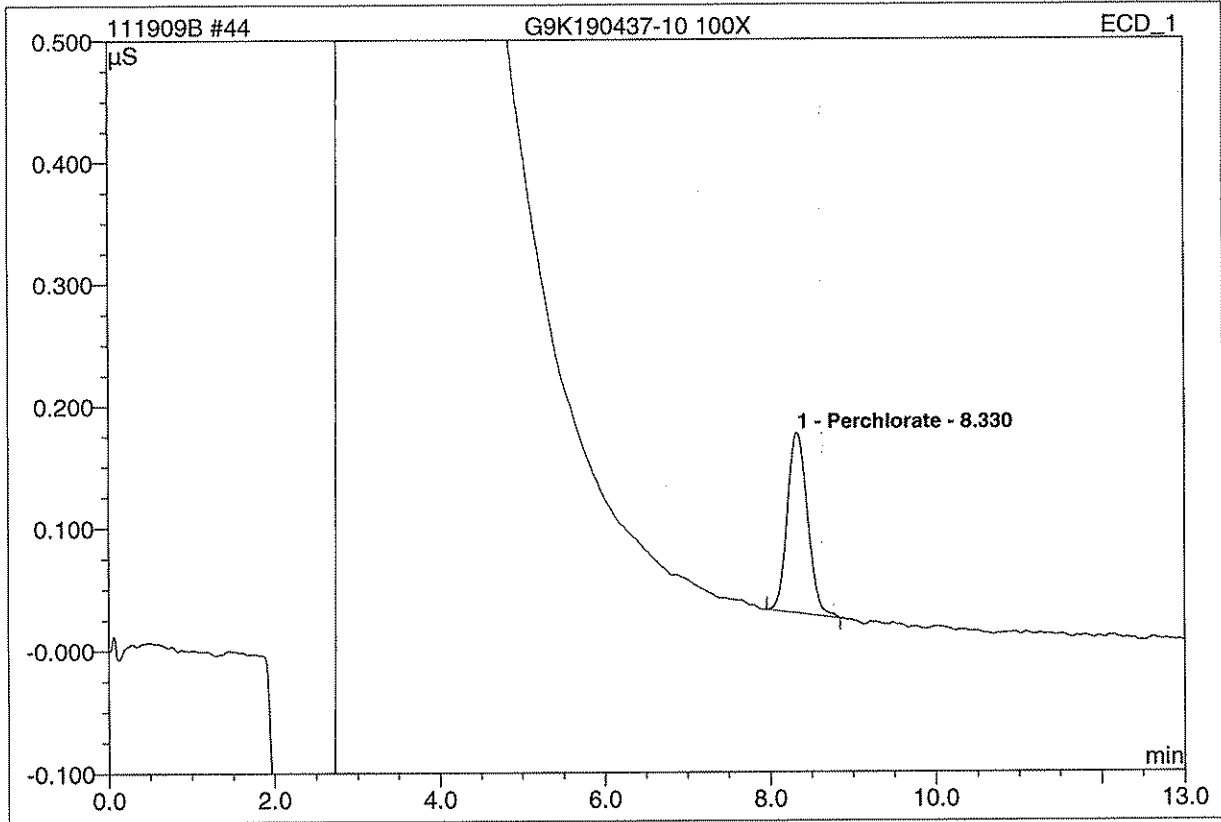
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.146	0.04000	100.00	1891.524	BMB
Total:			0.146	0.040	100.00	1891.524	

Sample Name: **G9K190437-10 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 13:56**

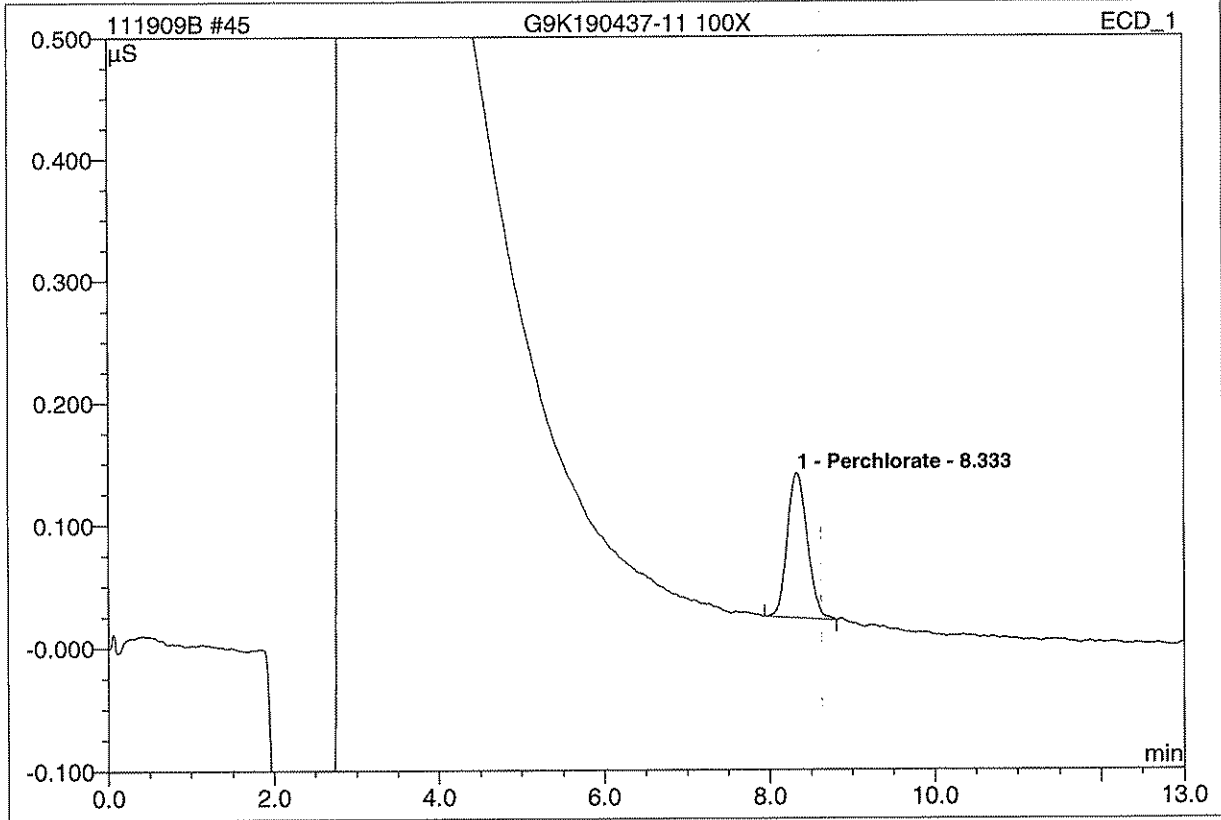
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.148	0.04157	100.00	1963.483	BMB
Total:			0.148	0.042	100.00	1963.483	

Sample Name: **G9K190437-11 100X**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 14:11**

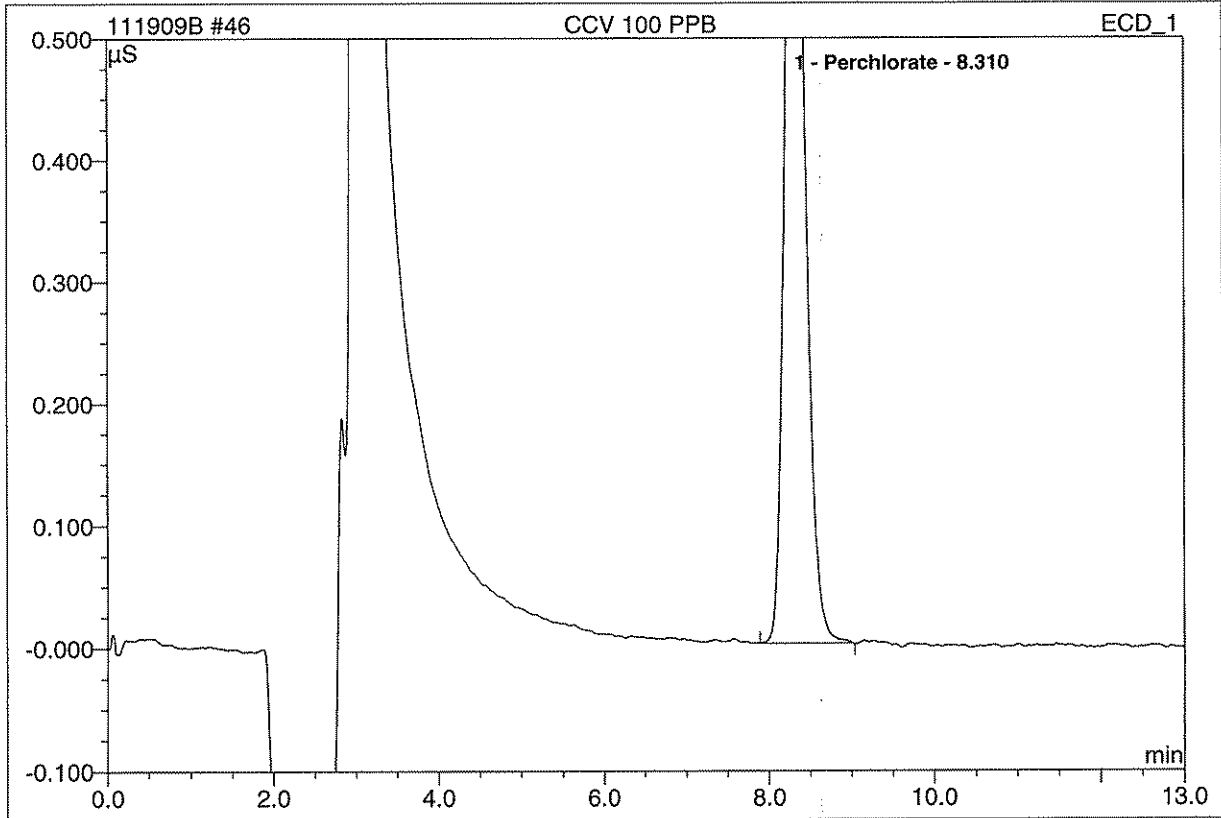
Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **100.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.33	Perchlorate	0.118	0.03326	100.00	1580.570	BMB
Total:			0.118	0.033	100.00	1580.570	

Sample Name: **CCV 100 PPB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 14:26**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**

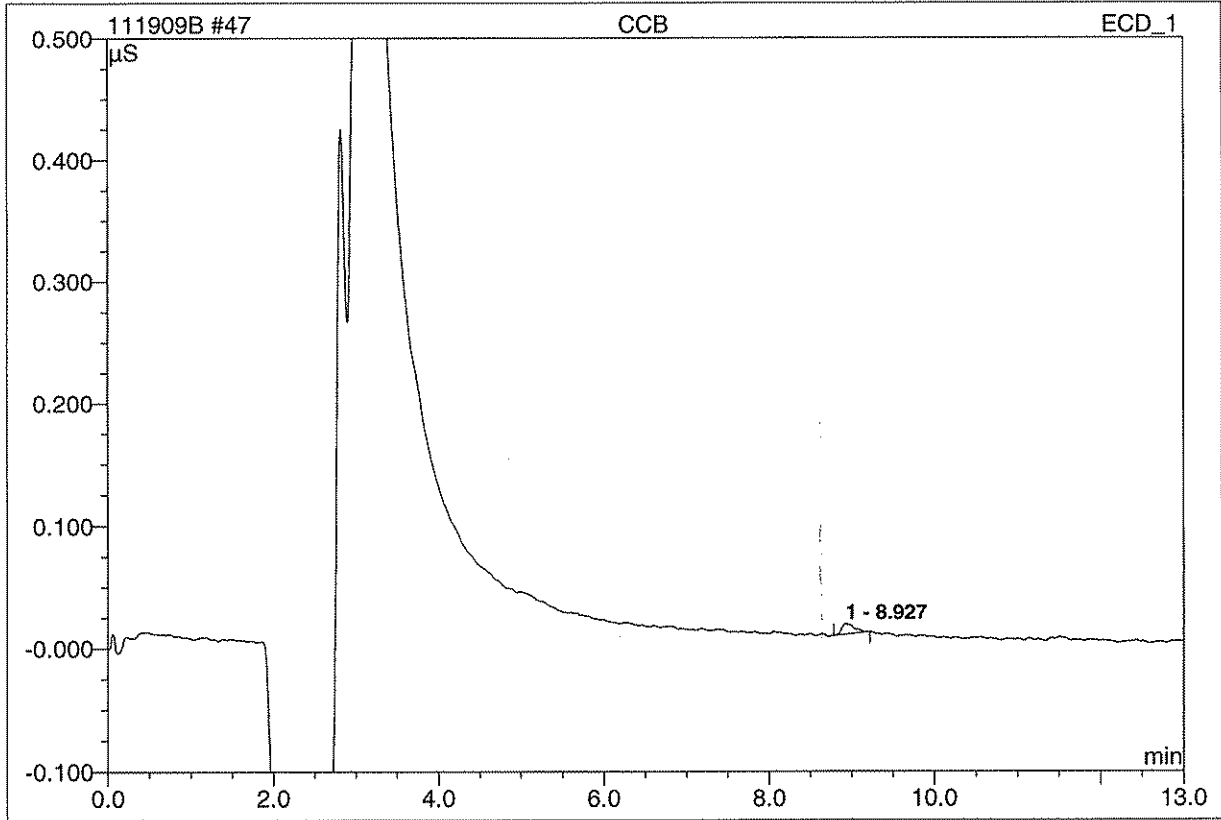


No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.31	Perchlorate	0.804	0.22072	100.00	95.627	BMB
Total:			0.804	0.221	100.00	95.627	

96-1

Sample Name: **CCB**
 Sample Type: **unknown**
 Control Program: **ICS-2000**
 Quantif. Method: **perchlorate**
 Recording Time: **11/20/2009 14:42**

Comment:
 Injection Volume (uL): **1000.0**
 Dilution Factor: **1.0000**
 Sample Weight: **1.0000**
 Operator: **rogersj**



No.	Ret.Time min	Peak Name	Height μS	Area μS*min	Rel.Area %	Amount μg/L	Type
1	8.93	n.a.	0.009	0.00151	100.00	n.a.	BMB
Total:			0.009	0.002	100.00	0.000	

ND