

gws 4/29/03

YZK non-com

software, The date

not 4/29/99, sho

be 4/29/2003.

gws 4/29/03

Element File: AS_5069.GEL Element: As Wavelength: 193.7
Date: 04/29/99-03 Time: 11:12 Slit: 0.70 L
Data File: 03M1402E.DAT ID/Wt File: 1.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 52

As ID: AS Position 002 Seq. No.: 00001 A/S Pos.: 2 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 2

Replicate 1

Peak Area (A-s): 0.271

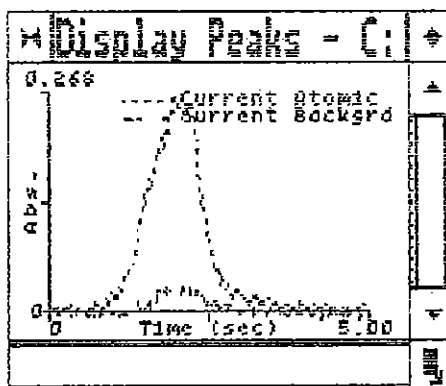
Background Pk Area (A-s): 0.014

Blank Corrected Pk Area (A-s): 0.271

Time: 11:14

Peak Height (A): 0.269

Background Pk Height (A): 0.031



As ID: AS Position 001 Seq. No.: 00002 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1

Replicate 1

Peak Area (A-s): 0.001

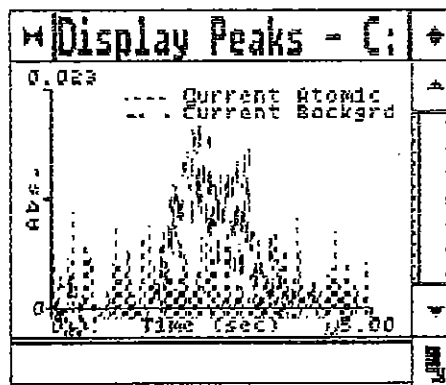
Background Pk Area (A-s): 0.002

Blank Corrected Pk Area (A-s): 0.001

Time: 11:17

Peak Height (A): 0.010

Background Pk Height (A): 0.023



As ID: Calib. Blank Seq. No.: 00003 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1

Replicate 1

Time: 11:21

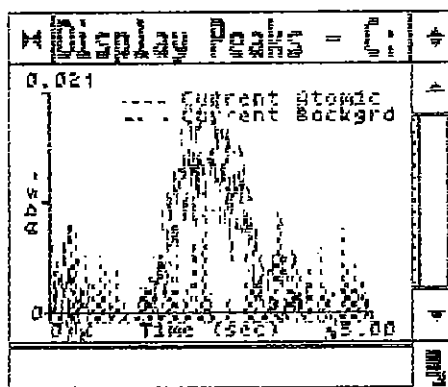
Peak Area (A-s): -0.006

Peak Height (A): 0.013

Background Pk Area (A-s): 0.005

Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): -0.006



uL dispensed: 5 from 20, 20 from 1

Replicate 2

Time: 11:24

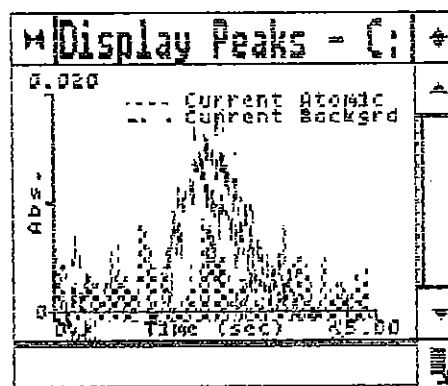
Peak Area (A-s): -0.000

Peak Height (A): 0.009

Background Pk Area (A-s): -0.002

Background Pk Height (A): 0.020

Blank Corrected Pk Area (A-s): -0.000



Mean Pk Area (A-s): -0.003

SD: 0.0041

RSD(%): 141.06

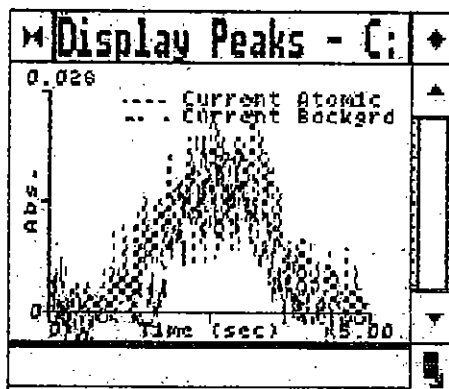
Auto-zero performed.

As ID: 1/2 STD1 1472A Seq. No.: 00004 A/S Pos.: 4 Date: 04/29/99

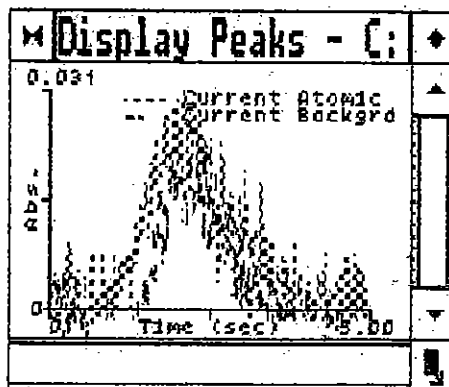
uL dispensed: 10 from 0, 5 from 20, 10 from 4

peak area (A-s): 0.017
Background Pk Area (A-s): 0.017
Blank Corrected Pk Area (A-s): 0.041

peak height (A): 0.026
Background Pk Height (A): 0.026



ul dispensed: 10 from 0, 5 from 20, 10 from 4
Replicate 2 Time: 11:31
Peak Area (A-s): 0.038 Peak Height (A): 0.031
Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.041



Mean Pk Area (A-s): 0.041 SD: 0.0004 RSD(%): 0.87

Standard number 1 applied. [0.0125]
Correlation coefficient: 1.00000

elaps: 2.2512

As ID: STD1 1472A Seq. No.: 00005 A/S Pos.: 4 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 4

Replicate 1

Peak Area (A-s): 0.072

Background Pk Area (A-s): 0.008

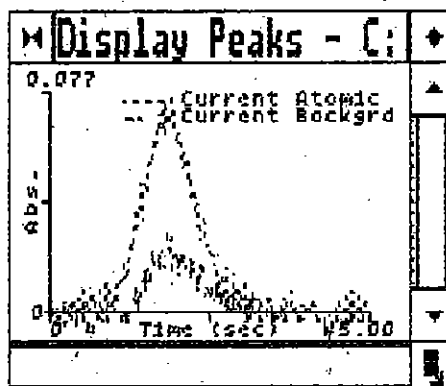
Blank Corrected Pk Area (A-s): 0.075

Concentration (mg/L): 0.0229

Time: 11:34

Peak Height (A): 0.077

Background Pk Height (A): 0.028



uL dispensed: 5 from 20, 20 from 4

Replicate 2

Peak Area (A-s): 0.072

Background Pk Area (A-s): 0.007

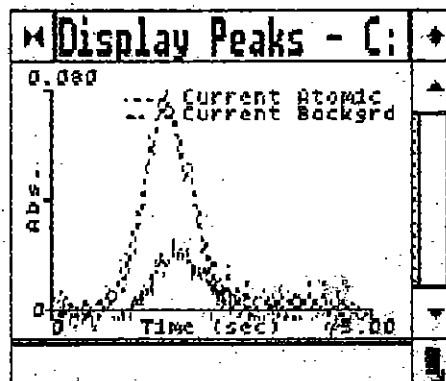
Blank Corrected Pk Area (A-s): 0.075

Concentration (mg/L): 0.0231

Time: 11:37

Peak Height (A): 0.080

Background Pk Height (A): 0.028



Mean Conc (mg/L): 0.0230 SD: 0.00017 RSD(%): 0.73

Standard number 2 applied. [0.0250]

Correlation coefficient: 0.99398 Slope: 3.0534

As ID: STD2 1472B Seq. No.: 00006 A/S Pos.: 3 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 3

Replicate 1

Peak Area (A-s): 0.143

Background Pk Area (A-s): 0.010

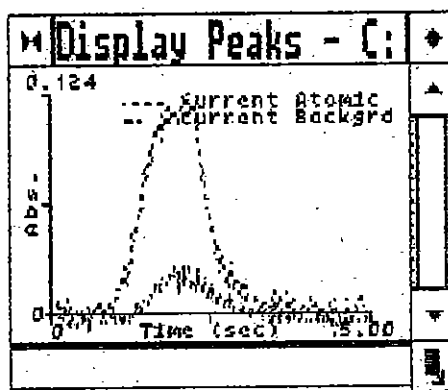
Blank Corrected Pk Area (A-s): 0.145

Concentration (mg/L): 0.0476

Time: 11:40

Peak Height (A): 0.124

Background Pk Height (A): 0.028



uL dispensed: 5 from 20, 20 from 3

Replicate 2

Peak Area (A-s): 0.146

Background Pk Area (A-s): 0.010

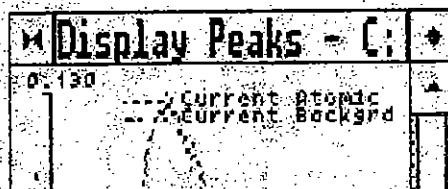
Blank Corrected Pk Area (A-s): 0.149

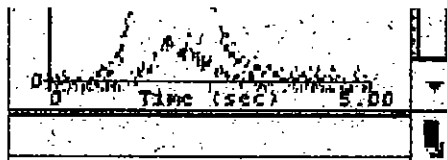
Concentration (mg/L): 0.0487

Time: 11:43

Peak Height (A): 0.130

Background Pk Height (A): 0.029





Mean Conc (mg/L): 0.0482 SD: 0.00079 RSD(%): 1.63

Standard number 3 applied. [0.0500]

Correlation coefficient: 0.99879 Slope: 2.9696

As ID: STD3 1472C Seq. No.: 00007 A/S Pos.: 2 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 2

Replicate 1

Time: 11:46

Peak Area (A-s): 0.287

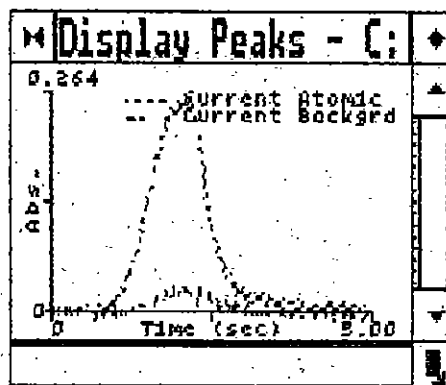
Peak Height (A): 0.264

Background Pk Area (A-s): 0.015

Background Pk Height (A): 0.030

Blank Corrected Pk Area (A-s): 0.290

Concentration (mg/L): 0.0975



uL dispensed: 5 from 20, 20 from 2

Replicate 2

Time: 11:50

Peak Area (A-s): 0.299

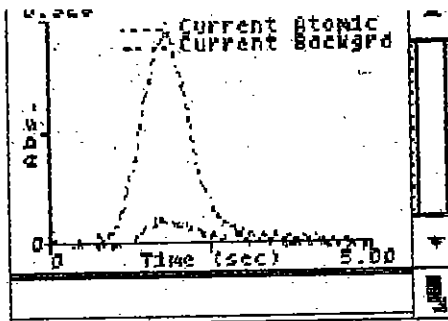
Peak Height (A): 0.328

Background Pk Area (A-s): 0.016

Background Pk Height (A): 0.039

Blank Corrected Pk Area (A-s): 0.302

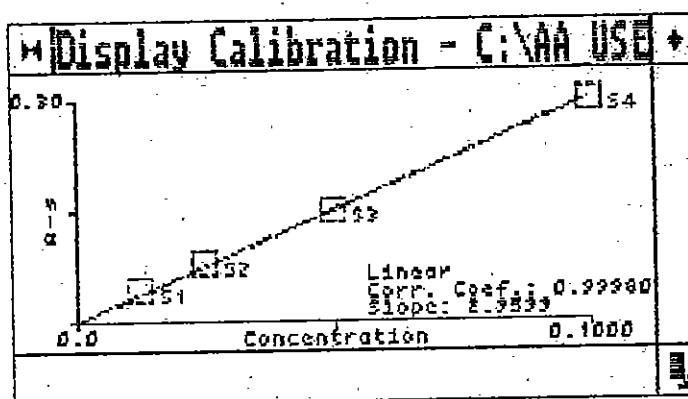
Concentration (mg/L): 0.1016



Mean Conc (mg/L): 0.0996 SD: 0.00292 RSD(%): 2.93

Standard number 4 applied. [0.1000]

Correlation coefficient: 0.99980 Slope: 2.9599



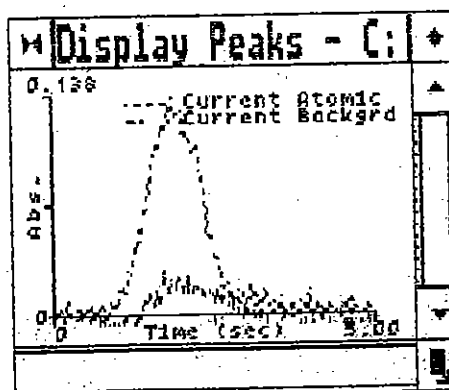
As ID: ICV A1474 Seq. No.: 00008 A/S Pos.: 40 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 40
Replicate 1

Time: 11:55

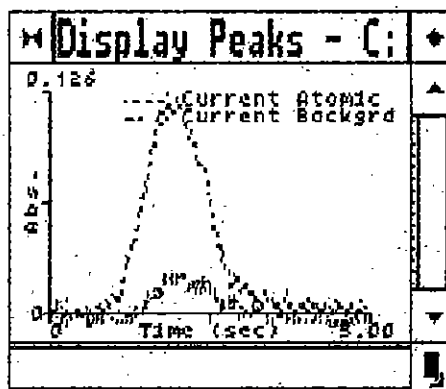
Peak Area (A-s): 0.142
Background Pk Area (A-s): 0.012
Blank Corrected Pk Area (A-s): 0.145
Concentration (mg/L): 0.0490

Peak Height (A): 0.138
Background Pk Height (A): 0.028
Corrected Conc (ppm): -----



uL dispensed: 5 from 20, 20 from 40
Replicate 2
Peak Area (A-s): 0.146
Background Pk Area (A-s): 0.008
Blank Corrected Pk Area (A-s): 0.149
Concentration (mg/L): 0.0503

Time: 11:58
Peak Height (A): 0.126
Background Pk Height (A): 0.025
Corrected Conc (ppm): -----



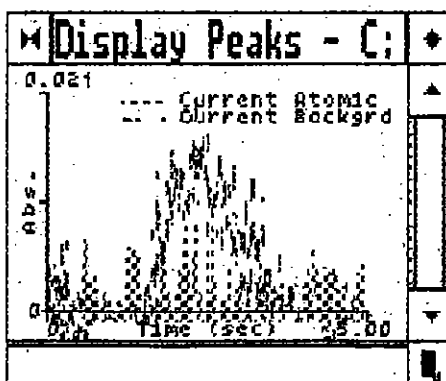
Mean Conc (mg/L): 0.0496 SD: 0.00095 RSD(%): 1.92
Corrected Conc (ppm): -----

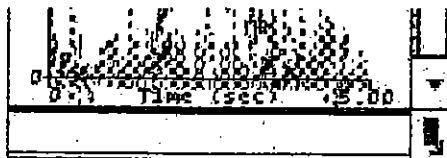
QC sample is within range 0.045 - 0.055

As ID: ICB Seq. No.: 00009 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1
Replicate 1
Peak Area (A-s): -0.003
Background Pk Area (A-s): 0.005
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0001

Time: 12:01
Peak Height (A): 0.009
Background Pk Height (A): 0.021
Corrected Conc (ppm): -----





uL dispensed: 5 from 20, 20 from 5

Replicate 2

Time: 12:11

Peak Area (A-s): -0.004

Peak Height (A): 0.009

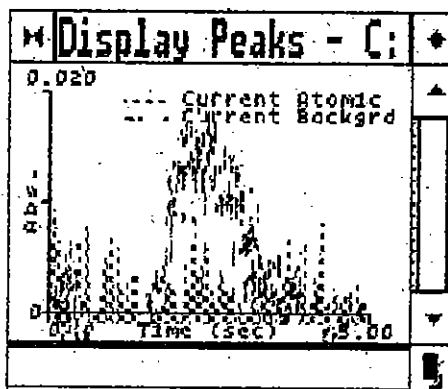
Background Pk Area (A-s): 0.005

Background Pk Height (A): 0.020

Blank Corrected Pk Area (A-s): -0.001

Concentration (mg/L): -0.0002

Corrected Conc (ppm): -0.0002



Mean Conc (mg/L): 0.0003

SD: 0.00076

RSD(%): 233.25

Corrected Conc (ppm): 0.0003

As ID: LCS-03M1402

Seq. No.: 00011

A/S Pos.: 6

Date: 04/29/99

uL dispensed: 5 from 20, 20 from 6

Replicate 1

Time: 12:14

Peak Area (A-s): 0.157

Peak Height (A): 0.115

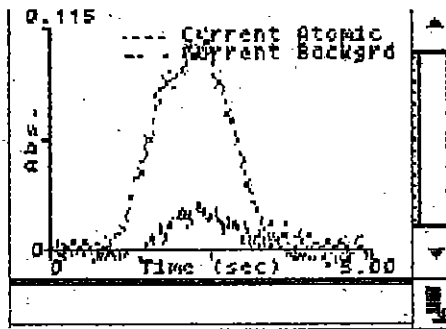
Background Pk Area (A-s): 0.011

Background Pk Height (A): 0.026

Blank Corrected Pk Area (A-s): 0.160

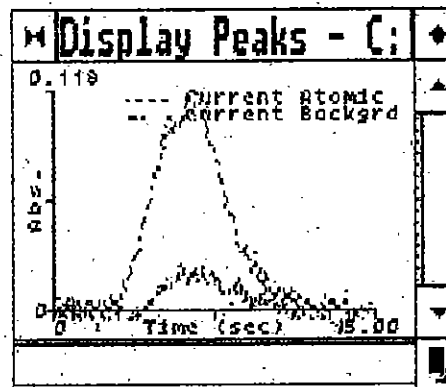
Concentration (mg/L): 0.0541

Corrected Conc (ppm): 0.0541



uL dispensed: 5 from 20, 20 from 6
 Replicate 2
 Peak Area (A-s): 0.151
 Background Pk Area (A-s): 0.013
 Blank Corrected Pk Area (A-s): 0.154
 Concentration (mg/L): 0.0521

Time: 12:17
 Peak Height (A): 0.118
 Background Pk Height (A): 0.026
 Corrected Conc (ppm): 0.0521



Mean Conc (mg/L): 0.0531 SD: 0.00141 RSD(8): 2.65
 Corrected Conc (ppm): 0.0531

As ID: LCSD-03M1402 Seq. No.: 00012 A/S Pos.: 7 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 7
 Replicate 1
 Peak Area (A-s): 0.157
 Background Pk Area (A-s): 0.016
 Blank Corrected Pk Area (A-s): 0.159
 Concentration (mg/L): 0.0539

Time: 12:21
 Peak Height (A): 0.107
 Background Pk Height (A): 0.024
 Corrected Conc (ppm): 0.0539

uL dispensed: 5 from 20, 20 from 1

Replicate 2

Peak Area (A-s): -0.007

Background Pk Area (A-s): 0.007

Blank Corrected Pk Area (A-s): -0.004

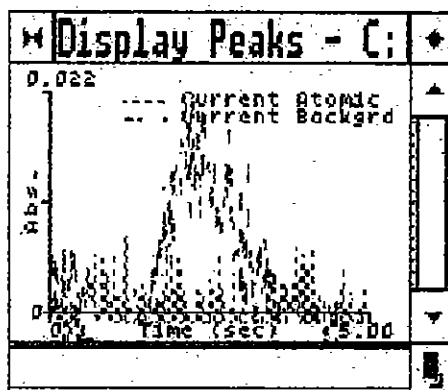
Concentration (mg/L): -0.0014

Time: 12:05

Peak Height (A): 0.008

Background Pk Height (A): 0.022

Corrected Conc (ppm): -----



Mean Conc (mg/L): -0.0007

SD: 0.00093

RSD(%): 124.05

Corrected Conc (ppm): -----

QC sample is within range

As ID: M-BL 03M1402 Seq. No.: 00010 A/S Pos.: 5 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 5

Replicate 1

Peak Area (A-s): -0.000

Background Pk Area (A-s): 0.007

Blank Corrected Pk Area (A-s): 0.003

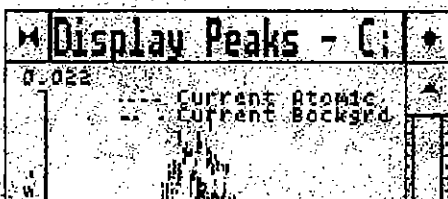
Concentration (mg/L): 0.0009

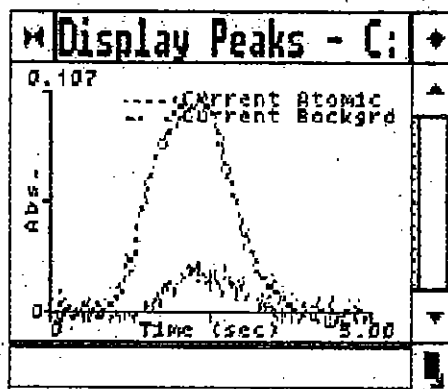
Time: 12:08

Peak Height (A): 0.009

Background Pk Height (A): 0.022

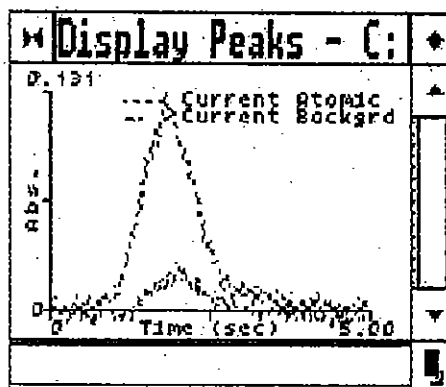
Corrected Conc (ppm): 0.0009





uL dispensed: 5 from 20, 20 from 7
 Replicate 2
 Peak Area (A-s): 0.133
 Background Pk Area (A-s): 0.008
 Blank Corrected Pk Area (A-s): 0.136
 Concentration (mg/L): 0.0458

Time: 12:24
 Peak Height (A): 0.131
 Background Pk Height (A): 0.026
 Corrected Conc (ppm): 0.0458

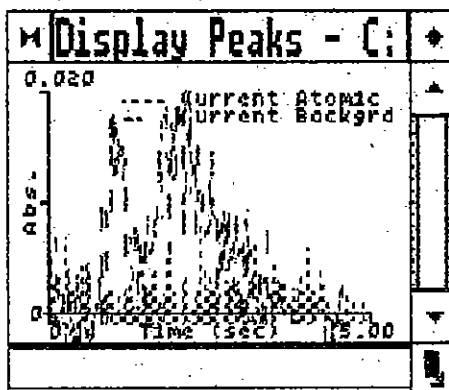


Mean Conc (mg/L): 0.0498 SD: 0.00570 RSD(%): 11.44
 Corrected Conc (ppm): 0.0498

As ID: 2933-3 S F=1 Seq. No.: 00013 A/S Pos.: 8 Date: 04/29/99

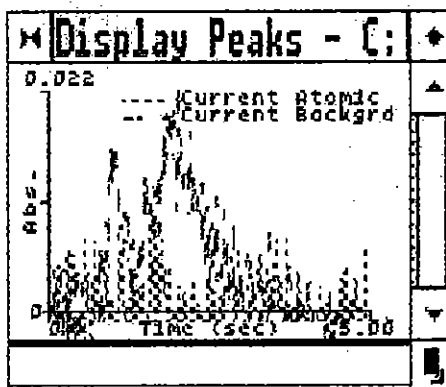
uL dispensed: 5 from 20, 20 from 8
 Replicate 1
 Peak Area (A-s): -0.006
 Background Pk Area (A-s): 0.015
 Blank Corrected Pk Area (A-s): -0.003
 Concentration (mg/L): -0.0010

Time: 12:27
 Peak Height (A): 0.013
 Background Pk Height (A): 0.021
 Corrected Conc (ppm): -0.0010



uL dispensed: 5 from 20, 20 from 8
 Replicate 2
 Peak Area (A-s): -0.003
 Background Pk Area (A-s): 0.014
 Blank Corrected Pk Area (A-s): -0.000
 Concentration (mg/L): -0.0000

Time: 12:30
 Peak Height (A): 0.010
 Background Pk Height (A): 0.022
 Corrected Conc (ppm): -0.0000



Mean Conc (mg/L): -0.0005
 Corrected Conc (ppm): -0.0005

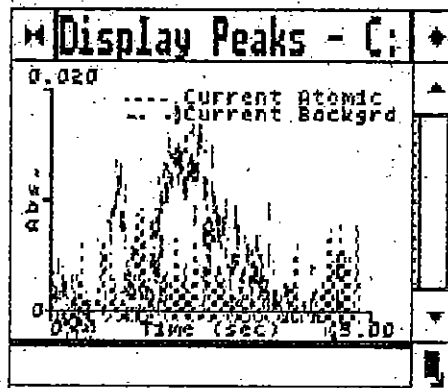
SD: 0.00072

RSD(%): 138.52

As ID: 2933-3 D F=1 Seq. No.: 00014 A/S Pos.: 9 Date: 04/29/99

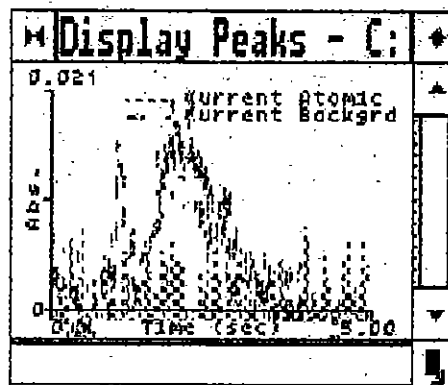
uL dispensed: 5 from 20, 20 from 9
 Replicate 1
 Peak Area (A-s): 0.001
 Background Pk Area (A-s): 0.011
 Blank Corrected Pk Area (A-s): 0.004
 Concentration (mg/L): 0.0013

Time: 12:34
 Peak Height (A): 0.013
 Background Pk Height (A): 0.020
 Corrected Conc (ppm): 0.0013



uL dispensed: 5 from 20, 20 from 9
 Replicate 2
 Peak Area (A-s): -0.002
 Background Pk Area (A-s): 0.014
 Blank Corrected Pk Area (A-s): 0.001
 Concentration (mg/L): 0.0002

Time: 12:37
 Peak Height (A): 0.009
 Background Pk Height (A): 0.021
 Corrected Conc (ppm): 0.0002



Mean Conc (mg/L): 0.0007
 Corrected Conc (ppm): 0.0007

SD: 0.00082

RSD(%): 109.34

As ID: 2933-3 1/5 F=5 Seq. No.: 00015 A/S Pos.: 10 Date: 04/29/99

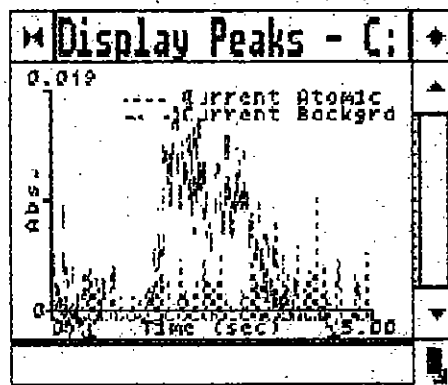
uL dispensed: 5 from 20, 20 from 10
 Replicate 1
 Peak Area (A-s): -0.009

Time: 12:40
 Peak Height (A): 0.010

Blank Corrected PK Area (A-s): -0.000

Concentration (mg/L): -0.0019

Corrected Conc (ppm): -0.010



uL dispensed: 5 from 20, 20 from 10

Replicate 2

Peak Area (A-s): -0.003

Background Pk Area (A-s): 0.007

Blank Corrected Pk Area (A-s): -0.000

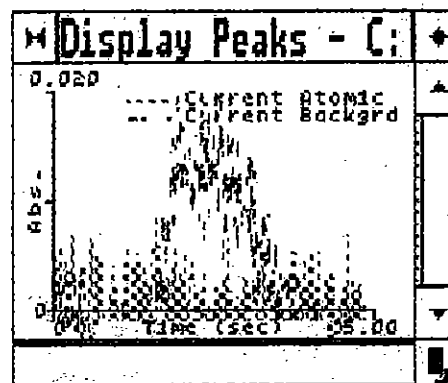
Concentration (mg/L): -0.0002

Time: 12:43

Peak Height (A): 0.009

Background Pk Height (A): 0.020

Corrected Conc (ppm): -0.001



Mean Conc (mg/L): -0.0010

Corrected Conc (ppm): -0.005

SD: 0.00125

RSD(%): 120.47

3492

uL dispensed: 5 from 20, 20 from 11

Replicate 1

Peak Area (A-s): 0.133

Background Pk Area (A-s): 0.019

Blank Corrected Pk Area (A-s): 0.136

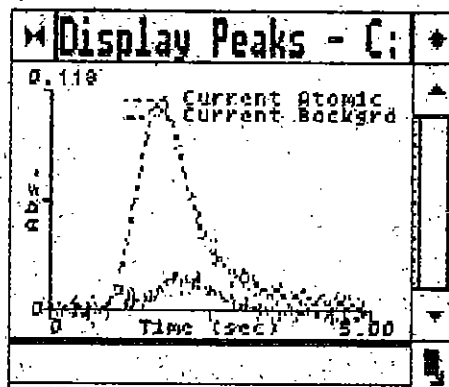
Concentration (mg/L): 0.0459

Time: 12:47

Peak Height (A): 0.118

Background Pk Height (A): 0.026

Corrected Conc (ppm): 0.0459



uL dispensed: 5 from 20, 20 from 11

Replicate 2

Peak Area (A-s): 0.131

Background Pk Area (A-s): 0.024

Blank Corrected Pk Area (A-s): 0.134

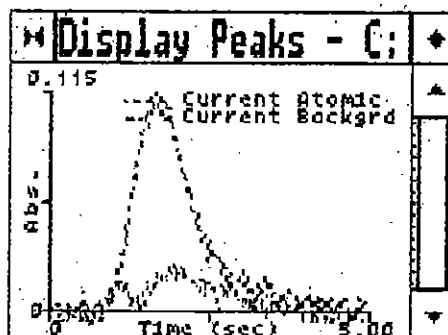
Concentration (mg/L): 0.0452

Time: 12:50

Peak Height (A): 0.115

Background Pk Height (A): 0.026

Corrected Conc (ppm): 0.0452



Mean Conc (mg/L): 0.0456
Corrected Conc (ppm): 0.0456

SD: 0.00047

RSD(%): 1.02

As ID: 2933-3 MSD F=1 Seq. No.: 00017 A/S Pos.: 12 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 12

Replicate 1

Time: 12:53

Peak Area (A-s): 0.136

Peak Height (A): 0.121

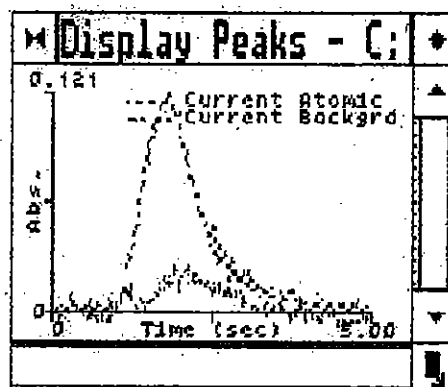
Background Pk Area (A-s): 0.023

Background Pk Height (A): 0.026

Blank Corrected Pk Area (A-s): 0.139

Concentration (mg/L): 0.0469

Corrected Conc (ppm): 0.0469



uL dispensed: 5 from 20, 20 from 12

Replicate 2

Time: 12:56

Peak Area (A-s): 0.133

Peak Height (A): 0.121

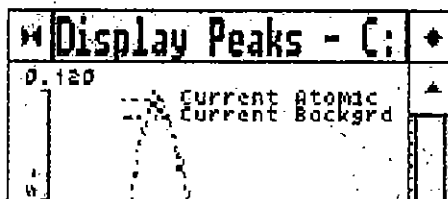
Background Pk Area (A-s): 0.024

Background Pk Height (A): 0.034

Blank Corrected Pk Area (A-s): 0.135

Concentration (mg/L): 0.0458

Corrected Conc (ppm): 0.0458



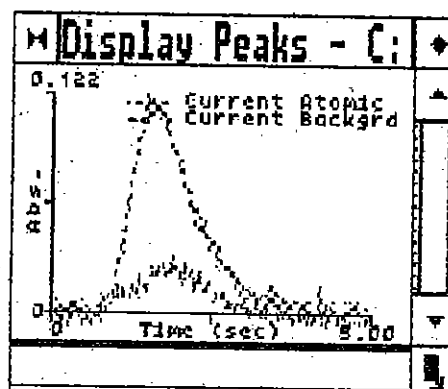


Mean Conc (mg/L): 0.0463 SD: 0.00082 RSD(%): 1.77
 Corrected Conc (ppm): 0.0463

As ID: 2933-3 PS F=1 Seq. No.: 00018 A/S Pos.: 13 Date: 04/29/99

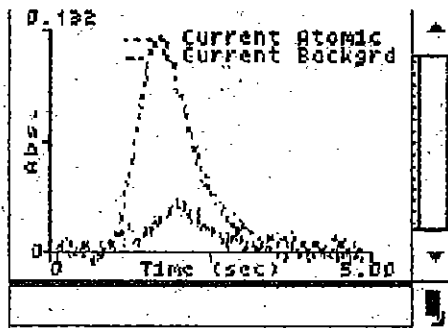
uL dispensed: 5 from 20, 20 from 13

Replicate 1 Time: 13:00
 Peak Area (A-s): 0.142 Peak Height (A): 0.122
 Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.036
 Blank Corrected Pk Area (A-s): 0.144
 Concentration (mg/L): 0.0488 Corrected Conc (ppm): 0.0488



uL dispensed: 5 from 20, 20 from 13

Replicate 2 Time: 13:03
 Peak Area (A-s): 0.141 Peak Height (A): 0.132
 Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.033
 Blank Corrected Pk Area (A-s): 0.144
 Concentration (mg/L): 0.0485 Corrected Conc (ppm): 0.0485



Mean Conc (mg/L): 0.0486 SD: 0.00020 RSD(%): 0.42
 Corrected Conc (ppm): 0.0486

As ID: 2933-1 F=1 Seq. No.: 00019 A/S Pos.: 14 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 14

Replicate 1

Time: 13:06

Peak Area (A-s): -0.001

Peak Height (A): 0.013

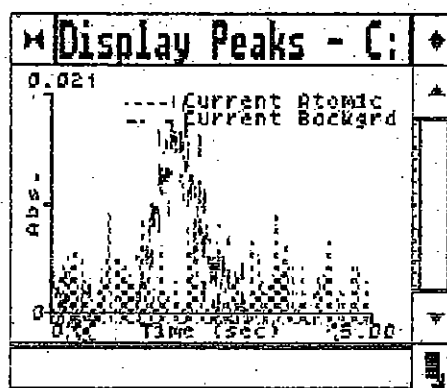
Background Pk Area (A-s): -0.001

Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): 0.002

Concentration (mg/L): 0.0006

Corrected Conc (ppm): 0.0006



uL dispensed: 5 from 20, 20 from 14

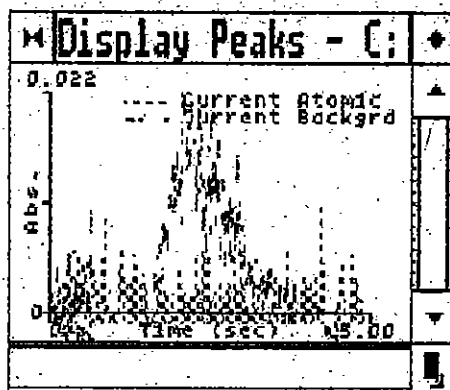
Replicate 2

Time: 13:09

Peak Area (A-s): -0.003

Peak Height (A): 0.011

Concentration (mg/L): -0.0001 Corrected Conc (ppm): -0.0001



Mean Conc (mg/L): 0.0002 SD: 0.00050 RSD(%): 218.14
Corrected Conc (ppm): 0.0002

As ID: CCV A1474 Seq. No.: 00020 A/S Pos.: 40 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 40

Replicate 1

Time: 13:13

Peak Area (A-s): 0.154

Peak Height (A): 0.141

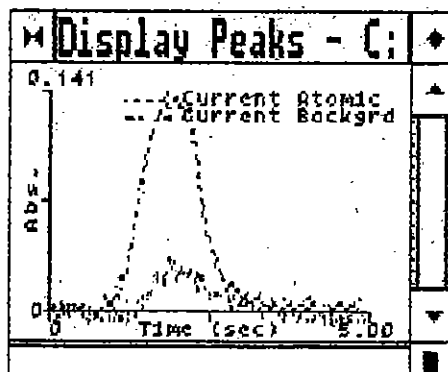
Background Pk Area (A-s): 0.017

Background Pk Height (A): 0.035

Blank Corrected Pk Area (A-s): 0.157

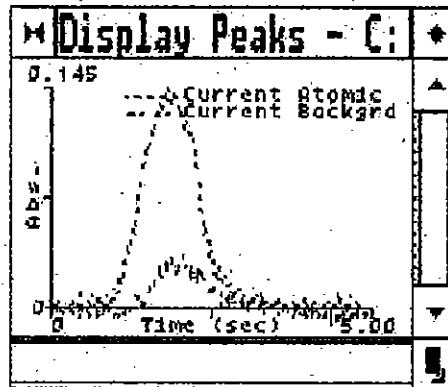
Concentration (mg/L): 0.0531

Corrected Conc (ppm): -----



uL dispensed: 5 from 20, 20 from 40
Replicate 2
Peak Area (A-s): 0.149
Background Pk Area (A-s): 0.018
Blank Corrected Pk Area (A-s): 0.152
Concentration (mg/L): 0.0515

Time: 13:16
Peak Height (A): 0.145
Background Pk Height (A): 0.035
Corrected Conc (ppm): -----



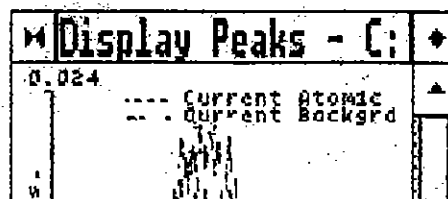
Mean Conc (mg/L): 0.0523 SD: 0.00118 RSD(%): 2.25
Corrected Conc (ppm): -----

QC sample is within range 0.0425 - 0.0575

As ID: CCB Seq. No.: 00021 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1
Replicate 1
Peak Area (A-s): 0.000
Background Pk Area (A-s): 0.007
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0010

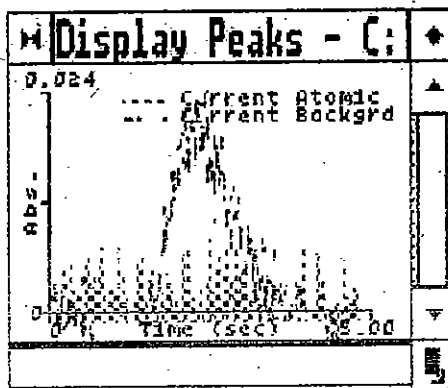
Time: 13:19
Peak Height (A): 0.010
Background Pk Height (A): 0.024
Corrected Conc (ppm): -----





uL dispensed: 5 from 20, 20 from 1
 Replicate 2
 Peak Area (A-s): -0.003
 Background Pk Area (A-s): 0.009
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0002

Time: 13:22
 Peak Height (A): 0.008
 Background Pk Height (A): 0.024
 Corrected Conc (ppm): -----



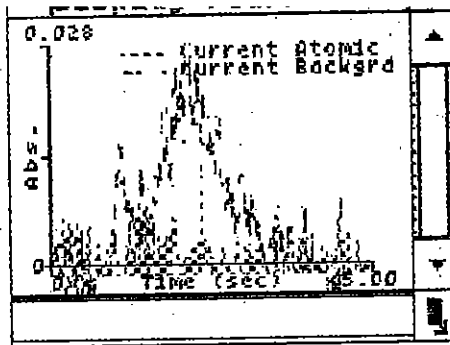
Mean Conc (mg/L): 0.0004 SD: 0.00086 RSD(%): 197.02
 Corrected Conc (ppm): -----

QC sample is within range

As ID: 2933-2 F=1 Seq. No.: 00022 A/S Pos.: 15 Date: 04/29/99

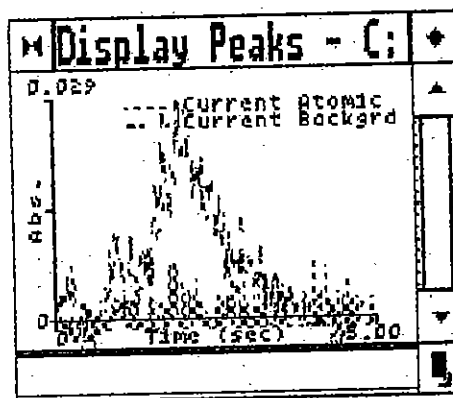
uL dispensed: 5 from 20, 20 from 15
 Replicate 1
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.024
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0003

Time: 13:25
 Peak Height (A): 0.010
 Background Pk Height (A): 0.029
 Corrected Conc (ppm): -0.0003



uL dispensed: 5 from 20, 20 from 15
 Replicate 2
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.025
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0003

Time: 13:28
 Peak Height (A): 0.009
 Background Pk Height (A): 0.029
 Corrected Conc (ppm): -0.0003



Mean Conc (mg/L): -0.0003
 Corrected Conc (ppm): -0.0003

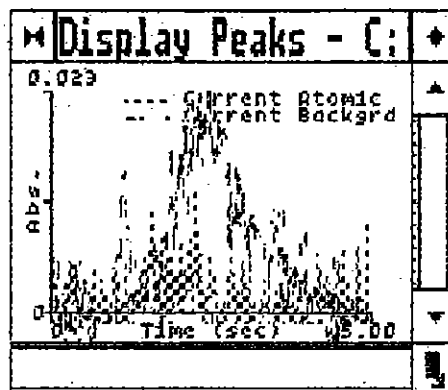
SD: 0.00002

RSD(%): 5.48

As ID: 2933-4 F=1 Seq. No.: 00023 A/S Pos.: 16 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 16
 Replicate 1
 Peak Area (A-s): 0.003
 Background Pk Area (A-s): 0.025
 Blank Corrected Pk Area (A-s): 0.006
 Concentration (mg/L): 0.0021

Time: 13:31
 Peak Height (A): 0.013
 Background Pk Height (A): 0.023
 Corrected Conc (ppm): 0.0021



uL dispensed: 5 from 20, 20 from 16

Replicate 2

Peak Area (A-s): 0.001

Background Pk Area (A-s): 0.013

Blank Corrected Pk Area (A-s): 0.004

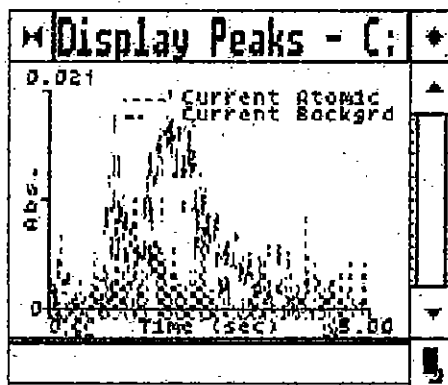
Concentration (mg/L): 0.0014

Time: 13:35

Peak Height (A): 0.012

Background Pk Height (A): 0.021

Corrected Conc (ppm): 0.0014



Mean Conc (mg/L): 0.0017

SD: 0.00044

RSD(%): 25.43

Corrected Conc (ppm): 0.0017

As ID: 2933-5 F=1 Seq. No.: 00024 A/S Pos.: 17 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 17

Replicate 1

Peak Area (A-s): 0.002

Background Pk Area (A-s): 0.014

Blank Corrected Pk Area (A-s): 0.005

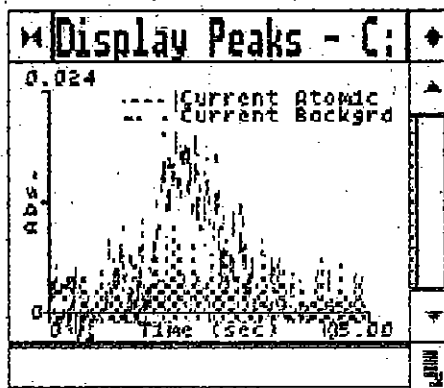
Concentration (mg/L): 0.0016

Time: 13:38

Peak Height (A): 0.011

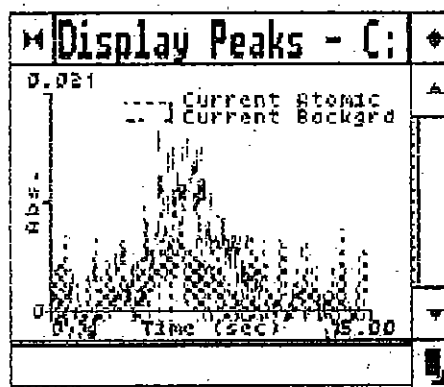
Background Pk Height (A): 0.024

Corrected Conc (ppm): 0.0016



uL dispensed: 5 from 20, 20 from 17
 Replicate 2
 Peak Area (A-s): 0.005
 Background Pk Area (A-s): 0.007
 Blank Corrected Pk Area (A-s): 0.008
 Concentration (mg/L): 0.0028

Time: 13:41
 Peak Height (A): 0.012
 Background Pk Height (A): 0.021
 Corrected Conc (ppm): 0.0028



Mean Conc (mg/L): 0.0022
 Corrected Conc (ppm): 0.0022

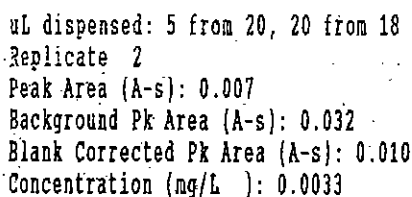
SD: 0.00088

RSD(%): 39.99

As ID: 2933-6 F=1 Seq. No.: 00025 A/S Pos.: 18 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 18
 Replicate 1
 Peak Area (A-s): 0.006
 Background Pk Area (A-s): 0.029
 Blank Corrected Pk Area (A-s): 0.009
 Concentration (mg/L): 0.0031

Time: 13:44
 Peak Height (A): 0.014
 Background Pk Height (A): 0.034
 Corrected Conc (ppm): 0.0031



Display Peaks - C:

0.039

--- Current Atomic
-- Current Backgrd

cps

Time (sec)

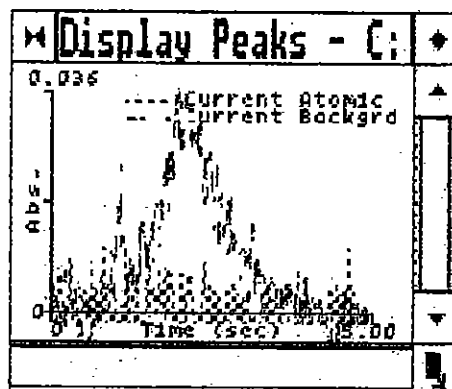
0.039

As ID: 2866-1 F=1 Seq. No.: 00026 A/S Pos.: 19 Date: 04/29/99

Time: 13:50
Peak Height (A): 0.011

Concentration (mg/L): 0.0010

Corrected Conc (ppm): 0.0010



uL dispensed: 5 from 20, 20 from 19

Replicate 2

Peak Area (A-s): -0.001

Background Pk Area (A-s): 0.039

Blank Corrected Pk Area (A-s): 0.002

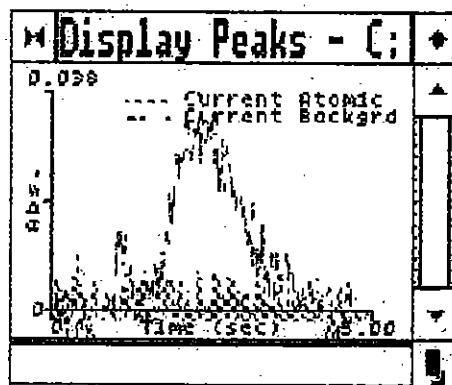
Concentration (mg/L): 0.0008

Time: 13:53

Peak Height (A): 0.011

Background Pk Height (A): 0.038

Corrected Conc (ppm): 0.0008



Mean Conc (mg/L): 0.0009
Corrected Conc (ppm): 0.0009

SD: 0.00020

RSD(%): 22.23

3504

uL dispensed: 5 from 20, 20 from 21

Replicate 1

Peak Area (A-s): -0.007

Background Pk Area (A-s): 0.004

Blank Corrected Pk Area (A-s): -0.004

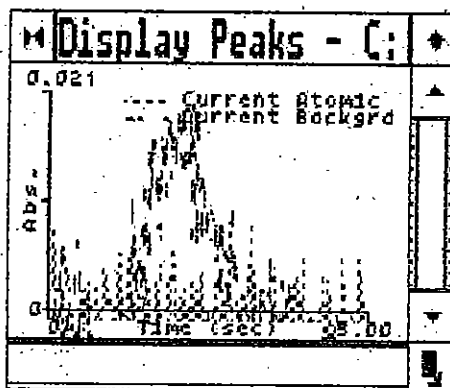
Concentration (mg/L): -0.0012

Time: 13:56

Peak Height (A): 0.009

Background Pk Height (A): 0.022

Corrected Conc (ppm): -0.0012



uL dispensed: 5 from 20, 20 from 21

Replicate 2

Peak Area (A-s): -0.007

Background Pk Area (A-s): 0.008

Blank Corrected Pk Area (A-s): -0.004

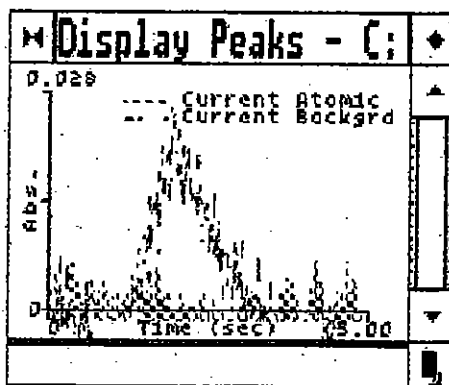
Concentration (mg/L): -0.0014

Time: 14:00

Peak Height (A): 0.007

Background Pk Height (A): 0.028

Corrected Conc (ppm): -0.0014



Mean Conc (mg/L): -0.0013
Corrected Conc (ppm): -0.0013

SD: 0.00012

RSD(%): 8.87

As ID: 2866-3 F=1 Seq. No.: 00028 A/S Pos.: 22 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 22

Replicate 1

Time: 14:03

Peak Area (A-s): 0.001

Peak Height (A): 0.012

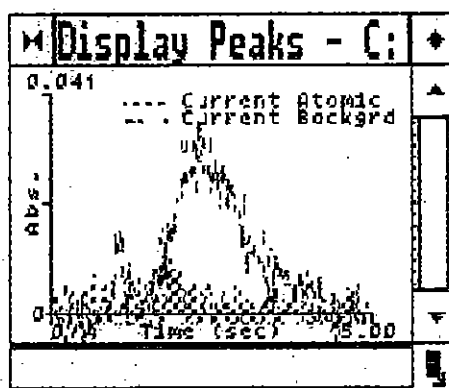
Background Pk Area (A-s): 0.039

Background Pk Height (A): 0.041

Blank Corrected Pk Area (A-s): 0.004

Concentration (mg/L): 0.0013

Corrected Conc (ppm): 0.0013



uL dispensed: 5 from 20, 20 from 22

Replicate 2

Time: 14:06

Peak Area (A-s): -0.003

Peak Height (A): 0.010

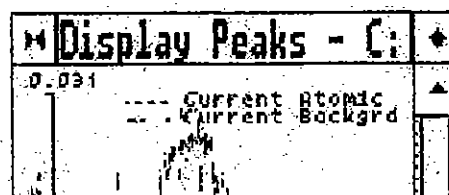
Background Pk Area (A-s): 0.035

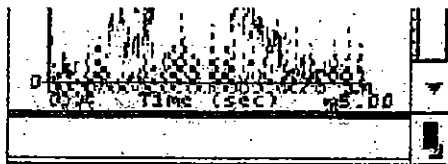
Background Pk Height (A): 0.031

Blank Corrected Pk Area (A-s): -0.000

Concentration (mg/L): -0.0001

Corrected Conc (ppm): -0.0001





Mean Conc (mg/L): 0.0006 SD: 0.00100 RSD(%): 162.45
 Corrected Conc (ppm): 0.0006

As ID: 2866-4 F=1 Seq. No.: 00029 A/S Pos.: 23 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 23

Replicate 1

Time: 14:09

Peak Area (A-s): -0.002

Peak Height (A): 0.009

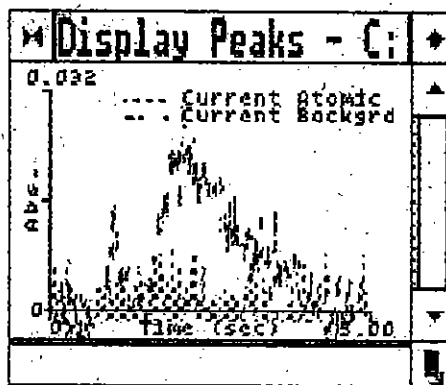
Background Pk Area (A-s): 0.033

Background Pk Height (A): 0.032

Blank Corrected Pk Area (A-s): 0.000

Concentration (mg/L): 0.0001

Corrected Conc (ppm): 0.0001



uL dispensed: 5 from 20, 20 from 23

Replicate 2

Time: 14:12

Peak Area (A-s): 0.004

Peak Height (A): 0.013

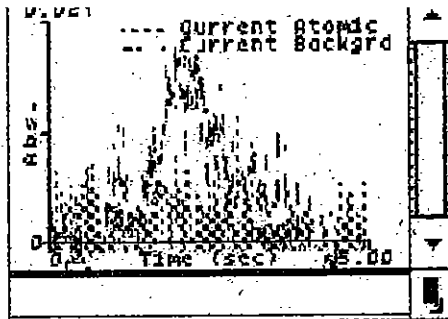
Background Pk Area (A-s): 0.017

Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): 0.006

Concentration (mg/L): 0.0022

Corrected Conc (ppm): 0.0022



Mean Conc (mg/L): 0.0012 SD: 0.00143 RSD(%): 123.96
 Corrected Conc (ppm): 0.0012

As ID: 2866-5 P=1 Seq. No.: 00030 A/S Pos.: 24 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 24

Replicate 1

Peak Area (A-s): -0.001

Background Pk Area (A-s): 0.026

Blank Corrected Pk Area (A-s): 0.002

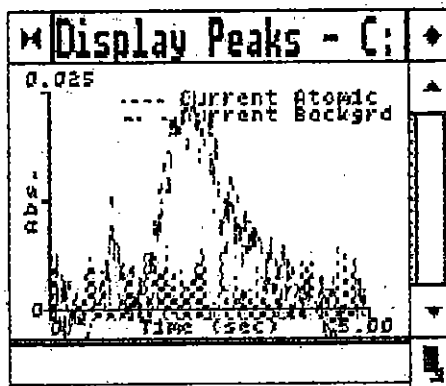
Concentration (mg/L): 0.0006

Time: 14:15

Peak Height (A): 0.008

Background Pk Height (A): 0.025

Corrected Conc (ppm): 0.0006



uL dispensed: 5 from 20, 20 from 24

Replicate 2

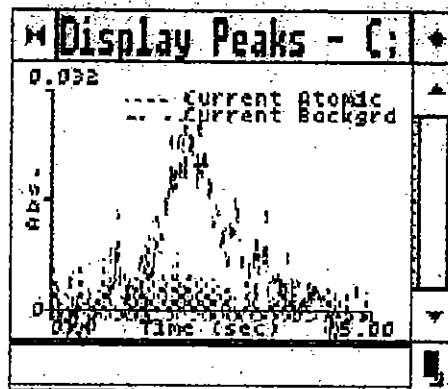
Peak Area (A-s): -0.002

Time: 14:19

Peak Height (A): 0.011

Concentration (mg/L): 0.0002

Corrected Conc (ppm): 0.0002



Mean Conc (mg/L): 0.0004
Corrected Conc (ppm): 0.0004

SD: 0.00029

RSD(%): 68.89

As ID: 2866-6 F=1 Seq. No.: 00031 A/S Pos.: 25 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 25

Replicate 1

Time: 14:22

Peak Area (A-s): -0.003

Peak Height (A): 0.010

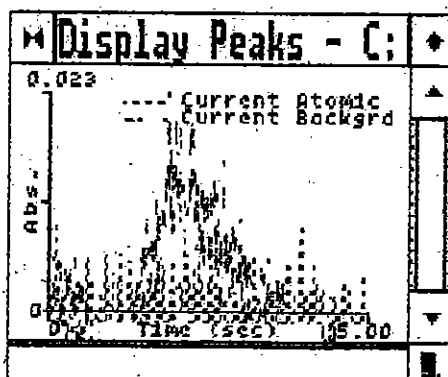
Background Pk Area (A-s): 0.006

Background Pk Height (A): 0.023

Blank Corrected Pk Area (A-s): 0.000

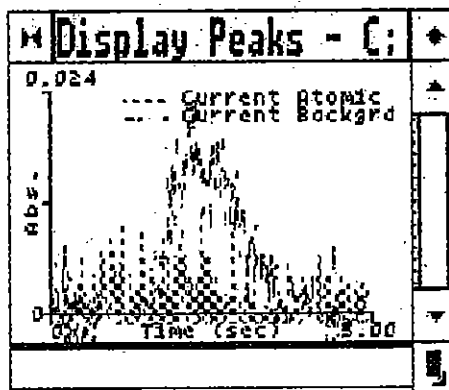
Concentration (mg/L): 0.0001

Corrected Conc (ppm): 0.0001



uL dispensed: 5 from 20, 20 from 25
Replicate 2
Peak Area (A-s): -0.001
Background Pk Area (A-s): 0.013
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0008

Time: 14:25
Peak Height (A): 0.011
Background Pk Height (A): 0.024
Corrected Conc (ppm): 0.0008

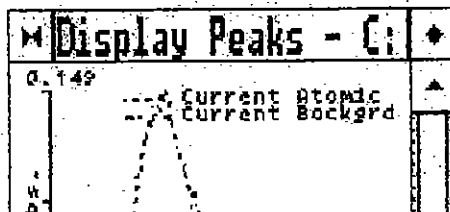


Mean Conc (mg/L): 0.0004 SD: 0.00049 RSD(%): 112.63
Corrected Conc (ppm): 0.0004

As ID: CCV A1474 Seq. No.: 00032 A/S Pos.: 40 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 40
Replicate 1
Peak Area (A-s): 0.149
Background Pk Area (A-s): 0.013
Blank Corrected Pk Area (A-s): 0.152
Concentration (mg/L): 0.0514

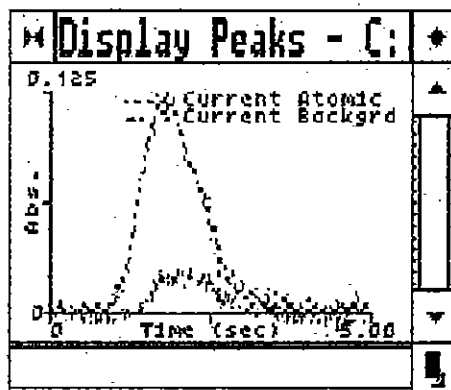
Time: 14:28
Peak Height (A): 0.149
Background Pk Height (A): 0.027
Corrected Conc (ppm): -----





uL dispensed: 5 from 20, 20 from 40
 Replicate 2
 Peak Area (A-s): 0.142
 Background Pk Area (A-s): 0.013
 Blank Corrected Pk Area (A-s): 0.145
 Concentration (mg/L): 0.0491

Time: 14:32
 Peak Height (A): 0.125
 Background Pk Height (A): 0.028
 Corrected Conc (ppm): -----



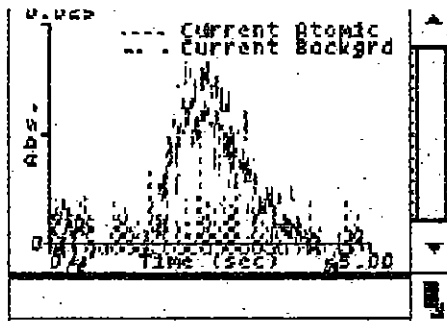
Mean Conc (mg/L): 0.0502 SD: 0.00166 RSD(%): 3.30
 Corrected Conc (ppm): -----

QC sample is within range 0.0425 - 0.0575

As ID: CCB Seq. No.: 00033 A/S Pos.: 1 Date: 04/29/99

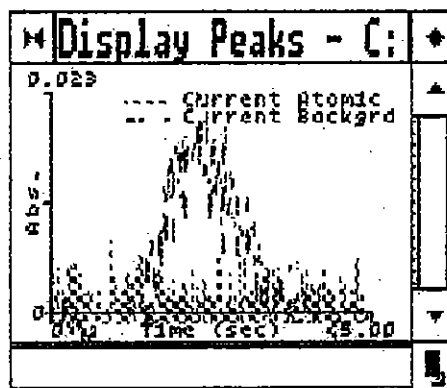
uL dispensed: 5 from 20, 20 from 1
 Replicate 1
 Peak Area (A-s): -0.006
 Background Pk Area (A-s): 0.012
 Blank Corrected Pk Area (A-s): -0.003
 Concentration (mg/L): -0.0011

Time: 14:35
 Peak Height (A): 0.012
 Background Pk Height (A): 0.025
 Corrected Conc (ppm): -----



uL dispensed: 5 from 20, 20 from 1
 Replicate 2
 Peak Area (A-s): -0.001
 Background Pk Area (A-s): 0.010
 Blank Corrected Pk Area (A-s): 0.001
 Concentration (mg/L): 0.0005

Time: 14:38
 Peak Height (A): 0.008
 Background Pk Height (A): 0.023
 Corrected Conc (ppm): -----



Mean Conc (mg/L): -0.0003
 Corrected Conc (ppm): -----

SD: 0.00113

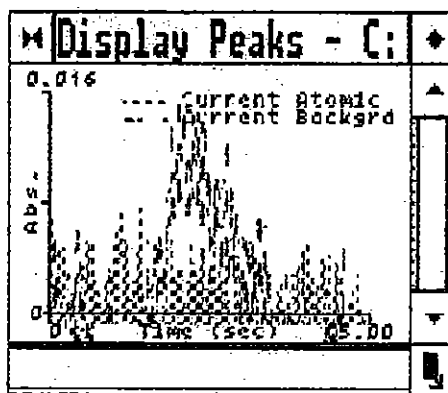
RSD(%): 353.69

QC sample is within range

As ID: 2866-7 F=1 Seq. No.: 00034 A/S Pos.: 26 Date: 04/29/99

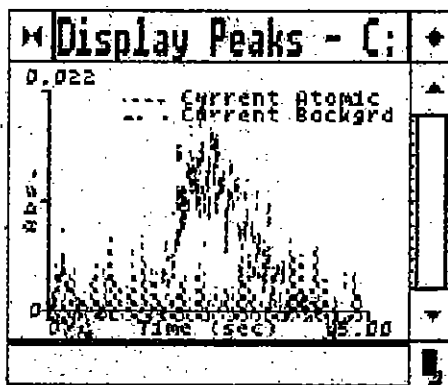
uL dispensed: 5 from 20, 20 from 26
 Replicate 1
 Peak Area (A-s): -0.003
 Background Pk Area (A-s): 0.001
 Blank Corrected Pk Area (A-s): -0.000
 Concentration (mg/L): -0.0001

Time: 14:41
 Peak Height (A): 0.008
 Background Pk Height (A): 0.016
 Corrected Conc (ppm): -0.0001



uL dispensed: 5 from 20, 20 from 26
 Replicate 2
 Peak Area (A-s): -0.002
 Background Pk Area (A-s): 0.007
 Blank Corrected Pk Area (A-s): 0.001
 Concentration (mg/L): 0.0002

Time: 14:44
 Peak Height (A): 0.008
 Background Pk Height (A): 0.022
 Corrected Conc (ppm): 0.0002

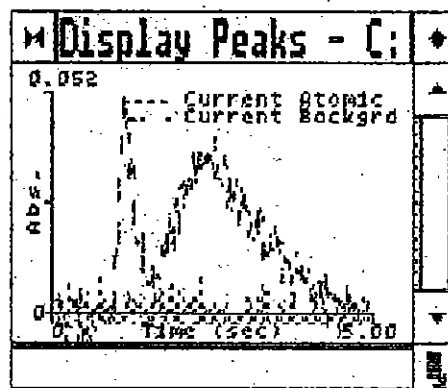


Mean Conc (mg/L): 0.0001 SD: 0.00024 RSD(%): 312.98
 Corrected Conc (ppm): 0.0001

As ID: 2843-1 F=1 Seq. No.: 00035 A/S Pos.: 27 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 27
 Replicate 1
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.071
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0004

Time: 14:47
 Peak Height (A): 0.010
 Background Pk Height (A): 0.053
 Corrected Conc (ppm): -0.0004



uL dispensed: 5 from 20, 20 from 27

Replicate 2

Peak Area (A-s): -0.001

Background Pk Area (A-s): 0.093

Blank Corrected Pk Area (A-s): 0.001

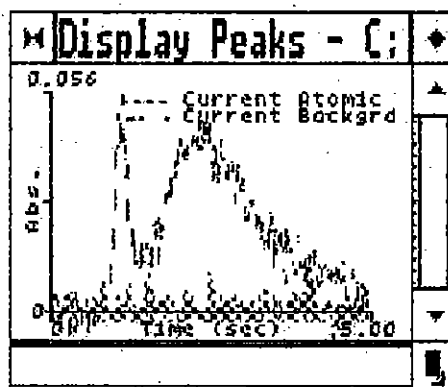
Concentration (mg/L): 0.0005

Time: 14:51

Peak Height (A): 0.014

Background Pk Height (A): 0.056

Corrected Conc (ppm): 0.0005



Mean Conc (mg/L): 0.0000

SD: 0.00063

RSD(%): 1687.63

Corrected Conc (ppm): 0.0000

As ID: 2843-2 F=1 Seq. No.: 00036 A/S Pos.: 28 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 28

Replicate 1

Peak Area (A-s): -0.002

Background Pk Area (A-s): 0.001

Blank Corrected Pk Area (A-s): 0.001

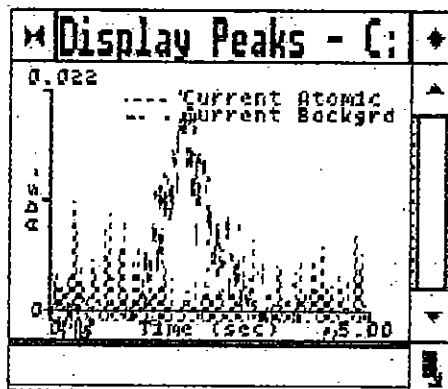
Concentration (mg/L): 0.0005

Time: 14:54

Peak Height (A): 0.011

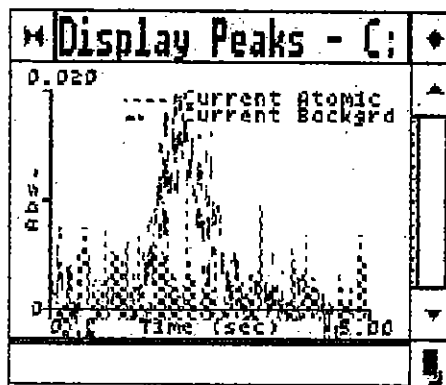
Background Pk Height (A): 0.022

Corrected Conc (ppm): 0.0005



uL dispensed: 5 from 20, 20 from 28
 Replicate 2
 Peak Area (A-s): -0.002
 Background Pk Area (A-s): 0.002
 Blank Corrected Pk Area (A-s): 0.001
 Concentration (ng/L): 0.0002

Time: 14:57
 Peak Height (A): 0.010
 Background Pk Height (A): 0.020
 Corrected Conc (ppm): 0.0002



Mean Conc (mg/L): 0.0003 SD: 0.00018 RSD(%): 53.40
 Corrected Conc (ppm): 0.0003

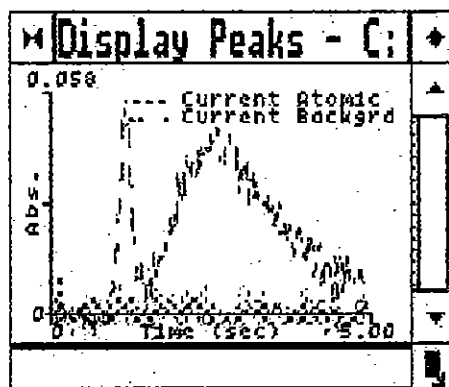
As ID: 2843-3 F=1 Seq. No.: 00037 A/S Pos.: 29 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 29
 Replicate 1

Time: 15:01

Concentration (mg/L): 0.0007

Corrected Conc (ppm): 0.0007



uL dispensed: 5 from 20, 20 from 29

Replicate 2

Peak Area (A-s): -0.002

Background Pk Area (A-s): 0.121

Blank Corrected Pk Area (A-s): 0.001

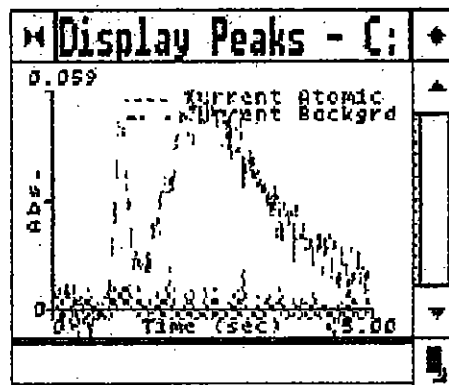
Concentration (mg/L): 0.0002

Time: 15:04

Peak Height (A): 0.012

Background Pk Height (A): 0.059

Corrected Conc (ppm): 0.0002



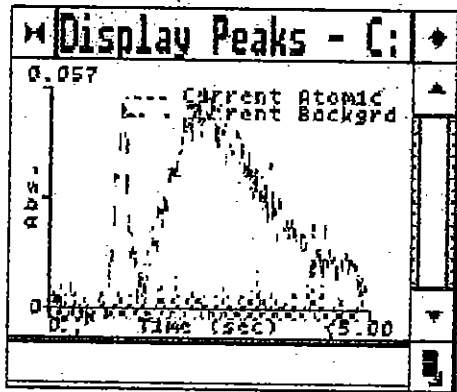
Mean Conc (mg/L): 0.0004
Corrected Conc (ppm): 0.0004

SD: 0.00030

RSD(%): 67.41

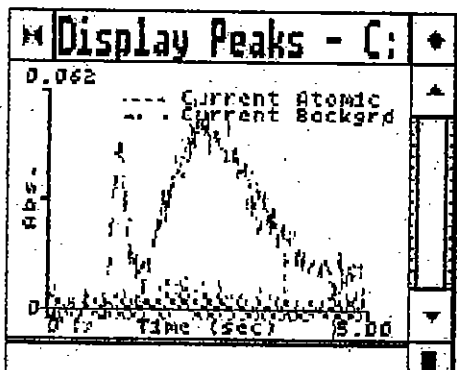
ul dispensed: 5 from 20, 20 from 30
Replicate 1
Peak Area (A-s): -0.004
Background Pk Area (A-s): 0.111
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0004

Time: 15:07
Peak Height (A): 0.010
Background Pk Height (A): 0.057
Corrected Conc (ppm): -0.0004



ul dispensed: 5 from 20, 20 from 30
Replicate 2
Peak Area (A-s): 0.001
Background Pk Area (A-s): 0.107
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0014

Time: 15:10
Peak Height (A): 0.010
Background Pk Height (A): 0.062
Corrected Conc (ppm): 0.0014



Mean Conc (mg/L): 0.0005 SD: 0.00133 RSD(%): 263.39
Corrected Conc (ppm): 0.0005

As ID: 2843-5 F=1 Seq. No.: 00039 A/S Pos.: 31 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 31

Replicate 1

Time: 15:14

Peak Area (A-s): -0.001

Peak Height (A): 0.009

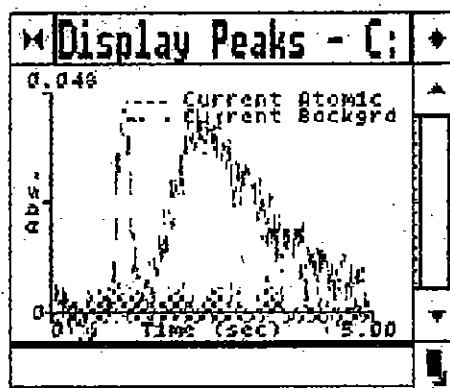
Background Pk Area (A-s): 0.083

Background Pk Height (A): 0.048

Blank Corrected Pk Area (A-s): 0.002

Concentration (mg/L): 0.0006

Corrected Conc (ppm): 0.0006



uL dispensed: 5 from 20, 20 from 31

Replicate 2

Time: 15:17

Peak Area (A-s): -0.002

Peak Height (A): 0.009

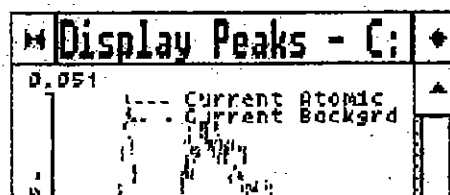
Background Pk Area (A-s): 0.087

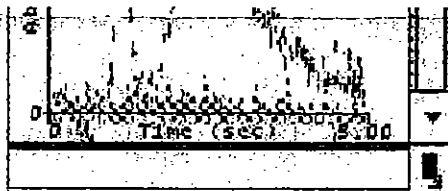
Background Pk Height (A): 0.051

Blank Corrected Pk Area (A-s): 0.001

Concentration (mg/L): 0.0005

Corrected Conc (ppm): 0.0005





Mean Conc (mg/L): 0.0005 SD: 0.00008 RSD(%): 15.52
 Corrected Conc (ppm): 0.0005

As ID: 2843-6 F=1 Seq. No.: 00040 A/S Pos.: 32 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 32

Replicate 1

Time: 15:20

Peak Area (A-s): -0.004

Peak Height (A): 0.008

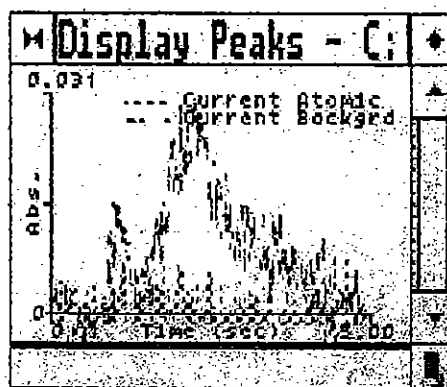
Background Pk Area (A-s): 0.038

Background Pk Height (A): 0.031

Blank Corrected Pk Area (A-s): -0.001

Concentration (mg/L): -0.0002

Corrected Conc (ppm): -0.0002



uL dispensed: 5 from 20, 20 from 32

Replicate 2

Time: 15:23

Peak Area (A-s): 0.001

Peak Height (A): 0.011

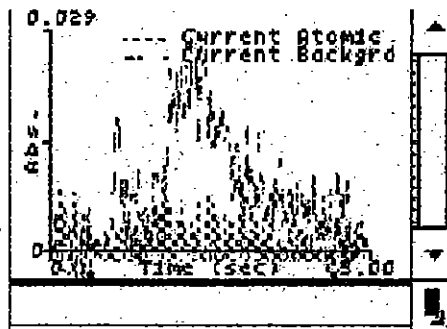
Background Pk Area (A-s): 0.035

Background Pk Height (A): 0.029

Blank Corrected Pk Area (A-s): 0.004

Concentration (mg/L): 0.0013

Corrected Conc (ppm): 0.0013



Mean Conc (mg/L): 0.0005 SD: 0.00107 RSD(%): 206.36
 Corrected Conc (ppm): 0.0005

As ID: 2843-7 F=1 Seq. No.: 00041 A/S Pos.: 33 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 33

Replicate 1

Time: 15:26

Peak Area (A-s): 0.001

Peak Height (A): 0.013

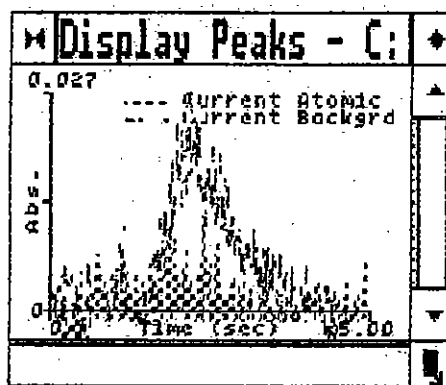
Background Pk Area (A-s): 0.020

Background Pk Height (A): 0.027

Blank Corrected Pk Area (A-s): 0.003

Concentration (mg/L): 0.0011

Corrected Conc (ppm): 0.0011



uL dispensed: 5 from 20, 20 from 33

Replicate 2

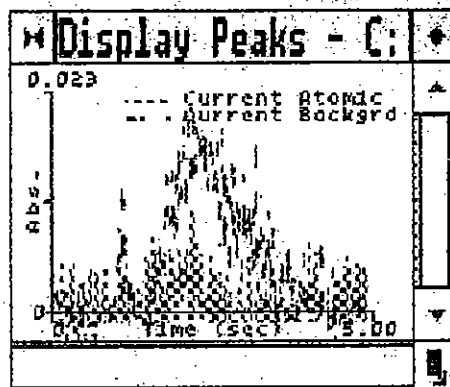
Time: 15:30

Peak Area (A-s): -0.001

Peak Height (A): 0.010

Background Pk Area (A-s): 0.010
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006

Background Pk Area (A-s): 0.010
Corrected Conc (ppm): 0.0006



Mean Conc (mg/L): 0.0009 SD: 0.00035 RSD(%): 39.69
Corrected Conc (ppm): 0.0009

As ID: CCV A1474 Seq. No.: 00042 A/S Pos.: 40 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 40

Replicate 1

Time: 15:33

Peak Area (A-s): 0.158

Peak Height (A): 0.139

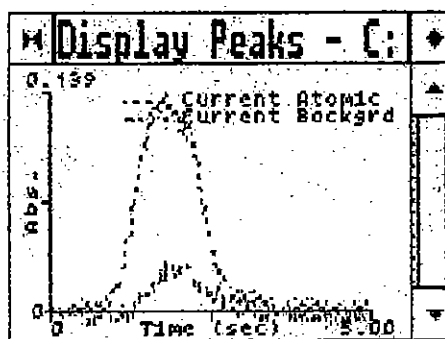
Background Pk Area (A-s): 0.015

Background Pk Height (A): 0.031

Blank Corrected Pk Area (A-s): 0.161

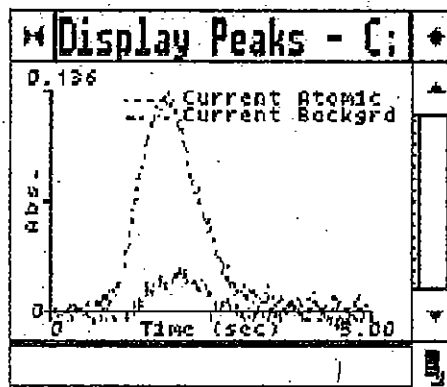
Concentration (mg/L): 0.0544

Corrected Conc (ppm): -----



uL dispensed: 5 from 20, 20 from 40
Replicate 2
Peak Area (A-s): 0.155
Background Pk Area (A-s): 0.010
Blank Corrected Pk Area (A-s): 0.157
Concentration (mg/L): 0.0532

Time: 15:36
Peak Height (A): 0.136
Background Pk Height (A): 0.028
Corrected Conc (ppm): -----



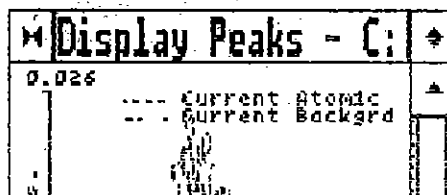
Mean Conc (mg/L): 0.0538 SD: 0.00083 RSD(%): 1.55
Corrected Conc (ppm): -----

QC sample is within range 0.0425 - 0.0575

As ID: CCB Seq. No.: 00043 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1
Replicate 1
Peak Area (A-s): -0.001
Background Pk Area (A-s): 0.007
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006

Time: 15:39
Peak Height (A): 0.010
Background Pk Height (A): 0.026
Corrected Conc (ppm): -----



uL dispensed: 5 from 20, 20 from 1

Replicate 2

Peak Area (A-s): -0.011

Background Pk Area (A-s): 0.009

Blank Corrected Pk Area (A-s): -0.008

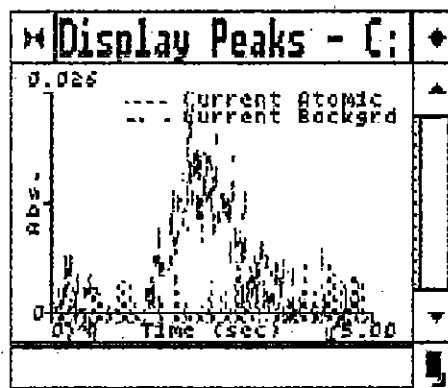
Concentration (mg/L): -0.0026

Time: 15:42

Peak Height (A): 0.006

Background Pk Height (A): 0.026

Corrected Conc (ppm): -----



Mean Conc (mg/L): -0.0010

SD: 0.00231

RSD(%): 233.85

Corrected Conc (ppm): -----

QC sample is within range

Level C Data Package Deliverables

Wet Chemistry



Applied P & Ch Laboratory

Applied P & Ch Laboratory
Wet Analysis Results for Method SM2320B

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method SM2320B

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Bicarbonate

CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg/L	2	210	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg/L	2	< 2	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2540	mg/L	2	245	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2540	mg/L	2	234	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2540	mg/L	2	210	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2539	mg/L	2	156	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2539	mg/L	2	129	
03W2540-MB-01	03W2540-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2540	mg/L	2	< 2	U
03W2539-MB-01	03W2539-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2539	mg/L	2	< 2	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method SM2320B

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method SM2320B

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Carbonate

CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2539	mg-CaCO ₃ /L	2	< 2	U
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2539	mg-CaCO ₃ /L	2	7.6	
03W2540-MB-01	03W2540-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2540	mg-CaCO ₃ /L	2	< 2	U
03W2539-MB-01	03W2539-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2539	mg-CaCO ₃ /L	2	< 2	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 9040B

Client Name: GEOFON, Inc.
Project ID: JPL

Project No: 04-4428.10
Service ID: 32843

Anal. Method 9040B
Collected by: Leo Williamson

Component Name: pH
CAS No: 10-29-7

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	7.63	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	7.00	
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	6.77	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	7.18	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	7.61	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	7.98	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	8.22	
03W2518-MB-01	03W2518-MB-01	Water	04/23/03	04/23/03	04/23/03	03W2518	pH unit	0.01	6.86	

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 160.1

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method 160.1

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Solids, Total Dissolved (TDS)

CAS No: 10-33-3

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	669	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	<10	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	731	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	740	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	613	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	300	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2543	mg/L	10	174	
03W2543-MB-01	03W2543-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2543	mg/L	10	<10	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 7196

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method 7196

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Chromium (VI)

CAS No: 1333-82-0

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U
03W2517-MB-01	03W2517-MB-01	Water	04/23/03	04/23/03	04/23/03	03W2517	mg/L	0.01	<0.01	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 314.0

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method 314.0

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Perchlorate

CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	5.4	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	< 4	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	2.8	B
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	3.3	B
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	5.7	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	2.4	B
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2531	µg/L	4	< 4	U
03W2531-MB-01	03W2531-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2531	µg/L	4	< 4	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

APCL Perchlorate Analysis Report

Sample Name : 2843-01 F=1

Data File Name : C:\DATA\03W2531K\2843-01_016.DXD

Method File Name : c:\peaknet\method\314-011.met

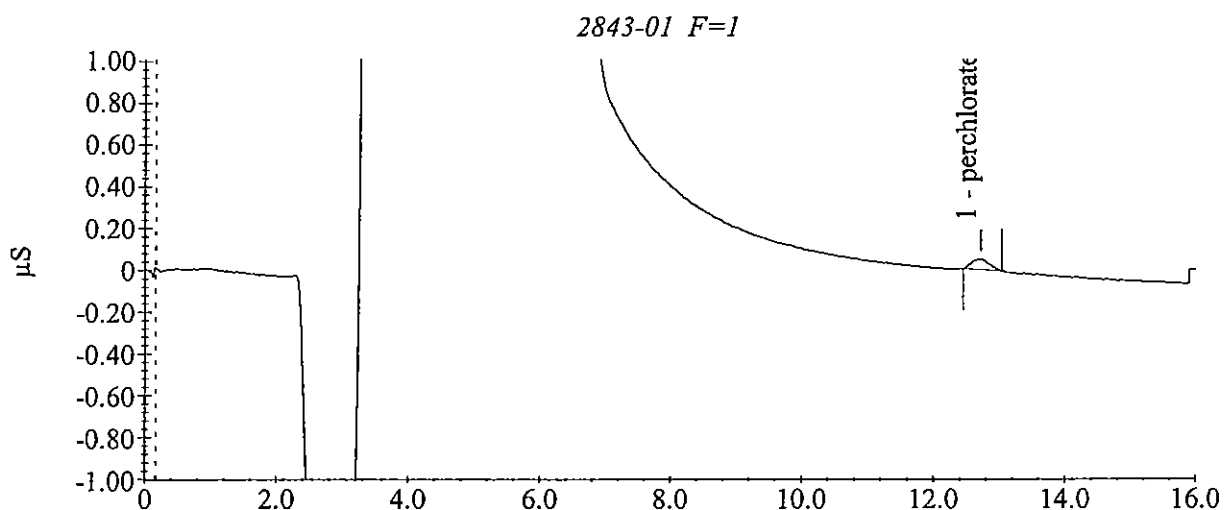
Date Time Collected : 04/24/2003 4:49:29 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.72	5.41	9187.00	496.27



APCL Perchlorate Analysis Report

Sample Name : mb

Data File Name : C:\DATA\03W2531K\W2531K K01_007.DXD

Method File Name : c:\peaknet\method\c314-011.met

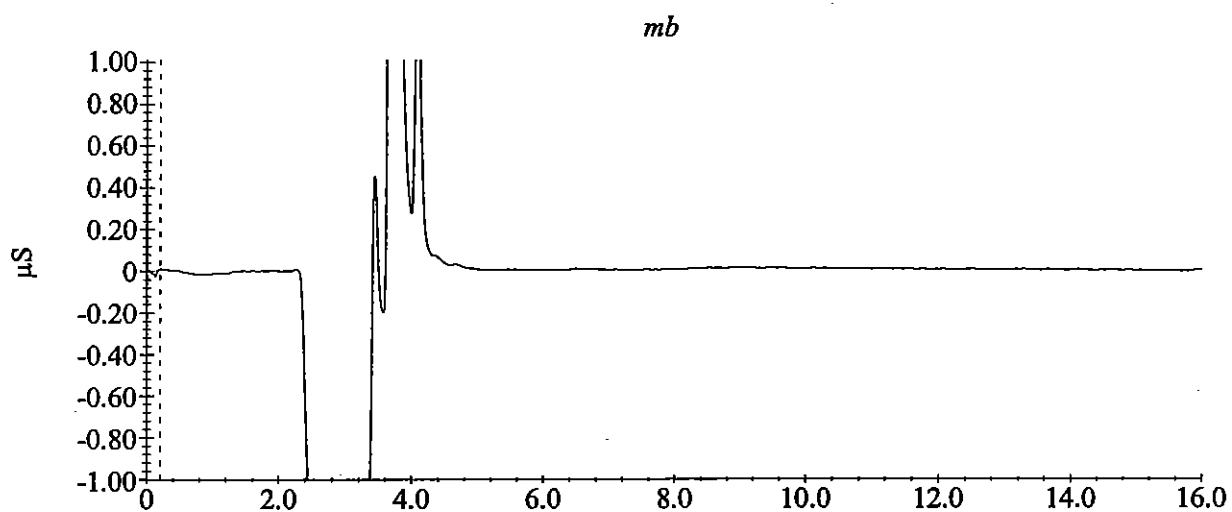
Date Time Collected : 04/24/2003 1:11:50 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



Applied P & Ch Laboratory
Wet Analysis Results for Method 300.0

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 300.0
 Project ID: JPL Service ID: 32843 Collected by: Leo Williamson

Component Name: Chloride Cl⁻
 CAS No: 16887-00-6

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	4	96.7	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.25	0.23	B
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	4	136	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	4	111	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	4	94.3	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.8	37.9	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.25	9.9	
03W2520-MB-01	03W2520-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2520	mg/L	0.2	<0.2	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 300.0

Client Name: GEOFON, Inc.

Project No: 04-4428.10

Anal. Method 300.0

Project ID: JPL

Service ID: 32843

Collected by: Leo Williamson

Component Name: Nitrate as N

CAS No: 14797-55-8

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.8	13.1	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.05	0.088	
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.8	17.1	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.8	14.8	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.8	13.1	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.16	10.1	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.05	0.15	
03W2520-MB-01	03W2520-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2520	mg/L	0.04	<0.04	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory
Wet Analysis Results for Method 300.0

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 300.0
 Project ID: JPL Service ID: 32843 Collected by: Leo Williamson

Component Name: Sulfate SO_4^{--}
 CAS No: 14808-79-8

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	10	139	
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.63	0.73	
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	10	194	
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	10	179	
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	10	136	
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	2	30.0	
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2520	mg/L	0.63	16.9	
03W2520-MB-01	03W2520-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2520	mg/L	0.5	<0.5	U

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

```

=====
Sample Name: 2843-1 F=20                      Date: 04/24/2003 10:13:00
Data File  : C:\DX\DATA\03W2520\2843-101.D05
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 5           Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

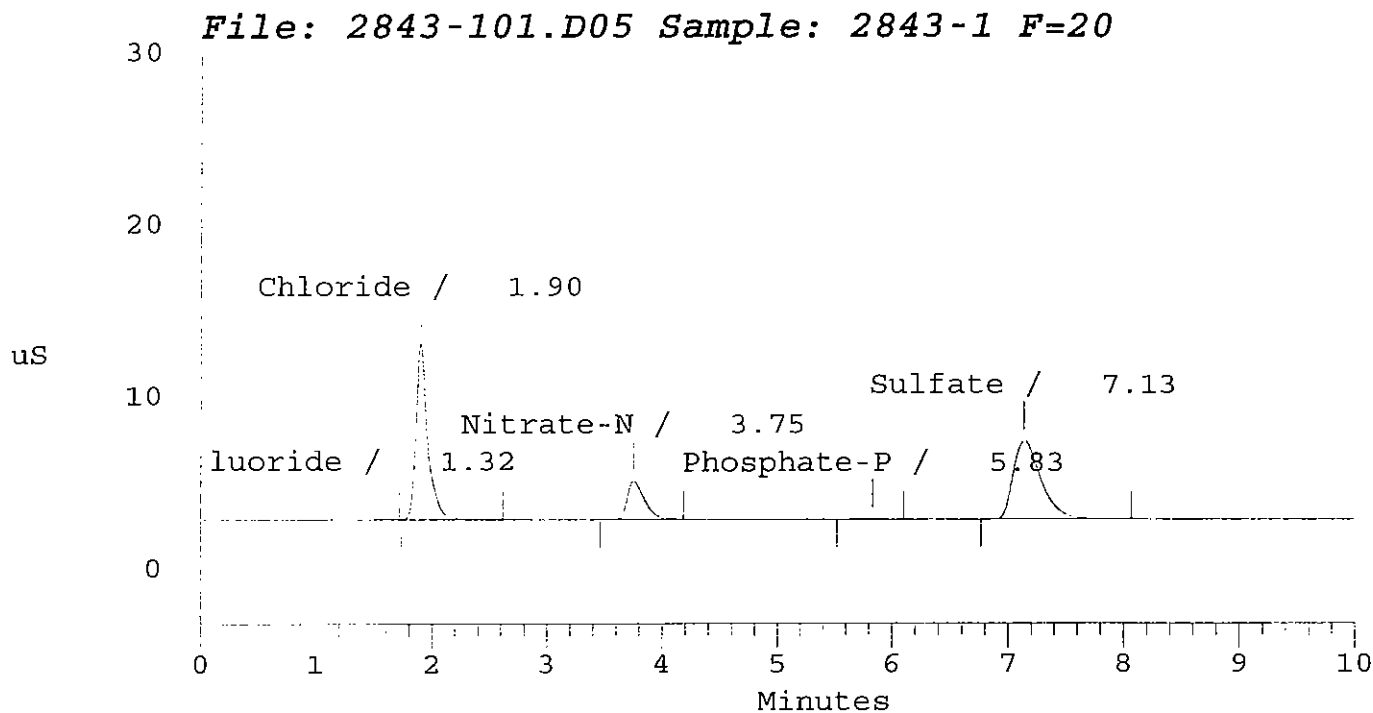
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          20    3000   5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	1.939	3479	71142	2	0.00
2	1.90	Chloride	96.710	340941	2410453	2	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
3	3.75	Nitrate-N	13.125	73704	761912	1	0.00
4	5.83	Phosphate-P	2.019	305	6634	1	0.00
5	7.13	Sulfate	138.952	150543	2533181	1	0.00
Totals			252.745	568973	5783322		



Data Reprocessed On 04/24/2003 09:29:32

Sample Name: MB RW1408 Date: 04/24/2003 09:26:23
Data File : C:\DX\DATA\03W2520\W2520K01.D02
Method : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 2 Detector: COND
Analyst : David Column: Dionex AS4A-SC

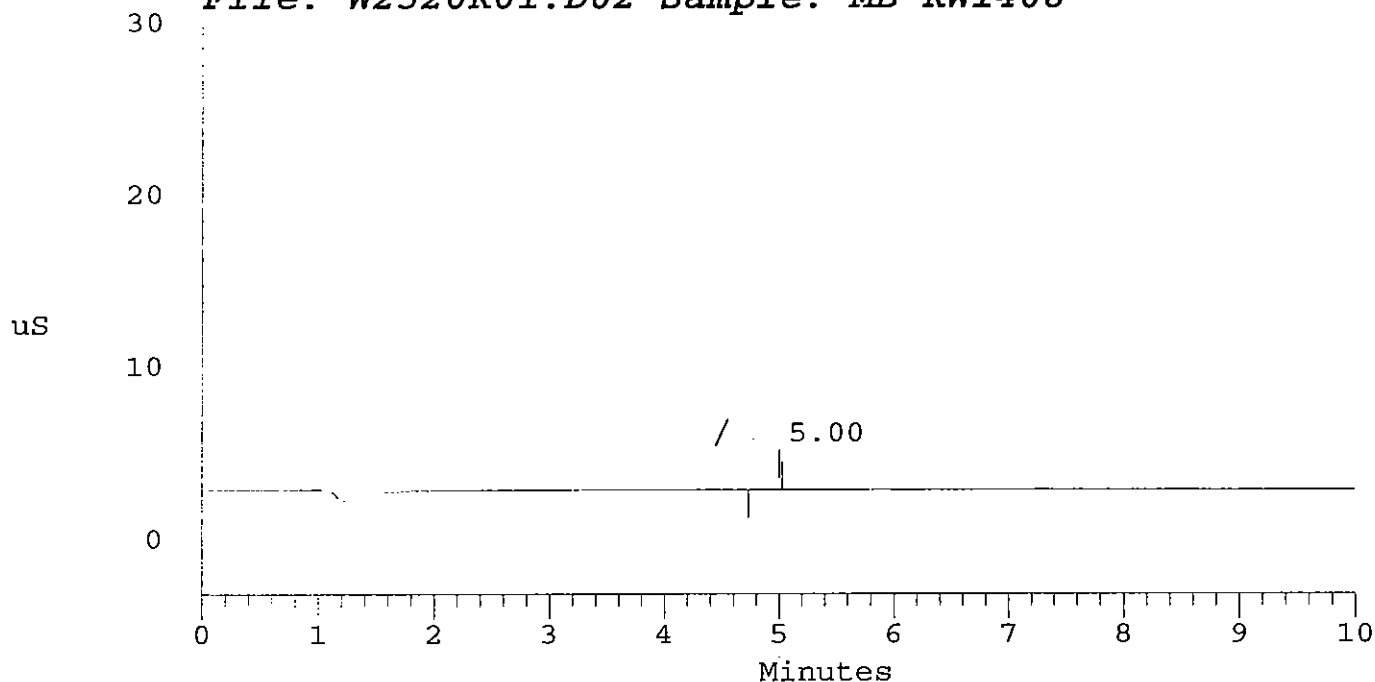
Calibration Volume Dilution Points Rate Start Stop Area Reject

External 1 1 3000 5Hz 0.00 10.00 1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Phosphate-P	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
Totals			0.000	0	0		

File: W2520K01.D02 Sample: MB RW1408



After
4/24/03 DC
Reason: 3. ³⁵³⁷✓

FORM-3

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 300.0

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2520

LCS Filename: -

Date Analyzed: 042403

Time Analyzed: 09:47

LCSD Filename: -

Date Analyzed: 042403

Time Analyzed: 10:00

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CHLORIDE CL ⁻	mg/L	4.0	0	3.97	99	80-120
NITRATE AS N	mg/L	1.5	0	1.52	101	80-120
SULFATE SO ₄ ⁻	mg/L	15	0	15.1	101	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHLORIDE CL ⁻	mg/L	4.0	4.00	100	1	20	80-120
NITRATE AS N	mg/L	1.5	1.53	102	1	20	80-120
SULFATE SO ₄ ⁻	mg/L	15	15.1	101	0	25	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

```

=====
Sample Name: LCS W7768-100X          Date: 04/24/2003 09:47:35
Data File  : C:\DX\DATA\03W2520\W2520L01.D03
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 3   Detector: COND
Analyst    : David                   Column: Dionex AS4A-SC
=====

```

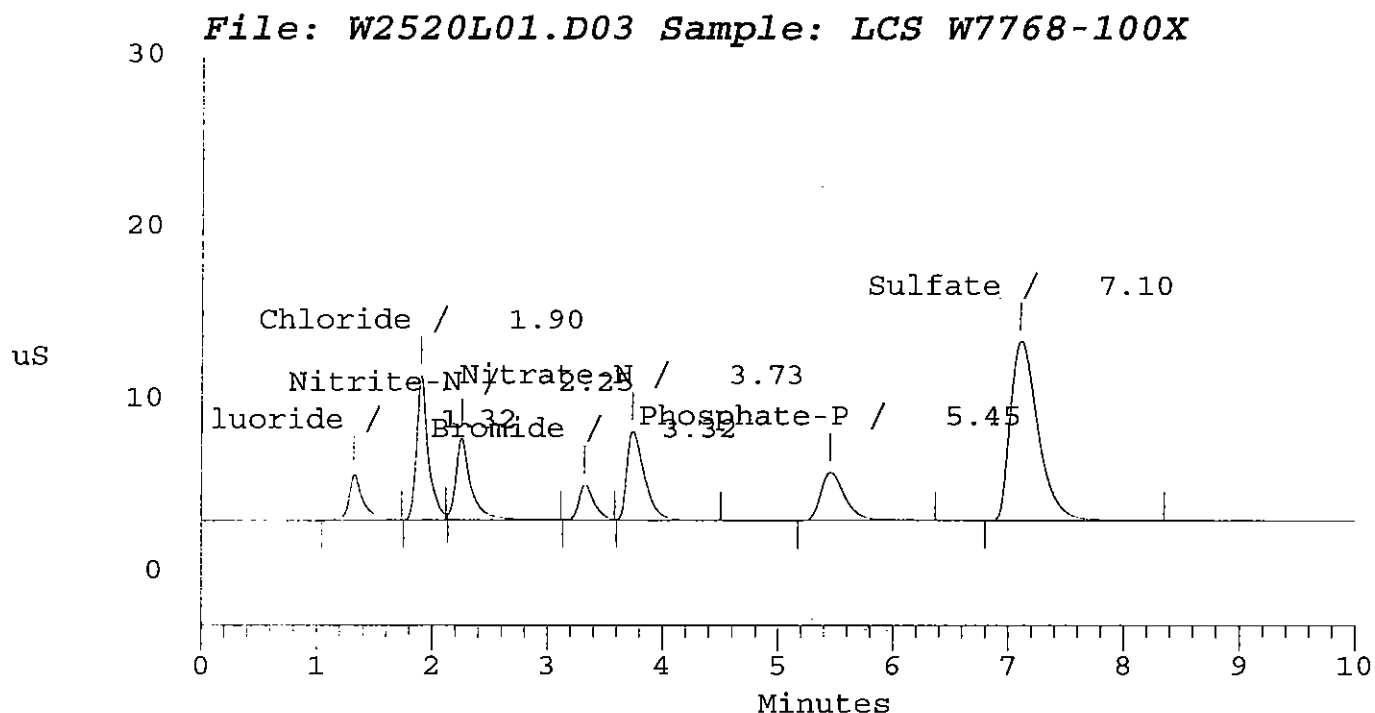
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    3000   5Hz   0.00 10.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	1.040	85973	756793	2	0.00
2	1.90	Chloride	3.972	278734	1968290	2	0.00
3	2.25	Nitrite-N	1.477	158208	1488527	2	0.00
4	3.32	Bromide	3.100	67655	631950	2	0.31
5	3.73	Nitrate-N	1.522	171363	1836152	2	0.00
6	5.45	Phosphate-P	2.968	92118	1357360	1	0.00
7	7.10	Sulfate	15.088	344782	5747482	1	0.00
Totals			29.167	1198834	13786553		



```

=====
Sample Name: LCSD W7768-100X          Date: 04/24/2003 10:00:18
Data File  : C:\DX\DATA\03W2520\W2520J01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 4    Detector: COND
Analyst    : David                      Column: Dionex AS4A-SC
=====

```

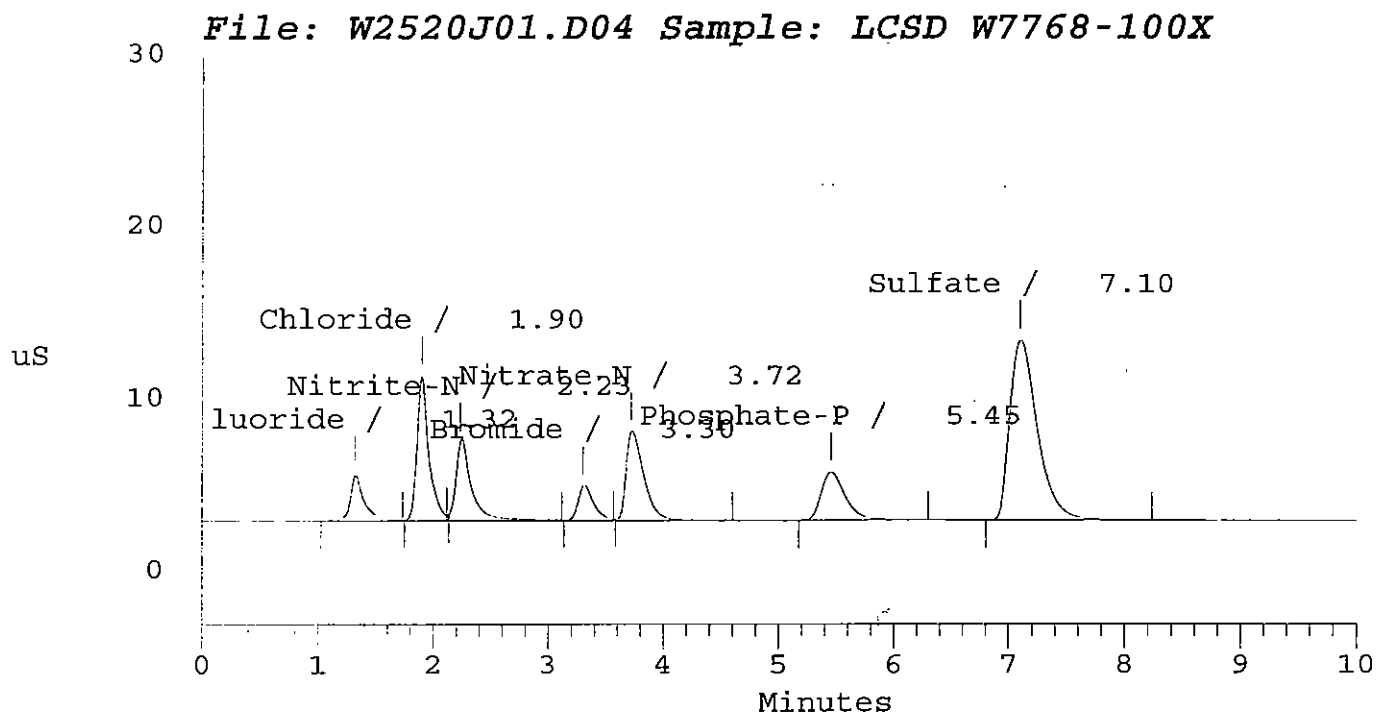
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	1.043	86625	758546	2	0.00
2	1.90	Chloride	4.001	279011	1983073	2	0.00
3	2.23	Nitrite-N	1.477	151201	1488305	2	-0.74
4	3.30	Bromide	3.108	66377	633593	2	0.25
5	3.72	Nitrate-N	1.532	170603	1849463	2	0.00
6	5.45	Phosphate-P	2.951	92485	1349669	1	0.00
7	7.10	Sulfate	15.054	346853	5734052	1	0.00
Totals			29.166	1193153	13796700		



FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 300.0

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2520

MS Filename: -

Date Analyzed: 042403

Time Analyzed: 12:19

MSD Filename: -

Date Analyzed: 042403

Time Analyzed: 13:19

MS Sample No: DUPE-2-2Q03

Sample Lab ID: 03-2843-1

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
CHLORIDE CL ⁻	mg/L	160	96.7	254	98	75-125
NITRATE AS N	mg/L	60.0	13.1	71.3	97	75-125
SULFATE SO ₄ ⁻	mg/L	600	139	732	99	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHLORIDE CL ⁻	mg/L	160	254	98	0	20	75-125
NITRATE AS N	mg/L	60.0	73.1	100	3	20	75-125
SULFATE SO ₄ ⁻	mg/L	600	734	99	0	25	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

```

=====
Sample Name: $2843-1 MS F=40                      Date: 04/24/2003 12:19:53
Data File  : C:\DX\DATA\03W2520\W2520M01.D14
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 14                Detector:COND
Analyst    : David                               Column: Dionex AS4A-SC
=====

```

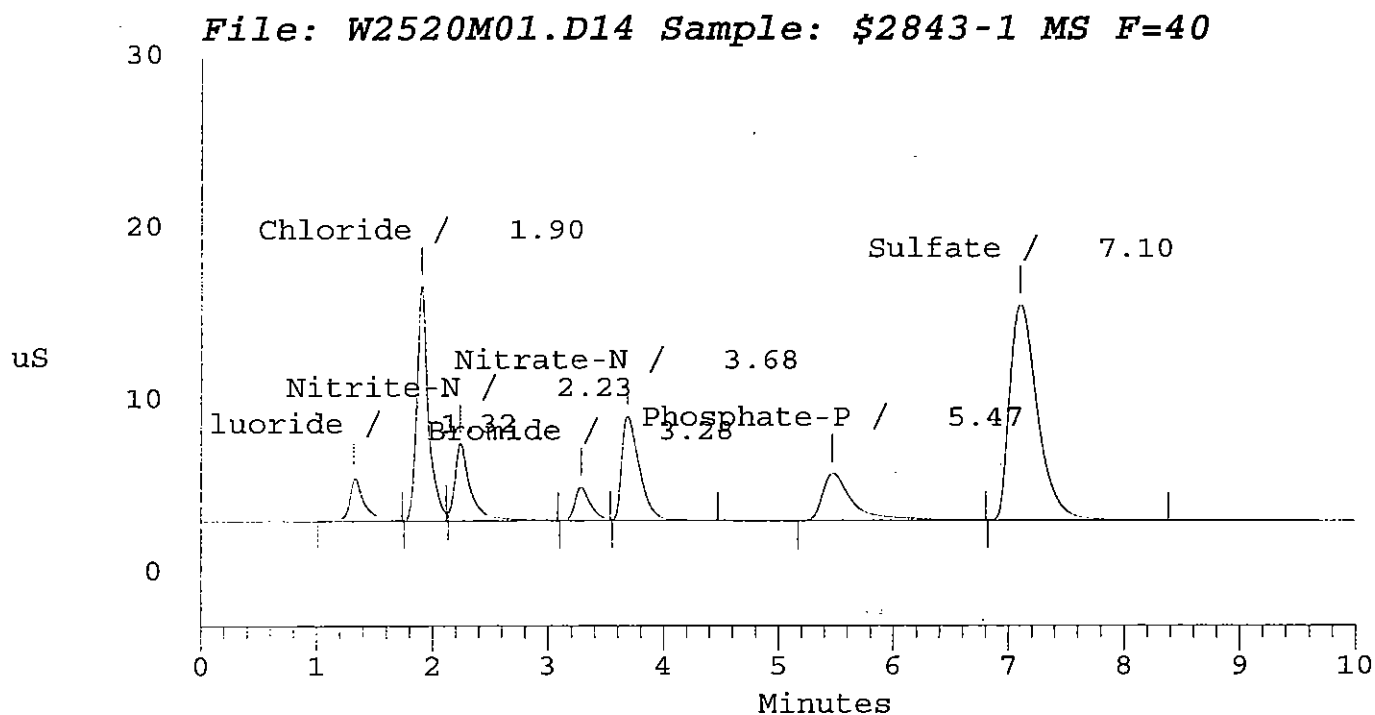
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          40    3000   5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	41.358	79337	752044	2	0.00
2	1.90	Chloride	253.578	454453	3180575	2	0.00
3	2.23	Nitrite-N	57.810	149613	1456026	2	-0.74
4	3.28	Bromide	119.719	65584	609807	2	0.65
5	3.68	Nitrate-N	71.355	202656	2161757	2	0.00
6	5.47	Phosphate-P	151.062	92047	1738538	2	0.00
7	7.10	Sulfate	732.316	417372	7018942	2	0.00
Totals			1427.197	1461061	16917689		



```

=====
Sample Name: $2843-1 MSD F=40          Date: 04/24/2003 13:19:00
Data File  : C:\DX\DATA\03W2520\W2520N01.D15
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 15    Detector: COND
Analyst    : David                     Column: Dionex AS4A-SC
=====

```

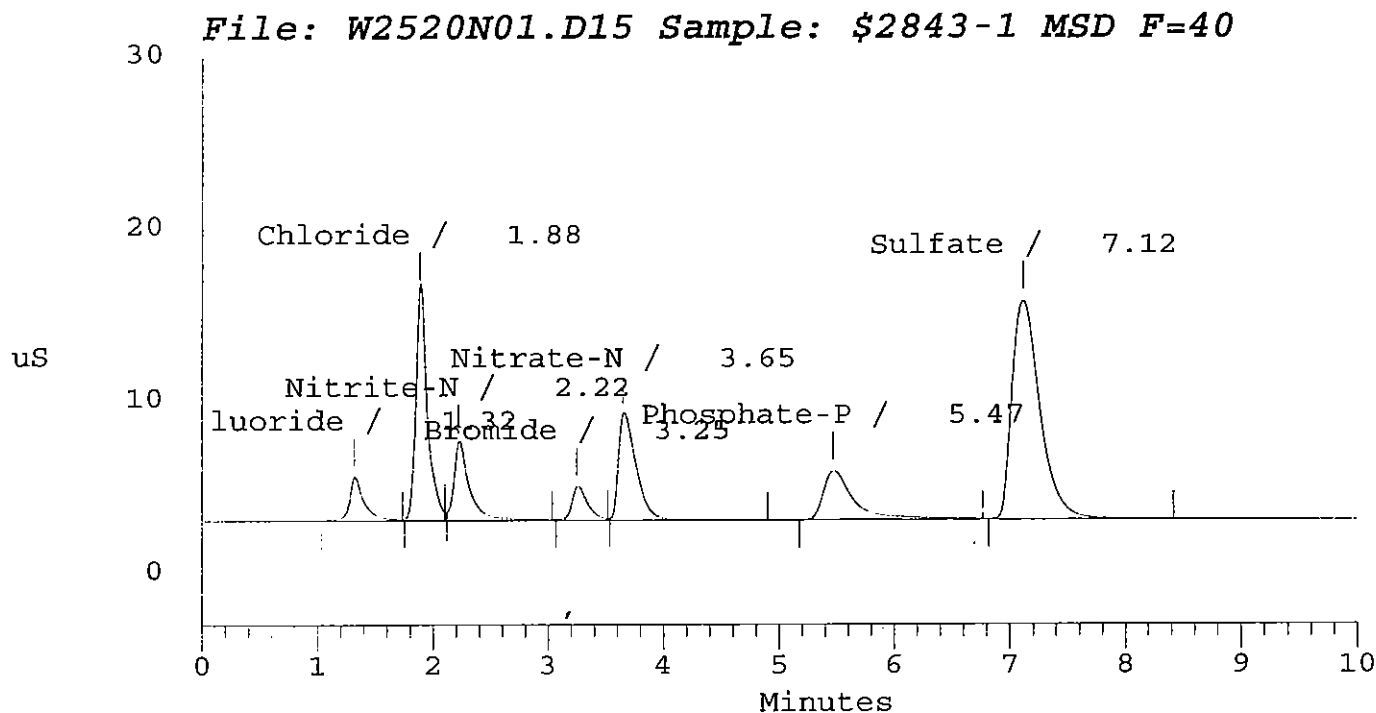
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          40    3000   5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	41.319	83715	751332	2	0.00
2	1.88	Chloride	253.874	443229	3184367	2	0.00
3	2.22	Nitrite-N	58.211	147971	1466307	2	-0.61
4	3.25	Bromide	121.798	65113	620563	2	0.54
5	3.65	Nitrate-N	73.129	204078	2216820	2	0.00
6	5.47	Phosphate-P	154.254	94712	1776140	2	0.00
7	7.12	Sulfate	733.465	421986	7030285	2	0.00
Totals			1436.050	1460803	17045814		



FORM-3

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 314.0

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2531

LCS Filename: -

Date Analyzed: 042403

Time Analyzed: 12:14

LCSD Filename: -

Date Analyzed: -

Time Analyzed: -

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
PERCHLORATE	µg/L	25	0	24.0	96	80-120
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

APCL Perchlorate Analysis Report

Sample Name : lcs 25ppb w7827d

Data File Name : C:\DATA\03W2531K\W2531K L01_004.DXD

Method File Name : c:\peaknet\method\c314-011.met

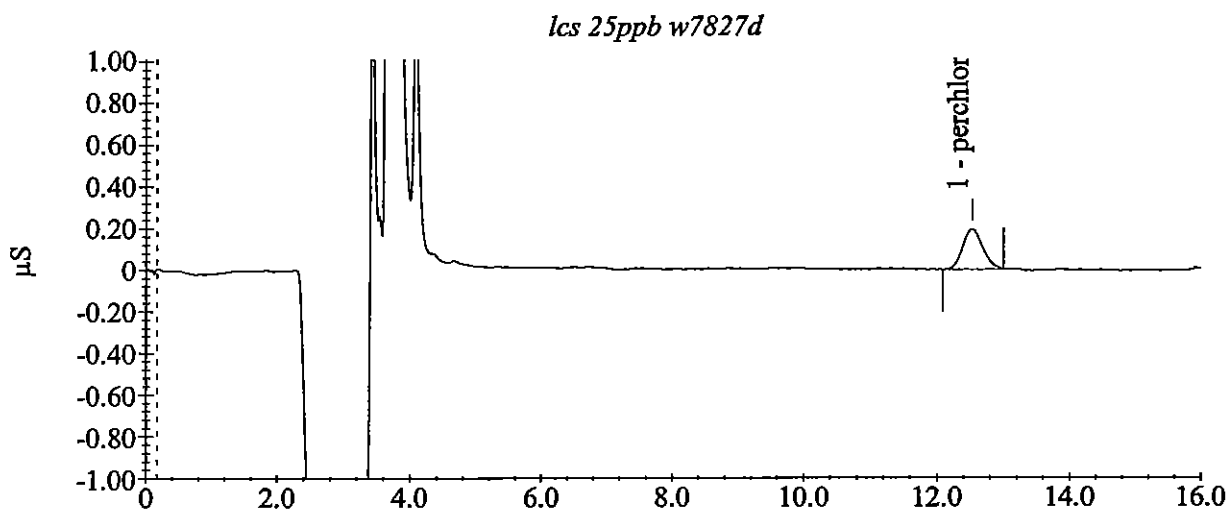
Date Time Collected : 04/24/2003 12:14:43 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.53	23.95	40641.05	1944.90



FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 314.0

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2531

MS Filename: -

Date Analyzed: 042403

Time Analyzed: 15:34

MSD Filename: -

Date Analyzed: 042403

Time Analyzed: 16:30

MS Sample No: 10GP-03-1-GW

Sample Lab ID: 03-2842-8

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
PERCHLORATE	µg/L	50	0	52.3	105	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	50	50.5	101	4	20	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

APCL Perchlorate Analysis Report

Sample Name : 2842-08 ms 50ppb f=1

Data File Name : C:\DATA\03W2531K\W2531K M01_012.DXD

Method File Name : c:\peaknet\method\c314-011.met

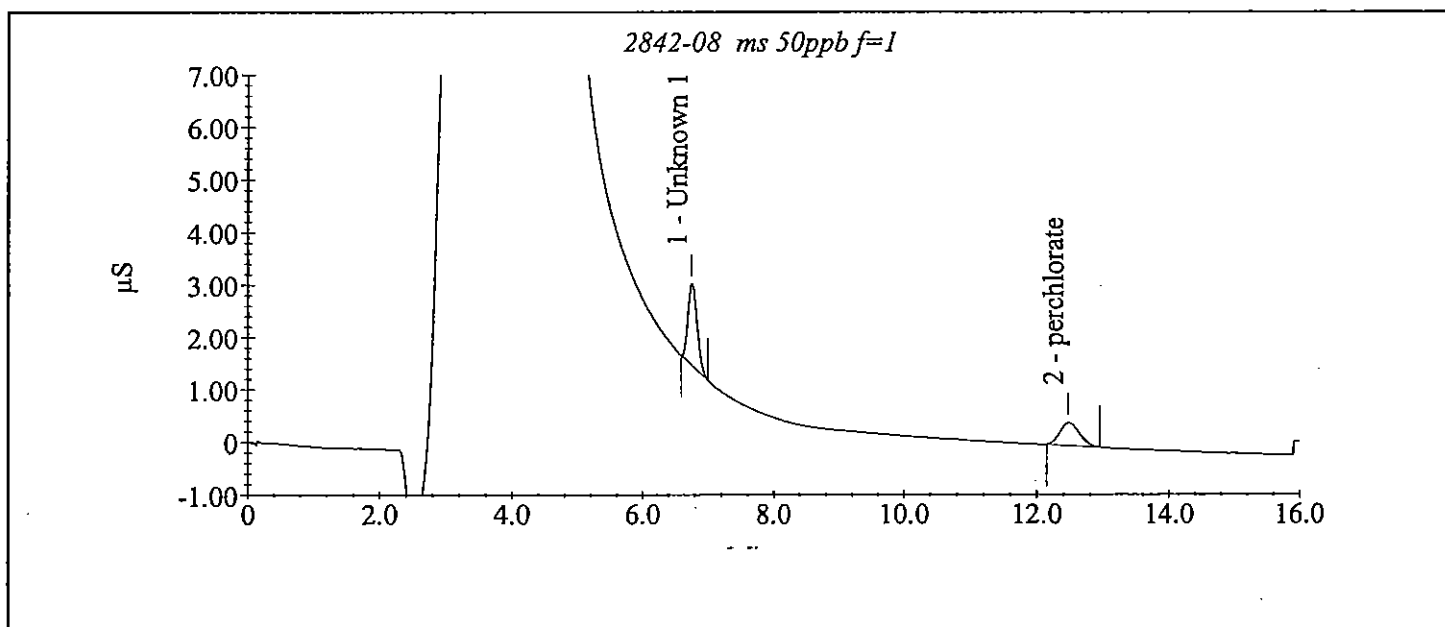
Date Time Collected : 04/24/2003 3:34:42 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
2	perchlorate	12.47	52.30	88749.00	4327.70



Rec 104.60



APCL Perchlorate Analysis Report

Sample Name : 2842-08 msd 50ppb f=1

Data File Name : C:\DATA\03W2531K\W2531K N01_015.DXD

Method File Name : c:\peaknet\method\314-011.met

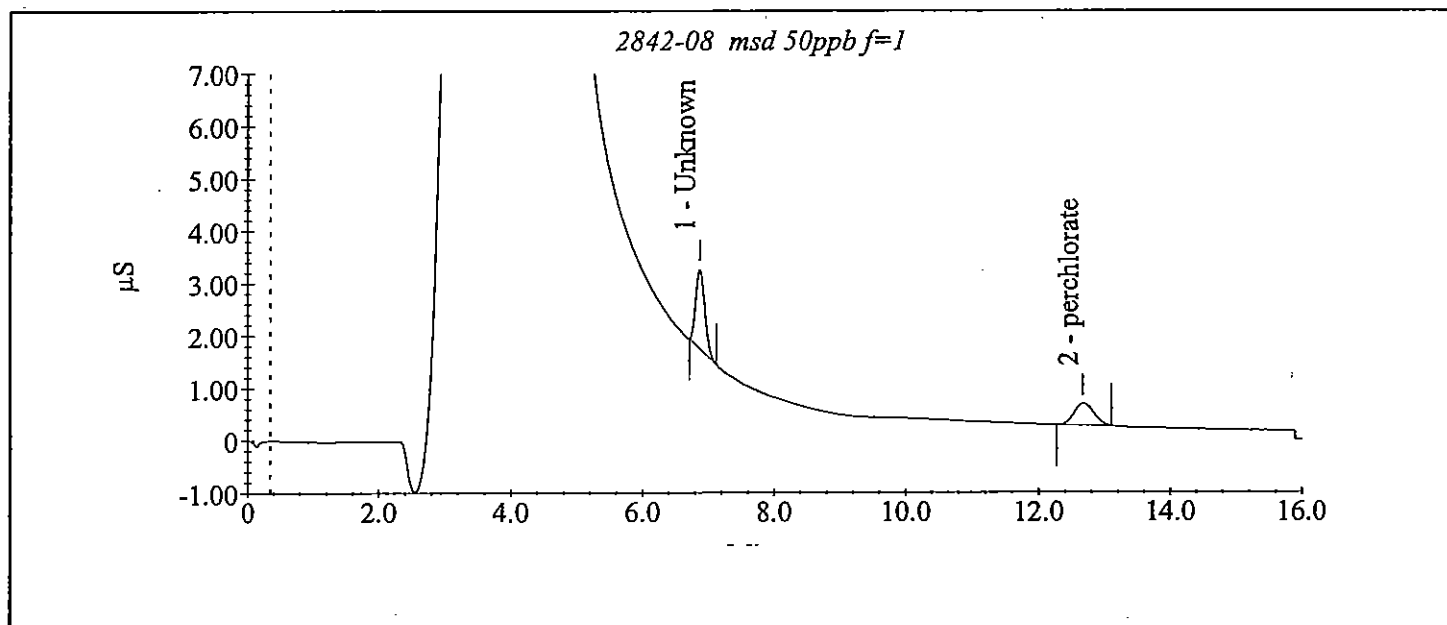
Date Time Collected : 04/24/2003 4:30:52 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
2	perchlorate	12.67	50.48	85667.30	4134.68



Rec 100.96%



APCL Perchlorate Analysis Report

Sample Name : 2842-08 F=1

Data File Name : C:\DATA\03W2531K\2842-08_010.DXD

Method File Name : c:\peaknet\method\314-011.met

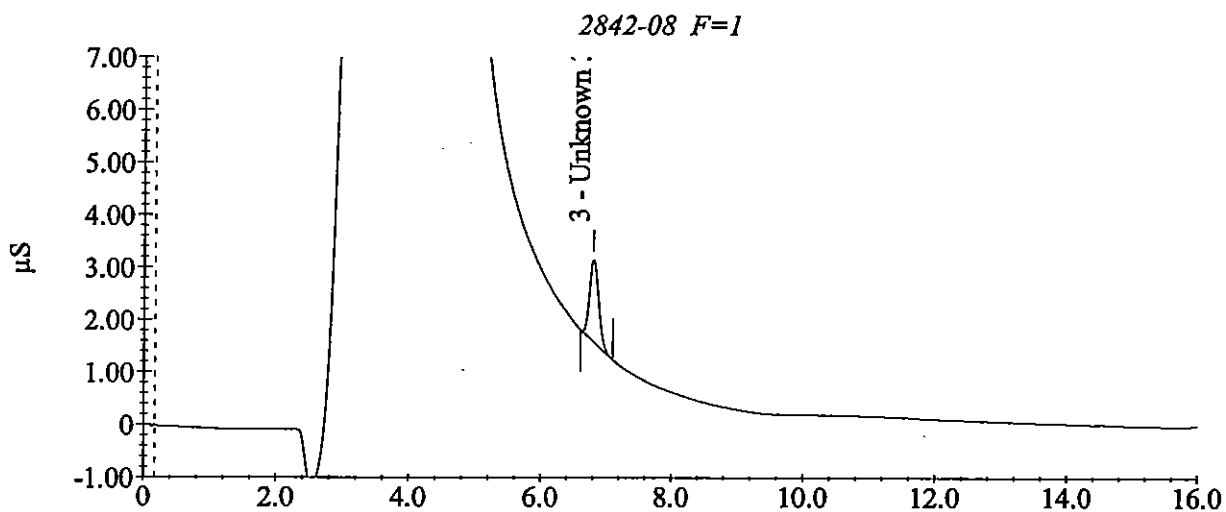
Date Time Collected : 04/24/2003 2:57:34 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



FORM-3

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 160.1

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2543

LCS Filename: -

Date Analyzed: 042403

Time Analyzed: 16:10

LCSD Filename: -

Date Analyzed: 042403

Time Analyzed: 16:10

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	0	421	105	88-108
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	418	105	0	20	88-108
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 160.1

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2543

MS Filename: -

Date Analyzed: 042403

Time Analyzed: 16:10

MSD Filename: -

Date Analyzed: 042403

Time Analyzed: 16:10

MS Sample No: STP-12

Sample Lab ID: 03-2823-1

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	726	1140	104	80-119
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	1110	96	8	20	80-119
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-3

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 7196

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2517

LCS Filename: -

Date Analyzed: 042303

Time Analyzed: 15:21

LCSD Filename: -

Date Analyzed: 042303

Time Analyzed: 15:21

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CHROMIUM (VI)	mg/L	0.25	0	0.225	90	80-115
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHROMIUM (VI)	mg/L	0.25	0.233	93	3	19	80-115
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 7196

Client Name: GEOFON, Inc.

Contract No:

Lab Code: APCL

Case No:

SAS No:

Service ID: 32843

Project ID: JPL

Project No: 04-4428.10

Sample Matrix: Water

Batch No: 03W2517

MS Filename: -

Date Analyzed: 042303

Time Analyzed: 15:21

MSD Filename: -

Date Analyzed: 042303

Time Analyzed: 15:21

MS Sample No: MW-14-1

Sample Lab ID: 03-2843-3

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
CHROMIUM (VI)	mg/L	0.25	0	0.226	90	78-115
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHROMIUM (VI)	mg/L	0.25	0.224	90	0	19	78-115
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

Wet Chemistry QC Report B
Duplicate Results

Matrix: Water

APCL Service ID: 03-2843

Analysis	Batch ID	Analysis Date	Sample Name	Unit	Result	Duplicate Result	RPD %	RPD Control limit
pH	03W/2518	04/23/2003	DUPE-2-2Q03	pH unit	7.63	7.66	0	20
Bicarbonate	03W/2539	04/24/2003	03-2809-1	mg/L	161	158	2	20
Carbonate	03W/2539	04/24/2003	03-2809-1	mg-CaCO ₃ /L	ND	ND	NC	20
Bicarbonate	03W/2540	04/24/2003	03-2828-1	mg/L	310	314	1	20
Carbonate	03W/2540	04/24/2003	03-2828-1	mg-CaCO ₃ /L	ND	ND	NC	20

Note: N/A = Not applicable; NR: Not requested; NC= Not Calculated; ND: Not detected.

6A
INITIAL CALIBRATION DATA

Lab Name: Applied P & Ch Lab Contract: _____

Analysis: Chromium (VI) Calibration Date: 01/29/2003

Concentration (mg/L)	0.000	0.0125	0.050	0.125	0.250	0.50
Absorbance	0.000	0.006	0.041	0.109	0.214	0.415

$A = 0.000 + 0.836C$

A=Absorbance

C=Concentration (mg/L)

$r = 0.9997$

DIONEX METHOD PARAMETERS - E300-063.MET

Method Comment: APCL EPA 300 ANALYSIS DX-100
Column ID: Dionex AS4A-SC
Analyst ID: David

System Parameters

```

System Name: DX-100
Number of Detectors..... 1
Run Time (minutes)..... 10.00
Sampling Rate (seconds)..... 0.20

Detector 1 Type..... COND
Detector 1 real time plot scale maximum (uS )..... 30.000
                               minimum..... -3.000
Detector 1 Output Equivalent to 1 Volt (in uS ) ..... 30.00
Detector 1 ACI Analog Input Connection ..... DET1
Save Data File..... Yes
Data File Name: C:\DX\DATA\03W1991\W1991001.D10

```

- - DETECTOR 1 PARAMETERS - -

Report Options

Report Options	
Create ASCII Report File.....	No
Print Report.....	Yes
Print All Components.....	Yes
Print Components Found.....	No
Print Missing Components.....	No
Print All Peaks.....	No
Print Unknown Peaks.....	No
Print Chromatogram.....	Yes
Autoscale Chromatogram Maximum.....	No
Autoscale Chromatogram Minimum.....	No
Fill Peaks with Color	No
Draw Grid Lines on Chromatogram.....	No
Show Component Fraction Numbers.....	No
Label with Peak Number.....	No
Label with Retention Times on Chromatogram.....	Yes
Label with Component Name.....	Yes
Format File Name: C:\DX\METHOD\DEFAULT.PR#	

Integration Parameters

Starting Peak Width (seconds).....	10.0
Peak Threshold	2.000
Peak Area Reject.....	1000
Area Reject for Reference Peaks.....	1000

Data Events

Time	Description
0.13	Start peak detection
10.00	Stop peak detection

Calibration Parameters

Number Of Levels for Calibration.....	6
Force Calibration Curve Through Origin.....	No
Calibration Fit Type.....	Linear
Replace Or Average Calibrations.....	Replace
External or Internal Calibration.....	External
Calculate Unknowns by Area or Height.....	Area
Default Sample Volume.....	1.0
Default Dilution Factor.....	1.0
Default Response Factor for Unknown Peaks.....	0.0
Calibration Standard Volume	1.0
Internal Standard Amount in Samples	1.0
Amount Units	ppm

Component # 4 Bromide
 Reference Comp. Nitrate-N
 Retention Time 3.45
 Window Size 0.20 min.
 Amount = K0 + K1*Area
 K0 = 4.58974E-002
 K1 = 4.83279E-006

Level	Amount	Area	Height
1	7.50000E-002	13830	1488
2	1.50000E+000	298206	30100
3	3.00000E+000	591234	61776
4	6.00000E+000	1219933	128845
5	7.50000E+000	1559887	166594
6	0.00000E+000	0	0

Component # 5 Nitrate-N
 Reference Comp. Nitrate-N
 Retention Time 3.87
 Window Size 0.25 min.
 Amount = K0 + K1*Area
 K0 = 4.24689E-002
 K1 = 8.05553E-007

Level	Amount	Area	Height
1	3.75000E-002	40157	3802
2	7.50000E-001	849179	77129
3	1.50000E+000	1713421	152776
4	3.00000E+000	3610927	313707
5	3.75000E+000	4688990	396441
6	0.00000E+000	0	0

Component # 6 Phosphate-P
 Reference Comp. Phosphate-P
 Retention Time 6.38
 Window Size 0.60 min.
 Amount = K0 + K1*Area
 K0 = 8.68926E-002
 K1 = 2.12227E-006

Level	Amount	Area	Height
1	7.50000E-002	24783	1450
2	1.50000E+000	642376	38579
3	3.00000E+000	1301126	79971
4	6.00000E+000	2756481	168994
5	7.50000E+000	3546397	217521
6	0.00000E+000	0	0

Component # 1 Fluoride Retention Time 1.32
 Reference Comp. Fluoride Window Size 0.15 min.
 Amount = $K0 + K1 \cdot \text{Area}$
 $K0 = -9.62851\text{E-}004$
 $K1 = 1.37614\text{E-}006$

Level	Amount	Area	Height
1	2.50000E-002	28534	2732
2	5.00000E-001	373164	44629
3	1.00000E+000	707646	82595
4	2.00000E+000	1435865	173007
5	2.50000E+000	1837162	220914
6	0.00000E+000	0	0

Component # 2 Chloride Retention Time 1.97
 Reference Comp. Chloride Window Size 0.15 min.
 Amount = $K0 + K1 \cdot \text{Area}$
 $K0 = 1.28188\text{E-}001$
 $K1 = 1.95287\text{E-}006$

Level	Amount	Area	Height
1	1.00000E-001	51206	7044
2	2.00000E+000	909455	126181
3	4.00000E+000	1856586	261681
4	8.00000E+000	3987563	585791
5	1.00000E+001	5142155	754321
6	0.00000E+000	0	0

Component # 3 Nitrite-N Retention Time 2.33
 Reference Comp. Chloride Window Size 0.15 min.
 Amount = $K0 + K1 \cdot \text{Area}$
 $K0 = 2.38085\text{E-}002$
 $K1 = 9.76240\text{E-}007$

Level	Amount	Area	Height
1	3.75000E-002	30884	3582
2	7.50000E-001	734006	79701
3	1.50000E+000	1468106	162005
4	3.00000E+000	3021523	336616
5	3.75000E+000	3856614	429219
6	0.00000E+000	0	0

Component # 7 Sulfate Retention Time 7.92
 Reference Comp. Sulfate Window Size 0.90 min.
 Amount = K0 + K1*Area
 K0 = 5.32283E-001
 K1 = 2.53252E-006

Level	Amount	Area	Height
1	3.76000E-001	129999	6524
2	7.50000E+000	2598757	138579
3	1.50000E+001	5330209	287851
4	3.00000E+001	11507107	615917
5	3.75000E+001	14859049	776426
6	0.00000E+000	0	0

Timed Events File: C:\DX\METHOD\W761CAL.TE

Step	Time	Description
Init		ACI Autosmp OFF
Init		ACI pump st ON
Init		ACI inject OFF
Init		ACI auto zer OFF
Init		ACI TTL 1 OFF
Init		ACI TTL 2 OFF
Init		ACI TTL 3 OFF
Init		ACI TTL 4 OFF
Init		ACI OFF
Init		ACI OFF
1	0.0	ACI Autosmp ON
1	0.0	ACI auto zer ON
2	2.5	ACI Autosmp OFF
2	2.5	ACI inject ON
2	2.5	ACI TTL 1 ON
2	2.5	Start Sampling

Component: Fluoride

Fit Type: Linear

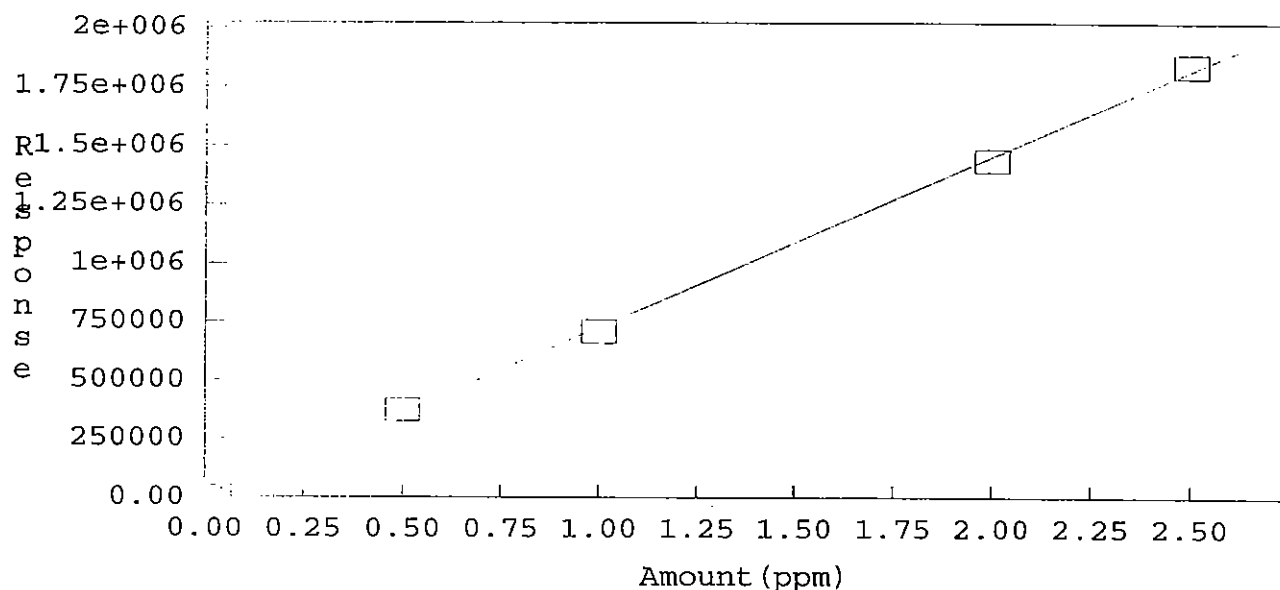
$r^2 = 0.999552$

Amt = Resp * $1.376e-006$ + -0.000962

Resp = Amt * $7.267e+005$ + 699.7

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Chloride

Fit Type: Linear

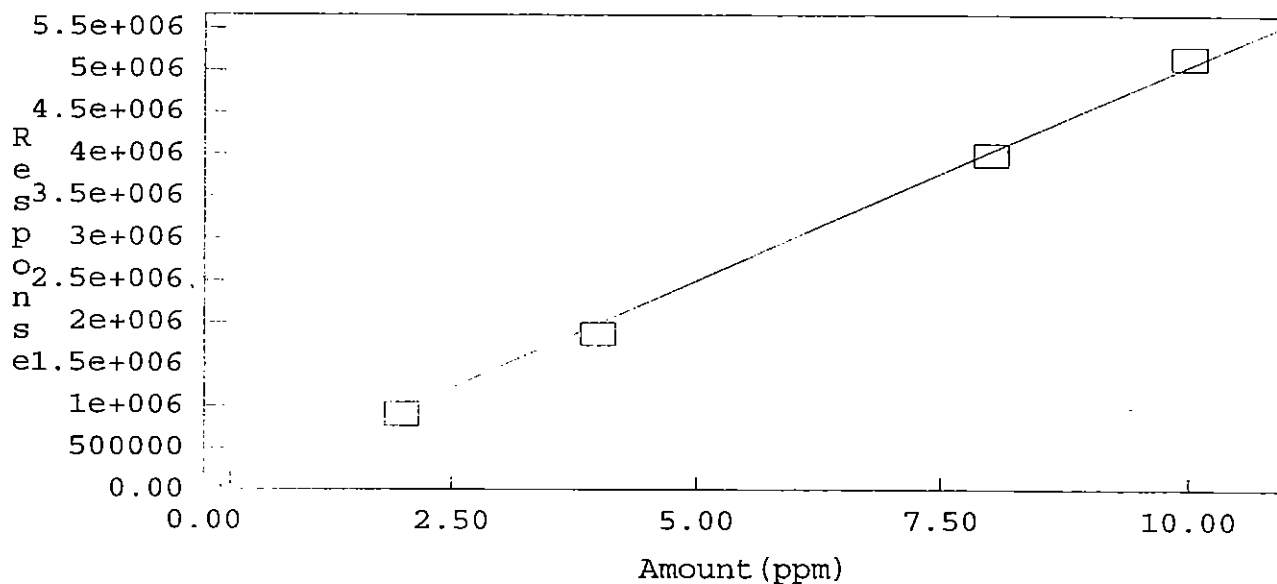
$r^2 = 0.998409$

Amt = Resp * $1.953e-006$ + 0.1282

Resp = Amt * $5.121e+005$ + $-6.564e+00$

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Nitrite-N

Fit Type: Linear

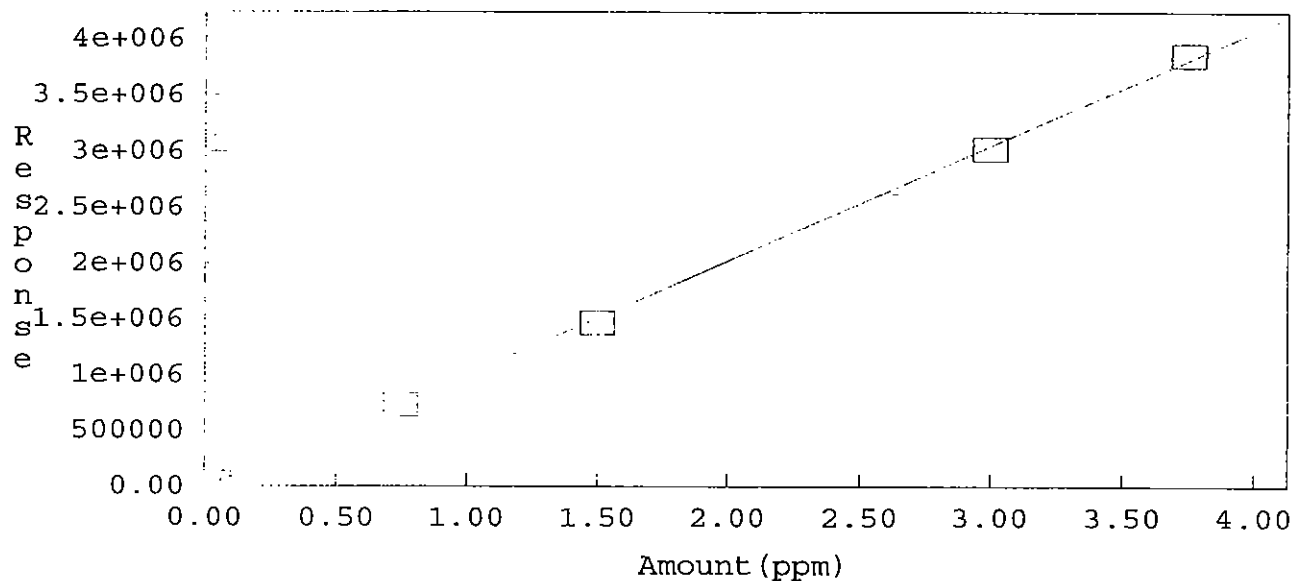
$r^2 = 0.999594$

Amt = Resp * $9.762e-007$ + 0.02381

Resp = Amt * $1.024e+006$ + $-2.439e+00$

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Bromide

Fit Type: Linear

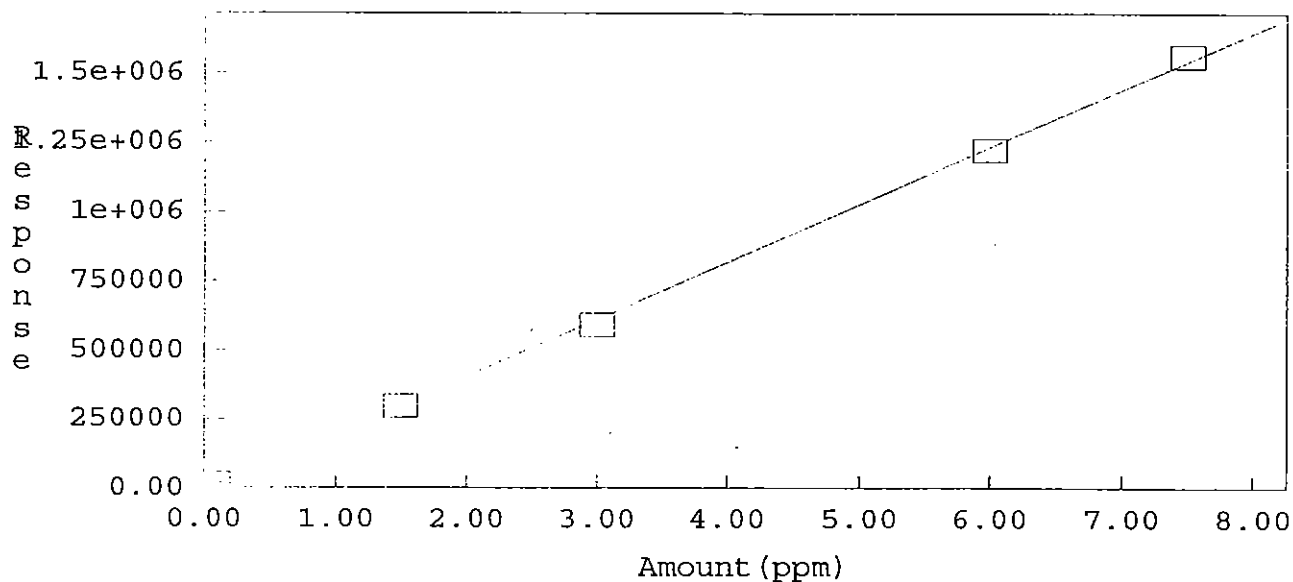
$r^2 = 0.999518$

Amt = Resp * $4.833e-006$ + 0.0459

Resp = Amt * $2.069e+005$ + -9497

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Nitrate-N

Fit Type: Linear

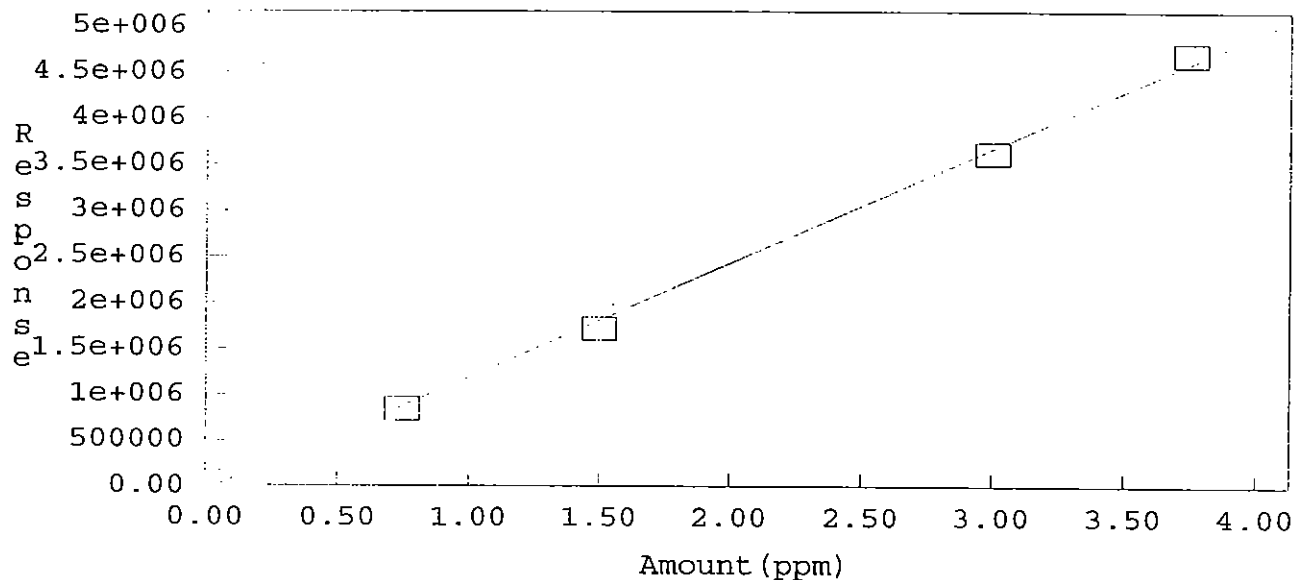
$r^2 = 0.998618$

Amt = Resp * $8.056e-007$ + 0.04247

Resp = Amt * $1.241e+006$ + $-5.272e+00$

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Phosphate-P

Fit Type: Linear

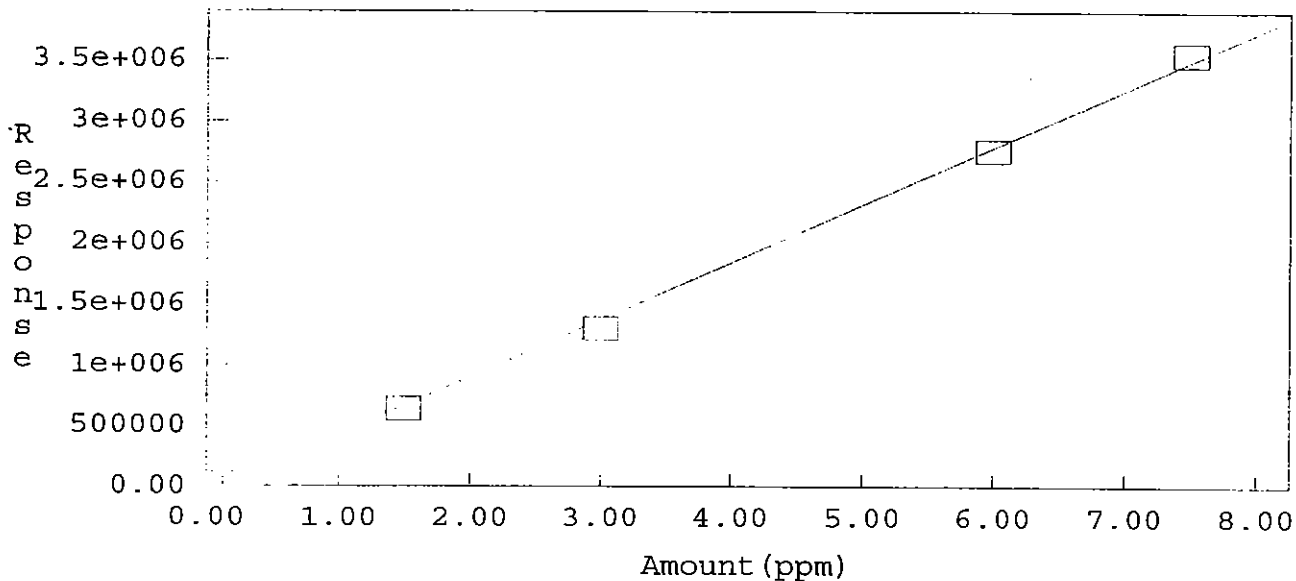
$r^2 = 0.998898$

Amt = Resp * $2.122e-006$ + 0.08689

Resp = Amt * $4.712e+005$ + $-4.094e+00$

Standardization: External

Calibration: Area



Method: C:\DX\METHOD\E300-063.MET

Component: Sulfate

Fit Type: Linear

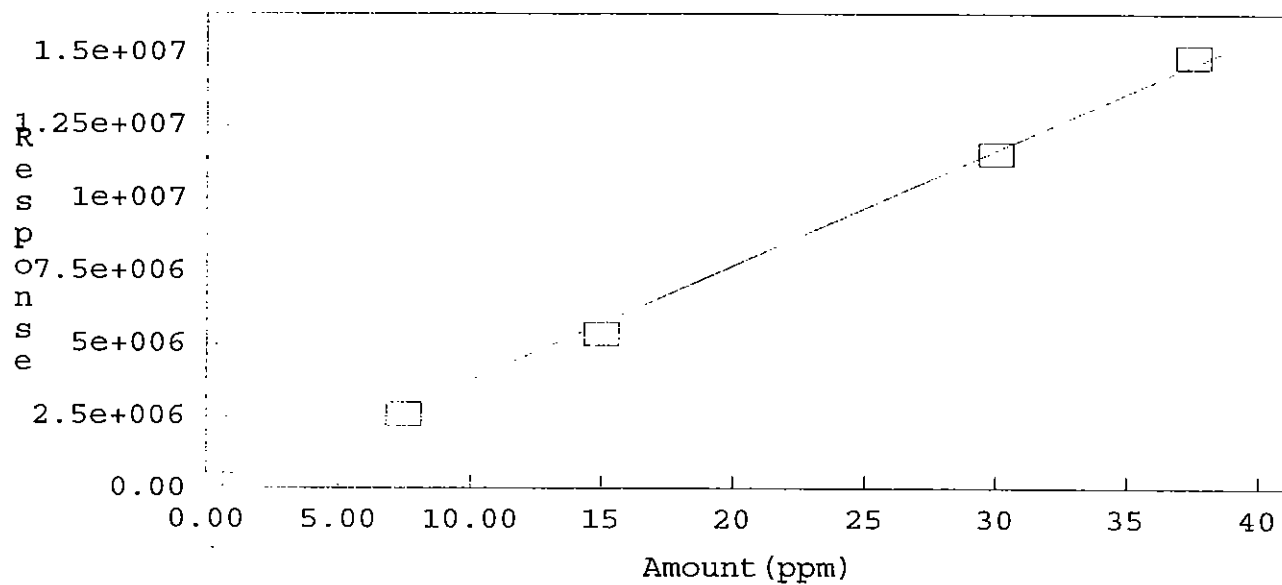
$r^2 = 0.998245$

Amt = Resp * $2.533\text{e-}006$ + 0.5323

Resp = Amt * $3.949\text{e+}005$ + $-2.102\text{e+}00$

Standardization: External

Calibration: Area



```

=====
Sample Name: ICV-W7768-100X                      Date: 03/21/2003 17:56:33
Data File  : C:\DX\DATA\e300-063\W7768Q01.D07
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 7                Detector: COND
Analyst    : David                               Column: Dionex AS4A-SC
=====

```

```

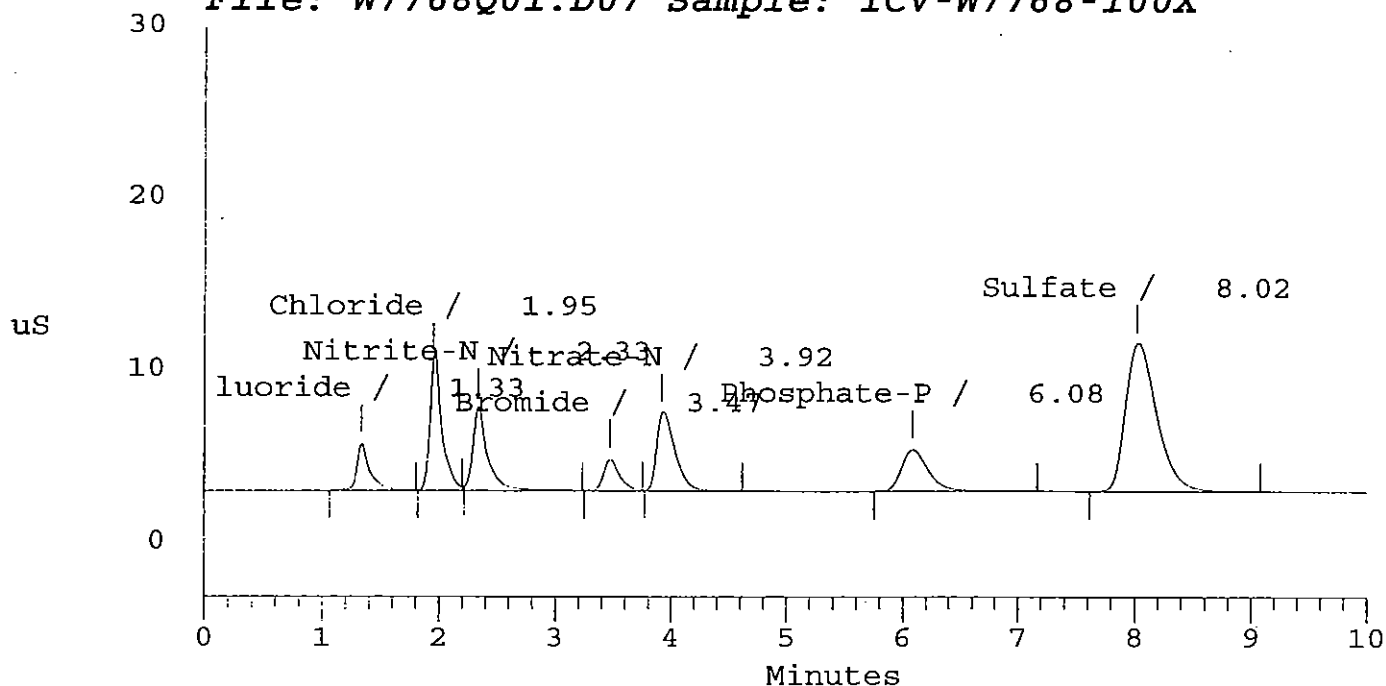
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00          1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	0.999	89896	726672	2	0.00
2	1.95	Chloride	3.767	248158	1863483	2	0.00
3	2.33	Nitrite-N	1.445	160603	1455681	2	1.17
4	3.47	Bromide	2.881	61007	586729	2	-0.71
5	3.92	Nitrate-N	1.410	149958	1697030	2	0.00
6	6.08	Phosphate-P	2.852	79916	1302965	1	0.00
7	8.02	Sulfate	13.993	285121	5314983	1	0.00
Totals			27.347	1074659	12947545		

File: W7768Q01.D07 Sample: ICV-W7768-100X



```

=====
Sample Name: ICB                               Date: 03/21/2003 18:21:00
Data File  : C:\DX\DATA\E300-063\W7767Q01.D08
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 8            Detector: COND
Analyst    : David                            Column: Dionex AS4A-SC
=====

```

```

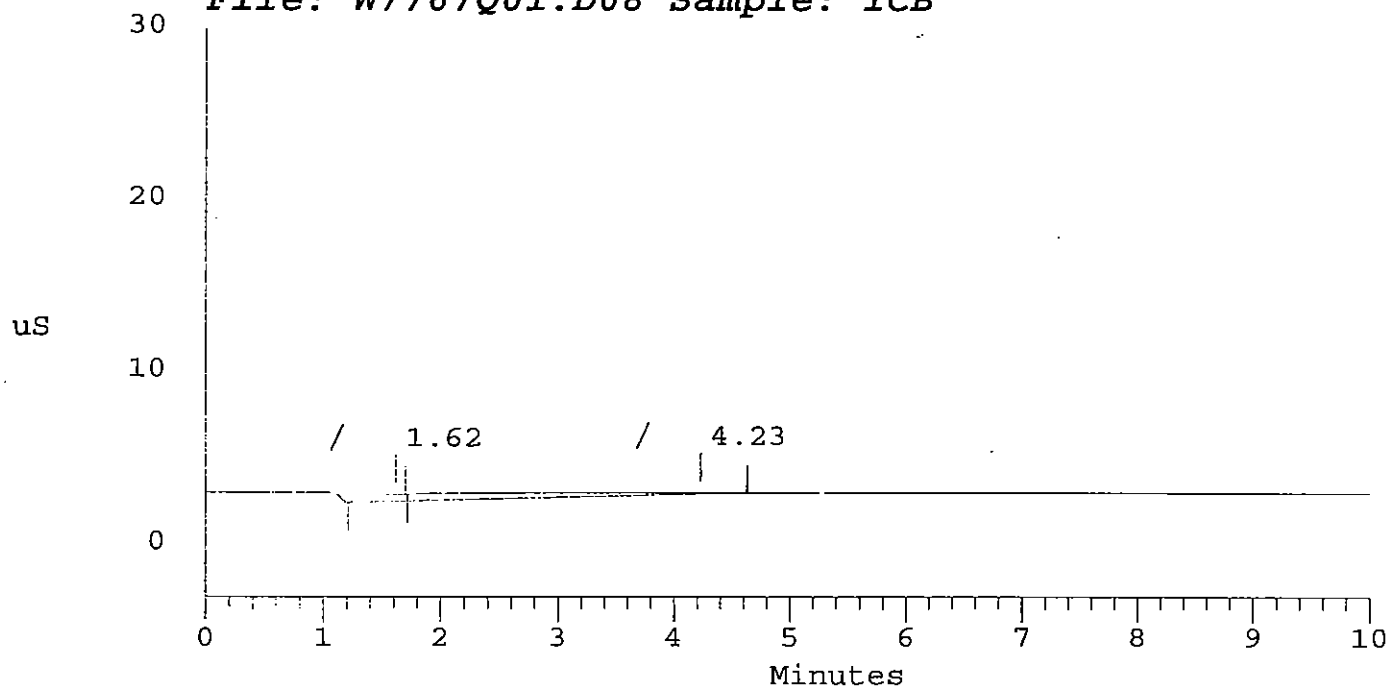
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1  3000  5Hz   0.00 10.00          1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Phosphate-P	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
Totals			0.000	0	0		

File: W7767Q01.D08 Sample: ICB



```

=====
Sample Name: AUTOCAL1R                      Date: 03/21/2003 16:23:08
Data File  : C:\DX\DATA\E300-063\W7767Q01.D01
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 1          Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

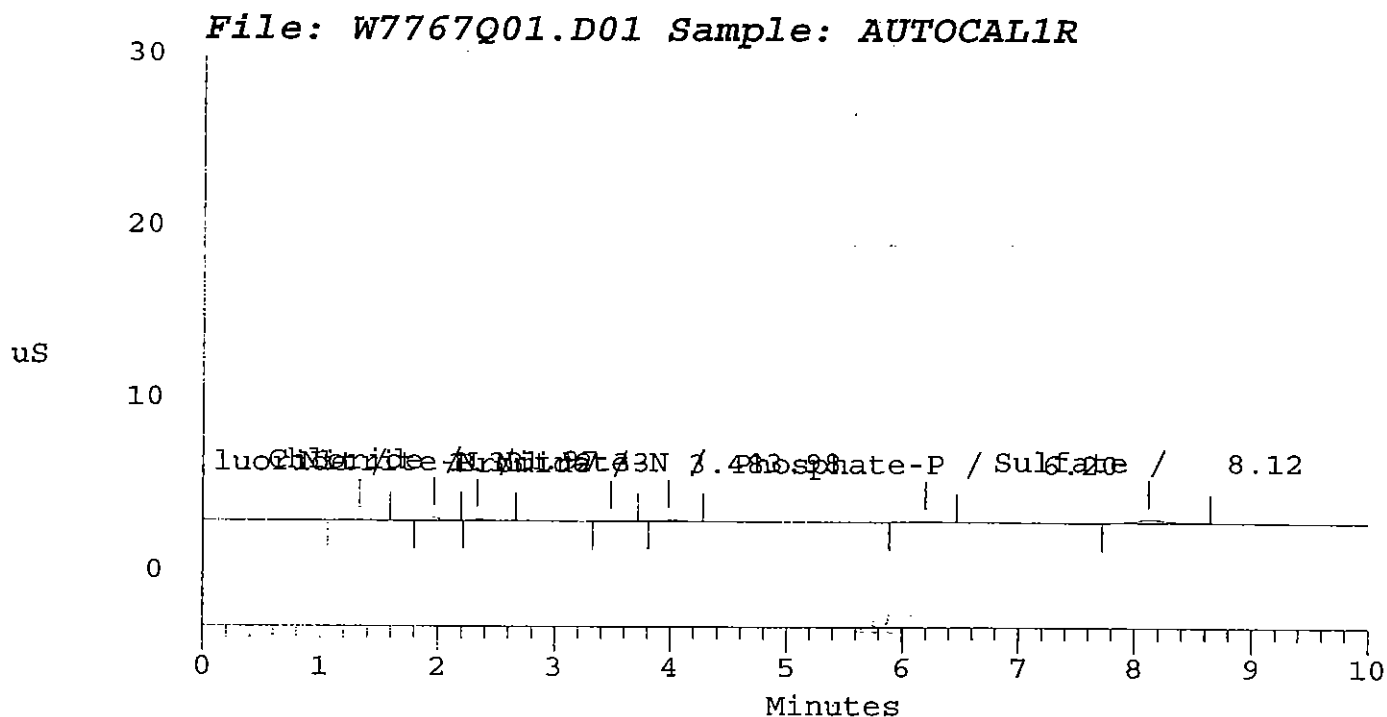
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	0.025	2732	28534	1	0.00
2	1.97	Chloride	0.100	7044	51206	2	0.00
3	2.33	Nitrite-N	0.038	3582	30884	2	-3.33
4	3.48	Bromide	0.075	1488	13830	1	-1.47
5	3.98	Nitrate-N	0.038	3802	40157	1	0.00
6	6.20	Phosphate-P	0.075	1450	24783	1	0.00
7	8.12	Sulfate	0.376	6524	129999	1	0.00
Totals			0.726	26621	319393		



```

=====
Sample Name: AUTOCAL2R                      Date: 03/21/2003 16:35:53
Data File  : C:\DX\DATA\E300-063\W7767Q01.D02
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 2
Analyst    : David                          Column: Dionex AS4A-SC
Detector: COND
=====

```

```

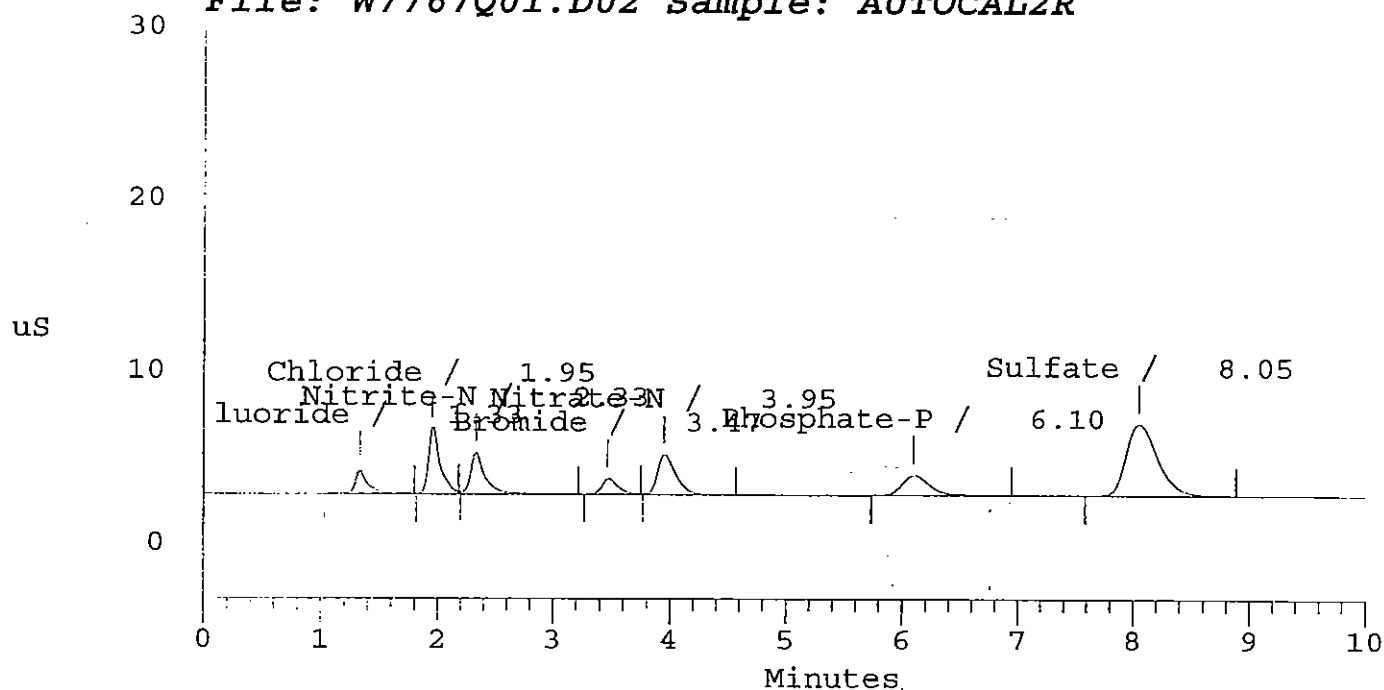
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1 3000 5Hz 0.00 10.00          1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	0.500	44629	373164	2	0.00
2	1.95	Chloride	2.000	126181	909455	2	0.00
3	2.33	Nitrite-N	0.750	79701	734006	2	0.85
4	3.47	Bromide	1.500	30100	298206	2	0.36
5	3.95	Nitrate-N	0.750	77129	849179	2	0.00
6	6.10	Phosphate-P	1.500	38579	642376	1	0.00
7	8.05	Sulfate	7.500	138579	2598757	1	0.00
Totals			14.500	534896	6405142		

File: W7767Q01.D02 Sample: AUTOCAL2R



```

=====
Sample Name: AUTOCAL3R                      Date: 03/21/2003 16:48:37
Data File  : C:\DX\DATA\E300-063\W7767Q01.D03
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 3          Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

```

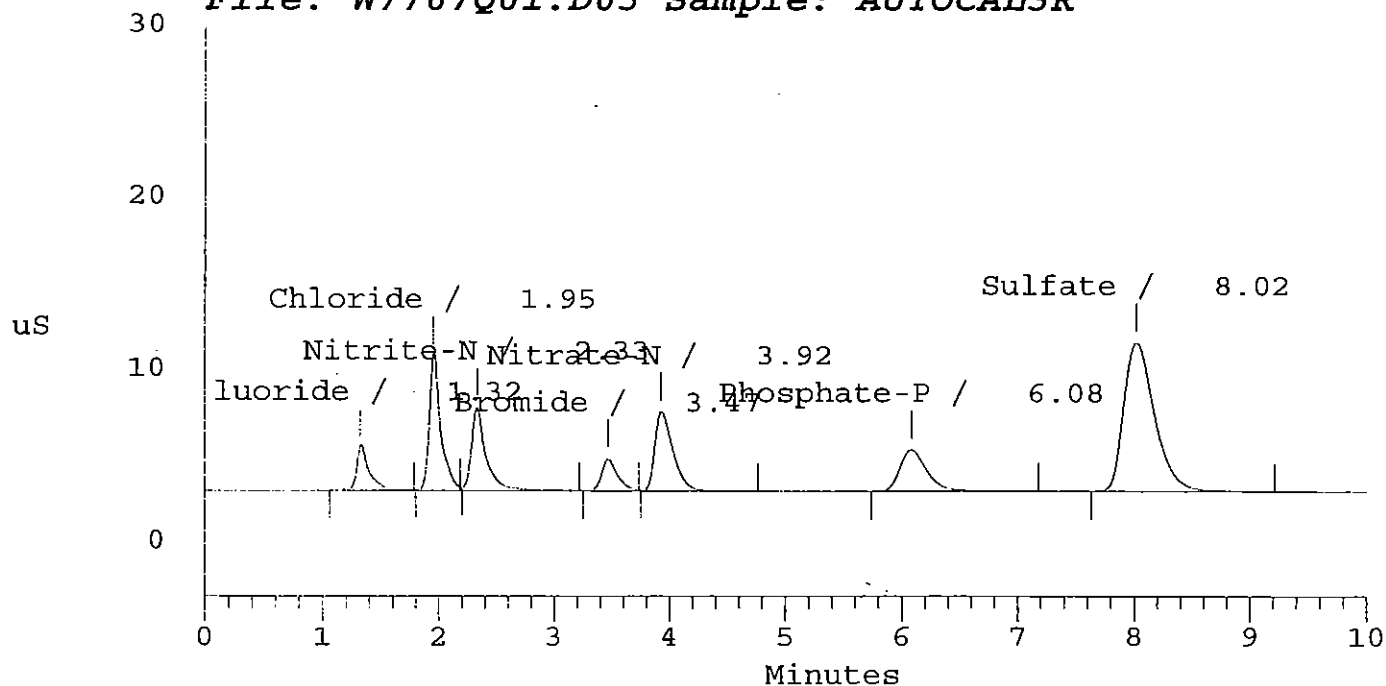
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00          1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	1.000	82595	707646	2	0.00
2	1.95	Chloride	4.000	261681	1856586	2	0.00
3	2.33	Nitrite-N	1.500	162005	1468106	2	0.00
4	3.47	Bromide	3.000	61776	591234	2	0.85
5	3.92	Nitrate-N	1.500	152776	1713421	2	0.00
6	6.08	Phosphate-P	3.000	79971	1301126	1	0.00
7	8.02	Sulfate	15.000	287851	5330209	1	0.00
Totals			29.000	1088657	12968327		

File: W7767Q01.D03 Sample: AUTOCAL3R



```

=====
Sample Name: AUTOCAL4R                      Date: 03/21/2003 17:01:21
Data File  : C:\DX\DATA\E300-063\W7767Q01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 4         Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

```

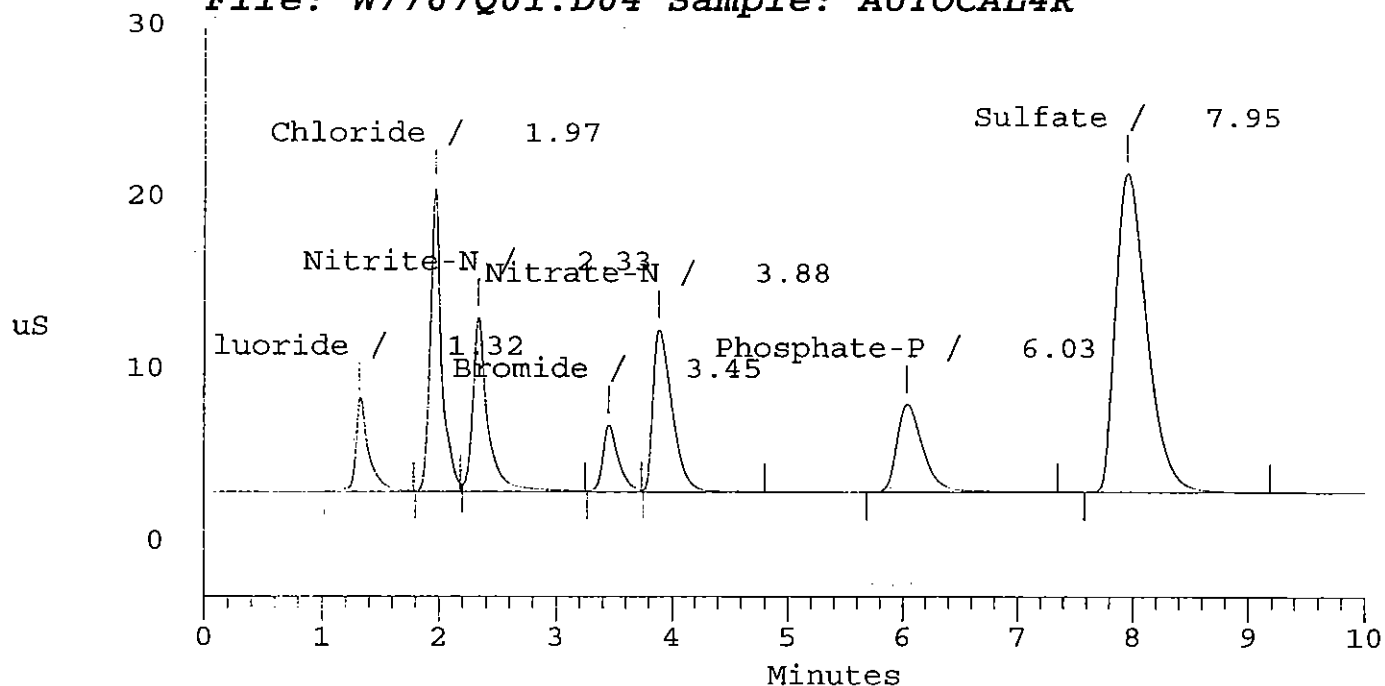
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1  3000  5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	2.000	173007	1435865	2	0.00
2	1.97	Chloride	8.000	585791	3987563	2	0.00
3	2.33	Nitrite-N	3.000	336616	3021523	2	-0.85
4	3.45	Bromide	6.000	128845	1219933	2	0.37
5	3.88	Nitrate-N	3.000	313707	3610927	2	0.00
6	6.03	Phosphate-P	6.000	168994	2756481	2	0.00
7	7.95	Sulfate	30.000	615917	11507107	2	0.00
Totals			58.000	2322876	27539399		

File: W7767Q01.D04 Sample: AUTOCAL4R



```

=====
Sample Name: AUTOCAL5R                      Date: 03/21/2003 17:14:05
Data File  : C:\DX\DATA\E300-063\W7767Q01.D05
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 5          Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

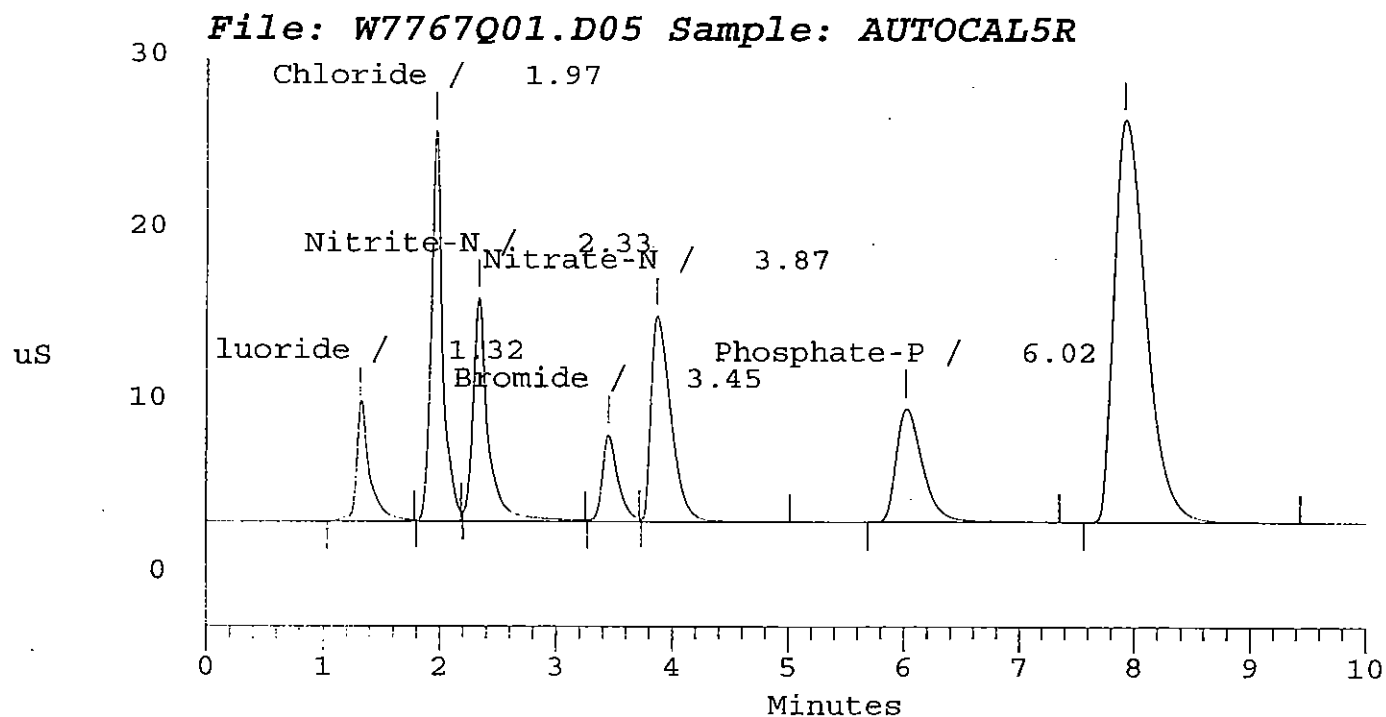
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1 3000 5Hz 0.00 10.00          1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	2.500	220914	1837162	2	0.00
2	1.97	Chloride	10.000	754321	5142155	2	0.00
3	2.33	Nitrite-N	3.750	429219	3856614	2	0.00
4	3.45	Bromide	7.500	166594	1559887	2	0.43
5	3.87	Nitrate-N	3.750	396441	4688990	2	0.00
6	6.02	Phosphate-P	7.500	217521	3546397	2	0.00
7	7.92	Sulfate	37.500	776426	14859049	2	0.00
Totals			72.500	2961435	35490255		



Data Reprocessed On 03/21/2003 17:39:26

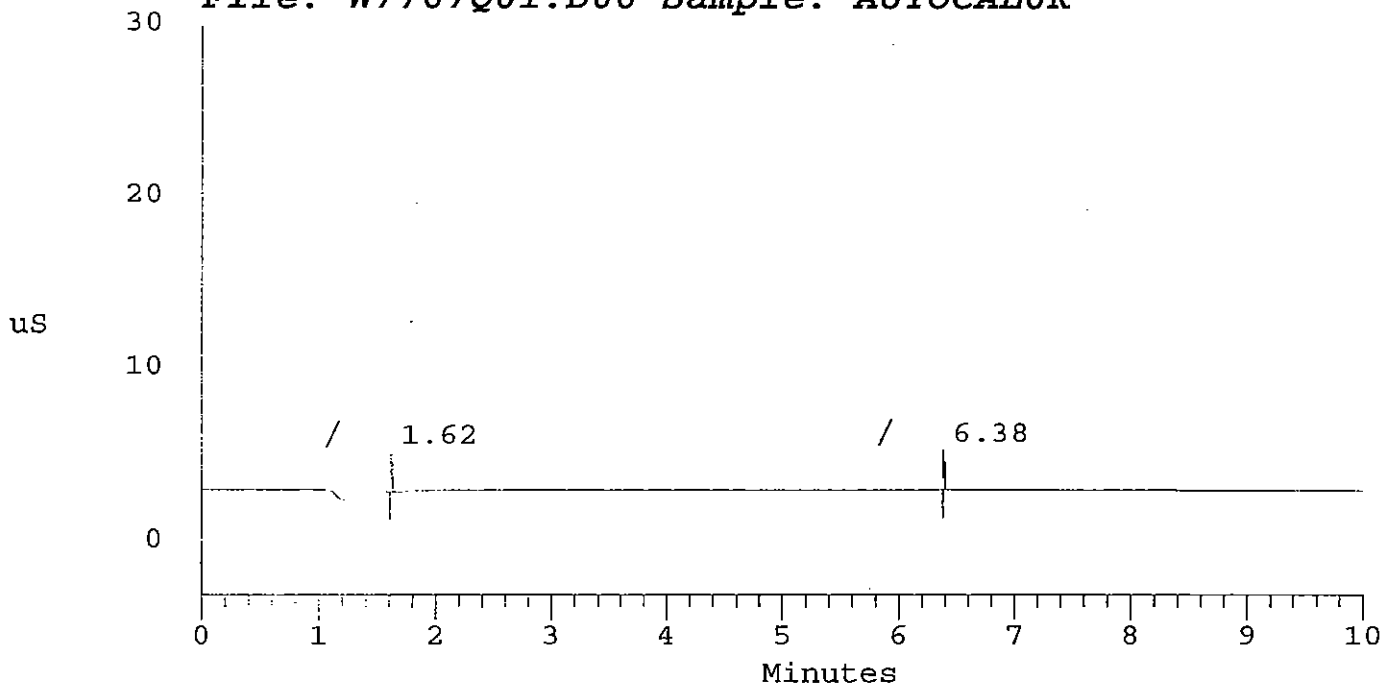
Sample Name: AUTOCAL6R Date: 03/21/2003 17:37:58
Data File : C:\DX\DATA\E300-063\W7767Q01.D06
Method : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 6 Detector: COND
Analyst : David Column: Dionex AS4A-SC

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area	Reject
External	1	1	3000	5Hz	0.00	10.00		1000

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
0	0.00	Phosphate-P	0.000	0	0	0	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
Totals			0.000	0	0		

File: W7767Q01.D06 Sample: AUTOCAL6R



After
3/21/03
V. L. Simon 3.2

```

=====
Sample Name: AUTOCAL6R                      Date: 03/21/2003 17:37:58
Data File  : C:\DX\DATA\E300-063\W7767Q01.D06
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 6          Detector: COND
Analyst    : David                          Column: Dionex AS4A-SC
=====

```

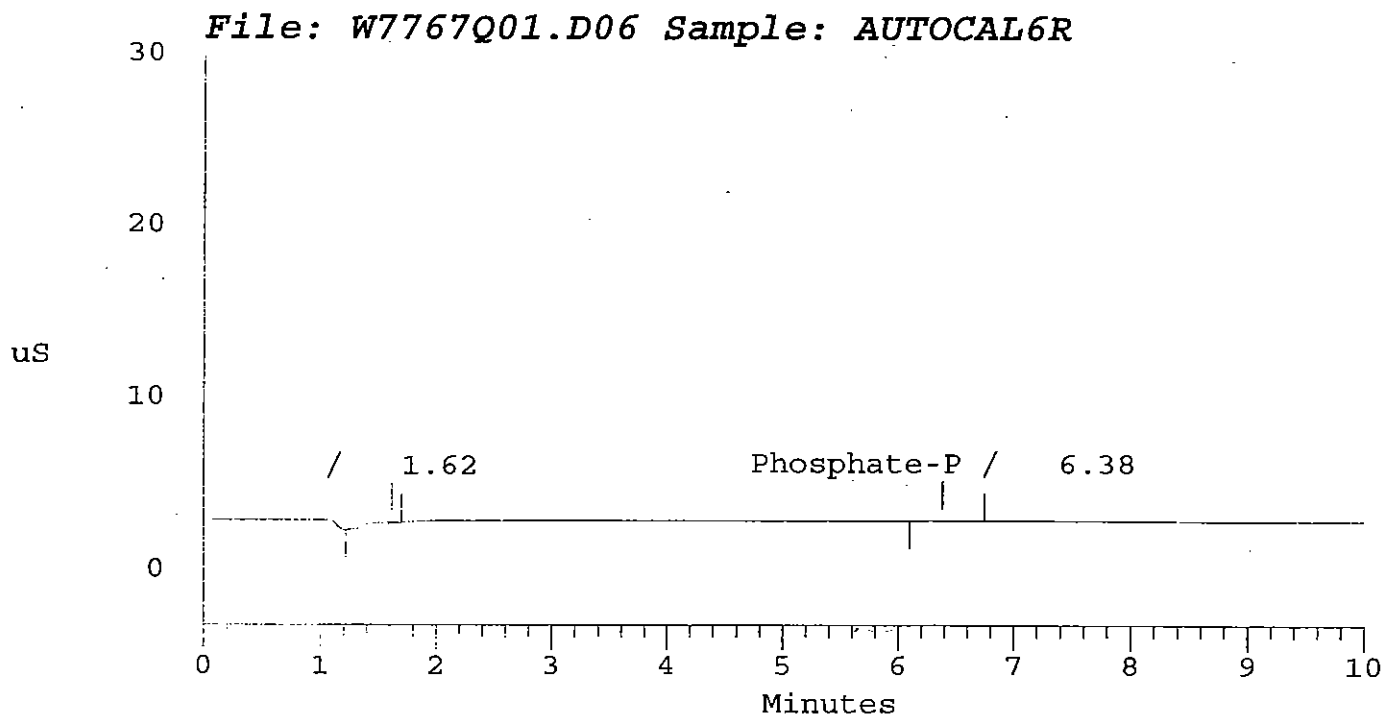
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1 3000 5Hz 0.00 10.00          1000

```

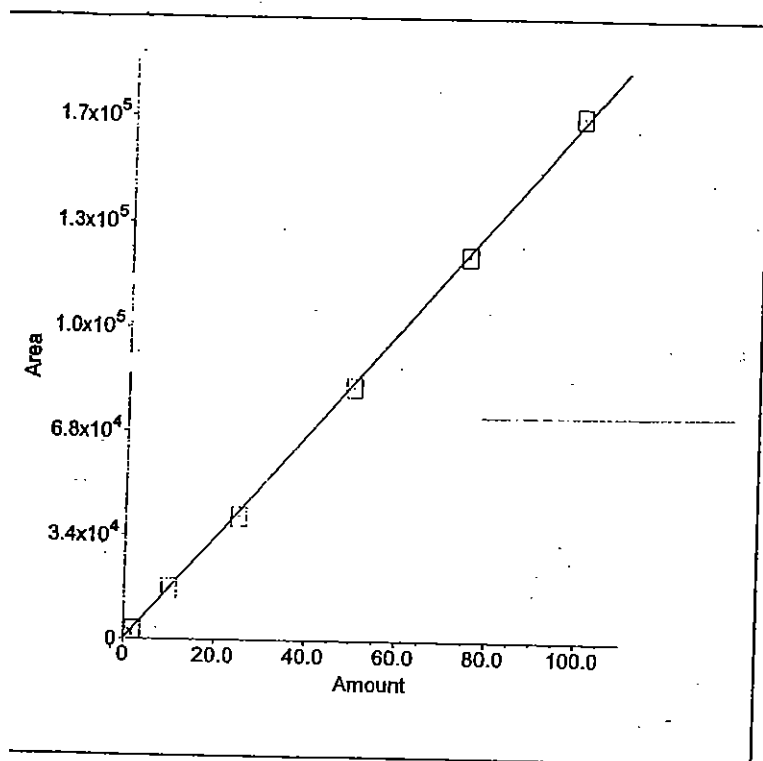
***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
2	6.38	Phosphate-P	0.000	582	11752	1	0.00
0	0.00	Sulfate	0.000	0	0	0	0.00
Totals			0.000	582	11752		



Before

Component: perchlorate
 Standard: External Fit Type: Linear
 Origin: Force Calibration: Area
 $r^2=0.999492$
 Amt=0.0005893*Resp+0



Calibration : 7 points , 0, 2, 10, 25, 50, 75, 100 ppb

Analyst C. W.
 Date 03/12/03
 Instrument IC-C

APCL Perchlorate Analysis Report

Sample Name : Cal blank

Data File Name : C:\data\E314-011\Mb_001.DXD

Method File Name : c:\peaknet\method\e314-011.met

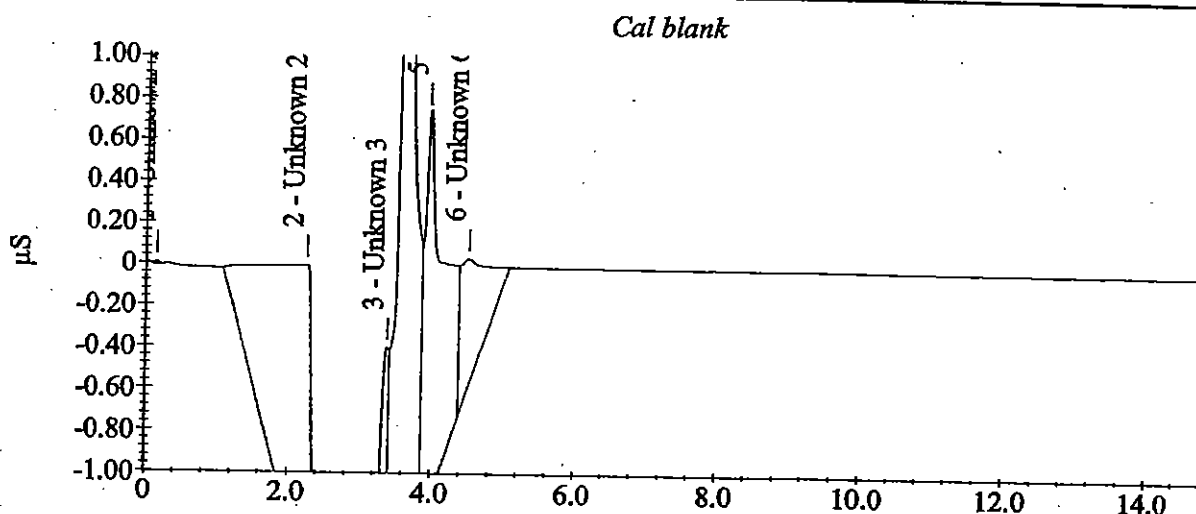
Date Time Collected : 03/12/2003 5:55:39 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



APCL Perchlorate Analysis Report

Sample Name : cal standard 2ppb W7827a

Data File Name : C:\DATA\E314-011\std-2pb_002.DXD

Method File Name : C:\PEAKNET\METHOD\314-011.met

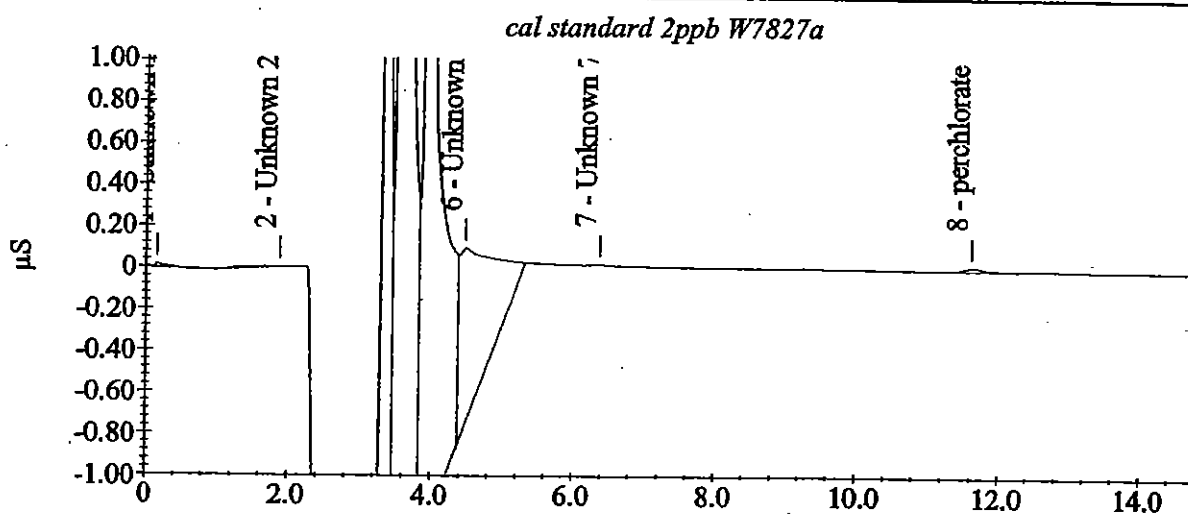
Date Time Collected : 03/12/2003 6:13:12 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
8	perchlorate	11.62	1.92	2910	164



APCL Perchlorate Analysis Report

Sample Name : cal standard 10ppb W7827c

Data File Name : C:\DATA\E314-011\std-10pb_004.DXD

Method File Name : C:\PEAKNET\METHOD\c314-011.met

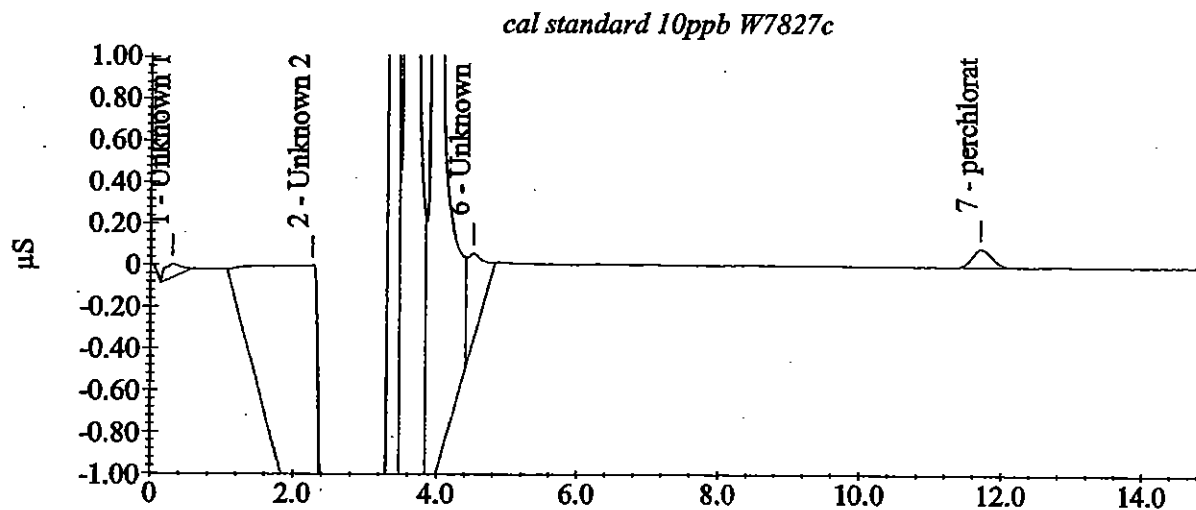
Date Time Collected : 03/12/2003 6:48:21 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
7	perchlorate	11.70	11.16	16917	879



APCL Perchlorate Analysis Report

Sample Name : cal standard 25ppb W7827d

Data File Name : C:\DATA\E314-011\std-25pb_005.DXD

Method File Name : C:\PEAKNET\METHOD\314-011.met

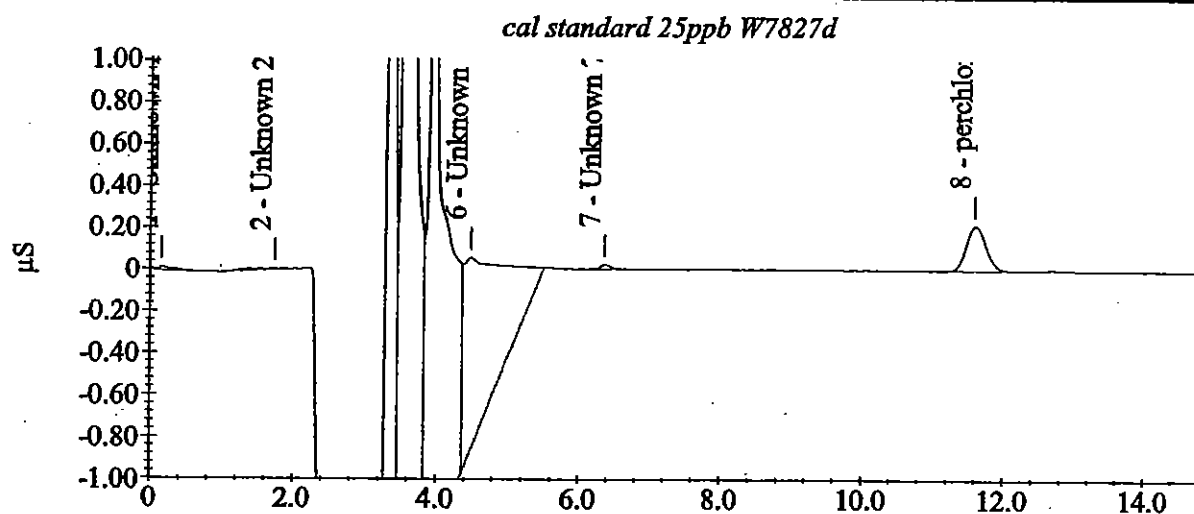
Date Time Collected : 03/12/2003 7:05:54 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
8	perchlorate	11.60	26.84	40702	2125



APCL Perchlorate Analysis Report

Sample Name : cal standard 50ppb W7827e

Data File Name : C:\DATA\E314-011\std-50pb_006.DXD

Method File Name : C:\PEAKNET\METHOD\314-011.met

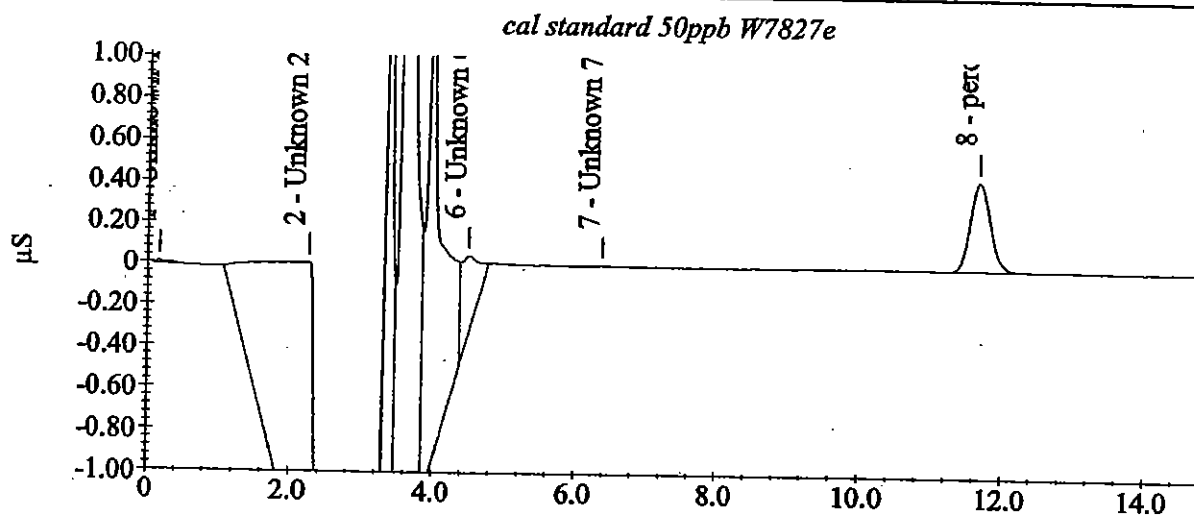
Date Time Collected : 03/12/2003 7:23:30 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
8	perchlorate	11.67	54.89	83240	4320



APCL Perchlorate Analysis Report

Sample Name : cal standard 75ppb W7827f

Data File Name : C:\DATA\E314-011\std-75pb_007.DXD

Method File Name : C:\PEAKNET\METHOD\c314-011.met

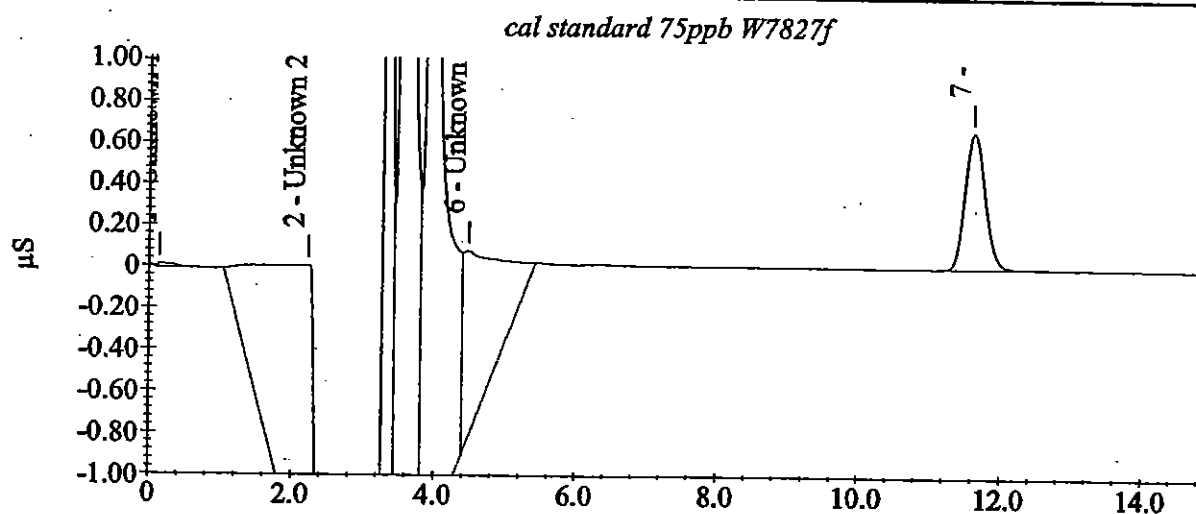
Date Time Collected : 03/12/2003 7:41:05 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
7	perchlorate	11.62	83.23	126224	6553



APCL Perchlorate Analysis Report

Sample Name : cal standard 100ppb W7827g

Data File Name : C:\DATA\E314-011\std-100pb_008.DXD

Method File Name : C:\PEAKNET\METHOD\314-011.met

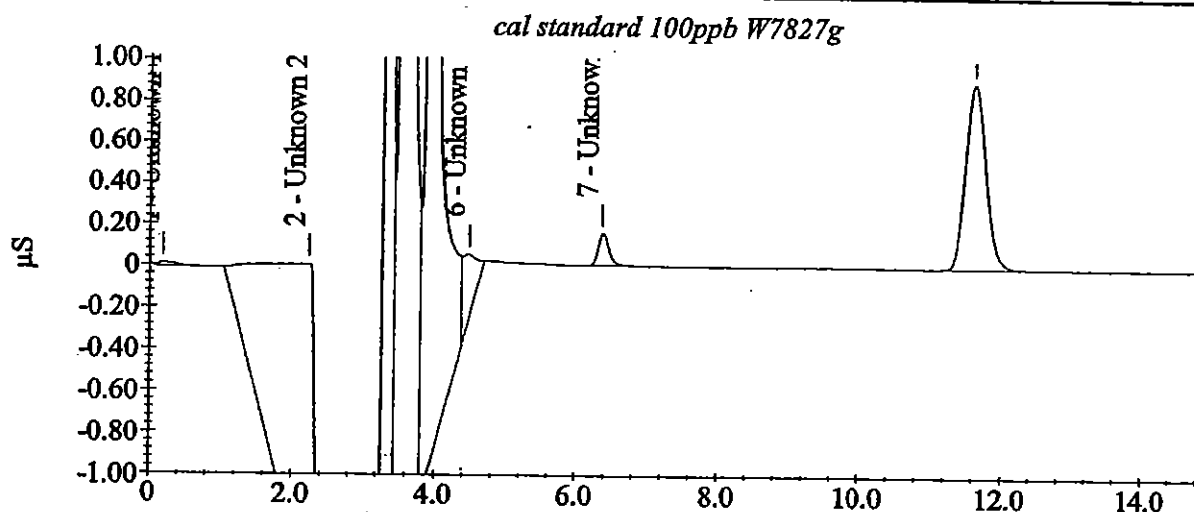
Date Time Collected : 03/12/2003 7:58:39 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
8	perchlorate	11.62	113.21	171686	89211



APCL Perchlorate Analysis Report

Sample Name : ICV 50 ppb w7828a

Data File Name : C:\DATA\E314-011\icv-50pb_009.DXD

Method File Name : C:\PEAKNET\METHOD\E314-011.met

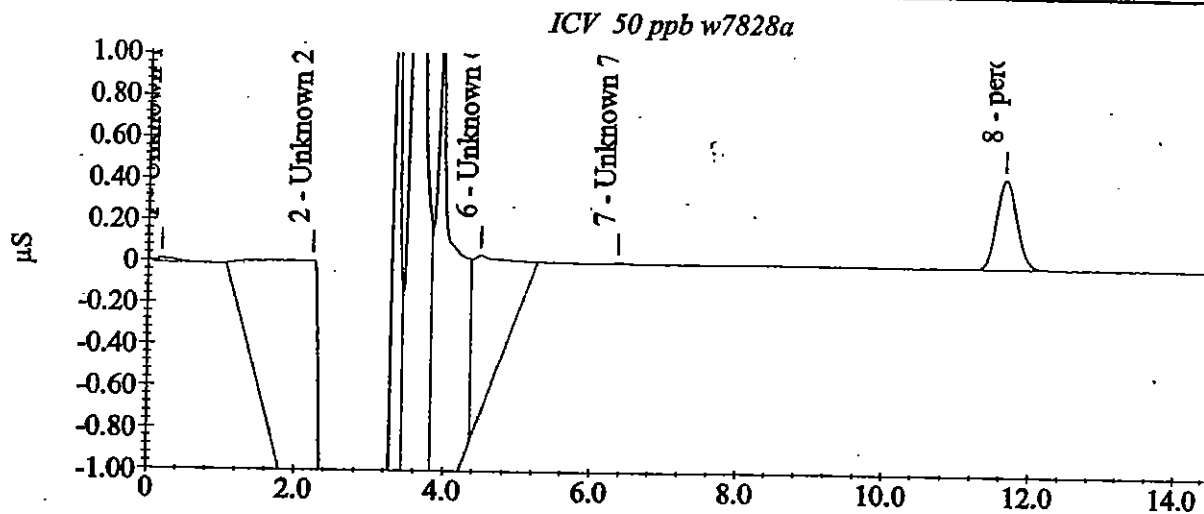
Date Time Collected : 03/12/2003 8:16:15 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
8	perchlorate	11.65	49.49	83990	4321



APCL Perchlorate Analysis Report

Sample Name : icb

Data File Name : C:\DATA\E314-011\ICB_010.DXD

Method File Name : c:\PeakNet\method\E314-011.met

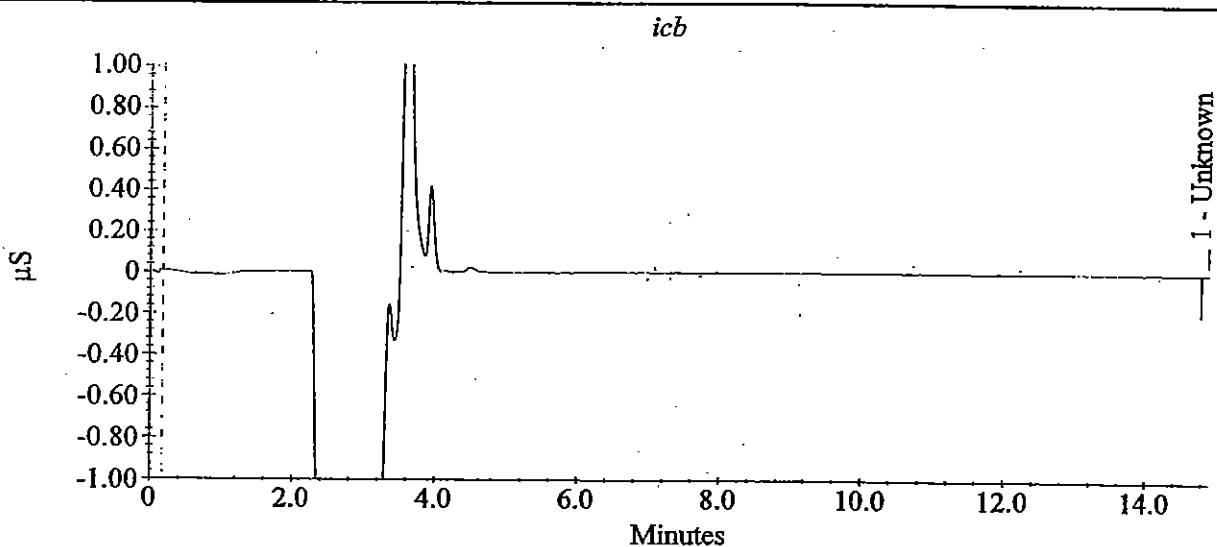
Date Time Collected : 03/12/2003 8:33:51 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



FORM-7
Applied P & Ch Laboratory
CCV Recovery for Wet Analysis

Client Name: GEOFON, Inc.
Case No:
Project ID: JPL

Contract No.:
SAS No.:
Project No.: 04-4428.10

Lab Code: APCL
Service ID: 32843

#	Component Name	Method	Batch No.	Unit	Expected	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Chloride Cl^-	300.0	03W2520	mg/L	4.0	3.97	99	-1	✓	90-110	04/24/2003
	NITRATE as N-NO_3^- , BY	300.0	03W2520	mg/L	1.5	1.52	102	2	✓	90-110	04/24/2003
	SULFATE SO_4^{--} , BY I	300.0	03W2520	mg/L	15	15.0	100	0	✓	90-110	04/24/2003
	Chloride Cl^-	300.0	03W2520	mg/L	4.0	3.96	99	-1	✓	90-110	04/24/2003
	NITRATE as N-NO_3^- , BY	300.0	03W2520	mg/L	1.5	1.50	100	0	✓	90-110	04/24/2003
	SULFATE SO_4^{--} , BY I	300.0	03W2520	mg/L	15	15.0	100	0	✓	90-110	04/24/2003
	Chloride Cl^-	300.0	03W2520	mg/L	4.0	3.98	100	0	✓	90-110	04/24/2003
	NITRATE as N-NO_3^- , BY	300.0	03W2520	mg/L	1.5	1.52	101	1	✓	90-110	04/24/2003
	SULFATE SO_4^{--} , BY I	300.0	03W2520	mg/L	15	15.2	101	1	✓	90-110	04/24/2003
2	Perchlorate	314.0	03W2531	$\mu\text{g/L}$	50	50.1	100	0	✓	90-110	04/24/2003
	Perchlorate	314.0	03W2531	$\mu\text{g/L}$	50	51.0	102	2	✓	90-110	04/24/2003
	Perchlorate	314.0	03W2531	$\mu\text{g/L}$	50	50.6	101	1	✓	90-110	04/24/2003
3	Chromium (VI)	7196	03W2517	mg/L	0.25	0.242	97	-3	✓	90-110	04/23/2003
	Chromium (VI)	7196	03W2517	mg/L	0.25	0.255	102	2	✓	90-110	04/23/2003

```

=====
Sample Name:  ##03W2520, W CCVW7767-100X      Date: 04/24/2003 08:57:11
Data File   :  C:\DX\DATA\03W2520\W2520Q01.D01
Method      :  C:\DX\METHOD\E300-063.MET
ACI Address:  1  System: 1  Inject#: 1
Analyst     :  David      Column: Dionex AS4A-SC
Detector: COND
=====

```

```

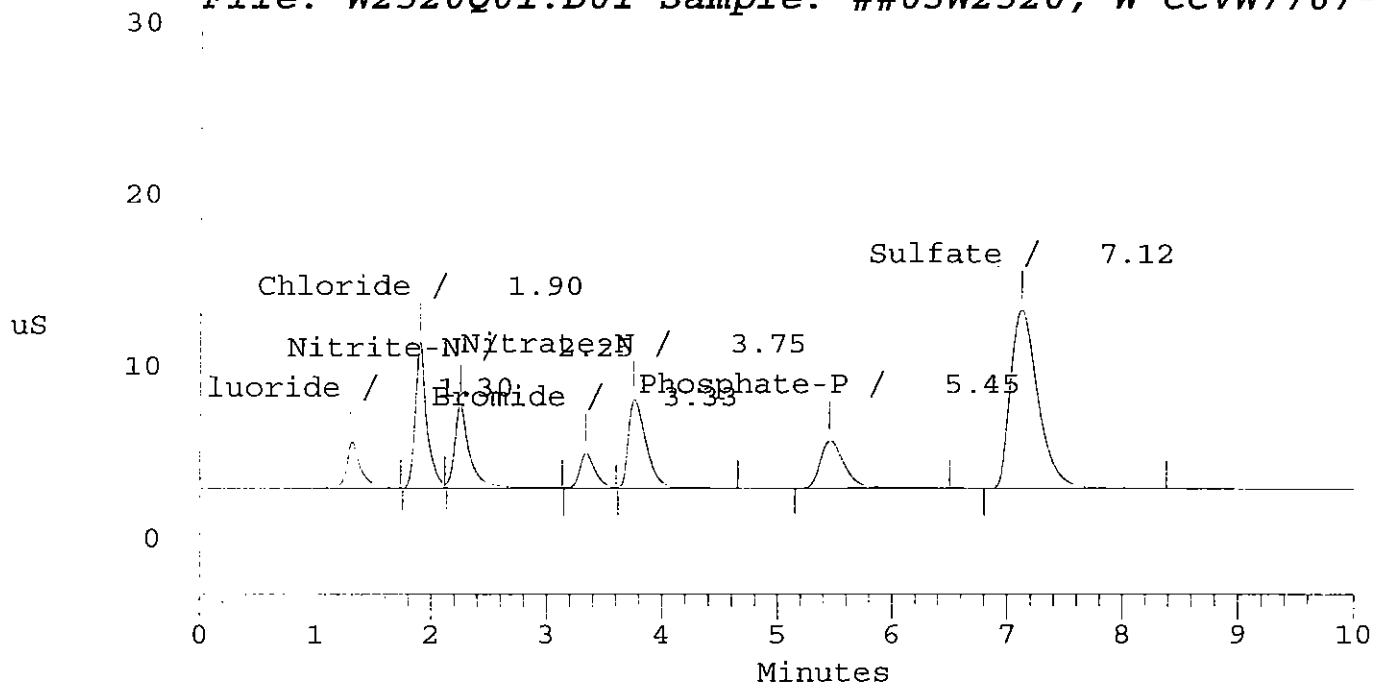
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    3000   5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.30	Fluoride	1.051	84773	764287	2	0.00
2	1.90	Chloride	3.967	282793	1965931	2	0.00
3	2.25	Nitrite-N	1.492	162676	1504082	2	0.00
4	3.33	Bromide	3.096	67669	631156	2	0.37
5	3.75	Nitrate-N	1.523	170690	1838204	2	0.00
6	5.45	Phosphate-P	2.990	92306	1367820	1	0.00
7	7.12	Sulfate	14.989	345638	5708532	1	0.00
Totals			29.109	1206545	13780011		

File: W2520Q01.D01 Sample: ##03W2520, W CCVW7767-100X



```

=====
Sample Name: CCV2W7767-100X      Date: 04/24/2003 11:43:08
Data File  : C:\DX\DATA\03W2520\W2520Q01.D12
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 12      Detector: COND
Analyst    : David                Column: Dionex AS4A-SC
=====

```

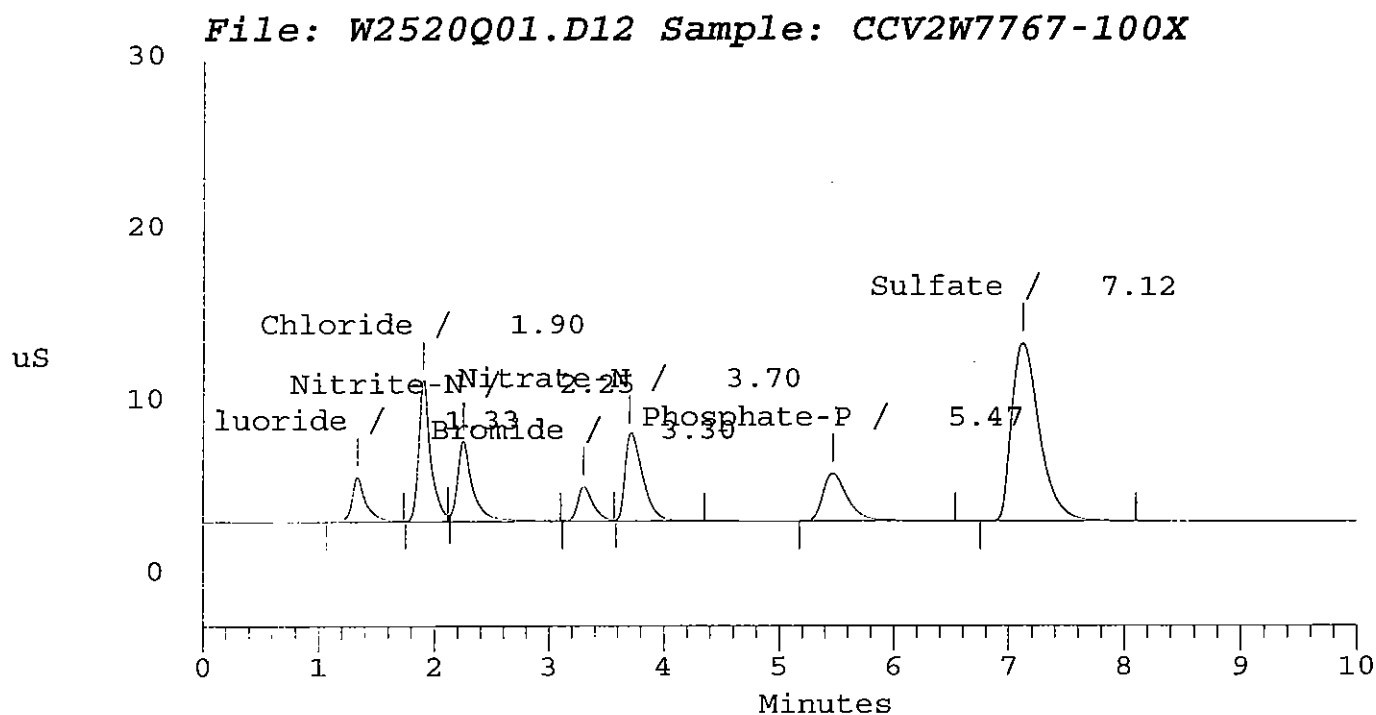
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1          1    3000   5Hz   0.00 10.00      1000
-----

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	1.034	86484	751746	2	0.00
2	1.90	Chloride	3.961	271907	1962887	2	0.00
3	2.25	Nitrite-N	1.463	155968	1474300	2	0.00
4	3.30	Bromide	3.066	67275	624905	2	0.71
5	3.70	Nitrate-N	1.501	166230	1810611	2	0.00
6	5.47	Phosphate-P	3.070	92345	1405798	2	0.00
7	7.12	Sulfate	15.013	344549	5717901	2	0.00
Totals			29.108	1184758	13748149		



```

=====
Sample Name: CCV3W7767-100X          Date: 04/24/2003 15:23:14
Data File  : C:\DX\DATA\03W2520\W2520Q01.D22
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 22      Detector: COND
Analyst    : David                   Column: Dionex AS4A-SC
=====

```

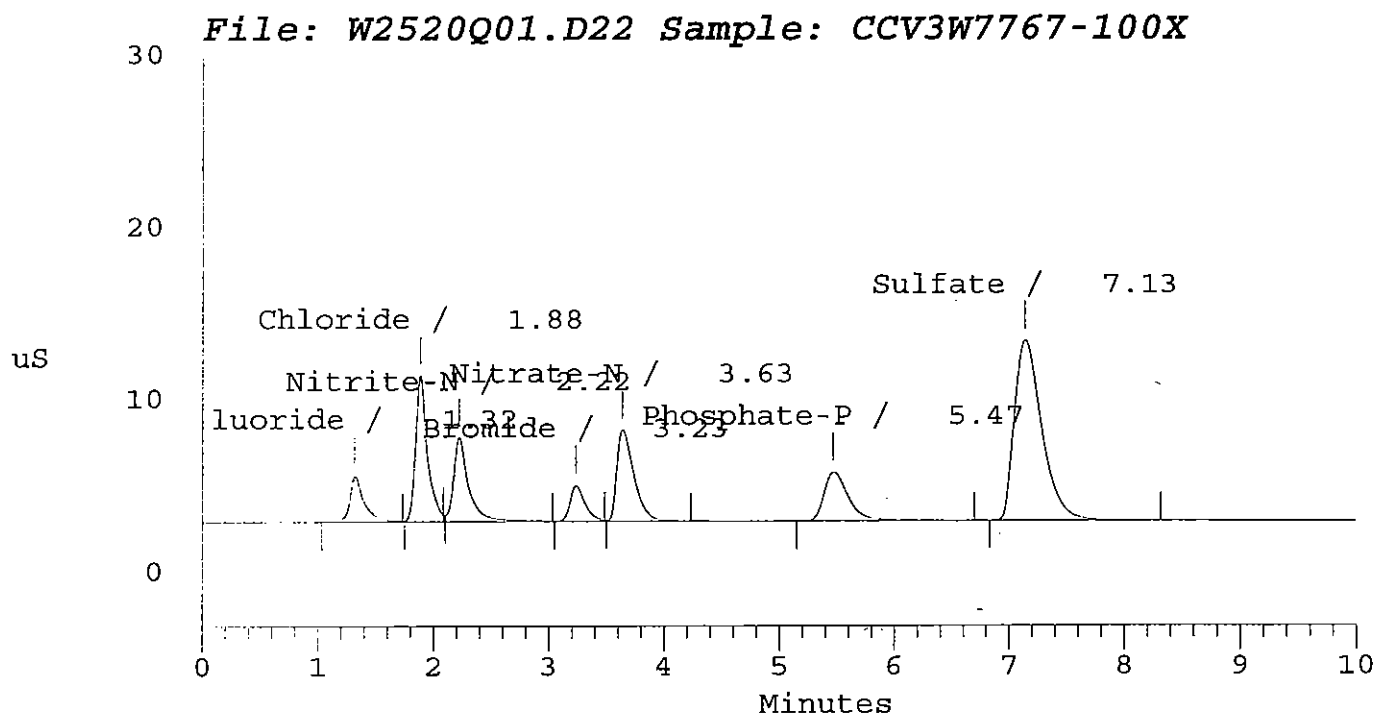
```

Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           1    3000   5Hz   0.00 10.00      1000

```

***** Component Report: All Components *****

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.32	Fluoride	1.046	86873	761106	2	0.00
2	1.88	Chloride	3.983	280578	1974042	2	0.00
3	2.22	Nitrite-N	1.482	160081	1493173	2	-0.61
4	3.23	Bromide	3.080	69206	627754	2	0.48
5	3.63	Nitrate-N	1.517	175059	1830830	2	0.00
6	5.47	Phosphate-P	3.119	93525	1428832	2	0.00
7	7.13	Sulfate	15.160	347175	5775937	2	0.00
Totals			29.387	1212497	13891673		



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e

Data File Name : C:\DATA\03W2531K\W2531K Q01_002.DXD

Method File Name : c:\peaknet\method\c314-011.met

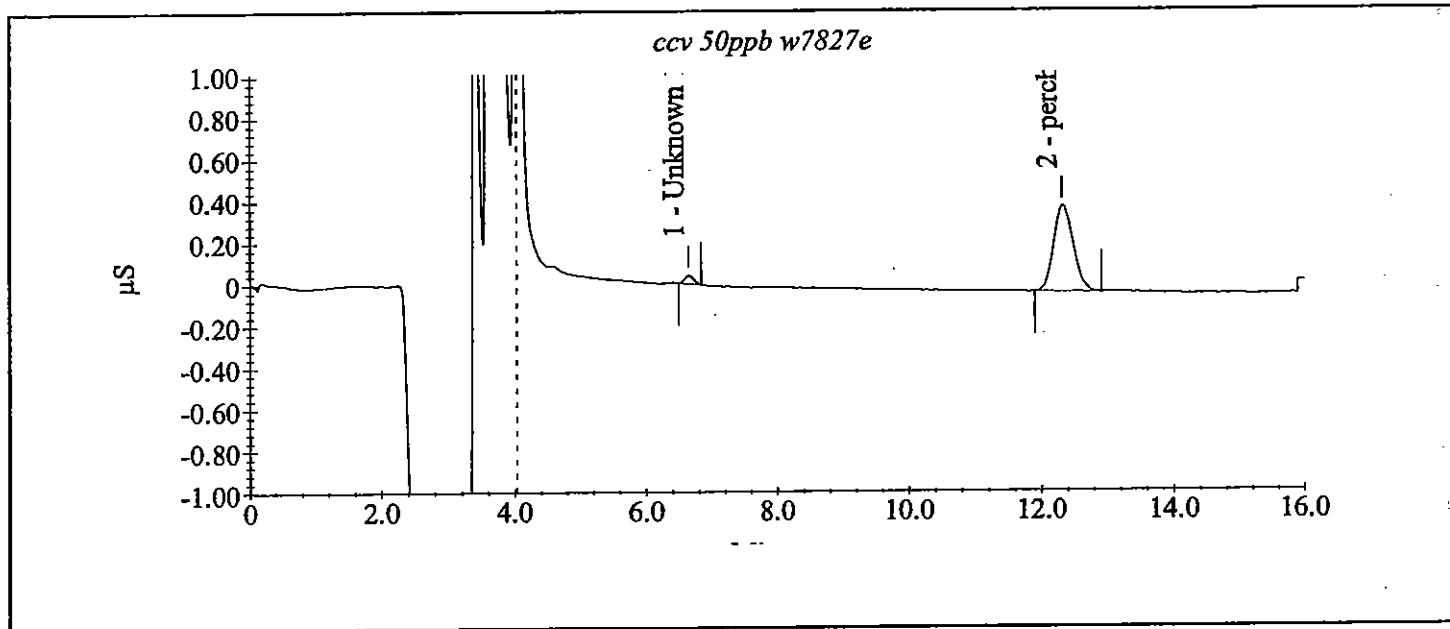
Date Time Collected : 04/24/2003 11:37:07 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
2	perchlorate	12.32	50.07	84975.50	4065.31



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e

Data File Name : C:\DATA\03W2531K\W2531K Q02_013.DXD

Method File Name : c:\peaknet\method\314-011.met

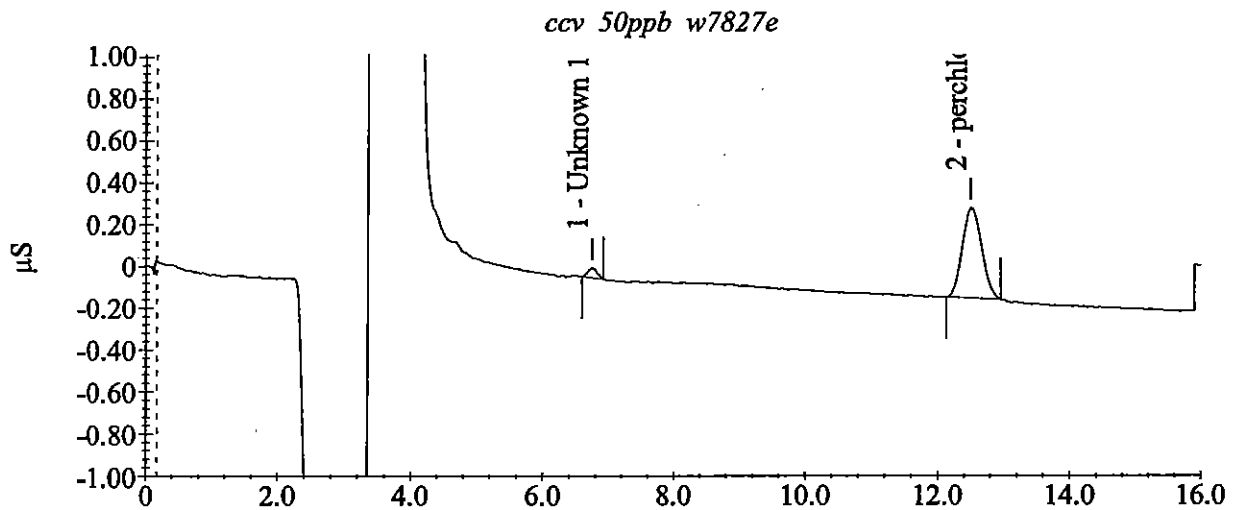
Date Time Collected : 04/24/2003 3:53:15 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
2	perchlorate	12.50	50.97	86505.35	4265.63



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e

Data File Name : C:\DATA\03W2531K\W2531K Q03_024.DXD

Method File Name : c:\peaknet\method\314-011.met

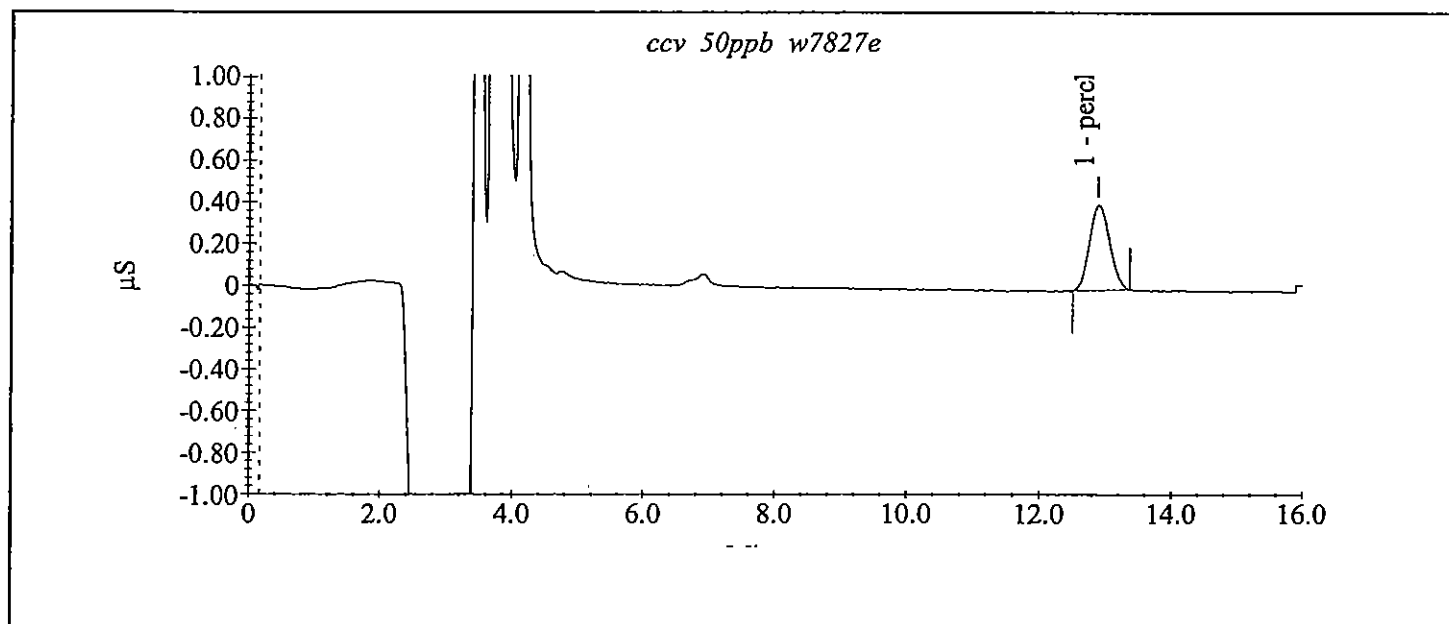
Date Time Collected : 04/24/2003 7:18:06 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.88	50.61	85888.70	4028.93



APCL Perchlorate Analysis Report

Sample Name : ##03w2531kw ipc 25ppb w7759

Data File Name : C:\DATA\03W2531K\W2531K IPC 25PPB_001.DXD

Method File Name : c:\peaknet\method\c314-011.met

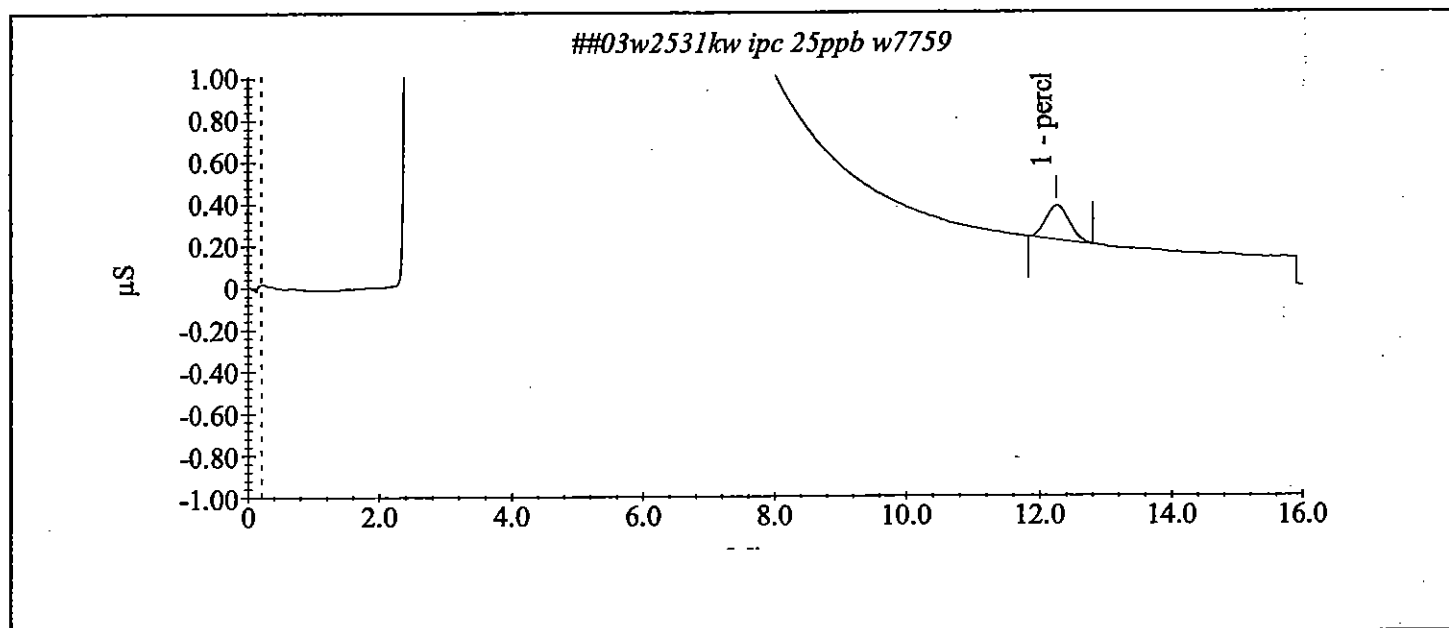
Date Time Collected : 04/24/2003 11:18:40 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.25	23.67	40165.10	1608.14



APCL Perchlorate Analysis Report

Sample Name : ICCS 4ppb w7827b

Data File Name : C:\DATA\03W2531K\W2531K ICCS 4PPB_006.DXD

Method File Name : c:\peaknet\method\c314-011.met

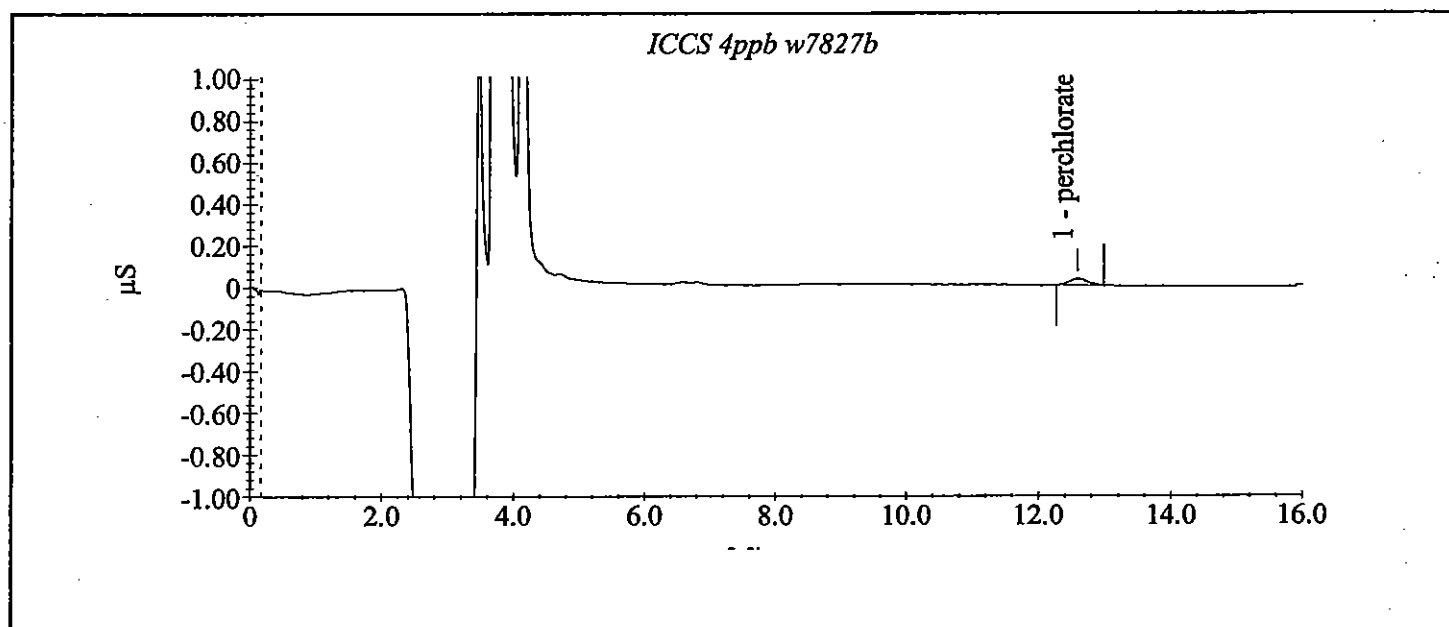
Date Time Collected : 04/24/2003 12:53:01 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.58	3.56	6033.30	308.44



APCL Perchlorate Analysis Report

Sample Name : ccb

Data File Name : C:\DATA\03W2531K\W2531K CCB01_003.DXD

Method File Name : c:\peaknet\method\c314-011.met

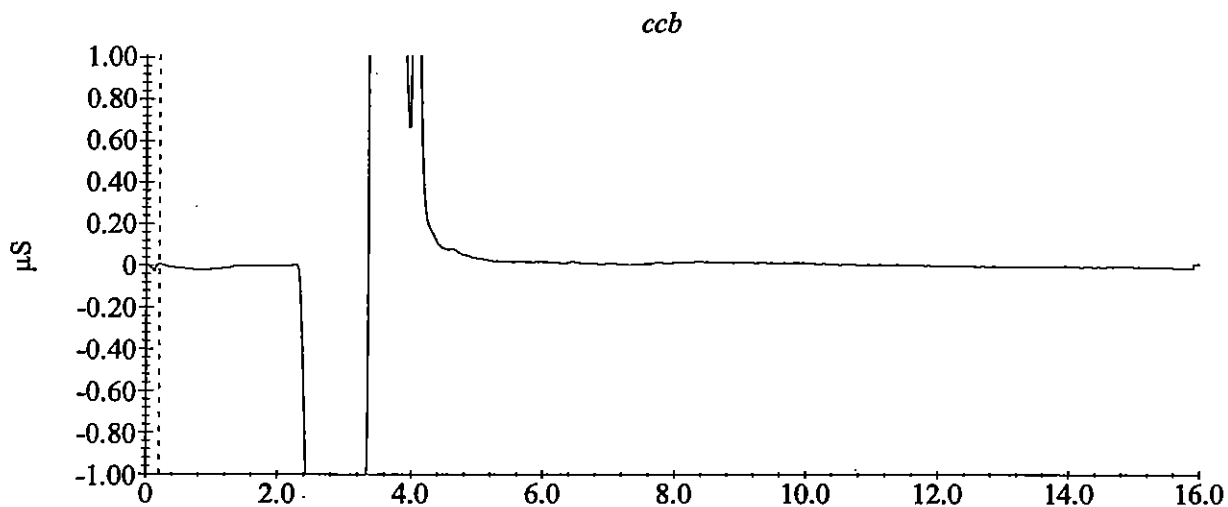
Date Time Collected : 04/24/2003 11:55:53 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



APCL Perchlorate Analysis Report

Sample Name : ccb

Data File Name : C:\DATA\03W2531K\W2531K K02_014.DXD

Method File Name : c:\peaknet\method\c314-011.met

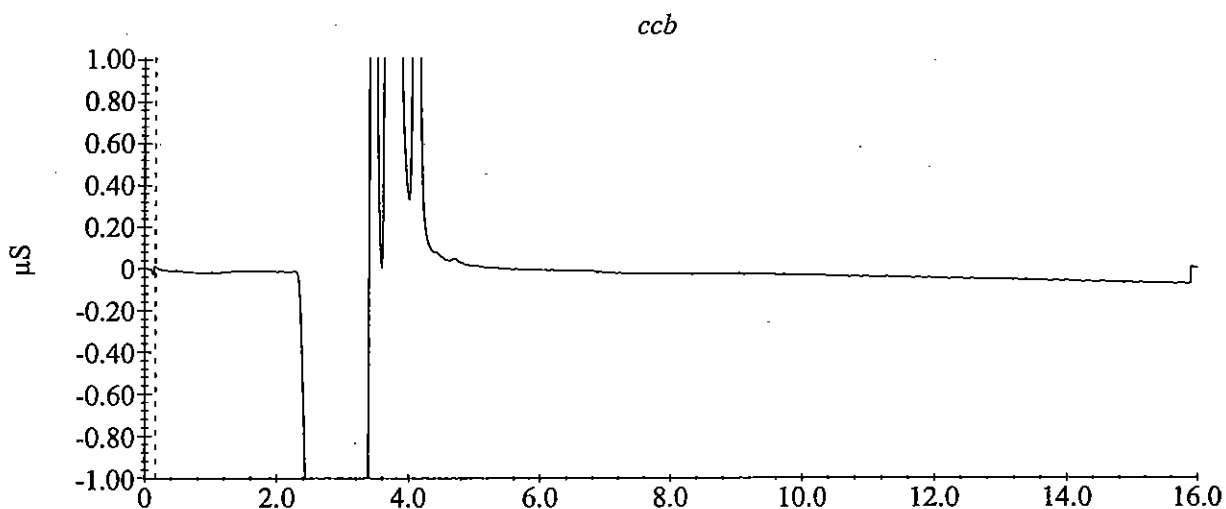
Date Time Collected : 04/24/2003 4:12:05 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



APCL Perchlorate Analysis Report

Sample Name : CCB

Data File Name : C:\DATA\03W2531K\W2531K K03_025.DXD

Method File Name : c:\peaknet\method\c314-011.met

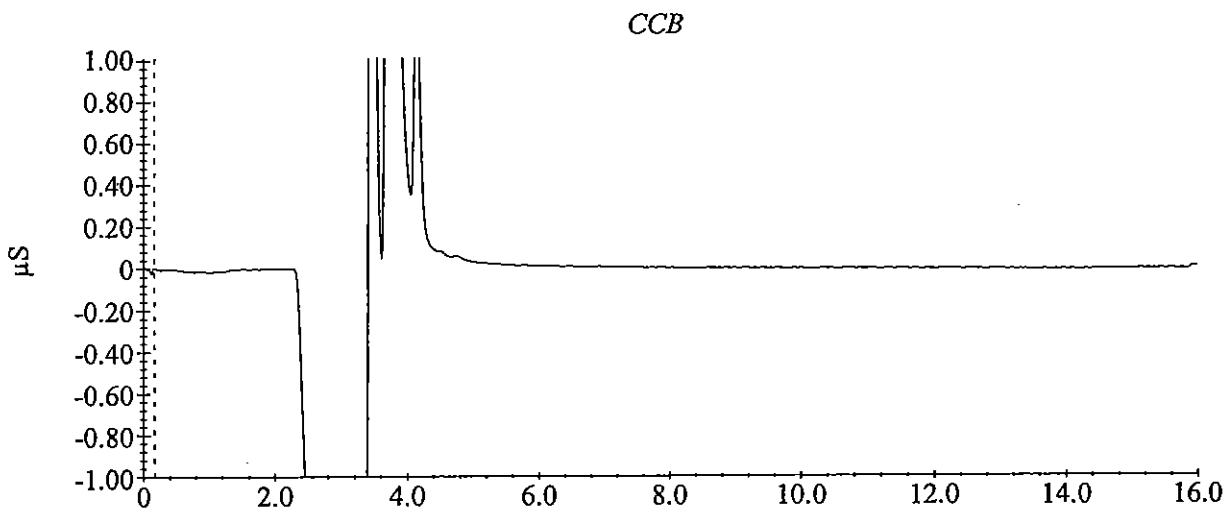
Date Time Collected : 04/24/2003 7:37:00 PM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
--------	----------------	----------------	--------------	-----------	-------------



Applied P & Ch Laboratory
 760 Magnolia Ave. Chino CA 91710
 Tel: (909) 590-1828 Fax: (909) 590-1498

Conductance (120.1) Worksheet

063

Batch # for reference Matrix: W
 Cell Constant _____ Calibration STD: 0.0100M KCl

Test Date: 4/22-24/03 Analyst: W.W

SOP: G-45

#	Sample ID	Treatment $V/X=f_0$	Dilution $V_f/V_i=f_1$	Temperature $T, ^\circ\text{C}$	$C_{25}=C_T f_1/[1-0.0191(25-T)]$ $C_T, \mu\text{mhos/cm}$ $C_{25}, \mu\text{mhos/cm}$		$\rho=1/C_{25}$ $\text{M}\Omega\text{ cm}$	Note & Anomaly
Cal.	Lot #:	-	-	25°C				$C_{25}=1,413\pm 20$
MB		/ =	/ =					for check
1	2829-1	/ =	/ =			233		
2	1-2	/ =	/ =			689		
3	-3	/ =	/ =			1140		
4	-4	/ =	/ =			750		
5	✓ -5	/ =	/ =			1.65		
6	2842-3 <u>5°C 4/23/03</u>	/ =	/ =					
7	1-7	/ =	/ =			2850		
8	-8	/ =	/ =			1350		
9	-9	/ =	/ =			8220		
10	✓ -10	/ =	/ =			4510		
11	2843-1	/ =	/ =			1080		
12	1-2	/ =	/ =			2.73		
13	-3	/ =	/ =			1830		
14	-4	/ =	/ =			1180		
15	-5	/ =	/ =			1490		
16	-6	/ =	/ =			808		
17	✓ -7	/ =	/ =			345		
18		/ =	/ =					
19		/ =	/ =					
20		/ =	/ =	✓				
Dup.		/ =	/ =					✓

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

Tel: (909) 590-1828 Fax: (909) 590-1498

Batch # 02/25/03 Matrix WMethod: 160.1

Balance No. _____

Date: 4/24/03Analyst: BW

EPA 160.1 TDS - Total Dissolved (filterable) Solids - Dry for 1hr. or more at 180 °C

EPA 160.2 TSS - Total Suspended (nonfilterable) Solids - Dry for 1hr. or more at 103-105 °C

EPA 160.3 TS - Total Solids - Dry for 1hr. or more at 103-105 °C

Other method (specify): _____

Result = $10^6 \times \Delta W \times f_1 / V$

SOP: G-81

#	Analysis Type	Sample ID (STD Lot #)	Treatment Ratio $V_1/X=f_1$	Volume V, mL	W ₁ g	W ₂ 1st, g	W ₂ 2nd, g	$\Delta W = W_2 - W_1$, g	Results (ppm)	Note
1	Blank		/ =	100	111.3126	111.3127	111.3127	0.001	1	D
2	LCS		/ =		109.2249	109.2671	109.2670		421	B
3	Sample-1	2823-1	/ =		98.0938	98.1664	98.1664		726	X1
4	MS on S-1	-1	/ =		99.5263	99.6404	99.6404		114	L
5	MSD on S-1	-1	/ =		98.3176	98.4290	98.4290		1114	C12
6	Sample-2	2843-1	/ =		114.7516	114.8184	114.8185		669	XX
7	Sample-3	-2	/ =		105.3122	105.3120	115.3118		0	12
8	Sample-4	-3	/ =		114.3072	114.3799	114.3803		731	H
9	Sample-5	-4	/ =		114.1425	114.2165	114.2165		740	C3
10	Sample-6	-5	/ =		112.9003	112.9616	112.9616		613	K
11	Sample-7	-6	/ =		105.8903	105.9303	105.9303		300	19
12	Sample-8	-7	/ =		112.3033	112.3205	112.3207		174	K
13	Sample-9	2852-1	/ =		117.6099	117.6955	117.6955		856	X5
14	Sample-10	2	/ =		108.5439	108.6680	108.6679		1240	1P
15	LCSD		/ =		111.4493	111.5331	111.5331		418	
16	Sample-11	3	/ =		116.1388	117.0493	117.0493		1105	7
17	Sample-12	4	/ =		116.9505	117.0465	117.0466		961	W
18	Sample-13	5	/ =		115.1104	115.2180	115.2181		1077	GT
19	Sample-14	6	/ =		115.8730	116.0576	116.0576		1842	OK
20	Sample-15	2862-2	/ =		116.6494	116.6861	116.6862		368	Z5
21	Sample-16	2867-1	/ =		116.5708	116.5709	116.5710		2	101
22	Sample-17	2	/ =		115.3476	115.3909	115.3909		423	J
23	Sample-18	3	/ =		113.0649	113.2624	113.2624		1985	PR
24	Sample-19	4	/ =		103.3061	103.4983	103.4983		1922	L
25	Sample-20	5	/ =		103.5332	103.7228	103.7230		1898	Z6
26	Mtx Dup.		/ =							

Type	STD Lot #	$C_{STD}(\mu\text{g/mL}) \times V_{STD}(\text{mL}) / X(\text{g or mL}) = T$	Spike Rec.	Ctl Limit (W/S)	PQL/MDL (in ppm)
MS	W-7618	x / = 400 ppm	%	85-115 %/80-120 %	PQL(w) 10
MSD	W- ✓	x / = ppm	%		PQL(s) 50
LCS	W-7619	x / = ppm	%	90-110 %/85-115 %	MDL(w) 4
LCSD	W- ✓	x / = ppm	%		MDL(s) 20

APCL form 5-127, March 7, 1995. Ver. 3.0

No pencil. Use blue pen for record. Use red pen for correction.

FILE: [CUST.DOC.WET]TDS.TEX ROOT-FILE: TDS.ROOT.TEX CONTROL-FILE: TDS.000 1-Page file: TDS1.TEX

Control limits are subjected to change. The updated values are given in the latest version of APCL Technical Handbook Vol. 2

pH (150.1/9045B) Worksheet

Temperature compensation must be performed by the instrument automatically.

Analyst De

SOP: G-44

Batch # <u>03W2509</u> Analysis Date: <u>4,23,03</u>				Batch # <u>03W2518</u> Analysis Date: <u>4,23,03</u>			
Starting Time: <u>09:30</u> Ending Time: _____				Starting Time: <u>15:52</u> Ending Time: _____			
Matrix ☐ Aqueous ☒ Soil				Matrix ☒ Aqueous ☐ Soil			
Standard	4.00	7.00	10.00	Standard	4.00	7.00	10.00
Lot #		<u>2120</u>	<u>030619-24</u>	Lot #		<u>2120</u>	<u>030619-24</u>
Temperature °C		<u>24.2</u>	<u>24.2</u>	Temperature °C		<u>24.5</u>	<u>24.0</u>
pH Reading		<u>7.03</u>	<u>10.03</u>	pH Reading		<u>7.01</u>	<u>10.02</u>
T-corrected pH		<u>7.00</u>	<u>10.01</u>	T-corrected pH		<u>7.00</u>	<u>10.01</u>
Control Limit	±0.05 pH unit			Control Limit	±0.05 pH unit		

#	Sample ID	Pre-treat	pH	Note	#	Sample ID	Pre-treat	pH	Note
MB	<u>08717HA</u>		<u>6.85</u>	<u>1:1</u>	MB	<u>T1115</u>		<u>6.86</u>	
1	<u>2820-1</u>		<u>8.78</u>		1	<u>2843-1</u>		<u>7.63</u>	
2	<u>↓ -2</u>		<u>8.19</u>		2	<u>-2</u>		<u>7.00</u>	
3	<u>2805-7</u>		<u>8.72</u>		3	<u>-3</u>		<u>6.77</u>	
4	<u>-20</u>		<u>9.25</u>		4	<u>-4</u>		<u>7.18</u>	
5	<u>-6</u>		<u>8.99</u>		5	<u>-5</u>		<u>7.61</u>	
6	<u>-8</u>		<u>8.56</u>		6	<u>-6</u>		<u>7.98</u>	
7	<u>-21</u>		<u>9.29</u>		7	<u>-7</u>		<u>8.22</u>	
8	<u>-5</u>		<u>10.31</u>		8				
9	<u>-18</u>		<u>9.34</u>		9				
10	<u>-12</u>		<u>8.95</u>		10				
11	<u>-9</u>		<u>8.22</u>		11				
12	<u>-1</u>		<u>8.26</u>		12				
13	<u>-11</u>		<u>7.72</u>		13				
14	<u>-10</u>		<u>9.08</u>		14				
15	<u>-17</u>		<u>8.51</u>		15				
16	<u>-2</u>		<u>9.37</u>		16				
17	<u>-15</u>		<u>9.69</u>		17				
18	<u>✓ -14</u>		<u>8.61</u>	<u>✓</u>	18				
19					19				
20					20				
Dup.	<u>2825-1</u>		<u>8.20</u>	<u>1:1</u>	Dup.	<u>2843-1</u>		<u>7.66</u>	

Alkalinity / OH / CO₃ / HCO₃ (310.1 / SM2320B) Worksheet

Batch # D302339 Matrix: W

Titrant H₂SO₄ Lot # W7900

Concentration (CO₂) 0.0255 N; Test Date: 4/24/03

Analyst: JD

SOP: G-51

#	Sample ID	Dilution V _f /V _i =f ₁	Smp Armt V _i , mL	H ₂ SO ₄ (mL) by Phln S _A E _A A	H ₂ SO ₄ (mL) by MR-BCG S _B E _B B	Phln-Alk, P Tot. Alk, T (in unit of mgCaCO ₃ /L)	OH ⁻ CO ₃ ²⁻ HCO ₃ ⁻	Note & Anomaly
1	MB: TWT	1 =	100	0	0	0	0	0
2	CCS	1 =	100	7.80	99.6	100.3	0	0
3	CCSD	1 =	100	7.81	101.0	101.0	0	0
4	2809-1	1 =	100	6.30	101.0	101.0	0	0
5	-2	1 =	100	0	0	0	0	0
6	-3	1 =	100	0	0	0	0	0
7	-4	1 =	100	0	0	0	0	0
8	-5	1 =	100	0	0	0	0	0
9	-6	1 =	100	0	0	0	0	0
10	-7	1 =	100	0.20	4.90	5.11	130.3	0
11	-8	1 =	100	0	0	0	0	0
12	2815-1	1 =	100	0	14.60	373.0	0	0
13	2819-6	1 =	100	0	6.05	154.6	0	0
14	-5	1 =	100	0	5.80	148.2	0	0
15	-4	1 =	100	0	9.90	209.5	0	0
16	-3	1 =	100	0	8.00	209.5	0	0
17	-2	1 =	100	0	5.05	129.0	0	0
18	-1	1 =	100	0	0	0	0	0
19	2843-6	1 =	100	0	6.10	154.9	0	0
20	-7	1 =	100	0.05	5.20	9.8	130.9	0
Dup.	2809-1	1 =	100	0	6.20	158.4	0	0

Calculation:

$$A = S_A - E_A$$

$$B = S_B - E_B$$

$$P = 50,000 f_1 A C / V$$

$$T = 50,000 f_1 (A + B) C / V$$

Alkalinity/OH/CO₃/HCO₃ (310.1/SM12320B) Worksheet

Batch # 03629580 Matrix: W

Titrant H₂SO₄ Lot # W7900

Concentration (C) 0.02545

N: Test Date: 4/29/03

Analyst: W

SOP: G-51

#	Sample ID	Dilution $V_f/V_i=f_1$	Smp Amt V_i , mL	H_2SO_4 (mL) by Phnh S_A E_A A		H_2SO_4 (mL) by MR-BCG S_B E_B B		Phnh-Alk., P	Tot. Alk., T (in unit of mgCaCO ₃ /L)	OH ⁻	CO ₃ ²⁻	HCO ₃ ⁻	Note & Anomaly
1	MB: 71115	1 =	100		0		0		0	0	0	0	
2	LC5	1 =	200				7.90		100.9				
3	LC5D	1 =	100				7.95		101.6				
4	2828-1	1 =	100		10		12.15		310.4	0	0	310.4	
5	-2	1 =	100		0	15.60	12.15		398.6	0	0	398.6	
6	-3	1 =	100		0		6.30		161.0	0	0	161.0	
7	-4	1 =	250		0		2.15	361.4	182.5	0	0	182.5	361.4
8	-5	1 =	250		0		6.80		347.5	0	0	347.5	
9	-6	1 =	500		0	44.0/15.90	15.40		406.2	0	0	406.2	
10	-7	1 =	500		0		10.05		663.0	0	0	663.0	
11	2829-1	1 =	100		1.10		1.70	38.3	81.8	0	0	76.6	52
12	-2	1 =	100		0		9.80		270.4	0	0	270.4	
13	-3	1 =	100		0		8.90		272.4	0	0	272.4	
14	-4	1 =	100		0.30		7.25	7.7	205.7	0	15.4	190.3	
15	-5	1 =	100		0		0		0	0	0	0	
16	2843-1	1 =	100		0		8.20		209.5	0	0	209.5	
17	-2	1 =	100		0		0		0	0	0	0	
18	-3	1 =	100		0		9.60		245.3	0	0	245.3	
19	-4	1 =	100		0		9.15		233.8	0	0	233.8	
20	-5	1 =	100		0		8.20		209.5	0	0	209.5	
Dup.	2828-1	1 =	100		6		12.30		314.3	0	0	314.3	
Titration		OH ⁻	CO ₃ ²⁻	HCO ₃ ⁻		Calculation							
						N: Test Date: 1/29/03 Analyst: SOP: G-51							

Calculation:

$$A = S_A - E_A$$

$$B = S_B - E_B$$

$$P = 50,000 f_1 A C / V$$

$$T = 50,000 f_1 (A+B) C / V$$

APCL Form 5-101, Nov. 29, 1999 Ver 3.2

Using blue pen. Correcting by red pen.

File: [CUST.DOC.WET]ALK.TEX

Root-File: [CUST.DOC.WET]ALK.ROOT.TEX

1-Page-File: [CUST.DOC.WET]ALK1.TEX

Titration Results	OH ⁻ (CaCO ₃ mg/L)	CO ₃ ²⁻ (CaCO ₃ mg/L)	HCO ₃ ⁻ (CaCO ₃ mg/L)
P=0	0	0	T
P<T/2	0	2P	T-2P
P=T/2	0	2P	0
P>T/2	2P-T	2(T-P)	0
P=T	T	0	0

Balance Daily Calibration Worksheet

Weight Set S/N: 12006

067

3601

Calib. Date	Lab Balance					Digital Balance					Analytical Balance					Calib. by
	Balance #	1 g ±0.05g	10 g ±0.1g	200 g ±0.5g	Note (C)	Balance #	1 g ±0.02g	10 g ±0.05g	200 g ±0.10g	Note (D) (C) (AR)	Balance #	1 g ±0.0002g	10 g ±0.0005g	200 g ±0.0010g	Note (D) (C) (AR)	
4/21/03	A-01	Net in Wt			✓	B-01	1.00	9.99	200.00	✓✓✓	C-01	1.0000	9.9999	200.0000	✓✓✓	✓
	A-02					B-02	1.00	9.99	200.00	✓✓✓	C-02	1.0000	9.9999	200.0000	✓✓✓	
	A-03	1.00	10.00	200.01	✓	B-03	1.00	9.99	200.00	✓✓✓	C-03	1.0000	9.9999	200.0000	✓✓✓	
	A-04					B-04	1.00	9.99	200.00	✓✓✓	C-04	1.0000	9.9999	200.0000	✓✓✓	
	A-					B-					C-					
4/22/03	A-01	Net in Wt			✓	B-01	1.00	9.99	200.00	✓✓✓	C-01	1.0000	9.9999	200.0000	✓✓✓	✓
	A-02					B-02	1.00	9.99	200.00	✓✓✓	C-02	1.0000	9.9999	200.0000	✓✓✓	
	A-03	1.00	10.00	200.01	✓	B-03	1.00	9.99	200.00	✓✓✓	C-03	1.0000	9.9999	200.0000	✓✓✓	
	A-04					B-04	1.00	9.99	200.00	✓✓✓	C-04	1.0000	9.9999	200.0000	✓✓✓	
	A-					B-					C-					
4/24/03	A-01	Net in Wt			✓	B-01	1.00	9.99	200.00	✓✓✓	C-01	1.0000	9.9999	200.0000	✓✓✓	✓
	A-02					B-02	1.00	9.99	200.00	✓✓✓	C-02	1.0000	9.9999	200.0000	✓✓✓	
	A-03	1.00	10.00	200.01	✓	B-03	1.00	9.99	200.00	✓✓✓	C-03	1.0000	9.9999	200.0000	✓✓✓	
	A-04					B-04	1.00	9.99	200.00	✓✓✓	C-04	1.0000	9.9999	200.0000	✓✓✓	
	A-					B-					C-					

Notation: (C) - Cleanliness; (D) - Display; (AR) - Auto Rerzeroing.
APCL form 4-213, March 30, 1995, Ver. 4.0 No pencil. Use blue pen for record. Use red pen for correction.
File: [CUST.DOC]LABBAL.CAL.TEX Reop-File: BAL.CAL-ROOT.TEX 1-Page-File: BAL.CAL1.TEX

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chromium (VI) (7196) Worksheet

Batch # 03W 7517 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 4/23/03Analyst: fu

Lot #: Reagent Water _____ Diphenylcazide solution _____

Test Time: 15:21

SOP: G-22

Calibration	STD Lot #	$C_{std} \times V_{std} / V_f = C_i$	A_i	$RF_i = A_i / C_i$	Calibration results	Note
STD-1	W-	x / = mg/L			Least Square [RF]=	Cal. Code:
STD-2	W-	x / = mg/L			Average RF=	
STD-3	W-	x / = mg/L			C.C.= <u>0.997</u> (≥ 0.995)	
STD-4	W-	x / = mg/L			RSD= % ($\leq 15\%$)	
STD-5	W-	x / = mg/L			Ref. page	
STD-6	W-	x / = mg/L			<u>A=0.000+0.836C</u>	

Analysis Type	Sample ID or Lot #	Samp. Amnt X_0 (g or mL)	Dilu./Ext $X/X_0 = f_1$	Treat. Ratio $V/X = f_2$	540 nm A	Concentration $C' = A / RF$	C (Sample) $C = f_1 f_2 C'$	Anomaly Note
CCV	Lot: W- <u>7853</u>	Expected Conc.: x	/	= <u>0.25</u> mg/L	<u>0.202</u>	<u>0.242</u> mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: <u>T1115</u>		$X/X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.00</u> ppm	
LCS1	Bl. Lot: <u>11</u>		$X/X_0 = 1$	95.0/ =	<u>0.188</u>	mg/L	<u>0.225</u> ppm	
Sample-1 <u>EB</u>	<u>2843-2</u>		$X/X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.000</u> ppm	
MS on S-1	<u>3</u>		$X/X_0 = 1$	95.0/ =	<u>0.189</u>	mg/L	<u>0.226</u> ppm	
MSD on S-1	<u>3</u>		$X/X_0 = 1$	95.0/ =	<u>0.187</u>	mg/L	<u>0.224</u> ppm	
Sample 2 <u>1</u>	<u>3</u>		$X/X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.002</u> ppm	
Sample 3 <u>2</u>	<u>4</u>		$X/X_0 = 1$	95.0/ =	<u>0.003</u>	mg/L	<u>0.003</u> ppm	
Sample 4 <u>3</u>	<u>5</u>		$X/X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
Sample 5 <u>4</u>	<u>6</u>		$X/X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.000</u> ppm	
Sample 6 <u>5</u>	<u>7</u>		$X/X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
Sample 7 <u>dup.</u>	<u>1</u>		$X/X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.002</u> ppm	
Sample 8			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 9			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 10			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Blank	Lot:		$X/X_0 = 1$	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: <u>T1115</u>		$X/X_0 = 1$	95.0/ =	<u>0.195</u>	mg/L	<u>0.223</u> ppm	
Sample 11			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 12			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 13			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 14			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 15			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 16			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 17			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 18			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 19			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 20			$X/X_0 = 1$	95.0/ =		mg/L	ppm	
MTX Dup. <u>cloning 0.25ug</u>			$X/X_0 = 1$	95.0/ =	<u>0.213</u>	<u>0.255</u> mg/L	ppm	

Type	STD Lot #	$C_{STD}(\mu\text{g/mL}) \times V_{STD}(\text{mL}) / X(\text{g or mL}) = T$	Spike Rec.	Ctl Limit (W/S)	PQL/MDL (in ppm)
MS	W- <u>7757</u>	x / = <u>0.25</u> ppm	%	80-120 %/80-120 %	PQL(w) 0.01
MSB	W- <u>7757</u>	x / = ppm	%		PQL(s) 0.05
MS	W- <u>7853</u>	x / = ppm	%	80-120 %/80-120 %	MDL(w) 0.005
MSD	W- <u>7853</u>	x / = <u>✓</u> ppm	%		MDL(s) 0.025

13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chromium (VI) (7196) Worksheet

Batch # 03W1295 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 1/24/03 Analyst: B.V.

Lot #: Reagent Water

Diphenylcazide solution

Test Time:

SOP: G-22

Calibration	STD Lot #	$C_{std} \times V_{std} / V_f = C_i$	A_i	$RF_i = A_i / C_i$	Calibration results	Note
STD-1	W-7191	x / = 0.000 mg/L	0.000		Least Square [RF] =	Cal. Code:
STD-2	W-	x / = 0.012 mg/L	0.006		Average RF =	A = 0.000 + 0.836 C
STD-3	W-	x / = 0.030 mg/L	0.001		C.C. = 0.997 (> 0.995)	
STD-4	W-	x / = 0.125 mg/L	0.009		RSD = % (< 15%)	
STD-5	W-	x / = 0.150 mg/L	0.014		Ref. page	
STD-6	W-	x / = 0.500 mg/L	0.015		A = 0.003 + 0.001 C	

Analysis Type	Sample ID or Lot #	Samp. Amnt X ₀ (g or mL)	Dilu./Ext X/X ₀ = f ₁	Treat. Ratio V/X = f ₂	540 nm A	Concentration C' = A/RF	C (Sample) C = f ₁ f ₂ C'	Anomaly Note
CCV	Lot: W-7076	Expected Conc.: x	/	= 0.15 mg/L	0.246	0.258 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T1115		/X ₀ = 1	95.0/ =	0.000	mg/L	0.00 ppm	
LCS1	Bl. Lot: 4		/X ₀ =	95.0/ =	0.204	mg/L	0.244 ppm	
Sample-1	1369-1		/X ₀ =	95.0/ =	0.000	mg/L	0.00 ppm	
MS on S-1	6		/X ₀ =	95.0/ =	0.223	mg/L	0.266 ppm	
MSD on S-1	6		/X ₀ =	95.0/ =	0.230	mg/L	0.275 ppm	
Sample 2	2		/X ₀ =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 3	3		/X ₀ =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 4	4		/X ₀ =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 5	5		/X ₀ =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 6	6		/X ₀ =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 7			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 8			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 9			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 10			/X ₀ =	95.0/ =		mg/L	ppm	
Blank	Lot:		/X ₀ =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: T1115		/X ₀ = 1	95.0/ =	0.210	mg/L	0.251 ppm	
Sample 11			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 12			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 13			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 14			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 15			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 16			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 17			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 18			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 19			/X ₀ =	95.0/ =		mg/L	ppm	
Sample 20			/X ₀ =	95.0/ =		mg/L	ppm	
MTX Dup.			/X ₀ =	95.0/ =	0.204	mg/L	0.244 ppm	

Type	STD Lot #	$C_{STD} (\mu\text{g/mL}) \times V_{STD} (\text{mL}) / X (\text{g or mL}) = T$	Spike Rec.	Ctl Limit (W/S)	PQL/MDL (in ppm)	
MS	W-7076	x / = 0.25 ppm	%	80-120 %/80-120 %	PQL(w)	0.01
MSD	W-	x / = ppm	%		PQL(s)	0.05
LCS	W-7191	x / = ppm	%	80-120 %/80-120 %	MDL(w)	0.005
LCSD	W-	x / = ppm	%		MDL(s)	0.025

APCL form 5-155 May 08, 1996. Ver. 3.1 No pencil. Use blue pen for record. Use red pen for correction.

File: \CUST.DOC\WET\CR6.TEX Root-File: CR6-ROOT.TEX 1-Page-File: CR61.TEX

Control limits are subjected to change. The updated values are given in the latest version of APCL Technical Handbook Vol. 2

DIONEX SCHEDULE - C:\DX\SCHEDULE\E300-063.SCH

Inj#	Sample Name	Method	Data File	Vol.	Dil.	Int.Std.
1	autocal1r	..\E300-063	..\W7767Q01.D01	1	1	1
2	autocal2r	..\E300-063	..\W7767Q01.D02	1	1	1
3	autocal3r	..\E300-063	..\W7767Q01.D03	1	1	1
4	autocal4r	..\E300-063	..\W7767Q01.D04	1	1	1
5	autocal5r	..\E300-063	..\W7767Q01.D05	1	1	1
6	autocal6r	..\E300-063	..\W7767Q01.D06	1	1	1
7	icv-w7768-100X	..\E300-063	..\W7768Q01.D07	1	1	1
8	icb	..\E300-063	..\W7767Q01.D08	1	1	1

Comment:

Analyst DRDate 3/21/03Instrument J

DIONEX SCHEDULE - C:\DX\SCHEDULE\03W2520.SCH

Inj#	Sample Name	Method	Data File	Vol.	Dil.	Int.Std.
1	##03W2520, W CCVW77	..\E300-063	..\W2520Q01.D01	1	1	1
2	MB RW1408	..\E300-063	..\W2520K01.D02	1	1	1
3	LCS W7768-100X	..\E300-063	..\W2520L01.D03	1	1	1
4	LCSD W7768-100X	..\E300-063	..\W2520J01.D04	1	1	1
5	2843-1 F=20	..\E300-063	..\2843-101.D05	1	20	1
6	2843-3 F=20	..\E300-063	..\2843-301.D06	1	20	1
7	2843-4 F=20	..\E300-063	..\2843-401.D07	1	20	1
8	2843-5 F=20	..\E300-063	..\2843-501.D08	1	20	1
9	2843-6 F=4	..\E300-063	..\2843-601.D09	1	4	1
10	2843-7 F=1.25	..\E300-063	..\2843-701.D10	1	1.25	1
11	2843-2 F=1.25	..\E300-063	..\2843-201.D11	1	1.25	1
12	CCV2W7767-100X	..\E300-063	..\W2520Q01.D12	1	1	1
13	MB RW1408	..\E300-063	..\W2520K01.D13	1	1	1
14	\$2843-1 MS F=40	..\E300-063	..\W2520M01.D14	1	40	1
15	\$2843-1 MSD F=40	..\E300-063	..\W2520N01.D15	1	40	1
16	2852-4 F=40	..\E300-063	..\2852-401.D16	1	40	1
17	2852-6 F=80	..\E300-063	..\2852-601.D17	1	80	1
18	2852-2 F=40	..\E300-063	..\2852-201.D18	1	40	1
19	2852-5 F=40	..\E300-063	..\2852-501.D19	1	40	1
20	2852-3 F=40	..\E300-063	..\2852-301.D20	1	40	1
21	2852-1 F=20	..\E300-063	..\2852-101.D21	1	20	1
22	CCV3W7767-100X	..\E300-063	..\W2520Q01.D22	1	1	1
23		..\STOP.MET		1	1	1

Comment:

LCS/LCSD LOT # W7768

MS/MSD LOT # W7767

ELUENT LOT # W7868

ANALYTICAL METHOD 9056/E300 MATRIX WAnalyst ErDate 4/20/03Instrument J

Line	Sample	Sample Type	Level	Method	Data File	Volume	Dilution
1	Cal blank	Sample		e314-011.met	c:\data\314-011\mb_001.dxd	1	1
2	cal standard 2ppb W7827a	Sample		e314-011.met	c:\data\314-011\std-2pb_002.dxd	1	1
3	cal standard 4ppb W7827b	Sample		e314-011.met	c:\data\314-011\std-4pb_003.dxd	1	1
4	cal standard 10ppb W7827c	Sample		e314-011.met	c:\data\314-011\std-10pb_004.dxd	1	1
5	cal standard 25ppb W7827d	Sample		e314-011.met	c:\data\314-011\std-25pb_005.dxd	1	1
6	cal standard 50ppb W7827e	Sample		e314-011.met	c:\data\314-011\std-50pb_006.dxd	1	1
7	cal standard 75ppb W7827f	Sample		e314-011.met	c:\data\314-011\std-75pb_007.dxd	1	1
8	cal standard 100ppb W7827g	Sample		e314-011.met	c:\data\314-011\std-100pb_008.dxd	1	1
9	ICV 50 ppb w7828a	Sample		e314-011.met	c:\data\314-011\vcv-50pb_009.dxd	1	1
10	icb	Sample		e314-011.met	c:\data\314-011\icb_010.dxd	1	1
11	anion 100pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-100_011.dxd	1	1
12	anion 200pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-200_012.dxd	1	1
13	anion 300pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-300_013.dxd	1	1
14	anion 400pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-400_014.dxd	1	1
15	anion 500pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-500_015.dxd	1	1
16	anion 600pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-600_016.dxd	1	1
17	anion 800pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-800_017.dxd	1	1
18	anion 1000pm each ,25pb CLO4	Sample		e314-011.met	c:\data\314-011\mct-1000_018.dxd	1	1
19	anion 400pm each 2pb	Sample		e314-011.met	c:\data\314-011\ipc-2pb_019.dxd	1	1
20	anion 400pm each 4pb	Sample		e314-011.met	c:\data\314-011\ipc-4pb_020.dxd	1	1
21	anion 400pm each 25pb	Sample		e314-011.met	c:\data\314-011\ipc-25pb_021.dxd	1	1
22	ICV 50 ppb	Sample		e314-011.met	c:\data\314-011\ccv-50pb	1	1
23	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-02_023.dxd	1	1
24	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-03_024.dxd	1	1
25	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-04	1	1
26	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-05	1	1
27	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-06	1	1
28	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-07	1	1
29	MDL 4pb	Sample		e314-011.met	c:\data\314-011\mdl-08	1	1
30	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
31	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
32	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
33	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
34	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
35	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
36	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\idap-25pb	1	1
37	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\314-011\ipc-25pb	1	1
38	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\314-011\ipc-25pb	1	1
39	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\314-011\ipc-4pb	1	1
40	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\314-011\ipc-4pb	1	1
41	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s01	1	5
42	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s02	1	5
43	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s03	1	5
44	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s04	1	5
45	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s05	1	5
46	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s06	1	5
47	MDL 20pb soil	Sample		e314-011.met	c:\data\314-011\mdl-s07	1	5
48	standard 25ppb W7827d	Sample		e314-011.met	c:\data\314-011\std-25pb	1	1
49	anion 100pm each,4pb CLO4	Sample		e314-011.met	c:\data\314-011\am-100-4pb	1	1
50	anion 200pm each,4pb CLO4	Sample		e314-011.met	c:\data\314-011\am-200-4pb	1	1
51	anion 300pm each,4pb CLO4	Sample		e314-011.met	c:\data\314-011\am-300-4pb	1	1
52	anion 100pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\am-100-2pb	1	1
53	anion 200pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\am-200-2pb	1	1
54	anion 300pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\am-300-2pb	1	1
55	1982-01 B S.C 4450us/cm	Sample		e314-011.met	c:\data\314-011\1982-01	1	1
56	1982-01 B S.C 4450us/cm	Sample		e314-011.met	c:\data\314-011\1982-01	1	2
57	1982-02 f=10	Sample		e314-011.met	c:\data\314-011\1982-02_057.dxd	1	10
58		Sample		aastopcl.met		1	1

ine	Sample	Sample Type	Level	Method	Data File	Volume	Dilution	Weight
1	##03w2531kw ipc 25ppb w7759	Sample		e314-011.met	w2531k ipc 25ppb	1	1	1
2	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q01	1	1	1
3	ccb	Sample		e314-011.met	w2531k ccb01	1	1	1
4	lcs 25ppb w7827d	Sample		e314-011.met	w2531k l01	1	1	1
5	LCS 18PPB W7685D	Sample		e314-011.met	w2531k j01_005.dxd	1	1	1
6	ICCS 4ppb w7827b	Sample		e314-011.met	w2531k iccs 4ppb_006.dxd	1	1	1
7	mb	Sample		e314-011.met	w2531k k01_007.dxd	1	1	1
8	2842-07 F=1	Sample		e314-011.met	2842-07_008.dxd	1	1	1
9	2842-09 F=2	Sample		e314-011.met	2842-09_009.dxd	1	2	1
10	2842-08 F=1	Sample		e314-011.met	2842-08_010.dxd	1	1	1
11	2842-10 F=1	Sample		e314-011.met	2842-10_011.dxd	1	1	1
12	2842-08 ms 50ppb f=1	Sample		e314-011.met	w2531k m01_012.dxd	1	1	1
13	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q02_013.dxd	1	1	1
14	ccb	Sample		e314-011.met	w2531k k02_014.dxd	1	1	1
15	2842-08 msd 50ppb f=1	Sample		e314-011.met	w2531k n01_015.dxd	1	1	1
16	2843-01 F=1	Sample		e314-011.met	2843-01_016.dxd	1	1	1
17	2843-02 F=1	Sample		e314-011.met	2843-02_017.dxd	1	1	1
18	2843-03 F=1	Sample		e314-011.met	2843-03_018.dxd	1	1	1
19	2843-04 F=1	Sample		e314-011.met	2843-04_019.dxd	1	1	1
20	2843-05 F=1	Sample		e314-011.met	2843-05_020.dxd	1	1	1
21	2843-06 F=1	Sample		e314-011.met	2843-06_021.dxd	1	1	1
22	2843-07 F=1	Sample		e314-011.met	2843-07_022.dxd	1	1	1
23	2829-01 F=1	Sample		e314-011.met	2829-01_023.dxd	1	1	1
24	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q03_024.dxd	1	1	1
25	CCB	Sample		e314-011.met	w2531k k03_025.dxd	1	1	1
26	2829-02 F=1	Sample		e314-011.met	2829-02_026.dxd	1	1	1
27	2829-03 F=1	Sample		e314-011.met	2829-03_027.dxd	1	1	1
28	2829-04 F=1	Sample		e314-011.met	2829-04_028.dxd	1	1	1
29	2829-05 F=1	Sample		e314-011.met	2829-05_029.dxd	1	1	1
30	2866-01 f=1	Sample		e314-011.met	2866-01_030.dxd	1	1	1
31	2866-02 f=1	Sample		e314-011.met	2866-02_031.dxd	1	1	1
32	2866-03 f=1	Sample		e314-011.met	2866-03_032.dxd	1	1	1
33	2866-04 f=1	Sample		e314-011.met	2866-04_033.dxd	1	1	1
34	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q04_034.dxd	1	1	1
35		Sample		aastopcl.met		1	1	1

Analyst Wei Wang
Date 4/24/03
Instrument LC-K