

gjn 4/29/03

YZK. non-com

Element File: AS_7063.G21 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

software, The dat

not 4/29/99, sho

be 4/29/2003.

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

Time: 11:14

Peak Area (A-s): 0.271

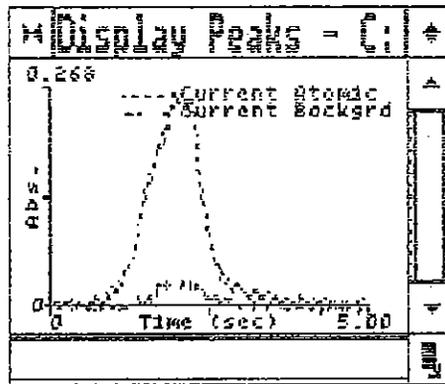
Peak Height (A): 0.269

Background Pk Area (A-s): 0.014

Background Pk Height (A): 0.031

Blank Corrected Pk Area (A-s): 0.271

gjn 4/29/03



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

Time: 11:17

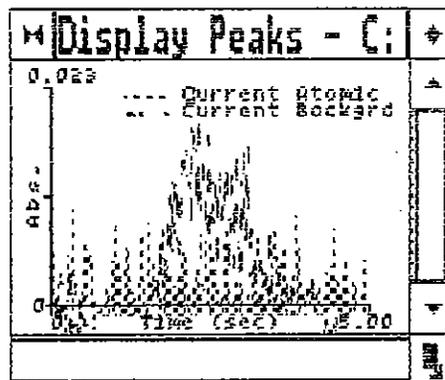
Peak Area (A-s): 0.001

Peak Height (A): 0.010

Background Pk Area (A-s): 0.002

Background Pk Height (A): 0.023

Blank Corrected Pk Area (A-s): 0.001



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

Peak Area (A-s): -0.006

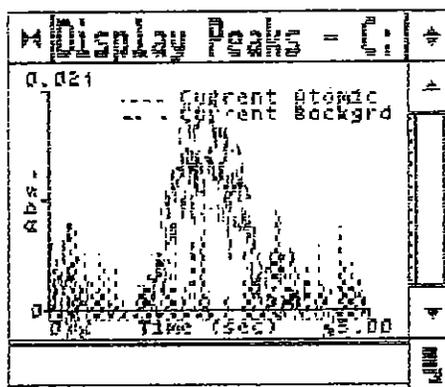
Background Pk Area (A-s): 0.005

Time: 11:21

Peak Height (A): 0.013

Background Pk Height (A): 0.021

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



uL dispensed: 5 from 20, 20 from 1

Replicate 2

Peak Area (A-s): -0.000

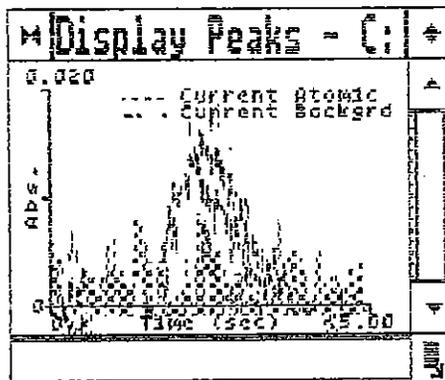
Background Pk Area (A-s): -0.002

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

Time: 11:24

Peak Height (A): 0.009

Background Pk Height (A): 0.020



Mean Pk Area (A-s): -0.003

SD: 0.0041

RSD(%): 141.06

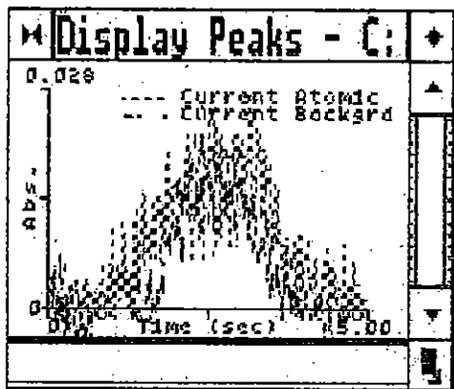
Auto-zero performed.

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

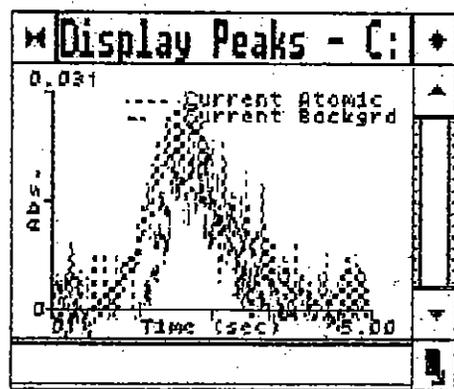
uL dispensed: 10 from 0.5 from 20. 10 from 4

Peak Area (A-s): 0.017
Blank Corrected Peak Area (A-s): 0.041

Peak Height (A): 0.026
Background Peak Height (A): 0.026



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



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

Standard number 1 applied. [0.0125]
Correlation coefficient: 1.00000 elaps: 2.2412

uL dispensed: 5 from 20, 20 from 4

Replicate 1

Peak Area (A-s): 0.072

Background Pk Area (A-s): 0.008

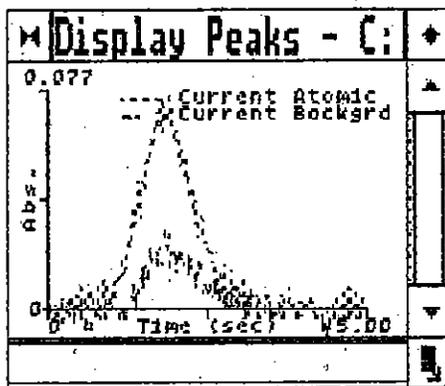
Blank Corrected Pk Area (A-s): 0.075

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

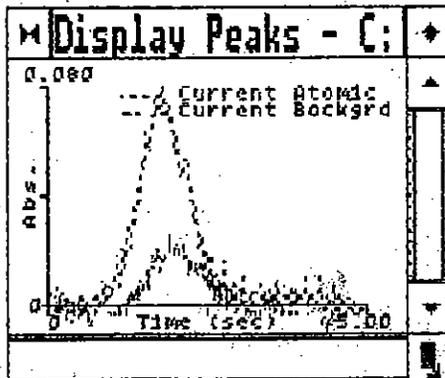
Blank Corrected Pk Area (A-s): 0.075

Concentration (mg/L): 0.0231

Time: 11:37

Peak Height (A): 0.080

Background Pk Height (A): 0.028

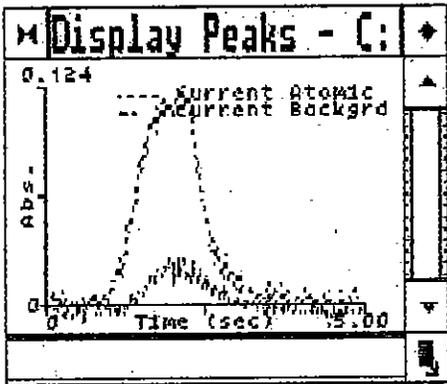


Mean Conc (mg/L): 0.0230 SD: 0.00017 RSD(%): 0.73

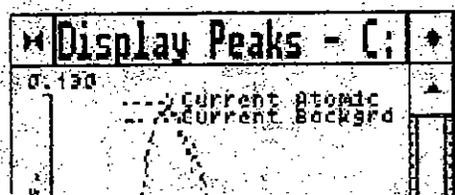
Standard number 2 applied. [0.0250]
Correlation coefficient: 0.99398 Slope: 3.0534

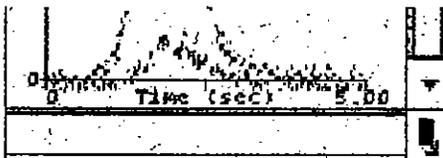
As ID: STD2 1472B Seq. No.: 00006 A/S Pos.: 3 Date: 04/29/99

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

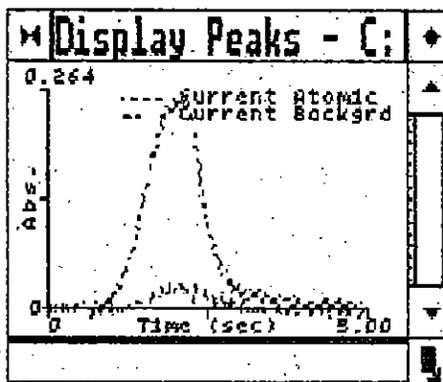
Peak Height (A): 0.264

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

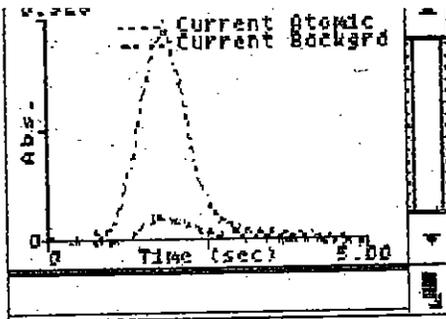
Peak Height (A): 0.328

Background Pk Area (A-s): 0.016

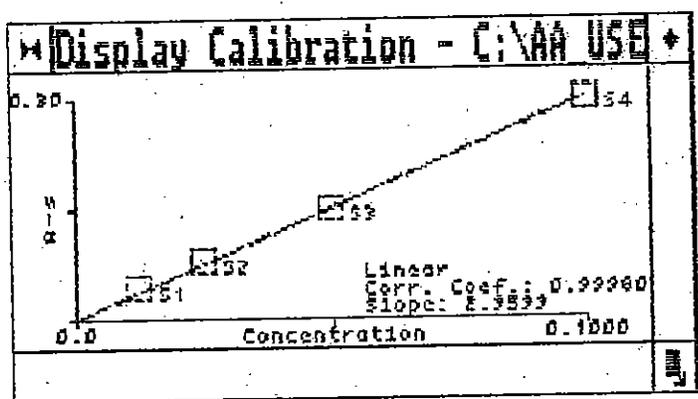
Background Pk Height (A): 0.039

Blank Corrected Pk Area (A-s): 0.302

Concentration (mg/L): 0.1016



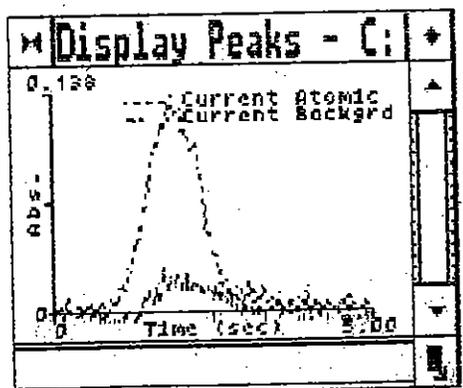
Mean Conc (mg/L): 0.0996 SD: 0.00292 RSD(%): 2.93
 Standard number 4 applied. [0.1000]
 Correlation coefficient: 0.99980 Slope: 2.9599



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

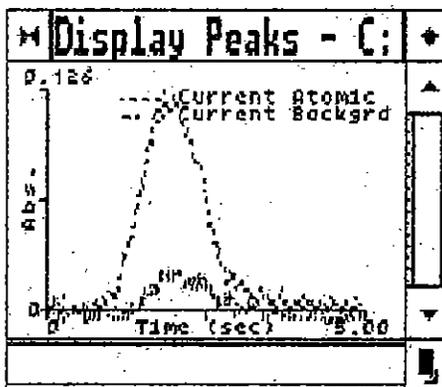
uL dispensed: 5 from 20, 20 from 40
 Replicate 1 Time: 11:55

Peak Area (A-s): 0.142 Peak Height (A): 0.138
 Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.028
 Blank Corrected Pk Area (A-s): 0.145
 Concentration (mg/L): 0.0490 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): -----



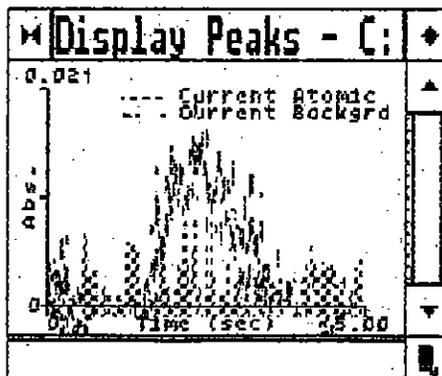
Mean Conc (mg/L): 0.0496 SD: 0.00095 RSD(%): 1.92
Corrected Conc (ppm): -----

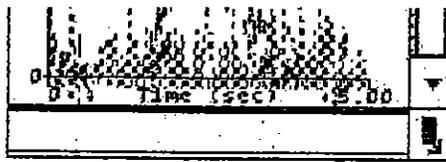
QC sample is within range 0.045 - 0.055

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

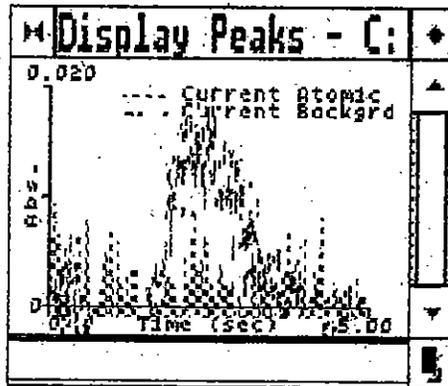
Time: 12:01
Peak Height (A): 0.009
Background Pk Height (A): 0.021
Corrected Conc (ppm): -----





uL dispensed: 5 from 20, 20 from 5
 Replicate 2
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.005
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0002

Time: 12:11
 Peak Height (A): 0.009
 Background Pk Height (A): 0.020
 Corrected Conc (ppm): -0.0002

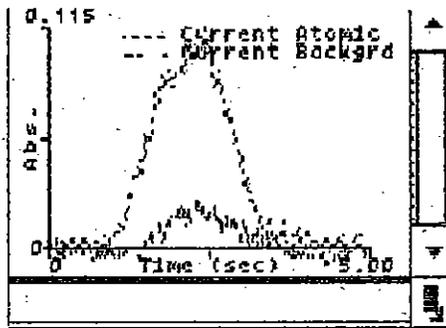


Mean Conc (mg/L): 0.0003 SD: 0.00076 RSD(8): 233.25
 Corrected Conc (ppm): 0.0003

As ID: LCS-03M1402 Seq. No.: 00011 A/S Pos.: 6 Date: 04/29/99

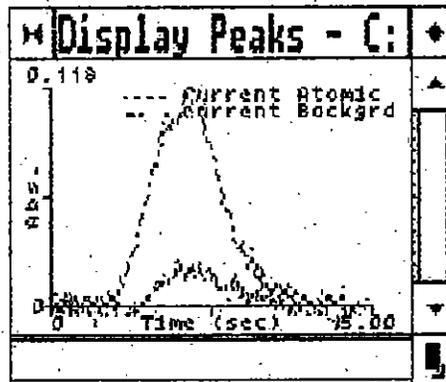
uL dispensed: 5 from 20, 20 from 6
 Replicate 1
 Peak Area (A-s): 0.157
 Background Pk Area (A-s): 0.011
 Blank Corrected Pk Area (A-s): 0.160
 Concentration (mg/L): 0.0541

Time: 12:14
 Peak Height (A): 0.115
 Background Pk Height (A): 0.026
 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
 Corrected Conc (ppm): 0.0531

SD: 0.00141 RSD(8): 2.65

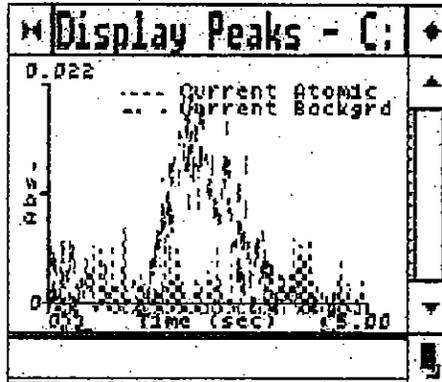
As ID: LCSD-03M1402 Seq. No.: 00012 A/S Pos.: 7 Date: 04/29/99

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): -----



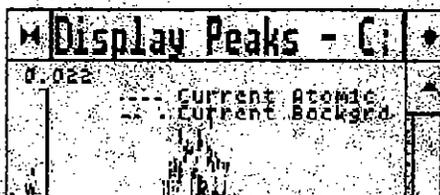
Mean Conc (mg/L): -0.0007 SD: 0.00093 RSD(%): 124.05
Corrected Conc (ppm): -----

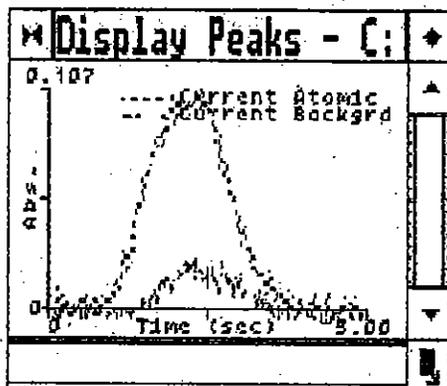
QC sample is within range

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

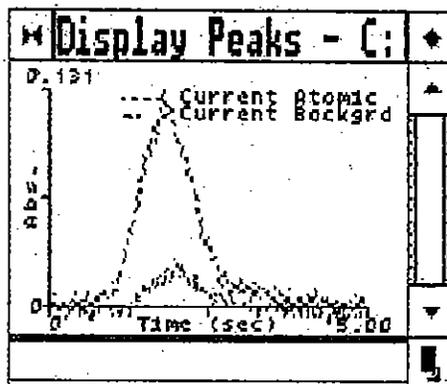
Time: 12:08
Peak Height (A): 0.009
Background Pk Height (A): 0.022
Corrected Conc (ppm): 0.0009





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

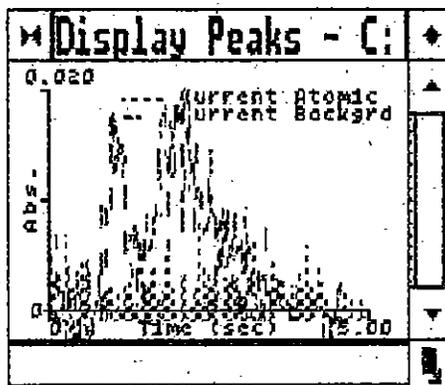


Mean Conc (mg/L): 0.0498 SD: 0.00570 RSD(%): 11.44
 Corrected Conc (ppm): 0.0498

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

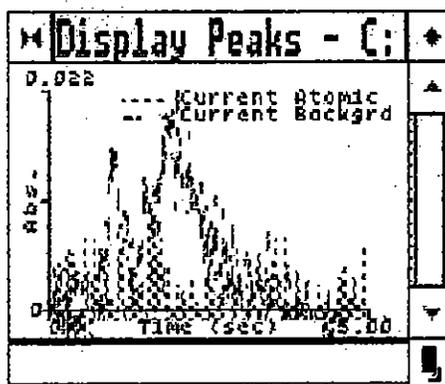
uL dispensed: 5 from 20, 20 from 8
 Replicate 1
 Peak Area (A-s): -0.006
 Background Pk Area (A-s): 0.015
 Blank Corrected Pk Area (A-s): -0.003
 Concentration (mg/L): -0.0010

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

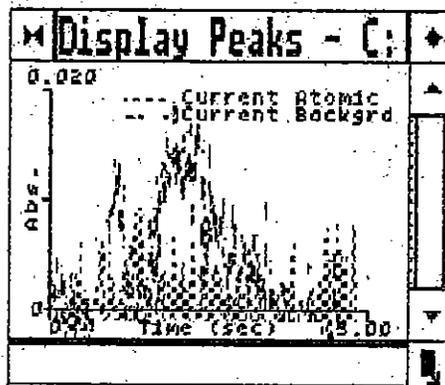
SD: 0.00072

RSD(%): 138.52

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

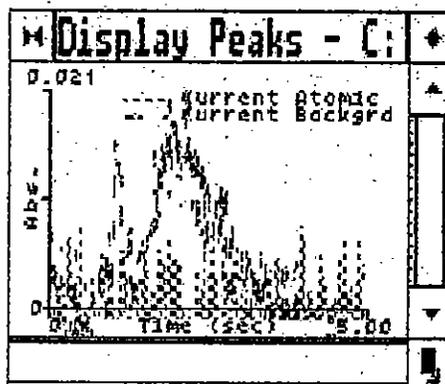
uL dispensed: 5 from 20, 20 from 9
 Replicate 1
 Peak Area (A-s): 0.001
 Background Pk Area (A-s): 0.011
 Blank Corrected Pk Area (A-s): 0.004
 Concentration (mg/L): 0.0013

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

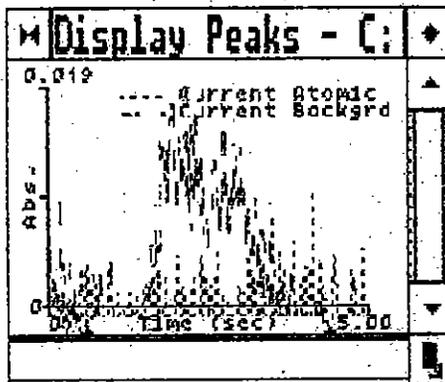
uL dispensed: 5 from 20, 20 from 10
 Replicate 1
 Peak Area (A-s): -0.009

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

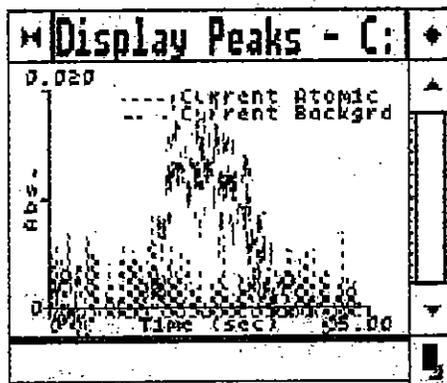
Concentration (mg/L): -0.0002

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

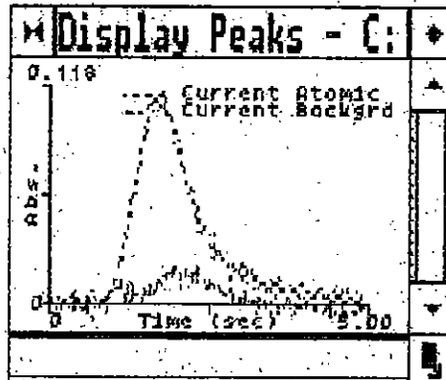
SD: 0.00125

RSD(%): 120.47

3840

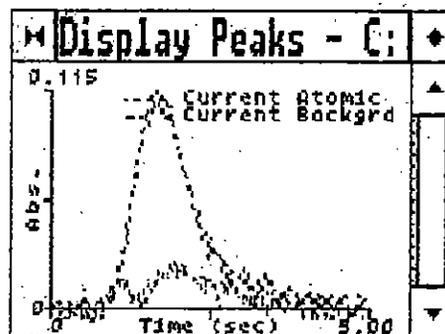
uL dispensed: 5 from 20, 20 from 11
Replicate 1
Peak Area (A-s): 0.133
Background Pk Area (A-s): 0.019
Blank Corrected Pk Area (A-s): 0.136
Concentration (ng/L): 0.0459

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 (ng/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 SD: 0.00047 RSD(%): 1.02
Corrected Conc (ppm): 0.0456

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

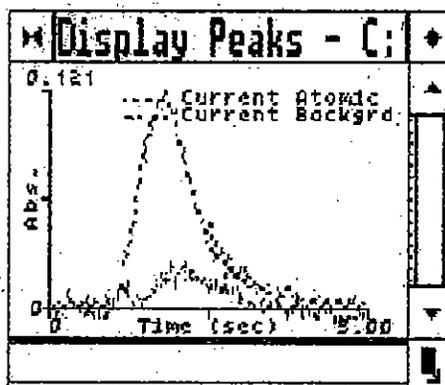
Background Pk Area (A-s): 0.023

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

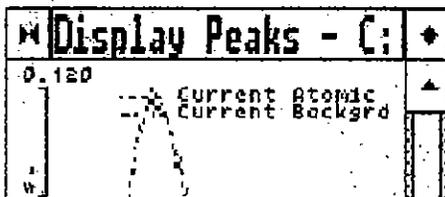
Background Pk Area (A-s): 0.024

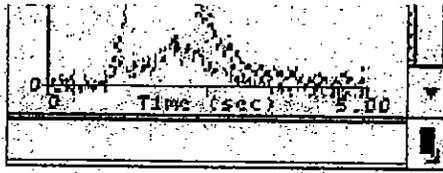
Background Pk Height (A): 0.034

Blank Corrected Pk Area (A-s): 0.135

Concentration (mg/L): 0.0458

Corrected Conc (ppm): 0.0458

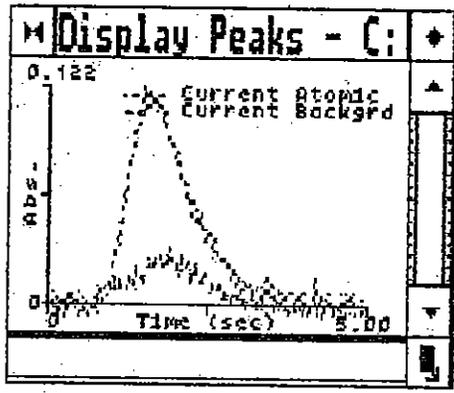




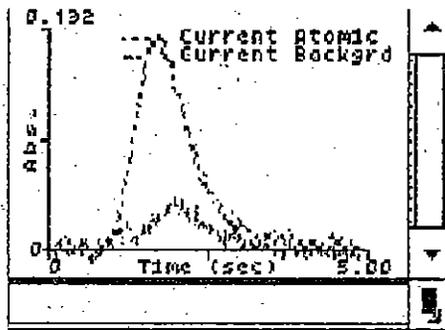
Mean Conc (mg/L): 0.0463 SD: 0.00082 RSD(%): 1.77
 Corrected Conc (ppm): 0.0463

As ID: 2933-3 PS P=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



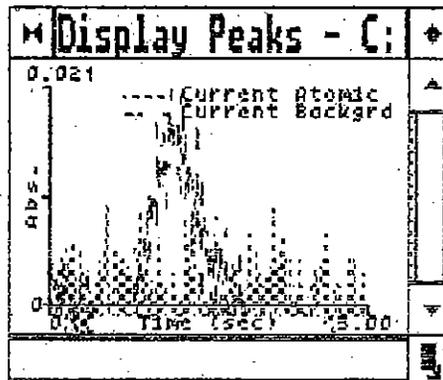
uL dispensed: 5 from 20, 20 from 13
 Replicate 2 Time: 13:03
 Peak Area (A-s): 0.141 Peak Height (A): 0.132
 Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.033
 Blank Corrected Pk Area (A-s): 0.144
 Concentration (mg/L): 0.0485 Corrected Conc (ppm): 0.0485



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

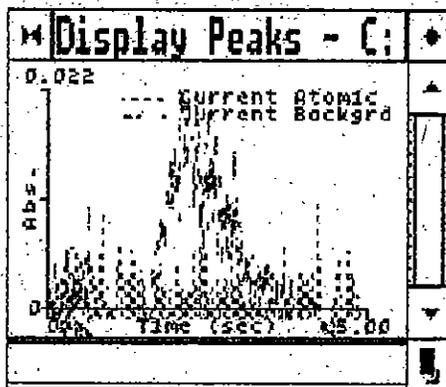
uL dispensed: 5 from 20, 20 from 14
 Replicate 1 Time: 13:06
 Peak Area (A-s): -0.001 Peak Height (A): 0.013
 Background Pk Area (A-s): -0.001 Background Pk Height (A): 0.021
 Blank Corrected Pk Area (A-s): 0.002
 Concentration (mg/L): 0.0006 Corrected Conc (ppm): 0.0006



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
Corrected Conc (ppm): 0.0002

SD: 0.00050

RSD(%): 218.14

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

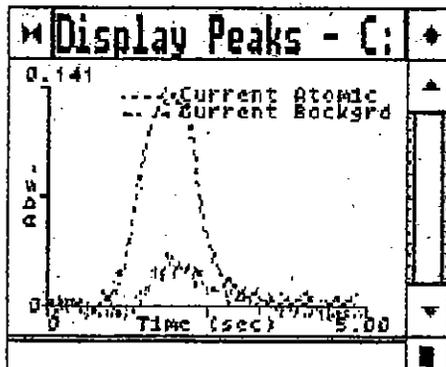
Background Pk Area (A-s): 0.017

Background Pk Height (A): 0.035

Blank Corrected Pk Area (A-s): 0.157

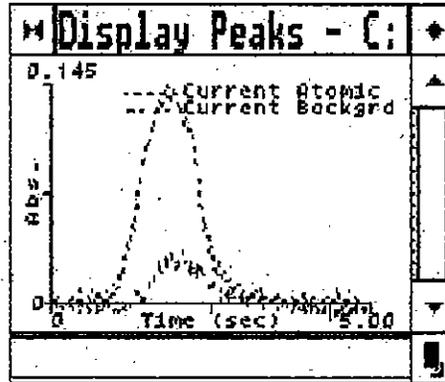
Concentration (mg/L): 0.0531

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): -----



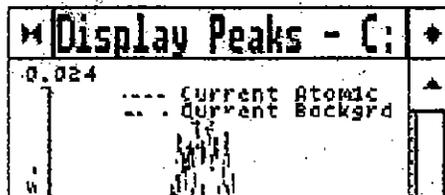
Mean Conc (mg/L): 0.0523 SD: 0.00118 RSD(%): 2.25
Corrected Conc (ppm): -----

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

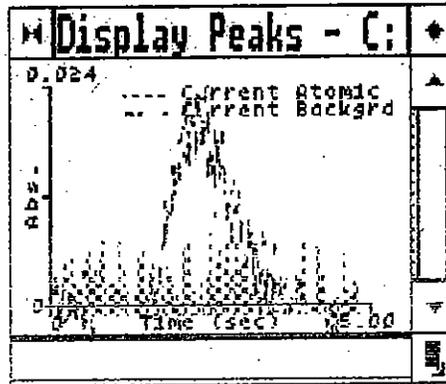
Time: 13:19
Peak Height (A): 0.010
Background Pk Height (A): 0.024
Corrected Conc (ppm): -----





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): -----



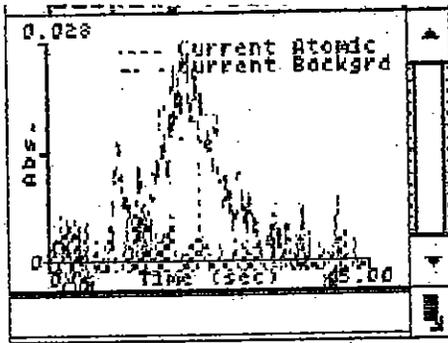
Mean Conc (mg/L): 0.0004 SD: 0.00086 RSD(%): 197.02
 Corrected Conc (ppm): -----

QC sample is within range

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

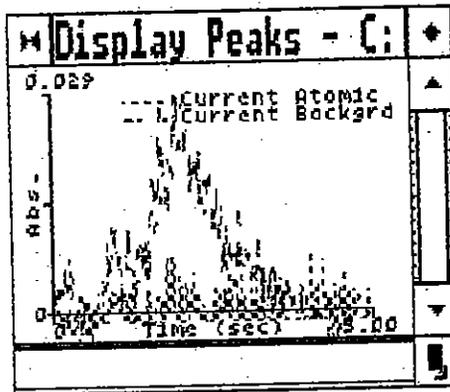
uL dispensed: 5 from 20, 20 from 15
 Replicate 1
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.024
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0003

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

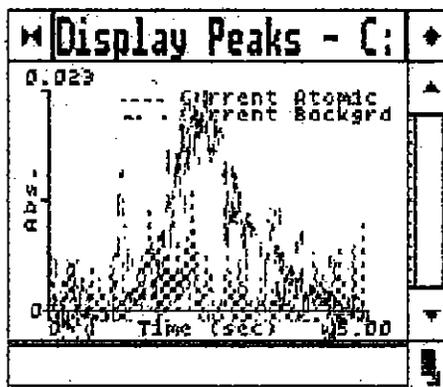
SD: 0.00002

RSD(%): 5.48

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

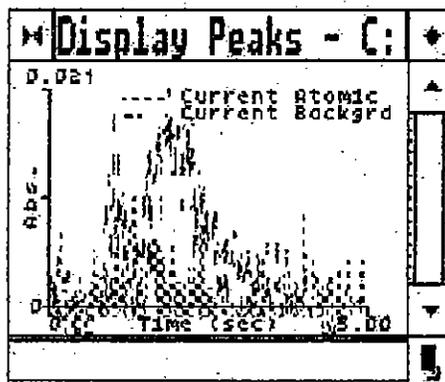
uL dispensed: 5 from 20, 20 from 16
 Replicate 1
 Peak Area (A-s): 0.003
 Background Pk Area (A-s): 0.025
 Blank Corrected Pk Area (A-s): 0.006
 Concentration (mg/L): 0.0021

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
 Corrected Conc (ppm): 0.0017

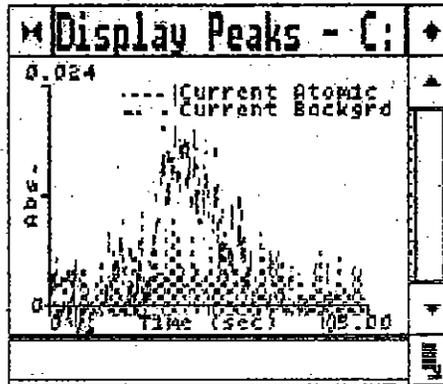
SD: 0.00044

RSD(%): 25.43

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

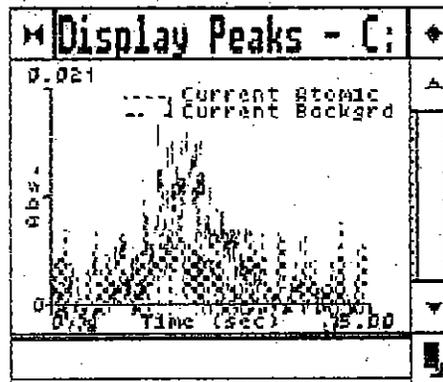
uL dispensed: 5 from 20, 20 from 17
 Replicate 1
 Peak Area (A-s): 0.002
 Background Pk Area (A-s): 0.014
 Blank Corrected Pk Area (A-s): 0.005
 Concentration (mg/L): 0.0016

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

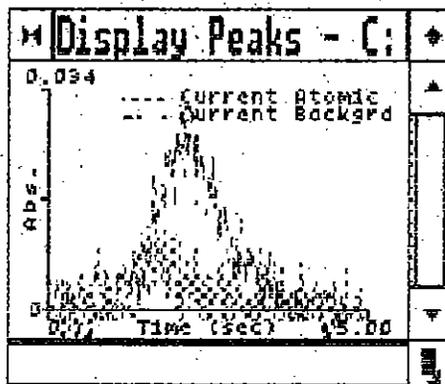
SD: 0.00088

RSD(%): 39.99

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

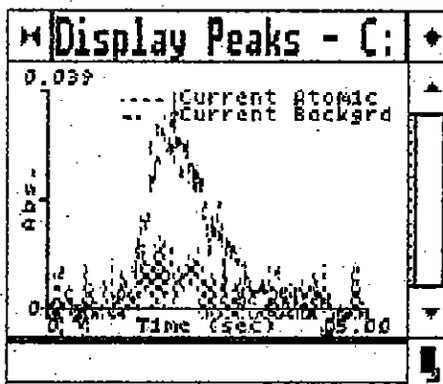
uL dispensed: 5 from 20, 20 from 18
 Replicate 1
 Peak Area (A-s): 0.006
 Background Pk Area (A-s): 0.029
 Blank Corrected Pk Area (A-s): 0.009
 Concentration (mg/L): 0.0031

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



ul dispensed: 5 from 20, 20 from 18
 Replicate 2
 Peak Area (A-s): 0.007
 Background Pk Area (A-s): 0.032
 Blank Corrected Pk Area (A-s): 0.010
 Concentration (mg/L): 0.0033

Time: 13:47
 Peak Height (A): 0.014
 Background Pk Height (A): 0.039
 Corrected Conc (ppm): 0.0033



Mean Conc (mg/L): 0.0032
 Corrected Conc (ppm): 0.0032

SD: 0.00013

RSD(%): 3.99

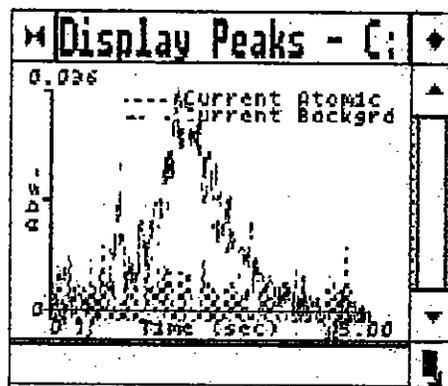
As ID: 2866-1 F=1 Seq. No.: 00026 A/S Pos.: 19 Date: 04/29/99

ul dispensed: 5 from 20, 20 from 19
 Replicate 1
 Peak Area (A-s): 0.000

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

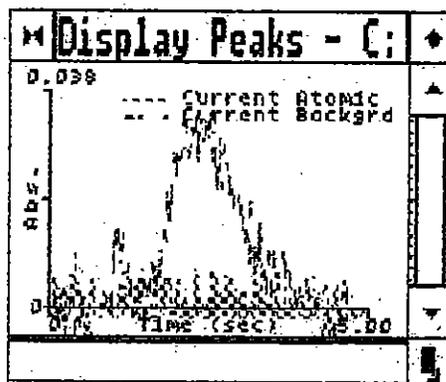
Concentration (mg/L): 0.0008

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

3852

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

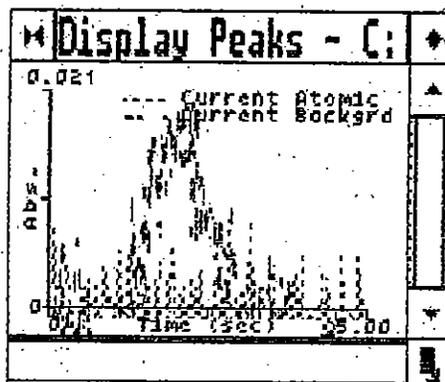
Concentration (mg/L): -0.0012

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

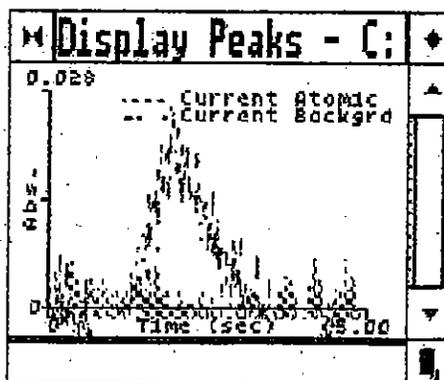
Concentration (mg/L): -0.0014

Time: 14:00

Peak Height (A): 0.007

Background Pk Height (A): 0.028

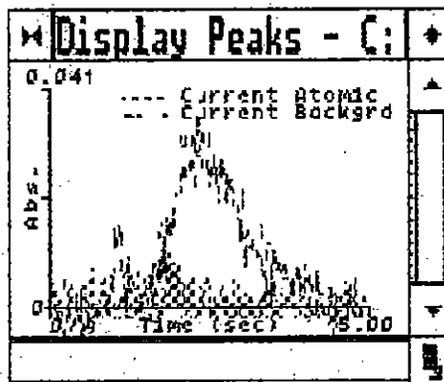
Corrected Conc (ppm): -0.0014



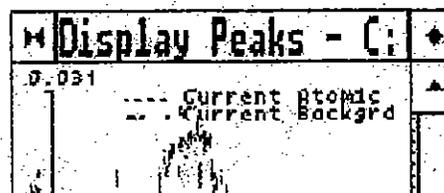
Mean Conc (mg/L): -0.0013 SD: 0.00012 RSD(%): 8.87
Corrected Conc (ppm): -0.0013

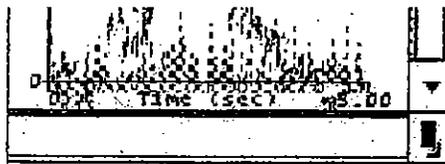
As ID: 2866-3 F=1 Seq. No.: 00028 A/S Pos.: 22 Date: 04/29/99

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

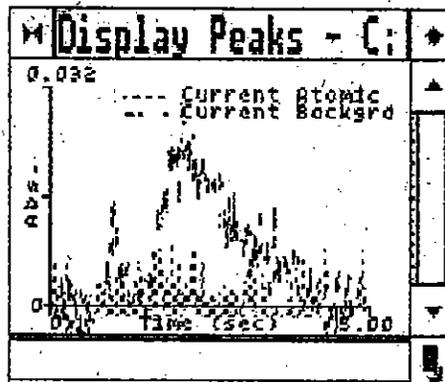
Background Pk Area (A-s): 0.033

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

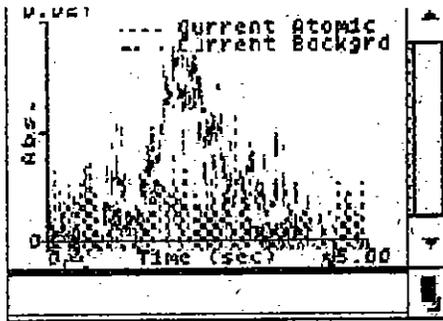
Background Pk Area (A-s): 0.017

Background Pk Height (A): 0.021

Blank Corrected Pk Area (A-s): 0.006

Concentration (mg/L): 0.0022

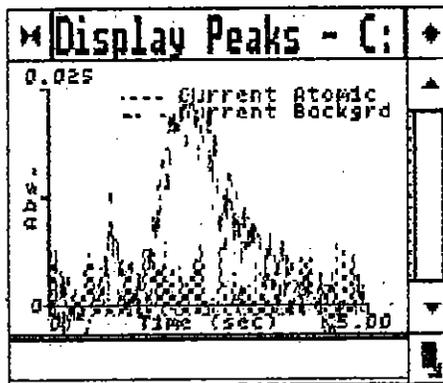
Corrected Conc (ppm): 0.0022



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

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

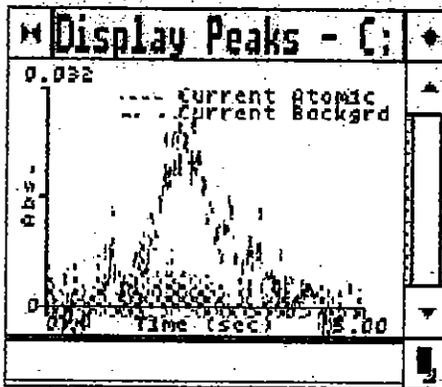
uL dispensed: 5 from 20, 20 from 24
 Replicate 1 Time: 14:15
 Peak Area (A-s): -0.001 Peak Height (A): 0.008
 Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.025
 Blank Corrected Pk Area (A-s): 0.002
 Concentration (mg/L): 0.0006 Corrected Conc (ppm): 0.0006



uL dispensed: 5 from 20, 20 from 24
 Replicate 2 Time: 14:19
 Peak Area (A-s): -0.002 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(8): 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

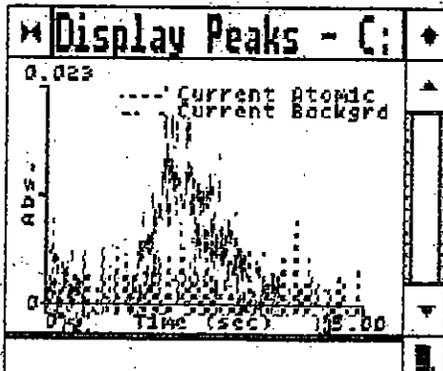
Background Pk Area (A-s): 0.006

Background Pk Height (A): 0.023

Blank Corrected Pk Area (A-s): 0.000

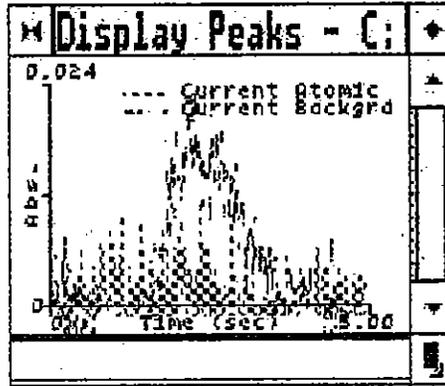
Concentration (mg/L): 0.0001

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

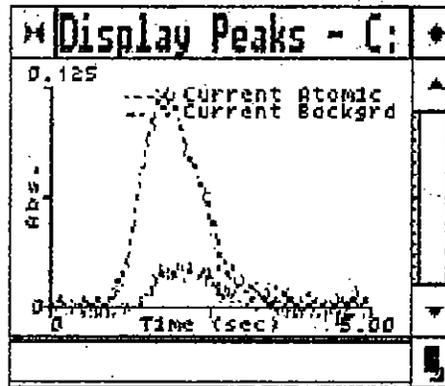
Time: 14:28
Peak Height (A): 0.149
Background Pk Height (A): 0.027
Corrected Conc (ppm): -----



Time (sec)	5.00
------------	------

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): -----



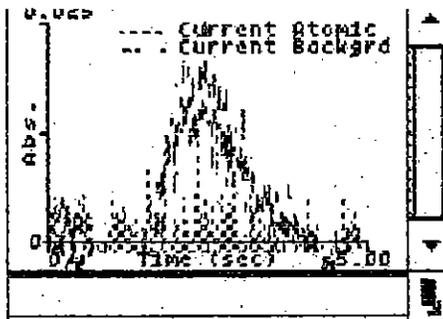
Mean Conc (mg/L): 0.0502 SD: 0.00166 RSD(%): 3.30
 Corrected Conc (ppm): -----

QC sample is within range 0.0425 - 0.0575

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

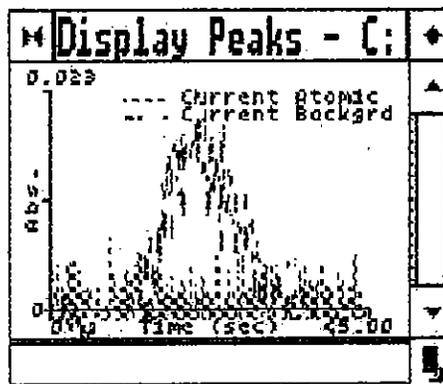
uL dispensed: 5 from 20, 20 from 1
 Replicate 1
 Peak Area (A-s): -0.006
 Background Pk Area (A-s): 0.012
 Blank Corrected Pk Area (A-s): -0.003
 Concentration (mg/L): -0.0011

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): -----

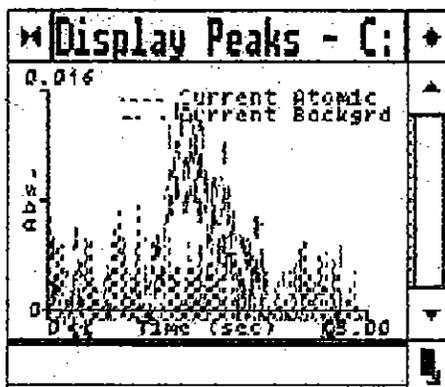
SD: 0.00113 RSD(8): 353.69

QC sample is within range

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

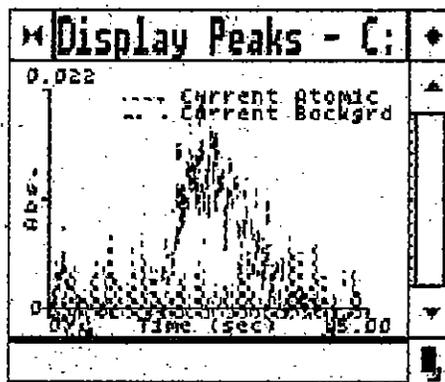
uL dispensed: 5 from 20, 20 from 26
 Replicate 1
 Peak Area (A-s): -0.003
 Background Pk Area (A-s): 0.001
 Blank Corrected Pk Area (A-s): -0.000
 Concentration (mg/L): -0.0001

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



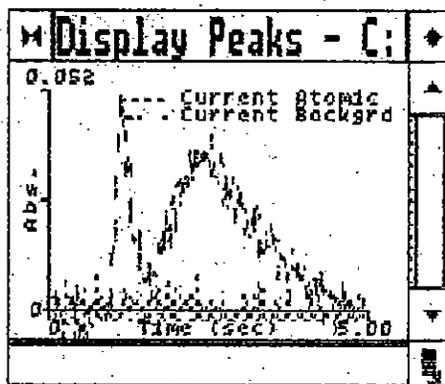
Mean Conc (mg/L): 0.0001
 Corrected Conc (ppm): 0.0001

SD: 0.00024 RSD(%): 312.98

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

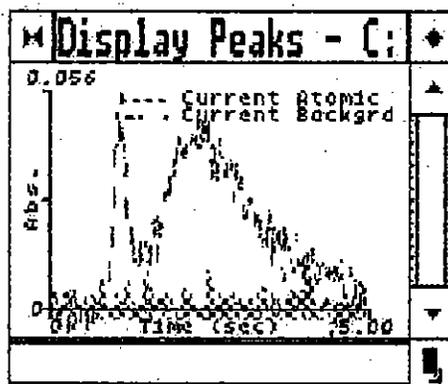
uL dispensed: 5 from 20, 20 from 27
 Replicate 1
 Peak Area (A-s): -0.004
 Background Pk Area (A-s): 0.071
 Blank Corrected Pk Area (A-s): -0.001
 Concentration (mg/L): -0.0004

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



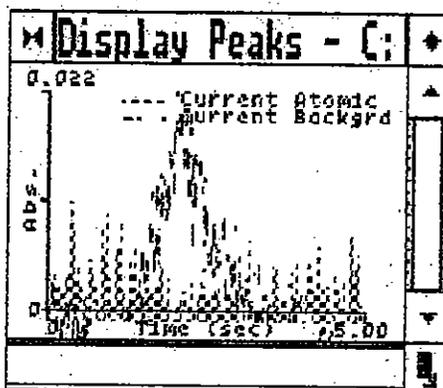
Mean Conc (mg/L): 0.0000
 Corrected Conc (ppm): 0.0000

SD: 0.00063 RSD(%): 1687.63

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

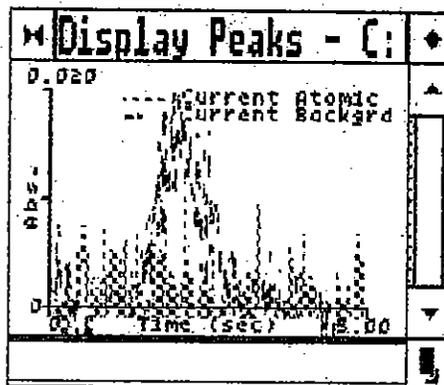
uL dispensed: 5 from 20, 20 from 28
 Replicate 1
 Peak Area (A-s): -0.002
 Background Pk Area (A-s): 0.001
 Blank Corrected Pk Area (A-s): 0.001
 Concentration (mg/L): 0.0005

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 (mg/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
 Corrected Conc (ppm): 0.0003

SD: 0.00018

RSD(%): 53.40

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

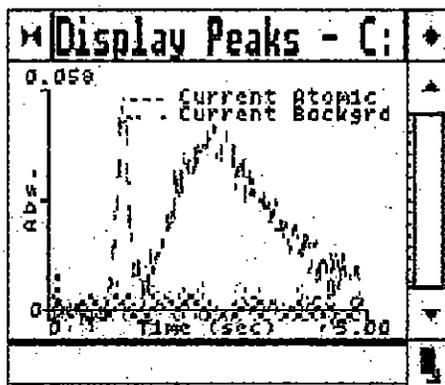
3863

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

Time: 15:01

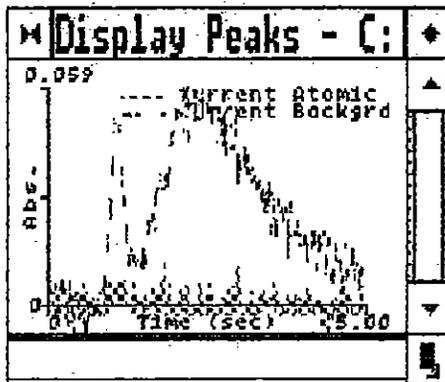
Concentration (mg/L): 0.0007

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



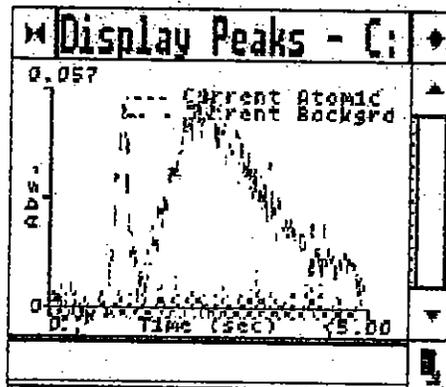
Mean Conc (mg/L): 0.0004
Corrected Conc (ppm): 0.0004

SD: 0.00030

RSD(%): 67.41

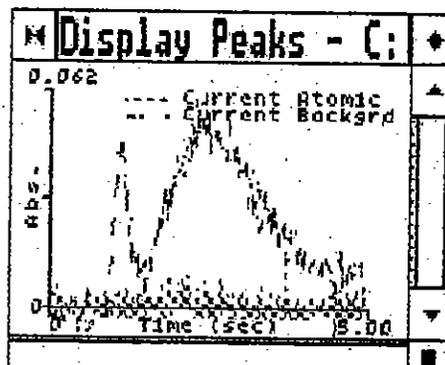
uL dispensed: 5 from 20, 20 from 30
Replicate 1
Peak Area (A-s): -0.004
Background Pk Area (A-s): 0.111
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0004

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

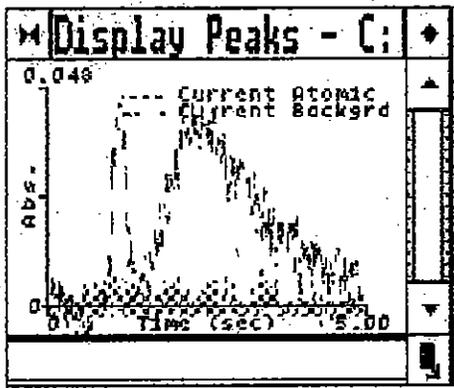
Time: 15:10
Peak Height (A): 0.010
Background Pk Height (A): 0.062
Corrected Conc (ppm): 0.0014



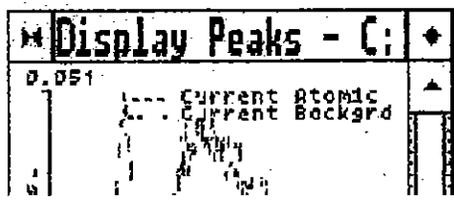
Mean Conc (mg/L): 0.0005 SD: 0.00133 RSD(%): 263.39
Corrected Conc (ppm): 0.0005

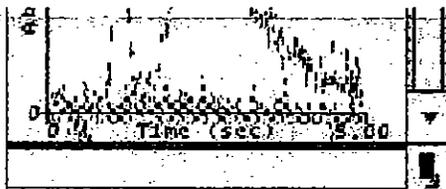
As ID: 2843-5 F=1 Seq. No.: 00039 A/S Pos.: 31 Date: 04/29/99

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 P=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

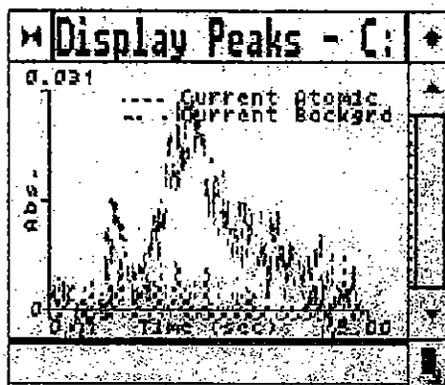
Background Pk Area (A-s): 0.038

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

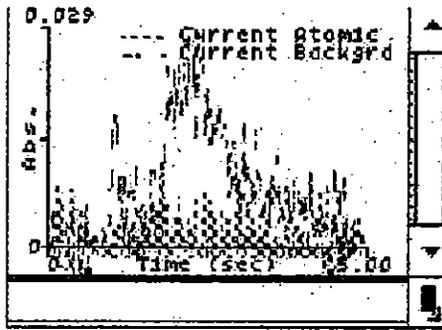
Background Pk Area (A-s): 0.035

Background Pk Height (A): 0.029

Blank Corrected Pk Area (A-s): 0.004

Concentration (mg/L): 0.0013

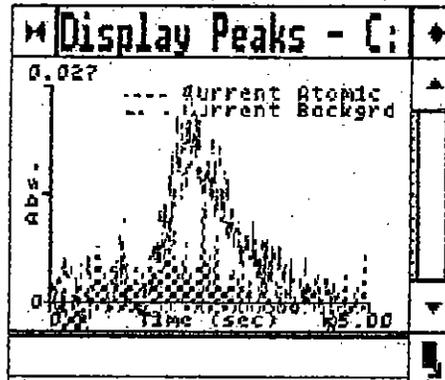
Corrected Conc (ppm): 0.0013



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

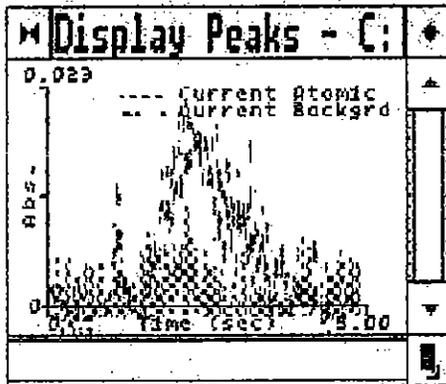
uL dispensed: 5 from 20, 20 from 33
 Replicate 1 Time: 15:26
 Peak Area (A-s): 0.001 Peak Height (A): 0.013
 Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.027
 Blank Corrected Pk Area (A-s): 0.003
 Concentration (mg/L): 0.0011 Corrected Conc (ppm): 0.0011



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): 0.023
Corrected Conc (ppm): 0.0006

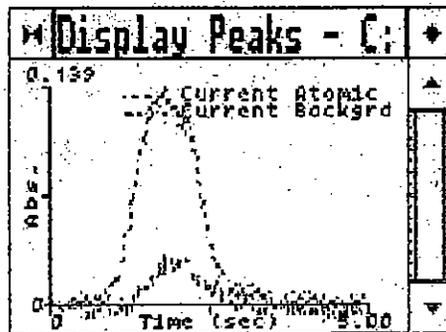


Mean Conc (mg/L): 0.0009 SD: 0.00035 RSD(%): 39.69
Corrected Conc (ppm): 0.0009

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

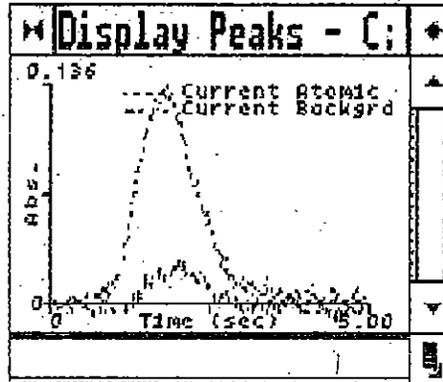
ul dispensed: 5 from 20, 20 from 40
Replicate 1
Peak Area (A-s): 0.158
Background Pk Area (A-s): 0.015
Blank Corrected Pk Area (A-s): 0.161
Concentration (mg/L): 0.0544

Time: 15:33
Peak Height (A): 0.139
Background Pk Height (A): 0.031
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): -----



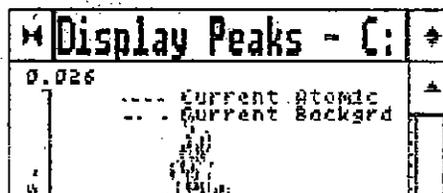
Mean Conc (mg/L): 0.0538 SD: 0.00083 RSD(%): 1.55
Corrected Conc (ppm): -----

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

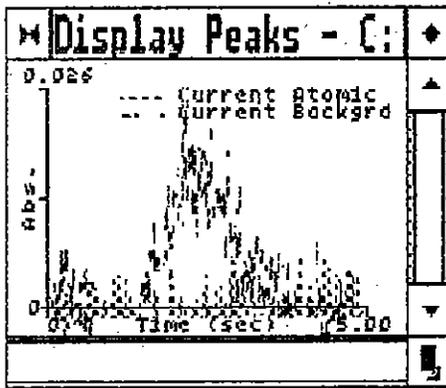
Time: 15:39
Peak Height (A): 0.010
Background Pk Height (A): 0.026
Corrected Conc (ppm): -----



0	Time (Sec)	5.00
---	------------	------

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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method SM2320B
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	166	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	< 2	U
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	164	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	153	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	202	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	115	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/29/03	03W2617	mg/L	2	114	
03W2617-MB-01	03W2617-MB-01	Water	04/29/03	04/29/03	04/29/03	03W2617	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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method SM2320B
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	<2	U
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	<2	U
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	<2	U
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	<2	U
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	<2	U
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	20.4	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/29/03	03W2617	mg-CaCO ₃ /L	2	38.4	
03W2617-MB-01	03W2617-MB-01	Water	04/29/03	04/29/03	04/29/03	03W2617	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: 32866

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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	7.66	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	6.21	
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	7.64	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	7.71	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	7.90	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	8.79	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	9.08	
03W2546-MB-01	03W2546-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2546	pH unit	0.01	6.83	

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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method 160.1
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	298	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	<10	U
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	311	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	235	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	333	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	201	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/28/03	03W2607	mg/L	10	347	
03W2607-MB-01	03W2607-MB-01	Water	04/28/03	04/28/03	04/28/03	03W2607	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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method: 7196
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/24/03	03W2542	mg/L	0.01	<0.01	U
03W2542-MB-01	03W2542-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2542	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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method: 314.0
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/24/03	03W2531	µg/L	4	< 4	U
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/24/03	03W2531	µg/L	4	< 4	U
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/24/03	03W2531	µg/L	4	< 4	U
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/24/03	03W2531	µg/L	4	< 4	U
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/29/03	03W2612	µg/L	4	< 4	U
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/29/03	03W2612	µg/L	8	124	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/29/03	03W2612	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
03W2612-MB-01	03W2612-MB-01	Water	04/29/03	04/29/03	04/29/03	03W2612	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 : 2866-01 f=1

Data File Name : C:\DATA\03W2531K\2866-01_030.DXD

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

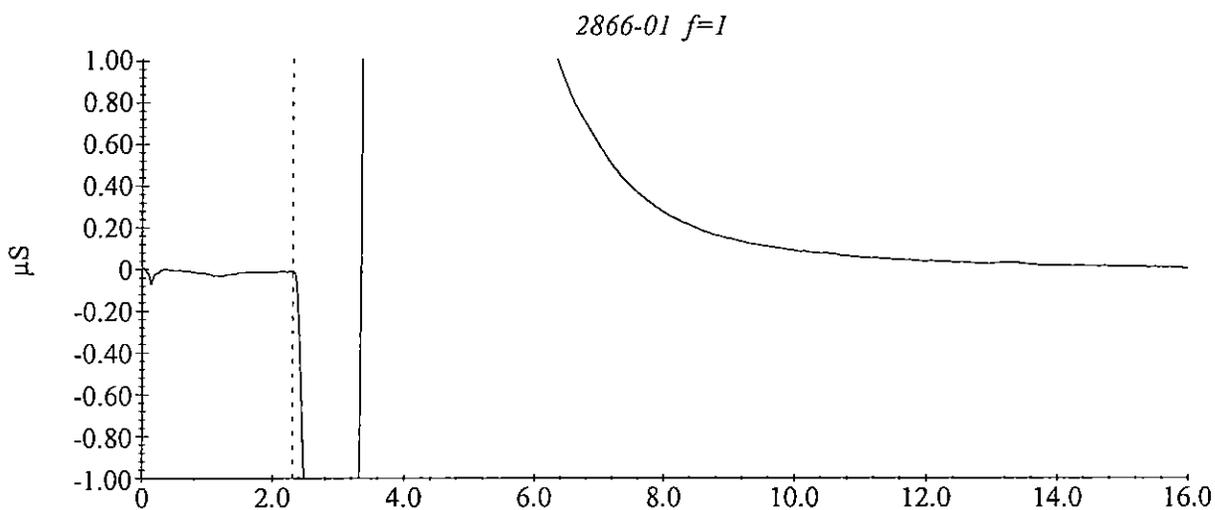
Date Time Collected : 04/24/2003 9:10:42 PM

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
--------	----------------	----------------	--------------	-----------	-------------



APCL Perchlorate Analysis Report

Sample Name : mb

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

Method File Name : c:\peaknet\method\ve314-011.met

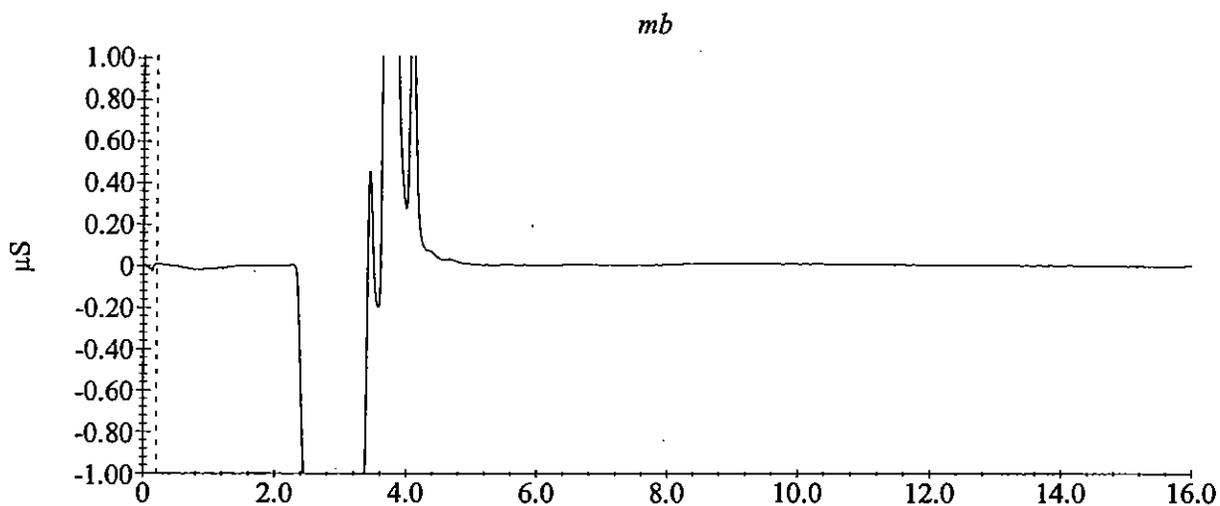
Date Time Collected : 04/24/2003 1:11:50 PM

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
--------	----------------	----------------	--------------	-----------	-------------



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\e314-011.met

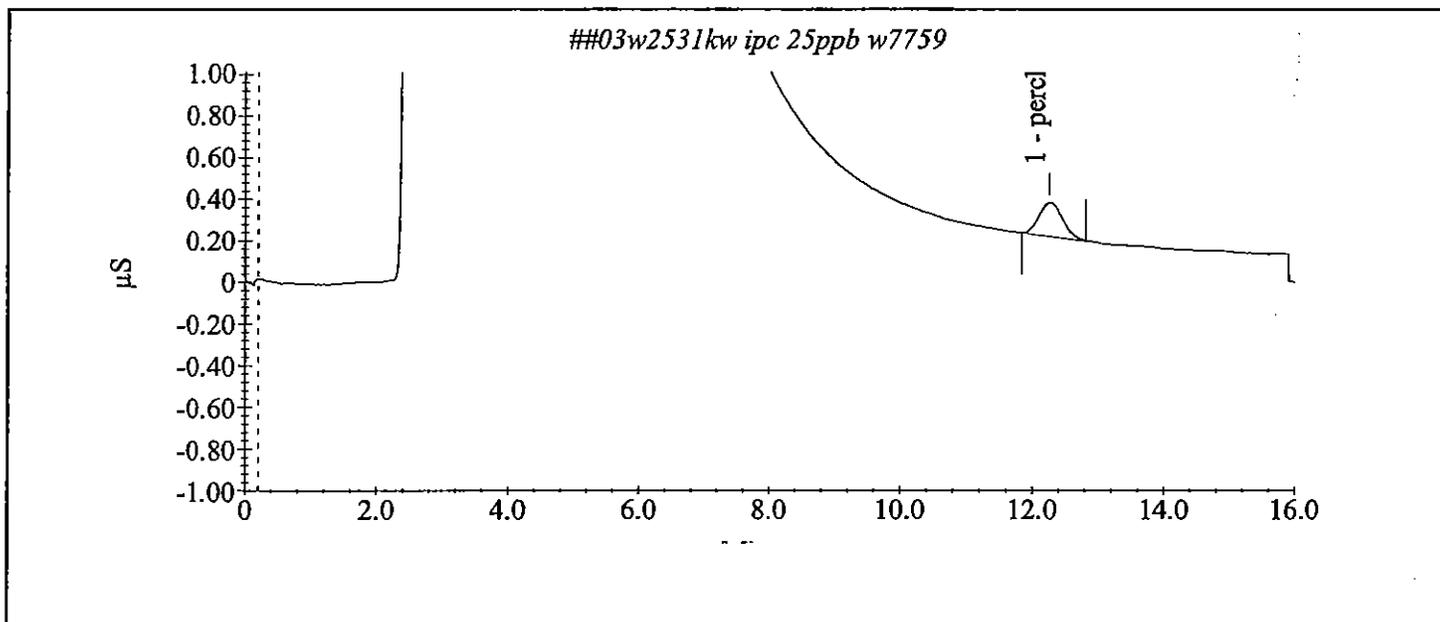
Date Time Collected : 04/24/2003 11:18:40 AM

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\314-011.met

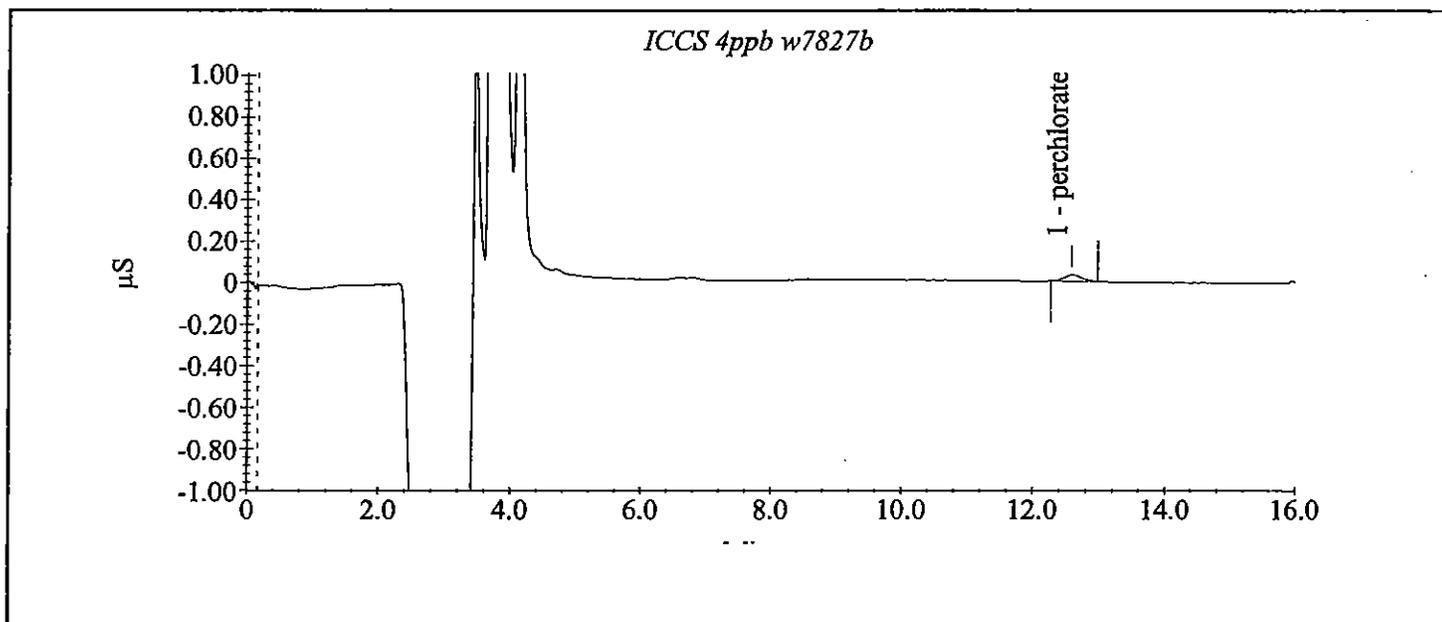
Date Time Collected : 04/24/2003 12:53:01 PM

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\ve314-011.met

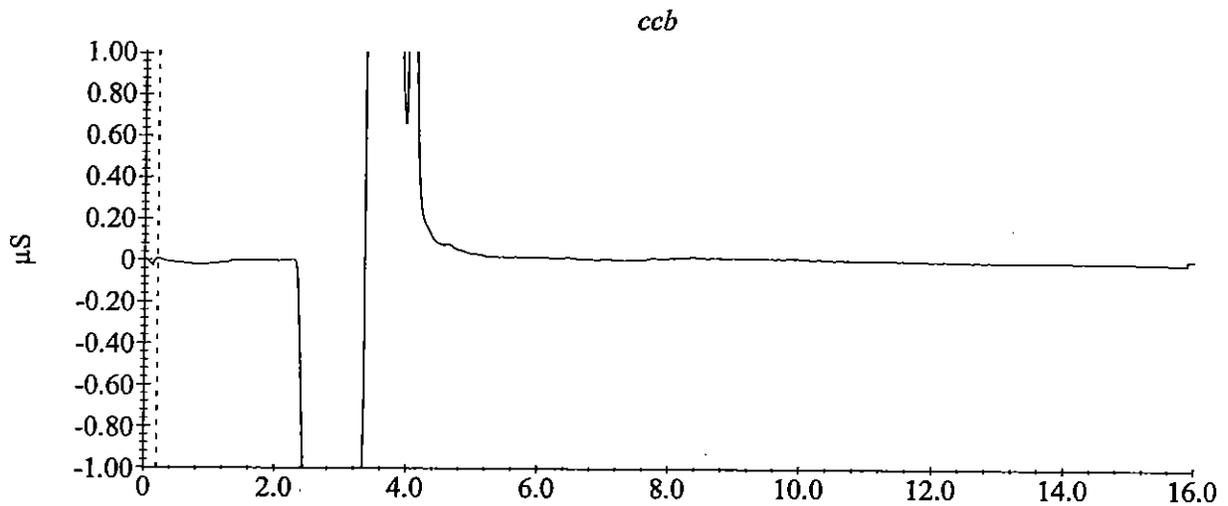
Date Time Collected : 04/24/2003 11:55:53 AM

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 K03_025.DXD

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

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

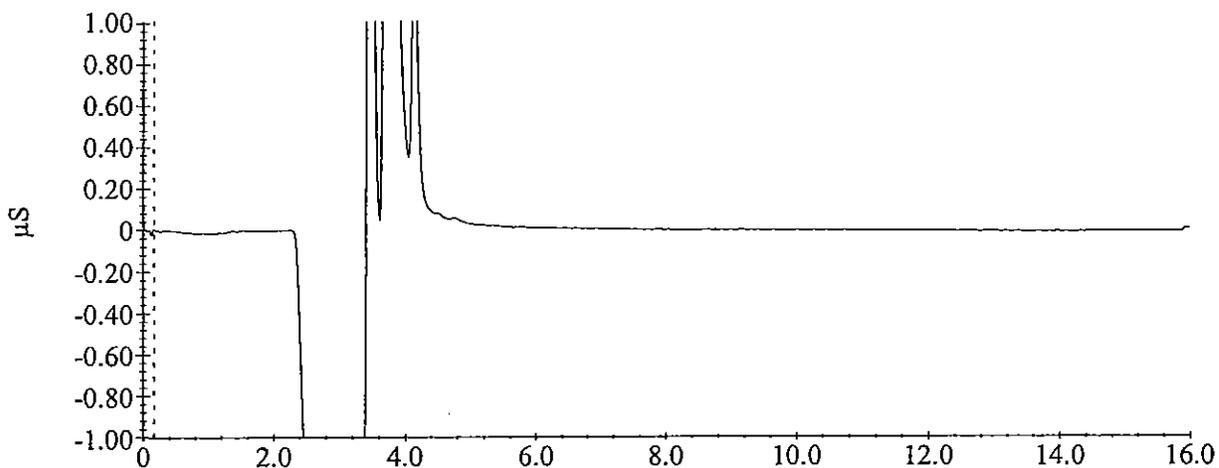
System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

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

CCB



APCL Perchlorate Analysis Report

Sample Name : ccb

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

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

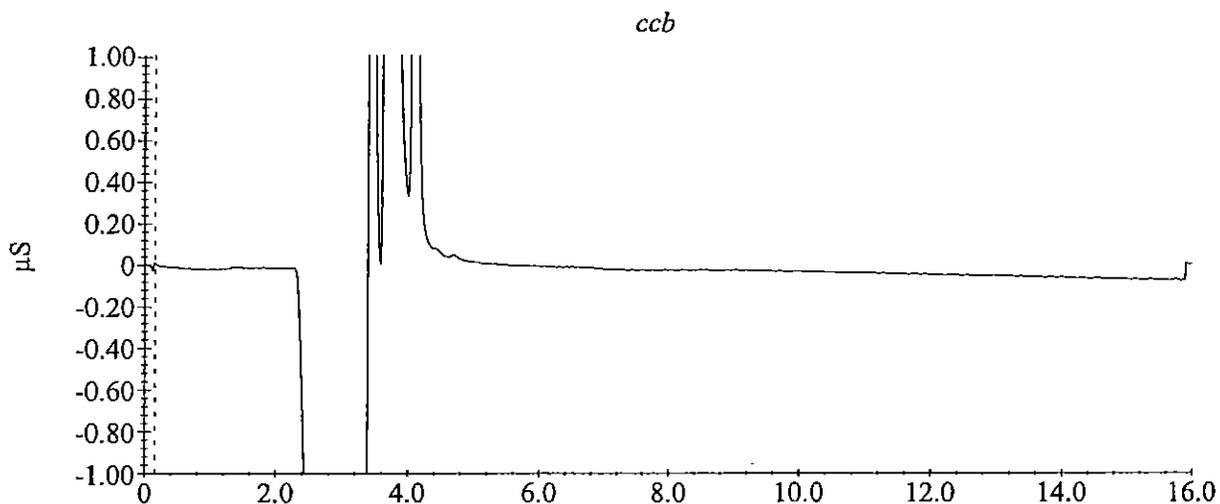
Date Time Collected : 04/24/2003 4:12:05 PM

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
--------	----------------	----------------	--------------	-----------	-------------



Applied P & Ch Laboratory
Wet Analysis Results for Method 300.0

Client Name: GEOFON, Inc.
 Project ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method: 300.0
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.5	18.9	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.25	0.24	B
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.5	18.5	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.25	7.6	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	1	37.0	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.4	10	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.4	8.9	
03W2550-MB-01	03W2550-MB-01	Water	04/25/03	04/25/03	04/25/03	03W2550	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: 32866 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.1	2.9	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.05	0.070	
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.1	2.8	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.05	0.98	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.2	3.0	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.08	<0.08	U
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.08	0.12	
03W2550-MB-01	03W2550-MB-01	Water	04/25/03	04/25/03	04/25/03	03W2550	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 ID: JPL

Project No: 04-4428.10
 Service ID: 32866

Anal. Method: 300.0
 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
03-2866-1	DUPE-3-2Q03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	1.3	56.2	
03-2866-2	EB-5-4/24/03	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.63	0.69	
03-2866-3	MW-20-1	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	1.3	54.5	
03-2866-4	MW-20-2	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	0.63	28.9	
03-2866-5	MW-20-3	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	2.5	30.4	
03-2866-6	MW-20-4	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	1	10.3	
03-2866-7	MW-20-5	Water	04/24/03	04/24/03	04/25/03	03W2550	mg/L	1	5.4	
03W2550-MB-01	03W2550-MB-01	Water	04/25/03	04/25/03	04/25/03	03W2550	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: 2866-1 F=2.5                               Date: 04/25/2003 10:27:15
Data File  : C:\DX\DATA\03W2550\2866-101.D05
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 5                     Detector:COND
Analyst    : David                                     Column: Dionex AS4A-SC
=====

```

```

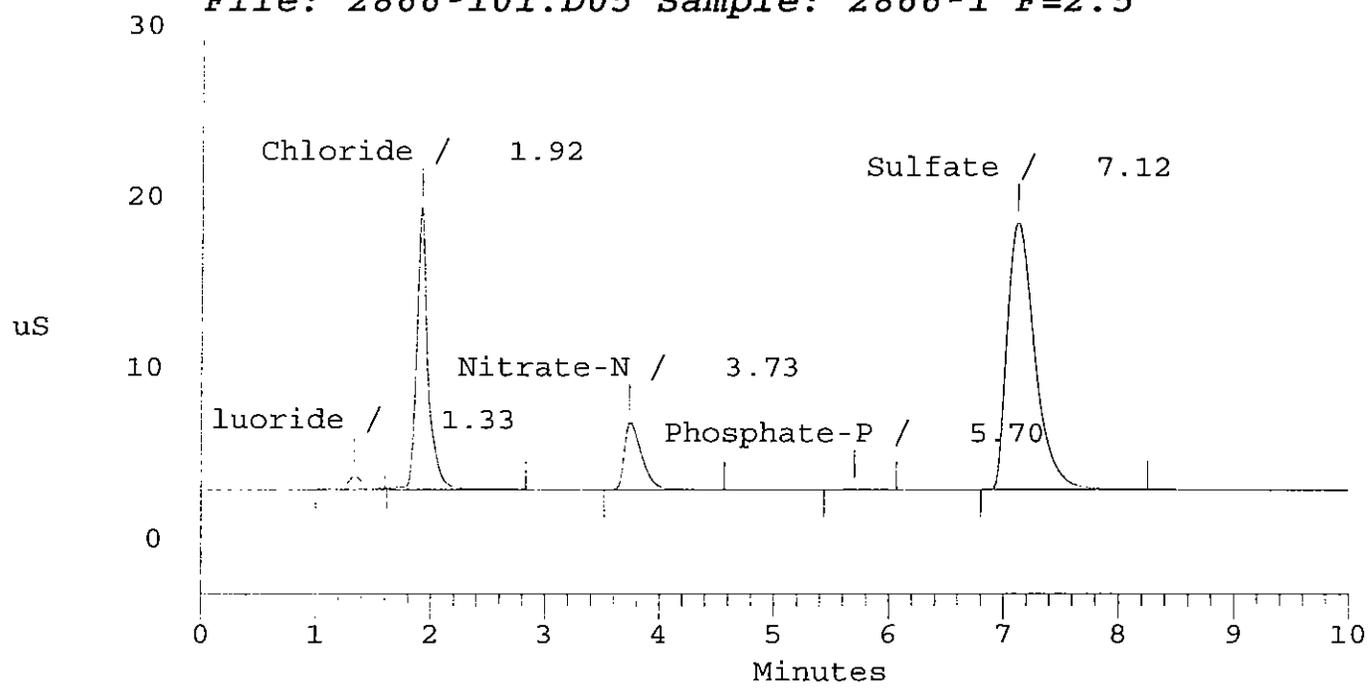
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           2.5   3000  5Hz   0.00 10.00      1000
-----

```

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

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	1.078	26456	313945	2	0.00
2	1.92	Chloride	18.935	548824	3812834	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	3.73	Nitrate-N	2.851	128499	1362709	1	0.00
4	5.70	Phosphate-P	0.273	551	10444	1	0.00
5	7.12	Sulfate	56.185	518282	8664007	1	0.00
Totals			79.321	1222613	14163939		

File: 2866-101.D05 Sample: 2866-1 F=2.5




```

=====
Sample Name: MB RW1408                               Date: 04/25/2003 09:49:07
Data File  : C:\DX\DATA\03W2550\W2550K01.D02
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 2                 Detector:COND
Analyst    : David                                  Column: Dionex AS4A-SC
=====

```

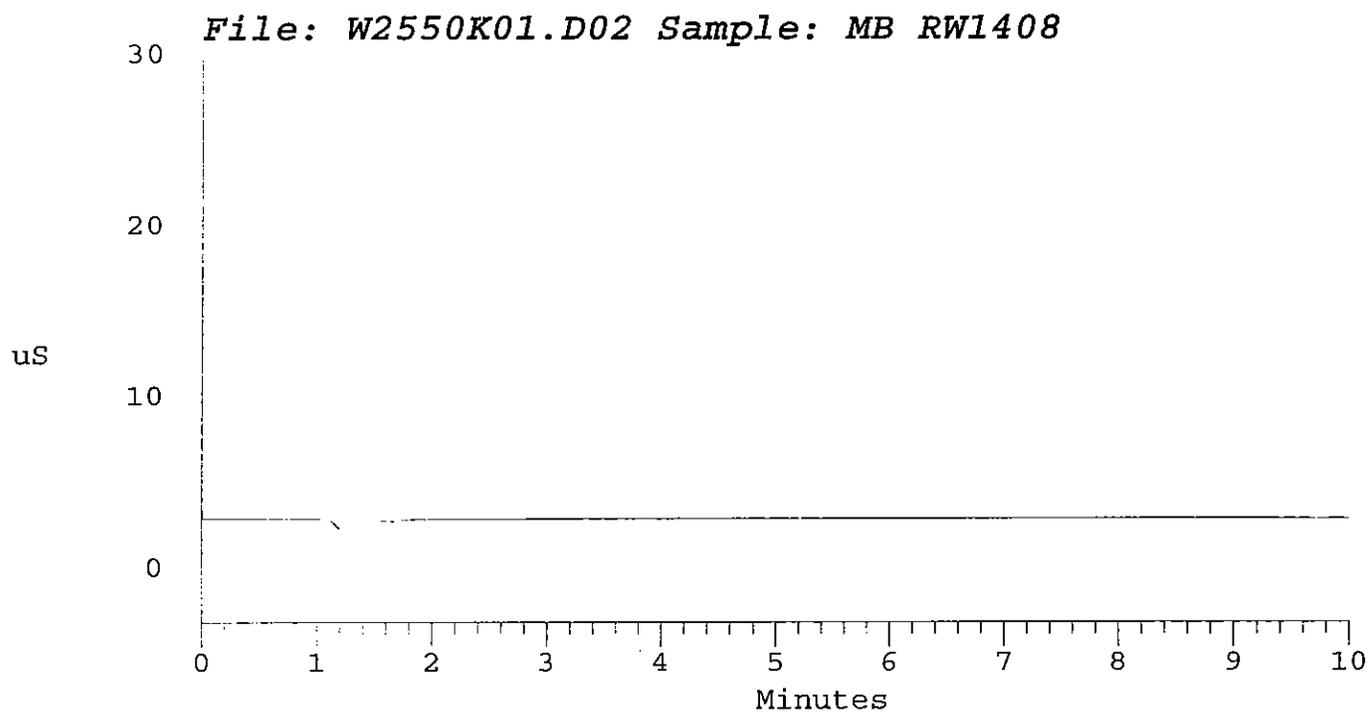
```

-----
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		



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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2550	
LCS Filename: -	Date Analyzed: 042503	Time Analyzed: 10:01
LCSD Filename: -	Date Analyzed: 042503	Time Analyzed: 10:14

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CHLORIDE CL ⁻	mg/L	4.0	0	4.04	101	80-120
NITRATE AS N	mg/L	1.5	0	1.54	103	80-120
SULFATE SO ₄ ²⁻	mg/L	15	0	15.0	100	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	3.98	100	1	20	80-120
NITRATE AS N	mg/L	1.5	1.53	102	1	20	80-120
SULFATE SO ₄ ²⁻	mg/L	15	15.4	103	3	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: 04/25/2003 10:01:49
Data File  : C:\DX\DATA\03W2550\W2550L01.D03
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 3   Detector:COND
Analyst    : David                   Column: Dionex AS4A-SC
=====

```

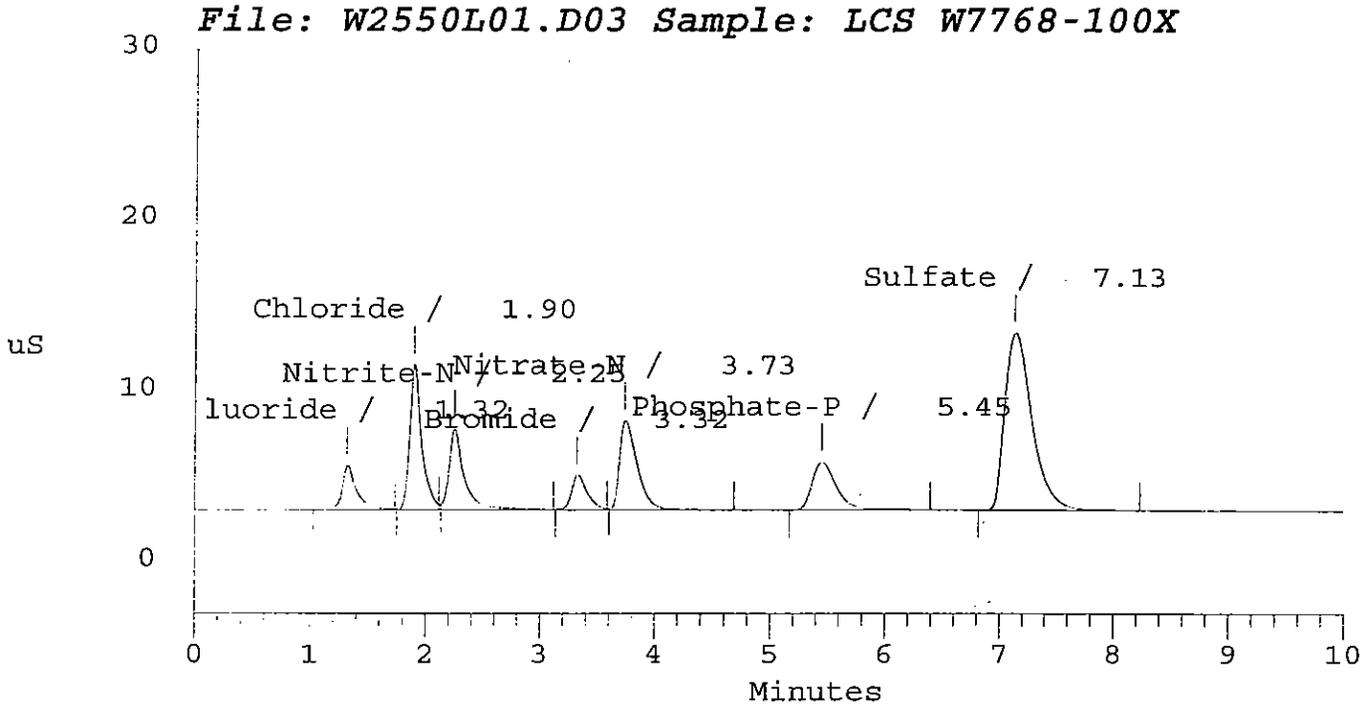
```

-----
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	1.055	85399	767251	2	0.00
2	1.90	Chloride	4.039	280873	2002379	2	0.00
3	2.25	Nitrite-N	1.480	157207	1491928	2	0.00
4	3.32	Bromide	3.126	66829	637246	2	0.31
5	3.73	Nitrate-N	1.541	172242	1859994	2	0.00
6	5.45	Phosphate-P	2.978	92375	1362323	1	0.00
7	7.13	Sulfate	14.999	343877	5712308	1	0.00
----- Totals -----			29.217	1198803	13833428		



```

=====
Sample Name: LCSD W7768-100X          Date: 04/25/2003 10:14:33
Data File  : C:\DX\DATA\03W2550\W2550J01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 4
Analyst    : David                    Column: Dionex AS4A-SC
Detector: COND
=====

```

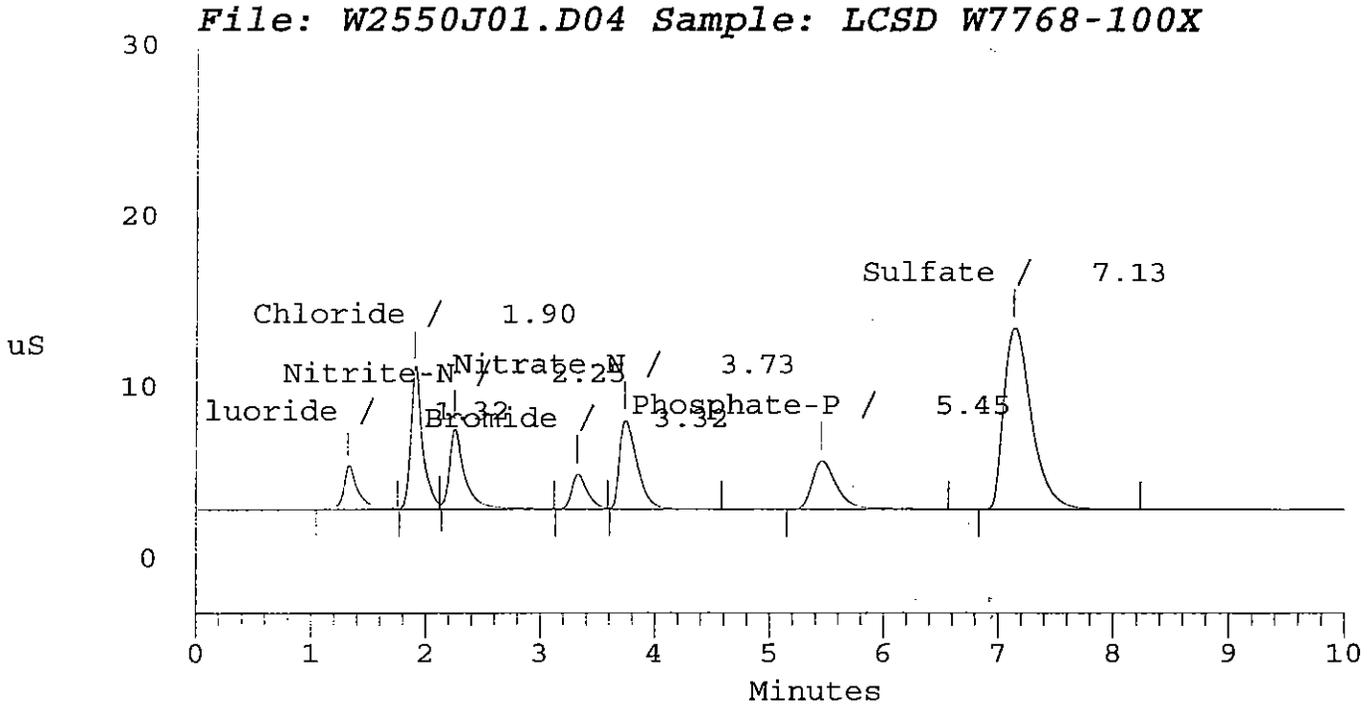
```

-----
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	1.32	Fluoride	1.048	81635	762419	2	0.00
2	1.90	Chloride	3.982	269397	1973310	2	0.00
3	2.25	Nitrite-N	1.475	154723	1486056	2	0.00
4	3.32	Bromide	3.084	66820	628617	2	0.31
5	3.73	Nitrate-N	1.527	171729	1843367	2	0.00
6	5.45	Phosphate-P	3.073	92602	1407158	2	0.00
7	7.13	Sulfate	15.359	350699	5854417	2	0.00
Totals			29.548	1187605	13955344		



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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2550	
MS Filename: -	Date Analyzed: 042503	Time Analyzed: 12:48
MSD Filename: -	Date Analyzed: 042503	Time Analyzed: 13:09
MS Sample No: MW-20-3	Sample Lab ID: 03-2866-5	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
CHLORIDE CL ⁻	mg/L	40.0	37.0	77.0	100	75-125
NITRATE AS N	mg/L	15.0	3.0	18.0	100	75-125
SULFATE SO ₄ ⁻	mg/L	150	30.4	179	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	40.0	78.3	103	3	20	75-125
NITRATE AS N	mg/L	15.0	18.5	103	3	20	75-125
SULFATE SO ₄ ⁻	mg/L	150	181	100	1	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: $2866-5 MS F=10           Date: 04/25/2003 12:48:36
Data File  : C:\DX\DATA\03W2550\W2550M01.D14
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 14    Detector:COND
Analyst    : David                     Column: Dionex AS4A-SC
=====

```

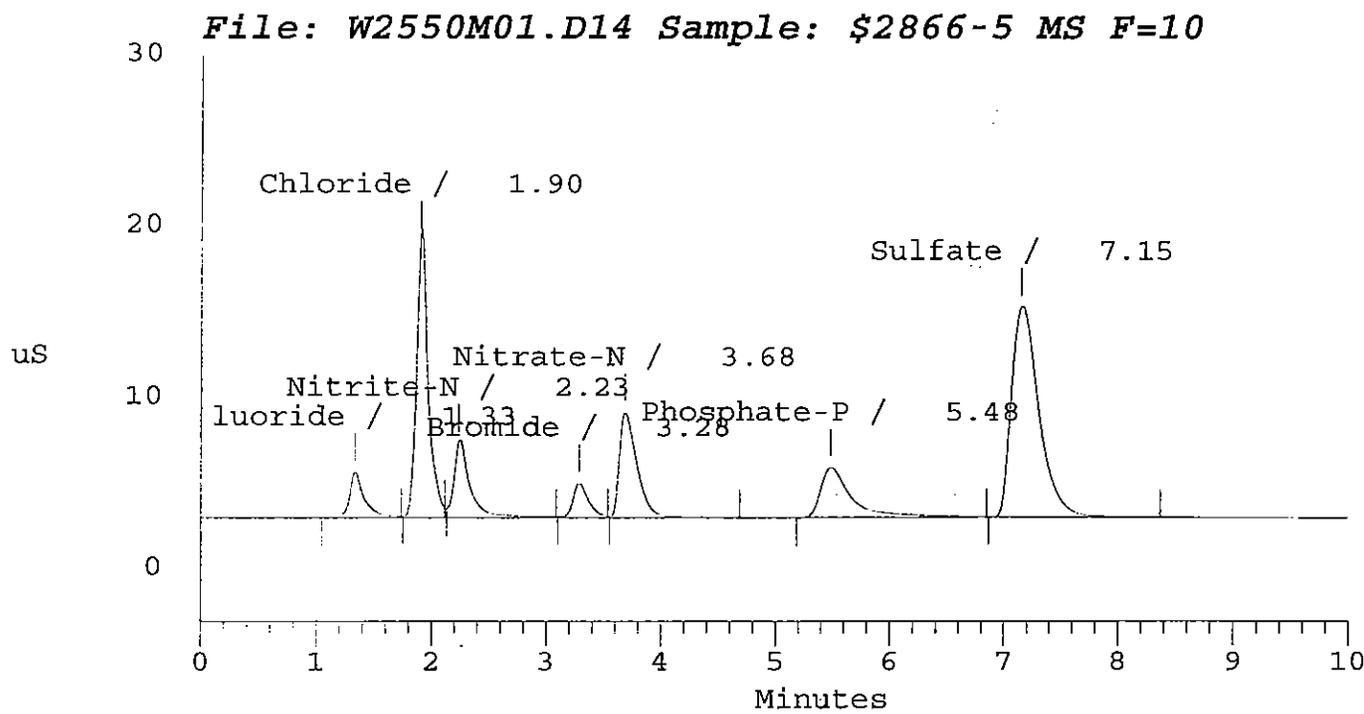
```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           10  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	11.025	88640	801824	2	0.00
2	1.90	Chloride	77.026	540224	3878622	2	0.00
3	2.23	Nitrite-N	14.635	145726	1474736	2	-0.74
4	3.28	Bromide	30.476	66979	621112	2	0.65
5	3.68	Nitrate-N	18.045	204919	2187356	2	0.00
6	5.48	Phosphate-P	41.153	97209	1898161	2	0.00
7	7.15	Sulfate	179.370	409785	6872490	2	0.00
Totals			371.730	1553483	17734302		



```

=====
Sample Name: $2866-5 MSD F=10           Date: 04/25/2003 13:09:18
Data File  : C:\DX\DATA\03W2550\W2550N01.D15
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 15     Detector:COND
Analyst    : David                      Column: Dionex AS4A-SC
=====

```

```

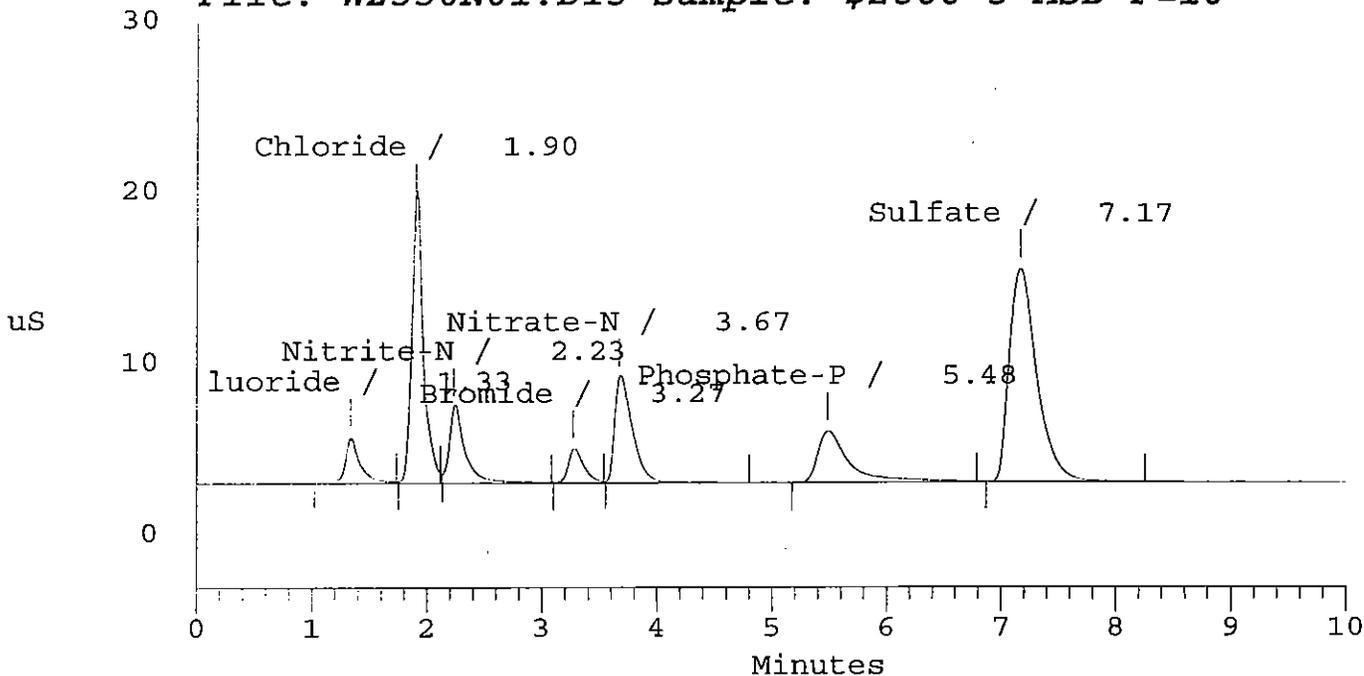
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External          1           10   3000  5Hz   0.00 10.00      1000
-----

```

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

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	11.191	89080	813916	2	0.00
2	1.90	Chloride	78.323	546216	3945003	2	0.00
3	2.23	Nitrite-N	14.803	148253	1491897	2	-0.74
4	3.27	Bromide	30.861	65286	629082	2	0.60
5	3.67	Nitrate-N	18.464	203841	2239336	2	0.00
6	5.48	Phosphate-P	42.275	100011	1951010	2	0.00
7	7.17	Sulfate	180.968	414530	6935581	2	0.00
Totals			376.884	1567217	18005825		

File: W2550N01.D15 Sample: \$2866-5 MSD F=10



```

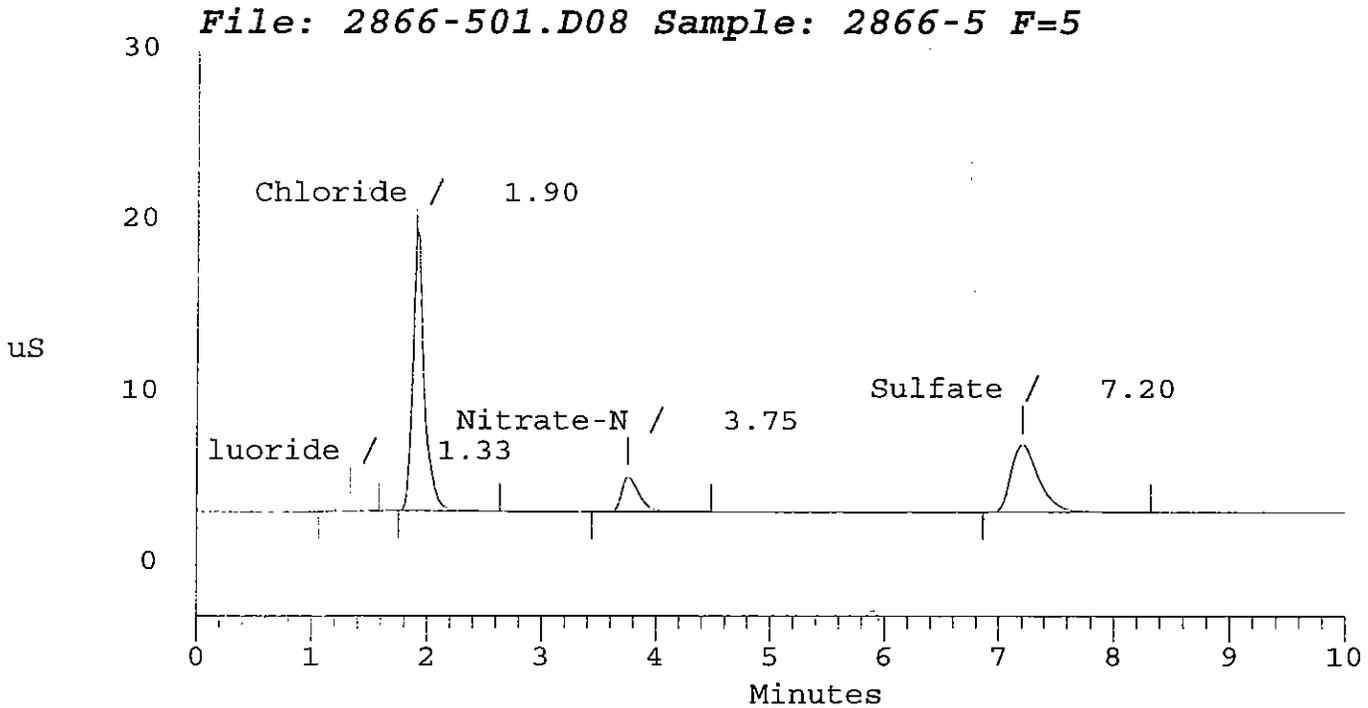
=====
Sample Name: 2866-5 F=5                               Date: 04/25/2003 11:06:49
Data File  : C:\DX\DATA\03W2550\2866-501.D08
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 8                   Detector:COND
Analyst    : David                                    Column: Dionex AS4A-SC
=====
    
```

```

-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           5    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	0.708	8928	103628	1	0.00
2	1.90	Chloride	37.017	508995	3725394	1	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	3.032	67407	700119	1	0.00
0	0.00	Phosphate-P	0.000	0	0	0	0.00
4	7.20	Sulfate	30.400	130320	2190560	1	0.00
----- Totals -----			71.157	715650	6719701		



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: 32866
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\314-011.met

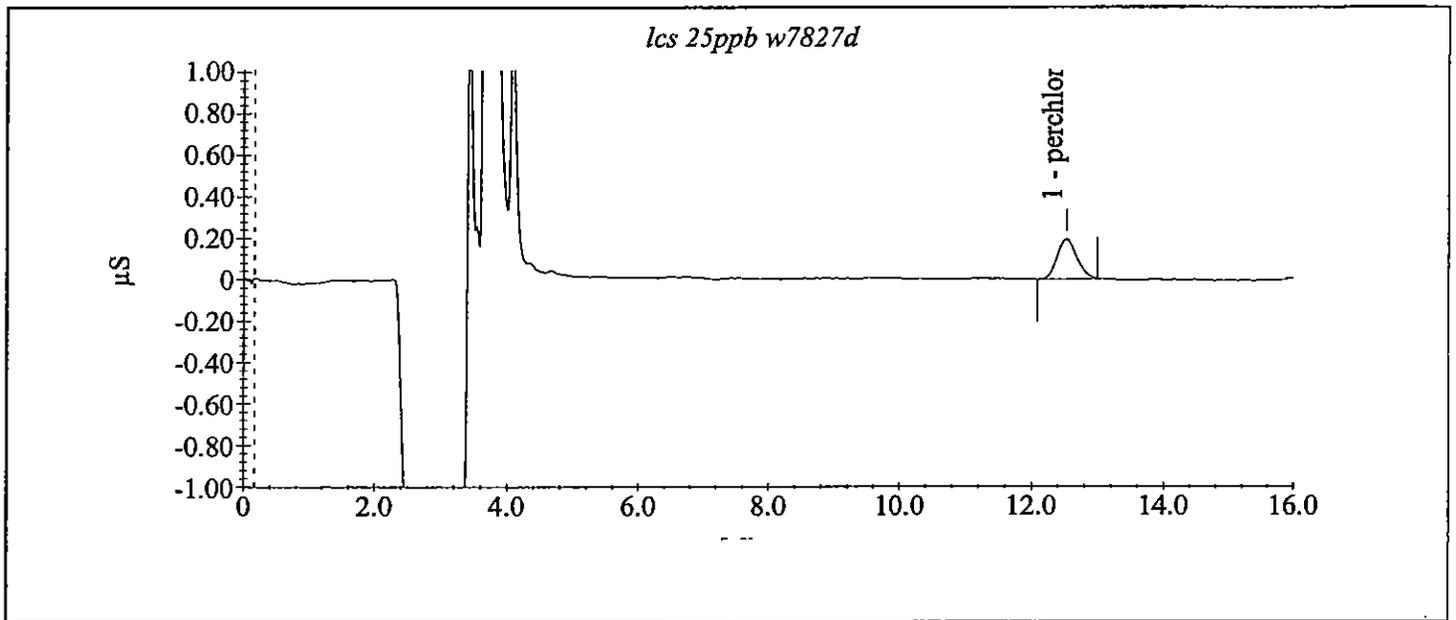
Date Time Collected : 04/24/2003 12:14:43 PM

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: 32866
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\314-011.met

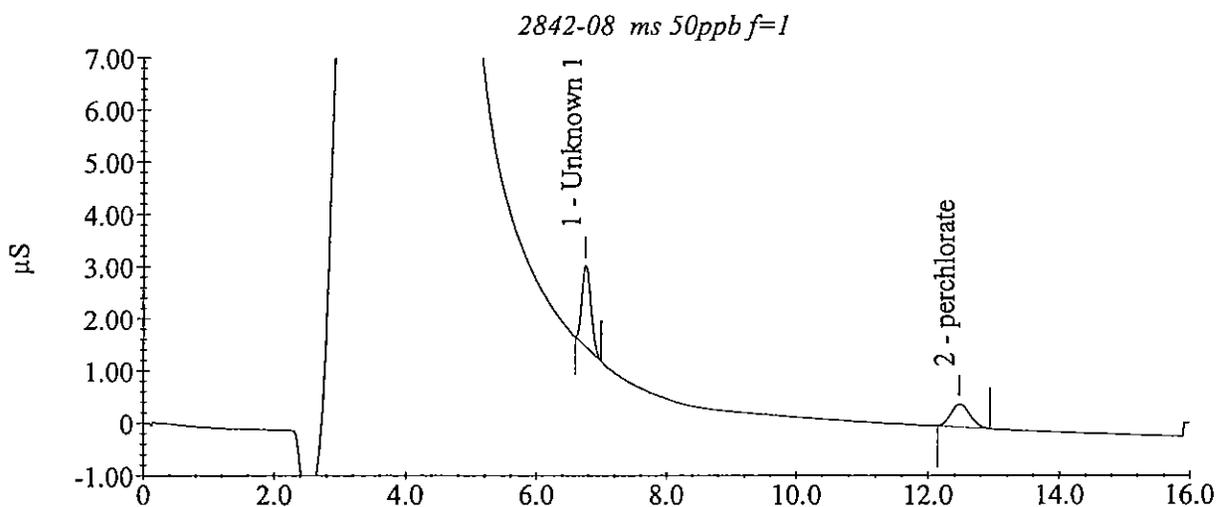
Date Time Collected : 04/24/2003 3:34:42 PM

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

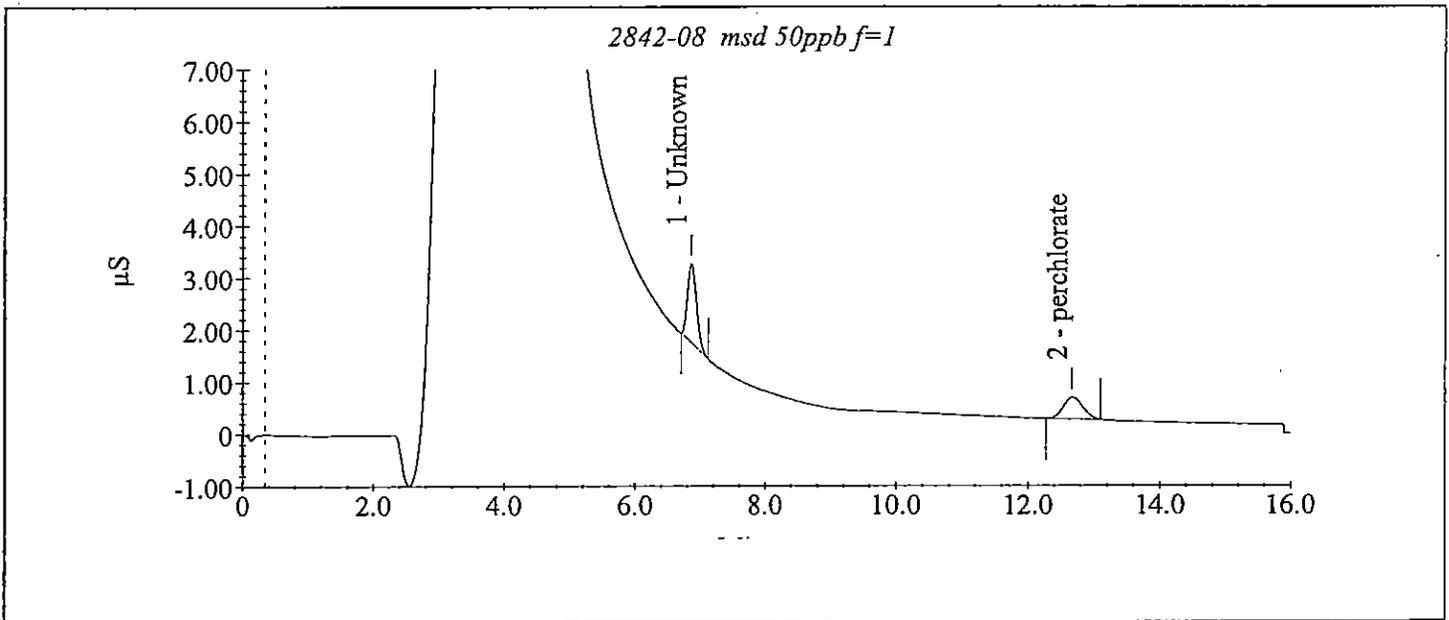
Date Time Collected : 04/24/2003 4:30:52 PM

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\e314-011.met

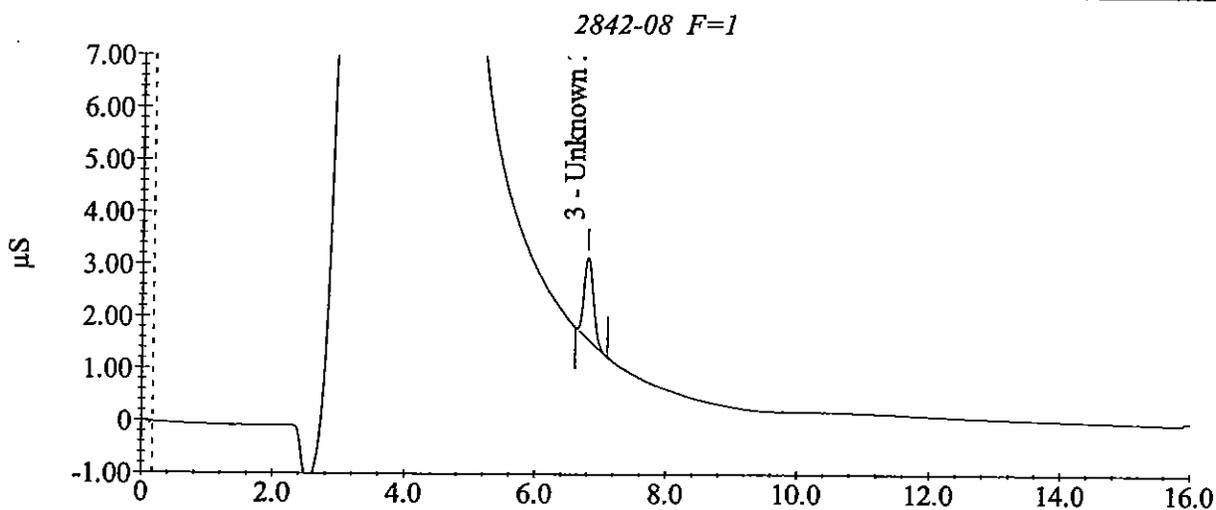
Date Time Collected : 04/24/2003 2:57:34 PM

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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2607	
LCS Filename: -	Date Analyzed: 042803	Time Analyzed: 17:19
LCSD Filename: -	Date Analyzed: 042803	Time Analyzed: 17:19

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	0	396	99	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	412	103	4	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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2607	
MS Filename: -	Date Analyzed: 042803	Time Analyzed: 17:19
MSD Filename: -	Date Analyzed: 042803	Time Analyzed: 17:19
MS Sample No: MW-17-2	Sample Lab ID: 03-2933-3	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	250	679	107	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	652	101	6	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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2542	
LCS Filename: -	Date Analyzed: 042403	Time Analyzed: 16:08
LCSD Filename: -	Date Analyzed: 042403	Time Analyzed: 16:08

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CHROMIUM (VI)	mg/L	0.25	0	0.267	107	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	0.258	103	4	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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2542	
MS Filename: -	Date Analyzed: 042403	Time Analyzed: 16:08
MSD Filename: -	Date Analyzed: 042403	Time Analyzed: 16:08
MS Sample No: DUPE-3-2Q03	Sample Lab ID: 03-2866-1	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
CHROMIUM (VI)	mg/L	0.25	0	0.230	92	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	0.233	93	1	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: _____

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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2612	
LCS Filename: -	Date Analyzed: 042903	Time Analyzed: 10:20
LCSD Filename: -	Date Analyzed: -	Time Analyzed: -

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
PERCHLORATE	µg/L	25	0	23.4	94	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: _____

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: 32866
Project ID: JPL	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W2612	
MS Filename: -	Date Analyzed: 042903	Time Analyzed: 14:07
MSD Filename: -	Date Analyzed: 042903	Time Analyzed: 14:26
MS Sample No: MW-17-2	Sample Lab ID: 03-2933-3	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
PERCHLORATE	µg/L	50	4.1	54.2	100	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD REC	
						PERCHLORATE	µg/L
# 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: 03-2866

Analysis	Batch ID	Analysis Date	Sample Name	Unit	Result	Duplicate Result	RPD %	RPD Control limit
pH	03W2546	04/24/2003	DUPE-3-2Q03	pH unit	7.66	7.62	1	20
Bicarbonate	03W2617	04/29/2003	DUPE-3-2Q03	mg/L	166	169	2	20
Carbonate	03W2617	04/29/2003	DUPE-3-2Q03	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

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 Retention Time 3.45
 Reference Comp. Nitrate-N 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 Retention Time 3.87
 Reference Comp. Nitrate-N 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 Retention Time 6.38
 Reference Comp. Phosphate-P 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*Area
 K0 = -9.62851E-004
 K1 = 1.37614E-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*Area
 K0 = 1.28188E-001
 K1 = 1.95287E-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*Area
 K0 = 2.38085E-002
 K1 = 9.76240E-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

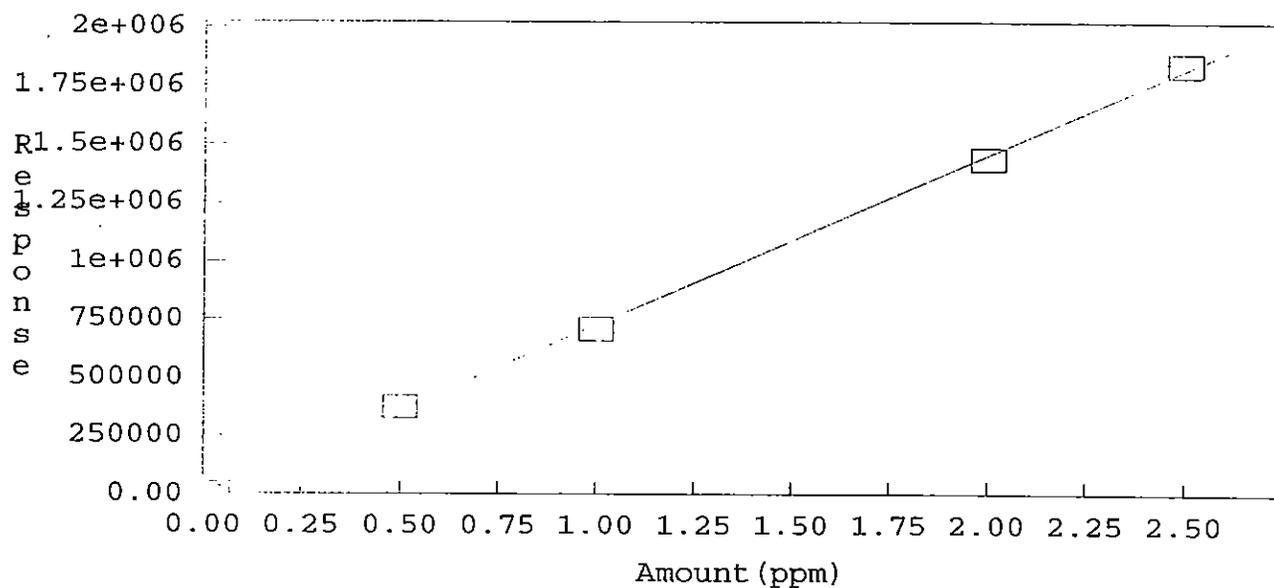
$r^2 = 0.999552$

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

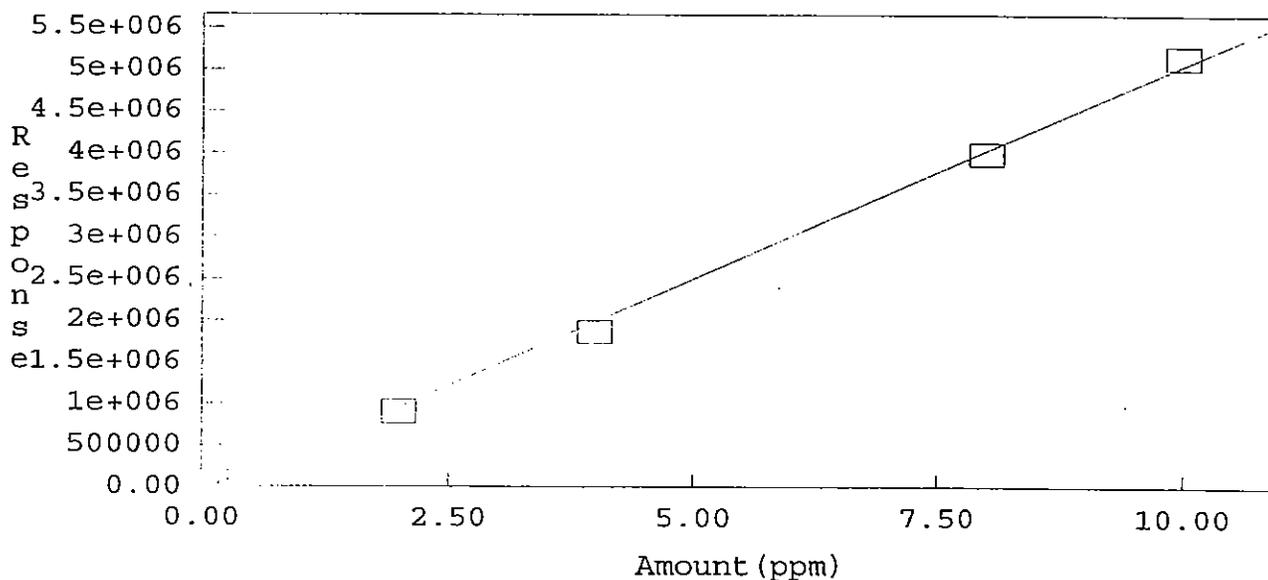
$r^2 = 0.998409$

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

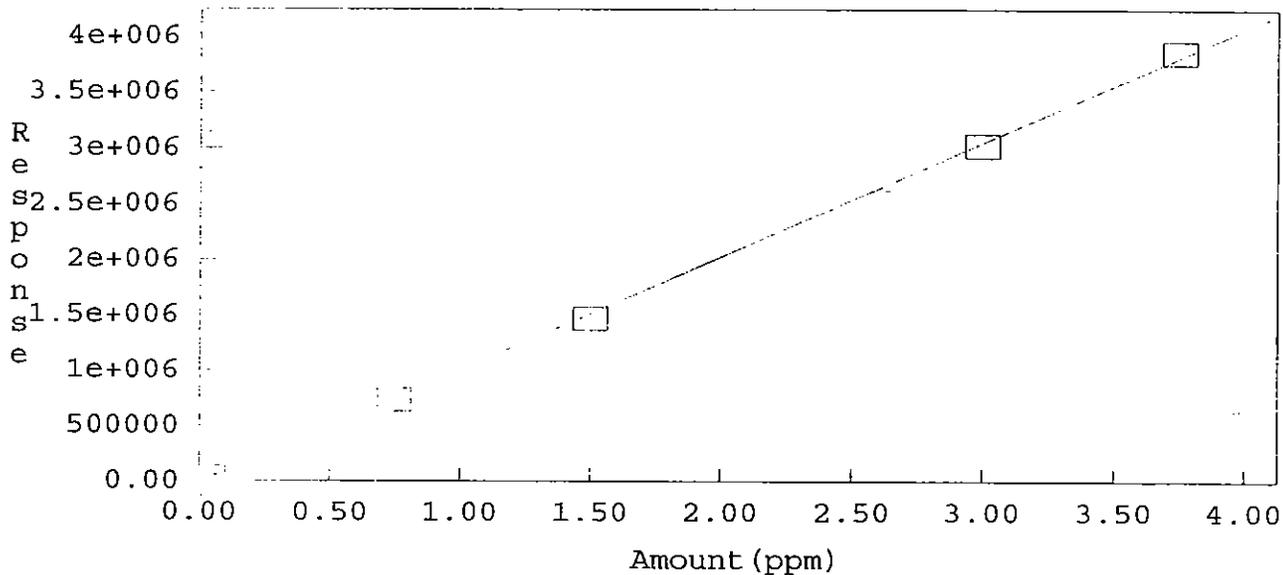
$r^2 = 0.999594$

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

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

Standardization: External

Calibration: Area



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

Component: Bromide

Fit Type: Linear

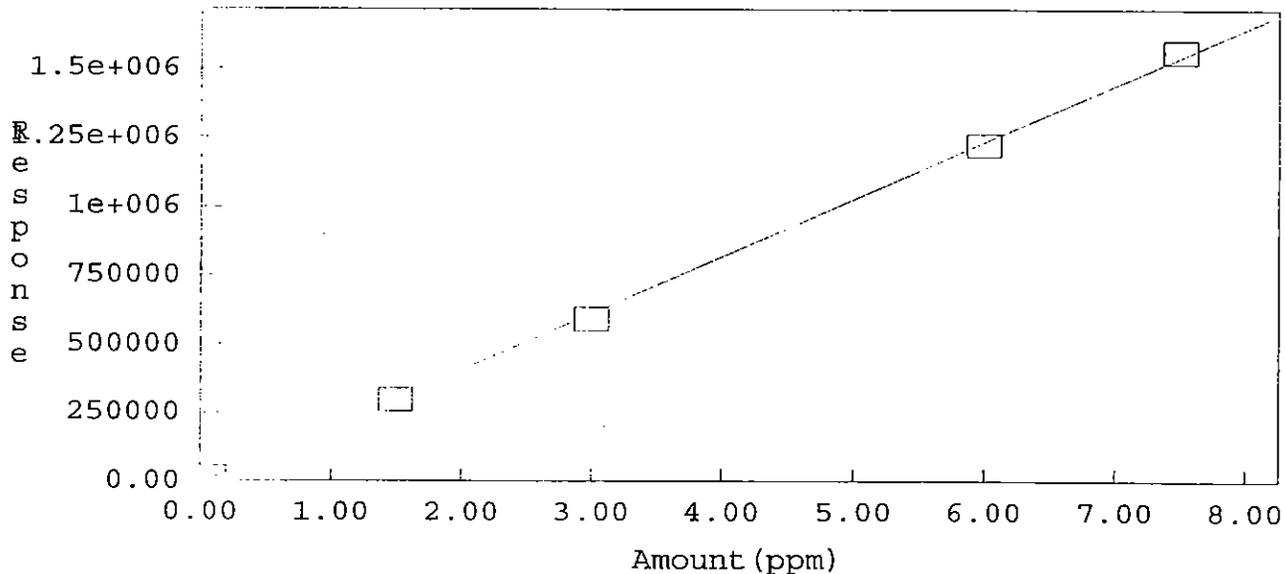
$r^2 = 0.999518$

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

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

Standardization: External

Calibration: Area



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

Component: Nitrate-N

Fit Type: Linear

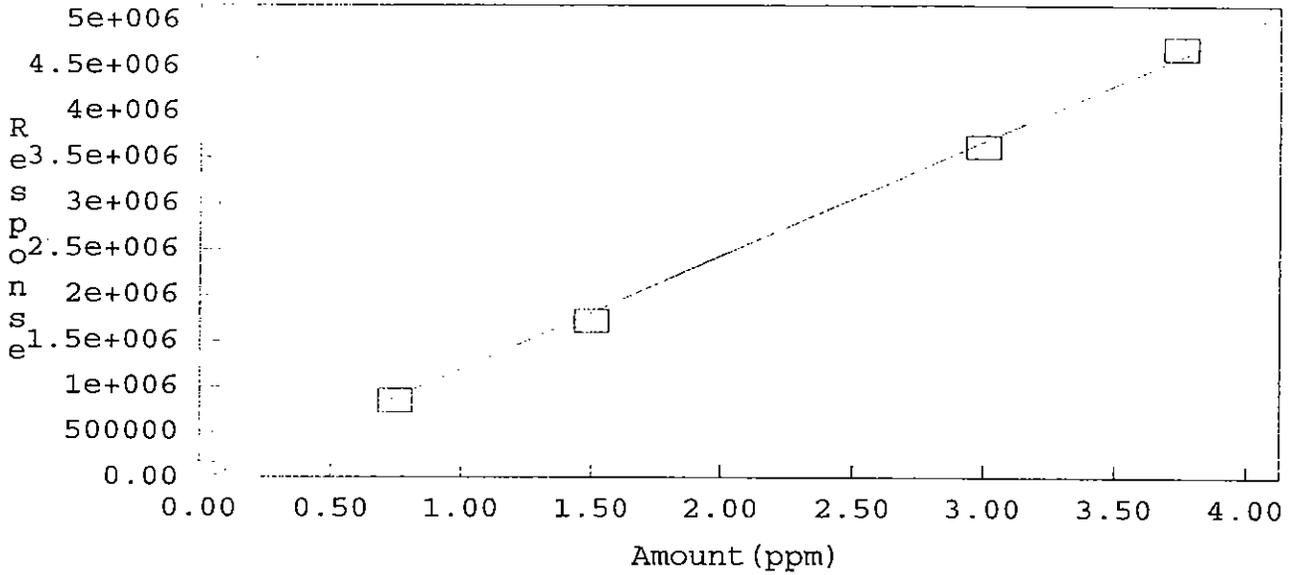
$r^2 = 0.998618$

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

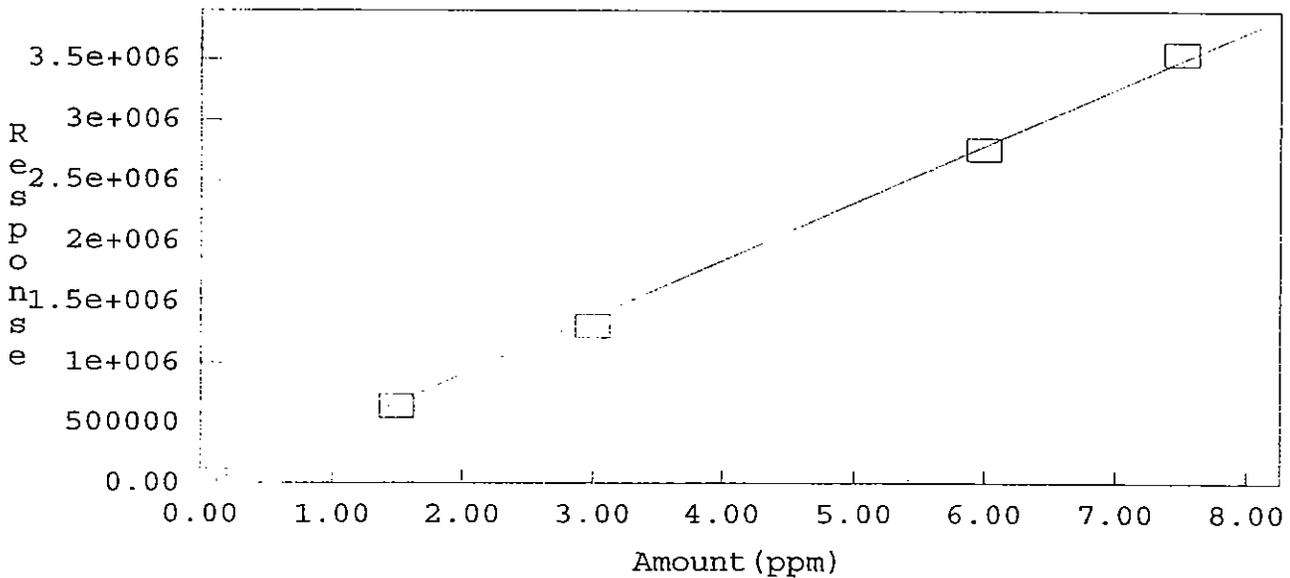
$r^2 = 0.998898$

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

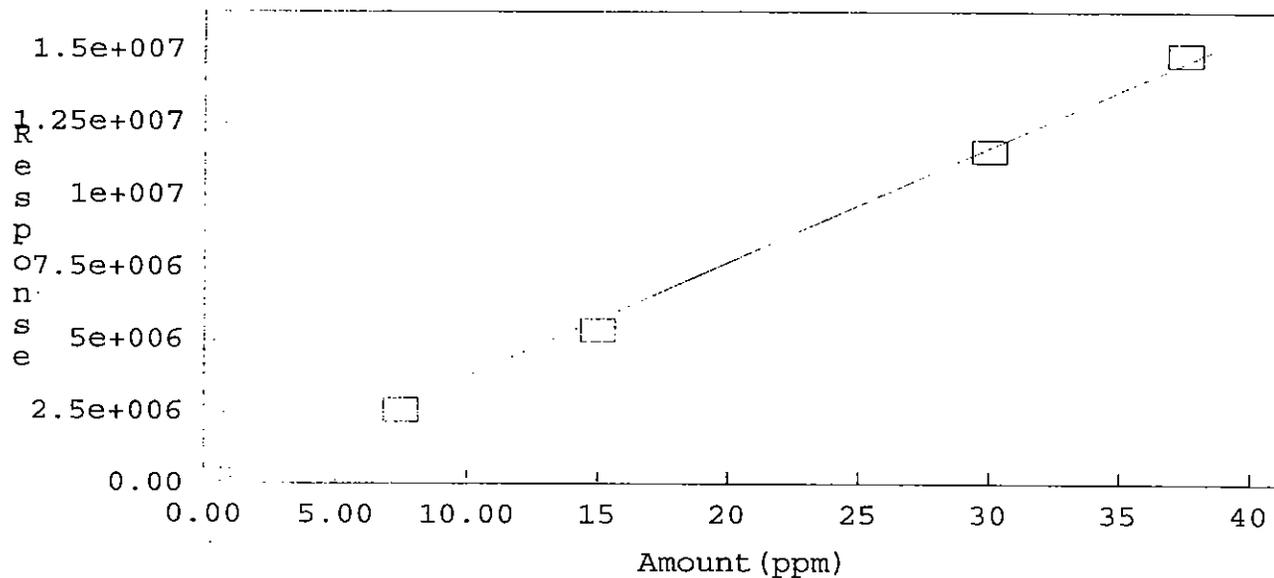
$r^2 = 0.998245$

Amt = Resp * $2.533e-006$ + 0.5323

Resp = Amt * $3.949e+005$ + -2.102e+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
Analyst    : David                   Column: Dionex AS4A-SC
Detector: COND
=====

```

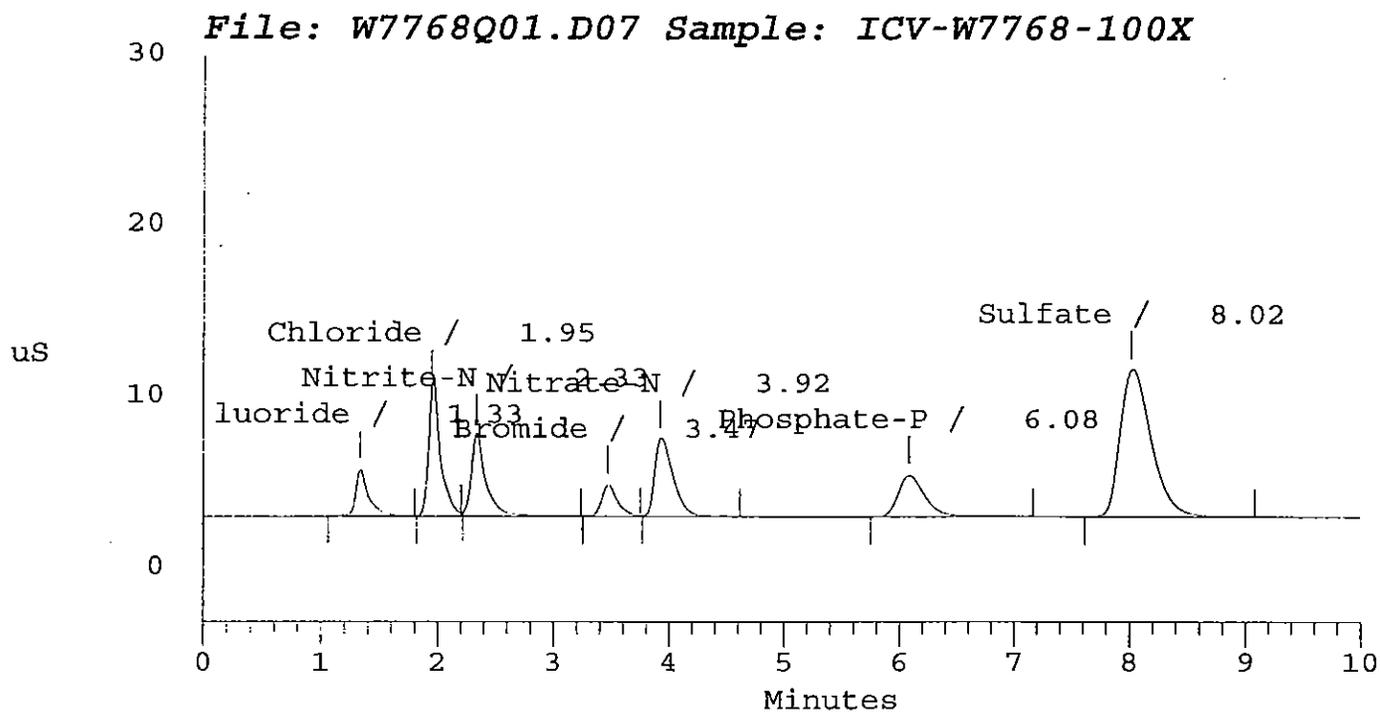
```

-----
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	0.999	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		




```

=====
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
=====

```

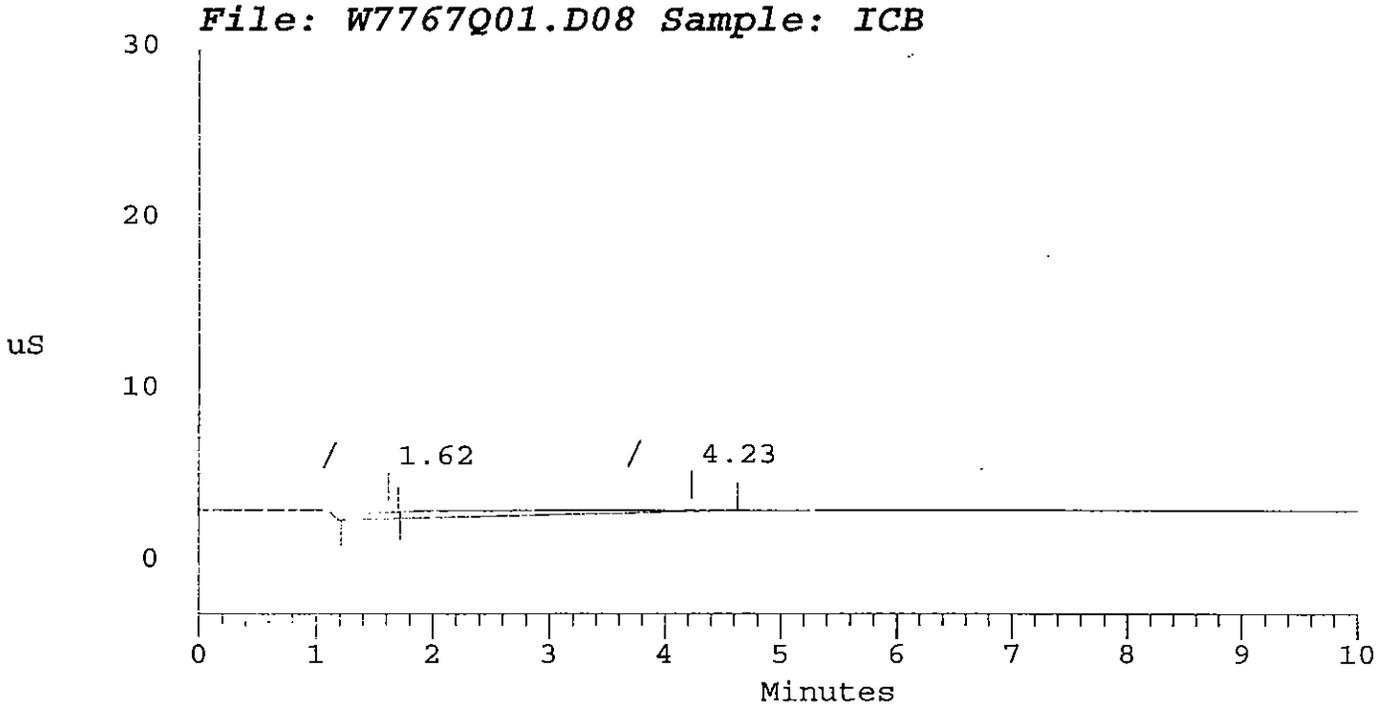
```

-----
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		



```

=====
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
=====

```

```

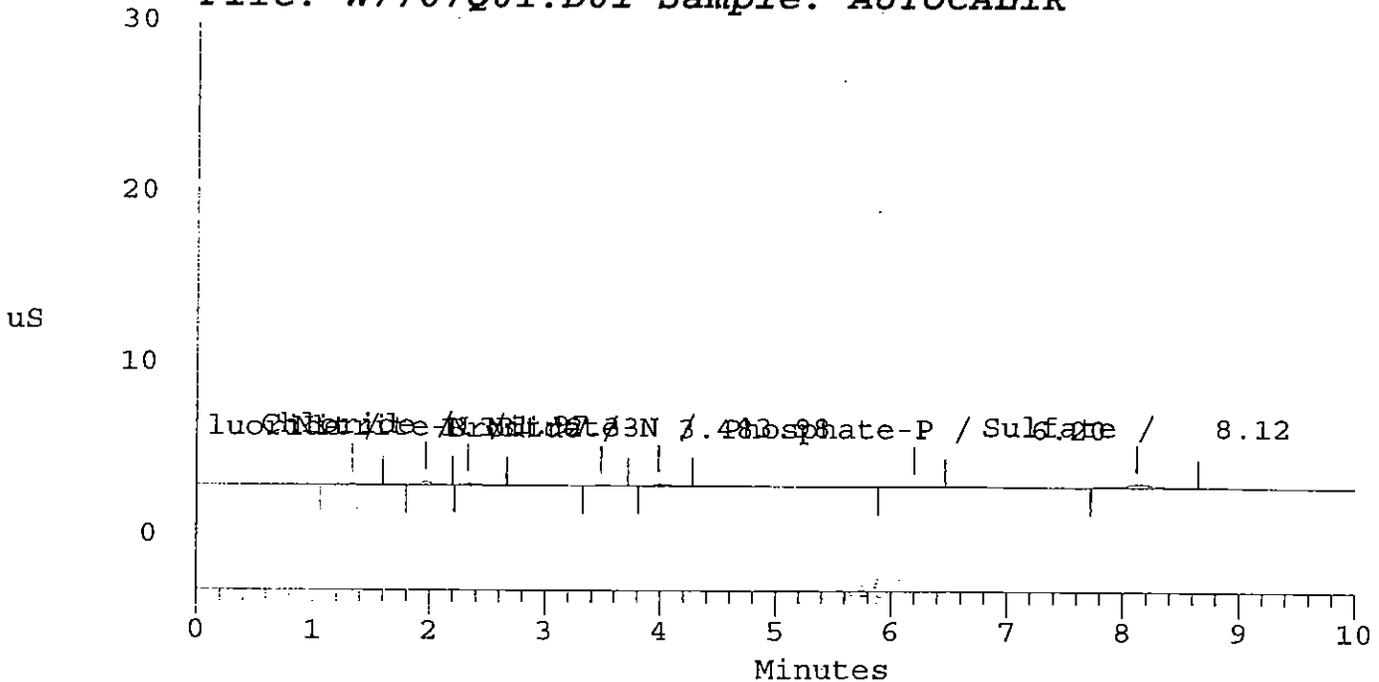
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00          1000

```

***** 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		

File: W7767Q01.D01 Sample: AUTOCAL1R



```

=====
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                 Detector: COND
Analyst    : David                                  Column: Dionex AS4A-SC
=====

```

```

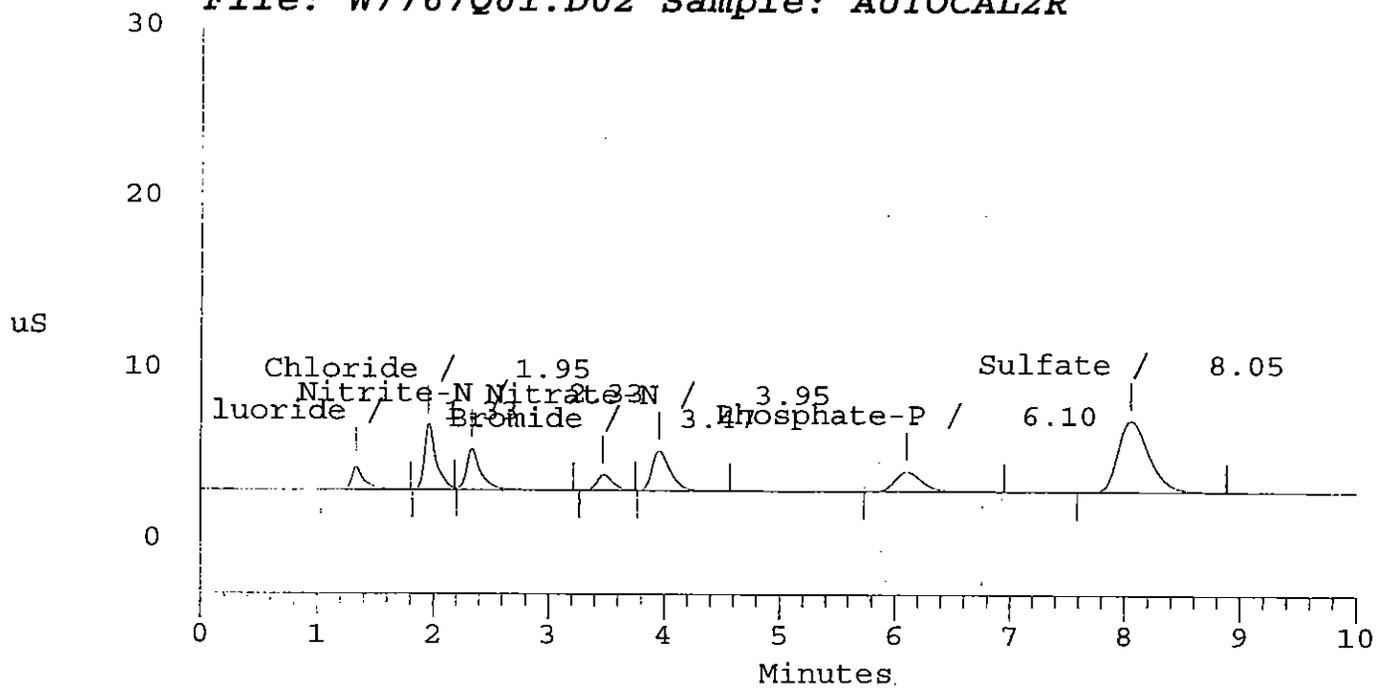
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00      1000

```

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

Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
1	1.33	Fluoride	0.500	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
=====

```

```

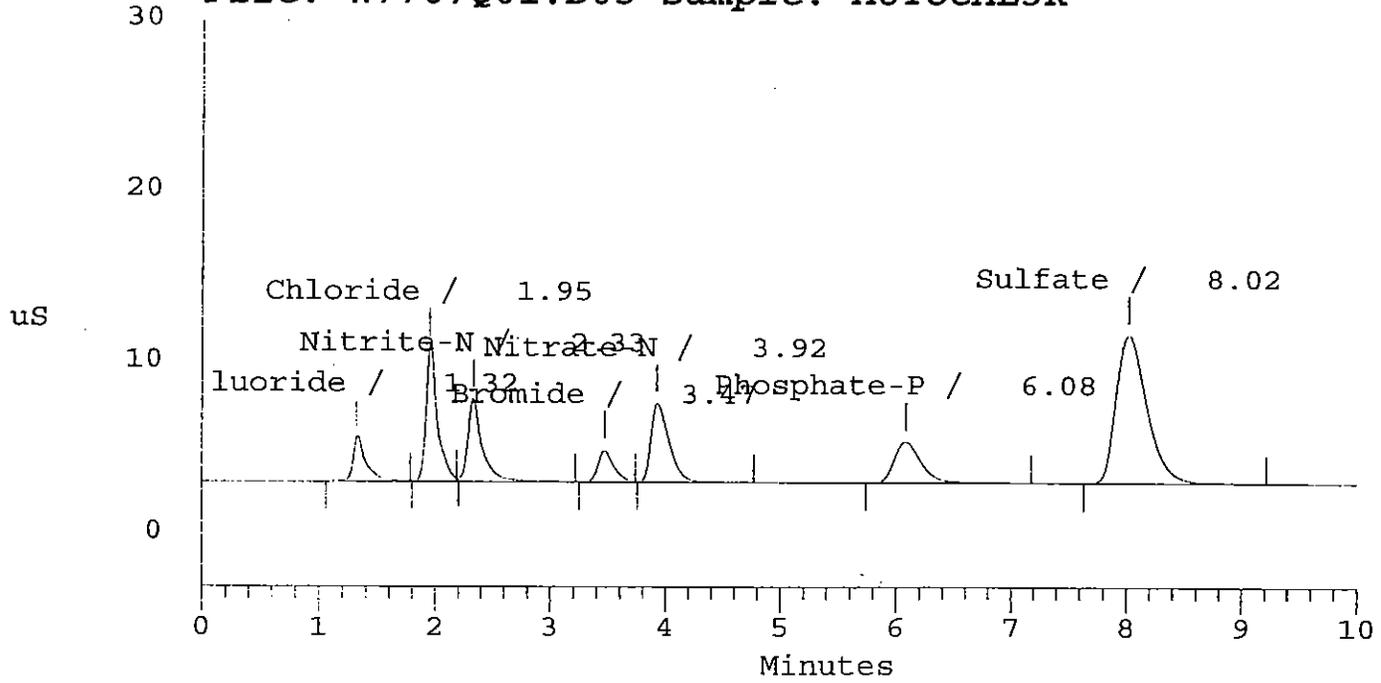
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00      1000
-----

```

***** 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
=====

```

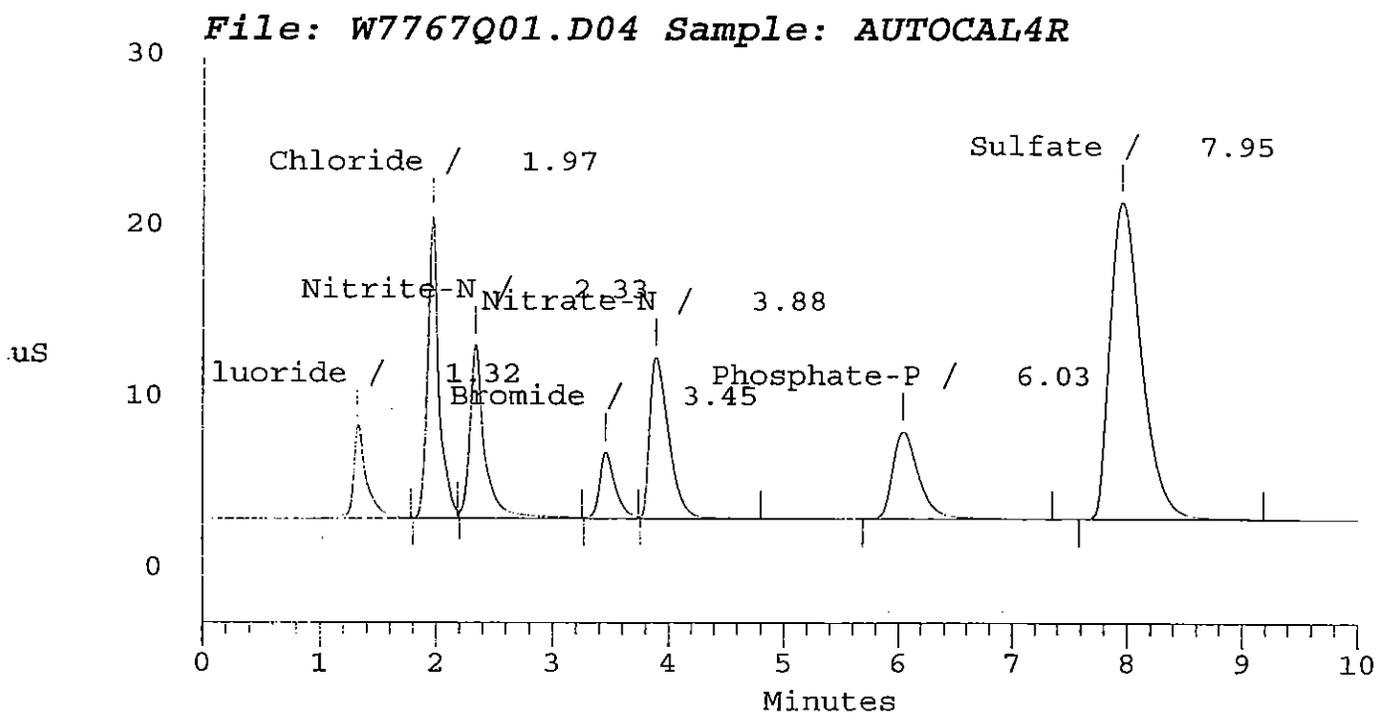
```

-----
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		



```

=====
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
=====

```

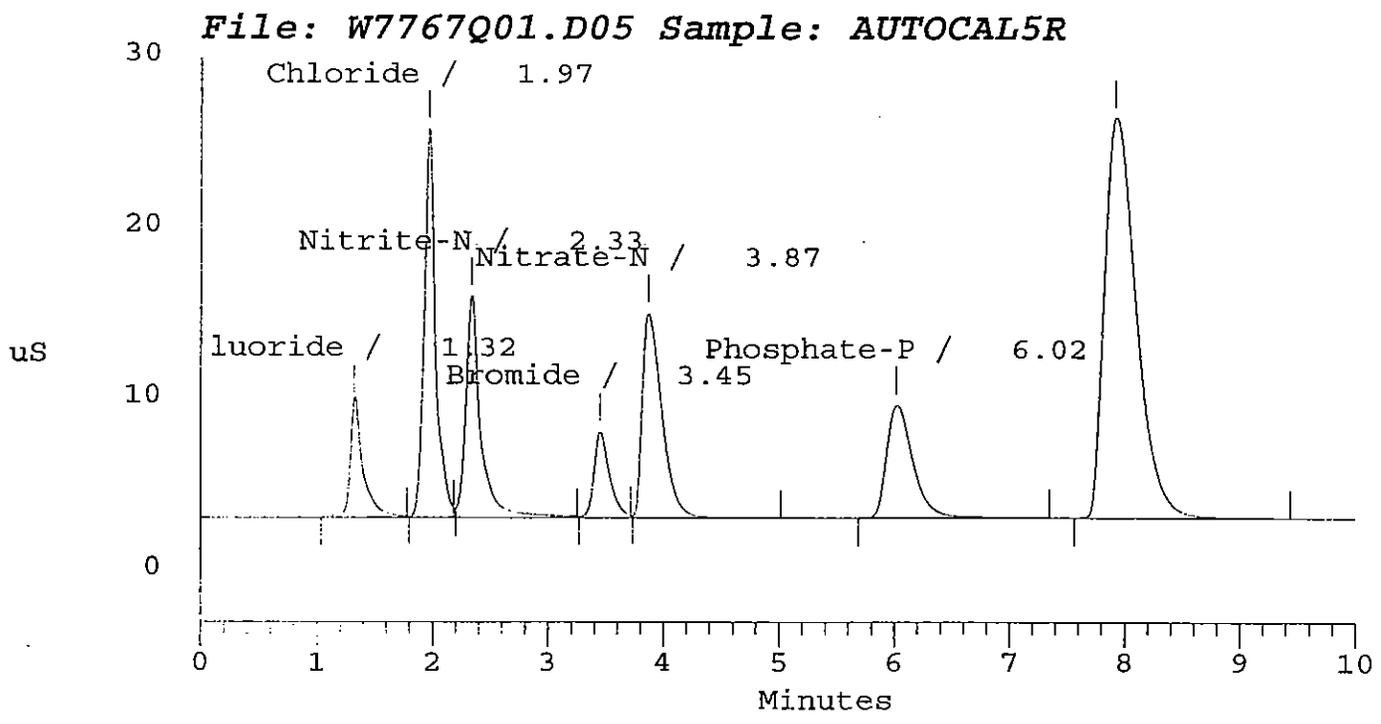
```

-----
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		



```

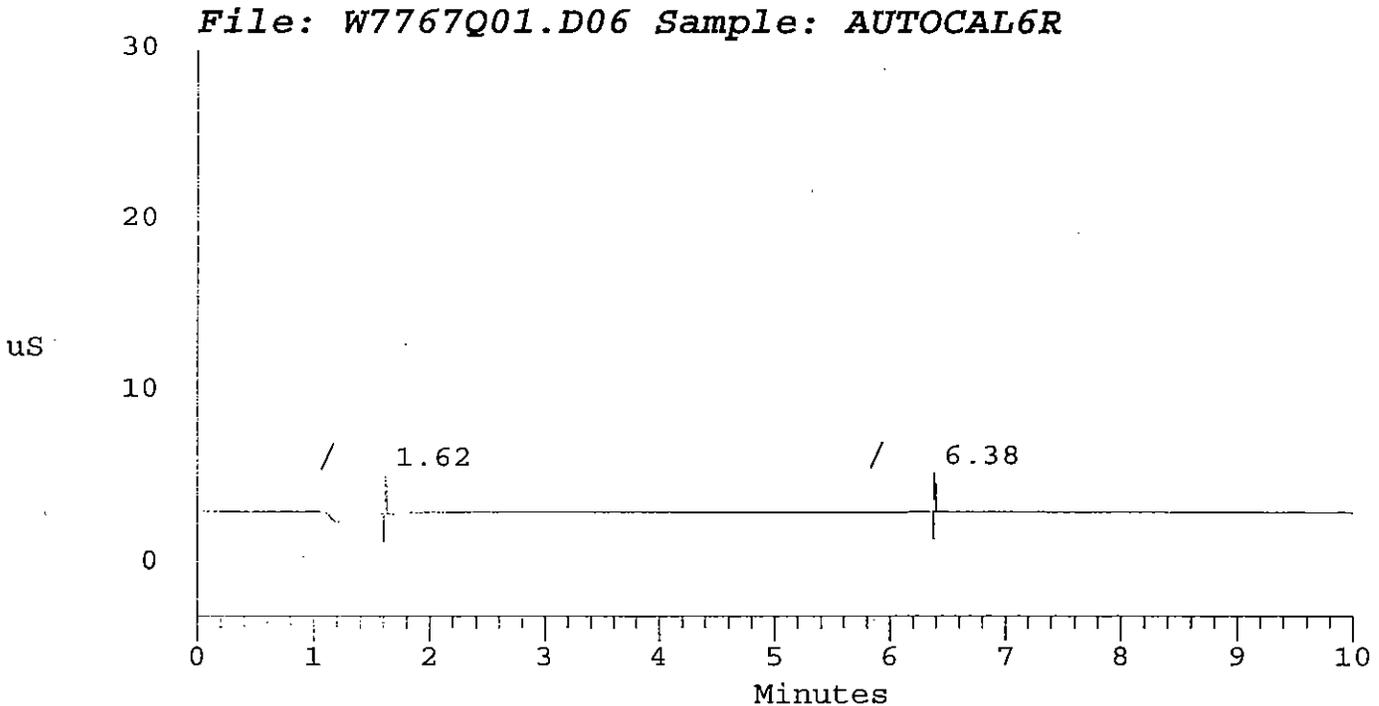
=====
Sample Name: AUTOCAL6R                               Date: 03/21/2003 17:37:58
Data File  : C:\DX\DATA\E300-063\W7767Q01.D06
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 6                 Detector: COND
Analyst    : David                                  Column: Dionex 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	0	



After
3/23/2003
Reason: 3.3

```

=====
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
=====

```

```

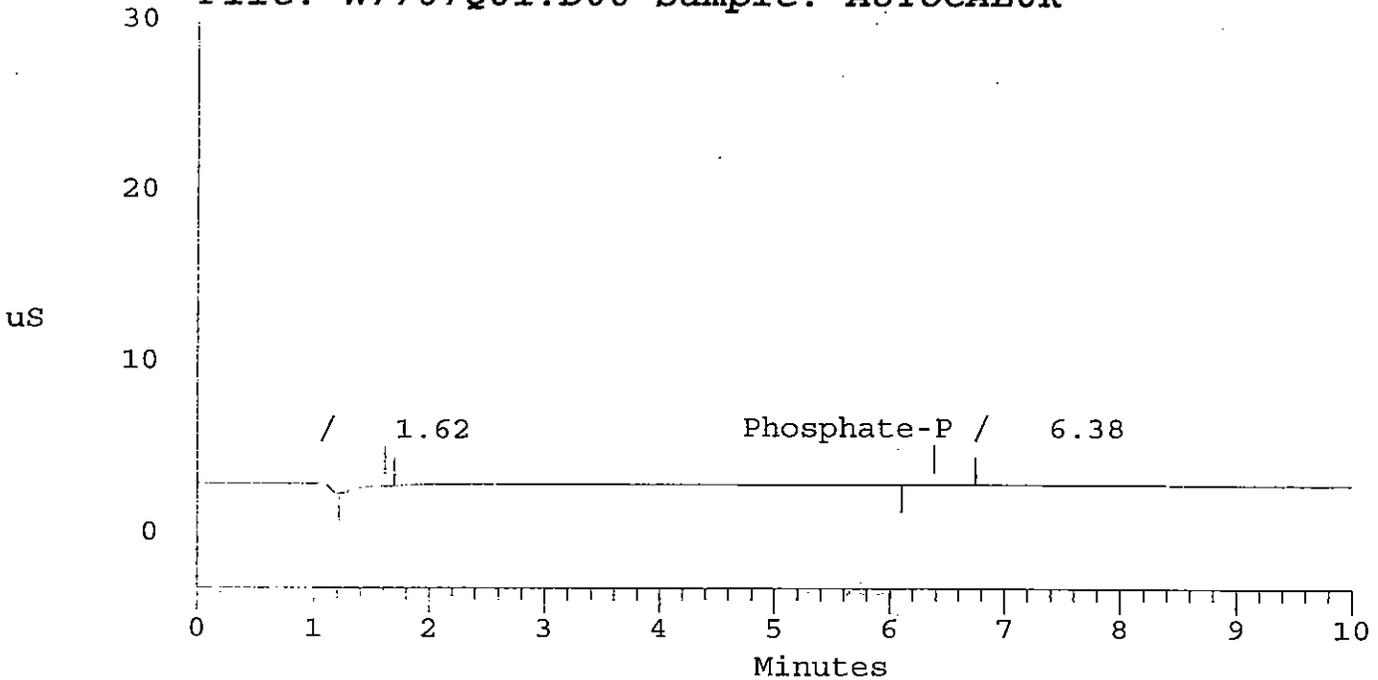
-----
Calibration Volume Dilution Points Rate Start Stop Area Reject
-----
External           1           1 3000 5Hz 0.00 10.00          1000

```

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

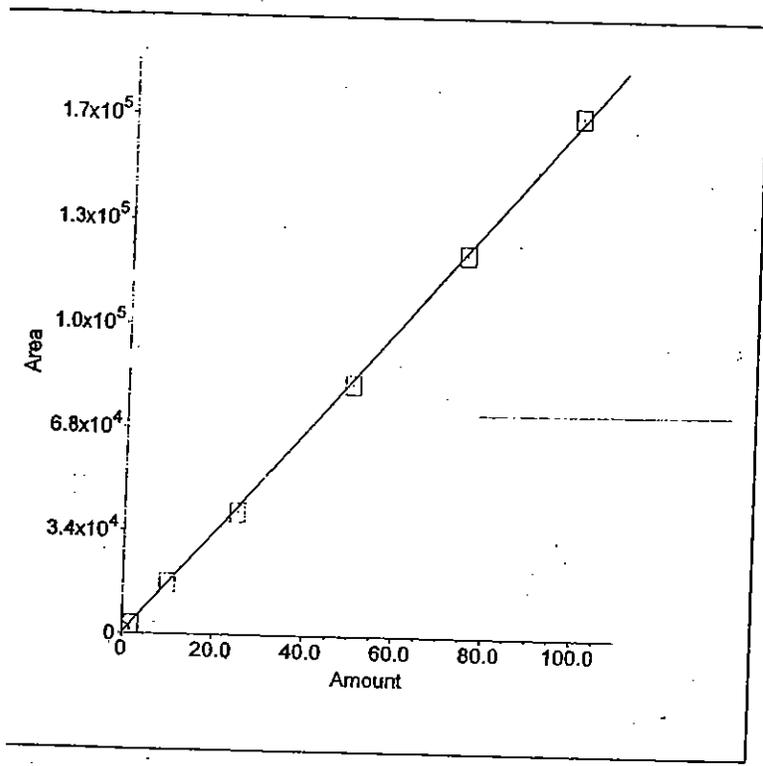
Pk. Num	Ret Time	Component Name	Concentration ppm	Height	Area	Bl. Code	%Delta
0	0.00	Fluoride	0.000	0	0	0	0.00
0	0.00	Chloride	0.000	0	0	0	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
0	0.00	Bromide	0.000	0	0	0	0.00
0	0.00	Nitrate-N	0.000	0	0	0	0.00
2	6.38	Phosphate-P	0.000	582	11752	1	0.00
0	0.00	Sulfate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

File: W7767Q01.D06 Sample: AUTOCAL6R



Before

1: 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-10

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

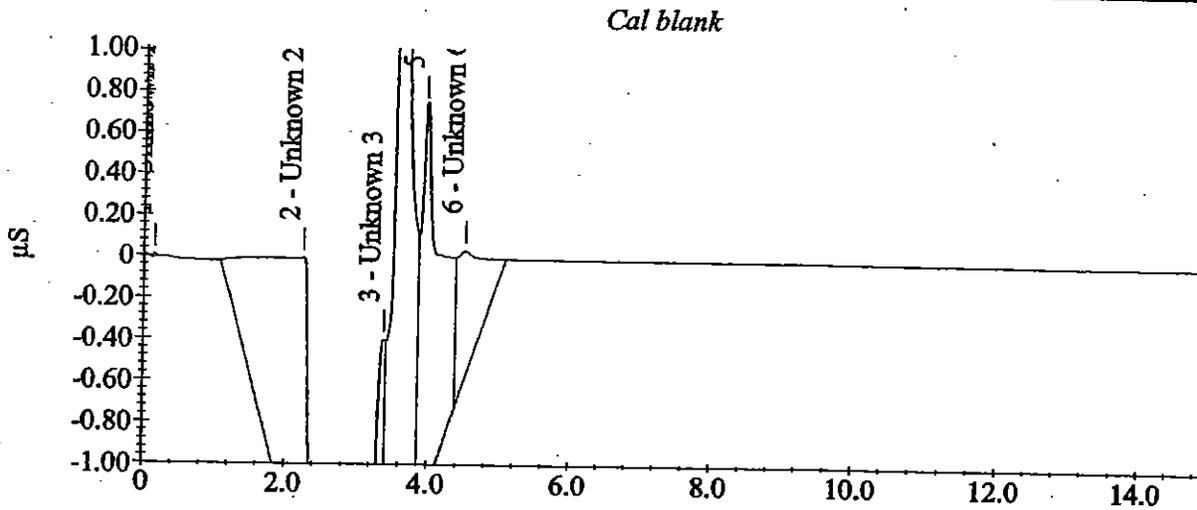
Date Time Collected : 03/12/2003 5:55:39 PM

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\E314-011.met

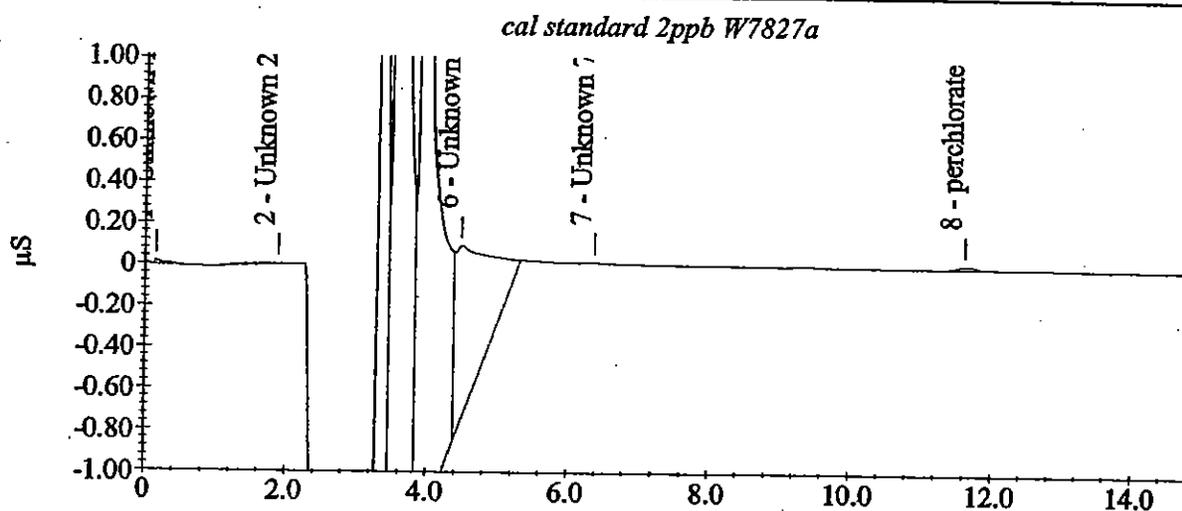
Date Time Collected : 03/12/2003 6:13:12 PM

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\314-011.met

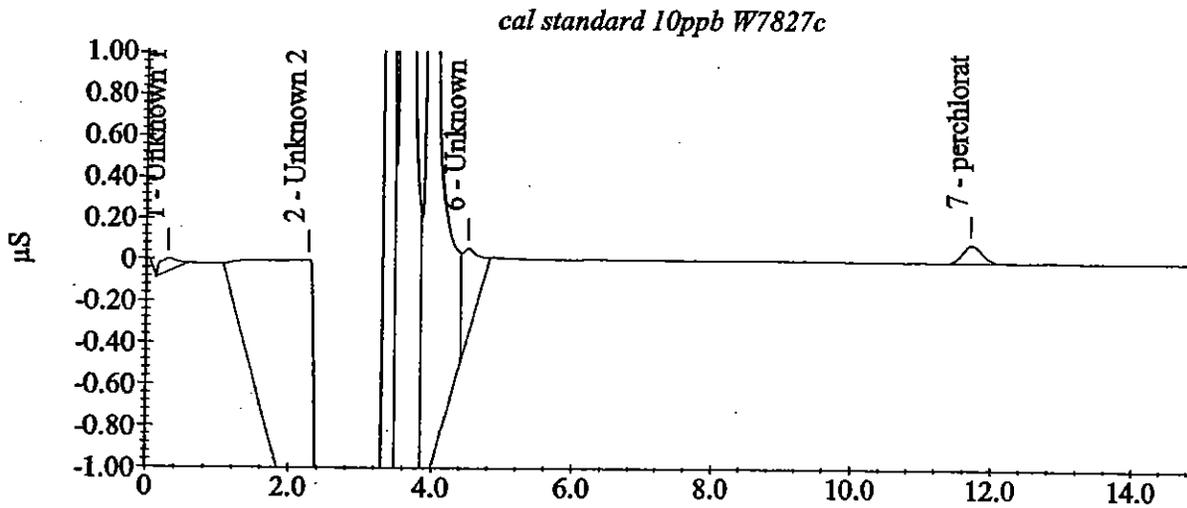
Date Time Collected : 03/12/2003 6:48:21 PM

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\E314-011.met

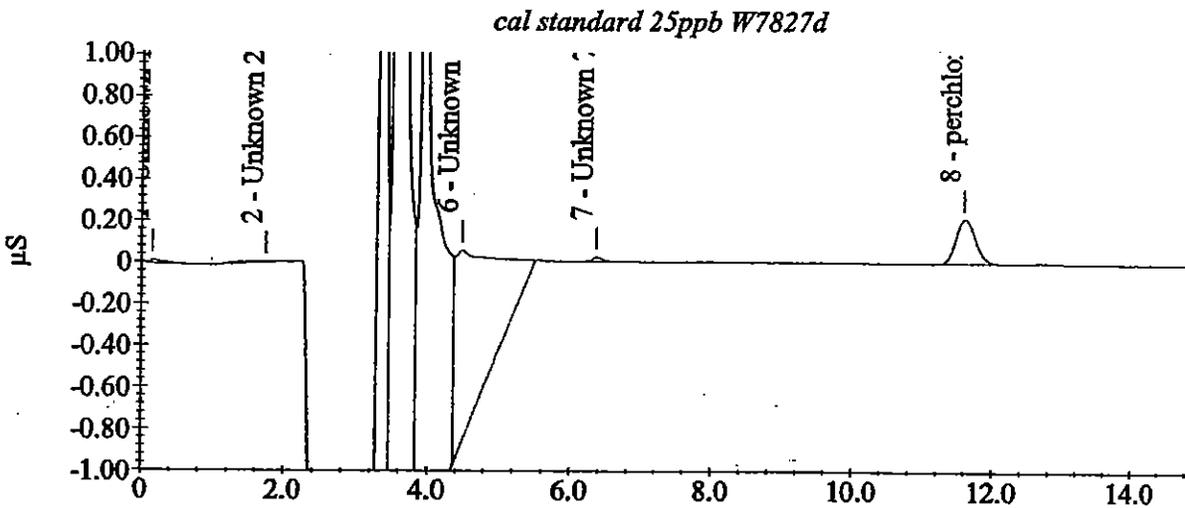
Date Time Collected : 03/12/2003 7:05:54 PM

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

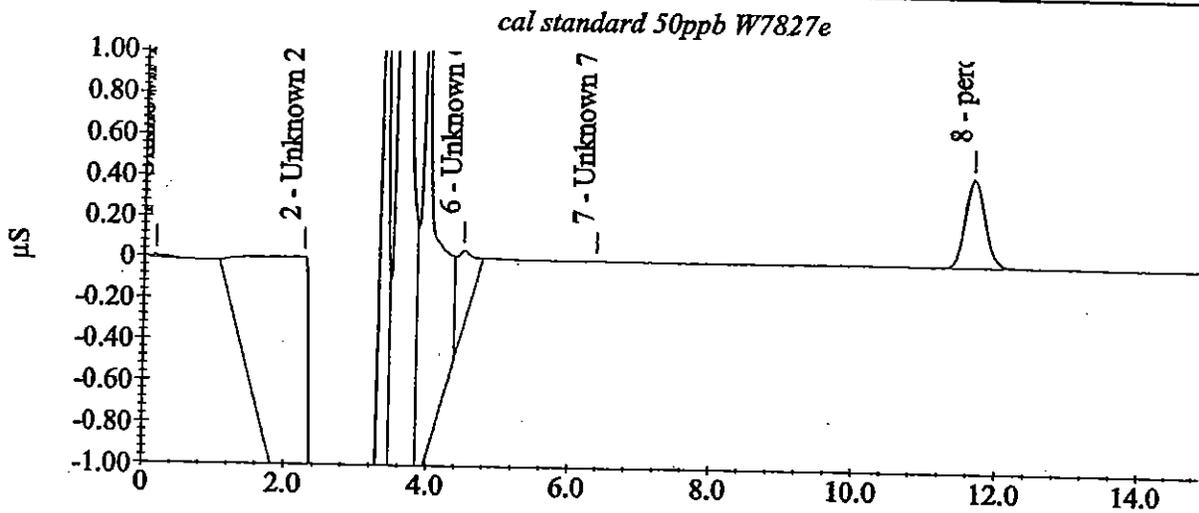
Date Time Collected : 03/12/2003 7:23:30 PM

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\e314-011.met

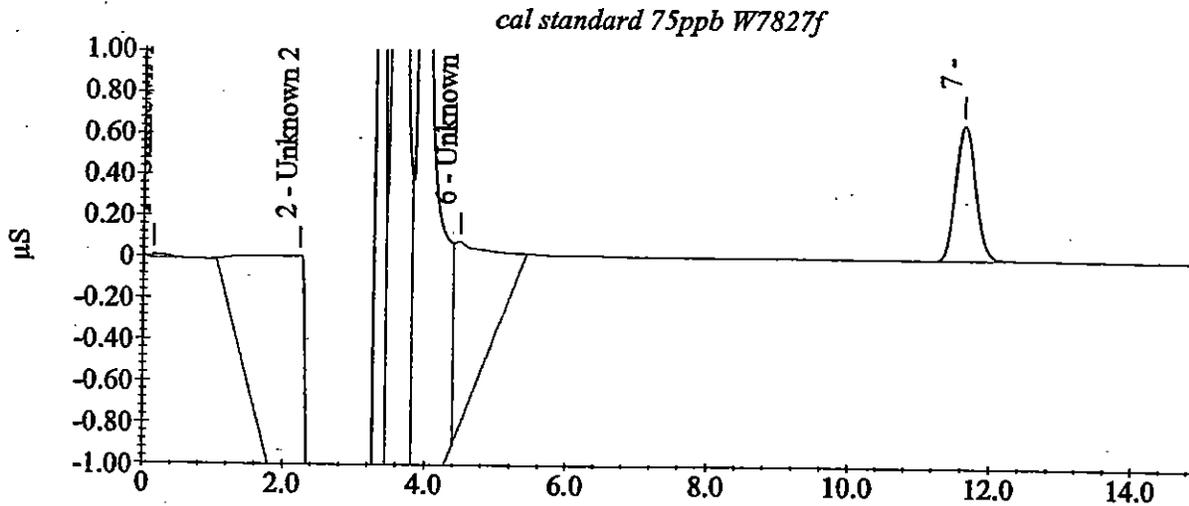
Date Time Collected : 03/12/2003 7:41:05 PM

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



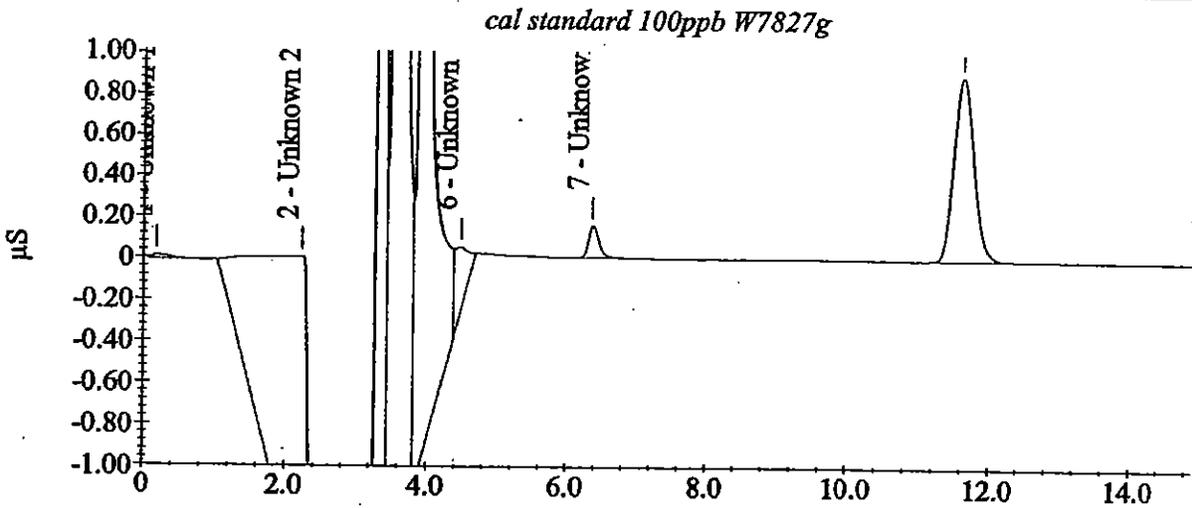
APCL Perchlorate Analysis Report

Sample Name : cal standard 100ppb W7827g
Data File Name : C:\DATA\E314-011\std-100pb_008.DXD

Method File Name : C:\PEAKNET\METHOD\E314-011.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	892.3



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

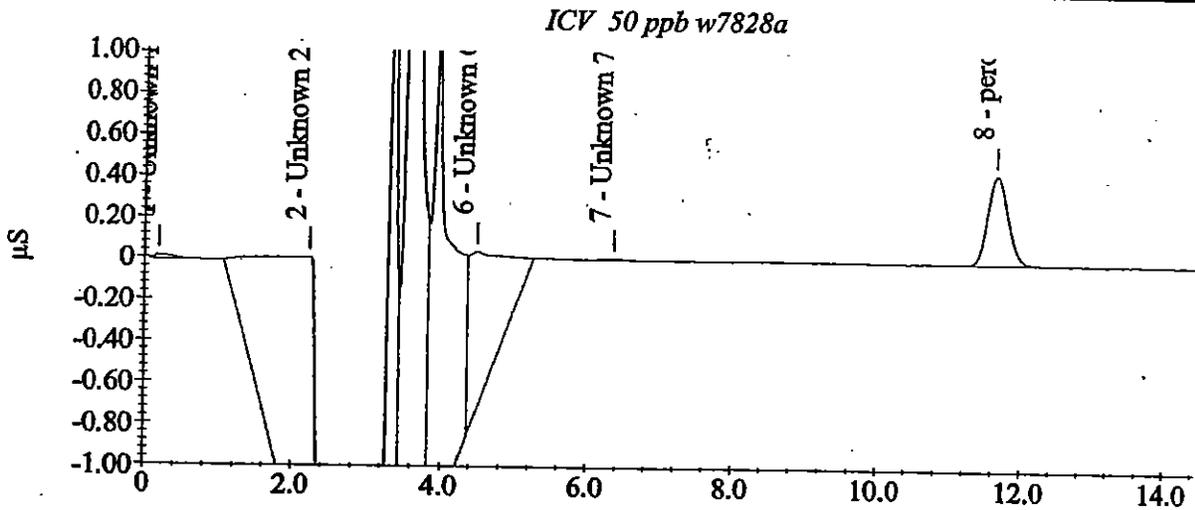
Date Time Collected : 03/12/2003 8:16:15 PM

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

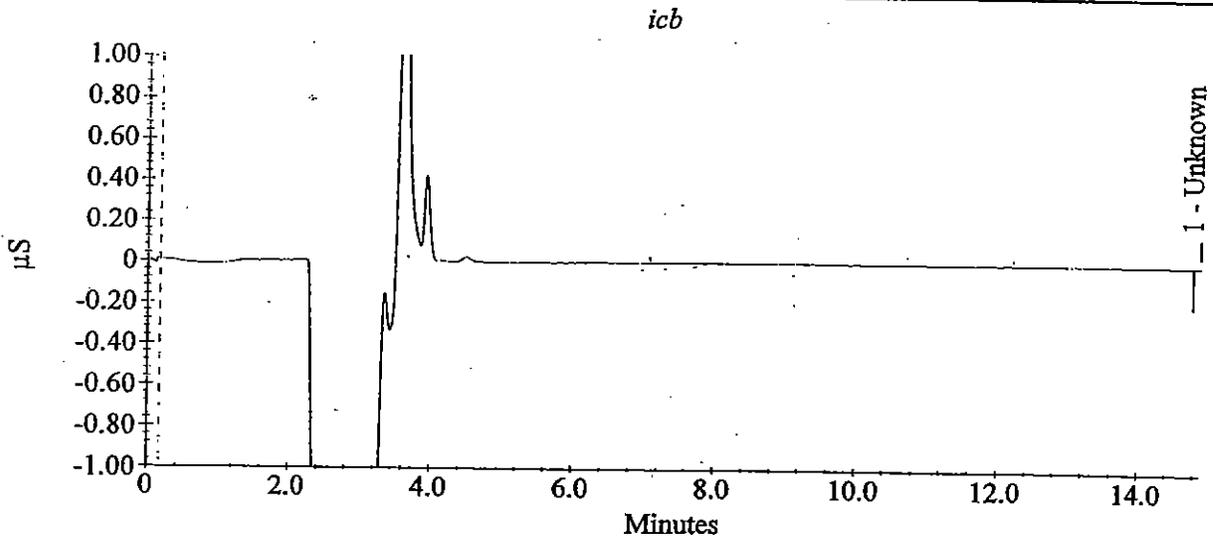
Date Time Collected : 03/12/2003 8:33:51 PM

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.

Contract No.:

Lab Code:

APCL

Case No:

SAS No.:

Service ID:

32866

Project ID: JPL

Project No.: 04-4428.10

#	Component Name	Method	Batch No.	Unit	Expected	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Chloride Cl ⁻	300.0	03W2550	mg/L	4.0	3.98	99	-1	✓	90-110	04/25/2003
	NITRATE as N-NO ₃ ⁻ , BY	300.0	03W2550	mg/L	1.5	1.49	100	0	✓	90-110	04/25/2003
	SULFATE SO ₄ ⁻ , BY I	300.0	03W2550	mg/L	15	14.8	99	-1	✓	90-110	04/25/2003
	Chloride Cl ⁻	300.0	03W2550	mg/L	4.0	3.96	99	-1	✓	90-110	04/25/2003
	NITRATE as N-NO ₃ ⁻ , BY	300.0	03W2550	mg/L	1.5	1.51	101	1	✓	90-110	04/25/2003
	SULFATE SO ₄ ⁻ , BY I	300.0	03W2550	mg/L	15	14.8	99	-1	✓	90-110	04/25/2003
	Chloride Cl ⁻	300.0	03W2550	mg/L	4.0	3.94	98	-2	✓	90-110	04/25/2003
	NITRATE as N-NO ₃ ⁻ , BY	300.0	03W2550	mg/L	1.5	1.51	100	0	✓	90-110	04/25/2003
	SULFATE SO ₄ ⁻ , BY I	300.0	03W2550	mg/L	15	14.8	99	-1	✓	90-110	04/25/2003
2	Perchlorate	314.0	03W2531	μg/L	50	50.1	100	0	✓	90-110	04/24/2003
	Perchlorate	314.0	03W2531	μg/L	50	51.0	102	2	✓	90-110	04/24/2003
	Perchlorate	314.0	03W2531	μg/L	50	50.6	101	1	✓	90-110	04/24/2003
	Perchlorate	314.0	03W2531	μg/L	50	51.0	102	2	✓	90-110	04/24/2003
3	Chromium (VI)	7196	03W2542	mg/L	0.25	0.243	97	-3	✓	90-110	04/24/2003
	Chromium (VI)	7196	03W2542	mg/L	0.25	0.238	95	-5	✓	90-110	04/24/2003
4	Perchlorate	314.0	03W2612	μg/L	50	53.1	106	6	✓	90-110	04/29/2003
	Perchlorate	314.0	03W2612	μg/L	50	49.8	100	0	✓	90-110	04/29/2003
	Perchlorate	314.0	03W2612	μg/L	50	48.9	98	-2	✓	90-110	04/29/2003
	Perchlorate	314.0	03W2612	μg/L	50	50.9	102	2	✓	90-110	04/30/2003

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\314-011.met

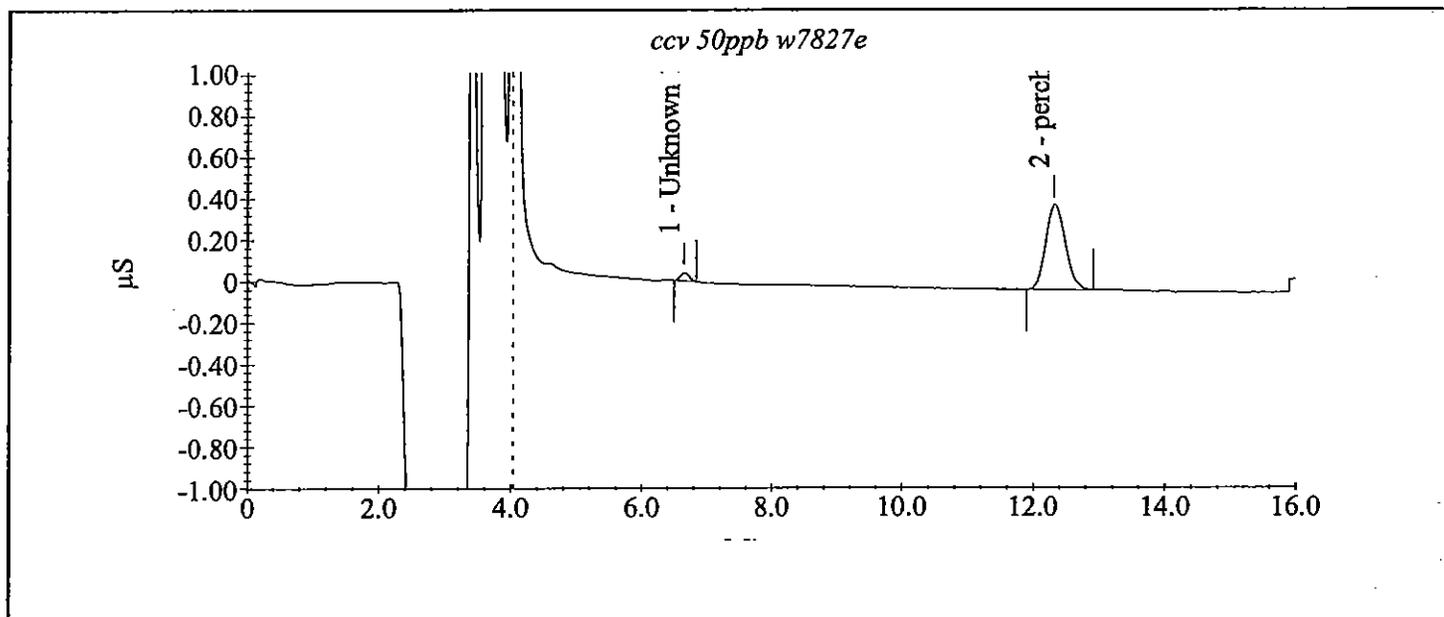
Date Time Collected : 04/24/2003 11:37:07 AM

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

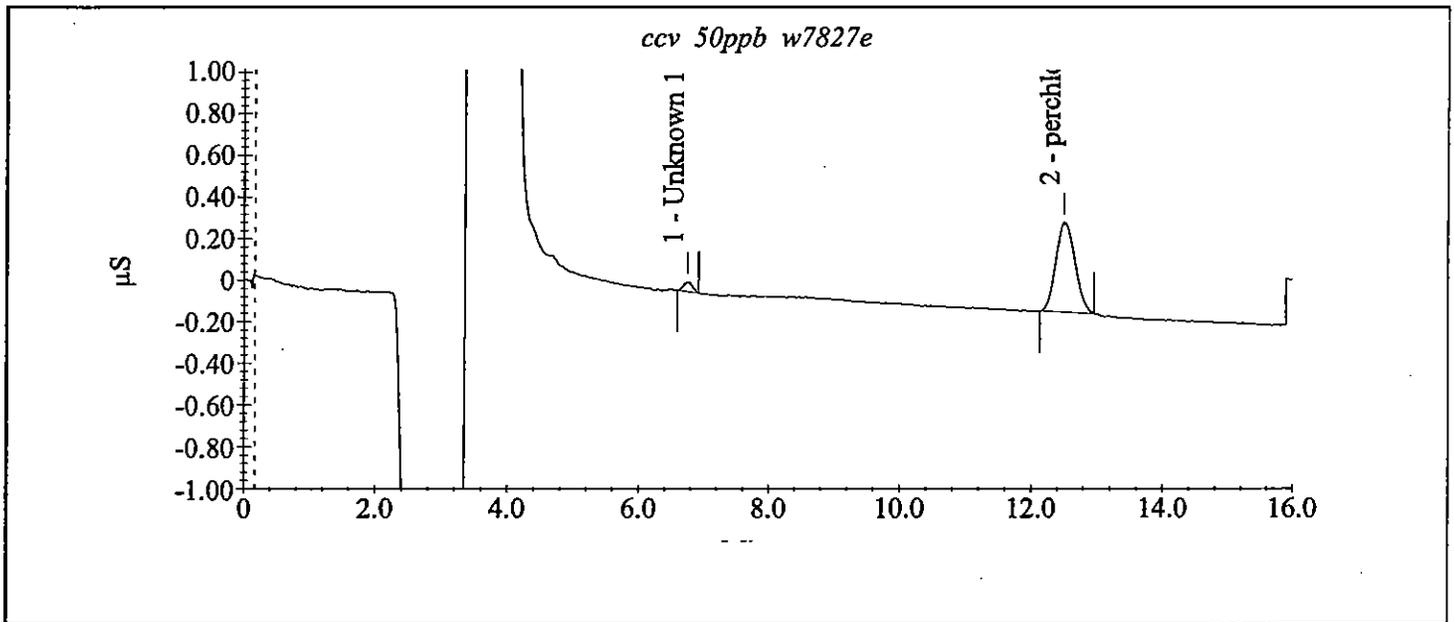
Date Time Collected : 04/24/2003 3:53:15 PM

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

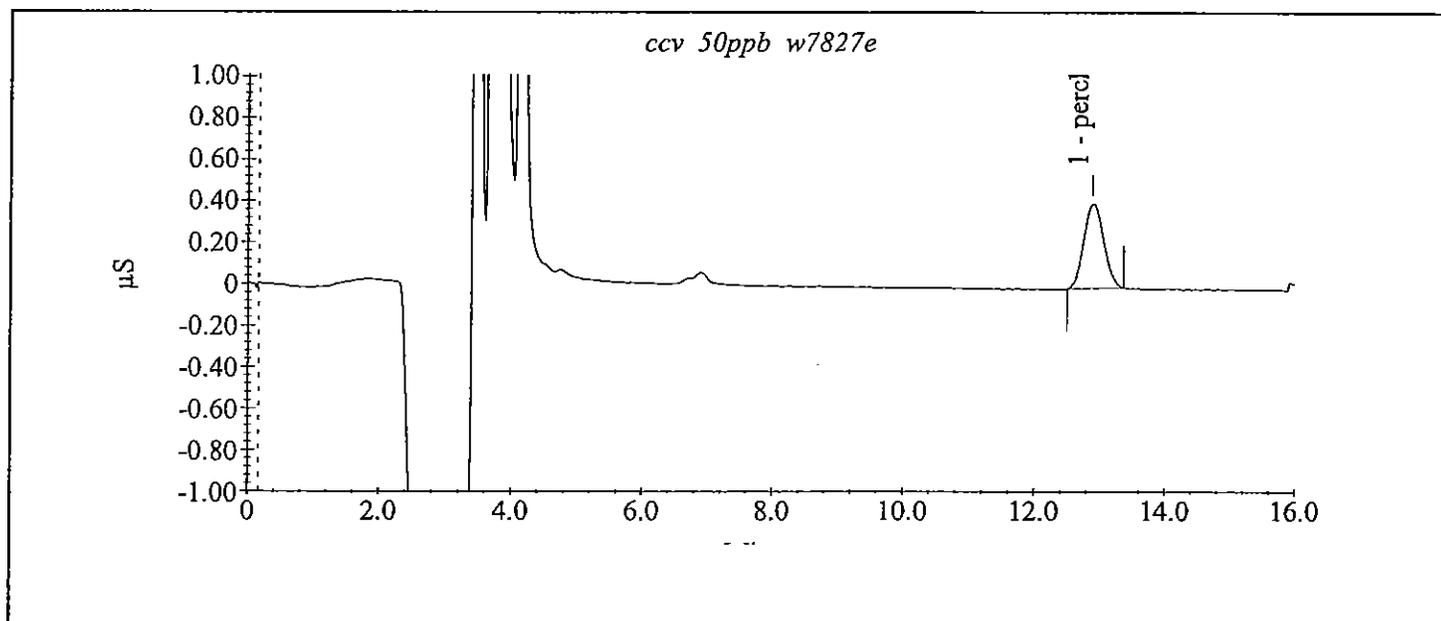
Date Time Collected : 04/24/2003 7:18:06 PM

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 : ccv 50ppb w7827e

Data File Name : C:\DATA\03W2531K\W2531K Q04_034.DXD

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

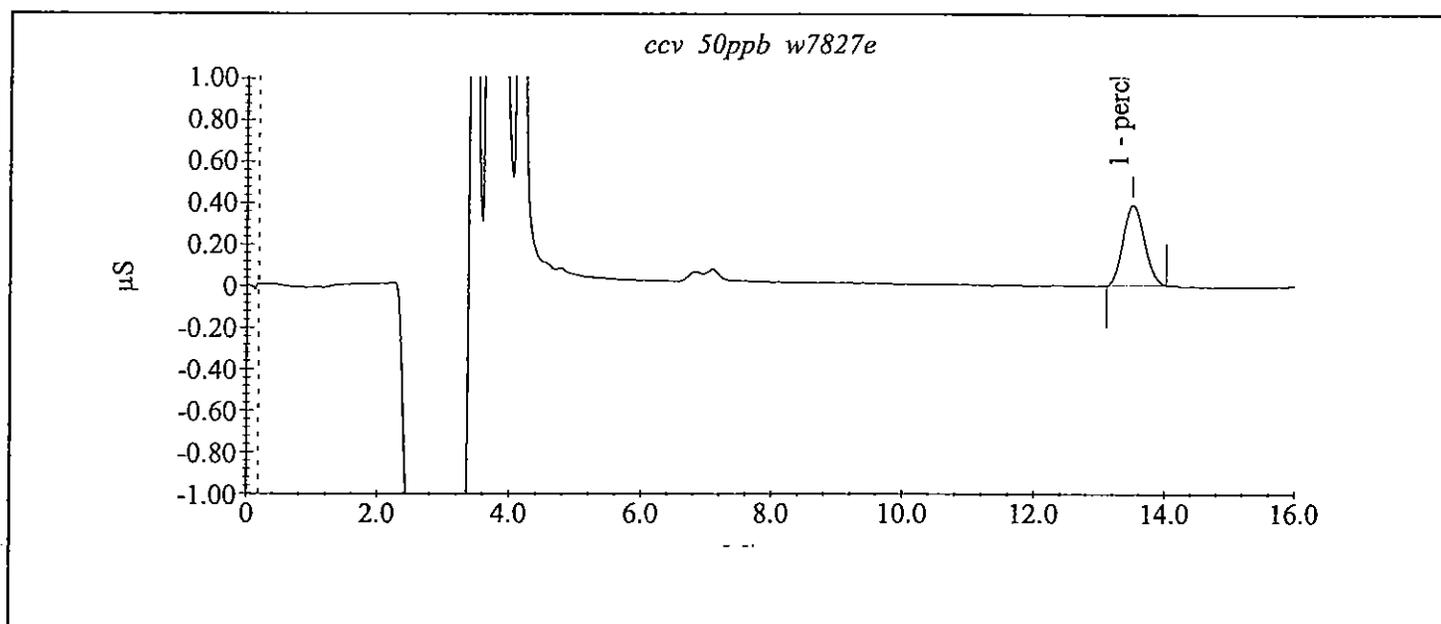
Date Time Collected : 04/24/2003 10:25:26 PM

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	13.50	50.96	86487.10	3844.02



```

=====
Sample Name:  ##03W2550, W CCVW7767-100X      Date: 04/25/2003 09:22:22
Data File   :  C:\DX\DATA\03W2550\W2550Q01.D01
Method      :  C:\DX\METHOD\E300-063.MET
ACI Address:  1 System: 1 Inject#: 1           Detector:COND
Analyst     :  David                          Column: Dionex AS4A-SC
=====
    
```

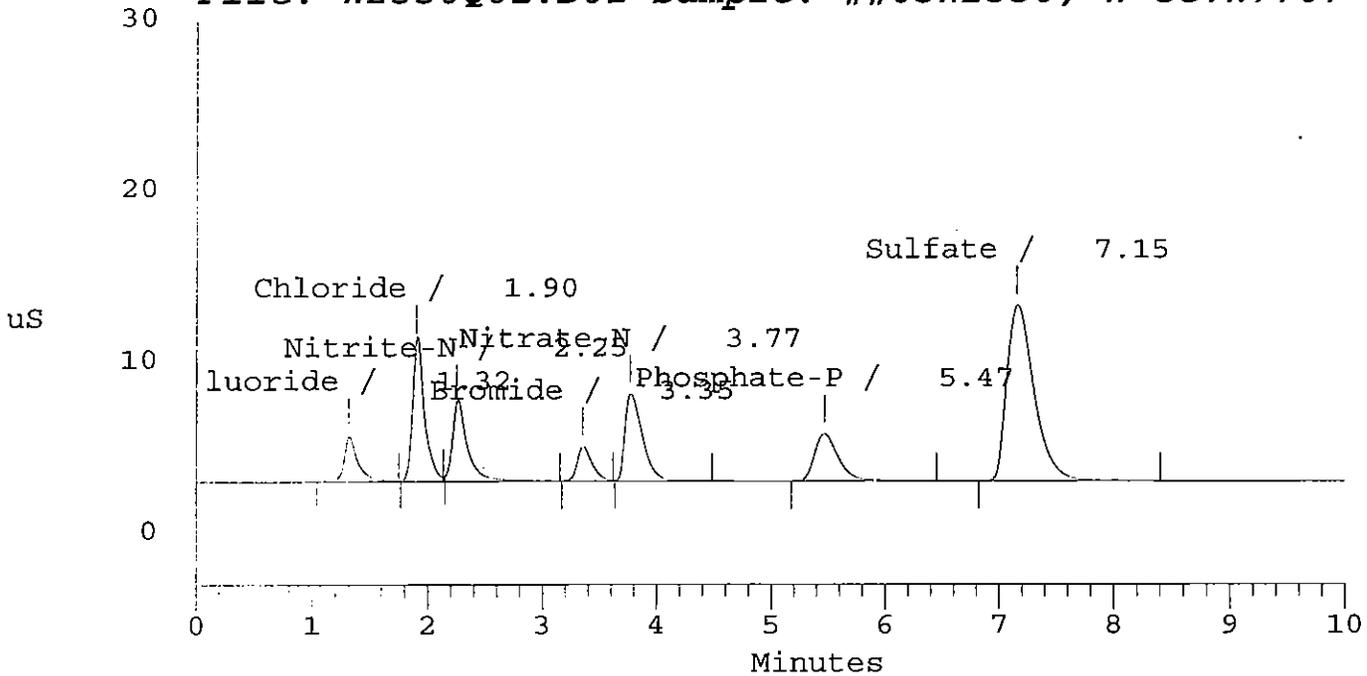
```

-----
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	1.32	Fluoride	1.038	86469	755072	2	0.00
2	1.90	Chloride	3.976	267025	1970127	2	0.00
3	2.25	Nitrite-N	1.450	151510	1460781	2	0.00
4	3.35	Bromide	3.043	67345	620071	2	0.42
5	3.77	Nitrate-N	1.494	169321	1801947	2	0.00
6	5.47	Phosphate-P	2.966	92193	1356614	1	0.00
7	7.15	Sulfate	14.835	340776	5647588	1	0.00
Totals			28.801	1174639	13612199		

File: W2550Q01.D01 Sample: ##03W2550, W CCVW7767-100X




```

=====
Sample Name: CCV2W7767-100X          Date: 04/25/2003 11:57:37
Data File  : C:\DX\DATA\03W2550\W2550Q01.D12
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 12
Analyst    : David                   Column: Dionex AS4A-SC
Detector: COND
=====

```

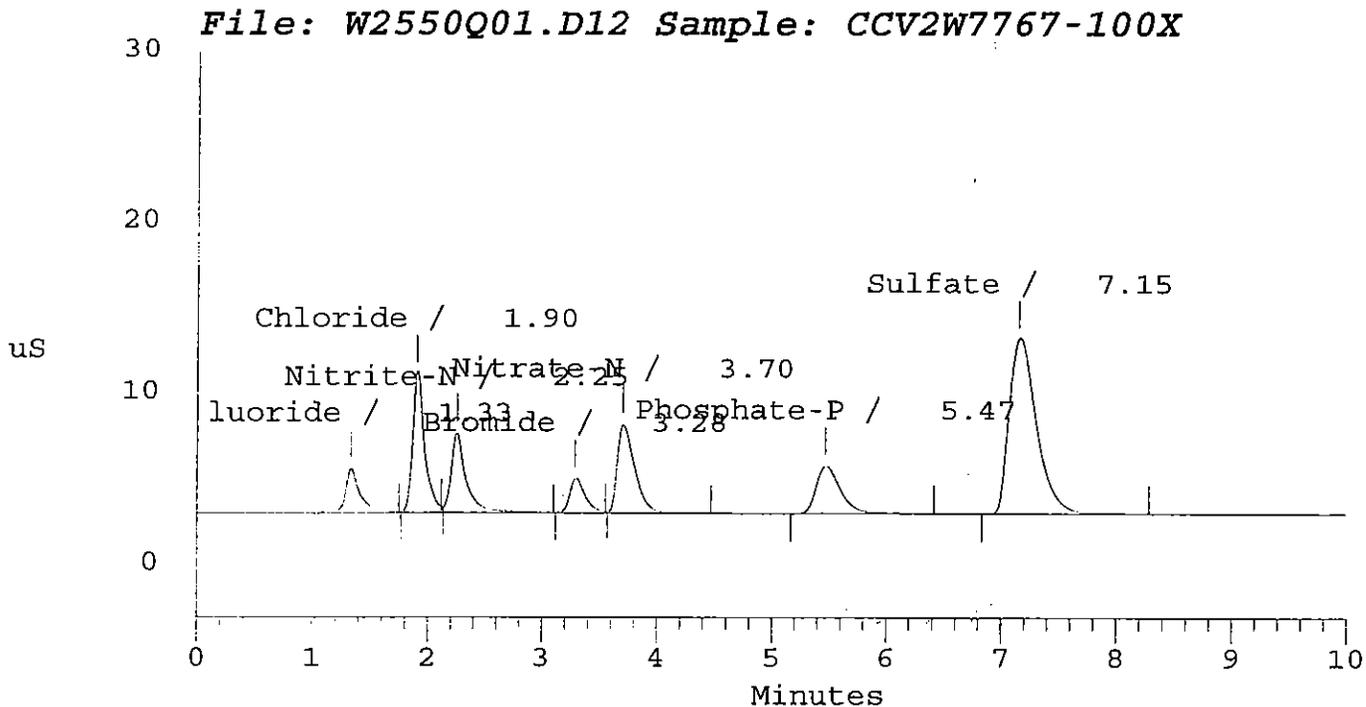
```

-----
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	1.053	85878	765952	2	0.00
2	1.90	Chloride	3.964	269379	1964022	2	0.00
3	2.25	Nitrite-N	1.479	155725	1490856	2	0.00
4	3.28	Bromide	3.079	66493	627695	2	0.20
5	3.70	Nitrate-N	1.509	171944	1821121	2	0.00
6	5.47	Phosphate-P	3.000	91791	1372626	1	0.00
7	7.15	Sulfate	14.806	338357	5636235	1	0.00
Totals			28.891	1179566	13678507		



```

=====
Sample Name: CCV3W7767-100X           Date: 04/25/2003 14:37:29
Data File  : C:\DX\DATA\03W2550\W2550Q01.D21
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 21   Detector: COND
Analyst    : David                    Column: Dionex AS4A-SC
=====

```

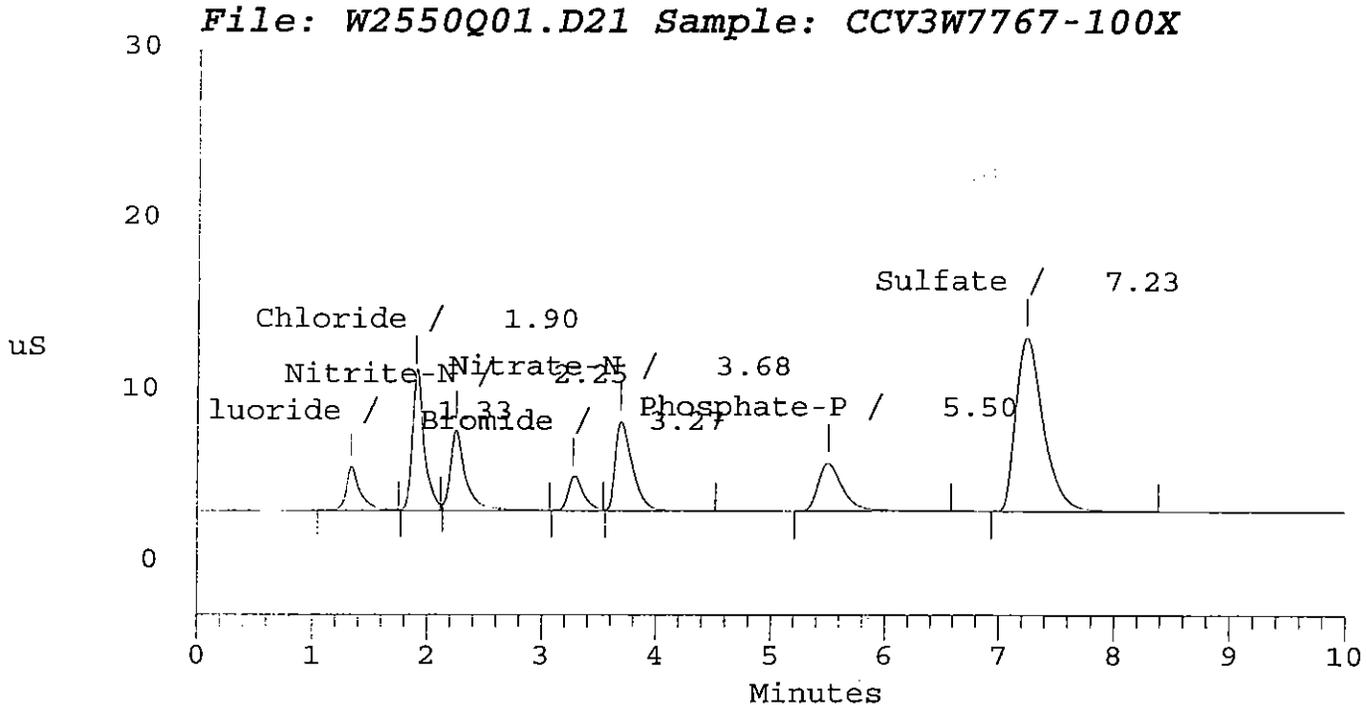
```

-----
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	1.045	85212	759966	2	0.00
2	1.90	Chloride	3.937	264088	1950427	2	0.00
3	2.25	Nitrite-N	1.471	157172	1482183	2	0.00
4	3.27	Bromide	3.081	65536	628093	2	0.14
5	3.68	Nitrate-N	1.507	172257	1818485	2	0.00
6	5.50	Phosphate-P	3.063	93190	1402211	1	0.00
7	7.23	Sulfate	14.791	337943	5630388	1	0.00
Totals			28.896	1175398	13671753		



Temperature compensation must be performed by the instrument automatically.

Analyst AD SOP: G-44

Batch # <u>03W2546</u> Analysis Date: <u>4, 24, 03</u>	Batch # <u>03W2561</u> Analysis Date: <u>4, 24, 03</u>						
Starting Time: <u>16:13</u> Ending Time: _____	Starting Time: <u>10:35</u> Ending Time: _____						
Matrix <input type="checkbox"/> Aqueous <input checked="" type="checkbox"/> Soil	Matrix <input type="checkbox"/> Aqueous <input checked="" type="checkbox"/> 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>24.0</u>	<u>24.0</u>	Temperature °C		<u>23.8</u>	<u>23.8</u>
pH Reading		<u>7.07</u>	<u>10.02</u>	pH Reading		<u>7.01</u>	<u>10.03</u>
T-corrected pH		<u>7.00</u>	<u>10.01</u>	T-corrected pH		<u>7.00</u>	<u>10.02</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>T1115</u>		<u>6.83</u>		MB	<u>08717HA</u>		<u>6.84</u>	<u>101</u>
1	<u>2866-1</u>		<u>7.66</u>		1	<u>2825-1</u>		<u>8.39</u>	
2	<u>2</u>		<u>6.21</u>		2	<u>2</u>		<u>9.00</u>	
3	<u>3</u>		<u>7.64</u>		3	<u>3</u>		<u>9.20</u>	
4	<u>4</u>		<u>7.71</u>		4	<u>4</u>		<u>9.21</u>	
5	<u>5</u>		<u>7.90</u>		5	<u>2826-1</u>		<u>8.87</u>	
6	<u>6</u>		<u>8.79</u>		6	<u>6</u>		<u>8.75</u>	
7	<u>7</u>		<u>9.08</u>		7	<u>7</u>		<u>9.00</u>	
8	<u>2881-1</u>		<u>8.33</u>		8	<u>8</u>		<u>8.67</u>	
9	<u>9</u>		<u>8.11</u>		9	<u>9</u>		<u>9.05</u>	
10	<u>10</u>		<u>8.47</u>		10	<u>10</u>		<u>8.89</u>	
11	<u>11</u>		<u>8.33</u>		11	<u>11</u>		<u>8.98</u>	
12	<u>12</u>		<u>8.27</u>		12	<u>12</u>		<u>8.77</u>	
13	<u>13</u>		<u>8.15</u>		13	<u>13</u>		<u>8.66</u>	
14					14	<u>14</u>		<u>8.80</u>	
15					15	<u>15</u>		<u>8.78</u>	
16					16	<u>16</u>		<u>9.25</u>	
17					17	<u>2827-1</u>		<u>9.19</u>	
18					18	<u>18</u>		<u>9.03</u>	
19					19	<u>19</u>		<u>9.31</u>	
20					20	<u>20</u>		<u>9.15</u>	
Dup.	<u>2866-1</u>		<u>7.62</u>		Dup.	<u>2825-4</u>		<u>9.15</u>	<u>✓</u>

Batch # B3M02617 Matrix: W Titrant H₂SO₄ Lot # W7900 Concentration (C) 0.02571 Test Date: 4/29/03 Analyst: RL SOP: G-51

#	Sample ID	Dilution V ₁ /V ₂ =f ₁	Smpl Amt V ₁ , mL	H ₂ SO ₄ (mL) by Phln A	H ₂ SO ₄ (mL) by MR-BCG S _B	B	Phln-Alk., P	Tot. Alk., T	OH ⁻	CO ₃ ²⁻	HCO ₃ ⁻	Note & Anomaly
1	MB: Tilt	1 =	100	0				0	0	0	0	
2	CCS	1 =	100					2.85				
3	CCSD	1 =	100					7.90				
4	2866-1	1 =	50.0	0				6.50				
5	12	1 =	50.0	0				0				
6	13	1 =	50.0	0				6.40				
7	14	1 =	50.0	0				6.00				
8	15	1 =	50.0	0				7.90				
9	16	1 =	50.0	0.40				4.90				
10	17	1 =	50.0	0.75				1.20				
11	2881-1	1 =	50.0	0.15				6.90				
12		1 =	50.0	0				7.20				
13		1 =	50.0	0.70				9.65				
14		1 =	50.0	0.20				9.45				
15		1 =	50.0	0.35				14.10				
16		1 =	50.0	0				4.90				
17		1 =										
18		1 =										
19		1 =										
20		1 =										
Dup.	2866-1	1 =	50.0	0				6.80				

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

Calculations:
 A = S_A - E_A
 B = S_B - E_B
 P = 50,000 f₁ A C / V
 T = 50,000 f₁ (A+B) C / V

Batch # 02W2542 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 4/14/03 Analyst: la

Lot #: Reagent Water _____ Diphenylcazide solution _____

Test Time: 10:08 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>0.9997</u> (> 0.995)	
STD-4	W-	x / = mg/L			RSD = % (< 15%)	
STD-5	W-	x / = mg/L			Ref. page	
STD-6	W-	x / = mg/L				

$A = 0.000 + 0.826C$

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	1	= <u>0.25</u> mg/L	<u>0.203</u>	<u>0.203</u> mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: <u>T115</u>		$X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.000</u> ppm	
LCS1	Bl. Lot:		$X_0 = 1$	95.0/ =	<u>0.223</u>	mg/L	<u>0.223</u> ppm	
Sample-1 Dup.	<u>2866-1</u>		$X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
MS on S-1	1		$X_0 = 1$	95.0/ =	<u>0.192</u>	mg/L	<u>0.230</u> ppm	
MSD on S-1	1		$X_0 = 1$	95.0/ =	<u>0.195</u>	mg/L	<u>0.233</u> ppm	
Sample 2 EB	2		$X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.000</u> ppm	
Sample 3	3		$X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.002</u> ppm	
Sample 4	4		$X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
Sample 5	5		$X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.002</u> ppm	
Sample 6	6		$X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
Sample 7	7		$X_0 = 1$	95.0/ =	<u>0.001</u>	mg/L	<u>0.001</u> ppm	
Sample 8			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 9			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 10			$X_0 = 1$	95.0/ =		mg/L	ppm	
Blank	Lot:		$X_0 = 1$	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: <u>T115</u>		$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 11			$X_0 = 1$	95.0/ =	<u>0.216</u>	mg/L	<u>0.258</u> ppm	
Sample 12			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 13			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 14			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 15			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 16			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 17			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 18			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 19			$X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 20			$X_0 = 1$	95.0/ =		mg/L	ppm	
MTX Dup.	<u>losing 0.25 mg/L</u>		$X_0 = 1$	95.0/ =	<u>0.197</u>	<u>0.238</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>7759</u>	x / = <u>0.25</u> ppm	%	80-120 %/80-120 %	PQL(w) 0.01
MSD	W- <u>7759</u>	x / = ppm	%	PQL(s) 0.05
LCS	W- <u>7853</u>	x / = ppm	%	80-120 %/80-120 %	MDL(w) 0.005
LCS	W- <u>7853</u>	x / = ppm	%	MDL(s) 0.025

Batch # 03W1295 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 1/29/03 Analyst: Bi

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 / = 0.000mg/L	0.000		Least Square [RF]=	Cal. Code:
STD-2	W-	x / = 0.012mg/L	0.006		Average RF=	A=0.000+0.836C
STD-3	W-	x / = 0.050mg/L	0.021		C.C.=0.997 (> 0.995)	
STD-4	W-	x / = 0.175mg/L	0.109		RSD= % (< 15%)	
STD-5	W-	x / = 0.250mg/L	0.214		Ref. page	
STD-6	W- ✓	x / = 0.50mg/L	0.415			A=0.003+0.146C

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	/	= 0.25 mg/L	0.216	0.258 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T1115		1/X ₀ = 1	95.0/ =	0.000	mg/L	0.00 ppm	
LCS1	Bl. Lot: 4		1/X ₀ =	95.0/ =	0.204	mg/L	0.244 ppm	
Sample-1	1369-1		1/X ₀ =	95.0/ =	0.000	mg/L	0.00 ppm	
MS on S-1	6		1/X ₀ =	95.0/ =	0.223	mg/L	0.266 ppm	
MSD on S-1	6		1/X ₀ =	95.0/ =	0.230	mg/L	0.275 ppm	
Sample 2	12		1/X ₀ =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 3	3		1/X ₀ =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 4	4		1/X ₀ =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 5	5		1/X ₀ =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 6	6		1/X ₀ = ✓	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 7			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 8			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 9			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 10			1/X ₀ =	95.0/ =		mg/L	ppm	
Blank	Lot:		1/X ₀ =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: T1115		1/X ₀ = 1	95.0/ =	0.210	mg/L	0.251 ppm	
Sample 11			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 12			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 13			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 14			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 15			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 16			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 17			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 18			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 19			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 20			1/X ₀ =	95.0/ =		mg/L	ppm	
MTX Dup.	closing 0.25mg/L		1/X ₀ =	95.0/ =	0.204	mg/L	0.204 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

13760 Magnolia Ave. Chino CA 91710

TDS
Solid Analysis (160.1, 160.2, 160.3) Worksheet

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

Batch # 03W2607 Matrix W Method: 160.1 Balance No. _____

Date: 4/28/23 Analyst: DC

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	T1116	1 =	100	111.7909	111.7908	111.7909	0.0000	0	R
2	LCS	T1116	1 =		213.859	213.8989	213.8987	0.0396	396	6
3	Sample-1	2866-1	1 =		103.9442	103.974	103.9740	0.0298	298	14
4	MS on S-1	2933-3	1 =		111.2769	111.3486	111.3448	0.0679	679	J
6	MSD on S-1	3	1 =		114.307	114.3720	114.3723	0.0652	652	H
6	Sample-2	2866-2	1 =		104.307	104.3076	104.3078	0.0001	1	3
7	Sample-3	3	1 =		115.1304	115.1614	115.1615	0.0311	311	10
8	Sample-4	4	1 =		114.3709	114.3928	114.3929	0.0231	231	A
9	Sample-5	5	1 =		115.911	115.9449	115.9450	0.0333	333	19
10	Sample-6	6	1 =		116.9493	116.9693	116.9694	0.0201	201	W
11	Sample-7	7	1 =		115.7069	115.7445	115.7446	0.0377	377	HIS
12	Sample-8	2881-1	1 =		106.3145	106.340	106.3400	0.0255	255	8
13	Sample-9	2	1 =		107.7107	107.7326	107.7327	0.0220	220	0
14	Sample-10	3	1 =		105.312	105.3666	105.3669	0.0544	544	12
15	LCSD	T1116	1 =		112.9002	112.9424	112.9444	0.0422	422	*
16	Sample-11	4	1 =		121.3177	121.3567	121.3567	0.0388	388	I
17	Sample-12	5	1 =		101.352	101.3998	101.3996	0.0472	472	W1
18	Sample-13	6	1 =		99.0757	99.0946	99.0945	0.0188	188	12
19	Sample-14	2933-1	1 =		103.5228	103.5228	103.5228	0.0000	0	26
20	Sample-15	2	1 =		115.1082	115.1334	115.1335	0.0253	253	G
21	Sample-16	3	1 =		115.3468	115.3716	115.3718	0.0250	250	J
22	Sample-17	4	1 =		116.6479	116.6725	116.6726	0.0247	247	ZJ
23	Sample-18	5	1 =		105.8998	105.9249	105.9249	0.0251	251	19
24	Sample-19	6	1 =		115.8730	115.8948	115.8949	0.0219	219	CK
25	Sample-20	2940	1 =							
26	Mtx Dup.		1 =							

Type	STD Lot #	$C_{STD}(\mu\text{s/mL}) \times V_{STD}(\text{mL}) / X(\text{g or mL}) = T$	Spike Rec.	Ctl Limit (W/S)	PQL/MDL (in ppm)
TS	W- 7618	x / = 4000 ppm	%	85-115 %/80-120 %	PQL(w) 10
TSS	W-	x / = ppm	%	PQL(s) 50
TDS	W- 7619	x / = ppm	%	90-110 %/85-115 %	MDL(w) 4
TS	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.
 [CUST.DOC.WET]TDS.TEX ROOT-FILE: TDS.ROOT.TEX CONTROL-FILE: TDS.000 1-Page file: TDS1.TEX
 [PQL] limits are subjected to change. The updated values are given in the latest version of APCL Technical Handbook Vol. 2

Applied R & Oh Laboratory

Balance Daily Calibration Worksheet

12501 Reynolds Ave., Orange, CA 92668
 Tel: (909) 580-1828 Fax: (909) 580-1498

Weight Set S/N: 12006

0685
3955

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)	
4/28/03	A-01	Net	W	W	✓	B-01	1.00	10.00	200.00	✓	C-01	1.0000	10.0001	200.0002	✓	W
	A-02					B-05	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-04	1.00	9.99	200.00	✓	B-07	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-					B-					C-					
	A-01	Net	W	W	✓	B-01	1.00	10.01	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-02					B-05	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-04	1.00	9.99	200.00	✓	B-07	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-					B-					C-					
4/30/03	A-01	Net	W	W	✓	B-01	1.00	10.01	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	W
	A-02					B-05	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-04	1.00	9.99	200.00	✓	B-07	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-					B-					C-					
	A-01	Net	W	W	✓	B-01	1.00	10.01	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-02					B-05	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓	C-01	1.0000	10.0001	200.0001	✓	
	A-04	1.00	9.99	200.00	✓	B-07	1.00	9.99	199.99	✓	C-02	1.0000	10.0000	200.0000	✓	
	A-					B-					C-					

Notation: (C) - Cleanliness; (D) - Display; (AR) - Auto Rzeroing;
 APCL form 4-213, March 30, 1995, Ver. 4.0 No pencil. Use blue pen for record. Use red pen for correction.
 File: C:\MST-DOC\LAB\BAL-CAL.TEX Root:File: BAL-CAL-ROOT.TEX 1-Page-File: BAL-CAL11.TEX

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\icv-50pb_009.dxd	1	1
10	lcb	Sample		e314-011.met	c:\data\314-011\lcb_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\lcv-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\vdap-25pb	1	1
31	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
32	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
33	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
34	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
35	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
36	IDP and IDA 25pb	Sample		e314-011.met	c:\data\314-011\vdap-25pb	1	1
37	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\314-011\lipo-25pb	1	1
38	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\314-011\lipo-25pb	1	1
39	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\314-011\lipo-4pb	1	1
40	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\314-011\lipo-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\lam-100-4pb	1	1
50	anion 200pm each ,4pb CLO4	Sample		e314-011.met	c:\data\314-011\lam-200-4pb	1	1
51	anion 300pm each ,4pb CLO4	Sample		e314-011.met	c:\data\314-011\lam-300-4pb	1	1
52	anion 100pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\lam-100-2pb	1	1
53	anion 200pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\lam-200-2pb	1	1
54	anion 300pm each,2pb CLO4	Sample		e314-011.met	c:\data\314-011\lam-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

Line	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
0	2842-08 F=1	Sample		e314-011.met	2842-08_010.dxd	1	1	1
1	2842-10 F=1	Sample		e314-011.met	2842-10_011.dxd	1	1	1
2	2842-08 ms 50ppb f=1	Sample		e314-011.met	w2531k m01_012.dxd	1	1	1
3	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q02_013.dxd	1	1	1
4	ccb	Sample		e314-011.met	w2531k k02_014.dxd	1	1	1
5	2842-08 msd 50ppb f=1	Sample		e314-011.met	w2531k n01_015.dxd	1	1	1
6	2843-01 F=1	Sample		e314-011.met	2843-01_016.dxd	1	1	1
7	2843-02 F=1	Sample		e314-011.met	2843-02_017.dxd	1	1	1
8	2843-03 F=1	Sample		e314-011.met	2843-03_018.dxd	1	1	1
9	2843-04 F=1	Sample		e314-011.met	2843-04_019.dxd	1	1	1
0	2843-05 F=1	Sample		e314-011.met	2843-05_020.dxd	1	1	1
1	2843-06 F=1	Sample		e314-011.met	2843-06_021.dxd	1	1	1
2	2843-07 F=1	Sample		e314-011.met	2843-07_022.dxd	1	1	1
3	2829-01 F=1	Sample		e314-011.met	2829-01_023.dxd	1	1	1
4	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q03_024.dxd	1	1	1
5	CCB	Sample		e314-011.met	w2531k k03_025.dxd	1	1	1
6	2829-02 F=1	Sample		e314-011.met	2829-02_026.dxd	1	1	1
7	2829-03 F=1	Sample		e314-011.met	2829-03_027.dxd	1	1	1
8	2829-04 F=1	Sample		e314-011.met	2829-04_028.dxd	1	1	1
9	2829-05 F=1	Sample		e314-011.met	2829-05_029.dxd	1	1	1
0	2866-01 f=1	Sample		e314-011.met	2866-01_030.dxd	1	1	1
1	2866-02 f=1	Sample		e314-011.met	2866-02_031.dxd	1	1	1
2	2866-03 f=1	Sample		e314-011.met	2866-03_032.dxd	1	1	1
3	2866-04 f=1	Sample		e314-011.met	2866-04_033.dxd	1	1	1
4	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q04_034.dxd	1	1	1
5		Sample		aastopcl.met		1	1	1

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

e	Sample	Sample Type	Level	Method	Data File	Volume	Dilution
	##03w2612kw ipc 25ppb w7759	Sample		e314-011.met	c:\data\03w2612kw2612k ipc 25ppb	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q01	1	1
	ccb	Sample		e314-011.met	c:\data\03w2612kw2612k ccb01	1	1
	lcs 25ppb w7827d	Sample		e314-011.met	c:\data\03w2612kw2612k l01	1	1
	LCS 18PPB W7685D	Sample		e314-011.met	c:\data\03w2612kw2612k j01	1	1
	ICCS 4ppb w7827b	Sample		e314-011.met	c:\data\03w2612kw2612k iccs 4ppb	1	1
	mb	Sample		e314-011.met	c:\data\03w2612kw2612k k01	1	1
	2866-05 F=1	Sample		e314-011.met	c:\data\03w2612k\2866-05	1	1
	2866-06 f=1	Sample		e314-011.met	c:\data\03w2612k\2866-06	1	1
	2866-07 F=1	Sample		e314-011.met	c:\data\03w2612k\2866-07	1	1
	2933-03 F=1	Sample		e314-011.met	c:\data\03w2612k\2933-03	1	1
	2933-01 f=1	Sample		e314-011.met	c:\data\03w2612k\2933-01	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q02	1	1
	ccb	Sample		e314-011.met	c:\data\03w2612kw2612k k02	1	1
	2933-02 f=1	Sample		e314-011.met	c:\data\03w2612k\2933-02	1	1
	2933-03 ms 50ppb f=1	Sample		e314-011.met	c:\data\03w2612kw2612k m01	1	1
	2933-03 msd 50ppb f=1	Sample		e314-011.met	c:\data\03w2612kw2612k n01	1	1
	2933-04 F=1	Sample		e314-011.met	c:\data\03w2612k\2933-04	1	1
	2933-05 F=1	Sample		e314-011.met	c:\data\03w2612k\2933-05	1	1
	2933-06 F=1	Sample		e314-011.met	c:\data\03w2612k\2933-06	1	1
	2881-01 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-01	1	1
	2881-02 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-02	1	1
	2881-03 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-03	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q03	1	1
	CCB	Sample		e314-011.met	c:\data\03w2612kw2612k k03	1	1
	2881-04 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-04	1	1
	2881-05 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-05	1	1
	2881-06 F=1	Sample		e314-011.met	c:\data\03w2612k\2881-06	1	1
	2866-06 md f=2	Sample		e314-011.met	c:\data\03w2612kw2612k d01	1	2
	2933-04 f=2	Sample		e314-011.met	c:\data\03w2612k\2933-04a	1	2
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q04	1	1
	ccb	Sample		e314-011.met	c:\data\03w2612kw2612k k04	1	1
	2964-01 f=1	Sample		e314-011.met	c:\data\03w2612k\2964-01	1	1
	2964-02 f=1	Sample		e314-011.met	c:\data\03w2612k\2964-02	1	1
	2964-03 f=1	Sample		e314-011.met	c:\data\03w2612k\2964-03	1	1
	2964-04 f=1	Sample		e314-011.met	c:\data\03w2612k\2964-04	1	1
	2964-05 f=1	Sample		e314-011.met	c:\data\03w2612k\2964-05	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q05	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q06	1	1
	ccb	Sample		e314-011.met	c:\data\03w2612kw2612k k05	1	1
	2964-01 f=4	Sample		e314-011.met	c:\data\03w2612k\2964-01	1	4
	2964-04 f=4	Sample		e314-011.met	c:\data\03w2612k\2964-04	1	4
	2964-03 f=20	Sample		e314-011.met	c:\data\03w2612k\2964-03	1	20
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2612kw2612k q07	1	1
		Sample		aastopcl.met		1	1

Analyst Wei Wang
 Date 4/29-30/03
 Instrument IC-K

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 *W*
 Date 3/21/03
 Instrument J

DIONEX SCHEDULE - C:\DX\SCHEDULE\03W2550.SCH

Inj#	Sample Name	Method	Data File	Vol.	Dil.	Int.Std.
1	##03W2550, W CCVW77	..\E300-063	..\W2550Q01.D01	1	1	1
2	MB RW1408	..\E300-063	..\W2550K01.D02	1	1	1
3	LCS W7768-100X	..\E300-063	..\W2550L01.D03	1	1	1
4	LCSD W7768-100X	..\E300-063	..\W2550J01.D04	1	1	1
5	2866-1 F=2.5	..\E300-063	..\2866-101.D05	1	2.5	1
6	2866-3 F=2.5	..\E300-063	..\2866-301.D06	1	2.5	1
7	2866-4 F=1.25	..\E300-063	..\2866-401.D07	1	1.25	1
8	2866-5 F=5	..\E300-063	..\2866-501.D08	1	5	1
9	2866-6 F=2	..\E300-063	..\2866-601.D09	1	2	1
10	2866-7 F=2	..\E300-063	..\2866-701.D10	1	2	1
11	2866-2 F=1.25	..\E300-063	..\2866-201.D11	1	1.25	1
12	CCV2W7767-100X	..\E300-063	..\W2550Q01.D12	1	1	1
13	MB RW1408	..\E300-063	..\W2550K11.D13	1	1	1
14	\$2866-5 MS F=10	..\E300-063	..\W2550M01.D14	1	10	1
15	\$2866-5 MSD F=10	..\E300-063	..\W2550N01.D15	1	10	1
16	2867-2 F=8	..\E300-063	..\2867-201.D16	1	8	1
17	2867-3 F=80	..\E300-063	..\2867-301.D17	1	80	1
18	2867-4 F=80	..\E300-063	..\2867-401.D18	1	80	1
19	2867-5 F=50	..\E300-063	..\2867-501.D19	1	50	1
20	2867-1 F=1.25	..\E300-063	..\2867-101.D20	1	1.25	1
21	CCV3W7767-100X	..\E300-063	..\W2550Q01.D21	1	1	1
22		..\STOP.MET		1	1	1

Comment :

LCS/LCSD LOT # W7768

MS/MSD LOT # W7767

ELUENT LOT # W7868

ANALYTICAL METHOD 9056/E300 MATRIX W

Analyst TDW

Date 4/25/03

Instrument I