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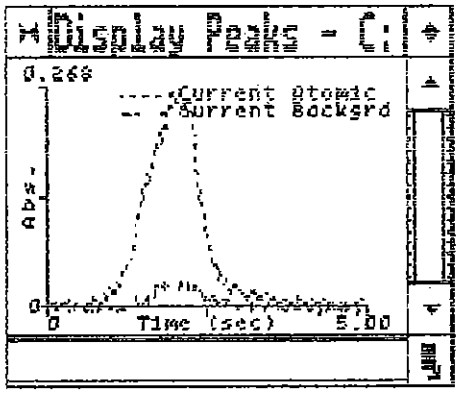
Element File: AS_7060.GEL Element: As Wavelength: 193.7
Date: 04/29/~~99~~ 03 Time: 11:12 Slit: 0.70 L
Data File: 03M1402E.DAT ID/Wt File: 1.IDW Lamp Current: 0
Technique: HGA Calib. Type: Linear Energy: 52

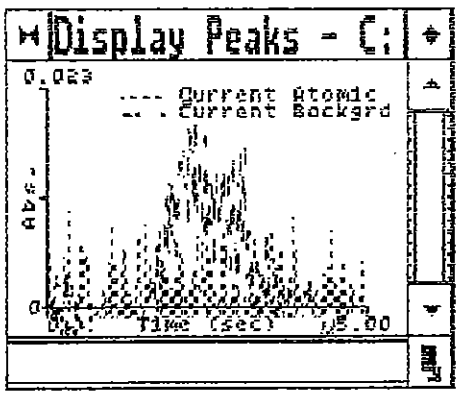
As ID: AS Position 002 Seq. No.: 00001 A/S Pos.: 2 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 2
Replicate 1 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



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

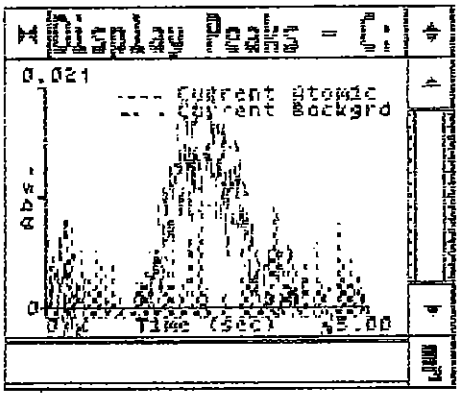
uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 11:17
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.002 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.001



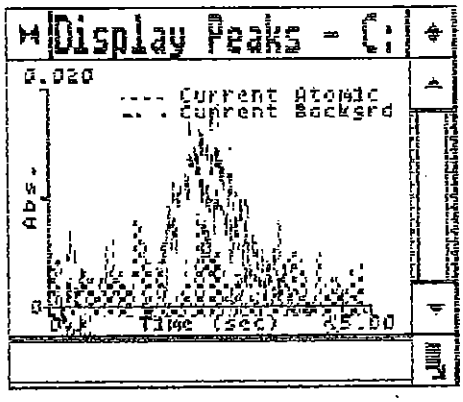
As ID: Calib. Blank Seq. No.: 00003 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 11:21
Peak Area (A-s): -0.006 Peak Height (A): 0.013
Background Pk Area (A-s): 0.005 Background Pk Height (A): 0.021

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



uL dispensed: 5 from 20, 20 from 1
Replicate 2 Time: 11:24
Peak Area (A-s): -0.000 Peak Height (A): 0.009
Background Pk Area (A-s): -0.002 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): -0.000



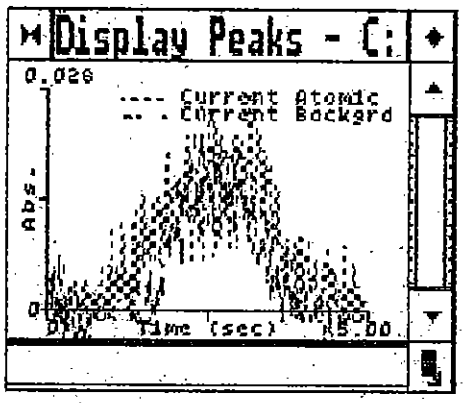
Mean Pk Area (A-s): -0.003 SD: 0.0041 RSD(%): 141.06

Auto-zero performed.

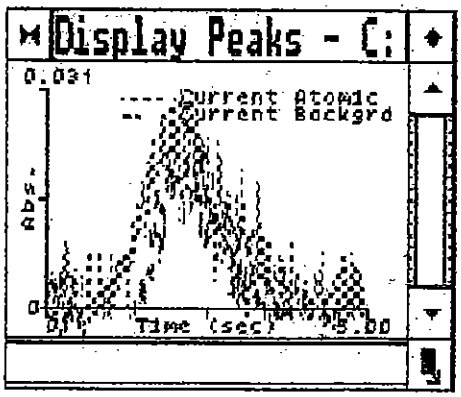
As ID: 1/2 STD1 1472A Seq. No.: 00004 A/S Pos.: 4 Date: 04/29/99

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

Peak Area (A-s): 0.038 Peak Height (A): 0.026
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.041



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

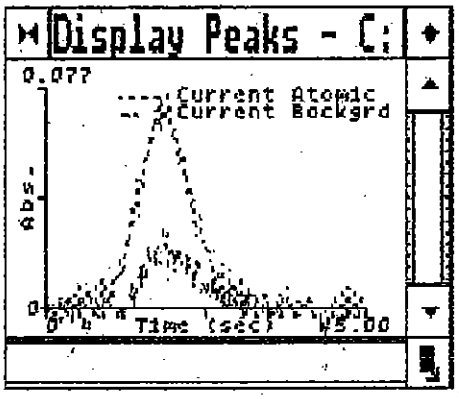


Mean Pk Area (A-s): 0.041 SD: 0.0004 RSD(%): 0.87

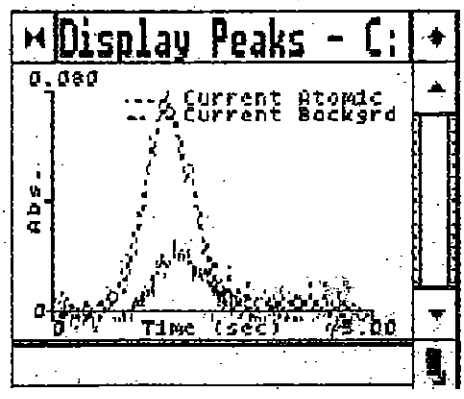
Standard number 1 applied. [0.0125]
Correlation coefficient: 1.00000 Slope: 3.2512

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

uL dispensed: 5 from 20, 20 from 4
Replicate 1 Time: 11:34
Peak Area (A-s): 0.072 Peak Height (A): 0.077
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.075
Concentration (mg/L): 0.0229



uL dispensed: 5 from 20, 20 from 4
Replicate 2 Time: 11:37
Peak Area (A-s): 0.072 Peak Height (A): 0.080
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.075
Concentration (mg/L): 0.0231

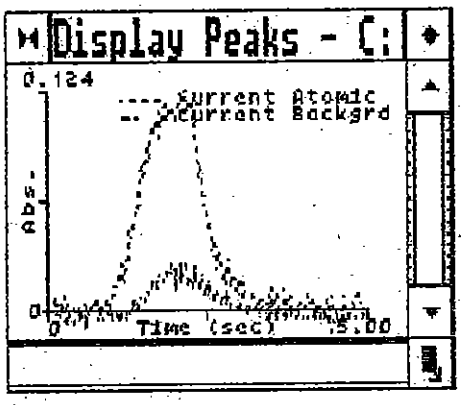


Mean Conc (mg/L): 0.0230 SD: 0.00017 RSD(%): 0.73

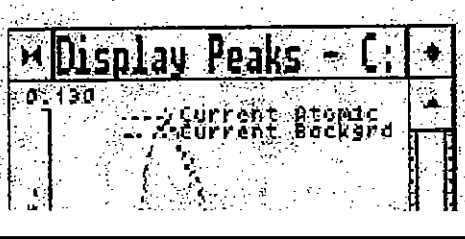
Standard number 2 applied. [0.0250]
Correlation coefficient: 0.99398 Slope: 3.0534

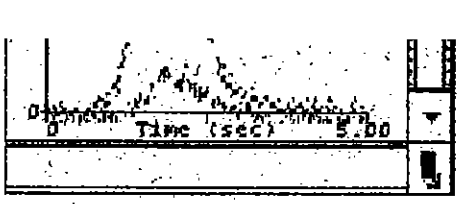
As ID: STD2 1472B Seq. No.: 00006 A/S Pos.: 3 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 3
Replicate 1 Time: 11:40
Peak Area (A-s): 0.143 Peak Height (A): 0.124
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.145
Concentration (mg/L): 0.0476



uL dispensed: 5 from 20, 20 from 3
Replicate 2 Time: 11:43
Peak Area (A-s): 0.146 Peak Height (A): 0.130
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.149
Concentration (mg/L): 0.0487



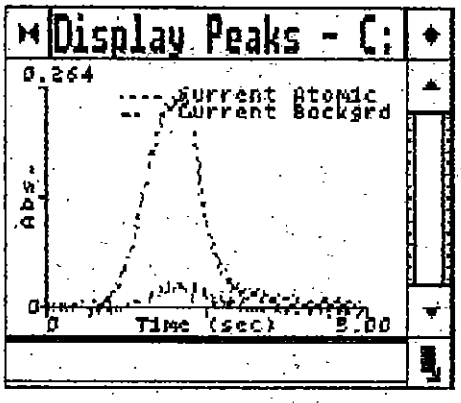


Mean Conc (mg/L): 0.0482 SD: 0.00079 RSD(%): 1.63

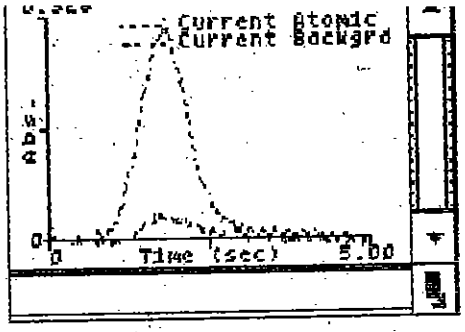
Standard number 3 applied. [0.0500]
Correlation coefficient: 0.99879 Slope: 2.9696

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

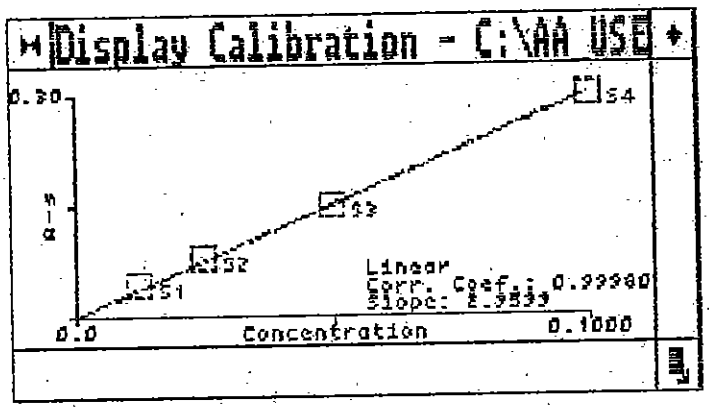


uL dispensed: 5 from 20, 20 from 2
Replicate 2 Time: 11:50
Peak Area (A-s): 0.299 Peak Height (A): 0.328
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.302
Concentration (mg/L): 0.1016



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

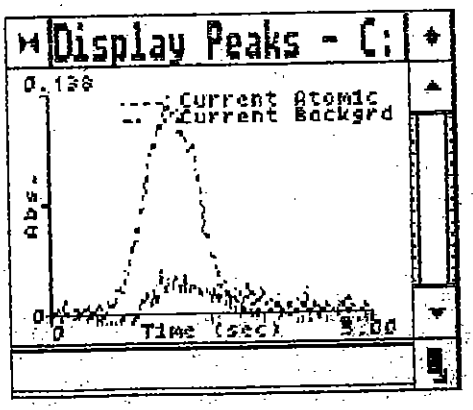
Standard number 4 applied. [0.1000]
Correlation coefficient: 0.99980 Slope: 2.9599



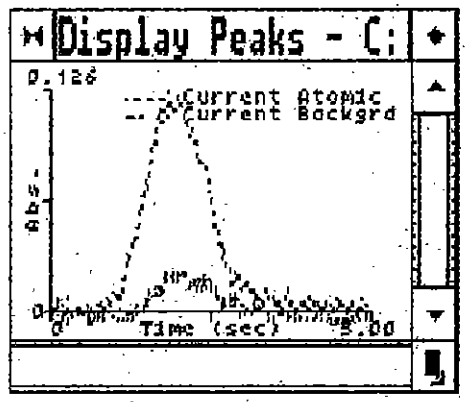
As ID: ICV A1474 Seq. No.: 00008 A/S Pos.: 40 Date: 04/29/99

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 Time: 11:58
Peak Area (A-s): 0.146 Peak Height (A): 0.126
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): 0.149
Concentration (mg/L): 0.0503 Corrected Conc (ppm): ----------

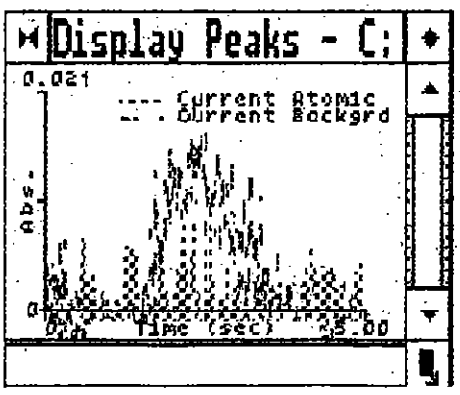


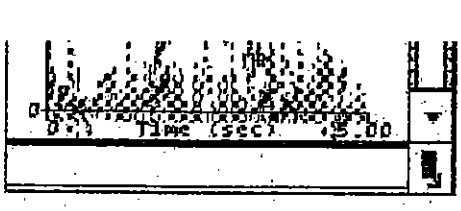
Mean Conc (mg/L): 0.0496 SD: 0.00095 RSD(%): 1.92
Corrected Conc (ppm): ----------

QC sample is within range 0.045 - 0.055

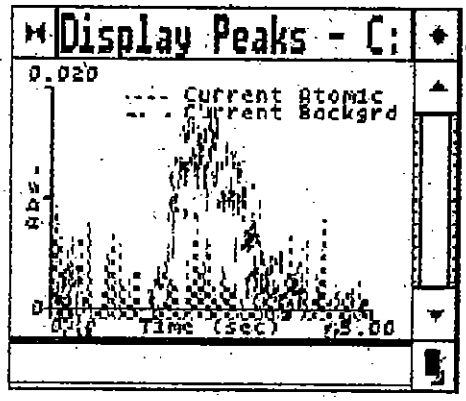
As ID: ICB Seq. No.: 00009 A/S Pos.: 1 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 12:01
Peak Area (A-s): -0.003 Peak Height (A): 0.009
Background Pk Area (A-s): 0.005 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0001 Corrected Conc (ppm): ----------





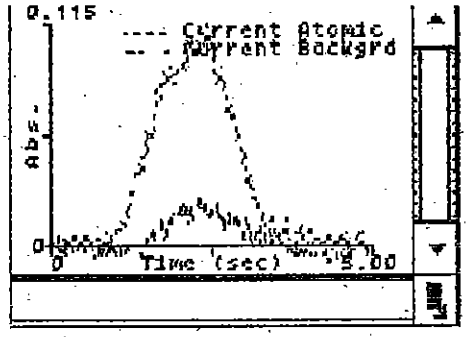
uL dispensed: 5 from 20, 20 from 5
Replicate 2 Time: 12:11
Peak Area (A-s): -0.004 Peak Height (A): 0.009
Background Pk Area (A-s): 0.005 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0002 Corrected Conc (ppm): -0.0002



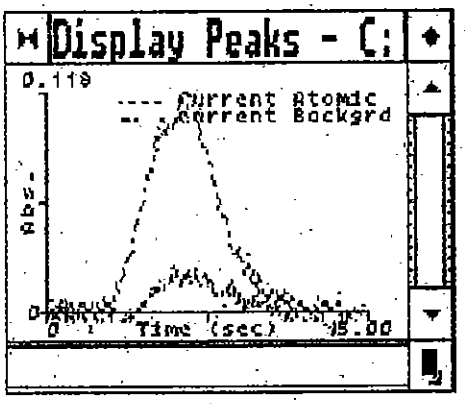
Mean Conc (mg/L): 0.0003 SD: 0.00076 RSD(%): 233.25
Corrected Conc (ppm): 0.0003

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

uL dispensed: 5 from 20, 20 from 6
Replicate 1 Time: 12:14
Peak Area (A-s): 0.157 Peak Height (A): 0.115
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.160
Concentration (mg/L): 0.0541 Corrected Conc (ppm): 0.0541



uL dispensed: 5 from 20, 20 from 6
Replicate 2 Time: 12:17
Peak Area (A-s): 0.151 Peak Height (A): 0.118
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.154
Concentration (mg/L): 0.0521 Corrected Conc (ppm): 0.0521

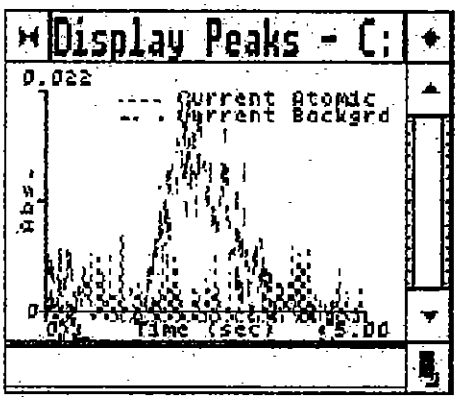


Mean Conc (mg/L): 0.0531 SD: 0.00141 RSD(%): 2.65
Corrected Conc (ppm): 0.0531

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

uL dispensed: 5 from 20, 20 from 7
Replicate 1 Time: 12:21
Peak Area (A-s): 0.157 Peak Height (A): 0.107
Background Pk Area (A-s): 0.016 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.159
Concentration (mg/L): 0.0539 Corrected Conc (ppm): 0.0539

uL dispensed: 5 from 20, 20 from 1
Replicate 2 Time: 12:05
Peak Area (A-s): -0.007 Peak Height (A): 0.008
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0014 Corrected Conc (ppm): ----------

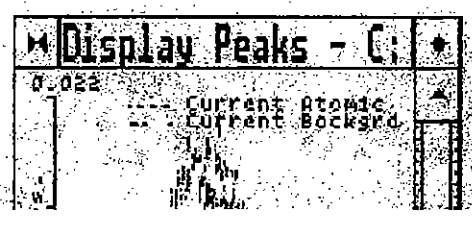


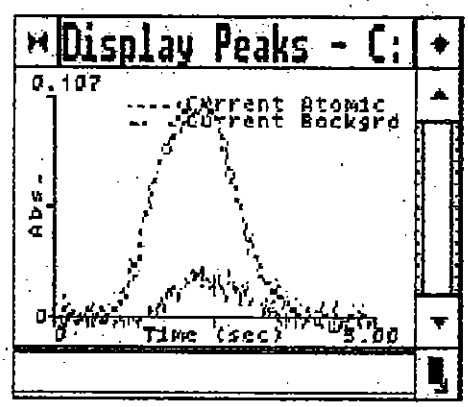
Mean Conc (mg/L): -0.0007 SD: 0.00093 RSD(%): 124.05
Corrected Conc (ppm): ----------

QC sample is within range

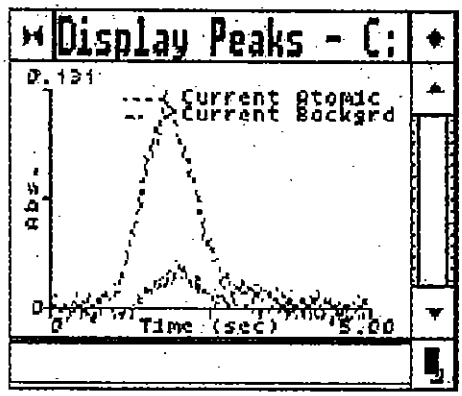
As ID: M-BL 03M1402 Seq. No.: 00010 A/S Pos.: 5 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 5
Replicate 1 Time: 12:08
Peak Area (A-s): -0.000 Peak Height (A): 0.009
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0009 Corrected Conc (ppm): 0.0009





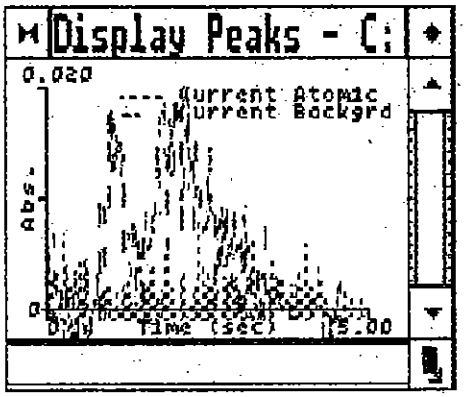
uL dispensed: 5 from 20, 20 from 7
Replicate 2 Time: 12:24
Peak Area (A-s): 0.133 Peak Height (A): 0.131
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.136
Concentration (mg/L): 0.0458 Corrected Conc (ppm): 0.0458



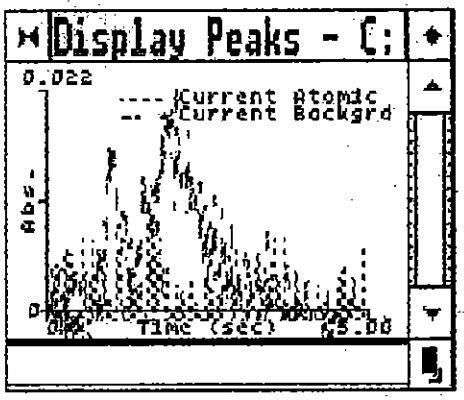
Mean Conc (mg/L): 0.0498 SD: 0.00570 RSD(%): 11.44
Corrected Conc (ppm): 0.0498

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 Time: 12:27
Peak Area (A-s): -0.006 Peak Height (A): 0.013
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0010 Corrected Conc (ppm): -0.0010



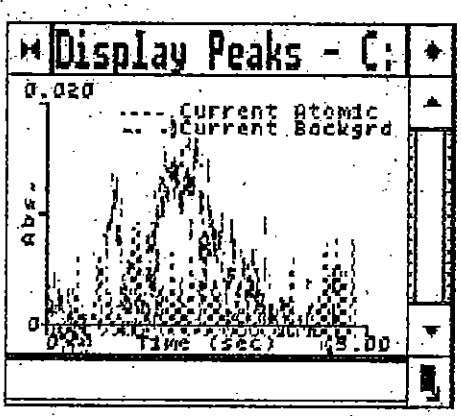
uL dispensed: 5 from 20, 20 from 8
Replicate 2 Time: 12:30
Peak Area (A-s): -0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0000 Corrected Conc (ppm): -0.0000



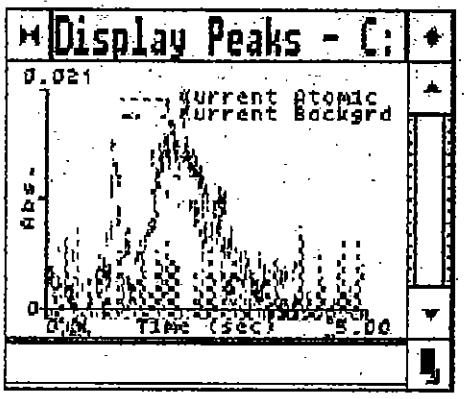
Mean Conc (mg/L): -0.0005 SD: 0.00072 RSD(%): 138.52
Corrected Conc (ppm): -0.0005

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 Time: 12:34
Peak Area (A-s): 0.001 Peak Height (A): 0.013
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.020
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 9
Replicate 2. Time: 12:37
Peak Area (A-s): -0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0002 Corrected Conc (ppm): 0.0002

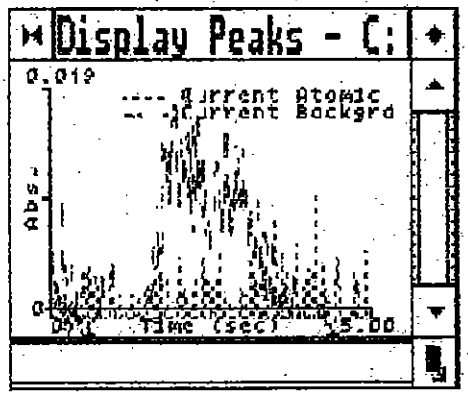


Mean Conc (mg/L): 0.0007 SD: 0.00082 RSD(%): 109.34
Corrected Conc (ppm): 0.0007

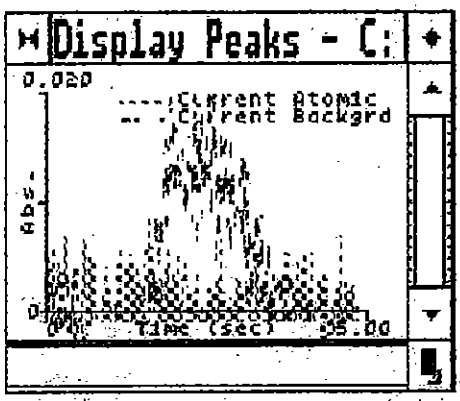
As ID: 2933-3 1/5 P=5 Seq. No.: 00015 A/S Pos.: 10 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 10
Replicate 1 Time: 12:40
Peak Area (A-s): -0.009 Peak Height (A): 0.010

Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0019 Corrected Conc (ppm): -0.010



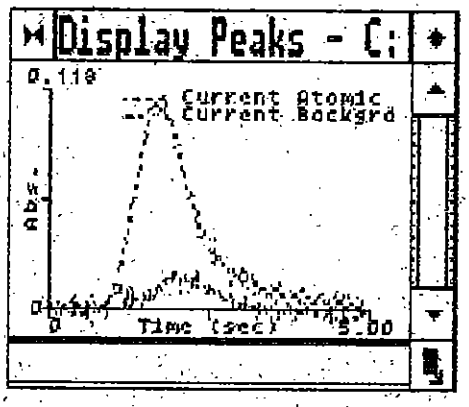
uL dispensed: 5 from 20, 20 from 10
Replicate 2 Time: 12:43
Peak Area (A-s): -0.003 Peak Height (A): 0.009
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0002 Corrected Conc (ppm): -0.001



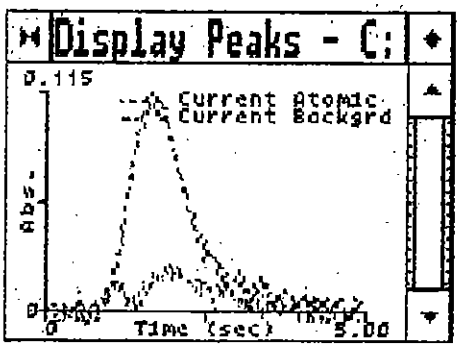
Mean Conc (mg/L): -0.0010 SD: 0.00125 RSD(%): 120.47
Corrected Conc (ppm): -0.005

As ID: 2933-3 MS P=1 Seq. No.: 00016 A/S Pos.: 11 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 11
Replicate 1
Time: 12:47
Peak Area (A-s): 0.133
Peak Height (A): 0.118
Background Pk Area (A-s): 0.019
Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.136
Concentration (mg/L): 0.0459
Corrected Conc (ppm): 0.0459



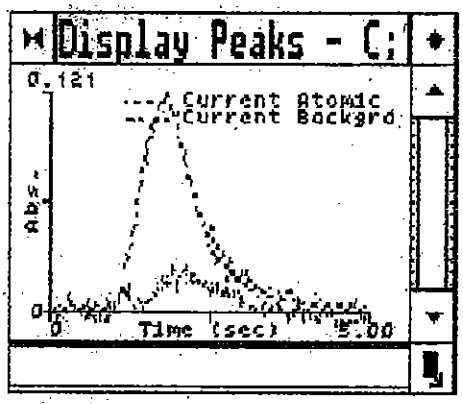
uL dispensed: 5 from 20, 20 from 11
Replicate 2
Time: 12:50
Peak Area (A-s): 0.131
Peak Height (A): 0.115
Background Pk Area (A-s): 0.024
Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.134
Concentration (mg/L): 0.0452
Corrected Conc (ppm): 0.0452



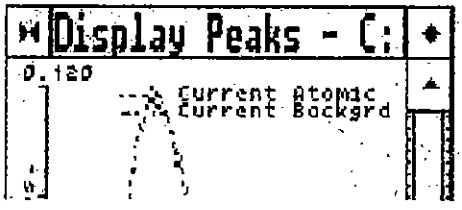
Mean Conc (mg/L): 0.0456 SD: 0.00047 RSD(%): 1.02
Corrected Conc (ppm): 0.0456

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



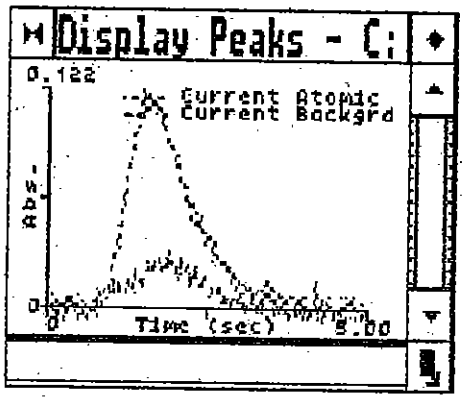
uL dispensed: 5 from 20, 20 from 12
Replicate 2 Time: 12:56
Peak Area (A-s): 0.133 Peak Height (A): 0.121
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.135
Concentration (mg/L): 0.0458 Corrected Conc (ppm): 0.0458



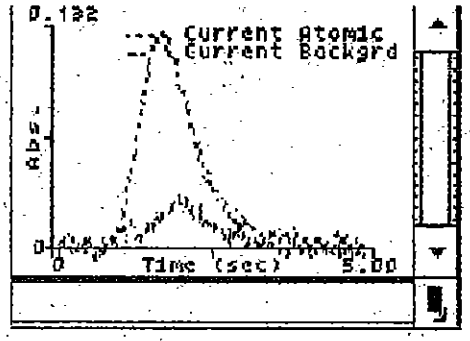
Mean Conc (mg/L): 0.0463 SD: 0.00082 RSD(%): 1.77
Corrected Conc (ppm): 0.0463

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

uL dispensed: 5 from 20, 20 from 13
Replicate 1 Time: 13:00
Peak Area (A-s): 0.142 Peak Height (A): 0.122
Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.036
Blank Corrected Pk Area (A-s): 0.144
Concentration (mg/L): 0.0488 Corrected Conc (ppm): 0.0488



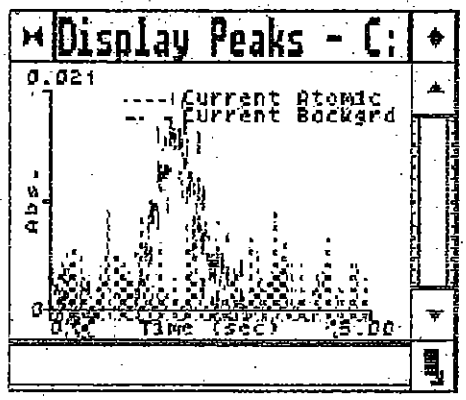
uL dispensed: 5 from 20, 20 from 13
Replicate 2 Time: 13:03
Peak Area (A-s): 0.141 Peak Height (A): 0.132
Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.033
Blank Corrected Pk Area (A-s): 0.144
Concentration (mg/L): 0.0485 Corrected Conc (ppm): 0.0485



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

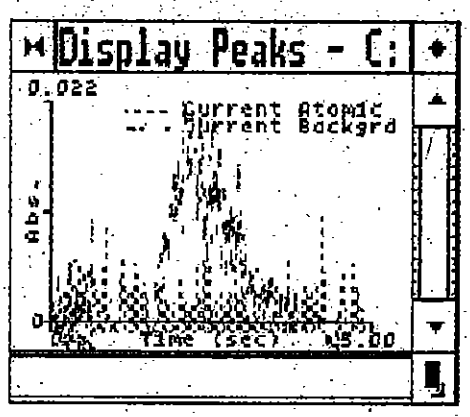
As ID: 2933-1 F=1 Seq. No.: 00019 A/S Pos.: 14 Date: 04/29/99

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



uL dispensed: 5 from 20, 20 from 14
Replicate 2 Time: 13:09
Peak Area (A-s): -0.003 Peak Height (A): 0.011

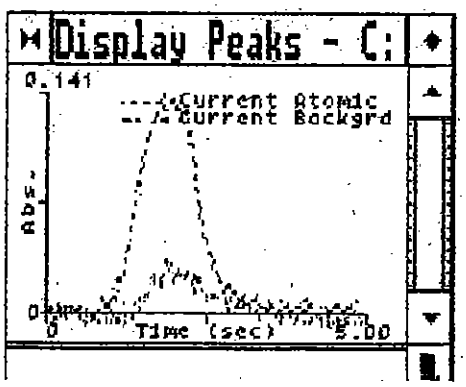
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0001 Corrected Conc (ppm): -0.0001



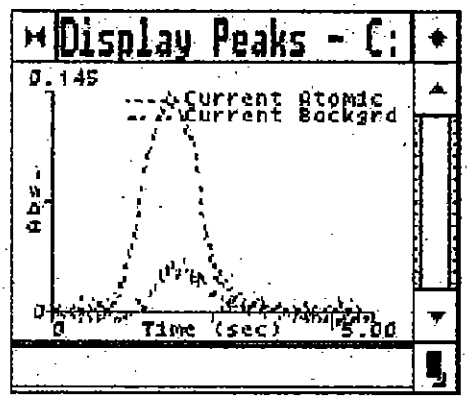
Mean Conc (mg/L): 0.0002 SD: 0.00050 RSD(%): 218.14
Corrected Conc (ppm): 0.0002

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

uL dispensed: 5 from 20, 20 from 40
Replicate 1 Time: 13:13
Peak Area (A-s): 0.154 Peak Height (A): 0.141
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.157
Concentration (mg/L): 0.0531 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 40
Replicate 2 Time: 13:16
Peak Area (A-s): 0.149 Peak Height (A): 0.145
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.035
Blank Corrected Pk Area (A-s): 0.152
Concentration (mg/L): 0.0515 Corrected Conc (ppm): ----------

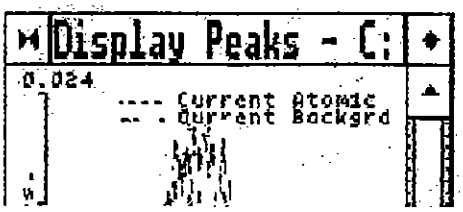


Mean Conc (mg/L): 0.0523 SD: 0.00118 RSD(%): 2.25
Corrected Conc (ppm): ----------

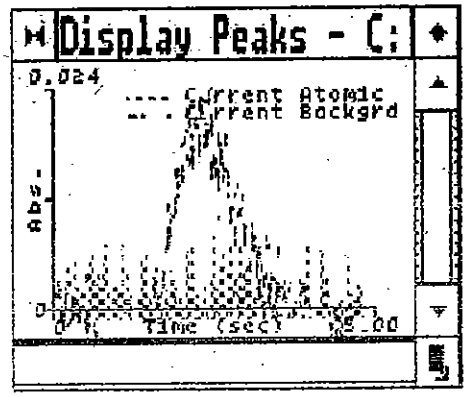
QC sample is within range 0.0425 - 0.0575

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

uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 13:19
Peak Area (A-s): 0.000 Peak Height (A): 0.010
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.003
Concentration (mg/L): 0.0010 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 1
Replicate 2 Time: 13:22
Peak Area (A-s): -0.003 Peak Height (A): 0.008
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0002 Corrected Conc (ppm): ----------

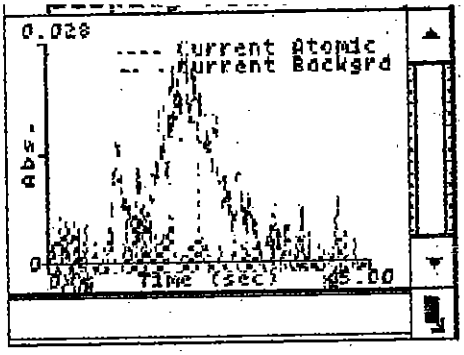


Mean Conc (mg/L): 0.0004 SD: 0.00086 RSD(%): 197.02
Corrected Conc (ppm): ----------

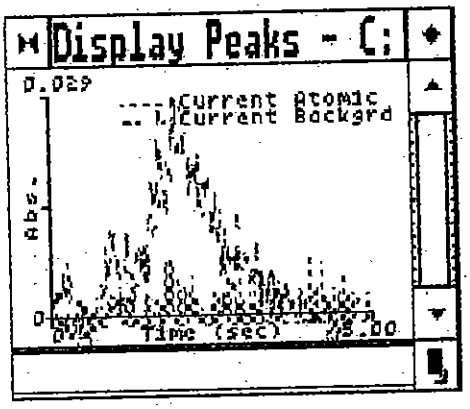
QC sample is within range

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 Time: 13:25
Peak Area (A-s): -0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0003 Corrected Conc (ppm): -0.0003



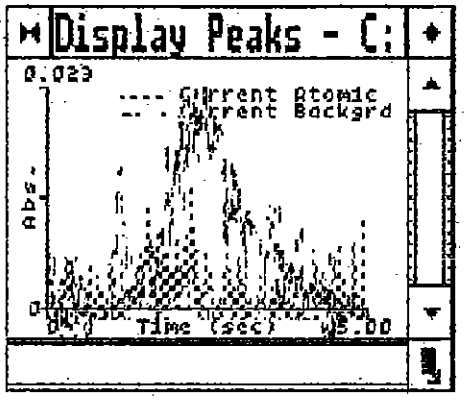
uL dispensed: 5 from 20, 20 from 15
Replicate 2 Time: 13:28
Peak Area (A-s): -0.004 Peak Height (A): 0.009
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0003 Corrected Conc (ppm): -0.0003



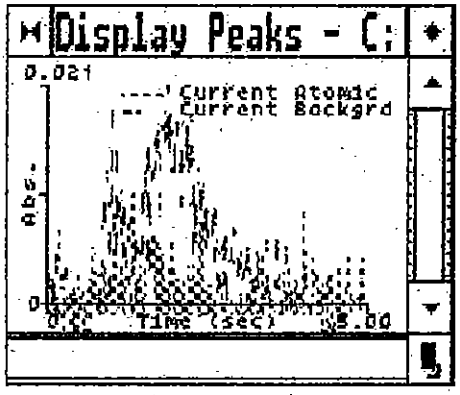
Mean Conc (mg/L): -0.0003 SD: 0.00002 RSD(%): 5.48
Corrected Conc (ppm): -0.0003

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 Time: 13:31
Peak Area (A-s): 0.003 Peak Height (A): 0.013
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.006
Concentration (mg/L): 0.0021 Corrected Conc (ppm): 0.0021



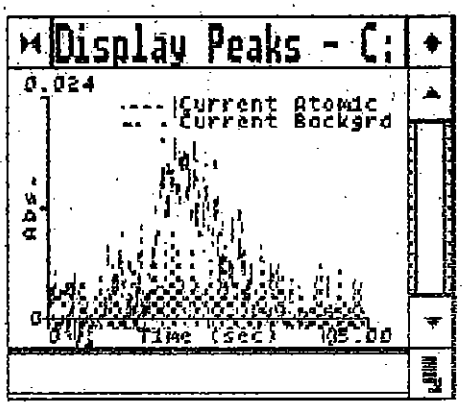
uL dispensed: 5 from 20, 20 from 16
Replicate 2 Time: 13:35
Peak Area (A-s): 0.001 Peak Height (A): 0.012
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0014 Corrected Conc (ppm): 0.0014



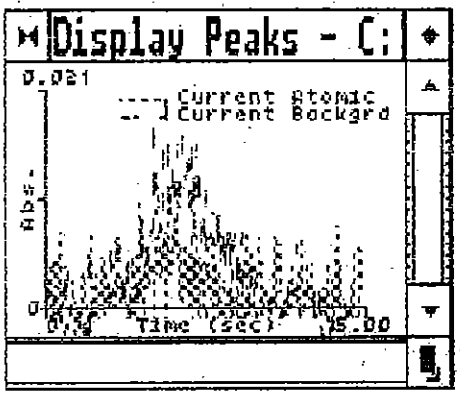
Mean Conc (mg/L): 0.0017 SD: 0.00044 RSD(%): 25.43
Corrected Conc (ppm): 0.0017

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

uL dispensed: 5 from 20, 20 from 17
Replicate 1 Time: 13:38
Peak Area (A-s): 0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.005
Concentration (mg/L): 0.0016 Corrected Conc (ppm): 0.0016



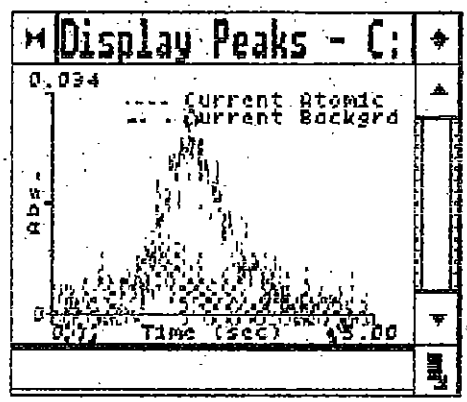
uL dispensed: 5 from 20, 20 from 17
Replicate 2 Time: 13:41
Peak Area (A-s): 0.005 Peak Height (A): 0.012
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.008
Concentration (mg/L): 0.0028 Corrected Conc (ppm): 0.0028



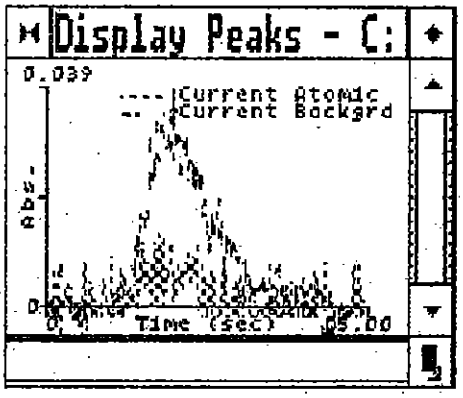
Mean Conc (mg/L): 0.0022 SD: 0.00088 RSD(%): 39.99
Corrected Conc (ppm): 0.0022

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 Time: 13:44
Peak Area (A-s): 0.006 Peak Height (A): 0.014
Background Pk Area (A-s): 0.029 Background Pk Height (A): 0.034
Blank Corrected Pk Area (A-s): 0.009
Concentration (mg/L): 0.0031 Corrected Conc (ppm): 0.0031



uL dispensed: 5 from 20, 20 from 18
Replicate 2 Time: 13:47
Peak Area (A-s): 0.007 Peak Height (A): 0.014
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.010
Concentration (mg/L): 0.0033 Corrected Conc (ppm): 0.0033

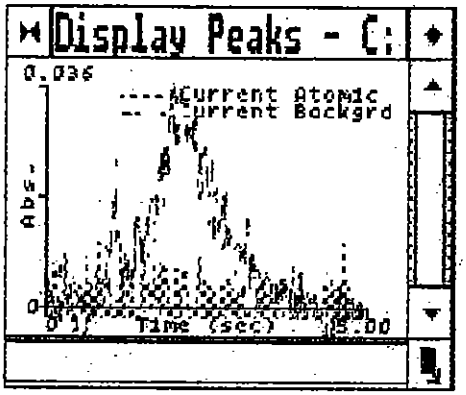


Mean Conc (mg/L): 0.0032 SD: 0.00013 RSD(%): 3.99
Corrected Conc (ppm): 0.0032

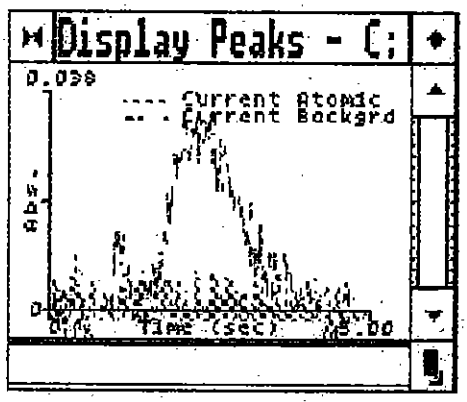
As ID: 2866-1 P=1 Seq. No.: 00026 A/S Pos.: 19 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 19
Replicate 1 Time: 13:50
Peak Area (A-s): 0.000 Peak Height (A): 0.011

Concentration (mg/L): 0.0010 Corrected Conc (ppm): 0.0010

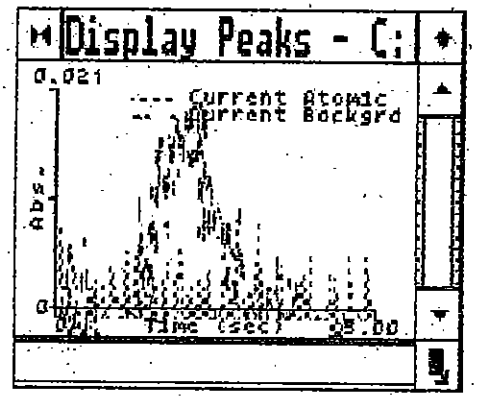


uL dispensed: 5 from 20, 20 from 19
Replicate 2 Time: 13:53
Peak Area (A-s): -0.001 Peak Height (A): 0.011
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.038
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0008 Corrected Conc (ppm): 0.0008

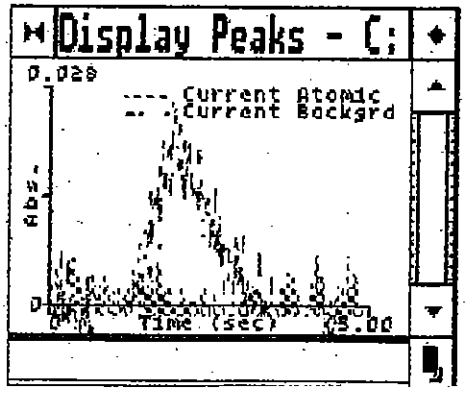


Mean Conc (mg/L): 0.0009 SD: 0.00020 RSD(%): 22.23
Corrected Conc (ppm): 0.0009

uL dispensed: 5 from 20, 20 from 21
Replicate 1 Time: 13:56
Peak Area (A-s): -0.007 Peak Height (A): 0.009
Background Pk Area (A-s): 0.004 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0012 Corrected Conc (ppm): -0.0012



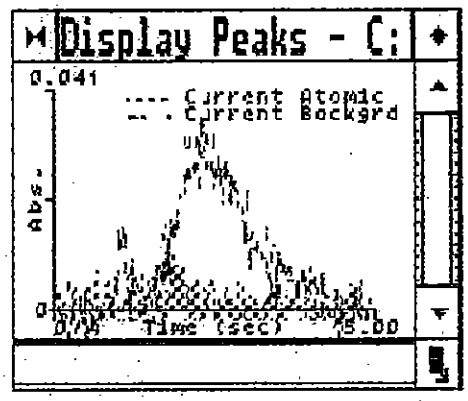
uL dispensed: 5 from 20, 20 from 21
Replicate 2 Time: 14:00
Peak Area (A-s): -0.007 Peak Height (A): 0.007
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): -0.004
Concentration (mg/L): -0.0014 Corrected Conc (ppm): -0.0014



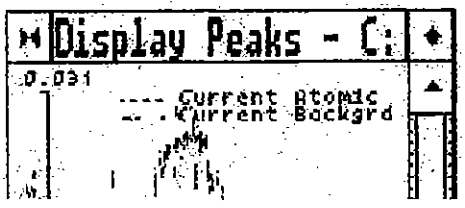
Mean Conc (mg/L): -0.0013 SD: 0.00012 RSD(%): 8.87
Corrected Conc (ppm): -0.0013

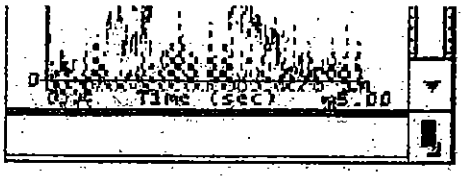
As ID: 2866-3 P=1 Seq. No.: 00028 A/S Pos.: 22 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 22
Replicate 1 Time: 14:03
Peak Area (A-s): 0.001 Peak Height (A): 0.012
Background Pk Area (A-s): 0.039 Background Pk Height (A): 0.041
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0013 Corrected Conc (ppm): 0.0013



uL dispensed: 5 from 20, 20 from 22
Replicate 2 Time: 14:06
Peak Area (A-s): -0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0001 Corrected Conc (ppm): -0.0001

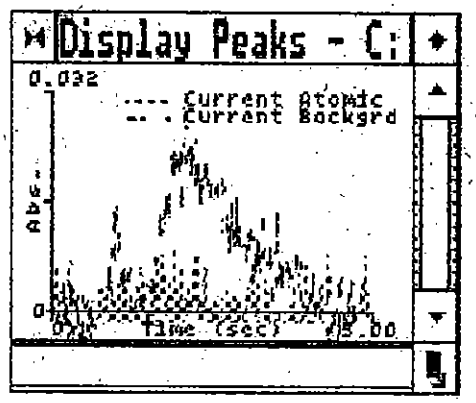




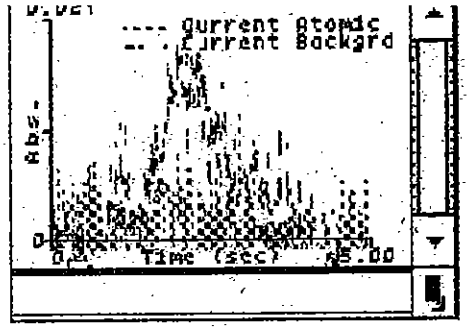
Mean Conc (mg/L): 0.0006 SD: 0.00100 RSD(%): 162.45
Corrected Conc (ppm): 0.0006

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

uL dispensed: 5 from 20, 20 from 23
Replicate 1 Time: 14:09
Peak Area (A-s): -0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.032
Blank Corrected Pk Area (A-s): 0.000
Concentration (mg/L): 0.0001 Corrected Conc (ppm): 0.0001



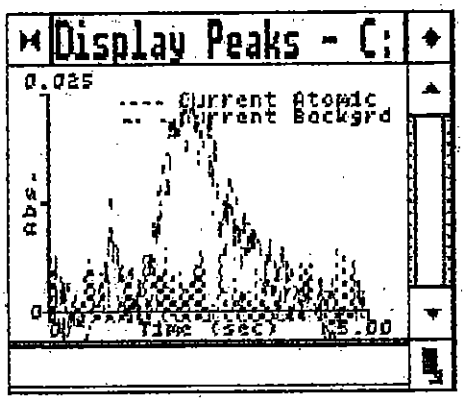
uL dispensed: 5 from 20, 20 from 23
Replicate 2 Time: 14:12
Peak Area (A-s): 0.004 Peak Height (A): 0.013
Background Pk Area (A-s): 0.017 Background Pk Height (A): 0.021
Blank Corrected Pk Area (A-s): 0.006
Concentration (mg/L): 0.0022 Corrected Conc (ppm): 0.0022



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

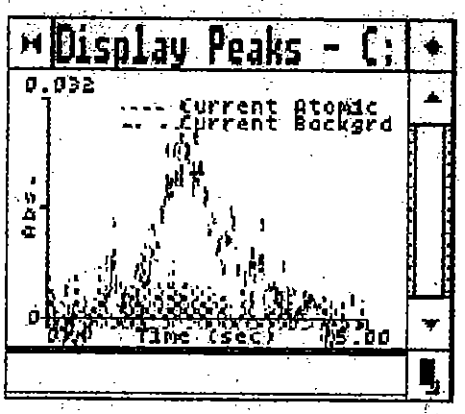
As ID: 2866-5 P=1 Seq. No.: 00030 A/S Pos.: 24 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 24
Replicate 1 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

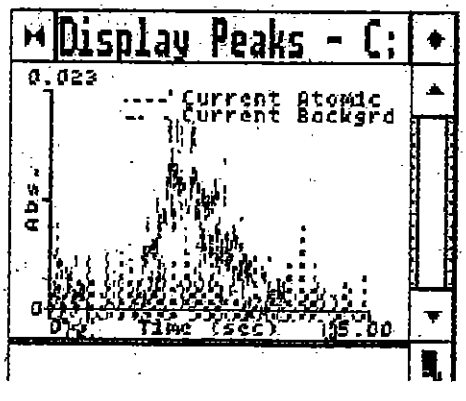
Concentration (mg/L): 0.0002 Corrected Conc (ppm): 0.0002



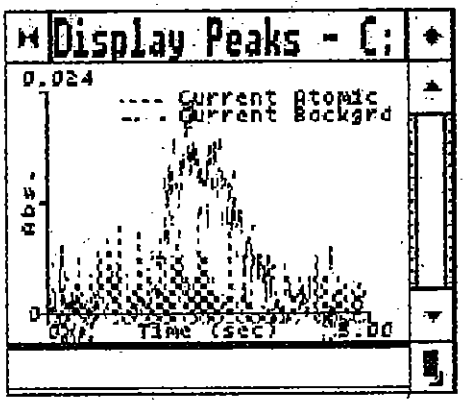
Mean Conc (mg/L): 0.0004 SD: 0.00029 RSD(%): 68.89
Corrected Conc (ppm): 0.0004

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



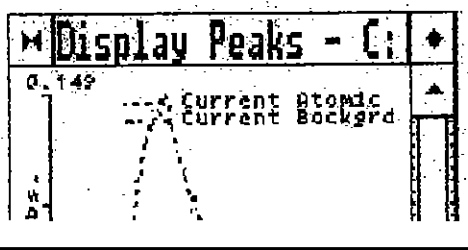
uL dispensed: 5 from 20, 20 from 25
Replicate 2 Time: 14:25
Peak Area (A-s): -0.001 Peak Height (A): 0.011
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0008 Corrected Conc (ppm): 0.0008



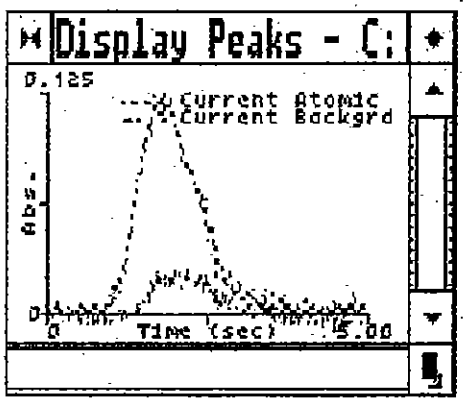
Mean Conc (mg/L): 0.0004 SD: 0.00049 RSD(%): 112.63
Corrected Conc (ppm): 0.0004

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 Time: 14:28
Peak Area (A-s): 0.149 Peak Height (A): 0.149
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.152
Concentration (mg/L): 0.0514 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 40
Replicate 2 Time: 14:32
Peak Area (A-s): 0.142 Peak Height (A): 0.125
Background Pk Area (A-s): 0.013 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.145
Concentration (mg/L): 0.0491 Corrected Conc (ppm): ----------

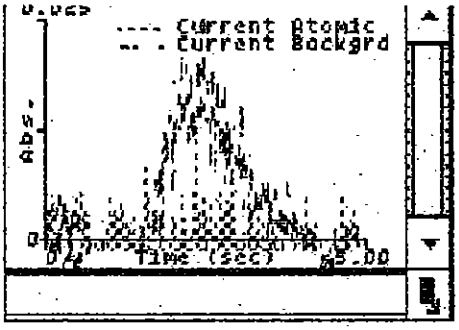


Mean Conc (mg/L): 0.0502 SD: 0.00166 RSD(%): 3.30
Corrected Conc (ppm): ----------

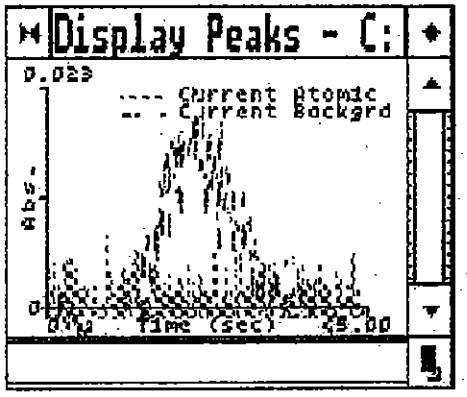
QC sample is within range 0.0425 - 0.0575

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

uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 14:35
Peak Area (A-s): -0.006 Peak Height (A): 0.012
Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): -0.003
Concentration (mg/L): -0.0011 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 1
Replicate 2 Time: 14:38
Peak Area (A-s): -0.001 Peak Height (A): 0.008
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005 Corrected Conc (ppm): ----------

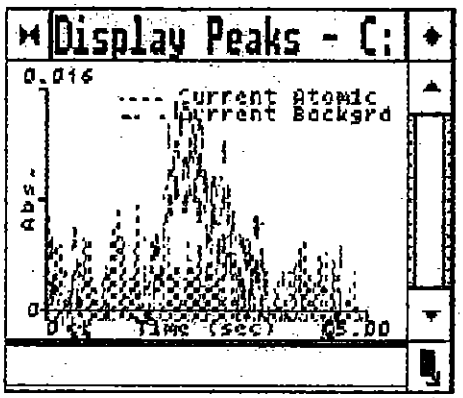


Mean Conc (mg/L): -0.0003 SD: 0.00113 RSD(%): 353.69
Corrected Conc (ppm): ----------

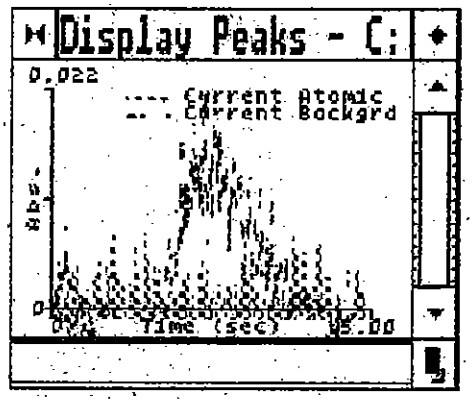
QC sample is within range

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 Time: 14:41
Peak Area (A-s): -0.003 Peak Height (A): 0.008
Background Pk Area (A-s): 0.001 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.000
Concentration (mg/L): -0.0001 Corrected Conc (ppm): -0.0001



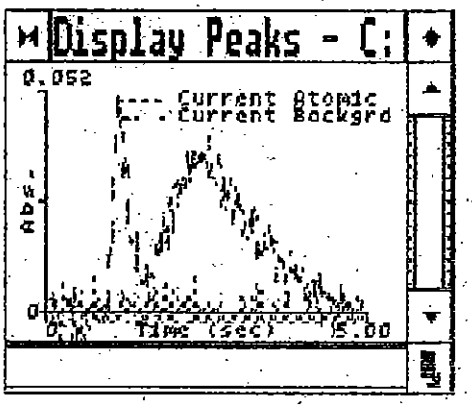
uL dispensed: 5 from 20, 20 from 26
Replicate 2 Time: 14:44
Peak Area (A-s): -0.002 Peak Height (A): 0.008
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0002 Corrected Conc (ppm): 0.0002



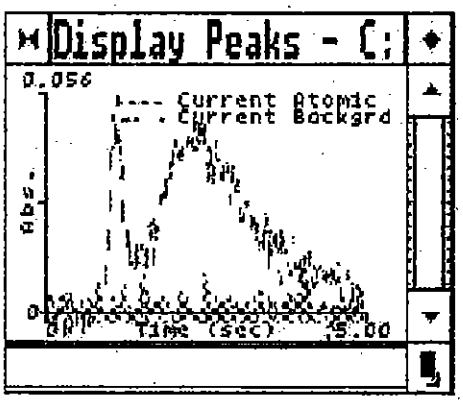
Mean Conc (mg/L): 0.0001 SD: 0.00024 RSD(%): 312.98
Corrected Conc (ppm): 0.0001

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

uL dispensed: 5 from 20, 20 from 27
Replicate 1 Time: 14:47
Peak Area (A-s): -0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.071 Background Pk Height (A): 0.053
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0004 Corrected Conc (ppm): -0.0004



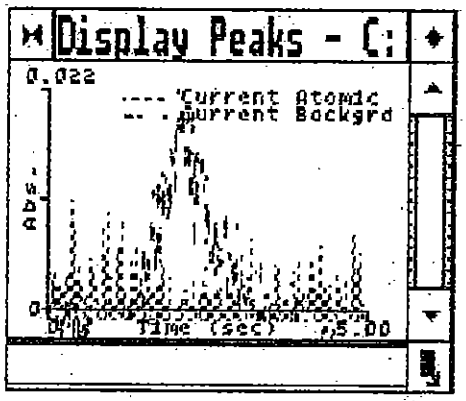
uL dispensed: 5 from 20, 20 from 27
Replicate 2 Time: 14:51
Peak Area (A-s): -0.001 Peak Height (A): 0.014
Background Pk Area (A-s): 0.093 Background Pk Height (A): 0.056
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005 Corrected Conc (ppm): 0.0005



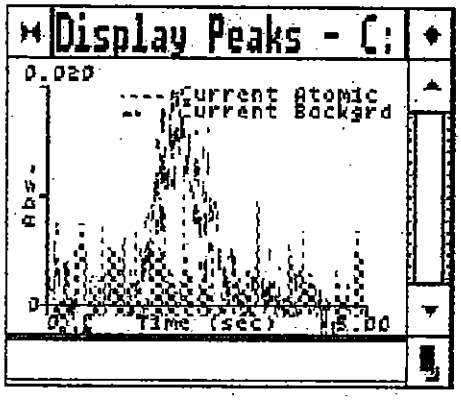
Mean Conc (mg/L): 0.0000 SD: 0.00063 RSD(%): 1687.63
Corrected Conc (ppm): 0.0000

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

uL dispensed: 5 from 20, 20 from 28
Replicate 1 Time: 14:54
Peak Area (A-s): -0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.001 Background Pk Height (A): 0.022
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005 Corrected Conc (ppm): 0.0005



uL dispensed: 5 from 20, 20 from 28
Replicate 2 Time: 14:57
Peak Area (A-s): -0.002 Peak Height (A): 0.010
Background Pk Area (A-s): 0.002 Background Pk Height (A): 0.020
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0002 Corrected Conc (ppm): 0.0002

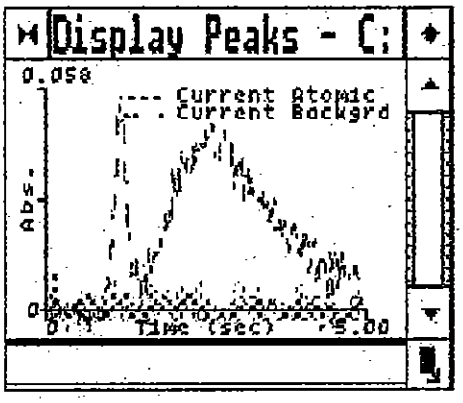


Mean Conc (mg/L): 0.0003 SD: 0.00018 RSD(%): 53.40
Corrected Conc (ppm): 0.0003

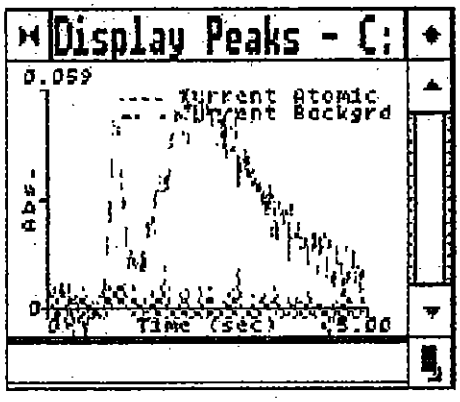
As ID: 2843-3 P=1 Seq. No.: 00037 A/S Pos.: 29 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 29
Replicate 1 Time: 15:01

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

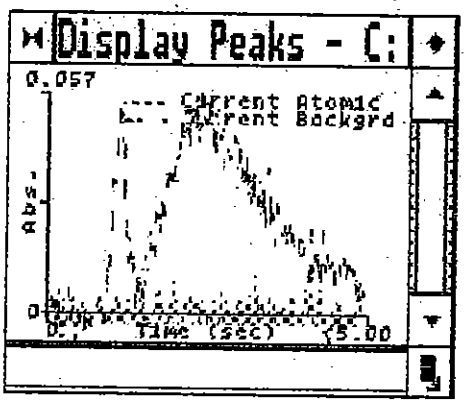


uL dispensed: 5 from 20, 20 from 29
Replicate 2 Time: 15:04
Peak Area (A-s): -0.002 Peak Height (A): 0.012
Background Pk Area (A-s): 0.121 Background Pk Height (A): 0.059
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0002 Corrected Conc (ppm): 0.0002

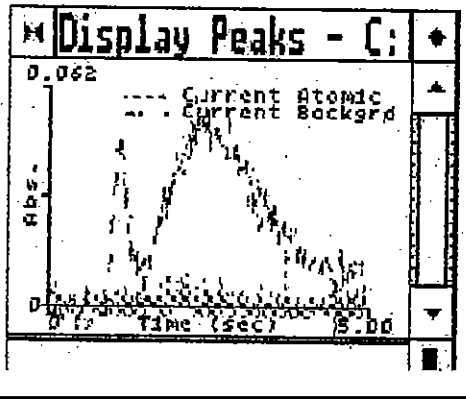


Mean Conc (mg/L): 0.0004 SD: 0.00030 RSD(%): 67.41
Corrected Conc (ppm): 0.0004

uL dispensed: 5 from 20, 20 from 30
Replicate 1 Time: 15:07
Peak Area (A-s): -0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.111 Background Pk Height (A): 0.057
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0004 Corrected Conc (ppm): -0.0004



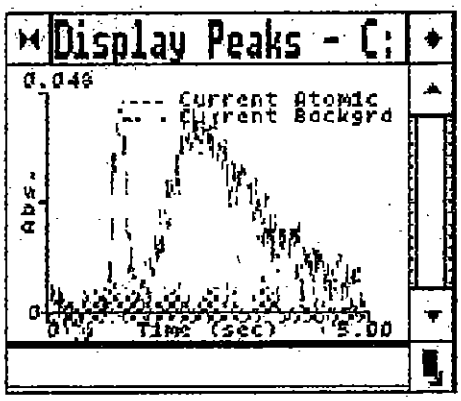
uL dispensed: 5 from 20, 20 from 30
Replicate 2 Time: 15:10
Peak Area (A-s): 0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.107 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0014 Corrected Conc (ppm): 0.0014



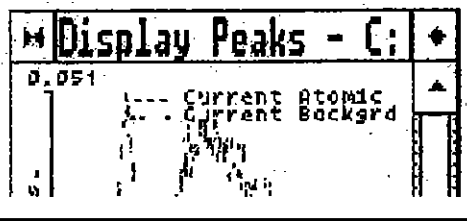
Mean Conc (mg/L): 0.0005 SD: 0.00133 RSD(%): 263.39
Corrected Conc (ppm): 0.0005

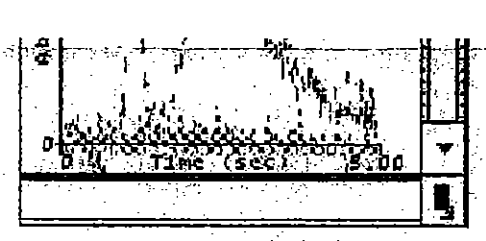
As ID: 2843-5 F=1 Seq. No.: 00039 A/S Pos.: 31 Date: 04/29/99

uL dispensed: 5 from 20, 20 from 31
Replicate 1 Time: 15:14
Peak Area (A-s): -0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.083 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006 Corrected Conc (ppm): 0.0006



uL dispensed: 5 from 20, 20 from 31
Replicate 2 Time: 15:17
Peak Area (A-s): -0.002 Peak Height (A): 0.009
Background Pk Area (A-s): 0.087 Background Pk Height (A): 0.051
Blank Corrected Pk Area (A-s): 0.001
Concentration (mg/L): 0.0005 Corrected Conc (ppm): 0.0005

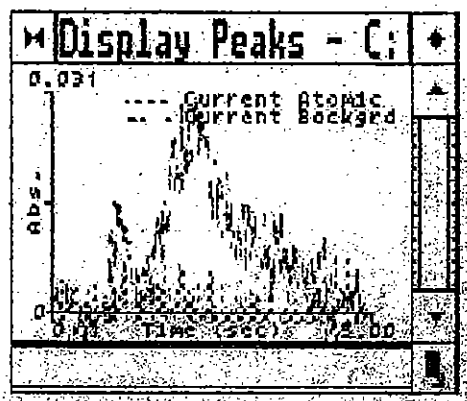




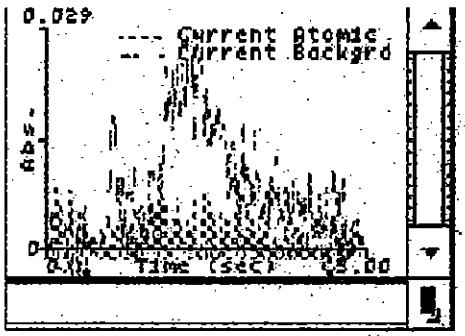
Mean Conc (mg/L): 0.0005 SD: 0.00008 RSD(%): 15.52
Corrected Conc (ppm): 0.0005

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

uL dispensed: 5 from 20, 20 from 32
Replicate 1 Time: 15:20
Peak Area (A-s): -0.004 Peak Height (A): 0.008
Background Pk Area (A-s): 0.038 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): -0.001
Concentration (mg/L): -0.0002 Corrected Conc (ppm): -0.0002



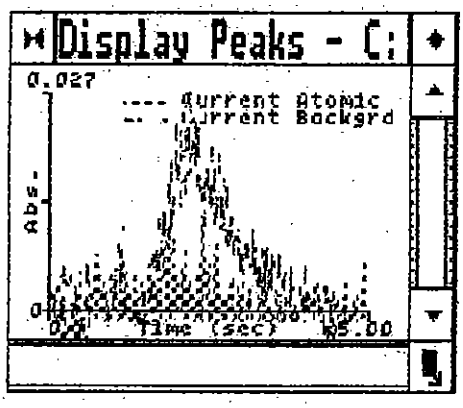
uL dispensed: 5 from 20, 20 from 32
Replicate 2 Time: 15:23
Peak Area (A-s): 0.001 Peak Height (A): 0.011
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.029
Blank Corrected Pk Area (A-s): 0.004
Concentration (mg/L): 0.0013 Corrected Conc (ppm): 0.0013



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

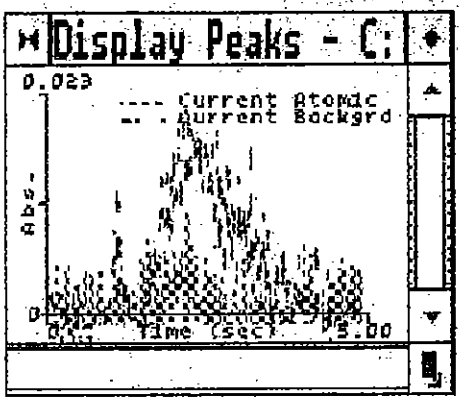
As ID: 2843-7 F=1 Seq. No.: 00041 A/S Pos.: 33 Date: 04/29/99

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



uL dispensed: 5 from 20, 20 from 33
Replicate 2 Time: 15:30
Peak Area (A-s): -0.001 Peak Height (A): 0.010

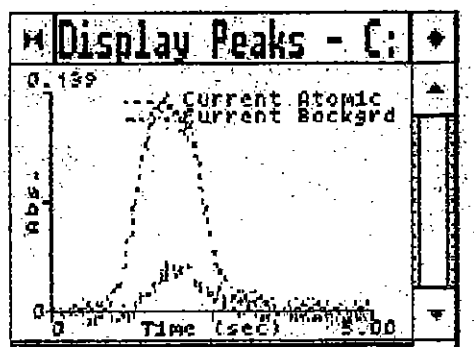
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.023
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006 Corrected Conc (ppm): 0.0006



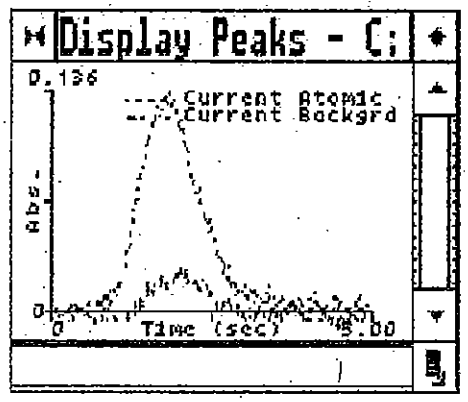
Mean Conc (mg/L): 0.0009 SD: 0.00035 RSD(%): 39.69
Corrected Conc (ppm): 0.0009

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

uL dispensed: 5 from 20, 20 from 40
Replicate 1 Time: 15:33
Peak Area (A-s): 0.158 Peak Height (A): 0.139
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.161
Concentration (mg/L): 0.0544 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 40
Replicate 2 Time: 15:36
Peak Area (A-s): 0.155 Peak Height (A): 0.136
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.157
Concentration (mg/L): 0.0532 Corrected Conc (ppm): ----------

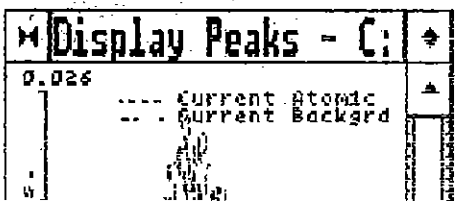


Mean Conc (mg/L): 0.0538 SD: 0.00083 RSD(%): 1.55
Corrected Conc (ppm): ----------

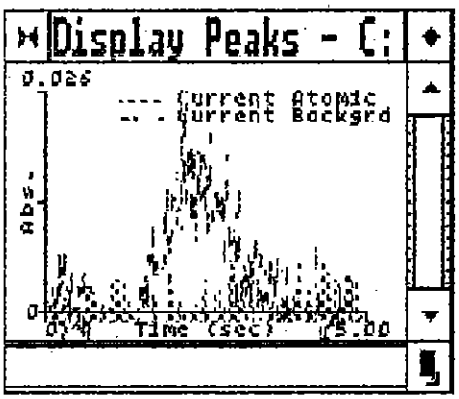
QC sample is within range 0.0425 - 0.0575

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

uL dispensed: 5 from 20, 20 from 1
Replicate 1 Time: 15:39
Peak Area (A-s): -0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): 0.002
Concentration (mg/L): 0.0006 Corrected Conc (ppm): ----------



uL dispensed: 5 from 20, 20 from 1
Replicate 2 Time: 15:42
Peak Area (A-s): -0.011 Peak Height (A): 0.006
Background Pk Area (A-s): 0.009 Background Pk Height (A): 0.026
Blank Corrected Pk Area (A-s): -0.008
Concentration (mg/L): -0.0026 Corrected Conc (ppm): ----------



Mean Conc (mg/L): -0.0010 SD: 0.00231 RSD(%): 233.85
Corrected Conc (ppm): ----------

QC sample is within range

Level C Data Package Deliverables

Wet Chemistry

Applied P & Ch Laboratory

Applied P & Ch Laboratory

Wet Analysis Results for Method SM2320B

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	SM2320B
Project ID:	JPL	Service ID:	32843	Collected by:	Leo Williamson

Component Name: Bicarbonate
CAS No:

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

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

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

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

Applied P & Ch Laboratory

Wet Analysis Results for Method SM2320B

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	SM2320B
Project ID:	JPL	Service ID:	32843	Collected by:	Leo Williamson

Component Name: Carbonate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-2843-1	DUPE-2-2Q03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03-2843-2	EB-4-4/23/03	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03-2843-3	MW-14-1	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03-2843-4	MW-14-2	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03-2843-5	MW-14-3	Water	04/23/03	04/23/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03-2843-6	MW-14-4	Water	04/23/03	04/23/03	04/24/03	03W2539	mg-$CaCO_3$/L	2	<2	U
03-2843-7	MW-14-5	Water	04/23/03	04/23/03	04/24/03	03W2539	mg-$CaCO_3$/L	2	7.6	
03W2540-MB-01	03W2540-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2540	mg-$CaCO_3$/L	2	<2	U
03W2539-MB-01	03W2539-MB-01	Water	04/24/03	04/24/03	04/24/03	03W2539	mg-$CaCO_3$/L	2	<2	U

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

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

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

Applied P & Ch Laboratory

Wet Analysis Results for Method 9040B

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 9040B
Project ID: JPL Service ID: 32843 Collected by: Leo Williamson

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory

Wet Analysis Results for Method 160.1

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	160.1
Project ID:	JPL	Service ID:	32843	Collected by:	Leo Williamson

Component Name: Solids, Total Dissolved (TDS)
CAS No: 10-33-3

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory

Wet Analysis Results for Method 7196

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	7196
Project ID:	JPL	Service ID:	32843	Collected by:	Leo Williamson

Component Name: Chromium (VI)
CAS No: 1333-82-0

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory

Wet Analysis Results for Method 314.0

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	314.0
Project ID:	JPL	Service ID:	32843	Collected by:	Leo Williamson

Component Name: Perchlorate
CAS No:

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

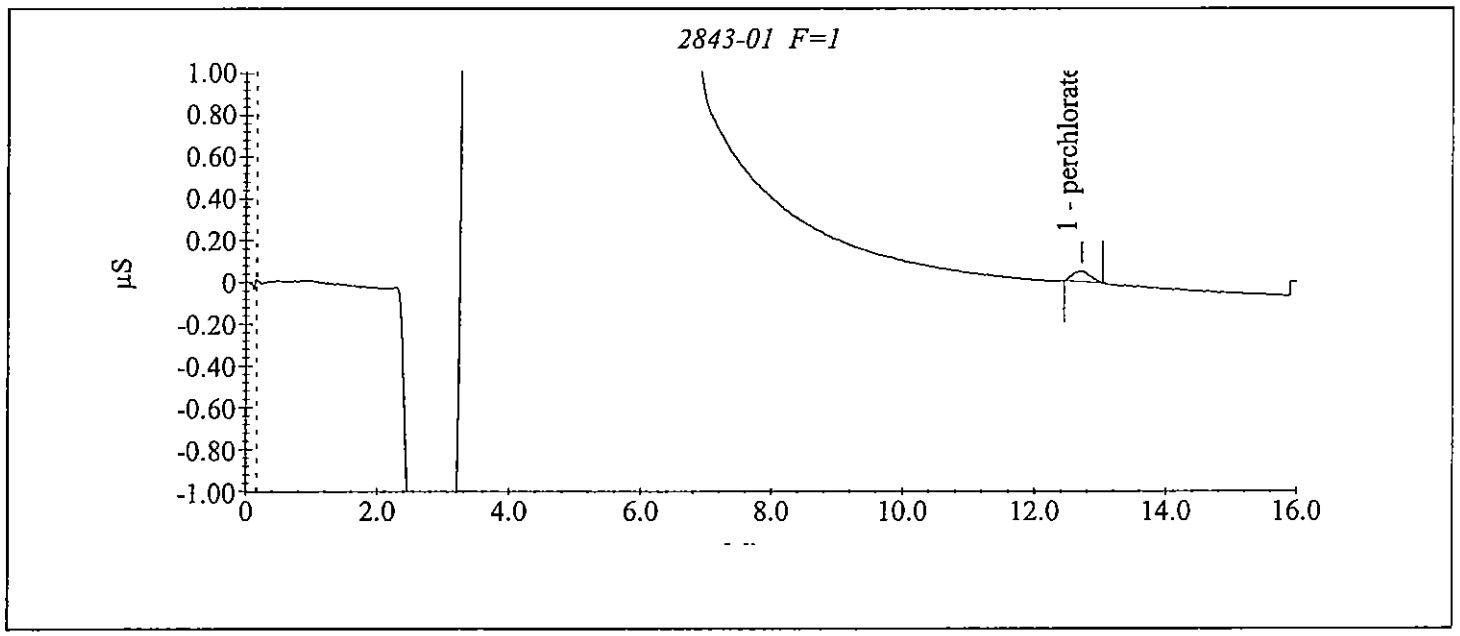
APCL Perchlorate Analysis Report

Sample Name : 2843-01 F=1
Data File Name : C:\DATA\03W2531K\2843-01_016.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 4:49:29 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



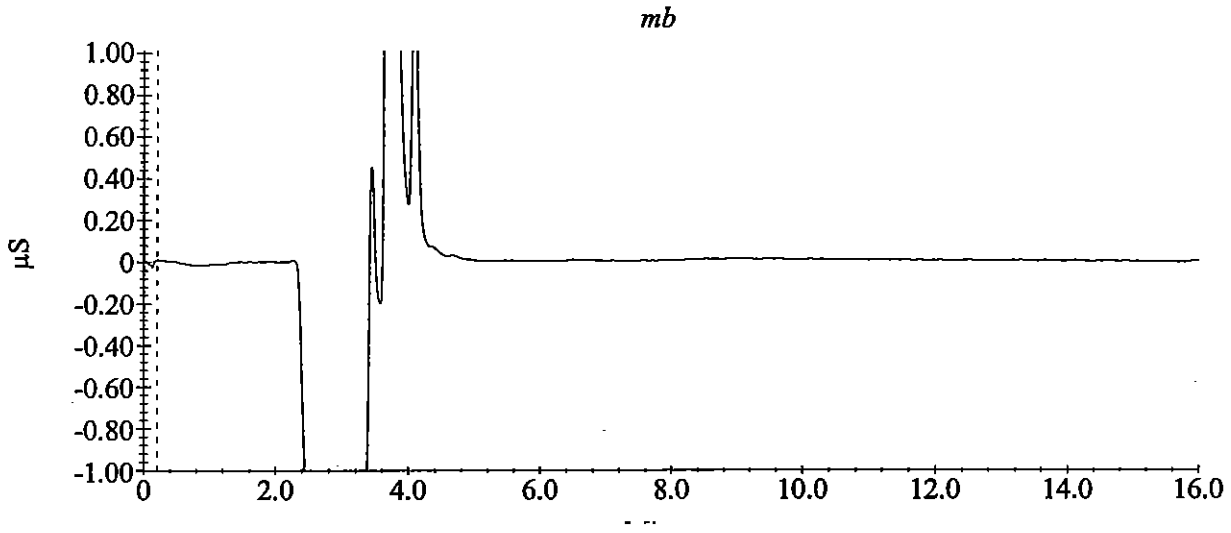
APCL Perchlorate Analysis Report

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

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 1:11:50 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

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

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

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

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

Component Name: Nitrate as N
CAS No: 14797-55-8

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

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

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

Applied P & Ch Laboratory

Wet Analysis Results for Method 300.0

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

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

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

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

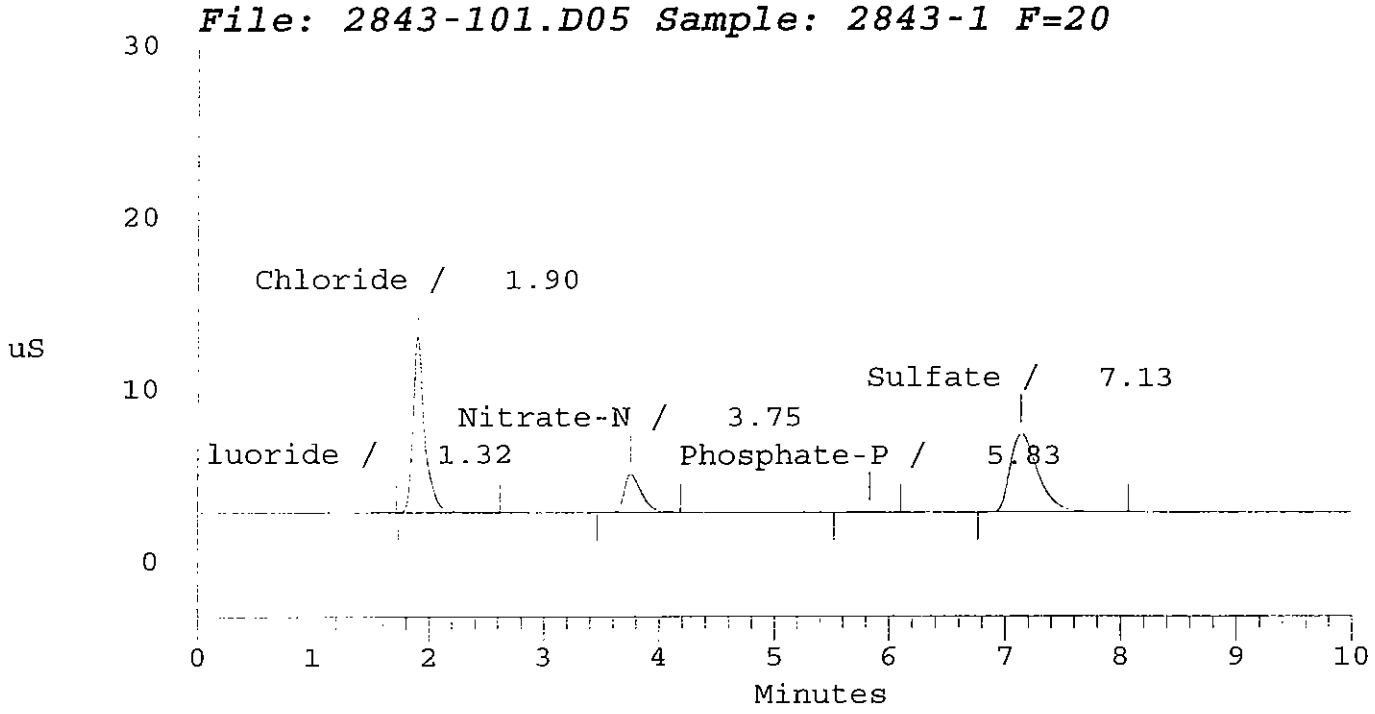
Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

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

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

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

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



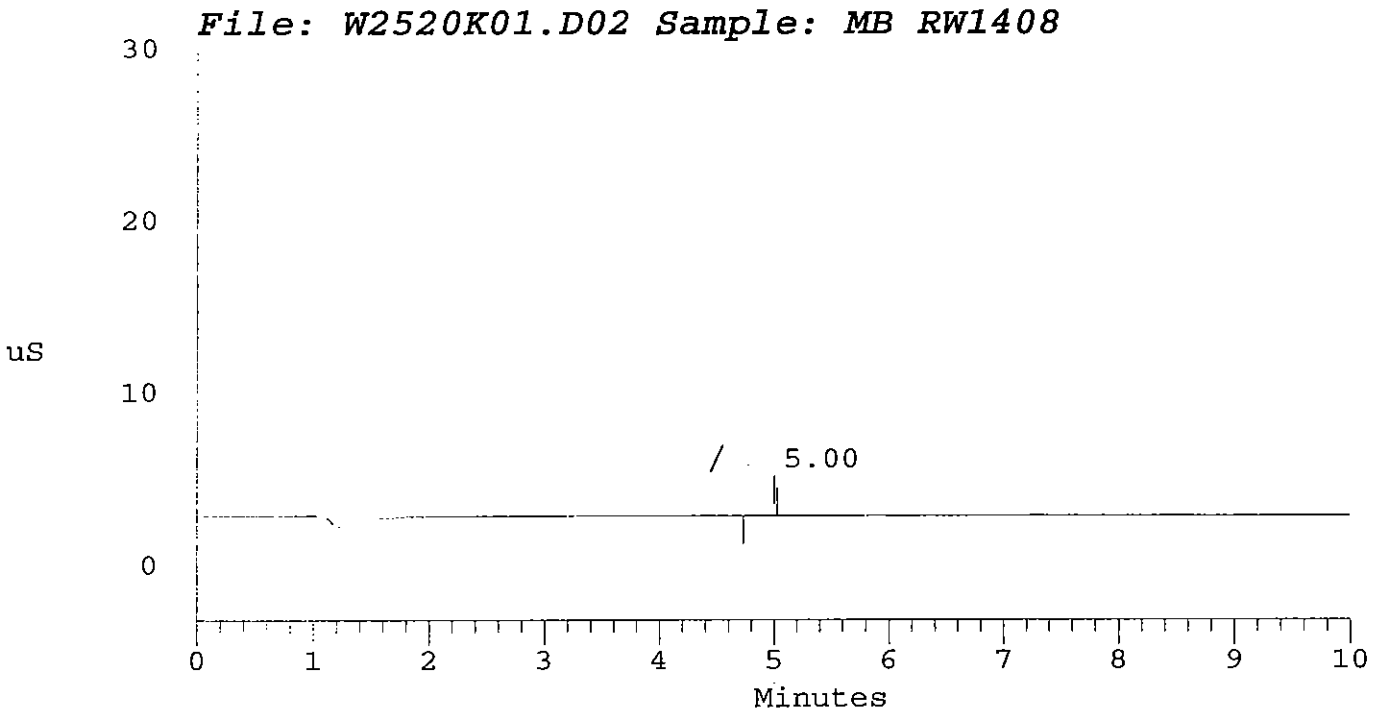
Data Reprocessed On 04/24/2003 09:29:32

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

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		



After
4/24/03 DC
reason: 3.

3537

FORM-3

Applied P & Ch Laboratory

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

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2520		
LCS Filename:	-	Date Analyzed:	042403	Time Analyzed:	09:47
LCSD Filename:	-	Date Analyzed:	042403	Time Analyzed:	10:00

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
CHLORIDE CL^-	mg/L	4.0	0	3.97	99	80-120
NITRATE AS N	mg/L	1.5	0	1.52	101	80-120
SULFATE SO_4^{--}	mg/L	15	0	15.1	101	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
CHLORIDE CL^-	mg/L	4.0	4.00	100	1	20	80-120
NITRATE AS N	mg/L	1.5	1.53	102	1	20	80-120
SULFATE SO_4^{--}	mg/L	15	15.1	101	0	25	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

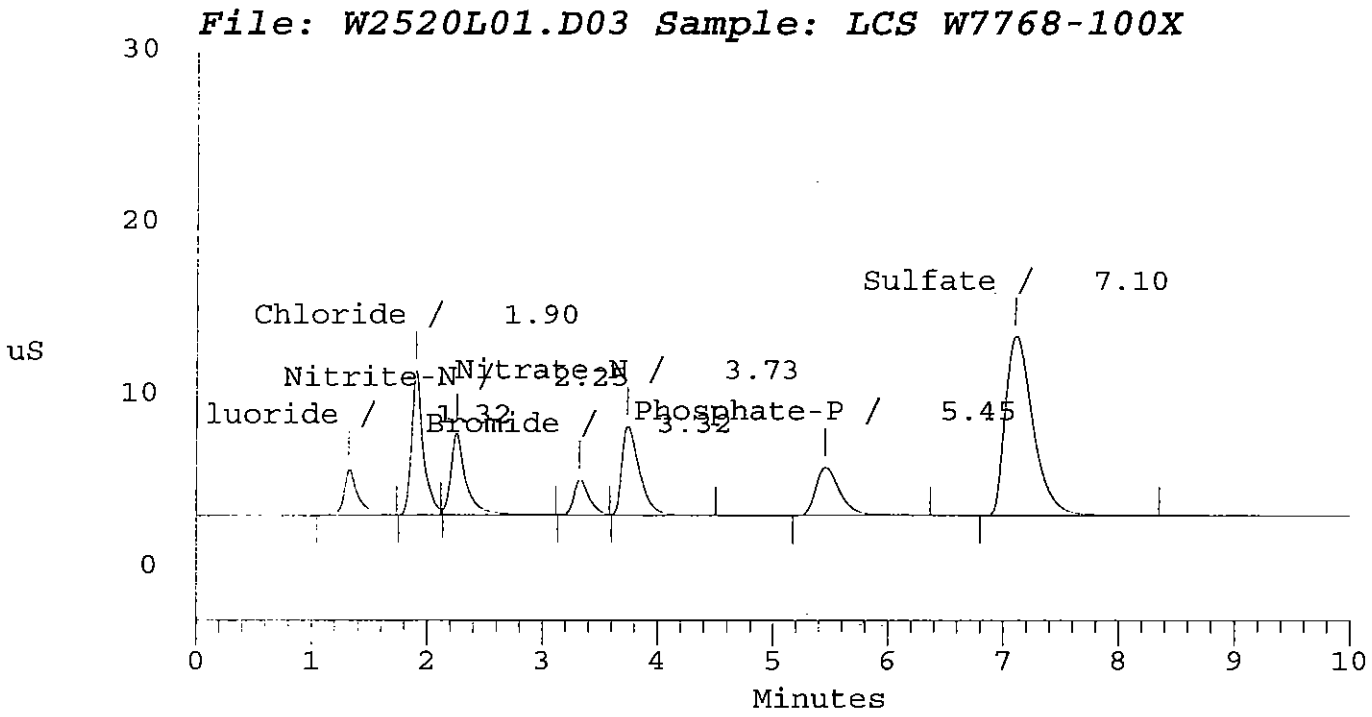
_____

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

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

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

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

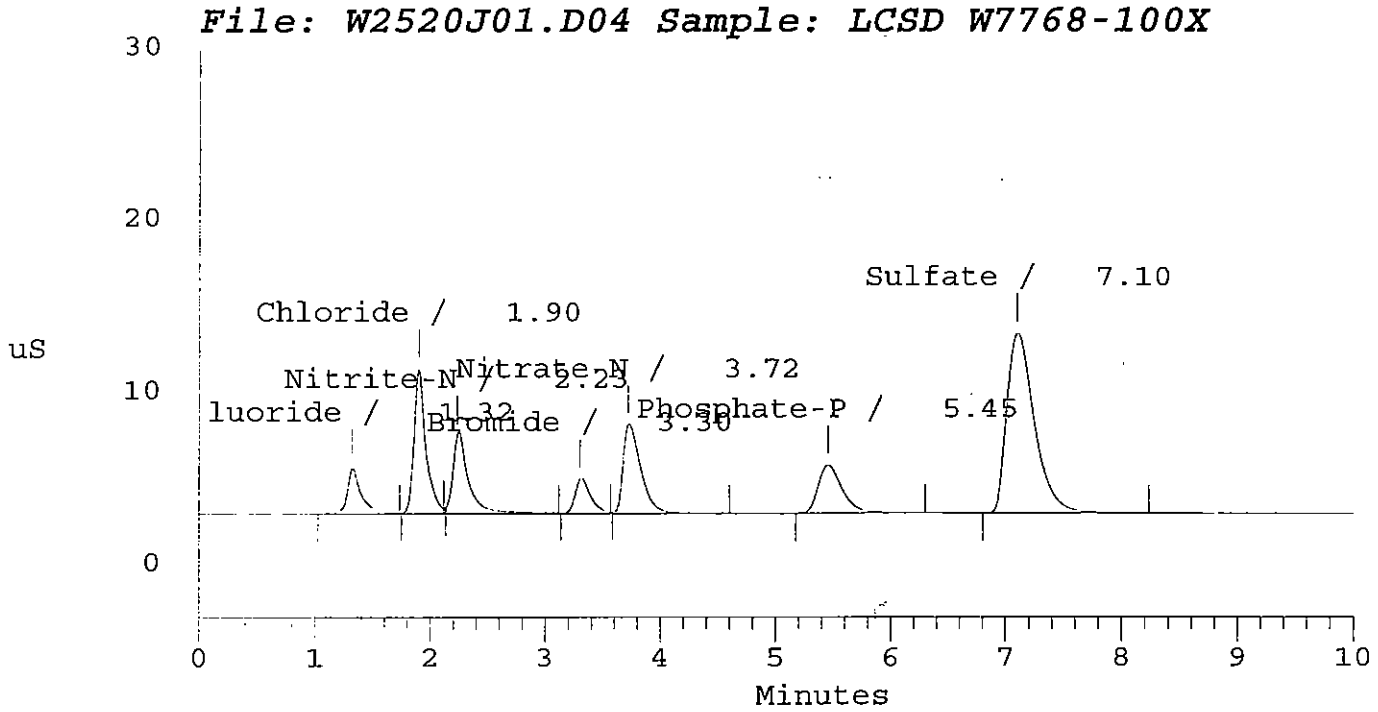


```
Sample Name: LCSD W7768-100X                    Date: 04/24/2003 10:00:18
Data File  : C:\DX\DATA\03W2520\W2520J01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 4                      Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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

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

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



FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 300.0

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2520		
MS Filename:	-	Date Analyzed:	042403	Time Analyzed:	12:19
MSD Filename:	-	Date Analyzed:	042403	Time Analyzed:	13:19
MS Sample No:	**DUPE-2-2Q03**	Sample Lab ID:	03-2843-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
CHLORIDE CL^-	mg/L	160	96.7	254	98	75-125
NITRATE AS N	mg/L	60.0	13.1	71.3	97	75-125
SULFATE SO_4^{--}	mg/L	600	139	732	99	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
CHLORIDE CL^-	mg/L	160	254	98	0	20	75-125
NITRATE AS N	mg/L	60.0	73.1	100	3	20	75-125
SULFATE SO_4^{--}	mg/L	600	734	99	0	25	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

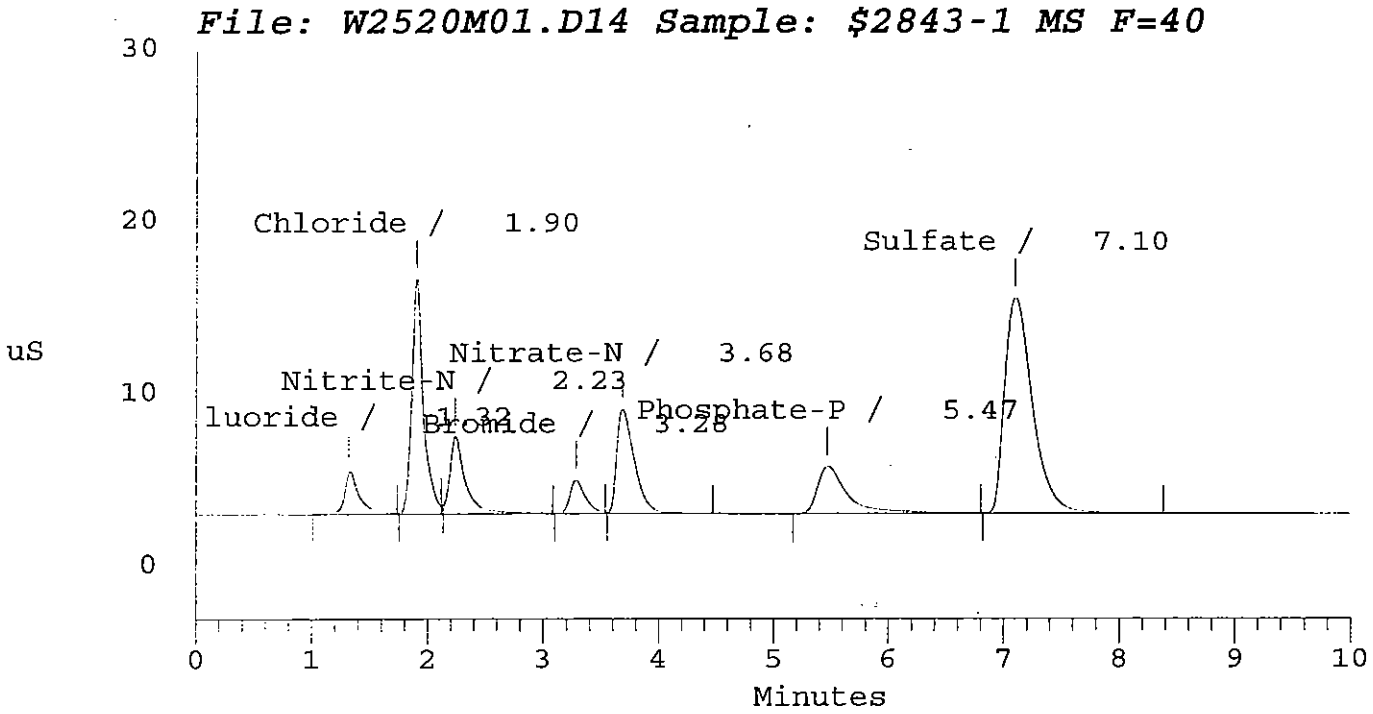
_____

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

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

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

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

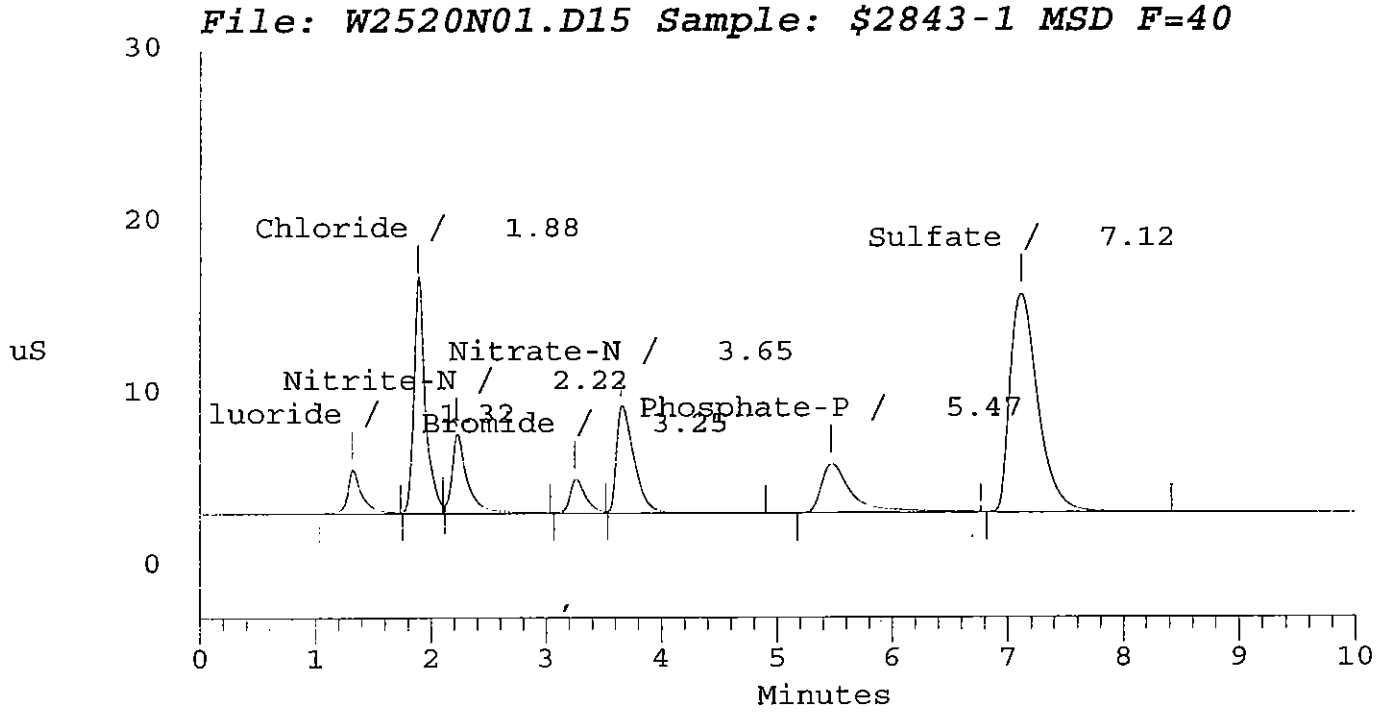


```
Sample Name: $2843-1 MSD F=40                Date: 04/24/2003 13:19:00
Data File  : C:\DX\DATA\03W2520\W2520N01.D15
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 15                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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

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

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



FORM-3

Applied P & Ch Laboratory

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

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2531		
LCS Filename:	-	Date Analyzed:	042403	Time Analyzed:	12:14
LCSD Filename:	-	Date Analyzed:	–	Time Analyzed:	–

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
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: _____

_____

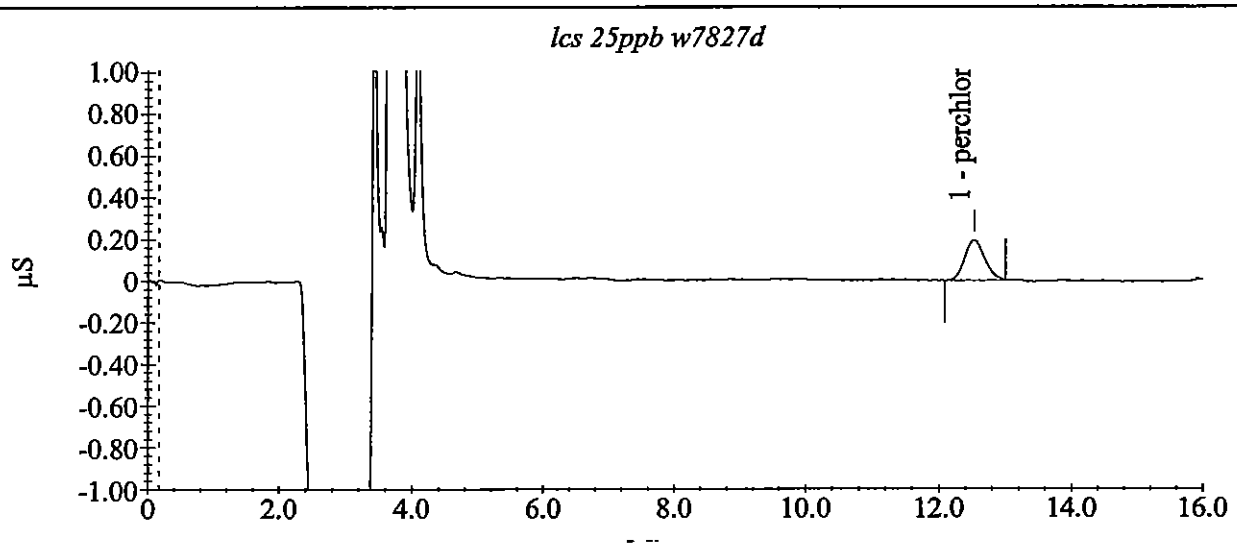
APCL Perchlorate Analysis Report

Sample Name : lcs 25ppb w7827d
Data File Name : C:\DATA\03W2531K\W2531K L01_004.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 12:14:43 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 314.0

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2531		
MS Filename:	-	Date Analyzed:	042403	Time Analyzed:	15:34
MSD Filename:	-	Date Analyzed:	042403	Time Analyzed:	16:30
MS Sample No:	**10GP-03-1-GW**	Sample Lab ID:	03-2842-8		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
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	QC Limit, % 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: _____

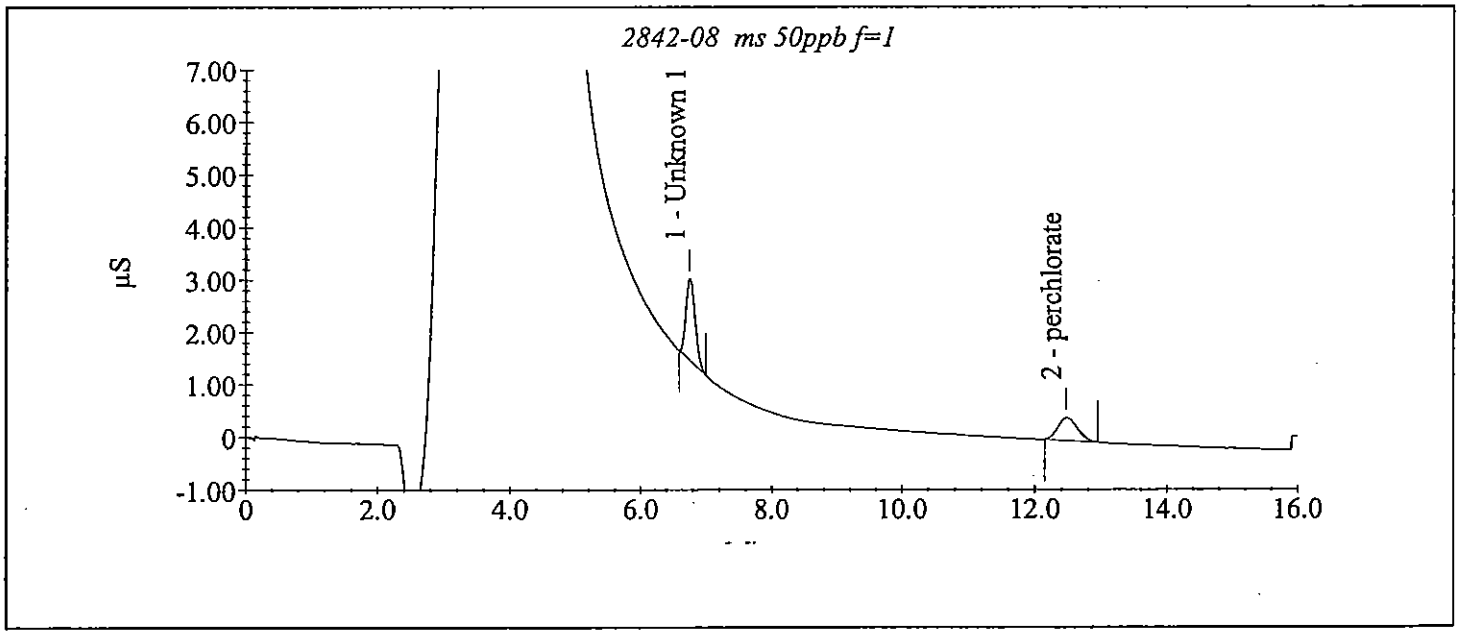
APCL Perchlorate Analysis Report

Sample Name : 2842-08 ms 50ppb f=1
Data File Name : C:\DATA\03W2531K\W2531K M01_012.DXD

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

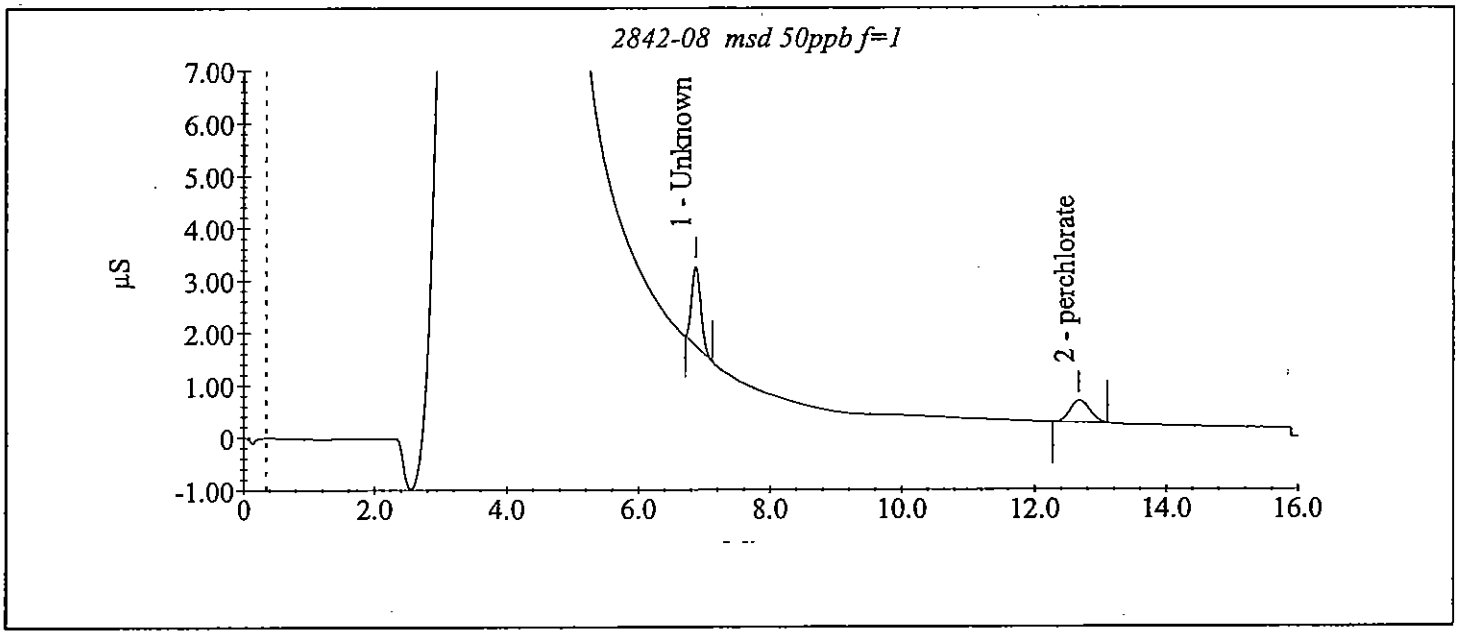
APCL Perchlorate Analysis Report

Sample Name : 2842-08 msd 50ppb f=1
Data File Name : C:\DATA\03W2531K\W2531K N01_015.DXD

Method File Name : c:\peaknet\method\e314-011.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 100.9%

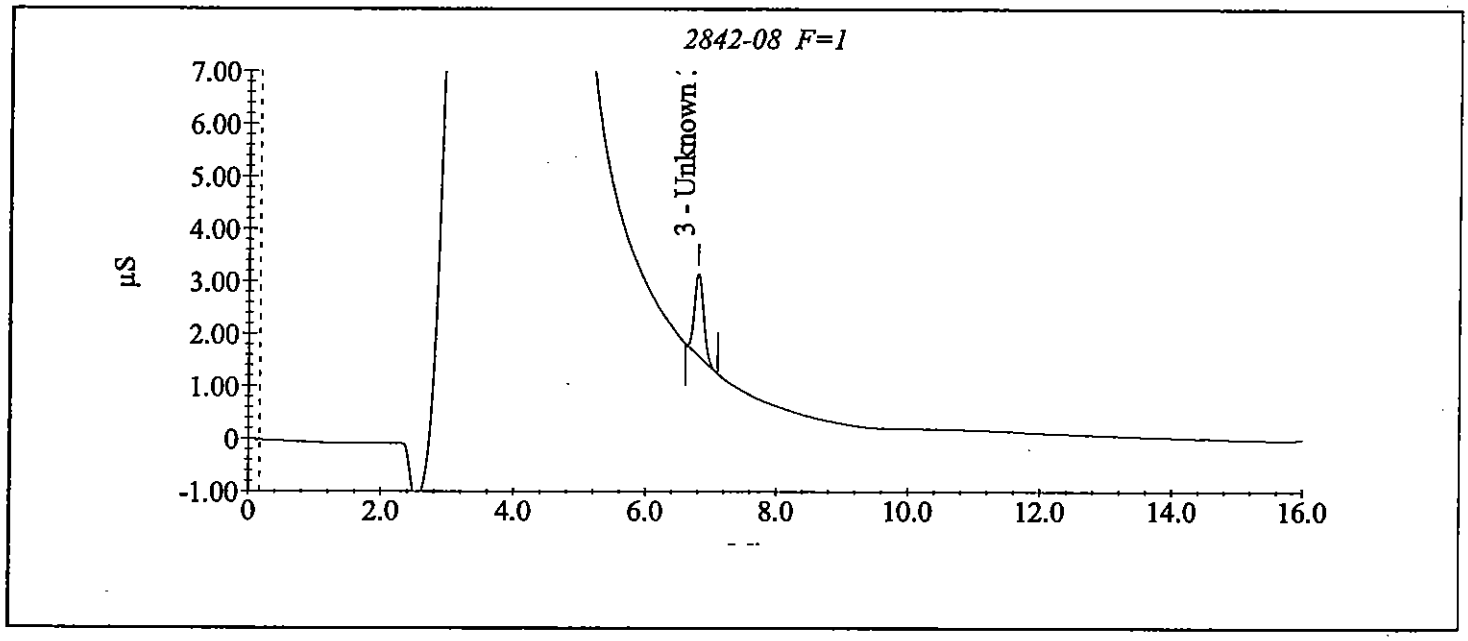
APCL Perchlorate Analysis Report

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:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2543		
LCS Filename:	-	Date Analyzed:	042403	Time Analyzed:	16:10
LCSD Filename:	-	Date Analyzed:	042403	Time Analyzed:	16:10

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

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

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

_____

FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 160.1

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2543		
MS Filename:	-	Date Analyzed:	042403	Time Analyzed:	16:10
MSD Filename:	-	Date Analyzed:	042403	Time Analyzed:	16:10
MS Sample No:	**STP-12**	Sample Lab ID:	03-2823-1		

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

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

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

FORM-3

Applied P & Ch Laboratory

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

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2517		
LCS Filename:	-	Date Analyzed:	042303	Time Analyzed:	15:21
LCSD Filename:	-	Date Analyzed:	042303	Time Analyzed:	15:21

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

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

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

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FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 7196

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32843
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2517		
MS Filename:	-	Date Analyzed:	042303	Time Analyzed:	15:21
MSD Filename:	-	Date Analyzed:	042303	Time Analyzed:	15:21
MS Sample No:	**MW-14-1**	Sample Lab ID:	03-2843-3		

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

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

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

_____

Wet Chemistry QC Report B
Duplicate Results

Matrix: Water

APCL Service ID: 03-2843

Analysis	Batch ID	Analysis Date	Sample Name	Unit	Result	Duplicate Result	RPD %	RPD Control limit
pH	03W2518	04/23/2003	DUPE-2-2Q03	pH unit	7.63	7.66	0	20
Bicarbonate	03W2539	04/24/2003	03-2809-1	mg/L	161	158	2	20
Carbonate	03W2539	04/24/2003	03-2809-1	mg-$CaCO_3$/L	ND	ND	NC	20
Bicarbonate	03W2540	04/24/2003	03-2828-1	mg/L	310	314	1	20
Carbonate	03W2540	04/24/2003	03-2828-1	mg-$CaCO_3$/L	ND	ND	NC	20

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

6A

INITIAL CALIBRATION DATA

Lab Name: Applied P & Ch Lab Contract: _____

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

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

A= 0.000 + 0.836C

A=Absorbance

C=Concentration (mg/L)

r= 0.9997

DIONEX METHOD PARAMETERS - E300-063.MET

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

System Parameters

System Name: DX-100

Number of Detectors	1
Run Time (minutes)	10.00
Sampling Rate (seconds)	0.20
Detector 1 Type	COND
Detector 1 real time plot scale maximum (uS)	30.000
minimum	-3.000
Detector 1 Output Equivalent to 1 Volt (in uS)	30.00
Detector 1 ACI Analog Input Connection	DET1
Save Data File	Yes

Data File Name: C:\DX\DATA\03W1991\W1991Q01.D10

-- DETECTOR 1 PARAMETERS --

Report Options

Create ASCII Report File	No
Print Report	Yes
Print All Components	Yes
Print Components Found	No
Print Missing Components	No
Print All Peaks	No
Print Unknown Peaks	No
Print Chromatogram	Yes
Autoscale Chromatogram Maximum	No
Autoscale Chromatogram Minimum	No
Fill Peaks with Color	No
Draw Grid Lines on Chromatogram	No
Show Component Fraction Numbers	No
Label with Peak Number	No
Label with Retention Times on Chromatogram	Yes
Label with Component Name	Yes

Format File Name: C:\DX\METHOD\DEFAULT.PRF

Integration Parameters

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

Data Events

Time	Description
0.13	Start peak detection
10.00	Stop peak detection

Calibration Parameters

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

Component # 4 Bromide 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 Table -- Last Modified: 17:42 on Fri, 21 Mar 2003

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

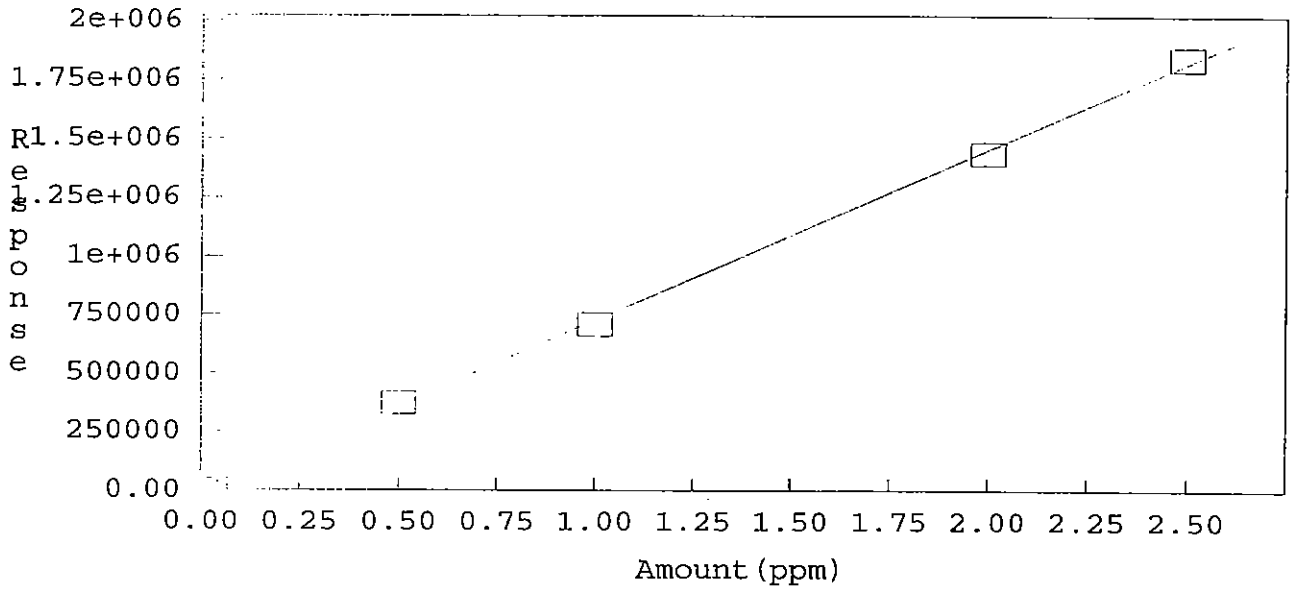
Level	Amount	Area	Height
1	3.76000E-001	129999	6524
2	7.50000E+000	2598757	138579
3	1.50000E+001	5330209	287851
4	3.00000E+001	11507107	615917
5	3.75000E+001	14859049	776426
6	0.00000E+000	0	0

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

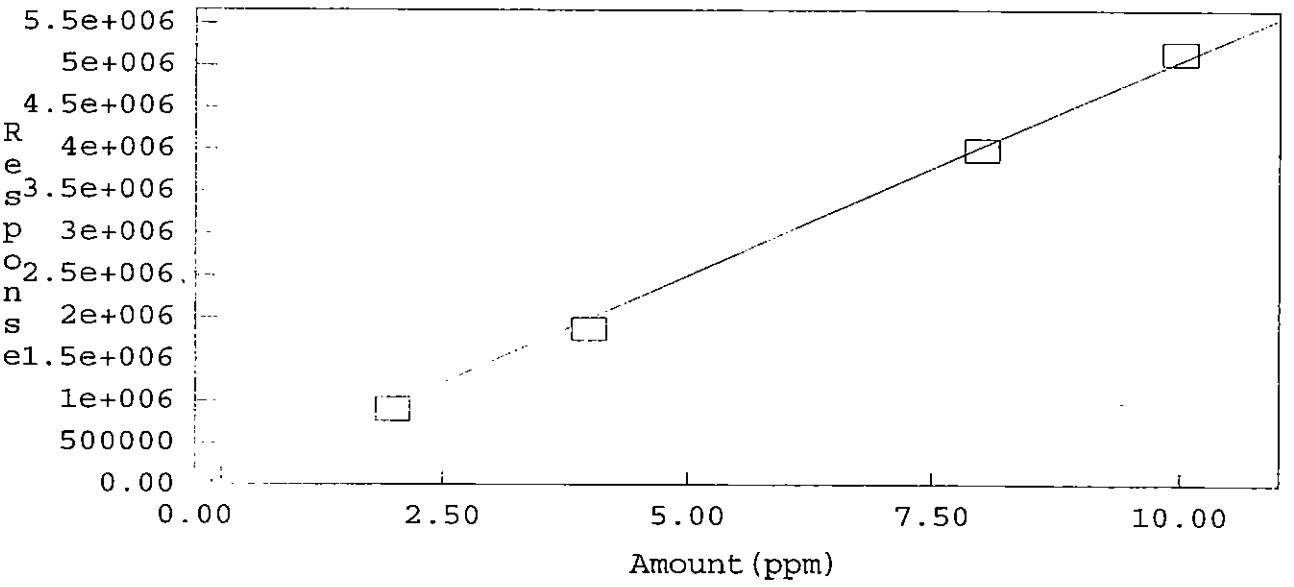
Method: E300-063.MET - Last Updated: 17:42 on Fri, 21 Mar 2003

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



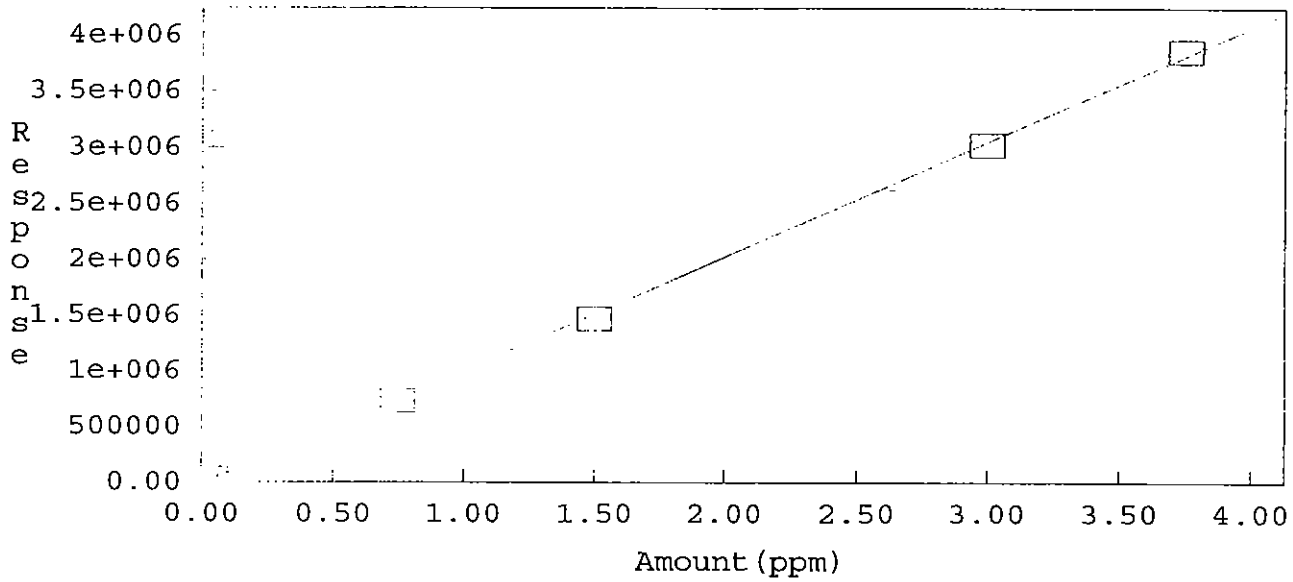
Method: C:\DX\METHOD\E300-063.MET

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



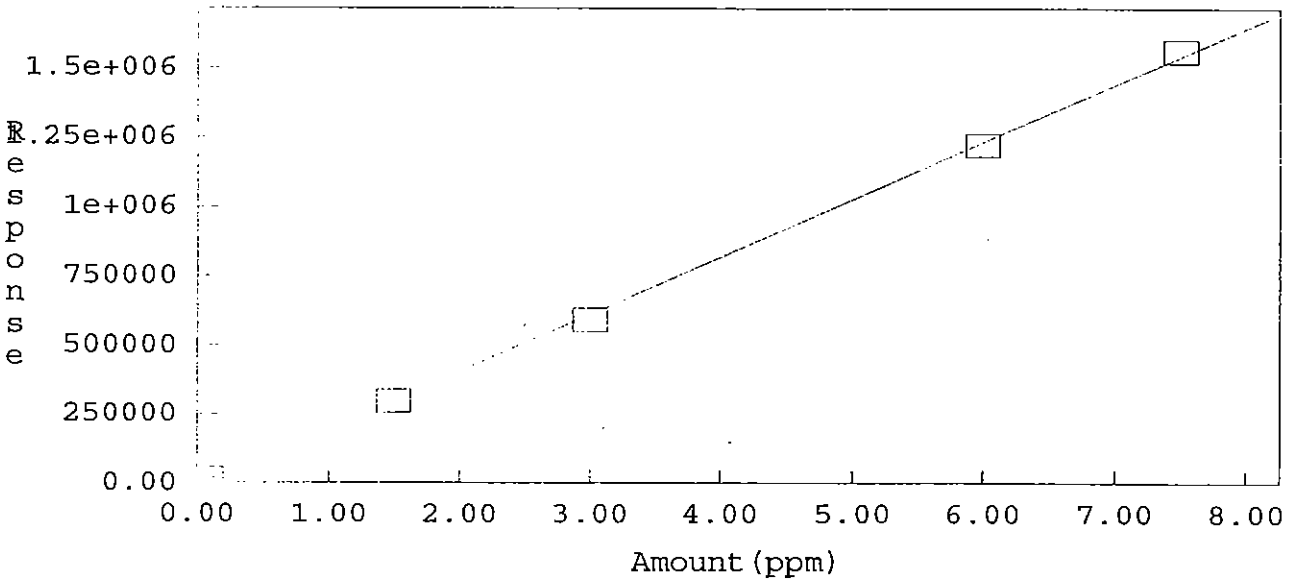
Method: C:\DX\METHOD\E300-063.MET

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



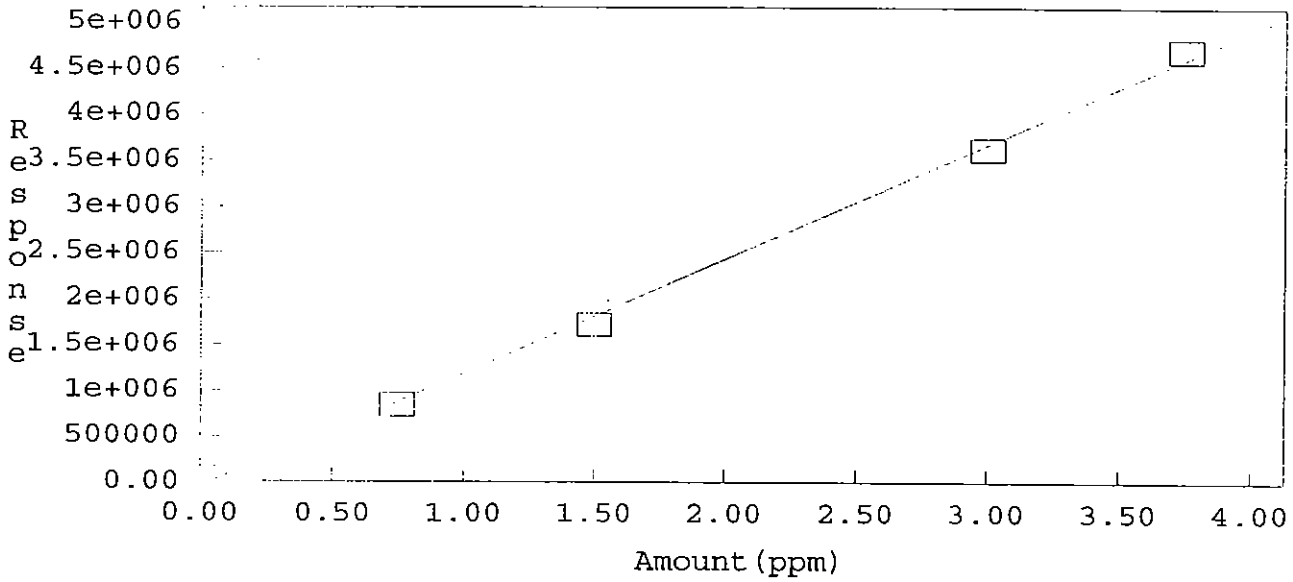
Method: C:\DX\METHOD\E300-063.MET

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



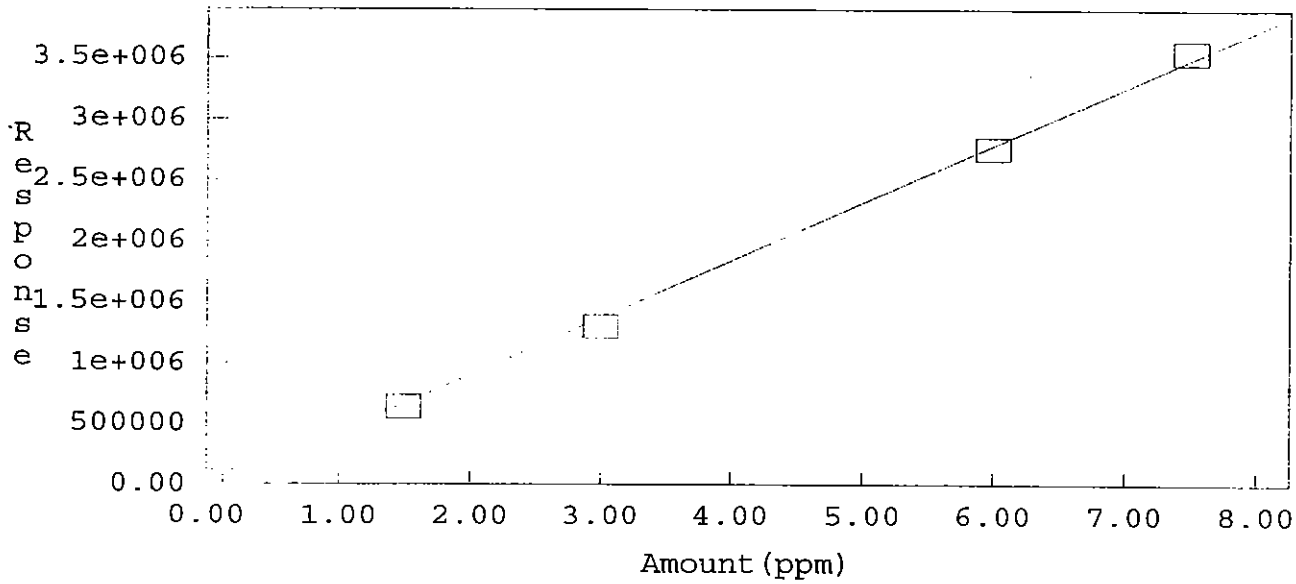
Method: C:\DX\METHOD\E300-063.MET

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



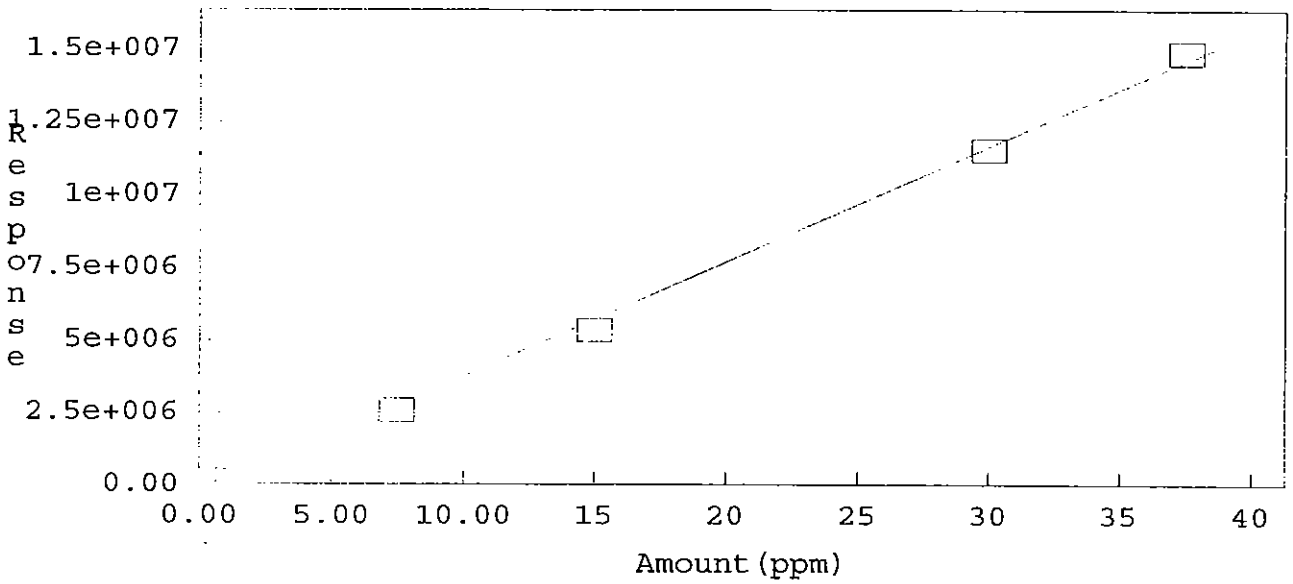
Method: C:\DX\METHOD\E300-063.MET

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

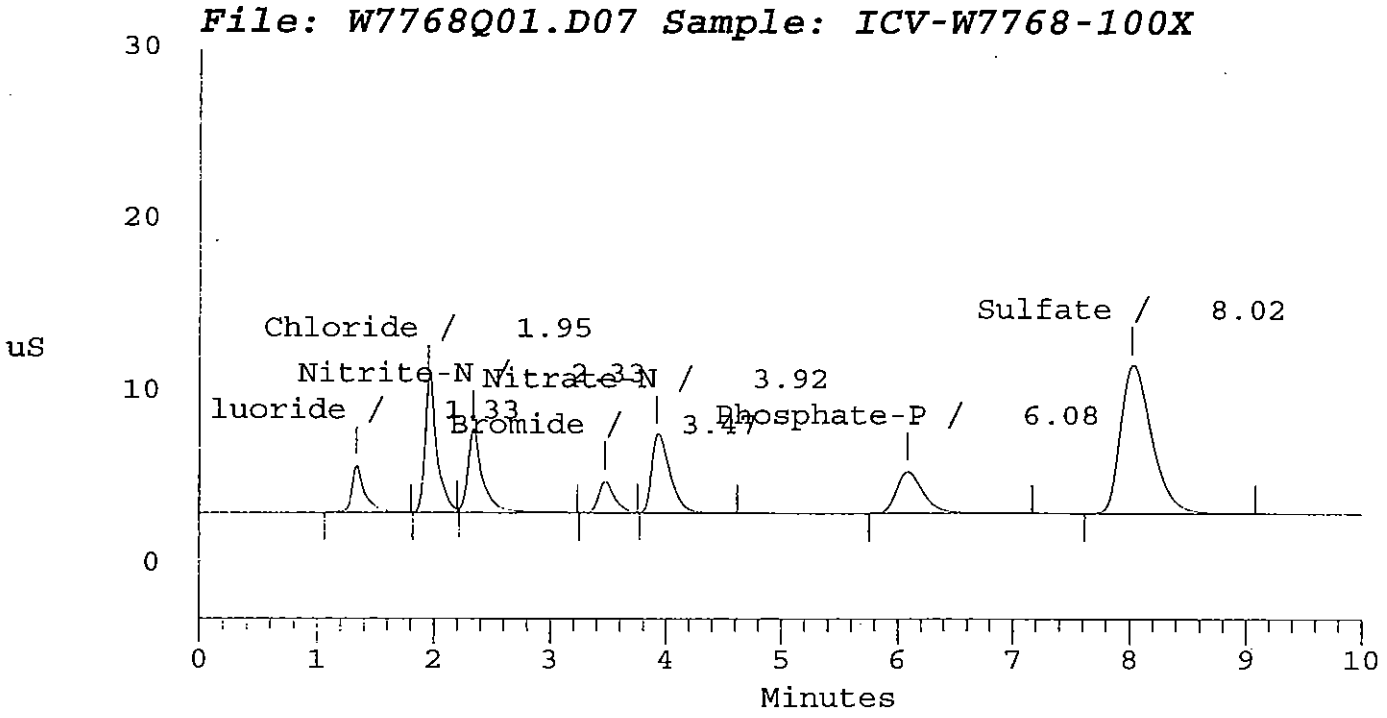


```
Sample Name: ICV-W7768-100X                    Date: 03/21/2003 17:56:33
Data File  : C:\DX\DATA\e300-063\W7768Q01.D07
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 7                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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

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

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

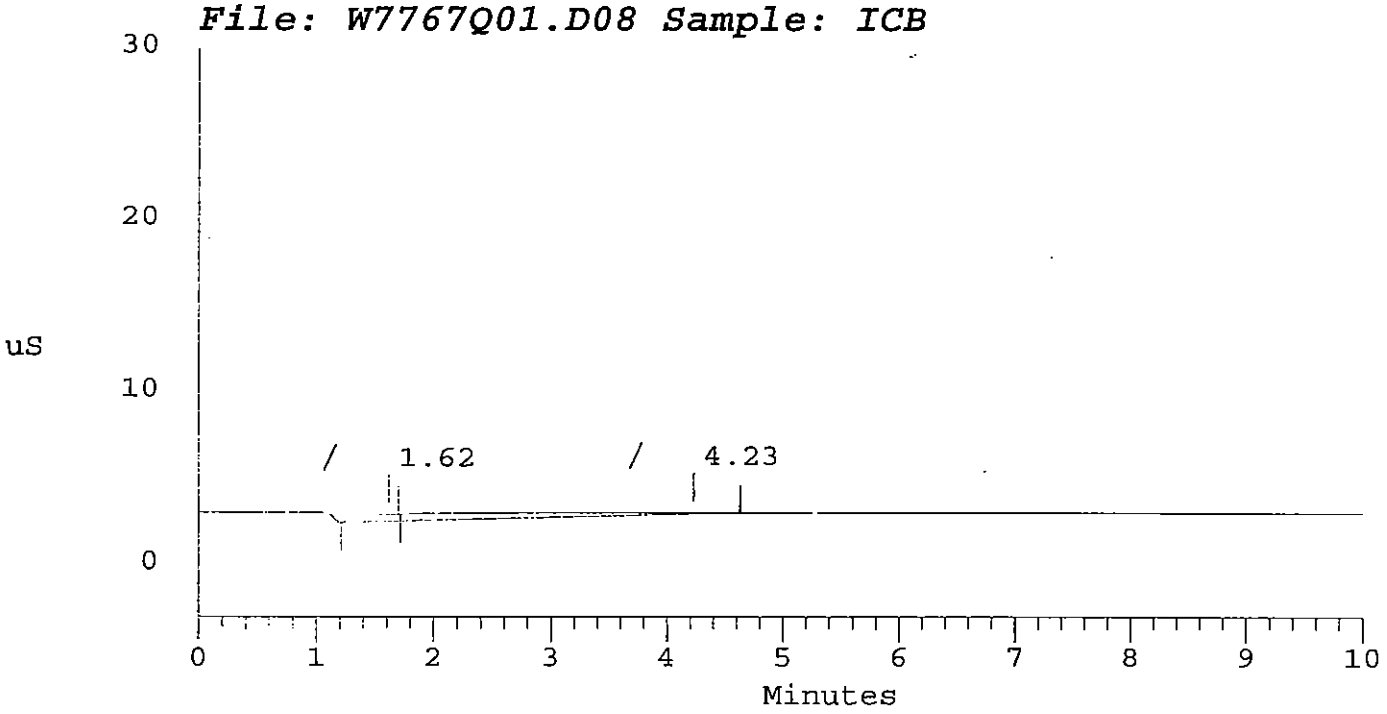


```
Sample Name: ICB                                  Date: 03/21/2003 18:21:00
Data File  : C:\DX\DATA\E300-063\W7767Q01.D08
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 8                        Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

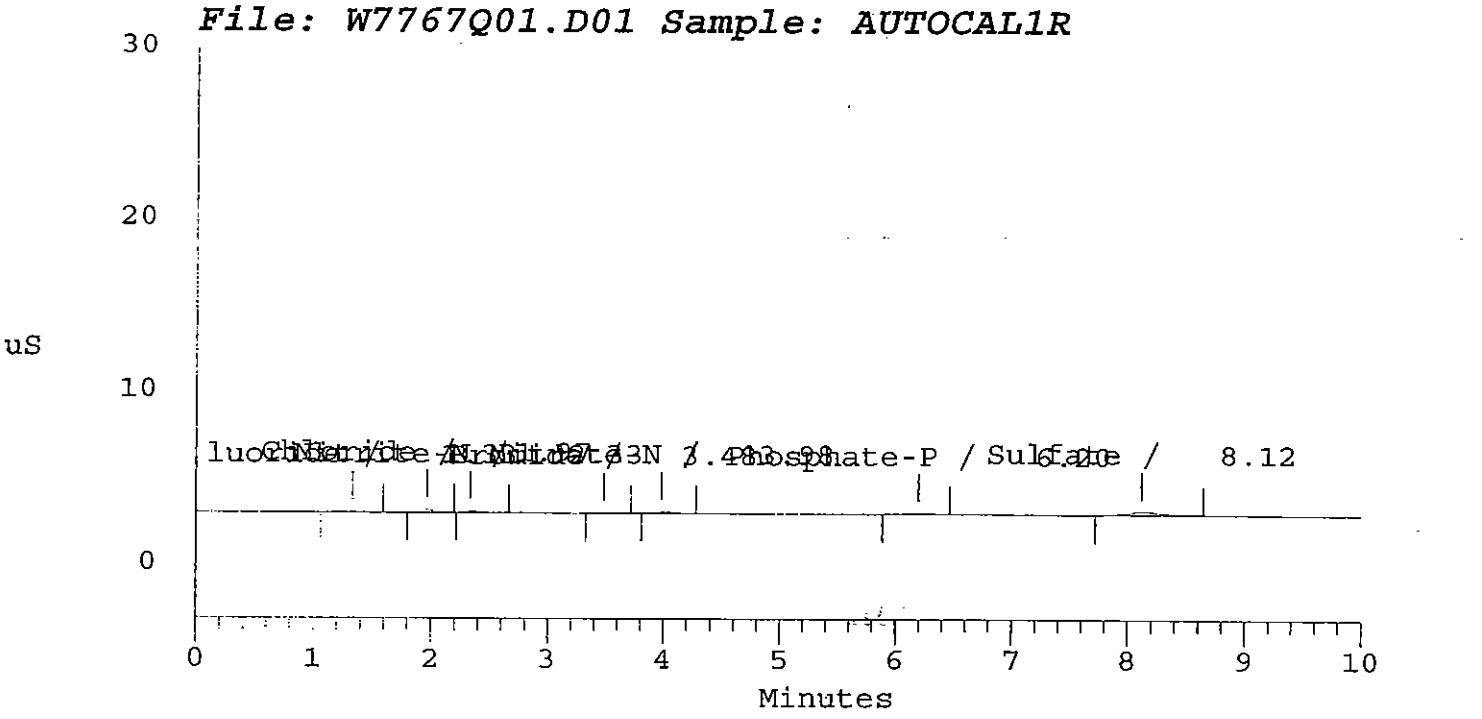


Sample Name:	AUTOCAL1R	Date:	03/21/2003 16:23:08
Data File :	C:\DX\DATA\E300-063\W7767Q01.D01		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address:	1 System: 1 Inject#: 1	Detector:	COND
Analyst :	David	Column:	Dionex AS4A-SC

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		

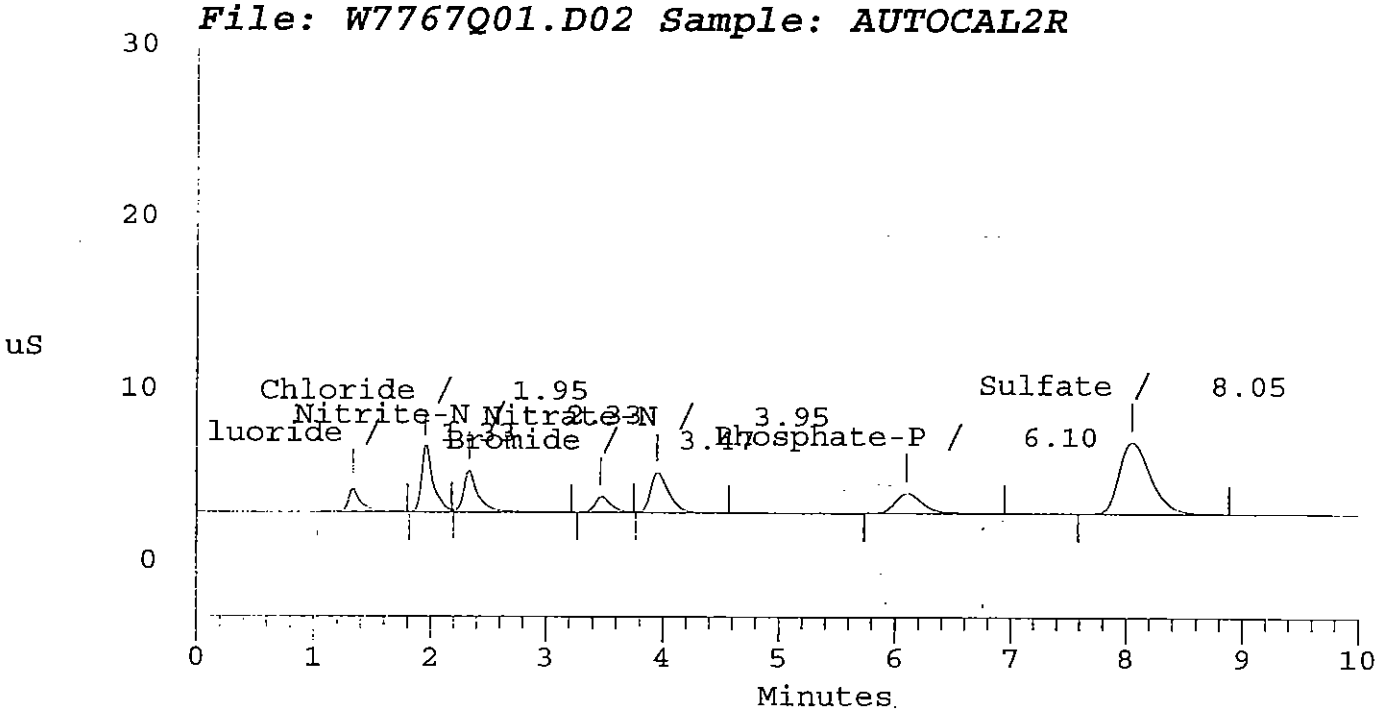


Sample Name: AUTOCAL2R Date: 03/21/2003 16:35:53
Data File : C:\DX\DATA\E300-063\W7767Q01.D02
Method : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 2 Detector:COND
Analyst : David Column: Dionex AS4A-SC

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		

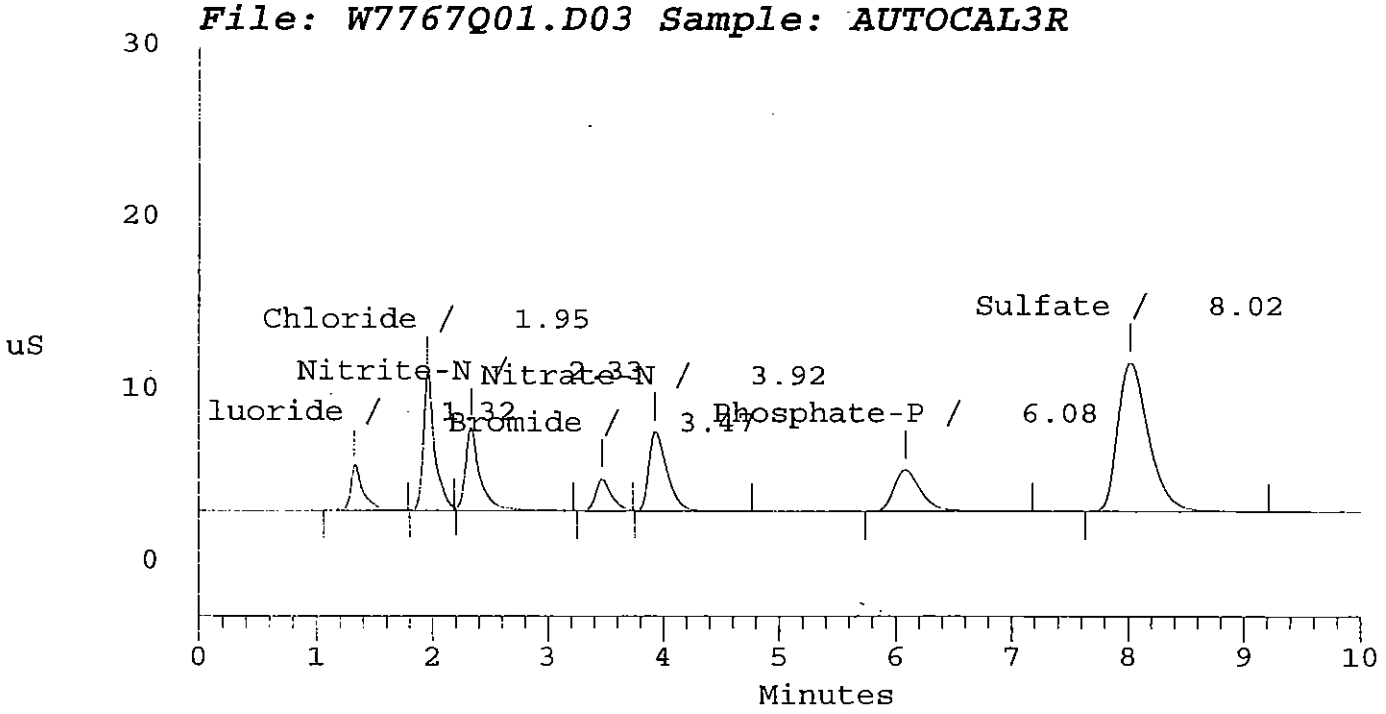


```
Sample Name: AUTOCAL3R                          Date: 03/21/2003 16:48:37
Data File  : C:\DX\DATA\E300-063\W7767Q01.D03
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 3                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

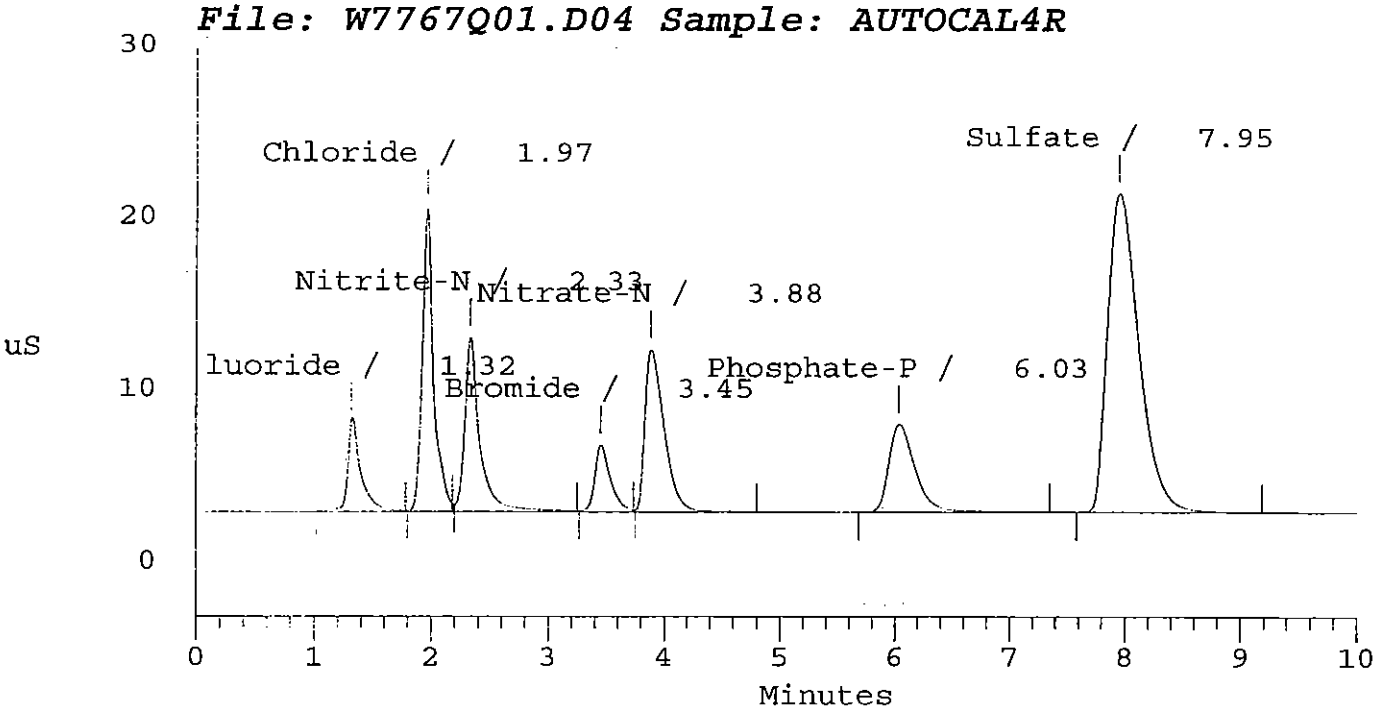


```
Sample Name: AUTOCAL4R                          Date: 03/21/2003 17:01:21
Data File  : C:\DX\DATA\E300-063\W7767Q01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 4                        Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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
Data File :	C:\DX\DATA\E300-063\W7767Q01.D05
Method :	C:\DX\METHOD\E300-063.MET
ACI Address:	1 System: 1 Inject#: 5
Analyst :	David

Date: 03/21/2003 17:14:05

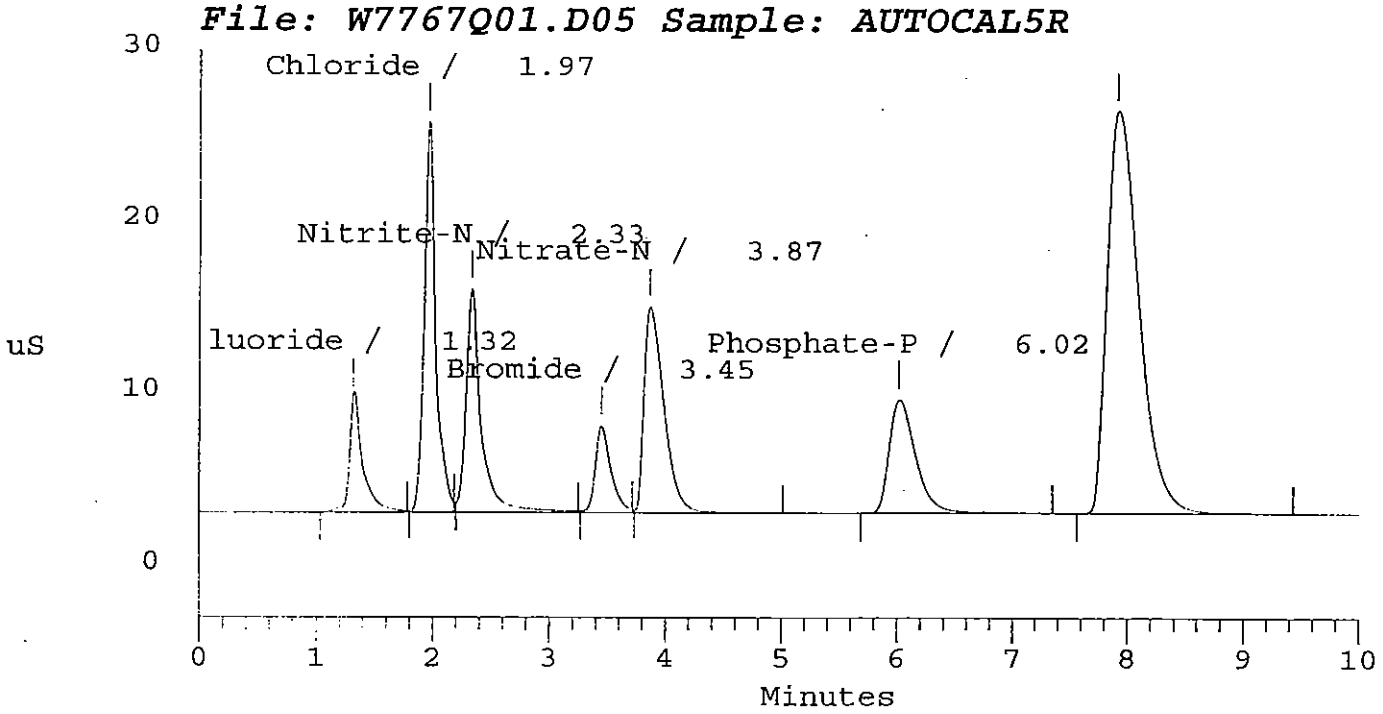
Detector:COND

Column: Dionex AS4A-SC

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

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

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



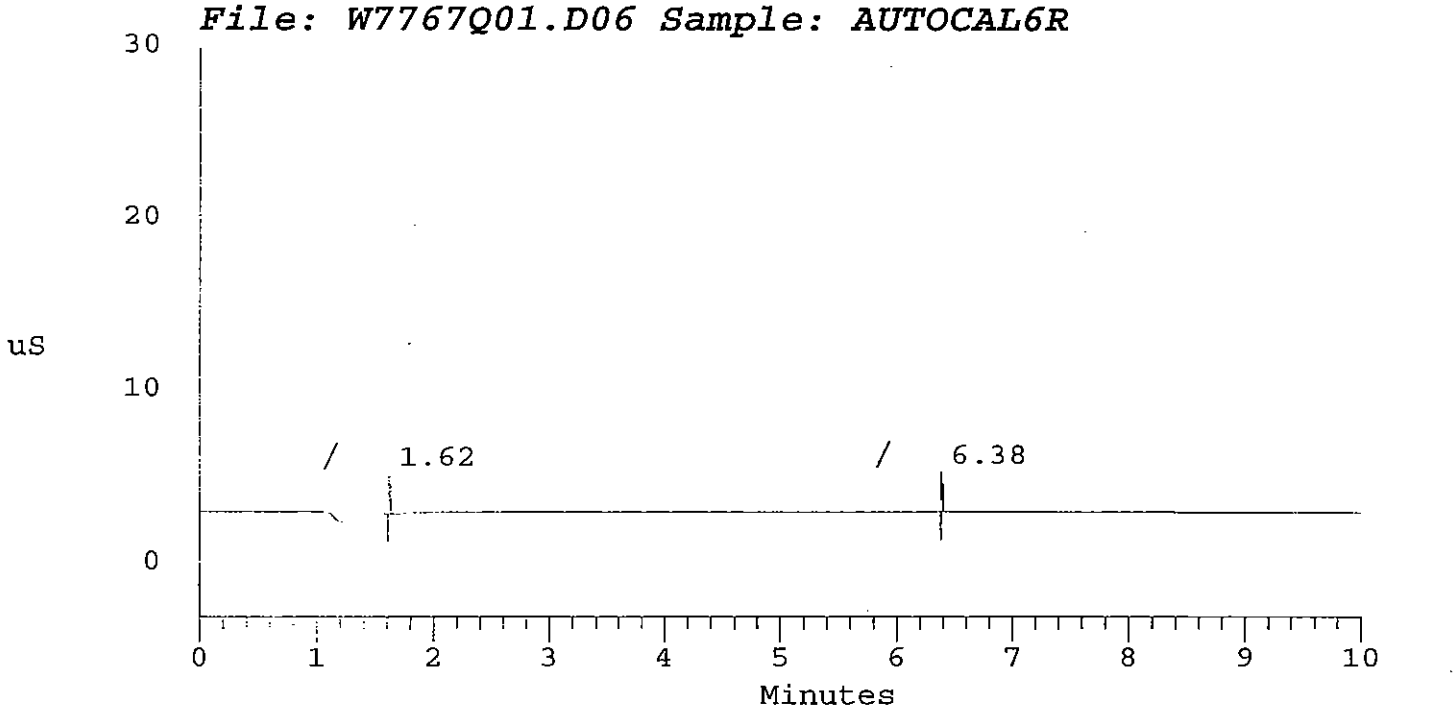
Data Reprocessed On 03/21/2003 17:39:26

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

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

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

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



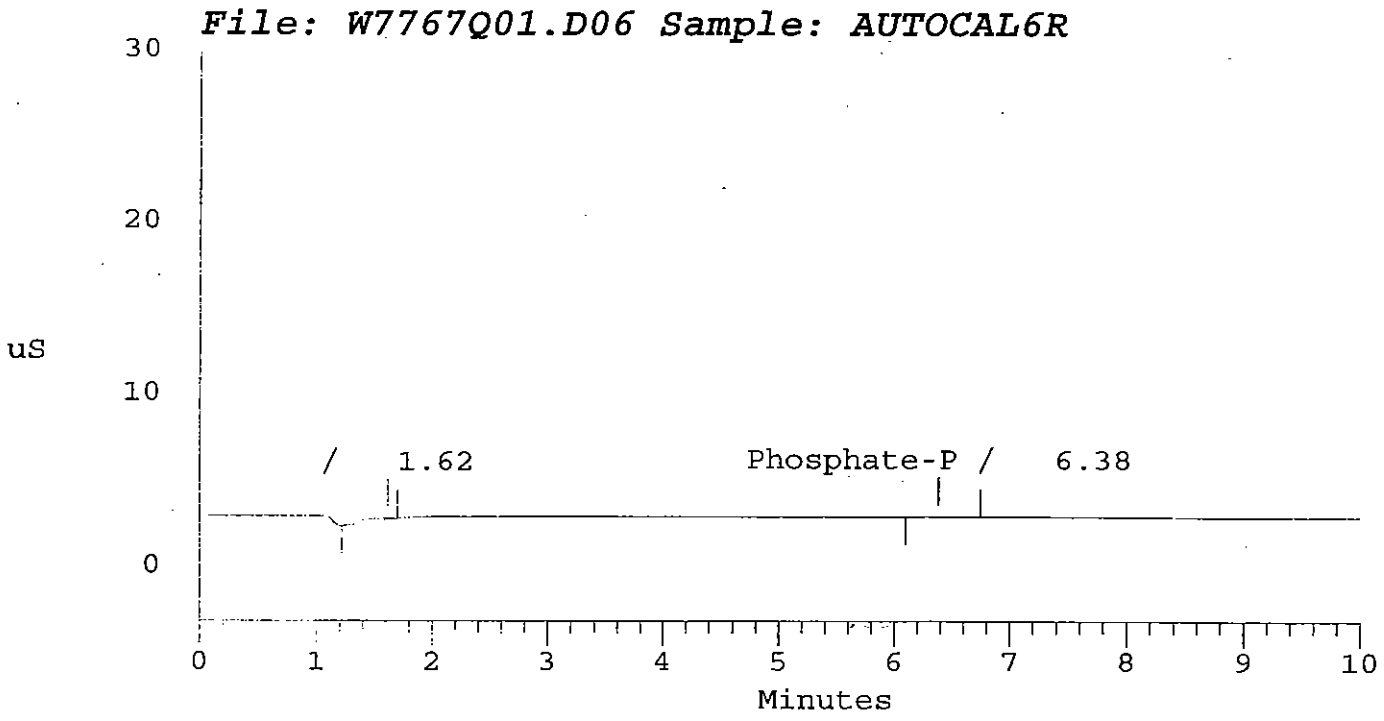
After
3/21/2003
Version 3.2

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

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

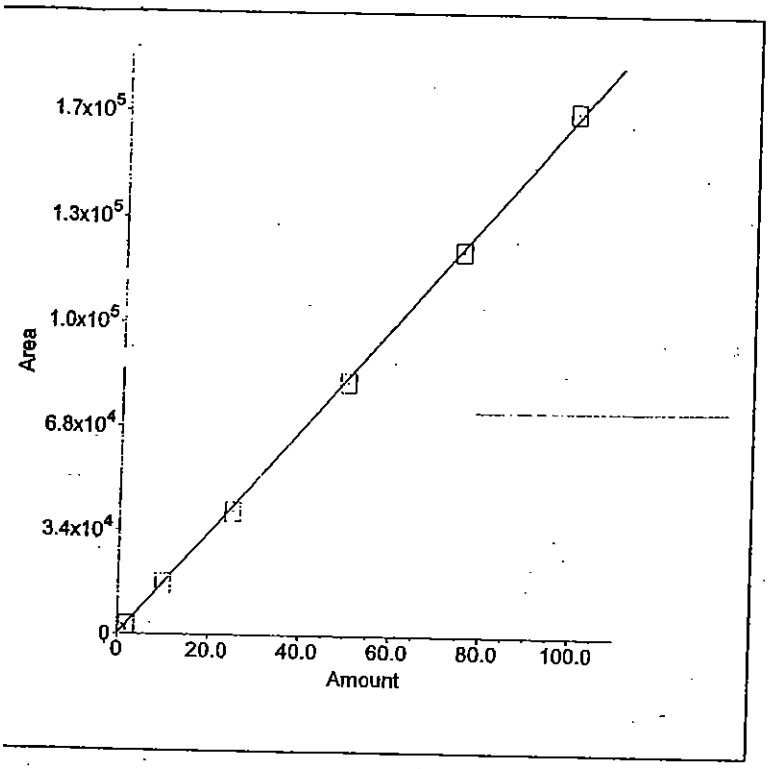
********** Component Report: All Components **********

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



Before

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



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

Analyst C. W
Date 03/12/03
Instrument IC-1

APCL Perchlorate Analysis Report

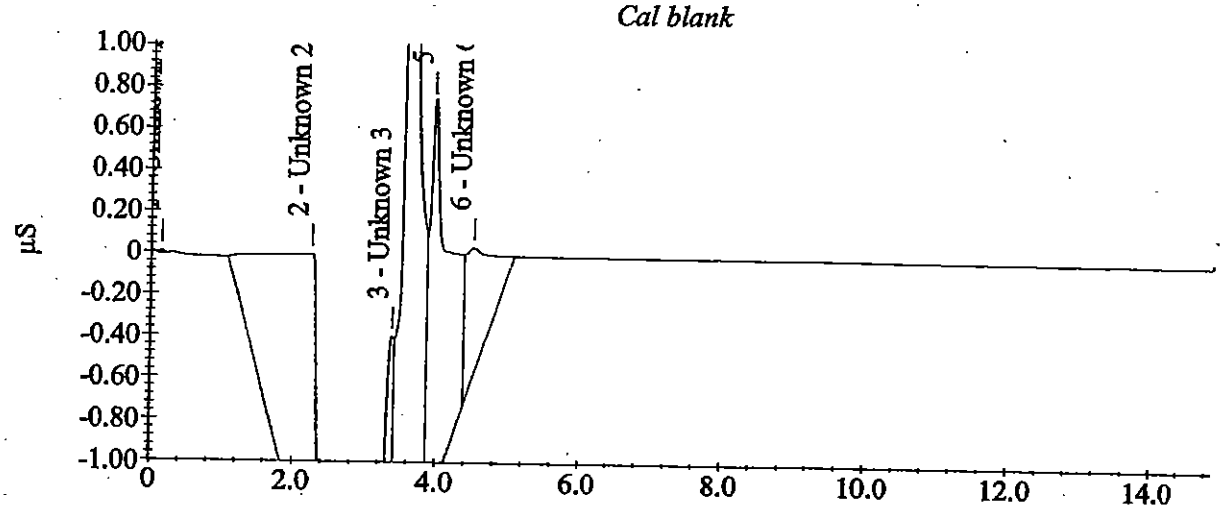
Sample Name : Cal blank
Data File Name : C:\data\E314-011\Mb_001.DXD

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

Cal blank



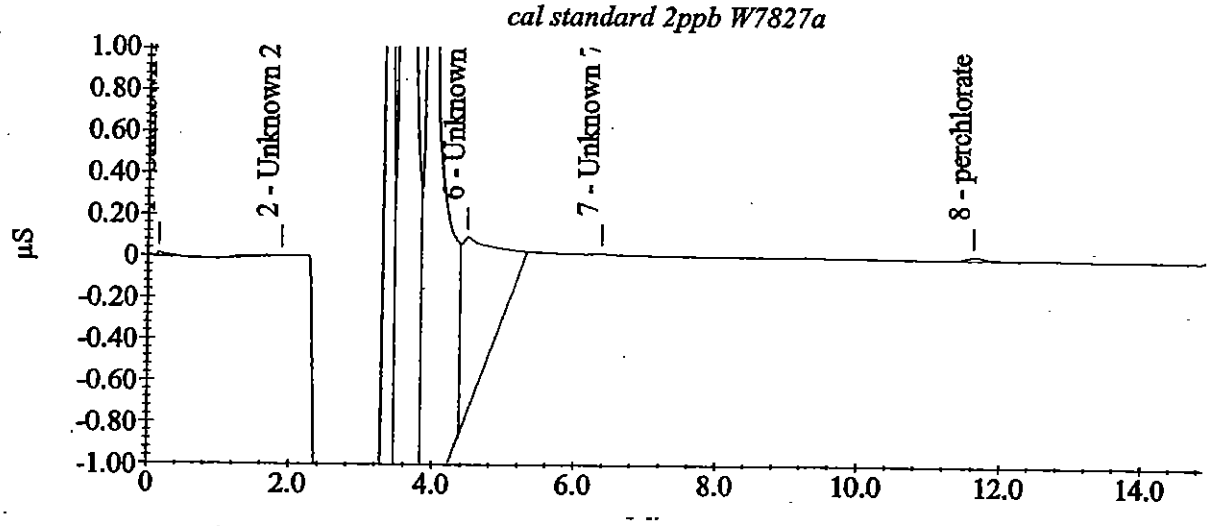
APCL Perchlorate Analysis Report

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



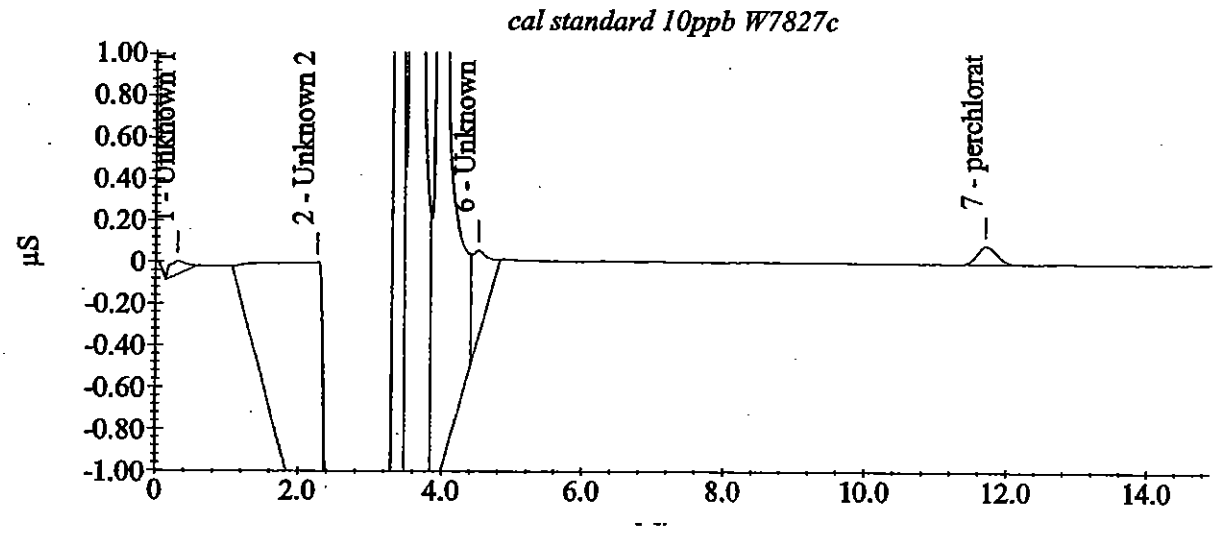
APCL Perchlorate Analysis Report

Sample Name : cal standard 10ppb W7827c
Data File Name : C:\DATA\E314-011\std-10pb_004.DXD

Method File Name : C:\PEAKNET\METHOD\e314-011.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



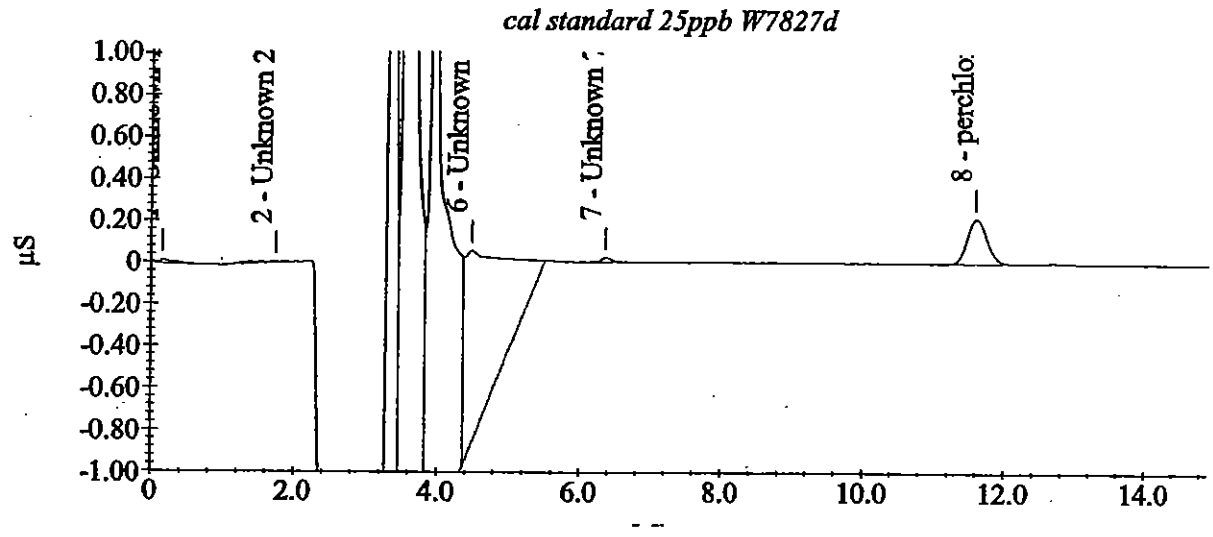
APCL Perchlorate Analysis Report

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



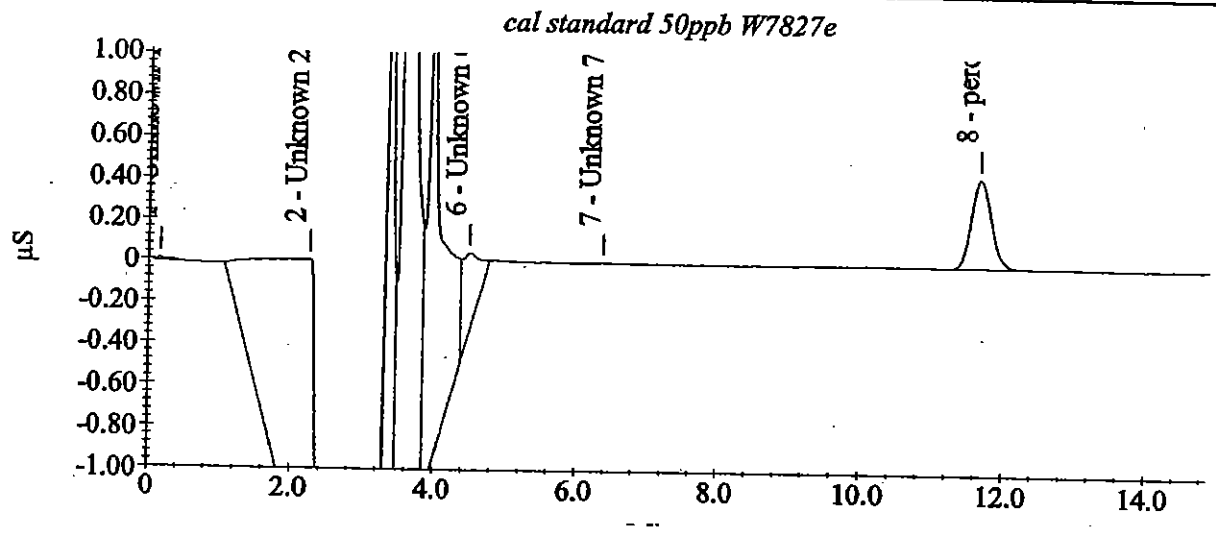
APCL Perchlorate Analysis Report

Sample Name : cal standard 50ppb W7827e
Data File Name : C:\DATA\E314-011\std-50pb_006.DXD

Method File Name : C:\PEAKNET\METHOD\e314-011.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



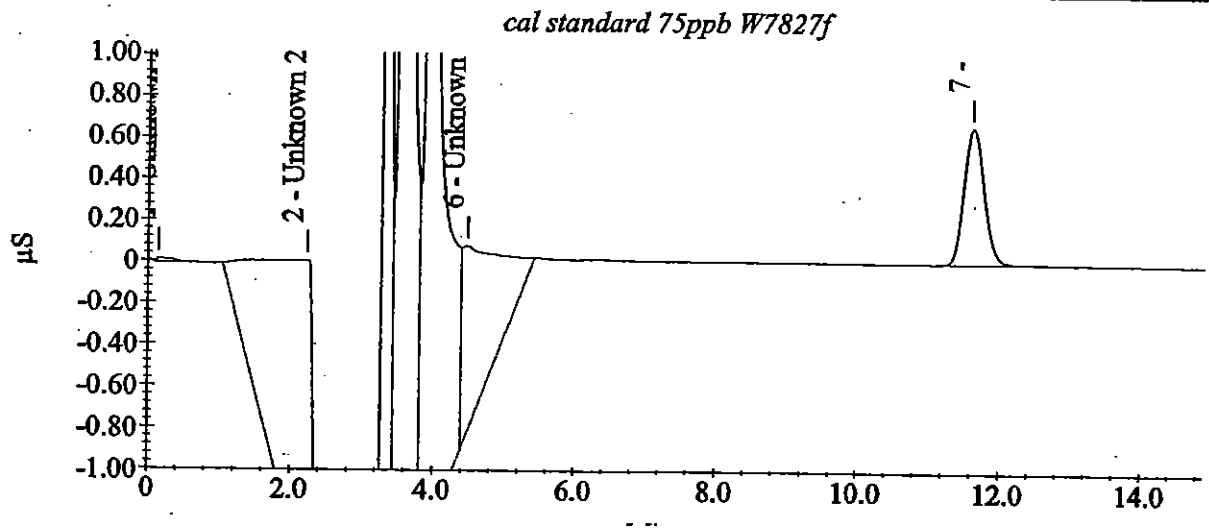
APCL Perchlorate Analysis Report

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



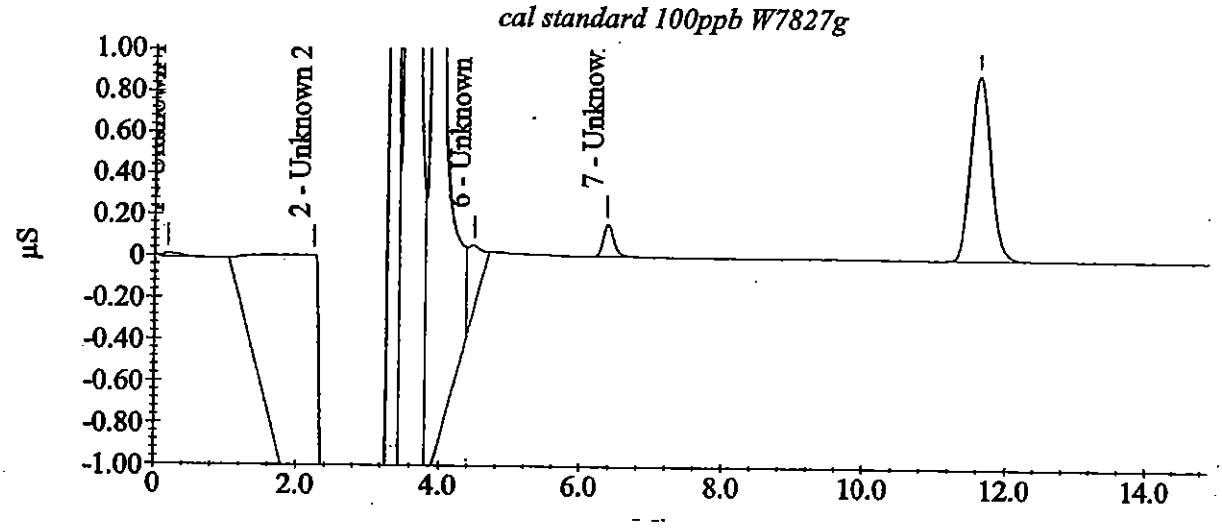
APCL Perchlorate Analysis Report

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	89233



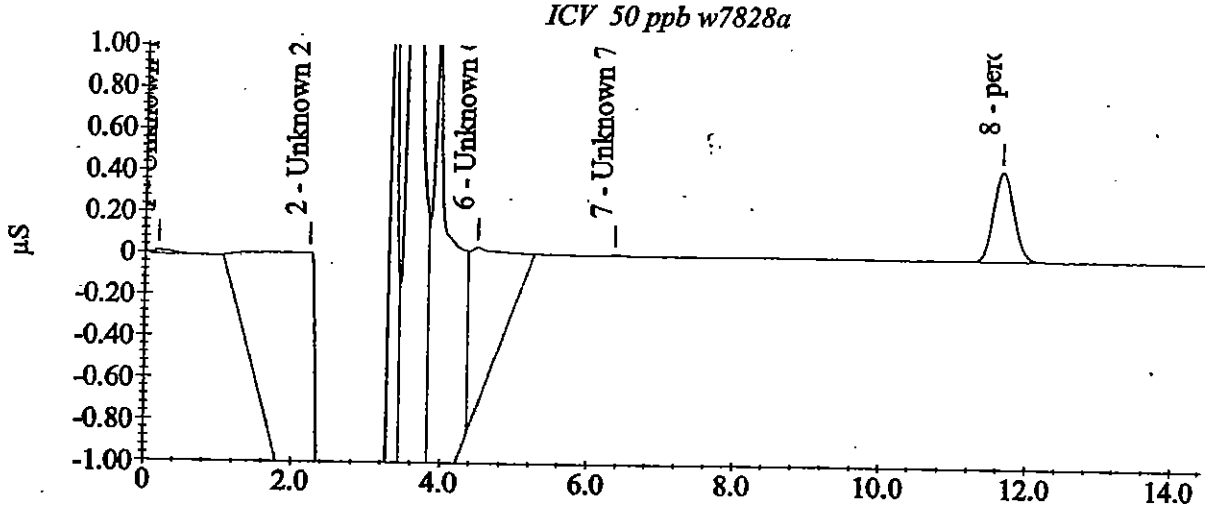
APCL Perchlorate Analysis Report

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



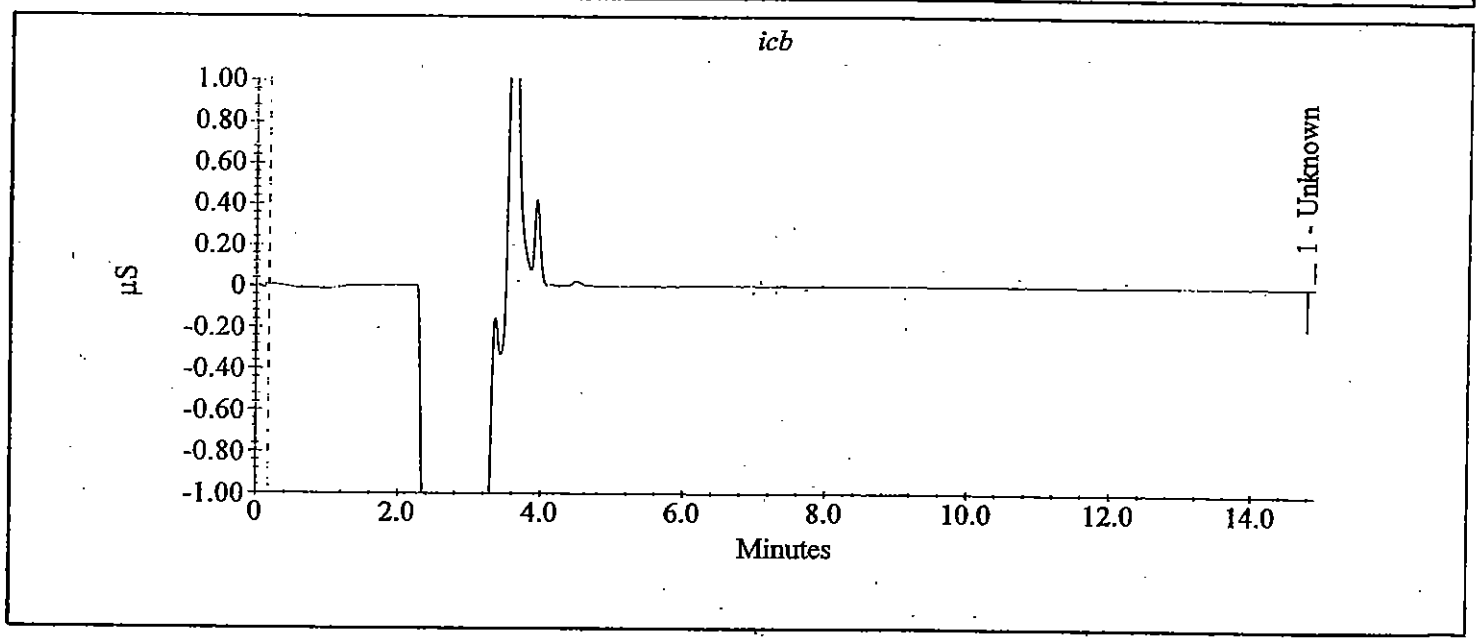
APCL Perchlorate Analysis Report

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: 32843

Project ID: JPL Project No.: 04-4428.10

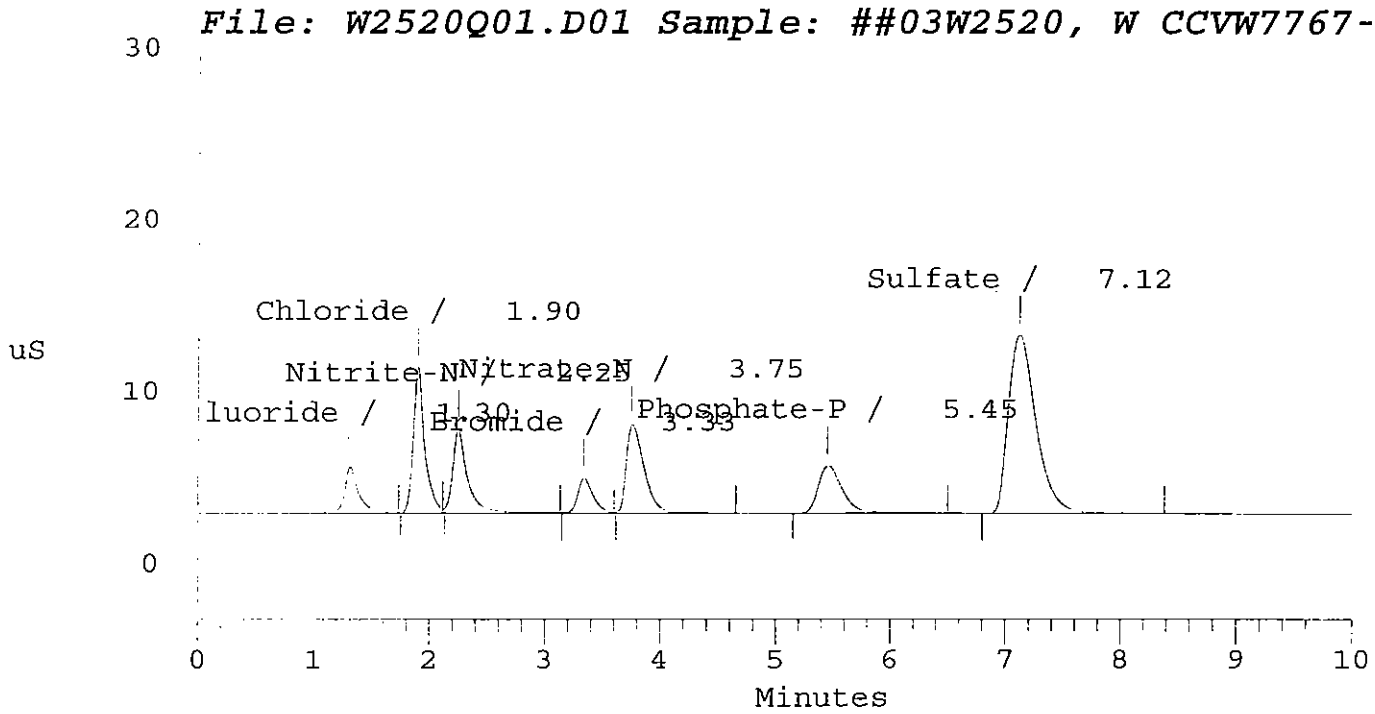
#	Component Name	Method	Batch No.	Unit	Expe-cted	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Chloride Cl^-	300.0	03W2520	mg/L	4.0	3.97	99	-1	√	90-110	04/24/2003
	NITRATE as N-NO_3^-, BY	300.0	03W2520	mg/L	1.5	1.52	102	2	√	90-110	04/24/2003
	SULFATE SO_4^{--}, BY I	300.0	03W2520	mg/L	15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

Sample Name: ##03W2520, W CCVW7767-100X Date: 04/24/2003 08:57:11
Data File : C:\DX\DATA\03W2520\W2520Q01.D01
Method : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 1 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	1.30	Fluoride	1.051	84773	764287	2	0.00
2	1.90	Chloride	3.967	282793	1965931	2	0.00
3	2.25	Nitrite-N	1.492	162676	1504082	2	0.00
4	3.33	Bromide	3.096	67669	631156	2	0.37
5	3.75	Nitrate-N	1.523	170690	1838204	2	0.00
6	5.45	Phosphate-P	2.990	92306	1367820	1	0.00
7	7.12	Sulfate	14.989	345638	5708532	1	0.00
		Totals	29.109	1206545	13780011		

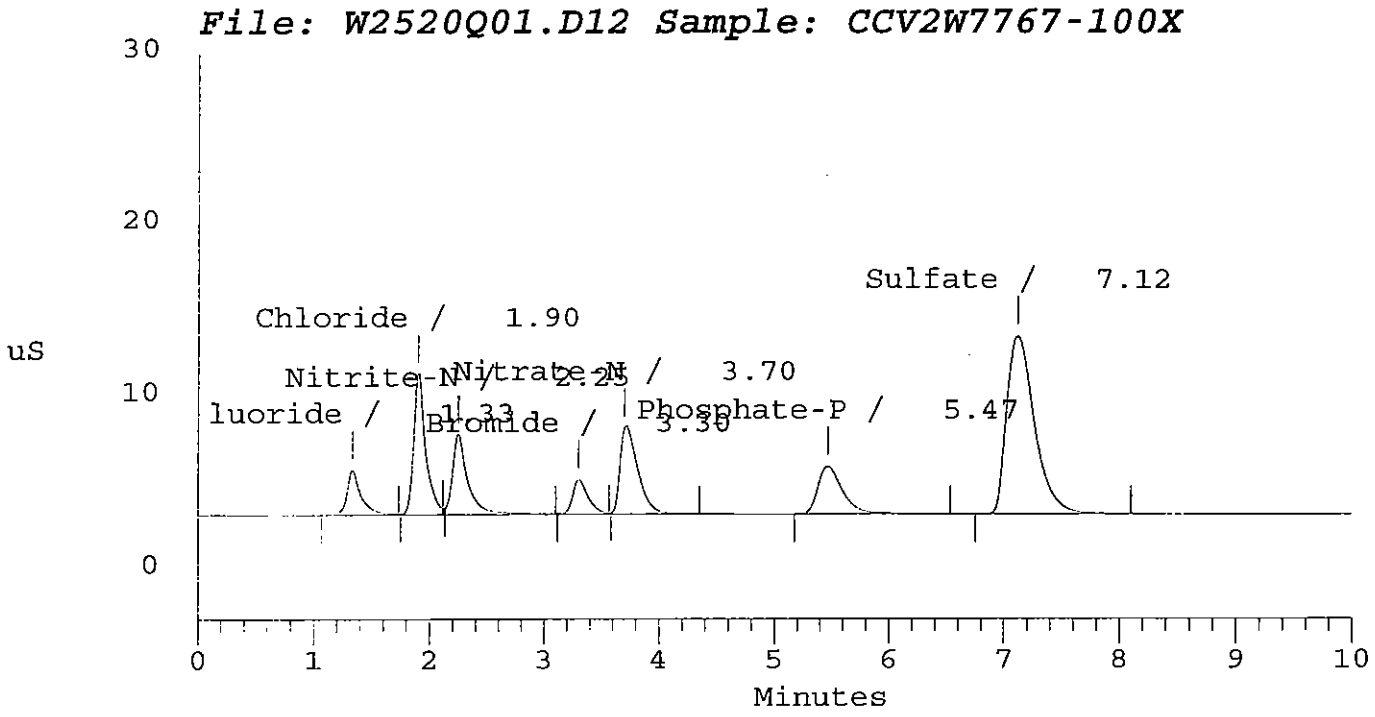


Sample Name:	CCV2W7767-100X	Date:	04/24/2003 11:43:08
Data File :	C:\DX\DATA\03W2520\W2520Q01.D12		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address: 1 System: 1 Inject#: 12		Detector:	COND
Analyst :	David	Column:	Dionex AS4A-SC

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

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

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

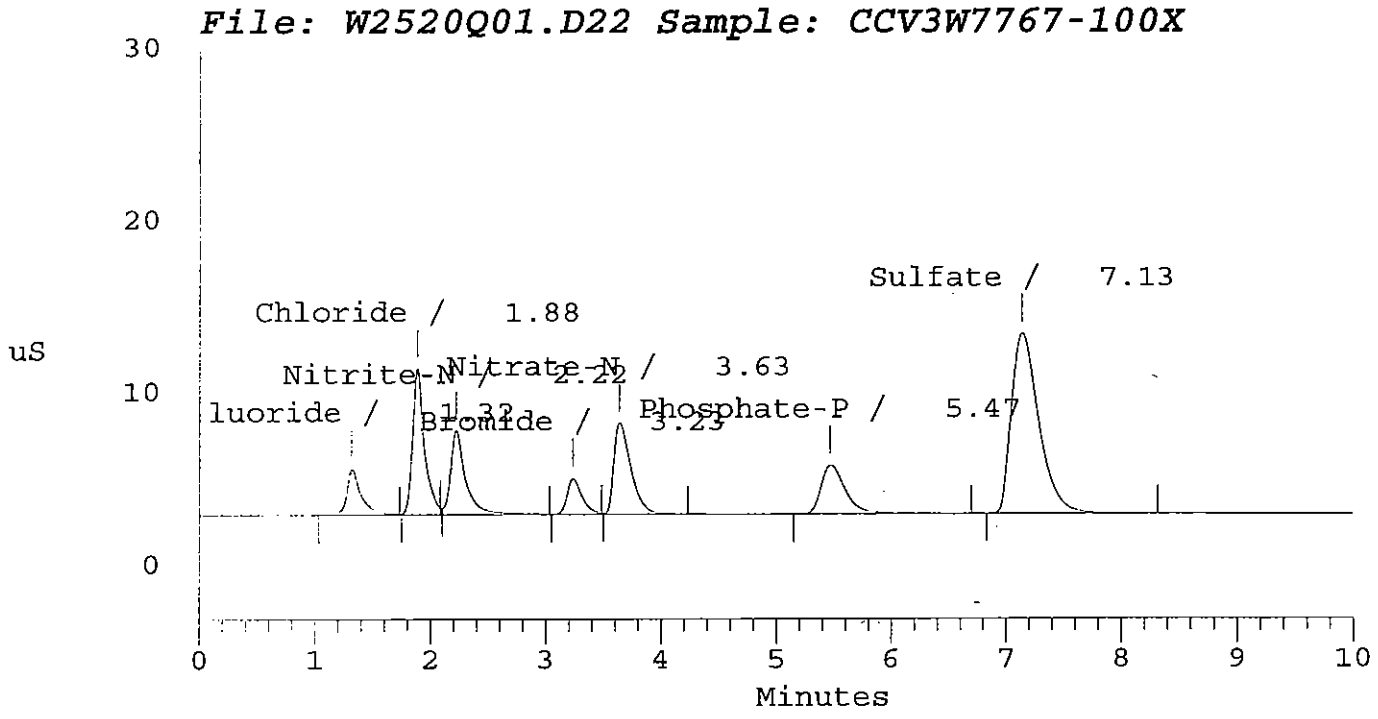


Sample Name:	CCV3W7767-100X	Date:	04/24/2003 15:23:14
Data File :	C:\DX\DATA\03W2520\W2520Q01.D22		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address:	1 System: 1 Inject#: 22		Detector:COND
Analyst :	David	Column:	Dionex AS4A-SC

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

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

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



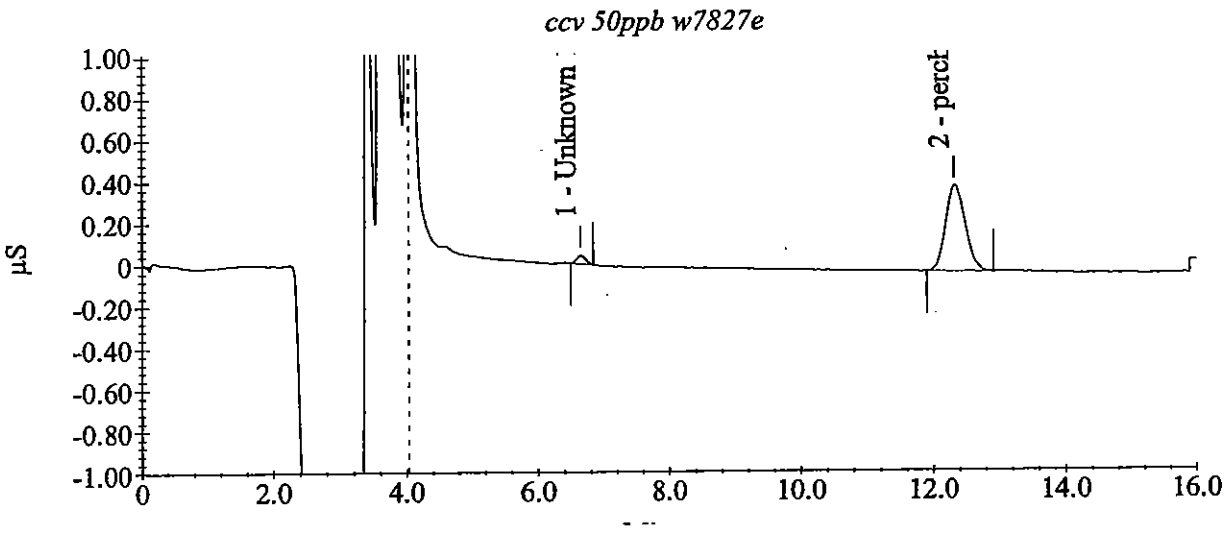
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2531K\W2531K Q01_002.DXD

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



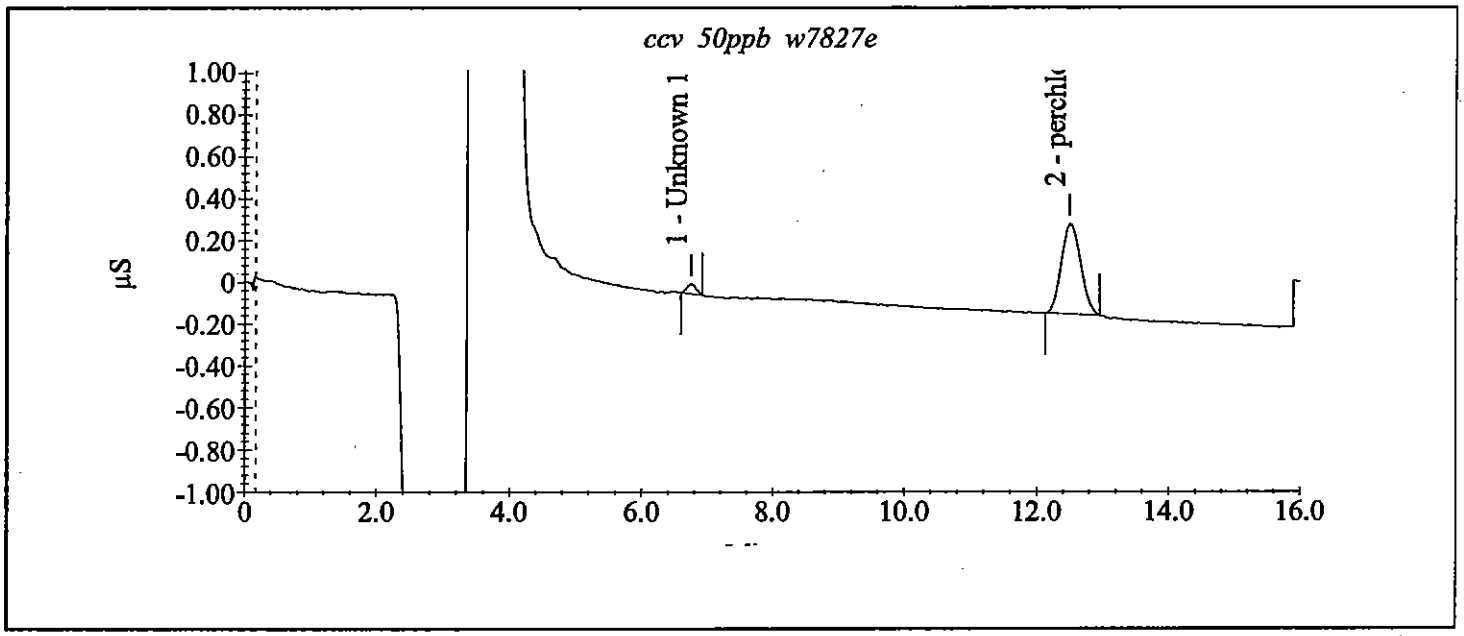
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2531K\W2531K Q02_013.DXD

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



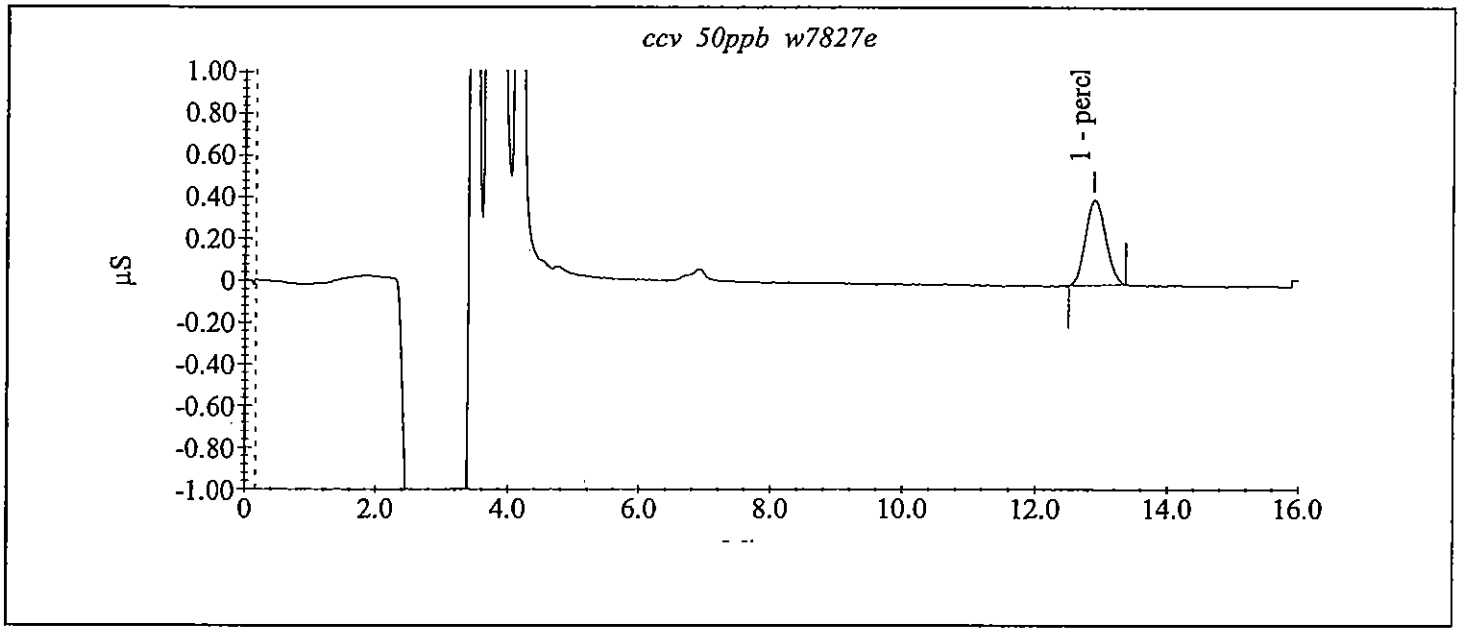
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2531K\W2531K Q03_024.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 7:18:06 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



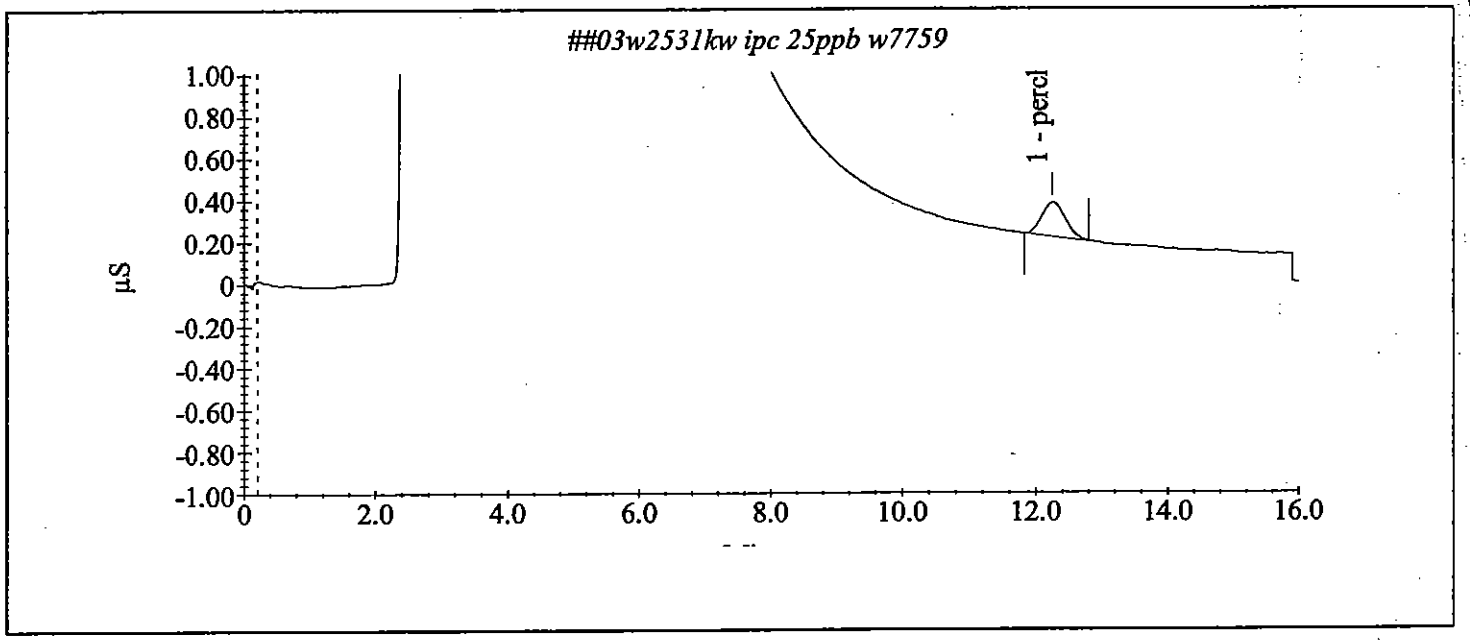
APCL Perchlorate Analysis Report

Sample Name : ##03w2531kw ipc 25ppb w7759
Data File Name : C:\DATA\03W2531K\W2531K IPC 25PPB_001.DXD

Method File Name : c:\peaknet\method\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



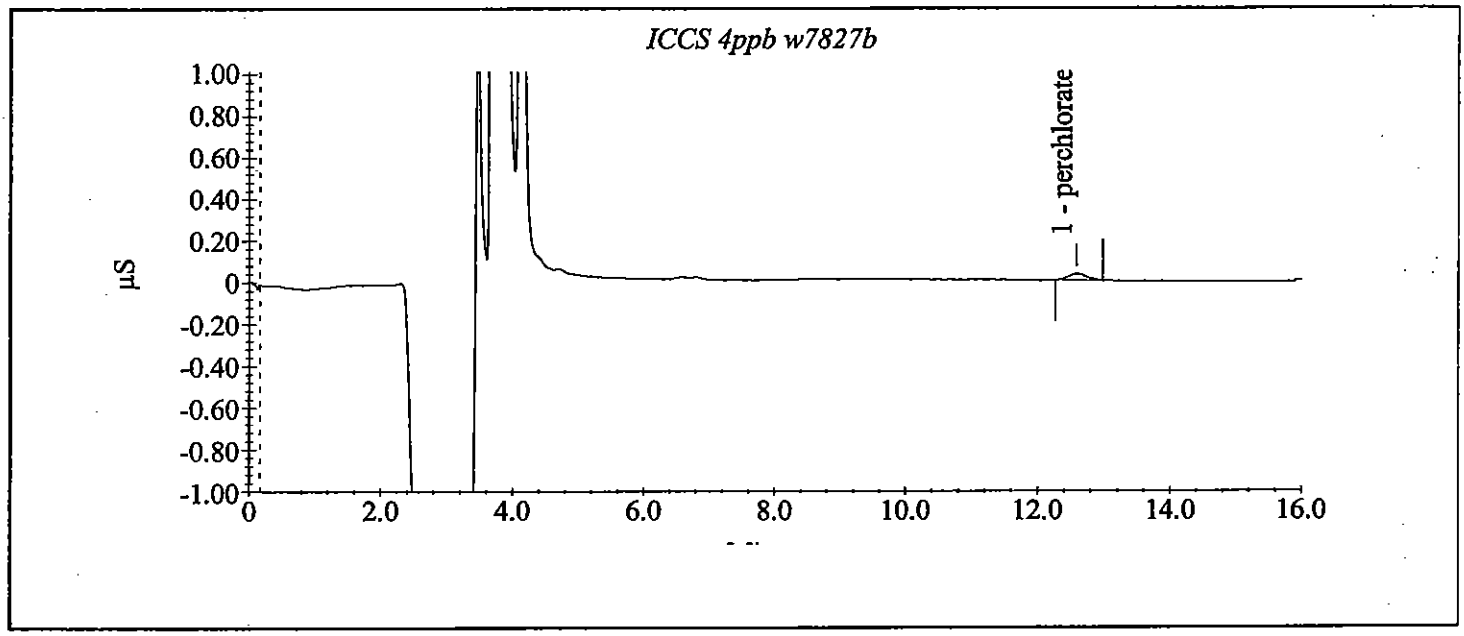
APCL Perchlorate Analysis Report

Sample Name : ICCS 4ppb w7827b
Data File Name : C:\DATA\03W2531K\W2531K ICCS 4PPB_006.DXD

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



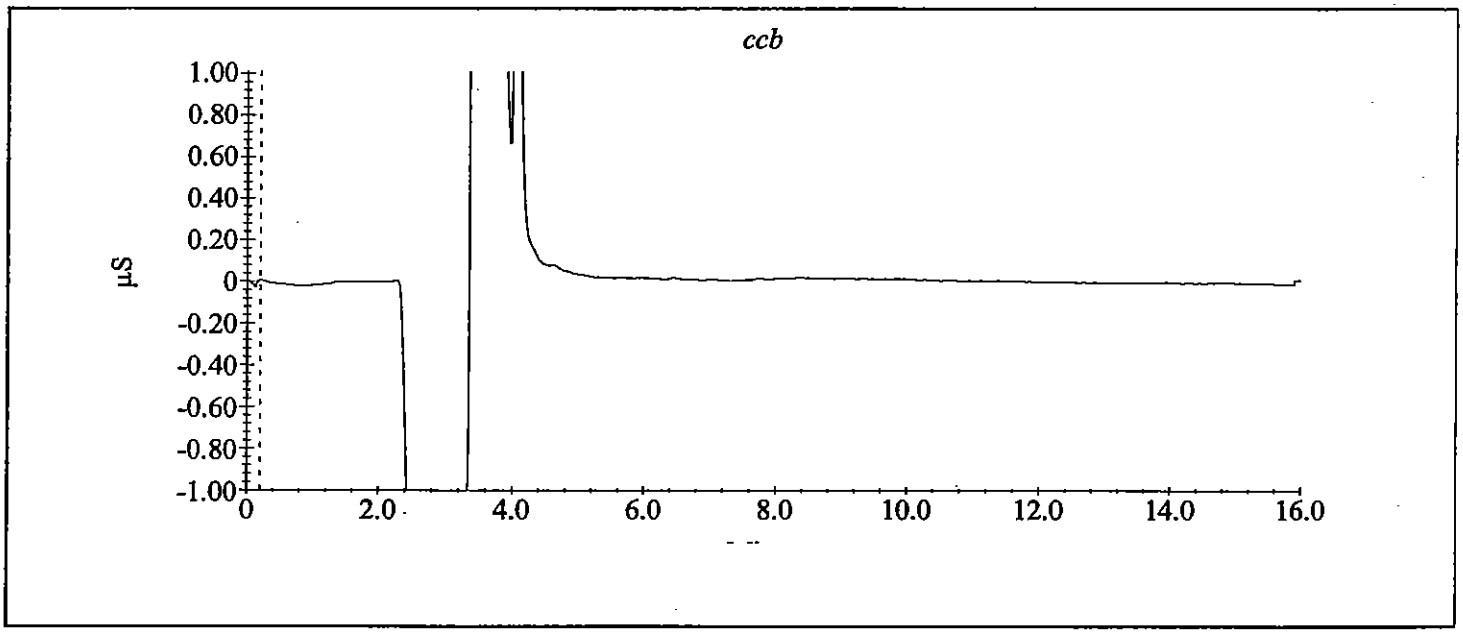
APCL Perchlorate Analysis Report

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

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 11:55:53 AM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



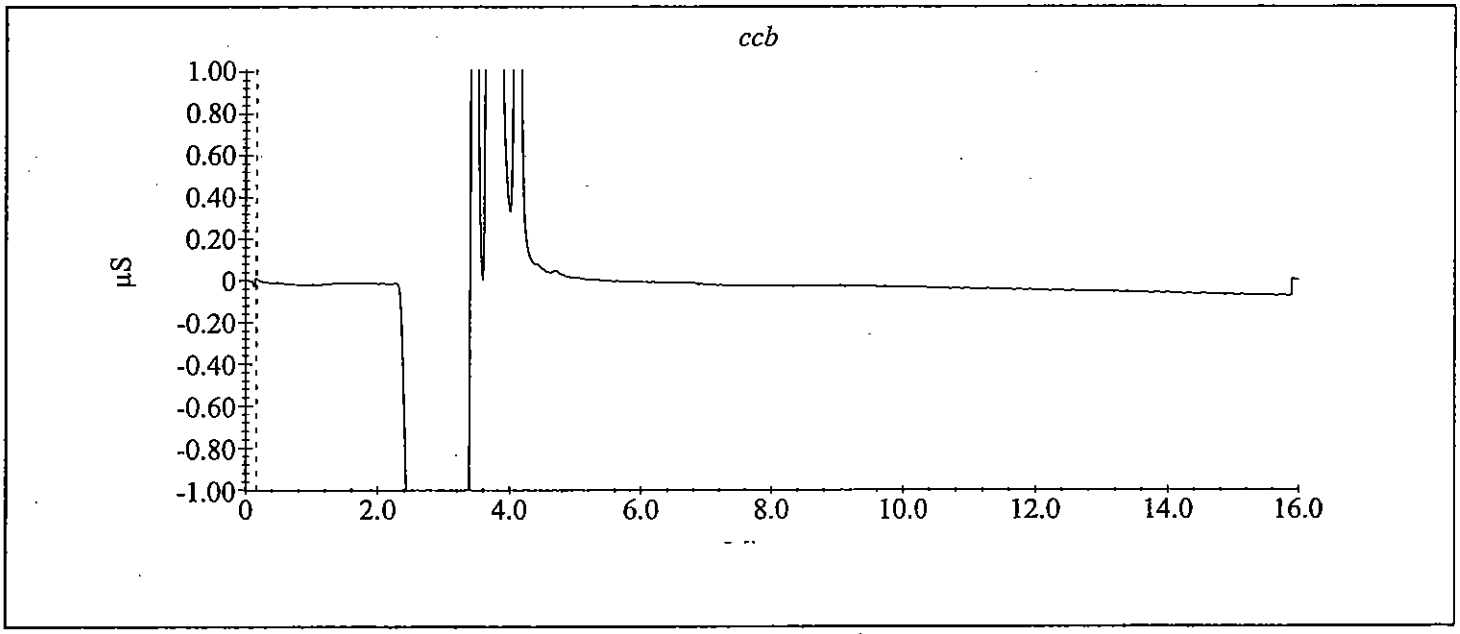
APCL Perchlorate Analysis Report

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

Method File Name : c:\peaknet\method\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



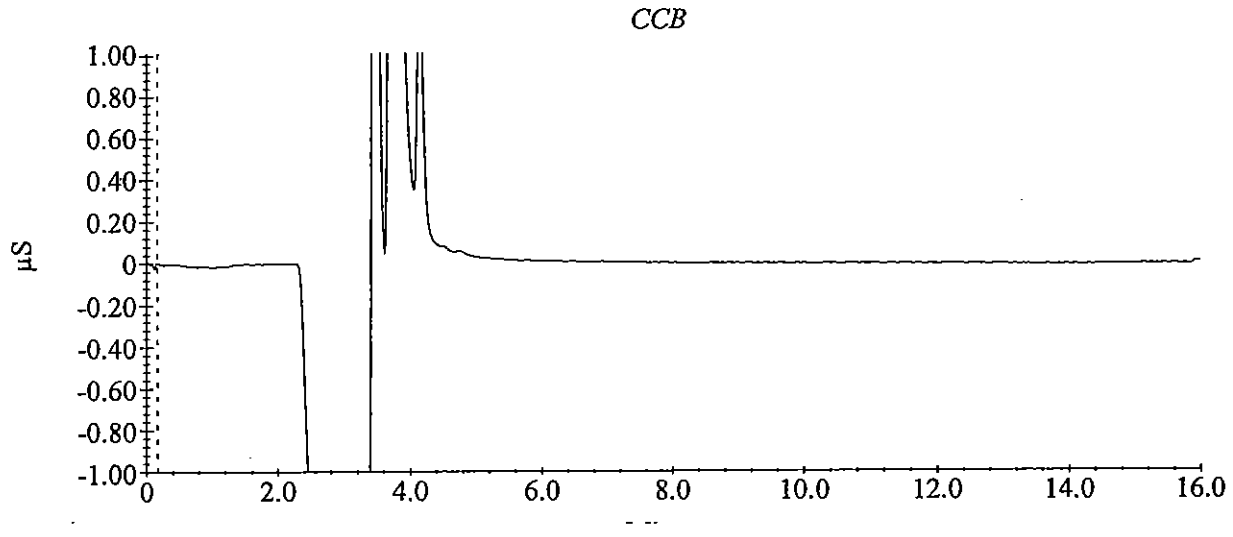
APCL Perchlorate Analysis Report

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

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 04/24/2003 7:37:00 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



Applied P & Ch Laboratory
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: (909) 590-1828 Fax: (909) 590-1498

Conductance (120.1) Worksheet

Batch # for reference Matrix: W

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

Cell Constant _____ Calibration STD: 0.0100M KCl SOP: G-45

#	Sample ID	Treatment V/X=f0	Dilution $V_f/V_i=f_1$	Temperature T, °C	$C_{25}=C_T f_1/[1-0.0191(25-T)]$ C_T, μmhos/cm	C_{25}, μmhos/cm	$\rho=1/C_{25}$ MΩ cm	Note & Anomaly
Cal.	Lot #:	-	-	25°C				C_{25}=1,413±20
MB		/ =	/ =					for clip
1	2829-1	/ =	/ =			233		
2	-2	/ =	/ =			689		
3	-3	/ =	/ =			1140		
4	-4	/ =	/ =			750		
5	-5	/ =	/ =			1.65		
6	2842-~~3~~	STL 4/23/03	/ =					
7	-7	/ =	/ =			2850		
8	-8	/ =	/ =			1350		
9	-9	/ =	/ =			8220		
10	-10	/ =	/ =			4510		
11	2843-1	/ =	/ =			1080		
12	-2	/ =	/ =			2.73		
13	-3	/ =	/ =			1830		
14	-4	/ =	/ =			1180		
15	-5	/ =	/ =			1490		
16	-6	/ =	/ =			808		
17	-7	/ =	/ =			345		
18		/ =	/ =					
19		/ =	/ =					
20		/ =	/ =					
Dup.		/ =	/ =					

APCL form 5-108, Apr. 22, 1996; Ver 2.1 No pencil. Use blue pen for record. Use red pen for correction.
FILE: [CUST.DOC.WET]CONDUC .TEX Root-File: CONDUC_ROOT.TEX 1-Page-File:[CUST.DOC.WET]CONDUC1.TEX

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TDS

Solid Analysis (160.1, 160.2, 160.3) Worksheet

Batch # 0211254 3 Matrix W Method: 160.1 Balance No. _____ Date: 4/24/03 Analyst: [illegible]

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

EPA 160.2 TSS – Total Suspended (nonfilterable) Soilds — 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 $V_f/X=f_1$	Volume V, mL	W_1 g	W_2 1st, g	W_2 2nd, g	$\Delta W = W_2 - W_1$, g	Results (ppm)	Note
1	Blank		/ =	100	111.3126	111.3127	111.3127	0.0001	1	D
2	LCS		/ =		109.2249	109.2671	109.2670		421	B
3	Sample-1	2823-1	/ =		98.0938	98.1664	98.1664		726	X1
4	MS on S-1	-1	/ =		99.5263	99.6404	99.6404		1141	L
5	MSD on S-1	-1	/ =		98.3176	98.4290	98.4290		1114	C12
6	Sample-2	2843-1	/ =		114.7516	114.8184	114.8185		669	XX
7	Sample-3	-2	/ =		105.3122	105.3120	115.3178		0	12
8	Sample-4	-3	/ =		114.3072	114.3799	114.3803		731	H
9	Sample-5	-4	/ =		114.1425	114.2165	114.2165		740	C3
10	Sample-6	-5	/ =		112.9003	112.9616	112.9616		613	K
11	Sample-7	-6	/ =		105.8902	105.9303	105.9303		300	19
12	Sample-8	-7	/ =		112.3033	112.3205	112.3207		174	K
13	Sample-9	2852-1	/ =		117.6099	117.6955	117.6955		856	X5
14	Sample-10	2	/ =		108.5439	108.6680	108.6679		1240	18
15	LCSD		/ =		111.4913	111.5331	111.5331		418.	
16	Sample-11	3	/ =		~~116.1388~~ ~~117.8167~~	117.0493	117.0493		1105	7
17	Sample-12	4	/ =		116.9505	117.0465	117.0466		961	W
18	Sample-13	5	/ =		115.1104	115.2180	115.2181		1077	G
19	Sample-14	6	/ =		115.8734	116.0576	116.0576		1842	CK
20	Sample-15	2862-2	/ =		116.6494	116.6861	116.6862		368	Z5
21	Sample-16	2867-1	/ =		116.5708	116.5709	116.5710		2	101
22	Sample-17	2	/ =		115.3476	115.3909	115.3909		423	J
23	Sample-18	3	/ =		113.0649	113.2624	113.2624		1985	PR
24	Sample-19	4	/ =		103.3061	103.4983	103.4983		1922	L
25	Sample-20	5	/ =	↓	103.5332	103.7228	103.7230		1898.	Z6
26	Mtx Dup.		/ =							

Type	STD Lot #	$C_{STD(\mu g/mL)} \times V_{STD(mL)} / X_{(g \text{ or } mL)} = T$	Spike Rec.	Ctl Limit (W/S)
MS	W- 7618	× / = 400 ppm	%	85-115 %/80-120 %
MSD	W- √	× / = ppm	%	.. ..
LCS	W- 7619	× / = ppm	%	90-110 %/85-115 %
LCSD	W- √	× / = ppm	%	.. ..

PQL/MDL (in ppm)	
PQL(w)	10
PQL(s)	50
MDL(w)	4
MDL(s)	20

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pH (150.1/9045B) Worksheet

Temperature compensation must be performed by the instrument automatically. Analyst De SOP: G-44

Batch # 03W2509	Analysis Date: 4,23,03	Batch # 03W2518	Analysis Date: 4,23,03
Starting Time: 09:30	Ending Time: :	Starting Time: 15:12	Ending Time: :
Matrix ☐ Aaueous ☒ Soil		Matrix ☒ Aaueous ☐ Soil	

Standard	4.00	7.00	10.00	Standard	4.00	7.00	10.00
Lot #		2120	030619-2K	Lot #		2120	030619-2K
Temperature °C		24.2	24.2	Temperature °C		24.5	24.6
pH Reading		7.03	10.03	pH Reading		7.01	10.02
T-corrected pH		7.00	10.01	T-corrected pH		7.00	10.01
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	08717HA		6.85	1:1	MB	T111S		6.86	
1	2820-1		8.78		1	2843-1		7.63	
2	" -2		8.19		2	-2		7.00	
3	2805-7		8.72		3	-3		6.77	
4	-20		9.25		4	-4		7.18	
5	-6		8.99		5	-5		7.61	
6	-8		8.56		6	-6		7.98	
7	-21		9.29		7	-7		8.22	
8	-5		10.31		8				
9	-18		9.34		9				
10	-12		8.95		10				
11	-9		8.22		11				
12	-1		8.26		12				
13	-11		7.72		13				
14	-10		9.08		14				
15	-17		8.51		15				
16	-2		9.37		16				
17	-15		9.69		17				
18	-14		8.61		18				
19					19				
20					20				
Dup.	2805-1		8.20	1:1	Dup.	2843-1		7.66	

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Alkalinity/OH/CO_3/HCO_3 (310.1/SM2320B) Worksheet

Batch # 03W2539 Matrix: W Titrant H_2SO_4 Lot # W7900 Concentration (C) 0.0250 N; Test Date: 4/24/03 Analyst: DL SOP: G-51

#	Sample ID	Dilution $V_f/V_i=f_1$	Smpl Amnt V_i, mL	H_2SO_4 (mL) by Phnln S_A	E_A	A	H_2SO_4 (mL) by MR-BCG S_B	E_B	B	Phnln-Alk., P	Tot. Alk., T (in unit of $mgCaCO_3/L$)	OH^-	CO_3^{2-}	HCO_3^-	Note & Anomaly
1	MB: LIMS	/ =	100			0			0		0	0	0	0	
2	LCS	/ =	100						7.80		99.6				
3	LCSD	/ =	100						7.85		100.3				
4	2809-1	/ =	10.0			0			6.30		161.0	0	0	161.0	
5	-2	/ =	10.0			0			0		0	0	0	0	
6	-3	/ =	10.0			0			7.00		178.9	0	0	178.9	
7	-4	/ =	10.0			0			8.75		223.6	0	0	223.6	
8	-5	/ =	10.0			0			7.70		196.7	0	0	196.7	
9	-6	/ =	10.0			0			5.75		146.9	0	0	146.9	
10	-7	/ =	10.0			0.20			4.90	5.11	130.3	0	10.2	120.1	
11	-8	/ =	10.0			0			0		0	0	0	0	
12	2815-1	/ =	10.0			0			14.60		373.0	0	0	373.0	
13	2819-6	/ =	10.0			0			6.05		154.6	0	0	154.6	
14	-5	/ =	10.0			0			5.80		148.2	0	0	148.2	
15	-4	/ =	10.0			0			9.90		252.9	0	0	252.9	
16	-3	/ =	10.0			0			8.20		209.5	0	0	209.5	
17	-2	/ =	10.0			0			5.05		129.0	0	0	129.0	
18	-1	/ =	10.0			0			0		0	0	0	0	
19	2843-6	/ =	10.0			0			6.60		168.9	0	0	168.9	
20	-7	/ =	10.0			0.05			5.20	3.8	~~132.9~~ 136.1	0	7.6	~~132.9~~ 129.1	4/24 DL
Dup.	2809-1	/ =	10.0						6.20		158.4	0	0	158.4	

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

Calculation:

$A=S_A-E_A$

$B=S_B-E_B$

$P=50{,}000\ f_1\ A\ C\ /V$

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

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

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Root-File: [CUST.DOC.WET]ALK_ROOT.TEX

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

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Alkalinity/OH/CO_3/HCO_3 (310.1/SM2320B) Worksheet

019
3600

Batch # 03W2540 Matrix: W Titrant H_2SO_4 Lot # W7900 Concentration (C) 0.02555 N; Test Date: 4/24/03 Analyst: DC SOP: G-51

#	Sample ID	Dilution $V_f/V_i=f_1$	Smpl Amnt V, mL	H_2SO_4 (mL) by Phnln S_A	E_A	A	H_2SO_4 (mL) by MR-BCG S_B	E_B	B	Phnln-Alk., P	Tot. Alk., T (in unit of mg$CaCO_3$/L)	OH^-	CO_3^{2-}	HCO_3^-	Note & Anomaly
1	MB: T1115	/ =	100			0			0		0	0	0	0	
2	LCS	/ =	100						7.90		100.9				
3	LCSD	/ =	100						7.95		101.6				
4	2828-1	/ =	50.0			0			12.15		310.4	0	0	310.4	
5	-2	/ =	50.0			0	4/24/03 DC	15.60	~~12.15~~		398.6	0	0	398.6	
6	-3	/ =	50.0			0			6.30		161.0	0	0	161.0	
7	-4	/ =	25.0			0			7.15	365.4 4/24/03 DC	~~182.7~~	0	0	~~182.7~~	365.4 4/24/03 DC
8	-5	/ =	25.0			0			6.80		347.5	0	0	347.5	
9	-6	/ =	50.0			0	4/24/03 DC	15.90	~~15.40~~		406.2	0	0	406.2	
10	-7	/ =	50.0			0			10.05		663.0	0	0	663.0	
11	2829-1	/ =	50.0			1.50			1.70	38.3	81.8	0	76.6	5.2	
12	-2	/ =	50.0			0			9.80		250.4	0	0	250.4	
13	-3	/ =	50.0			0			8.90		227.4	0	0	227.4	
14	-4	/ =	50.0			0.30			7.75	7.7	205.7	0	15.4	190.3	
15	-5	/ =	50.0			0			0		0	0	0	0	
16	2843-1	/ =	50.0			0			8.20		209.5	0	0	209.5	
17	-2	/ =	50.0			0			0		0	0	0	0	
18	-3	/ =	50.0			0			9.60		245.3	0	0	245.3	
19	-4	/ =	50.0			0			9.15		233.8	0	0	233.8	
20	-5	/ =	50.0			0			8.20		209.5	0	0	209.5	
Dup.	2828-1	/ =	50.0			0			12.30		314.3	0	0	314.3	

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

Calculation:

$A=S_A-E_A$

$B=S_B-E_B$

$P=50{,}000\ f_1\ A\ C\ /V$

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

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

Balance Daily Calibration Worksheet

Weight Set S/N: 12006

Calib. Date	Lab Balance #	Lab Balance 1 g ±0.05g	Lab Balance 10 g ±0.1g	Lab Balance 200 g ±0.5g	Lab Balance Note (C)	Digital Balance #	Digital Balance 1 g ±0.02g	Digital Balance 10 g ±0.05g	Digital Balance 200 g ±0.10g	Digital Balance Note (D) (C) (AR)	Analytical Balance #	Analytical Balance 1 g ±0.0002g	Analytical Balance 10 g ±0.0005g	Analytical Balance 200 g ±0.0010g	Analytical Balance Note (D) (C) (AR)	Calib. by
4/21/03	A-01	Not	in	use	L	B-01	1.00	10.00	200.01	✓ ✓ ✓	C-01	1.000	10.0000	200.001	✓ ✓ ✓	YL
	~~A-02~~					B-05	1.00	9.99	200.00	✓ ✓ ✓	C-02	1.00000	10.0001	200.0000	✓ ✓ ✓	
	A-03	1.00	10.00	200.01	✓	B-06	1.00	10.01	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	10.00	199.99	✓ ✓ ✓	C-					
	A-		4/21/03			B-		4/21/03			C-		4/21/03			
	A-					B-					C-					
4/22/03	A-01	not	in	use	✓	B-01	1.00	10.00	200.01	✓ ✓ ✓	C-01	1.0000	10.0000	200.0001	✓ ✓ ✓	YL
	~~A-02~~					B-05	1.00	9.99	200.00	✓ ✓ ✓	C-02	1.00000	10.0001	200.0000	✓ ✓ ✓	
	A-03	1.00	10.00	200.01	✓	B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	10.00	199.99	✓ ✓ ✓	C-					
	A-		4/22/03			B-					C-		4/22/03			
	A-					B-		4/22/03			C-					
4/23/03	A-01	not	in	use	✓	B-01	1.00	10.00	200.01	✓ ✓ ✓	C-01	1.0000	10.0002	200.0001	✓ ✓ ✓	YL
	~~A-02~~					B-05	1.00	9.99	200.00	✓ ✓ ✓	C-02	1.0001	10.0001	200.0002	✓ ✓ ✓	
	A-03	1.00	10.00	200.01	✓	B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	10.00	199.99	✓ ✓ ✓	C-					
	A-		4/23/03			B-			4/23/03		C-		4/23/03			
	A-					B-		4/23/03			C-					
4/24/03	A-01	not	in	use	✓	B-01	1.00	10.00	200.00	✓ ✓ ✓	C-01	1.0000	9.9999	200.0000	✓ ✓ ✓	YL
	~~A-02~~					B-05	1.00	10.01	200.01	✓ ✓ ✓	C-02	1.0000	10.0000	200.0002	✓ ✓ ✓	
	A-03	1.00	10.00	200.00		B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	9.99	199.99	✓ ✓ ✓	C-					
	A-		4/24/03			B-			4/24/03		C-		4/24/03			
	A-					B-		4/24/03			C-					

Notation: (C) – Cleanliness; (D) – Display; (AR) – Auto Rezeroing.

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
Tel: (909) 590-1828 Fax: (909) 590-1498

Chromium (VI) (7196) Worksheet

Batch # 03W2517 Matrix: W [Holding Time: 24 hours!!] Test Date: 4/23/03 Analyst:

Lot #: Reagent Water _____ Diphenylcazide solution _____ Test Time: 16:21 SOP: G-22

Calibration	STD Lot #	$C_{std} \times V_{std} / V_f = C_i$	A_i	$RF_i = A_i / C_i$	Calibration results	Note
STD-1	W-	× / = mg/L			Least Square [RF]=	Cal. Code:
STD-2	W-	× / = mg/L			Average $\overline{RF}$=	
STD-3	W-	× / = mg/L			C.C.=0.9997 (≥ 0.995)	
STD-4	W-	× / = mg/L			RSD= % (≤ 15%)	
STD-5	W-	× / = mg/L			Ref. page	
STD-6	W-	× / = mg/L			A=0.0004+0.836C	

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 $C' = A/\overline{RF}$	C (Sample) $C = f_1 f_2 C'$	Anomaly Note
CCV	Lot: W- 7853	Expected Conc.: × / = 0.25 mg/L			0.202	0.247 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T1115		/X_0 = 1	95.0/ =	0.000	mg/L	0.00 ppm	
LCS1	Bl. Lot: 11		/X_0 =	95.0/ =	0.188	mg/L	0.225 ppm	
Sample-1 EB	2843-2		/X_0 =	95.0/ =	0.000	mg/L	0.000 ppm	
MS on S-1	3		/X_0 =	95.0/ =	0.189	mg/L	0.226 ppm	
MSD on S-1	3		/X_0 =	95.0/ =	0.187	mg/L	0.224 ppm	
Sample 2 1	3		/X_0 =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 3 2	4		/X_0 =	95.0/ =	0.003	mg/L	0.003 ppm	
Sample 4 3	5		/X_0 =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 5 4	6		/X_0 =	95.0/ =	0.000	mg/L	0.000 ppm	
Sample 6 5	7		/X_0 =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 7 Dup.	1		/X_0 = ✓	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 8			/X_0 =	95.0/ =		mg/L	ppm	
Sample 9			/X_0 =	95.0/ =		mg/L	ppm	
Sample 10			/X_0 =	95.0/ =		mg/L	ppm	
Blank	Lot:		/X_0 =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: T1115		/X_0 = 1	95.0/ =	0.195	mg/L	0.233 ppm	
Sample 11			/X_0 =	95.0/ =		mg/L	ppm	
Sample 12			/X_0 =	95.0/ =		mg/L	ppm	
Sample 13			/X_0 =	95.0/ =		mg/L	ppm	
Sample 14			/X_0 =	95.0/ =		mg/L	ppm	
Sample 15			/X_0 =	95.0/ =		mg/L	ppm	
Sample 16			/X_0 =	95.0/ =		mg/L	ppm	
Sample 17			/X_0 = 4/23/03	95.0/ =		mg/L	ppm	
Sample 18			/X_0 =	95.0/ =		mg/L	ppm	
Sample 19			/X_0 =	95.0/ =		mg/L	ppm	
Sample 20			/X_0 =	95.0/ =		mg/L	ppm	
MTX Dup. closing 0.15 std ok			/X_0 =	95.0/ =	0.213	0.255 mg/L	ppm	

Type	STD Lot #	$C_{STD}(\mu g/mL) \times V_{STD}(mL) / X(g \text{ or } mL) = T$	Spike Rec.	Ctl Limit (W/S)
LCS	W- 7757	× / = 0.25 ppm	%	80-120 %/80-120 %
LCSD	W-	× / = ppm	%	.. ..
MS	W- 7853	× / =	%	80-120 %/80-120 %
MSD	W-	× / = ✓ ppm	%	.. ..

PQL/MDL (in ppm)	
PQL(w)	0.01
PQL(s)	0.05
MDL(w)	0.005
MDL(s)	0.025

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

Chromium (VI) (7196) Worksheet

Batch # 03W1295 Matrix: W [Holding Time: 24 hours!!] Test Date: 1/29/03 Analyst: BN

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	× / =0.000 mg/L	0.000		Least Square [RF]=	Cal. Code:
STD-2	W-	× / =0.025 mg/L	0.006		Average $\bar{RF}$=	A=0.000+0.836C
STD-3	W-	× / =0.050 mg/L	0.041		C.C.=0.9977 (≥ 0.995)	
STD-4	W-	× / =0.125 mg/L	0.109		RSD= % (≤ 15%)	
STD-5	W-	× / =0.250 mg/L	0.214		Ref. page	
STD-6	W- √	× / =0.50 mg/L	0.415		A=0.003+Bx1/29/03	

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 $C'=A/\bar{RF}$	C (Sample) $C=f_1 f_2 C'$	Anomaly Note
CCV	Lot: W-7076.	Expected Conc.:	×	/ =0.25 mg/L	0.26	0.258 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T1115		/X_0 = 1	95.0/ =	0.000	mg/L	0.00 ppm	
LCS1	Bl. Lot: "		/X_0 =	95.0/ =	0.209	mg/L	0.244 ppm	
Sample-1	1369-1		/X_0 =	95.0/ =	0.000	mg/L	0.00 ppm	
MS on S-1	6		/X_0 =	95.0/ =	0.223	mg/L	0.266 ppm	
MSD on S-1	6		/X_0 =	95.0/ =	0.230	mg/L	0.275 ppm	
Sample 2	2		/X_0 =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 3	3		/X_0 =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 4	4		/X_0 =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 5	5		/X_0 =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 6	6		/X_0 = √	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 7	-		/X_0 =	95.0/ =		mg/L	ppm	
Sample 8			/X_0 =	95.0/ =		mg/L	ppm	
Sample 9			/X_0 =	95.0/ =		mg/L	ppm	
Sample 10			/X_0 =	95.0/ =		mg/L	ppm	
Blank	Lot:		/X_0 =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: T1115		/X_0 = 1	95.0/ =	0.210	mg/L	0.251 ppm	
Sample 11			/X_0 =	95.0/ =		mg/L	ppm	
Sample 12			/X_0 =	95.0/ =		mg/L	ppm	
Sample 13			/X_0 =	95.0/ =		mg/L	ppm	
Sample 14			/X_0 =	95.0/ =		mg/L	ppm	
Sample 15			/X_0 =	95.0/ =		mg/L	ppm	
Sample 16			/X_0 =	95.0/ =		mg/L	ppm	
Sample 17			/X_0 = 1/2	95.0/ 1/29/03 =		mg/L	ppm	
Sample 18			/X_0 =	95.0/ =		mg/L	ppm	
Sample 19			/X_0 =	95.0/ =		mg/L	ppm	
Sample 20			/X_0 =	95.0/ =		mg/L	ppm	
MTX Dup.	closing 0.25mg/L		/X_0 =	95.0/ =	0.204	mg/L	0.249 ppm	

Type	STD Lot #	$C_{STD}(\mu g/mL) \times V_{STD}(mL) / X(g \text{ or } mL) = T$	Spike Rec.	Ctl Limit (W/S)
MS	W- 7076	× / =0.25 ppm	%	80-120 %/80-120 %
MSD	W- √	× / = ppm	%	.. ..
LCS	W- 7191	× / = ppm	%	80-120 %/80-120 %
LCSD	W- √	× / = ppm	%	.. ..

PQL/MDL (in ppm)	
PQL(w)	0.01
PQL(s)	0.05
MDL(w)	0.005
MDL(s)	0.025

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 DL

Date 3/21/03

Instrument J

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

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

Comment:
LCS/LCSD LOT # W7768
MS/MSD LOT # W7767
ELUENT LOT # W7868
ANALYTICAL METHOD 9056/E300 MATRIX W

Analyst DL
Date 4/20/03
Instrument J

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

chedule File: C:\PeakNet\schedule\03w2531k.sch

ine	Sample	Sample Type	Level	Method	Data File	Volume	Dilution	Weight
	##03w2531kw ipc 25ppb w7759	Sample		e314-011.met	w2531k ipc 25ppb	1	1	1
!	ccv 50ppb w7827e	Sample		e314-011.met	w2531k q01	1	1	1
'	ccb	Sample		e314-011.met	w2531k ccb01	1	1	1
+	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 Ic-K