Level C Data Package Deliverables

Wet Chemistry

Applied P & Ch Laboratory

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Wet Analysis Results for Method SM2320B

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method SM2320B
Project ID: JPL GW Mon-2Q03 Service ID: 33205 Collected by:

Component Name: Bicarbonate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	155	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	<2	U
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	133	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	120	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	210	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	159	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/20/03	03W2952	mg/L	2	132	
03W2952-MB-01	03W2952-MB-01	Water	05/20/03	05/20/03	05/20/03	03W2952	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 GW Mon-2Q03 Service ID: 33205 Collected by:

Component Name: Carbonate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/20/03	03W2952	mg-$CaCO_3$/L	2	<2	U
03W2952-MB-01	03W2952-MB-01	Water	05/20/03	05/20/03	05/20/03	03W2952	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 GW Mon-2Q03 Service ID: 33205 Collected by:

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

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.93	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.25	
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.14	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.75	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.78	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	7.94	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	8.76	
03W2852-MB-01	03W2852-MB-01	Water	05/13/03	05/13/03	05/13/03	03W2852	pH unit	0.01	6.88	

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

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Wet Analysis Results for Method 160.1

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 160.1
Project ID: JPL GW Mon-2Q03 Service ID: 33205 Collected by:

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
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	227	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	8.0	B
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	263	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	277	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	325	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	229	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/16/03	03W2928	mg/L	10	188	
03W2928-MB-01	03W2928-MB-01	Water	05/16/03	05/16/03	05/16/03	03W2928	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.

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Wet Analysis Results for Method 7196

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 7196
Project ID: JPL GW Mon-2Q03 Service ID: 33205 Collected by:

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
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/13/03	03W2850	mg/L	0.01	<0.01	U
03W2850-MB-01	03W2850-MB-01	Water	05/13/03	05/13/03	05/13/03	03W2850	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.

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Wet Analysis Results for Method 314.0

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 314.0
Project ID: JPL GW Mon-2Q03 Service ID: 33205 Collected by:

Component Name: Perchlorate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	23.8	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	<4	U
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	<4	U
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	<4	U
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	1.3	B
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	23.9	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/14/03	03W2866	µg/L	4	<4	U
03W2866-MB-01	03W2866-MB-01	Water	05/14/03	05/14/03	05/14/03	03W2866	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.

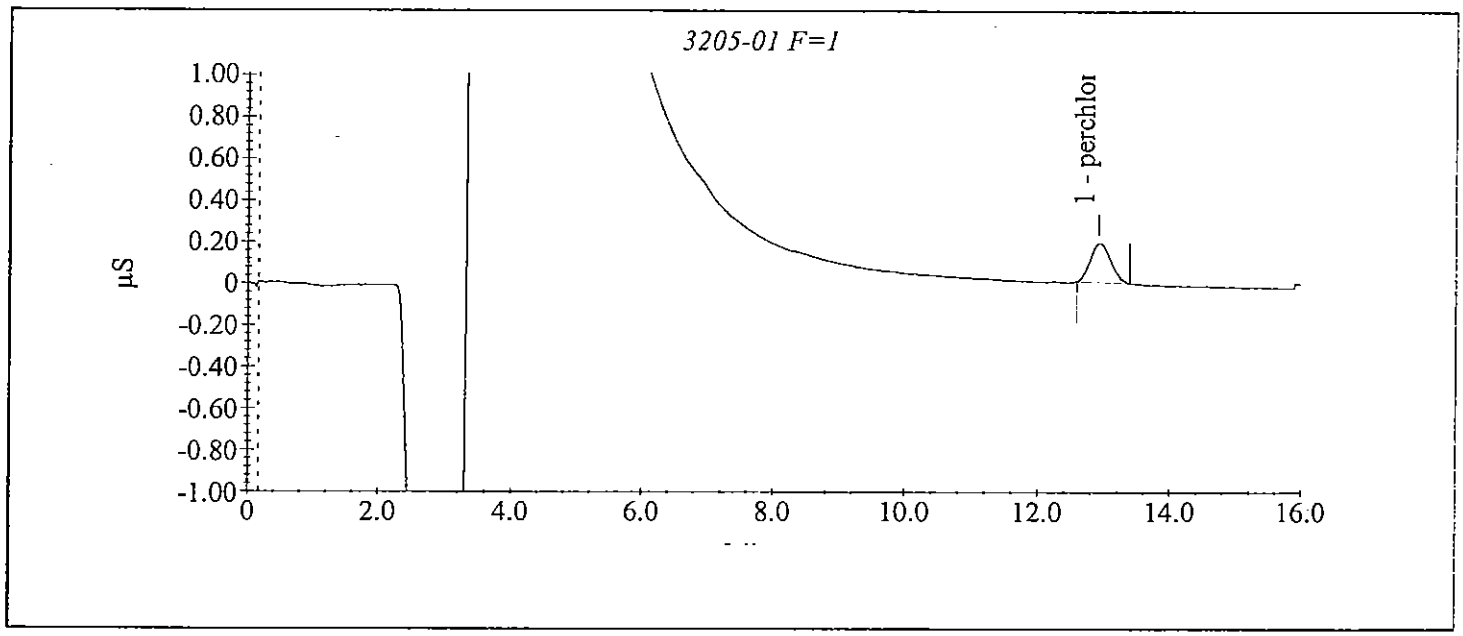
APCL Perchlorate Analysis Report

Sample Name : 3205-01 F=1
Data File Name : C:\DATA\03W2866K\3205-01_020.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 4:02:30 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	12.92	23.82	40420.50	1869.61



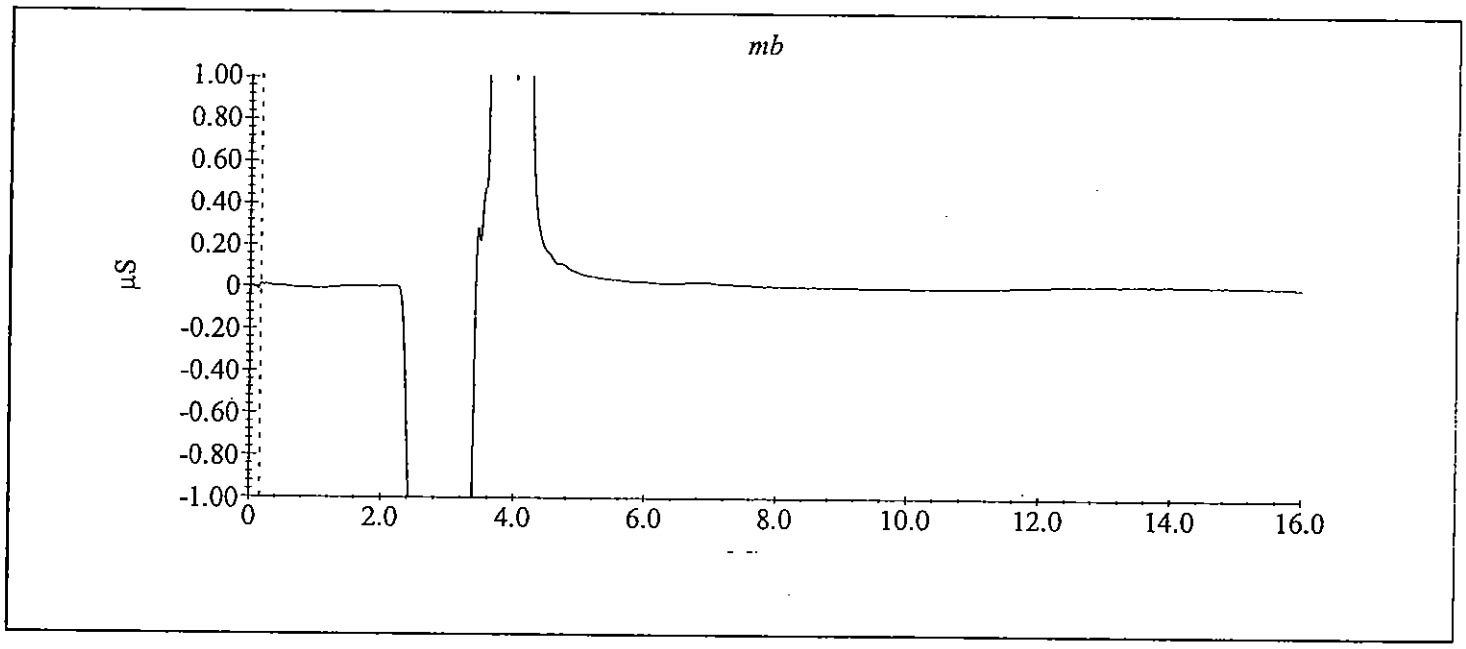
APCL Perchlorate Analysis Report

Sample Name : mb
Data File Name : C:\DATA\03W2866K\W2866K K01_007.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 12:01:09 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



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Wet Analysis Results for Method 300.0

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 300.0
Project ID: JPL GW Mon-2Q03 Service ID: 33205 Collected by:

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
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	10.8	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.25	0.37	
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	11.3	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	11.2	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	18.4	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	10.6	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.4	9.8	
03W2859-MB-01	03W2859-MB-01	Water	05/14/03	05/14/03	05/14/03	03W2859	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 GW Mon-2Q03 Service ID: 33205 Collected by:

Component Name: Nitrate N-NO_3^- as N
CAS No: 14797-55-8

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	1.3	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.05	0.16	
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	1.3	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	0.86	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	1.1	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	1.3	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.08	0.13	
03W2859-MB-01	03W2859-MB-01	Water	05/14/03	05/14/03	05/14/03	03W2859	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 GW Mon-2Q03 Service ID: 33205 Collected by:

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
03-3205-1	DUPE-7-2Q03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	26.0	
03-3205-2	EB-13-5/13/03	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	0.63	0.84	
03-3205-3	MW-18-1	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	42.9	
03-3205-4	MW-18-2	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	30.9	
03-3205-5	MW-18-3	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	40.8	
03-3205-6	MW-18-4	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	25.3	
03-3205-7	MW-18-5	Water	05/13/03	05/13/03	05/14/03	03W2859	mg/L	1	4.8	
03W2859-MB-01	03W2859-MB-01	Water	05/14/03	05/14/03	05/14/03	03W2859	mg/L	0.5	< 0.5	U

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

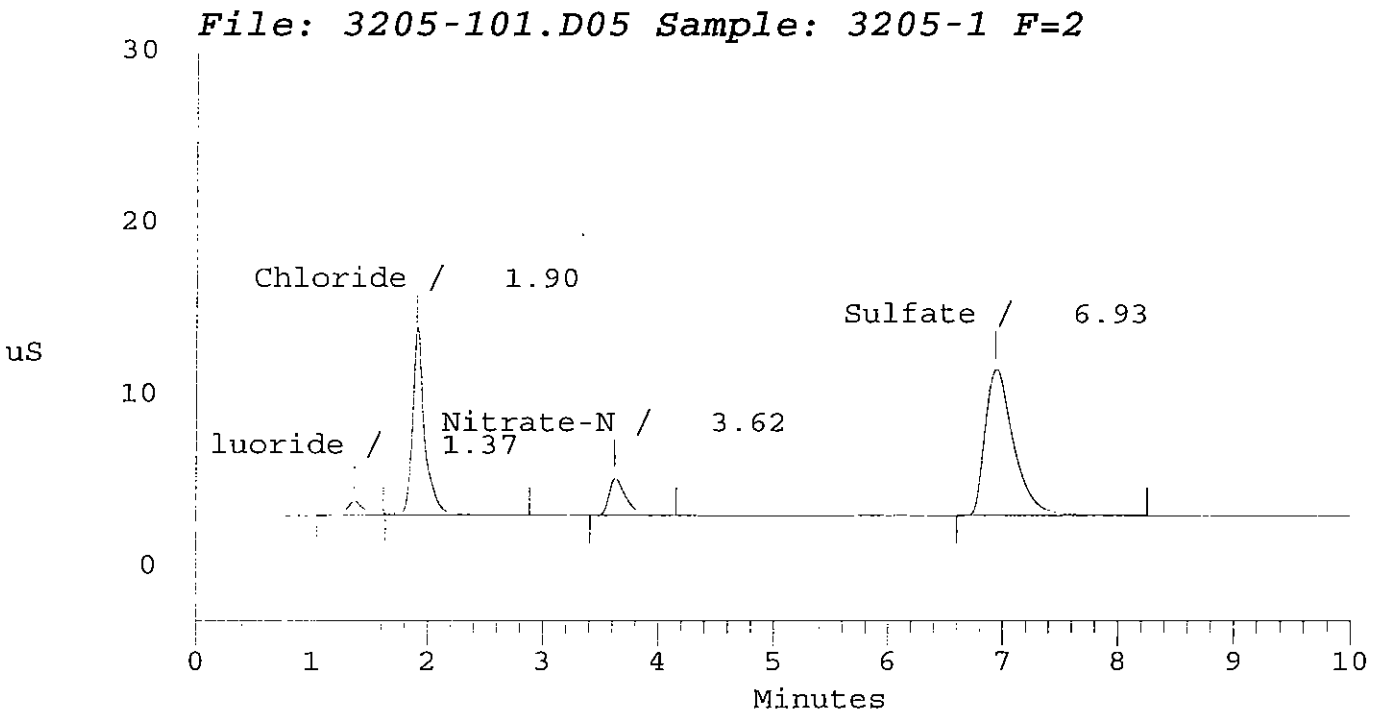
Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

```
Sample Name: 3205-1 F=2                          Date: 05/14/2003 10:34:38
Data File  : C:\DX\DATA\03W2859\3205-101.D05
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 5                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	2	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	1.37	Fluoride	0.856	28182	311678	2	0.00
2	1.90	Chloride	10.796	350850	2698391	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	3.62	Nitrate-N	1.265	71027	732466	1	0.00
0	0.00	Phosphate-P	0.000	0	0	0	0.00
4	6.93	Sulfate	26.029	282346	4928811	1	0.00
		Totals	38.946	732404	8671347		



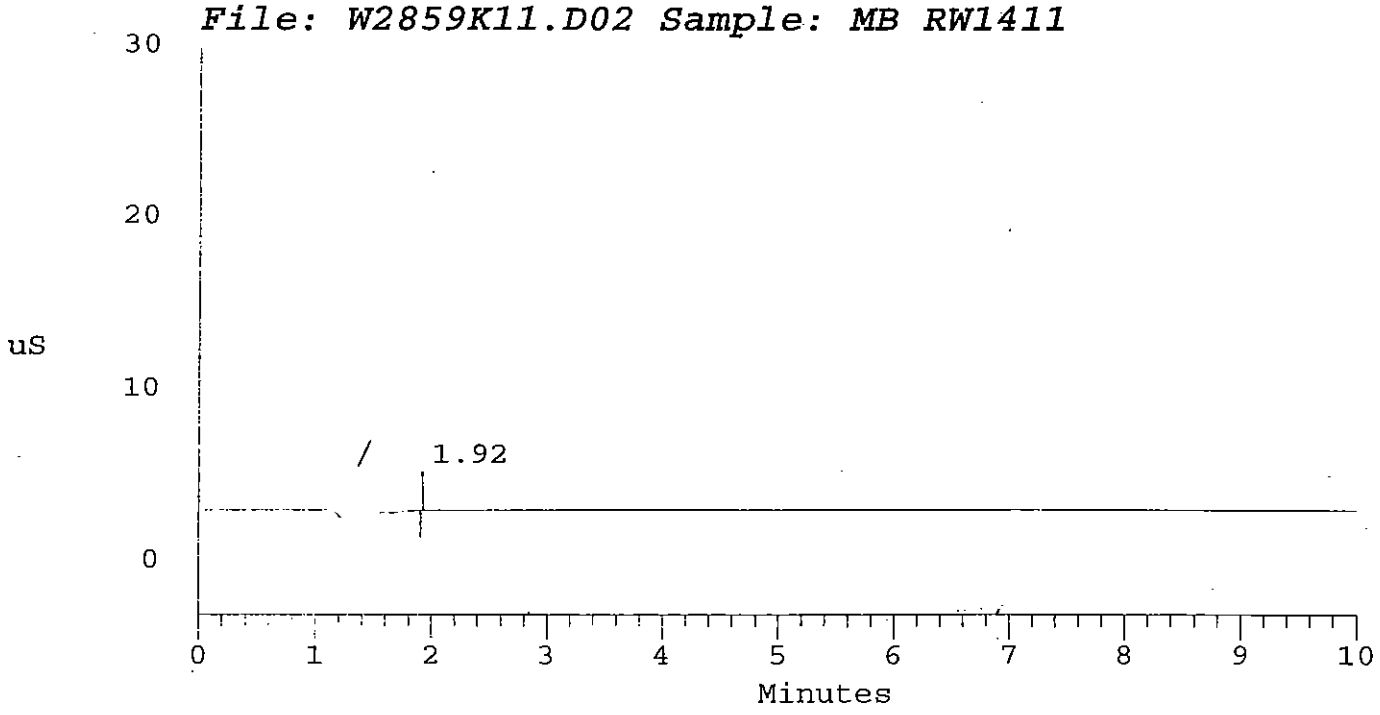
Data Reprocessed On 05/14/2003 09:43:25

Sample Name:	MB RW1411	Date:	05/14/2003 09:30:57
Data File :	C:\DX\DATA\03W2859\W2859K11.D02		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address:	1 System: 1 Inject#: 2	Detector:	COND
Analyst :	David	Column:	Dionex AS4A-SC

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

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

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



after
5/19/03 DL

reason: 3.V 351

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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2859		
LCS Filename:	-	Date Analyzed:	051403	Time Analyzed:	09:57
LCSD Filename:	-	Date Analyzed:	051403	Time Analyzed:	10:10

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
CHLORIDE CL^-	mg/L	4.0	0	4.11	103	80-120
NITRATE N-NO_3^- AS N	mg/L	1.5	0	1.59	106	80-120
SULFATE SO_4^{--}	mg/L	15	0	15.5	103	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	4.08	102	1	20	80-120
NITRATE N-NO_3^- AS N	mg/L	1.5	1.57	105	1	20	80-120
SULFATE SO_4^{--}	mg/L	15	15.4	103	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: _____

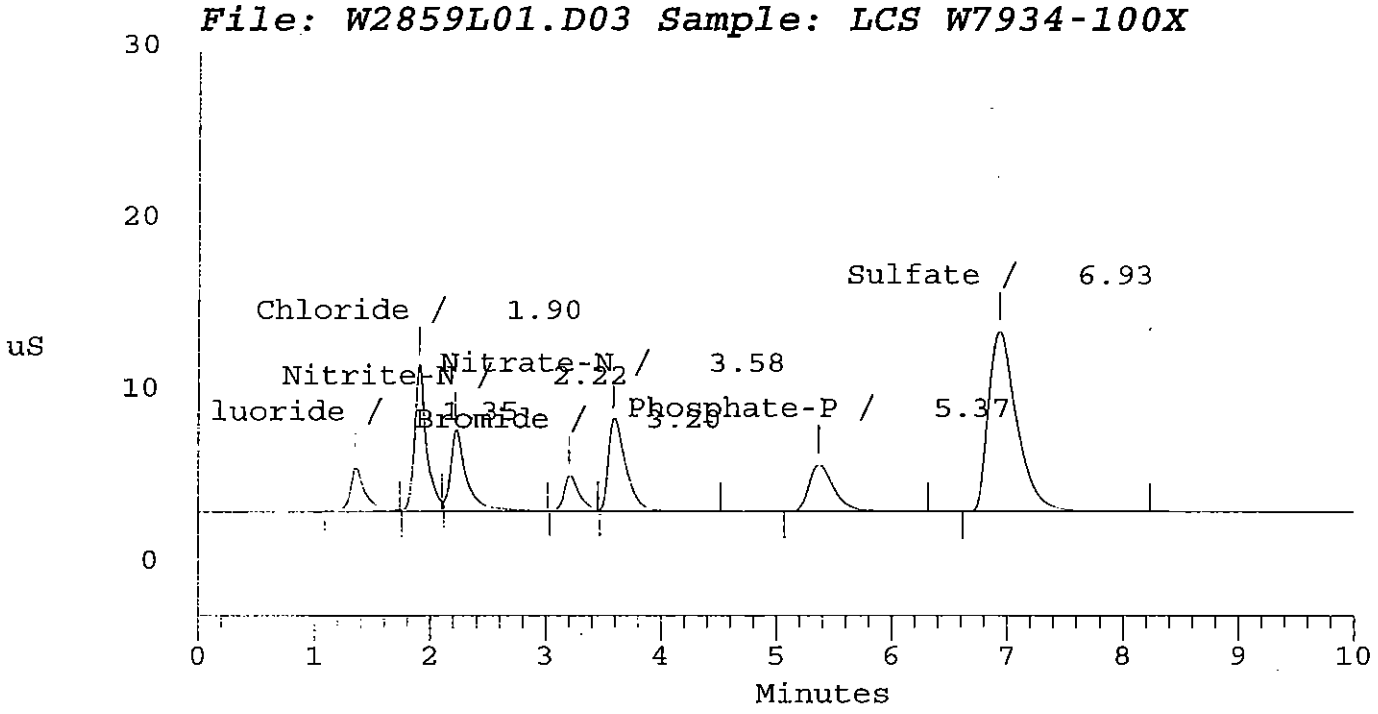
_____

```
Sample Name: LCS W7934-100X                    Date: 05/14/2003 09:57:25
Data File  : C:\DX\DATA\03W2859\W2859L01.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	1.35	Fluoride	1.076	83597	782362	2	0.00
2	1.90	Chloride	4.111	280763	2039659	2	0.00
3	2.22	Nitrite-N	1.519	153422	1531655	2	-1.48
4	3.20	Bromide	3.192	68526	650921	2	0.83
5	3.58	Nitrate-N	1.585	177548	1914628	2	0.00
6	5.37	Phosphate-P	2.933	89922	1340985	1	0.00
7	6.93	Sulfate	15.541	348488	5926439	1	0.00
		Totals	29.957	1202267	14186648		

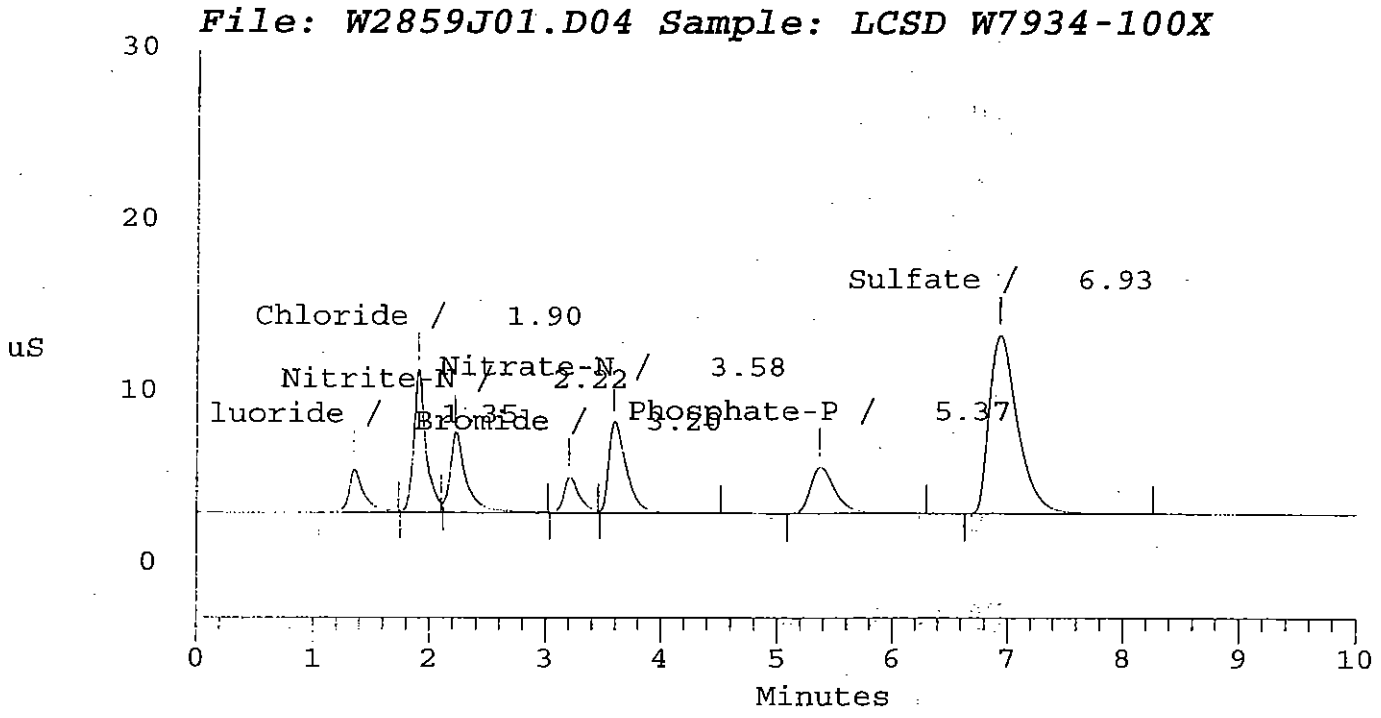


```
Sample Name: LCSD W7934-100X                    Date: 05/14/2003 10:10:08
Data File  : C:\DX\DATA\03W2859\W2859J01.D04
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 4                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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	1.35	Fluoride	1.058	81792	769756	2	0.00
2	1.90	Chloride	4.080	272656	2023650	2	0.00
3	2.22	Nitrite-N	1.516	150663	1528802	2	-1.48
4	3.20	Bromide	3.207	68320	654077	2	0.83
5	3.58	Nitrate-N	1.570	174978	1896098	2	0.00
6	5.37	Phosphate-P	2.939	88722	1343927	1	0.00
7	6.93	Sulfate	15.447	345241	5889306	1	0.00
		Totals	29.818	1182372	14105617		



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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2859		
MS Filename:	-	Date Analyzed:	051403	Time Analyzed:	16:32
MSD Filename:	-	Date Analyzed:	051403	Time Analyzed:	16:45
MS Sample No:	**3-MW-5-0503**	Sample Lab ID:	03-3215-2		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
CHLORIDE CL^-	mg/L	32.0	41.8	73.1	98	75-125
NITRATE N-NO_3^- AS N	mg/L	12.0	0.22	12.3	101	75-125
SULFATE SO_4^{--}	mg/L	120	15.9	137	101	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	32.0	72.6	96	2	20	75-125
NITRATE N-NO_3^- AS N	mg/L	12.0	12.0	98	3	20	75-125
SULFATE SO_4^{--}	mg/L	120	136	100	1	25	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

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

Comments: _____

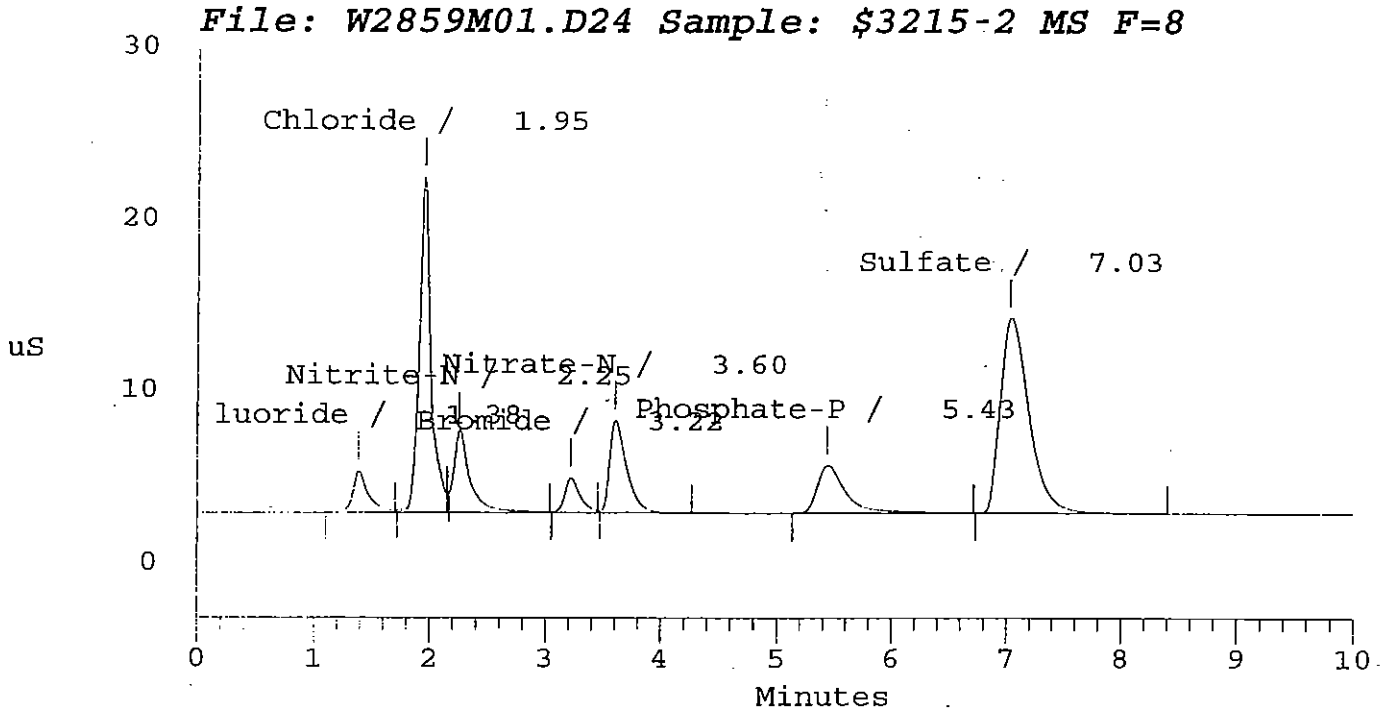
_____

```
Sample Name: $3215-2 MS F=8                    Date: 05/14/2003 16:32:29
Data File  : C:\DX\DATA\03W2859\W2859M01.D24
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 24                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	8	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	1.38	Fluoride	8.354	79680	759498	2	0.00
2	1.95	Chloride	73.045	649781	4609865	2	0.00
3	2.25	Nitrite-N	12.397	155683	1562967	2	-2.56
4	3.22	Bromide	24.518	67089	624654	2	0.89
5	3.60	Nitrate-N	12.332	177197	1860930	2	0.00
6	5.43	Phosphate-P	28.717	91156	1650443	2	0.00
7	7.03	Sulfate	136.924	376804	6548093	2	0.00
		Totals	296.287	1597390	17616451		

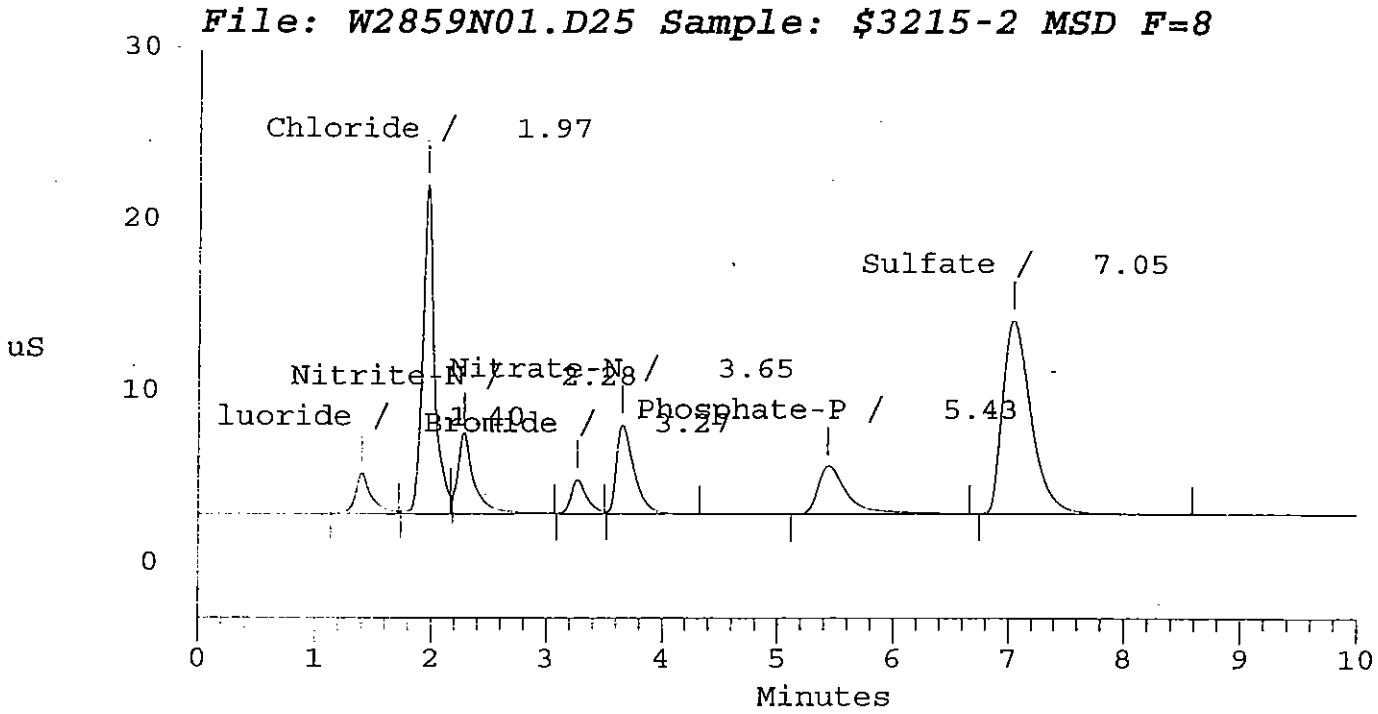


```
Sample Name: $3215-2 MSD F=8                    Date: 05/14/2003 16:45:10
Data File  : C:\DX\DATA\03W2859\W2859N01.D25
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 25                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

Calibration	Volume	Dilution	Points	Rate	Start	Stop	Area Reject
External	1	8	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	1.40	Fluoride	8.397	79599	763385	2	0.00
2	1.97	Chloride	72.594	638216	4580986	2	0.00
3	2.28	Nitrite-N	12.389	157307	1561986	2	-1.96
4	3.27	Bromide	24.586	66709	626406	2	1.05
5	3.65	Nitrate-N	12.045	171899	1816298	2	0.00
6	5.43	Phosphate-P	29.427	93025	1692266	2	0.00
7	7.05	Sulfate	136.386	375086	6521567	2	0.00
		Totals	295.823	1581841	17562895		



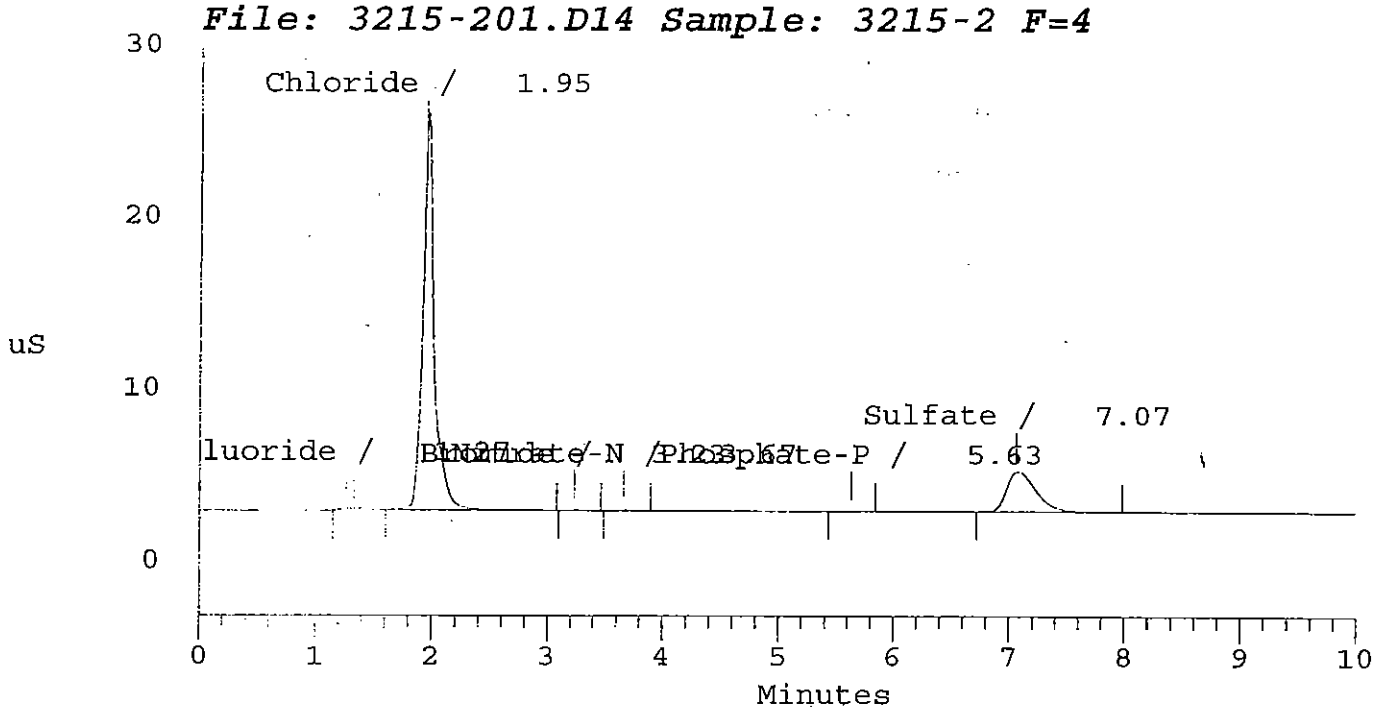
Data Reprocessed On 05/15/2003 12:14:16

Sample Name: 3215-2 F=4 Date: 05/14/2003 13:25:32
Data File : C:\DX\DATA\03W2859\3215-201.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	4	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	1.27	Fluoride	0.064	2136	12358	1	0.00
2	1.95	Chloride	41.779	718264	5282714	2	0.00
0	0.00	Nitrite-N	0.000	0	0	0	0.00
3	3.23	Bromide	0.380	976	10145	2	-0.43
4	3.67	Nitrate-N	0.224	1783	16662	1	0.00
5	5.63	Phosphate-P	0.423	644	8929	1	0.00
6	7.07	Sulfate	15.948	77447	1364110	1	0.00
		Totals	58.817	801250	6694917		



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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2866		
LCS Filename:	-	Date Analyzed:	051403	Time Analyzed:	11:05
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	24.4	98	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: _____

_____

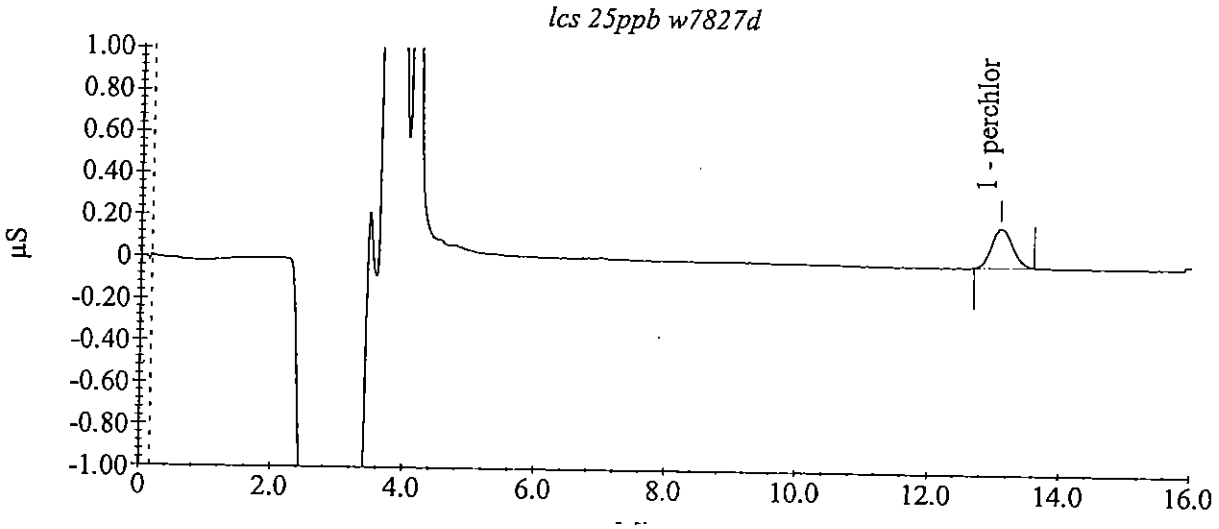
APCL Perchlorate Analysis Report

Sample Name : lcs 25ppb w7827d
Data File Name : C:\DATA\03W2866K\W2866K L01_004.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 11:05:03 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	13.08	24.44	41481.15	1855.67



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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2866		
MS Filename:	-	Date Analyzed:	051403	Time Analyzed:	15:25
MSD Filename:	-	Date Analyzed:	051403	Time Analyzed:	15:44
MS Sample No:	**MW-22-1**	Sample Lab ID:	03-3130-2		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
PERCHLORATE	µg/L	50	3.2	57.3	108	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	54.1	102	6	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: _____

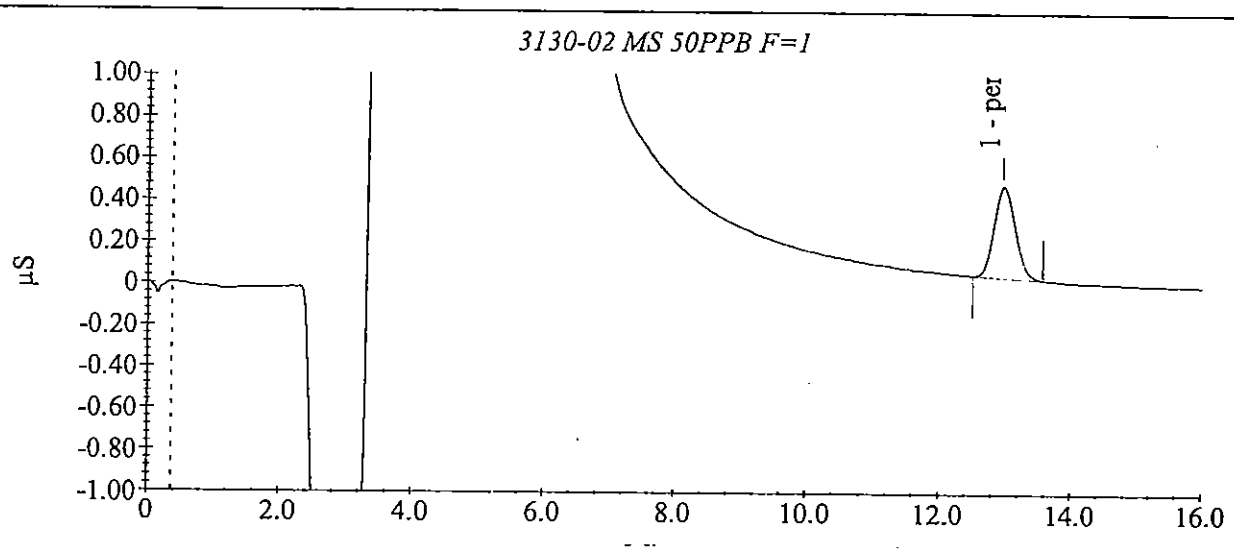
APCL Perchlorate Analysis Report

Sample Name : 3130-02 MS 50PPB F=1
Data File Name : C:\DATA\03W2866K\W2866K M01_018.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 3:25:30 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	12.95	57.34	97311.35	4341.27



Rec 108.2%

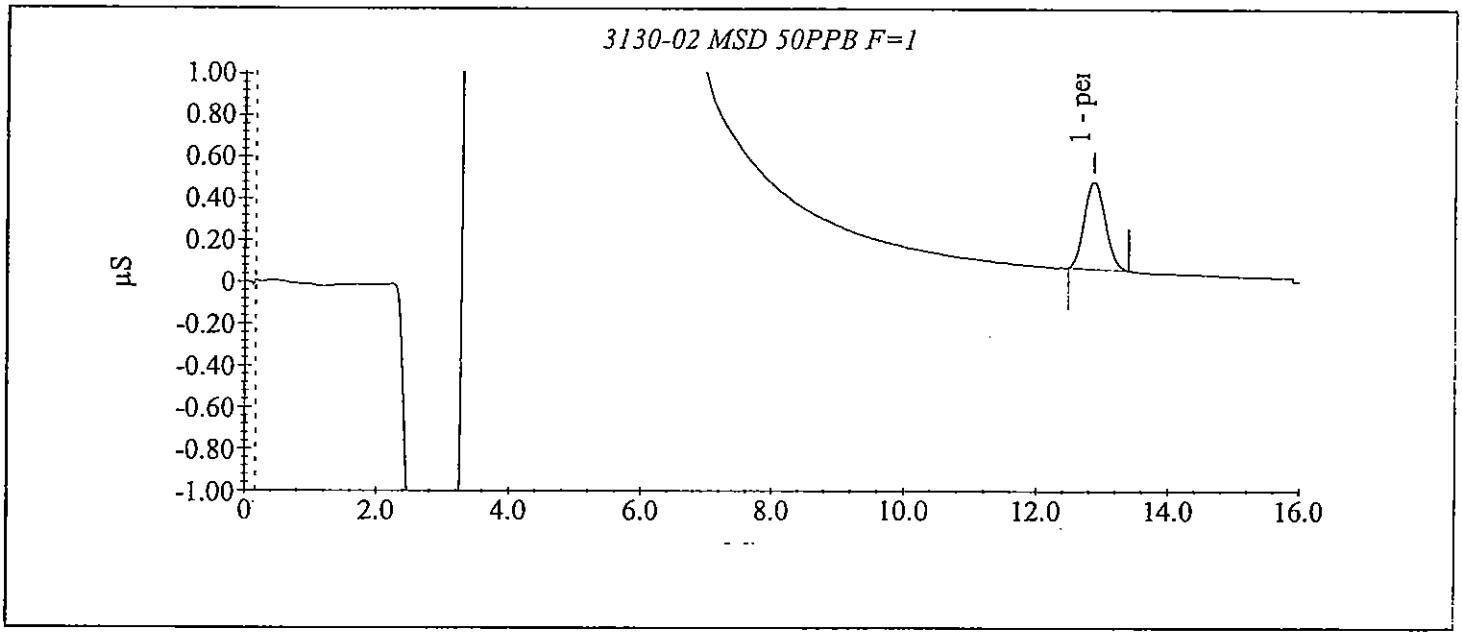
APCL Perchlorate Analysis Report

Sample Name : 3130-02 MSD 50PPB F=1
Data File Name : C:\DATA\03W2866K\W2866K N01_019.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 3:44:00 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
1	perchlorate	12.87	54.09	91796.15	4159.03



Rec 101.7%

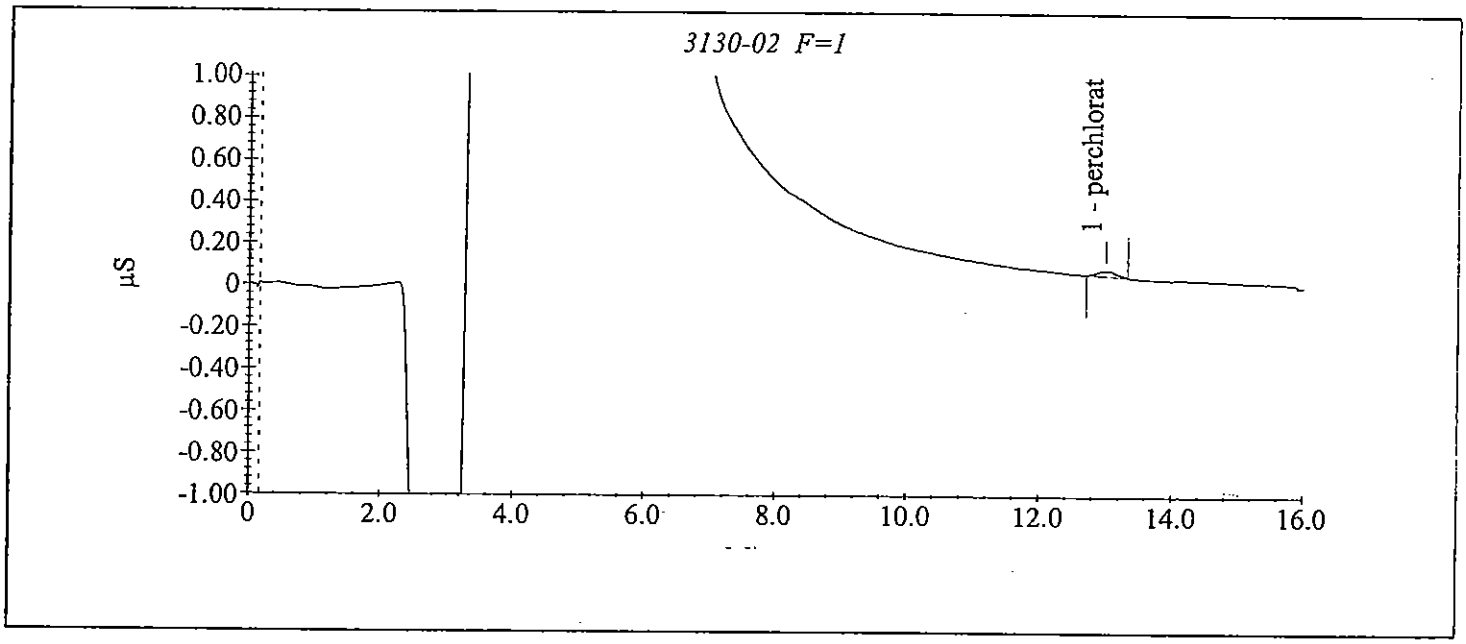
APCL Perchlorate Analysis Report

Sample Name : 3130-02 F=1
Data File Name : C:\DATA\03W2866K\3130-02_011.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 1:15:45 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	13.00	3.21	5450.00	280.42



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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2928		
LCS Filename:	-	Date Analyzed:	051603	Time Analyzed:	11:47
LCSD Filename:	-	Date Analyzed:	051603	Time Analyzed:	11:47

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	0	380	95	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	414	104	9	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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2928		
MS Filename:	-	Date Analyzed:	051603	Time Analyzed:	11:47
MSD Filename:	-	Date Analyzed:	051603	Time Analyzed:	11:47
MS Sample No:	**12**	Sample Lab ID:	03-3252-2		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
SOLIDS, TOTAL DISSOLVED (TDS)	mg/L	400	211	645	109	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	639	107	2	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:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2850		
LCS Filename:	-	Date Analyzed:	051303	Time Analyzed:	16:00
LCSD Filename:	-	Date Analyzed:	051303	Time Analyzed:	16:00

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.263	105	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	0.258	103	2	19	80-115
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

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

Comments: _____

_____

FORM-3

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 7196

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	33205
Project ID:	JPL GW Mon-2Q03	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W2850		
MS Filename:	-	Date Analyzed:	051303	Time Analyzed:	16:00
MSD Filename:	-	Date Analyzed:	051303	Time Analyzed:	16:00
MS Sample No:	**MW-18-1**	Sample Lab ID:	03-3205-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.225	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	0.221	88	2	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: 03-3205

Analysis	Batch ID	Analysis Date	Sample Name	Unit	Result	Duplicate Result	RPD %	RPD Control limit
pH	03W2852	5/13/03	DUPE-7-2Q03	pH unit	7.93	7.90	0	20
Bicarbonate	03W2952	5/20/03	03-3234-2	mg/L	105	105	0	20
Carbonate	03W2952	5/20/03	03-3234-2	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

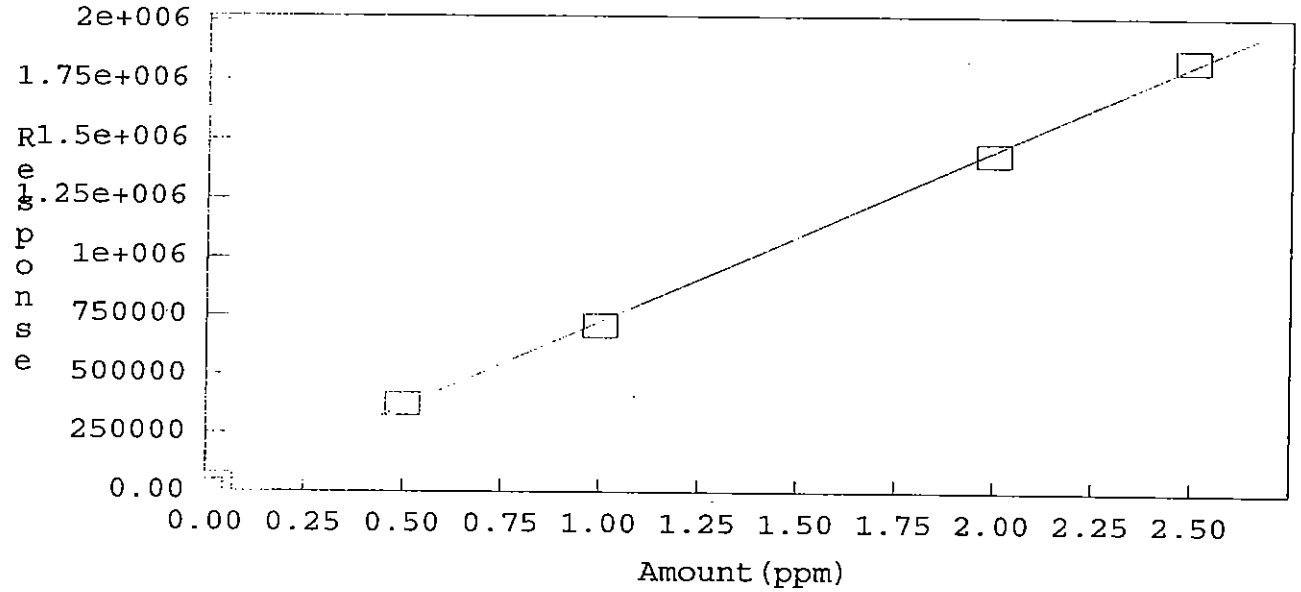
Level	Amount	Area	Height
1	3.76000E-001	129999	6524
2	7.50000E+000	2598757	138579
3	1.50000E+001	5330209	287851
4	3.00000E+001	11507107	615917
5	3.75000E+001	14859049	776426
6	0.00000E+000	0	0

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

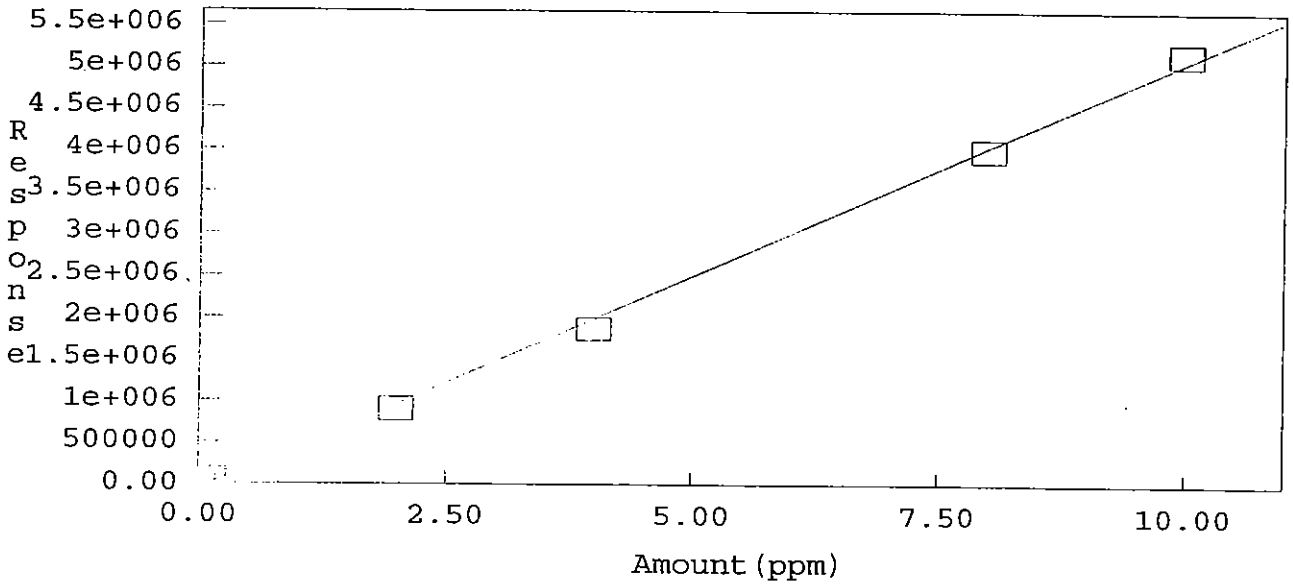
Method: E300-063.MET - Last Updated: 17:42 on Fri, 21 Mar 2003

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



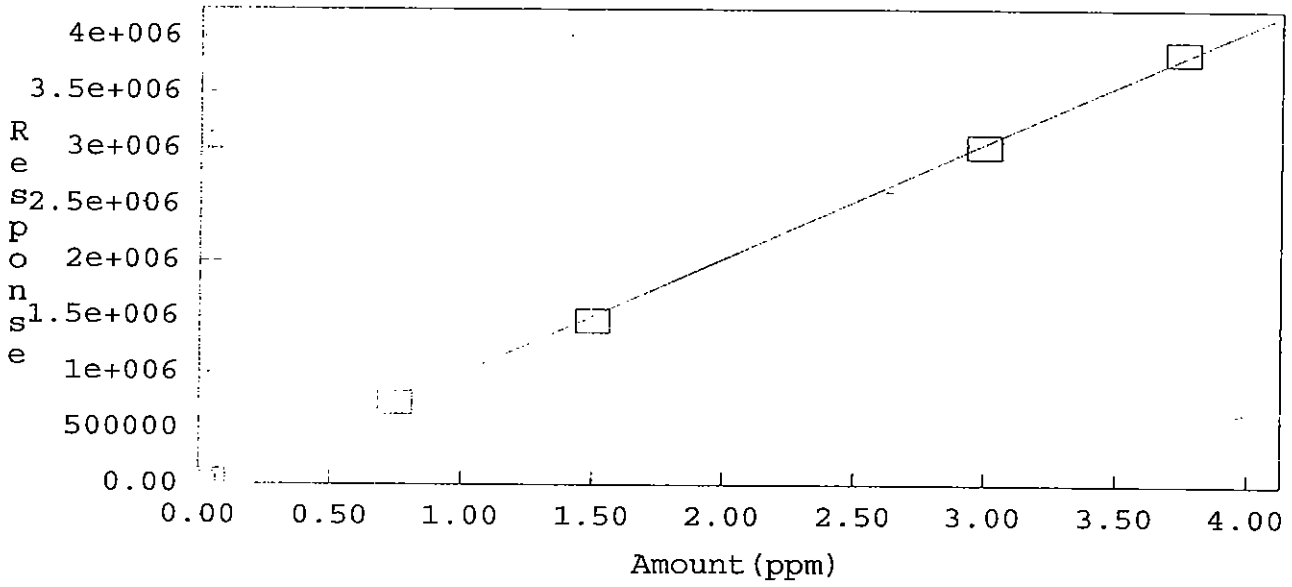
Method: C:\DX\METHOD\E300-063.MET

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



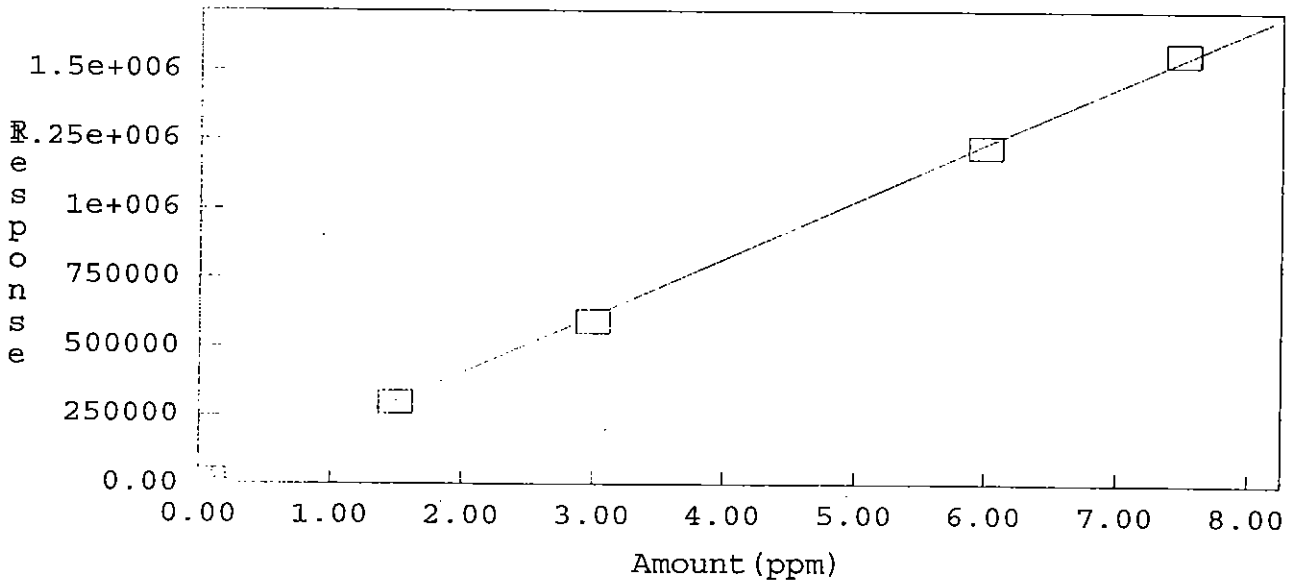
Method: C:\DX\METHOD\E300-063.MET

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



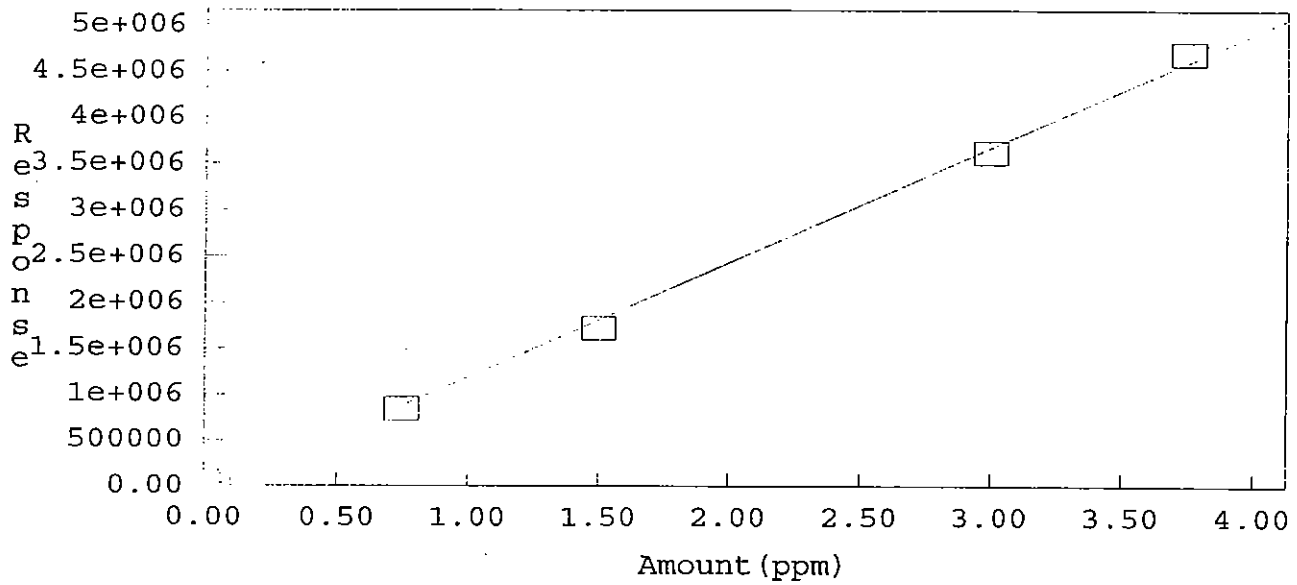
Method: C:\DX\METHOD\E300-063.MET

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



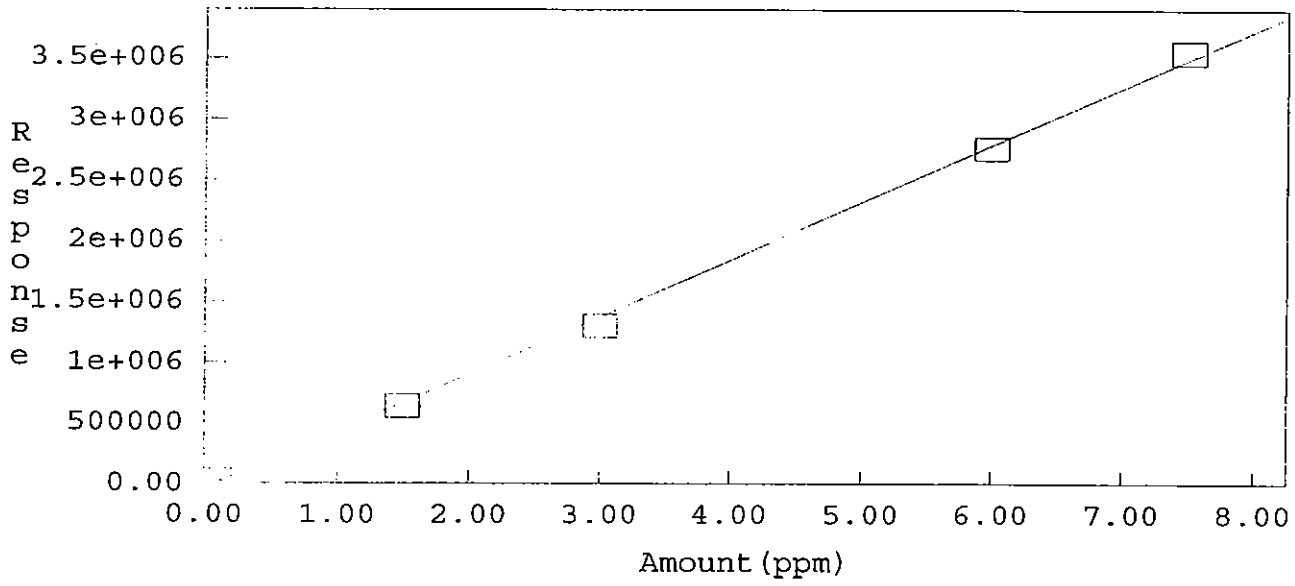
Method: C:\DX\METHOD\E300-063.MET

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



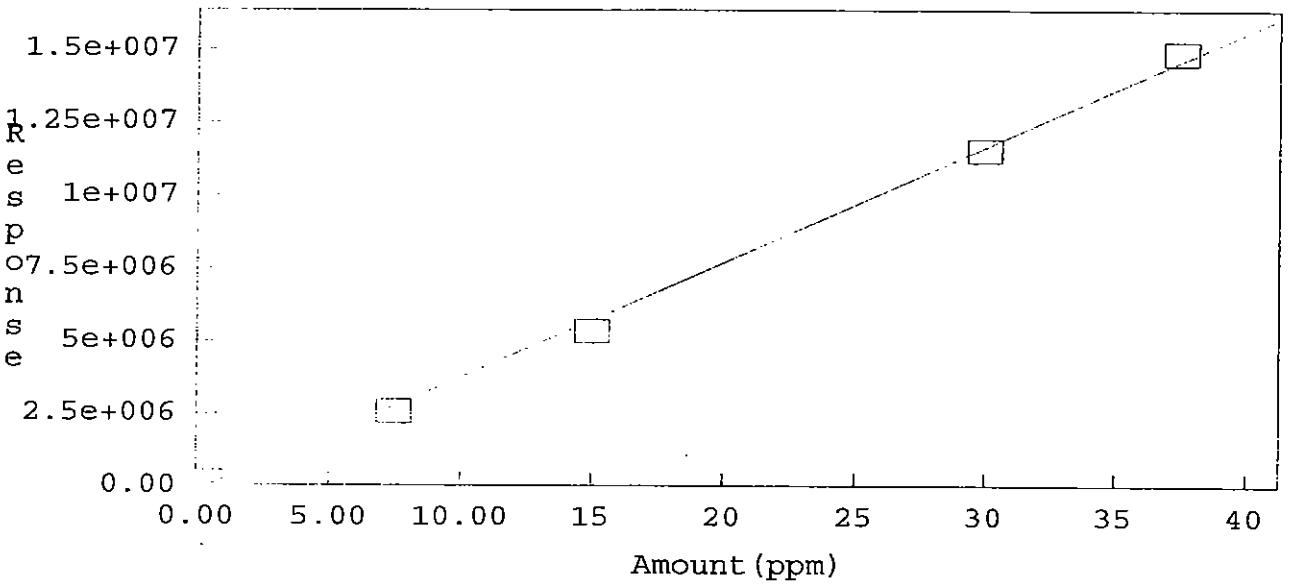
Method: C:\DX\METHOD\E300-063.MET

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

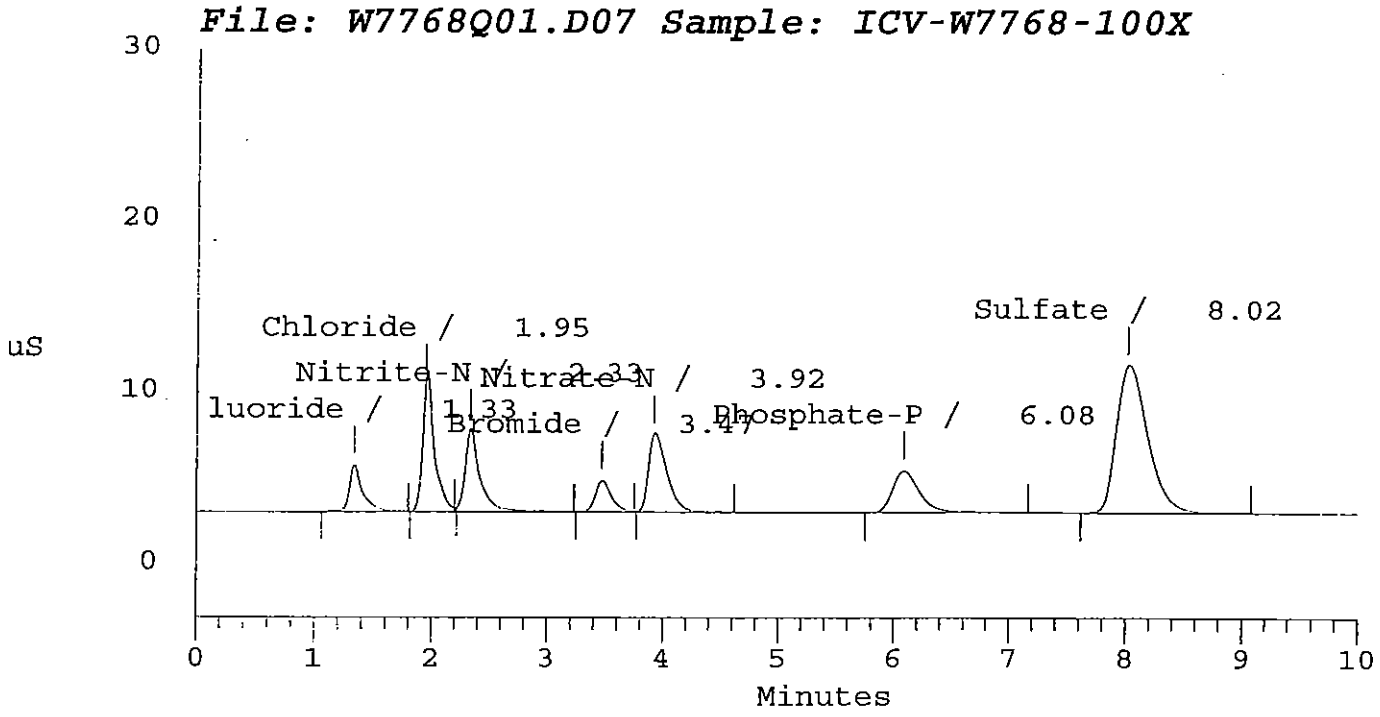


Sample Name: ICV-W7768-100X Date: 03/21/2003 17:56:33
Data File : C:\DX\DATA\e300-063\W7768Q01.D07
Method : C:\DX\METHOD\E300-063.MET
ACI Address: 1 System: 1 Inject#: 7 Detector:COND
Analyst : David Column: Dionex AS4A-SC

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		

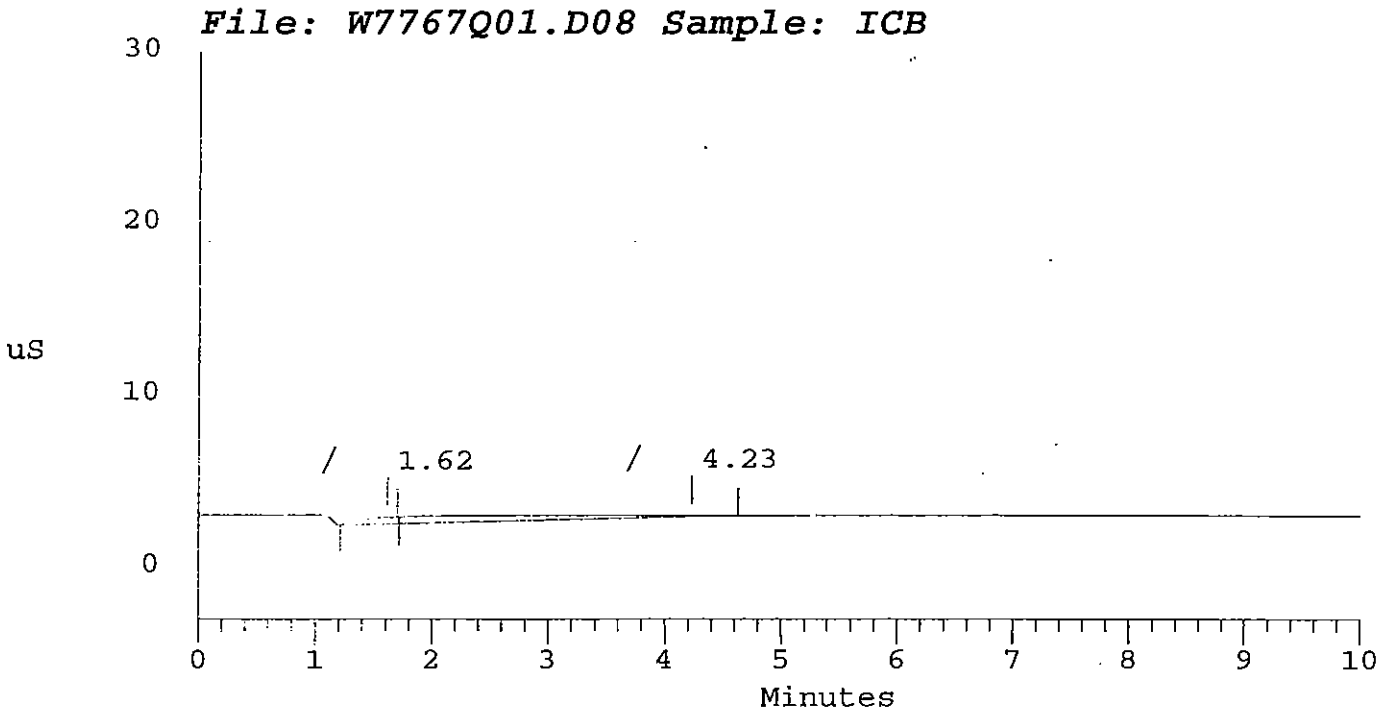


```
Sample Name: ICB                                  Date: 03/21/2003 18:21:00
Data File  : C:\DX\DATA\E300-063\W7767Q01.D08
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 8                        Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

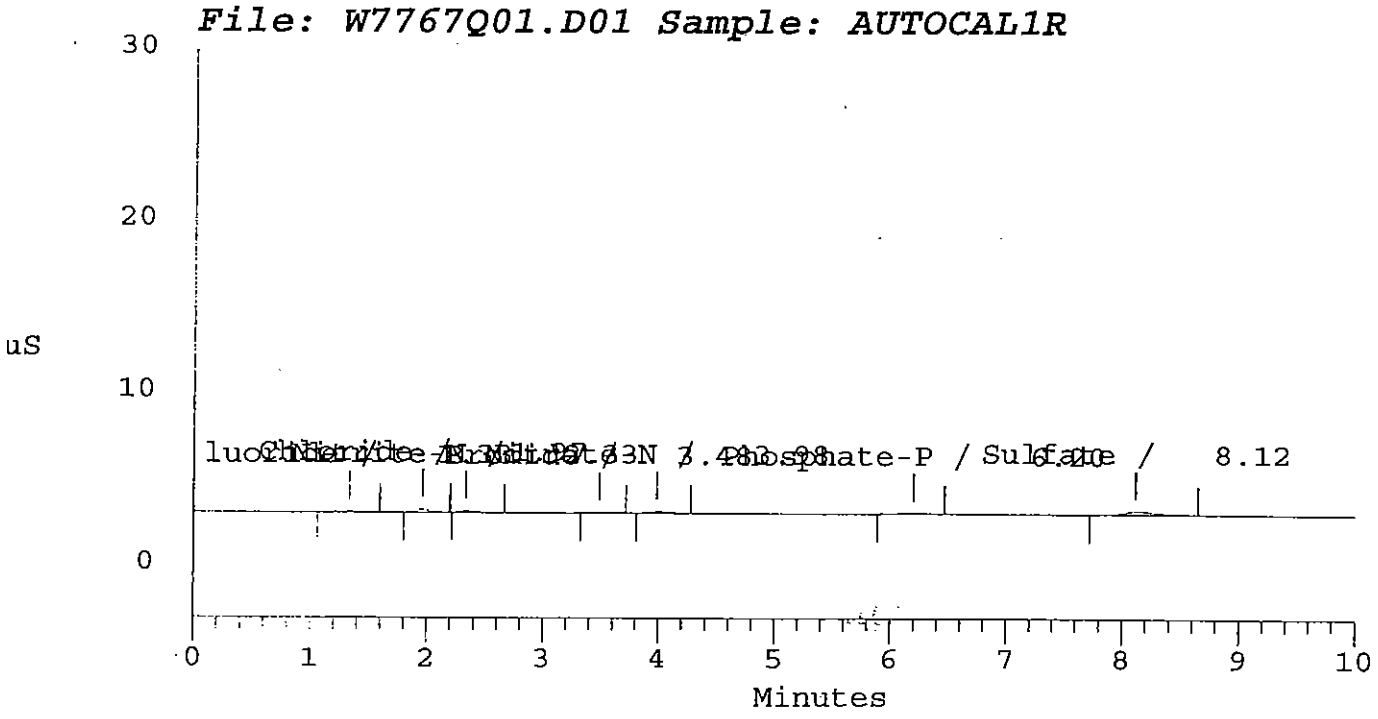


```
Sample Name: AUTOCAL1R                          Date: 03/21/2003 16:23:08
Data File  : C:\DX\DATA\E300-063\W7767Q01.D01
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 1                      Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

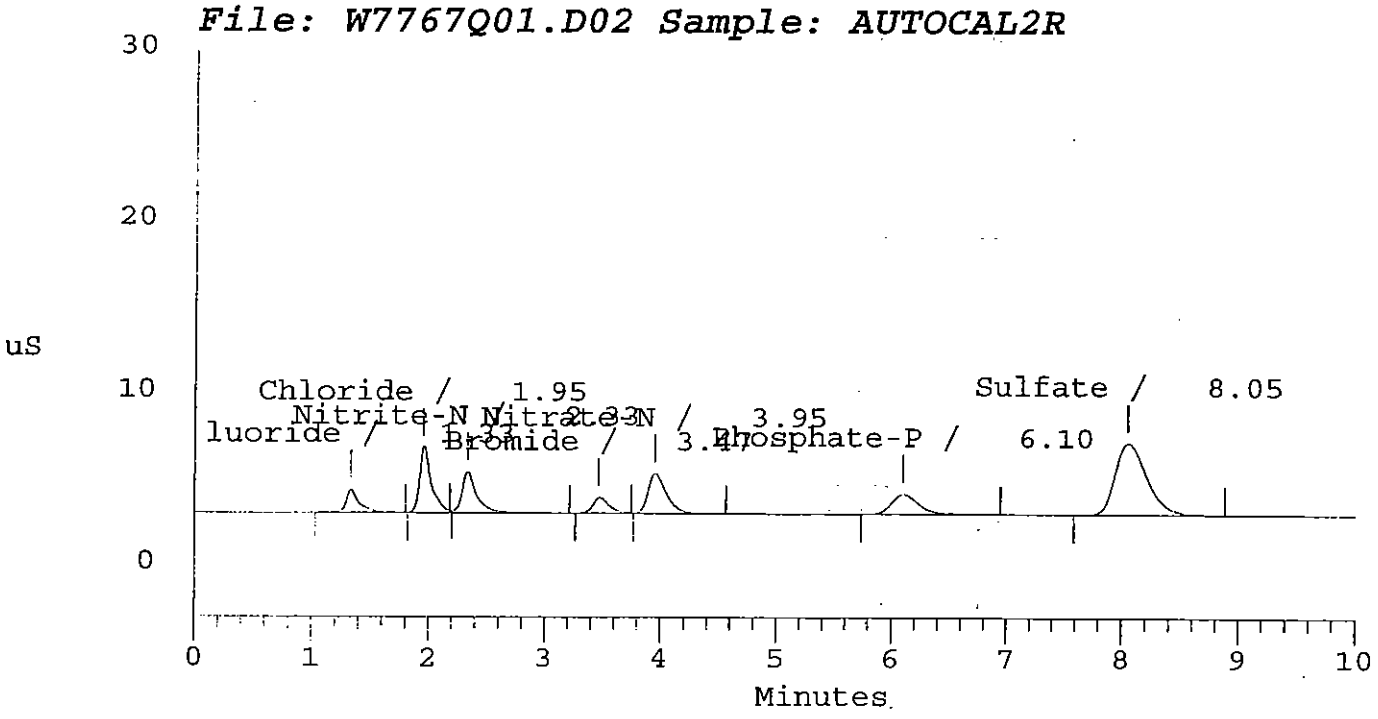


```
Sample Name: AUTOCAL2R                          Date: 03/21/2003 16:35:53
Data File  : C:\DX\DATA\E300-063\W7767Q01.D02
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 2                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

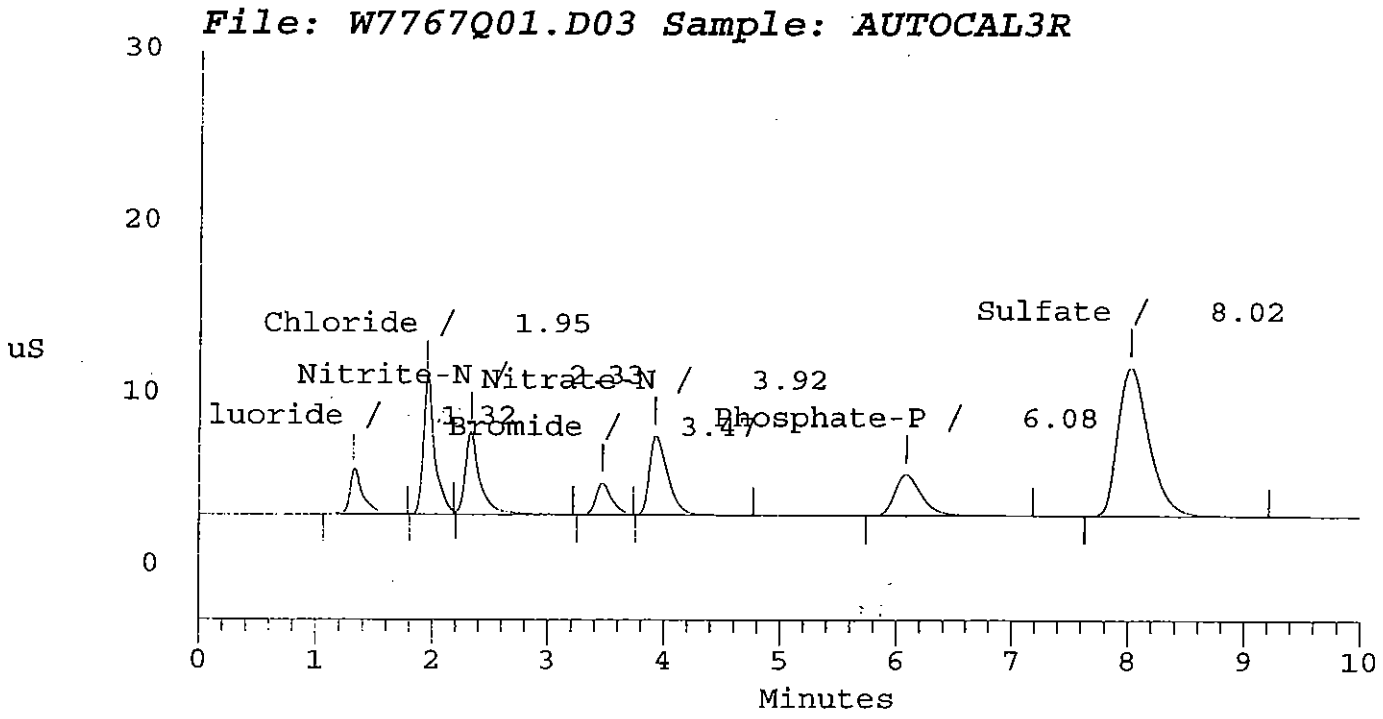


```
Sample Name: AUTOCAL3R                          Date: 03/21/2003 16:48:37
Data File  : C:\DX\DATA\E300-063\W7767Q01.D03
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 3                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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		

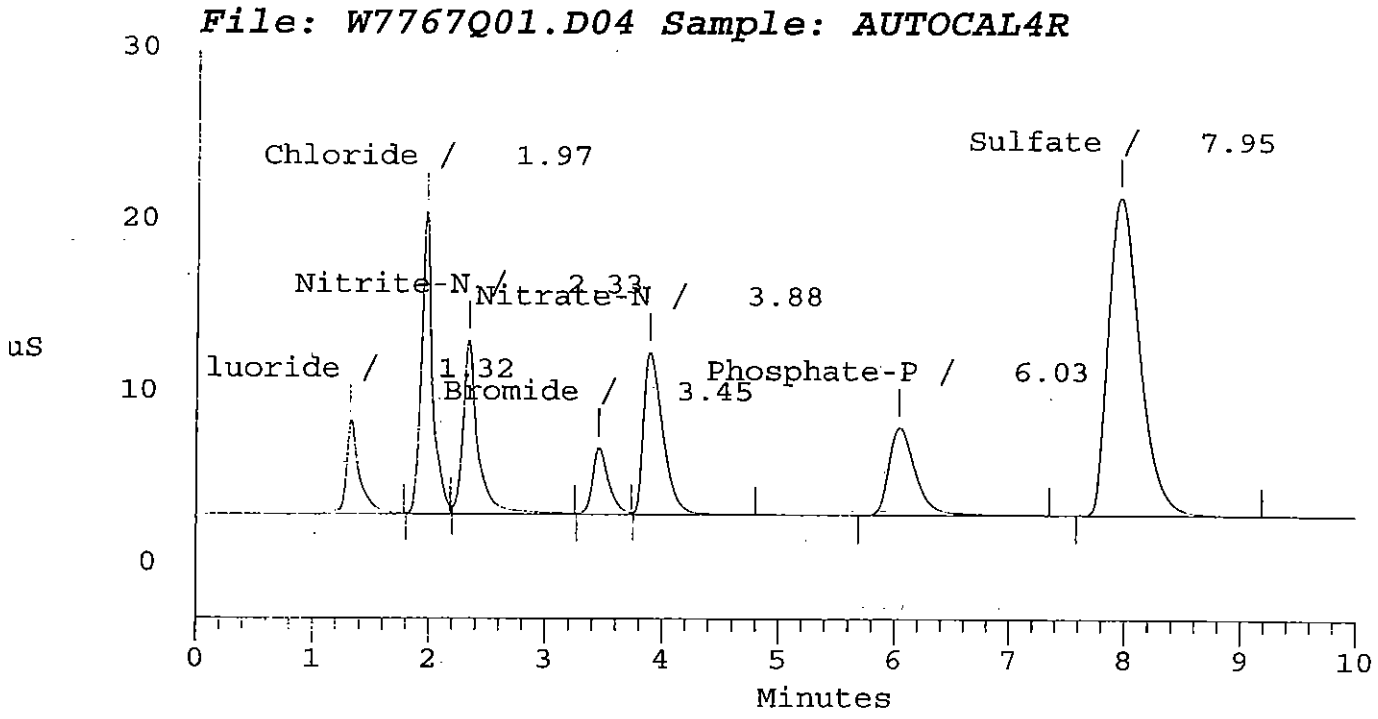


Sample Name:	AUTOCAL4R	Date:	03/21/2003 17:01:21
Data File :	C:\DX\DATA\E300-063\W7767Q01.D04		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address: 1	System: 1 Inject#: 4	Detector:	COND
Analyst :	David	Column:	Dionex AS4A-SC

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		

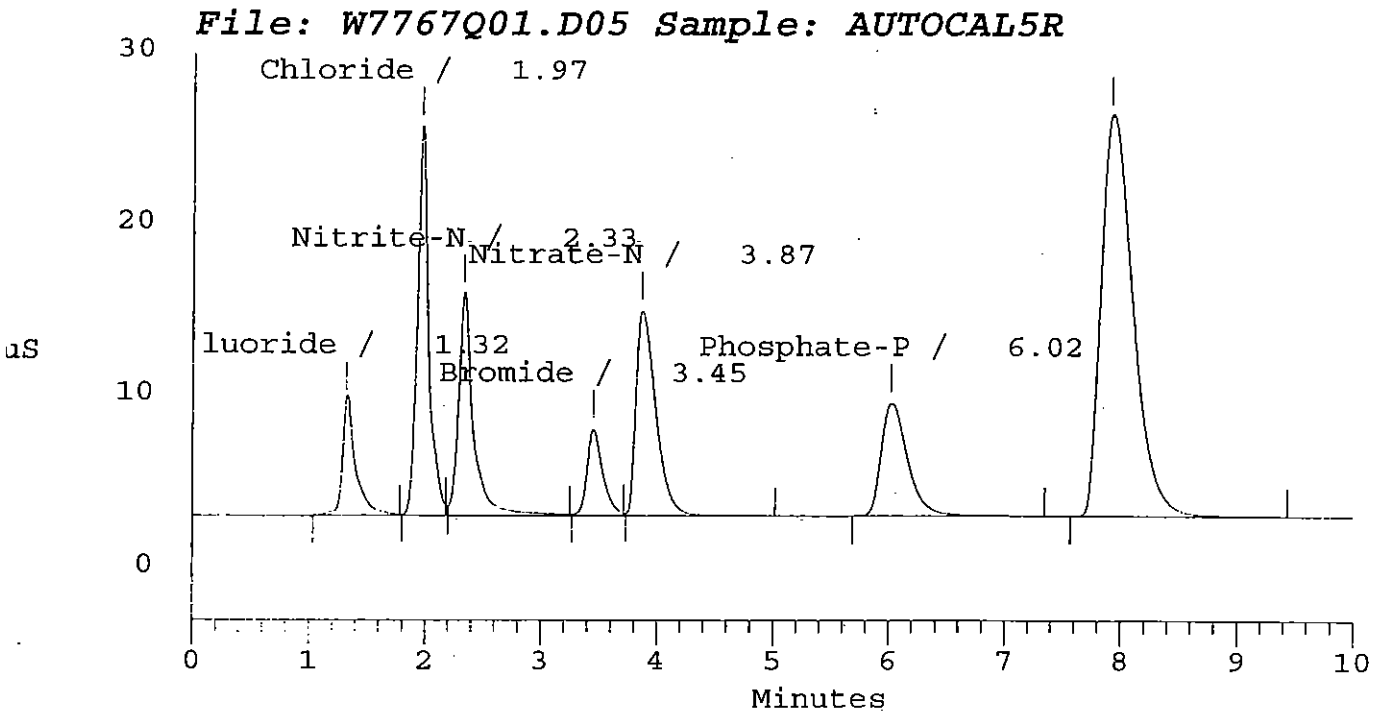


```
Sample Name: AUTOCAL5R                          Date: 03/21/2003 17:14:05
Data File  : C:\DX\DATA\E300-063\W7767Q01.D05
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 5                      Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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

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

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



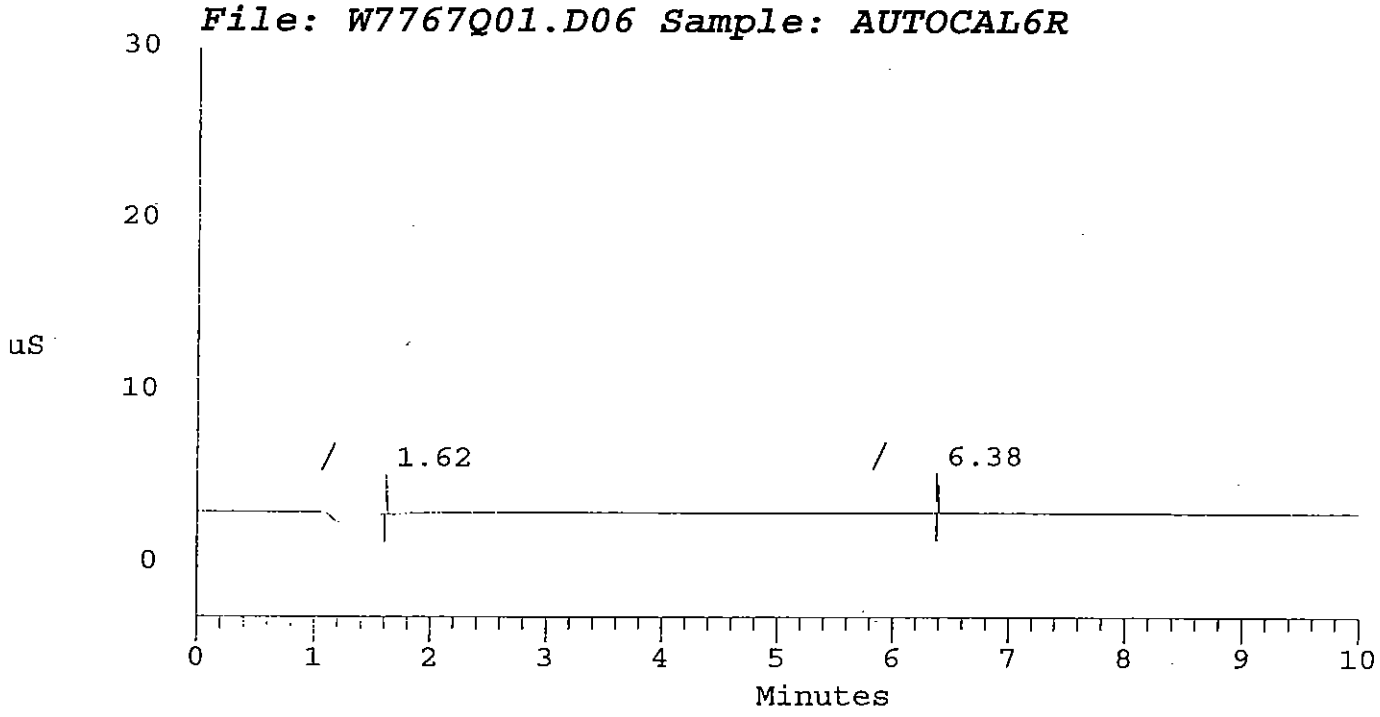
Data Reprocessed On 03/21/2003 17:39:26

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

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

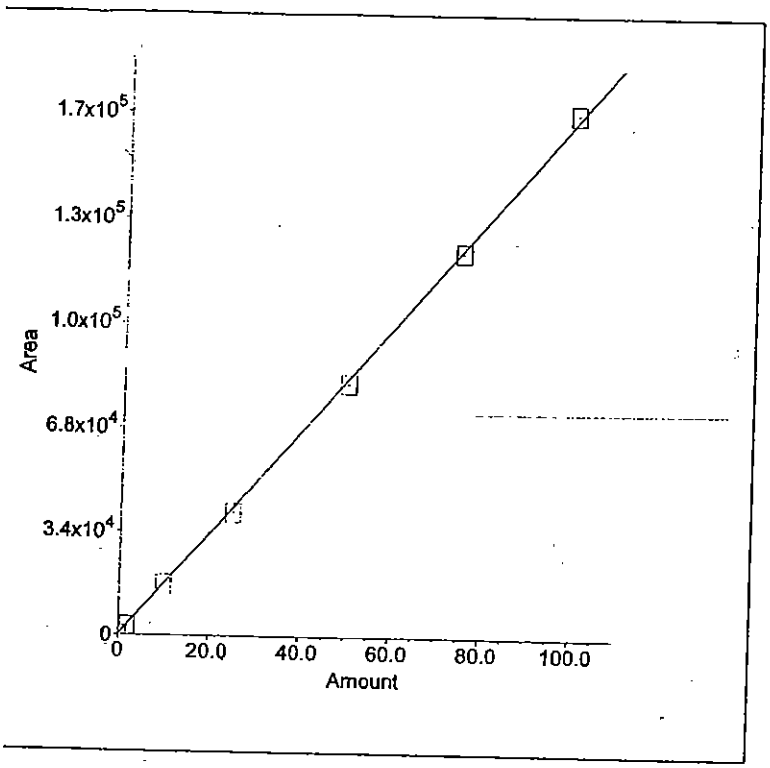
********** Component Report: All Components **********

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



After
3/21/03 tz

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



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

Analyst C. W
Date 03/12/03
Instrument Ic-1c

APCL Perchlorate Analysis Report

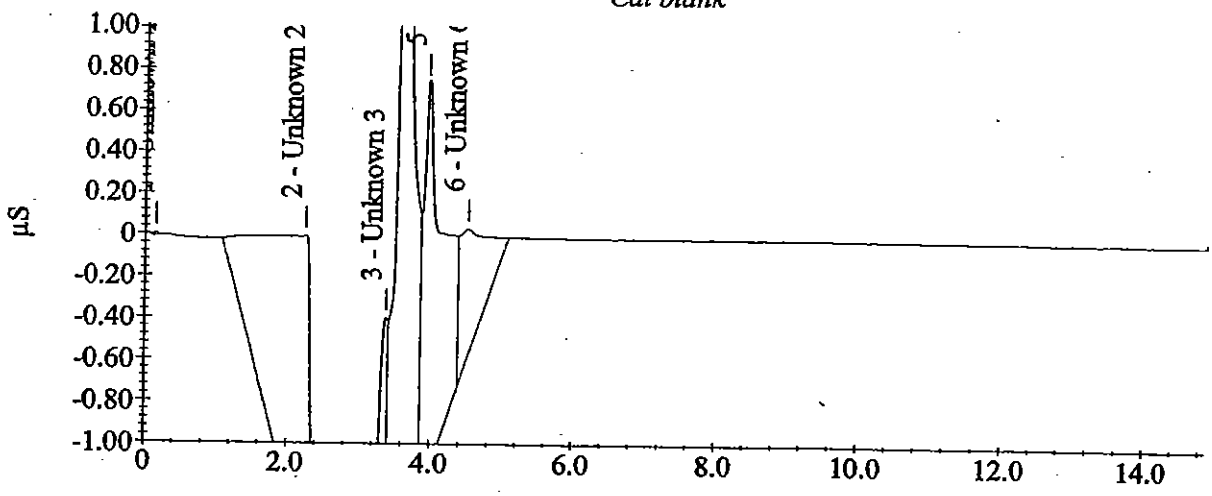
Sample Name : Cal blank
Data File Name : C:\data\E314-011\Mb_001.DXD

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



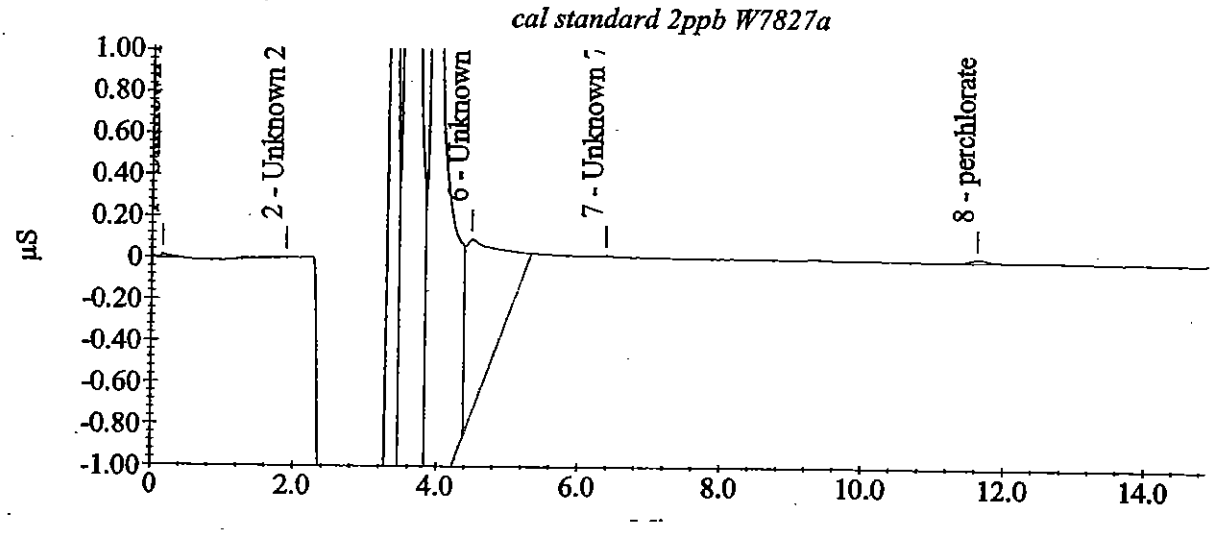
APCL Perchlorate Analysis Report

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



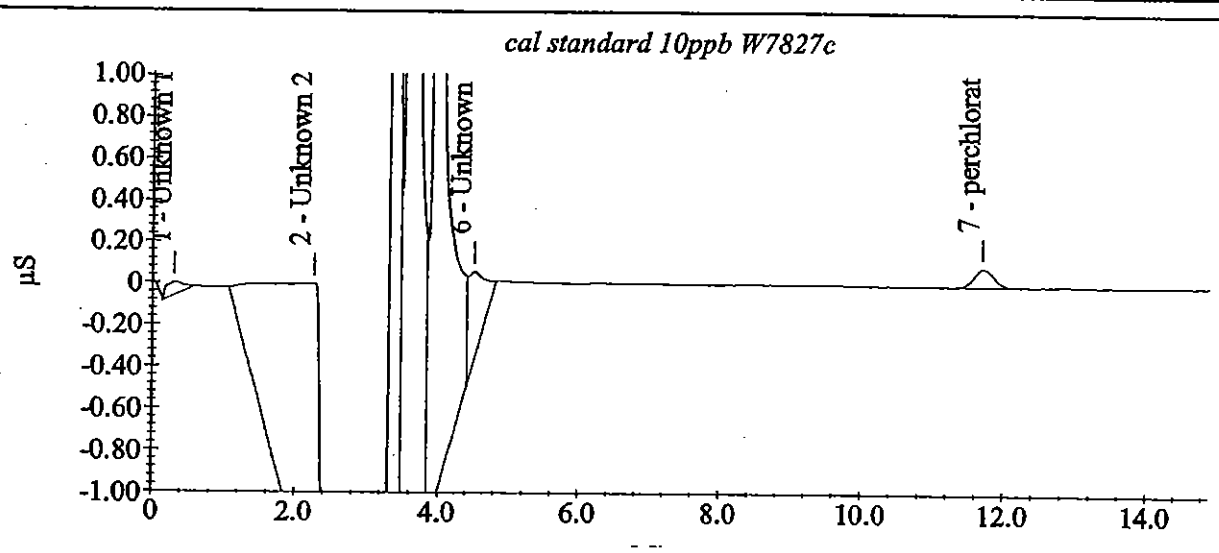
APCL Perchlorate Analysis Report

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



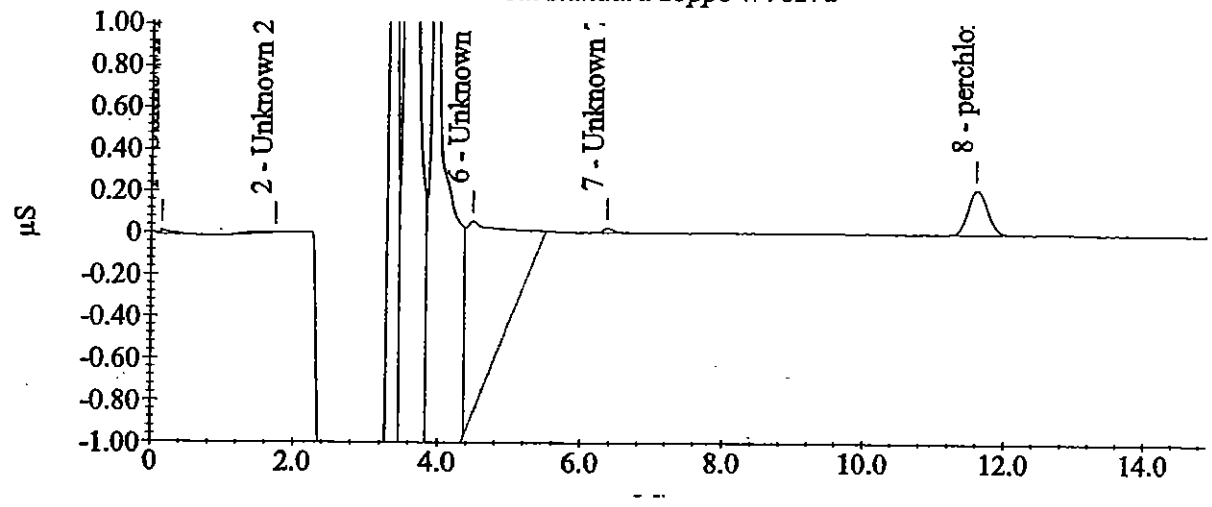
APCL Perchlorate Analysis Report

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



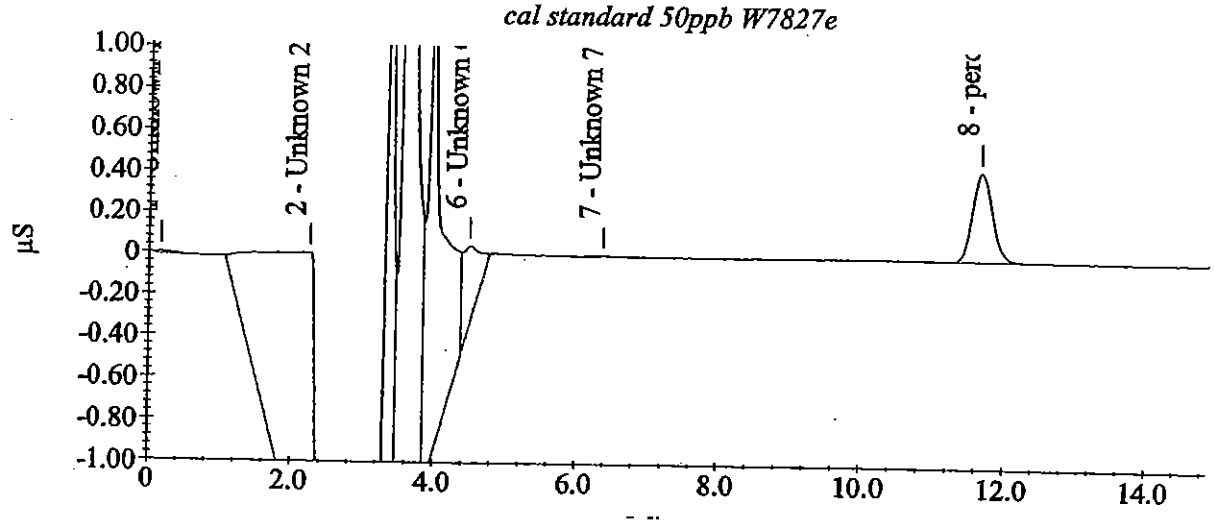
APCL Perchlorate Analysis Report

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



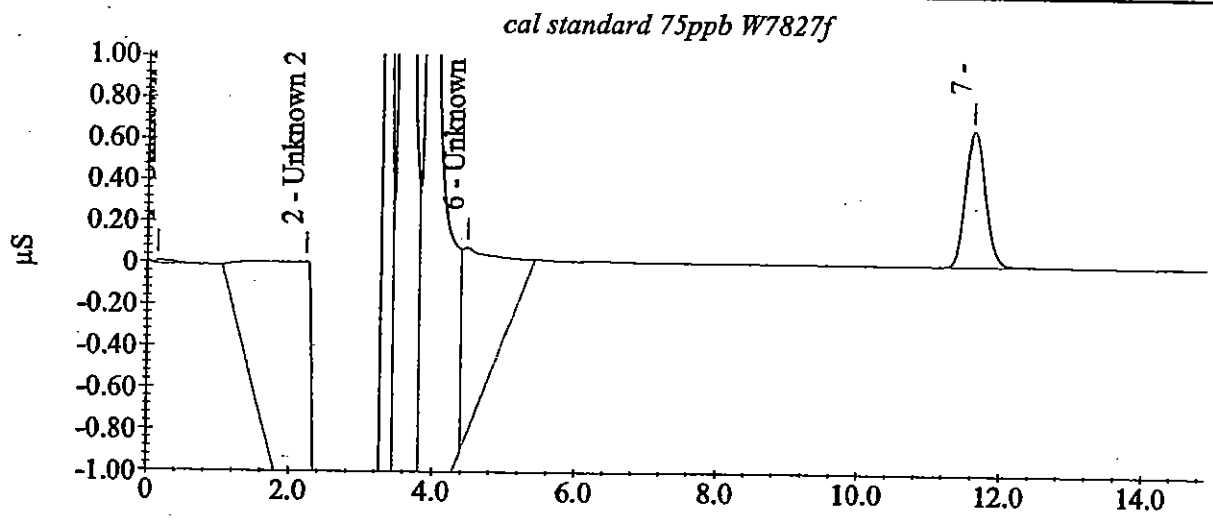
APCL Perchlorate Analysis Report

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



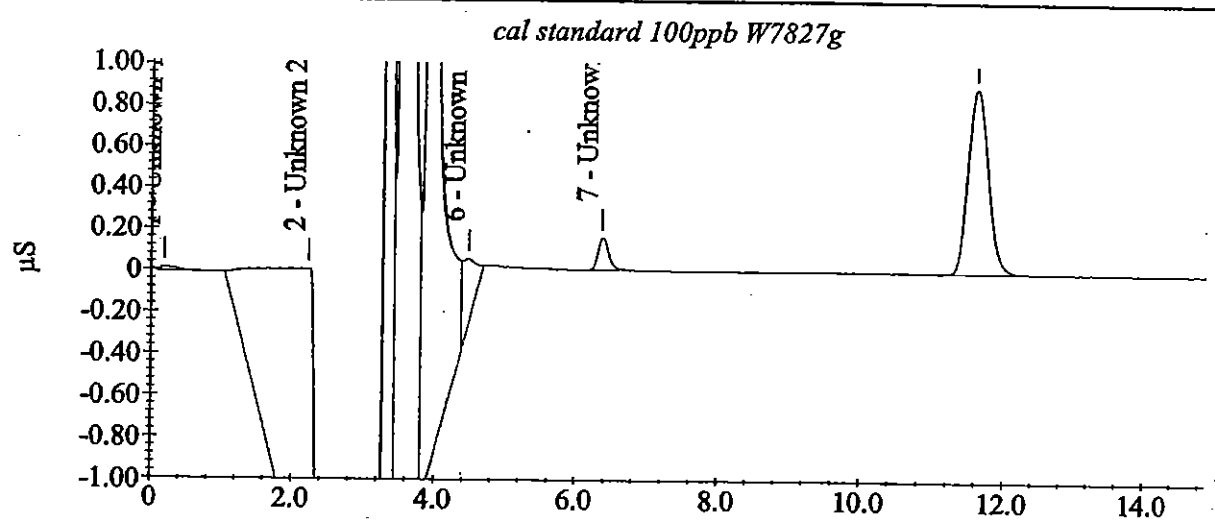
APCL Perchlorate Analysis Report

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	89223



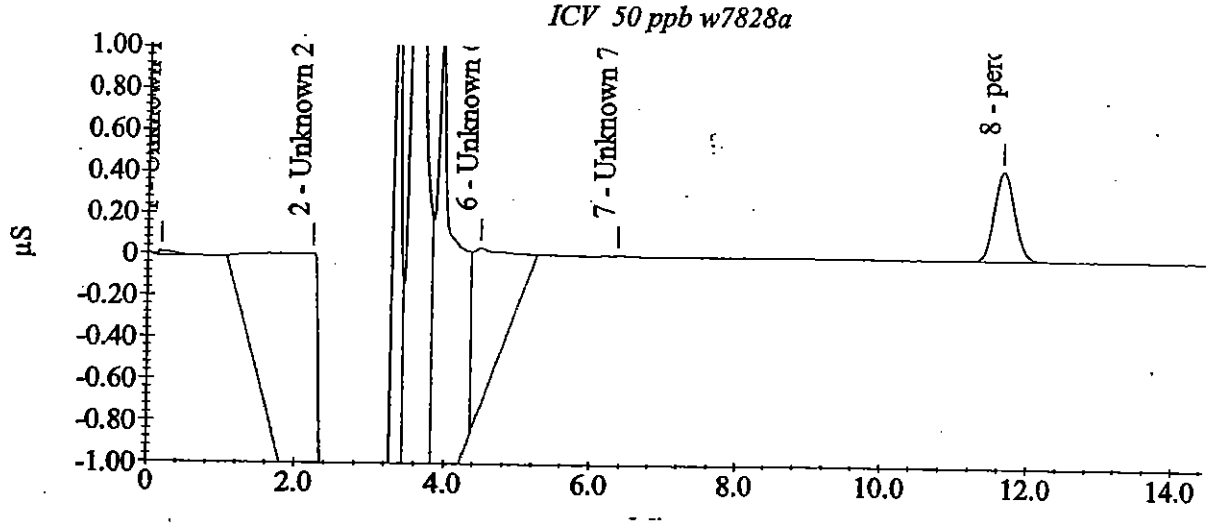
APCL Perchlorate Analysis Report

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



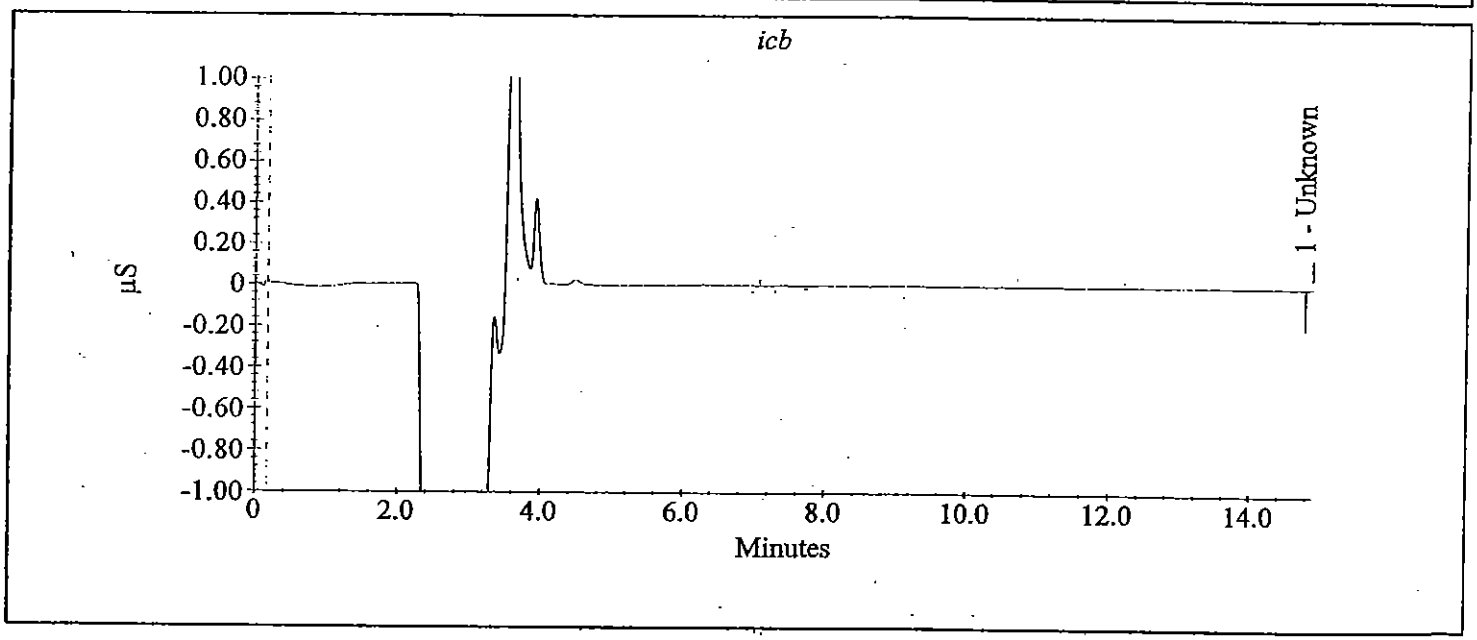
APCL Perchlorate Analysis Report

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: 33205

Project ID: JPL GW Mon-2Q03 Project No.: 04-4428.10

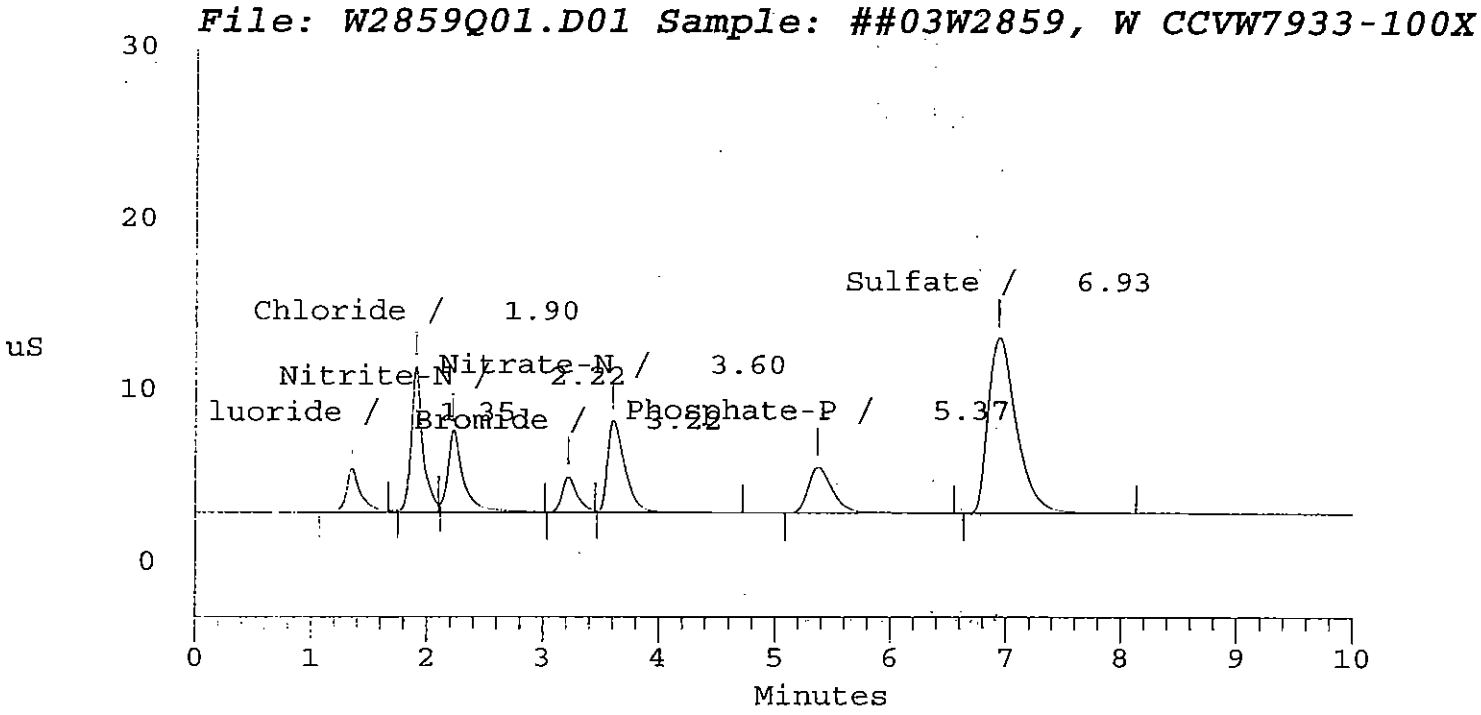
#	Component Name	Method	Batch No.	Unit	Expe-cted	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	NITRATE as N-NO_3^-, BY	300.0	03W2859	mg/L	1.5	1.54	103	3	√	90-110	05/14/2003
	SULFATE SO_4^{--}, BY I	300.0	03W2859	mg/L	15	15.0	100	0	√	90-110	05/14/2003
	NITRATE as N-NO_3^-, BY	300.0	03W2859	mg/L	1.5	1.56	104	4	√	90-110	05/14/2003
	SULFATE SO_4^{--}, BY I	300.0	03W2859	mg/L	15	15.7	105	5	√	90-110	05/14/2003
	NITRATE as N-NO_3^-, BY	300.0	03W2859	mg/L	1.5	1.58	105	5	√	90-110	05/14/2003
	SULFATE SO_4^{--}, BY I	300.0	03W2859	mg/L	15	15.3	102	2	√	90-110	05/14/2003
	NITRATE as N-NO_3^-, BY	300.0	03W2859	mg/L	1.5	1.55	104	4	√	90-110	05/14/2003
	SULFATE SO_4^{--}, BY I	300.0	03W2859	mg/L	15	15.4	102	2	√	90-110	05/14/2003
2	Perchlorate	314.0	03W2866	µg/L	50	49.5	99	-1	√	90-110	05/14/2003
	Perchlorate	314.0	03W2866	µg/L	50	50.1	100	0	√	90-110	05/14/2003
	Perchlorate	314.0	03W2866	µg/L	50	51.2	102	2	√	90-110	05/14/2003
	Perchlorate	314.0	03W2866	µg/L	50	48.7	97	-3	√	90-110	05/14/2003
3	Chromium (VI)	7196	03W2850	mg/L	0.25	0.244	98	-2	√	90-110	05/13/2003
	Chromium (VI)	7196	03W2850	mg/L	0.25	0.246	98	-2	√	90-110	05/13/2003

```
Sample Name: ##03W2859, W CCVW7933-100X     Date: 05/14/2003 08:56:41
Data File  : C:\DX\DATA\03W2859\W2859Q01.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	1.35	Fluoride	1.019	84470	740863	2	0.00
2	1.90	Chloride	3.990	281090	1977617	2	0.00
3	2.22	Nitrite-N	1.489	154617	1500535	2	-1.48
4	3.22	Bromide	3.088	68839	629471	2	0.89
5	3.60	Nitrate-N	1.538	176638	1856814	2	0.00
6	5.37	Phosphate-P	2.893	88104	1322120	2	0.00
7	6.93	Sulfate	15.021	338615	5721080	2	0.00
		Totals	29.038	1192373	13748501		

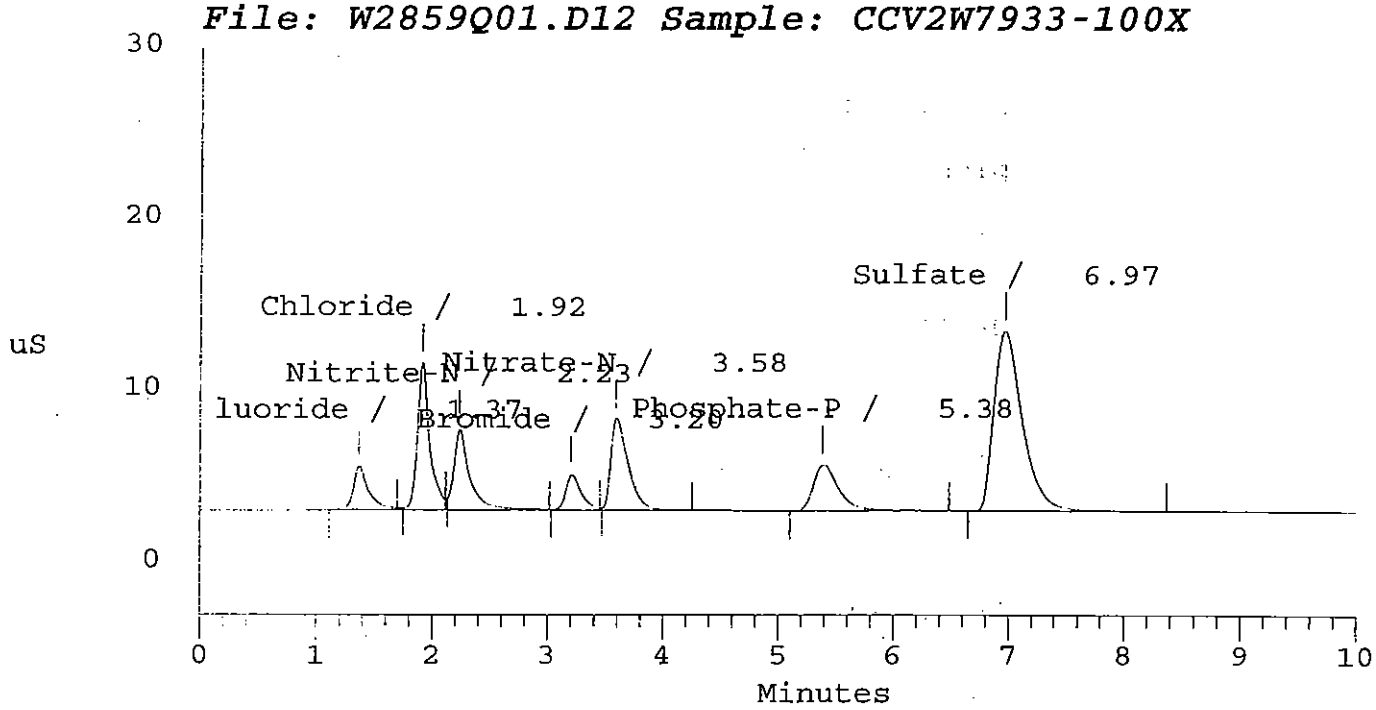


```
Sample Name: CCV2W7933-100X                    Date: 05/14/2003 12:07:22
Data File  : C:\DX\DATA\03W2859\W2859Q01.D12
Method     : C:\DX\METHOD\E300-063.MET
ACI Address: 1  System: 1  Inject#: 12                    Detector:COND
Analyst    : David          Column: Dionex AS4A-SC
```

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	1.37	Fluoride	1.083	85382	787936	2	0.00
2	1.92	Chloride	4.198	284648	2083953	2	0.00
3	2.23	Nitrite-N	1.499	155051	1511466	2	-1.60
4	3.20	Bromide	3.132	67224	638504	2	0.83
5	3.58	Nitrate-N	1.559	175808	1882984	2	0.00
6	5.38	Phosphate-P	3.009	88355	1376751	2	0.00
7	6.97	Sulfate	15.681	347567	5981841	2	0.00
		Totals	30.162	1204035	14263434		

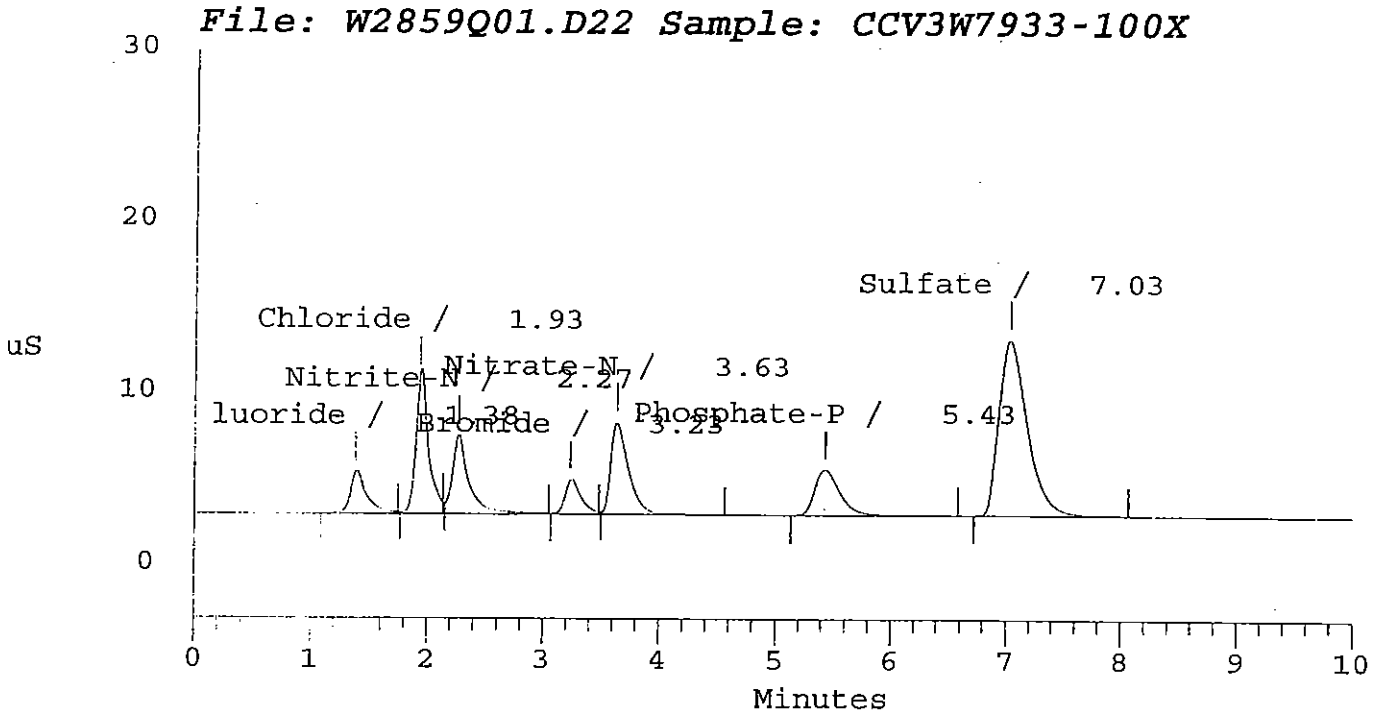


Sample Name:	CCV3W7933-100X	Date:	05/14/2003 15:50:18
Data File :	C:\DX\DATA\03W2859\W2859Q01.D22		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address:	1 System: 1 Inject#: 22	Detector:	COND
Analyst :	David	Column:	Dionex AS4A-SC

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	1.38	Fluoride	1.100	81137	799779	2	0.00
2	1.93	Chloride	4.207	267302	2088568	2	0.00
3	2.27	Nitrite-N	1.533	152914	1546049	2	-1.00
4	3.23	Bromide	3.157	65599	643811	2	0.48
5	3.63	Nitrate-N	1.575	176607	1902104	2	0.00
6	5.43	Phosphate-P	2.976	87715	1361116	1	0.00
7	7.03	Sulfate	15.272	339716	5820312	1	0.00
		Totals	29.820	1170990	14161739		

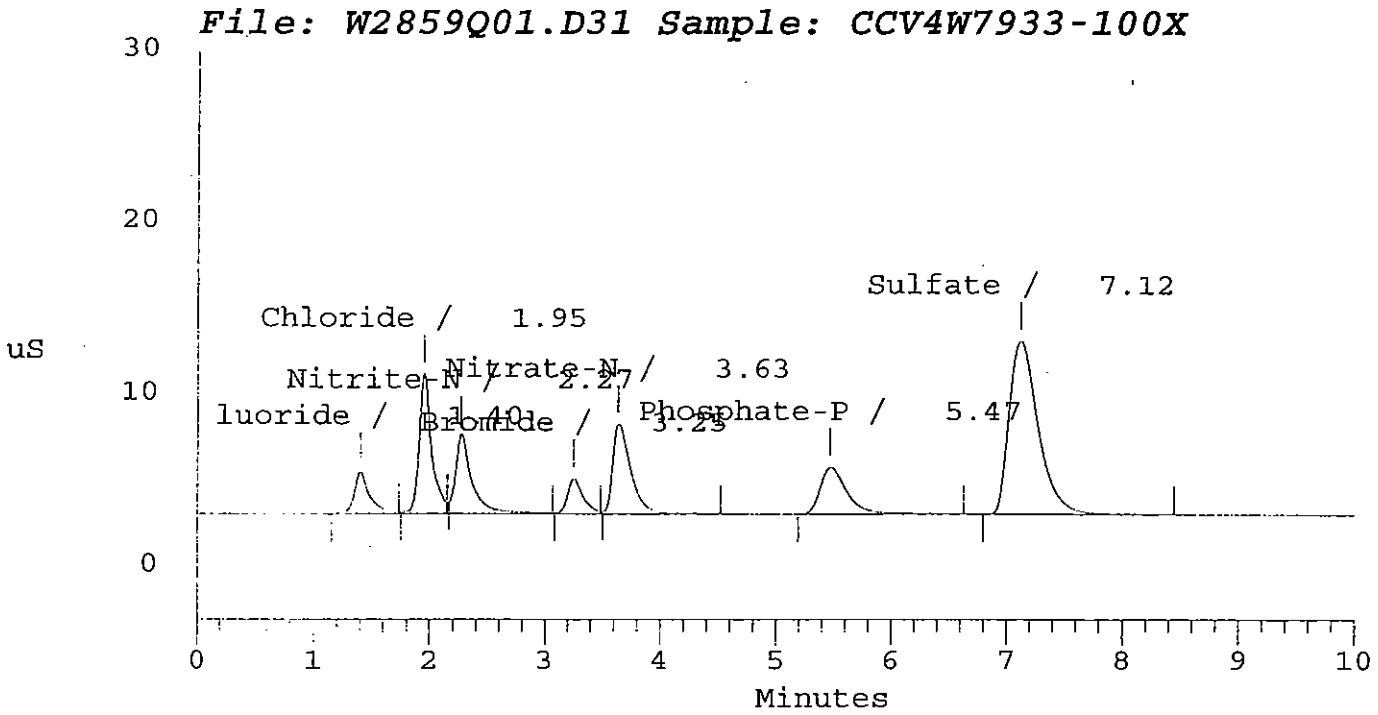


Sample Name:	CCV4W7933-100X	Date:	05/14/2003 18:21:56
Data File :	C:\DX\DATA\03W2859\W2859Q01.D31		
Method :	C:\DX\METHOD\E300-063.MET		
ACI Address: 1	System: 1 Inject#: 31		Detector:COND
Analyst :	David	Column:	Dionex AS4A-SC

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	1.40	Fluoride	1.047	80853	761254	2	0.00
2	1.95	Chloride	4.092	269986	2029639	2	0.00
3	2.27	Nitrite-N	1.534	151437	1547205	2	-1.84
4	3.25	Bromide	3.152	67661	642758	2	1.00
5	3.63	Nitrate-N	1.553	172472	1875004	2	0.00
6	5.47	Phosphate-P	3.253	89907	1491969	2	0.00
7	7.12	Sulfate	15.361	335356	5855492	2	0.00
		Totals	29.992	1167672	14203320		



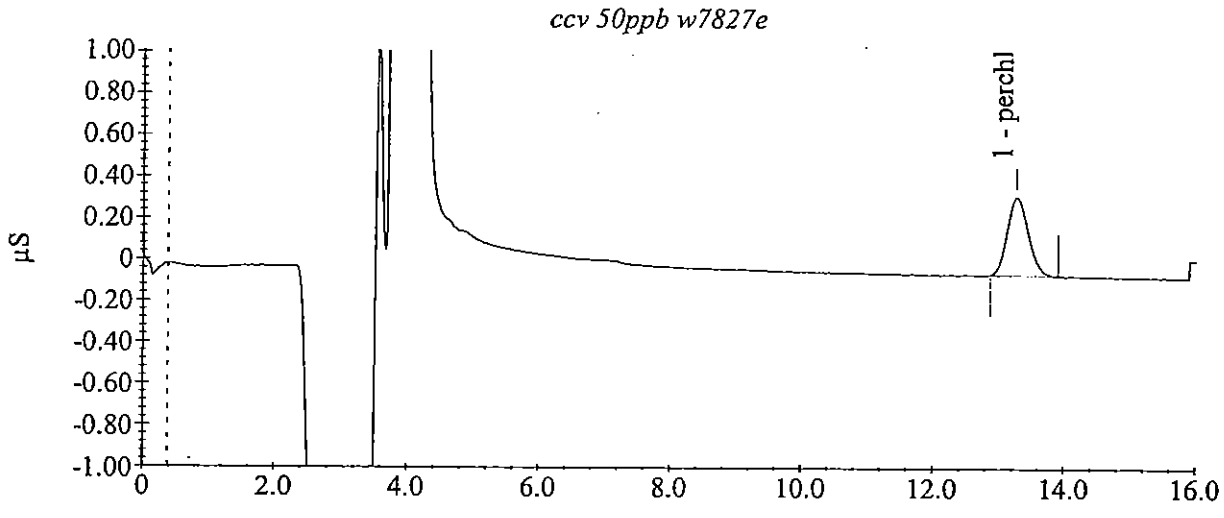
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2866K\W2866K Q01_002.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 10:27:45 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	13.27	49.48	83972.25	3758.80



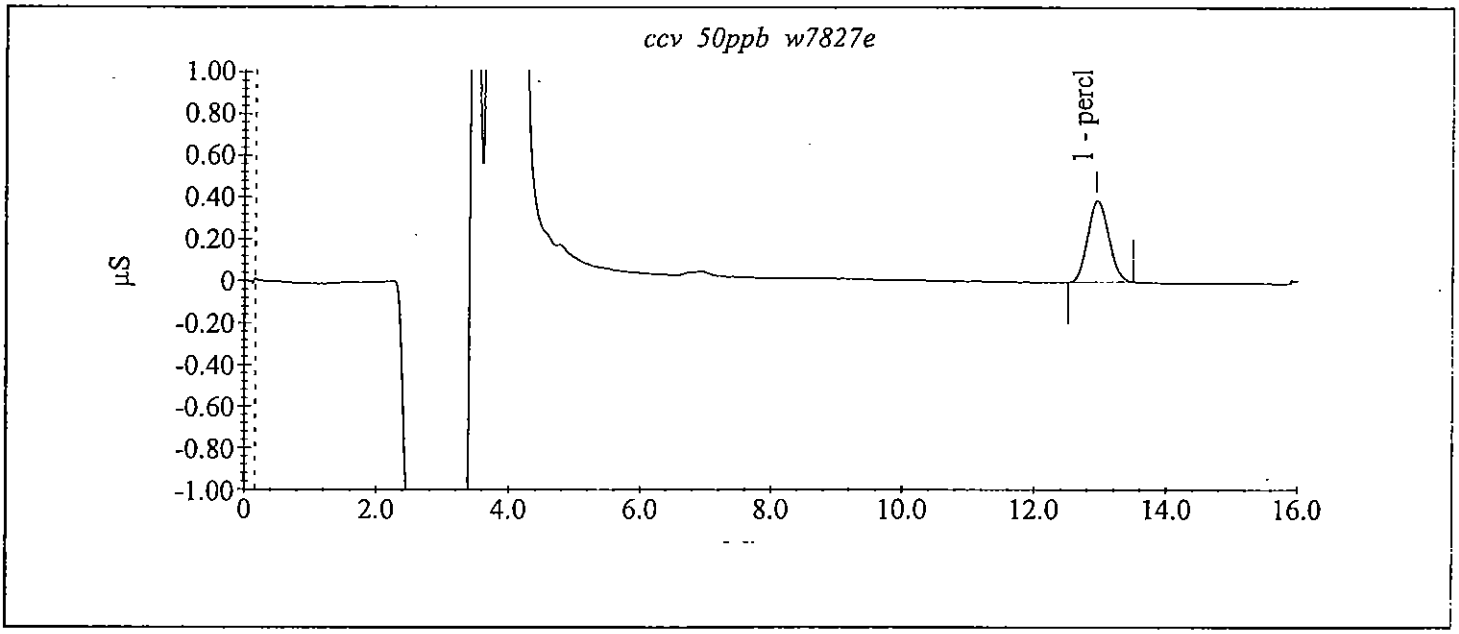
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2866K\W2866K Q02_013.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 1:52:40 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	12.93	50.09	85002.70	3843.98



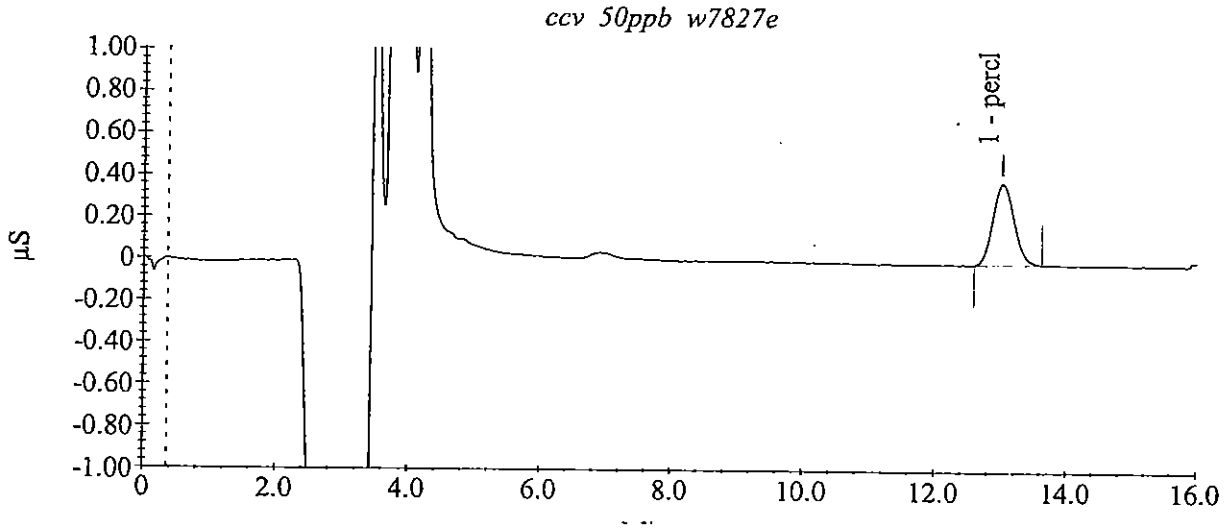
APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w7827e
Data File Name : C:\DATA\03W2866K\W2866K Q03_024.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 5:16:40 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	13.00	51.17	86840.70	3881.59



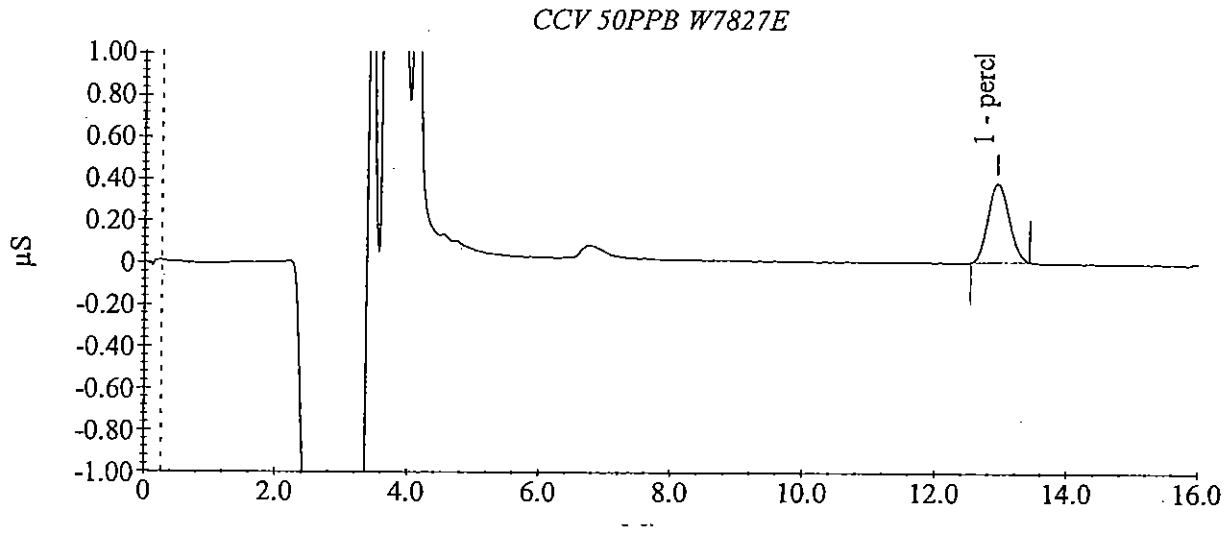
APCL Perchlorate Analysis Report

Sample Name : CCV 50PPB W7827E
Data File Name : C:\DATA\03W2866K\W2866K Q04_030.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 7:08:32 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	12.93	48.73	82694.90	3753.24



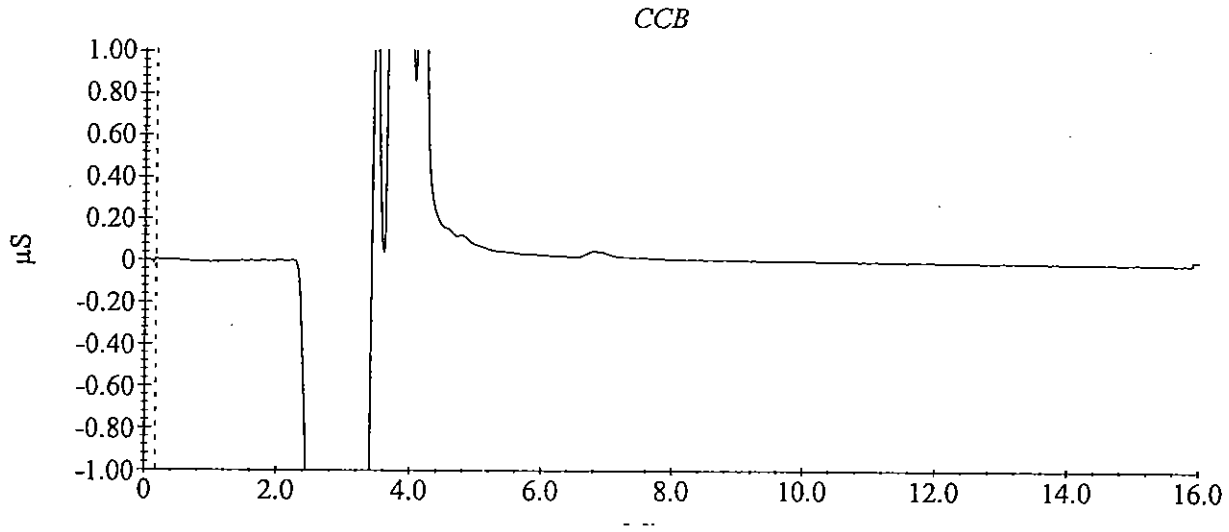
APCL Perchlorate Analysis Report

Sample Name : CCB
Data File Name : C:\DATA\03W2866K\W2866K K03_025.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 5:35:20 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



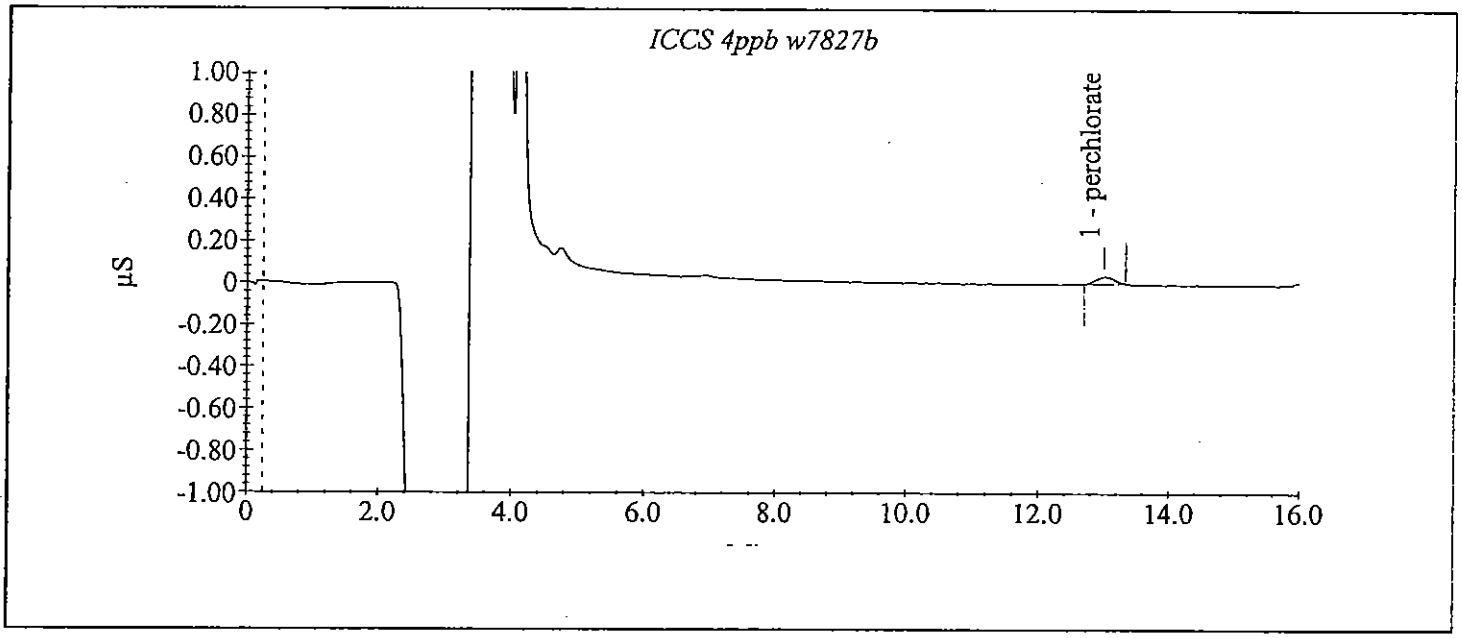
APCL Perchlorate Analysis Report

Sample Name : ICCS 4ppb w7827b
Data File Name : C:\DATA\03W2866K\W2866K ICCS 4PPB_006.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 11:42:32 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	13.00	3.99	6766.70	338.94



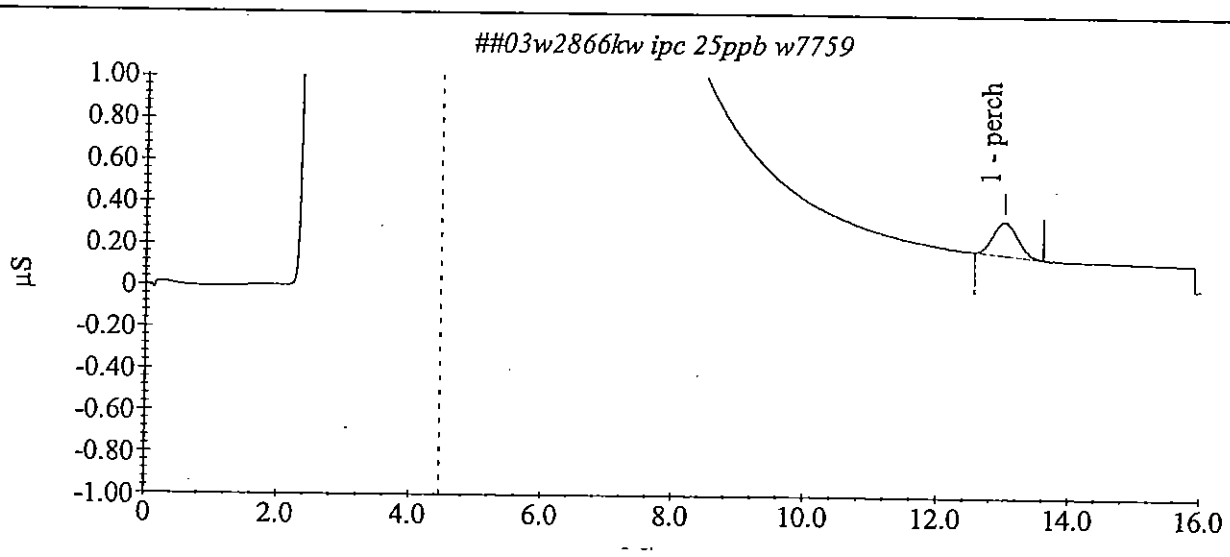
APCL Perchlorate Analysis Report

Sample Name : ##03w2866kw ipc 25ppb w7759
Data File Name : C:\DATA\03W2866K\W2866K IPC 25PPB_001.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 10:09:21 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	13.00	24.48	41539.95	1610.19



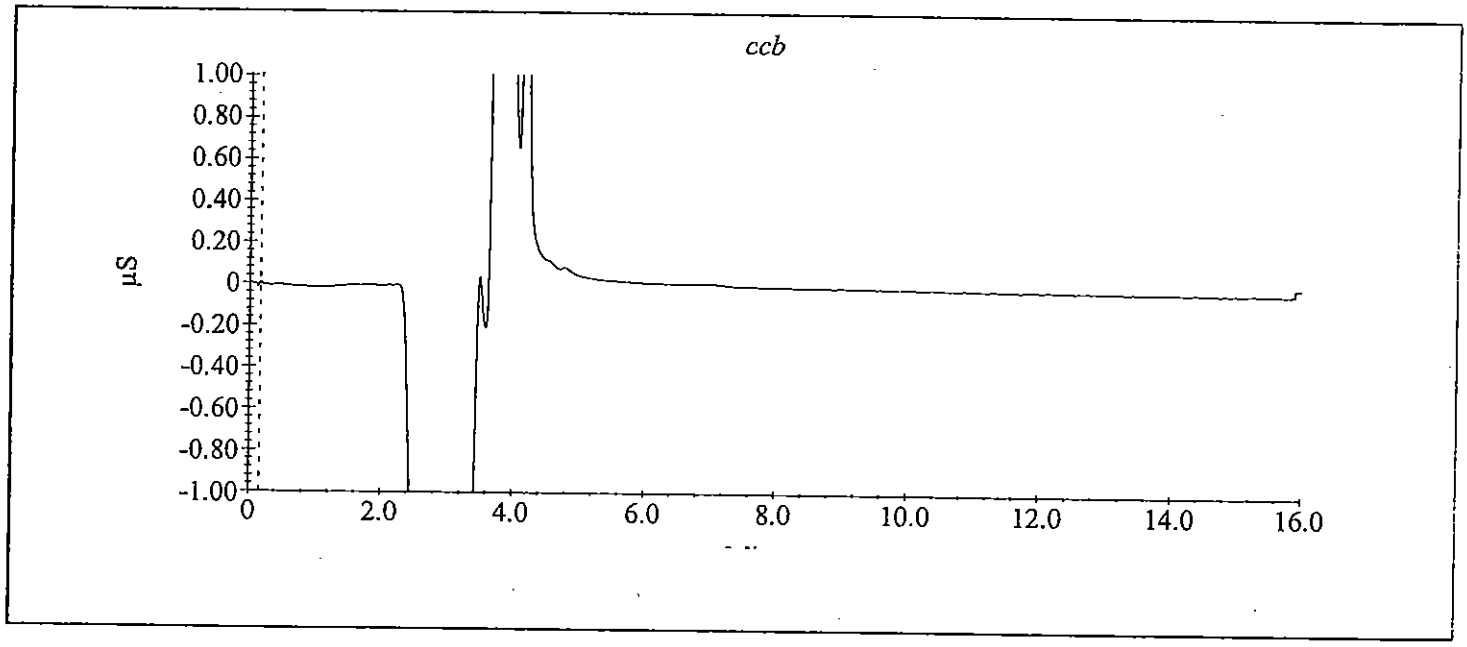
APCL Perchlorate Analysis Report

Sample Name : ccb
Data File Name : C:\DATA\03W2866K\W2866K CCB01_003.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 10:46:19 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



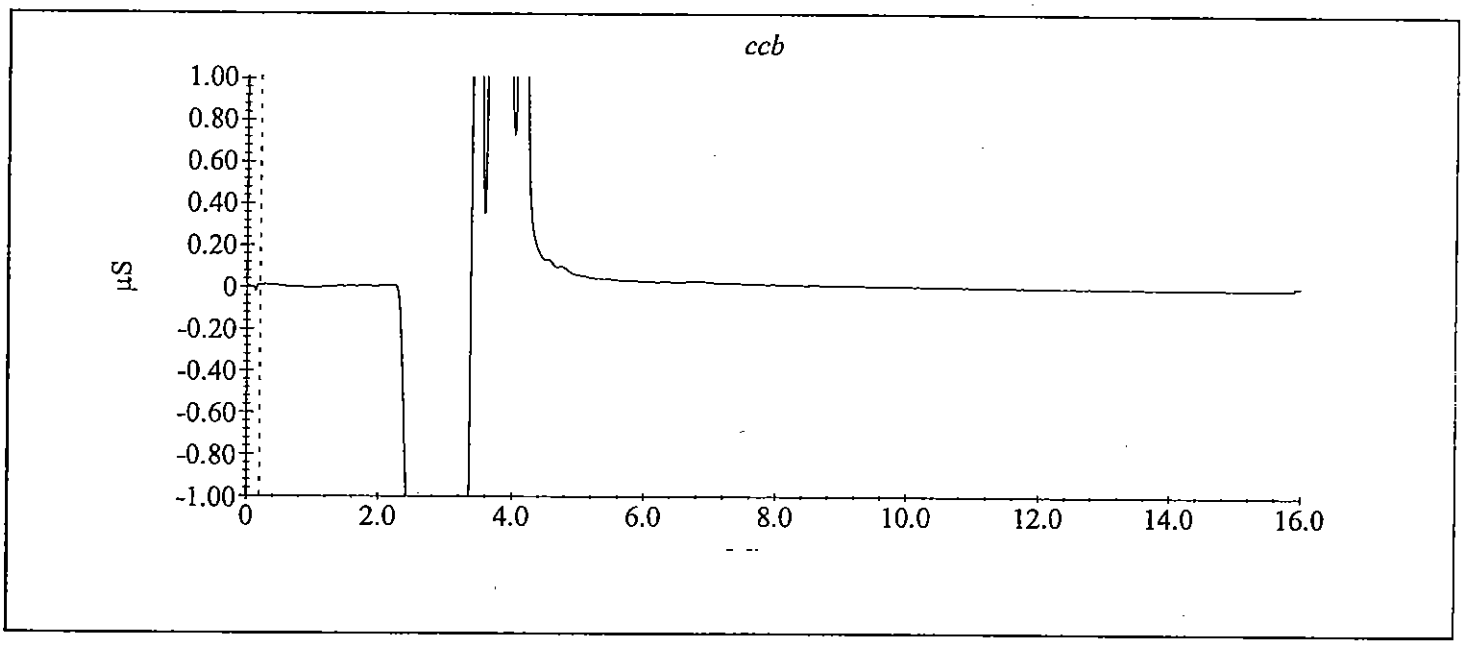
APCL Perchlorate Analysis Report

Sample Name : ccb
Data File Name : C:\DATA\03W2866K\W2866K K02_014.DXD

Method File Name : c:\peaknet\method\e314-011.met
Date Time Collected : 05/14/2003 2:11:26 PM
System Operator : C.W and W.W
Dilution Factor : 1.00

Peak Information : All Components

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



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

Conductance (120.1) Worksheet

Test Date: 5/14/03 Analyst: [illegible]

Lab #: for reference Matrix: W SOP: G-45

Cell Constant: _____ Calibration STD: 0.0100M KCl

#	Sample ID	Treatment V/X=f_0	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				$C_{25}=1,413\pm20$
MB		/ =	/ =					for cal.
1	3177-1	/ =	/ =			681		
2	3178-1	/ =	/ =			462		
3	3205-1	/ =	/ =			386		
4	-2	/ =	/ =			93.3		
5	-3	/ =	/ =			387		
6	-4	/ =	/ =			454		
7	-5	/ =	/ =			562		
8	-6	/ =	/ =			486		
9	-7	/ =	/ =			369		
10		/ =	/ =					
11		/ =	/ =					
12		/ =	/ =					
13		/ =	/ =					
14		/ =	/ =					
15		/ =	/ =					
16		/ =	/ =					
17		/ =	/ =					
18		/ =	/ =					
19		/ =	/ =					
20		/ =	/ =					
Dup.		/ =	/ =					

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

Balance Daily Calibration Worksheet

413

Weight Set S/N: 12006

Calib. Date	Lab Balance: Balance #	1 g ±0.05g	10 g ±0.1g	200 g ±0.5g	Note (C)	Digital Balance: Balance #	1 g ±0.02g	10 g ±0.05g	200 g ±0.10g	Note (D) (C) (AR)	Analytical Balance: Balance #	1 g ±0.0002g	10 g ±0.0005g	200 g ±0.0010g	Note (D) (C) (AR)	Calib. by
5/13/03	A-01	not	in	use	✓	B-01	1.00	10.00	200.00	✓ ✓ ✓	C-01	1.0000	10.0000	200.0000	✓ ✓ ✓	
	~~A-02~~					B-05	0.999	9.99	200.00	✓ ✓ ✓	C-02	1.0001	10.001	199.9999	✓ ✓ ✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.01	✓ ✓ ✓	C-					
	A-04					B-07	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-		± 1 13 03			B-			± 1 13 03		C-		± 1 13 03			
	A-					B-		± 1 13 03			C-					
5/14/03	A-01	not	in	use	✓	B-01	1.00	10.00	200.00	✓ ✓ ✓	C-01	1.0000	10.0002	200.0003	✓ ✓ ✓	½
	~~A-02~~					B-05	1.00	10.00	200.00	✓ ✓ ✓	C-02	1.0001	10.0000	200.0000	✓ ✓ ✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	9.99	199.98	✓ ✓ ✓	C-					
	A-		± 1 14 03			B-			± 1 14 03		C-		± 1 14 03			
	A-					B-		± 1 14 03			C-					
±/16/03	A-01	not in use			✓	B-01	1.00	10.00	200.00	✓ ✓ ✓	C-01	1.0000	10.0002	200.0003	✓ ✓ ✓	½
	~~A-02~~					B-05	1.00	10.01	200.00	✓ ✓ ✓	C-02	1.0001	10.0000	200.0000	✓ ✓ ✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	9.99	199.98	✓ ✓ ✓	C-			± 1 03		
	A-		± 1 16 03			B-			± 1 03		C-		± 1			
	A-					B-		± 1 03			C-					
5/16/03	A-01	not	in use		✓	B-01	1.00	10.00	200.00	✓ ✓ ✓	C-01	1.0000	10.0002	200.0002	✓ ✓ ✓	½
	~~A-02~~					B-05	1.00	10.01	200.00	✓ ✓ ✓	C-02	1.0001	10.0000	200.0001	✓ ✓ ✓	
	A-03	1.00	9.99	200.00	✓	B-06	1.00	10.00	200.00	✓ ✓ ✓	C-					
	A-04					B-07	1.00	9.99	199.99	✓ ✓ ✓	C-					
	A-		± 1 16 03			B-			± 1 16 03		C-		± 1 16 03			
	A-					B-		± 1 16 03			C-					

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

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

Batch #23W295 Matrix: W Titrant H_2SO_4 Lot #WJ900 Concentration (C) 0.01555 N; Test Date: 1/20/03 Analyst: DL 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 $mgCaCO_3/L$)	OH^-	CO_3^{2-}	HCO_3^-	Note & Anomaly
1	MB: T1116	/ =	100			0			0		0	0	0	0	
2	LCS	/ =	↓						7.70		98.4				
3	LCSD	/ =	↓						7.65		97.7				
4	3205-1	/ =	50.0			0			3.08		155	0	0	155	
5	-2	/ =	↓			0			0		0	0	0	0	
6	-3	/ =				0			5.22		133	0	0	133	
7	-4	/ =				0			4.70		120	0	0	120	
8	-5	/ =				0			8.20		210	0	0	210	
9	-6	/ =				0			6.22		159	0	0	159	
10	-7	/ =				0.02			5.18	0.511	133	0	1.022	132	
11	3237-1	/ =				0			2.30		58.8	0	0	58.8	
12	-2	/ =				0			1.87		47.8	0	0	47.8	
13	-3	/ =				0			4.24		108	0	0	108	
14	-4	/ =				0			2.20		56.2	0	0	56.2	
15	-5	/ =				0			2.06		52.6	0	0	52.6	
16	-6	/ =				0			2.04		52.1	0	0	52.1	
17	-7	/ =				0			1.96		50.1	0	0	50.1	
18	-8	/ =				0			2.14		54.7	0	0	54.7	
19	3254-1	/ =				0			4.05		103	0	0	103	
20	-2	/ =	↓			0			4.12		105	0	0	105	
Dup.	-2.	/ =	50.0			0			4.10		105	0	0	105	

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

Using blue pen. Correcting by red pen.

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

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

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

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Chromium (VI) (7196) Worksheet

Batch # 03W2859 Matrix: W [Holding Time: 24 hours!!] Test Date: 5/13/03 Analyst:

Lot #: Reagent Water _____ Diphenylcazide solution _____ Test Time: 16:01 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=0.0007+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-7850	Expected Conc.: × / =0.25 mg/L			0.204	0.244 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T1116		/X_0 =	95.0/ =	0.000	mg/L	0.000 ppm	
LCS1	Bl. Lot: "		/X_0 =	95.0/ =	0.220	mg/L	0.263 ppm	
Sample-1 Dup	3205-1		/X_0 =	95.0/ =	0.000	mg/L	0.000 ppm	
MS on S-1	3		/X_0 =	95.0/ =	0.188	mg/L	0.225 ppm	
MSD on S-1	3		/X_0 =	95.0/ =	0.185	mg/L	0.221 ppm	
Sample 2 Dup	2		/X_0 =	95.0/ =	0.000	mg/L	0.000 ppm	
Sample 3 1	3		/X_0 =	95.0/ =	0.000	mg/L	ppm	
Sample 4 2	4		/X_0 =	95.0/ =	0.000	mg/L	ppm	
Sample 5 3	5		/X_0 =	95.0/ =	0.000	mg/L	ppm	
Sample 6 4	6		/X_0 =	95.0/ =	0.000	mg/L	ppm	
Sample 7 5	7		/X_0 =	95.0/ =	0.000	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: T1116		/X_0 =	95.0/ =	0.216	mg/L	0.258 ppm	
Sample 11			/X_0 =	95.0/ =		mg/L	ppm	
Sample 12			/X_0 =	95.0/ =		mg/L	ppm	
Sample 13			/X_0 =	95.0/ =		mg/L	ppm	
Sample 14			/X_0 =	95.0/ =		mg/L	ppm	
Sample 15			/X_0 =	95.0/ =		mg/L	ppm	
Sample 16			/X_0 =	95.0/ =		mg/L	ppm	
Sample 17			/X_0 =	95.0/ =		mg/L	ppm	
Sample 18			/X_0 =	95.0/ =		mg/L	ppm	
Sample 19			/X_0 =	95.0/ =		mg/L	ppm	
Sample 20			/X_0 =	95.0/ =		mg/L	ppm	
MTX Dup. closing 0.27 mg/L			/X_0 =	95.0/ =	0.206	0.246 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)
MS	W-7853	× / = 0.25 ppm	%	80-120 %/80-120 %
MSD	W- "	× / = ppm	%	.. ..
LCS	W-7759	× / = 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

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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	× / =0.000mg/L	0.000		Least Square [RF]=	Cal. Code:
STD-2	W-	× / =0.012mg/L	0.006		Average $\overline{RF}$=	A=0.000+0.836C
STD-3	W-	× / =0.050mg/L	0.041		C.C.=0.9977 (≥ 0.995)	
STD-4	W-	× / =0.125mg/L	0.109		RSD= % (≤ 15%)	
STD-5	W-	× / =0.250mg/L	0.214		Ref. page	
STD-6	W- ↓	× / =0.500mg/L	0.415		A=0.003+BN 1/29/03	

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 $C' = A/\overline{RF}$	C (Sample) $C = f_1 f_2 C'$	Anomaly Note
CCV	Lot: W-7076.	Expected Conc.: × / =0.25 mg/L			0.216	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	6/2		/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	0.25 ppm	
Sample 11			/X_0 =	95.0/ =		mg/L	ppm	
Sample 12			/X_0 =	95.0/ =		mg/L	ppm	
Sample 13			/X_0 =	95.0/ =		mg/L	ppm	
Sample 14			/X_0 =	95.0/ =		mg/L	ppm	
Sample 15			/X_0 =	95.0/ =		mg/L	ppm	
Sample 16			/X_0 =	95.0/ =		mg/L	ppm	
Sample 17			/X_0 =	95.0/ =		mg/L	ppm	
Sample 18			/X_0 =	95.0/ =		mg/L	ppm	
Sample 19			/X_0 =	95.0/ =		mg/L	ppm	
Sample 20			/X_0 =	95.0/ =		mg/L	ppm	
MTX Dup.	closing 0.25mg/L		/X_0 =	95.0/ =	0.204	mg/L	0.248 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

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pH (150.1/9045B) Worksheet

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

Batch # 03W2852	Analysis Date: 1/13/03	Starting Time: 1631	Ending Time:	Matrix ☒ Aqueous ☐ Soil

Standard	4.00	7.00	10.00
Lot #		030660-24	030649-24
Temperature °C		23.4	23.4
pH Reading		7.00	10.01
T-corrected pH		7.01	10.02
Control Limit		±0.05 pH unit	

Batch # 03W2860	Analysis Date: 1/14/03	Starting Time: 0817	Ending Time:	Matrix ☒ Aqueous ☐ Soil

Standard	4.00	7.00	10.00
Lot #		030660-24	030649-24
Temperature °C		23.0	23.0
pH Reading		6.99	11.00
T-corrected pH		7.01	10.02
Control Limit		±0.05 pH unit	

#	Sample ID	Pre-treat	pH	Note
MB	T1116		6.88	
1	3099-1		7.33	
2	3265-1		7.93	
3	-2		7.25	
4	-3		7.14	
5	-4		7.25	
6	-5		7.28	
7	-6		7.94	
8	-7		8.76	
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
Dup.	3265-1		7.90	

#	Sample ID	Pre-treat	pH	Note
MB	T1116		6.87	
1	3234-1		7.01	
2	3234-2		7.64	
3	3233-7		7.99	
4	-5		8.09	
5	-6		8.03	
6	-8		7.80	
7	-2		8.06	
8	-4		7.95	
9	-1		7.89	
10	-3		7.4	
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
Dup.	3234-1		7.03	

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Solid Analysis (160.1, 160.2, 160.3) Worksheet

Method: 160.1 Balance No. _____ Date: 5/16/03 Analyst: DC

Matrix: W

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

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

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

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
T1116	/ =	100	103.1633	103.1635	103.1635	-	2	C
"	/ =		101.3359	101.3739	101.3739		380	D
3251-1	/ =		98.0960	98.1173	98.1173		213	Y1
-2	/ =		110.1355	110.1998	110.2000		645	CC
-2	/ =		106.8250	106.8889	106.8889		639	H1
-2	/ =		105.3139	105.3349	105.3350		21	12
-3	/ =		121.3268	121.3370	121.3371		163	I
3241-1	/ =		114.2653	114.2923	114.2924		271	N
-2	/ =		99.0864	99.1046	99.1047		183	Y2
-3	/ =		116.9499	116.9766	116.9766		267	W
-4	/ =		107.7133	107.7403	107.7402		270	O
-5	/ =		112.8987	112.9309	112.9310		323	K
-6	/ =		103.1189	103.1482	103.1483		294	GC
3202-1	/ =		113.8646	113.8873	113.8873		227	6
T1116	/ =		111.2249	111.2661	111.2663		414	8
-2	/ =		114.7868	114.7876	114.7876		8	12
-3	/ =		103.5346	103.5609	103.5609		263	76
-4	/ =		115.1339	115.1615	115.1616		277	10
-5	/ =		114.7803	114.7827	114.7828		325	XX
-6	/ =		111.2778	111.3007	111.3007		229	5
-7	/ =		116.6472	116.6658	116.6660		188	7E
3199-1	/ =		113.8273	113.8793	113.8794		521.	33
	/ =							
	/ =							
	/ =							
	/ =							

STD Lot #	$C_{STD(\mu g/mL)} \times V_{STD(mL)} / X_{(g \text{ or } mL)} = T$	Spike Rec.	Ctl Limit (W/S)
W7618	× / = 400 ppm	%	85-115 %/80-120 %
W "	× / = ppm	%	.. ..
W7615	× / = ppm	%	90-110 %/85-115 %
W "	× / = ppm	%	.. ..

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

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\03W2859.SCH

Inj#	Sample Name	Method	Data File	Vol.	Dil.	Int.Std.
1	##03W2859, W CCVW79	..\E300-063	..\W2859Q01.D01	1	1	1
2	MB RW1411	..\E300-063	..\W2859K11.D02	1	1	1
3	LCS W7934-100X	..\E300-063	..\W2859L01.D03	1	1	1
4	LCSD W7934-100X	..\E300-063	..\W2859J01.D04	1	1	1
5	3205-1 F=2	..\E300-063	..\3205-101.D05	1	2	1
6	3205-3 F=2	..\E300-063	..\3205-301.D06	1	2	1
7	3205-4 F=2	..\E300-063	..\3205-401.D07	1	2	1
8	3205-5 F=2	..\E300-063	..\3205-501.D08	1	2	1
9	3205-6 F=2	..\E300-063	..\3205-601.D09	1	2	1
10	3205-7 F=2	..\E300-063	..\3205-701.D10	1	2	1
11	3205-2 F=1.25	..\E300-063	..\3205-201.D11	1	1.25	1
12	CCV2W7933-100X	..\E300-063	..\W2859Q01.D12	1	1	1
13	MB RW1411	..\E300-063	..\W2859K01.D13	1	1	1
14	3215-2 F=4	..\E300-063	..\3215-201.D14	1	4	1
15	3215-4 F=25	..\E300-063	..\3215-401.D15	1	25	1
16	3215-6 F=25	..\E300-063	..\3215-601.D16	1	25	1
17	3212-2 F=1	..\E300-063	..\3212-201.D17	1	1	1
18	3212-3 F=40	..\E300-063	..\3212-301.D18	1	40	1
19	3212-4 F=20	..\E300-063	..\3212-401.D19	1	20	1
20	3212-5 F=10	..\E300-063	..\3212-501.D20	1	10	1
21	3212-6 F=10	..\E300-063	..\3212-601.D21	1	10	1
22	CCV3W7933-100X	..\E300-063	..\W2859Q01.D22	1	1	1
23	MB RW1411	..\E300-063	..\W2859K01.D23	1	1	1
24	$3215-2 MS F=8	..\E300-063	..\W2859M01.D24	1	8	1
25	$3215-2 MSD F=8	..\E300-063	..\W2859N01.D25	1	8	1
26	3216-2 F=20	..\E300-063	..\3216-201.D26	1	20	1
27	3216-3 F=20	..\E300-063	..\3216-301.D27	1	20	1
28	3216-4 F=20	..\E300-063	..\3216-401.D28	1	20	1
29	3216-5 F=20	..\E300-063	..\3216-501.D29	1	20	1
30	3216-6 F=10	..\E300-063	..\3216-601.D30	1	10	1
31	CCV4W7933-100X	..\E300-063	..\W2859Q01.D31	1	1	1
32		..\STOP.MET		1	1	1

Comment:
LCS/LCSD LOT # W7934
MS/MSD LOT # W7933
ELUENT LOT # W7868
ANALYTICAL METHOD 9056/E300 MATRIX W

Analyst _____
Date 4/16/03
Instrument J

ine	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
0	icb	Sample		e314-011.met	c:\data\e314-011\icb_010.dxd	1	1
1	anion 100pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-100_011.dxd	1	1
2	anion 200pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-200_012.dxd	1	1
3	anion 300pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-300_013.dxd	1	1
4	anion 400pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-400_014.dxd	1	1
5	anion 500pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-500_015.dxd	1	1
6	anion 600pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-600_016.dxd	1	1
7	anion 800pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-800_017.dxd	1	1
8	anion 1000pm each ,25pb CLO4	Sample		e314-011.met	c:\data\e314-011\mct-1000_018.dxd	1	1
9	anion 400pm each 2pb	Sample		e314-011.met	c:\data\e314-011\ipc-2pb_019.dxd	1	1
0	anion 400pm each 4pb	Sample		e314-011.met	c:\data\e314-011\ipc-4pb_020.dxd	1	1
1	anion 400pm each 25pb	Sample		e314-011.met	c:\data\e314-011\ipc-25pb_021.dxd	1	1
2	ICV 50 ppb	Sample		e314-011.met	c:\data\e314-011\ccv-50pb	1	1
3	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-02_023.dxd	1	1
4	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-03_024.dxd	1	1
5	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-04	1	1
6	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-05	1	1
7	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-06	1	1
8	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-07	1	1
9	MDL 4pb	Sample		e314-011.met	c:\data\e314-011\mdl-08	1	1
0	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
1	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
2	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
3	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
4	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
5	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
6	IDP and IDA 25pb	Sample		e314-011.met	c:\data\e314-011\idap-25pb	1	1
7	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\e314-011\ipc-25pb	1	1
8	MCT anion 800pm each, 25pbCLO4	Sample		e314-011.met	c:\data\e314-011\ipc-25pb	1	1
9	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\e314-011\ipc-4pb	1	1
0	MCT anion 800pm each, 4pbCLO4	Sample		e314-011.met	c:\data\e314-011\ipc-4pb	1	1
1	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s01	1	5
2	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s02	1	5
3	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s03	1	5
4	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s04	1	5
5	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s05	1	5
6	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s06	1	5
7	MDL 20pb soil	Sample		e314-011.met	c:\data\e314-011\mdl-s07	1	5
8	standard 25ppb W7827d	Sample		e314-011.met	c:\data\e314-011\std-25pb	1	1
9	anion 100pm each,4pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-100-4pb	1	1
0	anion 200pm each ,4pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-200-4pb	1	1
1	anion 300pm each ,4pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-300-4pb	1	1
2	anion 100pm each,2pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-100-2pb	1	1
3	anion 200pm each,2pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-200-2pb	1	1
4	anion 300pm each,2pb CLO4	Sample		e314-011.met	c:\data\e314-011\am-300-2pb	1	1
5	1982-01 B S.C 4450us/cm	Sample		e314-011.met	c:\data\e314-011\1982-01	1	1
6	1982-01 B S.C 4450us/cm	Sample		e314-011.met	c:\data\e314-011\1982-01	1	2
7	1982-02 f=10	Sample		e314-011.met	c:\data\e314-011\1982-02_057.dxd	1	10
8		Sample		aastopcl.met		1	1

le	Sample	Sample Type	Level	Method	Data File	Volume	Dilution
	##03w2866kw ipc 25ppb w7759	Sample		e314-011.met	c:\data\03w2866k\w2866k ipc 25ppb	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2866k\w2866k q01	1	1
	ccb	Sample		e314-011.met	c:\data\03w2866k\w2866k ccb01	1	1
	lcs 25ppb w7827d	Sample		e314-011.met	c:\data\03w2866k\w2866k l01	1	1
	LCS 18PPB W7685D	Sample		e314-011.met	c:\data\03w2866k\w2866k j01	1	1
	ICCS 4ppb w7827b	Sample		e314-011.met	c:\data\03w2866k\w2866k iccs 4ppb	1	1
	mb	Sample		e314-011.met	c:\data\03w2866k\w2866k k01	1	1
	3177-01 F=1	Sample		e314-011.met	c:\data\03w2866k\3177-01	1	1
	3178-01 f=1	Sample		e314-011.met	c:\data\03w2866k\3178-01	1	1
	3130-01 F=1	Sample		e314-011.met	c:\data\03w2866k\3130-01	1	1
	3130-02 F=1	Sample		e314-011.met	c:\data\03w2866k\3130-02	1	1
	3130-03 f=1	Sample		e314-011.met	c:\data\03w2866k\3130-03	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2866k\w2866k q02	1	1
	ccb	Sample		e314-011.met	c:\data\03w2866k\w2866k k02	1	1
	3130-04 f=1	Sample		e314-011.met	c:\data\03w2866k\3130-04	1	1
	3130-05 F=1	Sample		e314-011.met	c:\data\03w2866k\3130-05	1	1
	3130-06 F=1	Sample		e314-011.met	c:\data\03w2866k\3130-06	1	1
	3130-02 MS 50PPB F=1	Sample		e314-011.met	c:\data\03w2866k\w2866k m01	1	1
	3130-02 MSD 50PPB F=1	Sample		e314-011.met	c:\data\03w2866k\w2866k n01	1	1
	3205-01 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-01	1	1
	3205-02 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-02	1	1
	3205-03 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-03	1	1
	3205-04 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-04	1	1
	ccv 50ppb w7827e	Sample		e314-011.met	c:\data\03w2866k\w2866k q03	1	1
	CCB	Sample		e314-011.met	c:\data\03w2866k\w2866k k03	1	1
	3205-05 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-05	1	1
	3205-06 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-06	1	1
	3205-07 F=1	Sample		e314-011.met	c:\data\03w2866k\3205-07	1	1
	3178-01 f=1	Sample		e314-011.met	c:\data\03w2866k\3178-01	1	1
	CCV 50PPB W7827E	Sample		e314-011.met	c:\data\03w2866k\w2866k q04	1	1
		Sample		aastopcl.met		1	1

Analyst alex cy

Date 5/14/03

Instrument IC-K

APCL

Applied Physics & Chemistry Laboratory

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May 23, 2003

GEOFON, Inc.
Attention: Leo Williamson
22632 Golden Spring Dr Ste 270
Diamond Bar CA 91765

Dear Leo,

This package contains samples in our Service ID 03-2819 and your project : 04-4428.10 JPL
Enclosed please find:

(1) Original analytical report.
(2) Original Chain of Custody.
(3) One diskette containing EDD deliverable.
(4) One original Level C Data Package Deliverable.

If anything is missing or you have any questions, please feel free to contact me.

Respectfully submitted,

Regina Kirakozova
Associate QA/QC Director
Applied P & Ch Laboratory

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

APCL Analytical Report

Submitted to:
GEOFON, Inc.
Attention: Leo Williamson
22632 Golden Spring Dr Ste 270
Diamond Bar CA 91765
Tel: (909)396-7662 Fax: (909)396-1455

Service ID #: 801-032819
Collected by: Leo Williamson
Collected on: 04/22/03

Received: 04/22/03
Extracted: N/A
Tested: 04/22-25/03
Reported: 04/28/03

Sample Description: Water from MW-19.
Project Description: 04-4428.10 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result EB-3-4/22/03 03-02819-1	MW-19-1 03-02819-2	MW-19-2 03-02819-3
PH	9040B	pH unit	0.01	7.89	7.68	6.92
BICARBONATE	SM2320B	mg/L	2	<2	129	210
CARBONATE	SM2320B	mg-$CaCO_3$/L	2	<2	<2	<2
SOLIDS, TOTAL DISSOLVED (TDS)	160.1	mg/L	10	<10	162	720
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01
Dilution Factor				1	1	1
PERCHLORATE	314.0	µg/L	4	<4	<4	4.3
Dilution Factor				1.25	1.25	20
CHLORIDE CL^-	300.0	mg/L	0.2	0.26	8.3	100
NITRATE AS N	300.0	mg/L	0.04	0.098	1.2	12.5
SULFATE SO_4^{--}	300.0	mg/L	0.5	0.79	23.1	142
Dilution Factor				1	1	1
ARSENIC	200.9	µg/L	5	<5	1.7J	<5
CALCIUM	200.7	µg/L	200	204	33,500	112,000
IRON	200.7	µg/L	50	53.1	2,500	3,150
MAGNESIUM	200.7	µg/L	100	24.7J	10,400	37,900
POTASSIUM	200.7	µg/L	400	46.6J	2,190	2,820
SODIUM	200.7	µg/L	2000	446J	11,800	28,500
VOLATILE ORGANIC COMPOUNDS						
Dilution Factor				1	1	1
BENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOCHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOFORM	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
N-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
SEC-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TERT-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-BUTANONE	524.2	µg/L	10	<10	<10	<10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	<0.5	0.6
CHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5

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Component Analyzed	Method	Unit	PQL	Analysis Result EB-3-4/22/03 03-02819-1	MW-19-1 03-02819-2	MW-19-2 03-02819-3
4-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	1.1 [a]	<1.1	<1.1	<1.1
1,2-DIBROMOETHANE (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
DIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
DICHLORODIFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRANS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CIS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRANS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
ETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
HEXACHLOROBUTADIENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE (CUMENE)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
P-ISOPROPYLTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1.8 [a]	<1.8	<1.8	<1.8
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	<10	<10	<10
NAPHTHALENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
STYRENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	1.0
TOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	0.4J
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
VINYL CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
O-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
M/P-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5

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Component Analyzed	Method	Unit	PQL	Analysis Result MW-19-3 03-02819-4	MW-19-4 03-02819-5	MW-19-5 03-02819-6	TB-3-4/22/03 03-02819-7
BICARBONATE	SM2320B	mg/L	2	253	148	155	-
CARBONATE	SM2320B	mg-$CaCO_3$/L	2	< 2	< 2	< 2	-
PH	9040B	pH unit	0.01	7.52	8.15	8.08	-
CHROMIUM (VI)	7196	mg/L	0.01	< 0.01	< 0.01	< 0.01	-
SOLIDS, TOTAL DISSOLVED (TDS)	160.1	mg/L	10	582	197	352	-
Dilution Factor				1	1	1	1
PERCHLORATE	314.0	µg/L	4	3.6J	< 4	< 4	-
Dilution Factor				12.5	4	10	1
CHLORIDE CL^-	300.0	mg/L	0.2	88.3	18.6	67.2	-
NITRATE AS N	300.0	mg/L	0.04	10.8	2.3	1.2	-
SULFATE SO_4^{--}	300.0	mg/L	0.5	96.6	33.3	69.2	-
Dilution Factor				1	1	1	1
ARSENIC	200.9	µg/L	5	< 5	< 5	1.7J	-
CALCIUM	200.7	µg/L	200	106,000	34,000	44,800	-
IRON	200.7	µg/L	50	236	105	616	-
MAGNESIUM	200.7	µg/L	100	35,000	17,500	27,700	-
POTASSIUM	200.7	µg/L	400	3,020	2,060	2,770	-
SODIUM	200.7	µg/L	2000	29,700	20,800	30,100	-
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
BENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
BROMOBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
BROMOCHLOROMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
BROMODICHLOROMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
BROMOFORM	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
BROMOMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
N-BUTYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
SEC-BUTYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
TERT-BUTYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-BUTANONE	524.2	µg/L	10	< 10	< 10	< 10	< 10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLORODIBROMOMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROFORM	524.2	µg/L	0.5	< 0.5	0.7	0.3J	< 0.5
CHLOROMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
2-CHLOROTOLUENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
4-CHLOROTOLUENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	1.1 [a]	< 1.1	< 1.1	< 1.1	< 1.1
1,2-DIBROMOETHANE (EDB)	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
DIBROMOMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,2-DICHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5
DICHLORODIFLUOROMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5	< 0.5

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

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-19-3 03-02819-4	MW-19-4 03-02819-5	MW-19-5 03-02819-6	TB-3-4/22/03 03-02819-7
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRANS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRANS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
HEXACHLOROBUTADIENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE (CUMENE)	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
P-ISOPROPYLTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	1.8 [a]	<1.8	<1.8	<1.8	<1.8
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	<1	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	<10	<10	<10	<10
NAPHTHALENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
STYRENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	0.8	<0.5	2.8	<0.5
TOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
VINYL CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
O-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
M/P-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit
N.D.: Not Detected or less than the practical quantitation limit. "-": Analysis is not required.
J: Reported between PQL and MDL.
Listed Dilution Factors (DF) are relative to the method default DF. All unlisted DFs are 1.0
[a] MDL reported.

Respectfully submitted,

Dominic Lau
Laboratory Director
Applied P & Ch Laboratory

Level C Data Package Deliverables

General Information

Project: 04-4428.10 JPL

APCL Service ID: 03-2819

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

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Case Narrative

Project: JPL/MW-19/04-4428.10

For GEOFON, Inc.

APCL Service No: 03-2819

1. Sample Identification

The sample identifications are listed in the following table:

GEOFON, Inc. Sample ID	APCL Sample ID
MW-19-5	03-02819-6
MW-19-4	03-02819-5
MW-19-3	03-02819-4
MW-19-2	03-02819-3
MW-19-1	03-02819-2
TB-3-4/22/03	03-02819-7
EB-3-4/22/03	03-02819-1

2. Analytical Methodology

Samples are analyzed by EPA methods

9040B (pH),
SM2320B (Carbonate /Bicarbonate),
160.1 (Solids, Total Dissolved (TDS)),
7196A (Chromium (VI)),
314.0 (Perchlorate),
300.0 (Anion by IC),
200.9 (Arsenic, As, by GFAA),
200.7 (Metal by ICP),
524.2 (Volatile Organic Compounds),

3. Holding Time

All samples were extracted, digested and analyzed within the holding times defined by the appropriate EPA methods of the analyses.

4. Preservation

All samples were preserved and stored according to the appropriate EPA methods.

5. Tele-log

None

6. Anomaly

None

"I certify that these data are technically accurate, complete, and in compliance with the terms and conditions of the contract, for other than the conditions detailed above. Release of the data contained in the hardcopy data package and its electronic data deliverable submitted on diskette had been authorized by the Laboratory Manager or her/his designee, as verified by the following signature."

Respectfully submitted,

Regina Kirakozova
Associate QA/QC Director
Applied P & Ch Laboratory

GEOFON INCORPORATED

22632 GOLDEN SPRINGS DR., SUITE 270
DIAMOND BAR, CA 91765 • (909) 396-7662 • FAX (909) 396-1455

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-19 0020

GEOFON's LAB COORDINATOR	LAB COORDINATOR'S PHONE	LAB COORDINATOR'S FAX	LABORATORY SERVICE ID	LABORATORY CONTACT	MAIL REPORT (COMPANY NAME)
Brad Shojaee	(909) 396-7662	(909) 396-1455	–	Kenny Chan	GEOFON, INC.
PROJECT NAME	**PROJECT LOCATION**	**PROJECT NUMBER**	**LABORATORY PHONE**	**LABORATORY FAX**	**RECIPIENT NAME**
JPL GW MON-2003	MW-19 (Pasadena City Yard)	04-4428.10	(909) 590-1828	(909) 590-1498	Leo W. Williamson
PROJECT CONTACT	**PROJECT PHONE NUMBER**	**PROJECT FAX**	**LABORATORY ADDRESS**		**ADDRESS**
Leo W. Williamson	(714) 920-8729	(909) 396-1455	13760 Magnolia Ave		22632 Golden Springs Dr. #270
PROJECT ADDRESS	**CITY, STATE AND ZIPCODE**	**CLIENT**	**CITY, STATE AND ZIPCODE**		**CITY, STATE AND ZIPCODE**
4800 Oak Grove Dr.	Pasadena, CA.	US NAVY SWDIV	Chino, CA. 91710		Diamond Bar, CA. 91765
PROJECT MANAGER	**PROJECT MANAGER'S PHONE**	**PROJECT MANAGER'S FAX**			
Asrar Faheem	(909) 396-7662	(909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	Analyses: 524.2 (VOCs)	200.7 & 200.8 (Minerals)	7196 (Hex Chrome)	SM2320B (Carb. Bicarb.)	300.0 (Cl, SO_4, NO_3)	314.0 (Perchlorate)	160.1 (TDS) & 9040B (pH)	200.8 (Cr+, Pb_2)	Comments
1	MW-19-5	H_2O	4/22/03	920	HCl NONE HNO_3	3+1 1+1	III	NORMAL	X	X	X	X	X	X	X	X	MINERALS: Na / K / Ca / As / Mg / Fe
2	MW-19-4	↓	↓	1025	↓	↓	↓	↓	X	X	X	X	X	X	X	X	
3	MW-19-3			1130					X	X	X	X	X	X	X	X	
4	MW-19-2			1300					X	X	X	X	X	X	X	X	MS / MSD
5	MW-19-1	↓	↓	1410	↓	↓	↓	↓	X	X	X	X	X	X	X	X	
6																	
7	TB-3-4/22/03	H_2O	–	–	HCl	3	III	NORMAL	X								
8	EB-3-4/22/03	↓	4/22/03	1140	HCl NONE HNO_3	3+1 1+1	↓	↓	X	X	X	X	X	X	X	X	
9																	
10																	

2819

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER.				COOLER TEMPERATURE UPON RECEIPT
Leo W. Williamson					
RELINQUISHED BY	**RECEIVED BY**	**DATE**	**TIME**		**SAMPLE'S CONDITION UPON RECEIPT**
Leo W. Williamson		4/24/03	14:37		
		4/22/03	1555		

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

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

Sample Receiving Checklist

APCL ServiceID: 2819 **Client Name/Project:** Geofon Inc

1. Sample Arrival

Date/Time Received 4/22/03 1555 Date/Time Opened 4/22/03 1555 By (name): Paul Kay
Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Adam Weel

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☑ Client has Copy? ☑ Signed, dated? By: L.W.
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold _____ # Received 7
☐ CoC/Docs Zip-Locked under lid? ☐ Compos.#: _ ☑ #Samples OK? _____
☐ Discrepancies? ☐ Client notified? ☐ Response (attach docs): _____

3. Shipping Container/Cooler

☑ Cooler Used? # of 1 Cooled by: ☑ Ice ☐ Blue Ice ☐ Dry Ice ☐ None
Temp °C 2.9°C _____ _____ _____ _____ _____
(Cooler temperature measured from temp blank if present, otherwise measured from the cooler).
Cooler Custody Seal? ☑ Absent ☐ Intact ☐ Tampered?

4. Sample Preservation

☐ **pH <2** ☐ pH >12
If Not, pH = _____ Preserved by: ☐ Client ☐ APCL ☐ Third Party _____

5. Holding-time Requirements

☐ pH 24hr ☐ BACT 6/24hr ☐ Cr^{VI} 24hr ☐ NO_3^- 48hr ☐ BOD 48hr
☐ Cl_2 ASAP ☐ Turbidity 48hr ☐ DO ASAP ☐ Fe(II) ASAP
☐ HT Expired? ☐ Client notified?

6. Sample Container Condition

☑ Intact? ☐ Broken? ☐ Documented? Number: _____
Type: ☑ plastic ☑ glass ☐ Tube: brass/SS ☐ Tedlar Bag
☑ Quantity OK? ☐ Leaking? ☐ Anomaly?
☑ Caps tight? ☐ Air Bubbles? ☐ Anomaly?
Labels: ☑ Unique ID? ☐ Date/Time ☐ Preserved?

7. Turn Around Time

☑ RUSH TAT: 5 days ☐ Std (7-10 days) ☐ Not Marked

8. Sample Matrix

☐ Drinking H_2O ☑ Other Liq ☐ Soil ☐ Wipe ☐ Polymer ☐ Air ☐ Other: _____
☐ Ground H_2O ☐ Sludge ☐ Filter ☐ Oil/Petro ☐ Paint ☐ W. Water ☐ Extract ☐ Unknown

9. Pre-Login Check List Completed & OK?

☑ ALL OK? (if not, attach docs) ☐ Client Contact? (Name:_____)Date/Time:_____
Received/Checked by: Paul K Date: 22 Apr 2003 Time: 7:41a.m.

***HT:** Samples must be analyzed for results to reflect total concentrations. Results generated outside required of holding times are considered minimal values and may be used to define waste as hazardous but not as non-hazardous.

DocumentFile: {neal.texfiles}smprcl.tex.

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Sample Login: Check List

03-02819 (0470_ 130) (2202777_ 130)

04/22/03

Part 1: General Information

☐	Company Information	Name:	*GEOFON, Inc.*
		Address:	*22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765*
☐	Project Information	Project Description:	*JPL*
		Project #:	*04-4428.10*
☐	Billing Information	P.O. #:	
		Bill Address:	*22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765*
		Lab Project ID:	
		Client Database #:	*3*
☐	Receiving Information	Who Received Sample?	*Paul Kou*
		Receiving Date/Time:	*04/22/03 1555*
		COC No.	
☐	Shipping Information	Shipping Company	*APCL pick up*
		Packing Information:	*Cooler/Ice Chester*
		Cooler Temperature:	*2.9 °C*
☐	Container Information	Container Provider:	*Client*
☐	Sampling Information	Sampling Person:	
		Sampling Company:	*Client*
☐	Turn-Around-Time Option:		*Rush 5 working day(s)*
☐	QC Option:		*NEESA C*
☐	Disposal Option:		*Not specify*

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Cont-tainer	Preser-vative	Vol, ml Am. g	# of Replica	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	MW-19-5	VOC	03-02819-6-α	W	V	C	40	3	G	042203	N	0	7	☐
	MW-19-5	Metal	03-02819-6-β	W	P	N	500	1	G	042203	N	0	7	☐
	MW-19-5	300	03-02819-6-γ	W	P		500	1	G	042203	N	0	7	☐
2	MW-19-4	VOC	03-02819-5-α	W	V	C	40	3	G	042203	N	0	7	☐
	MW-19-4	Metal	03-02819-5-β	W	P	N	500	1	G	042203	N	0	7	☐
	MW-19-4	300	03-02819-5-γ	W	P		500	1	G	042203	N	0	7	☐
3	MW-19-3	VOC	03-02819-4-α	W	V	C	40	3	G	042203	N	0	7	☐
	MW-19-3	Metal	03-02819-4-β	W	P	N	500	1	G	042203	N	0	7	☐
	MW-19-3	300	03-02819-4-γ	W	P		500	1	G	042203	N	0	7	☐
4	MW-19-2	VOC	03-02819-3-α	W	V	C	40	6	G	042203	N	0	7	☐
	MW-19-2	Metal	03-02819-3-β	W	P	N	500	2	G	042203	N	0	7	☐
	MW-19-2	300	03-02819-3-γ	W	P		500	2	G	042203	N	0	7	☐
5	MW-19-1	VOC	03-02819-2-α	W	V	C	40	3	G	042203	N	0	7	☐
	MW-19-1	Metal	03-02819-2-β	W	P	N	500	1	G	042203	N	0	7	☐
	MW-19-1	300	03-02819-2-γ	W	P		500	1	G	042203	N	0	7	☐
6	TB-3-4/22/03	VOC	03-02819-7	W	V	C	40	2	G	042203	N	0	7	☐
7	EB-3-4/22/03	VOC	03-02819-1-α	W	V	C	40	3	G	042203	N	0	7	☐
	EB-3-4/22/03	Metal	03-02819-1-β	W	P	N	500	1	G	042203	N	0	7	☐
	EB-3-4/22/03	300	03-02819-1-γ	W	P		500	1	G	042203	N	0	7	☐

Part 3: Analysis Information

Test Items:

- ☐ *524.2* Volatile Organic Compounds
- ☐ *7196A* Chromium (VI)
- ☐ *314.0/300.0* Perchlorate, low level
- ☐ *300.0* Chloride Cl^- by IC
- ☐ *300.0* Sulfate (SO_4^{--}), by IC
- ☐ *300.0/SM4500NO3* Nitrate (NO_3^-) as N by IC
- ☐ *SM2320B* Carbonate
- ☐ *SM2320B* Bicarbonate
- ☐ *9040B/150.1* pH
- ☐ *160.1* Solids, Total Dissolved (TDS)
- ☐ *200.7/6010B* Sodium, Na, by ICP
- ☐ *200.7/6010B* Calcium, Ca, by ICP
- ☐ *200.7/6010B* Potassium, K, by ICP
- ☐ *200.7/6010B* Magnesium, Mg, by ICP
- ☐ *200.7/6010B* Iron, Fe, by ICP

Level C Data Package Deliverables

Volatile Organics

Applied P & Ch Laboratory

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/23/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03G2136-MB-01	Received Date:	04/23/2003
Sample ID:	**03G2136-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	15:34
Data File Name:	G2136K01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	70-129	104
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	73
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	89
4	TOLUENE-D8	2037-26-5	73-129	100
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	86
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	90
3	FLUOROBENZENE	462-06-6	50-200	95
# of out-of-control				0

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

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-1	Received Date:	04/22/2003
Sample ID:	**EB-3-4/22/03**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	16:03
Data File Name:	2819-01	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1 [a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8 [a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates		Control Limit, %	Surro. Rec.%
1 1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	107
2 1,2-DICHLOROETHANE-D4	17060-07-0	70-129	79
3 DIBROMOFLUOROMETHANE	1868-53-7	70-122	91
4 TOLUENE-D8	2037-26-5	73-129	101
# of out-of-control			0

Internal Standard		Control Limit, %	IS Rec.%
1 CHLOROBENZENE-D5	3114-55-4	50-200	90
2 1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	93
3 FLUOROBENZENE	462-06-6	50-200	97
# of out-of-control			0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a] MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-2	Received Date:	04/22/2003
Sample ID:	**MW-19-1**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	-	Anal. Time:	16:32
Data File Name:	2819-02	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1 [a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8 [a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates		Control Limit, %	Surro. Rec.%
1 1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	104
2 1,2-DICHLOROETHANE-D4	17060-07-0	70-129	85
3 DIBROMOFLUOROMETHANE	1868-53-7	70-122	88
4 TOLUENE-D8	2037-26-5	73-129	98
# of out-of-control			0

Internal Standard		Control Limit, %	IS Rec.%
1 CHLOROBENZENE-D5	3114-55-4	50-200	94
2 1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	95
3 FLUOROBENZENE	462-06-6	50-200	99
# of out-of-control			0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-3	Received Date:	04/22/2003
Sample ID:	**MW-19-2**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	17:00
Data File Name:	2819-03	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	0.6	
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1 [a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8[a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	1.0	
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	0.4	J
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates		Control Limit, %	Surro. Rec.%
1 1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	110
2 1,2-DICHLOROETHANE-D4	17060-07-0	70-129	82
3 DIBROMOFLUOROMETHANE	1868-53-7	70-122	90
4 TOLUENE-D8	2037-26-5	73-129	101
# of out-of-control			0

Internal Standard		Control Limit, %	IS Rec.%
1 CHLOROBENZENE-D5	3114-55-4	50-200	88
2 1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	88
3 FLUOROBENZENE	462-06-6	50-200	96
# of out-of-control			0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-4	Received Date:	04/22/2003
Sample ID:	**MW-19-3**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	17:29
Data File Name:	2819-04	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1[a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8[a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	0.8	
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	110
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	89
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	93
4	TOLUENE-D8	2037-26-5	73-129	104
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	86
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	88
3	FLUOROBENZENE	462-06-6	50-200	94
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-5	Received Date:	04/22/2003
Sample ID:	**MW-19-4**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	17:58
Data File Name:	2819-05	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	0.7	
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1[a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8[a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	102
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	88
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	86
4	TOLUENE-D8	2037-26-5	73-129	99
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	92
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	93
3	FLUOROBENZENE	462-06-6	50-200	98
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-6	Received Date:	04/22/2003
Sample ID:	**MW-19-5**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	–	Anal. Time:	18:26
Data File Name:	2819-06	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	0.3	J
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1[a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8[a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	2.8	
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	108
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	91
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	91
4	TOLUENE-D8	2037-26-5	73-129	104
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	94
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	91
3	FLUOROBENZENE	462-06-6	50-200	96
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

Applied P & Ch Laboratory

Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	04/22/2003
Project ID:	JPL	Service ID:	32819	Collected by:	
		Lab Sample ID:	03-2819-7	Received Date:	04/22/2003
Sample ID:	**TB-3-4/22/03**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	04/23/03	Anal. Date:	04/23/03
Batch No:	03G2136	Prep. No:	-	Anal. Time:	18:56
Data File Name:	2819-07	Sample Amount:	25 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	25 mL	Heated Purge: (Y/N)	N

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	BENZENE	71-43-2	µg/L	0.5	<0.5	U
2	BROMOBENZENE	108-86-1	µg/L	0.5	<0.5	U
3	BROMOCHLOROMETHANE	74-97-5	µg/L	0.5	<0.5	U
4	BROMODICHLOROMETHANE	75-27-4	µg/L	0.5	<0.5	U
5	BROMOFORM	75-25-2	µg/L	0.5	<0.5	U
6	BROMOMETHANE	74-83-9	µg/L	0.5	<0.5	U
7	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	1.1[a]	<1.1	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	1.8[a]	<1.8	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates		Control Limit, %	Surro. Rec.%
1 1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	105
2 1,2-DICHLOROETHANE-D4	17060-07-0	70-129	84
3 DIBROMOFLUOROMETHANE	1868-53-7	70-122	90
4 TOLUENE-D8	2037-26-5	73-129	100
# of out-of-control			0

Internal Standard		Control Limit, %	IS Rec.%
1 CHLOROBENZENE-D5	3114-55-4	50-200	86
2 1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	87
3 FLUOROBENZENE	462-06-6	50-200	94
# of out-of-control			0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]MDL reported.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		SDG Number:	032819
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G2136		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	03G2136-LCS-01	03G2136-LCS-01	109	89	98	102	0
2	MW-19-2MS	03-2819-3MS	107	85	95	104	0
3	MW-19-2MSD	03-2819-3MSD	111	88	98	102	0
4	03G2136-MB-01	03G2136-MB-01	104	73	89	100	0
5	EB-3-4/22/03	03-2819-1	107	79	91	101	0
6	MW-19-1	03-2819-2	104	85	88	98	0
7	MW-19-2	03-2819-3	110	82	90	101	0
8	MW-19-3	03-2819-4	110	89	93	104	0
9	MW-19-4	03-2819-5	102	88	86	99	0
10	MW-19-5	03-2819-6	108	91	91	104	0
11	TB-3-4/22/03	03-2819-7	105	84	90	100	0
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC Control Limit
S1 = 1-BROMO-4-FLUOROBENZENE (4-BROMOFL	70-129
S2 = 1,2-DICHLOROETHANE-D4	70-129
S3 = DIBROMOFLUOROMETHANE	70-122
S4 = TOLUENE-D8	73-129

Column to be used to flag recovery values:

* – Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32819
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G2136		
LCS Filename:	G2136L01	Date Analyzed:	042303	Time Analyzed:	11:44
LCSD Filename:	–	Date Analyzed:	–	Time Analyzed:	–

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/L	20	0	21.0	105	65-120
CHLOROBENZENE	µg/L	20	0	21.5	108	65-134
1,1-DICHLOROETHENE	µg/L	20	0	19.7	99	65-127
TOLUENE	µg/L	20	0	19.6	98	65-134
TRICHLOROETHENE	µg/L	20	0	19.9	100	67-122
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

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

Comments: _____

_____

FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32819
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G2136		
MS Filename:	G2136M01	Date Analyzed:	042303	Time Analyzed:	12:13
MSD Filename:	G2136N01	Date Analyzed:	042303	Time Analyzed:	12:42
MS Sample No:	**MW-19-2**	Sample Lab ID:	03-2819-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	µg/L	20	0	20.5	103	65-121
CHLOROBENZENE	µg/L	20	0	21.4	107	65-134
1,1-DICHLOROETHENE	µg/L	20	0	19.0	95	65-127
TOLUENE	µg/L	20	0	20.0	100	65-134
TRICHLOROETHENE	µg/L	20	0.4	20.3	100	65-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	µg/L	20	21.0	105	2	28	65-121
CHLOROBENZENE	µg/L	20	22.0	110	3	35	65-134
1,1-DICHLOROETHENE	µg/L	20	19.2	96	1	31	65-127
TOLUENE	µg/L	20	19.9	100	0	35	65-134
TRICHLOROETHENE	µg/L	20	20.1	99	1	30	65-125
# 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: _____

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	32819
Project ID:	JPL	Project No:	04-4428.10	Analysis Date:	04/23/03
		Sample Matrix:	Water	Analysis Time:	15:34
Sample ID:	**03G2136-MB-01**	Batch No:	03G2136	Instrument ID:	GC/MS: G
Lab Sample ID:	03G2136-MB-01	Data File Name:	G2136K01	GC Column:	DB-VEX
		Heated Purge: (Y/N)	N	Column ID:	0.45 mm

This Method Blank applies to the following samples and QC samples:

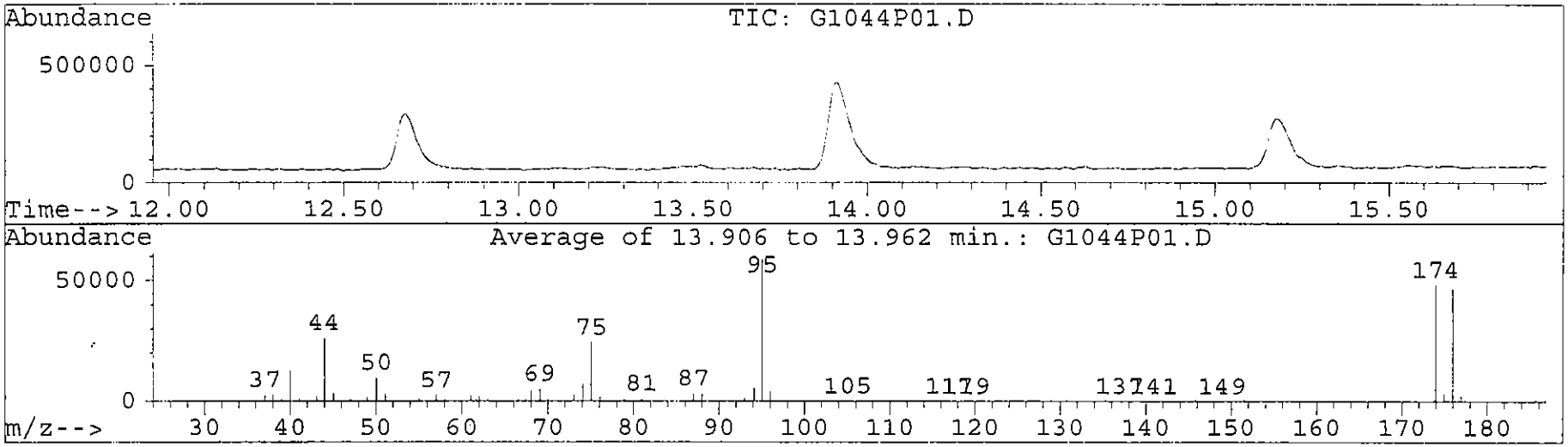
#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	03G2136-LCS-01	03G2136-LCS-01	Lab Contorl Spike	G2136L01	04/23/03	11:44
2	MW-19-2MS	03-2819-3MS	Matrix Spike	G2136M01	04/23/03	12:13
3	MW-19-2MSD	03-2819-3MSD	Matrix Spike Duplicate	G2136N01	04/23/03	12:42
4	EB-3-4/22/03	03-2819-1	Field Sample	2819-01	04/23/03	16:03
5	MW-19-1	03-2819-2	Field Sample	2819-02	04/23/03	16:32
6	MW-19-2	03-2819-3	Field Sample	2819-03	04/23/03	17:00
7	MW-19-3	03-2819-4	Field Sample	2819-04	04/23/03	17:29
8	MW-19-4	03-2819-5	Field Sample	2819-05	04/23/03	17:58
9	MW-19-5	03-2819-6	Field Sample	2819-06	04/23/03	18:26
10	TB-3-4/22/03	03-2819-7	Field Sample	2819-07	04/23/03	18:56
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

BFB

Data File : C:\HPCHEM\1\DATA\03G1044\G1044P01.D
Acq On : 10 Jan 03 1:51 pm
Sample : ##03g1044, w
Misc :

Vial: 16
Operator: Eddie
Inst : GCMS-G
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2



Peak Apex is scan: 1479

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	16.9	9968	PASS
75	95	30	60	41.9	24658	PASS
95	95	100	100	100.0	58860	PASS
96	95	5	9	7.2	4263	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	82.4	48487	PASS
175	174	5	9	7.2	3468	PASS
176	174	95	101	96.8	46953	PASS
177	176	5	9	6.3	2949	PASS

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 03-2819

Lab File ID: G1044 P01 BFB Injection Date: 01/10/2003

Instrument ID: GCMS-G BFB Injection Time: 1351

GC Column: VOCOL ID: 0.32 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.9
75	30.0 - 60.0% of mass 95	41.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 100.0% of mass 95	82.4
175	5.0 - 9.0% of mass 174	5.9 (7.2)1
176	95.0 - 101.0% of mass 174	79.8 (96.8)1
177	5.0 - 9.0% of mass 176	5.0 (6.3)2

1-Value is % mass 174 2-Value is % mass 176

This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD0003	003-A0003	003-A0003.D	01/10/03	1427
02	VSTD002	003-002	003-0002.D	01/10/03	1526
03	VSTD010	003-0010	003-0010.D	01/10/03	1555
04	VSTD020	003-0020	003-0020.D	01/10/03	1624
05	VSTD040	003-0040	003-0040.D	01/10/03	1654
06	VSTD080	003-0080	003-0080.D	01/10/03	1723
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