

Level C Data Package Deliverables

Wet Chemistry



Applied P & Ch Laboratory

Applied P & Ch Laboratory
Wet Analysis Results for Method 7196

Client Name: GEOFON, Inc.
Project ID: JPL GW Mon-4Q03

Project No: 04-4428.10
Service ID: 36002

Anal. Method 7196
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
03-6002-1	DUPE-7-4-Q03	Water	11/06/03	11/06/03	11/06/03	03W5082	mg/L	0.01	<0.01	U
03-6002-2	MW-5	Water	11/06/03	11/06/03	11/06/03	03W5082	mg/L	0.01	<0.01	U
03-6002-3	MW-8	Water	11/06/03	11/06/03	11/06/03	03W5082	mg/L	0.01	0.0080	B
03-6002-4	MW-10	Water	11/06/03	11/06/03	11/06/03	03W5082	mg/L	0.01	<0.01	U
03W5082-MB-01	03W5082-MB-01	Water	11/06/03	11/06/03	11/06/03	03W5082	mg/L	0.01	<0.01	U

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

Note: Q - Qualifier.

Qualifier: U - Not Detected or less than MDL

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

Applied P & Ch Laboratory
Wet Analysis Results for Method 314.0

Client Name: GEOFON, Inc. Project No: 04-4428.10 Anal. Method 314.0
 Project ID: JPL GW Mon-4Q03 Service ID: 36002 Collected by:

Component Name: Perchlorate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-6002-1	DUPE-7-4-Q03	Water	11/06/03	11/06/03	11/10/03	03W5108	µg/L	4	20.2	
03-6002-2	MW-5	Water	11/06/03	11/06/03	11/11/03	03W5120	µg/L	4	<4	U
03-6002-3	MW-8	Water	11/06/03	11/06/03	11/10/03	03W5108	µg/L	4	20.2	
03-6002-4	MW-10	Water	11/06/03	11/06/03	11/11/03	03W5120	µg/L	4	21.9	
03W5108-MB-01	03W5108-MB-01	Water	11/10/03	11/10/03	11/10/03	03W5108	µg/L	4	<4	U
03W5120-MB-01	03W5120-MB-01	Water	11/11/03	11/11/03	11/11/03	03W5120	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.

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: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5108	
LCS Filename: -	Date Analyzed: 111003	Time Analyzed:
LCSD Filename: -	Date Analyzed: 111003	Time Analyzed:

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
PERCHLORATE	µg/L	25	0	26.2	105	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	25	28.0	112	6	20	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: _____

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: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5108	
MS Filename: -	Date Analyzed: 111003	Time Analyzed:
MSD Filename: -	Date Analyzed: 111003	Time Analyzed:
MS Sample No: MW-3-1	Sample Lab ID: 03-5973-2	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
PERCHLORATE	µg/L	25	0	26.2	105	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	25	26.7	107	2	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: _____

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: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5082	
LCS Filename: -	Date Analyzed: 110603	Time Analyzed: 12:00
LCSD Filename: -	Date Analyzed: 110603	Time Analyzed: 12:00

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
CHROMIUM (VI)	mg/L	0.25	0	0.242	97	80-115
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHROMIUM (VI)	mg/L	0.25	0.246	98	1	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: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5082	
MS Filename: -	Date Analyzed: 110603	Time Analyzed: 12:00
MSD Filename: -	Date Analyzed: 110603	Time Analyzed: 12:00
MS Sample No: MW-5	Sample Lab ID: 03-6002-2	

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

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
CHROMIUM (VI)	mg/L	0.25	0.233	93	3	19	78-115
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits

D - Spiked components diluted out

Comments: _____

FORM-3

Applied P & Ch Laboratory

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

Client Name: GEOFON, Inc.	Contract No:	Lab Code: APCL
Case No:	SAS No:	Service ID: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5120	
LCS Filename: -	Date Analyzed: 111103	Time Analyzed:
LCSD Filename: -	Date Analyzed: 111103	Time Analyzed:

Spiked Components	Unit	Spike Added	Concentration		LCS Rec% #	QC Limit, % REC
			Unspiked	LCS		
PERCHLORATE	µg/L	25	0	28.8	115	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	25	28.7	115	0	20	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: _____

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: 36002
Project ID: JPL GW Mon-4Q03	Project No: 04-4428.10	Sample Matrix: Water
	Batch No: 03W5120	
MS Filename: -	Date Analyzed: 111103	Time Analyzed:
MSD Filename: -	Date Analyzed: 111103	Time Analyzed:
MS Sample No: MW-5	Sample Lab ID: 03-6002-2	

Spiked Components	Unit	Spike Added	Concentration		MS Rec% #	QC Limit, % REC
			Unspiked	MS		
PERCHLORATE	µg/L	25	0	30.0	120	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, %	
						RPD	REC
PERCHLORATE	µg/L	25	30.1	120	0	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: _____

6A

INITIAL CALIBRATION DATA

Lab Name: Applied P & Ch Lab Contract: 36002

Analysis: Chromium (VI) Calibration Date: 7/28/03

Concentration (mg/L)	0.000	0.0125	0.025	0.125	0.250	0.50
Absorbance	0.000	0.007	0.017	0.107	0.212	0.420

A = -0.001 + 0.846C

A = Absorbance

C = Concentration (mg/L)

r = 0.9999

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

Client Name: GEOFON, Inc.
 Case No:
 Project ID: JPL GW Mon-4Q03

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

Lab Code: APCL
 Service ID: 36002

#	Component Name	Method	Batch No.	Unit	Expected	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Perchlorate	314.0	03W5108	µg/L	50	57.0	114	14	✓	85-115	11/10/2003
	Perchlorate	314.0	03W5108	µg/L	50	57.3	115	15	✓	85-115	11/10/2003
	Perchlorate	314.0	03W5108	µg/L	50	57.1	114	14	✓	85-115	11/10/2003
	Perchlorate	314.0	03W5108	µg/L	50	57.2	114	14	✓	85-115	11/10/2003
2	Chromium (VI)	7196	03W5082	mg/L	0.25	0.251	100	0	✓	90-110	11/06/2003
	Chromium (VI)	7196	03W5082	mg/L	0.25	0.255	102	2	✓	90-110	11/06/2003
3	Perchlorate	314.0	03W5120	µg/L	50	57.0	114	14	✓	85-115	11/11/2003
	Perchlorate	314.0	03W5120	µg/L	50	57.3	115	15	✓	85-115	11/11/2003
	Perchlorate	314.0	03W5120	µg/L	50	57.1	114	14	✓	85-115	11/11/2003
	Perchlorate	314.0	03W5120	µg/L	50	57.1	114	14	✓	85-115	11/11/2003

APCL Perchlorate Analysis Report

Sample Name : 6002-01 f=1

Data File Name : C:\DATA\03W5108K\6002-01_031.DXD

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

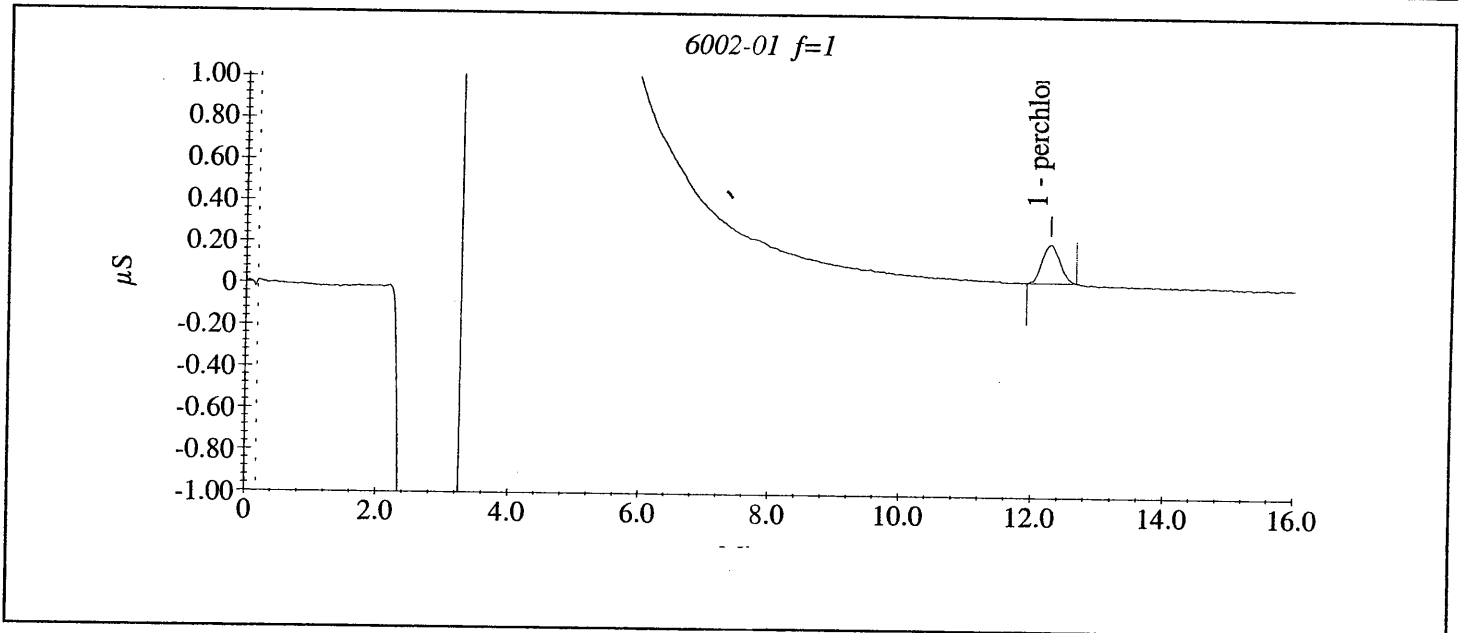
Date Time Collected : 11/11/2003 1:42:15 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.27	20.18	34253.20	1862.10



APCL Perchlorate Analysis Report

Sample Name : 6002-03 f=1

Data File Name : C:\DATA\03W5108K\6002-03_032.DXD

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

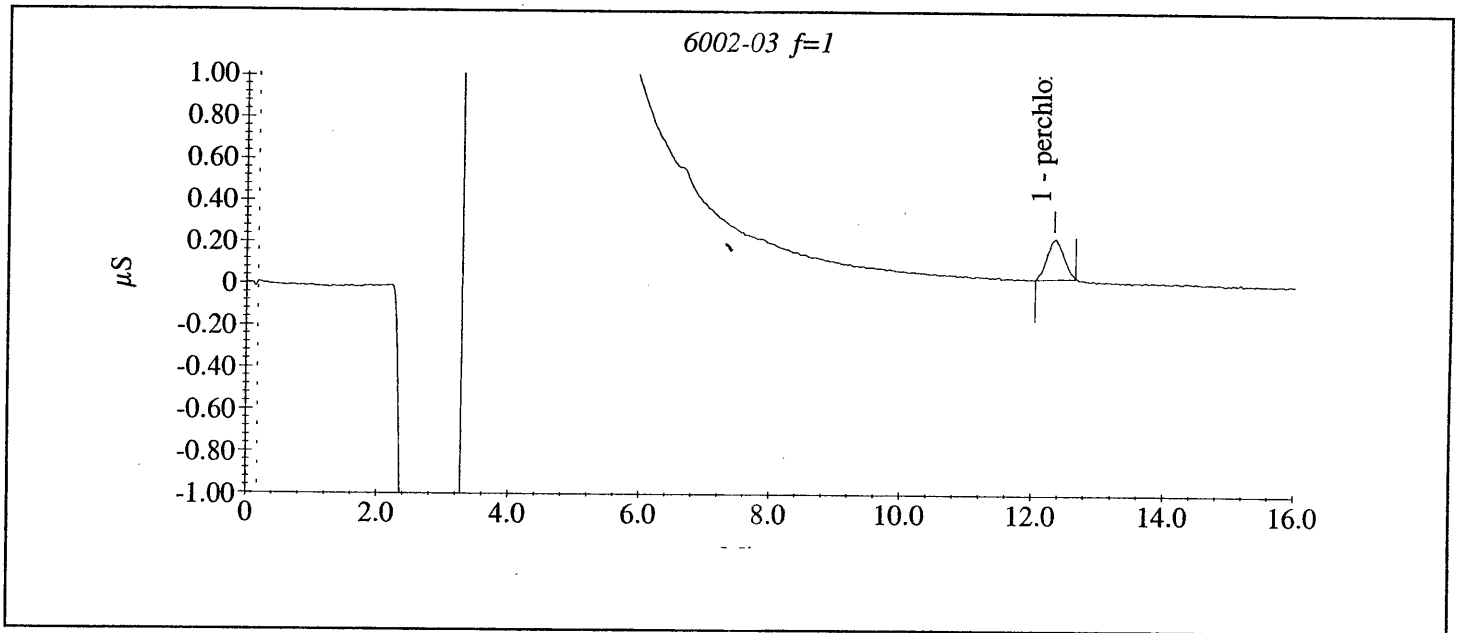
Date Time Collected : 11/11/2003 2:00:39 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.33	20.16	34211.60	1896.41



Line	Sample	Sample Type	Level	Method	Data File	Volume	Dilution
1	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5108k\w5108k q01	1	1
2	lcs 25ppb w8087	Sample		e314-011.met	c:\data\03w5108k\w5108k l01_002.dxd	1	1
3	Lcsd 25PPB W8257	Sample		e314-011.met	c:\data\03w5108k\w5108k j01_003.dxd	1	1
4	ICCS 4ppb w8088	Sample		e314-011.met	c:\data\03w5108k\w5108k iccs 4ppb_004.dxd	1	1
5	##03W5108K IPC 25PPB W8032	Sample		e314-011.met	c:\data\03w5108k\w5108k ipc 25ppb_005.dxd	1	1
6	mb	Sample		e314-011.met	c:\data\03w5108k\w5108k k01_006.dxd	1	1
7	5951-02 f=1	Sample		e314-011.met	c:\data\03w5108k\5951-02_007.dxd	1	1
8	5951-03 f=1	Sample		e314-011.met	c:\data\03w5108k\5951-03_008.dxd	1	1
9	5951-04 f=1	Sample		e314-011.met	c:\data\03w5108k\5951-04_009.dxd	1	1
10	5973-01 f=1	Sample		e314-011.met	c:\data\03w5108k\5973-01_010.dxd	1	1
11	5973-02 f=1	Sample		e314-011.met	c:\data\03w5108k\5973-02_011.dxd	1	1
12	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5108k\w5108k q02_012.dxd	1	1
13	ccb	Sample		e314-011.met	c:\data\03w5108k\w5108k ccb_013.dxd	1	1
14	5973-03 f=1	Sample		e314-011.met	c:\data\03w5108k\5973-03_014.dxd	1	1
15	5973-02 ms 25ppb f=1	Sample		e314-011.met	c:\data\03w5108k\w5108k m01_015.dxd	1	1
16	5973-02 msd 25ppb f=1	Sample		e314-011.met	c:\data\03w5108k\w5108k n01_016.dxd	1	1
17	5971-09 f=1	Sample		e314-011.met	c:\data\03w5108k\5971-09_017.dxd	1	1
18	5971-01 f=1	Sample		e314-011.met	c:\data\03w5108k\5971-01_018.dxd	1	1
19	5971-02 f=1	Sample		e314-011.met	c:\data\03w5108k\5971-02_019.dxd	1	1
20	5971-03 f=1	Sample		e314-011.met	c:\data\03w5108k\5971-03_020.dxd	1	1
21	5971-04 f=1	Sample		e314-011.met	c:\data\03w5108k\5971-04_021.dxd	1	1
22	5971-06 F=1	Sample		e314-011.met	c:\data\03w5108k\5971-06_022.dxd	1	1
23	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5108k\w5108k q03_023.dxd	1	1
24	ccb	Sample		e314-011.met	c:\data\03w5108k\w5108k ccb_024.dxd	1	1
25	5971-10 F=1	Sample		e314-011.met	c:\data\03w5108k\5971-10_025.dxd	1	1
26	5995-04 f=1	Sample		e314-011.met	c:\data\03w5108k\5995-04_026.dxd	1	1
27	5995-05 f=1	Sample		e314-011.met	c:\data\03w5108k\5995-05_027.dxd	1	1
28	5995-11 f=1	Sample		e314-011.met	c:\data\03w5108k\5995-11_028.dxd	1	1
29	5995-12 f=1	Sample		e314-011.met	c:\data\03w5108k\5995-12_029.dxd	1	1
30	5995-13 f=1	Sample		e314-011.met	c:\data\03w5108k\5995-13_030.dxd	1	1
31	6002-01 f=1	Sample		e314-011.met	c:\data\03w5108k\6002-01_031.dxd	1	1
32	6002-03 f=1	Sample		e314-011.met	c:\data\03w5108k\6002-03_032.dxd	1	1
33	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5108k\w5108k q04_033.dxd	1	1
34		Sample		aastopcl.met		1	1

Analyst W. W
 Date 11/10/03
 Instrument IC-1

Line	Weight	Int. Std.	Comment
1	1	1	
2	1	1	
3	1	1	
4	1	1	
5	1	1	
6	1	1	
7	1	1	
8	1	1	
9	1	1	
10	1	1	
11	1	1	
12	1	1	
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28	1	1	
29	1	1	
30	1	1	
31	1	1	
32	1	1	
33	1	1	
34	1	1	

Default Method Path: C:\PEAKNET\METHOD
Default Data Path: C:\DATA\03W5052K
Comment:

APCL Perchlorate Analysis Report

Sample Name : 5973-02 msd 25ppb f=1

Data File Name : C:\DATA\03W5108K\W5108K N01_016.DXD

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

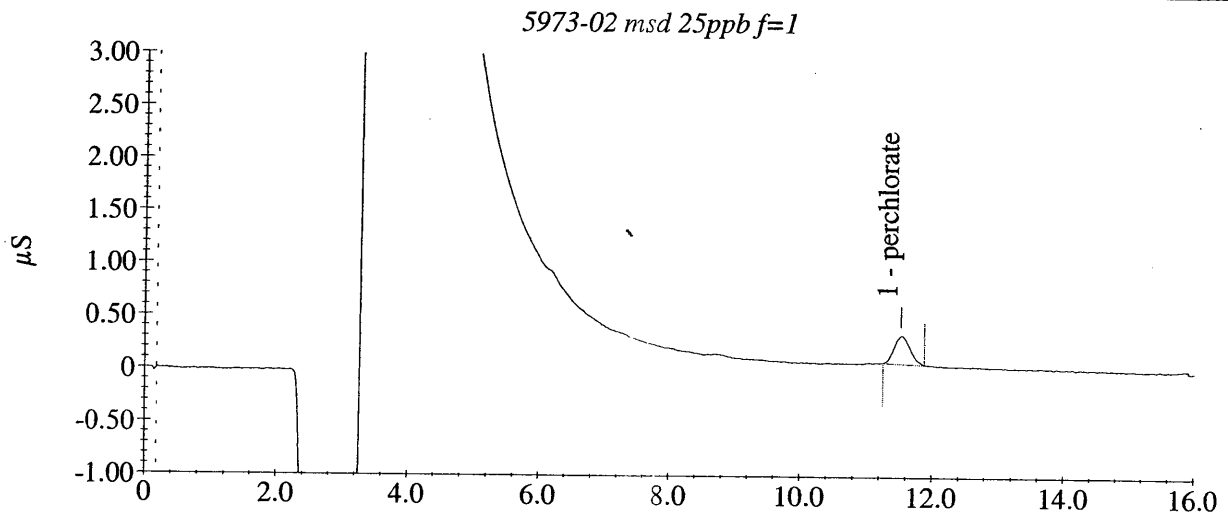
Date Time Collected : 11/10/2003 9:06:07 PM

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	11.52	26.73	45370.45	2652.08



Rec 106.92%



APCL Perchlorate Analysis Report

Sample Name : 5973-02 ms 25ppb f=1

Data File Name : C:\DATA\03W5108K\W5108K M01_015.DXD

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

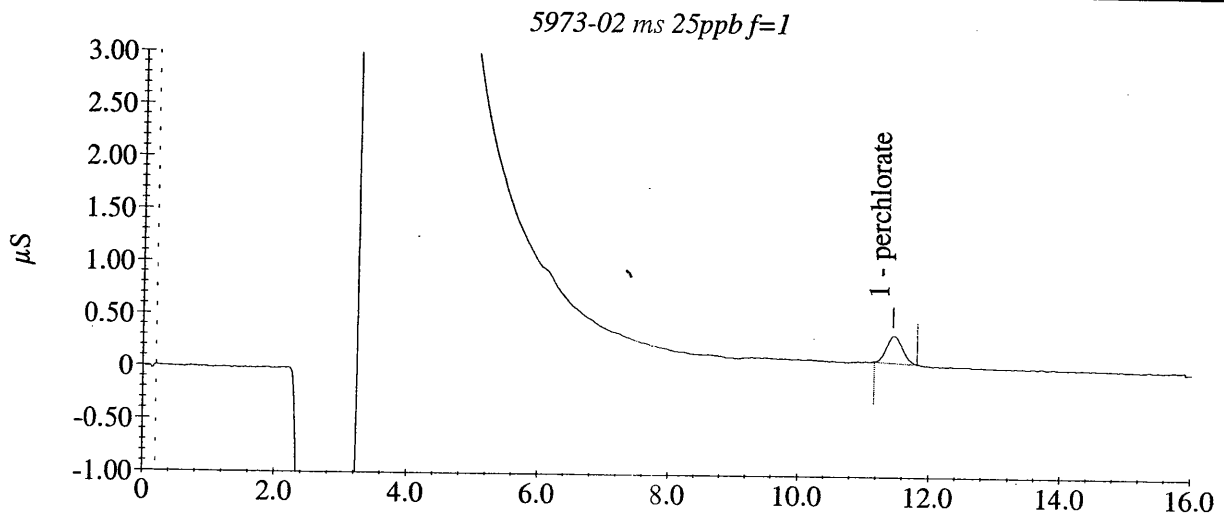
Date Time Collected : 11/10/2003 8:47:41 PM

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	11.43	26.20	44461.00	2600.57



See 104.807.



APCL Perchlorate Analysis Report

Sample Name : 5973-02 f=1

Data File Name : C:\DATA\03W5108K\5973-02_011.DXD

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

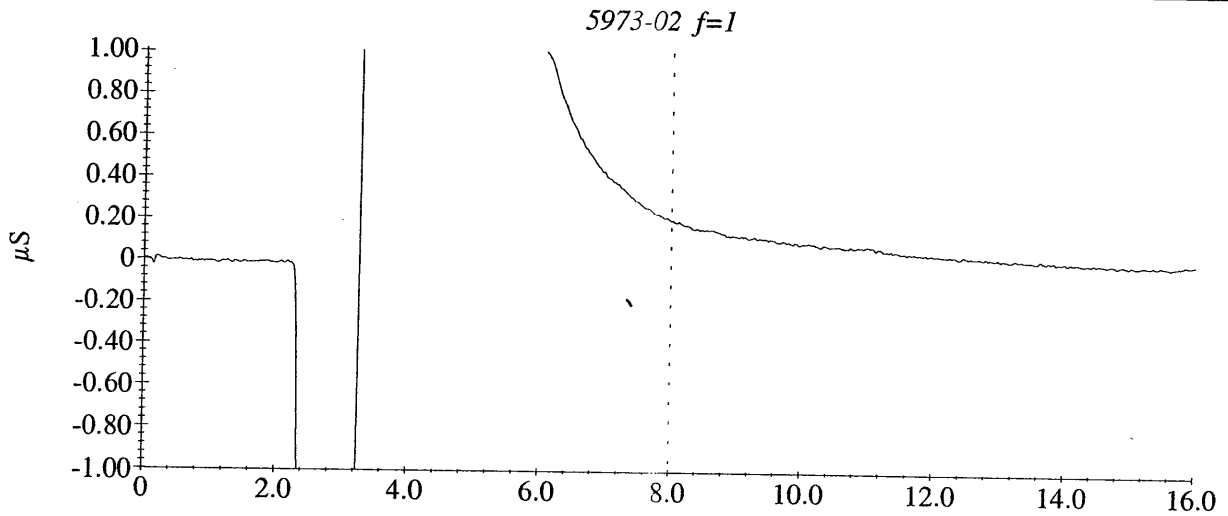
Date Time Collected : 11/10/2003 7:33:49 PM

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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APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w8082

Data File Name : C:\DATA\03W5108K\W5108K Q03_023.DXD

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

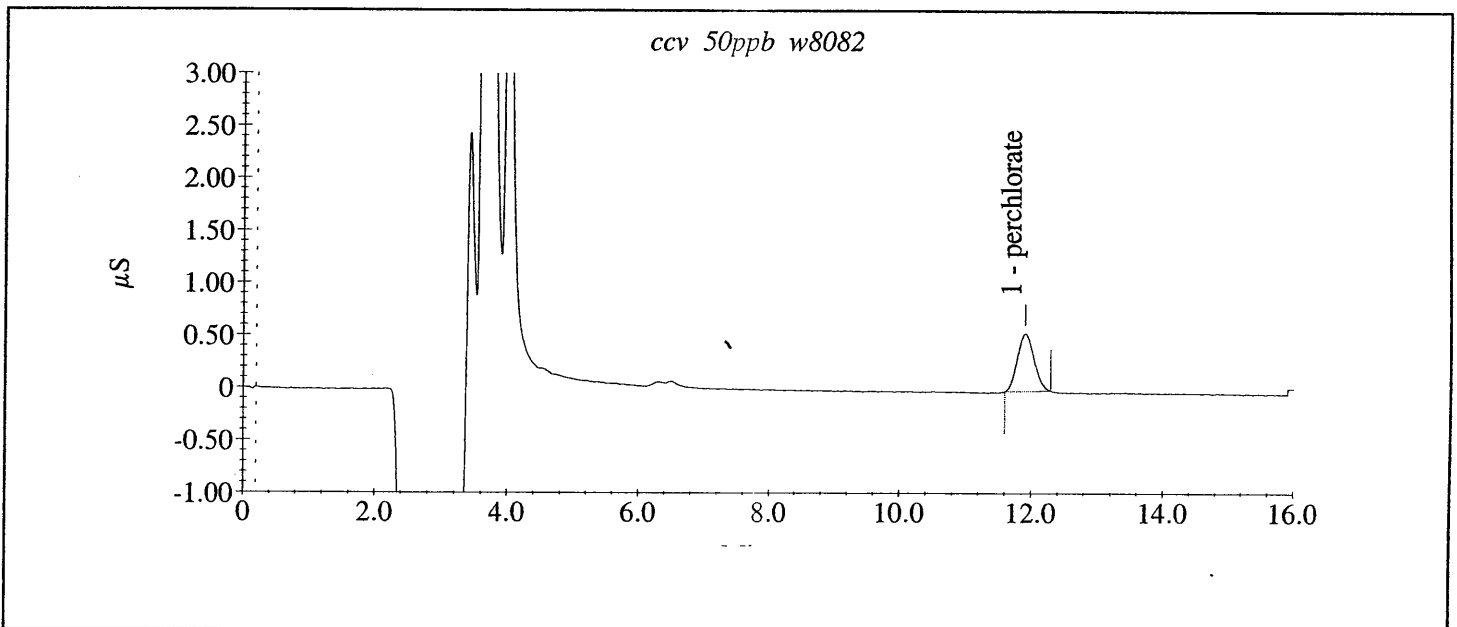
Date Time Collected : 11/10/2003 11:14:59 PM

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	11.90	57.11	96922.40	5514.72



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w8082

Data File Name : C:\DATA\03W5108K\W5108K Q04_033.DXD

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

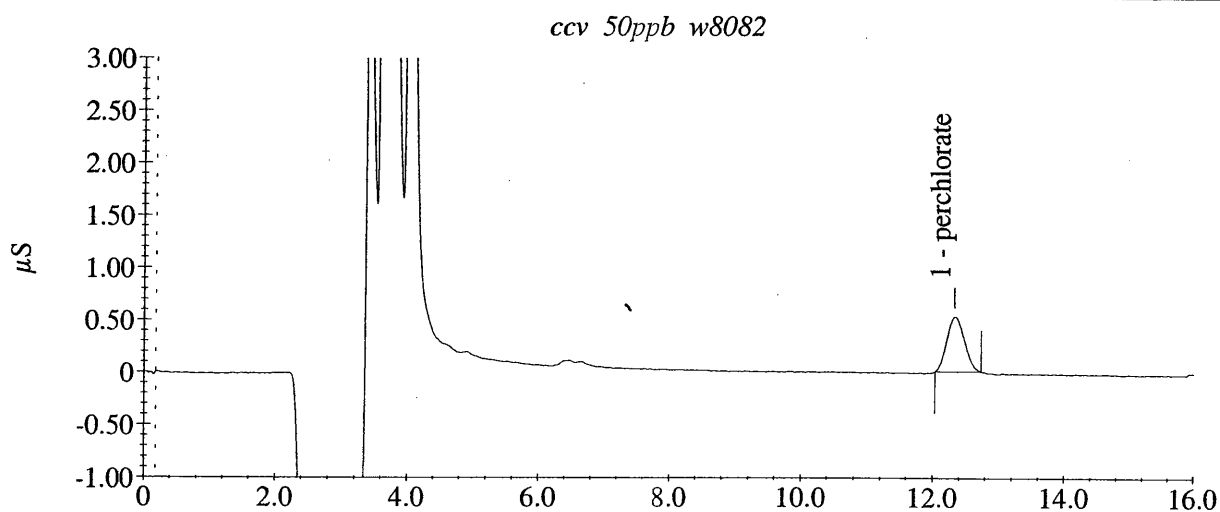
Date Time Collected : 11/11/2003 2:19:05 AM

System Operator : C.W and W.W

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
1	perchlorate	12.32	57.20	97068.15	5286.31



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w8082

Data File Name : C:\DATA\03W5108K\W5108K Q02_012.DXD

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

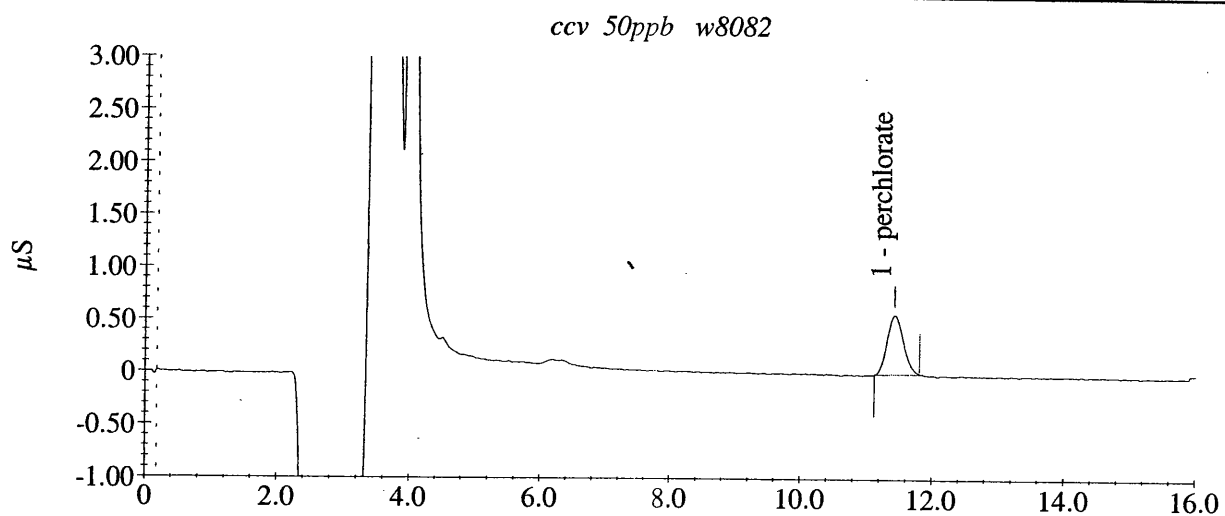
Date Time Collected : 11/10/2003 7:52:17 PM

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	11.42	57.31	97262.60	5686.38



APCL Perchlorate Analysis Report

Sample Name : ccv 50ppb w8082

Data File Name : C:\DATA\03W5108K\W5108K Q01_001.DXD

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

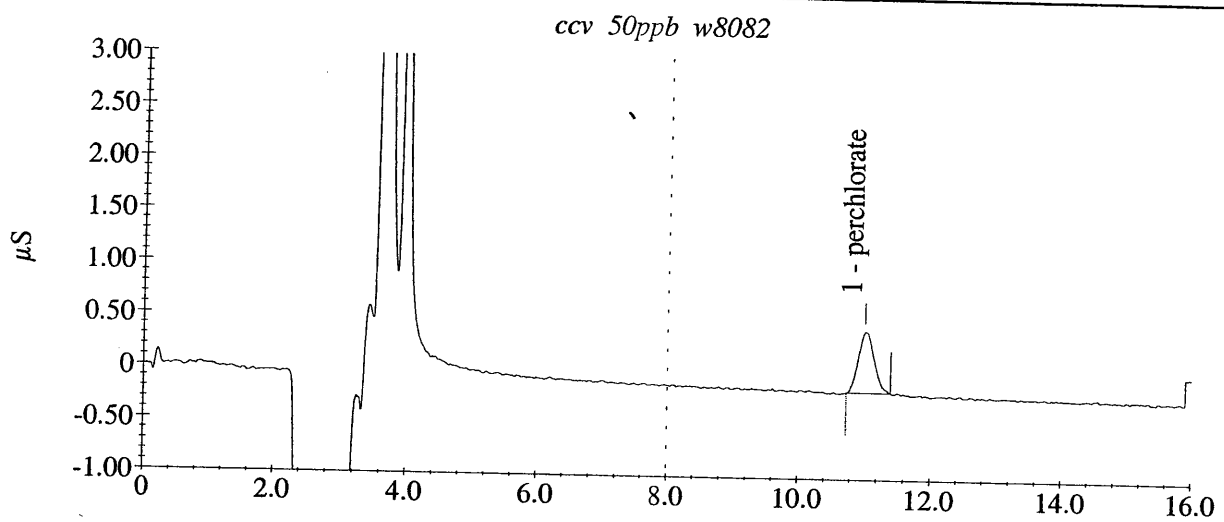
Date Time Collected : 11/10/2003 4:27:18 PM

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	11.00	57.01	96748.70	5815.69



APCL Perchlorate Analysis Report

Sample Name : lcs 25ppb w8087

Data File Name : C:\DATA\03W5108K\W5108K L01_002.DXD

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

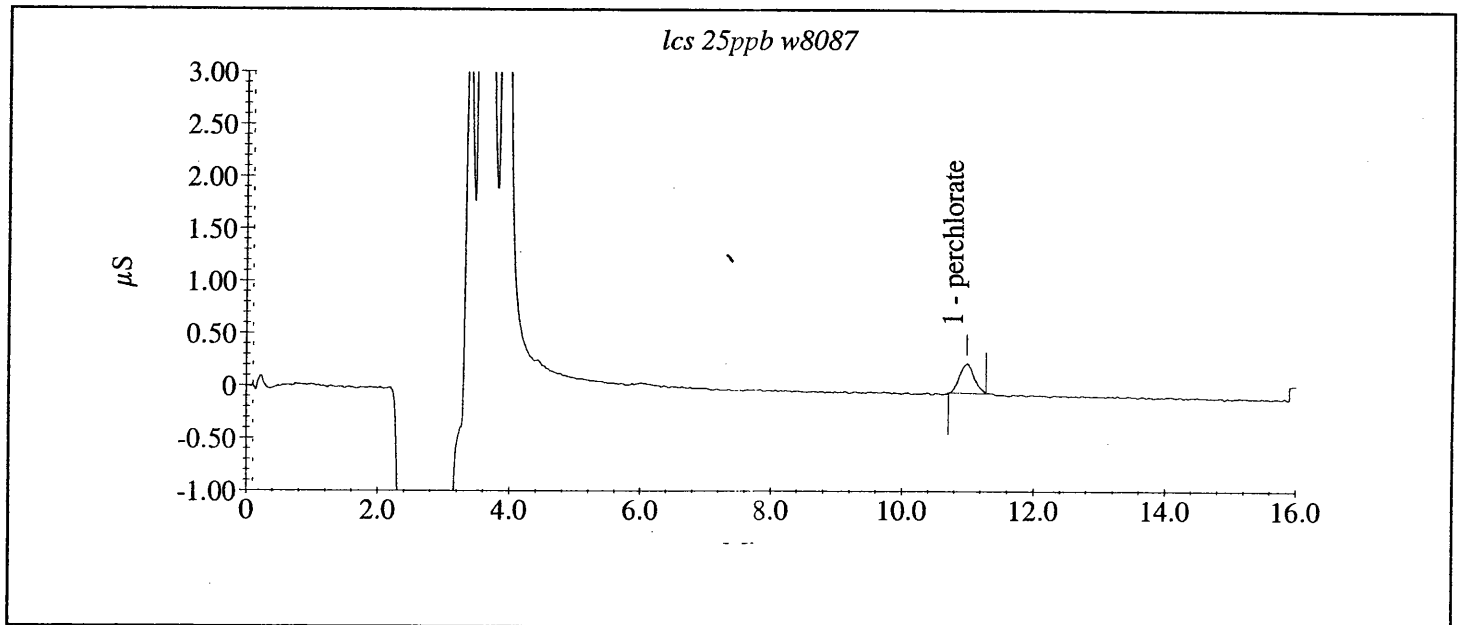
Date Time Collected : 11/10/2003 4:47:17 PM

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	10.98	26.23	44506.70	2828.34



APCL Perchlorate Analysis Report

Sample Name : Lcsd 25PPB W8257

Data File Name : C:\DATA\03W5108K\W5108K J01_003.DXD

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

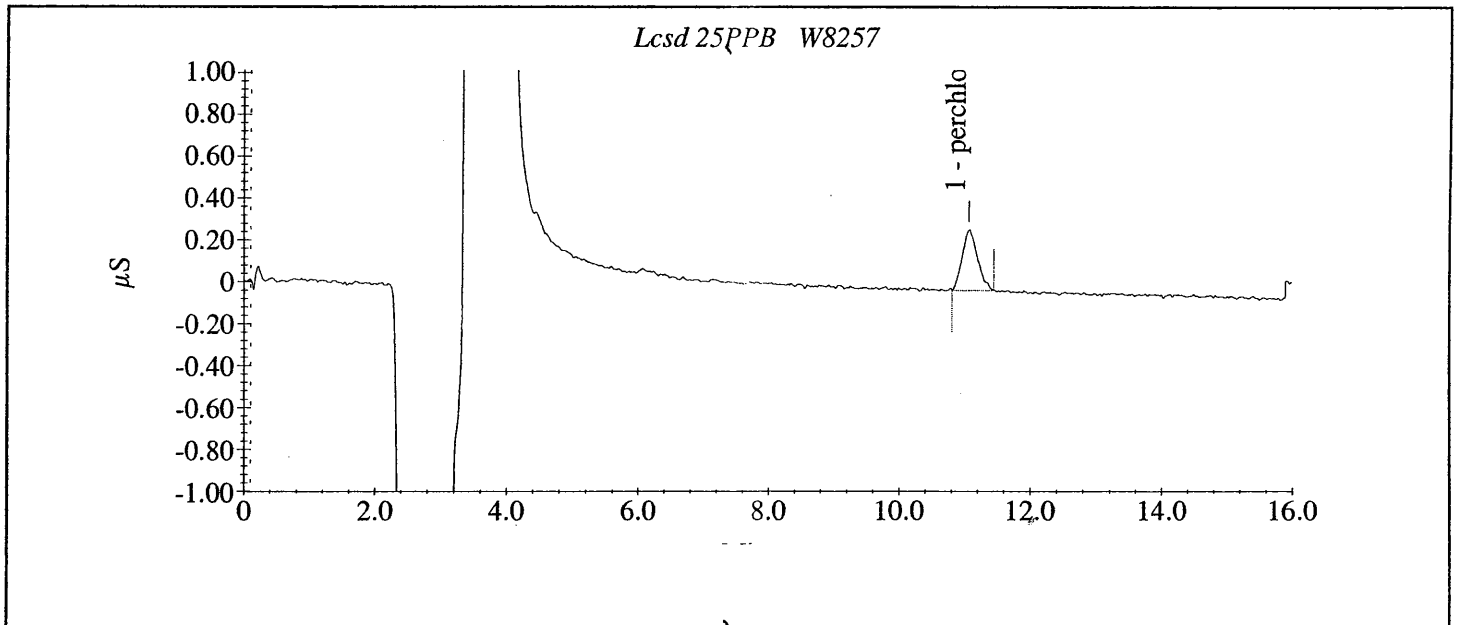
Date Time Collected : 11/10/2003 5:05:55 PM

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	11.07	28.04	47583.00	2860.19



APCL Perchlorate Analysis Report

Sample Name : ICCS 4ppb w8088

Data File Name : C:\DATA\03W5108K\W5108K ICCS 4PPB_004.DXD

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

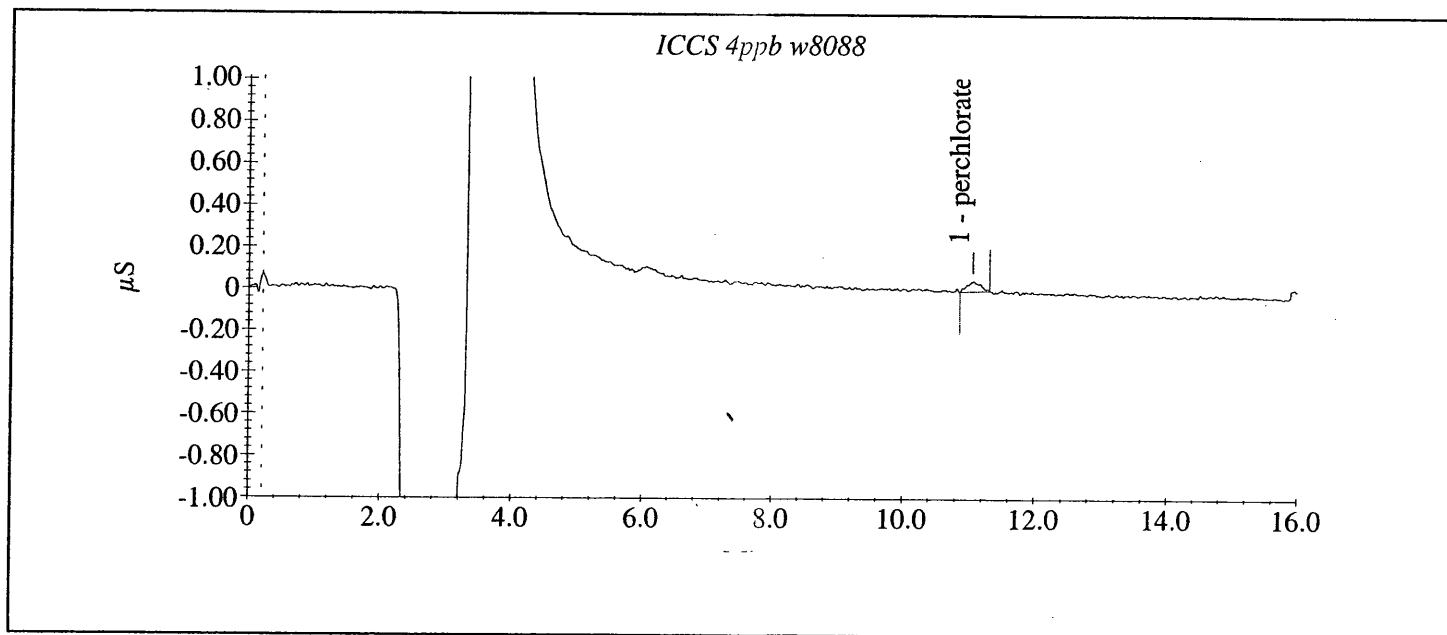
Date Time Collected : 11/10/2003 5:24:30 PM

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	11.07	4.17	7075.90	492.73



APCL Perchlorate Analysis Report

Sample Name : ##03W5108K IPC 25PPB W8032

Data File Name : C:\DATA\03W5108K\W5108K IPC 25PPB_005.DXD

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

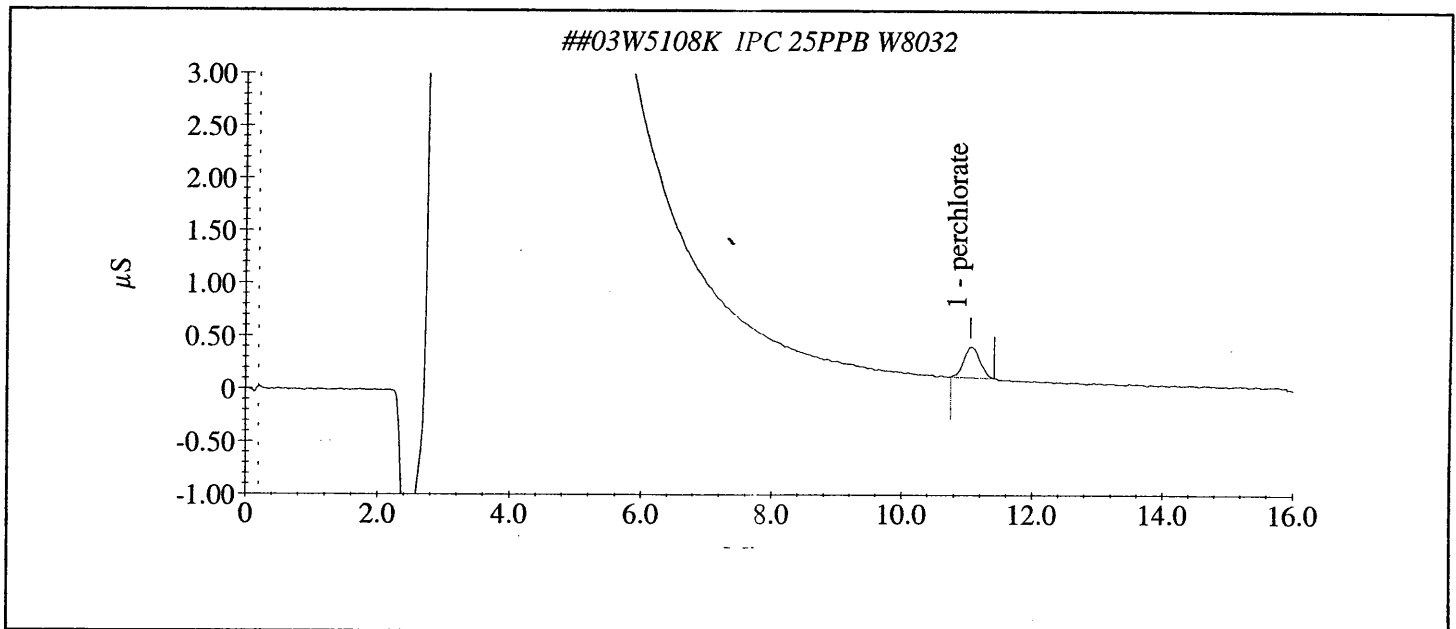
Date Time Collected : 11/10/2003 5:43:02 PM

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	11.05	29.25	49637.40	2902.69



APCL Perchlorate Analysis Report

Sample Name : ccb

Data File Name : C:\DATA\03W5108K\W5108K CCB_024.DXD

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

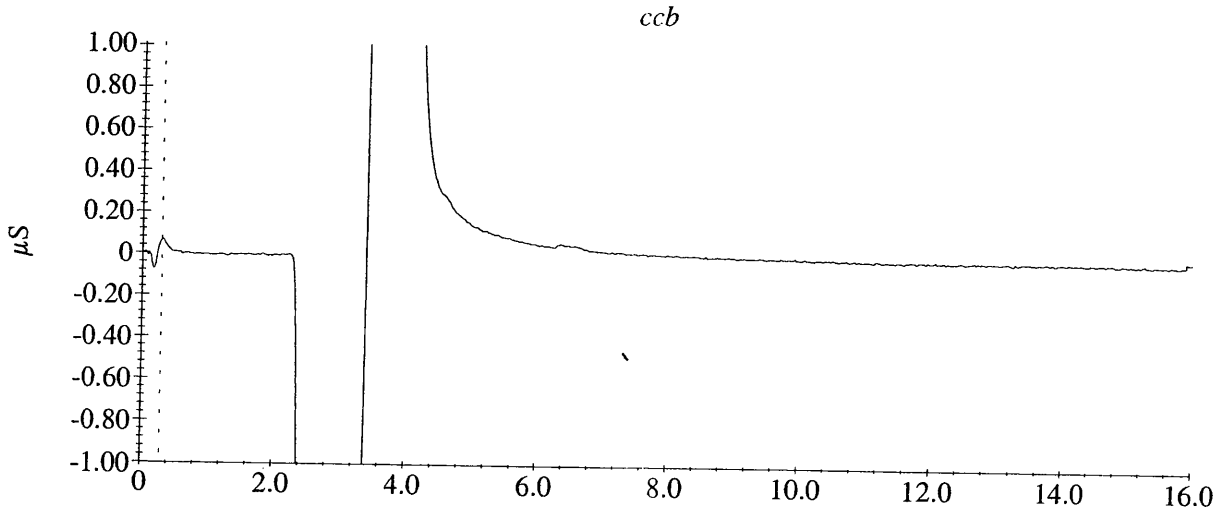
Date Time Collected : 11/10/2003 11:33:27 PM

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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APCL Perchlorate Analysis Report

Sample Name : ccb

Data File Name : C:\DATA\03W5108K\W5108K CCB_013.DXD

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

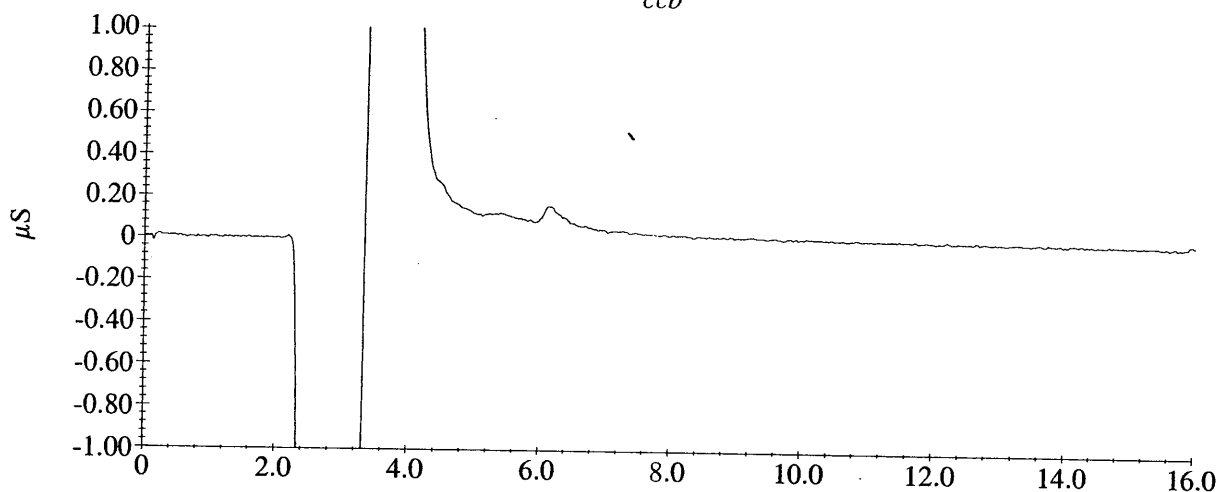
Date Time Collected : 11/10/2003 8:10:48 PM

System Operator : C.W and W.W

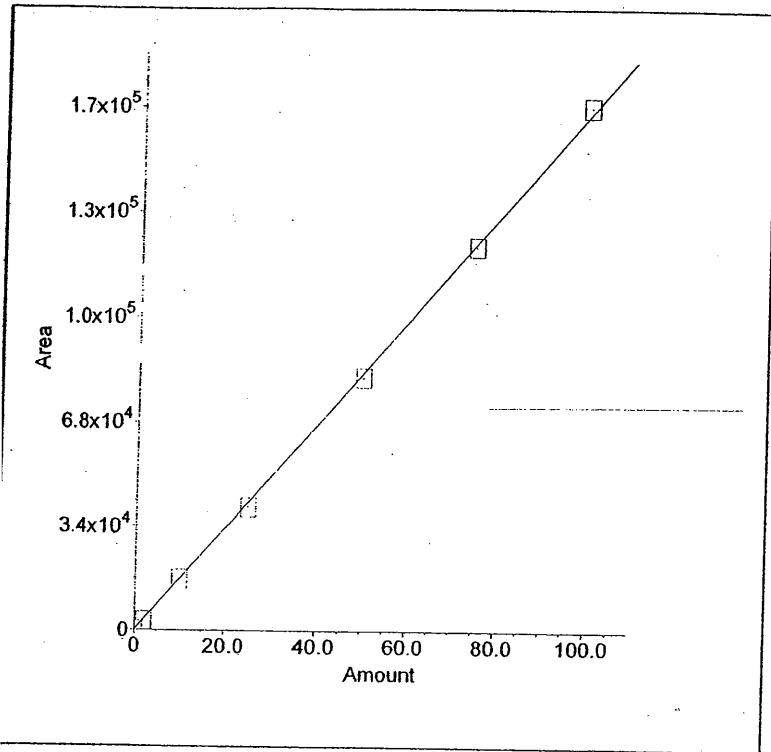
Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
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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 LC-1c

APCL Perchlorate Analysis Report

Sample Name : cal standard 2ppb W7827a

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

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

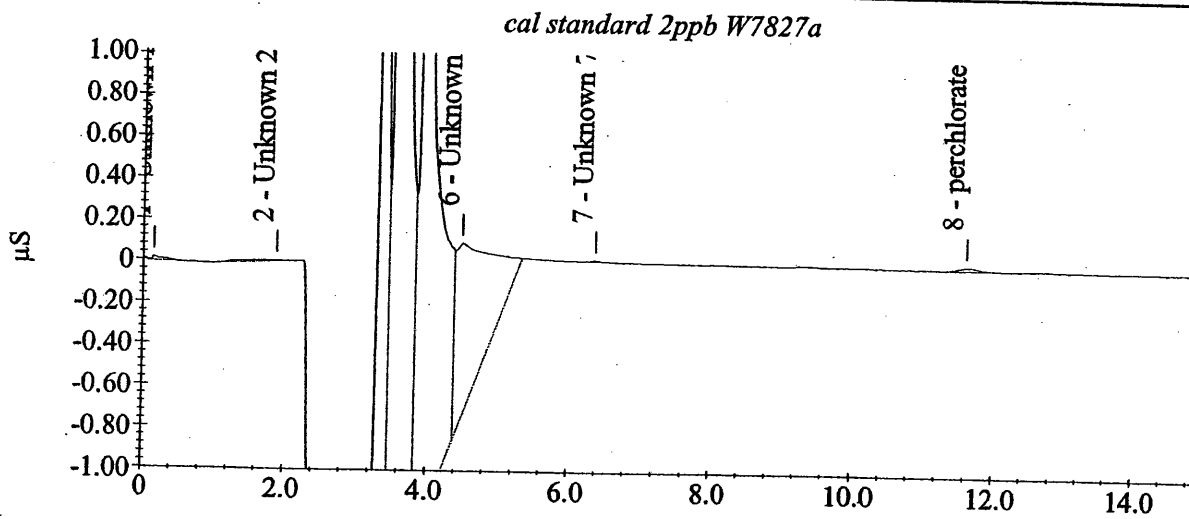
Date Time Collected : 03/12/2003 6:13:12 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

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



APCL Perchlorate Analysis Report

Sample Name : cal standard 10ppb W7827c

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

Method File Name : C:\PEAKNET\METHOD\ve314-011.met

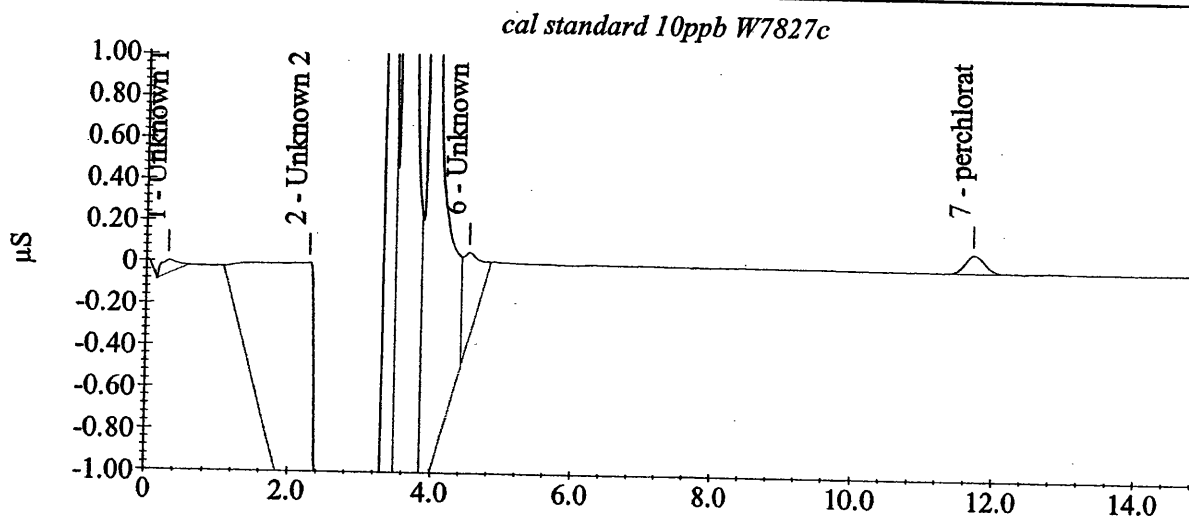
Date Time Collected : 03/12/2003 6:48:21 PM

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 : icb

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

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

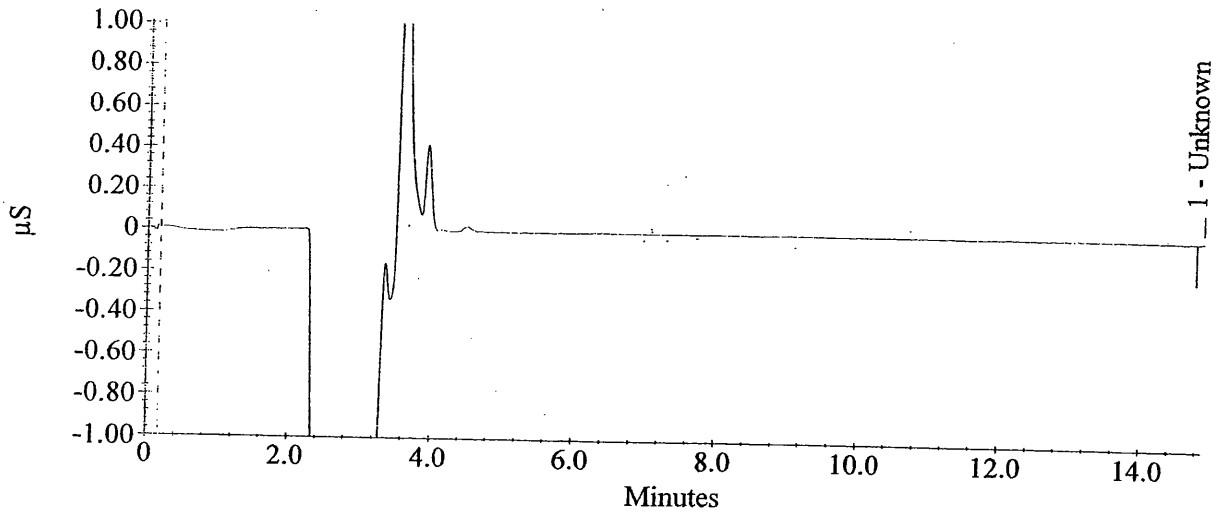
Date Time Collected : 03/12/2003 8:33:51 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
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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\314-011.met

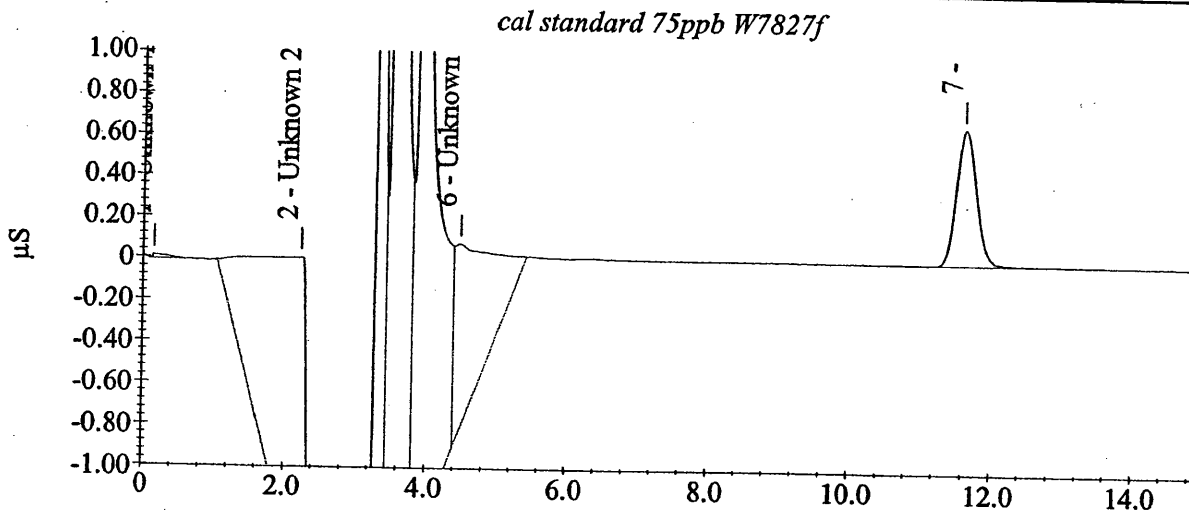
Date Time Collected : 03/12/2003 7:41:05 PM

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 blank

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

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

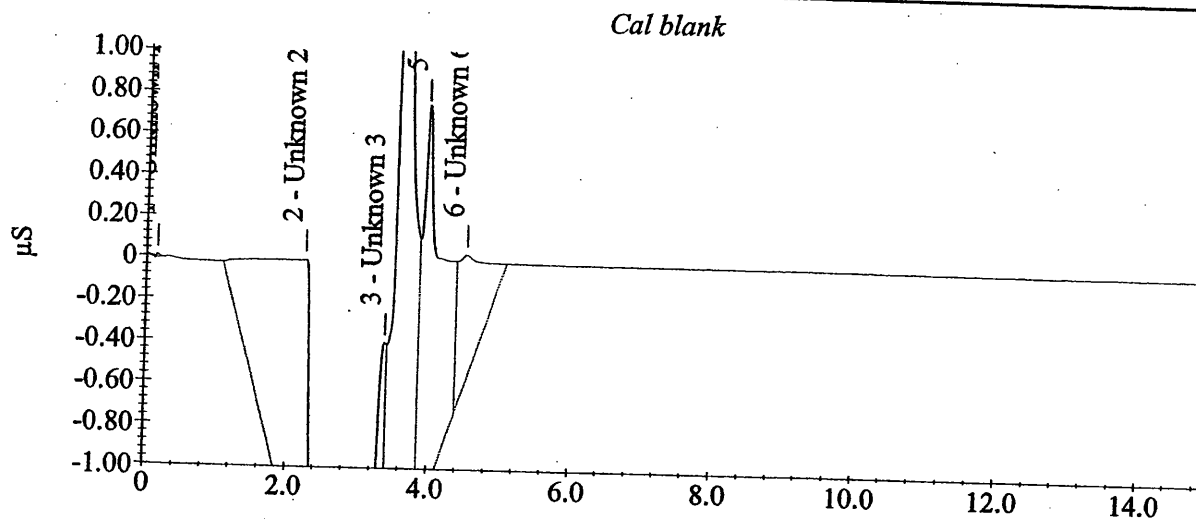
Date Time Collected : 03/12/2003 5:55:39 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

Peak #	Component Name	Retention Time	Amount (ppb)	Peak Area	Peak Height
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APCL Perchlorate Analysis Report

Sample Name : cal standard 50ppb W7827e

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

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

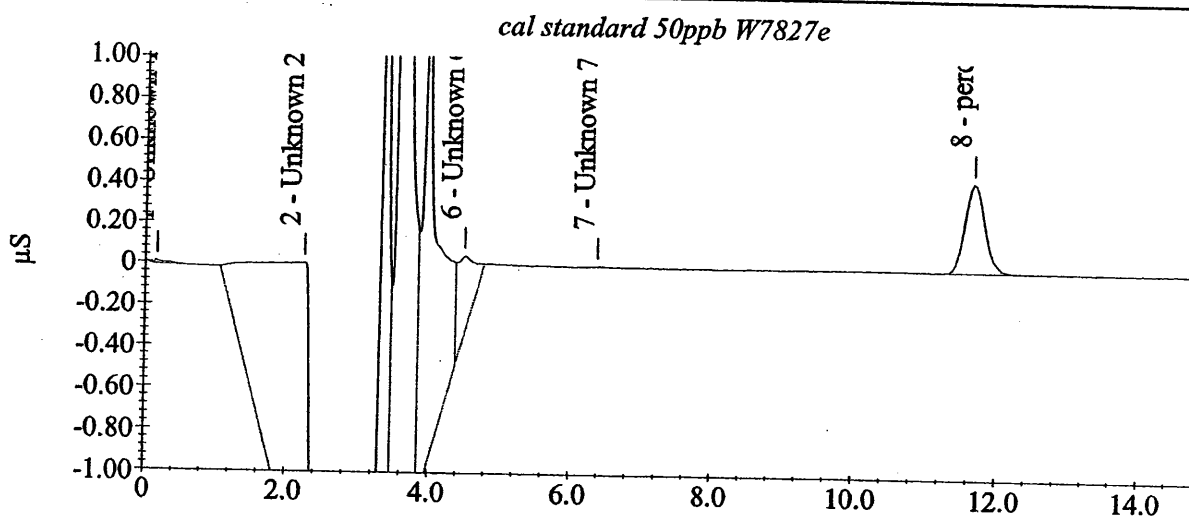
Date Time Collected : 03/12/2003 7:23:30 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

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



APCL Perchlorate Analysis Report

Sample Name : ICV 50 ppb w7828a

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

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

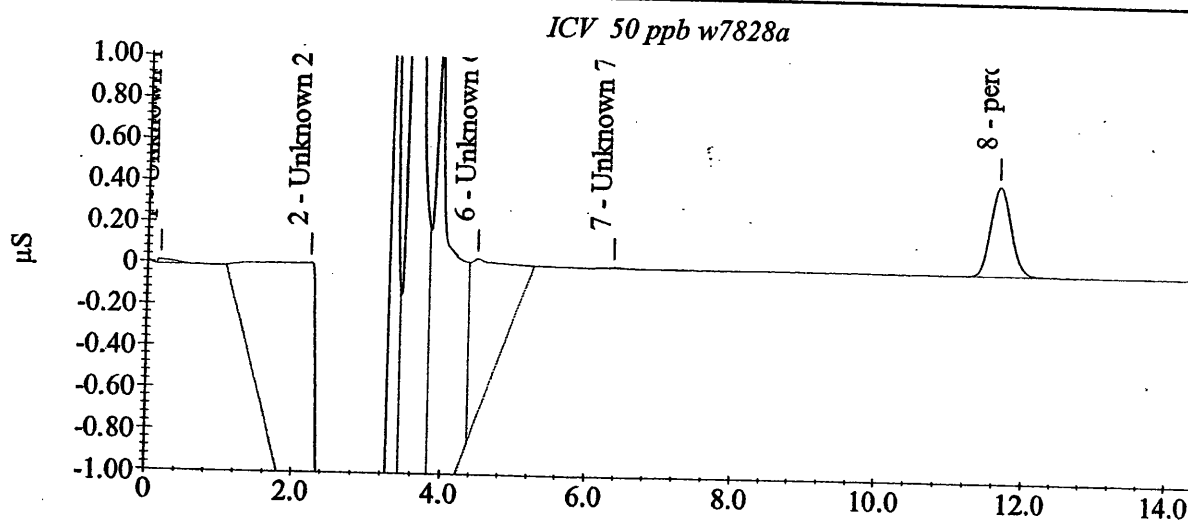
Date Time Collected : 03/12/2003 8:16:15 PM

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 : cal standard 100ppb W7827g

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

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

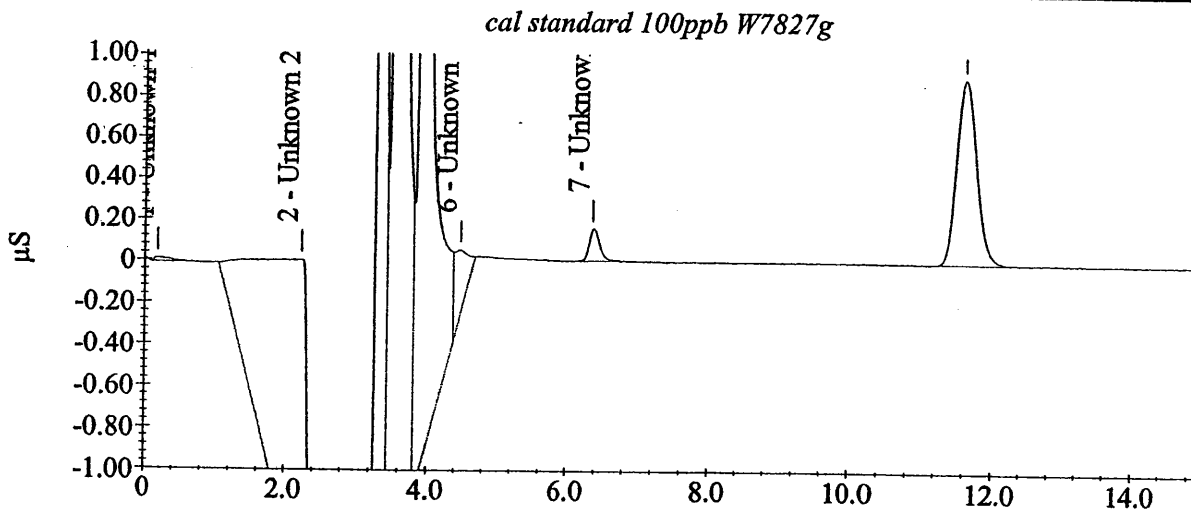
Date Time Collected : 03/12/2003 7:58:39 PM

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	8927



APCL Perchlorate Analysis Report

Sample Name : cal standard 25ppb W7827d

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

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

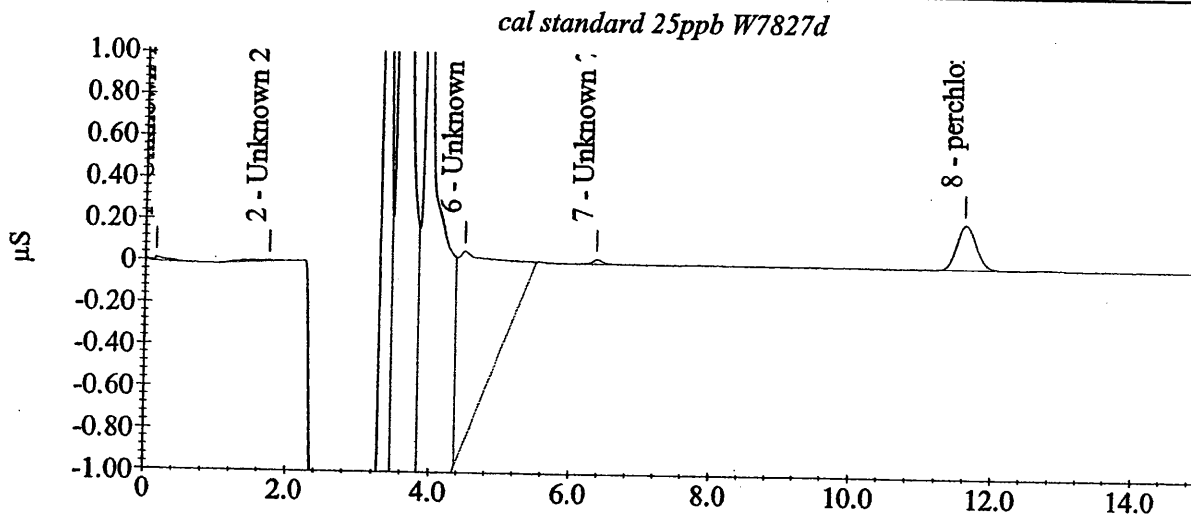
Date Time Collected : 03/12/2003 7:05:54 PM

System Operator : wei wang

Dilution Factor : 1.00

Peak Information : All Components

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



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

Line	Weight	Int. Std.	Comment
1	1	1	
2	1	1	
3	1	1	
4	1	1	
5	1	1	
6	1	1	
7	1	1	
8	1	1	
9	1	1	
10	1	1	
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55	1	1	
56	1	1	
57	1	1	
58	1	1	

Default Method Path: C:\PEAKNET\METHOD
Default Data Path: C:\DATA\03W1286K
Comment:
Remark:

Condition information:

1. Column

Separator column: AS16 4mm

Guard column: AS16 4mm

2. Eluent: NaOH 38mM

3. Flow rate: 1.2mL/min

4. Suppressor: ASRS-ULTRA 4mm

5. Detector: CD20

6. Analyst: Charles Wu and Wei Wang

7. Date: 03 / 12 / 2003

8. Instrument: IC-K DX-500 Dionex

Line	Sample	Sample Type	Level	Method	Data File	Volume	Dilution	Weight
1	##03w5120k ipc 25ppb w8032	Sample		e314-011.met	c:\data\03w5120k\w5120k ipc25ppb	1	1	1
2	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5120k\w5120k q01	1	1	1
3	lcs 25ppb w8087	Sample		e314-011.met	c:\data\03w5120k\w5120k i01	1	1	1
4	Lcsd 25PPB W8257	Sample		e314-011.met	c:\data\03w5120k\w5120k j01	1	1	1
5	ICCS 4ppb w8088	Sample		e314-011.met	c:\data\03w5120k\w5120k iccs 4ppb	1	1	1
6	mb	Sample		e314-011.met	c:\data\03w5120k\w5120k k01	1	1	1
7	5975-01 f=1	Sample		e314-011.met	c:\data\03w5120k\5975-01	1	1	1
8	5975-02 f=1	Sample		e314-011.met	c:\data\03w5120k\5975-02	1	1	1
9	5975-03 f=1	Sample		e314-011.met	c:\data\03w5120k\5975-03	1	1	1
10	6002-02 f=1	Sample		e314-011.met	c:\data\03w5120k\6002-02	1	1	1
11	6002-04 f=1	Sample		e314-011.met	c:\data\03w5120k\6002-04	1	1	1
12	6034-03 f=1	Sample		e314-011.met	c:\data\03w5120k\6034-03	1	1	1
13	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w5120k\w5120k q02	1	1	1
14	ccb	Sample		e314-011.met	c:\data\03w5120k\w5120k ccb	1	1	1
15	6002-02 ms 25ppb f=1	Sample		e314-011.met	c:\data\03w5120k\w5120k m01	1	1	1
16	6002-02 msd 25ppb f=1	Sample		e314-011.met	c:\data\03w5120k\w5120k n01	1	1	1
17	6034-03 MS 25PPB F=5	Sample		e314-011.met	c:\data\03w5120k\w5120k m02	1	5	1
18	6034-03 MSD 25PPB F=5	Sample		e314-011.met	c:\data\03w5120k\w5120k n02	1	5	1
19	6034-01 F=1	Sample		e314-011.met	c:\data\03w5120k\6034-01	1	1	1
20	6034-02 F=1	Sample		e314-011.met	c:\data\03w5120k\6034-02	1	1	1
21	6034-04 f=1	Sample		e314-011.met	c:\data\03w5120k\6034-04	1	1	1
22	6047-01 F=1	Sample		e314-011.met	c:\data\03w5120k\6047-01	1	1	1
23	6047-02 F=1	Sample		e314-011.met	c:\data\03w5120k\6047-02	1	1	1
24	CCV 50PPB W8082	Sample		e314-011.met	c:\data\03w5120k\w5120k q03	1	1	1
25	6047-03 F=1	Sample		e314-011.met	c:\data\03w5120k\6047-03	1	1	1
26	6034-03 F=5	Sample		e314-011.met	c:\data\03w5120k\6034-03a	1	5	1
27	6047-02 F=50	Sample		e314-011.met	c:\data\03w5120k\6047-02a	1	50	1
28	6047-03 F=25	Sample		e314-011.met	c:\data\03w5120k\6047-03a	1	25	1
29	CCV 50PPB W8082	Sample		e314-011.met	c:\data\03w5120k\w5120k q04	1	1	1
30		Sample		aastopcl.met		1	1	1
31	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w01	1	1	1
32	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w02	1	1	1
33	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w03	1	1	1
34	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w04	1	1	1
35	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w05	1	1	1
36	MDL 4PPB WATER	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w06	1	1	1
37	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-w07	1	1	1
38	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s01	1	5	1
39	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s02	1	5	1
40	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s03	1	5	1
41	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s04	1	5	1
42	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s05	1	5	1
43	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s06	1	5	1
44	MDL 20PPB SOIL	Sample		e314-011.met	c:\data\03w5120k\w5120k mdl-s07	1	5	1
45		Sample		aastopcl.met		1	1	1

Analyst W. W
Date 11/11/03
Instrument 20-C

Line	Int. Std.	Comment
1	1	
2	1	
3	1	
4	1	
5	1	
6	1	
7	1	
8	1	
9	1	
10	1	
11	1	
12	1	
13	1	
14	1	
15	1	
16	1	
17	1	
18	1	
19	1	
20	1	
21	1	
22	1	
23	1	
24	1	
25	1	
26	1	
27	1	
28	1	
29	1	
30	1	
31	1	
32	1	
33	1	
34	1	
35	1	
36	1	
37	1	
38	1	
39	1	
40	1	
41	1	
42	1	
43	1	
44	1	
45	1	
46	1	
47	1	
48	1	
49	1	
50	1	

fault Method Path: C:\PEAKNET\METHOD
 fault Data Path: C:\DATA\03W5052K
 mment:

Chromium (VI) (7196) Worksheet

Batch # 03W1508 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 11/6/03 Analyst: Be

Lot #: Reagent Water _____ Diphenylcazide solution _____

Test Time: 12:00 SOP: G-2

Calibration	STD Lot #	$C_{std} \times V_{std} / V_f = C_i$	A_i	$RF_i = A_i / C_i$	Calibration results	Note
STD-1	W-	x / = mg/L			Least Square [RF]=	Cal. Code:
STD-2	W-	x / = mg/L			Average RF=	
STD-3	W-	x / = mg/L			C.C. = <u>0.9999</u> (> 0.995)	
STD-4	W-	x / = mg/L			RSD = % (< 15%)	
STD-5	W-	x / = mg/L			Ref. page	
STD-6	W-	x / = mg/L				

$A = -0.001 + 0.846c$

Analysis Type	Sample ID or Lot #	Samp. Amnt X_0 (g or mL)	Dilu./Ext $X/X_0 = f_1$	Treat. Ratio $V/X = f_2$	540 nm A	Concentration $C' = A / RF$	C (Sample) $C = f_1 f_2 C'$	Anomaly Note
CCV	Lot: W- <u>7757</u>	Expected Conc.: x	/	= <u>0.25</u> mg/L	<u>0.221</u>	<u>0.25</u> mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: <u>71118</u>		$1/X_0 = 1$	95.0/ =	<u>0.000</u>	mg/L	<u>0.001</u> ppm	
LCS1	Bl. Lot: <u>71118</u>		$1/X_0 = 1$	95.0/ =	<u>0.204</u>	mg/L	<u>0.242</u> ppm	
Sample-1	<u>6002-1</u>		$1/X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.004</u> ppm	
MS on S-1	<u>2</u>		$1/X_0 = 1$	95.0/ =	<u>0.190</u>	mg/L	<u>0.226</u> ppm	
MSD on S-1	<u>2</u>		$1/X_0 = 1$	95.0/ =	<u>0.196</u>	mg/L	<u>0.233</u> ppm	
Sample 2	<u>2</u>		$1/X_0 = 1$	95.0/ =	<u>0.002</u>	mg/L	<u>0.004</u> ppm	
Sample 3	<u>3</u>		$1/X_0 = 1$	95.0/ =	<u>0.006</u>	mg/L	<u>0.008</u> ppm	
Sample 4	<u>4</u>		$1/X_0 = 1$	95.0/ =	<u>0.004</u>	mg/L	<u>0.006</u> ppm	
Sample 5			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 6			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 7			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 8			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 9			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 10			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Blank	Lot:		$1/X_0 = 1$	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: <u>71118</u>		$1/X_0 = 1$	95.0/ =	<u>0.207</u>	mg/L	<u>0.246</u> ppm	
Sample 11			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 12			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 13			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 14			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 15			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 16			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 17			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 18			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 19			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
Sample 20			$1/X_0 = 1$	95.0/ =		mg/L	ppm	
MTX Dup.			$1/X_0 = 1$	95.0/ =		mg/L	ppm	

adding 0.25 mg/L

0.215 0.255 mg/L

Type	STD Lot #	$C_{STD} (\mu\text{g/mL}) \times V_{STD} (\text{mL}) / X (\text{g or mL}) = T$	Spike Rec.	Ctl Limit (W/S)	PQL/MDL (in ppm)
MS	W- <u>7757</u>	x / = <u>0.25</u> ppm	%	80-120 %/80-120 %	PQL(w) 0.01
MSD	W- <u>7757</u>	x / = ppm	%	PQL(s) 0.05
LCS	W- <u>7853</u>	x / = ppm	%	80-120 %/80-120 %	MDL(w) 0.005
LCSD	W- <u>7853</u>	x / = ppm	%	MDL(s) <u>0.1548</u>

Applied P & Ch Laboratory

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

Chromium (VI) (7196) Worksheet

Batch # PE Matrix: WHS [Holding Time: 24 hours!!]

Test Date: 7/28/03 Analyst: BL

Lot #: Reagent Water 7/28/03
Diphenylcazide solution

Test Time: _____ SOP: G

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- <u>7257</u>	x / = <u>0.00</u> mg/L	<u>0.000</u>		Least Square [RF]=	Cal. Code:
STD-2	W-	x / = <u>0.015</u> mg/L	<u>0.007</u>		Average RF=	
STD-3	W-	x / = <u>0.075</u> mg/L	<u>0.017</u>		C.C. <u>0.999</u> (> 0.995)	
STD-4	W-	x / = <u>0.15</u> mg/L	<u>0.107</u>		RSD= _____ (% (<= 15%))	
STD-5	W-	x / = <u>0.30</u> mg/L	<u>0.212</u>		Ref. page	
STD-6	W-	x / = <u>0.60</u> mg/L	<u>0.420</u>			

$A = -0.001 + 0.846C$

Analysis Type	Sample ID or Lot #	Samp. Amt X ₀ (g or mL)	Dilu./Ext X/X ₀ =f ₁	Treat. Ratio V/X=f ₂	540 nm A	Concentration C'=A/RF	C (Sample) C=f ₁ f ₂ C'	Anom: Note
CCV	Lot: W- <u>7853</u>	Expected Conc.: x	1	= <u>0.15</u> mg/L	<u>0.218</u>	<u>0.259</u> mg/L	REC. %	90-110
Method Blank	Bl. Lot:		1/X ₀ =	95.0/ =	<u>0.000</u>	<u>0.000</u> mg/L	ppm	
LCS1	Bl. Lot:		1/X ₀ =	95.0/ =	<u>0.210</u>	<u>0.252</u> mg/L	ppm	
Sample-1	<u>4177-37</u>	<u>1ml -> 100ml</u> X ₀ = 1	1/X ₀ =	95.0/ = 2	<u>0.290</u>	<u>0.689</u> mg/L	ppm	
MS on S-1	<u>37</u>	<u>0.5ml -> 100ml</u> X ₀ =	1/X ₀ =	95.0/ = 2	<u>0.287</u>	<u>0.682</u> mg/L	ppm	report
MSD on S-1	<u>4175-15</u>	<u>10.0g / 500ml</u> X ₀ = 5	1/X ₀ =	95.0/ = 10	<u>0.050</u>	<u>3.04</u> mg/L	ppm	
Sample 2	<u>15</u>	<u>4</u>	1/X ₀ =	95.0/ = 2	<u>0.247</u>	<u>2.94</u> mg/L	ppm	report
Sample 3			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 4			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 5			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 6			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 7			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 8			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 9			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 10			1/X ₀ =	95.0/ =		mg/L	ppm	
Blank	Lot:		1/X ₀ =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot:		1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 11			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 12			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 13			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 14			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 15			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 16			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 17			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 18			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 19			1/X ₀ =	95.0/ =		mg/L	ppm	
Sample 20			1/X ₀ =	95.0/ =		mg/L	ppm	
MTX Dup.	<u>0.25</u>		1/X ₀ =	95.0/ =	<u>0.25</u>	<u>0.25</u> mg/L	ppm	

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

1549



Applied Physics & Chemistry Laboratory

13760 Magnolia Ave. Chino CA 91710

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

December 8, 2003

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

Dear Brad,

This package contains samples in our Service ID 03-6034 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,

A handwritten signature in black ink, appearing to read 'Regina Kirakozova', written over a light blue horizontal line.

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

Submitted to:

GEOFON, Inc.

Attention: Brad Shojaee

22632 Golden Spring Dr Ste 270

Diamond Bar CA 91765

Tel: (909)396-7662 Fax: (909)396-1455

APCL Analytical Report

Service ID #: 801-036034

Collected by: JR

Collected on: 11/07/03

Sample Description: Water

Project Description: 04-4428.10 JPL

Received: 11/07/03

Extracted: N/A

Tested: 11/07-12/03

Reported: 11/13/03

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result	
				DUPE-2-4-Q03 03-06034-1	MW-6 03-06034-2
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01
Dilution Factor				1	1
PERCHLORATE	314.0	µg/L	4	<4	3.6J
VOLATILE ORGANIC COMPOUNDS					
Dilution Factor				1	1
BENZENE	524.2	µg/L	0.5	<0.5	<0.5
BROMOBENZENE	524.2	µg/L	0.5	<0.5	<0.5
BROMOCHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5
BROMODICHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5
BROMOFORM	524.2	µg/L	0.5	<0.5	<0.5
BROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5
N-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5
SEC-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5
TERT-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5
2-BUTANONE	524.2	µg/L	10	<10	<10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	<0.5	<0.5
CHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5
CHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	<0.5	0.3J
CHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5
2-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5
4-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5
1,2-DIBROMOETHANE (EDB)	524.2	µg/L	0.5	<0.5	<0.5
DIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5
1,2-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5
DICHLORODIFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	0.9
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	0.8
CIS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result	
				DUPE-2-4-Q03	MW-6
				03-06034-1	03-06034-2
TRANS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,2-DICHLOROPROPANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,3-DICHLOROPROPANE	524.2	µg/L	0.5	< 0.5	< 0.5
2,2-DICHLOROPROPANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1-DICHLOROPROPENE	524.2	µg/L	0.5	< 0.5	< 0.5
CIS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	< 0.5	< 0.5
TRANS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	< 0.5	< 0.5
ETHYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
HEXACHLOROBUTADIENE	524.2	µg/L	0.5	< 0.5	< 0.5
ISOPROPYLBENZENE (CUMENE)	524.2	µg/L	0.5	< 0.5	< 0.5
P-ISOPROPYLTOLUENE	524.2	µg/L	0.5	< 0.5	< 0.5
METHYLENE CHLORIDE	524.2	µg/L	0.5	< 0.5	< 0.5
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	< 1	< 1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	< 10	< 10
NAPHTHALENE	524.2	µg/L	0.5	< 0.5	< 0.5
N-PROPYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
STYRENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1,1,2-TETRACHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1,2,2-TETRACHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	< 0.5	3.0
TOLUENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
TRICHLOROETHENE	524.2	µg/L	0.5	< 0.5	< 0.5
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,1,2,2-TRICHLORO-1,1,2,2-TRIFLUOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	< 0.5	< 0.5
VINYL CHLORIDE	524.2	µg/L	0.5	< 0.5	< 0.5
O-XYLENE	524.2	µg/L	0.5	< 0.5	< 0.5
M/P-XYLENE	524.2	µg/L	0.5	< 0.5	< 0.5

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-13 03-06034-3	MW-15 03-06034-4	TB-12-11-7-03 03-06034-5
CHROMIUM (VI)	7196	mg/L	0.01	0.020	< 0.01	-
Dilution Factor				5	1	1
PERCHLORATE	314.0	µg/L	4	223	< 4	-
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	1.5	< 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	1.7	< 0.5	< 0.5
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
4-CHLOROTOLUENE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
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-DICHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROETHANE	524.2	µg/L	0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROETHANE	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	0.4J	< 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

APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result		
				MW-13 03-06034-3	MW-15 03-06034-4	TB-12-11-7-03 03-06034-5
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	0.5	<0.5	<0.5	<0.5
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	0.9	<0.5	<0.5
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	9.0	<0.5	<0.5
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
1,1,2,2,3,3,3-HEPTACHLORO-1,1,2,2,3,3,3-TRIFLUOROETHANE	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

PQL: Practical Quantitation Limit. MDL: Method Detection Limit. CRDL: Contract Required Detection Limit

N.D.: Not Detected or less than the practical quantitation limit. "L": 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

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: 03-6034



Applied P & Ch Laboratory

13760 Magnolia Ave. Chino, CA 91710

Telephone (909)590-1828

Fax (909)590-1498

Case Narrative

Project: JPL/04-4428.10

For GEOFON, Inc.

APCL Service No: 03-6034

1. Sample Identification

The sample identifications are listed in the following table:

GEOFON, Inc. Sample ID	APCL Sample ID
MW-13	03-06034-3
MW-6	03-06034-2
MW-15	03-06034-4
DUPE-2-4-Q03	03-06034-1
TB-12-11-7-03	03-06034-5

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),

7196 (Chromium (VI)),

314.0 (Perchlorate, low level),

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



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

CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

Sharon Weiss

0073

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont	QC Level	T.A.T	Analyses	Comments
1	H13-13	W	11-7-03	0757	1B	III	Normal	X	X	H/S/H/S/I
2	H13-26			0926	B	I		X	X	
3	TB-12-11-7-03				3	I		X	X	
4	H13-15			1003	5	I		X	X	
5	Dupa-2-4-003			1007	5	IV		X	X	
6										
7										
8										
9										
10										

SAMPLES COLLECTED BY: SL COURIER AND AIR BILL NUMBER: _____ COOLER TEMPERATURE UPON RECEIPT: _____

REINQUISHED BY: _____ RECEIVED BY: _____ DATE: 11-7-03 TIME: 1508

LABORATORY SERVICE ID: _____ LABORATORY PHONE: 909 590 1828 LABORATORY FAX: 909 590 1498

PROJECT NAME: SRC 610 Mon. 4-003 PROJECT LOCATION: H13-13, H13-26 + H13-15 PROJECT NUMBER: 07-4428.10 LABORATORY ADDRESS: 137160 Haagenia Ave. Diamond Bar, CA 91710

PROJECT CONTACT: Scott Blum PROJECT PHONE NUMBER: 909 396 7662 PROJECT FAX: 909 396 1455 CLIENT: US Navy SubIV CITY, STATE AND ZIP CODE: Chino, CA 91710

PROJECT ADDRESS: 1800 Oak Grove Dr. Diamond, CA PROJECT MANAGER'S PHONE: 909 396 7662 PROJECT MANAGER'S FAX: _____

LABORATORY CONTACT: Kevin Chen MAIL REPORT (COMPANY NAME): Carolyn

RECIPIENT NAME: Tony Ford ADDRESS: 22632 Golden Springs Dr. Diamond Bar, CA 91765

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

Sample Receiving Checklist

APCL ServiceID: **6034** Client Name/Project: Geofon

1. Sample Arrival

Date/Time Received 11/7/03 1555 Date/Time Opened 11/7/03 1555 By (name): Jason
Custody Transfer: Client Golden State UPS US Mail FedEx APCL Empl: Richard

2. Chain-of-Custody (CoC)

With Samples? Faxed? Client has Copy? Signed, dated? By: _____
 Project ID? Analyses Clear? Hold Samples? #on Hold _____ # Received _____
 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 3.1
(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 NO₃⁻ 48hr BOD 48hr
 Cl₂ 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 day Std (7-10 days) Not Marked

8. Sample Matrix

Drinking H₂O Other Liq Soil Wipe Polymer Air Other: _____
 Ground H₂O 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: _____ Printed: 7 Nov 2003 7:33 a.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.

Applied P & Ch Laboratory

13760 Magnolia Ave. Chino CA 91710

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

Sample Login: Check List

03-06034 (0470_ 189) (2202777_ 189)

11/07/03

Part 1: General Information

<input type="checkbox"/>	Company Information	Name:	<i>GEOFON, Inc.</i>
		Address:	<i>22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765</i>
<input type="checkbox"/>	Project Information	Project Description:	<i>JPL</i>
		Project #:	<i>04-4428.10</i>
<input type="checkbox"/>	Billing Information	P.O. #:	
		Bill Address:	<i>22632 Golden Spring Dr Ste 270 ,Diamond Bar ,CA 91765</i>
		Lab Project ID:	
		Client Database #:	<i>3</i>
<input type="checkbox"/>	Receiving Information	Who Received Sample?	<i>Jason N.</i>
		Receiving Date/Time:	<i>11/07/03 1555</i>
		COC No.	<i>0073</i>
<input type="checkbox"/>	Shipping Information	Shipping Company	<i>APCL pick up</i>
		Packing Information:	<i>Cooler/Ice Chester</i>
		Cooler Temperature:	<i>3.1 °C</i>
<input type="checkbox"/>	Container Information	Container Provider:	<i>Client</i>
<input type="checkbox"/>	Sampling Information	Sampling Person:	<i>JR</i>
		Sampling Company:	<i>Client</i>
<input type="checkbox"/>	Turn-Around-Time Option:		<i>Rush 5 working day(s)</i>
<input type="checkbox"/>	QC Option:		<i>NEESA C</i>
<input type="checkbox"/>	Disposal Option:		<i>Not specify</i>

Part 2: Sample Information

Seq. #	Sample ID (on COC)	Sample Sub-ID	APCL Sample ID	Matrix	Container	Preservative	Vol, ml Am. g	# of Replicas	Condition G, L, B	Collected mmddyy	Hold ?	Composite Group	TAT Days	
1	MW-13 ✓	VOC	03-06034-3- α	W	V	C	40	6	G	110703	N	0	7	<input type="checkbox"/>
	MW-13	CrVI	03-06034-3-β	W	P		500	2	G	110703	N	0	7	<input type="checkbox"/>
2	MW-6 ✓	VOC	03-06034-2-α	W	V	C	40	3	G	110703	N	0	7	<input type="checkbox"/>
	MW-6	CrVI	03-06034-2-β	W	P		500	1	G	110703	N	0	7	<input type="checkbox"/>
3	MW-15 ✓	VOC	03-06034-4-α	W	V	C	40	3	G	110703	N	0	7	<input type="checkbox"/>
	MW-15	CrVI	03-06034-4-β	W	P		500	1	G	110703	N	0	7	<input type="checkbox"/>
4	DUPE-2-4-Q03 ✓	VOC	03-06034-1-α	W	V	C	40	3	G	110703	N	0	7	<input type="checkbox"/>
	DUPE-2-4-Q03	CrVI	03-06034-1-β	W	P		500	1	G	110703	N	0	7	<input type="checkbox"/>
5	TB-12-11-7-03 ✓	VOC	03-06034-5	W	V	C	40	3	G	110703	N	0	7	<input type="checkbox"/>

Part 3: Analysis Information

Test Items:	<input type="checkbox"/> 524.2	Volatile Organic Compounds
	<input type="checkbox"/> 7196A	Chromium (VI)
	<input type="checkbox"/> 314.0/300.0	Perchlorate, low level
	<input type="checkbox"/> 300.0	Chloride Cl ⁻ by IC
	<input type="checkbox"/> 300.0	Sulfate (SO ₄ ⁻), by IC
	<input type="checkbox"/> 300.0/SM4500NON	Nitrate (NO ₃ ⁻) as N by IC
	<input type="checkbox"/> SM2320B	Carbonate
	<input type="checkbox"/> SM2320B	Bicarbonate
	<input type="checkbox"/> 9040B/150.1	pH
	<input type="checkbox"/> 160.1	Solids, Total Dissolved (TDS)
	<input type="checkbox"/> 200.7/6010B	Sodium, Na, by ICP
	<input type="checkbox"/> 200.7/6010B	Calcium, Ca, by ICP
	<input type="checkbox"/> 200.7/6010B	Potassium, K, by ICP
	<input type="checkbox"/> 200.7/6010B	Magnesium, Mg, by ICP
	<input type="checkbox"/> 200.7/6010B	Iron, Fe, by ICP
	<input type="checkbox"/> 206.2/7060A	Arsenic, As, by GFAA
	<input type="checkbox"/> 8270-SIM	1,4-Dioxane

Seq. #	Client's Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCH	CL	SO4	NO3	CARBON	BICARB	
1	MW-13	VOC	03-06034-3-α	W	X								<input type="checkbox"/>
	MW-13	CrVI	03-06034-3-β	W		X	X						<input type="checkbox"/>
2	MW-6	VOC	03-06034-2-α	W	X								<input type="checkbox"/>