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 No:	04-442810	Anal. Method	7196
Project ID:	JPL	Service ID:	31369	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
03-1369-1	EB-1-1/29/03	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03-1369-2	MW-21-1	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03-1369-3	MW-21-2	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03-1369-4	MW-21-3	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03-1369-5	MW-21-4	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03-1369-6	MW-21-5	Water	01/29/03	01/29/03	01/29/03	03W1295	mg/L	0.01	<0.01	U
03W1295-MB-01	03W1295-MB-01	Water	01/29/03	01/29/03	01/29/03	03W1295	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:	04-442810	Anal. Method	314.0
Project ID:	JPL	Service ID:	31369	Collected by:	

Component Name: Perchlorate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-1369-1	EB-1-1/29/03	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	<4	U
03-1369-2	MW-21-1	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	3.1	B
03-1369-3	MW-21-2	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	<4	U
03-1369-4	MW-21-3	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	1.9	B
03-1369-5	MW-21-4	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	1.8	B
03-1369-6	MW-21-5	Water	01/29/03	01/29/03	01/29/03	03W1286	μg/L	4	<4	U
03W1286-MB-01	03W1286-MB-01	Water	01/29/03	01/29/03	01/29/03	03W1286	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:	31369
Project ID:	JPL	Project No:	04-442810	Sample Matrix:	Water
		Batch No:	03W1286		
LCS Filename:	-	Date Analyzed:	012903	Time Analyzed:	11:37
LCSD Filename:	-	Date Analyzed:	012903	Time Analyzed:	12:01

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
PERCHLORATE	μg/L	25	0	26.8	107	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
PERCHLORATE	μg/L	18	18.3	101	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:	31369
Project ID:	JPL	Project No:	04-442810	Sample Matrix:	Water
		Batch No:	03W1286		
MS Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:24
MSD Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:48
MS Sample No:	**LF754**	Sample Lab ID:	03-1338-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
PERCHLORATE	μg/L	50	0	44.0	88	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	44.0	88	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: _____

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:	31369
Project ID:	JPL	Project No:	04-442810	Sample Matrix:	Water
		Batch No:	03W1295		
LCS Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:28
LCSD Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:28

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.244	98	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	0.251	100	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:	31369
Project ID:	JPL	Project No:	04-442810	Sample Matrix:	Water
		Batch No:	03W1295		
MS Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:28
MSD Filename:	-	Date Analyzed:	012903	Time Analyzed:	16:28
MS Sample No:	**MW-21-5**	Sample Lab ID:	03-1369-6		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.266	106	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	0.275	110	4	19	78-115
# of Out-of-control				0	0		

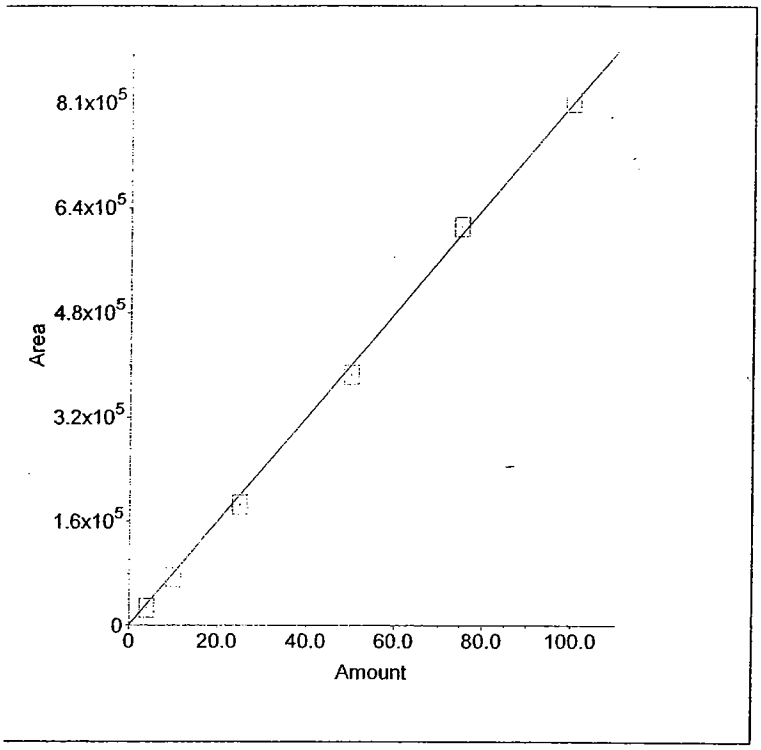
Column to be used to flag recovery and RPD values:

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

Comments: _____

Method:C:\PEAKNET\METHOD\E314.0-9.MET Updated:07/31/2002 2:41:38 PM Total:1

1. Component:perchlorate
Standard:External Fit Type:Linear
Origin:Force Calibration:Area
r^2=0.998635
Amt=0.0001235*Resp+0



Analyst Wei Wang
Date 07/31/02
Instrument Icrc

6A

INITIAL CALIBRATION DATA

Lab Name: Applied P & Ch Lab Contract: 03-1369

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

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: 31369
Project ID: JPL Project No.: 04-442810

#	Component Name	Method	Batch No.	Unit	Expe-cted	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Perchlorate	314.0	03W1286	ug/L	50	53.4	107	7	√	90-110	01/29/2003
	Perchlorate	314.0	03W1286	ug/L	50	52.0	104	4	√	90-110	01/29/2003
	Perchlorate	314.0	03W1286	ug/L	50	50.8	102	2	√	90-110	01/29/2003
2	Chromium (VI)	7196	03W1295	mg/L	0.25	0.258	103	3	√	90-110	01/29/2003
	Chromium (VI)	7196	03W1295	mg/L	0.25	0.244	98	-2	√	90-110	01/29/2003

ne	Sample	Sample Type	Level	Method	Data File	Volume	Dilution	Weight	Int. Std.
	mb	Sample		e314.0-9.met	mb_001.dxd	1	1	1	1
	std1 4ppb w7373a	Calibration	1	e314.0-9.met	std1_002.dxd	1	1	1	1
	std2 10ppb w7373b	Calibration	2	e314.0-9.met	std2_003.dxd	1	1	1	1
	std3 25ppb w7373c	Calibration	3	e314.0-9.met	std3_004.dxd	1	1	1	1
	std4 50ppb w7373d	Calibration	4	e314.0-9.met	std4_005.dxd	1	1	1	1
	std5 75ppb w7373e	Calibration	5	e314.0-9.met	std5_006.dxd	1	1	1	1
	std6 100ppb w7373f	Calibration	6	e314.0-9.met	std6_007.dxd	1	1	1	1
	icv 50ppb w7319c	Sample		e314.0-9.met	icv_a008.dxd	1	1	1	1
	icb	Sample		e314.0-9.met	icb	1	1	1	1
	3984-15 f=1	Sample		e314.0-9.met	3984-15	1	1	1	1
	3843-33 f=1	Sample		e314.0-9.met	3843-33	1	1	1	1
	3984-15 f=1	Sample		e314.0-9.met	3984-15a	1	1	1	1
	3843-33 f=1	Sample		e314.0-9.met	3843-33a	1	1	1	1
	3984-15 f=1	Sample		e314.0-9.met	3984-15b	1	1	1	1
	3843-33 f=1	Sample		e314.0-9.met	3843-33b	1	1	1	1

Analyst Wei Wang

Date 7/31/02

Instrument IL-K

e	Sample	Sample Type	Level	Method	Data File	Volume	Dilution
	##03w1286kw ipc 25ppb w7685b	Sample		e314.0-9.met	c:\data\03w1286k\w1286k ipc 25ppb	1	1
	MB	Sample		e314.0-9.met	c:\data\03w1286k\w1286k k01	1	1
	ccv 50ppb w7685c	Sample		e314.0-9.met	c:\data\03w1286k\w1286k q01	1	1
	lcs 25ppb w7373C	Sample		e314.0-9.met	c:\data\03w1286k\w1286k l01	1	1
	lcs 18ppb w7685D	Sample		e314.0-9.met	c:\data\03w1286k\w1286k j01	1	1
	ICCS 4ppb w7685a	Sample		e314.0-9.met	c:\data\03w1286k\w1286k iccs 4ppb	1	1
	1356-02 f=10	Sample		e314.0-9.met	c:\data\03w1286k\1356-02	1	10
	1339-02 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1339-02	1	1
	1338-02 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1338-02	1	1
	1338-03 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1338-03	1	1
	1338-04 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1338-04	1	1
	1356-02 f=20	Sample		e314.0-9.met	c:\data\03w1286k\1356-02a	1	20
	ccv 50ppb w7685c	Sample		e314.0-9.met	c:\data\03w1286k\w1286k q02	1	1
	ccb	Sample		e314.0-9.met	c:\data\03w1286k\w1286k k02	1	1
	1338-03 ms f=1	Sample		e314.0-9.met	c:\data\03w1286k\w1286k m01	1	1
	1338-03 msd f=1	Sample		e314.0-9.met	c:\data\03w1286k\w1286k n01	1	1
	1369-01 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-01	1	1
	1369-02 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-02	1	1
	1369-03 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-03	1	1
	1369-04 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-04	1	1
	1369-05 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-05	1	1
	1369-06 f=1	Sample		e314.0-9.met	c:\data\03w1286k\1369-06	1	1
	ccv 50ppb w7685c	Sample		e314.0-9.met	c:\data\03w1286k\w1286k q03	1	1
	LFB--25	Sample		e314.0-9.met	c:\data\03w1286k\lfb--25	1	1
	MCT--200	Sample		e314.0-9.met	c:\data\03w1286k\mct--200	1	1
	MCT--300	Sample		e314.0-9.met	c:\data\03w1286k\mct--300	1	1
	MCT--400	Sample		e314.0-9.met	c:\data\03w1286k\mct--400	1	1
	MCT--500	Sample		e314.0-9.met	c:\data\03w1286k\mct--500	1	1
	MCT--600	Sample		e314.0-9.met	c:\data\03w1286k\mct--600	1	1
	MCT--800	Sample		e314.0-9.met	c:\data\03w1286k\mct--800	1	1
	MCT--1000	Sample		e314.0-9.met	c:\data\03w1286k\mct--1000	1	1
	ccv 50ppb w7685c	Sample		e314.0-9.met	c:\data\03w1286k\w1286k q04	1	1
		Sample		aastopcl.met		1	1

Analyst Wei Wang

Date 1/29/03

Instrument IC-1

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

Chromium (VI) (7196) Worksheet

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

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

Calibration	STD Lot #	$C_{std} \times V_{std} / V_f = C_i$	A_i	$RF_i = A_i / C_i$	Calibration results	Note
STD-1	W-7191	× / =0.000mg/L	0.000		Least Square [RF]=	Cal. Code:
STD-2	W-	× / =0.012mg/L	0.006		Average $\bar{RF}$=	A=0.000+0.836C
STD-3	W-	× / =0.050mg/L	0.041		C.C.=0.9717 (≥ 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+Bri~~ 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 $C'=A/\bar{RF}$	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/ =	0.204	mg/L	0.244 ppm	
Sample-1	1369-1		/X_0 =	95.0/ =	0.000	mg/L	0.00 ppm	
MS on S-1	6		/X_0 =	95.0/ =	0.223	mg/L	0.266 ppm	
MSD on S-1	6		/X_0 =	95.0/ =	0.230	mg/L	0.275 ppm	
Sample 2	2		/X_0 =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 3	3		/X_0 =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 4	4		/X_0 =	95.0/ =	0.001	mg/L	0.001 ppm	
Sample 5	5		/X_0 =	95.0/ =	0.002	mg/L	0.002 ppm	
Sample 6	6		/X_0 =	95.0/ =	0.004	mg/L	0.005 ppm	
Sample 7	-		/X_0 =	95.0/ =		mg/L	ppm	
Sample 8			/X_0 =	95.0/ =		mg/L	ppm	
Sample 9			/X_0 =	95.0/ =		mg/L	ppm	
Sample 10			/X_0 =	95.0/ =		mg/L	ppm	
Blank	Lot:		/X_0 =	95.0/ =		mg/L	ppm	
LCS2	Bl. Lot: T1115		/X_0 = 1	95.0/ =	0.210	mg/L	0.251 ppm	
Sample 11			/X_0 =	95.0/ =		mg/L	ppm	
Sample 12			/X_0 =	95.0/ =		mg/L	ppm	
Sample 13			/X_0 =	95.0/ =		mg/L	ppm	
Sample 14			/X_0 =	95.0/ =		mg/L	ppm	
Sample 15			/X_0 =	95.0/ =		mg/L	ppm	
Sample 16			/X_0 =	95.0/ =		mg/L	ppm	
Sample 17			/X_0 =	95.0/ =		mg/L	ppm	
Sample 18			/X_0 =	95.0/ =		mg/L	ppm	
Sample 19			/X_0 =	95.0/ =		mg/L	ppm	
Sample 20			/X_0 =	95.0/ =		mg/L	ppm	
MTX Dup.	closing 0.25mg/L		/X_0 =	95.0/ =	0.204	mg/L	0.244 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

APCL form 5-155 May 08, 1996. Ver. 3.1 No pencil. Use blue pen for record. Use red pen for correction.
File:[CUST.DOC.WET]CR6.TEX Root-file: CR6_ROOT.TEX 1-Page-File: CR61.TEX
Control limits are subjected to change. The updated values are given in the latest version of APCL Technical Handbook Vol. 2

APCL

Applied Physics & Chemistry Laboratory

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

January 19, 2003

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

Dear Leo Williamson,

This package contains samples in our Service ID 03-1684 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

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-23 ~~0009~~ 0010

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: SPL GW Mon-1Q03	PROJECT LOCATION MW-23 (N. of BLDG 233)	PROJECT NUMBER 04-4428.10	LABORATORY PHONE (909) 590-1828	LABORATORY FAX (909) 590-1498	RECIPIENT NAME Leo W. Williamson
PROJECT CONTACT Leo W. Williamson	PROJECT PHONE NUMBER (714) 920-8729	PROJECT FAX (909) 396-1455	LABORATORY ADDRESS 13760 Magnolia Ave		ADDRESS 22632 Golden Springs Dr. #270
PROJECT ADDRESS 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE Pasadena, CA.	CLIENT US NAVY, SWDIV	CITY, STATE AND ZIPCODE Chino, CA. 91710		CITY, STATE AND ZIPCODE Diamond Bar, CA. 91765
PROJECT MANAGER Asrar Faheem	PROJECT MANAGER'S PHONE (909) 396-7662	PROJECT MANAGER'S FAX (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T	524.2 (VOCs)	314.0 (Perchlorates)	200.8 (Total Chromium)	7196 (Hex. Chrome)					Comments
1	MW-23-3	H_2O	2/17/03	845	HCl HNO_3 NONE	3+1+1	III	NORMAL	X	X	X	X					MS/MSD
2	MW-23-2	↓	↓	920	↓	↓	↓	↓	X	X	X	X					
3	MW-23-1	↓	↓	955	↓	↓	↓	↓	X	X	X	X					
4																	
5	EB-9-2/17/03	H_2O	2/17/03	925	HCl HNO_3 NONE	3+1+1	III	NORMAL	X	X	X	X					1684
6	TB-9-2/17/03	↓	N/A	N/A	HCl	2	↓	↓	X								
7																	
8	MW-23-4	H_2O	2/17/03	740	NONE HNO_3	2	III	NORMAL			X	X					
9																	
10																	

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Leo W. Williamson	Barbara Stryse	2/17/03	13:55	
Richard Stenson	[illegible]	2/17/03	14:40	

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

Applied P & Ch Laboratory
13760 Magnolia Ave. Chino CA 91710
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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 #: 801-031684
Collected by: Leo Williamson
Collected on: 02/17/03

Received: 02/17/03
Extracted: N/A
Tested: 02/17-20/03
Reported: 02/21/03

Sample Description: Water from MW-24,23
Project Description: 04-4428.10 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result EB-9-2/17/03 03-01684-1	MW-23-1 03-01684-2	MW-23-2 03-01684-3
Dilution Factor				1	1	1
PERCHLORATE	314.0	µg/L	4	<4	1.9J	2.4J

Component Analyzed	Method	Unit	PQL	Analysis Result MW-23-3 03-01684-4	MW-24-1 03-01684-6	MW-24-2 03-01684-7	MW-24-3 03-01684-8
Dilution Factor				1	5	2	1
PERCHLORATE	314.0	µg/L	4	2.2J	257	106	1.6

Component Analyzed	Method	Unit	PQL	Analysis Result EB-9-2/17/03 03-01684-1	MW-23-1 03-01684-2	MW-23-2 03-01684-3	MW-23-3 03-01684-4
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01	<0.01
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
2-BUTANONE	524.2	µg/L	10	<10	<10	<10	<10
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
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	0.5J	0.5	<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

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Component Analyzed	Method	Unit	PQL [a]	Analysis Result EB-9-2/17/03 03-01684-1	MW-23-1 03-01684-2	MW-23-2 03-01684-3	MW-23-3 03-01684-4
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
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
4-METHYL-2-PENTANONE (MIBK)	524.2	μg/L	10	<10	<10	<10	<10
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
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	<0.5	1.0	0.6	<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	1.5	0.7	<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
1,1,2-TRICHLOROTRIFLUORO	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

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Component Analyzed	Method	Unit	PQL	Analysis Result MW-23-4 03-01684-5	MW-24-1 03-01684-6	MW-24-2 03-01684-7
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01
VOLATILE ORGANIC COMPOUNDS						
Dilution Factor				1	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
2-BUTANONE	524.2	µg/L	10	-	<10	<10
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
CARBON TETRACHLORIDE	524.2	µg/L	0.5	-	4.7	8.9
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	-	2.4	2.8
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	1.1 [a]	-	<1.1	<1.1
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	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	-	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	-	<0.5	0.5J
CIS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	-	<0.5	<0.5
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

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Component Analyzed	Method	Unit	PQL	Analysis Result MW-23-4 03-01684-5	MW-24-1 03-01684-6	MW-24-2 03-01684-7
ISOPROPYLBENZENE (CUMENE)	524.2	μg/L	0.5	-	<0.5	<0.5
P-ISOPROPYLTOLUENE	524.2	μg/L	0.5	-	<0.5	<0.5
4-METHYL-2-PENTANONE (MIBK)	524.2	μg/L	10	-	<10	<10
METHYLENE CHLORIDE	524.2	μg/L	1.8 [a]	-	<1.8	<1.8
METHYL-T-BUTYL ETHER (MTBE)	524.2	μg/L	1	-	<1	<1
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	-	0.5J	<0.5
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	-	1.7	1.3
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-TRICHLOROTRIFLUORO	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

Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-3 03-01684-8	MW-24-4 03-01684-9	TB-9-2/17/03 03-01684-10
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	-

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Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-3 03-01684-8	MW-24-4 03-01684-9	TB-9-2/17/03 03-01684-10
VOLATILE ORGANIC COMPOUNDS						
Dilution Factor				1	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
2-BUTANONE	524.2	μg/L	10	<10	-	<10
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
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	-	<0.5
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	1.1 [a]	<1.1	-	<1.1
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	-	<0.5
1,2-DICHLOROETHANE	524.2	μg/L	0.5	<0.5	-	<0.5
1,1-DICHLOROETHENE	524.2	μg/L	0.5	<0.5	-	<0.5
CIS-1,2-DICHLOROETHENE	524.2	μg/L	0.5	<0.5	-	<0.5
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

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Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-3 03-01684-8	MW-24-4 03-01684-9	TB-9-2/17/03 03-01684-10
P-ISOPROPYLTOLUENE	524.2	μg/L	0.5	<0.5	-	<0.5
4-METHYL-2-PENTANONE (MIBK)	524.2	μg/L	10	<10	-	<10
METHYLENE CHLORIDE	524.2	μg/L	1.8 [a]	<1.8	-	<1.8
METHYL-T-BUTYL ETHER (MTBE)	524.2	μg/L	1	<1	-	<1
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	-	<0.5
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-TRICHLOROTRIFLUORO	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

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: 03-1684

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

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

Case Narrative

Project: JPL/04-4428.10

For GEOFON, Inc.

APCL Service No: 03-1684

1. Sample Identification

The sample identifications are listed in the following table:

GEOFON, Inc. Sample ID	APCL Sample ID
MW-24-4	03-01684-9
MW-24-3	03-01684-8
MW-24-2	03-01684-7
MW-24-1	03-01684-6
MW-23-3	03-01684-4
MW-23-2	03-01684-3
MW-23-1	03-01684-2
EB-9-2/17/03	03-01684-1
TB-9-2/17/03	03-01684-10
MW-23-4	03-01684-5

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
7196A (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

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-24 0011

GEOFON's LAB COORDINATOR: Brad Shojaee	LAB COORDINATOR'S PHONE: (909) 396-7662	LAB COORDINATOR'S FAX: (909) 396-1455	LABORATORY SERVICE ID: —	LABORATORY CONTACT: Kenny Chan	MAIL REPORT (COMPANY NAME): GEOFON, INC.
PROJECT NAME: JPL GW Mon-1903	PROJECT LOCATION: MW-24 (E. of Security Bldg.)	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1929	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Leo W. Williamson
PROJECT CONTACT: Leo W. Williamson	PROJECT PHONE NUMBER: (714) 970-8729	PROJECT FAX: (909) 396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave		ADDRESS: 22632 Golden Springs Dr. #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena, CA	CLIENT: US NAVY SUPDIV	CITY, STATE AND ZIPCODE: Chino, CA 91710		CITY, STATE AND ZIPCODE: Diamond Bar, CA 91765
PROJECT MANAGER: Asrar Faheem	PROJECT MANAGER'S PHONE: (909) 396-7662	PROJECT MANAGER'S FAX: (909) 396-1455			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: 524.2 (VOCs)	314.0 (Perchlorates)	200.8 (Total Chromium)	7196 (Hex Chrome)					Comments
1	MW-24-4	H_2O	2/17/03	1120	HNO_3 NONE	2	III	NORMAL			X	X					
2	MW-24-3	↓	↓	1205	HCl HNO_3 NONE	3+1+1	↓	↓	X	X	X	X					
3	MW-24-2	↓	↓	1240	↓	↓	↓	↓	X	X	X	X					
4	MW-24-1	↓	↓	1315	↓	↓	↓	↓	X	X	X	X					1684
5																	
6																	
7																	
8																	
9																	
10																	

SAMPLES COLLECTED BY: Leo W. Williamson

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Leo W. Williamson	Barbara Stinson	2/17/03	1355	
Barbara Stinson	[illegible]	2/17/03	1440	

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

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

Sample Receiving Checklist

APCL ServiceID: **1684** Client Name/Project: Geofon

1. Sample Arrival

Date/Time Received 2/17/03 1440 Date/Time Opened 2/17/03 1440 By (name): Kenny Chan

Custody Transfer: ☐ Client ☐ Golden State ☐ UPS ☐ US Mail ☐ FedEx ☑ APCL Empl: Richard Stinson

2. Chain-of-Custody (CoC)

☑ With Samples? ☐ Faxed? ☐ Client has Copy? ☐ Signed, dated? By: _____
☑ Project ID? ☑ Analyses Clear? ☐ Hold Samples? #on Hold _____ # Received 10
☑ 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 2.6°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: _____ ☑ 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: Kenny Chan Date: 17 Feb 2003 Time: 7:36 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.

DocumentFile: [neal.texfiles]smprcl.tex.

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

Sample Login: Check List

03-01684 (0470_ 112) (2202777_ 112)

02/18/03

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?	*Kenny Chan*
	Receiving Date/Time:	*02/17/03 1440*
	COC No.	
☐ Shipping Information	Shipping Company	*APCL pick up*
	Packing Information:	*Cooler/Ice Chester*
	Cooler Temperature:	*2.6 °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-24-4	CR VI	03-01684-9	W	P		500	1	G	021703	N	0	6	☐
2	MW-24-3	524.2	03-01684-8-α	W	V	C	40	3	G	021703	N	0	6	☐
	MW-24-3	CRVI/Perch	03-01684-8-β	W	P		500	1	G	021703	N	0	6	☐
3	MW-24-2	524.2	03-01684-7-α	W	V	C	40	3	G	021703	N	0	6	☐
	MW-24-2	CRVI/Perch	03-01684-7-β	W	P		500	1	G	021703	N	0	6	☐
4	MW-24-1	524.2	03-01684-6-α	W	V	C	40	3	G	021703	N	0	6	☐
	MW-24-1	CRVI/Perch	03-01684-6-β	W	P		500	1	G	021703	N	0	6	☐
5	MW-23-3	524.2	03-01684-4-α	W	V	C	40	6	G	021703	N	0	6	☐
	MW-23-3	CRVI/Perch	03-01684-4-β	W	P		500	2	G	021703	N	0	6	☐
6	MW-23-2	524.2	03-01684-3-α	W	V	C	40	3	G	021703	N	0	6	☐
	MW-23-2	CRVI/Perch	03-01684-3-β	W	P		500	1	G	021703	N	0	6	☐
7	MW-23-1	524.2	03-01684-2-α	W	V	C	40	3	G	021703	N	0	6	☐
	MW-23-1	CRVI/Perch	03-01684-2-β	W	P		500	1	G	021703	N	0	6	☐
8	EB-9-2/17/03	524.2	03-01684-1-α	W	V	C	40	3	G	021703	N	0	6	☐
	EB-9-2/17/03	CRVI/Perch	03-01684-1-β	W	P		500	1	G	021703	N	0	6	☐
9	TB-9-2/17/03	524.2	03-01684-10	W	V	C	40	2	G	021703	N	0	6	☐
10	MW-23-4	CR VI	03-01684-5	W	P		500	1	G	021703	N	0	6	☐

Part 3: Analysis Information

Test Items:

- ☑ *524.2* — Volatile Organic Compounds
- ☑ *7196A* — Chromium (VI)
- ☑ *314.0/300.0* — Perchlorate, low level

Seq. #	Client"s Sample ID (as given on COC)	Sample Sub-ID	APCL Sample ID	Matrix	524.2	CHROMIUM	PERCH	
1	MW-24-4	CR VI	03-01684-9	W		X		☐
2	MW-24-3	524.2	03-01684-8-α	W	X			☐
	MW-24-3	CRVI/Perch	03-01684-8-β	W		X	X	☐
3	MW-24-2	524.2	03-01684-7-α	W	X			☐
	MW-24-2	CRVI/Perch	03-01684-7-β	W		X	X	☐
4	MW-24-1	524.2	03-01684-6-α	W	X			☐
	MW-24-1	CRVI/Perch	03-01684-6-β	W		X	X	☐
5	MW-23-3	524.2	03-01684-4-α	W	X			☐
	MW-23-3	CRVI/Perch	03-01684-4-β	W		X	X	☐
6	MW-23-2	524.2	03-01684-3-α	W	X			☐
	MW-23-2	CRVI/Perch	03-01684-3-β	W		X	X	☐
7	MW-23-1	524.2	03-01684-2-α	W	X			☐
	MW-23-1	CRVI/Perch	03-01684-2-β	W		X	X	☐
8	EB-9-2/17/03	524.2	03-01684-1-α	W	X			☐
	EB-9-2/17/03	CRVI/Perch	03-01684-1-β	W		X	X	☐

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:	02/18/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03G1460-MB-01	Received Date:	02/18/2003
Sample ID:	**03G1460-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/18/03	Anal. Date:	02/18/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	21:41
Data File Name:	G1460K01	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	< 10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	< 0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	< 0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	< 0.5	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	µg/L	1.8	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	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	1,1,2-TRICHLOROTRIFLUORO	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	106
2	DIBROMOFLUOROMETHANE	1868-53-7	70-129	91
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	78
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	82
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	85
3	FLUOROBENZENE	462-06-6	50-200	88
# 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:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-1	Received Date:	02/17/2003
Sample ID:	**EB-9-2/17/03**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/18/03	Anal. Date:	02/18/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	22:09
Data File Name:	1684-01	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1,1,2-TRICHLOROTRIFLUORO	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	111
2	DIBROMOFLUOROMETHANE	1868-53-7	70-129	99
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	82
4	TOLUENE-D8	2037-26-5	73-129	107
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	79
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	85
3	FLUOROBENZENE	462-06-6	50-200	84
# 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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-2	Received Date:	02/17/2003
Sample ID:	**MW-23-1**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/18/03	Anal. Date:	02/18/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	22:37
Data File Name:	1684-02	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	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	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1.5	
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	1,1,2-TRICHLOROTRIFLUORO	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	115
2	DIBROMOFLUOROMETHANE	1868-53-7	70-129	98
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	85
4	TOLUENE-D8	2037-26-5	73-129	106
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	75
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	80
3	FLUOROBENZENE	462-06-6	50-200	81
# 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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-3	Received Date:	02/17/2003
Sample ID:	**MW-23-2**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/18/03	Anal. Date:	02/18/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	23:05
Data File Name:	1684-03	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	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	
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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	0.6	
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	0.7	
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	1,1,2-TRICHLOROTRIFLUORO	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	111
2	DIBROMOFLUOROMETHANE	1868-53-7	70-129	96
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	81
4	TOLUENE-D8	2037-26-5	73-129	103
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	80
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	85
3	FLUOROBENZENE	462-06-6	50-200	86
# 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:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-4	Received Date:	02/17/2003
Sample ID:	**MW-23-3**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/18/03	Anal. Date:	02/18/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	23:33
Data File Name:	1684-04	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	< 10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	< 0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	< 0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	< 0.5	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1,1,2-TRICHLOROTRIFLUORO	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	115
2	DIBROMOFLUOROMETHANE	1868-53-7	70-129	102
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	88
4	TOLUENE-D8	2037-26-5	73-129	113
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	76
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	80
3	FLUOROBENZENE	462-06-6	50-200	80
# 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:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-6	Received Date:	02/17/2003
Sample ID:	**MW-24-1**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/19/03	Anal. Date:	02/19/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	00:02
Data File Name:	1684-06	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	4.7	
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	2.4	
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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	J
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	1.7	
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	1,1,2-TRICHLOROTRIFLUORO	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	DIBROMOFLUOROMETHANE	1868-53-7	70-129	95
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	83
4	TOLUENE-D8	2037-26-5	73-129	103
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	83
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	90
3	FLUOROBENZENE	462-06-6	50-200	87
# 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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-7	Received Date:	02/17/2003
Sample ID:	**MW-24-2**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/19/03	Anal. Date:	02/19/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	00:31
Data File Name:	1684-07	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	8.9	
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	2.8	
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	J
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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1.3	
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	1,1,2-TRICHLOROTRIFLUORO	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	DIBROMOFLUOROMETHANE	1868-53-7	70-129	95
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	82
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	86
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	88
3	FLUOROBENZENE	462-06-6	50-200	91
# 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:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-8	Received Date:	02/17/2003
Sample ID:	**MW-24-3**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/19/03	Anal. Date:	02/19/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	01:00
Data File Name:	1684-08	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	< 10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	< 0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	< 0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	< 0.5	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1,1,2-TRICHLOROTRIFLUORO	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	DIBROMOFLUOROMETHANE	1868-53-7	70-129	97
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	80
4	TOLUENE-D8	2037-26-5	73-129	105
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	82
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	86
3	FLUOROBENZENE	462-06-6	50-200	86
# 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:	02/17/2003
Project ID:	JPL	Service ID:	31684	Collected by:	
		Lab Sample ID:	03-1684-10	Received Date:	02/17/2003
Sample ID:	**TB-9-2/17/03**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: G
Anal. Method:	524.2	Prep. Date:	02/19/03	Anal. Date:	02/19/03
Batch No:	03G1460	Prep. No:	–	Anal. Time:	01:29
Data File Name:	1684-10	Sample Amount:	25.0 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	2-BUTANONE	78-93-3	μg/L	10	<10	U
8	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
9	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
10	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	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	4-METHYL-2-PENTANONE (MIBK)	108-10-1	μg/L	10	<10	U
42	METHYLENE CHLORIDE	75-09-2	μg/L	1.8 [a]	<1.8	U
43	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	μg/L	1	<1	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	1,1,2-TRICHLOROTRIFLUORO	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	DIBROMOFLUOROMETHANE	1868-53-7	70-129	102
3	1,2-DICHLOROETHANE-D4	17060-07-0	70-122	86
4	TOLUENE-D8	2037-26-5	73-129	108
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	81
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	89
3	FLUOROBENZENE	462-06-6	50-200	85
# 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:	031684
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G1460		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	03G1460-LCS-01	03G1460-LCS-01	99	98	91	101	0
2	MW-23-3MS	03-1684-4MS	101	104	96	104	0
3	MW-23-3MSD	03-1684-4MSD	110	106	99	111	0
4	03G1460-MB-01	03G1460-MB-01	106	91	77	97	0
5	EB-9-2/17/03	03-1684-1	111	98	82	106	0
6	MW-23-1	03-1684-2	115	98	85	106	0
7	MW-23-2	03-1684-3	111	96	80	103	0
8	MW-23-3	03-1684-4	115	102	88	113	0
9	MW-24-1	03-1684-6	107	95	83	103	0
10	MW-24-2	03-1684-7	108	94	82	100	0
11	MW-24-3	03-1684-8	108	96	80	105	0
12	TB-9-2/17/03	03-1684-10	110	102	85	108	0
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 = DIBROMOFLUOROMETHANE	70-129
S3 = 1,2-DICHLOROETHANE-D4	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:	31684
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G1460		
LCS Filename:	G1460L01	Date Analyzed:	021803	Time Analyzed:	18:51
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	20.2	101	65-120
CHLOROBENZENE	μg/L	20	0	20.8	104	65-134
1,1-DICHLOROETHENE	μg/L	20	0	19.8	99	65-127
TOLUENE	μg/L	20	0	19.1	96	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:	31684
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G1460		
MS Filename:	G1460M01	Date Analyzed:	021803	Time Analyzed:	19:19
MSD Filename:	G1460N01	Date Analyzed:	021803	Time Analyzed:	19:48
MS Sample No:	**MW-23-3**	Sample Lab ID:	03-1684-4		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	μg/L	20	0	21.6	108	65-121
CHLOROBENZENE	μg/L	20	0	22.8	114	65-134
1,1-DICHLOROETHENE	μg/L	20	0	21.3	107	65-127
TOLUENE	μg/L	20	0	20.5	103	65-134
TRICHLOROETHENE	μg/L	20	0	21.0	105	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	22.0	110	2	28	65-121
CHLOROBENZENE	μg/L	20	23.5	118	3	35	65-134
1,1-DICHLOROETHENE	μg/L	20	21.5	108	1	31	65-127
TOLUENE	μg/L	20	21.0	105	2	35	65-134
TRICHLOROETHENE	μg/L	20	21.6	108	3	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:	31684
Project ID:	JPL	Project No:	04-4428.10	Analysis Date:	02/18/03
		Sample Matrix:	Water	Analysis Time:	21:41
Sample ID:	**03G1460-MB-01**	Batch No:	03G1460	Instrument ID:	GC/MS: G
Lab Sample ID:	03G1460-MB-01	Data File Name:	G1460K01	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	03G1460-LCS-01	03G1460-LCS-01	Lab Control Spike	G1460L01	02/18/03	18:51
2	MW-23-3MS	03-1684-4MS	Matrix Spike	G1460M01	02/18/03	19:19
3	MW-23-3MSD	03-1684-4MSD	Matrix Spike Duplicate	G1460N01	02/18/03	19:48
4	EB-9-2/17/03	03-1684-1	Field Sample	1684-01	02/18/03	22:09
5	MW-23-1	03-1684-2	Field Sample	1684-02	02/18/03	22:37
6	MW-23-2	03-1684-3	Field Sample	1684-03	02/18/03	23:05
7	MW-23-3	03-1684-4	Field Sample	1684-04	02/18/03	23:33
8	MW-24-1	03-1684-6	Field Sample	1684-06	02/19/03	00:02
9	MW-24-2	03-1684-7	Field Sample	1684-07	02/19/03	00:31
10	MW-24-3	03-1684-8	Field Sample	1684-08	02/19/03	01:00
11	TB-9-2/17/03	03-1684-10	Field Sample	1684-10	02/19/03	01:29
12						
13						
14						
15						
16						
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21						
22						
23						
24						
25						

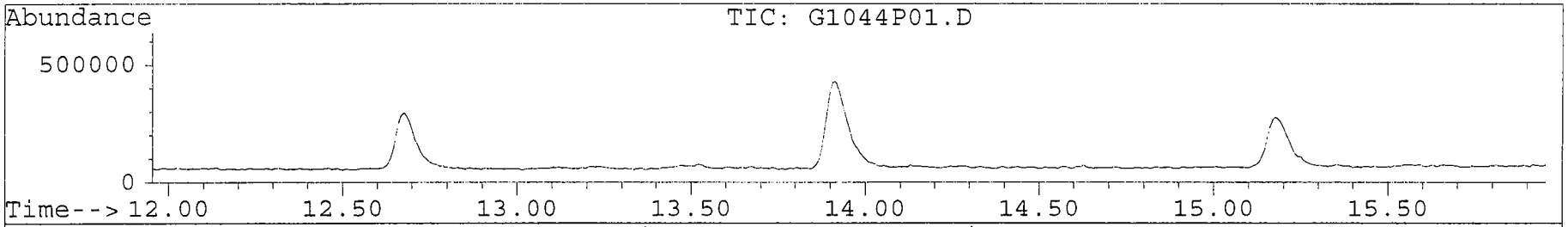
BFB

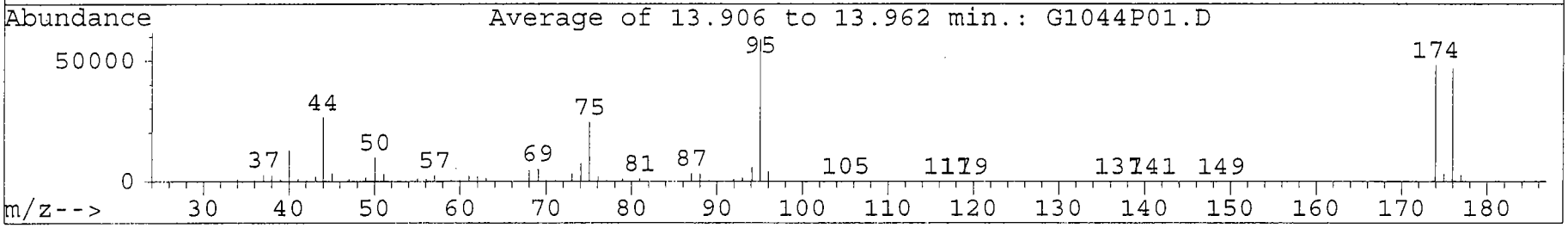
1428

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

G1044 1.D E524G003.M Mon Jan 13 09:24:09 2003

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: _____

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
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Response Factor Report GCMS-G

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 09:57:17 2003
Response via : Initial Calibration

Calibration Files
0.3 =3-0003.D 2 =3-002.D 10 =3-010.D
20 =3-020.D 40 =3-040.D 80 =3-080.D

		Compound	0.3	2	10	20	40	80	Avg	%RSD	r2
1)	I	1 Fluorobenzene I1	----------ISTD----------								
2)		3 di-Cl-di-F-metha	0.401	0.288	0.312	0.289	0.285	0.276	0.308	15.17	1.000
3)	P	4 Chloromethane		0.201	0.216	0.253	0.278	0.269	0.243	13.88	
4)		9 F114 85 135	0.350	0.300	0.334	0.313	0.315	0.304	0.319	5.93	
5)	C	5 vinyl chloride	0.217	0.232	0.243	0.233	0.237	0.223	0.231	3.96	
6)		6 bromomethane	0.255	0.283	0.240	0.190	0.198	0.198	0.227	16.60	0.999
7)		7 Chloroethane	0.158	0.177	0.177	0.169	0.175	0.169	0.171	4.25	
8)		8 tri-Cl-F-methane	0.318	0.367	0.432	0.414	0.413	0.398	0.390	10.70	
9)		111 isopropyl alcoh		0.005	0.005	0.004	0.005	0.004	0.005#	12.57	
10)		100 ethyl ether x5	0.177	0.141	0.135	0.133	0.137	0.133	0.143	12.11	
11)		102 Acrolein x10		0.010	0.010	0.015	0.012	0.011	0.011#	17.19	
12)		119 methyl acetate	0.177	0.103	0.110	0.126		0.124	0.128	22.73	1.000
13)		104 Carbon disulfid	0.919	0.866	0.830	0.793	0.817	0.777	0.834	6.25	
14)		103 Acrylonitrilex1		0.024	0.024	0.024	0.024	0.024	0.024#	1.28	
15)		95 Acetone x10		0.027	0.017	0.018	0.016	0.016	0.019#	25.00	0.999
16)		108 F-113	0.232	0.267	0.343	0.325	0.321	0.311	0.300	13.95	
17)	M,C	13 11-dichloroethen	0.376	0.399	0.409	0.389	0.398	0.381	0.392	3.13	
18)		101 Acetonnitrilex1	0.009	0.001	0.007	0.007	0.007	0.006	0.006#	44.01	0.998
19)		109 Iodomethane	0.170	0.363	0.385	0.320	0.331	0.296	0.311	24.45	0.996
20)		113 Tert butyl alco		0.012	0.008	0.009	0.008	0.009	0.009#	17.38	0.999
21)		18 methylene chlori	1.220	0.724	0.498	0.407	0.365		0.643	54.62	0.993
22)		112 Allyl chloride	0.514	0.479	0.422	0.416	0.405	0.365	0.434	12.39	
23)		200 Nitro methane x	0.044	0.044	0.044	0.043	0.044	0.042	0.044#	1.92	
24)		10 t-Bu-Me-ether	0.842	0.479	0.398	0.418	0.420	0.429	0.498	34.33	1.000
25)		19 t-12-di-Cl-ethen	0.324	0.294	0.299	0.296	0.301	0.289	0.301	4.05	
26)		98 Vinyl acetate x5	0.312	0.304	0.286	0.157	0.315	0.248	0.270	22.48	
27)	P	21 11-dichloroethan	0.500	0.546	0.535	0.527	0.534	0.507	0.525	3.36	
28)		91 2-butanone MEKx1	0.104	0.095	0.090	0.088	0.094	0.092	0.094	6.20	

(#) = Out of Range

Response Factor Report GCMS-G

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 09:57:17 2003
Response via : Initial Calibration

Calibration Files
0.3 =3-0003.D 2 =3-002.D 10 =3-010.D
20 =3-020.D 40 =3-040.D 80 =3-080.D

		Compound	0.3	2	10	20	40	80	Avg	%RSD	r^2
29)		115 Di isoprop ethe	0.108	1.340	1.315	1.320	1.351	1.317	1.125	44.32	1.000
30)		22 c-12-di-Cl-ethen	0.299	0.300	0.291	0.291	0.297	0.287	0.294	1.83	
31)		23 22-Dichloropropa	0.573	0.467	0.437	0.419	0.418	0.403	0.453	13.83	
32)		24 Br-Cl-methane	0.042	0.099	0.104	0.104	0.108	0.105	0.094	27.43	1.000
33)	C	25 chloroform	0.648	0.531	0.493	0.488	0.504	0.487	0.525	11.86	
34)		201 Ethyl acetate x		0.144	0.137	0.100	0.151	0.136	0.134	14.75	
35)		116 ETBE	0.910	0.810	0.787	0.780	0.785	0.769	0.807	6.50	
36)		117 Iso-butyl alcoh	0.024	0.029	0.029	0.020	0.031	0.027	0.027#	14.60	
37)		26 tetrahydrofuranx		0.011	0.010	0.010	0.010	0.010	0.010#	4.18	
38)	S	27 Di-Br-F-Methane	0.604	0.385	0.352	0.350	0.360	0.349	0.400	25.18	1.000
39)		34 111-tri-Cl-ethan	0.542	0.428	0.418	0.409	0.414	0.413	0.437	11.85	
40)		30 12-dichloroethan	0.024	0.205	0.204	0.201	0.208	0.205	0.175	42.30	1.000
41)		35 11-Di-Cl-propene	0.413	0.378	0.379	0.371	0.378	0.373	0.382	4.04	
42)	S	29 1,2-di-Cl-ethane		0.173	0.165	0.164	0.165	0.159	0.165	3.14	
43)	M	36 benzene	0.854	0.901	0.876	0.863	0.883	0.837	0.869	2.63	
44)		37 CCl4	0.341	0.311	0.354	0.334	0.340	0.329	0.335	4.32	
45)		97 thiophene	0.441	0.456	0.429	0.421	0.430	0.415	0.432	3.39	
46)		118 TAME		0.635	0.539	0.536	0.527	0.541	0.556	8.06	
47)	C	39 12-di-Cl-propane	0.255	0.253	0.252	0.254	0.257	0.253	0.254	0.66	
48)	M	40 trichloroethene	0.253	0.267	0.275	0.273	0.279	0.269	0.269	3.39	
49)		96 Me-methacrylate		0.128	0.086	0.083	0.087	0.092	0.095	19.43	0.99
50)		42 Br-di-Cl-methane	0.441	0.364	0.340	0.327	0.331	0.324	0.355	12.65	
51)		41 dibromomethane	0.100	0.117	0.128	0.132	0.133	0.127	0.123	10.29	
52)		45 c-13-di-Cl-prope	0.341	0.316	0.303	0.301	0.309	0.307	0.313	4.71	
53)	S	55 toluene-d8(S2)		0.509	0.500	0.491	0.504	0.493	0.500	1.57	
54)		92 2-ClEt-Vi-ether1	0.045	0.052	0.054	0.055	0.057	0.057	0.054	8.68	
55)	M C	56 toluene	0.926	0.820	0.796	0.777	0.794	0.786	0.817	6.80	
56)		107 Et methacrylate		0.232	0.176	0.112	0.178	0.147	0.169	26.25	
57)		93 2-Hexanone x5		0.062	0.058	0.050	0.058	0.057	0.057	7.78	

(#) = Out of Range

Response Factor Report GCMS-G

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 09:57:17 2003
Response via : Initial Calibration

Calibration Files
0.3 =3-0003.D 2 =3-002.D 10 =3-010.D
20 =3-020.D 40 =3-040.D 80 =3-080.D

		Compound	0.3	2	10	20	40	80	Avg	%RSD	
58)		48 112-tri-Cl-Et	0.226	0.143	0.120	0.116	0.121	0.118	0.141	30.67	1.000
59)		58 1,2-di-br-ethane	0.050	0.125	0.124	0.129	0.129	0.128	0.114	27.70	1.000
60)		51 di-Br-Cl-methane	0.117	0.177	0.166	0.165	0.170	0.172	0.161	13.59	
61)		46 t-13-di-cl-prope	0.200	0.197	0.206	0.204	0.206	0.197	0.202	2.11	
62)		105 1-Chlorohexane	0.564	0.285	0.272	0.253	0.249	0.237	0.310	40.49	0.999
63)	I	47 Cl-benzene-d5, I2	----------ISTD----------								
64)		54 MIBK	0.207	0.298	0.328	0.319	0.325	0.304	0.297	15.38	0.999
65)		49 1,3-di-cl-propan	0.624	0.665	0.699	0.690	0.647	0.598	0.654	5.95	
66)		59 tetra-Cl-ethene	0.767	0.892	0.960	0.927	0.884	0.850	0.880	7.60	
67)	M P	60 chlorobenzene	1.465	1.556	1.560	1.485	1.424	1.278	1.461	7.13	
68)		61 1112-tetra-Cl-Et	0.473	0.619	0.613	0.631	0.602	0.573	0.585	9.96	
69)	C	64 ethylbenzene	3.150	3.064	2.822	2.754	2.619	2.485	2.816	9.06	
70)		65 m/p-Xylenes x2	2.309	2.321	2.213	2.124	2.010	1.868	2.141	8.30	
71)		99 1-4-di-Cl-butane	0.809	0.710	0.649	0.615	0.570	0.518	0.645	16.06	
72)	P	52 bromoform	0.118	0.305	0.317	0.319	0.302	0.282	0.274	28.23	0.998
73)		66 styrene	1.595	1.641	1.561	1.507	1.441	1.326	1.512	7.58	
74)		67 o-xylene	2.457	2.410	2.147	2.035	1.889	1.700	2.106	13.98	
75)	P	68 1122-Tetra-Cl-Et	0.391	0.469	0.403	0.385	0.349	0.323	0.387	12.94	
76)		110 t-1,4-dichloro-		0.153	0.078	0.060	0.058	0.053	0.081	51.75	0.999
77)		106 Cl-benzyl	0.890	0.534	0.539	0.531	0.489	0.448	0.572	27.91	0.996
78)	I	62 1,4-DCB-d4 150 152	----------ISTD----------								
79)		69 123-tri-Cl-Pr		0.112	0.116	0.123	0.127	0.131	0.122	6.42	
80)	S	70 4-Br-1-F-Bz (S3)		0.935	0.877	0.886	0.890	0.880	0.893	2.69	
81)		71 isopropylbenzene	2.780	3.439	3.399	3.298	3.366	3.435	3.286	7.71	
82)		72 bromobenzene	0.527	0.700	0.760	0.772	0.787	0.782	0.721	13.87	
83)		73 n-propylbenzene	0.727	0.924	0.921	0.910	0.914	0.920	0.886	8.83	
84)		74 2-Cl-Tl 126	0.646	0.602	0.566	0.545	0.606	0.566	0.589	6.23	

(#) = Out of Range

Response Factor Report GCMS-G

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Mon Jan 13 09:57:17 2003
Response via : Initial Calibration

Calibration Files
0.3 =3-0003.D 2 =3-002.D 10 =3-010.D
20 =3-020.D 40 =3-040.D 80 =3-080.D

	Compound		0.3	2	10	20	40	80	Avg	%RSD	r2
85)	75 4-Cl-Tl	126	0.683	0.834	0.866	0.784	0.843	0.816	0.804	8.13	
86)	76 135-tri-Me-Bz		2.482	2.722	2.700	2.625	2.675	2.716	2.653	3.43	
87)	79 tert-butylbenzen		2.218	2.871	2.824	2.765	2.829	2.837	2.724	9.19	
88)	78 124-tri-Me-Bz		1.891	2.455	2.250	2.296	2.326	2.317	2.256	8.48	
89)	80 13-di-Cl-Bz	146	0.934	1.158	1.264	1.084	1.198	1.258	1.149	10.87	
90)	82 14-di-Cl-Bz	146	1.527	1.764	1.616	1.744	1.694	1.675	1.670	5.24	
91)	81 sec-butylbenzene		3.330	4.148	4.224	3.968	4.057	4.172	3.983	8.35	
92)	77 4-iso-Pr-toluene		2.419	3.039	3.032	2.939	2.928	2.886	2.874	8.04	
93)	84 12-di-Cl-benzene		0.920	1.150	1.163	1.111	1.152	1.156	1.109	8.49	
94)	85 n-butylbenzene		3.034	2.990	3.069	2.970	2.978	3.028	3.012	1.28	
95)	86 12-diBr-3-Cl-Pra			0.063	0.077	0.085	0.089	0.091	0.081	13.95	
96)	87 124-tri-Cl-Bz		0.534	0.749	0.838	0.873	0.858	0.901	0.792	17.24	0.999
97)	88 naphthalene		0.804	0.553	0.616	0.666	0.652	0.700	0.665	12.68	
98)	90 123-tri-Cl-Bz		0.497	0.559	0.642	0.649	0.636	0.642	0.604	10.29	
99)	89 hx-Cl-butadiene		0.432	0.625	0.690	0.663	0.662	0.652	0.621	15.29	1.000

(#) = Out of Range

INITIAL CALIBRATION SUMMARY

Method File E524G003
Last Calibration Update Mon Jan 13 09:57:17 2003

Level 1 File Name	3-0003.D	**Level 1 ID**	0.3
Level 2 File Name	3-002.D	**Level 2 ID**	2
Level 3 File Name	3-010.D	**Level 3 ID**	10
Level 4 File Name	3-020.D	**Level 4 ID**	20
Level 5 File Name	3-040.D	**Level 5 ID**	40
Level 6 File Name	3-080.D	**Level 6 ID**	80
Level 7 File Name	3-020.D	**Level 7 ID**	cc

Compound Name	Level 1 Response	Level 2 Response	Level 3 Response	Level 4 Response	Level 5 Response	Level 6 Response	Level 7 Response	Coeff X^0	Coeff X^1 / ave RF	Coeff X^2	R^2 / RSD
1 Fluorobenzene I1 1	765834	768596	755237	739905	721219	703721	-1	------	------	------	------
3 di-Cl-di-F-methane 85 87	9202	44272	235359	427426	820884	1551879	-1	0.0191	0.2750	0.0000	0.9996
4 Chloromethane 50 52	4751	30836	163038	374044	803175	1514667	-1	0.0000	0.2433	0.0000	0.1388
9 F114 85 135	8035	46094	252154	462947	909235	1714061	-1	0.0000	0.3193	0.0000	0.0593
5 vinyl chloride 62 64	4990	35625	183259	344227	682967	1258237	-1	0.0000	0.2307	0.0000	0.0396
6 bromomethane 94 96	5861	43488	181174	281305	570773	1116110	-1	0.0126	0.1961	0.0000	0.9990
7 Chloroethane 64 66	3629	27223	133510	250119	505034	952606	-1	0.0000	0.1709	0.0000	0.0425
8 tri-Cl-F-methane 101 103	7295	56379	326202	612174	1192828	2238212	-1	0.0000	0.3902	0.0000	0.1070
111 isopropyl alcohol x10	1236	8181	34708	55395	131600	244204	-1	0.0000	0.0045	0.0000	0.1257
100 ethyl ether x5	20361	108089	509174	980952	1975186	3742221	-1	0.0000	0.1425	0.0000	0.1211
102 Acrolein x10	3234	15074	75489	215710	340415	601157	-1	0.0000	0.0114	0.0000	0.1719
119 methyl acetate	4062	15788	82815	187169	-1	696519	-1	-0.0033	0.1242	0.0000	0.9997
104 Carbon disulfide	21121	133095	626926	1173322	2357195	4372134	-1	0.0000	0.8336	0.0000	0.0625
103 Acrylonitrilex10	4569	37044	178667	348877	701313	1341637	-1	0.0000	0.0239	0.0000	0.0128
95 Acetone x10	989	41993	128289	268909	465240	912905	-1	0.0227	0.0159	0.0000	0.9991
108 F-113	5327	41068	259145	480691	925581	1749444	-1	0.0000	0.2998	0.0000	0.1395
13 11-dichloroethene 61 96	8641	61263	309126	575822	1147783	2146767	-1	0.0000	0.3920	0.0000	0.0313
101 Acetonnitrilex10	2063	1527	53569	97490	189257	353648	-1	0.0013	0.0063	0.0000	0.9985
109 Iodomethane	3901	55824	290992	473953	954242	1666625	-1	0.0467	0.2964	0.0000	0.9961
113 Tert butyl alcohol x10	2556	18436	60720	133851	240444	485913	-1	0.0016	0.0086	0.0000	0.9991
18 methylene chloride 49 84	28023	111315	375753	602942	1052979	-1	-1	0.0818	0.3520	0.0000	0.9932

112 Allyl chloride	11807	73643	318868	616004	1168854	2056270	-1	0.0000	0.4336	0.0000	0.1239
200 Nitro methane x10	10089	68361	334791	633827	1264975	2385881	-1	0.0000	0.0436	0.0000	0.0192
10 t-Bu-Me-ether 73 57	19344	73627	300489	618307	1211982	2415631	-1	-0.0086	0.4281	0.0000	0.9997
19 t-12-di-Cl-ethene 96 61	7446	45222	225516	438020	867973	1629626	-1	0.0000	0.3005	0.0000	0.0405
98 Vinyl acetate x5	35861	233914	1080092	1161950	4543111	6984572	-1	0.0000	0.2704	0.0000	0.2248
21 11-dichloroethane 63 83	11490	83925	403704	780313	1539657	2853804	-1	0.0000	0.5248	0.0000	0.0336
91 2-butanone MEKx10	23960	146366	680153	1296553	2708302	5159574	-1	0.0000	0.0938	0.0000	0.0620
115 Di isoprop ether	2475	206054	993426	1953682	3898884	7414434	-1	0.0032	1.3231	0.0000	0.9998
22 c-12-di-Cl-ethene 96 61	6875	46067	219592	430734	857123	1613152	-1	0.0000	0.2941	0.0000	0.0183
23 22-Dichloropropane 77 97	13155	71811	330092	619878	1207116	2269373	-1	0.0000	0.4529	0.0000	0.1383
24 Br-Cl-methane 128 130	956	15248	78733	153832	312235	593248	-1	-0.0008	0.1060	0.0000	0.9998
25 chloroform 83 85	14881	81604	372529	722194	1453363	2739754	-1	0.0000	0.5251	0.0000	0.1186
201 Ethyl acetate x2	-1	44403	206670	296783	873148	1526995	-1	0.0000	0.1337	0.0000	0.1475
116 ETBE	20917	124488	594002	1154600	2264664	4329036	-1	0.0000	0.8068	0.0000	0.0650
117 Iso-butyl alcohol X10	5582	44403	221032	297076	880890	1546333	-1	0.0000	0.0268	0.0000	0.1460
26 tetrahydrofuranx5	1945	8407	36840	75144	146600	287877	-1	0.0000	0.0102	0.0000	0.0418
27 Di-Br-F-Methane (S1) 111 1	13867	59189	265788	517816	1038870	1963588	-1	0.0096	0.3493	0.0000	0.9997
34 111-tri-Cl-ethane 97 99	12459	65859	315664	604949	1193974	2324189	-1	0.0000	0.4374	0.0000	0.1185
30 12-dichloroethane 64 62	549	31555	154021	298086	600265	1155412	-1	-0.0025	0.2060	0.0000	0.9999
35 11-Di-Cl-propene 75 110	9488	58117	286388	549558	1091787	2099663	-1	0.0000	0.3822	0.0000	0.0404
29 1,2-di-Cl-ethane-d4 [Surr] 10	-1	26643	124715	242470	475685	894560	-1	0.0000	0.1652	0.0000	0.0314
36 benzene 78 52	19613	138554	661631	1277049	2547937	4710056	-1	0.0000	0.8690	0.0000	0.0263
37 CCl4 117 119	7832	47773	267339	493900	981263	1852391	-1	0.0000	0.3348	0.0000	0.0432
97 thiophene	10129	70133	323713	623624	1239916	2337761	-1	0.0000	0.4320	0.0000	0.0339
118 TAME	4367	97622	406861	792558	1521011	3045504	-1	0.0000	0.5555	0.0000	0.0806
39 12-di-Cl-propane 63 76	5869	38931	190695	376101	741594	1426638	-1	0.0000	0.2543	0.0000	0.0066
40 trichloroethene 130 132	5805	41064	207771	403682	804090	1515012	-1	0.0000	0.2693	0.0000	0.0339
96 Me-methacrylate	1472	19691	65318	123371	250724	519513	-1	-0.0068	0.0920	0.0000	0.9983
42 Br-di-Cl-methane 83 85	10138	55994	256691	484084	955698	1823535	-1	0.0000	0.3546	0.0000	0.1265
41 dibromomethane 174 172	2292	17911	96884	194764	383350	714384	-1	0.0000	0.1227	0.0000	0.1029

Compound Name	Level 1 Response	Level 2 Response	Level 3 Response	Level 4 Response	Level 5 Response	Level 6 Response	Level 7 Response	Coeff X^0	Coeff X^1 / ave RF	Coeff X^2	R^2 / RSD
45 c-13-di-Cl-propene 75 110	7832	48533	229072	445153	890451	1727952	-1	------	------	------	------
55 toluene-d8(S2) 100 99	-1	78299	377922	725871	1455135	2774904	-1	0.0000	0.4995	0.0000	0.0157
92 2-ClEt-Vi-ether10	10352	80060	410701	820365	1655105	3234891	-1	0.0000	0.0536	0.0000	0.0868
56 toluene 91 92	21278	126101	601438	1149709	2291459	4425814	-1	0.0000	0.8167	0.0000	0.0680

107 Et methacrylate	-1	35707	132945	165590	512644	828103	-1	0.0000	0.1690	0.0000	0.2625
93 2-Hexanone x5	10744	47646	218029	368204	831419	1601350	-1	0.0000	0.0568	0.0000	0.0778
48 112-tri-Cl-Et 97 83	5203	21908	90597	172036	347876	664699	-1	0.0031	0.1179	0.0000	0.9998
58 1,2-di-br-ethane 107 109	1144	19207	94012	191133	371448	723238	-1	-0.0016	0.1288	0.0000	1.0000
51 di-Br-Cl-methane 129 127	2693	27173	125300	243477	489254	967601	-1	0.0000	0.1610	0.0000	0.1359
46 t-13-di-cl-propene 75 110	4584	30276	155530	301394	594704	1109294	-1	0.0000	0.2015	0.0000	0.0211
105 1-Chlorohexane	12961	43864	205359	374248	719249	1336615	-1	0.0247	0.2364	0.0000	0.9994
47 Cl-benzene-d5, I2	226795	229493	225971	224981	233528	241678	-1	0.0000	1.0000	0.0000	0.0000
54 MIBK	1407	13676	74160	143757	303184	587112	-1	0.0184	0.3053	0.0000	0.9988
49 1,3-di-cl-propane 76 78	4247	30516	157929	310529	604220	1155285	-1	0.0000	0.6537	0.0000	0.0595
59 tetra-Cl-ethene 166 168	5221	40927	216892	417298	825820	1643233	-1	0.0000	0.8800	0.0000	0.0760

Compound Name	Level 1 Response	Level 2 Response	Level 3 Response	Level 4 Response	Level 5 Response	Level 6 Response	Level 7 Response	Coeff X^0	Coeff X^1 / ave RF	Coeff X^2	R^2 / RSD
60 chlorobenzene 112 77	9971	71440	352480	668143	1330525	2470738	-1	0.0000	------	------	------
61 1112-tetra-Cl-Et 131 133	3219	28400	138607	283855	562377	1108773	-1	0.0000	0.5853	0.0000	0.0996
64 ethylbenzene 91 106	21430	140640	637777	1239073	2446417	4804958	-1	0.0000	2.8157	0.0000	0.0906
65 m/p-Xylenes x2	31419	213036	1000145	1911139	3754507	7222435	-1	0.0000	2.1406	0.0000	0.0830
99 1-4-di-Cl-butane	5503	32572	146606	276558	532573	1001628	-1	0.0000	0.6450	0.0000	0.1606
52 bromoform 173 175	806	13982	71698	143599	281887	544898	-1	0.0303	0.2823	0.0000	0.9980
66 styrene 104 78	10850	75317	352645	677932	1346269	2563056	-1	0.0000	1.5116	0.0000	0.0758
67 o-xylene 91 106	16715	110603	485194	915641	1764503	3287299	-1	0.0000	2.1063	0.0000	0.1398
68 1122-Tetra-Cl-Et 83 85	2658	21540	91096	173152	326262	625224	-1	0.0000	0.3868	0.0000	0.1294
110 t-1,4-dichloro-2-butene	1095	7032	17679	27009	54200	103110	-1	0.0235	0.0507	0.0000	0.9991
106 Cl-benzyl	6053	24517	121704	238713	457227	866531	-1	0.0784	0.4469	0.0000	0.9969
62 1,4-DCB-d4 150 152 I3	197143	197148	188831	184633	176207	164785	-1	0.0000	1.0000	0.0000	0.0000
69 123-tri-Cl-Pr 110 97	253	4401	21971	45443	89331	172722	-1	0.0000	0.1218	0.0000	0.0642
70 4-Br-1-F-Bz (S3) 174 95	-1	36886	165570	327081	627145	1159540	-1	0.0000	0.8935	0.0000	0.0269
71 isopropylbenzene 105 120	16442	135584	641793	1217921	2372165	4528346	-1	0.0000	3.2861	0.0000	0.0771
72 bromobenzene 156 158	3119	27613	143515	285095	554412	1030644	-1	0.0000	0.7214	0.0000	0.1387
73 n-propylbenzene 120 78	4297	36443	173970	335858	643879	1212584	-1	0.0000	0.8858	0.0000	0.0883
74 2-Cl-Tl 126 128	3821	23738	106793	201349	427470	745993	-1	0.0000	0.5885	0.0000	0.0623
75 4-Cl-Tl 126 128	4042	32882	163598	289530	594245	1075809	-1	0.0000	0.8045	0.0000	0.0813
76 135-tri-Me-Bz 105 120	14680	107323	509842	969387	1885346	3580223	-1	0.0000	2.6533	0.0000	0.0343
79 tert-butylbenzene 119 91	13115	113211	533176	1020985	1994231	3739615	-1	0.0000	2.7239	0.0000	0.0919
78 124-tri-Me-Bz 105 120	11184	96787	424953	847796	1639260	3054447	-1	0.0000	2.2558	0.0000	0.0848
80 13-di-Cl-Bz 146 148	5522	45648	238597	400250	844281	1658291	-1	0.0000	1.1491	0.0000	0.1087

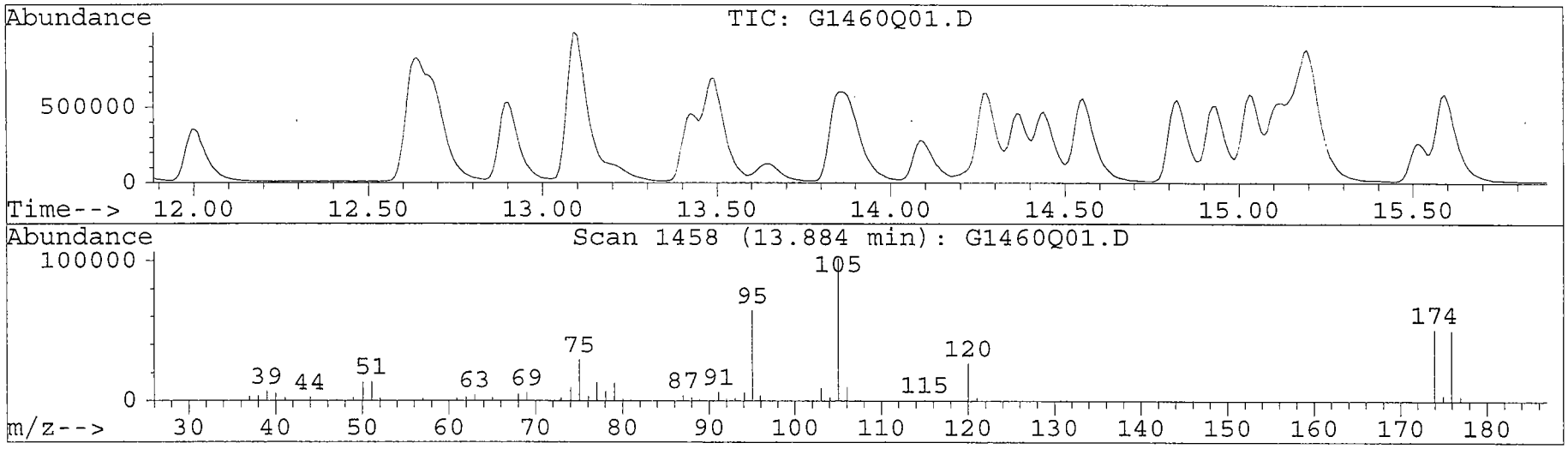
82	14-di-Cl-Bz	146 148	9029	69544	305231	644124	1193857	2207723	-1	0.0000	1.6699	0.0000	0.0524
81	sec-butylbenzene	105 134	19695	163551	797663	1465228	2859247	5499576	-1	0.0000	3.9831	0.0000	0.0835
77	4-iso-Pr-toluene	119 134	14306	119820	572630	1085210	2064029	3804782	-1	0.0000	2.8739	0.0000	0.0804
84	12-di-Cl-benzene	146 148	5444	45355	219614	410082	812246	1524040	-1	0.0000	1.1088	0.0000	0.0849
85	n-butylbenzene	91 134	17944	117913	579573	1096665	2099124	3991637	-1	0.0000	3.0116	0.0000	0.0128
86	12-diBr-3-Cl-Pra	157 155	-1	2498	14611	31395	62914	120318	-1	0.0000	0.0813	0.0000	0.1395
87	124-tri-Cl-Bz	180 182	3158	29532	158333	322231	604462	1187497	-1	-0.0539	0.9002	0.0000	0.9995
88	naphthalene	128 129	4753	21798	116373	245906	459400	922945	-1	0.0000	0.6651	0.0000	0.1268
90	123-tri-Cl-Bz	180 182	2940	22060	121207	239739	448256	845940	-1	0.0000	0.6042	0.0000	0.1029
89	hx-Cl-butadiene	225 260	2553	24644	130257	244690	466707	859594	-1	0.0135	0.6525	0.0000	0.9999

BFB

Data File : C:\HPCHEM\1\DATA\03G1460\G1460Q01.D
Acq On : 18 Feb 03 6:22 pm
Sample : f=1
Misc :

Vial: 17
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: 1458

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.9	13527	PASS
75	95	30	60	45.6	29456	PASS
95	95	100	100	100.0	64624	PASS
96	95	5	9	6.1	3958	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	79.2	51168	PASS
175	174	5	9	8.0	4095	PASS
176	174	95	101	98.9	50616	PASS
177	176	5	9	6.5	3292	PASS

FORM-5A

Applied P & Ch Laboratory

Volatile Organic Instrument Performance Check for Method 524.2

Bromofluorobenzene (BFB), Part II

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	031684
Project ID:	JPL	BFB Inj. Date:	02/18/03	Batch No:	03G1460
		BFB Inj. Time:	18:22	Sequence No:	03G1460
Project No:	04-4428.10	Instrument ID:	G	GC Column:	DB-VEX
Data File Name:	G1460Q01	Heated Purge: (Y/N)	N	Column ID:	0.45 mm

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

#	Client Sample No	Lab Sample ID	Data File Name	Date Analyzed	Time Analyzed
1	03G1460-CCV-01	03G1460-CCV-01	G1460Q01	02/18/03	18:22
2	03G1460-LCS-01	03G1460-LCS-01	G1460L01	02/18/03	18:51
3	MW-23-3MS	03-1684-4MS	G1460M01	02/18/03	19:19
4	MW-23-3MSD	03-1684-4MSD	G1460N01	02/18/03	19:48
5	03G1460-MB-01	03G1460-MB-01	G1460K01	02/18/03	21:41
6	EB-9-2/17/03	03-1684-1	1684-01	02/18/03	22:09
7	MW-23-1	03-1684-2	1684-02	02/18/03	22:37
8	MW-23-2	03-1684-3	1684-03	02/18/03	23:05
9	MW-23-3	03-1684-4	1684-04	02/18/03	23:33
10	MW-24-1	03-1684-6	1684-06	02/19/03	00:02
11	MW-24-2	03-1684-7	1684-07	02/19/03	00:31
12	MW-24-3	03-1684-8	1684-08	02/19/03	01:00
13	TB-9-2/17/03	03-1684-10	1684-10	02/19/03	01:29
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					

Evaluate Continuing Calibration Report

1440

Data File : C:\HPCHEM\1\DATA\03G1460\G1460Q01.D Vial: 17
Acq On : 18 Feb 03 6:22 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Tue Feb 11 14:02:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1 Fluorobenzene I1 1	1.000	1.000	0.0	80	0.00
2		3 di-Cl-di-F-methane 85 8	0.308	0.304	1.4	84	0.00
3	P	4 Chloromethane 50 5	0.243	0.260	-6.8	82	0.00
4		9 F114 85 135	0.319	0.274	14.1	70	0.00
5	C	5 vinyl chloride 62 6	0.231	0.213	7.6	73	0.00
6		6 bromomethane 94 9	0.227	0.156	31.2#	66	0.00
7		7 Chloroethane 64 66	0.171	0.169	1.4	80	0.00
8		8 tri-Cl-F-methane 101 10	0.390	0.382	2.0	74	0.00
9		111 isopropyl alcohol x10	0.005	0.004#	17.0	80	0.00
10		100 ethyl ether x5	0.143	0.121	15.1	73	0.00
11		102 Acrolein x10	0.011	0.011#	4.0	60	0.00
12		119 methyl acetate	0.128	0.088	30.9#	56	0.00
13		104 Carbon disulfide	0.834	0.724	13.2	73	0.00
14		103 Acrylonitrilex10	0.024	0.022#	7.3	75	0.00
15		95 Acetone x10	0.019	0.025#	-32.3#	110	0.00
16		108 F-113	0.300	0.280	6.8	69	0.00
17	M,C	13 11-dichloroethene 61 9	0.392	0.372	5.1	77	0.00
18		101 Acetonnitrilex10	0.006	0.007#	-15.4	85	0.00
19		109 Iodomethane	0.311	0.306	1.5	76	0.00
20		113 Tert butyl alcohol x10	0.009	0.007#	20.7#	65	0.00
21		18 methylene chloride 49 8	0.643	0.328	48.9#	64	0.00
22		112 Allyl chloride	0.434	0.442	-1.9	85	0.00
23		200 Nitro methane x10	0.044	0.043#	0.5	81	0.00
24		10 t-Bu-Me-ether 73 57	0.498	0.391	21.3#	75	0.00
25		19 t-12-di-Cl-ethene 96 6	0.301	0.278	7.6	75	0.00
26		98 Vinyl acetate x5	0.270	0.289	-6.9	147	0.00
27	P	21 11-dichloroethane 63 8	0.525	0.549	-4.6	83	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\03G1460\G1460Q01.D Vial: 17
Acq On : 18 Feb 03 6:22 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Tue Feb 11 14:02:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
28		91 2-butanone MEKx10	0.094	0.093	1.0	85	0.00
29		115 Di isoprop ether	1.125	1.282	-13.9	78	0.00
30		22 c-12-di-Cl-ethene 96 6	0.294	0.266	9.6	73	0.00
31		23 22-Dichloropropane 77 9	0.453	0.440	2.9	84	0.00
32		24 Br-Cl-methane 128 13	0.094	0.091	3.1	70	0.00
33	C	25 chloroform 83 8	0.525	0.475	9.4	78	0.00
34		201 Ethyl acetate x2	0.134	0.131	1.7	105	0.00
35		116 ETBE	0.807	0.728	9.7	75	0.00
36		117 Iso-butyl alcohol X10	0.027	0.027#	-2.1	109	0.00
37		26 tetrahydrofuranx5	0.010	0.009#	13.7	70	0.00
38	S	27 Di-Br-F-Methane (S1) 11	0.400	0.329	17.7	75	0.00
39		34 111-tri-Cl-ethane 97 9	0.437	0.407	7.0	80	0.00
40		30 12-dichloroethane 64 6	0.175	0.185	-5.8	73	0.00
41		35 11-Di-Cl-propene 75 11	0.382	0.368	3.8	79	0.00
42	S	29 1,2-di-Cl-ethane-d4 [Sur	0.165	0.145	12.1	71	0.00
43	M	36 benzene 78 5	0.869	0.876	-0.8	81	0.00
44		37 CCl4 117 11	0.335	0.328	1.9	79	0.00
45		97 thiophene	0.432	0.410	5.1	78	0.00
46		118 TAME	0.556	0.504	9.2	75	0.00
47	C	39 12-di-Cl-propane 63 7	0.254	0.256	-0.5	80	0.00
48	M	40 trichloroethene 130 13	0.269	0.256	5.0	75	0.00
49		96 Me-methacrylate	0.095	0.077	19.4	74	0.00
50		42 Br-di-Cl-methane 83 8	0.355	0.310	12.6	76	0.00
51		41 dibromomethane 174 17	0.123	0.111	9.2	68	0.00
52		45 c-13-di-Cl-propene 75 11	0.313	0.291	6.9	77	0.00
53	S	55 toluene-d8(S2) 100	0.500	0.461	7.6	75	0.00
54		92 2-ClEt-Vi-ether10	0.054	0.039#	26.8#	57	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

1442

Data File : C:\HPCHEM\1\DATA\03G1460\G1460Q01.D Vial: 17
Acq On : 18 Feb 03 6:22 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Tue Feb 11 14:02:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound			AvgRF	CCRF	%Dev	Area%	Dev(min)
55	M C	56 toluene	91	9	0.817	0.727	11.0	75	0.00
56		107 Et methacrylate			0.169	0.158	6.7	113	0.00
57		93 2-Hexanone x5			0.057	0.058	-2.8	94	0.00
58		48 112-tri-Cl-Et	97	8	0.141	0.103	27.1#	71	0.00
59		58 1,2-di-br-ethane	107	109	0.114	0.112	1.6	70	0.00
60		51 di-Br-Cl-methane	129	12	0.161	0.145	9.7	71	0.00
61		46 t-13-di-cl-propene	75	11	0.202	0.186	7.8	73	0.00
62		105 1-Chlorohexane			0.310	0.242	22.0#	76	0.00
63	I	47 Cl-benzene-d5, I2			1.000	1.000	0.0	78	0.00
64		54 MIBK			0.297	0.316	-6.5	77	0.00
65		49 1,3-di-cl-propane	76	78	0.654	0.628	3.9	71	0.00
66		59 tetra-Cl-ethene	166	16	0.880	0.829	5.7	69	0.00
67	M P	60 chlorobenzene	112	7	1.461	1.470	-0.6	77	0.00
68		61 1112-tetra-Cl-Et	131	13	0.585	0.585	0.1	72	0.00
69	C	64 ethylbenzene	91	10	2.816	2.630	6.6	74	0.00
70		65 m/p-Xylenes x2			2.141	2.071	3.3	76	0.00
71		99 1-4-di-Cl-butane			0.645	0.587	8.9	74	0.00
72	P	52 bromoform	173	17	0.274	0.278	-1.7	68	0.00
73		66 styrene	104	7	1.512	1.465	3.1	75	0.00
74		67 o-xylene	91	10	2.106	2.036	3.3	78	0.00
75	P	68 1122-Tetra-Cl-Et	83	8	0.387	0.357	7.7	72	0.00
76		110 t-1,4-dichloro-2-butene			0.081	0.062	23.6#	79	0.00
77		106 Cl-benzyl			0.572	0.519	9.3	76	0.00
78	I	62 1,4-DCB-d4 150 152 I3			1.000	1.000	0.0	73	0.00
79		69 123-tri-Cl-Pr	110	9	0.122	0.115	5.8	68	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

1443

Data File : C:\HPCHEM\1\DATA\03G1460\G1460Q01.D Vial: 17
Acq On : 18 Feb 03 6:22 pm Operator: Eddie
Sample : f=1 Inst : GCMS-G
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\E524G003.M
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Tue Feb 11 14:02:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.050 Min. Rel. Area : 35% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound			AvgRF	CCRF	%Dev	Area%	Dev(min)
80	S	70 4-Br-1-F-Bz (S3)	174	9	0.893	0.876	1.9	72	0.00
81		71 isopropylbenzene	105	12	3.286	3.506	-6.7	78	0.00
82		72 bromobenzene	156	15	0.721	0.729	-1.1	69	0.00
83		73 n-propylbenzene	120	7	0.886	0.954	-7.7	77	0.00
84		74 2-Cl-Tl	126	128	0.589	0.608	-3.3	82	0.00
85		75 4-Cl-Tl	126	128	0.804	0.814	-1.2	76	0.00
86		76 135-tri-Me-Bz	105	12	2.653	2.803	-5.7	78	0.00
87		79 tert-butylbenzene	119	9	2.724	2.919	-7.2	77	0.00
88		78 124-tri-Me-Bz	105	12	2.256	2.368	-5.0	75	0.00
89		80 13-di-Cl-Bz	146	148	1.149	1.238	-7.7	84	0.00
90		82 14-di-Cl-Bz	146	148	1.670	1.565	6.3	66	0.00
91		81 sec-butylbenzene	105	13	3.983	3.934	1.2	73	0.00
92		77 4-iso-Pr-toluene	119	13	2.874	3.112	-8.3	77	0.00
93		84 12-di-Cl-benzene	146	14	1.109	1.072	3.3	71	0.00
94		85 n-butylbenzene	91	13	3.012	3.051	-1.3	75	0.00
95		86 12-diBr-3-Cl-Pra	157	15	0.081	0.077	5.8	66	0.00
96		87 124-tri-Cl-Bz	180	18	0.792	0.816	-3.0	68	0.00
97		88 naphthalene	128	12	0.665	0.659	0.9	72	0.00
98		90 123-tri-Cl-Bz	180	18	0.604	0.608	-0.6	68	0.00
99		89 hx-Cl-butadiene	225	26	0.621	0.703	-13.3	78	0.00

(#) = Out of Range SPCC's out = 0 CCC's out = 0

Continuing Calibration Concentration Summary

Data File G1460Q01.D
Method File E524G003

Compound Name	Amount	Actual	Units	%Dev	Target Response
1 Fluorobenzene I1 1	10	10.00	ppb	0.00	591778
3 di-Cl-di-F-methane 85 87	20	21.40	ppb	7.00	359539
4 Chloromethane 50 52	20	21.35	ppb	6.77	307507
9 F114 85 135	20	17.19	ppb	14.06	324813
5 vinyl chloride 62 64	20	18.49	ppb	7.57	252423
6 bromomethane 94 96	20	15.32	ppb	23.40	185214
7 Chloroethane 64 66	20	19.73	ppb	1.37	199446
8 tri-Cl-F-methane 101 103	20	19.60	ppb	2.02	452455
111 isopropyl alcohol x10	200	165.93	ppb	17.03	44307
100 ethyl ether x5	100	84.87	ppb	15.13	715849
102 Acrolein x10	200	192.02	ppb	3.99	129218
119 methyl acetate	20	14.49	ppb	27.55	104539
104 Carbon disulfide	20	17.36	ppb	13.19	856500
103 Acrylonitrilex10	200	185.48	ppb	7.26	262267
95 Acetone x10	200	301.31	ppb	50.65	296938
108 F-113	20	18.65	ppb	6.76	330807
13 11-dichloroethene 61 96	20	18.99	ppb	5.05	440572
101 Acetonnitrilex10	200	219.68	ppb	9.84	83103
109 Iodomethane	20	19.09	ppb	4.55	362542
113 Tert butyl alcohol x10	200	168.67	ppb	15.67	86380
18 methylene chloride 49 84	20	16.33	ppb	18.36	388514
112 Allyl chloride	20	20.38	ppb	1.91	523068
200 Nitro methane x10	200	198.91	ppb	0.55	513554
10 t-Bu-Me-ether 73 57	20	18.49	ppb	7.56	463239
19 t-12-di-Cl-ethene 96 61	20	18.48	ppb	7.61	328622
98 Vinyl acetate x5	100	106.94	ppb	6.94	1711455
21 11-dichloroethane 63 83	20	20.92	ppb	4.58	649538
91 2-butanone MEKx10	200	197.94	ppb	1.03	1098582
115 Di isoprop ether	20	19.36	ppb	3.20	1517740
22 c-12-di-Cl-ethene 96 61	20	18.08	ppb	9.58	314689
23 22-Dichloropropane 77 97	20	19.42	ppb	2.91	520414
24 Br-Cl-methane 128 130	20	17.22	ppb	13.90	107513
25 chloroform 83 85	20	18.11	ppb	9.45	562709
201 Ethyl acetate x2	40	39.32	ppb	1.70	311093
116 ETBE	20	18.05	ppb	9.75	861868
117 Iso-butyl alcohol X10	200	204.27	ppb	2.14	323418
26 tetrahydrofuranx5	100	86.33	ppb	13.67	52358
27 Di-Br-F-Methane (S1) 111 1	20	18.58	ppb	7.10	389740
34 111-tri-Cl-ethane 97 99	20	18.60	ppb	7.01	481376
30 12-dichloroethane 64 62	20	18.06	ppb	9.68	218763
35 11-Di-Cl-propene 75 110	20	19.24	ppb	3.80	435115
29 1,2-di-Cl-ethane-d4 [Surr] 10	20	17.59	ppb	12.06	171967
36 benzene 78 52	20	20.16	ppb	0.82	1036891
37 CCl4 117 119	20	19.61	ppb	1.93	388571

97 thiophene	20	18.99	ppb	5.07	485414
118 TAME	20	18.16	ppb	9.21	596925
39 12-di-Cl-propane 63 76	20	20.10	ppb	0.48	302443
40 trichloroethene 130 132	20	19.01	ppb	4.97	302851
96 Me-methacrylate	20	17.46	ppb	12.72	91041
42 Br-di-Cl-methane 83 85	20	17.49	ppb	12.57	366939
41 dibromomethane 174 172	20	18.15	ppb	9.24	131761
45 c-13-di-Cl-propene 75 110	20	18.62	ppb	6.90	344591
55 toluene-d8(S2) 100 99	20	18.47	ppb	7.63	546081
92 2-ClEt-Vi-ether10	200	146.39	ppb	26.81	464605

Compound Name	Amount	Actual	Units	%Dev	Target Response
56 toluene 91 92	20	17.81	ppb	10.96	860639
107 Et methacrylate	20	18.65	ppb	6.74	186547
93 2-Hexanone x5	100	102.81	ppb	2.81	345601
48 112-tri-Cl-Et 97 83	20	17.13	ppb	14.35	121372
58 1,2-di-br-ethane 107 109	20	17.59	ppb	12.05	133143
51 di-Br-Cl-methane 129 127	20	18.06	ppb	9.71	172025
46 t-13-di-cl-propene 75 110	20	18.44	ppb	7.82	219885
105 1-Chlorohexane	20	19.41	ppb	2.93	286196
47 Cl-benzene-d5, I2	10	10.00	ppb	0.00	174442
54 MIBK	20	20.09	ppb	0.47	110237
49 1,3-di-cl-propane 76 78	20	19.22	ppb	3.91	219173
59 tetra-Cl-ethene 166 168	20	18.85	ppb	5.75	289385
60 chlorobenzene 112 77	20	20.11	ppb	0.56	512729
61 1112-tetra-Cl-Et 131 133	20	19.98	ppb	0.09	204000
64 ethylbenzene 91 106	20	18.68	ppb	6.60	917530

Compound Name	Amount	Actual	Units	%Dev	Target Response
65 m/p-Xylenes x2	40	38.69	ppb	3.26	1444924
99 1-4-di-Cl-butane	20	18.22	ppb	8.92	204952
52 bromoform 173 175	20	18.65	ppb	6.74	97152
66 styrene 104 78	20	19.38	ppb	3.09	511088
67 o-xylene 91 106	20	19.34	ppb	3.32	710454
68 1122-Tetra-Cl-Et 83 85	20	18.46	ppb	7.69	124558
110 t-1,4-dichloro-2-butene	20	19.65	ppb	1.73	21472
106 Cl-benzyl	20	21.45	ppb	7.27	180930
62 1,4-DCB-d4 150 152 I3	10	10.00	ppb	0.00	135045
69 123-tri-Cl-Pr 110 97	20	18.84	ppb	5.82	30971
70 4-Br-1-F-Bz (S3) 174 95	20	19.61	ppb	1.93	236654
71 isopropylbenzene 105 120	20	21.34	ppb	6.71	947069
72 bromobenzene 156 158	20	20.22	ppb	1.12	197021
73 n-propylbenzene 120 78	20	21.53	ppb	7.67	257616
74 2-Cl-Tl 126 128	20	20.66	ppb	3.28	164182
75 4-Cl-Tl 126 128	20	20.23	ppb	1.16	219809
76 135-tri-Me-Bz 105 120	20	21.13	ppb	5.65	757129
79 tert-butylbenzene 119 91	20	21.43	ppb	7.17	788448
78 124-tri-Me-Bz 105 120	20	20.99	ppb	4.97	639538
80 13-di-Cl-Bz 146 148	20	21.55	ppb	7.73	334364
82 14-di-Cl-Bz 146 148	20	18.74	ppb	6.30	422635
81 sec-butylbenzene 105 134	20	19.75	ppb	1.23	1062571

77 4-iso-Pr-toluene	119 134	20	21.65	ppb	8.27	840434
84 12-di-Cl-benzene	146 148	20	19.34	ppb	3.32	289531
85 n-butylbenzene	91 134	20	20.26	ppb	1.30	824002
86 12-diBr-3-Cl-Pra	157 155	20	18.83	ppb	5.83	20668
87 124-tri-Cl-Bz	180 182	20	18.72	ppb	6.38	220338
88 naphthalene	128 129	20	19.83	ppb	0.87	178074
90 123-tri-Cl-Bz	180 182	20	20.11	ppb	0.57	164131
				Ave.% Dev	7.30	

FORM-8A

Applied P & Ch Laboratory

Internal Standard Area and RT Summary for Method 524.2

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	031684
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		CCV Data File:	G1460Q01	Instrument ID:	G

Batch No: 03G1460

#	Client Sample No	Lab Sample ID	Analysis Date & Time	IS-1 Area #	IS-1 RT #	IS-2 Area #	IS-2 RT #	IS-3 Area #	IS-3 RT #
12 Hour CCV STD			02/18/03 18:22	591778	9.03	174442	12.66	135045	15.15
CCV Upper Limit				1183556	9.53	348884	13.16	270090	15.65
CCV Lower Limit				295889	8.53	87221	12.16	67522	14.65
1	03G1460-LCS-01	03G1460-LCS-01	02/18/03 18:51	536082	9.03	158251	12.66	128496	15.16
2	MW-23-3MS	03-1684-4MS	02/18/03 19:19	520076	9.02	150711	12.66	132933	15.15
3	MW-23-3MSD	03-1684-4MSD	02/18/03 19:48	488245	9.03	142999	12.65	119298	15.15
4	03G1460-MB-01	03G1460-MB-01	02/18/03 21:41	521481	9.02	142380	12.66	115036	15.15
5	EB-9-2/17/03	03-1684-1	02/18/03 22:09	496561	9.02	137930	12.66	114161	15.15
6	MW-23-1	03-1684-2	02/18/03 22:37	481084	9.01	131613	12.66	107886	15.15
7	MW-23-2	03-1684-3	02/18/03 23:05	509798	9.02	139395	12.66	114388	15.15
8	MW-23-3	03-1684-4	02/18/03 23:33	470590	9.02	132884	12.65	108485	15.14
9	MW-24-1	03-1684-6	02/19/03 00:02	516779	9.02	145360	12.65	120914	15.14
10	MW-24-2	03-1684-7	02/19/03 00:31	541406	9.02	150569	12.65	118698	15.14
11	MW-24-3	03-1684-8	02/19/03 01:00	507038	9.02	142793	12.65	115695	15.14
12	TB-9-2/17/03	03-1684-10	02/19/03 01:29	500979	9.01	141855	12.66	119836	15.13
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									

IS-1 = FLUOROBENZENE
IS-2 = CHLOROBENZENE-D5
IS-3 = 1,4-DICHLOROBENZENE-D4

Area Upper Limit = +100% of CCV internal standard area
Area Lower Limit = - 50% of CCV internal standard area
RT Upper Limit = +0.50 minutes of CCV internal standard RT
RT Lower Limit = - 0.50 minutes of CCV internal standard RT

Column used to flag values outside QC limits with an asterisk.
* Values outside of QC limits

9

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

VOC-044

VOC Analysis General Logbook

Sequence # 03G1044 Batch # 03G1044 Matrix: W Date: 1/10/03 Analyst: [illegible]

IS/Surrogate: GC14507/14508 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Defoaming(mark-*DF*): _____

Calib. + Ini. Batch ☑ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study Datafile Path: _____

#	Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{spg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
2377	SP	G1044P01	E524G-003	25T 25=1	/ =	/ =	1		G1044P01	1/10/03 1:51pm	
2378	Calib	3-0003		/ =	/ =	/ =			3-0003	GC14720	
2379		3-002		/ =	/ =	/ =			3-002		
2380		3-010		/ =	/ =	/ =			3-010		
2381		3-020		/ =	/ =	/ =			3-020		
2382		3-040		/ =	/ =	/ =			3-040		
2383		3-080		/ =	/ =	/ =			3-080		
2384	CCV	G1044Q01		/ =	/ =	/ =			G1044Q01	GC14721 CCV/ICV/BFB	
2385	MS	M01		/ =	/ =	/ =			M01	$1011-03	<2
2386	LCS	L01		/ =	/ =	/ =			L01		
2387	MSD	N01		/ =	/ =	/ =			N01	$1011-03	<2
2388	MB	K01		/ =	/ =	/ =			K01		
2389	Sample	1084-03		/ =	/ =	/ =			1084-03		<2
2390		6844-02A		/ =	/ =	/ =			6844-02A		
2391		6844-01A		/ =	/ =	/ =			↓ -01A		
2392		1017-1		/ =	/ =	/ =			1017-1		
2393		1011-02		/ =	/ =	/ =			1011-02		
2394		3		/ =	/ =	/ =			3		
2395		4		/ =	/ =	/ =			4		
2396		5		/ =	/ =	/ =			5		
2397		1047-01		/ =	/ =	/ =			1047-01		
2398		↓ -02		/ =	/ =	/ =			↓ -02		
2399		1051-2		/ =	/ =	/ =			1051-02		
2400		↓ 3		/ =	/ =	/ =			↓ 3		
2401		1084-1		/ =	/ =	/ =			1084-01		
2402		2		/ =	/ =	/ =			2		
2403		4		/ =	/ =	/ =			4		
2404				/ =	/ =	/ =					
2405				/ =	/ =	/ =					
2406				/ =	1/10/03	/ =					
2407				/ =	/ =	/ =					
2408				/ =	/ =	/ =					

Type	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$
LCS/LCSD	2386	GC-14721	200 × 2.5 /X= 20 ppb		GC-	× /X= ppb
MS/MSD	2385/2387	GC-	× /X= 25 ppb		GC-	× /X= ppb

Footnote/Anomaly:

FILE: [CUST.DOC.GC]VOC_LOG .TEX Root-File: VOC_LOG_ROOT.TEX 1-Page-File:[CUST.DOC.GC]VOC_LOG1.TEX; pH for field water sample only.
APCL form 7-201, April 03, 1996; Ver 4.1 No pencil. Use blue pen for record. Use red pen for correction. Supervisor Initial [illegible]

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

VOC-057

VOC Analysis General Logbook

Sequence # 03G1460 Batch # 03G1460 Matrix: W Date: 2-18-03 Analyst: Eddie

Lot #: IS/Surrogate: GC-14507 / 14508 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Defoaming(mark-*DF*): _____

☐ Calib. + Ini. Batch ☑ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study Datafile Path: _____

Op. #	Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{spg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
2793	SP	G1460P01	E524G	25/25 = 1	/ =	/ =	1		G1460P01		
2794	CV	001	003	/ =	/ =	/ =			001	2-18-03 G1484	
2795	LS	L01		/ =	/ =	/ =			L01		
2796	MS	M01		/ =	/ =	/ =			M01	1684-04	<2
2797	MSD	N01		/ =	/ =	/ =			N01	1684-04	
2798	MB	M02		/ =	/ =	/ =			M02	1684-07	
2799	MSD	N02		/ =	/ =	/ =			N02	1684-07	
2800	MB	K01		/ =	/ =	/ =			K01		
2801	Sample	1684-01		/ =	/ =	/ =			1684-01	eb	<2
2802		02		/ =	/ =	/ =			02		
2803		03		/ =	/ =	/ =			03		
2804		04		/ =	/ =	/ =			04		
2805		06		/ =	/ =	/ =			06		
2806		07		/ =	/ =	/ =			07		
2807		08		/ =	/ =	/ =			08		
2808		10		/ =	/ =	/ =			10	eb	
2809		1694-01		/ =	/ =	/ =			1694-01		
2810		02		/ =	/ =	/ =			02		
2811		03		/ =	/ =	/ =			03		
2812		04		/ =	/ =	/ =			04		
2813		05		/ =	/ =	/ =			05		
2814		06		/ =	/ =	/ =			06		
2815		07		/ =	/ =	/ =			07		
2816		08		/ =	/ =	/ =			08		
2817		09		/ =	/ =	/ =			09		
2818		10		/ =	/ =	/ =			10	eb	
2819				/ =	/ =	/ =					
2820				/ =	/ =	/ =					
2821				/ =	/ =	/ =					
2822				/ =	/ =	/ =					
2823				/ =	/ =	/ =					
2824				/ =	/ =	/ =					

Type	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$
LCS/LCSD	2795	GC-	× /X= ppb		GC-	× /X= ppb
MS/MSD	2796/2797	GC-14842	200 × 2.5 /X= 20 ppb		GC-	× /X= ppb

Footnote/Anomaly:

1449