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: 04-4428.10 Anal. Method 7196
Project ID: Service ID: 34854 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
03-4854-1	MW-7	Water	08/26/03	08/26/03	08/26/03	03W4245	mg/L	0.01	<0.01	U
03-4854-2	MW-13	Water	08/26/03	08/26/03	08/26/03	03W4245	mg/L	0.01	<0.01	U
03-4854-3	MW-16	Water	08/26/03	08/26/03	08/26/03	03W4245	mg/L	0.01	<0.01	U
03W4245-MB-01	03W4245-MB-01	Water	08/26/03	08/26/03	08/26/03	03W4245	mg/L	0.01	<0.01	U

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

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

Applied P & Ch Laboratory

Wet Analysis Results for Method 314.0

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Anal. Method	314.0
Project ID:		Service ID:	34854	Collected by:	

Component Name: Perchlorate
CAS No:

Lab ID	Sample ID	Matrix	Coll. Date	Rcv Date	Anal. Date	Batch	Unit	RL	Result	Q
03-4854-1	MW-7	Water	08/26/03	08/26/03	08/28/03	03W4284	μg/L	200	1920	
03-4854-2	MW-13	Water	08/26/03	08/26/03	08/28/03	03W4284	μg/L	16	159	
03-4854-3	MW-16	Water	08/26/03	08/26/03	08/28/03	03W4284	μg/L	100	1520	
03W4284-MB-01	03W4284-MB-01	Water	08/28/03	08/28/03	08/28/03	03W4284	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:	34854
Project ID:		Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W4284		
LCS Filename:	-	Date Analyzed:	082803	Time Analyzed:	
LCSD Filename:	-	Date Analyzed:	082803	Time Analyzed:	

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
PERCHLORATE	μg/L	25	0	25.3	101	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	25	26.9	108	7	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:	34854
Project ID:		Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W4284		
MS Filename:	-	Date Analyzed:	082803	Time Analyzed:	
MSD Filename:	-	Date Analyzed:	082803	Time Analyzed:	
MS Sample No:	**MW-16**	Sample Lab ID:	03-4854-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
PERCHLORATE	μg/L	25	1520	1540	80	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	25	1550	120	1	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:	34854
Project ID:		Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W4245		
LCS Filename:	-	Date Analyzed:	082603	Time Analyzed:	13:40
LCSD Filename:	-	Date Analyzed:	082603	Time Analyzed:	13:40

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.235	94	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	0.230	92	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:	34854
Project ID:		Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03W4245		
MS Filename:	-	Date Analyzed:	082603	Time Analyzed:	13:40
MSD Filename:	-	Date Analyzed:	082603	Time Analyzed:	13:40
MS Sample No:	**MW-16**	Sample Lab ID:	03-4854-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
CHROMIUM (VI)	mg/L	0.25	0	0.217	87	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	0.223	89	2	19	78-115
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

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

Comments: _____

6A

INITIAL CALIBRATION DATA

Lab Name: Applied P & Ch Lab Contract: 34854

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

Concentration (mg/L)	0.000	0.0125	0.050	0.125	0.250	0.50
Absorbance	0.000	0.007	0.017	0.107	0.212	0.420

A=-0.001+ 0.846C

A=Absorbance

C=Concentration (mg/L)

r= 0.9999

FORM-7

Applied P & Ch Laboratory

CCV Recovery for Wet Analysis

Client Name: GEOFON, Inc.
Case No:
Project ID:

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

Lab Code: APCL
Service ID: 34854

#	Component Name	Method	Batch No.	Unit	Expe-cted	Test Result	Rec. %	Dev. %	Flag	Control Limit, %	Test Date
1	Perchlorate	314.0	03W4284	μg/L	50.0	57.5	115	15	√	85-115	08/28/2003
	Perchlorate	314.0	03W4284	μg/L	50.0	57.4	115	15	√	85-115	08/28/2003
	Perchlorate	314.0	03W4284	μg/L	50.0	57.5	115	15	√	85-115	08/28/2003
	Perchlorate	314.0	03W4284	μg/L	50.0	56.7	113	13	√	85-115	08/28/2003
2	Chromium (VI)	7196	03W4245	mg/L	0.25	0.247	99	-1	√	90-110	08/26/2003
	Chromium (VI)	7196	03W4245	mg/L	0.25	0.243	97	-3	√	90-110	08/26/2003

Laboratory
Ave. Chino CA 91710
1828 Fax: (909) 590-1498

Chromium (VI) (7196) Worksheet

05W4245 Matrix: W

[Holding Time: 24 hours!!]

Test Date: 8/26/03 Analyst: [illegible]

Lot #: Reagent Water _____ Diphenylcazide solution _____

Test Time: 13:280 SOP: G-22

Calibration	STD Lot #	$C_{std} \times V_{std}/V_f = C_i$	A_i	$RF_i = A_i/C_i$	Calibration results	Note
STD-1	W-	× / = mg/L			Least Square [RF]=	Cal. Code:
STD-2	W-	× / = mg/L			Average $\bar{RF}$=	
STD-3	W-	× / = mg/L			C.C.=0.9999 (≥ 0.995)	
STD-4	W-	× / = mg/L			RSD= % (≤ 15%)	
STD-5	W-	× / = mg/L			Ref. page	
STD-6	W-	× / = mg/L			A= -0.0014+0.846C	

Analysis Type	Sample ID or Lot #	Samp. Amnt X_0 (g or mL)	Dilu./Ext $X/X_0=f_1$	Treat. Ratio $V/X=f_2$	540 nm A	Concentration $C'=A/\bar{RF}$	C (Sample) $C=f_1\ f_2\ C'$	Anomaly Note
CCV	Lot: W- 7757	Expected Conc.:	×	/ = 0.25 mg/L	0.208	0.247 mg/L	REC. %	90-110 %
Method Blank	Bl. Lot: T117		/X_0 = 1	95.0/ =	0.000	mg/L	0.00 ppm	
LCS1	Bl. Lot: "		/X_0 =	95.0/ =	0.198	mg/L	0.235 ppm	
Sample-1	4854-1		/X_0 =	95.0/ =	0.003	mg/L	0.005 ppm	
MS on S-1	3		/X_0 =	95.0/ =	0.183	mg/L	0.217 ppm	
MSD on S-1	3		/X_0 =	95.0/ =	0.188	mg/L	0.223 ppm	
Sample 2	2		/X_0 =	95.0/ =	0.004	mg/L	0.006 ppm	
Sample 3	3		/X_0 =	95.0/ =	0.002	mg/L	0.004 ppm	
Sample 4			/X_0 =	95.0/ =		mg/L	ppm	
Sample 5			/X_0 =	95.0/ =		mg/L	ppm	
Sample 6			/X_0 =	95.0/ =		mg/L	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: T117		/X_0 = 1	95.0/ =	0.194	mg/L	0.230 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 0.25 mg/L		/X_0 =	95.0/ =	0.205	0.243 mg/L	ppm	

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

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

Chromium (VI) (7196) Worksheet

Batch # PZ Matrix: W & GS [Holding Time: 24 hours!!] Test Date: 7/28/03 Analyst: [illegible]

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

Calibration	STD Lot #	$C_{std} \times V_{std}/V_f = C_i$	A_i	$RF_i = A_i/C_i$	Calibration results	Note
STD-1	W-7757	× / = 0.00 mg/L	0.000		Least Square [RF]=	Cal. Code:
STD-2	W-	× / = 0.025 mg/L	0.007		Average $\overline{RF}$=	
STD-3	W-	× / 0.025 = 0.050 mg/L	0.017		C.C. 0.9999 (≥ 0.995)	
STD-4	W-	× / = 0.125 mg/L	0.107		RSD= % (≤ 15%)	
STD-5	W-	× / = 0.250 mg/L	0.212		Ref. page	
STD-6	W-	× / = 0.50 mg/L	0.420		A = -0.001 + 0.846C	

Analysis Type	Sample ID or Lot #	Samp. Amnt X_0 (g or mL)	Dilu./Ext $X/X_0 = f_1$	Treat. Ratio $V/X = f_2$	540 nm A	Concentration $C' = A/\overline{RF}$	C (Sample) $C = f_1 f_2 C'$	Anom: Note
CCV	Lot: W-7853	Expected Conc.:	×	/ = 0.25 mg/L	0.218	0.259 mg/L	REC. %	90-110
Method Blank	Bl. Lot:		$/X_0$ =	95.0/ =	0.000	0.000 mg/L	ppm	
LCS1	Bl. Lot:		$/X_0$ =	95.0/ =	0.210	0.250 mg/L	ppm	
Sample-1	4177-37	1ml → 100ml	$/X_0$ = 1	95.0/ = 2	0.290	0.689 mg/L	ppm	
MS on S-1	37	0.5ml → 100ml	$/X_0$ =	95.0/ = 2	0.287	0.682 mg/L	ppm	report
MSD on S-1	4175-15	10.0g	50.0ml $/X_0$ = 5	95.0/ = 10	0.050	3.04 mg/L	ppm	
Sample 2	15	✓	$/X_0$ =	95.0/ = 2	0.247	2.94 mg/L	ppm	report
Sample 3			$/X_0$ =	95.0/ =		mg/L	ppm	
Sample 4			$/X_0$ =	95.0/ =		mg/L	ppm	
Sample 5			$/X_0$ =	95.0/ =		mg/L	ppm	
Sample 6			$/X_0$ =	95.0/ =		mg/L	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:		$/X_0$ =	95.0/ =		mg/L	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.	[illegible]		$/X_0$ =	95.0/ =	0.218	0.259 mg/L	ppm	

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

2753

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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

Schedule File: C:\PeakNet\schedule\03w4284k.sch

Line	Sample	Sample Type	Level	Method	Data File	Volume	Dilution	Weight
1	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w4284k\w4284 q01	1	1	1
2	##03w4284k ipc 25ppb w8032	Sample		e314-011.met	c:\data\03w4284k\w4284 ipc25ppb	1	1	1
3	lcs 25ppb w8087	Sample		e314-011.met	c:\data\03w4284k\w4284 l01	1	1	1
4	Lcsd 25PPB W8033a	Sample		e314-011.met	c:\data\03w4284k\w4284 j01	1	1	1
5	ICCS 4ppb w8088	Sample		e314-011.met	c:\data\03w4284k\w4284 iccs4ppb	1	1	1
6	mb	Sample		e314-011.met	c:\data\03w4284k\w4284 k01	1	1	1
7	4854-03 f=1	Sample		e314-011.met	c:\data\03w4284k\4854-03	1	1	1
8	4857-01 f=1	Sample		e314-011.met	c:\data\03w4284k\4857-01	1	1	1
9	4878-02 f=1	Sample		e314-011.met	c:\data\03w4284k\4878-02	1	1	1
10	4854-03 md f=25	Sample		e314-011.met	c:\data\03w4284k\w4284 d01	1	25	1
11	4873-01 f=1	Sample		e314-011.met	c:\data\03w4284k\4873-01	1	1	1
12	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w4284k\w4284 q02	1	1	1
13	ccb	Sample		e314-011.met	c:\data\03w4284k\w4284 ccb	1	1	1
14	4857-01 ms 25ppb f=1 w8033b	Sample		e314-011.met	c:\data\03w4284k\w4284 m01	1	1	1
15	4857-01 msd 25ppb f=1 w8033b	Sample		e314-011.met	c:\data\03w4284k\w4284 n01	1	1	1
16	4854-01 f=1	Sample		e314-011.met	c:\data\03w4284k\4854-01	1	1	1
17	4854-02 f=1	Sample		e314-011.met	c:\data\03w4284k\4854-02	1	1	1
18	4842-01 f=1	Sample		e314-011.met	c:\data\03w4284k\4842-01	1	1	1
19	4842-02 f=1	Sample		e314-011.met	c:\data\03w4284k\4842-02	1	1	1
20	4842-03 f=1	Sample		e314-011.met	c:\data\03w4284k\4842-03	1	1	1
21	4857-02 f=1	Sample		e314-011.met	c:\data\03w4284k\4857-02	1	1	1
22	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w4284k\w4284 q03	1	1	1
23	ccb	Sample		e314-011.met	c:\data\03w4284k\w4284 ccb	1	1	1
24	4857-03 f=1	Sample		e314-011.met	c:\data\03w4284k\4857-03	1	1	1
25	4873-01 f=10	Sample		e314-011.met	c:\data\03w4284k\4873-01	1	10	1
26	4854-01 f=50	Sample		e314-011.met	c:\data\03w4284k\4854-01	1	50	1
27	4854-02 f=4	Sample		e314-011.met	c:\data\03w4284k\4854-02	1	4	1
28	4854-03 ms 25ppb f=25 w8033b	Sample		e314-011.met	c:\data\03w4284k\w4284 m02	1	25	1
29	4854-03 msd 25ppb f=25 w8033b	Sample		e314-011.met	c:\data\03w4284k\w4284 n02	1	25	1
30	4878-02 f=1 spike 3ppb	Sample		e314-011.met	c:\data\03w4284k\spike 3ppb	1	1	1
31	4857-02 f=1 spike 4ppb	Sample		e314-011.met	c:\data\03w4284k\spike 4ppb	1	1	1
32	ccv 50ppb w8082	Sample		e314-011.met	c:\data\03w4284k\w4284 q04	1	1	1
33		Sample		aastopcl.met		1	1	1

Analyst W. W

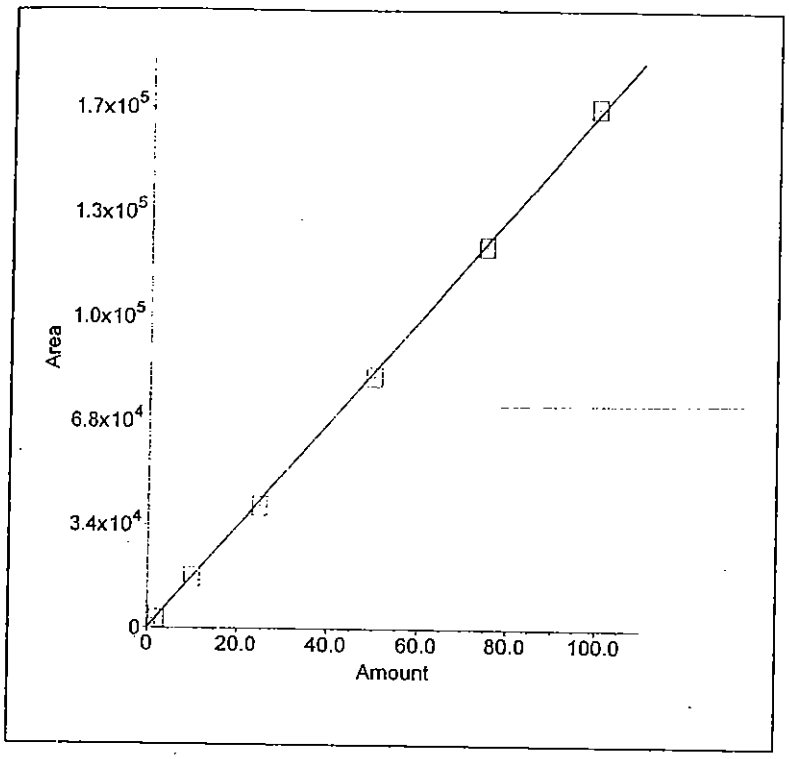
Date 8/28/03

Instrument IC-K

2754

Method:C:\PEAKNET\METHOD\E314-011.MET Updated:03/13/2003 10:39:48 AM Total:1

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



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

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

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

Line	Weight	Int. Std.	Comment
1	1	1	
2	1	1	
3	1	1	
4	1	1	
5	1	1	
6	1	1	
7	1	1	
8	1	1	
9	1	1	
10	1	1	
11	1	1	
12	1	1	
13	1	1	
14	1	1	
15	1	1	
16	1	1	
17	1	1	
18	1	1	
19	1	1	
20	1	1	
21	1	1	
22	1	1	
23	1	1	
24	1	1	
25	1	1	
26	1	1	
27	1	1	
28	1	1	
29	1	1	
30	1	1	
31	1	1	
32	1	1	
33	1	1	
34	1	1	
35	1	1	
36	1	1	
37	1	1	
38	1	1	
39	1	1	
40	1	1	
41	1	1	
42	1	1	
43	1	1	
44	1	1	
45	1	1	
46	1	1	
47	1	1	
48	1	1	
49	1	1	
50	1	1	
51	1	1	
52	1	1	
53	1	1	
54	1	1	
55	1	1	
56	1	1	
57	1	1	
58	1	1	

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

Condition information:

1. Column

Separator column: AS16 4mm

Guard column: AS16 4mm

2. Eluent : NaOH 38mM

3. Flow rate: 1.2mL/min

4. Suppressor: ASRS-ULTRA 4mm

5.Detector: CD20

6.Analyst: Charles Wu and Wei Wang

7.Date: 03 / 12 / 2003

8.Instrument: IC-K DX-500 Dionex

APCL

Applied Physics & Chemistry Laboratory

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Sep 02, 2003

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

Dear Brad,

This package contains samples in our Service ID 03-4534 and your project : 04-4428.10 JPL
Enclosed please find:

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

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

Respectfully submitted,

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

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

APCL Analytical Report

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

Service ID #: 801-034534
Collected by: L. Williamson
Collected on: 08/07/03

Received: 08/07/03
Extracted: N/A
Tested: 08/07-11/03
Reported: 08/18/03

Sample Description: Water from MW-11,24,14.
Project Description: 04-4428.10 JPL

Analysis of Water Samples

Component Analyzed	Method	Unit	PQL	Analysis Result EB-6-8-7-03 03-04534-1	MW-11-1 03-04534-2	MW-11-2 03-04534-3	MW-11-3 03-04534-4
Dilution Factor				1	1	1	1
PERCHLORATE	314.0	μg/L	4	<4	<4	<4	<4
VOLATILE ORGANIC COMPOUNDS							
Dilution Factor				1	1	1	1
BENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
BROMOBENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
BROMOCHLOROMETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
BROMOFORM	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
BROMOMETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
N-BUTYLBENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
SEC-BUTYLBENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
TERT-BUTYLBENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
2-BUTANONE	524.2	μg/L	10	<10	<10	<10	<10
CARBON TETRACHLORIDE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROBENZENE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROETHANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	μg/L	0.5	<0.5	<0.5	<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
1,2-DIBROMO-3-CHLOROPROPANE	524.2	μg/L	0.5	<0.5	<0.5	<0.5	<0.5
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

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result EB-6-8-7-03 03-04534-1	MW-11-1 03-04534-2	MW-11-2 03-04534-3	MW-11-3 03-04534-4
TRANS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
CIS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRANS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
ETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
HEXACHLOROBUTADIENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE (CUMENE)	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
P-ISOPROPYLTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	<1	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	<10	<10	<10	<10
NAPHTHALENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
STYRENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
VINYL CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
O-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
M/P-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-11-4 03-04534-5	MW-14-4 03-04534-6	MW-14-5 03-04534-7	MW-24-1 03-04534-8
Dilution Factor				1	1	1	100
PERCHLORATE	314.0	µg/L	4	<4	2.3J	<4	2,450
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	22.1
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	<0.5	<0.5	10.2
CHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
4-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
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	0.8
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

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-11-4 03-04534-5	MW-14-4 03-04534-6	MW-14-5 03-04534-7	MW-24-1 03-04534-8
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	0.3J	<10	<10	0.3J
METHYLENE CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	0.4J
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	<0.5	<0.5	1.5
TOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	4.8
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
VINYL CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
O-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
M/P-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-2 03-04534-9	MW-24-3 03-04534-10	TB-6-8-7-03 03-04534-12
Dilution Factor				5	1	1
PERCHLORATE	314.0	µg/L	4	148	<4	-

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-2 03-04534-9	MW-24-3 03-04534-10	TB-6-8-7-03 03-04534-12
VOLATILE ORGANIC COMPOUNDS						
Dilution Factor				1	1	1
BENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOCHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMODICHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOFORM	524.2	µg/L	0.5	<0.5	<0.5	<0.5
BROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
N-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
SEC-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TERT-BUTYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-BUTANONE	524.2	µg/L	10	<10	<10	<10
CARBON TETRACHLORIDE	524.2	µg/L	0.5	4.7	<0.5	<0.5
CHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLORODIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CHLOROFORM	524.2	µg/L	0.5	2.4	<0.5	<0.5
CHLOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
4-CHLOROTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DIBROMO-3-CHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DIBROMOETHANE (EDB)	524.2	µg/L	0.5	<0.5	<0.5	<0.5
DIBROMOMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,4-DICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
DICHLORODIFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CIS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRANS-1,2-DICHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
2,2-DICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
CIS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRANS-1,3-DICHLOROPROPENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
ETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
HEXACHLOROBUTADIENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
ISOPROPYLBENZENE (CUMENE)	524.2	µg/L	0.5	<0.5	<0.5	<0.5

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-2 03-04534-9	MW-24-3 03-04534-10	TB-6-8-7-03 03-04534-12
P-ISOPROPYLTOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
METHYLENE CHLORIDE	524.2	µg/L	0.5	0.3J	<0.5	1.3
METHYL-T-BUTYL ETHER (MTBE)	524.2	µg/L	1	<1	<1	<1
4-METHYL-2-PENTANONE (MIBK)	524.2	µg/L	10	<10	<10	<10
NAPHTHALENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
N-PROPYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
STYRENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-TETRACHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TETRACHLOROETHENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TOLUENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-TRICHLOROBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-TRICHLOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
TRICHLOROETHENE	524.2	µg/L	0.5	0.8	<0.5	<0.5
TRICHLOROFLUOROMETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-TRICHLOROPROPANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
112TRICHLORO-122TRIFLUOROETHANE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-TRIMETHYLBENZENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
VINYL CHLORIDE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
O-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5
M/P-XYLENE	524.2	µg/L	0.5	<0.5	<0.5	<0.5

Component Analyzed	Method	Unit	PQL	Analysis Result MW-11-1 03-04534-2	MW-11-2 03-04534-3	MW-11-3 03-04534-4
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01

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APCL Analytical Report

Component Analyzed	Method	Unit	PQL	Analysis Result MW-24-1 03-04534-8	MW-24-2 03-04534-9	MW-24-3 03-04534-10	MW-24-4 03-04534-11
CHROMIUM (VI)	7196	mg/L	0.01	<0.01	<0.01	<0.01	<0.01

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

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: 03-4534

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

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

Case Narrative

Project: JPL/04-4428.10

For GEOFON, Inc.

APCL Service No: 03-4534

1. Sample Identification

The sample identifications are listed in the following table:

GEOFON, Inc. Sample ID	APCL Sample ID
MW-11-4	03-04534-5
MW-11-3	03-04534-4
MW-11-2	03-04534-3
MW-11-1	03-04534-2
MW-24-4	03-04534-11
MW-24-3	03-04534-10
MW-24-2	03-04534-9
MW-24-1	03-04534-8
MW-14-5	03-04534-7
MW-14-4	03-04534-6
TB-6-8-7-03	03-04534-12
EB-6-8-7-03	03-04534-1

2. Analytical Methodology

Samples are analyzed by EPA methods

524.2 (Volatile Organic Compounds),
7196 (Chromium (VI)),
314.0 (Perchlorate, low level),

3. Holding Time

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

4. Preservation

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

5. Tele-log

None

6. Anomaly

None

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

Respectfully submitted,

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

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-11 D050

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-3Q03	PROJECT LOCATION MW-11 (S. of Bl 277)	PROJECT NUMBER 04-4428.10	LABORATORY PHONE (909) 590-1828	LABORATORY FAX (909) 590-1498	RECIPIENT NAME Tony Ford
PROJECT CONTACT J. Robinson	PROJECT PHONE NUMBER (714) 9208729	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 Pasdena, CA.	CLIENT US NAVY SWDIV	CITY, STATE AND ZIPCODE 91710 Chino, CA.		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 (Perchlorate)	7196 (Hex Chrome)	200.8 (Total Chrome)					Comments
1	MW-11-4	H_2O	8/7/03	0943	HCl HNO3 NONE	3+1+1	III	NORMAL	X	X							
2	MW-11-3	↓	↓	0806	↓	↓	↓	↓	X	X	X	X					
3	MW-11-2	↓	↓	0824	↓	↓	↓	↓	X	X	X	X					
4	MW-11-1	↓	↓	0844	↓	↓	↓	↓	X	X	X	X					
5																	
6																	
7																	
8																	
9																	
10																	

4534

8.7.03

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	[illegible]	08/02/03	0802	
Richard Stimson	Richard Stimson	8/7/03	1300	
Richard Stimson	[illegible]	8-7-03	1350	

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

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CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-24 0051

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-3Q03	PROJECT LOCATION: MW-24 ~~(Annex Parking Lot)~~	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX: (909) 590-1498	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: J. Robinson	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	Analyses: 524.2 (VOCs)	314.0 (Perchlorate)	7196 (Hex Chrome)	200.8 (Total Chrome)					Comments
1	~~MW-14-5~~	~~H_2O~~			~~HCl NaOH NONE~~	~~3+1~~	~~III~~	~~NORMAL~~	~~X~~	~~X~~							VOID Entry JL 8.7.03
2	MW-24-4	↓	8/7/03	0947	↓	↓	↓	↓	~~X~~	~~X~~ 8-7-03	X	X					
3	MW-24-3	↓	↓	1003	↓	3+1+1	↓	↓	X	X	X	X					
4	MW-24-2	↓	↓	1047	↓	↓	↓	↓	X	X	X	X					
5	MW-24-1	↓	↓	1052	↓	↓	↓	↓	X	X	X	X					
6																	
7																	
8																	
9																	
10																	

4534

8.7.03

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	[signature]	8.7.03	0930	
[signature]	[signature]	8-7-03	1300	
[signature]	[signature]	8-7-03	1350	

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

GEOFON INCORPORATED

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CHAIN-OF-CUSTODY RECORD

LABORATORY COPY

MW-14 0052

GEOFON'S LAB COORDINATOR: Brad Shogan	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-3903	PROJECT LOCATION: MW-14	PROJECT NUMBER: 04-4428.10	LABORATORY PHONE: 909 590 1828	LABORATORY FAX: 909-590-1498	RECIPIENT NAME: Tony Ford
PROJECT CONTACT: J. Robinson	PROJECT PHONE NUMBER: 714 920 8729	PROJECT FAX: 909-396-1455	LABORATORY ADDRESS: 13760 Magnolia Ave.		ADDRESS: 22632 Golden Spr. Dr. #270
PROJECT ADDRESS: 4800 Oak Grove Dr.	CITY, STATE AND ZIPCODE: Pasadena CA	CLIENT: US NAVY SUDIV	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 (VOC)	Analyses: 314.0 (Perchlorate)							Comments
1	MW-14-5	H_2O	8-7-03	1141	HCl/NaOH	4	III	Normal	X	X							
2	MW-14-4			1212		3			X	X							Add 314.0
3	TB-6-8-7-03			—		2			X								
4	EB-6-8-7-03			1156		4			X	X							
5																	
6																	
7								8-7-03									
8																	
9																	
10																	

4534

SAMPLES COLLECTED BY	COURIER AND AIR BILL NUMBER				COOLER TEMPERATURE UPON RECEIPT
RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT	
J. Robinson	[signature]	8-7-03	1300		
[signature]	[signature]	8-7-03	1350		

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: 4534 Client Name/Project: Geofon

1. Sample Arrival

Date/Time Received 8/7/03 1350 Date/Time Opened 8/7/03 1350 By (name): KennyChan

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 12
☑ 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 2.8°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: KennyChan Printed: 7 Aug 2003 7:33 a.m.

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

DocumentFile: [neal.textfiles]smprcl.tex.

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

Sample Login: Check List

03-04534 (0470_ 162) (2202777_ 162)

08/07/03

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:	*08/07/03 1350*
		COC No.	
☐	Shipping Information	Shipping Company	*APCL pick up*
		Packing Information:	*Cooler/Ice Chester*
		Cooler Temperature:	*2.8 °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-11-4	524.2	03-04534-5-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-11-4	Perch	03-04534-5-β	W	P		500	1	G	080703	N	0	7	☐
2	MW-11-3	524.2	03-04534-4-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-11-3	CRVI/Perch	03-04534-4-β	W	P		500	1	G	080703	N	0	7	☐
3	MW-11-2	524.2	03-04534-3-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-11-2	CRVI/Perch	03-04534-3-β	W	P		500	1	G	080703	N	0	7	☐
4	MW-11-1	524.2	03-04534-2-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-11-1	CRVI/Perch	03-04534-2-β	W	P		500	1	G	080703	N	0	7	☐
5	MW-24-4	CRVI	03-04534-11	W	P		500	1	G	080703	N	0	7	☐
6	MW-24-3	524.2	03-04534-10-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-24-3	CRVI/Perch	03-04534-10-β	W	P		500	1	G	080703	N	0	7	☐
7	MW-24-2	524.2	03-04534-9-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-24-2	CRVI/Perch	03-04534-9-β	W	P		500	1	G	080703	N	0	7	☐
8	MW-24-1	524.2	03-04534-8-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-24-1	CRVI/Perch	03-04534-8-β	W	P		500	1	G	080703	N	0	7	☐
9	MW-14-5	524.2	03-04534-7-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-14-5	Perch	03-04534-7-β	W	P		500	1	G	080703	N	0	7	☐
10	MW-14-4	524.2	03-04534-6-α	W	V	C	40	3	G	080703	N	0	7	☐
	MW-14-4	Perch	03-04534-6-β	W	P		500	1	G	080703	N	0	7	☐
11	TB-6-8-7-03	524.2	03-04534-12	W	V	C	40	2	G	080703	N	0	7	☐
12	EB-6-8-7-03	524.2	03-04534-1-α	W	V	C	40	3	G	080703	N	0	7	☐
	EB-6-8-7-03	Perch	03-04534-1-β	W	P		500	1	G	080703	N	0	7	☐

Part 3: Analysis Information

Test Items:

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

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:	08/11/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03G3659-MB-01	Received Date:	08/11/2003
Sample ID:	**03G3659-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	13:18
Data File Name:	G3659K01	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	111
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	108
4	TOLUENE-D8	2037-26-5	73-129	96
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	98
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	96
3	FLUOROBENZENE	462-06-6	50-200	89
# 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:	08/08/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03G3619-MB-01	Received Date:	08/08/2003
Sample ID:	**03G3619-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	13:25
Data File Name:	G3619K01	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	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	110
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	106
4	TOLUENE-D8	2037-26-5	73-129	97
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	97
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	96
3	FLUOROBENZENE	462-06-6	50-200	93
# 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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-1	Received Date:	08/07/2003
Sample ID:	**EB-6-8-7-03**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	14:11
Data File Name:	4534-01	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	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	109
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	107
4	TOLUENE-D8	2037-26-5	73-129	96
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	95
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	95
3	FLUOROBENZENE	462-06-6	50-200	89
# 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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-2	Received Date:	08/07/2003
Sample ID:	**MW-11-1**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	19:38
Data File Name:	4534-02	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	97
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	113
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
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	92
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	91
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-3	Received Date:	08/07/2003
Sample ID:	**MW-11-2**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	20:04
Data File Name:	4534-03	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	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	116
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
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	93
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	92
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-4	Received Date:	08/07/2003
Sample ID:	**MW-11-3**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	20:30
Data File Name:	4534-04	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	97
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	114
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	109
4	TOLUENE-D8	2037-26-5	73-129	99
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	92
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	91
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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-5	Received Date:	08/07/2003
Sample ID:	**MW-11-4**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	20:56
Data File Name:	4534-05	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	0.5	<0.5	U
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	0.3	J
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	112
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
4	TOLUENE-D8	2037-26-5	73-129	99
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	93
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	93
3	FLUOROBENZENE	462-06-6	50-200	89
# 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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-6	Received Date:	08/07/2003
Sample ID:	**MW-14-4**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	21:22
Data File Name:	4534-06	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	95
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	113
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	109
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	92
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	94
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-7	Received Date:	08/07/2003
Sample ID:	**MW-14-5**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/08/03	Anal. Date:	08/08/03
Batch No:	03G3619	Prep. No:	–	Anal. Time:	21:49
Data File Name:	4534-07	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	112
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	109
4	TOLUENE-D8	2037-26-5	73-129	99
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	92
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	92
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-8	Received Date:	08/07/2003
Sample ID:	**MW-24-1**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	15:04
Data File Name:	4534-08	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	22.1	
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	10.2	
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	0.5	<0.5	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	0.8	
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	0.5	0.4	J
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	0.3	J
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	1.5	
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	4.8	
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	97
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	109
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	108
4	TOLUENE-D8	2037-26-5	73-129	97
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	95
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	94
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

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Organic Analysis Results for Method 524.2

Client Name:	GEOFON, Inc.	Project No:	04-4428.10	Collection Date:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-9	Received Date:	08/07/2003
Sample ID:	**MW-24-2**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	15:31
Data File Name:	4534-09	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	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	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	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	0.5	0.3	J
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	0.8	
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	113
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
4	TOLUENE-D8	2037-26-5	73-129	97
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	95
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	94
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-10	Received Date:	08/07/2003
Sample ID:	**MW-24-3**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	15:57
Data File Name:	4534-10	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	N-BUTYLBENZENE	104-51-8	µg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	µg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	µg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	µg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	µg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	µg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	µg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	µg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	µg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	µg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	µg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	µg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	µg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	µg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	µg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	µg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	µg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	µg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	µg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	µg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	µg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	µg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	µg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	µg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	µg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	0.5	<0.5	U

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

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	96
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	112
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
4	TOLUENE-D8	2037-26-5	73-129	96
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	94
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	94
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.

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:	08/07/2003
Project ID:	JPL	Service ID:	34534	Collected by:	
		Lab Sample ID:	03-4534-12	Received Date:	08/07/2003
Sample ID:	**TB-6-8-7-03**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: A
Anal. Method:	524.2	Prep. Date:	08/11/03	Anal. Date:	08/11/03
Batch No:	03G3659	Prep. No:	–	Anal. Time:	13:45
Data File Name:	4534-12	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	N-BUTYLBENZENE	104-51-8	μg/L	0.5	<0.5	U
8	SEC-BUTYLBENZENE	135-98-8	μg/L	0.5	<0.5	U
9	TERT-BUTYLBENZENE	98-06-6	μg/L	0.5	<0.5	U
10	2-BUTANONE	78-93-3	μg/L	10	<10	U
11	CARBON TETRACHLORIDE	56-23-5	μg/L	0.5	<0.5	U
12	CHLOROBENZENE	108-90-7	μg/L	0.5	<0.5	U
13	CHLORODIBROMOMETHANE	124-48-1	μg/L	0.5	<0.5	U
14	CHLOROETHANE	75-00-3	μg/L	0.5	<0.5	U
15	CHLOROFORM	67-66-3	μg/L	0.5	<0.5	U
16	CHLOROMETHANE	74-87-3	μg/L	0.5	<0.5	U
17	2-CHLOROTOLUENE	95-49-8	μg/L	0.5	<0.5	U
18	4-CHLOROTOLUENE	106-43-4	μg/L	0.5	<0.5	U
19	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	μg/L	0.5	<0.5	U
20	1,2-DIBROMOETHANE (EDB)	106-93-4	μg/L	0.5	<0.5	U
21	DIBROMOMETHANE	74-95-3	μg/L	0.5	<0.5	U
22	1,2-DICHLOROBENZENE	95-50-1	μg/L	0.5	<0.5	U
23	1,3-DICHLOROBENZENE	541-73-1	μg/L	0.5	<0.5	U
24	1,4-DICHLOROBENZENE	106-46-7	μg/L	0.5	<0.5	U
25	DICHLORODIFLUOROMETHANE	75-71-8	μg/L	0.5	<0.5	U
26	1,1-DICHLOROETHANE	75-34-3	μg/L	0.5	<0.5	U
27	1,2-DICHLOROETHANE	107-06-2	μg/L	0.5	<0.5	U
28	1,1-DICHLOROETHENE	75-35-4	μg/L	0.5	<0.5	U
29	CIS-1,2-DICHLOROETHENE	156-59-2	μg/L	0.5	<0.5	U
30	TRANS-1,2-DICHLOROETHENE	156-60-5	μg/L	0.5	<0.5	U
31	1,2-DICHLOROPROPANE	78-87-5	μg/L	0.5	<0.5	U
32	1,3-DICHLOROPROPANE	142-28-9	μg/L	0.5	<0.5	U
33	2,2-DICHLOROPROPANE	594-20-7	μg/L	0.5	<0.5	U
34	1,1-DICHLOROPROPENE	563-58-6	μg/L	0.5	<0.5	U
35	CIS-1,3-DICHLOROPROPENE	10061-01-5	μg/L	0.5	<0.5	U
36	TRANS-1,3-DICHLOROPROPENE	10061-02-6	μg/L	0.5	<0.5	U
37	ETHYLBENZENE	100-41-4	μg/L	0.5	<0.5	U
38	HEXACHLOROBUTADIENE	87-68-3	μg/L	0.5	<0.5	U
39	ISOPROPYLBENZENE (CUMENE)	98-82-8	μg/L	0.5	<0.5	U

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	P-ISOPROPYLTOLUENE	99-87-6	µg/L	0.5	<0.5	U
41	METHYLENE CHLORIDE	75-09-2	µg/L	0.5	1.3	
42	METHYL-T-BUTYL ETHER (MTBE)	1634-04-4	µg/L	1	<1	U
43	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	10	<10	U
44	NAPHTHALENE	91-20-3	µg/L	0.5	<0.5	U
45	N-PROPYLBENZENE	103-65-1	µg/L	0.5	<0.5	U
46	STYRENE	100-42-5	µg/L	0.5	<0.5	U
47	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	0.5	<0.5	U
48	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	0.5	<0.5	U
49	TETRACHLOROETHENE	127-18-4	µg/L	0.5	<0.5	U
50	TOLUENE	108-88-3	µg/L	0.5	<0.5	U
51	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	0.5	<0.5	U
52	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	0.5	<0.5	U
53	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	0.5	<0.5	U
54	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	0.5	<0.5	U
55	TRICHLOROETHENE	79-01-6	µg/L	0.5	<0.5	U
56	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	0.5	<0.5	U
57	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	0.5	<0.5	U
58	112TRICHLORO-122TRIFLUOROETHANE	76-13-1	µg/L	0.5	<0.5	U
59	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	0.5	<0.5	U
60	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	0.5	<0.5	U
61	VINYL CHLORIDE	75-01-4	µg/L	0.5	<0.5	U
62	O-XYLENE	95-47-6	µg/L	0.5	<0.5	U
63	M/P-XYLENE	108-38-3	µg/L	0.5	<0.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	1-BROMO-4-FLUOROBENZENE (4-BROMOFL	460-00-4	70-129	94
2	1,2-DICHLOROETHANE-D4	17060-07-0	70-129	113
3	DIBROMOFLUOROMETHANE	1868-53-7	70-122	110
4	TOLUENE-D8	2037-26-5	73-129	95
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	98
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	98
3	FLUOROBENZENE	462-06-6	50-200	89
# 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

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:	034534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3659		

#	Client Sample No	Lab Sample ID	S1 %	#	S2 %	#	S3 %	#	S4 %	#	TOT OUT
1	03G3659-LCS-01	03G3659-LCS-01	95		96		98		96		0
2	03G3659-MB-01	03G3659-MB-01	96		111		108		96		0
3	TB-6-8-7-03	03-4534-12	94		113		110		95		0
4	EB-6-8-7-03	03-4534-1	96		109		107		96		0
5	MW-24-1	03-4534-8	97		109		108		97		0
6	MW-24-2	03-4534-9	96		113		110		97		0
7	MW-24-3	03-4534-10	96		112		110		96		0
8	MW-12-4MS	03-4572-6MS	97		103		101		97		0
9	MW-12-4MSD	03-4572-6MSD	96		99		99		97		0
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											

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

Column to be used to flag recovery values:

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

FORM-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:		Service ID:	034534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3619		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	03G3619-LCS-01	03G3619-LCS-01	95	98	99	97	0
2	MW-4-2MS	03-4455-4MS	100	90	97	102	0
3	MW-4-2MSD	03-4455-4MSD	96	95	98	96	0
4	03G3619-MB-01	03G3619-MB-01	96	110	106	97	0
5	MW-11-1	03-4534-2	97	113	110	98	0
6	MW-11-2	03-4534-3	96	116	110	98	0
7	MW-11-3	03-4534-4	97	114	109	99	0
8	MW-11-4	03-4534-5	96	112	110	99	0
9	MW-14-4	03-4534-6	95	113	109	98	0
10	MW-14-5	03-4534-7	96	112	109	99	0
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

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

Column to be used to flag recovery values:

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

FORM-3A

Applied P & Ch Laboratory

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

Client Name:	GEOFON, Inc.	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	34534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3659		
LCS Filename:	G3659L01	Date Analyzed:	081103	Time Analyzed:	11:06
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	18.6	93	65-120
CHLOROBENZENE	μg/L	20	0	20.3	102	65-134
1,1-DICHLOROETHENE	μg/L	20	0	19.3	97	65-127
TOLUENE	μg/L	20	0	19.1	96	65-134
TRICHLOROETHENE	μg/L	20	0	19.3	97	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:	34534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3659		
MS Filename:	G3659M02	Date Analyzed:	081103	Time Analyzed:	21:14
MSD Filename:	G3659N02	Date Analyzed:	081103	Time Analyzed:	21:40
MS Sample No:	**MW-12-4**	Sample Lab ID:	03-4572-6		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	μg/L	20	0	19.0	95	65-121
CHLOROBENZENE	μg/L	20	0	20.9	105	65-134
1,1-DICHLOROETHENE	μg/L	20	0	19.2	96	65-127
TOLUENE	μg/L	20	0	19.5	98	65-134
TRICHLOROETHENE	μg/L	20	0.4	20.3	100	65-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	μg/L	20	18.8	94	1	28	65-121
CHLOROBENZENE	μg/L	20	20.6	103	2	35	65-134
1,1-DICHLOROETHENE	μg/L	20	19.2	96	0	31	65-127
TOLUENE	μg/L	20	19.3	97	1	35	65-134
TRICHLOROETHENE	μg/L	20	20.2	99	1	30	65-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

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

Comments: _____

FORM-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:	34534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3619		
LCS Filename:	G3619L01	Date Analyzed:	080803	Time Analyzed:	11:12
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	19.1	96	65-120
CHLOROBENZENE	μg/L	20	0	20.7	104	65-134
1,1-DICHLOROETHENE	μg/L	20	0	19.7	99	65-127
TOLUENE	μg/L	20	0	19.5	98	65-134
TRICHLOROETHENE	μg/L	20	0	20.0	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:	34534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		Batch No:	03G3619		
MS Filename:	G3619M01	Date Analyzed:	080803	Time Analyzed:	11:40
MSD Filename:	G3619N01	Date Analyzed:	080803	Time Analyzed:	12:06
MS Sample No:	**MW-4-2**	Sample Lab ID:	03-4455-4		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	μg/L	20	0	19.2	96	65-121
CHLOROBENZENE	μg/L	20	0	21.1	106	65-134
1,1-DICHLOROETHENE	μg/L	20	0	20.2	101	65-127
TOLUENE	μg/L	20	0	20.3	102	65-134
TRICHLOROETHENE	μg/L	20	0.7	21.3	103	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	18.8	94	2	28	65-121
CHLOROBENZENE	μg/L	20	20.3	102	4	35	65-134
1,1-DICHLOROETHENE	μg/L	20	19.3	97	4	31	65-127
TOLUENE	μg/L	20	19.3	97	5	35	65-134
TRICHLOROETHENE	μg/L	20	20.4	99	4	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:	34534
Project ID:	JPL	Project No:	04-4428.10	Analysis Date:	08/11/03
		Sample Matrix:	Water	Analysis Time:	13:18
Sample ID:	**03G3659-MB-01**	Batch No:	03G3659	Instrument ID:	GC/MS: A
Lab Sample ID:	03G3659-MB-01	Data File Name:	G3659K01	GC Column:	HP-VOC
		Heated Purge: (Y/N)	N	Column ID:	0.20 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	03G3659-LCS-01	03G3659-LCS-01	Lab Control Spike	G3659L01	08/11/03	11:06
2	MW-12-4MS	03-4572-6MS	Matrix Spike	G3659M02	08/11/03	21:14
3	MW-12-4MSD	03-4572-6MSD	Matrix Spike Duplicate	G3659N02	08/11/03	21:40
4	TB-6-8-7-03	03-4534-12	Field Sample	4534-12	08/11/03	13:45
5	EB-6-8-7-03	03-4534-1	Field Sample	4534-01	08/11/03	14:11
6	MW-24-1	03-4534-8	Field Sample	4534-08	08/11/03	15:04
7	MW-24-2	03-4534-9	Field Sample	4534-09	08/11/03	15:31
8	MW-24-3	03-4534-10	Field Sample	4534-10	08/11/03	15:57
9	MW-12-4MS	03-4572-6MS	Matrix Spike	G3659M02	08/11/03	21:14
10	MW-12-4MSD	03-4572-6MSD	Matrix Spike Duplicate	G3659N02	08/11/03	21:40
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						

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:	34534
Project ID:	JPL	Project No:	04-4428.10	Analysis Date:	08/08/03
		Sample Matrix:	Water	Analysis Time:	13:25
Sample ID:	**03G3619-MB-01**	Batch No:	03G3619	Instrument ID:	GC/MS: A
Lab Sample ID:	03G3619-MB-01	Data File Name:	G3619K01	GC Column:	HP-VOC
		Heated Purge: (Y/N)	N	Column ID:	0.20 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	03G3619-LCS-01	03G3619-LCS-01	Lab Control Spike	G3619L01	08/08/03	11:12
2	MW-4-2MS	03-4455-4MS	Matrix Spike	G3619M01	08/08/03	11:40
3	MW-4-2MSD	03-4455-4MSD	Matrix Spike Duplicate	G3619N01	08/08/03	12:06
4	MW-11-1	03-4534-2	Field Sample	4534-02	08/08/03	19:38
5	MW-11-2	03-4534-3	Field Sample	4534-03	08/08/03	20:04
6	MW-11-3	03-4534-4	Field Sample	4534-04	08/08/03	20:30
7	MW-11-4	03-4534-5	Field Sample	4534-05	08/08/03	20:56
8	MW-14-4	03-4534-6	Field Sample	4534-06	08/08/03	21:22
9	MW-14-5	03-4534-7	Field Sample	4534-07	08/08/03	21:49
10						
11						
12						
13						
14						
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16						
17						
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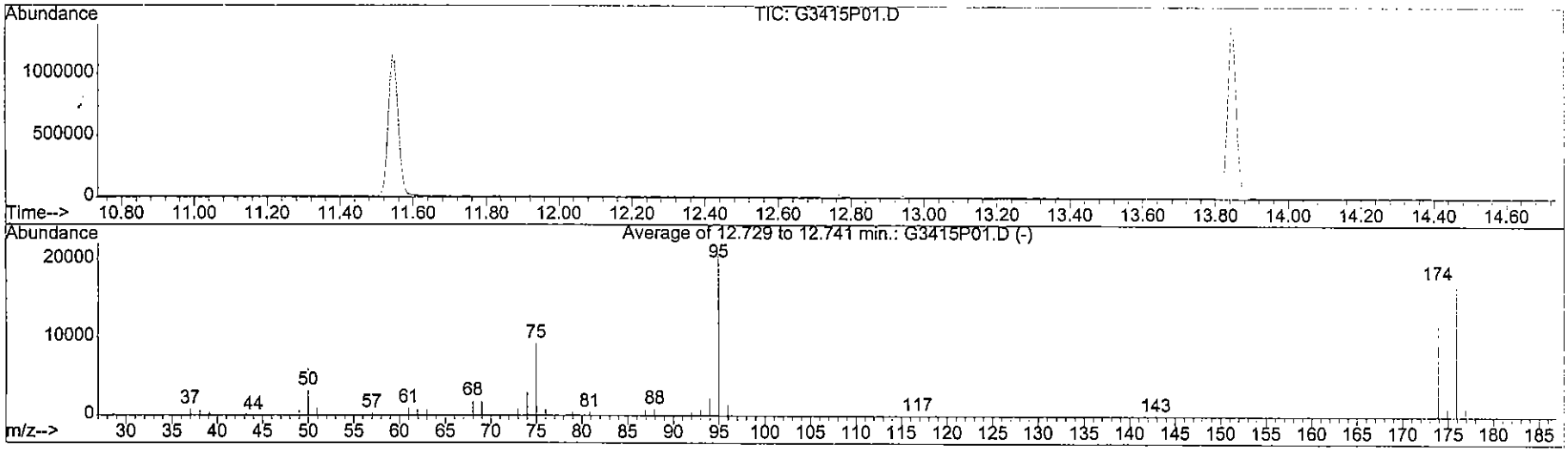
27						
28						

BFB

1640

Data File : C:\MSDCHEM\1\DATA\03G3415\G3415P01.D Vial: 2
Acq On : 22 Jul 2003 5:08 pm Operator: zou
Sample : ##03g3415, w 50 ng Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p
Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2



Spectrum Information: Average of 12.729 to 12.741 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.3	3208	PASS
75	95	30	60	44.1	9259	PASS
95	95	100	100	100.0	20984	PASS
96	95	5	9	7.0	1467	PASS
173	174	0.00	2	0.7	120	PASS
174	95	50	100	81.3	17069	PASS
175	174	5	9	7.1	1218	PASS
176	174	95	101	98.6	16830	PASS
177	176	5	9	7.6	1277	PASS

G3415P01.D E524A002.M Thu Jul 31 17:21:02 2003

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name : APPLIED P & CH LAB Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 034534

Lab File ID: G 3415 P01 BFB Injection Date: 07/22/2003

Instrument ID: GCMS-A BFB Injection Time: 1708

GC Column: HP-VOC ID: 0.20 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	15.3
75	30.0 - 60.0% of mass 95	44.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.6 (0.7)1
174	50.0 - 100.0% of mass 95	81.3
175	5.0 - 9.0% of mass 174	5.8 (7.1)1
176	95.0 - 101.0% of mass 174	80.2 (98.6)1
177	5.0 - 9.0% of mass 176	6.1 (7.6)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	20-0003	20-00003.D	07/22/2003	1925
02	VSTD002	20-0002	20-0002.D	07/22/2003	2111
03	VSTD010	20-0010	20-0010.D	07/22/2003	2137
04	VSTD020	20-0020	20-0020.D	07/22/2003	2256
05	VSTD040	20-0040	20-0040.D	07/23/2003	0043
06	VSTD060	20-0060	20-0060.D	07/23/2003	0245
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Response Factor Report GCMS-A

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Initial Calibration

Calibration Files
.3 =2-00003.D 2 =2-0002A.D 10 =2-00010.D
20 =2-00020.D 40 =2-00040.D 60 =2-00060.D

		Compound	.3	2	10	20	40	60	Avg	%RSD	r^2
1)	I 1	Fluorobenzene	----------	----------	----------	ISTD	----------	----------	----------		
2)	3	di-Cl-di-F-m	0.279	0.253	0.228	0.251	0.250	0.246	0.251	6.61	
3)	p 4	Chloromethan	0.300	0.265	0.208	0.221	0.218	0.200	0.235	16.51	0.996
4)	2	F114	0.116	0.138	0.126	0.136	0.137	0.133	0.131	6.45	
5)	C 5	vinyl chlori	0.268	0.267	0.219	0.239	0.240	0.223	0.242	8.61	
6)	6	bromomethane	0.143	0.128	0.105	0.113	0.104	0.106	0.116	13.63	
7)	7	chloroethane	0.162	0.171	0.136	0.131	0.138	0.129	0.144	12.08	
8)	8	tri-Cl-F-met	0.426	0.367	0.310	0.357	0.356	0.338	0.359	10.76	
9)	91	Acetonitrile		0.055	0.041	0.042	0.041	0.040	0.044	14.16	
10)	9	acrolein	0.034	0.034	0.026	0.025	0.024	0.022	0.028	18.73	0.997
11)	11	acetone X	0.106	0.053	0.028	0.024	0.024	0.021	0.043	77.29	0.994
12)	12	ethyl ether	0.162	0.157	0.117	0.117	0.110	0.098	0.127	20.67	0.992
13)	M, C13	11-dichloroe	0.345	0.312	0.258	0.277	0.275	0.253	0.287	12.31#	
14)	14	Iodomethane	0.266	0.286	0.244	0.262	0.258	0.205	0.253	10.75	
15)	15	F-113	0.313	0.246	0.193	0.211	0.205	0.185	0.225	21.21	0.994
16)	16	acrylonitril	0.053	0.052	0.042	0.041	0.040	0.040	0.045	13.61	
17)	17	carbon disul	0.838	0.780	0.654	0.729	0.722	0.649	0.729	10.00	
18)	94	Isopropyl Al	0.015	0.008	0.005	0.006	0.007	0.006	0.008	46.15	0.995
19)	18	methylene ch	1.323	0.482	0.257	0.251	0.242	0.244	0.467	92.15	1.00
20)	19	t-12-di-Cl-e	0.297	0.305	0.248	0.262	0.256	0.253	0.270	8.99	
21)	20	t-Bu-Me-ethe	0.474	0.509	0.419	0.427	0.427	0.442	0.450	7.81	
22)	95	Tert butyl a		0.014	0.010	0.010	0.012	0.013	0.012	16.51	0.990
23)	94	allyl chlori		0.549	0.412	0.417	0.307	0.282	0.393	26.97	
24)	p 21	11-dichloroe	0.518	0.484	0.380	0.407	0.403	0.409	0.433	12.52	
25)	97	propionitril		0.020	0.014	0.016	0.016	0.017	0.017	14.53	
26)	22	c-12-di-Cl-e	0.296	0.311	0.252	0.263	0.257	0.255	0.272	9.12	
27)	23	22-Dichlorop	0.392	0.360	0.280	0.290	0.277	0.262	0.310	16.98	0.998
28)	24	Br-Cl-methan	0.158	0.150	0.117	0.123	0.122	0.122	0.132	13.12	

(#) = Out of Range

Response Factor Report GCMS-A

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Initial Calibration

Calibration Files
.3 =2-00003.D 2 =2-0002A.D 10 =2-00010.D
20 =2-00020.D 40 =2-00040.D 60 =2-00060.D

		Compound	.3	2	10	20	40	60	Avg	%RSD	r^2
29)	C	25 chloroform	0.724	0.528	0.396	0.413	0.403	0.406	0.478	27.21#	1.00
30)		26 tetrahydrofu	0.036	0.035	0.031	0.031	0.032	0.032	0.033	6.66	
31)		98 Diisopropyl	0.648	0.792	0.634	0.653	0.636	0.641	0.667	9.23	
32)	S	27 Di-Br-F-Me (		0.294	0.230	0.240	0.239	0.243	0.249	10.27	
33)		99 ETBE	0.437	0.534	0.485	0.524	0.532	0.549	0.510	8.20	
34)	S	29 1,2-Di-Cl-Et		0.248	0.186	0.191	0.191	0.192	0.202	12.96	
35)		30 12-dichloroe	0.094	0.093	0.070	0.070	0.070	0.070	0.078	15.50	1.00
36)		32 vinyl acetat	0.319	0.377	0.321	0.291	0.285	0.280	0.312	11.53	
37)		92 Nitro Methan		0.006	0.005	0.005	0.006	0.006	0.006	9.09	
38)		33 2-butanoneME	0.081	0.061	0.044	0.043	0.042	0.041	0.052	30.99	1.00
39)		93 Ethyl Acetat	0.175	0.135	0.110	0.107	0.107	0.110	0.124	22.07	0.999
40)		34 111-trichlor	0.479	0.436	0.353	0.387	0.385	0.378	0.403	11.36	
41)		35 11-Di-Cl-pro	0.271	0.306	0.284	0.325	0.324	0.316	0.304	7.40	
42)	M	36 benzene	1.117	1.160	0.923	0.983	0.960	0.948	1.015	9.69	
43)		37 CCl4	0.434	0.397	0.329	0.361	0.358	0.350	0.371	10.20	
44)		100 Isobutyl al	0.002	0.005	0.004	0.004	0.005	0.005	0.004	30.78	0.997
45)		38 thiophene	0.471	0.573	0.471	0.505	0.504	0.503	0.505	7.36	
46)	C	39 12-di-Cl-pro	0.247	0.251	0.204	0.220	0.221	0.220	0.227	7.93#	
47)	M	40 trichloroeth	0.354	0.335	0.274	0.312	0.315	0.309	0.316	8.59	
48)		41 dibromometha	0.177	0.159	0.126	0.133	0.134	0.135	0.144	13.68	
49)		101 TAME	0.352	0.451	0.420	0.462	0.472	0.498	0.442	11.61	
50)		42 Br-di-Cl-met	0.433	0.359	0.280	0.298	0.298	0.297	0.327	17.81	1.00
51)		43 Me-methacryl	0.065	0.098	0.100	0.112	0.117	0.121	0.102	20.03	0.999
52)		44 2-ClEt-Vi-et	0.010	0.016	0.019	0.025	0.029		0.020	37.07	0.992
53)		45 c-13-di-Cl-p	0.312	0.358	0.307	0.333	0.335	0.336	0.330	5.59	
54)		46 t-1,3-dichlo	0.227	0.272	0.247	0.270	0.278	0.281	0.262	8.00	
55)	I	47 Chlorobezene-d5	----------ISTD----------								
56)		48 112-tri-Cl-E	0.288	0.275	0.213	0.222	0.224	0.226	0.241	13.17	

(#) = Out of Range

Response Factor Report GCMS-A

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Initial Calibration

Calibration Files
.3 =2-00003.D 2 =2-0002A.D 10 =2-00010.D
20 =2-00020.D 40 =2-00040.D 60 =2-00060.D

			Compound	.3	2	10	20	40	60	Avg	%RSD	r^2
57)		49	13-di-Cl-pro	0.436	0.432	0.347	0.357	0.359	0.353	0.381	10.91	
58)		50	Et methacryl	0.189	0.269	0.272	0.287	0.301	0.321	0.273	16.74	0.997
59)		51	di-Br-Cl-met	0.422	0.341	0.275	0.296	0.304	0.309	0.325	16.16	0.999
60)	P	52	bromoform	0.222	0.192	0.159	0.171	0.181	0.187	0.185	11.70	
61)		53	1,4-dichloro	0.405	0.396	0.312	0.330	0.340	0.344	0.354	10.53	
62)		54	MIBK	0.132	0.144	0.134	0.144	0.155	0.166	0.146	8.89	
63)	s	55	toluene-d8	1.345	1.364	1.130	1.244	1.257	1.223	1.260	6.78	
64)	M,C	56	toluene	1.448	1.627	1.315	1.441	1.448	1.412	1.448	6.98	
65)		57	2-hexanone X	0.100	0.109	0.092	0.094	0.098	0.100	0.099	5.95	
66)		58	12-dibromoet	0.274	0.254	0.210	0.222	0.233	0.235	0.238	9.68	
67)		59	tetra-Cl-eth	0.496	0.464	0.378	0.427	0.424	0.408	0.433	9.68	
68)	M,P	60	chlorobenzen	1.297	1.156	0.893	0.967	0.959	0.919	1.032	15.48	0.999
69)		61	1112-tetra-C	0.447	0.412	0.317	0.340	0.348	0.348	0.369	13.47	
70)	I	62	1,4-Dichlorobenzen	----------ISTD----------								
71)		63	1-chlorohexa	0.269	0.309	0.291	0.356	0.374	0.358	0.326	12.94	
72)	C	64	Et-Bz	3.072	3.263	2.780	3.211	3.292	3.156	3.129	6.01#	
73)		65	m/p-Xylenes	2.292	2.598	2.175	2.438	2.422	2.268	2.365	6.37	
74)		66	styrene	1.472	1.978	1.707	1.902	1.915	1.818	1.798	10.32	
75)		67	o-xylene	1.955	2.508	2.249	2.527	2.563	2.438	2.373	9.83	
76)	p	68	1122-Tetra-C	0.659	0.575	0.456	0.475	0.501	0.503	0.528	14.34	
77)		69	123-tri-Cl-P	0.186	0.176	0.138	0.146	0.151	0.152	0.158	11.76	
78)	S	70	4-Br-1-F-Bz	0.953	0.876	0.706	0.798	0.823	0.806	0.827	10.01	
79)		71	isopropylben	2.262	3.010	2.857	3.361	3.462	3.290	3.040	14.58	
80)		72	bromobenzene	0.840	0.881	0.719	0.807	0.842	0.810	0.817	6.73	
81)		92	t-1,4-dichlo	0.038	0.078	0.075	0.082	0.094	0.095	0.077	27.12	0.997
82)		73	n-propylbenz	0.759	0.999	0.867	1.019	1.061	1.009	0.952	12.10	
83)		74	2-Cl-Toluene	0.756	0.887	0.758	0.870	0.905	0.873	0.841	7.90	
84)		75	4-Cl-Toluene	0.853	0.955	0.757	0.860	0.880	0.830	0.856	7.52	

(#) = Out of Range

Response Factor Report GCMS-A

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Initial Calibration

Calibration Files
.3 =2-00003.D 2 =2-0002A.D 10 =2-00010.D
20 =2-00020.D 40 =2-00040.D 60 =2-00060.D

		Compound	.3	2	10	20	40	60	Avg	%RSD	r^2
85)	76	135-tri-Me-B	2.031	2.864	2.465	2.815	2.851	2.678	2.617	12.38	
86)	77	4-iso-Pr-tol	2.280	3.155	2.726	3.159	3.220	2.998	2.923	12.39	
87)	78	124-tri-Me-B	2.267	3.012	2.517	2.854	2.932	2.773	2.726	10.34	
88)	79	tert-butylbe	2.041	2.391	2.526	2.636	2.748	2.655	2.499	10.24	
89)	80	13-DCB	1.989	1.888	1.484	1.667	1.680	1.592	1.717	10.95	
90)	81	sec-butylben	2.715	3.632	3.274	3.857	3.936	3.690	3.517	12.95	
91)	82	14-DCB	2.240	1.859	1.457	1.644	1.684	1.613	1.749	15.60	0.999
92)	83	Cl-benzyl	0.164	0.159	0.155	0.169	0.181	0.165	0.165	5.41	
93)	84	12-DCB	1.762	1.734	1.326	1.464	1.479	1.408	1.529	11.67	
94)	85	n-butylbenze	0.528	0.789	0.731	0.875	0.910	0.843	0.779	17.73	0.997
95)	86	12-diBr-2-Cl	0.110	0.104	0.091	0.102	0.118	0.120	0.108	10.09	
96)	87	124-tri-Cl-B	0.843	0.926	0.884	1.065	1.130	1.091	0.990	12.16	
97)	88	naphthalene	2.218	1.820	1.426	1.651	1.832	1.831	1.796	14.50	
98)	89	hx-Cl-butadi	0.644	0.621	0.514	0.599	0.629	0.588	0.599	7.74	
99)	90	123-Tri-Cl-B	0.849	0.875	0.777	0.914	0.969	0.944	0.888	7.86	

(#) = Out of Range

INITIAL CALIBRATION SUMMARY

Method File	E524A002		
Last Calibration Update	Thu Jul 24 12:40:35 2003		
Level 1 File Name	2-00003.D	**Level 1 ID**	.3
Level 2 File Name	2-0002A.D	**Level 2 ID**	2
Level 3 File Name	2-00010.D	**Level 3 ID**	10
Level 4 File Name	2-00020.D	**Level 4 ID**	20
Level 5 File Name	2-00040.D	**Level 5 ID**	40
Level 6 File Name	2-00060.D	**Level 6 ID**	60
Level 7 File Name	2-00020.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	919393	1006828	1003977	1015499	990930	980047	-1	------	------	------	------
3 di-Cl-di-F-methane	7698	51044	228452	508778	990705	1444214	-1	0.0000	0.2510	0.0000	0.0661
4 Chloromethane	8264	53373	208536	448729	864850	1174857	-1	0.0169	0.2027	0.0000	0.9966
2 F114	3209	27835	126949	275940	544934	783345	-1	0.0000	0.1313	0.0000	0.0645
5 vinyl chloride	7381	53695	219399	484855	949966	1312837	-1	0.0000	0.2424	0.0000	0.0861
6 bromomethane	3952	25743	105105	228520	411844	626111	-1	0.0000	0.1165	0.0000	0.1363
7 chloroethane	4460	34347	136103	266250	546077	758703	-1	0.0000	0.1443	0.0000	0.1208
8 tri-Cl-F-methane	11754	73985	311036	724847	1412342	1986417	-1	0.0000	0.3591	0.0000	0.1076
91 Acetonitrile X10	-1	110646	413272	845923	1639456	2365932	-1	0.0000	0.0439	0.0000	0.1416
9 acrolein X10	9511	67561	262941	513017	937791	1313901	-1	0.0306	0.0223	0.0000	0.9978
11 acetone X10	29124	106138	281400	497276	943071	1241915	-1	0.0622	0.0208	0.0000	0.9944
12 ethyl ether X5	22348	158277	587938	1189867	2188257	2883396	-1	0.0885	0.0991	0.0000	0.9929
13 11-dichloroethene	9522	62800	259067	562011	1088836	1490545	-1	0.0000	0.2867	0.0000	0.1231
14 Iodomethane	7324	57536	244664	532902	1022337	1206486	-1	0.0000	0.2534	0.0000	0.1075
15 F-113	8636	49466	193654	427782	814332	1086062	-1	0.0189	0.1881	0.0000	0.9947
16 acrylonitrile X10	14700	104060	420553	831510	1601521	2352958	-1	0.0000	0.0447	0.0000	0.1361
17 carbon disulfide	23125	156993	656825	1480814	2862257	3817157	-1	0.0000	0.7288	0.0000	0.1000
94 Isopropyl Alcoholx10	4021	15273	46223	124874	265806	369178	-1	-0.0027	0.0064	0.0000	0.9954
18 methylene chloride	36501	97000	257935	510536	960233	1435510	-1	0.0322	0.2370	0.0000	0.9996
19 t-12-di-Cl-ethene	8180	61414	249312	531623	1015155	1488348	-1	0.0000	0.2701	0.0000	0.0899
20 t-Bu-Me-ether	13066	102540	420692	866584	1693079	2598506	-1	0.0000	0.4496	0.0000	0.0781
95 Tert butyl alcoholx10	-1	28855	98345	205914	482970	785022	-1	-0.0326	0.0135	0.0000	0.9918

94 allyl chloride	-1	110646	413272	845923	1216384	1660968	-1	0.0000	0.3934	0.0000	0.2697
21 11-dichloroethane	14292	97373	381929	825889	1598207	2404444	-1	0.0000	0.4335	0.0000	0.1252
97 propionitrile	-1	4103	13637	33328	64498	101359	-1	0.0000	0.0168	0.0000	0.1453
22 c-12-di-Cl-ethene	8154	62676	253306	533706	1019103	1499328	-1	0.0000	0.2723	0.0000	0.0912
23 22-Dichloropropane	10809	72464	281116	589735	1098975	1539718	-1	0.0244	0.2629	0.0000	0.9982
24 Br-Cl-methane	4359	30212	117713	250220	483734	716534	-1	0.0000	0.1321	0.0000	0.1312
25 chloroform	19972	106303	398005	838697	1597118	2387736	-1	0.0108	0.4031	0.0000	0.9998
26 tetrahydrofuranX5	4965	35404	154519	318868	624422	946730	-1	0.0000	0.0328	0.0000	0.0666
98 Diisopropyl ether	17882	159533	636576	1326012	2521921	3767835	-1	0.0000	0.6674	0.0000	0.0923
27 Di-Br-F-Me (surr)	-1	59230	230740	486919	949109	1428311	-1	0.0000	0.2492	0.0000	0.1027
99 ETBE	12061	107588	486462	1064815	2106754	3231163	-1	0.0000	0.5102	0.0000	0.0820
29 1,2-Di-Cl-Et-d4 (S1)	-1	50036	187219	388784	757790	1126883	-1	0.0000	0.2018	0.0000	0.1296
30 12-dichloroethane	2582	18795	70404	142937	277276	411282	-1	0.0020	0.0695	0.0000	0.9999
32 vinyl acetate X5	43949	379164	1608933	2957025	5653569	8226056	-1	0.0000	0.3120	0.0000	0.1153
92 Nitro Methane(x10)	-1	12060	47784	111334	237578	325914	-1	0.0000	0.0056	0.0000	0.0909
33 2-butanoneMEK X10	22369	123309	444332	875377	1648493	2411259	-1	0.0340	0.0406	0.0000	0.9998
93 Ethyl Acetate x2	9671	54370	220002	434881	845931	1295021	-1	0.0014	0.1088	0.0000	0.9995
34 111-trichloroethane	13204	87716	354801	785718	1524561	2222673	-1	0.0000	0.4029	0.0000	0.1136
35 11-Di-Cl-propene	7463	61583	285223	660985	1285689	1859527	-1	0.0000	0.3044	0.0000	0.0740
36 benzene	30808	233485	926403	1995763	3805709	5575015	-1	0.0000	1.0150	0.0000	0.0969
37 CCl4	11983	79844	329846	732441	1420059	2060040	-1	0.0000	0.3715	0.0000	0.1020

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
100 Isobutyl alcoholx10	457	10371	40745	87337	182637	287972	-1	------	------	------	------
38 thiophene	12985	115327	473132	1025220	1999457	2960047	-1	0.0000	0.5046	0.0000	0.0736
39 12-di-Cl-propane	6808	50516	204989	446632	875952	1293157	-1	0.0000	0.2271	0.0000	0.0793
40 trichloroethene	9774	67466	274815	633192	1246934	1815606	-1	0.0000	0.3164	0.0000	0.0859
41 dibromomethane	4889	32002	126997	270225	530196	793122	-1	0.0000	0.1441	0.0000	0.1368
101 TAME	9699	90788	421379	938326	1872529	2927534	-1	0.0000	0.4424	0.0000	0.1161
42 Br-di-Cl-methane	11934	72312	281223	604352	1181950	1745648	-1	0.0014	0.2967	0.0000	0.9998
43 Me-methacrylate	1794	19729	100519	228095	464768	714088	-1	-0.0114	0.1219	0.0000	0.9990
44 2-ClEt-Vi-ether10	2834	31796	189485	514977	1130652	-1	-1	-0.0446	0.0290	0.0000	0.9927
45 c-13-di-Cl-propene	8596	71992	308098	676158	1328342	1977341	-1	0.0000	0.3301	0.0000	0.0559
46 t-1,3-dichloropropene	6273	54825	247619	547714	1100371	1653172	-1	0.0000	0.2625	0.0000	0.0800
47 Chlorobezene-d5	683445	775455	774184	772935	739886	736062	-1	0.0000	1.0000	0.0000	0.0000

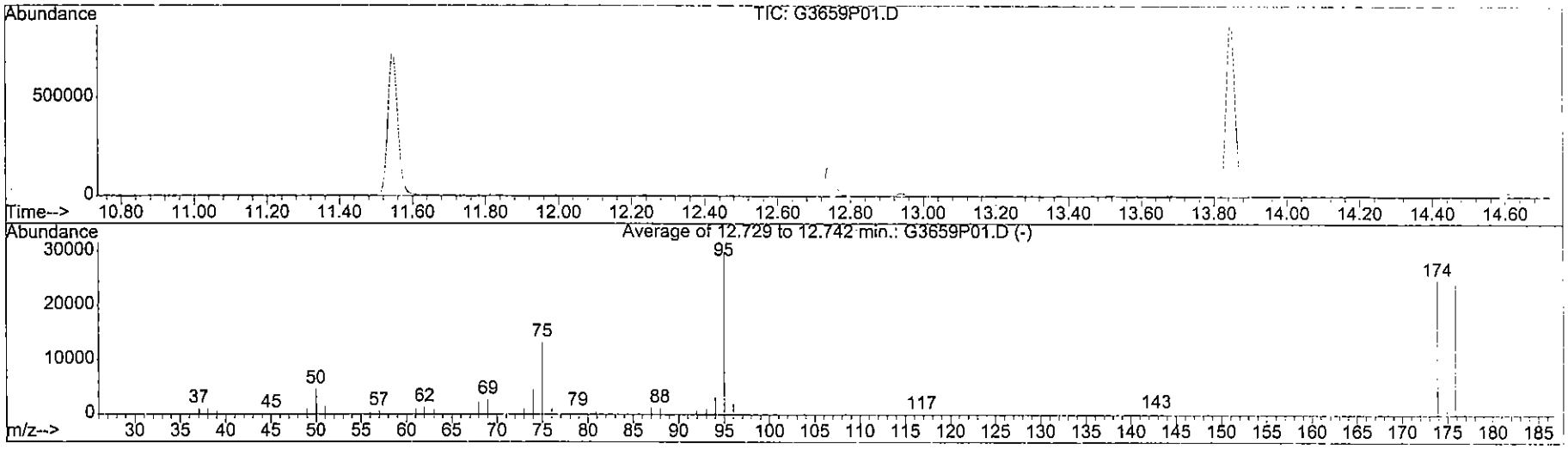
48 112-tri-Cl-Et	5902	42713	164770	343401	662895	997315	-1	0.0000	0.2413	0.0000	0.1317
49 13-di-Cl-propane	8941	66977	268452	552557	1062190	1558760	-1	0.0000	0.3807	0.0000	0.1091
50 Et methacrylate	3865	41714	210769	443099	890456	1418605	-1	-0.0322	0.3197	0.0000	0.9978

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
51 di-Br-Cl-methane	8661	52843	213283	456818	899440	1365305	-1	-0.0111	0.3087	0.0000	0.9994
52 bromoform	4560	29809	123106	263988	534402	823804	-1	0.0000	0.1852	0.0000	0.1170
53 1,4-dichlorobutane-2	8296	61397	241554	510059	1005306	1519089	-1	0.0000	0.3544	0.0000	0.1053
54 MIBK	2701	22334	103475	222364	457366	733371	-1	0.0000	0.1456	0.0000	0.0889
55 toluene-d8	27570	211476	874470	1923324	3719816	5400714	-1	0.0000	1.2603	0.0000	0.0678
56 toluene	29681	252340	1018191	2227432	4284454	6235319	-1	0.0000	1.4484	0.0000	0.0698
57 2-hexanone X5	10224	84522	356146	728526	1453530	2205707	-1	0.0000	0.0989	0.0000	0.0595
58 12-dibromoethane	5621	39459	162435	343609	688415	1038913	-1	0.0000	0.2381	0.0000	0.0968
59 tetra-Cl-ethene	10167	72027	292262	659769	1256084	1800306	-1	0.0000	0.4328	0.0000	0.0968
60 chlorobenzene	26600	179300	691236	1494861	2837497	4059222	-1	0.0338	0.9255	0.0000	0.9991
61 1112-tetra-Cl-Et	9159	63898	245258	525072	1031299	1537036	-1	0.0000	0.3686	0.0000	0.1347
62 1,4-Dichlorobenzene-d4	358277	419640	407774	393961	367099	365124	-1	0.0000	1.0000	0.0000	0.0000
63 1-chlorohexane	2893	25946	118729	280119	548810	784184	-1	0.0000	0.3261	0.0000	0.1294
64 Et-Bz	33015	273886	1133719	2529977	4833949	6913463	-1	0.0000	3.1290	0.0000	0.0601
65 m/p-Xylenes X2	49281	436018	1773476	3842318	7112016	9936549	-1	0.0000	2.3654	0.0000	0.0637
66 styrene	15818	166023	695954	1498467	2811895	3981902	-1	0.0000	1.7985	0.0000	0.1032
67 o-xylene	21010	210456	917264	1990843	3763083	5341093	-1	0.0000	2.3732	0.0000	0.0983
68 1122-Tetra-Cl-Et	7086	48249	186045	374484	736112	1101133	-1	0.0000	0.5283	0.0000	0.1434
69 123-tri-Cl-Pr	1994	14801	56224	114784	222436	332760	-1	0.0000	0.1581	0.0000	0.1176
70 4-Br-1-F-Bz (S3)	10243	73535	287803	629095	1208574	1766234	-1	0.0000	0.8271	0.0000	0.1001
71 isopropylbenzene	24316	252585	1164869	2648278	5083237	7208570	-1	0.0000	3.0403	0.0000	0.1458
72 bromobenzene	9030	73980	293172	635461	1236729	1774887	-1	0.0000	0.8166	0.0000	0.0673
92 t-1,4-dichloro-2-butene	406	6524	30509	64587	137632	207953	-1	-0.0118	0.0961	0.0000	0.9978
73 n-propylbenzene	8157	83853	353478	802663	1558540	2210026	-1	0.0000	0.9523	0.0000	0.1210
74 2-Cl-Toluene	8123	74427	309252	685694	1328259	1912837	-1	0.0000	0.8415	0.0000	0.0790
75 4-Cl-Toluene	9172	80121	308786	677984	1291985	1819259	-1	0.0000	0.8560	0.0000	0.0752
76 135-tri-Me-Benzene	21830	240336	1005234	2217776	4186569	5867539	-1	0.0000	2.6173	0.0000	0.1238
77 4-iso-Pr-toluene	24508	264794	1111631	2489320	4727712	6567533	-1	0.0000	2.9230	0.0000	0.1239
78 124-tri-Me-Benzene	24365	252796	1026195	2248874	4305294	6074118	-1	0.0000	2.7257	0.0000	0.1034
79 tert-butylbenzene	21932	200692	1030129	2077031	4034706	5816456	-1	0.0000	2.4995	0.0000	0.1024

80 13-DCB	21374	158442	605258	1313556	2467081	3488098	-1	0.0000	1.7167	0.0000	0.1095
81 sec-butylbenzene	29181	304851	1334960	3039109	5779243	8084394	-1	0.0000	3.5174	0.0000	0.1295
82 14-DCB	24079	155998	594167	1295125	2472135	3533637	-1	-0.0003	1.6325	0.0000	0.9988
83 Cl-benzyl	1764	13306	63403	132793	265795	361085	-1	0.0000	0.1654	0.0000	0.0541
84 12-DCB	18942	145496	540526	1153351	2171646	3083911	-1	0.0000	1.5286	0.0000	0.1167
85 n-butylbenzene	5679	66251	298215	689097	1335543	1846727	-1	-0.0178	0.8660	0.0000	0.9968
86 12-diBr-2-Cl-Pra	1180	8757	37194	80335	173925	263112	-1	0.0000	0.1076	0.0000	0.1009
87 124-tri-Cl-Bz	9061	77700	360446	838928	1658990	2390948	-1	0.0000	0.9898	0.0000	0.1216
88 naphthalene	23839	152715	581293	1300980	2689379	4011635	-1	0.0000	1.7961	0.0000	0.1450
89 hx-Cl-butadiene	6922	52135	209577	472099	923440	1288580	-1	0.0000	0.5992	0.0000	0.0774
90 123-Tri-Cl-Bz	9124	73440	317007	719921	1423460	2068944	-1	0.0000	0.8881	0.0000	0.0786

BFB

Data File : C:\MSDCHEM\1\DATA\03G3659\G3659P01.D Vial: 1
Acq On : 11 Aug 2003 10:14 am Operator: zou
Sample : ##03g3659,w 50ng Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p
Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2



Spectrum Information: Average of 12.729 to 12.742 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.5	4665	PASS
75	95	30	60	44.1	13288	PASS
95	95	100	100	100.0	30159	PASS
96	95	5	9	7.5	2271	PASS
173	174	0.00	2	0.5	114	PASS
174	95	50	100	82.3	24811	PASS
175	174	5	9	8.0	1991	PASS
176	174	95	101	97.9	24285	PASS
177	176	5	9	6.3	1535	PASS

G3659P01.D E524A002.M Mon Aug 11 15:57:30 2003

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:	034534
Project ID:	JPL	BFB Inj. Date:	08/11/03	Batch No:	03G3659
		BFB Inj. Time:	10:14	Sequence No:	03G3659
Project No:	04-4428.10	Instrument ID:	A	GC Column:	HP-VOC
Data File Name:	G3659P01	Heated Purge: (Y/N)	N	Column ID:	0.20 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	03G3659-CCV-01	03G3659-CCV-01	G3659Q01	08/11/03	10:40
2	03G3659-LCS-01	03G3659-LCS-01	G3659L01	08/11/03	11:06
3	03G3659-MB-01	03G3659-MB-01	G3659K01	08/11/03	13:18
4	TB-6-8-7-03	03-4534-12	4534-12	08/11/03	13:45
5	EB-6-8-7-03	03-4534-1	4534-01	08/11/03	14:11
6	MW-24-1	03-4534-8	4534-08	08/11/03	15:04
7	MW-24-2	03-4534-9	4534-09	08/11/03	15:31
8	MW-24-3	03-4534-10	4534-10	08/11/03	15:57
9	MW-12-4MS	03-4572-6MS	G3659M02	08/11/03	21:14
10	MW-12-4MSD	03-4572-6MSD	G3659N02	08/11/03	21:40
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Continuing Calibration Concentration Summary

Data File G3659Q01
Method File E524A002

Compound Name	Amount	Actual	Units	%Dev	Target Response
1 Fluorobenzene	10	10.00	ppb	0.00	764133
3 di-Cl-di-F-methane	20	17.70	ppb	11.52	339443
4 Chloromethane	20	15.64	ppb	21.82	255103
2 F114	20	19.72	ppb	1.42	197749
5 vinyl chloride	20	17.40	ppb	12.98	322358
6 bromomethane	20	12.76	ppb	36.22	113517
7 chloroethane	20	18.70	ppb	6.52	206129
8 tri-Cl-F-methane	20	19.13	ppb	4.34	524924
91 Acetonitrile X10	200	174.31	ppb	12.84	584362
9 acrolein X10	200	197.96	ppb	1.02	360446
11 acetone X10	200	292.02	ppb	46.01	511834
12 ethyl ether X5	100	102.57	ppb	2.57	844649
13 11-dichloroethene	20	18.56	ppb	7.20	406590
14 Iodomethane	20	8.59	ppb	57.07	166238
15 F-113	20	21.13	ppb	5.64	318205
16 acrylonitrile X10	200	166.07	ppb	16.97	567276
17 carbon disulfide	20	17.54	ppb	12.31	976666
94 Isopropyl Alcoholx10	200	166.25	ppb	16.87	79517
18 methylene chloride	20	18.96	ppb	5.18	368132
19 t-12-di-Cl-ethene	20	17.88	ppb	10.62	368993
20 t-Bu-Me-ether	20	17.60	ppb	12.00	604643
95 Tert butyl alcoholx10	200	169.66	ppb	15.17	149992
94 allyl chloride	20	19.44	ppb	2.80	584362
21 11-dichloroethane	20	17.33	ppb	13.35	574058
97 propionitrile	20	18.62	ppb	6.90	23869
22 c-12-di-Cl-ethene	20	18.24	ppb	8.82	379501
23 22-Dichloropropane	20	24.79	ppb	23.94	516622
24 Br-Cl-methane	20	17.45	ppb	12.74	176116
25 chloroform	20	19.68	ppb	1.62	614292
26 tetrahydrofuranX5	100	82.15	ppb	17.85	206156
98 Diisopropyl ether	20	17.85	ppb	10.77	910176
27 Di-Br-F-Me (surr)	20	18.81	ppb	5.97	358122
99 ETBE	20	18.67	ppb	6.66	727874
29 1,2-Di-Cl-Et-d4 (S1)	20	18.49	ppb	7.56	285144
30 12-dichloroethane	20	19.93	ppb	0.37	107389
32 vinyl acetate X5	100	93.14	ppb	6.86	2220559
92 Nitro Methane(x10)	200	186.18	ppb	6.91	79006
33 2-butanoneMEK X10	200	210.61	ppb	5.30	679357
93 Ethyl Acetate x2	40	32.96	ppb	17.60	275070
34 111-trichloroethane	20	18.79	ppb	6.07	578308
35 11-Di-Cl-propene	20	19.70	ppb	1.52	458172
36 benzene	20	17.89	ppb	10.56	1387345
37 CCl4	20	19.69	ppb	1.57	558782

Compound Name	Amount	Actual	Units	%Dev	Target Response
100 Isobutyl alcoholx10	200	158.40	ppb	20.80	55273
38 thiophene	20	18.62	ppb	6.90	717865
39 12-di-Cl-propane	20	17.61	ppb	11.94	305636
40 trichloroethene	20	18.51	ppb	7.44	447547
41 dibromomethane	20	17.43	ppb	12.86	191858
101 TAME	20	18.74	ppb	6.29	633612
42 Br-di-Cl-methane	20	19.18	ppb	4.10	435941
43 Me-methacrylate	20	16.44	ppb	17.82	144340
44 2-ClEt-Vi-ether10	200	98.28	ppb	50.86	183472
45 c-13-di-Cl-propene	20	19.55	ppb	2.27	492981
46 t-1,3-dichloropropene	20	20.01	ppb	0.07	401404
47 Chlorobezene-d5	10	10.00	ppb	0.00	595141
48 112-tri-Cl-Et	20	17.14	ppb	14.32	246121
49 13-di-Cl-propane	20	17.42	ppb	12.88	394744
50 Et methacrylate	20	17.26	ppb	13.72	309091

Compound Name	Amount	Actual	Units	%Dev	Target Response
51 di-Br-Cl-methane	20	18.64	ppb	6.78	335964
52 bromoform	20	17.42	ppb	12.89	192070
53 1,4-dichlorobutane-2	20	17.02	ppb	14.88	359028
54 MIBK	20	16.01	ppb	19.95	138771
55 toluene-d8	20	18.41	ppb	7.94	1380968
56 toluene	20	18.32	ppb	8.39	1579323
57 2-hexanone X5	100	86.48	ppb	13.52	508775
58 12-dibromoethane	20	17.13	ppb	14.35	242728
59 tetra-Cl-ethene	20	18.62	ppb	6.88	479686
60 chlorobenzene	20	19.60	ppb	2.02	1099490
61 1112-tetra-Cl-Et	20	17.79	ppb	11.03	390340
62 1,4-Dichlorobenzene-d4	10	10.00	ppb	0.00	318055
63 1-chlorohexane	20	19.99	ppb	0.07	207296
64 Et-Bz	20	18.55	ppb	7.27	1845608
65 m/p-Xylenes X2	40	37.95	ppb	5.12	2855210
66 styrene	20	19.20	PPB	4.02	1097995
67 o-xylene	20	19.42	ppb	2.88	1466176
68 1122-Tetra-Cl-Et	20	15.78	ppb	21.12	265064
69 123-tri-Cl-Pr	20	16.52	ppb	17.38	83112
70 4-Br-1-F-Bz (S3)	20	17.74	ppb	11.29	466731
71 isopropylbenzene	20	20.19	ppb	0.96	1952530
72 bromobenzene	20	18.09	ppb	9.54	469862
92 t-1,4-dichloro-2-butene	20	17.90	ppb	10.49	50934
73 n-propylbenzene	20	19.96	ppb	0.22	604443
74 2-Cl-Toluene	20	19.12	ppb	4.40	511745
75 4-Cl-Toluene	20	18.85	ppb	5.76	513142
76 135-tri-Me-Benzene	20	20.09	ppb	0.46	1672635
77 4-iso-Pr-toluene	20	20.52	ppb	2.59	1907530
78 124-tri-Me-Benzene	20	19.69	ppb	1.53	1707247
79 tert-butylbenzene	20	19.74	ppb	1.28	1569659
80 13-DCB	20	18.08	ppb	9.59	987293
81 sec-butylbenzene	20	20.38	ppb	1.88	2279521

82 14-DCB	20	18.83	ppb	5.84	977724
83 Cl-benzyl	20	24.78	ppb	23.91	130389
84 12-DCB	20	17.69	ppb	11.57	859875
85 n-butylbenzene	20	19.56	ppb	2.19	533156
86 12-diBr-2-Cl-Pra	20	16.72	ppb	16.42	57226
87 124-tri-Cl-Bz	20	20.19	ppb	0.96	635630
88 naphthalene	20	16.78	ppb	16.09	958708
89 hx-Cl-butadiene	20	19.46	ppb	2.70	370879
90 123-Tri-Cl-Bz	20	19.27	ppb	3.64	544416

Average D % 9.9459377

Evaluate Continuing Calibration Report

1655

Data File : C:\MSDCHEM\1\DATA\03G3659\G3659Q01.D Vial: 2
Acq On : 11 Aug 2003 10:40 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

			Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1	Fluorobenzene	1.000	1.000	0.0	75	0.02
2		3	di-Cl-di-F-methane	0.251	0.222	11.6	67	0.04
3	p	4	Chloromethane	0.235	0.167	28.9#	57	0.04
4		2	F114	0.131	0.129	1.5	72	0.04
5	C	5	vinyl chloride	0.242	0.211	12.8	66	0.04
6		6	bromomethane	0.116	0.074	36.2#	50#	0.04
7		7	chloroethane	0.144	0.135	6.2	77	0.03
8		8	tri-Cl-F-methane	0.359	0.343	4.5	72	0.04
9		91	Acetonitrile X10	0.044	0.038	13.6	69	0.03
10		9	acrolein X10	0.028	0.024	14.3	70	0.04
11		11	acetone X10	0.043	0.033	23.3#	103	0.04
12		12	ethyl ether X5	0.127	0.111	12.6	71	0.04
13	M, C	13	11-dichloroethene	0.287	0.266	7.3	72	0.04
14		14	Iodomethane	0.253	0.109	56.9#	31#	0.04
15		15	F-113	0.225	0.208	7.6	74	0.04
16		16	acrylonitrile X10	0.045	0.037	17.8	68	0.03
17		17	carbon disulfide	0.729	0.639	12.3	66	0.04
18		94	Isopropyl Alcoholx10	0.008	0.005	37.5#	64	0.10
19		18	methylene chloride	0.467	0.241	48.4#	72	0.04
20		19	t-12-di-Cl-ethene	0.270	0.241	10.7	69	0.04
21		20	t-Bu-Me-ether	0.450	0.396	12.0	70	0.04
22		95	Tert butyl alcoholx10	0.012	0.010	16.7	73	0.06
23		94	allyl chloride	0.393	0.382	2.8	69	0.03
24	p	21	11-dichloroethane	0.433	0.376	13.2	70	0.03
25		97	propionitrile	0.017	0.016	5.9	72	0.03
26		22	c-12-di-Cl-ethene	0.272	0.248	8.8	71	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\03G3659\G3659Q01.D Vial: 2
Acq On : 11 Aug 2003 10:40 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

1656

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
27		23 22-Dichloropropane	0.310	0.338	-9.0	88	0.03
28		24 Br-Cl-methane	0.132	0.115	12.9	70	0.02
29	C	25 chloroform	0.478	0.402	15.9	73	0.03
30		26 tetrahydrofuranX5	0.033	0.027	18.2	65	0.02
31		98 Diisopropyl ether	0.667	0.596	10.6	69	0.02
32	S	27 Di-Br-F-Me (surr)	0.249	0.234	6.0	74	0.03
33		99 ETBE	0.510	0.476	6.7	68	0.02
34	S	29 1,2-Di-Cl-Et-d4 (S1)	0.202	0.187	7.4	73	0.03
35		30 12-dichloroethane	0.078	0.070	10.3	75	0.02
36		32 vinyl acetate X5	0.312	0.291	6.7	75	0.03
37		92 Nitro Methane(x10)	0.006	0.005	16.7	71	0.03
38		33 2-butanoneMEK X10	0.052	0.044	15.4	78	0.03
39		93 Ethyl Acetate x2	0.124	0.090	27.4#	63	0.02
40		34 111-trichloroethane	0.403	0.378	6.2	74	0.02
41		35 11-Di-Cl-propene	0.304	0.300	1.3	69	0.02
42	M	36 benzene	1.015	0.908	10.5	70	0.02
43		37 CCl4	0.371	0.366	1.3	76	0.02
44		100 Isobutyl alcoholx10	0.004	0.004	0.0	63	-0.22
45		38 thiophene	0.505	0.470	6.9	70	0.02
46	C	39 12-di-Cl-propane	0.227	0.200	11.9	68	0.02
47	M	40 trichloroethene	0.316	0.293	7.3	71	0.01
48		41 dibromomethane	0.144	0.126	12.5	71	0.01
49		101 TAME	0.442	0.415	6.1	68	0.02
50		42 Br-di-Cl-methane	0.327	0.285	12.8	72	0.01
51		43 Me-methacrylate	0.102	0.094	7.8	63	0.01
52		44 2-ClEt-Vi-ether10	0.020	0.012	40.0#	36#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\03G3659\G3659Q01.D Vial: 2
Acq On : 11 Aug 2003 10:40 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

			Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		45	c-13-di-Cl-propene	0.330	0.323	2.1	73	0.01
54		46	t-1,3-dichloropropene	0.262	0.263	-0.4	73	0.00
55	I	47	Chlorobezene-d5	1.000	1.000	0.0	77	0.00
56		48	112-tri-Cl-Et	0.241	0.207	14.1	72	0.00
57		49	13-di-Cl-propane	0.381	0.332	12.9	71	0.00
58		50	Et methacrylate	0.273	0.260	4.8	70	0.00
59		51	di-Br-Cl-methane	0.325	0.282	13.2	74	0.00
60	P	52	bromoform	0.185	0.161	13.0	73	0.00
61		53	1,4-dichlorobutane-2	0.354	0.302	14.7	70	0.00
62		54	MIBK	0.146	0.117	19.9	62	0.00
63	s	55	toluene-d8	1.260	1.160	7.9	72	0.01
64	M,C	56	toluene	1.448	1.327	8.4	71	0.00
65		57	2-hexanone X5	0.099	0.085	14.1	70	0.00
66		58	12-dibromoethane	0.238	0.204	14.3	71	0.00
67		59	tetra-Cl-ethene	0.433	0.403	6.9	73	0.00
68	M,P	60	chlorobenzene	1.032	0.924	10.5	74	0.00
69		61	1112-tetra-Cl-Et	0.369	0.328	11.1	74	0.00
70	I	62	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
71		63	1-chlorohexane	0.326	0.326	0.0	74	0.00
72	C	64	Et-Bz	3.129	2.901	7.3	73	0.00
73		65	m/p-Xylenes X2	2.365	2.244	5.1	74	0.00
74		66	styrene	1.798	1.726	4.0	73	0.00
75		67	o-xylene	2.373	2.305	2.9	74	0.00
76	p	68	1122-Tetra-Cl-Et	0.528	0.417	21.0#	71	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

1658

Data File : C:\MSDCHEM\1\DATA\03G3659\G3659Q01.D Vial: 2
Acq On : 11 Aug 2003 10:40 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

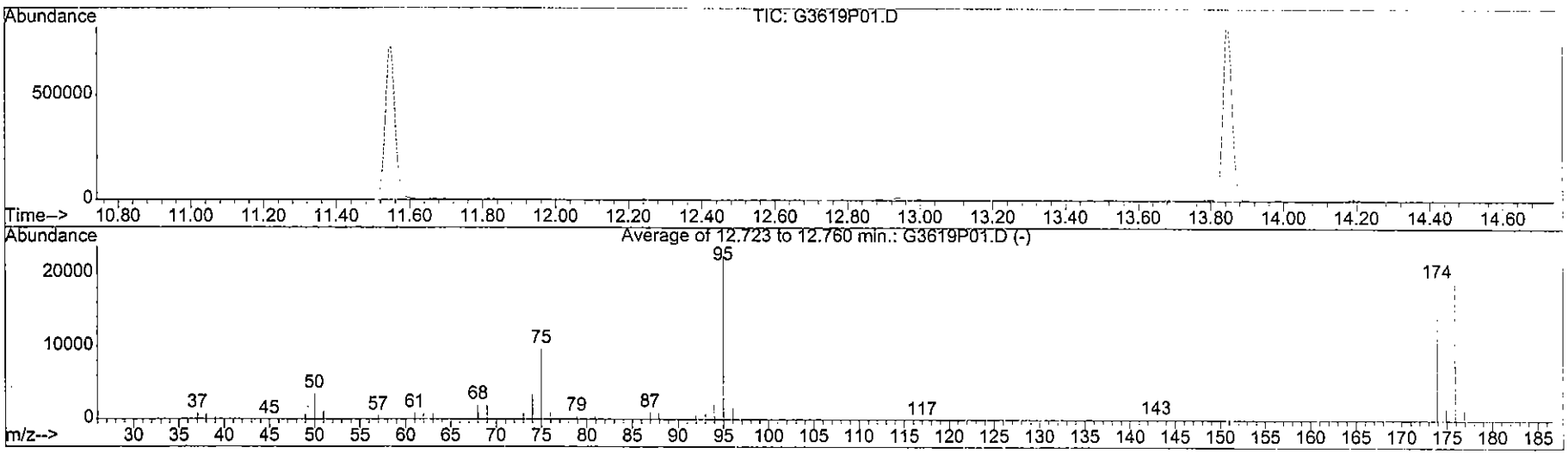
Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77		69 123-tri-Cl-Pr	0.158	0.131	17.1	72	0.00
78	S	70 4-Br-1-F-Bz (S3)	0.827	0.734	11.2	74	0.00
79		71 isopropylbenzene	3.040	3.069	-1.0	74	0.00
80		72 bromobenzene	0.817	0.739	9.5	74	0.00
81		92 t-1,4-dichloro-2-butene	0.077	0.080	-3.9	79	0.00
82		73 n-propylbenzene	0.952	0.950	0.2	75	0.00
83		74 2-Cl-Toluene	0.841	0.804	4.4	75	0.00
84		75 4-Cl-Toluene	0.856	0.807	5.7	76	0.00
85		76 135-tri-Me-Benzene	2.617	2.629	-0.5	75	0.00
86		77 4-iso-Pr-toluene	2.923	2.999	-2.6	77	0.00
87		78 124-tri-Me-Benzene	2.726	2.684	1.5	76	0.00
88		79 tert-butylbenzene	2.499	2.468	1.2	76	0.00
89		80 13-DCB	1.717	1.552	9.6	75	0.00
90		81 sec-butylbenzene	3.517	3.584	-1.9	75	0.00
91		82 14-DCB	1.749	1.537	12.1	75	0.00
92		83 Cl-benzyl	0.165	0.205	-24.2#	98	0.00
93		84 12-DCB	1.529	1.352	11.6	75	0.00
94		85 n-butylbenzene	0.779	0.838	-7.6	77	0.00
95		86 12-diBr-2-Cl-Pra	0.108	0.090	16.7	71	0.00
96		87 124-tri-Cl-Bz	0.990	0.999	-0.9	76	0.00
97		88 naphthalene	1.796	1.507	16.1	74	0.00
98		89 hx-Cl-butadiene	0.599	0.583	2.7	79	0.00
99		90 123-Tri-Cl-Bz	0.888	0.856	3.6	76	0.00

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

BFB

Data File : C:\MSDCHEM\1\DATA\03G3619\G3619P01.D Vial: 1
Acq On : 8 Aug 2003 10:20 am Operator: zou
Sample : ##03g3619,w 50ng Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p
Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2



Spectrum Information: Average of 12.723 to 12.760 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	15.7	3543	PASS
75	95	30	60	43.2	9759	PASS
95	95	100	100	100.0	22616	PASS
96	95	5	9	7.4	1670	PASS
173	174	0.00	2	0.5	88	PASS
174	95	50	100	84.3	19060	PASS
175	174	5	9	8.9	1695	PASS
176	174	95	101	99.9	19044	PASS
177	176	5	9	7.6	1443	PASS

G3619P01.D E524A002.M Fri Aug 08 17:50:53 2003

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:	034534
Project ID:	JPL	BFB Inj. Date:	08/08/03	Batch No:	03G3619
		BFB Inj. Time:	10:20	Sequence No:	03G3619
Project No:	04-4428.10	Instrument ID:	A	GC Column:	HP-VOC
Data File Name:	G3619P01	Heated Purge: (Y/N)	N	Column ID:	0.20 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	03G3619-CCV-01	03G3619-CCV-01	G3619Q01	08/08/03	10:46
2	03G3619-LCS-01	03G3619-LCS-01	G3619L01	08/08/03	11:12
3	MW-4-2MS	03-4455-4MS	G3619M01	08/08/03	11:40
4	MW-4-2MSD	03-4455-4MSD	G3619N01	08/08/03	12:06
5	03G3619-MB-01	03G3619-MB-01	G3619K01	08/08/03	13:25
6	MW-11-1	03-4534-2	4534-02	08/08/03	19:38
7	MW-11-2	03-4534-3	4534-03	08/08/03	20:04
8	MW-11-3	03-4534-4	4534-04	08/08/03	20:30
9	MW-11-4	03-4534-5	4534-05	08/08/03	20:56
10	MW-14-4	03-4534-6	4534-06	08/08/03	21:22
11	MW-14-5	03-4534-7	4534-07	08/08/03	21:49
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Evaluate Continuing Calibration Report

1661

Data File : C:\MSDCHEM\1\DATA\03G3619\G3619Q01.D Vial: 2
Acq On : 8 Aug 2003 10:46 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

			Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	1	Fluorobenzene	1.000	1.000	0.0	75	0.02
2		3	di-Cl-di-F-methane	0.251	0.231	8.0	69	0.04
3	p	4	Chloromethane	0.235	0.164	30.2#	56	0.04
4		2	F114	0.131	0.132	-0.8	73	0.04
5	C	5	vinyl chloride	0.242	0.214	11.6	67	0.04
6		6	bromomethane	0.116	0.072	37.9#	48#	0.04
7		7	chloroethane	0.144	0.138	4.2	79	0.03
8		8	tri-Cl-F-methane	0.359	0.353	1.7	74	0.04
9		91	Acetonitrile X10	0.044	0.039	11.4	70	0.03
10		9	acrolein X10	0.028	0.024	14.3	72	0.04
11		11	acetone X10	0.043	0.034	20.9#	104	0.03
12		12	ethyl ether X5	0.127	0.112	11.8	72	0.04
13	M, C	13	11-dichloroethene	0.287	0.270	5.9	73	0.04
14		14	Iodomethane	0.253	0.095	62.5#	27#	0.04
15		15	F-113	0.225	0.211	6.2	75	0.04
16		16	acrylonitrile X10	0.045	0.038	15.6	70	0.03
17		17	carbon disulfide	0.729	0.675	7.4	69	0.03
18		94	Isopropyl Alcoholx10	0.008	0.006	25.0#	70	0.06
19		18	methylene chloride	0.467	0.236	49.5#	70	0.04
20		19	t-12-di-Cl-ethene	0.270	0.248	8.1	71	0.03
21		20	t-Bu-Me-ether	0.450	0.410	8.9	72	0.03
22		95	Tert butyl alcoholx10	0.012	0.011	8.3	78	0.03
23		94	allyl chloride	0.393	0.389	1.0	70	0.03
24	p	21	11-dichloroethane	0.433	0.383	11.5	71	0.03
25		97	propionitrile	0.017	0.014	17.6	66	0.02
26		22	c-12-di-Cl-ethene	0.272	0.252	7.4	72	0.02

(#) = Out of Range

Evaluate Continuing Calibration Report

1662

Data File : C:\MSDCHEM\1\DATA\03G3619\G3619Q01.D Vial: 2
Acq On : 8 Aug 2003 10:46 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
27		23 22-Dichloropropane	0.310	0.340	-9.7	88	0.03
28		24 Br-Cl-methane	0.132	0.119	9.8	73	0.02
29	C	25 chloroform	0.478	0.407	14.9	74	0.02
30		26 tetrahydrofuranX5	0.033	0.028	15.2	67	0.02
31		98 Diisopropyl ether	0.667	0.601	9.9	69	0.02
32	S	27 Di-Br-F-Me (surr)	0.249	0.236	5.2	74	0.03
33		99 ETBE	0.510	0.489	4.1	70	0.02
34	S	29 1,2-Di-Cl-Et-d4 (S1)	0.202	0.191	5.4	75	0.03
35		30 12-dichloroethane	0.078	0.072	7.7	77	0.02
36		32 vinyl acetate X5	0.312	0.303	2.9	78	0.03
37		92 Nitro Methane(x10)	0.006	0.005	16.7	73	0.03
38		33 2-butanoneMEK X10	0.052	0.046	11.5	80	0.03
39		93 Ethyl Acetate x2	0.124	0.097	21.8#	68	0.02
40		34 111-trichloroethane	0.403	0.384	4.7	74	0.02
41		35 11-Di-Cl-propene	0.304	0.308	-1.3	71	0.02
42	M	36 benzene	1.015	0.925	8.9	71	0.02
43		37 CCl4	0.371	0.369	0.5	77	0.02
44		100 Isobutyl alcoholx10	0.004	0.004	0.0	67	-0.23
45		38 thiophene	0.505	0.480	5.0	71	0.02
46	C	39 12-di-Cl-propane	0.227	0.203	10.6	69	0.02
47	M	40 trichloroethene	0.316	0.298	5.7	72	0.01
48		41 dibromomethane	0.144	0.130	9.7	73	0.01
49		101 TAME	0.442	0.429	2.9	70	0.02
50		42 Br-di-Cl-methane	0.327	0.290	11.3	73	0.01
51		43 Me-methacrylate	0.102	0.101	1.0	67	0.01
52		44 2-ClEt-Vi-ether10	0.020	0.014	30.0#	41#	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\03G3619\G3619Q01.D Vial: 2
Acq On : 8 Aug 2003 10:46 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

1663

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

			Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
53		45	c-13-di-Cl-propene	0.330	0.327	0.9	74	0.01
54		46	t-1,3-dichloropropene	0.262	0.270	-3.1	75	0.00
55	I	47	Chlorobezene-d5	1.000	1.000	0.0	77	0.00
56		48	112-tri-Cl-Et	0.241	0.213	11.6	74	0.00
57		49	13-di-Cl-propane	0.381	0.337	11.5	72	0.00
58		50	Et methacrylate	0.273	0.269	1.5	72	0.00
59		51	di-Br-Cl-methane	0.325	0.289	11.1	75	0.00
60	P	52	bromoform	0.185	0.166	10.3	75	0.00
61		53	1,4-dichlorobutane-2	0.354	0.307	13.3	72	0.00
62		54	MIBK	0.146	0.124	15.1	66	0.00
63	s	55	toluene-d8	1.260	1.176	6.7	73	0.01
64	M,C	56	toluene	1.448	1.364	5.8	73	0.00
65		57	2-hexanone X5	0.099	0.091	8.1	74	0.00
66		58	12-dibromoethane	0.238	0.212	10.9	73	0.00
67		59	tetra-Cl-ethene	0.433	0.412	4.8	74	0.00
68	M,P	60	chlorobenzene	1.032	0.935	9.4	74	0.00
69		61	1112-tetra-Cl-Et	0.369	0.332	10.0	75	0.00
70	I	62	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	80	0.00
71		63	1-chlorohexane	0.326	0.327	-0.3	73	0.00
72	C	64	Et-Bz	3.129	2.968	5.1	74	0.00
73		65	m/p-Xylenes X2	2.365	2.297	2.9	75	0.00
74		66	styrene	1.798	1.765	1.8	74	0.00
75		67	o-xylene	2.373	2.354	0.8	74	0.00
76	p	68	1122-Tetra-Cl-Et	0.528	0.433	18.0	73	0.00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\03G3619\G3619Q01.D Vial: 2
Acq On : 8 Aug 2003 10:46 am Operator: zou
Sample : f=1 Inst : GCMS-A
Misc : Multiplr: 1.00
MS Integration Params: Lscint.p

Method : C:\MSDCHEM\1\METHODS\E524A002.M (RTE Integrator)
Title : **Applied P &Ch Lab** EPA 524.2
Last Update : Thu Jul 24 12:40:35 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
77		69 123-tri-Cl-Pr	0.158	0.136	13.9	75	0.00
78	S	70 4-Br-1-F-Bz (S3)	0.827	0.752	9.1	75	0.00
79		71 isopropylbenzene	3.040	3.126	-2.8	74	0.00
80		72 bromobenzene	0.817	0.758	7.2	75	0.00
81		92 t-1,4-dichloro-2-butene	0.077	0.082	-6.5	80	0.00
82		73 n-propylbenzene	0.952	0.967	-1.6	76	0.00
83		74 2-Cl-Toluene	0.841	0.819	2.6	75	0.00
84		75 4-Cl-Toluene	0.856	0.820	4.2	76	0.00
85		76 135-tri-Me-Benzene	2.617	2.683	-2.5	76	0.00
86		77 4-iso-Pr-toluene	2.923	3.044	-4.1	77	0.00
87		78 124-tri-Me-Benzene	2.726	2.712	0.5	76	0.00
88		79 tert-butylbenzene	2.499	2.505	-0.2	76	0.00
89		80 13-DCB	1.717	1.598	6.9	77	0.00
90		81 sec-butylbenzene	3.517	3.644	-3.6	75	0.00
91		82 14-DCB	1.749	1.569	10.3	76	0.00
92		83 Cl-benzyl	0.165	0.217	-31.5#	103	0.00
93		84 12-DCB	1.529	1.392	9.0	76	0.00
94		85 n-butylbenzene	0.779	0.851	-9.2	78	0.00
95		86 12-diBr-2-Cl-Pra	0.108	0.094	13.0	73	0.00
96		87 124-tri-Cl-Bz	0.990	1.035	-4.5	78	0.00
97		88 naphthalene	1.796	1.573	12.4	76	0.00
98		89 hx-Cl-butadiene	0.599	0.596	0.5	79	0.00
99		90 123-Tri-Cl-Bz	0.888	0.881	0.8	77	0.00

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

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Continuing Calibration Concentration Summary

Data File G3619Q01
Method File E524A002

Compound Name	Amount	Actual	Units	%Dev	Target Response
1 Fluorobenzene	10	10.00	ppb	0.00	760914
3 di-Cl-di-F-methane	20	18.37	ppb	8.15	350895
4 Chloromethane	20	15.38	ppb	23.11	250056
2 F114	20	20.17	ppb	0.86	201480
5 vinyl chloride	20	17.66	ppb	11.69	325784
6 bromomethane	20	12.42	ppb	37.88	110085
7 chloroethane	20	19.17	ppb	4.17	210434
8 tri-Cl-F-methane	20	19.68	ppb	1.62	537597
91 Acetonitrile X10	200	177.11	ppb	11.44	591239
9 acrolein X10	200	204.26	ppb	2.13	369611
11 acetone X10	200	295.99	ppb	48.00	515963
12 ethyl ether X5	100	104.47	ppb	4.47	855474
13 11-dichloroethene	20	18.87	ppb	5.66	411575
14 Iodomethane	20	7.51	ppb	62.44	144854
15 F-113	20	21.47	ppb	7.33	321704
16 acrylonitrile X10	200	170.13	ppb	14.93	578709
17 carbon disulfide	20	18.51	ppb	7.44	1026499
94 Isopropyl Alcoholx10	200	183.40	ppb	8.30	87566
18 methylene chloride	20	18.53	ppb	7.34	358772
19 t-12-di-Cl-ethene	20	18.39	ppb	8.07	377936
20 t-Bu-Me-ether	20	18.25	ppb	8.73	624525
95 Tert butyl alcoholx10	200	180.58	ppb	9.71	160566
94 allyl chloride	20	19.75	ppb	1.24	591239
21 11-dichloroethane	20	17.68	ppb	11.59	583244
97 propionitrile	20	17.17	ppb	14.14	21919
22 c-12-di-Cl-ethene	20	18.48	ppb	7.61	382910
23 22-Dichloropropane	20	24.97	ppb	24.84	518023
24 Br-Cl-methane	20	18.07	ppb	9.64	181609
25 chloroform	20	19.93	ppb	0.34	619565
26 tetrahydrofuranX5	100	85.75	ppb	14.25	214291
98 Diisopropyl ether	20	18.01	ppb	9.97	914466
27 Di-Br-F-Me (surr)	20	18.93	ppb	5.36	358922
99 ETBE	20	19.15	ppb	4.25	743459
29 1,2-Di-Cl-Et-d4 (S1)	20	18.96	ppb	5.21	291164
30 12-dichloroethane	20	20.46	ppb	2.29	109753
32 vinyl acetate X5	100	96.99	ppb	3.01	2302550
92 Nitro Methane(x10)	200	192.79	ppb	3.60	81466
33 2-butanoneMEK X10	200	218.65	ppb	9.32	701333
93 Ethyl Acetate x2	40	35.61	ppb	10.97	295853
34 111-trichloroethane	20	19.06	ppb	4.70	584259
35 11-Di-Cl-propene	20	20.22	ppb	1.11	468409
36 benzene	20	18.22	ppb	8.89	1407278
37 CCl4	20	19.86	ppb	0.72	561205

Compound Name	Amount	Actual	Units	%Dev	Target Response
100 Isobutyl alcoholx10	200	166.67	ppb	16.67	58106
38 thiophene	20	19.04	ppb	4.82	730842
39 12-di-Cl-propane	20	17.88	ppb	10.62	308922
40 trichloroethene	20	18.87	ppb	5.65	454247
41 dibromomethane	20	18.06	ppb	9.72	197924
101 TAME	20	19.39	ppb	3.07	652583
42 Br-di-Cl-methane	20	19.52	ppb	2.38	441872
43 Me-methacrylate	20	17.47	ppb	12.63	153364
44 2-ClEt-Vi-ether10	200	111.81	ppb	44.09	212526
45 c-13-di-Cl-propene	20	19.84	ppb	0.82	498164
46 t-1,3-dichloropropene	20	20.54	ppb	2.69	410148
47 Chlorobezene-d5	10	10.00	ppb	0.00	594577
48 112-tri-Cl-Et	20	17.65	ppb	11.73	253337
49 13-di-Cl-propane	20	17.68	ppb	11.59	400223
50 Et methacrylate	20	17.81	ppb	10.94	319361

Compound Name	Amount	Actual	Units	%Dev	Target Response
51 di-Br-Cl-methane	20	19.10	ppb	4.50	344016
52 bromoform	20	17.87	ppb	10.66	196812
53 1,4-dichlorobutane-2	20	17.32	ppb	13.39	364953
54 MIBK	20	17.04	ppb	14.79	147582
55 toluene-d8	20	18.66	ppb	6.71	1398140
56 toluene	20	18.84	ppb	5.81	1622333
57 2-hexanone X5	100	91.67	ppb	8.33	538779
58 12-dibromoethane	20	17.77	ppb	11.15	251555
59 tetra-Cl-ethene	20	19.02	ppb	4.89	489478
60 chlorobenzene	20	19.83	ppb	0.83	1111537
61 1112-tetra-Cl-Et	20	17.99	ppb	10.05	394273
62 1,4-Dichlorobenzene-d4	10	10.00	ppb	0.00	314620
63 1-chlorohexane	20	20.05	ppb	0.27	205765
64 Et-Bz	20	18.97	ppb	5.13	1867831
65 m/p-Xylenes X2	40	38.84	ppb	2.90	2890463
66 styrene	20	19.63	PPB	1.85	1110739
67 o-xylene	20	19.84	ppb	0.80	1481328
68 1122-Tetra-Cl-Et	20	16.38	ppb	18.10	272231
69 123-tri-Cl-Pr	20	17.22	ppb	13.91	85659
70 4-Br-1-F-Bz (S3)	20	18.19	ppb	9.04	473414
71 isopropylbenzene	20	20.57	ppb	2.83	1967297
72 bromobenzene	20	18.56	ppb	7.22	476714
92 t-1,4-dichloro-2-butene	20	18.38	ppb	8.10	51829
73 n-propylbenzene	20	20.32	ppb	1.58	608713
74 2-Cl-Toluene	20	19.46	ppb	2.72	515117
75 4-Cl-Toluene	20	19.17	ppb	4.16	516213
76 135-tri-Me-Benzene	20	20.50	ppb	2.52	1688486
77 4-iso-Pr-toluene	20	20.83	ppb	4.15	1915619
78 124-tri-Me-Benzene	20	19.90	ppb	0.49	1706718
79 tert-butylbenzene	20	20.04	ppb	0.20	1575985
80 13-DCB	20	18.62	ppb	6.91	1005533
81 sec-butylbenzene	20	20.72	ppb	3.60	2292846

82 14-DCB	20	19.22	ppb	3.88	987220
83 Cl-benzyl	20	26.24	ppb	31.21	136574
84 12-DCB	20	18.21	ppb	8.93	875953
85 n-butylbenzene	20	19.87	ppb	0.67	535675
86 12-diBr-2-Cl-Pra	20	17.39	ppb	13.07	58878
87 124-tri-Cl-Bz	20	20.91	ppb	4.53	650992
88 naphthalene	20	17.52	ppb	12.42	989871
89 hx-Cl-butadiene	20	19.90	ppb	0.48	375234
90 123-Tri-Cl-Bz	20	19.85	ppb	0.76	554611

Average D % 8.4932066

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:	034534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		CCV Data File:	G3659Q01	Instrument ID:	A

Batch No: 03G3659

#	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			08/11/03 10:40	764133	7.65	595141	11.55	318055	13.84
CCV Upper Limit				1528266	8.15	1190282	12.05	636110	14.34
CCV Lower Limit				382066	7.15	297570	11.05	159027	13.34
1	03G3659-LCS-01	03G3659-LCS-01	08/11/03 11:06	777095	7.65	607472	11.55	315375	13.84
2	03G3659-MB-01	03G3659-MB-01	08/11/03 13:18	681858	7.65	580347	11.54	305392	13.84
3	TB-6-8-7-03	03-4534-12	08/11/03 13:45	677866	7.65	581586	11.55	312924	13.84
4	EB-6-8-7-03	03-4534-1	08/11/03 14:11	681250	7.65	566414	11.55	301495	13.85
5	MW-24-1	03-4534-8	08/11/03 15:04	670497	7.65	567157	11.55	297754	13.85
6	MW-24-2	03-4534-9	08/11/03 15:31	661864	7.65	564727	11.54	299987	13.84
7	MW-24-3	03-4534-10	08/11/03 15:57	658604	7.65	559386	11.54	298037	13.85
8	MW-12-4MS	03-4572-6MS	08/11/03 21:14	757966	7.64	592654	11.54	310822	13.84
9	MW-12-4MSD	03-4572-6MSD	08/11/03 21:40	801156	7.65	622097	11.54	325477	13.84
10									
11									
12									
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

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:	034534
Project ID:	JPL	Project No:	04-4428.10	Sample Matrix:	Water
		CCV Data File:	G3619Q01	Instrument ID:	A

Batch No: 03G3619

#	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			08/08/03 10:46	760914	7.65	594577	11.54	314620	13.84
CCV Upper Limit				1521828	8.15	1189154	12.04	629240	14.34
CCV Lower Limit				380457	7.15	297288	11.04	157310	13.34
1	03G3619-LCS-01	03G3619-LCS-01	08/08/03 11:12	789769	7.65	614802	11.54	323815	13.84
2	MW-4-2MS	03-4455-4MS	08/08/03 11:40	784993	7.64	592210	11.54	296302	13.84
3	MW-4-2MSD	03-4455-4MSD	08/08/03 12:06	821352	7.65	637228	11.54	327356	13.84
4	03G3619-MB-01	03G3619-MB-01	08/08/03 13:25	705734	7.65	577919	11.54	302850	13.84
5	MW-11-1	03-4534-2	08/08/03 19:38	664384	7.65	549929	11.55	285791	13.84
6	MW-11-2	03-4534-3	08/08/03 20:04	664730	7.65	552377	11.54	290381	13.84
7	MW-11-3	03-4534-4	08/08/03 20:30	668853	7.65	547701	11.55	286651	13.85
8	MW-11-4	03-4534-5	08/08/03 20:56	679537	7.65	554670	11.55	291894	13.85
9	MW-14-4	03-4534-6	08/08/03 21:22	662147	7.65	549660	11.55	294214	13.85
10	MW-14-5	03-4534-7	08/08/03 21:49	665690	7.65	547164	11.55	290008	13.85
11									
12									
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

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VOC-054

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

VOC Analysis General Logbook

Sequence # 03g3659 Batch # 03g3659 Matrix: W Date: 08/11/03 Analyst: Zou

[illegible] IS/Surrogate: GC-15114/15115 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Defoaming(mark-*DF*): _____

[illegible] + 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
2697	SP	G3659P01	E524A 002	25/25 = 1	/ =	/ =	1		G3659P01	08/11/03 10:14am	
2698	CCV	Q01		/ =	/ =	/ =			Q01	gc15535	
2699	LCS	L01		/ =	/ =	/ =			L01		
2700	MS	M01		/ =	/ =	/ =			M01	$4509-08	<2
2701	MSD	N01		/ =	/ =	/ =			N01	↓	↓
2702	MB	K01		/ =	/ =	/ =			K01		
2703	Sample	4534-12		/ =	/ =	/ =			4534-12		<2
2704		01		/ =	/ =	/ =			01		
2705		4509-08		/ =	/ =	/ =			4509-08		
2706		4534-08		/ =	/ =	/ =			4534-08		
2707		09		/ =	/ =	/ =			09		
2708		10		/ =	/ =	/ =			10		
2709		4572-01		/ =	/ =	/ =			4572-01		
2710		02		/ =	/ =	/ =			02		
2711		03		/ =	/ =	/ =			03		
2712		04		/ =	/ =	/ =			04		
2713		05		/ =	/ =	/ =			05		
2714		06		/ =	/ =	/ =			06		
2715		07		/ =	/ =	/ =			07		
2716		08		/ =	/ =	/ =			08		
2717		09		/ =	/ =	/ =			09		
2718		10		/ =	/ =	/ =			10		
2719		11		/ =	/ =	/ =			11		
2720		G3659M02		/ =	/ =	/ =			G3659M02	$4572-06	
2721	↓	↓ N02	↓	↓ / ↓ = ↓	/ =	/ =	↓		↓ N02	↓	↓
2722				/ =	/ =	/ =					
2723				/ =	/ =	/ =					
2724				/ =	/ =	/ =					
2725				/ =	/ =	/ =					
2726				/ =	/ =	/ =					
2727				/ =	/ =	/ =					
2728				/ =	/ =	/ =					

08/12/03

Type	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g\ or\ mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g\ or\ mL)=T$
CS/LCSD	2699	GC- 15536	200 × 2.5 /X= 20 ppb		GC-	× /X= ppb
MS/MSD	2700/2701	GC-	× /X= ppb		GC-	× /X= ppb

Footnote/Anomaly:

167

E: [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.
CL form 7-201, April 03, 1996; Ver 4.1 No pencil. Use blue pen for record. Use red pen for correction. Supervisor Initial [illegible]

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

VOC Analysis General Logbook

03G3619 Batch # 03G3619 Matrix: W Date: 08/08/03 Analyst: Zou

IS/Surrogate: GC-15114/15115 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Defoaming(mark-*DF*): _____

Ini. Batch ☒ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study Datafile Path: _____

	Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{epg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
	SP	G3619P01	E524A 002	25/25 = 1	/ =	/ =	1		G3619P01	08/08/03	10:20AM
2669	CCV	Q01		/ =	/ =	/ =			Q01	gc1552	
2670	LCS	L01		/ =	/ =	/ =			L01		
2671	MS	M01		/ =	/ =	/ =			M01	$4455-04	<2
2672	MSD	N01		/ =	/ =	/ =			N01	↓	↓
2673	MB	K01		/ =	/ =	/ =			K01		
2674	Sample	4509-11		/ =	/ =	/ =			4509-11	t6	<2
2675		4455-04		/ =	/ =	/ =			4455-04	MS	
2676		4509-01		/ =	/ =	/ =			4509-01		
2677		02		/ =	/ =	/ =			02		
2678		03		/ =	/ =	/ =			03		
2679		04		/ =	/ =	/ =			04		
2680		05		/ =	/ =	/ =			05		
2681		07		/ =	/ =	/ =			07		
2682		09		/ =	/ =	/ =			09		
2683		4525-01		/ =	/ =	/ =			4525-01		
2684		02		/ =	/ =	/ =			02		
2685		03		/ =	/ =	/ =			03		
2686		04		/ =	/ =	/ =			04		
2687		4534-02		/ =	/ =	/ =			4534-02		
2688		4534-03		/ =	/ =	/ =			4534-03		
2689		04		/ =	/ =	/ =			04		
2690		05		/ =	/ =	/ =			05		
2691		06		/ =	/ =	/ =			06		
2692		07		/ =	/ =	/ =			07		
2693				/ =	/ =	/ =					
2694				/ =	/ =	/ =					
2695				/ =	/ =	/ =					
2696				/ =	/ =	/ =					

08/11/03

Type	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$	Op #	STD Lot #	$C_{std}(ng/\mu L)\times V_{std}(\mu L)/X(g \text{ or } mL)=T$
CS/LCSD	2667	GC-	× /X= ppb		GC-	× /X= ppb
IS/MSD	2668/2669	GC-15522	200 × 2.5 /X= 20 ppb		GC-	× /X= ppb

Footnote/Anomaly:

pH for field water sample only.
Supervisor Initial _____

Applied P & Ch Laboratory
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VOC Analysis General Logbook

Sequence # 0393415 Batch # 0393415 Matrix: W Date: 07/22/03 Analyst: Bou

Lot #: IS/Surrogate: GC-1514/1515 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
2217	SP	G3415P01	E524A 002	25/25 = 1	/ =	/ =	1		G3415P01	07/22/03	17:08
2218	Calib.	02-00003		/ =	/ =	/ =			02-00003	0.3ppb	
2219		00002A		/ =	/ =	/ =			00002A	2ppb	
2220		00010		/ =	/ =	/ =			00010	10ppb	
2221		00020		/ =	/ =	/ =			00020	20ppb	
2222		00040		/ =	/ =	/ =			00040	40ppb	
2223		00060		/ =	/ =	/ =			00060	60ppb	
2224				/ =	/ =	/ =					
2225				/ =	/ =	/ =					
2226				/ =	/ =	/ =					
2227				/ =	/ =	/ =					
2228				/ =	/ =	/ =					
2229				/ =	/ =	/ =					
2230				/ =	/ =	/ =					
2231				/ =	/ =	/ =					
2232				/ =	/ =	/ =					
2233				/ =	/ =	/ =					
2234				/ =	/ =	/ =					
2235				/ =	/ =	/ =					
2236				/ =	/ =	/ =					
2237				/ =	/ =	/ =					
2238				/ =	/ =	/ =					
2239				/ =	/ =	/ =					
2240				/ =	/ =	/ =					
2241				/ =	/ =	/ =					
2242				/ =	/ =	/ =					
2243				/ =	/ =	/ =					
2244				/ =	/ =	/ =					
2245				/ =	/ =	/ =					
2246				/ =	/ =	/ =					
2247				/ =	/ =	/ =					
2248				/ =	/ =	/ =					

07/23/03

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		GC-	× /X= ppb		GC-	× /X= ppb
MS/MSD		GC-	× /X= ppb		GC-	× /X= ppb

Footnote/Anomaly:

1672

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VOC Analysis General Logbook

Sequence # 03J3452 Batch # 03J3452 Matrix: W Date: 07/24/03 Analyst: Zou

Defoaming(mark-*DF*): _____

Lot #: IS/Surrogate: GC-15114/15115 Methanol(mark-*M*): _____ PEG (mark-*PEG*): _____ Datafile Path: _____

☐ Calib. + Ini. Batch ☒ Initial Batch; ☐ Middle Batch; ☐ Final Batch. ☐ Internal Study

Op. #	Type	Sample ID	Method	$V/X=f_1$	$V_f/V_i=f_2$	$V_{rpg}/V_{inj}=f_3$	F	A-#	Datafile	Note	pH
2313	SP	G3452P01	E524A 002	25/25 = 1	/ =	/ =	1		G3452P01	07/24/03	10:07am
2314	CCV	Q01		/ =	/ =	/ =			Q01	gc15447	
2315	LCS	L01		/ =	/ =	/ =			L01		
2316	LCSD	J01		/ =	/ =	/ =			J01		
2317	MB	K01		/ =	/ =	/ =			K01		
2318	Sample	4176-08		/ =	/ =	/ =			4176-08	internal PE	
2319		4482-05		/ =	/ =	/ =			4482-05	PE	
2320		18		/ =	/ =	/ =			18		
2321		03		15 = 5	/ =	/ =	5		03		
2322		03A		125 = 1	/ =	/ =	1		03A		
2323		04		15 = 5	/ =	/ =	5		04		
2324		04A		15 = 5	/ =	/ =	5		04A		
2325		04B		125 = 1	/ =	/ =	1		04B		
2326		4475-03B		15 = 5	/ =	/ =	5		4475-03B		
2327		03C		125 = 1	/ =	/ =	1		03C		
2328				/ =	/ =	/ =					
2329				/ =	/ =	/ =					
2330				/ =	/ =	/ =					
2331				/ =	/ =	/ =					
2332				/ =	/ =	/ =					
2333				/ =	/ =	/ =					
2334				/ =	/ =	/ =					
2335				/ =	/ =	/ =					
2336				/ =	/ =	/ =					
2337				/ =	/ =	/ =					
2338				/ =	/ =	/ =					
2339				/ =	107/25/01 =						
2340				/ =	/ =	/ =					
2341				/ =	/ =	/ =					
2342				/ =	/ =	/ =					
2343				/ =	/ =	/ =					
2344				/ =	/ =	/ =					

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	2315/2316	GC-15448	200 × 2.5 /X= 20 ppb		GC-	× /X= ppb
MS/MSD		GC-	× /X= ppb		GC-	× /X= ppb

Footnote/Anomaly:

pH for field water samples only: _____ Supervisor Initial 1673