M60050.002141
MCAS EL TORO
SSIC # 5090.

COMPUCHEM LABORATORIES

01/NOV/91

Ms. Karen Hobart
Hadley Industries
5900 West 4th Street
Ludington, MI 49431

Subject: Report of Data - Account Number 500253

Enclosed herewith are the results of analytical work and associated Quality Control data for the samples received by CompuChem@ under the referenced account number.

As you know, CLP service is performed in accordance with EPA methodologies as defined for the National Contract Laboratory Program; 'SOW For Organic Analysis; Multi-Media, Multi-Concentration'. Your original data has been stored and is available for future reference.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. We would like to continue providing you analytical support and services in the future. If you should have questions or require additional analytical services, please contact your representative at 1-919-549-8263.

Sincerely,

Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM LABORATORIES, INC.

01/NOV/91

Ms. Karen Hobart
Hadley Industries
5900 West 4th Street
Ludington, MI 49431

ACCOUNT #: 500253

CC#	SAMPLE-ID	RECEIPT DATE
452446	INFLUENT	10/12/91
452450	BETWEEN	10/12/91
452451	EFFLUENT	10/12/91
452454	LAB PURE	10/12/91

TOTAL NUMBER OF SAMPLES = 4

COMPUCHEM LABORATORIES, INC.

SDG NARRATIVE -- CASE #23861
SDG #10
Contract #3-90 (REV)
CompuChem Laboratories, Inc.

SAMPLE IDENTIFIERS: INFLUENT, BETWEEN, EFFLUENT, LABPURE

Case #23861, SDG #10 consisted of 4 water samples for volatile only analysis. The samples were received intact on 10-12-91 via Express Mail in properly sealed shipping containers with chain-of-custody documents. Sample LABPURE was not listed on the chain-of-custody.

VOLATILES:
All volatile fractions were analyzed within holding time requirements. Three samples contained only low levels of methylene chloride which were also present in the associated method blanks. Sample INFLUENT contained five TCL compounds. The levels of trichloroethene and tetrachloroethene in sample INFLUENT were significantly higher than the levels present in the matrix spike/matrix spike duplicate prepared from the sample. The differences were attributed to the use of separate sample bottles for the preparation of the MS/MSD. A qualifying notice was included with the data. None of the samples contained any tentatively identified compounds. All surrogate recovery criteria were met. The QC matrix spike/matrix spike duplicate results were acceptable. The recoveries of trichloroethene fell below QC limits in the MS/MSD and failed to meet RPD QC limits.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in the hardcopy data package has been authorized by the Laboratory Manager or his designee, as verified by the following signature.

Janet G. Livingston 10-31-91

Janet G. Livingston 10-31-91
Quality Assurance Specialist III

Note: This report is paginated for reference and accountability in increasing numerical sequence.

LABORATORY NOTICE

ORIGINAL COMPUCHEM ID# 452446
MATRIX SPIKE COMPUCHEM ID# 452447
MATRIX SPIKE DUPLICATE COMPUCHEM ID# 452448
CLIENT ID# INFLUENT
CASE# 23861

The volatile fraction of the above original unspiked sample was analyzed as a Low Level Liquid matrix spike (MS) and matrix spike duplicate (MSD). The analysis of the original sample contained the spike compound trichloroethene at a reported amount of 53 ug/l and tetrachloroethene at 40 ug/l. The MS and MSD were analyzed using an aliquot from another sample container and the reported amounts for the these compounds were significantly lower. We are attributing these results to variations in content of discrete sample containers and are reporting these data with reference to this qualifying notice.

Valgena Respass
Valgena Respass Employee ID# 1009
Data Review Specialist
October 25, 1991

Approved by Susan W Bass 10/25/91
Susan W. Bass Employee ID# 633
GC/MS Data Review Manager
October 25, 1991

Approved by Janet H. Livingston
Employee ID# 758
Final Technical Reviewer
Date: 10/31/91

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000.0 \text{ UL}} = \frac{1.000}{\cancel{5000.00}}$$

VR 10/25/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)

J2( ) J4( ) D2( ) (:1)

8 MN 10/25/91

CLP, 23861, 10, INFLUENTMSD, LOW, WATER, 452449, VOA, MSD, F50053

GC/MS ANALYSIS 5000
AMOUNT PURGED: ~~0~~ UL MN 10/25/91
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BH911016B53
BLANK FILENAME: CB911017C53
STANDARD FILENAME: CU911016B53
SAMPLE FILENAME: C2R52448A53

ANALYST(S): INJECTION 633 WORKUP SWB

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE JA JQ MN 10/25/91

DISPOSITION: [✓] COMPLETE
[ ] REINJECT NEAT
[ ] DILUTE ( )

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : Ø

POSTED

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 1

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

original 452446

GC/MS REVIEW Nospada DATE 10/25/91 AUDITOR _____ DATE ___/___/___

REPORT INTEGRATION TOTAL # OF INJECTIONS: 3

FINAL REPORTABLE PACKAGE(S): C2R-053 /

QA COMMENTS:

INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:54	1.01	0.550	1.01	17.17	50.00	0.072	0.211	0.34
13	5:11		0.582						
14	5:47	1.00	0.649	1.00	43.78	50.00	1.304	1.489	0.88
15	6:22	1.00	0.714	1.00	0.50	50.00	0.013	1.328	0.01
16	7:14		0.810						
17	8:27	1.00	0.948	1.00	1.54	50.00	0.044	1.411	0.03
18	8:31	1.01	0.955	1.01	2.11	50.00	0.011	0.262	0.04
19	9:08	1.00	1.025	1.00	0.84	50.00	0.045	2.690	0.02
20	9:29	1.00	0.853	1.00	0.27	50.00	0.003	0.502	0.01
21	9:50		0.884						
22	10:15	1.00	0.922	1.00	48.25	50.00	0.733	0.760	0.97
23	10:18	1.00	1.155	0.99	1.16	50.00	0.035	1.516	0.02
24	11:39	1.00	1.047	1.00	59.74	50.00	0.588	0.492	1.19
25	12:06		1.088						
26	12:44		1.144						
27	14:06	1.00	0.807	1.00	0.27	50.00	0.001	0.189	0.01
28	14:25	1.00	0.825	1.00	47.55	50.00	1.098	1.154	0.95
29	13:42		1.231						
30	14:56		1.342						
31	15:19	1.00	1.376	1.00	0.77	50.00	0.005	0.315	0.02
32	15:35	1.00	0.894	1.00	4.81	50.00	0.051	0.531	0.10
33	15:56		0.912						
34	16:10		1.452						
35	17:31	1.00	1.003	1.00	49.92	50.00	1.014	1.016	1.00
36	17:49	1.00	1.020	1.00	3.36	50.00	0.033	0.491	0.07
37	18:07	1.00	1.036	1.00	0.63	100.00	0.004	0.601	0.01
38	19:00	1.00	1.088	1.00	0.35	50.00	0.004	0.602	0.01
39	19:03	1.00	1.090	1.00	0.97	50.00	0.018	0.933	0.02
40	19:24		1.743						
41	20:35		1.178						
42	8:27	1.00	0.948	1.00	2.08	100.00	0.028	1.370	0.02
43	18:07	1.00	1.036	1.00	0.98	150.00	0.004	0.601	0.01

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	688	8:57	1	1.000	A BB	50184.	50.000 UG/L	7.72
2	114	858	11:09	2	1.000	A BB	232310.	50.000 UG/L	7.72
3	117	1345	17:29	3	1.000	A BB	208074.	50.000 UG/L	7.72
4	65	782	10:10	1	1.137	A BB	68507.	52.654 UG/L	8.13
5	98	1100	14:18	3	0.818	A BB	215729.	52.874 UG/L	8.16
6	95	1556	20:14	3	1.157	A BB	174208.	54.076 UG/L	8.35
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	371	4:49	1	0.539	A BB	69608.	51.327 UG/L	7.92 yes
12	43	380	4:56	1	0.552	A BB	3638.	17.169 UG/L	2.65 yes
13	NOT FOUND								
14	84	447	5:49	1	0.650	A BB	65417.	43.775 UG/L	6.76 yes B
15	96	492	6:24	1	0.715	A BB	672.	0.504 UG/L	0.08 no
16	NOT FOUND								
17	96	652	8:29	1	0.948	A BB	2186.	1.543 UG/L	0.24 yes
18	43	664	8:38	1	0.965	A*BB	555.	2.113 UG/L	0.33 no
19	83	705	9:10	1	1.025	A BB	2278.	0.844 UG/L	0.13 no
20	97	733	9:32	2	0.854	A BB	637.	0.273 UG/L	0.04 no
21	NOT FOUND								
22	78	791	10:17	2	0.922	A BB	170327.	48.254 UG/L	7.45 yes
23	62	790	10:16	1	1.148	A BB	1769.	1.163 UG/L	0.18 no
24	130	899	11:41	2	1.048	A BB	136513.	59.736 UG/L	9.22 yes
25	NOT FOUND								
26	NOT FOUND								
27	43	1087	14:08	3	0.808	A BB	210.	0.266 UG/L	0.04 no
28	91	1111	14:27	3	0.826	A BB	228382.	47.546 UG/L	7.34 yes
29	NOT FOUND								
30	NOT FOUND								
31	97	1180	15:20	2	1.375	A BB	1131.	0.772 UG/L	0.12 no
32	164	1204	15:39	3	0.895	A BB	10648.	4.815 UG/L	0.74 yes
33	NOT FOUND								
34	NOT FOUND								
35	112	1350	17:33	3	1.004	A BB	210942.	49.915 UG/L	7.70 yes
36	106	1373	17:51	3	1.021	A BB	6865.	3.358 UG/L	0.52 yes
37	106	1394	18:07	3	1.036	A BB	1572.	0.629 UG/L	0.10 no
38	106	1463	19:01	3	1.088	A BB	878.	0.350 UG/L	0.05 no
39	104	1467	19:04	3	1.091	A BB	3778.	0.973 UG/L	0.15 no
40	NOT FOUND								
41	NOT FOUND								
42	96	652	8:29	1	0.948	A*BB	2186 ~~2858~~	1.543 ~~2.079~~ UG/L	0.32 yes
43	106	1394	18:07	3	1.036	A*BB	2450.	0.979 UG/L	0.15 no

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:55	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:08	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:28	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:08	1.00	1.137	1.00	52.65	50.00	1.365	1.296	1.05
5	14:16	1.00	0.817	1.00	52.87	50.00	1.037	0.980	1.06
6	20:12	1.00	1.156	1.00	54.08	50.00	0.837	0.774	1.08
7	2:48		0.313						
8	2:56		0.329						
9	3:20		0.375						
10	3:31		0.395						
11	4:49	1.00	0.539	1.00	51.33	50.00	1.387	1.351	1.03

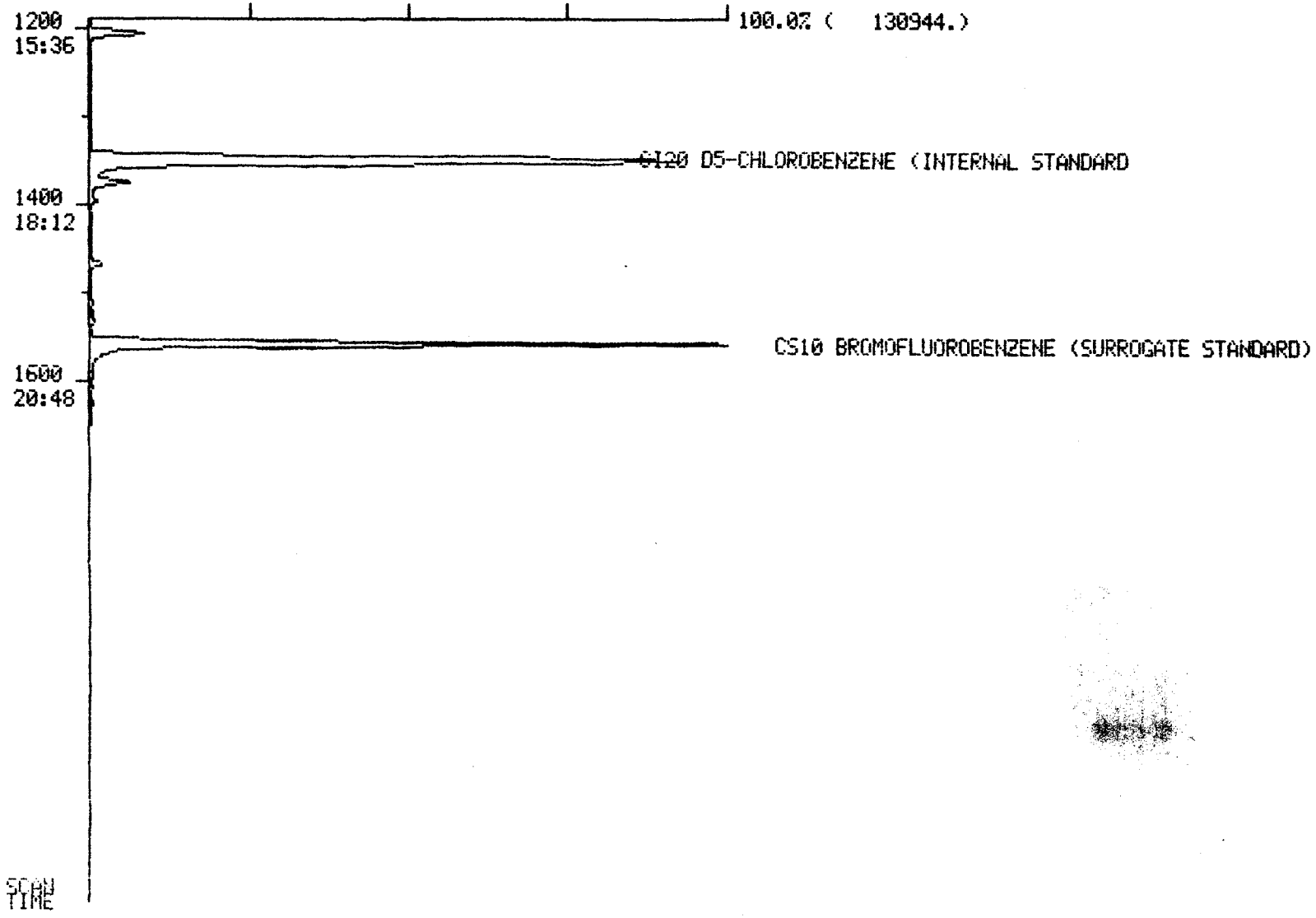
Quantitation Report File: C2R52448A53

Data: C2R52448A53.TI
10/17/91 10:06:00 8 WA 10/25/91
Sample: CLP,23861,10,INFLUENTMSD,LOW,WATER,45244, VOA,MSD,F50053
Conds.: DB624,CU911016B53,BH911016B53,CB911017C53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SWB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

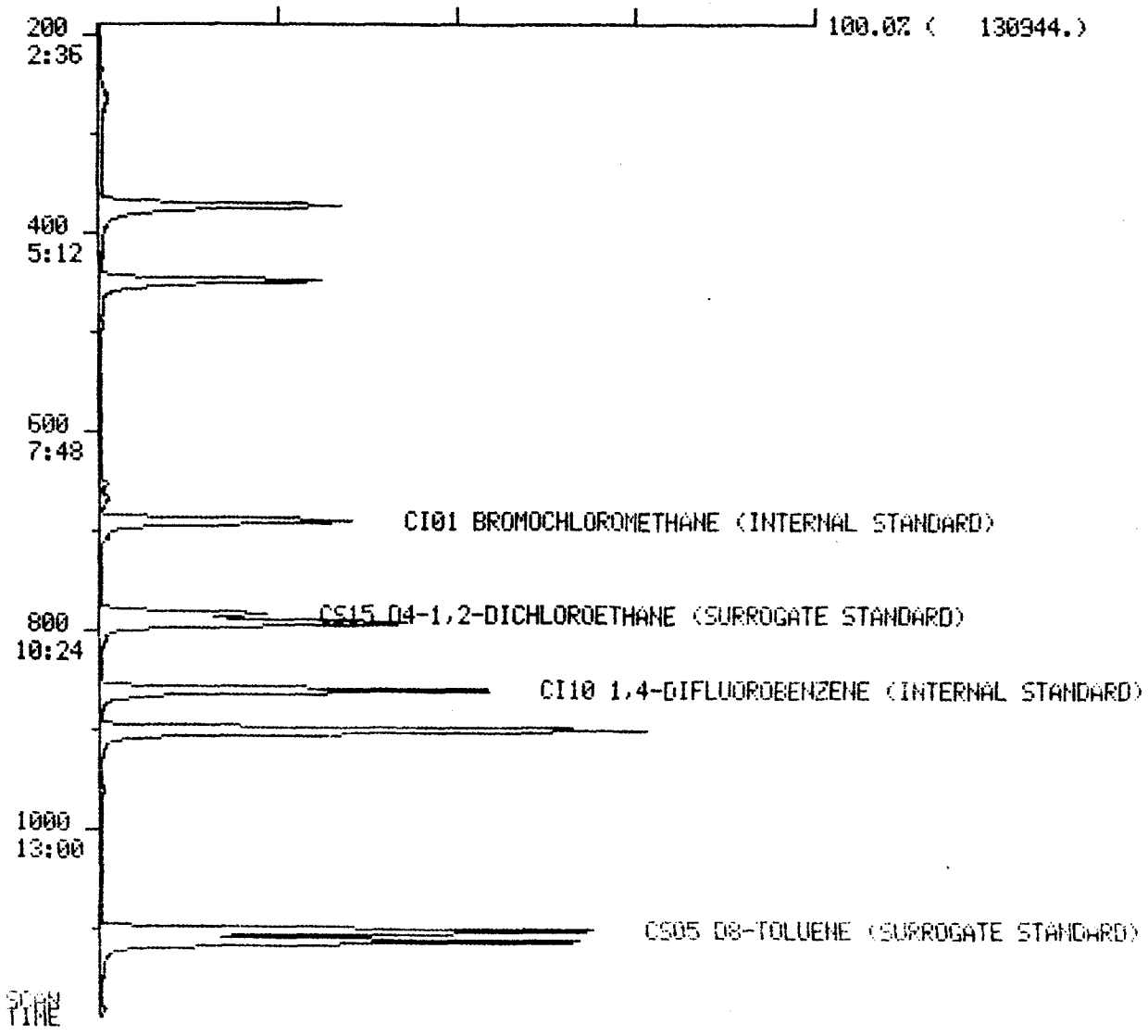
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C998 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

C2R52448A53 SCANS 1189 TO 1650 ACQUIRED: 10/17/91 10:06:00
CALI: C2R52448A53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,23861,10,INFLUENTMSD,LOW,WATER,~~452449~~,VOA,MSD,F50053,452448 mod 5/91
CONDS.: DB624,CU911016B53,BH911016B53,CB911017C53



23861 10 SAMPLE DATA PACKAGE

.R52448A53 SCANS 189 TO 1189 ACQUIRED: 10/17/91 10:06:00
CALI: C2R52448A53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,23861,10,INFLUENTMSD,LOW,WATER,~~452449~~,VOA,MSD,F50053,452440 mw125191
CONDS.: DB624,CU911016B53,BH911016B53,CB911017C53



23861 10 SAMPLE DATA PACKAGE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INFLUENTMSD

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452449

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: C2R52448A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/17/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	44	B
67-64-1	Acetone	17	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	51	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	60	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	48	
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

(4) Matrix Spike Duplicate data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

(b) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile. Spectra not required.

LABORATORY NOTICE

ORIGINAL COMPUCHEM ID# 452446
MATRIX SPIKE COMPUCHEM ID# 452447
MATRIX SPIKE DUPLICATE COMPUCHEM ID# 452448
CLIENT ID# INFLUENT
CASE# 23861

The volatile fraction of the above original unspiked sample was analyzed as a Low Level Liquid matrix spike (MS) and matrix spike duplicate (MSD). The analysis of the original sample contained the spike compound trichloroethene at a reported amount of 53 ug/l and tetrachloroethene at 40 ug/l. The MS and MSD were analyzed using an aliquot from another sample container and the reported amounts for the these compounds were significantly lower. We are attributing these results to variations in content of discrete sample containers and are reporting these data with reference to this qualifying notice.

Valgena Respas

Valgena Respas Employee ID# 1009
Data Review Specialist
October 25, 1991

Approved by Susan W Bass 10/25/91

Susan W. Bass Employee ID# 633
GC/MS Data Review Manager
October 25, 1991

Approved by Janet G. Livingston

Employee ID# 758
Final Technical Reviewer
Date: 10/31/91

LOW LEVEL WATER - 5 0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000.0 \text{ UL}} = \cancel{5000.00}\ 1.000$$

VR 10/25/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)
J2( ) J4( ) D2( ) (:1)

CLP,23861,10,INFLUENTMS,LOW,WATER,452447,VOA,MS,F50053

GC/MS ANALYSIS
AMOUNT PURGED: ~~0 UL~~ 5000ul 10/25/91
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BH911016B53
BLANK FILENAME: CB911017C53
STANDARD FILENAME: CU911016B53
SAMPLE FILENAME: CR052447A53

ANALYST(S): INJECTION 633 WORKUP SUBaa

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE JQ

DISPOSITION: [✓] COMPLETE
[ ] REINJECT NEAT
[ ] DILUTE ( )

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 1

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

452446 original
bottle 1 of 2

GC/MS REVIEW Kopaas DATE 10/25/91 AUDITOR _____ DATE ___/___/___

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 2

FINAL REPORTABLE PACKAGE(S): CRU-053 /

QA COMMENTS:

INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:54	1.01	0.550	1.00	14.24	50.00	0.060	0.211	0.28
13	5:11		0.582						
14	5:47	1.00	0.649	1.00	43.18	50.00	1.286	1.489	0.86
15	6:22	1.00	0.714	1.00	0.37	50.00	0.010	1.328	0.01
16	7:14		0.810						
17	8:27	1.00	0.948	1.00	1.56	50.00	0.044	1.411	0.03
18	8:31		0.955						
19	9:08	1.00	1.025	1.00	0.75	50.00	0.041	2.690	0.02
20	9:29	1.00	0.853	1.00	0.22	50.00	0.002	0.502	0.00
21	9:50		0.884						
22	10:15	1.00	0.922	1.00	49.88	50.00	0.758	0.760	1.00
23	10:18	1.00	1.155	1.00	1.16	50.00	0.035	1.516	0.02
24	11:39	1.00	1.047	1.00	62.09	50.00	0.611	0.492	1.24
25	12:06		1.088						
26	12:44		1.144						
27	14:06		0.807						
28	14:25	1.00	0.825	1.00	47.75	50.00	1.102	1.154	0.96
29	13:42		1.231						
30	14:56		1.342						
31	15:19	1.00	1.376	1.00	0.81	50.00	0.005	0.315	0.02
32	15.38	1.00	0.894	1.00	4.84	50.00	0.051	0.531	0.10
33	15.56		0.912						
34	16:10		1.452						
35	17:31	1.00	1.003	1.00	49.86	50.00	1.013	1.016	1.00
36	17:49	1.00	1.020	1.00	3.44	50.00	0.034	0.491	0.07
37	18:07	1.00	1.036	1.00	0.63	100.00	0.004	0.601	0.01
38	19:00	1.00	1.088	1.00	0.33	50.00	0.004	0.602	0.01
39	19:03	1 00	1.090	1.00	0.95	50.00	0.018	0.933	0.02
40	19:24		1.743						
41	20:35		1.178						
42	8:27	1.00	0.948	1.00	1.96	100.00	0.027	1.370	0.02
43	18:07	1.00	1.036	1.00	0.96	150.00	0.004	0.601	0.01

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	688	8:57	1	1.000	A BB	50657.	50.000 UG/L	7.83
2	114	858	11:09	2	1.000	A BB	222898.	50.000 UG/L	7.83
3	117	1343	17:28	3	1.000	A BB	204807.	50.000 UG/L	7.83
4	65	782	10:10	1	1.137	A BB	65624.	49.967 UG/L	7.83
5	98	1099	14:17	3	0.818	A BB	216753.	53.972 UG/L	8.45
6	95	1554	20:12	3	1.157	A BB	166916.	52.639 UG/L	8.24
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	369	4:48	1	0.536	A BB	64301.	46.971 UG/L	7.36 yes
12	43	379	4:56	1	0.551	A BB	3046.	14.241 UG/L	2.23 yes
13	NOT FOUND								
14	84	445	5:47	1	0.647	A BB	65137.	43.181 UG/L	6.76 yes
15	96	490	6:22	1	0.712	A BB	495.	0.368 UG/L	0.06 no
16	NOT FOUND								
17	96	651	8:28	1	0.946	A BB	2228.	1.558 UG/L	0.24 yes
18	NOT FOUND								
19	83	705	9:10	1	1.025	A BB	2057.	0.755 UG/L	0.12 no
20	97	732	9:31	2	0.853	A BB	498.	0.223 UG/L	0.03 no
21	NOT FOUND								
22	78	791	10:17	2	0.922	A BB	168927.	49.878 UG/L	7.81 yes
23	62	791	10:17	1	1.150	A BB	1783.	1.161 UG/L	0.18 no
24	130	898	11:40	2	1.047	A BB	136146.	62.091 UG/L	9.72 yes
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1110	14:26	3	0.827	A BB	225762.	47.750 UG/L	7.48 yes
29	NOT FOUND								
30	NOT FOUND								
31	97	1178	15:19	2	1.373	A BB	1141.	0.812 UG/L	0.13 no
32	164	1202	15:38	3	0.895	A BB	10532.	4.838 UG/L	0.76 yes
33	NOT FOUND								
34	NOT FOUND								
35	112	1348	17:31	3	1.004	A BB	207403.	49.861 UG/L	7.81 yes
36	106	1371	17:49	3	1.021	A BB	6929.	3.443 UG/L	0.54 yes
37	106	1393	18:07	3	1.037	A BB	1553.	0.631 UG/L	0.10 no
38	106	1463	19:01	3	1.089	A BB	820.	0.332 UG/L	0.05 no
39	104	1464	19:02	3	1.090	A BB	3635.	0.951 UG/L	0.15 no
40	NOT FOUND								
41	NOT FOUND								
42	96	651	8:28	1	0.946	A*BB	2228 ~~2729~~	1.558 ~~1.962~~ UG/L	0.31 yes
43	106	1393	18:07	3	1.037	A*BB	2373.	0.963 UG/L	0.15 no

VR 10/25/91

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:55	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:08	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:28	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:08	1.00	1.137	1.00	49.97	50.00	1.295	1.296	1.00
5	14:16	1.00	0.817	1.00	53.97	50.00	1.058	0.980	1.08
6	20:12	1.00	1.156	1.00	52.64	50.00	0.815	0.774	1.05
7	2:48		0.313						
8	2:56		0.329						
9	3:20		0.375						
10	3:31		0.395						
11	4:49	1.00	0.539	0.99	46.97	50.00	1.269	1.351	0.94

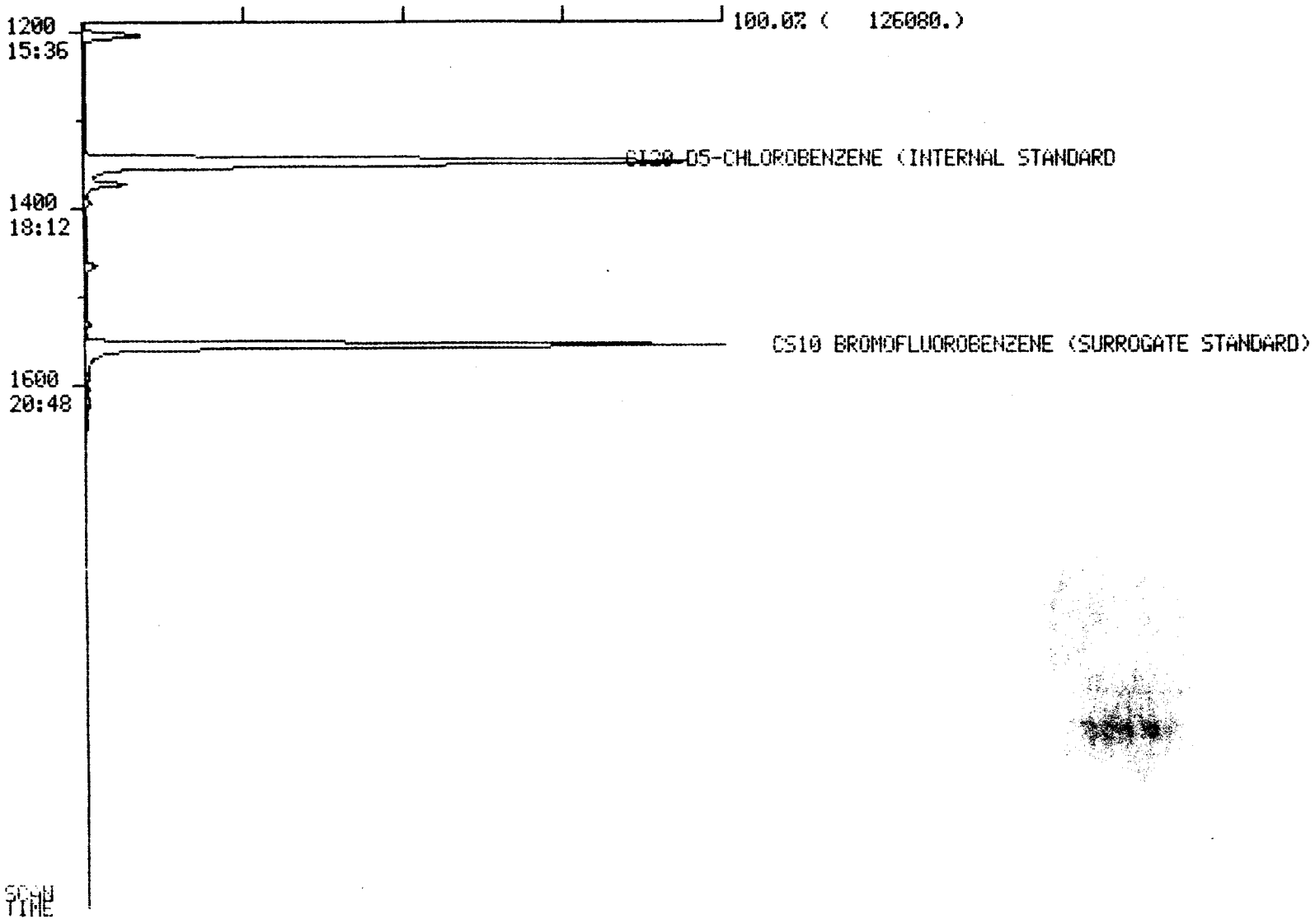
Quantitation Report File: CR052447A53

Data: CR052447A53.TI
10/17/91 8:58:00
Sample: CLP,23861,10,INFLUENTMS,LOW,WATER,452447,VOA,MS,F50053
Conds.: DB624,CU911016B53,BH911016B53,CB911017C53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SWB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

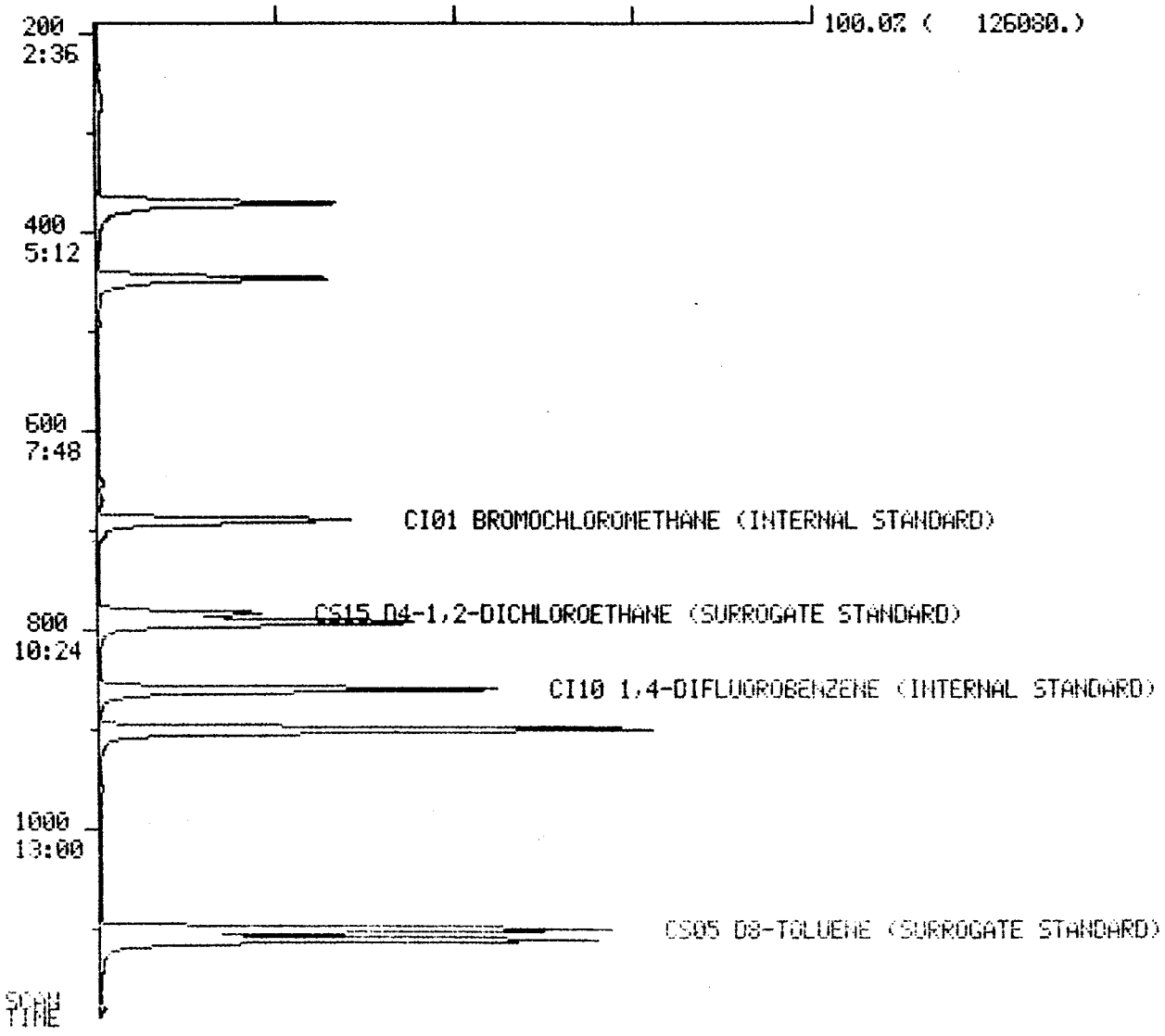
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CR052447A53 SCANS 1189 TO 1650 ACQUIRED: 10/17/91 8:58:00
CALI: CR052447A53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,23861,10,INFLUENTMS,LOW,WATER,452447,VOA,MS,F50053
CONDS.: DB624,CU911016B53,BH911016B53,CB911017C53



23861 10 SAMPLE DATA PACKAGE

DATA FROM FILE: CR052447A53 SCANS 189 TO 1189 ACQUIRED: 10/17/91 8:58:00
CALI: CR052447A53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,23861,10,INFLUENTMS,LOW,WATER,452447,VOA,MS,F50053
CONDS.: DB624,CU911016B53,BH911016B53,CB911017C53



23861 10 SAMPLE DATA PACKAGE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INFLUENTMS

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452447

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR052447A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/17/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	43	B
67-64-1	Acetone	14	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	47	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	2	J
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	62	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	50	
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	J
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	48	
108-90-7	Chlorobenzene	50	
100-41-4	Ethylbenzene	3	J
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

(3) Matrix Spike data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

(b) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile. Spectra not required.

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000.0 \text{ UL}} = \cancel{5000.00}\ 1.000$$

MW 12/91

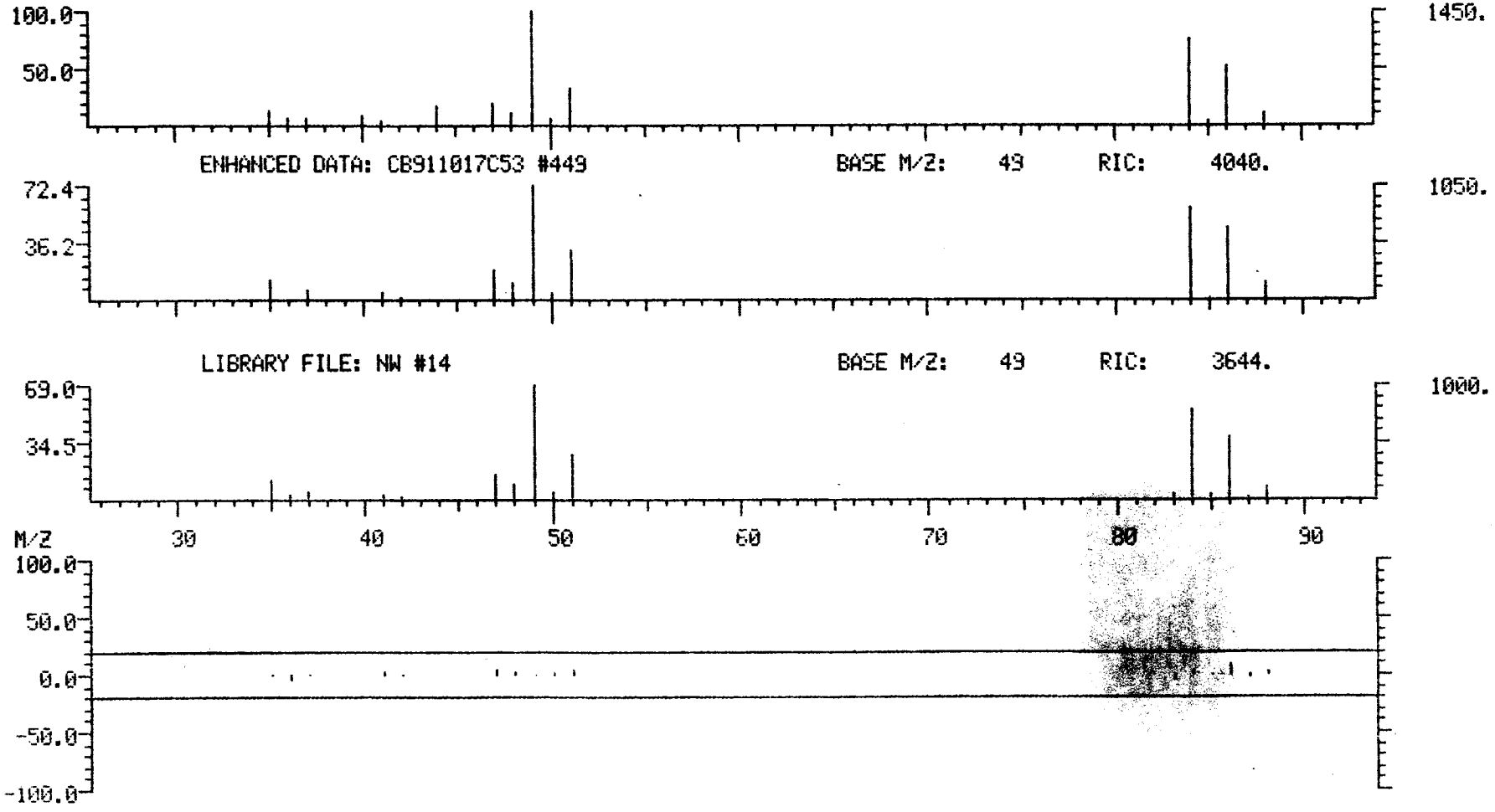
THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

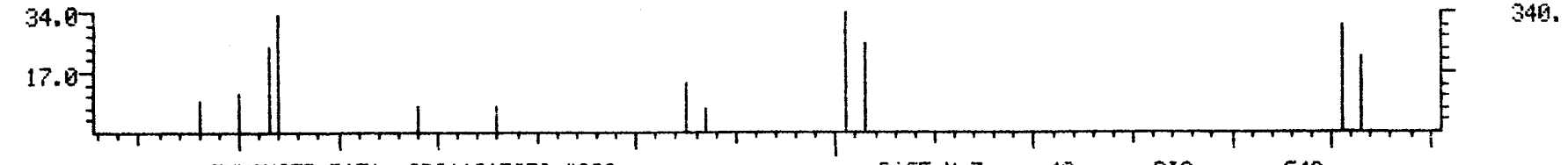
RAW DATA: CB911017C53 #449 BASE M/Z: 49 RIC: 5328.
10/17/91 0:38
SAMPLE: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CU911016B53,BH911016B53



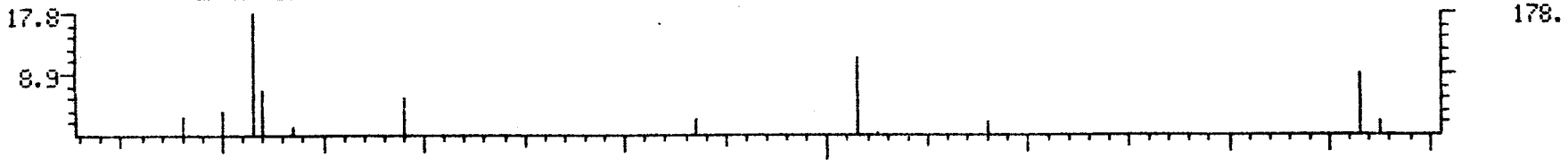
TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

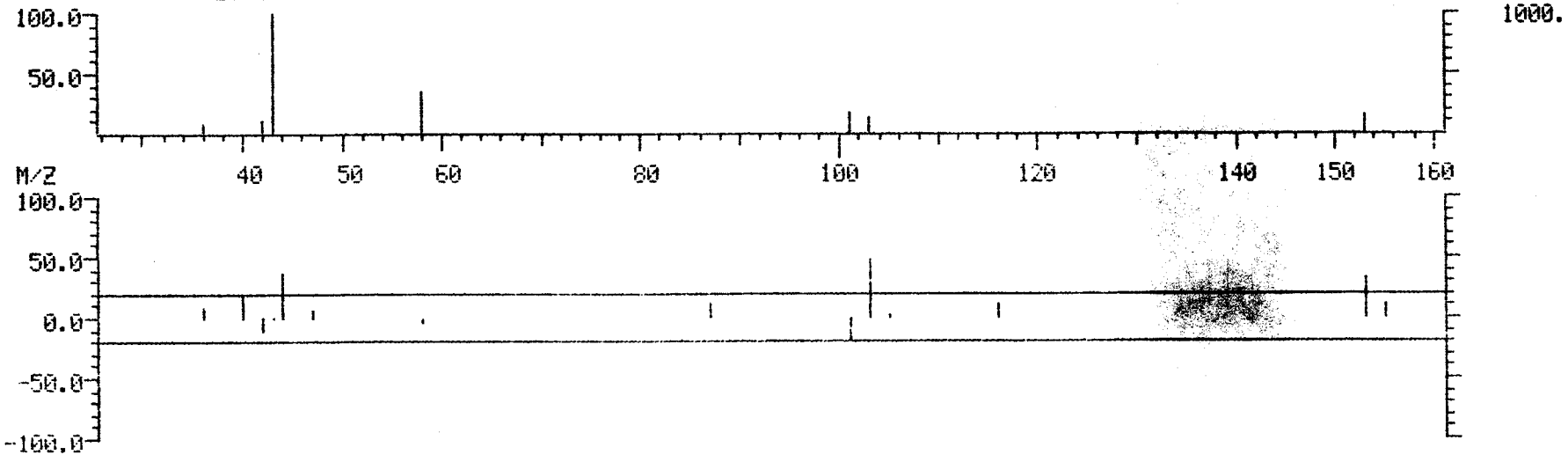
RAW DATA: CB911017C53 #382 BASE M/Z: 101 RIC: 2240.
10/17/91 0:38
SAMPLE: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CU911016B53,BH911016B53



ENHANCED DATA: CB911017C53 #382 BASE M/Z: 43 RIC: 642.



LIBRARY FILE: NW #12 BASE M/Z: 43 RIC: 2004.



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:54	1.01	0.550	1.01	9.97	50.00	0.042	0.211	0.20
13	5:11		0.582						
14	5:47	1.01	0.649	1.00	5.59	50.00	0.166	1.489	0.11
15	6:22	1.01	0.714	1.00	0.43	50.00	0.011	1.328	0.01
16	7:14		0.810						
17	8:27		0.948						
18	8:31		0.955						
19	9:08		1.025						
20	9:29	1.00	0.853	1.00	0.14	50.00	0.001	0.502	0.00
21	9:50		0.884						
22	10:15	1.00	0.922	1.00	0.63	50.00	0.010	0.760	0.01
23	10:18		1.155						
24	11:39	1.00	1.047	1.00	0.16	50.00	0.002	0.492	0.00
25	12:06		1.088						
26	12:44		1.144						
27	14:06		0.807						
28	14:25	1.00	0.825	1.00	0.47	50.00	0.011	1.154	0.01
29	13:42		1.231						
30	14:56		1.342						
31	15:19		1.376						
32	15:38		0.894						
33	15:56		0.912						
34	16:10		1.452						
35	17:31		1.003						
36	17:49		1.020						
37	18:07	1.00	1.036	1.00	0.16	100.00	0.001	0.601	0.00
38	19:00		1.088						
39	19:03		1.090						
40	19:24		1.743						
41	20:35		1.178						
42	8:27	0.76	0.948	0.76	0.42	100.00	0.006	1.370	0.00
43	18:07	1.00	1.036	1.00	0.16	150.00	0.001	0.601	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	689	8:57	1	1.000	A BB	52312.	50.000 UG/L	16.13
2	114	858	11:09	2	1.000	A BB	225378.	50.000 UG/L	16.13
3	117	1346	17:30	3	1.000	A BB	222020.	50.000 UG/L	16.13
4	65	782	10:10	1	1.135	A BB	65779.	48.500 UG/L	15.64
5	98	1101	14:19	3	0.818	A BB	205455.	47.193 UG/L	15.22
6	95	1557	20:14	3	1.157	A BB	158940.	46.237 UG/L	14.91
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	382	4:58	1	0.554	A BB	2203.	9.974 UG/L	3.22
13	NOT FOUND								
14	84	449	5:50	1	0.652	A BB	8704.	5.588 UG/L	1.80
15	96	493	6:25	1	0.716	A BB	596.	0.429 UG/L	0.14 NO
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	97	731	9:30	2	0.852	A*BB	310.	0.137 UG/L	0.04 NO
21	NOT FOUND								
22	78	792	10:18	2	0.923	A BB	2155.	0.629 UG/L	0.20 NO
23	NOT FOUND								
24	130	898	11:40	2	1.047	A BB	349.	0.157 UG/L	0.05 NO
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1112	14:27	3	0.826	A BB	2410.	0.470 UG/L	0.15 NO
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	106	1396	18:09	3	1.037	A BB	426.	0.160 UG/L	0.05 NO
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	493	6:25	1	0.716	**B*	595.	0.415 UG/L	0.13 NO
43	106	1396	18:09	3	1.037	**B*	425.	0.159 UG/L	0.05 ND

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:55	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:08	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:28	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:08	1.00	1.137	1.00	48.50	50.00	1.257	1.296	0.97
5	14:16	1.00	0.817	1.00	47.19	50.00	0.925	0.980	0.94
6	20:12	1.00	1.156	1.00	46.24	50.00	0.716	0.774	0.92
7	2:48		0.313						
8	2:56		0.329						
9	3:20		0.375						
10	3:31		0.395						
11	4:49		0.539						

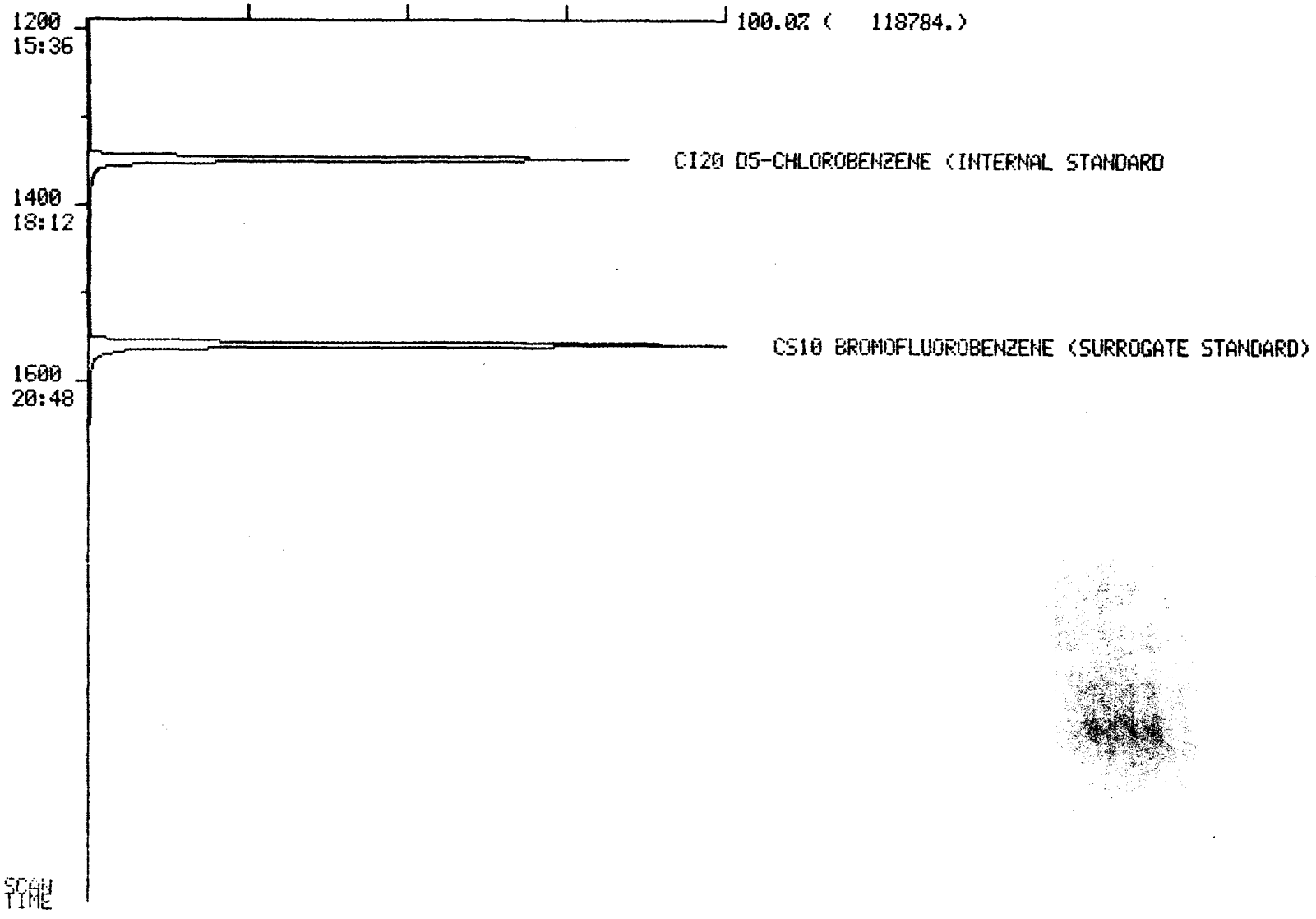
Quantitation Report File: CB911017C53

Data: CB911017C53.TI
10/17/91 0:38:00
Sample: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
Conds.: DB624,CU911016B53,BH911016B53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: NWSW Analyst: 1171 Acct. No.: AM

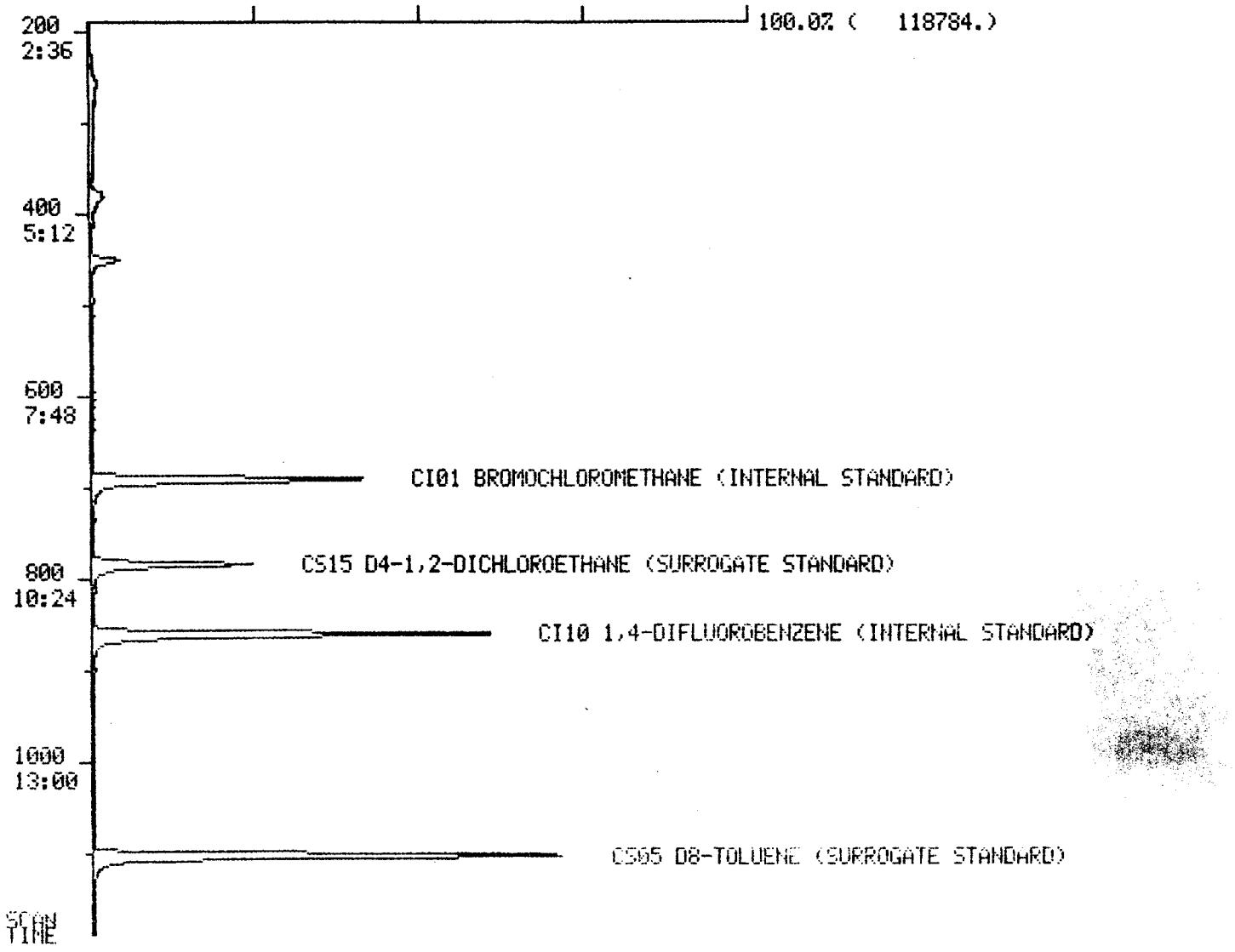
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CB911017C53 SCANS 1189 TO 1650 ACQUIRED: 10/17/91 0:38:00
CALI: CB911017C53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CU911016B53,BH911016B53



DATA FROM FILE: CB911017C53 SCANS 189 TO 1189 ACQUIRED: 10/17/91 0:38:00
CALI: CB911017C53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CU911016B53,BH911016B53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKPK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKPK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911017C53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/17/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKPK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKPK

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911017C53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/17/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	6	J
67-64-1	Acetone	10	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000 \text{ UL}} = \cancel{5000.00}\ 1.0$$

BEL 10/22/91

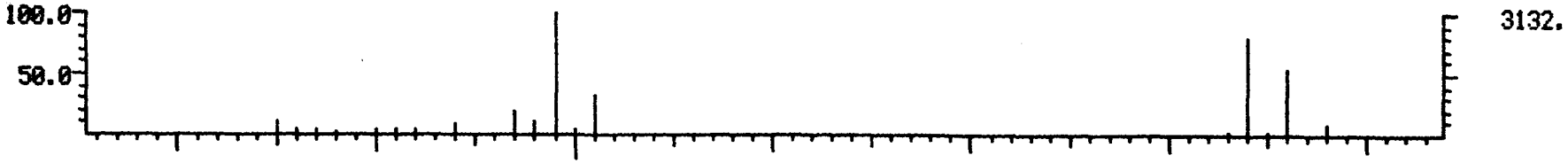
THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

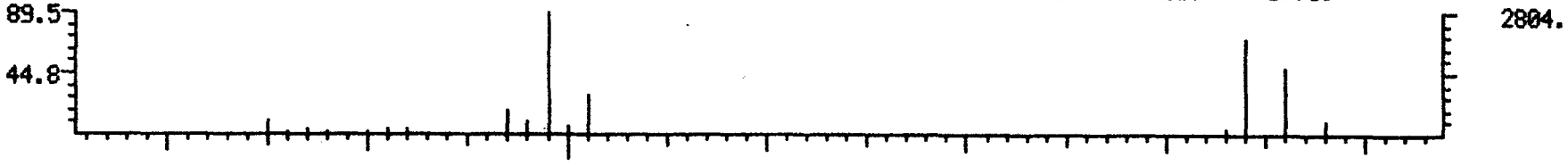
TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

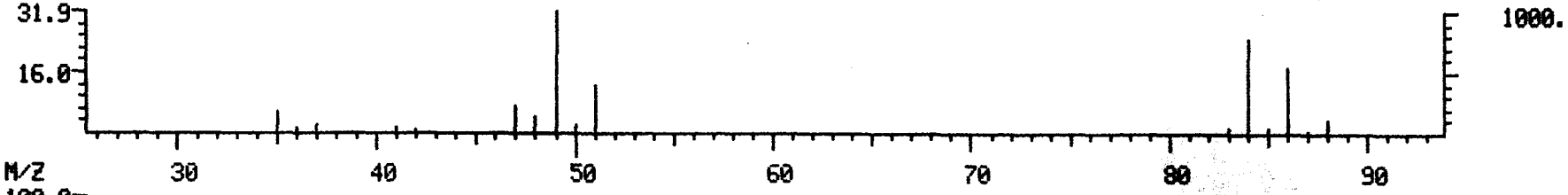
RAW DATA: CB911016A53 #445 BASE M/Z: 49 RIC: 11264.
10/16/91 14:53
SAMPLE: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
CONDS.: DB624,CT911016A53,BG911016A53

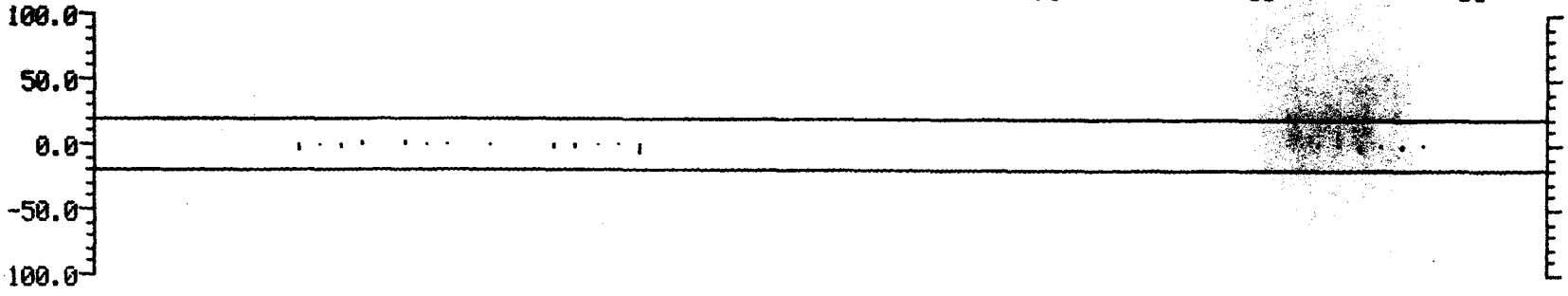


ENHANCED DATA: CB911016A53 #445 BASE M/Z: 49 RIC: 9776.



LIBRARY FILE: NW #14 BASE M/Z: 49 RIC: 3644.



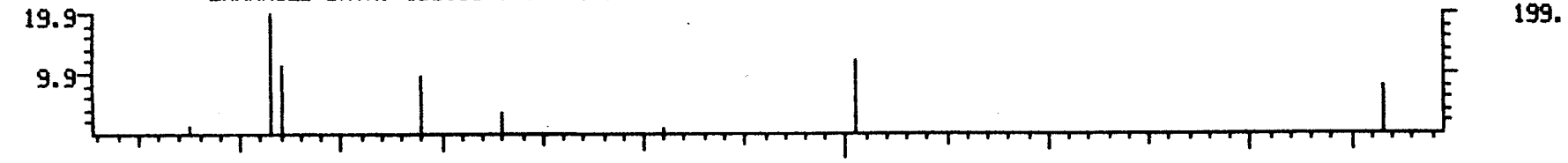


TARGET COMPOUND COMPARISON

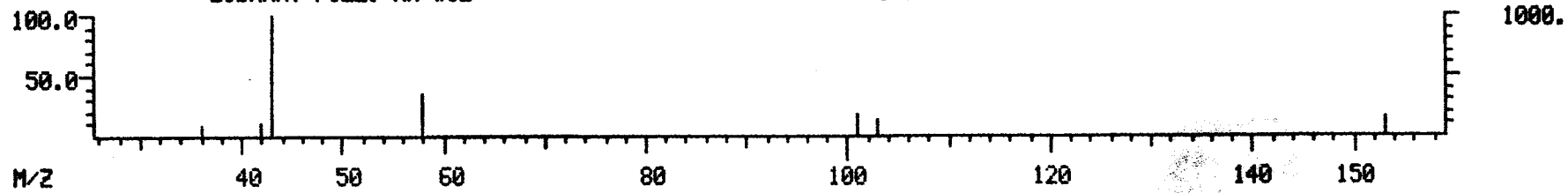
COMPOUND: C035 ACETONE <67-64-1>

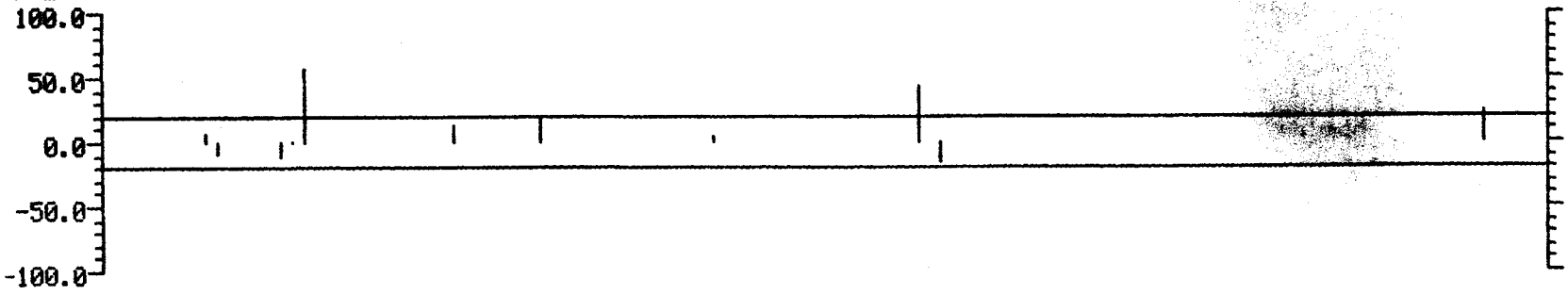
RAW DATA: CB911016A53 #379 BASE M/Z: 44 RIC: 2012.
10/16/91 14:53
SAMPLE: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
CONDS.: DB624,CT911016A53,BG911016A53

ENHANCED DATA: CB911016A53 #379 BASE M/Z: 43 RIC: 662.



LIBRARY FILE: NW #12 BASE M/Z: 43 RIC: 2004.





No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	1.00	0.549	1.00	13.49	50.00	0.053	0.197	0.27
13	5:14		0.581						
14	5:49	0.99	0.647	1.00	13.21	50.00	0.347	1.314	0.26
15	6:25	0.99	0.712	1.00	0.29	50.00	0.007	1.197	0.01
16	7:16		0.808						
17	8:31		0.947						
18	8:35		0.954						
19	9:13		1.025						
20	9:34	0.99	0.854	1.00	0.13	50.00	0.001	0.497	0.00
21	9:55		0.885						
22	10:20	0.99	0.922	1.00	0.52	50.00	0.008	0.789	0.01
23	10:22		1.153						
24	11:44	1.00	1.046	1.00	0.05	50.00	0.000	0.494	0.00
25	12:10		1.086						
26	12:48		1.142						
27	14:09		0.807						
28	14:29	1.00	0.826	1.00	0.52	50.00	0.012	1.159	0.01
29	13:46		1.229						
30	14:59		1.338						
31	15:22		1.371						
32	15:41		0.895						
33	15:59		0.912						
34	16:13		1.448						
35	17:35		1.004						
36	17:53		1.021						
37	18:10	1.00	1.036	1.00	0.08	100.00	0.001	0.616	0.00
38	19:03		1.088						
39	19:06		1.090						
40	19:27		1.735						
41	20:38		1.177						
42	8:31	0.75	0.947	0.75	0.27	100.00	0.003	1.276	0.00
43	18:10	1.00	1.036	1.00	0.08	150.00	0.000	0.612	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	128	688	8:57	1	1.000	A BB	54250.	50.000 UG/L	15.27	
2	114	858	11:09	2	1.000	A BB	239046.	50.000 UG/L	15.27	
3	117	1343	17:28	3	1.000	A BB	216558.	50.000 UG/L	15.27	
4	65	782	10:10	1	1.137	A BB	63070.	50.063 UG/L	15.29	
5	98	1099	14:17	3	0.818	A BB	215270.	50.164 UG/L	15.32	
6	95	1553	20:11	3	1.156	A BB	165643.	48.513 UG/L	14.82	
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	43	379	4:56	1	0.551	A BB	2879.	13.491 UG/L	4.12	yes
13	NOT FOUND									
14	84	445	5:47	1	0.647	A BB	18832.	13.209 UG/L	4.03	yes
15	96	490	6:22	1	0.712	A BB	376.	0.289 UG/L	0.09	No
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	97	732	9:31	2	0.853	A BB	308.	0.130 UG/L	0.04	No
21	NOT FOUND									
22	78	791	10:17	2	0.922	A BB	1969.	0.522 UG/L	0.16	No
23	NOT FOUND									
24	130	899	11:41	2	1.048	A BB	117.	0.049 UG/L	0.02	No
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	91	1110	14:26	3	0.827	A BB	2633.	0.525 UG/L	0.16	No
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	NOT FOUND									
35	NOT FOUND									
36	NOT FOUND									
37	106	1393	18:07	3	1.037	A BB	225.	0.084 UG/L	0.03	No
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
41	NOT FOUND									
42	96	490	6:22	1	0.712	**B*	375.	0.271 UG/L	0.08	No
43	106	1393	18:07	3	1.037	**B*	224.	0.085 UG/L	0.03	↓

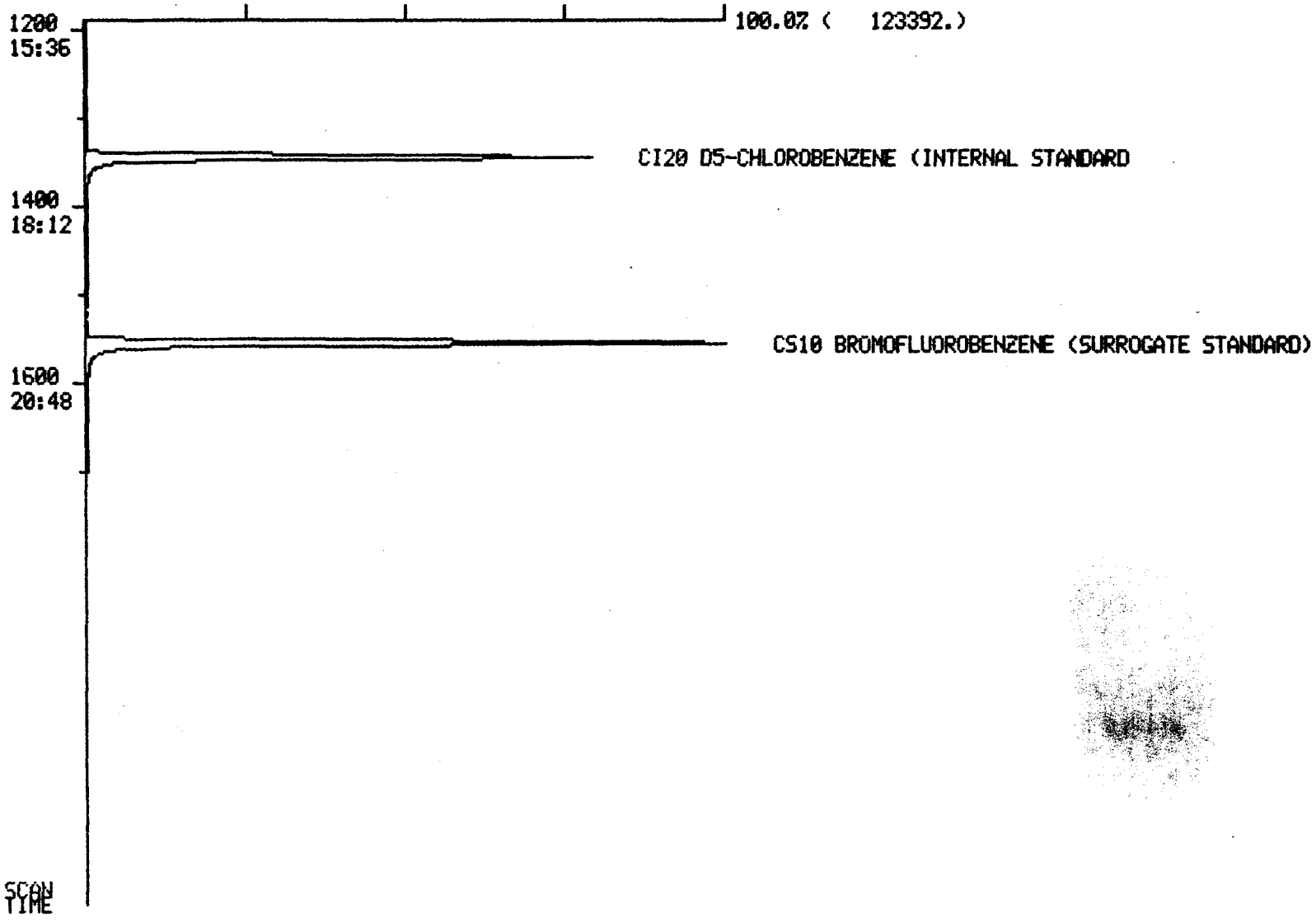
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:00	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:13	0.99	1.136	1.00	50.06	50.00	1.163	1.161	1.00
5	14:20	1.00	0.818	1.00	50.16	50.00	0.994	0.991	1.00
6	20:15	1.00	1.156	1.00	48.51	50.00	0.765	0.788	0.97
7	2:52		0.319						
8	2:59		0.331						
9	3:24		0.379						
10	3:32		0.393						
11	4:51		0.539						

Data: CB911016A53.TI
10/16/91 14:53:00
Sample: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
Conds.: DB624,CT911016A53,BG911016A53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SWB

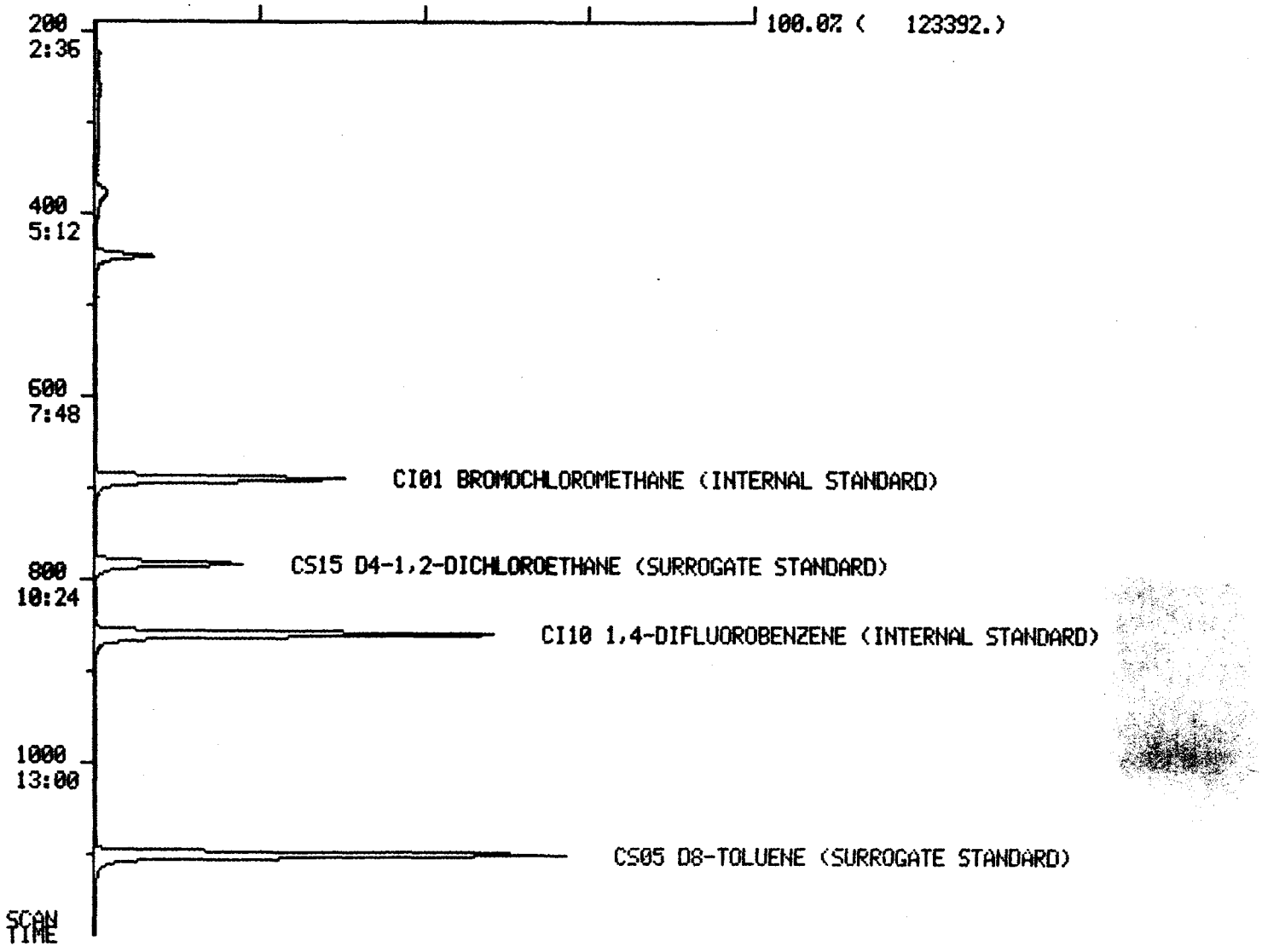
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CB911016A53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 14:53:00
CALI: CB911016A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
CONDS.: DB624,CT911016A53,BG911016A53



DATA FROM FILE: CB911016A53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 14:53:00
CALI: CB911016A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
CONDS.: DB624,CT911016A53,BG911016A53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKST

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKST

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911016A53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKST

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKST

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911016A53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	13	
67-64-1	Acetone	14	
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000 \text{ UL}} = \cancel{5000.00}\ 1.0$$

BVB 10/21/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	1.00	0.551	1.00	9.10	50.00	0.039	0.213	0.18
13	5:13		0.583						
14	5:49	1.00	0.650	1.00	6.69	50.00	0.205	1.531	0.13
15	6:24	1.00	0.715	1.00	0.38	50.00	0.011	1.391	0.01
16	7:15		0.811						
17	8:29		0.948						
18	8:33		0.956						
19	9:11		1.026						
20	9:31	1.00	0.852	1.00	0.15	50.00	0.001	0.484	0.00
21	9:52		0.884						
22	10:18	1.00	0.922	1.00	0.57	50.00	0.009	0.805	0.01
23	10:20		1.156						
24	11:42	1.00	1.048	1.00	0.13	50.00	0.001	0.475	0.00
25	12:09		1.087						
26	12:46		1.143						
27	14:08		0.807						
28	14:27	1.00	0.826	1.00	0.53	50.00	0.013	1.177	0.01
29	13:44		1.230						
30	14:59		1.341						
31	15:21		1.375						
32	15:40		0.895						
33	15:59		0.913						
34	16:12		1.451						
35	17:34	1.00	1.003	1.00	0.08	50.00	0.002	1.012	0.00
36	17:52		1.020						
37	18:09	1.00	1.036	1.00	0.21	100.00	0.001	0.604	0.00
38	19:03		1.088						
39	19:05	1.00	1.090	1.00	0.03	50.00	0.001	0.918	0.00
40	19:26		1.740						
41	20:37		1.177						
42	8:29	0.75	0.948	0.75	0.38	100.00	0.005	1.397	0.00
43	18:09	1.00	1.036	1.00	0.21	150.00	0.001	0.602	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	687	8:56	1	1.000	A BB	50836.	50.000 UG/L	15.73
2	114	856	11:08	2	1.000	A BB	248039.	50.000 UG/L	15.73
3	117	1344	17:28	3	1.000	A BB	216902.	50.000 UG/L	15.73
4	65	780	10:08	1	1.135	A BB	72023.	49.357 UG/L	15.53
5	98	1098	14:16	3	0.817	A BB	234026.	50.906 UG/L	16.02
6	95	1554	20:12	3	1.156	A BB	174807.	49.145 UG/L	15.46
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	379	4:56	1	0.552	A BB	1970.	9.096 UG/L	2.86
13	NOT FOUND								
14	84	446	5:48	1	0.649	A BB	10408.	6.687 UG/L	2.10
15	96	491	6:23	1	0.715	A BB	534.	0.378 UG/L	0.12 BDL
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	97	731	9:30	2	0.854	A BB	363.	0.151 UG/L	0.05 BDL
21	NOT FOUND								
22	78	789	10:15	2	0.922	A BB	2272.	0.569 UG/L	0.18 BDL
23	NOT FOUND								
24	130	897	11:40	2	1.048	A BB	313.	0.133 UG/L	0.04 BDL
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1110	14:26	3	0.826	A BB	2727.	0.534 UG/L	0.17 BDL
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	112	1351	17:34	3	1.005	A BB	360.	0.082 UG/L	0.03 BDL
36	NOT FOUND								
37	106	1394	18:07	3	1.037	A BB	546.	0.209 UG/L	0.07 BDL
38	NOT FOUND								
39	104	1466	19:03	3	1.091	A BB	126.	0.032 UG/L	0.01 BDL
40	NOT FOUND								
41	NOT FOUND								
42	96	491	6:23	1	0.715	**B*	533.	0.375 UG/L	0.12 BDL
43	106	1394	18:07	3	1.037	**B*	545.	0.209 UG/L	0.07 ✓

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:10	1.00	1.137	1.00	49.36	50.00	1.417	1.435	0.99
5	14:19	1.00	0.817	1.00	50.91	50.00	1.079	1.060	1.02
6	20:14	1.00	1.156	1.00	49.15	50.00	0.806	0.820	0.98
7	2:50		0.317						
8	2:57		0.330						
9	3:22		0.376						
10	3:32		0.395						
11	4:49		0.539						

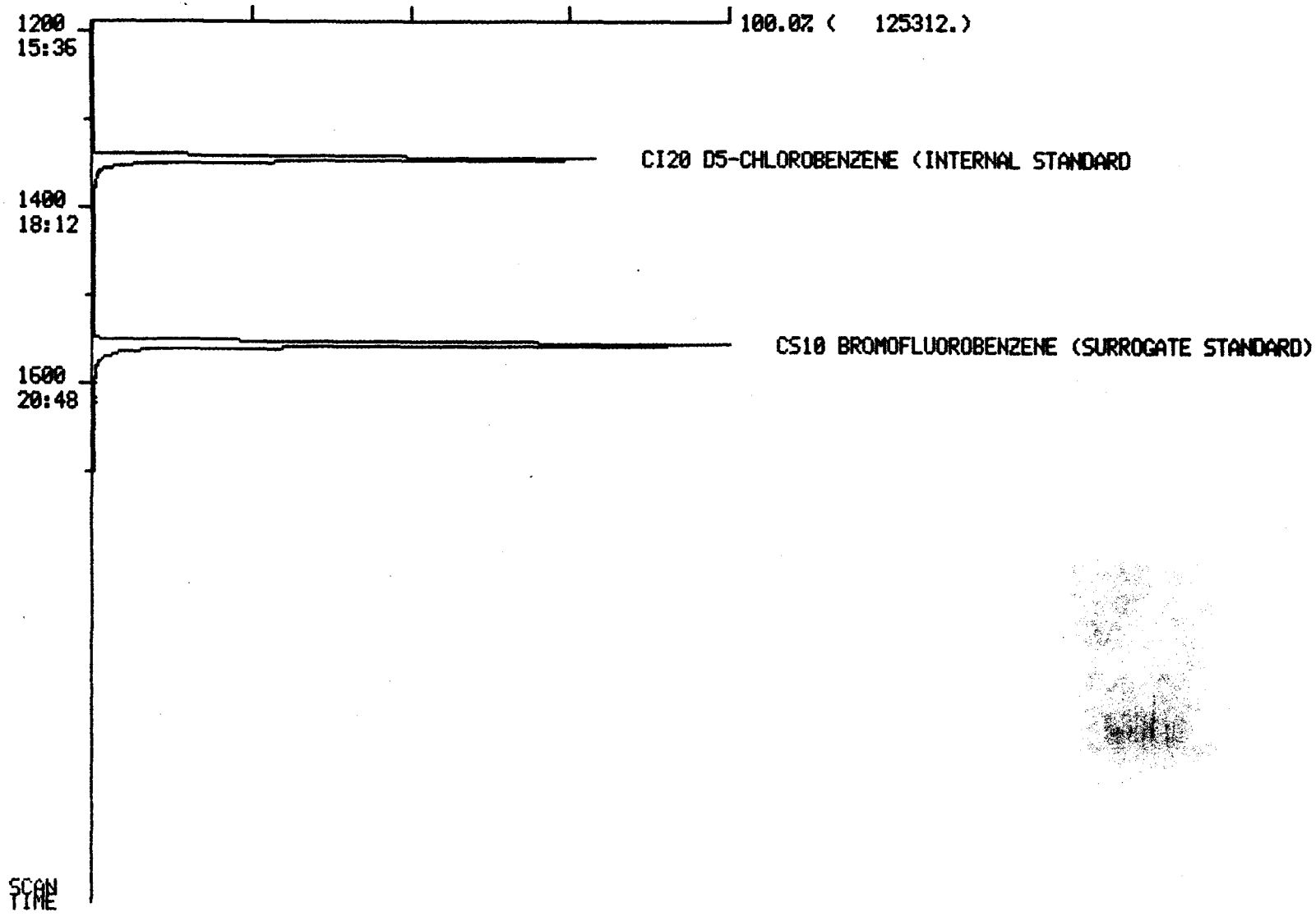
Quantitation Report File: CB911016C53

Data: CB911016C53.TI
10/16/91 0:52:00
Sample: CLP,BLANK,,VBLKPT,LOW,WATER,,VOA,BLANK,F50053
Conds.: DB624,CT911015B53,BG911015B53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: NWSW Analyst: 1171 Acct. No.: AM

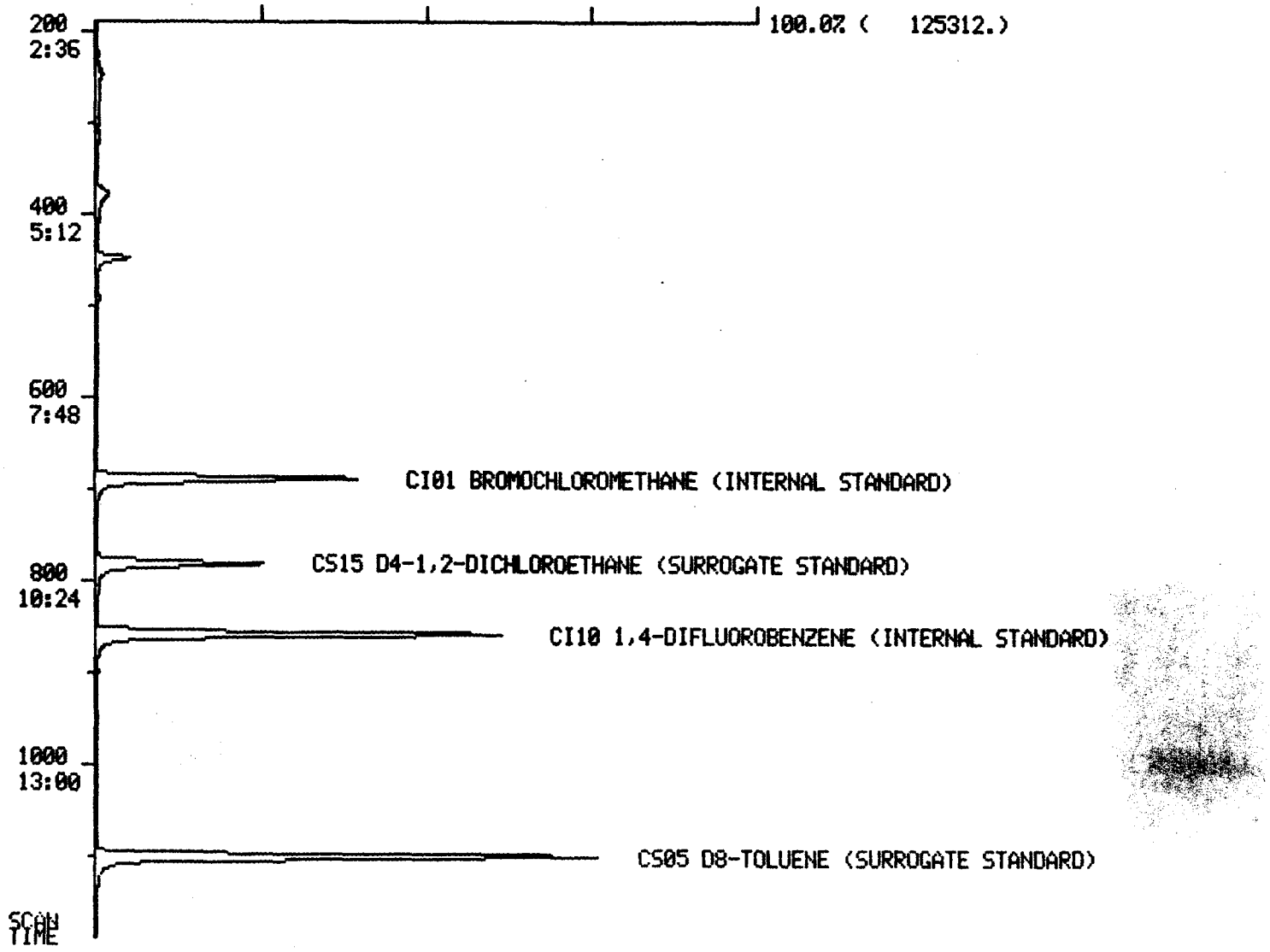
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CB911016C53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 0:52:00
CALI: CB911016C53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,BLANK,,VBLKPT,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CT911015B53,BG911015B53



DATA FROM FILE: CB911016C53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 0:52:00
CALI: CB911016C53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,BLANK,,VBLKPT,LOW,WATER,,VOA,BLANK,F50053
CONDS.: DB624,CT911015B53,BG911015B53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKPT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKPT

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911016C53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKPT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: VBLKPT

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB911016C53

Level: (low/med) LOW Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	7	J
67-64-1	Acetone	9	J
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

(2) Blank data – in chronological order. NOTE: This order is different from that used for samples.

(a) Tabulated results (Form I VOA)

(b) Tentatively Identified Compounds (Form I VOA – TIC); even if none found.

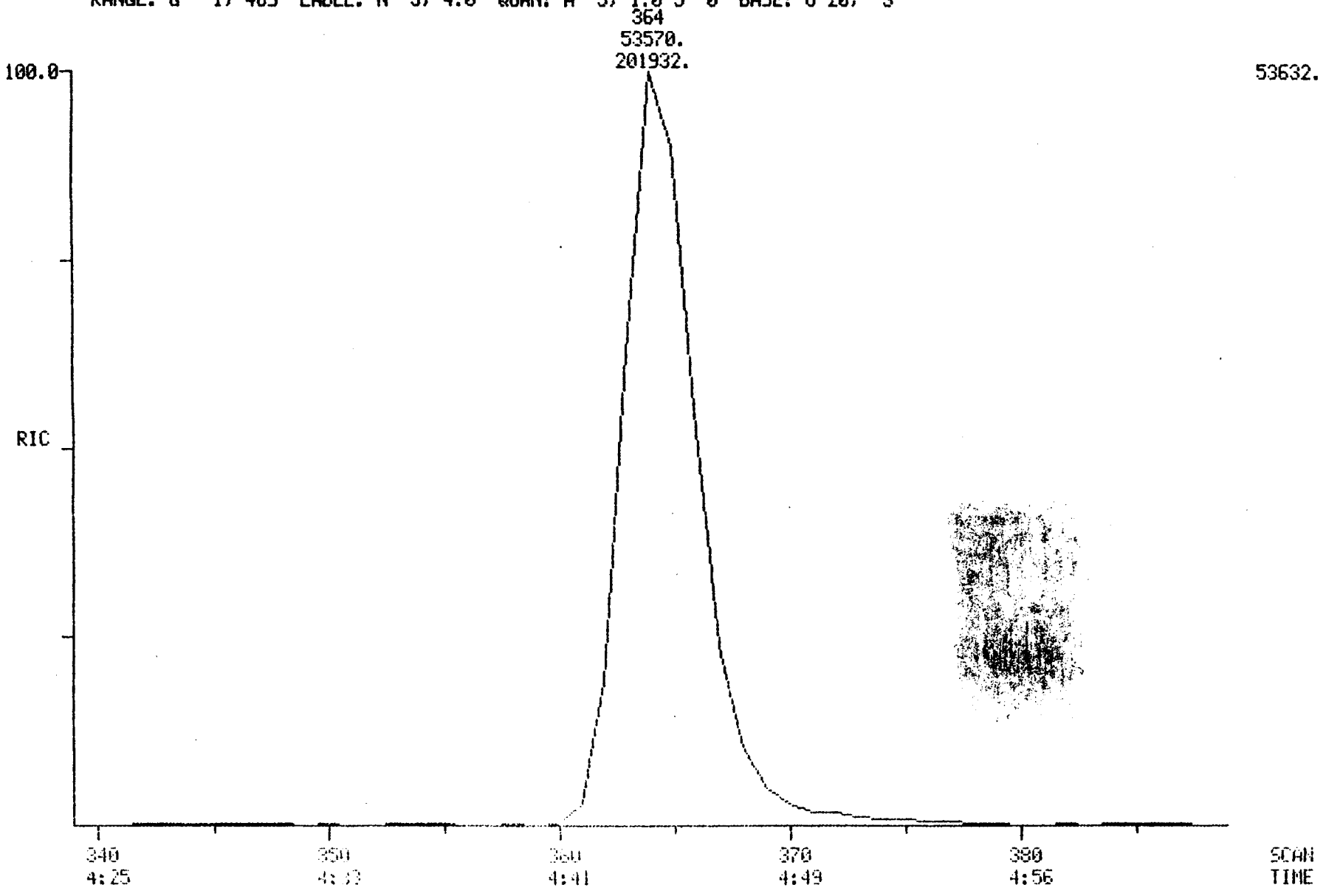
(c) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile.

(d) TCL spectra with lab generated standard. Data systems which are incapable of dual display shall provide spectra in the following order:
- Raw TCL compound spectra
- Enhanced or background substracted spectra
- Laboratory generated TCL standard spectra

(e) GC/MS library search spectra for Tentatively Identified Compound(s) (TIC) concentrations.

(f) Quantitation/calculation of Tentatively Identified Compound(s) concentrations.

RIC DATA: BH911016B53 #1 SCANS 339 TO 389
10/16/91 22:36:00 CALI: CALTAB #3
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
RANGE: G 1, 469 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3



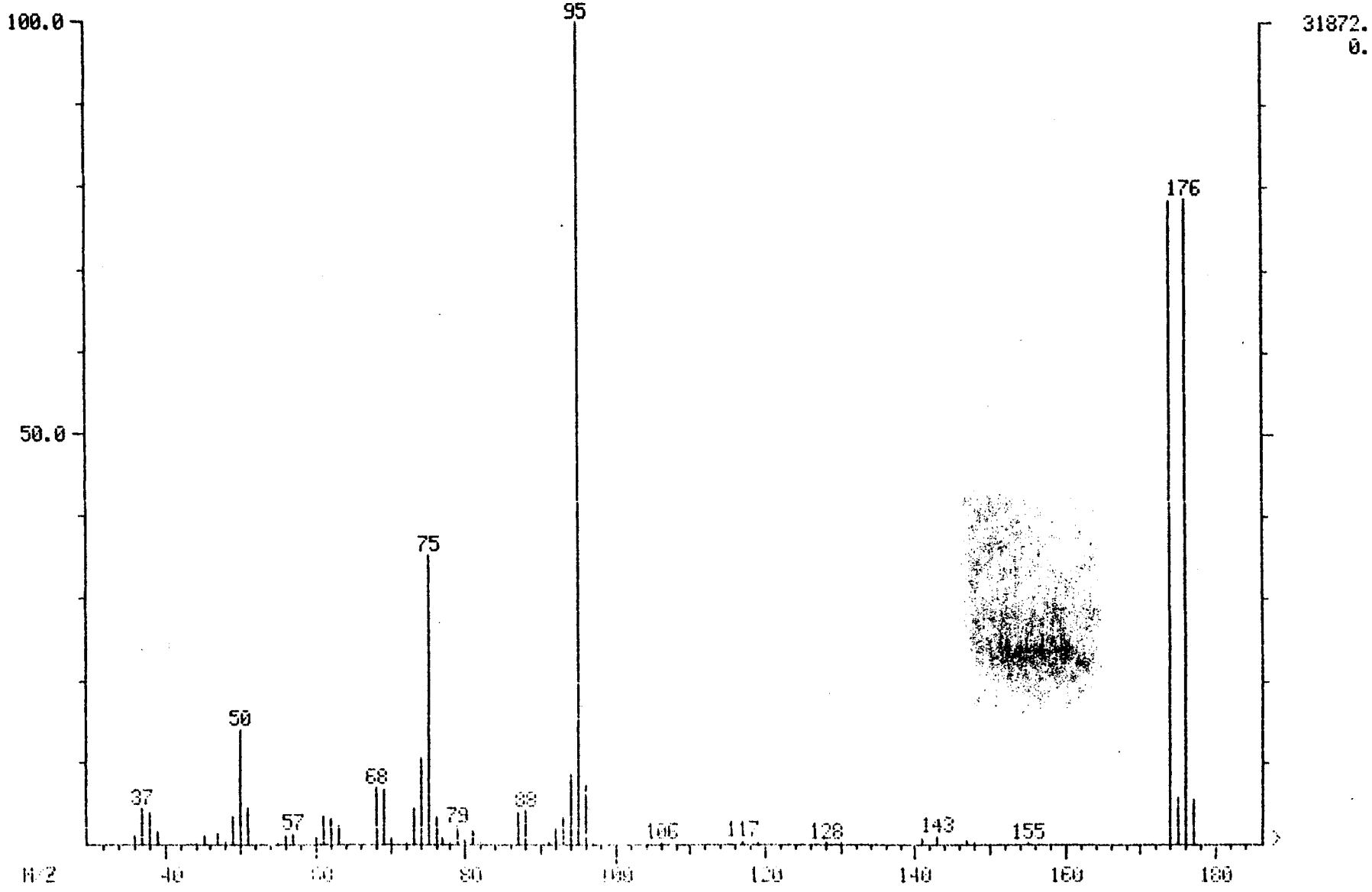
Mass List Data: BH911016B53 # 364 Base m/z: 95
10/16/91 22:36:00 + 4:44 Cali: CALTAB # 3 RIC: 135680.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
Conds.: DB624
#363 to #365 summed - #344

36		0.00	0.	Minima	Min Inten:		0.
207				Maxima	#	0	
Mass		% RA	Inten.	Mass		% RA	Inten.
36?		1.24	394.	148		0.16	50.
37?		4.46	1420.	155	S	0.19	59.
38?		3.92	1248.	174		78.41	24992.
39?		1.79	570.	175		5.87	1870.
40?	S	0.02	7.	176		78.61	25056.
44?	S	0.37	117.	177		5.45	1736.
45?		1.02	325.	207		0.18	58.
47?		1.37	436.				
48?		0.26	83.				
49?		3.27	1042.				
50?		14.01	4464.				
51?		4.53	1444.				
55?		0.35	113.				
56?		1.11	354.				
57?	S	1.52	483.				
60?		0.78	248.				
61?		3.21	1023.				
62?		3.06	976.				
63?		2.30	734.				
68?		6.89	2196.				
69		6.73	2144.				
70		0.82	262.				
72		0.36	115.				
73		4.39	1398.				
74		10.54	3360.				
75		35.49	11312.				
76		3.35	1068.				
77		0.78	249.				
78		0.26	83.				
79		2.10	669.				
80		0.70	224.				
81		1.94	618.				
82		0.51	162.				
87		4.00	1274.				
88		4.07	1298.				
91		0.39	123.				
92		2.20	701.				
93		3.20	1021.				
94		8.61	2744.				
95		100.00	31872.				
96		7.24	2308.				
97		0.19	60.				
106		0.18	56.				
117		0.50	158.				
119		0.44	140.				
128		0.23	74.				
130		0.21	66.				
141		0.91	289.				
143		0.97	310.				
147		0.64	203.				

MASS SPECTRUM
10/16/91 22:36:00 + 4:44
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
TEMP: 180 DEG. C
#363 TO #365 SUMMED - #344

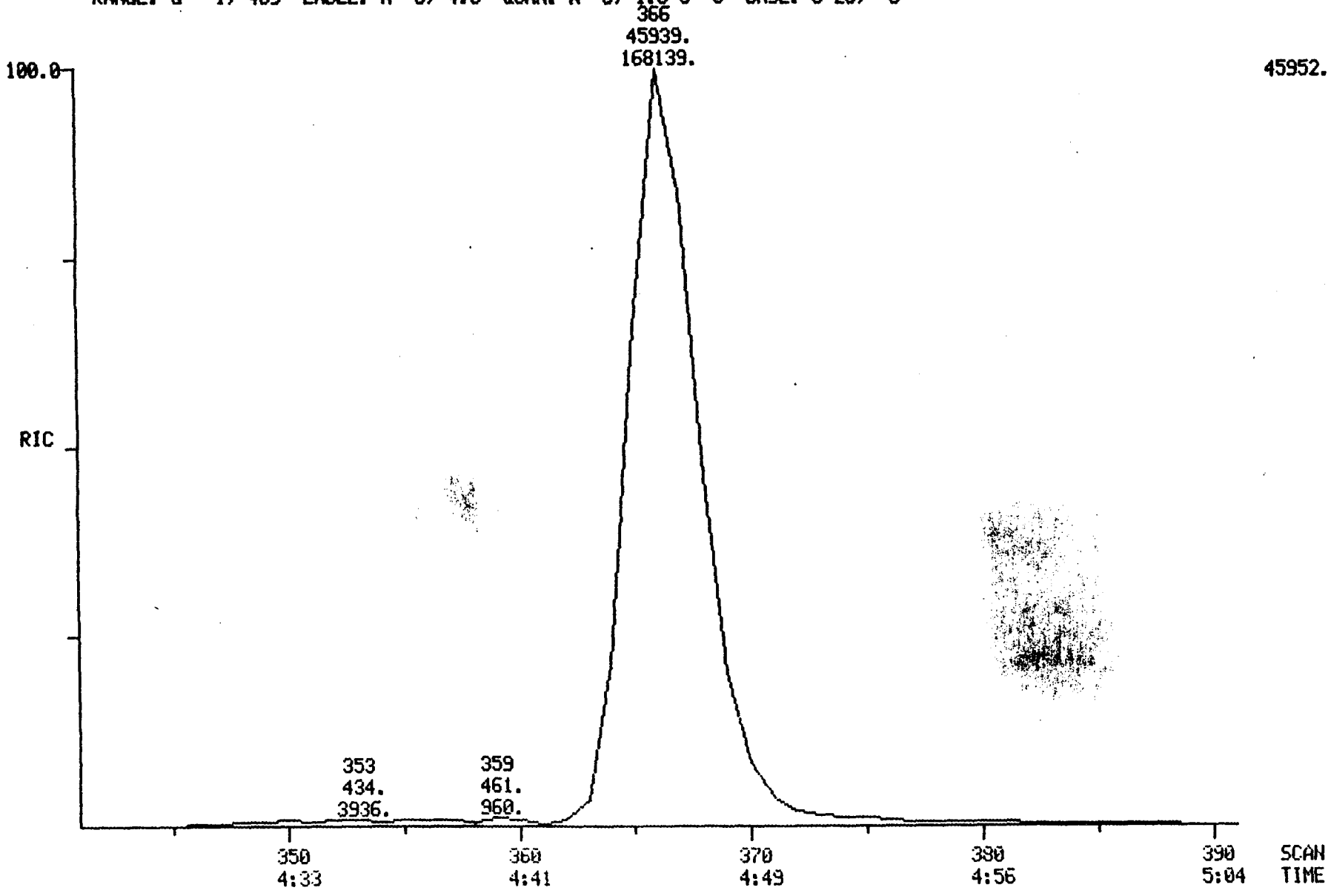
DATA: BH911016B53 #364
CALI: CALTAB #3

BASE M/Z: 95
RIC: 135680.



RIC
10/16/91 13:41:00
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
RANGE: G 1, 469 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

DATA: BG911016A53 #1 SCANS 341 TO 391
CALI: CALTAB #3



Mass List Data: b6911016A53 # 366 Base m/z: 95
10/16/91 13:41:00 + 4:45 Cali: CALTAB # 3 RIC: 114688.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
Conds.: DB624
#365 to #367 summed - #345

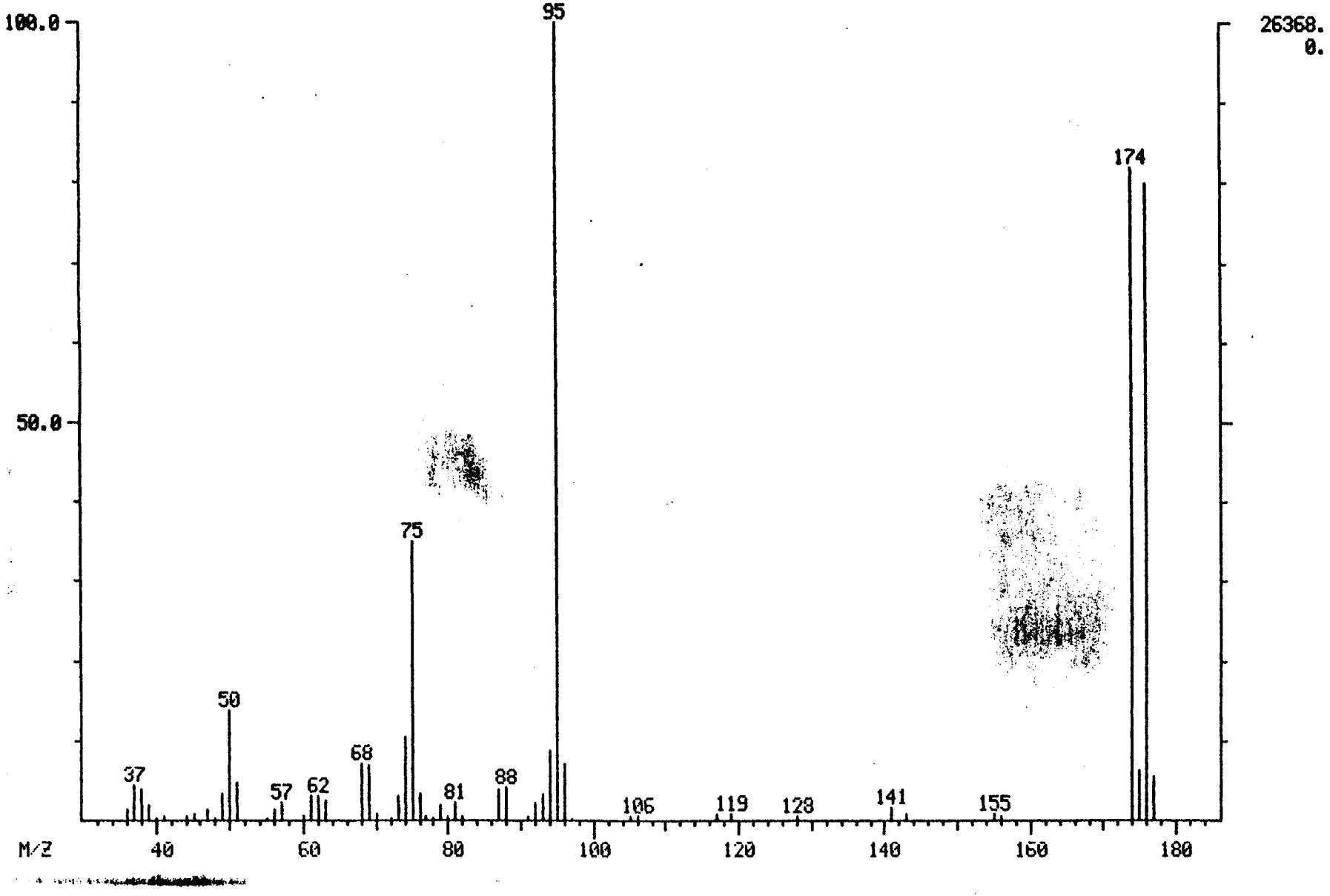
36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.	Mass		% RA	Inten.
36?		1.41	372.	155		0.93	246.
37?		4.52	1192.	156	S	0.60	158.
38?		3.94	1040.	174		81.92	21600.
39?		1.90	500.	175		6.33	1670.
40?	S	0.21	55.	176		79.98	21088.
41?		0.42	112.	177		5.48	1446.
44?	S	0.49	128.				
45?		0.74	195.				
47?		1.35	357.				
48?		0.28	73.				
49?		3.24	855.				
50?	/	13.83	3648.				
51?		4.59	1210.				
55?		0.22	59.				
56?		1.33	352.				
57?		2.25	592.				
60?		0.66	175.				
61?		3.13	825.				
62?		3.15	830.				
63?		2.44	644.				
68?		7.08	1866.				
69		6.83	1800.				
70		0.87	230.				
72		0.38	101.				
73		3.16	832.				
74		10.59	2792.				
75		35.07	9248.				
76		3.45	909.				
77		0.66	175.				
78		0.22	59.				
79		1.97	519.				
80		0.64	168.				
81		2.29	604.				
82		0.69	182.				
87		3.98	1050.				
88		4.19	1104.				
91		0.46	122.				
92		2.23	588.				
93		3.36	886.				
94		8.81	2324.				
95		100.00	26368.				
96		7.24	1908.				
97		0.22	59.				
105		0.44	116.				
106		0.61	161.				
117		0.85	225.				
119		0.91	241.				
128		0.46	120.				
141		1.60	421.				
143		0.85	225.				

MASS SPECTRUM
10/16/91 13:41:00 + 4:45
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
TEMP: 180 DEG. C
#365 TO #367 SUMMED - #345

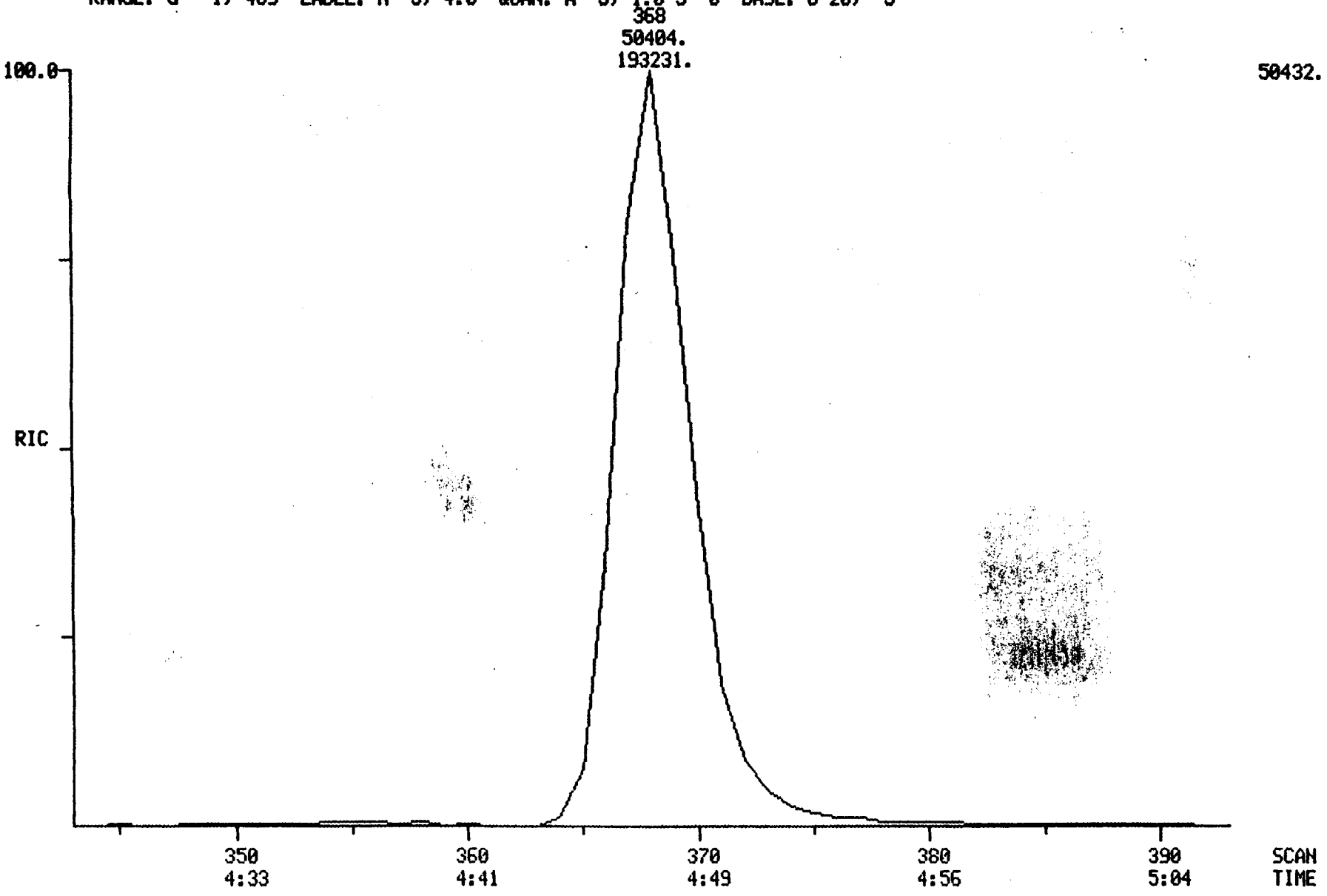
DATA: BG911016A53 #366
CALI: CALTAB #3

BASE M/Z: 95
RIC: 114688.



RIC
10/15/91 23:46:00
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
RANGE: G 1, 469 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3

DATA: BG911015B53 #1 SCANS 343 TO 393
CALI: CALTAB #3



Mass List Data: BG911015B53 # 368 Base m/z: 95
10/15/91 23:46:00 + 4:47 Cali: CALTAB # 3 RIC: 129152.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
Conds.: DB624
#367 to #369 summed - #350

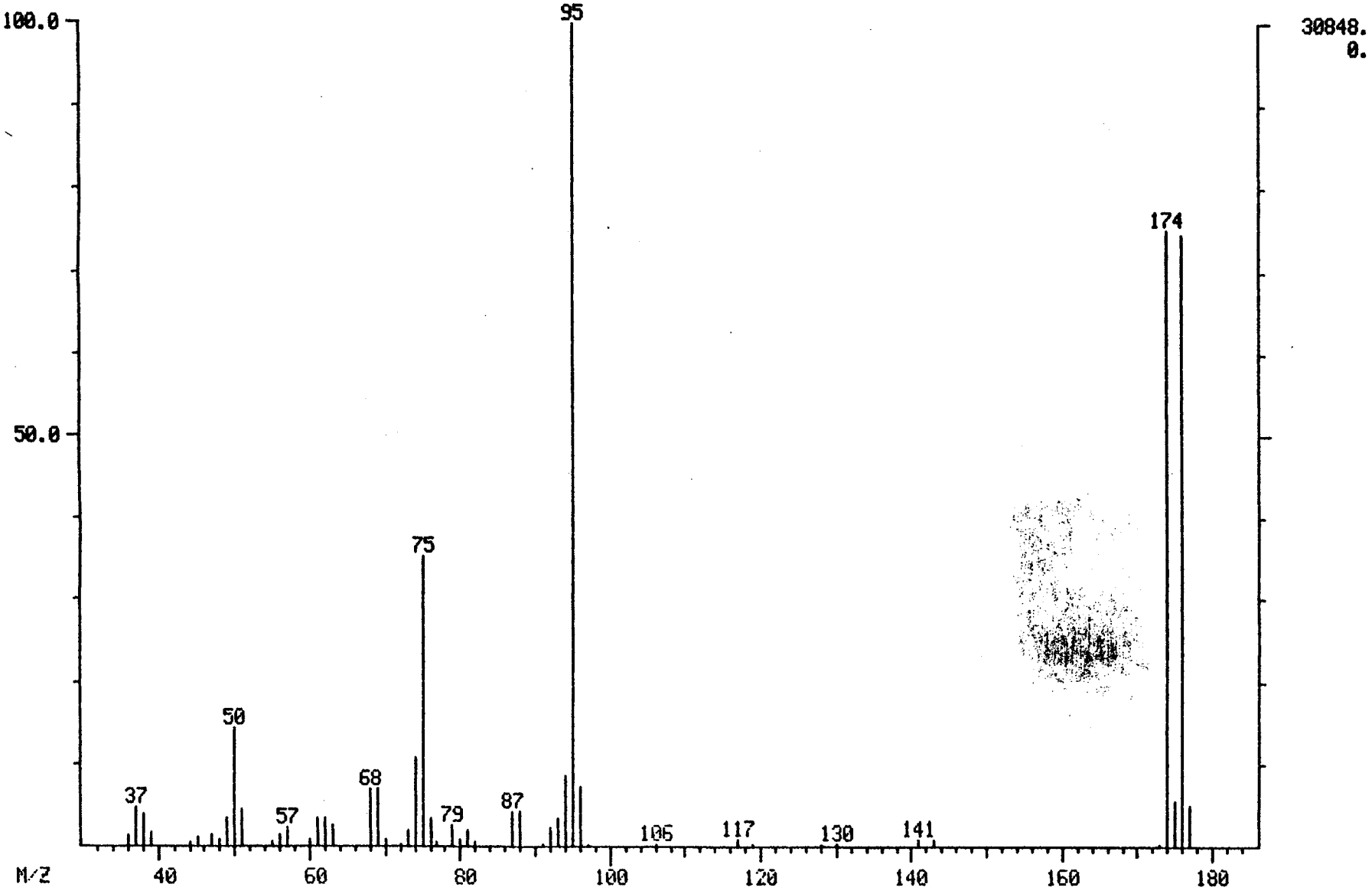
36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.	Mass	% RA	Inten.
36?		1.25	386.	175	5.60	1726.
37?		4.59	1416.	176	74.48	22976.
38?		4.01	1236.	177	5.08	1566.
39?		1.77	545.			
40?	S	0.05	15.			
44?	S	0.43	133.			
45?		1.02	316.			
47?		1.44	444.			
48?		0.82	252.			
49?		3.34	1030.			
50?		14.29	4408.			
51?		4.52	1394.			
55?		0.42	130.			
56?		1.26	388.			
57?		2.33	718.			
60?		0.78	242.			
61?		3.33	1026.			
62?		3.19	985.			
63?		2.38	735.			
68?		6.98	2152.			
69		6.86	2116.			
70		0.82	253.			
72		0.41	128.			
73	S	1.88	580.			
74		10.70	3300.			
75		35.48	10944.			
76		3.30	1019.			
77		0.53	164.			
79		2.37	732.			
80		0.73	226.			
81		1.89	584.			
82		0.44	136.			
87		4.16	1284.			
88		4.07	1254.			
91		0.16	50.			
92		2.18	673.			
93		3.19	985.			
94		8.69	2680.			
95		100.00	30848.			
96		7.18	2216.			
97		0.40	123.			
106		0.37	114.			
117		0.71	218.			
119		0.22	67.			
128		0.21	66.			
130		0.25	76.			
141		0.91	281.			
143		0.89	274.			
173		0.21	64.			
174		75.10	23168.			

MASS SPECTRUM
10/15/91 23:46:00 + 4:47
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
TEMP: 180 DEG. C
#367 TO #369 SUMMED - #350

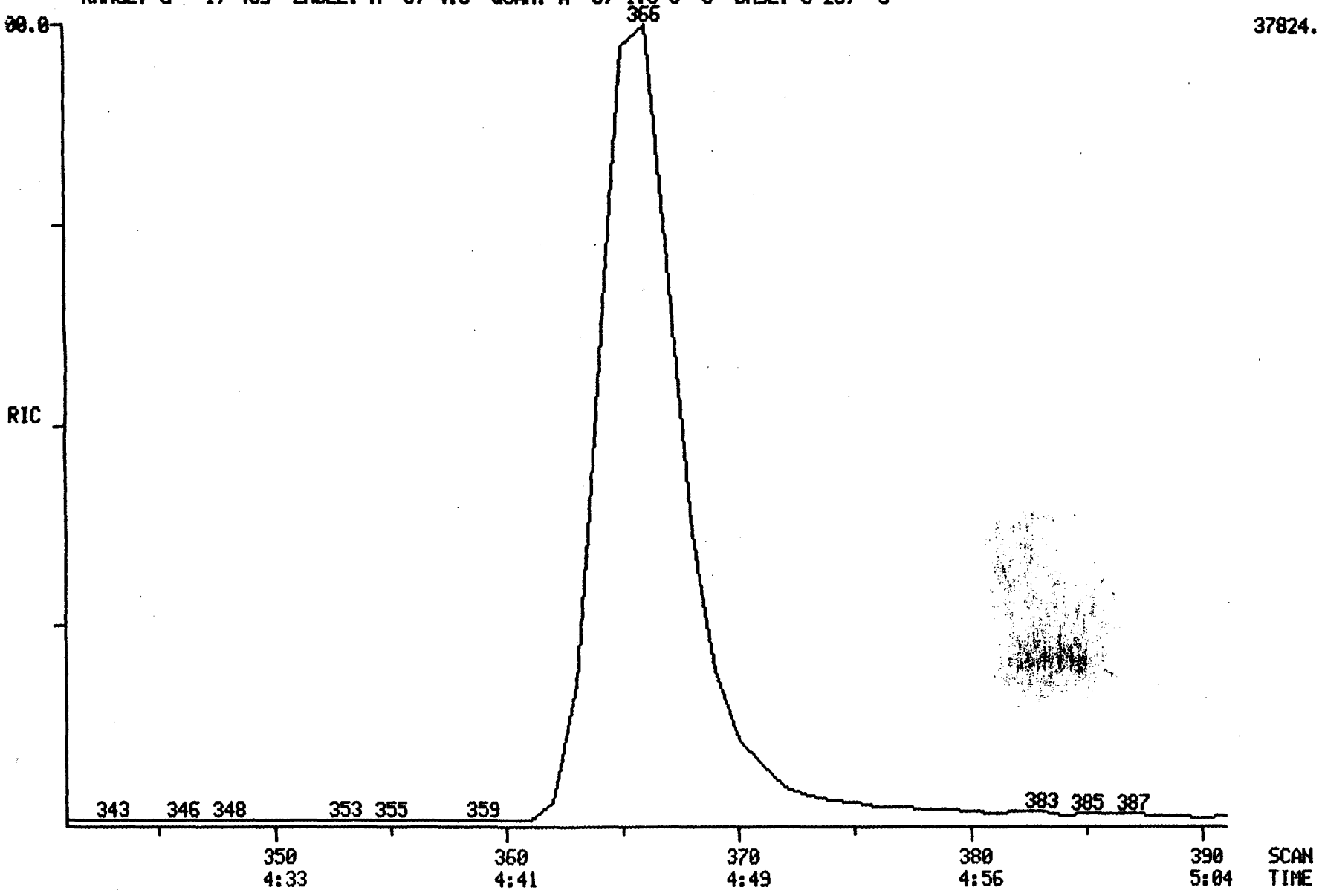
DATA: BG911015B53 #368
CALI: CALTAB #3

BASE M/Z: 95
RIC: 129152.



RIC
10/10/91 10:48:00
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
RANGE: G 1, 469 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BF911010A53 #365 SCANS 341 TO 391
CALI: BF911010A53 #3



10/10/91 10:48:00 + 4:45 Cali: BF911010A53 # 3 RIC: 100480.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
Conds.: DB624
#365 to #367 summed - #346

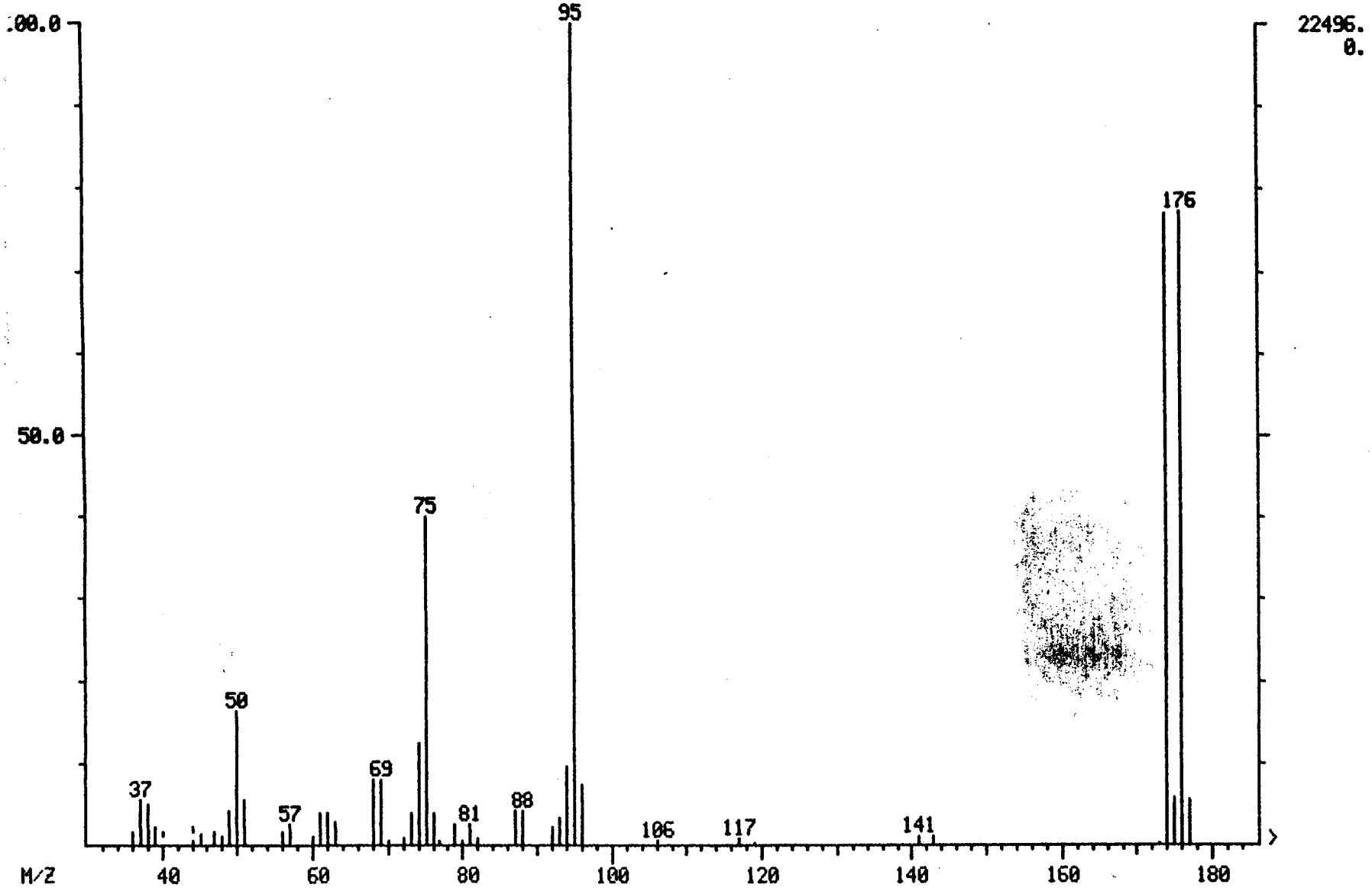
36 0.00 0. Minima Min Inten: 0.
207 Maxima # 0

Mass		% RA	Inten.
36?		1.58	355.
37?		5.66	1274.
38?		4.87	1096.
39?		2.15	483.
40?	S	0.06	14.
44?	S	0.50	113.
45?		1.27	285.
47?		1.75	394.
48?		1.02	230.
49?		4.05	911.
50?		16.23	3652.
51?		5.50	1238.
56?		1.52	342.
57?		2.51	564.
60?		1.14	256.
61?		3.89	876.
62?		3.74	842.
63?		2.81	632.
68?		7.97	1794.
69		8.04	1808.
70		0.68	153.
72		0.87	196.
73		3.80	854.
74		12.32	2772.
75		40.11	9024.
76		3.86	869.
77		0.54	121.
79		2.43	546.
80		0.64	143.
81		2.48	559.
82		0.79	178.
87		4.17	937.
88		4.18	940.
92		2.26	508.
93		3.44	774.
94		9.57	2152.
95		100.00	22496.
96		7.46	1678.
106		0.51	114.
117		0.81	183.
119		0.31	69.
141		1.06	238.
143		1.05	237.
173		0.32	73.
174		76.96	17312.
175		5.94	1336.
176		77.38	17408.
177		5.50	1238.
207	S	0.29	65.

MASS SPECTRUM
10/10/91 10:48:00 + 4:45
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50053
CONDS.: DB624
TEMP: 180 DEG. C
#365 TO #367 SUMMED - #346

DATA: BF911010A53 #366
CALI: BF911010A53 #3

BASE M/Z: 95
RIC: 100480.



(1) BFB (for each 12 hour period, for each GC/MS system utilized)

(a) Bar graph spectrum

(b) Mass listing

(c) Reconstructed total ion chromatogram (RIC)

d. Raw QC data

(1) BFB (for ech 12 hour period, for each GC/MS system utilized)

(a) Bar graph spectrum

(b) Mass listing

(c) Reconstructed total ion chromatogram (RIC)

(2) Blank data – in chronological order. NOTE: This order is different from that used for samples.

(a) Tabulated results (Form I VOA)

(b) Tentatively Identified Compounds (Form I VOA – TIC); even if none found.

(c) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile.

(d) TCL spectra with lab generated standard. Data systems which are incapable of dual display shall provide spectra in the following order:
– Raw TCL compound spectra
– Enhanced or background substracted spectra
– Laboratory generated TCL standard spectra

(e) GC/MS library search spectra for Tentatively Identified Compound(s) (TIC) concentrations.

(f) Quantitation/calculation of Tentatively Identified Compound(s) concentrations.

(3) Matrix Spike data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

(b) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile. Spectra not required.

(4) Matrix Spike Duplicate data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

(b) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile. Spectra not required.

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

VOLATILE

INITIAL TIME OF TUNE 7236
TIME TUNE EXPIRES 1036
SHIFT(S) (A) ____ (B) / (C) ____
DATE 10.16.91
ANALYSIS TYPE ~~GC~~ NWSW
PREVENTIVE MAINTENANCE None RBH 10.16.91

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF911016B53	/	10/16/91	21:19	BFB	–	7008	2ml	8118	LC=SC RBH 10-16-91
2	/	CS911016B53		/ /	21:32	VSTD050	–	1971	5ml		
3		BG911016B53	CS	/ /	22:21	BFB	–	7008	2ml		
4		BH911016B53	/	/ /	22:36	BFB	–	7008	2ml		
5	/	CT911016B53		/ /	22:48	VSTD050	–	1971	5ml		
6		CU911016B53	/	/ /	23:31	VSTD050	–	1971	5ml		
7		CR911017C53	/	10/17/91	0:38	VBLK PK			5ml	1171	
8		CN051847C53	/	/ /	1:33	FS921	17210				
9		CN051848C53	/	/ /	2:04	FS922					
10		CN051849C53	/	/ /	2:37	FS923					
11		CN052282C53	/	/ /	3:11	FS914					
12		CR051840C53	/	/ /	3:44	FS915					
13		CN048921C53	/	/ /	4:19	000					
14		CN049385C53	/	/ /	4:52	000					
15		CN049698C53	/	/ /	5:25	000					
16		CN050006C53	/	/ /	5:58	B1					
17		CN050074C53 (K. Fuller)	/	/ /	6:32	B1					
18		CN050378C53	/	/ /	7:05	000					
19		CN051020C53	/	/ /	7:38	000					
20		CN051748C53	/	/ /	8:11	B1					
21		CR052447A53	/	/ /	8:58	INFLUENTMS (Sub 10/17/91)	23861		5ml	633	
22		CR052448A53	/	/ /	10:06	INFLUENTMSD	23861		5ml	633	
23				/ /							
24				/ /							
				/ /							

VERIFIED Wapan 10/21/91
SUPERVISOR APPROVAL Sly Bao 10/17/91
FORMME 11017A53

64
23861 10 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:54	1.00	0.550	1.00	50.00	50.00	0.211	0.211	1.00
13	5:11	1.00	0.582	1.00	50.00	50.00	2.936	2.936	1.00
14	5.47	1.00	0.649	1.00	50.00	50.00	1.489	1.489	1.00
15	6:22	1.00	0.714	1.00	50.00	50.00	1.328	1.328	1.00
16	7:14	1.00	0.810	1.00	50.00	50.00	2.146	2.146	1.00
17	8:27	1.00	0.948	1.00	50.00	50.00	1.411	1.411	1.00
18	8:31	1.00	0.955	1.00	50.00	50.00	0.262	0.262	1.00
19	9:08	1.00	1.025	1.00	50.00	50.00	2.690	2.690	1.00
20	9:29	1.00	0.853	1.00	50.00	50.00	0.502	0.502	1.00
21	9:50	1.00	0.884	1.00	50.00	50.00	0.495	0.495	1.00
22	10:15	1.00	0.922	1.00	50.00	50.00	0.760	0.760	1.00
23	10:18	1.00	1.155	1.00	50.00	50.00	1.516	1.516	1.00
24	11:39	1.00	1.047	1.00	50.00	50.00	0.492	0.492	1.00
25	12:06	1.00	1.088	1.00	50.00	50.00	0.286	0.286	1.00
26	12:44	1.00	1.144	1.00	50.00	50.00	0.467	0.467	1.00
27	14:06	1.00	0.807	1.00	50.00	50.00	0.189	0.189	1.00
28	14:25	1.00	0.825	1.00	50.00	50.00	1.154	1.154	1.00
29	13:42	1.00	1.231	1.00	50.00	50.00	0.426	0.426	1.00
30	14:56	1.00	1.342	1.00	50.00	50.00	0.298	0.298	1.00
31	15:19	1.00	1.376	1.00	50.00	50.00	0.315	0.315	1.00
32	15:35	1.00	0.894	1.00	50.00	50.00	0.531	0.531	1.00
33	15:56	1.00	0.912	1.00	50.00	50.00	0.118	0.118	1.00
34	16:10	1.00	1.452	1.00	50.00	50.00	0.516	0.516	1.00
35	17:31	1.00	1.003	1.00	50.00	50.00	1.016	1.016	1.00
36	17:49	1.00	1.020	1.00	50.00	50.00	0.491	0.491	1.00
37	18:07	1.00	1.036	1.00	100.00	100.00	0.601	0.601	1.00
38	19:00	1.00	1.088	1.00	50.00	50.00	0.602	0.602	1.00
39	19:03	1.00	1.090	1.00	50.00	50.00	0.933	0.933	1.00
40	19:24	1.00	1.743	1.00	50.00	50.00	0.339	0.339	1.00
41	20:35	1.00	1.178	1.00	50.00	50.00	0.442	0.442	1.00
42	8:27	1.00	0.948	1.00	100.00	100.00	1.370	1.370	1.00
43	18:07	1.00	1.036	1.00	150.00	150.00	0.601	0.601	1.00

Mid 2/1/91.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	686	8:55	1	1.000	A BB	51029.	50.000 UG/L	2.13
2	114	856	11:08	2	1.000	A BB	241297.	50.000 UG/L	2.13
3	117	1344	17:28	3	1.000	A BB	220422.	50.000 UG/L	2.13
4	65	780	10:08	1	1.137	A BB	66150.	50.000 UG/L	2.13
5	98	1098	14:16	3	0.817	A BB	216110.	50.000 UG/L	2.13
6	95	1554	20:12	3	1.156	A BB	170637.	50.000 UG/L	2.13
7	50	215	2:48	1	0.313	A BB	28586.	50.000 UG/L	2.13
8	62	226	2:56	1	0.329	A BB	38130.	50.000 UG/L	2.13
9	94	257	3:20	1	0.375	A BB	52946.	50.000 UG/L	2.13
10	64	271	3:31	1	0.395	A BB	27531.	50.000 UG/L	2.13
11	96	370	4:49	1	0.539	A BB	68950.	50.000 UG/L	2.13
12	43	377	4:54	1	0.550	A BB	10773.	50.000 UG/L	2.13
13	76	399	5:11	1	0.582	A BB	149820.	50.000 UG/L	2.13
14	84	445	5:47	1	0.649	A BB	75977.	50.000 UG/L	2.13
15	96	490	6:22	1	0.714	A BB	67771.	50.000 UG/L	2.13
16	63	556	7:14	1	0.810	A BB	109534.	50.000 UG/L	2.13
17	96	650	8:27	1	0.948	A BB	72019.	50.000 UG/L	2.13
18	43	655	8:31	1	0.955	A BB	13355.	50.000 UG/L	2.13
19	83	703	9:08	1	1.025	A BB	137288.	50.000 UG/L	2.13
20	97	730	9:29	2	0.853	A BB	121057.	50.000 UG/L	2.13
21	117	757	9:50	2	0.884	A BB	119464.	50.000 UG/L	2.13
22	78	789	10:15	2	0.922	A BB	183318.	50.000 UG/L	2.13
23	62	792	10:18	1	1.155	A BB	77344.	50.000 UG/L	2.13
24	100	896	11:39	2	1.047	A BB	118684.	50.000 UG/L	2.13
25	63	931	12:06	2	1.086	A BB	69011.	50.000 UG/L	2.13
26	83	979	12:44	2	1.144	A BB	112645.	50.000 UG/L	2.13
27	43	1084	14:06	3	0.807	A BB	41742.	50.000 UG/L	2.13
28	91	1109	14:25	3	0.825	A BB	254422.	50.000 UG/L	2.13
29	75	1054	13:42	2	1.231	A BB	102900.	50.000 UG/L	2.13
30	75	1149	14.56	2	1.342	A BB	71846.	50.000 UG/L	2.13
31	97	1178	15:19	2	1.376	A BB	76045.	50.000 UG/L	2.13
32	164	1202	15:38	3	0.894	A BB	117144.	50.000 UG/L	2.13
33	43	1226	15:56	3	0.912	A BB	25962.	50.000 UG/L	2.13
34	129	1243	16:10	2	1.452	A BB	124457.	50 000 UG/L	2.13
35	112	1348	17:31	3	1.003	A BB	223840.	50.000 UG/L	2.13
36	106	1371	17:49	3	1.020	A BB	108301.	50.000 UG/L	2.13
37	106	1393	18:07	3	1.036	A BB	264943.	100.000 UG/L	4.26
38	106	1462	19:00	3	1.088	A BB	132744.	50.000 UG/L	2.13
39	104	1465	19:03	3	1.090	A BB	205624.	50.000 UG/L	2.13
40	173	1492	19:24	2	1.743	A BB	81686.	50.000 UG/L	2.13
41	83	1583	20:35	3	1.178	A BB	97367.	50.000 UG/L	2.13
42	96	650	8:27	1	0.948	A*BB	139790.	100.000 UG/L	4.26
43	106	1393	18:07	3	1.036	A*BB	397687.	150.000 UG/L	6.38

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:55	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:08	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:28	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:08	1.00	1.137	1.00	50.00	50.00	1.296	1.296	1.00
5	14:16	1.00	0.817	1.00	50.00	50.00	0.980	0.980	1.00
6	20:12	1.00	1.156	1.00	50.00	50.00	0.774	0.774	1.00
7	2.48	1.00	0.313	1.00	50.00	50.00	0.560	0.560	1.00
8	2:56	1.00	0.329	1.00	50.00	50.00	0.747	0.747	1.00
9	3:20	1.00	0.375	1.00	50.00	50.00	1.038	1.038	1.00
10	3:31	1.00	0.395	1.00	50.00	50.00	0.540	0.540	1.00
11	4:49	1.00	0.539	1.00	50.00	50.00	1.351	1.351	1.00

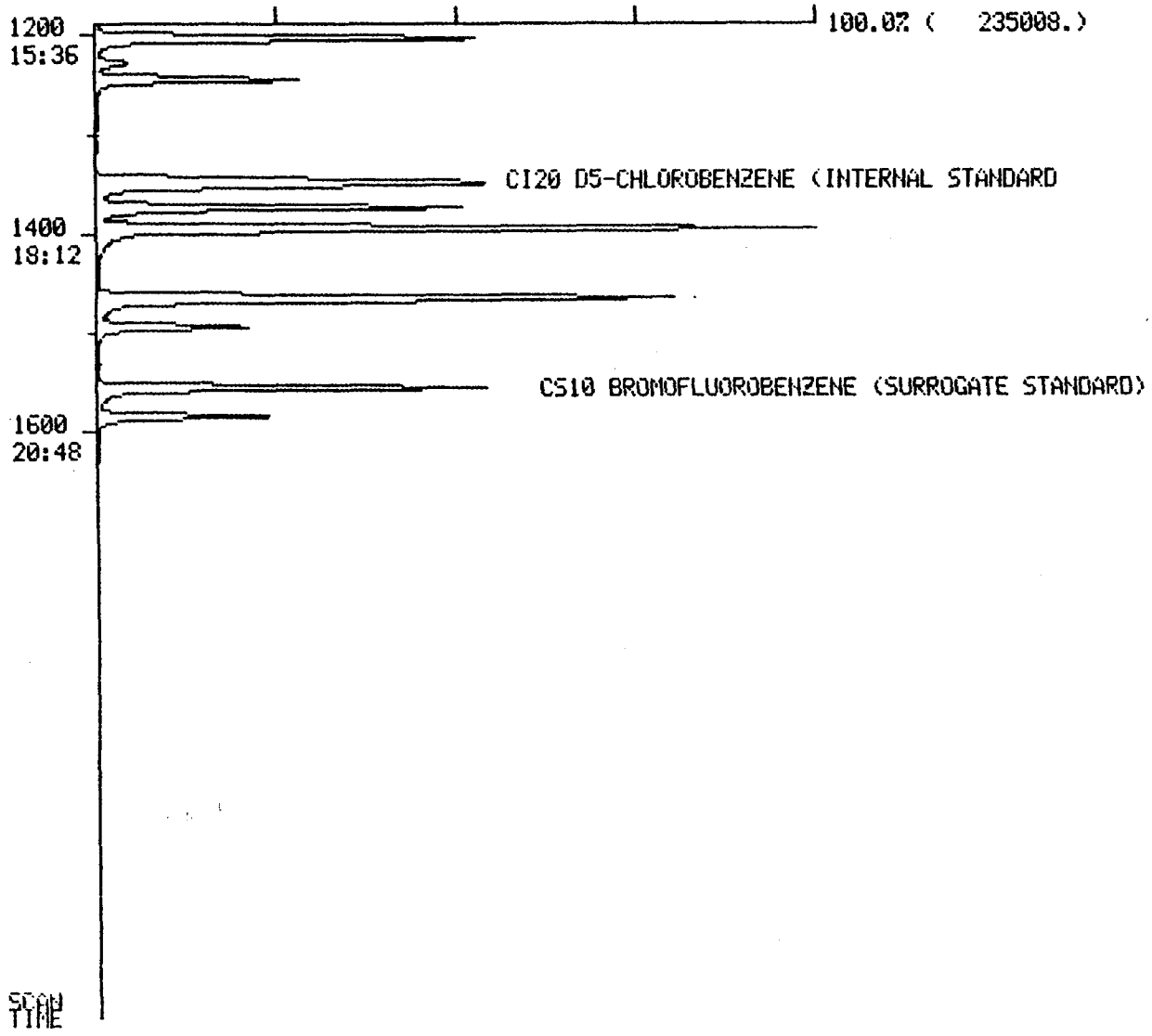
Quantitation Report File: CU911016B53

Data: CU911016B53.TI
10/16/91 23:31:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
Conds.: DB624,,BH911016B53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 1971 Analyst: 8118 Acct. No.: RBM

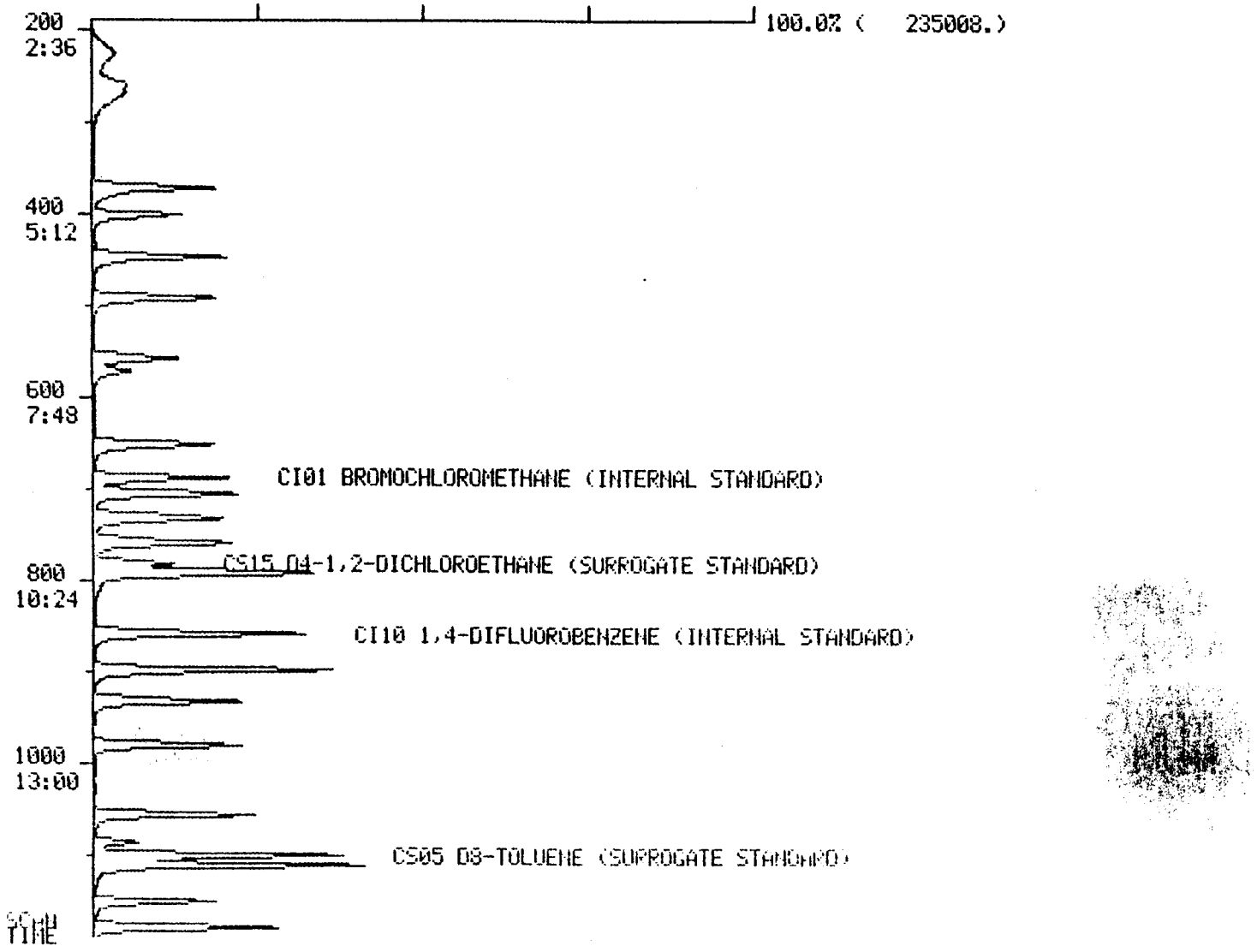
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CU911016B53 SCANS 1189 TO 1650 ACQUIRED: 10/16/91 23:31:00
CALI: CU911016B53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BH911016B53



DATA FROM FILE: CU911016B53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 23:31:00
CALI: CU911016B53 #3 OUT OF 189 TO 1650
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BH911016B53



7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Instrument ID: F50053 Calibration date: 10/16/91 Time: 2331

Lab File ID: CU911016B53 Init. Calib. Date(s): 10/10/91 10/10/91

Heated Purge: (Y/N) N Init. Calib. Times: 1155 1724

GC Column: DB624 ID: 0.530(mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.709	0.560		21.0	
Bromomethane	0.958	1.038	0.100	-8.4	25.0
Vinyl Chloride	0.838	0.747	0.100	10.9	25.0
Chloroethane	0.572	0.540		5.6	
Methylene Chloride	1.554	1.489		4.2	
Acetone	0.297	0.211		29.0	
Carbon Disulfide	3.534	2.936		16.9	
1,1-Dichloroethene	1.384	1.351	0.100	2.4	25.0
1,1-Dichloroethane	2.444	2.146	0.200	12.2	25.0
1,2-Dichloroethene (total)	1.426	1.370		3.9	
Chloroform	3.022	2.690	0.200	11.0	25.0
1,2-Dichloroethane	1.786	1.516	0.100	15.1	25.0
2-Butanone	0.340	0.262		22.9	
1,1,1-Trichloroethane	0.608	0.502	0.100	17.4	25.0
Carbon Tetrachloride	0.600	0.495	0.100	17.5	25.0
Bromodichloromethane	0.598	0.467	0.200	21.9	25.0
1,2-Dichloropropane	0.350	0.286		18.3	
cis-1,3-Dichloropropene	0.536	0.426	0.200	20.5	25.0
Trichloroethene	0.513	0.492	0.300	4.1	25.0
Dibromochloromethane	0.609	0.516	0.100	15.3	25.0
1,1,2-Trichloroethane	0.362	0.315	0.100	13.0	25.0
Benzene	0.909	0.760	0.500	16.4	25.0
Trans-1,3-Dichloropropene	0.386	0.298	0.100	22.8	25.0
Bromoform	0.446	0.339	0.100	24.0	25.0
4-Methyl-2-Pentanone	0.274	0.189		31.0	
2-Hexanone	0.173	0.118		31.8	
Tetrachloroethene	0.543	0.531	0.200	2.2	25.0
1,1,2,2-Tetrachloroethane	0.576	0.442	0.500	23.3	25.0
Toluene	1.344	1.154	0.400	14.1	25.0
Chlorobenzene	1.122	1.016	0.500	9.4	25.0
Ethylbenzene	0.539	0.491	0.100	8.9	25.0
Styrene	1.023	0.933	0.300	8.8	25.0
Xylene (total)	0.661	0.602	0.300	8.9	25.0
Toluene-d8	1.122	0.980		12.7	
Bromofluorobenzene	0.868	0.774	0.200	10.8	25.0
1,2-Dichloroethane-d4	1.565	1.296		17.2	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA 3/90

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

VOLATILE

INITIAL TIME OF TUNE ~~12:39~~ 13:41 SHIFT(S) (A) ✓ (B) ✓ (C) ____
TIME TUNE EXPIRES ~~0:39~~ 1:41 DATE 10/16/91
ANALYSIS TYPE NWSW

PREVENTIVE MAINTENANCE NONE SUB 10/16/91

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1	✓	BF911016A53		10/16/91	12:39	BFB		7008	2ul	633	
2	✓	CS911016A53		10/16/91	13:00	VSTD050		1966	5ml	633	
3		BG911016A53	✓	10/16/91	13:41	BFB		7008	2ul	633	
4		CT911016A53	✓	10/16/91	14:02	VSTD050		19660	5ml	633	
5		CB911016A53	✓	10/16/91	14:53	VBLKST	-	-	5ml	633	~~8118~~ [illegible]
6		CN052451B53	✓	10/16/91	16:11	EFFLUENT	23861	-	5ml	8118	
7		CN052447B53	BS	/ /	16:42	EFFLUENTMS	↓	-	5ml	↓	
8		CN052448B53	SH	/ /	17:16	EFFLUENTMSD	↓	-	5ml	↓	
9	✓	CR052448B53	~~EFSH~~	/ /	18:15	EFFLUENTMSD	23861	-	5ml	↓	No more sample
10		CN051840B53	SH	/ /	19:37	FS915	17210	-	5ml	↓	
11		CN051846B53	✓	/ /	20:19	FS916	17210	-	5ml	↓	Surrogate Marginal KILLED TUNE
12				/ /	:						
13				/ /	:						
14				/ /	:						
15				/ /	:						
16				/ /	:						
17				/ /	:						
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						
				/ /	:						

VERIFIED B. Linvill
SUPERVISOR APPROVAL 1452 [illegible]
FORMME 11016B53

71

23861 10 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	1.00	0.551	1.00	46.43	50.00	0.197	0.212	0.93
13	5:13	1.00	0.581	1.00	53.71	50.00	2.606	2.426	1.07
14	5:49	1.00	0.648	1.00	43.28	50.00	1.314	1.518	0.87
15	6:24	1.00	0.713	1.00	50.99	50.00	1.197	1.174	1.02
16	7:15	1.00	0.809	1.00	52.18	50.00	1.955	1.874	1.04
17	8:29	1.00	0.946	1.00	51.78	50.00	1.354	1.308	1.04
18	8:34	1.00	0.955	1.00	47.26	50.00	0.234	0.247	0.95
19	9:11	1.00	1.025	1.00	51.29	50.00	2.432	2.371	1.03
20	9:33	1.00	0.853	1.00	52.21	50.00	0.497	0.476	1.04
21	9:54	1.00	0.886	1.00	53.07	50.00	0.499	0.470	1.06
22	10:19	1.00	0.923	1.00	51.78	50.00	0.789	0.761	1.04
23	10:21	1.00	1.154	1.00	50.10	50.00	1.364	1.361	1.00
24	11:43	1.00	1.048	1.00	51.23	50.00	0.494	0.483	1.02
25	12:09	1.00	1.087	1.00	50.67	50.00	0.285	0.282	1.01
26	12:47	1.00	1.143	1.00	51.00	50.00	0.465	0.455	1.02
27	14:08	1.00	0.808	1.00	51.52	50.00	0.187	0.181	1.03
28	14:28	1.00	0.827	1.00	50.85	50.00	1.159	1.139	1.02
29	13:45	1.00	1.230	1.00	51.50	50.00	0.423	0.411	1.03
30	14:59	1.00	1.340	1.00	51.82	50.00	0.292	0.281	1.04
31	15:21	1.00	1.373	1.00	50.11	50.00	0.314	0.313	1.00
32	15:40	1.00	0.895	1.00	50.17	50.00	0.529	0.527	1.00
33	15:59	1.00	0.913	1.00	50.03	50.00	0.113	0.112	1.00
34	16:12	1.00	1.449	1.00	51.43	50.00	0.506	0.492	1.03
35	17:34	1.00	1.004	1.00	50.40	50.00	1.019	1.011	1.01
36	17:52	1.00	1.021	1.00	51.22	50.00	0.494	0.482	1.02
37	18:08	1.00	1.036	1.00	99.70	100.00	0.616	0.617	1.00
38	19:02	1.00	1.088	1.00	50.51	50.00	0.604	0.598	1.01
39	19:04	1.00	1.090	1.00	50.22	50.00	0.923	0.919	1.00
40	19:25	1.00	1.737	1.00	51.35	50.00	0.324	0.316	1.03
41	20:36	1.00	1.178	1.00	50.00	50.00	0.440	0.440	1.00
42	8:29	1.00	0.946	1.00	102.81	100.00	1.276	1.241	1.03
43	18:08	1.00	1.036	1.00	150.20	150.00	0.612	0.611	1.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	692	9:00	1	1.000	A BB	55338.	50.000	UG/L	2.10
2	114	862	11:12	2	1.000	A BB	239433.	50.000	UG/L	2.10
3	117	1348	17:31	3	1.000	A BB	218146.	50.000	UG/L	2.10
4	65	786	10:13	1	1.136	A BB	64254.	46.655	UG/L	1.96
5	98	1103	14:20	3	0.818	A BB	216138.	49.154	UG/L	2.07
6	95	1558	20:15	3	1.156	A BB	171972.	49.050	UG/L	2.06
7	50	221	2:52	1	0.319	A BB	31272.	53.330	UG/L	2.24
8	62	229	2:59	1	0.331	A BB	38139.	53.732	UG/L	2.26
9	94	262	3:24	1	0.379	A BB	48253.	49.484	UG/L	2.08
10	64	272	3:32	1	0.393	A BB	27119.	51.483	UG/L	2.17
11	96	373	4:51	1	0.539	A BB	68615.	52.201	UG/L	2.20
12	43	380	4:56	1	0.549	A BB	10884.	46.433	UG/L	1.95
13	76	402	5:14	1	0.581	A BB	144237.	53.714	UG/L	2.26
14	84	448	5:49	1	0.647	A BB	72713.	43.285	UG/L	1.82
15	96	493	6:25	1	0.712	A BB	66258.	50.991	UG/L	2.15
16	63	559	7:16	1	0.808	A BB	108189.	52.176	UG/L	2.20
17	96	655	8:31	1	0.947	A BB	74939.	51.776	UG/L	2.18
18	43	660	8:35	1	0.954	A BB	12922.	47.260	UG/L	1.99
19	83	709	9:13	1	1.025	A BB	134606.	51.288	UG/L	2.16
20	97	736	9:34	2	0.854	A BB	118931.	52.210	UG/L	2.20
21	117	763	9:55	2	0.885	A BB	119502.	53.073	UG/L	2.23
22	78	795	10:20	2	0.922	A BB	188828.	51.783	UG/L	2.18
23	62	798	10:22	1	1.153	A BB	75494.	50.105	UG/L	2.11
24	130	902	11:44	2	1.046	A BB	118392.	51.234	UG/L	2.16
25	63	936	12:10	2	1.086	A BB	68309.	50.671	UG/L	2.13
26	83	984	12:48	2	1.142	A BB	111226.	51.000	UG/L	2.15
27	43	1088	14:09	3	0.807	A BB	40737.	51.521	UG/L	2.17
28	91	1114	14:29	3	0.826	A BB	252774.	50.845	UG/L	2.14
29	75	1059	13:46	2	1.229	A BB	101336.	51.496	UG/L	2.17
30	75	1153	14:59	2	1.338	A BB	69806.	51.823	UG/L	2.18
31	97	1182	15:22	2	1.371	A BB	75118.	50.110	UG/L	2.11
32	164	1207	15:41	3	0.895	A BB	115416.	50.172	UG/L	2.11
33	43	1230	15:59	3	0.912	A BB	24542.	50.026	UG/L	2.11
34	129	1248	16:13	2	1.448	A BB	121166.	51.435	UG/L	2.16
35	112	1353	17:35	3	1.004	A BB	222398.	50.402	UG/L	2.12
36	106	1376	17:53	3	1.021	A BB	107780.	51.218	UG/L	2.16
37	106	1397	18:10	3	1.036	A BB	268545.	99.697	UG/L	4.20
38	106	1466	19:03	3	1.088	A BB	131696.	50.513	UG/L	2.13
39	104	1469	19:06	3	1.090	A BB	201353.	50.222	UG/L	2.11
40	173	1496	19:27	2	1.735	A BB	77681.	51.348	UG/L	2.16
41	83	1587	20:38	3	1.177	A BB	95905.	49.996	UG/L	2.10
42	96	655	8:31	1	0.947	A*BB	141197.	102.809	UG/L	4.33
43	106	1397	18:10	3	1.036	A*BB	400241.	150.195	UG/L	6.32

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:58	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:11	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:30	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:12	1.00	1.136	1.00	46.66	50.00	1.161	1.244	0.93
5	14:20	1.00	0.819	1.00	49.15	50.00	0.991	1.008	0.98
6	20:14	1.00	1.156	1.00	49.05	50.00	0.788	0.804	0.98
7	2:49	1.02	0.314	1.02	53.33	50.00	0.565	0.530	1.07
8	2:56	1.01	0.328	1.01	53.73	50.00	0.689	0.641	1.07
9	3:23	1.01	0.377	1.00	49.48	50.00	0.872	0.881	0.99
10	3:31	1.00	0.393	1.00	51.48	50.00	0.490	0.476	1.03
11	4:49	1.01	0.538	1.00	52.20	50.00	1.240	1.188	1.04

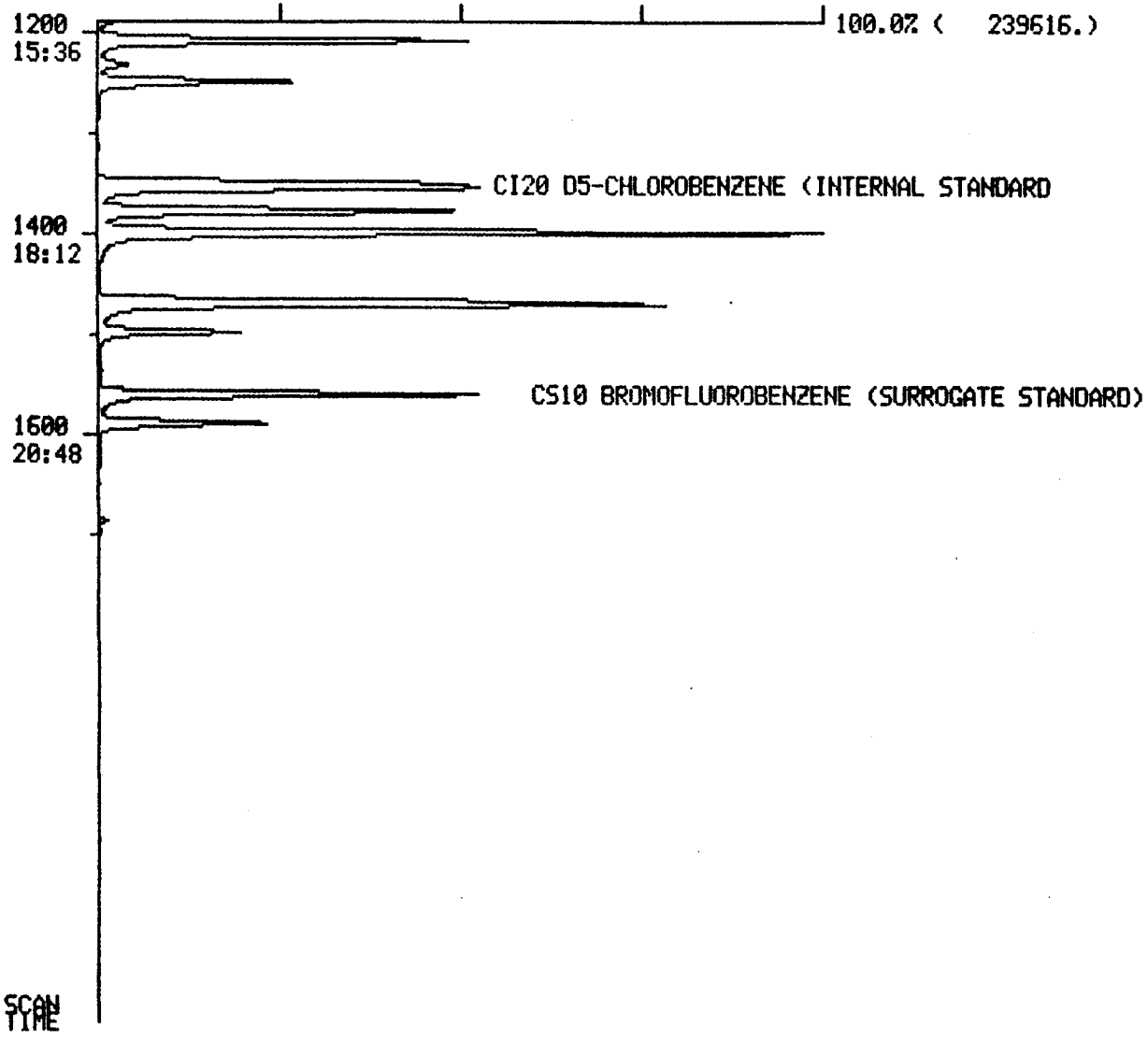
Quantitation Report File: CT911016A53

Data: CT911016A53.TI
10/16/91 14:02:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
Conds.: DB624,,BG911016A53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 1966 Analyst: 633 Acct. No.: SWB

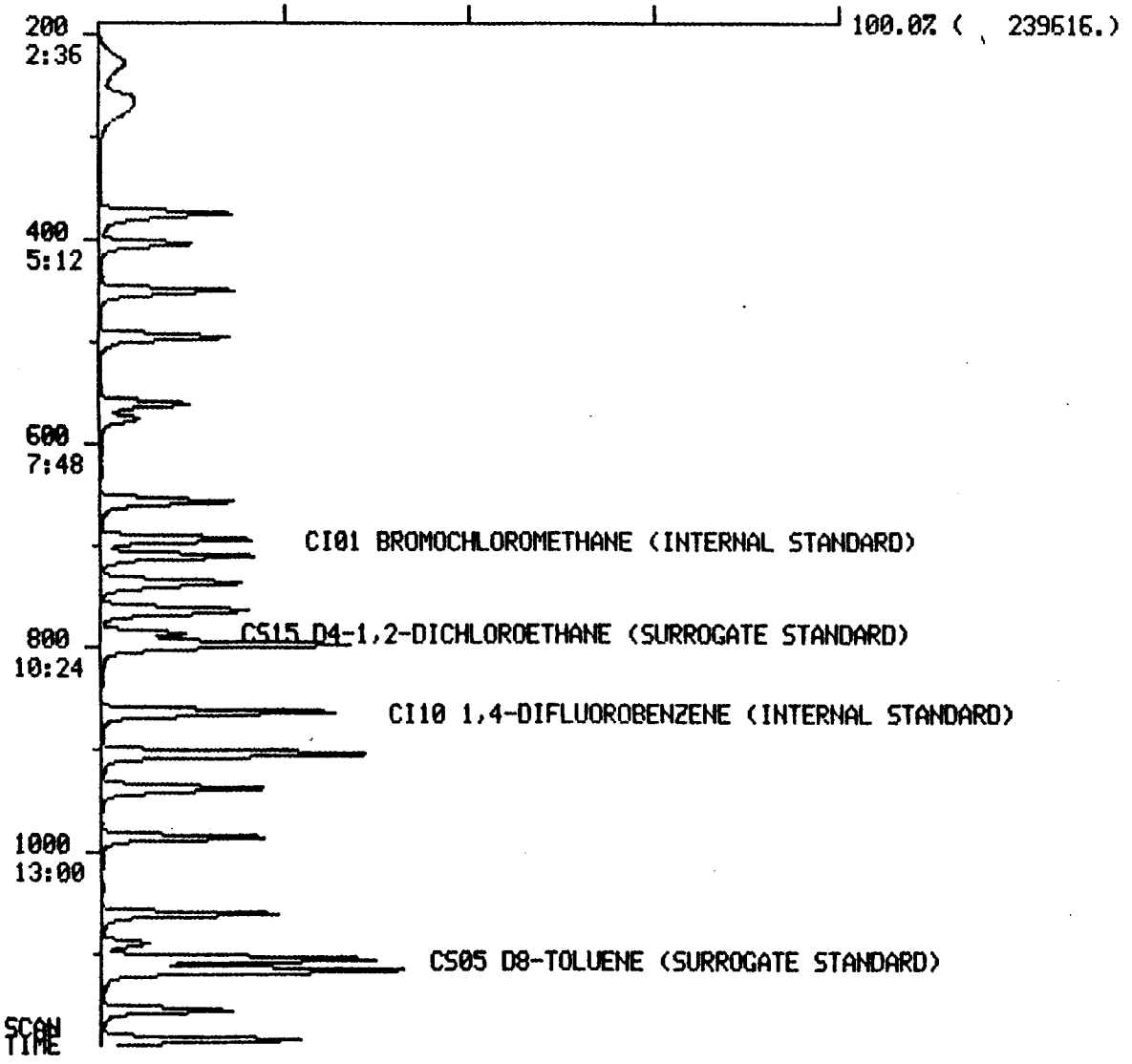
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CT911016A53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 14:02:00
CALI: CT911016A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BG911016A53



DATA FROM FILE: CT911016A53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 14:02:00
CALI: CT911016A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BG911016A53



7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Instrument ID: F50053 Calibration date: 10/16/91 Time: 1402

Lab File ID: CT911016A53 Init. Calib. Date(s): 10/10/91 10/10/91

Heated Purge: (Y/N) N Init. Calib. Times: 1155 1724

GC Column: DB-624 ID: 0.530(mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.709	0.565		20.3	
Bromomethane	0.958	0.872	0.100	9.0	25.0
Vinyl Chloride	0.838	0.689	0.100	17.8	25.0
Chloroethane	0.572	0.490		14.3	
Methylene Chloride	1.554	1.314		15.4	
Acetone	0.297	0.197		33.7	
Carbon Disulfide	3.534	2.606		26.3	
1,1-Dichloroethene	1.384	1.240	0.100	10.4	25.0
1,1-Dichloroethane	2.444	1.955	0.200	20.0	25.0
1,2-Dichloroethene (total)	1.426	1.276		10.5	
Chloroform	3.022	2.432	0.200	19.5	25.0
1,2-Dichloroethane	1.786	1.364	0.100	23.6	25.0
2-Butanone	0.340	0.234		31.2	
1,1,1-Trichloroethane	0.608	0.497	0.100	18.3	25.0
Carbon Tetrachloride	0.600	0.499	0.100	16.8	25.0
Bromodichloromethane	0.598	0.465	0.200	22.2	25.0
1,2-Dichloropropane	0.350	0.285		18.6	
cis-1,3-Dichloropropene	0.536	0.423	0.200	21.1	25.0
Trichloroethene	0.513	0.494	0.300	3.7	25.0
Dibromochloromethane	0.609	0.506	0.100	16.9	25.0
1,1,2-Trichloroethane	0.362	0.314	0.100	13.3	25.0
Benzene	0.909	0.789	0.500	13.2	25.0
Trans-1,3-Dichloropropene	0.386	0.292	0.100	24.4	25.0
Bromoform	0.446	0.324	0.100	27.4	25.0
4-Methyl-2-Pentanone	0.274	0.187		31.8	
2-Hexanone	0.173	0.113		34.7	
Tetrachloroethene	0.543	0.529	0.200	2.6	25.0
1,1,2,2-Tetrachloroethane	0.576	0.440	0.500	23.6	25.0
Toluene	1.344	1.159	0.400	13.8	25.0
Chlorobenzene	1.122	1.019	0.500	9.2	25.0
Ethylbenzene	0.539	0.494	0.100	8.3	25.0
Styrene	1.023	0.923	0.300	9.8	25.0
Xylene (total)	0.661	0.604	0.300	8.6	25.0
Toluene-d8	1.122	0.991		11.7	
Bromofluorobenzene	0.868	0.788	0.200	9.2	25.0
1,2-Dichloroethane-d4	1.565	1.161		25.8	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA 3/90

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

VOLATILE

RUN LOG

INITIAL TIME OF TUNE 2346 SHIFTS (A) ____ (B) ____ (C) ____
TIME TUNE EXPIRES 1146 DATE 9/15/91
ANALYSIS TYPE NWSW
PREVENTIVE MAINTENANCE Calibrate 10/15/91

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF911015B53		10/15/91	22:11	BFB			2ul	1171	Lc=5c 10/16/91
2		BF911015B53	/	/ /	22:27						
3	/	CS911015B53		/ /	22:41	USTD050			5ul		
4				/ /	:	Standover					
5		BF911015B53		/ /	23:30	BFB			2ul	1171	
6		BF911015B53	/	/ /	23:46						
7		CT911015B53	/	/ /	23:58	USTD050			5ul		
8		CB911016C53	/	10/16/91	0:52	UBLK_PT					
9		CR051434C53	/	/ /	2:10	TBLK006741	24170				
10		CN052241C53	/	/ /	2:41	RUQTAXZAX	24237				
11		CN051638C53	/	/ /	3:14	RUQT102					
12		CN051646C53	DE	/ /	3:48	RUMW1B02					
13		CN051647C53	/	/ /	4:21	RUMW2A02					
14		CN051648C53	/	/ /	4:54	RUMW2A02D					
15		CN051649C53	DE	/ /	5:27	RUMW2B02					
16		CN052238C53	/	/ /	6:01	RUQS202					
17		CN052240C53	/	/ /	6:34	RUMW3A02					
18		CN051639C53	/	/ /	7:07	RUMW3A02MS					
19		CN051640C53	/	/ /	7:40	RUMW3A02MSD					
20		CR051646A53	/	/ /	9:05	RVMW1B02	24237		2000ml	633	
21		CR051649A53	/	/ /	9:46	RVMW2B02	24237		2000ml	633	
22		CN052454A53	/	/ /	10:22	LABPURE	23861		5ml	633	
23		CN052446A53	/	/ /	11:04	INFLUENT	23861		5ml	633	
24		CN052450A53	/	/ /	11:38	BETWEEN	23861		5ml	633	
				/ /	:						

VERIFIED ____
SUPERVISOR APPROVAL SLBass 10/16/91
FORMME 1016A53

78

23861 10 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	0.99	0.552	1.00	38.51	50.00	0.213	0.277	0.77
13	5:15	0.99	0.584	1.00	45.91	50.00	3.088	3.363	0.92
14	5:51	0.99	0.650	1.00	47.08	50.00	1.531	1.626	0.94
15	6:26	0.99	0.715	1.00	48.67	50.00	1.391	1.429	0.97
16	7:18	0.99	0.811	1.00	40.26	50.00	2.269	2.819	0.81
17	8:31	1.00	0.947	1.00	45.52	50.00	1.404	1.542	0.91
18	8:36	1.00	0.955	1.00	36.48	50.00	0.289	0.397	0.73
19	9:13	1.00	1.025	1.00	45.92	50.00	2.800	3.048	0.92
20	9:34	0.99	0.853	1.00	49.64	50.00	0.484	0.488	0.99
21	9:55	0.99	0.884	1.00	58.40	50.00	0.477	0.409	1.17
22	10:21	0.99	0.922	1.00	35.65	50.00	0.805	1.129	0.71
23	10:22	1.00	1.153	1.00	41.15	50.00	1.538	1.869	0.82
24	11:44	1.00	1.046	1.00	56.38	50.00	0.475	0.421	1.13
25	12:11	1.00	1.086	1.00	32.19	50.00	0.295	0.459	0.64
26	12:48	1.00	1.141	1.00	42.09	50.00	0.464	0.551	0.84
27	14:10	1.00	0.808	1.00	29.28	50.00	0.198	0.339	0.59
28	14:30	1.00	0.827	1.00	41.40	50.00	1.177	1.421	0.83
29	13:47	1.00	1.228	1.00	35.38	50.00	0.433	0.612	0.71
30	15:01	1.00	1.338	1.00	38.32	50.00	0.293	0.383	0.77
31	15:24	1.00	1.372	1.00	44.60	50.00	0.318	0.356	0.89
32	15:42	1.00	0.895	1.00	62.14	50.00	0.502	0.404	1.24
33	16:01	1.00	0.913	1.00	31.16	50.00	0.125	0.200	0.62
34	16:14	1.00	1.447	1.00	58.85	50.00	0.487	0.414	1.18
35	17:36	1.00	1.004	1.00	49.17	50.00	1.012	1.029	0.98
36	17:54	1.00	1.021	1.00	49.01	50.00	0.493	0.503	0.98
37	18:11	1.00	1.037	1.00	95.98	100.00	0.604	0.629	0.96
38	19:05	1.00	1.088	1.00	49.07	50.00	0.598	0.609	0.98
39	19:07	1.00	1.090	1.00	47.94	50.00	0.918	0.957	0.96
40	19:28	1.00	1.736	1.00	67.36	50.00	0.317	0.235	1.35
41	20:39	1.00	1.178	1.00	37.59	50.00	0.449	0.597	0.75
42	8:31	1.00	0.947	1.00	94.07	100.00	1.397	1.485	0.94
43	18:11	1.00	1.037	1.00	145.03	150.00	0.602	0.622	0.97

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	688	8:57	1	1.000	A BB	49559.	50.000	UG/L	2.34
2	114	859	11:10	2	1.000	A BB	243846.	50.000	UG/L	2.34
3	117	1347	17:31	3	1.000	A BB	218266.	50.000	UG/L	2.34
4	65	782	10:10	1	1.137	A BB	71128.	41.303	UG/L	1.93
5	98	1101	14:19	3	0.817	A BB	231309.	44.182	UG/L	2.07
6	95	1557	20:14	3	1.156	A BB	178966.	44.749	UG/L	2.10
7	50	218	2:50	1	0.317	A BB	29554.	32.307	UG/L	1.51
8	62	227	2:57	1	0.330	A BB	42393.	38.591	UG/L	1.81
9	94	259	3:22	1	0.376	A BB	46460.	51.576	UG/L	2.41
10	64	272	3:32	1	0.395	A BB	23941.	38.199	UG/L	1.79
11	96	371	4:49	1	0.539	A BB	69699.	54.814	UG/L	2.57
12	43	379	4:56	1	0.551	A BB	10557.	38.514	UG/L	1.80
13	76	401	5:13	1	0.583	A BB	153018.	45.906	UG/L	2.15
14	84	447	5:49	1	0.650	A BB	75867.	47.081	UG/L	2.20
15	96	492	6:24	1	0.715	A BB	68913.	48.669	UG/L	2.28
16	63	558	7:15	1	0.811	A BB	112461.	40.255	UG/L	1.88
17	96	652	8:29	1	0.948	A BB	69593.	45.521	UG/L	2.13
18	43	658	8:33	1	0.956	A BB	14346.	36.484	UG/L	1.71
19	83	706	9:11	1	1.026	A BB	138746.	45.922	UG/L	2.15
20	97	732	9:31	2	0.852	A BB	118051.	49.639	UG/L	2.32
21	117	759	9:52	2	0.884	A BB	116435.	58.400	UG/L	2.73
22	78	792	10:18	2	0.922	A BB	196249.	35.648	UG/L	1.67
23	62	795	10:20	1	1.156	A BB	76213.	41.149	UG/L	1.93
24	130	900	11:42	2	1.048	A BB	115790.	56.377	UG/L	2.64
25	63	934	12:09	2	1.087	A BB	72037.	32.193	UG/L	1.51
26	83	982	12:46	2	1.143	A BB	113168.	42.086	UG/L	1.97
27	43	1087	14:08	3	0.807	A BB	43315.	29.284	UG/L	1.37
28	91	1112	14:27	3	0.826	A BB	256804.	41.397	UG/L	1.94
29	75	1057	13:44	2	1.231	A BB	105598.	35.382	UG/L	1.66
30	75	1152	14:59	2	1.341	A BB	71548.	38.323	UG/L	1.79
31	97	1181	15:21	2	1.375	A BB	77474.	44.601	UG/L	2.09
32	164	1205	15:40	3	0.895	A BB	109658.	62.143	UG/L	2.91
33	43	1230	15:59	3	0.913	A BB	27197.	31.160	UG/L	1.46
34	129	1246	16:12	2	1.451	A BB	118799.	58.846	UG/L	2.76
35	112	1351	17:34	3	1.003	A BB	220974.	49.174	UG/L	2.30
36	106	1374	17:52	3	1.020	A BB	107690.	49.011	UG/L	2.29
37	106	1396	18:09	3	1.036	A BB	263462.	95.979	UG/L	4.49
38	106	1465	19:03	3	1.088	A BB	130466.	49.070	UG/L	2.30
39	104	1468	19:05	3	1.090	A BB	200370.	47.944	UG/L	2.24
40	173	1495	19:26	2	1.740	A BB	77339.	67.358	UG/L	3.15
41	83	1586	20:37	3	1.177	A BB	97927.	37.595	UG/L	1.76
42	96	652	8:29	1	0.948	A*BB	138505.	94.070	UG/L	4.40
43	106	1396	18:09	3	1.036	A*BB	393928.	145.026	UG/L	6.79

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:00	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:13	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:32	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:13	0.99	1.136	1.00	41.30	50.00	1.435	1.737	0.83
5	14:21	1.00	0.818	1.00	44.18	50.00	1.060	1.199	0.88
6	20:17	1.00	1.156	1.00	44.75	50.00	0.820	0.916	0.89
7	2:49	1.00	0.314	1.01	32.31	50.00	0.596	0.923	0.65
8	2:59	0.99	0.332	0.99	38.59	50.00	0.855	1.108	0.77
9	3:23	1.00	0.376	1.00	51.58	50.00	0.937	0.909	1.03
10	3:34	0.99	0.396	1.00	38.20	50.00	0.483	0.632	0.76
11	4:52	0.99	0.540	1.00	54.81	50.00	1.406	1.283	1.10

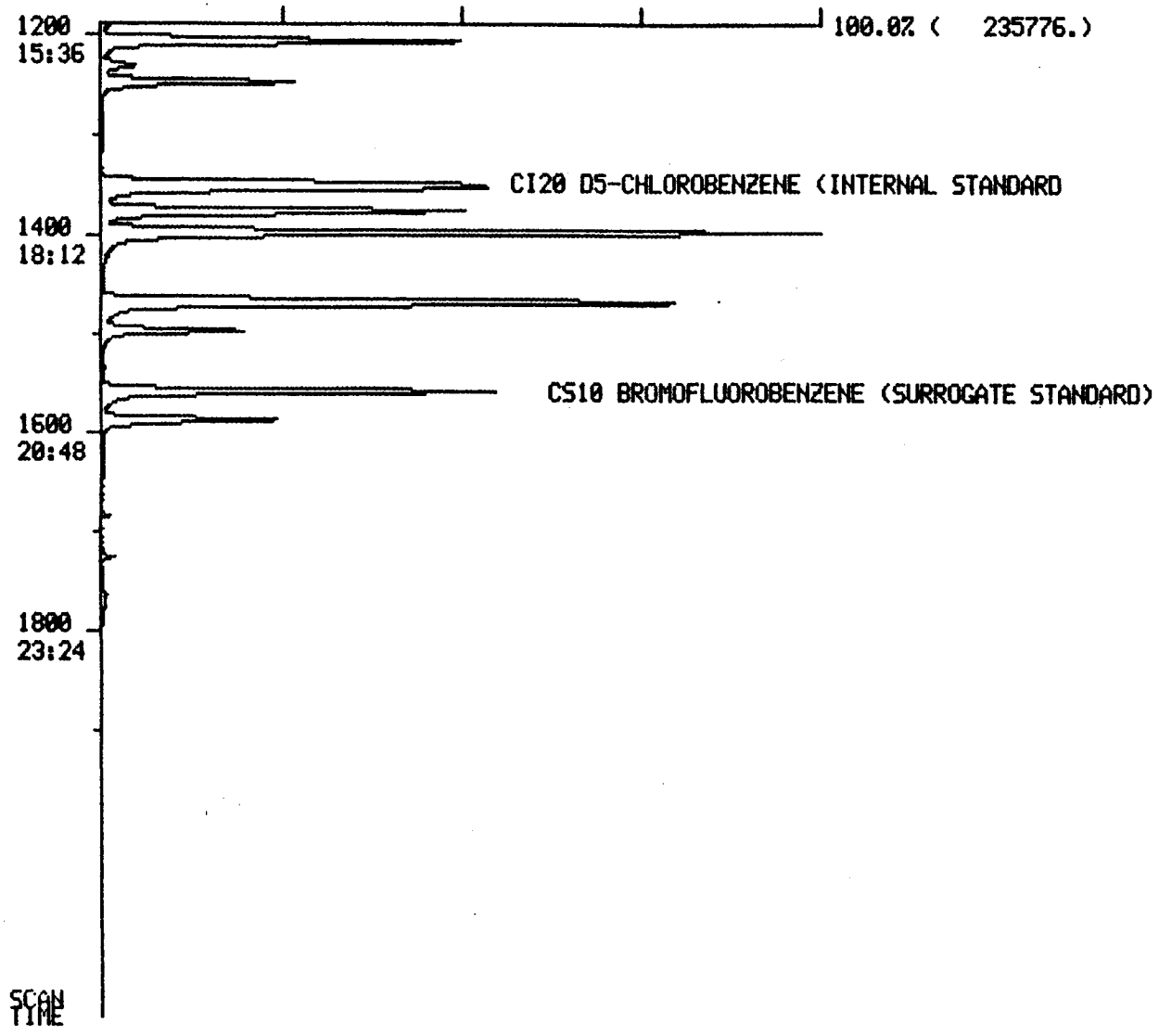
Quantitation Report File: CT911015B53

Data: CT911015B53.TI
10/15/91 23:58:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F0053
Conds.: DB624,,BQ911015B53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: NWSW Analyst: 1171 Acct. No.: AM

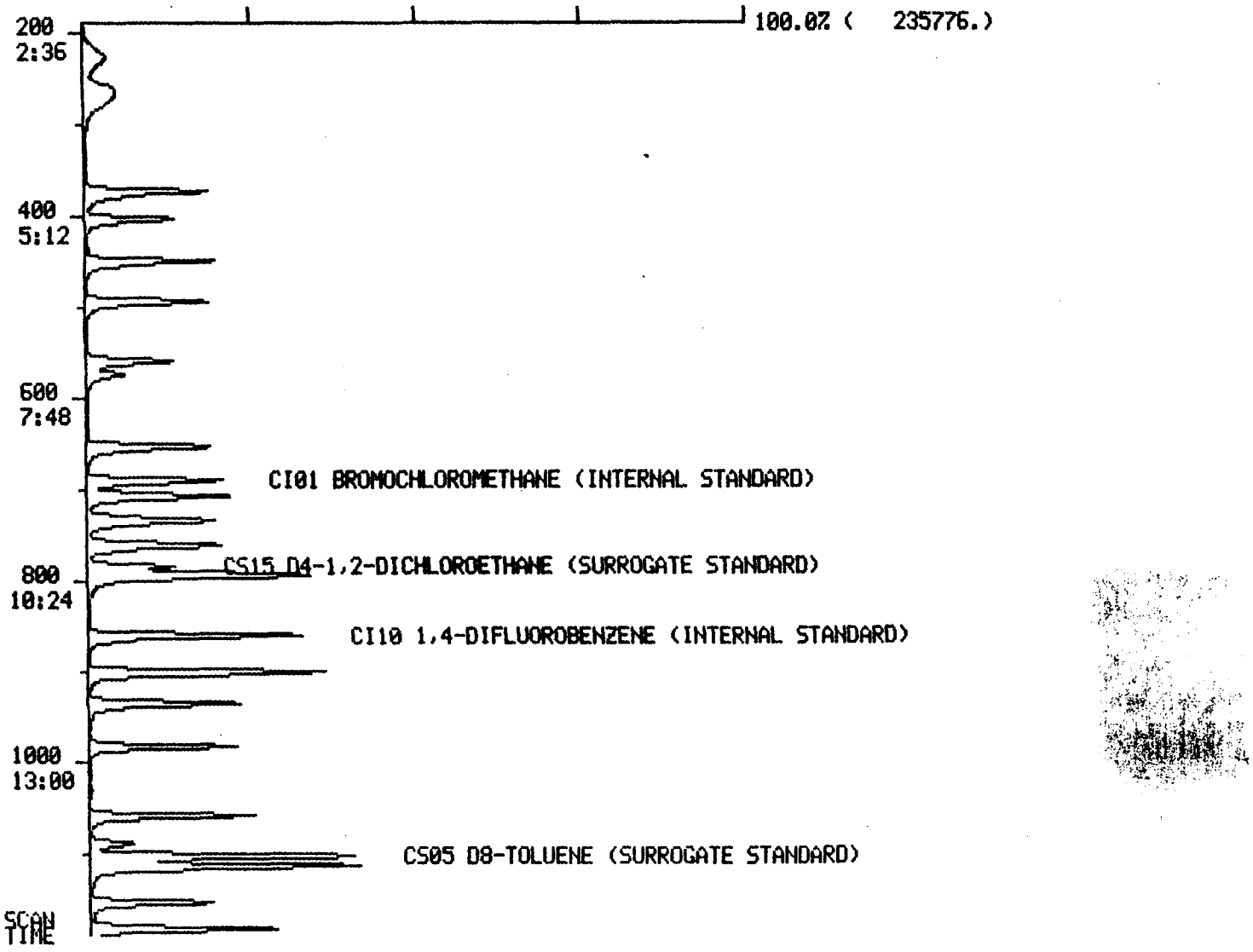
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CT911015B53 SCANS 1189 TO 1900 ACQUIRED: 10/15/91 23:58:00
CALI: CT911015B53 #3 OUT OF 189 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F0053
CONDS.: DB624,,BG911015B53



DATA FROM FILE: CT911015B53 SCANS 189 TO 1189 ACQUIRED: 10/15/91 23:58:00
CALI: CT911015B53 #3 OUT OF 189 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F0053
CONDS.: DB624,,BG911015B53



7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Instrument ID: F50053 Calibration date: 10/15/91 Time: 2358

Lab File ID: CT911015B53 Init. Calib. Date(s): 10/10/91 10/10/91

Heated Purge: (Y/N) N Init. Calib. Times: 1155 1724

GC Column: DB-624 ID: 0.530(mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.709	0.596		15.9	
Bromomethane	0.958	0.937	0.100	2.2	25.0
Vinyl Chloride	0.838	0.855	0.100	-2.0	25.0
Chloroethane	0.572	0.483		15.6	
Methylene Chloride	1.554	1.531		1.5	
Acetone	0.297	0.213		28.3	
Carbon Disulfide	3.534	3.088		12.6	
1,1-Dichloroethene	1.384	1.406	0.100	-1.6	25.0
1,1-Dichloroethane	2.444	2.269	0.200	7.2	25.0
1,2-Dichloroethene (total)	1.426	1.397		2.0	
Chloroform	3.022	2.800	0.200	7.3	25.0
1,2-Dichloroethane	1.786	1.538	0.100	13.9	25.0
2-Butanone	0.340	0.289		15.0	
1,1,1-Trichloroethane	0.608	0.484	0.100	20.4	25.0
Carbon Tetrachloride	0.600	0.477	0.100	20.5	25.0
Bromodichloromethane	0.598	0.464	0.200	22.4	25.0
1,2-Dichloropropane	0.350	0.295		15.7	
cis-1,3-Dichloropropene	0.536	0.433	0.200	19.2	25.0
Trichloroethene	0.513	0.475	0.300	7.4	25.0
Dibromochloromethane	0.609	0.487	0.100	20.0	25.0
1,1,2-Trichloroethane	0.362	0.318	0.100	12.2	25.0
Benzene	0.909	0.805	0.500	11.4	25.0
Trans-1,3-Dichloropropene	0.386	0.293	0.100	24.1	25.0
Bromoform	0.446	0.317	0.100	28.9	25.0
4-Methyl-2-Pentanone	0.274	0.198		27.7	
2-Hexanone	0.173	0.125		27.8	
Tetrachloroethene	0.543	0.502	0.200	7.6	25.0
1,1,2,2-Tetrachloroethane	0.576	0.449	0.500	22.0	25.0
Toluene	1.344	1.177	0.400	12.4	25.0
Chlorobenzene	1.122	1.012	0.500	9.8	25.0
Ethylbenzene	0.539	0.493	0.100	8.5	25.0
Styrene	1.023	0.918	0.300	10.3	25.0
Xylene (total)	0.661	0.598	0.300	9.5	25.0
Toluene-d8	1.122	1.060		5.5	
Bromofluorobenzene	0.868	0.820	0.200	5.5	25.0
1,2-Dichloroethane-d4	1.565	1.435		8.3	

All other compounds must meet a minimum RRF of 0.010.

FORM VII VOA 3/90

(2) Continuing Calibration (Form VII VOA) – in order by instrument, if more than one intrument used.

(a) VOA standard(s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) When more than one continuing calibration is performed, forms must be in chronological order, within fraction and instrument.

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

VOLATILE

INITIAL TIME OF TUNE _____ SHIFT(S) (A) X (B) _____ (C) _____
TIME TUNE EXPIRES _____ DATE 10-10-91
ANALYSIS TYPE NWSW

PREVENTIVE MAINTENANCE None 5ml 10-11-91

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF911010A53	/	10/10/91	10:48	BFB	—	7038	2ml	1964	Scale
2	/	CS911010A53		10/10/91	11:01	VSTD050	—	1966	5ml	1964	
3		CT911010A53	/	10/10/91	11:55	VSTD080	—	1966	5ml	1964	
4		CU911010A53	/	10/10/91	13:33	VSTD200	—	1968	5ml	1527	
5		CV911010A53	/	10/10/91	14:06	VSTD100	—	1967	5ml	1527	
6		CW911010A53	/	10/10/91	14:39	VSTD20	—	1965	5ml	1527	
7		CX911010A53		10/10/91	15:12	VSTD10	—	1964	5ml	1527	
8		CY911010A53	/	10/10/91	17:24	VSTD010	—	1964	5ml	8118	
9		CZ911010A53		10/10/91	18:04	VSTD200	-	1968	5ml	8118	
10				/ /	:						
11				/ /	:						
12				/ /	:						
13				/ /	:						
14				/ /	:						
15				/ /	:						
16				/ /	:						
17				/ /	:						
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						
				/ /	:						

VERIFIED [illegible] 10/17/91
SUPERVISOR APPROVAL [illegible]
FORMME 11010B53

86

23861 10 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
12	4:58	0.99	0.550	1.00	136.23	50.00	0.642	0.235	2.72
13	5:15	0.98	0.581	0.99	198.32	50.00	12.433	3.134	3.97
14	5:52	0.98	0.649	0.99	180.37	50.00	4.305	1.193	3.61
15	6:27	0.98	0.714	0.99	179.69	50.00	4.662	1.297	3.59
16	7:19	0.99	0.810	1.00	187.63	50.00	8.238	2.195	3.75
17	8:33	0.99	0.947	1.00	184.09	50.00	5.287	1.436	3.68
18	8:37	0.99	0.954	1.00	186.22	50.00	0.967	0.260	3.72
19	9:15	0.99	1.024	1.00	187.68	50.00	10.241	2.728	3.75
20	9:36	0.99	0.854	1.00	168.95	50.00	2.137	0.632	3.38
21	9:57	0.99	0.885	1.00	177.11	50.00	2.129	0.601	3.54
22	10:22	0.99	0.924	1.00	164.75	50.00	3.059	0.928	3.29
23	10:24	0.99	1.151	1.00	183.55	50.00	5.912	1.611	3.67
24	11:45	0.99	1.046	1.00	156.29	50.00	1.590	0.509	3.13
25	12:12	0.99	1.086	1.00	172.93	50.00	1.204	0.348	3.46
26	12:49	0.99	1.141	1.00	179.14	50.00	2.160	0.603	3.58
27	14:10	0.99	0.808	1.00	157.33	50.00	0.859	0.273	3.15
28	14:30	0.99	0.827	1.00	167.68	50.00	4.537	1.353	3.35
29	13:48	0.99	1.228	1.00	175.76	50.00	1.911	0.544	3.52
30	15:01	0.99	1.337	1.00	180.62	50.00	1.378	0.382	3.61
31	15:24	0.99	1.370	1.00	160.51	50.00	1.156	0.360	3.21
32	15:42	1.00	0.895	1.00	162.82	50.00	1.704	0.523	3.26
33	16:00	1.00	0.913	1.00	163.31	50.00	0.547	0.167	3.27
34	16:14	1.00	1.446	1.00	168.88	50.00	2.056	0.609	3.38
35	17:36	1.00	1.004	1.00	166.78	50.00	3.672	1.101	3.34
36	17:53	1.00	1.020	1.00	169.14	50.00	1.857	0.549	3.38
37	18:10	1.00	1.036	1.00	346.22	100.00	2.172	0.627	3.46
38	19:04	1.00	1.087	1.00	169.09	50.00	2.210	0.654	3.38
39	19:06	1.00	1.089	1.00	173.16	50.00	3.484	1.006	3.46
40	19:28	1.00	1.733	1.00	166.06	50.00	1.461	0.440	3.32
41	20:39	1.00	1.177	1.00	153.33	50.00	1.756	0.573	3.07
42	8:33	0.99	0.947	1.00	364.00	100.00	4.975	1.367	3.64
43	18:10	1.00	1.036	1.00	515.19	150.00	2.185	0.636	3.43

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	688	8:57	1	1.000	A BB	44220.	50.000	UG/L	0.62
2	114	858	11:09	2	1.000	A BB	193539.	50.000	UG/L	0.62
3	117	1343	17:28	3	1.000	A BB	165623.	50.000	UG/L	0.62
4	65	781	10:09	1	1.135	A BB	242435.	198.068	UG/L	2.47
5	98	1099	14:17	3	0.818	A BB	679356.	180.636	UG/L	2.25
6	95	1554	20:12	3	1.157	A BB	525790.	180.723	UG/L	2.25
7	50	213	2:46	1	0.310	A BB	121470.	267.824	UG/L	3.34
8	62	222	2:53	1	0.323	A BB	134234.	216.631	UG/L	2.70
9	94	255	3:19	1	0.371	A BB	159345.	215.757	UG/L	2.69
10	64	266	3:27	1	0.387	A BB	92034.	217.600	UG/L	2.71
11	96	366	4:45	1	0.532	A BB	200209.	187.090	UG/L	2.33
12	43	377	4:54	1	0.548	A BB	28369.	136.225	UG/L	1.70
13	76	395	5:08	1	0.574	A BB	549784.	198.324	UG/L	2.47
14	84	442	5:45	1	0.642	A BB	190358.	180.374	UG/L	2.25
15	96	488	6:21	1	0.709	A BB	206173.	179.690	UG/L	2.24
16	63	555	7:13	1	0.807	A BB	364297.	187.635	UG/L	2.34
17	96	650	8:27	1	0.945	A BB	233783.	184.091	UG/L	2.30
18	43	657	8:32	1	0.955	A BB	42739.	186.219	UG/L	2.32
19	83	705	9:10	1	1.025	A BB	452842.	187.681	UG/L	2.34
20	97	731	9:30	2	0.852	A BB	413507.	168.948	UG/L	2.11
21	117	758	9:51	2	0.883	A BB	411995.	177.114	UG/L	2.21
22	78	791	10:17	2	0.922	A BB	592041.	164.749	UG/L	2.05
23	62	794	10:19	1	1.154	A BB	261447.	183.554	UG/L	2.29
24	130	898	11:40	2	1.047	A BB	307793.	156.289	UG/L	1.95
25	63	932	12:07	2	1.086	A BB	232958.	172.928	UG/L	2.16
26	83	980	12:44	2	1.142	A BB	418066.	179.143	UG/L	2.23
27	43	1084	14:06	3	0.807	A BV	142241.	157.330	UG/L	1.96
28	91	1110	14:26	3	0.827	A BB	751503.	167.678	UG/L	2.09
29	75	1055	13:43	2	1.230	A BB	369907.	175.761	UG/L	2.19
30	75	1149	14:56	2	1.339	A BB	266762.	180.624	UG/L	2.25
31	97	1178	15:19	2	1.373	A BB	223738.	160.511	UG/L	2.00
32	164	1202	15:38	3	0.895	A BB	282148.	162.822	UG/L	2.03
33	43	1226	15:56	3	0.913	A BB	90599.	163.315	UG/L	2.04
34	129	1243	16:10	2	1.449	A BB	397851.	168.876	UG/L	2.11
35	112	1348	17:31	3	1.004	A BB	608215.	166.782	UG/L	2.08
36	106	1371	17:49	3	1.021	A BB	307575.	169.139	UG/L	2.11
37	106	1393	18:07	3	1.037	A BB	719500.	346.215	UG/L	4.32
38	106	1462	19:00	3	1.089	A BB	366098.	169.087	UG/L	2.11
39	104	1464	19:02	3	1.090	A BB	577072.	173.156	UG/L	2.16
40	173	1491	19:23	2	1.738	A BB	282711.	166.058	UG/L	2.07
41	83	1583	20:35	3	1.179	A BB	290820.	153.328	UG/L	1.91
42	96	650	8:27	1	0.945	A*BB	439956.	364.002	UG/L	4.54
43	106	1393	18:07	3	1.037	A*BB	1085600.	515.191	UG/L	6.43

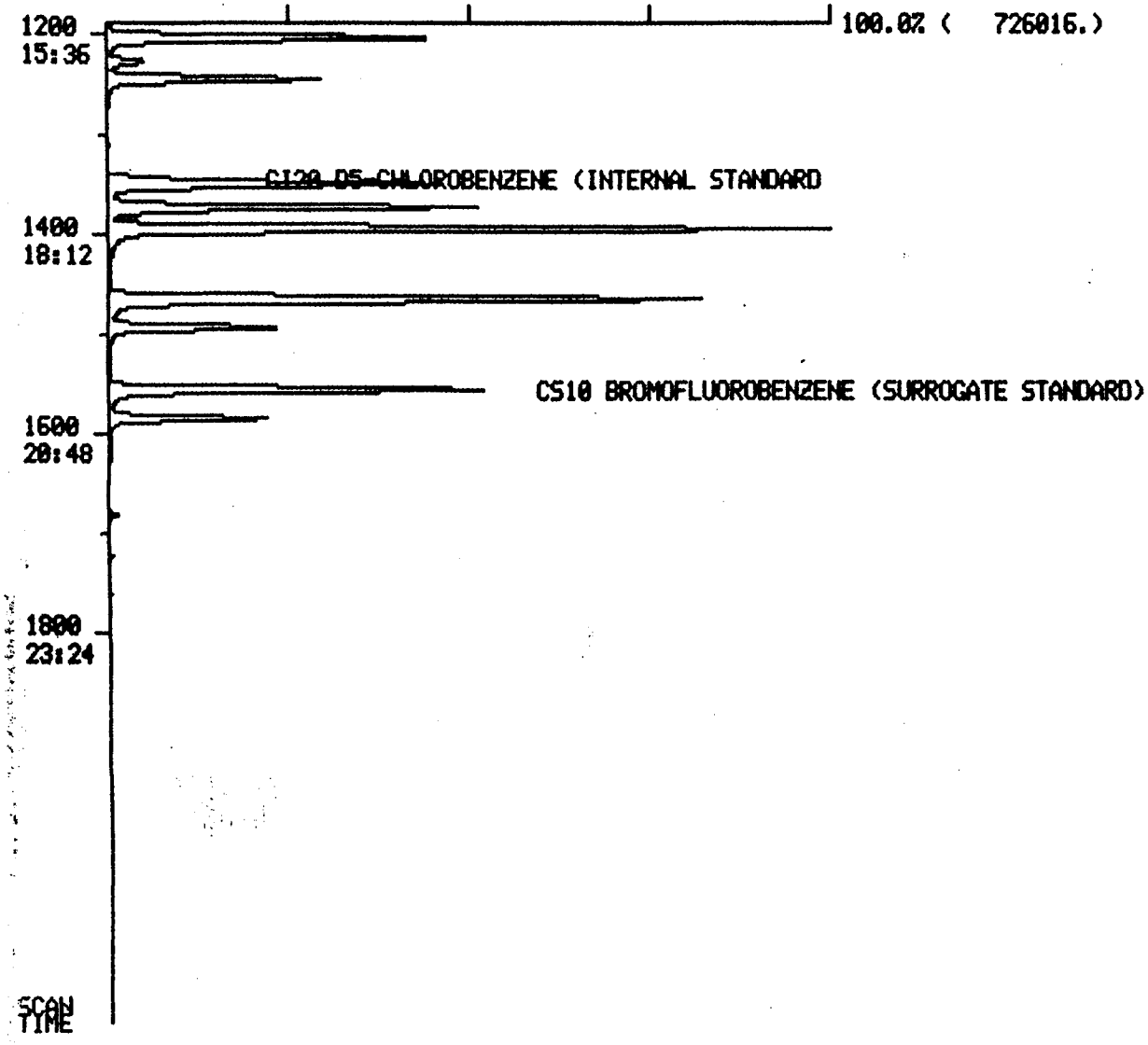
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:02	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:14	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:32	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:15	0.99	1.134	1.00	198.07	50.00	5.482	1.384	3.96
5	14:22	0.99	0.819	1.00	180.64	50.00	4.102	1.135	3.61
6	20:16	1.00	1.156	1.00	180.72	50.00	3.175	0.878	3.61
7	2:51	0.97	0.315	0.98	267.82	50.00	2.747	0.513	5.36
8	2:58	0.97	0.328	0.98	216.63	50.00	3.036	0.701	4.33
9	3:24	0.98	0.376	0.99	215.76	50.00	3.603	0.835	4.32
10	3:33	0.97	0.393	0.98	217.60	50.00	2.081	0.478	4.35
11	4:52	0.98	0.540	0.99	187.09	50.00	4.528	1.210	3.74

Data: CU911010A53.TI
10/10/91 13:33:00
Sample: CLP,STAND,,VSTD200,LOW,WATER,,VOA,IC200,F50053
Conds.: DB624,,BF911010A53
Formula: NWSW Instrument: F50053 Weight: 5000.000
Submitted by: 1968 Analyst: 1523 Acct. No.: RCA

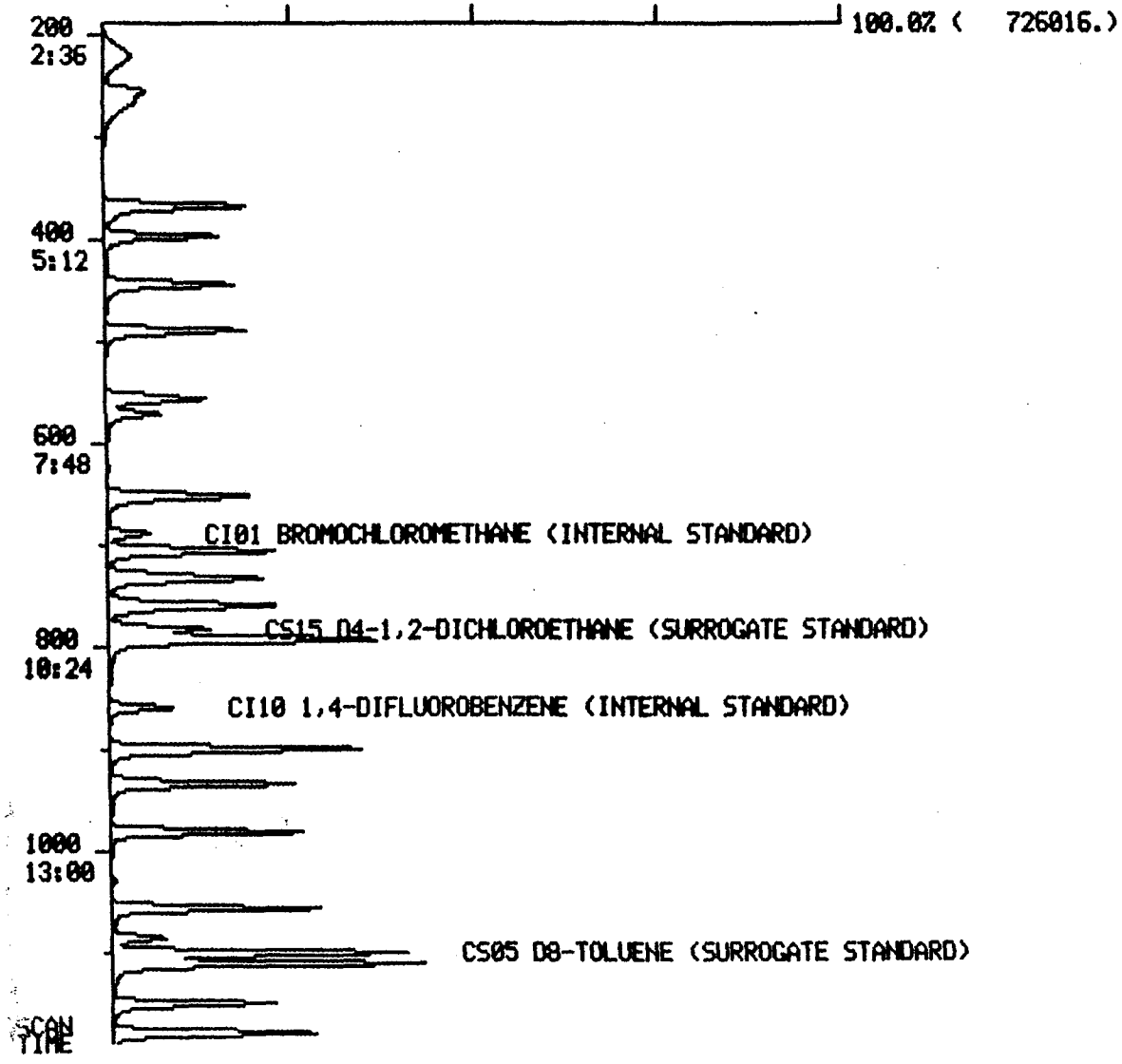
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CU911010A53 SCANS 1189 TO 1800 ACQUIRED: 10/10/91 13:33:00
CALI: CU911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD200,LOW,WATER,,VOA,IC200,F50053
CONDS.: DB624,,BF911010A53



DATA FROM FILE: CU911010A53 SCANS 189 TO 1189 ACQUIRED: 10/10/91 13:33:00
CALI: CU911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD200,LOW,WATER,,VOA,IC200,F50053
CONDS.: DB624,,BF911010A53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	0.98	0.550	1.00	106.98	50.00	0.504	0.235	2.14
13	5:15	0.98	0.581	1.00	120.40	50.00	7.548	3.134	2.41
14	5:52	0.98	0.649	1.00	119.19	50.00	2.845	1.193	2.38
15	6:27	0.98	0.714	1.00	109.91	50.00	2.852	1.297	2.20
16	7:19	0.98	0.810	1.00	117.73	50.00	5.169	2.195	2.35
17	8:33	0.99	0.947	1.00	106.28	50.00	3.052	1.436	2.13
18	8:37	0.99	0.954	1.00	136.88	50.00	0.710	0.260	2.74
19	9:15	0.99	1.024	1.00	115.34	50.00	6.293	2.728	2.31
20	9:36	0.99	0.854	1.00	86.46	50.00	1.093	0.632	1.73
21	9:57	0.99	0.885	1.00	93.93	50.00	1.129	0.601	1.88
22	10:22	0.99	0.924	1.00	88.66	50.00	1.646	0.928	1.77
23	10:24	0.99	1.151	1.00	114.46	50.00	3.687	1.611	2.29
24	11:45	0.99	1.046	1.00	88.81	50.00	0.904	0.509	1.78
25	12:12	0.99	1.086	1.00	91.50	50.00	0.637	0.348	1.83
26	12:49	0.99	1.141	1.00	94.15	50.00	1.135	0.603	1.88
27	14:10	1.00	0.808	1.00	90.23	50.00	0.493	0.273	1.80
28	14:30	0.99	0.827	1.00	90.32	50.00	2.444	1.353	1.81
29	13:48	0.99	1.228	1.00	93.33	50.00	1.015	0.544	1.87
30	15:01	0.99	1.337	1.00	96.50	50.00	0.736	0.382	1.93
31	15:24	1.00	1.370	1.01	90.39	50.00	0.651	0.360	1.81
32	15:42	1.00	0.895	1.00	91.62	50.00	0.959	0.523	1.83
33	16:00	1.00	0.913	1.00	92.90	50.00	0.311	0.167	1.86
34	16:14	1.00	1.446	1.01	94.33	50.00	1.148	0.609	1.89
35	17:36	1.00	1.004	1.00	91.93	50.00	2.024	1.101	1.84
36	17:53	1.00	1.020	1.00	91.74	50.00	1.007	0.549	1.83
37	18:10	1.00	1.036	1.00	175.57	100.00	1.102	0.627	1.76
38	19:04	1.00	1.087	1.00	93.01	50.00	1.216	0.654	1.86
39	19:06	1.00	1.089	1.00	93.76	50.00	1.887	1.006	1.88
40	19:28	1.00	1.733	1.01	95.21	50.00	0.838	0.440	1.90
41	20:39	1.00	1.177	1.00	88.26	50.00	1.011	0.573	1.77
42	8:33	0.99	0.947	1.00	216.00	100.00	2.952	1.367	2.16
43	18:10	1.00	1.036	1.00	268.73	150.00	1.140	0.636	1.79

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	685	8:54	1	1.000	A BB	36960.	50.000	UG/L	1.10
2	114	856	11:08	2	1.000	A BB	191424.	50.000	UG/L	1.10
3	117	1344	17:28	3	1.000	A BB	166888.	50.000	UG/L	1.10
4	65	779	10:08	1	1.137	A BB	117826.	115.173	UG/L	2.54
5	98	1099	14:17	3	0.818	A BB	341416.	90.092	UG/L	1.98
6	95	1555	20:13	3	1.157	A BB	268355.	91.539	UG/L	2.02
7	50	215	2:48	1	0.314	A BB	44322.	116.921	UG/L	2.58
8	62	227	2:57	1	0.331	A BB	56179.	108.473	UG/L	2.39
9	94	255	3:19	1	0.372	A BB	63172.	102.339	UG/L	2.25
10	64	267	3:28	1	0.390	A BB	38199.	108.058	UG/L	2.38
11	96	368	4:47	1	0.537	A BB	99782.	111.560	UG/L	2.46
12	43	376	4:53	1	0.549	A BB	18620.	106.976	UG/L	2.36
13	76	397	5:10	1	0.580	A BB	278963.	120.398	UG/L	2.65
14	84	443	5:46	1	0.647	A BB	105139.	119.194	UG/L	2.63
15	96	488	6:21	1	0.712	A BB	105400.	109.906	UG/L	2.42
16	63	554	7:12	1	0.809	A BB	191047.	117.730	UG/L	2.59
17	96	649	8:26	1	0.947	A BB	112804.	106.276	UG/L	2.34
18	43	655	8:31	1	0.956	A BB	26258.	136.884	UG/L	3.02
19	83	703	9:08	1	1.026	A BB	232594.	115.336	UG/L	2.54
20	97	729	9:29	2	0.852	A BB	209313.	86.465	UG/L	1.91
21	117	756	9:50	2	0.883	A BB	216106.	93.929	UG/L	2.07
22	78	789	10:15	2	0.922	A BB	315128.	88.661	UG/L	1.95
23	62	792	10:18	1	1.156	A BB	136269.	114.464	UG/L	2.52
24	130	897	11:40	2	1.048	A BB	172986.	88.808	UG/L	1.96
25	63	931	12:06	2	1.088	A BB	121920.	91.504	UG/L	2.02
26	83	979	12:44	2	1.144	A BB	217325.	94.154	UG/L	2.07
27	43	1085	14:06	3	0.807	A BB	82198.	90.229	UG/L	1.99
28	91	1110	14:26	3	0.826	A BB	407892.	90.320	UG/L	1.99
29	75	1055	13:43	2	1.232	A BB	194279.	93.331	UG/L	2.06
30	75	1149	14:56	2	1.342	A BB	140962.	96.500	UG/L	2.13
31	97	1179	15:20	2	1.377	A BB	124615.	90.388	UG/L	1.99
32	164	1202	15:38	3	0.894	A BB	159980.	91.621	UG/L	2.02
33	43	1227	15:57	3	0.913	A BB	51932.	92.903	UG/L	2.05
34	129	1244	16:10	2	1.453	A BB	219791.	94.326	UG/L	2.08
35	112	1349	17:32	3	1.004	A BB	337793.	91.926	UG/L	2.03
36	106	1372	17:50	3	1.021	A BB	168093.	91.736	UG/L	2.02
37	106	1394	18:07	3	1.037	A BB	367657.	175.571	UG/L	3.87
38	106	1463	19:01	3	1.089	A BB	202920.	93.011	UG/L	2.05
39	104	1465	19:03	3	1.090	A BB	314863.	93.761	UG/L	2.07
40	173	1493	19:25	2	1.744	A BB	160328.	95.214	UG/L	2.10
41	83	1584	20:36	3	1.179	A BB	168686.	88.261	UG/L	1.94
42	96	649	8:26	1	0.947	A*BB	218204.	215.998	UG/L	4.76
43	106	1394	18:07	3	1.037	A*BB	570577.	268.725	UG/L	5.92

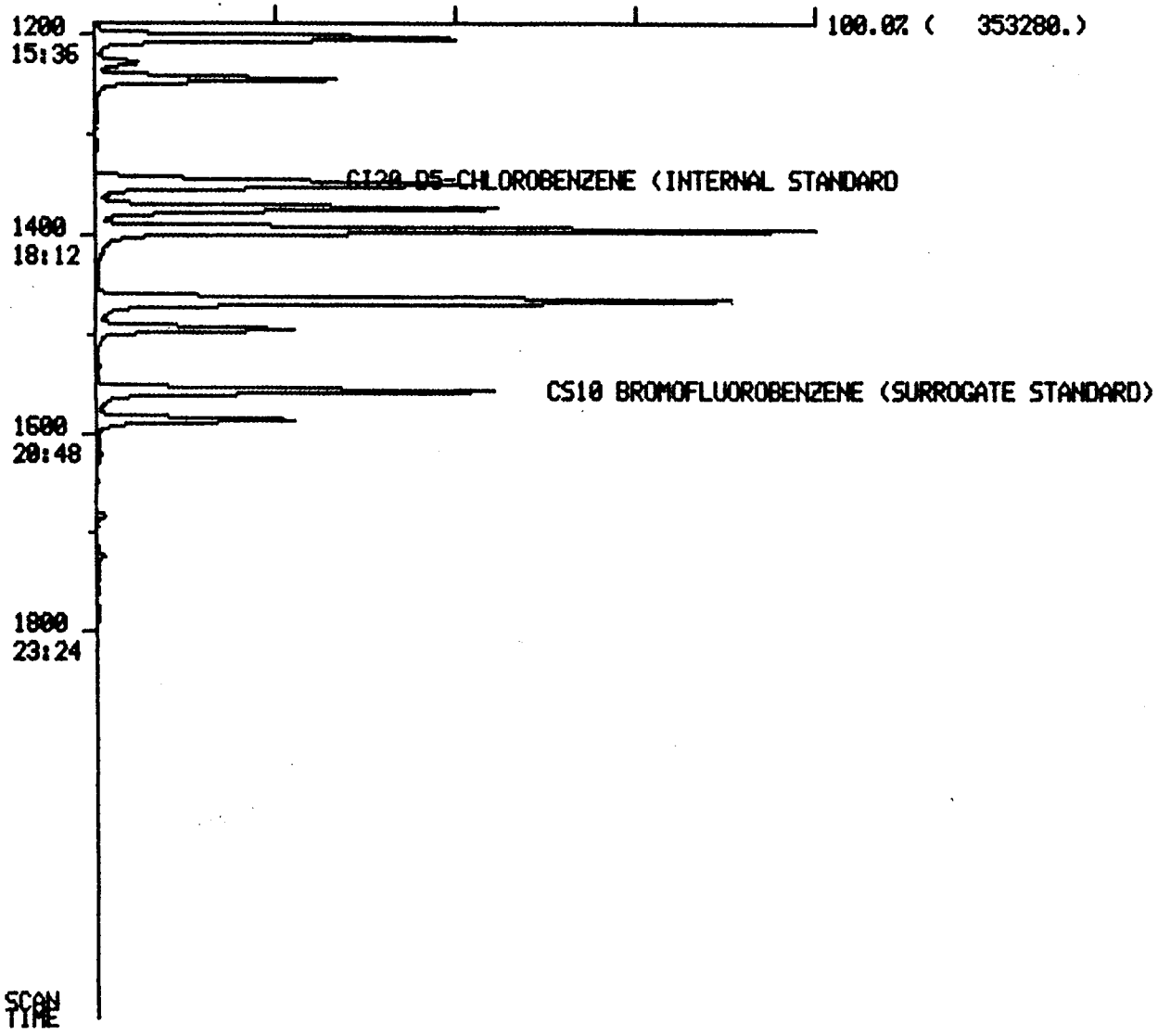
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:02	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:14	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:32	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:15	0.99	1.134	1.00	115.17	50.00	3.188	1.384	2.30
5	14:22	0.99	0.819	1.00	90.09	50.00	2.046	1.135	1.80
6	20:16	1.00	1.156	1.00	91.54	50.00	1.608	0.878	1.83
7	2:51	0.98	0.315	1.00	116.92	50.00	1.199	0.513	2.34
8	2:58	1.00	0.328	1.01	108.47	50.00	1.520	0.701	2.17
9	3:24	0.98	0.376	0.99	102.34	50.00	1.709	0.835	2.05
10	3:33	0.98	0.393	0.99	108.06	50.00	1.034	0.478	2.16
11	4:52	0.98	0.540	1.00	111.56	50.00	2.700	1.210	2.23

Data: CV911010A53.TI
10/10/91 14:06:00
Sample: CLP,STAND,,VSTD100,LOW,WATER,,VOA,IC100,F50053
Conds.: DB624,,BF911010A53
Formula: NWSW Instrument: F50053 Weight: 5000.000
Submitted by: 1967 Analyst: 1523 Acct. No.: RCA

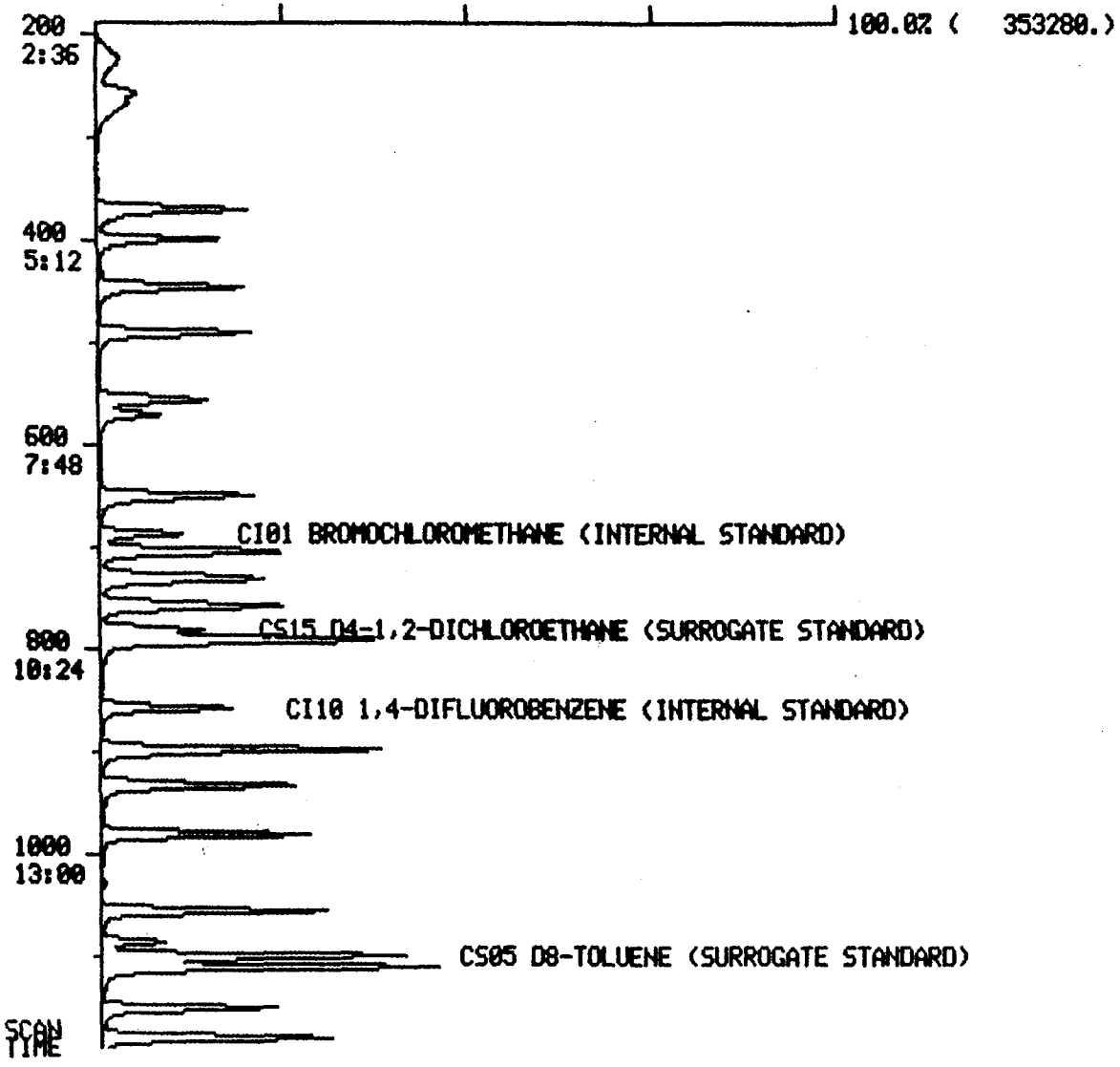
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CV911010A53 SCANS 1189 TO 1800 ACQUIRED: 10/10/91 14:06:00
CALI: CV911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD100,LOW,WATER,,VOA,IC100,F50053
CONDS.: DB624,,BF911010A53



DATA FROM FILE: CV911010A53 SCANS 189 TO 1189 ACQUIRED: 10/10/91 14:06:00
CALI: CV911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD100,LOW,WATER,,VOA,IC100,F50053
CONDS.: DB624,,BF911010A53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.551	1.00	44.73	50.00	0.235	0.263	0.89
13	5:15	1.00	0.583	1.00	50.56	50.00	3.134	3.100	1.01
14	5:51	1.00	0.649	1.00	47.36	50.00	1.193	1.260	0.95
15	6:26	1.00	0.714	1.00	54.93	50.00	1.297	1.181	1.10
16	7:18	1.00	0.810	1.00	52.57	50.00	2.195	2.088	1.05
17	8:32	1.00	0.947	1.00	56.46	50.00	1.436	1.272	1.13
18	8:37	1.00	0.957	1.00	56.14	50.00	0.260	0.231	1.12
19	9:14	1.00	1.025	1.00	52.49	50.00	2.728	2.599	1.05
20	9:35	1.00	0.853	1.00	59.03	50.00	0.632	0.536	1.18
21	9:56	1.00	0.884	1.00	57.90	50.00	0.601	0.519	1.16
22	10:22	1.00	0.922	1.00	58.54	50.00	0.928	0.793	1.17
23	10:24	1.00	1.154	1.00	53.32	50.00	1.611	1.510	1.07
24	11:45	1.00	1.046	1.00	57.50	50.00	0.509	0.442	1.15
25	12:12	1.00	1.086	1.00	58.38	50.00	0.348	0.298	1.17
26	12:49	1.00	1.141	1.00	57.47	50.00	0.603	0.525	1.15
27	14:11	1.00	0.808	1.00	58.79	50.00	0.273	0.232	1.18
28	14:30	1.00	0.827	1.00	56.33	50.00	1.353	1.201	1.13
29	13:48	1.00	1.228	1.00	58.22	50.00	0.544	0.467	1.16
30	15:02	1.00	1.338	1.00	57.31	50.00	0.382	0.333	1.15
31	15:24	1.00	1.370	1.00	55.87	50.00	0.360	0.322	1.12
32	15:43	1.00	0.896	1.00	55.91	50.00	0.523	0.468	1.12
33	16:02	1.00	0.913	1.00	60.07	50.00	0.167	0.139	1.20
34	16:15	1.00	1.447	1.00	56.23	50.00	0.609	0.541	1.12
35	17:37	1.00	1.004	1.00	55.39	50.00	1.101	0.994	1.11
36	17:54	1.00	1.020	1.00	56.32	50.00	0.549	0.487	1.13
37	18:11	1.00	1.036	1.00	110.23	100.00	0.627	0.569	1.10
38	19:05	1.00	1.087	1.00	55.37	50.00	0.654	0.590	1.11
39	19:07	1.00	1.090	1.00	54.38	50.00	1.006	0.925	1.09
40	19:28	1.00	1.734	1.00	56.28	50.00	0.440	0.391	1.13
41	20:39	1.00	1.177	1.00	58.45	50.00	0.573	0.490	1.17
42	8:32	1.00	0.947	1.00	111.45	100.00	1.367	1.226	1.11
43	18:11	1.00	1.036	1.00	165.61	150.00	0.636	0.576	1.10

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	695	9:02	1	1.000	A BB	43594.	50.000	UG/L	1.97
2	114	864	11:14	2	1.000	A BB	173326.	50.000	UG/L	1.97
3	117	1349	17:32	3	1.000	A BB	153018.	50.000	UG/L	1.97
4	65	788	10:15	1	1.134	A BB	60333.	48.455	UG/L	1.91
5	98	1105	14:22	3	0.819	A BB	173734.	52.109	UG/L	2.05
6	95	1559	20:16	3	1.156	A BB	134398.	52.325	UG/L	2.06
7	50	219	2:51	1	0.315	A BB	22356.	40.679	UG/L	1.60
8	62	228	2:58	1	0.328	A BB	30543.	47.763	UG/L	1.88
9	94	261	3:24	1	0.376	A BB	36404.	52.739	UG/L	2.08
10	64	273	3:33	1	0.393	A BB	20848.	44.008	UG/L	1.73
11	96	375	4:52	1	0.540	A BB	52748.	51.065	UG/L	2.01
12	43	382	4:58	1	0.550	A BV	10265.	44.726	UG/L	1.76
13	76	404	5:15	1	0.581	A BB	136645.	50.560	UG/L	1.99
14	84	451	5:52	1	0.649	A BB	52020.	47.356	UG/L	1.87
15	96	496	6:27	1	0.714	A BB	56557.	54.928	UG/L	2.16
16	63	563	7:19	1	0.810	A BB	95702.	52.571	UG/L	2.07
17	96	658	8:33	1	0.947	A BB	62597.	56.464	UG/L	2.22
18	43	663	8:37	1	0.954	A BB	11313.	56.143	UG/L	2.21
19	83	712	9:15	1	1.024	A BB	118933.	52.486	UG/L	2.07
20	97	738	9:36	2	0.854	A BB	109596.	59.027	UG/L	2.33
21	117	765	9:57	2	0.885	A BB	104161.	57.898	UG/L	2.28
22	78	798	10:22	2	0.924	A BB	160913.	58.545	UG/L	2.31
23	62	800	10:24	1	1.151	A BB	70210.	53.321	UG/L	2.10
24	130	904	11:45	2	1.046	A BB	88185.	57.496	UG/L	2.26
25	63	938	12:12	2	1.086	A BB	60322.	58.381	UG/L	2.30
26	83	986	12:49	2	1.141	A BB	104498.	57.472	UG/L	2.26
27	43	1090	14:10	3	0.808	A BB	41764.	58.791	UG/L	2.32
28	91	1116	14:30	3	0.827	A BB	207037.	56.334	UG/L	2.22
29	75	1061	13:48	2	1.228	A BB	94240.	58.224	UG/L	2.29
30	75	1155	15:01	2	1.337	A BB	66132.	57.312	UG/L	2.26
31	97	1184	15:24	2	1.370	A BB	62416.	55.866	UG/L	2.20
32	164	1208	15:42	3	0.895	A BB	80049.	55.913	UG/L	2.20
33	43	1231	16:00	3	0.913	A BB	25627.	60.071	UG/L	2.37
34	129	1249	16:14	2	1.446	A BB	105491.	56.231	UG/L	2.21
35	112	1354	17:36	3	1.004	A BB	168461.	55.385	UG/L	2.18
36	106	1376	17:53	3	1.020	A BB	84004.	56.321	UG/L	2.22
37	106	1398	18:10	3	1.036	A BB	192003.	110.228	UG/L	4.34
38	106	1467	19:04	3	1.087	A BB	100018.	55.372	UG/L	2.18
39	104	1469	19:06	3	1.089	A BB	153952.	54.380	UG/L	2.14
40	173	1497	19:28	2	1.733	A BB	76234.	56.277	UG/L	2.22
41	83	1588	20:39	3	1.177	A BB	87618.	58.450	UG/L	2.30
42	96	658	8:33	1	0.947	A*BB	119154.	111.449	UG/L	4.39
43	106	1398	18:10	3	1.036	A*BB	292021.	165.606	UG/L	6.52

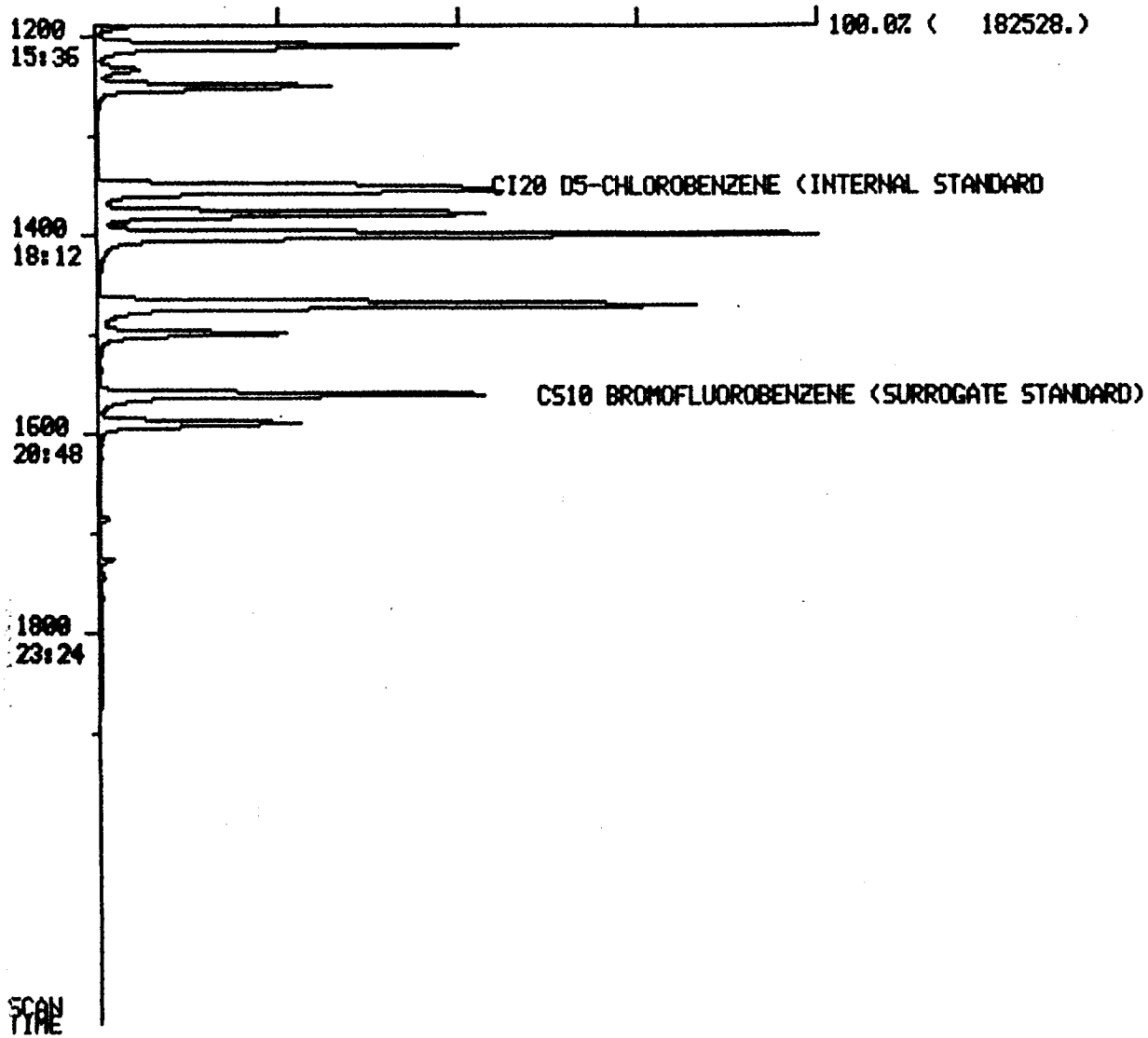
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:01	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:14	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:33	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:14	1.00	1.136	1.00	48.45	50.00	1.384	1.428	0.97
5	14:22	1.00	0.819	1.00	52.11	50.00	1.135	1.089	1.04
6	20:17	1.00	1.156	1.00	52.32	50.00	0.878	0.839	1.05
7	2:51	1.00	0.316	1.00	40.68	50.00	0.513	0.630	0.81
8	2:58	1.00	0.329	1.00	47.76	50.00	0.701	0.733	0.96
9	3:24	1.00	0.378	0.99	52.74	50.00	0.835	0.792	1.05
10	3:33	1.00	0.394	1.00	44.01	50.00	0.478	0.543	0.88
11	4:52	1.00	0.540	1.00	51.06	50.00	1.210	1.185	1.02

Data: CT911010A53.TI
10/10/91 11:55:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
Conds.: DB624,,BF911010A53
Formula: 5ML Instrument: F50053 Weight: 0.000
Submitted by: 7008 Analyst: 1964 Acct. No.: SM

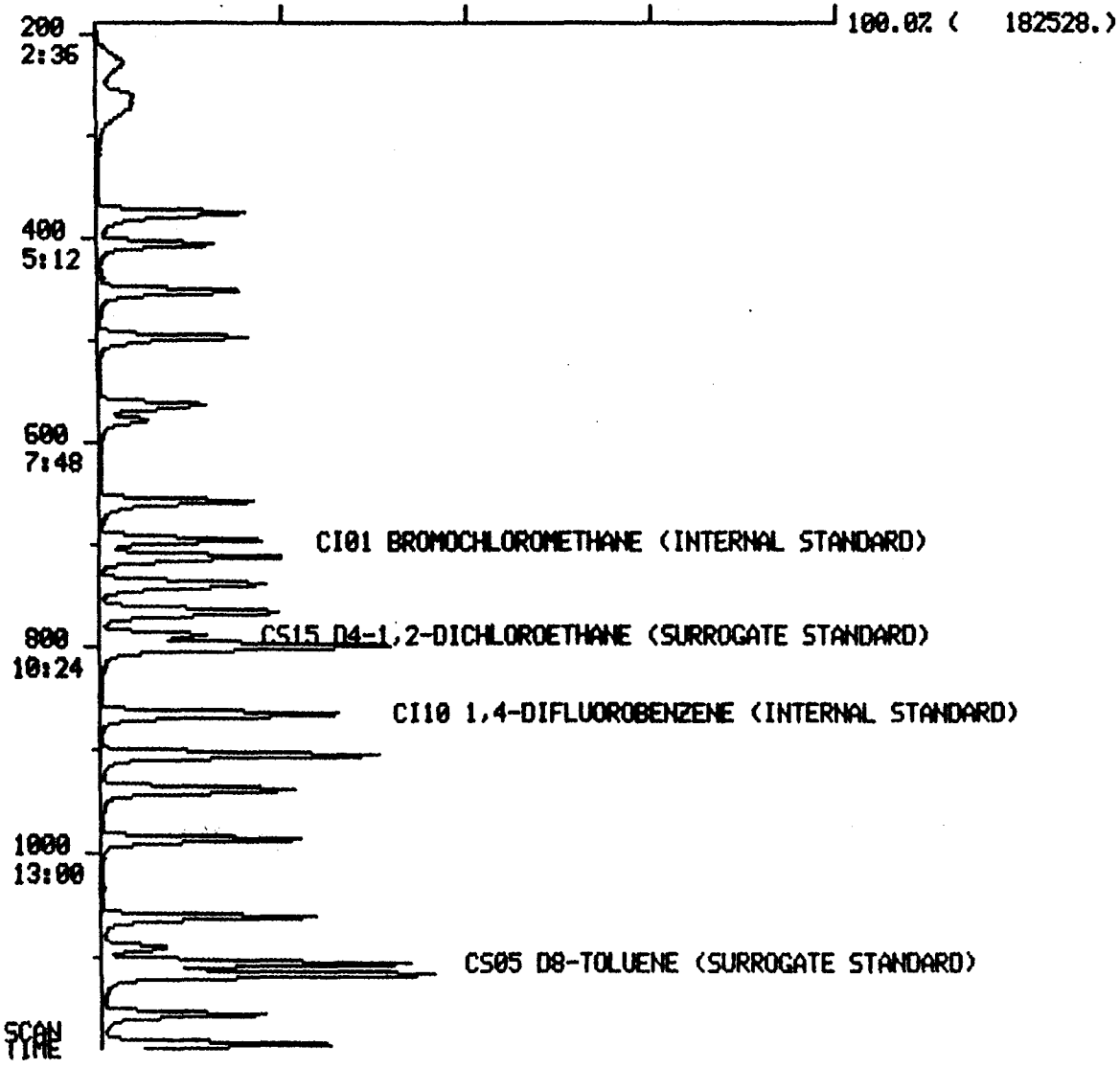
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CT911010A53 SCANS 1189 TO 1900 ACQUIRED: 10/10/91 11:55:00
CALI: CT911010A53 #3 OUT OF 189 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BF911010A53



DATA FROM FILE: CT911010A53 SCANS 189 TO 1189 ACQUIRED: 10/10/91 11:55:00
CALI: CT911010A53 #3 OUT OF 189 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50053
CONDS.: DB624,,BF911010A53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	0.99	0.550	1.00	35.14	50.00	0.165	0.235	0.70
13	5:15	0.99	0.581	1.00	26.49	50.00	1.661	3.134	0.53
14	5:52	0.99	0.649	1.00	35.09	50.00	0.837	1.193	0.70
15	6:27	0.99	0.714	1.00	25.62	50.00	0.665	1.297	0.51
16	7:19	0.99	0.810	1.00	25.93	50.00	1.139	2.195	0.52
17	8:33	0.99	0.947	1.00	24.34	50.00	0.699	1.436	0.49
18	8:37	0.99	0.954	1.00	31.49	50.00	0.163	0.260	0.63
19	9:15	0.99	1.024	1.00	26.17	50.00	1.428	2.728	0.52
20	9:36	0.99	0.854	1.00	21.74	50.00	0.275	0.632	0.43
21	9:57	0.99	0.885	1.00	22.03	50.00	0.265	0.601	0.44
22	10:22	0.99	0.924	1.00	22.21	50.00	0.412	0.928	0.44
23	10:24	0.99	1.151	1.00	26.41	50.00	0.851	1.611	0.53
24	11:45	0.99	1.046	1.00	24.22	50.00	0.246	0.509	0.48
25	12:12	1.00	1.086	1.00	23.25	50.00	0.162	0.348	0.46
26	12:49	1.00	1.141	1.00	22.22	50.00	0.268	0.603	0.44
27	14:10	1.00	0.808	1.00	24.00	50.00	0.131	0.273	0.48
28	14:30	1.00	0.827	1.00	22.41	50.00	0.607	1.353	0.45
29	13:48	1.00	1.228	1.00	21.83	50.00	0.237	0.544	0.44
30	15:01	1.00	1.337	1.00	22.82	50.00	0.174	0.382	0.46
31	15:24	1.00	1.370	1.00	24.94	50.00	0.180	0.360	0.50
32	15:42	1.00	0.895	1.00	24.84	50.00	0.260	0.523	0.50
33	16:00	1.00	0.913	1.00	26.09	50.00	0.087	0.167	0.52
34	16:14	1.00	1.446	1.00	23.93	50.00	0.291	0.609	0.48
35	17:36	1.00	1.004	1.00	23.65	50.00	0.521	1.101	0.47
36	17:53	1.00	1.020	1.00	22.40	50.00	0.246	0.549	0.45
37	18:10	1.00	1.036	1.00	45.81	100.00	0.287	0.627	0.46
38	19:04	1.00	1.087	1.00	23.83	50.00	0.311	0.654	0.48
39	19:06	1.00	1.089	1.00	24.15	50.00	0.486	1.006	0.48
40	19:28	1.00	1.733	1.00	26.62	50.00	0.234	0.440	0.53
41	20:39	1.00	1.177	1.00	26.50	50.00	0.303	0.573	0.53
42	8:33	0.99	0.947	1.00	49.90	100.00	0.682	1.367	0.50
43	18:10	1.00	1.036	1.00	69.66	150.00	0.295	0.636	0.46

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	688	8:57	1	1.000	A BB	38866.	50.000	UG/L	3.99
2	114	859	11:10	2	1.000	A BB	190255.	50.000	UG/L	3.99
3	117	1346	17:30	3	1.000	A BB	167982.	50.000	UG/L	3.99
4	65	783	10:11	1	1.138	A BB	28624.	26.607	UG/L	2.12
5	98	1101	14:19	3	0.818	A BB	82151.	21.536	UG/L	1.72
6	95	1556	20:14	3	1.156	A BB	65903.	22.334	UG/L	1.78
7	50	219	2:51	1	0.318	A BB	11361.	28.502	UG/L	2.28
8	62	231	3:00	1	0.336	A BB	13895.	25.513	UG/L	2.04
9	94	260	3:23	1	0.378	A BB	17095.	26.336	UG/L	2.10
10	64	271	3:31	1	0.394	A BB	10136.	27.267	UG/L	2.18
11	96	371	4:49	1	0.539	A BB	26821.	28.516	UG/L	2.28
12	43	380	4:56	1	0.552	A BB	6431.	35.136	UG/L	2.81
13	76	400	5:12	1	0.581	A BB	64550.	26.493	UG/L	2.12
14	84	447	5:49	1	0.650	A BB	32547.	35.088	UG/L	2.80
15	96	491	6:23	1	0.714	A BB	25841.	25.624	UG/L	2.05
16	63	557	7:14	1	0.810	A BB	44250.	25.931	UG/L	2.07
17	96	651	8:28	1	0.946	A BB	27167.	24.340	UG/L	1.94
18	43	658	8:33	1	0.956	A BB	6352.	31.492	UG/L	2.51
19	83	705	9:10	1	1.025	A BB	55506.	26.174	UG/L	2.09
20	97	732	9:31	2	0.852	A BB	52310.	21.741	UG/L	1.74
21	117	759	9:52	2	0.884	A BB	50382.	22.033	UG/L	1.76
22	78	791	10:17	2	0.921	A BB	78451.	22.207	UG/L	1.77
23	62	795	10:20	1	1.156	A BB	33060.	26.408	UG/L	2.11
24	130	899	11:41	2	1.047	A BB	46893.	24.222	UG/L	1.93
25	63	934	12:09	2	1.087	A BB	30787.	23.248	UG/L	1.86
26	83	982	12:46	2	1.143	A BB	50983.	22.223	UG/L	1.77
27	43	1087	14:08	3	0.808	A BB	22009.	24.002	UG/L	1.92
28	91	1112	14:27	3	0.826	A BB	101891.	22.415	UG/L	1.79
29	75	1057	13:44	2	1.231	A BB	45168.	21.832	UG/L	1.74
30	75	1151	14:58	2	1.340	A BB	33131.	22.820	UG/L	1.82
31	97	1180	15:20	2	1.374	A BB	34175.	24.940	UG/L	1.99
32	164	1204	15:39	3	0.895	A BB	43659.	24.841	UG/L	1.98
33	43	1229	15:59	3	0.913	A BB	14677.	26.085	UG/L	2.08
34	129	1246	16:12	2	1.451	A BB	55429.	23.934	UG/L	1.91
35	112	1351	17:34	3	1.004	A BB	87492.	23.655	UG/L	1.89
36	106	1374	17:52	3	1.021	A BB	41315.	22.401	UG/L	1.79
37	106	1395	18:08	3	1.036	A BB	96561.	45.811	UG/L	3.66
38	106	1464	19:02	3	1.088	A BB	52320.	23.825	UG/L	1.90
39	104	1467	19:04	3	1.090	A BB	81630.	24.150	UG/L	1.93
40	173	1494	19:25	2	1.739	A BB	44543.	26.615	UG/L	2.13
41	83	1585	20:36	3	1.178	A BB	50981.	26.501	UG/L	2.12
42	96	651	8:28	1	0.946	A*BB	53008.	49.899	UG/L	3.98
43	106	1395	18:08	3	1.036	A*BB	148881.	69.662	UG/L	5.56

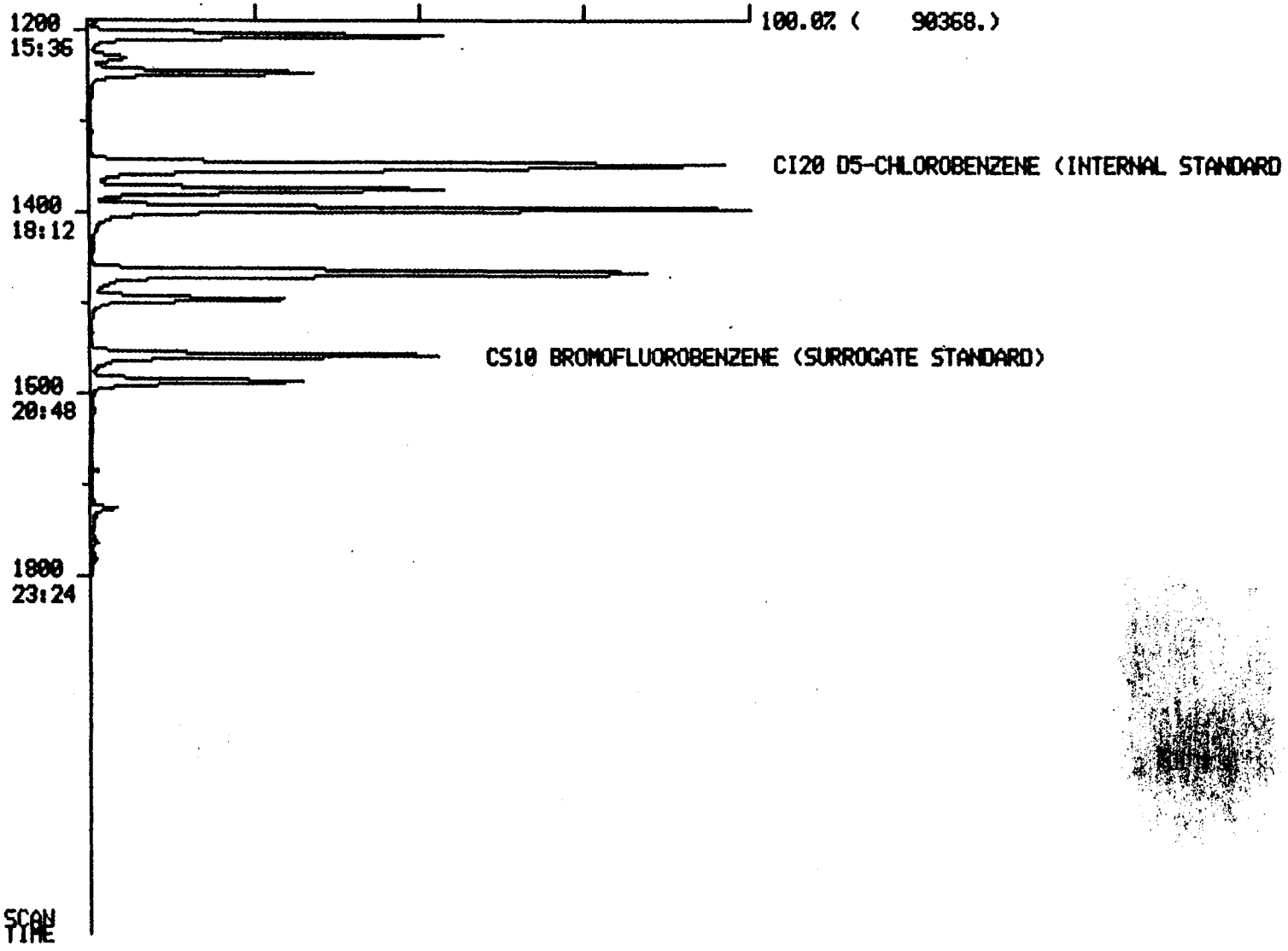
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:02	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:14	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:32	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:15	0.99	1.134	1.00	26.61	50.00	0.736	1.384	0.53
5	14:22	1.00	0.819	1.00	21.54	50.00	0.489	1.135	0.43
6	20:16	1.00	1.156	1.00	22.33	50.00	0.392	0.878	0.45
7	2:51	1.00	0.315	1.01	28.50	50.00	0.292	0.513	0.57
8	2:58	1.01	0.328	1.02	25.51	50.00	0.358	0.701	0.51
9	3:24	1.00	0.376	1.01	26.34	50.00	0.440	0.835	0.53
10	3:33	0.99	0.393	1.00	27.27	50.00	0.261	0.478	0.55
11	4:52	0.99	0.540	1.00	28.52	50.00	0.690	1.210	0.57

Data: CW911010A53.TI
10/10/91 14:39:00
Sample: CLP,STAND,,VSTD020,LOW,WATER,,VOA,IC020,F50053
Conds.: DB624,,BF911010A53
Formula: NWSW Instrument: F50053 Weight: 5000.000
Submitted by: 1965 Analyst: 1523 Acct. No.: RCA

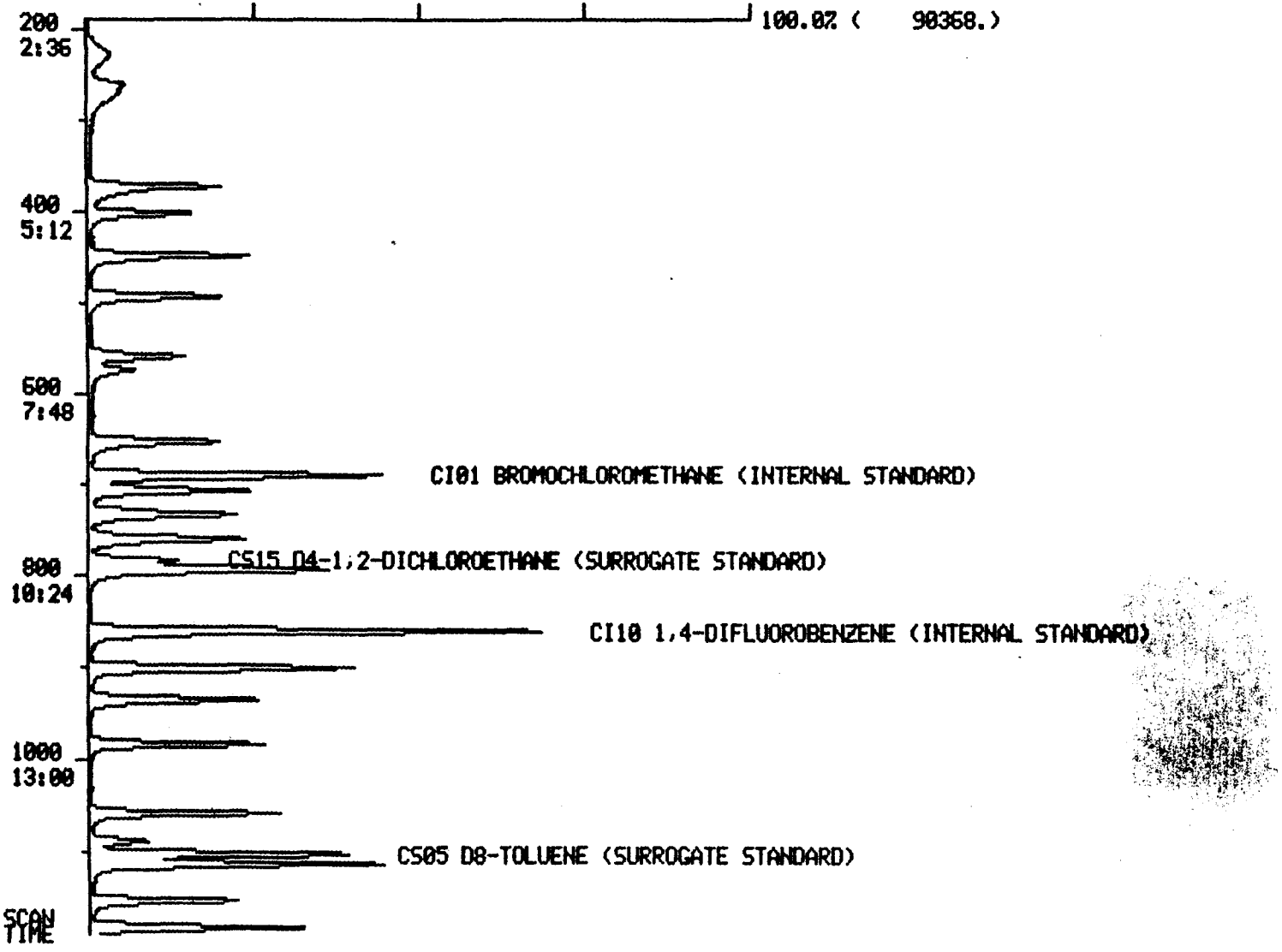
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CW911010A53 SCANS 1189 TO 1800 ACQUIRED: 10/10/91 14:39:00
CALI: CW911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD020,LOW,WATER,,VOA,IC020,F50053
CONDS.: DB624,,BF911010A53



DATA FROM FILE: CW911010A53 SCANS 189 TO 1189 ACQUIRED: 10/10/91 14:39:00
CALI: CW911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD020,LOW,WATER,,VOA,IC020,F50053
CONDS.: DB624,,BF911010A53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
12	4:58	1.00	0.550	1.00	10.00	10.00	0.425	0.425	1.00
13	5:15	1.00	0.581	1.00	10.00	10.00	3.500	3.500	1.00
14	5:52	0.99	0.649	1.00	10.00	10.00	1.986	1.986	1.00
15	6:27	0.99	0.714	1.00	10.00	10.00	1.556	1.556	1.00
16	7:19	0.99	0.810	1.00	10.00	10.00	2.536	2.536	1.00
17	8:33	0.99	0.947	1.00	10.00	10.00	1.679	1.679	1.00
18	8:37	1.00	0.954	1.00	10.00	10.00	0.432	0.432	1.00
19	9:15	0.99	1.024	1.00	10.00	10.00	3.103	3.103	1.00
20	9:36	1.00	0.854	1.00	10.00	10.00	0.641	0.641	1.00
21	9:57	1.00	0.885	1.00	10.00	10.00	0.643	0.643	1.00
22	10:22	0.99	0.924	1.00	10.00	10.00	0.999	0.999	1.00
23	10:24	1.00	1.151	1.00	10.00	10.00	1.869	1.869	1.00
24	11:45	1.00	1.046	1.00	10.00	10.00	0.588	0.588	1.00
25	12:12	1.00	1.086	1.00	10.00	10.00	0.379	0.379	1.00
26	12:49	1.00	1.141	1.00	10.00	10.00	0.607	0.607	1.00
27	14:10	1.00	0.808	1.00	10.00	10.00	0.310	0.310	1.00
28	14:30	1.00	0.827	1.00	10.00	10.00	1.496	1.496	1.00
29	13:48	1.00	1.228	1.00	10.00	10.00	0.557	0.557	1.00
30	15:01	1.00	1.337	1.00	10.00	10.00	0.398	0.398	1.00
31	15:24	1.00	1.370	1.00	10.00	10.00	0.386	0.386	1.00
32	15:42	1.00	0.895	1.00	10.00	10.00	0.638	0.638	1.00
33	16:00	1.00	0.913	1.00	10.00	10.00	0.189	0.189	1.00
34	16:14	1.00	1.446	1.00	10.00	10.00	0.618	0.618	1.00
35	17:36	1.00	1.004	1.00	10.00	10.00	1.278	1.278	1.00
36	17:53	1.00	1.020	1.00	10.00	10.00	0.565	0.565	1.00
37	18:10	1.00	1.036	1.00	20.00	20.00	0.707	0.707	1.00
38	19:04	1.00	1.087	1.00	10.00	10.00	0.753	0.753	1.00
39	19:06	1.00	1.089	1.00	10.00	10.00	1.080	1.080	1.00
40	19:28	1.00	1.733	1.00	10.00	10.00	0.421	0.421	1.00
41	20:39	1.00	1.177	1.00	10.00	10.00	0.605	0.605	1.00
42	8:33	0.99	0.947	1.00	20.00	20.00	1.618	1.618	1.00
43	18:10	1.00	1.036	1.00	30.00	30.00	0.722	0.722	1.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	691	8:59	1	1.000	A BB	43462.	50.000 UG/L	8.35
2	114	862	11:12	2	1.000	A BB	184880.	50.000 UG/L	8.35
3	117	1348	17:31	3	1.000	A BB	160390.	50.000 UG/L	8.35
4	65	785	10:12	1	1.136	A BB	14206.	10.000 UG/L	1.67
5	98	1103	14:20	3	0.818	A BB	38568.	10.000 UG/L	1.67
6	95	1558	20:15	3	1.156	A BB	28297.	10.000 UG/L	1.67
7	50	222	2:53	1	0.321	A BB	8833.	14.797 UG/L	2.47
8	62	229	2:59	1	0.331	A BB	9352.	14.177 UG/L	2.37
9	94	262	3:24	1	0.379	A BB	9533.	10.000 UG/L	1.67
10	64	274	3:34	1	0.397	A BB	6035.	10.000 UG/L	1.67
11	96	373	4:51	1	0.540	A BB	13054.	10.000 UG/L	1.67
12	43	381	4:57	1	0.551	A BB	3692.	10.000 UG/L	1.67
13	76	402	5:14	1	0.582	A BB	30421.	10.000 UG/L	1.67
14	84	448	5:49	1	0.648	A BB	17260.	10.000 UG/L	1.67
15	96	493	6:25	1	0.713	A BB	13527.	10.000 UG/L	1.67
16	63	559	7:16	1	0.809	A BB	22042.	10.000 UG/L	1.67
17	96	654	8:30	1	0.946	A BB	14593.	10.000 UG/L	1.67
18	43	660	8:35	1	0.955	A BV	3758.	10.000 UG/L	1.67
19	83	708	9:12	1	1.025	A BB	26975.	10.000 UG/L	1.67
20	97	735	9:33	2	0.853	A BB	23701.	10.000 UG/L	1.67
21	117	762	9:54	2	0.884	A BB	23791.	10.000 UG/L	1.67
22	78	794	10:19	2	0.921	A BB	36928.	10.000 UG/L	1.67
23	62	797	10:22	1	1.153	A BB	16244.	10.000 UG/L	1.67
24	130	902	11:44	2	1.046	A BB	21756.	10.000 UG/L	1.67
25	63	936	12:10	2	1.086	A BB	14006.	10.000 UG/L	1.67
26	83	984	12:48	2	1.142	A BB	22459.	10.000 UG/L	1.67
27	43	1089	14:09	3	0.808	A BV	9958.	10.000 UG/L	1.67
28	91	1114	14:29	3	0.826	A BB	48003.	10.000 UG/L	1.67
29	75	1059	13:46	2	1.229	A BV	20578.	10.000 UG/L	1.67
30	75	1153	14:59	2	1.338	A BB	14705.	10.000 UG/L	1.67
31	97	1182	15:22	2	1.371	A BV	14258.	10.000 UG/L	1.67
32	164	1207	15:41	3	0.895	A BB	20452.	10.000 UG/L	1.67
33	43	1231	16:00	3	0.913	A BV	6049.	10.000 UG/L	1.67
34	129	1248	16:13	2	1.448	A BB	22866.	10.000 UG/L	1.67
35	112	1352	17:35	3	1.003	A BB	41005.	10.000 UG/L	1.67
36	106	1375	17:52	3	1.020	A BB	18130.	10.000 UG/L	1.67
37	106	1397	18:10	3	1.036	A BB	45351.	20.000 UG/L	3.34
38	106	1466	19:03	3	1.088	A BB	24157.	10.000 UG/L	1.67
39	104	1469	19:06	3	1.090	A BB	34641.	10.000 UG/L	1.67
40	173	1496	19:27	2	1.735	A BB	15569.	10.000 UG/L	1.67
41	83	1587	20:38	3	1.177	A BB	19420.	10.000 UG/L	1.67
42	96	654	8:30	1	0.946	A*BB	28120.	20.000 UG/L	3.34
43	106	1397	18:10	3	1.036	A*BB	69508.	30.000 UG/L	5.01

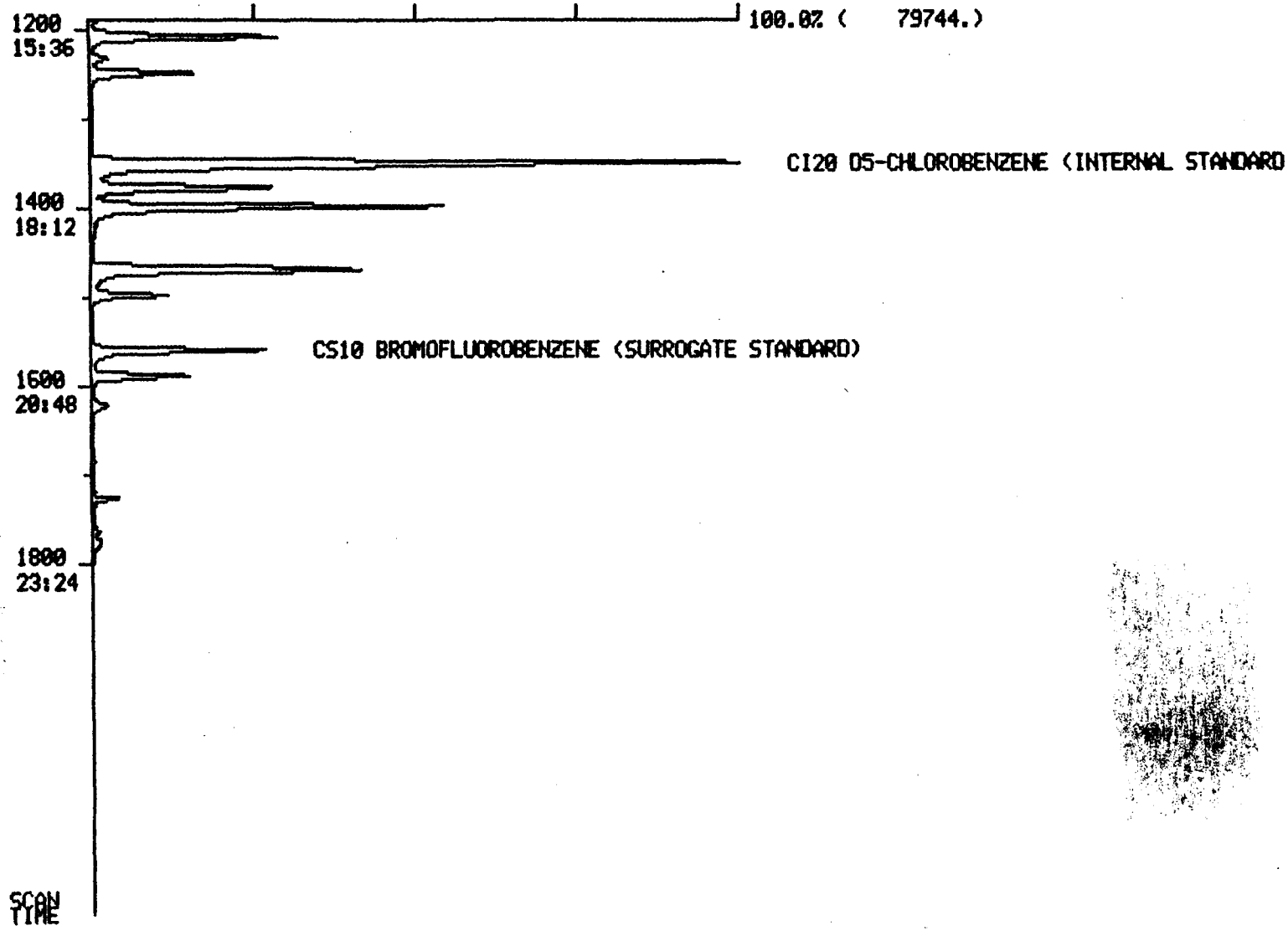
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:02	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:14	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:32	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:15	1.00	1.134	1.00	10.00	10.00	1.634	1.634	1.00
5	14:22	1.00	0.819	1.00	10.00	10.00	1.202	1.202	1.00
6	20:16	1.00	1.156	1.00	10.00	10.00	0.882	0.882	1.00
7	2:51	1.01	0.315	1.02	14.80	200.00	0.051	0.687	0.07
8	2:58	1.00	0.328	1.01	14.18	200.00	0.054	0.759	0.07
9	3:24	1.00	0.376	1.01	10.00	10.00	1.097	1.097	1.00
10	3:33	1.00	0.393	1.01	10.00	10.00	0.694	0.694	1.00
11	4:52	0.99	0.540	1.00	10.00	10.00	1.502	1.502	1.00

Data: CY911010A53.TI
10/10/91 17:24:00
Sample: CLP,STAND,,VSTD010,LOW,WATER,,VOA,IC010,F50053
Conds.: DB624,,BF911010A53
Formula: NWSW Instrument: F50053 Weight: 5000.000
Submitted by: 1964 Analyst: 1523 Acct. No.: RCA

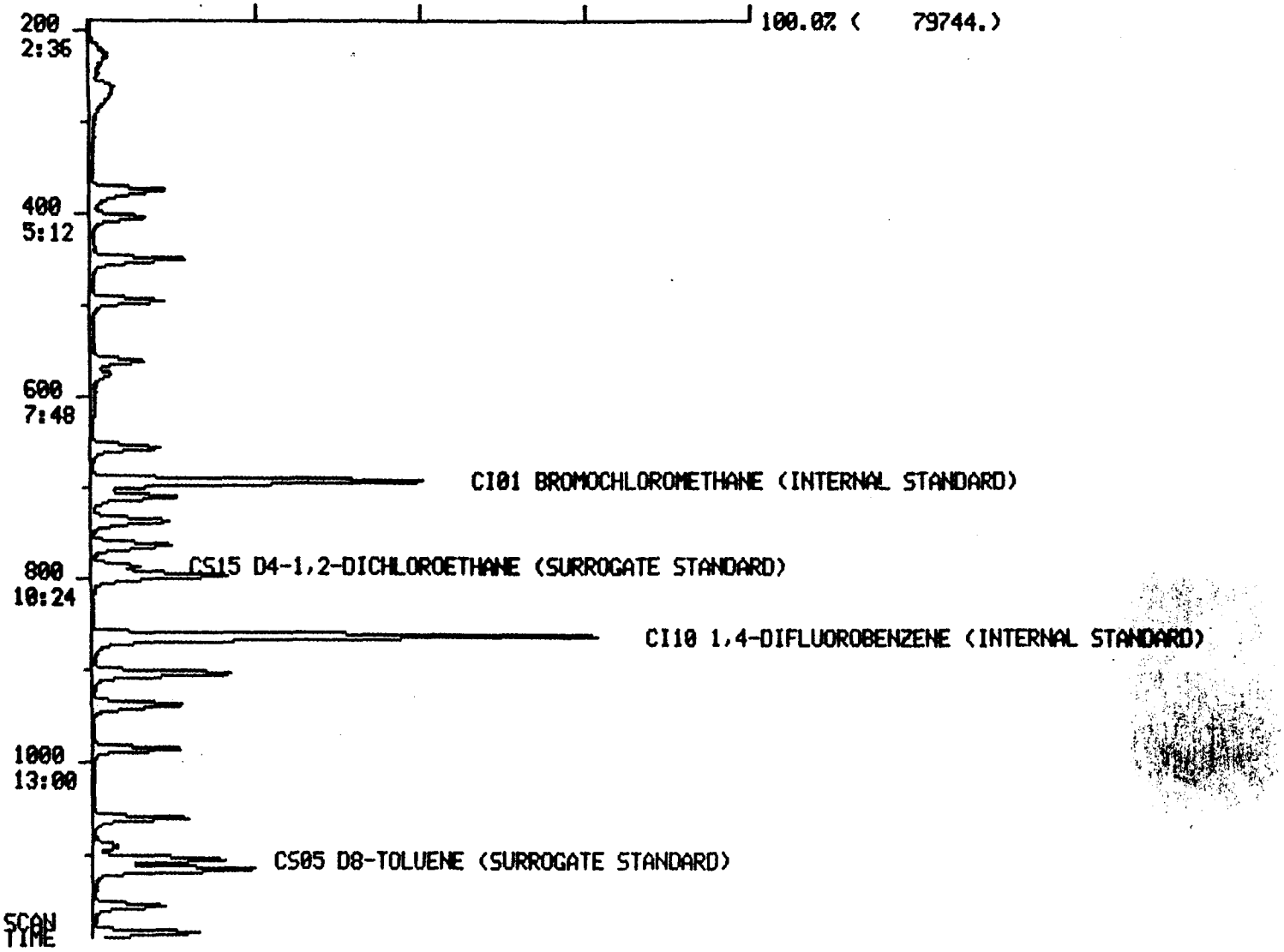
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CY911010A53 SCANS 1189 TO 1800 ACQUIRED: 10/10/91 17:24:00
CALI: CY911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD010,LOW,WATER,,VOA,IC010,F50053
CONDS.: DB624,,BF911010A53



DATA FROM FILE: CY911010A53 SCANS 189 TO 1189 ACQUIRED: 10/10/91 17:24:00
CALI: CY911010A53 #3 OUT OF 189 TO 1800
SAMPLE: CLP,STAND,,VSTD010,LOW,WATER,,VOA,IC010,F50053
CONDS.: DB624,,BF911010A53



6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Instrument ID: F50053 Calibration Date(s): 10/10/91 10/10/91

Heated Purge: (Y/N): N Calibration Times: 1155 1724

GC Column: DB-624 ID: 0.530(mm)

LAB FILE ID: RRF10 = CY911010A53 RRF20 = CW911010A53
RRF50= CT911010A53 RRF100= CV911010A53 RRF200= CU911010A53

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	1.016	0.731	0.513	0.600	0.687	0.709	26.9
Bromomethane *	1.097	1.100	0.835	0.855	0.901	0.958	13.7*
Vinyl Chloride *	1.076	0.894	0.701	0.760	0.759	0.838	18.0*
Chloroethane	0.694	0.652	0.478	0.517	0.520	0.572	16.6
Methylene Chloride	1.986	2.094	1.193	1.422	1.076	1.554	29.7
Acetone	0.425	0.414	0.235	0.252	0.160	0.297	39.4
Carbon Disulfide	3.500	4.152	3.134	3.774	3.108	3.534	12.5
1,1-Dichloroethene *	1.502	1.725	1.210	1.350	1.132	1.384	17.1*
1,1-Dichloroethane *	2.536	2.846	2.195	2.585	2.060	2.444	12.9*
1,2-Dichloroethene (total)	1.618		1.367	1.476	1.244	1.141	57.2
Chloroform *	3.103	3.570	2.728	3.147	2.560	3.022	13.0*
1,2-Dichloroethane *	1.869	2.127	1.611	1.843	1.478	1.786	14.0*
2-Butanone	0.432	0.409	0.260	0.355	0.242	0.340	25.2
1,1,1-Trichloroethane *	0.641	0.687	0.632	0.547	0.534	0.608	10.8*
Carbon Tetrachloride *	0.643	0.662	0.601	0.564	0.532	0.600	9.0*
Bromodichloromethane *	0.607	0.670	0.603	0.568	0.540	0.598	8.2*
1,2-Dichloropropane	0.379	0.405	0.348	0.318	0.301	0.350	12.2
cis-1,3-Dichloropropene *	0.557	0.594	0.544	0.507	0.478	0.536	8.4*
Trichloroethene *	0.588	0.616	0.509	0.452	0.398	0.513	17.8*
Dibromochloromethane *	0.618	0.728	0.609	0.574	0.514	0.609	12.8*
1,1,2-Trichloroethane *	0.386	0.449	0.360	0.325	0.289	0.362	16.8*
Benzene *	0.999	1.031	0.928	0.823	0.765	0.909	12.5*
Trans-1,3-Dichloropropene *	0.398	0.435	0.382	0.368	0.345	0.386	8.8*
Bromoform *	0.421	0.585	0.440	0.419	0.365	0.446	18.5*
4-Methyl-2-Pentanone	0.310	0.328	0.273	0.246	0.215	0.274	16.8
2-Hexanone	0.189	0.218	0.167	0.156	0.137	0.173	18.0
Tetrachloroethene *	0.638	0.650	0.523	0.479	0.426	0.543	18.1*
1,1,2,2-Tetrachloroethane *	0.605	0.759	0.573	0.505	0.439	0.576	20.9*
Toluene *	1.496	1.516	1.353	1.222	1.134	1.344	12.4*
Chlorobenzene *	1.278	1.302	1.101	1.012	0.918	1.122	14.8*
Ethylbenzene *	0.565	0.615	0.549	0.504	0.464	0.539	10.7*
Styrene *	1.080	1.215	1.006	0.943	0.871	1.023	12.9*
Xylene (total) *	0.753	0.739	0.654	0.608	0.553	0.661	12.9*
Toluene-d8	1.202	1.223	1.135	1.023	1.025	1.122	8.5
Bromofluorobenzene *	0.882	0.981	0.878	0.804	0.794	0.868	8.7*
1,2-Dichloroethane-d4	1.634	1.841	1.384	1.594	1.371	1.565	12.5

* Compounds with required minimum RRF and maximum %RSD values.
All other compounds must meet a minimum RRF of 0.010.

FORM VI VOA 3/90

(1) Initial Calibration data (Form VI VOA) – in order by instrument if more than one instrument used.

(a) VOA standard(s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) All initial calibration data must be included, regardless of when it was performed and for which case. When more than one initial calibration is performed, the data must be put in chronological order, by instrument.

c. Standards data

(1) Initial Calibration data (Form VI VOA) – in order by instrument if more than one instrument used.

(a) VOA standard(s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) All initial calibration data must be included, regardless of when it was performed and for which case. When more than one initial calibration is performed, the data must be put in chronological order, by instrument.

(2) Continuing Calibration (Form VII VOA) – in order by instrument, if more than one intrument used.

(a) VOA standard(s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) When more than one continuing calibration is performed, forms must be in chronological order, within fraction and instrument.

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000 \text{ UL}} = \cancel{5000.00}\ 1.0$$

SWB 10/21/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)
J2( ) J4( ) D2( ) (:1)

CLP, 23861, 10, LABPURE, LOW, WATER, 452454, VOA, EPA, F50053

GC/MS ANALYSIS Sml SWB 10/21/91
AMOUNT PURGED: 0 UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BG911015B53
BLANK FILENAME: CB911016C53
STANDARD FILENAME: CT911015B53
SAMPLE FILENAME: CN052454A53

ANALYST(S): INJECTION 633 WORKUP SWBas

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [X] COMPLETE
[ ] REINJECT NEAT
[ ] DILUTE ( )

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : Ø

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED _____

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

GC/MS REVIEW SWBas DATE 10/21/91 AUDITOR Wepper DATE 10/21/91

REPORT INTEGRATION: TOTAL # OF INJECTIONS: ___

FINAL REPORTABLE PACKAGE(S): CN052454A53 / _____

QA COMMENTS:

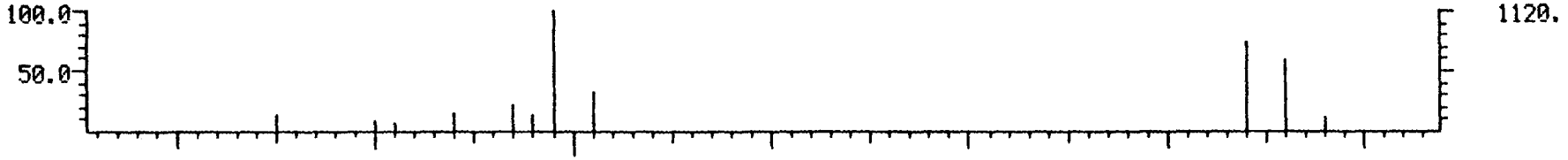
INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

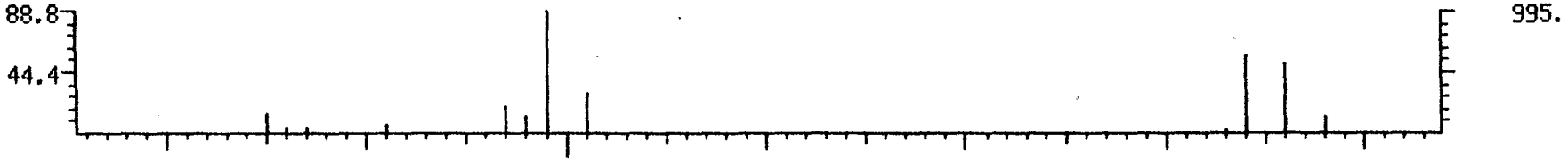
TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

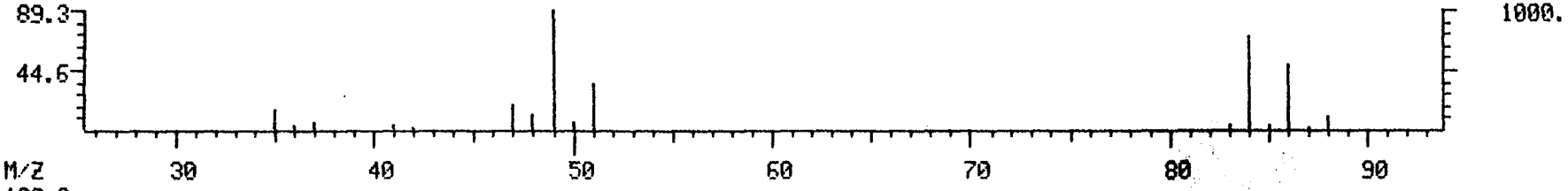
RAW DATA: CN052454A53 #445 BASE M/Z: 49 RIC: 3980.
10/16/91 10:22
SAMPLE: CLP,23861,10,LABPURE,LOW,WATER,452454,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53

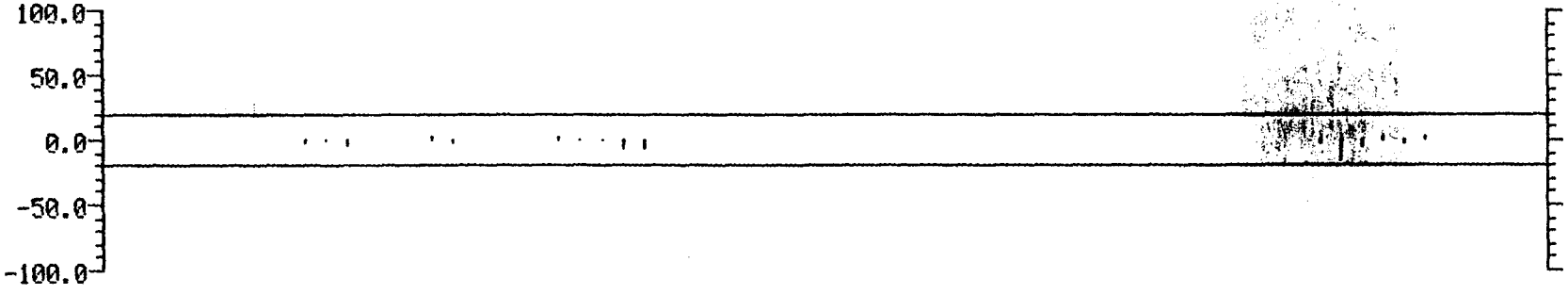


ENHANCED DATA: CN052454A53 #445 BASE M/Z: 49 RIC: 3296.



LIBRARY FILE: NW #14 BASE M/Z: 49 RIC: 3644.





No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	0.99	0.551	1.00	2.18	50.00	0.009	0.213	0.04
13	5:13		0.583						
14	5:49	1.00	0.650	1.00	4.71	50.00	0.144	1.531	0.09
15	6:24	0.99	0.715	0.99	0.41	50.00	0.011	1.391	0.01
16	7:15		0.811						
17	8:29		0.948						
18	8:33		0.956						
19	9:11		1.026						
20	9:31	0.99	0.852	1.00	0.15	50.00	0.001	0.484	0.00
21	9:52		0.884						
22	10:18	0.99	0.922	1.00	0.55	50.00	0.009	0.805	0.01
23	10:20		1.156						
24	11:42	0.99	1.048	1.00	0.09	50.00	0.001	0.475	0.00
25	12:09		1.087						
26	12:46		1.143						
27	14:08		0.807						
28	14:27	1.00	0.826	1.00	0.48	50.00	0.011	1.177	0.01
29	13:44		1.230						
30	14:59		1.341						
31	15:21		1.375						
32	15:40		0.895						
33	15:59		0.913						
34	16:12		1.451						
35	17:34		1.003						
36	17:52		1.020						
37	18:09	1.00	1.036	1.00	0.09	100.00	0.001	0.604	0.00
38	19:03		1.088						
39	19:05		1.090						
40	19:26		1.740						
41	20:37		1.177						
42	8:29	0.75	0.948	0.75	0.40	100.00	0.006	1.397	0.00
43	18:09	1.00	1.036	1.00	0.09	150.00	0.000	0.602	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	685	8:54	1	1.000	A BB	46573.	50.000 UG/L	16.96
2	114	855	11:07	2	1.000	A BB	237057.	50.000 UG/L	16.96
3	117	1341	17:26	3	1.000	A BB	210340.	50.000 UG/L	16.96
4	65	778	10:07	1	1.136	A BB	59456.	44.475 UG/L	15.08
5	98	1097	14:16	3	0.818	A BB	204567.	45.886 UG/L	15.56
6	95	1552	20:11	3	1.157	A BB	156466.	45.361 UG/L	15.38
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	377	4:54	1	0.550	A*BB	433.	2.182 UG/L	0.74 NO
13	NOT FOUND								
14	84	445	5:47	1	0.650	A BB	6715.	4.709 UG/L	1.60 Yes B
15	96	487	6:20	1	0.711	A BB	528.	0.408 UG/L	0.14 BDL
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	97	727	9:27	2	0.850	A BB	336.	0.146 UG/L	0.05 BDL
21	NOT FOUND								
22	78	787	10:14	2	0.920	A BB	2092.	0.548 UG/L	0.19 BDL
23	NOT FOUND								
24	130	894	11:37	2	1.046	A BB	202.	0.090 UG/L	0.03 BDL
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1108	14:24	3	0.826	A BB	2354.	0.476 UG/L	0.16 BDL
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	106	1391	18:05	3	1.037	A BB	241.	0.095 UG/L	0.03 BDL
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	487	6:20	1	0.711	**B*	527.	0.405 UG/L	0.14 BDL
43	106	1391	18:05	3	1.037	**B*	240.	0.095 UG/L	0.03 L

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:10	0.99	1.137	1.00	44.47	50.00	1.277	1.435	0.89
5	14:19	1.00	0.817	1.00	45.89	50.00	0.973	1.060	0.92
6	20:14	1.00	1.156	1.00	45.36	50.00	0.744	0.820	0.91
7	2:50		0.317						
8	2:57		0.330						
9	3:22		0.376						
10	3:32		0.395						
11	4:49		0.539						

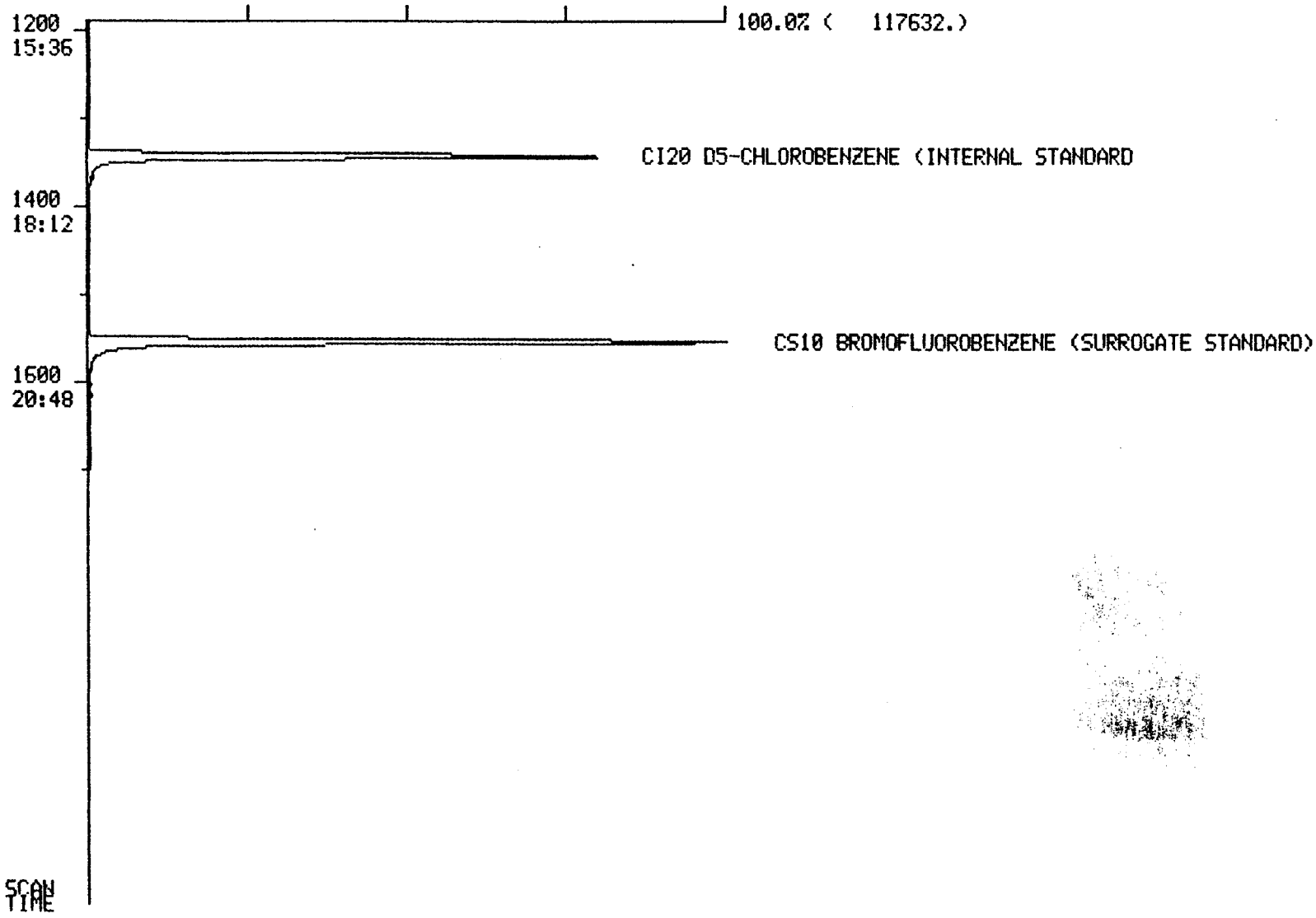
Quantitation Report File: CN052454A53

Data: CN052454A53.TI
10/16/91 10:22:00
Sample: CLP,23861,10,LABPURE,LOW,WATER,452454,VOA,EPA,F50053
Conds.: DB624,CT911015B53,BG911015B53,CB911016C53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

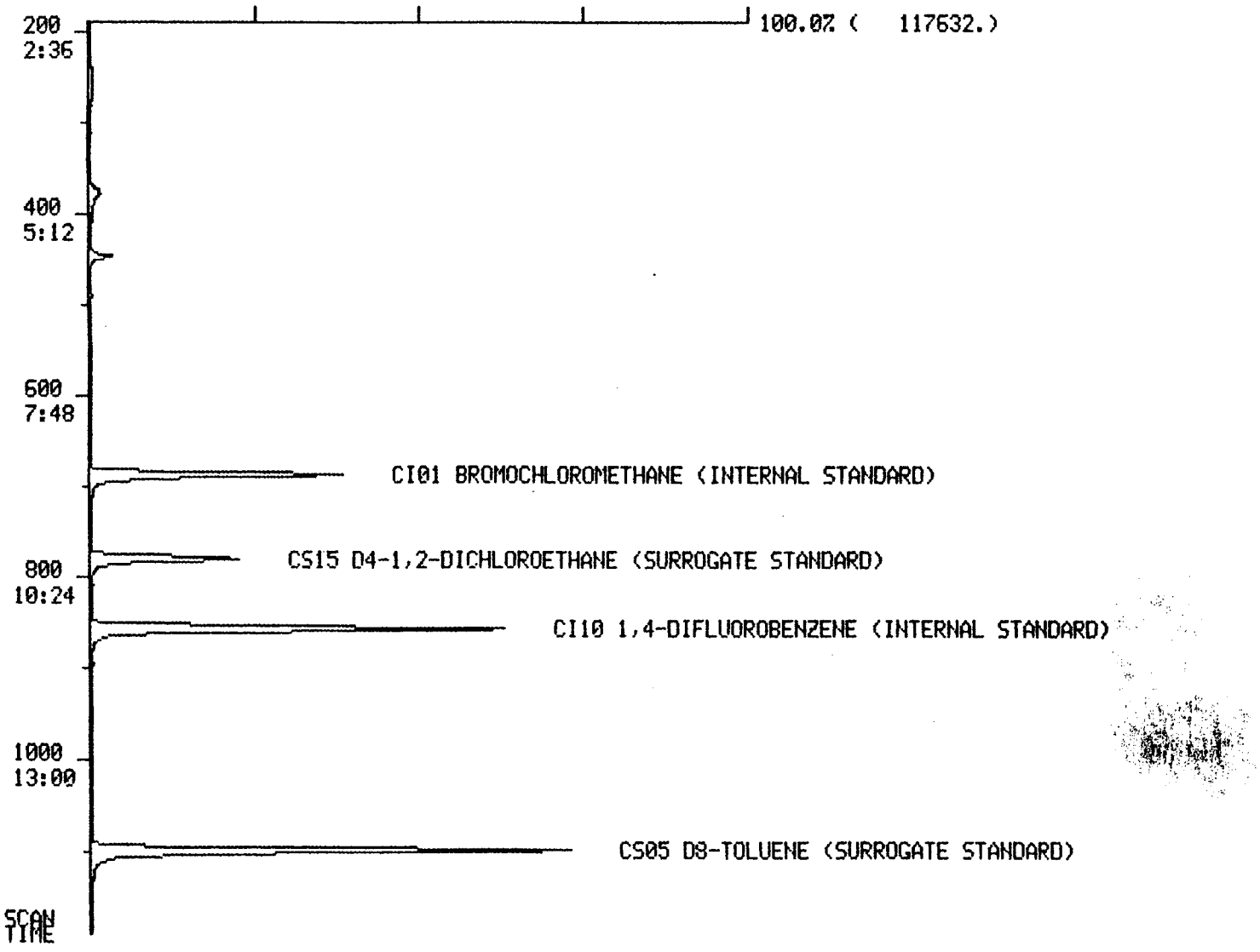
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CN052454A53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 10:22:00
CALI: CN052454A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,LABPURE,LOW,WATER,452454,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



23861 10 SAMPLE DATA PACKAGE

DATA FROM FILE: CN052454A53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 10:22:00
CALI: CN052454A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,LABPURE,LOW,WATER,452454,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

LABPURE

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452454

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052454A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LABPURE

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452454

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052454A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

LABORATORY NOTICE

ORIGINAL COMPUCHEM ID# 452446
MATRIX SPIKE COMPUCHEM ID# 452447
MATRIX SPIKE DUPLICATE COMPUCHEM ID# 452448
CLIENT ID# INFLUENT
CASE# 23861

The volatile fraction of the above original unspiked sample was analyzed as a Low Level Liquid matrix spike (MS) and matrix spike duplicate (MSD). The analysis of the original sample contained the spike compound trichloroethene at a reported amount of 53 ug/l and tetrachloroethene at 40 ug/l. The MS and MSD were analyzed using an aliquot from another sample container and the reported amounts for the these compounds were significantly lower. We are attributing these results to variations in content of discrete sample containers and are reporting these data with reference to this qualifying notice.

Valgena Respass

Valgena Respass Employee ID# 1009
Data Review Specialist
October 25, 1991

Approved by Susan W Bass 10/25/91

Susan W. Bass Employee ID# 633
GC/MS Data Review Manager
October 25, 1991

Approved by Janet G. Livingston

Employee ID# 258
Final Technical Reviewer
Date: 10/31/91

==========

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0\ \text{UL}}{\cancel{0.0}\ \text{UL}\ 5000.0} = \cancel{5000.00}\ 1.000$$

MR 01/25/91

==========

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

==========

LAB INSTRUCTIONS PPS#

original HOT

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)

J2( ) J4( ) D2( ) (:1)

CLP, 23861, 10, INFLUENT, LOW, WATER, 452446, VOA, EPA, F50053

GC/MS ANALYSIS 5000 SWB 10/16/91
AMOUNT PURGED: 0. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BG911015B53
BLANK FILENAME: CB911016C53
STANDARD FILENAME: CT911015B53
SAMPLE FILENAME: CN052446A53

ANALYST(S): INJECTION SWB /633 WORKUP SWBaro

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE

POSTED

[ ] REINJECT NEAT
[ ] DILUTE ( )

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : Ø

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 1

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

bottle 2 of 2

GC/MS REVIEW [signature] DATE 10/25/91 AUDITOR _____ DATE ___/___/___

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 1

FINAL REPORTABLE PACKAGE(S): CN0-A53 /

QA COMMENTS:

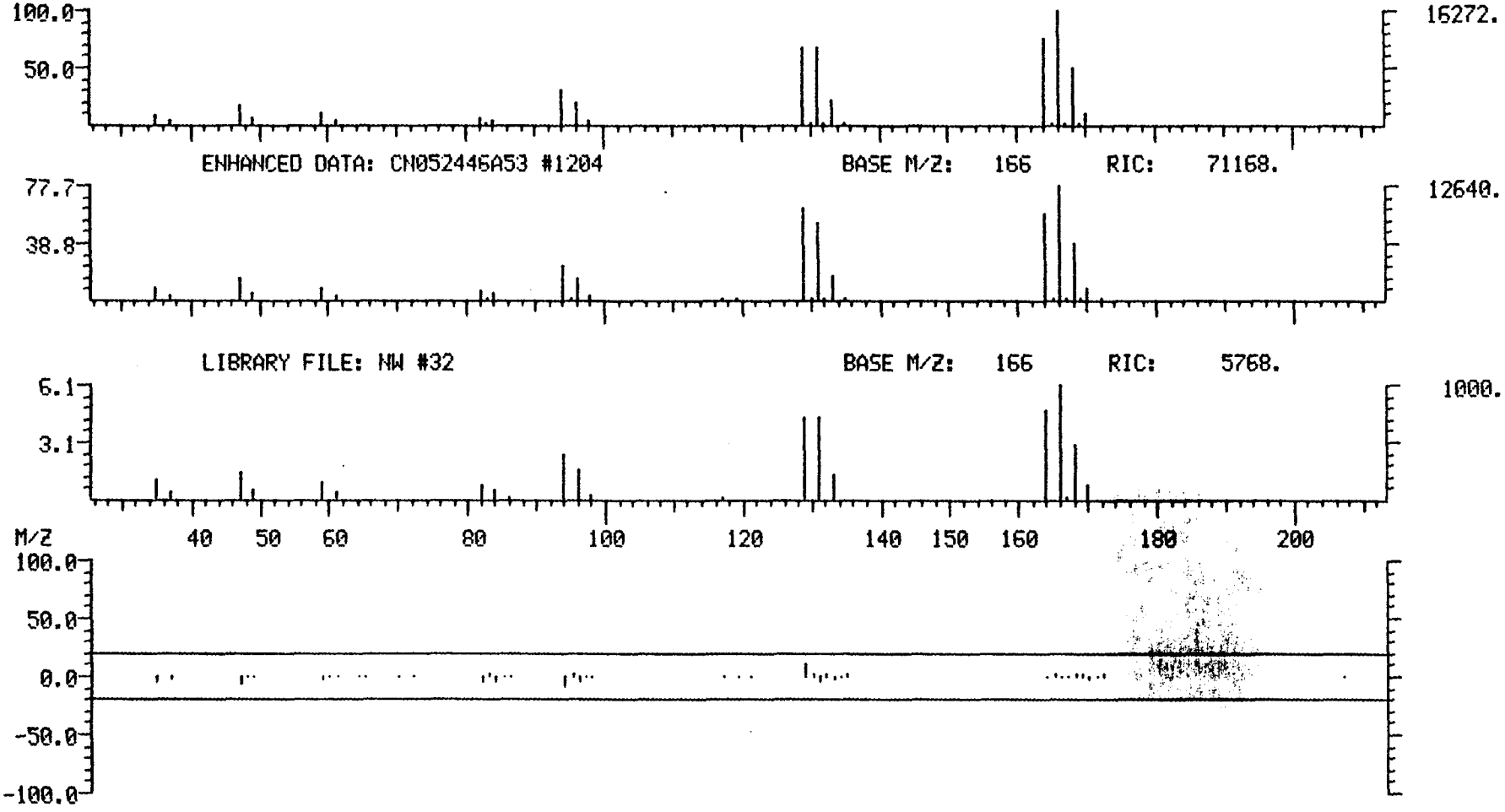
INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE <127-18-4>

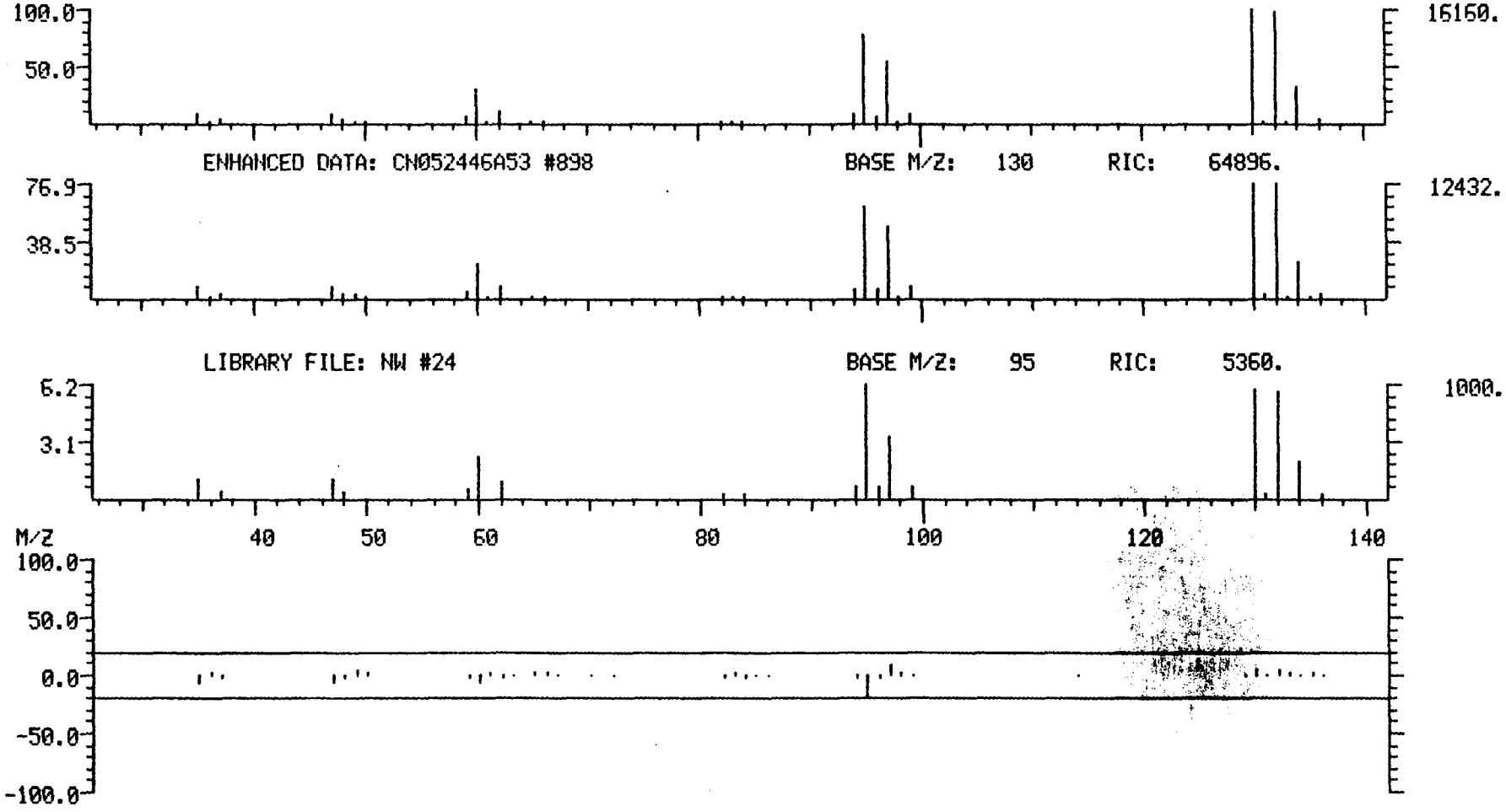
RAW DATA: CN052446A53 #1204 BASE M/Z: 166 RIC: 87168.
10/16/91 11:04
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE <79-01-6>

RAW DATA: CN052446A53 #898 BASE M/Z: 130 RIC: 79616.
10/16/91 11:04
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53

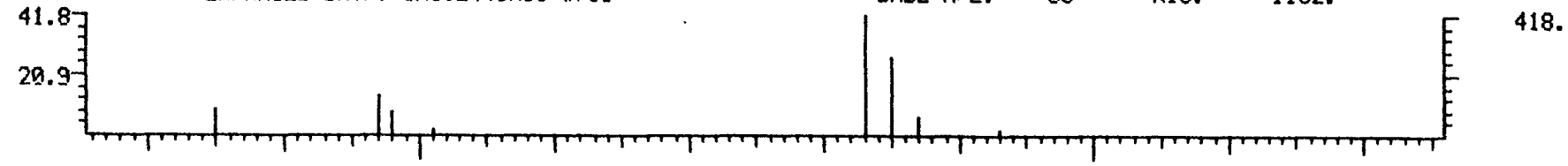


TARGET COMPOUND COMPARISON

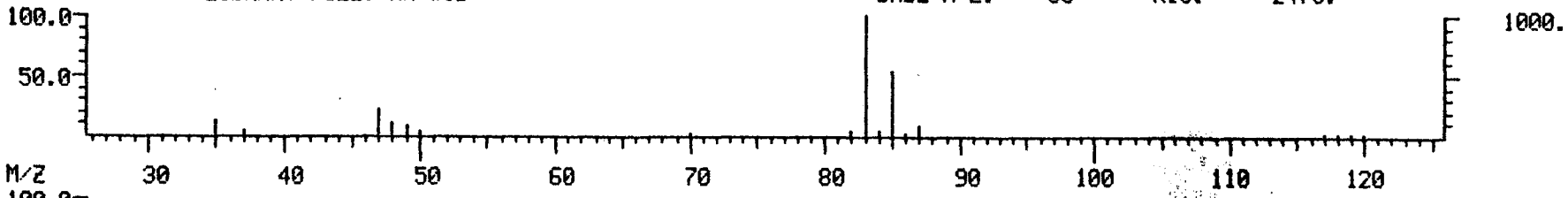
COMPOUND: C060 CHLOROFORM <67-66-3>

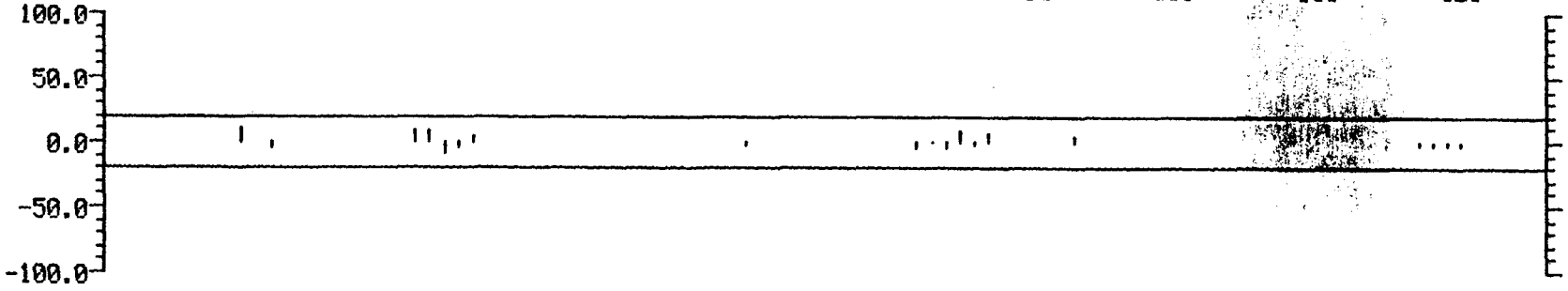
RAW DATA: CN052446A53 #705 BASE M/Z: 83 RIC: 1960.
10/16/91 11:04
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53

ENHANCED DATA: CN052446A53 #705 BASE M/Z: 83 RIC: 1102.



LIBRARY FILE: NW #19 BASE M/Z: 83 RIC: 2476.

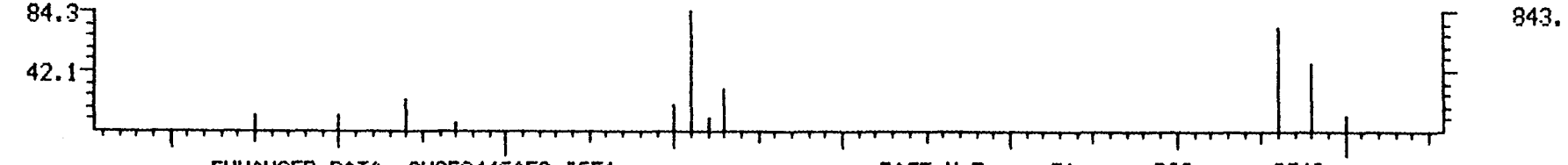




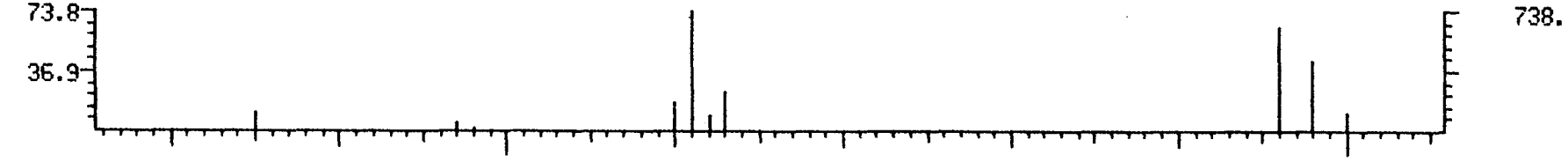
TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE <156-59-2>

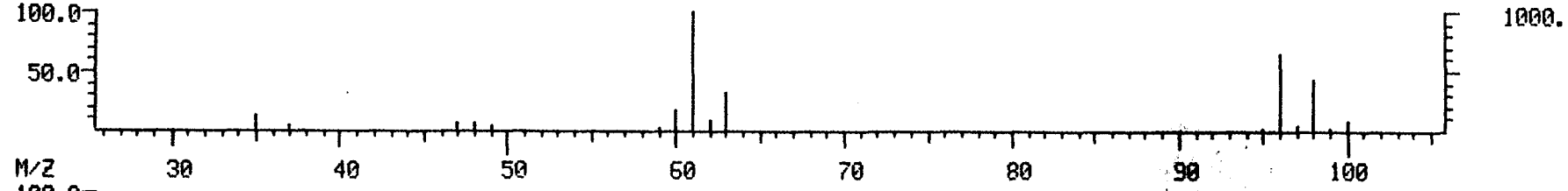
RAW DATA: CN052446A53 #651 BASE M/Z: 61 RIC: 3220.
10/16/91 11:04
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53

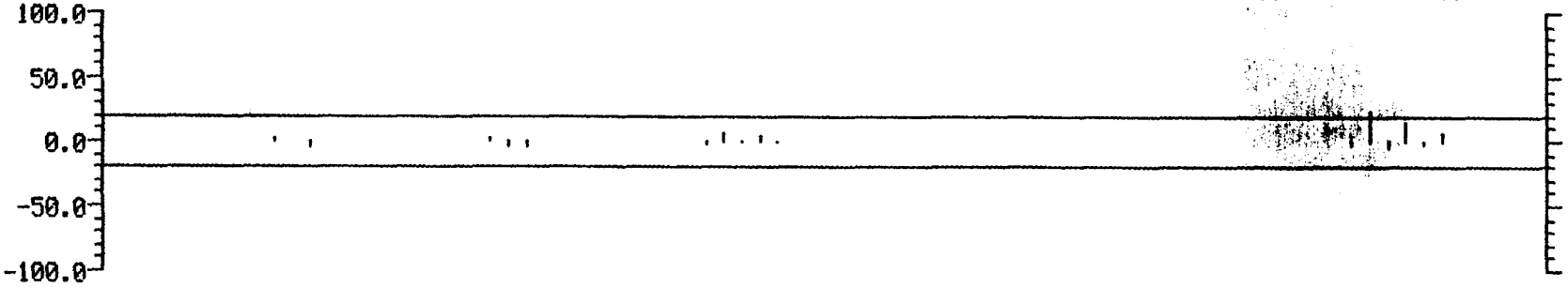


ENHANCED DATA: CN052446A53 #651 BASE M/Z: 61 RIC: 2648.



LIBRARY FILE: NW #17 BASE M/Z: 61 RIC: 3196.

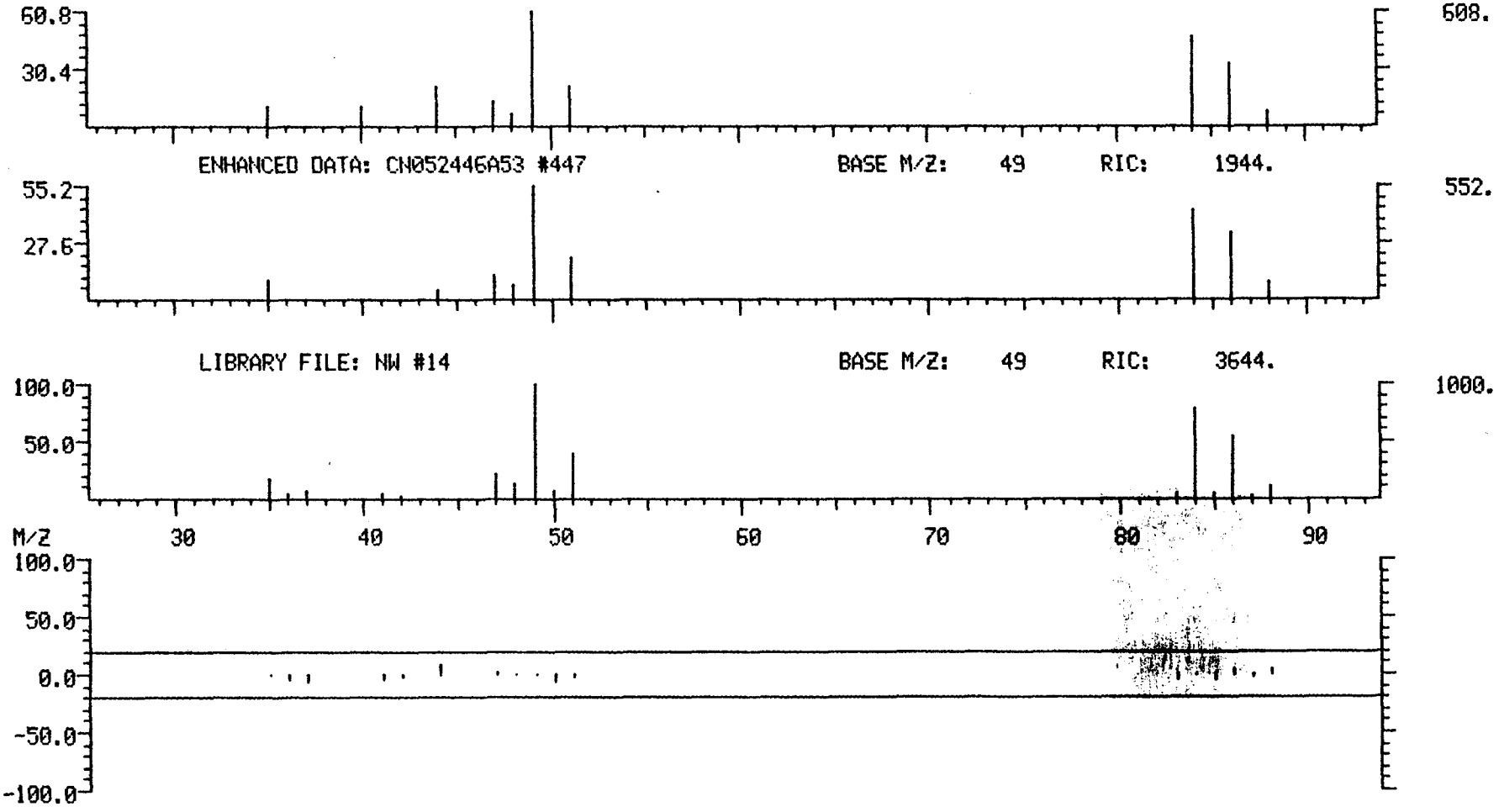




TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

RAW DATA: CN052446A53 #447 BASE M/Z: 49 RIC: 2336.
10/16/91 11:04
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	1.01	0.551	1.01	1.67	50.00	0.007	0.213	0.03
13	5:13		0.583						
14	5:49	1.00	0.650	1.00	2.53	50.00	0.078	1.531	0.05
15	6:24	1.00	0.715	1.00	0.59	50.00	0.016	1.391	0.01
16	7:15	1.00	0.811	1.00	0.19	50.00	0.009	2.269	0.00
17	8:29	1.00	0.948	1.00	4.13	50.00	0.116	1.404	0.08
18	8:33		0.956						
19	9:11	1.00	1.026	1.00	1.34	50.00	0.075	2.800	0.03
20	9:31	1.00	0.852	1.00	0.11	50.00	0.001	0.484	0.00
21	9:52		0.884						
22	10:18	1.00	0.922	1.00	0.56	50.00	0.009	0.805	0.01
23	10:20	1.00	1.156	1.00	0.12	50.00	0.004	1.538	0.00
24	11:42	1.00	1.048	1.00	53.27	50.00	0.506	0.475	1.07
25	12:09		1.087						
26	12:46		1.143						
27	14:08		0.807						
28	14:27	1.00	0.826	1.00	0.42	50.00	0.010	1.177	0.01
29	13:44		1.230						
30	14:59		1.341						
31	15:21	1.00	1.375	1.00	0.95	50.00	0.006	0.318	0.02
32	15:40	1.00	0.895	1.00	40.88	50.00	0.411	0.502	0.82
33	15:59		0.913						
34	16:12		1.451						
35	17:34		1.003						
36	17:52		1.020						
37	18:09		1.036						
38	19:03		1.088						
39	19:05		1.090						
40	19:26		1.740						
41	20:37		1.177						
42	8:29	1.00	0.948	1.00	4.73	100.00	0.066	1.397	0.05
43	18:09	0.00	1.036	0.00	-0.00	150.00	-0.000	0.602	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	688	8:57	1	1.000	A BB	47589.	50.000 UG/L	12.58
2	114	858	11:09	2	1.000	A BB	224444.	50.000 UG/L	12.58
3	117	1345	17:29	3	1.000	A BB	200358.	50.000 UG/L	12.58
4	65	782	10:10	1	1.137	A BB	58473.	42.806 UG/L	10.77
5	98	1100	14:18	3	0.818	A BB	200088.	47.117 UG/L	11.85
6	95	1556	20:14	3	1.157	A BB	151435.	46.090 UG/L	11.60
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	381	4:57	1	0.554	A BB	338.	1.667 UG/L	0.42 NO
13	NOT FOUND								
14	84	447	5:49	1	0.650	A BB	3692.	2.534 UG/L	0.64 YES B
15	96	491	6:23	1	0.714	A BB	775.	0.586 UG/L	0.15 M
16	63	556	7:14	1	0.808	A BB	419.	0.194 UG/L	0.05 M
17	96	651	8:28	1	0.946	A BB	5516.	4.127 UG/L	1.04 YES
18	NOT FOUND								
19	83	705	9:10	1	1.025	A BB	3577.	1.342 UG/L	0.34 YES
20	97	730	9:29	2	0.851	A BB	229.	0.105 UG/L	0.03 NO
21	NOT FOUND								
22	78	791	10:17	2	0.922	A BB	2032.	0.562 UG/L	0.14 NO
23	62	794	10:19	1	1.154	A BB	175.	0.120 UG/L	0.03 M
24	130	898	11:40	2	1.047	A BB	113539.	53.266 UG/L	13.40 YES
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1111	14:27	3	0.826	A BB	1979.	0.420 UG/L	0.11 NO
29	NOT FOUND								
30	NOT FOUND								
31	97	1180	15:20	2	1.375	A BB	1361.	0.954 UG/L	0.24 M
32	164	1204	15:39	3	0.895	A BB	82293.	40.876 UG/L	10.28 YES
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	651	8:28	1	0.946	A*BB	5516 ~~6291.~~ 4.127	~~4.730~~ UG/L	1.19 YES
43	106	6724	0:00	3	0.000	****	-2.	-0.001 UG/L	-0.00

MW 05/91

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:10	1.00	1.137	1.00	42.81	50.00	1.229	1.435	0.86
5	14:19	1.00	0.817	1.00	47.12	50.00	0.999	1.060	0.94
6	20:14	1.00	1.156	1.00	46.09	50.00	0.756	0.820	0.92
7	2:50		0.317						
8	2:57		0.330						
9	3:22		0.376						
10	3:32		0.395						
11	4:49		0.539						

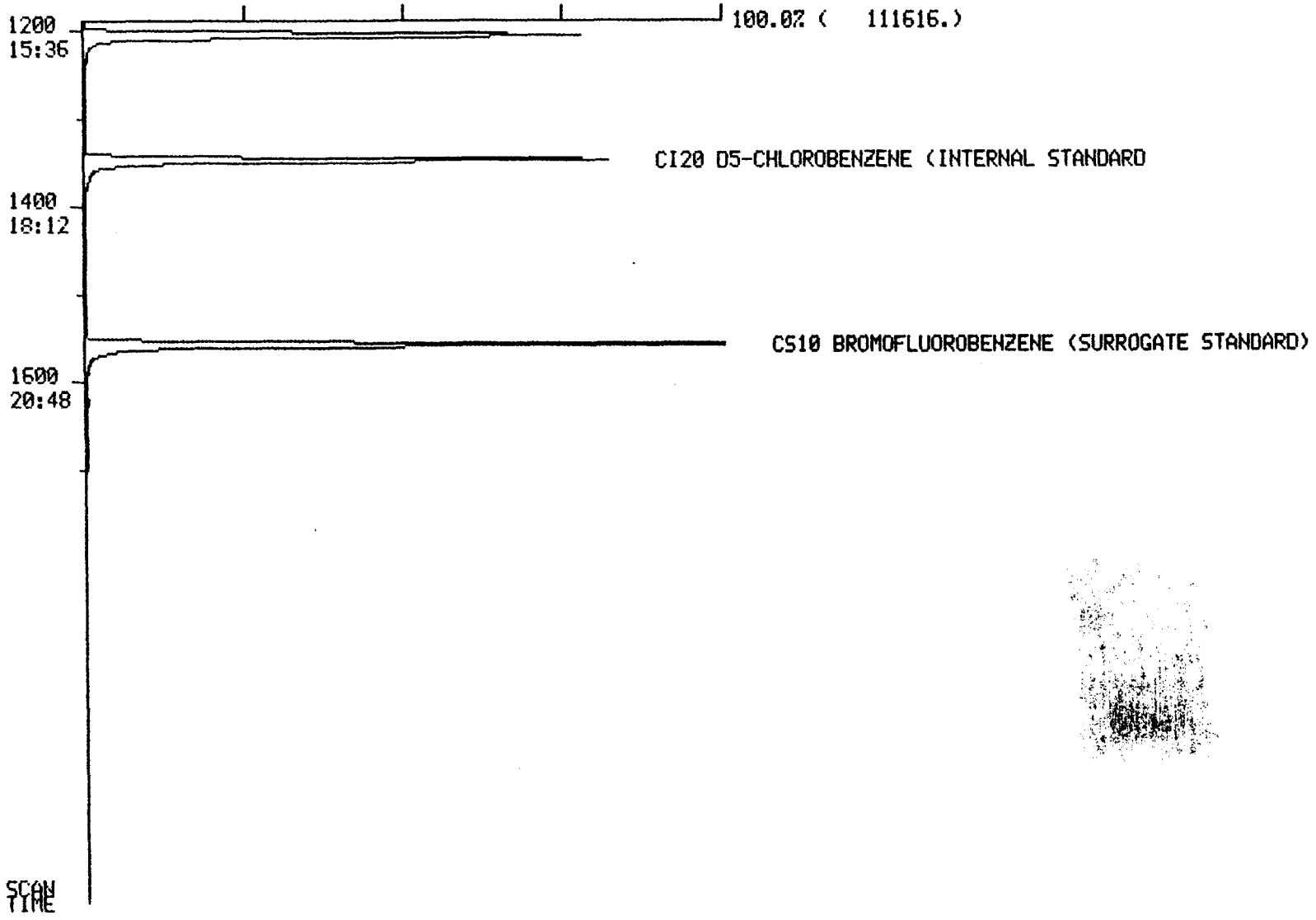
Quantitation Report File: CN0524[illegible]

Data: CN052446A53.TI
10/16/91 11:04:00
Sample: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
Conds.: DB624,CT911015B53,BG911015B53,CB911016C53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

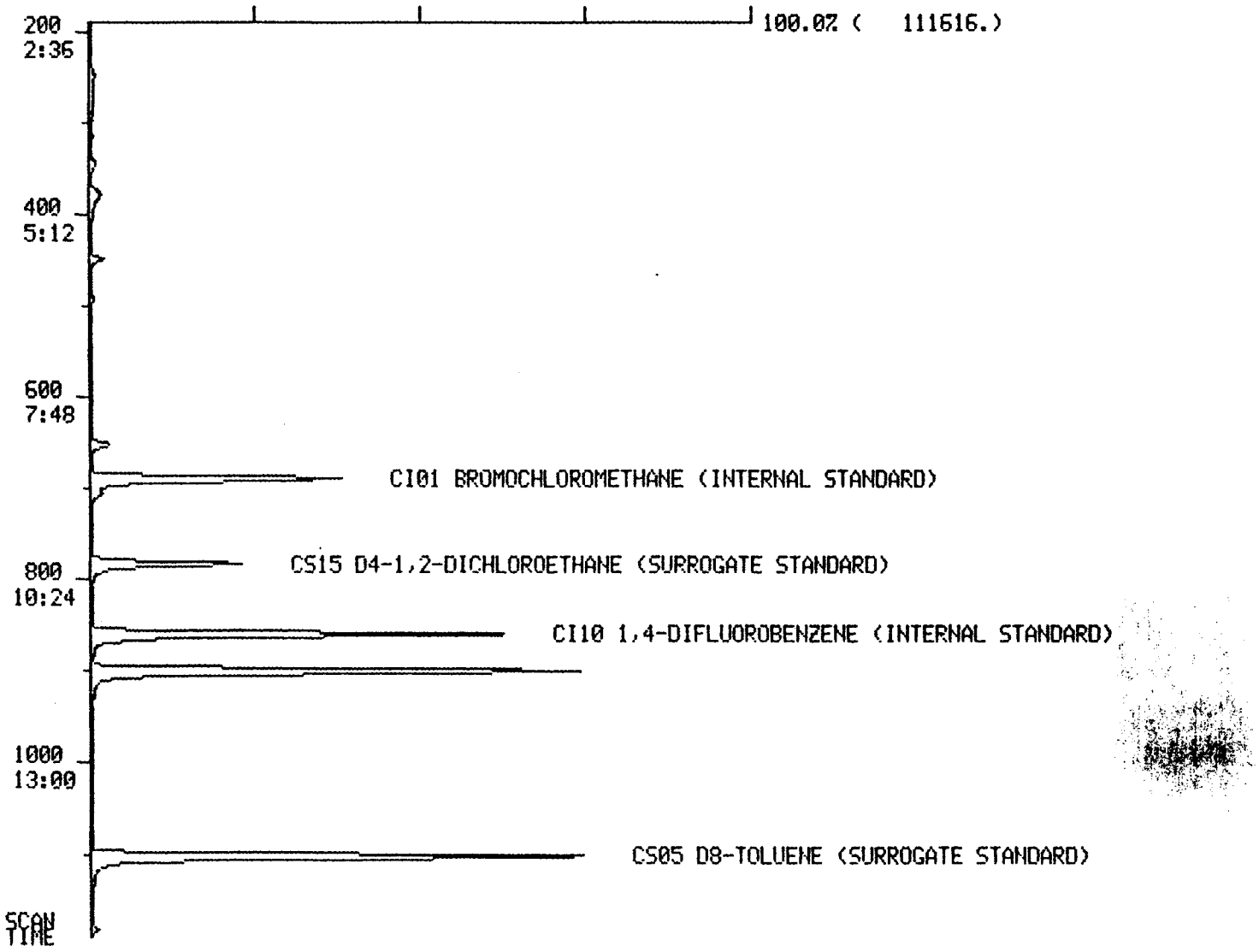
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CN052446A53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 11:04:00
CALI: CN052446A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



23861 10 SAMPLE DATA PACKAGE

DATA FROM FILE: CN052446A53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 11:04:00
CALI: CN052446A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

INFLUENT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452446

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052446A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 3/90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

INFLUENT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452446

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052446A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. _____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	1	J
107-06-2	1,2-Dichloroethane	4	J
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	53	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	41	
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{5.0}\ 5000. \text{ UL}} = \cancel{1000.00}\ 1.0$$

10/22/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)
J2( ) J4( ) D2( ) (:1)

CLP, 23861, 10, EFFLUENT, LOW, WATER, 452451, VOA, EPA, F50053

GC/MS ANALYSIS
AMOUNT PURGED: 5000 UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BG911016A53
BLANK FILENAME: CB911016A53
STANDARD FILENAME: CT911016A53
SAMPLE FILENAME: CN052451B53

ANALYST(S): INJECTION 8118 WORKUP

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE
[ ] REINJECT NEAT
[ ] DILUTE ( )

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

GC/MS REVIEW DATE 10/22/91 AUDITOR DATE 10/22/91

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 1

FINAL REPORTABLE PACKAGE(S): CN-B53 /

QA COMMENTS:

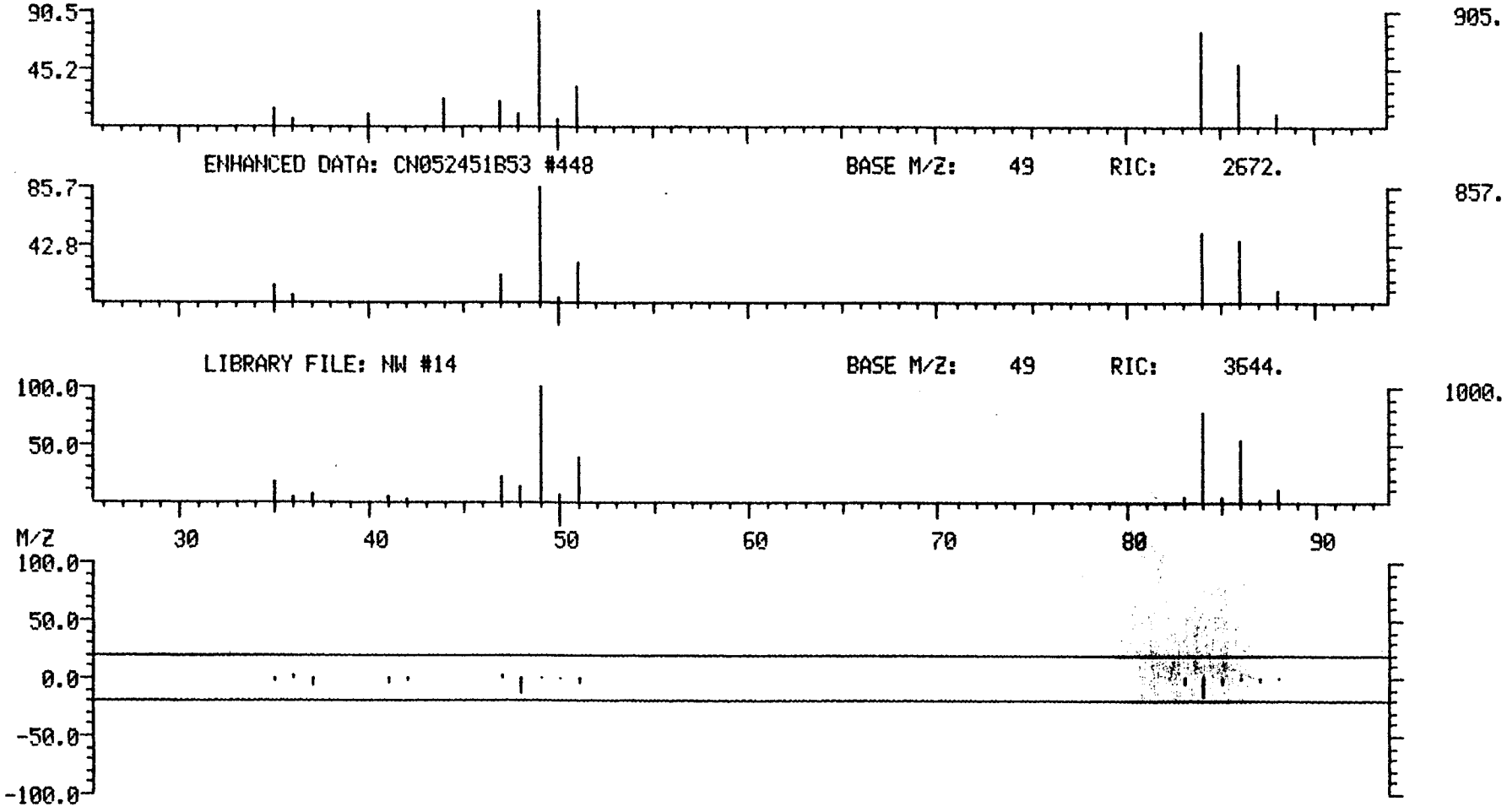
INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

RAW DATA: CN052451B53 #448 BASE M/Z: 49 RIC: 3420.
10/16/91 16:11
SAMPLE: CLP,23861,10,EFFLUENT,LOW,WATER,452451,VOA,EPA,F50053
CONDS.: DB624,CT911016A53,BG911016A53,CB911016A53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	0.99	0.549	1.00	2.49	50.00	0.010	0.197	0.05
13	5:14		0.581						
14	5:49	1.00	0.647	1.00	3.96	50.00	0.104	1.314	0.08
15	6:25	1.00	0.712	1.00	0.38	50.00	0.009	1.197	0.01
16	7:16		0.808						
17	8:31		0.947						
18	8:35		0.954						
19	9:13		1.025						
20	9:34	1.00	0.854	1.00	0.13	50.00	0.001	0.497	0.00
21	9:55		0.885						
22	10:20	1.00	0.922	1.00	0.60	50.00	0.010	0.789	0.01
23	10:22		1.153						
24	11:44	1.00	1.046	1.00	0.44	50.00	0.004	0.494	0.01
25	12:10		1.086						
26	12:48		1.142						
27	14:09		0.807						
28	14:29	1.00	0.826	1.00	0.51	50.00	0.012	1.159	0.01
29	13:46		1.229						
30	14:59		1.338						
31	15:22		1.371						
32	15:41	1.00	0.895	1.00	0.16	50.00	0.002	0.529	0.00
33	15:59		0.912						
34	16:13		1.448						
35	17:35	1.00	1.004	1.00	0.08	50.00	0.002	1.019	0.00
36	17:53		1.021						
37	18:10	1.00	1.036	1.00	0.06	100.00	0.000	0.616	0.00
38	19:03		1.088						
39	19:06		1.090						
40	19:27		1.735						
41	20:38		1.177						
42	8:31	0.75	0.947	0.75	0.36	100.00	0.005	1.276	0.00
43	18:10	1.00	1.036	1.00	0.06	150.00	0.000	0.612	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot	
1	128	690	8:58	1	1.000	A BB	55570.	50.000 UG/L	16.57	
2	114	860	11:11	2	1.000	A BB	255341.	50.000 UG/L	16.57	
3	117	1345	17:29	3	1.000	A BB	227377.	50.000 UG/L	16.57	
4	65	784	10:12	1	1.136	A BB	60976.	47.251 UG/L	15.66	
5	98	1101	14:19	3	0.819	A BB	217728.	48.323 UG/L	16.02	
6	95	1555	20:13	3	1.156	A BB	168283.	46.941 UG/L	15.56	
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	NOT FOUND									
12	43	378	4:55	1	0.548	A BB	544.	2.489 UG/L	0.82	No ~~B~~
13	NOT FOUND									
14	84	448	5:49	1	0.649	A BB	5784.	3.961 UG/L	1.31	yes B
15	96	493	6:25	1	0.714	A BB	512.	0.385 UG/L	0.13	No
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	97	733	9:32	2	0.852	A BB	321.	0.127 UG/L	0.04	No
21	NOT FOUND									
22	78	793	10:19	2	0.922	A BB	2427.	0.603 UG/L	0.20	No
23	NOT FOUND									
24	130	900	11:42	2	1.047	A BB	1119.	0.443 UG/L	0.15	No
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	91	1112	14:27	3	0.827	A BB	2674.	0.507 UG/L	0.17	No
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	164	1203	15:38	3	0.894	A BB	375.	0.156 UG/L	0.05	No
33	NOT FOUND									
34	NOT FOUND									
35	112	1349	17:32	3	1.003	A BB	352.	0.076 UG/L	0.03	No
36	NOT FOUND									
37	106	1396	18:09	3	1.038	A BB	181.	0.065 UG/L	0.02	No
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
41	NOT FOUND									
42	96	493	6:25	1	0.714	**B*	511.	0.360 UG/L	0.12	No
43	106	1396	18:09	3	1.038	**B*	180.	0.065 UG/L	0.02	↓

BN 10/22/91

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:00	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:13	1.00	1.136	1.00	47.25	50.00	1.097	1.161	0.95
5	14:20	1.00	0.818	1.00	48.32	50.00	0.958	0.991	0.97
6	20:15	1.00	1.156	1.00	46.94	50.00	0.740	0.788	0.94
7	2:52		0.319						
8	2:59		0.331						
9	3:24		0.379						
10	3:32		0.393						
11	4:51		0.539						

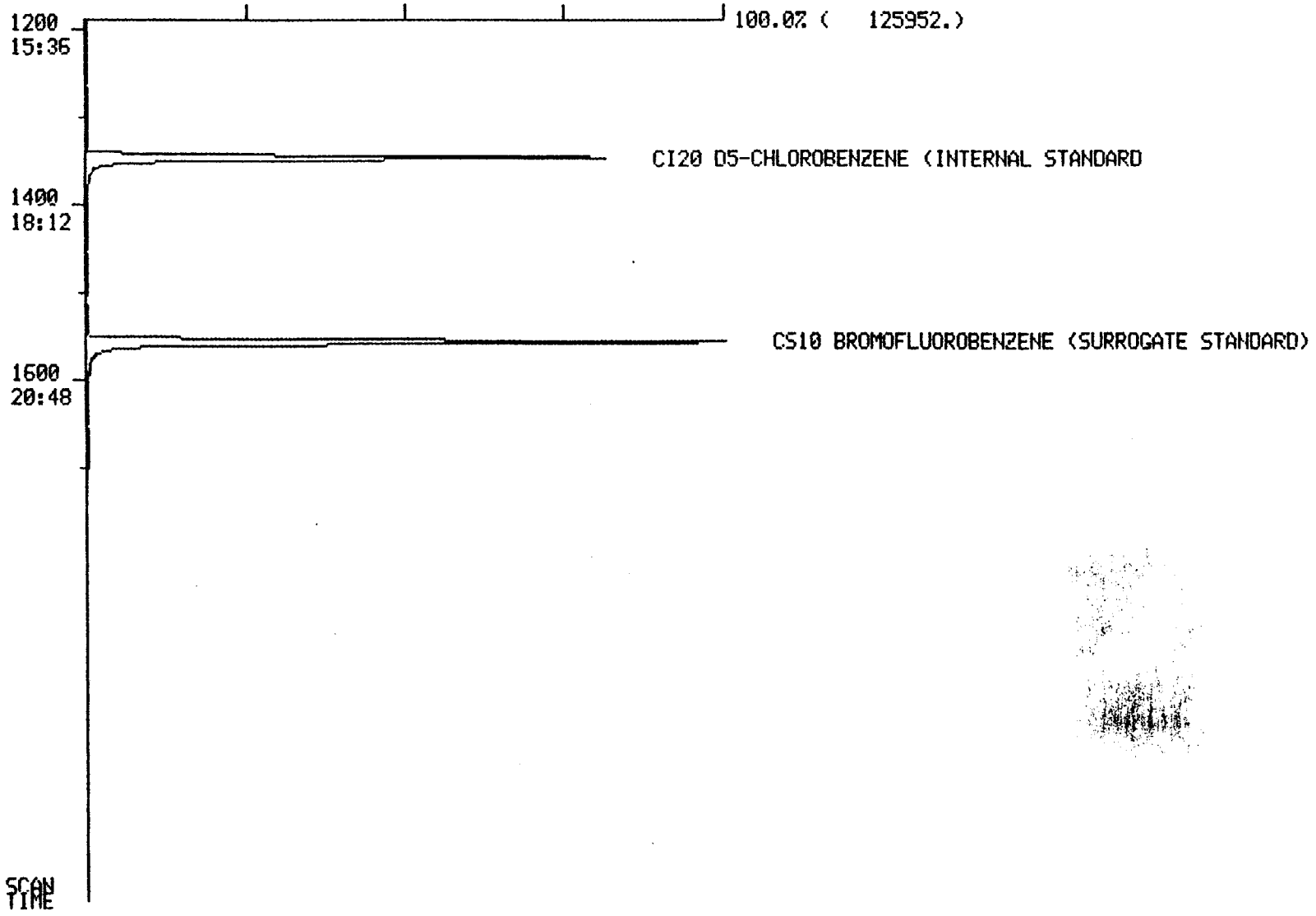
Quantitation Report File: CN052451B53

Data: CN052451B53.TI
10/16/91 16:11:00
Sample: CLP,23861,10,EFFLUENT,LOW,WATER,452451,VOA,EPA,F50053
Conds.: DB624,CT911016A53,BG911016A53,CB911016A53
Formula: NWSW Instrument: F50053 Weight: 5.000
Submitted by: 428 Analyst: 8118 Acct. No.: RBM

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

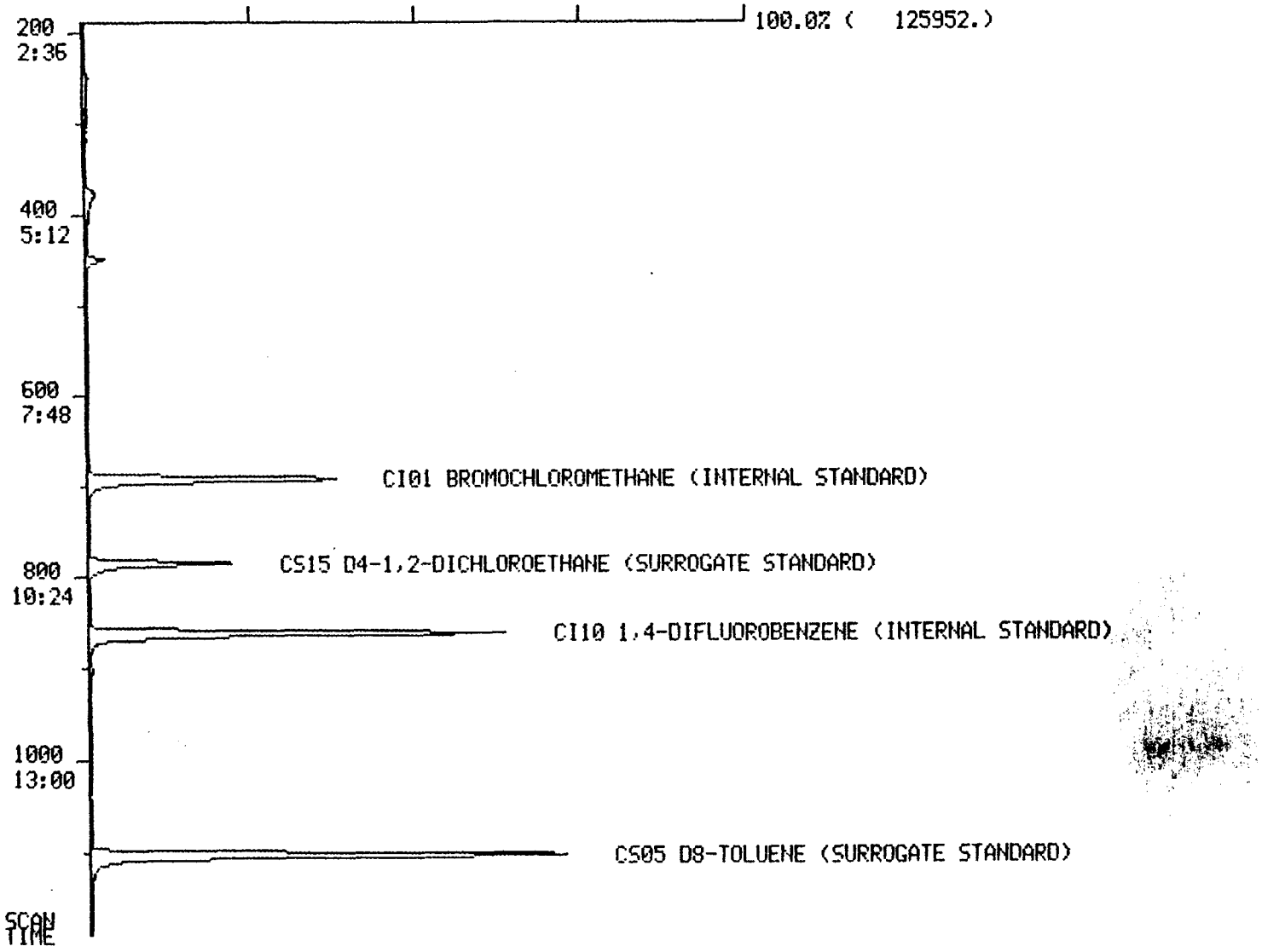
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CN052451B53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 16:11:00
CALI: CN052451B53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,EFFLUENT,LOW,WATER,452451,VOA,EPA,F50053
CONDS.: DB624,CT911016A53,BG911016A53,CB911016A53



23861 10 SAMPLE DATA PACKAGE

DATA FROM FILE: CN052451B53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 16:11:00
CALI: CN052451B53 #3 OUT OF 189 TO 1700 ✓
SAMPLE: CLP,23861,10,EFFLUENT,LOW,WATER,452451,VOA,EPA,F50053
CONDS.: DB624,CT911016A53,BG911016A53,CB911016A53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM.RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452451

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052451B53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EFFLUENT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452451

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052451B53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

LOW LEVEL WATER - 5.0 ML PURGE

CORRECTION FACTOR CALCULATION:

$$\frac{5000.0 \text{ UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} = \text{CF}$$

$$\frac{5000.0 \text{ UL}}{\cancel{0.0}\ 5000 \text{ UL}} = \frac{1.0}{\cancel{5000.00}}$$

SWB 10/21/91

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.

SURROGATE SPIKE CONVERSION FACTOR = 1.0

LAB INSTRUCTIONS PFS#_____

VOA
GC/MS WORKSHEET

J( ) J3( ) D( ) (:1)

J2( ) J4( ) D2( ) (:1)

CLP, 23861, 10, BETWEEN, LOW, WATER, 452450, VOA, EPA, F50053

GC/MS ANALYSIS
AMOUNT PURGED: ~~0 UL~~ 5ml SWB 10/21/91
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BG911015B53
BLANK FILENAME: CB911016C53
STANDARD FILENAME: CT911015B53
SAMPLE FILENAME: CN052450A53

ANALYST(S): INJECTION SWBas 633 WORKUP SWBas

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

POSTED

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : Ø

[ ] REINJECT NEAT
[ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED _____

COMMENTS: NOTE: IF CONDITION CODE IS "OT" EXPLAIN FULLY HERE.

GC/MS REVIEW SWBas DATE 10/21/91 AUDITOR [illegible] DATE 10/21/91

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 1

FINAL REPORTABLE PACKAGE(S): CN052450A53 / _____

QA COMMENTS:

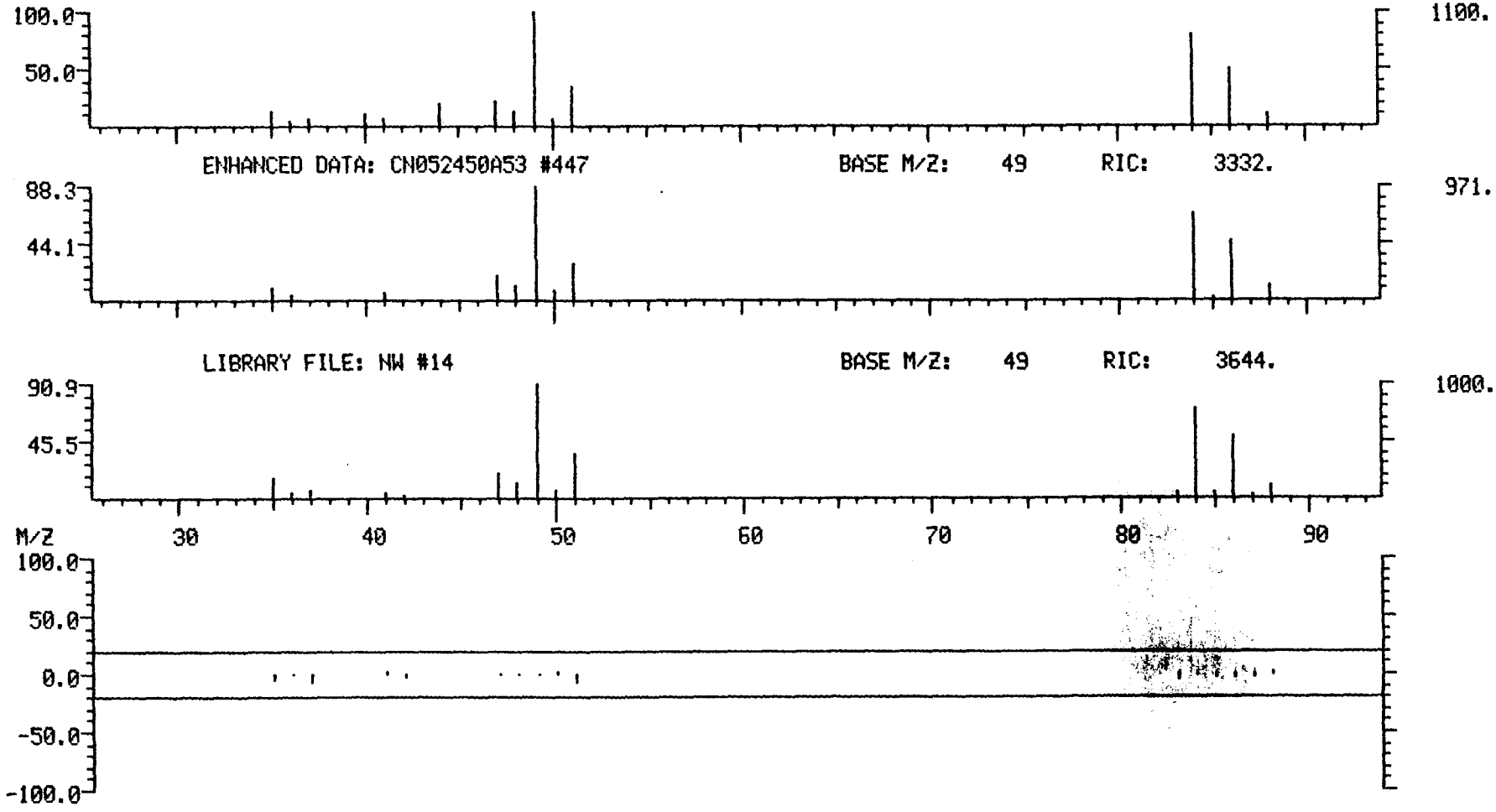
INITIALS _____ DATE ___/___/___

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE <75-09-2>

RAW DATA: CN052450A53 #447 BASE M/Z: 49 RIC: 4176.
10/16/91 11:38
SAMPLE: CLP,23861,10,BETWEEN,LOW,WATER,452450,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:56	1.00	0.551	1.00	7.68	50.00	0.033	0.213	0.15
13	5:13		0.583						
14	5:49	1.00	0.650	1.00	4.87	50.00	0.149	1.531	0.10
15	6:24	1.00	0.715	1.00	0.41	50.00	0.011	1.391	0.01
16	7:15		0.811						
17	8:29		0.948						
18	8:33		0.956						
19	9:11		1.026						
20	9:31	1.00	0.852	1.00	0.15	50.00	0.001	0.484	0.00
21	9:52		0.884						
22	10:18	1.00	0.922	1.00	0.56	50.00	0.009	0.805	0.01
23	10:20		1.156						
24	11:42	1.00	1.048	1.00	0.25	50.00	0.002	0.475	0.01
25	12:09		1.087						
26	12:46		1.143						
27	14:08		0.807						
28	14:27	1.00	0.826	1.00	0.49	50.00	0.011	1.177	0.01
29	13:44		1.230						
30	14:59		1.341						
31	15:21		1.375						
32	15:40		0.895						
33	15:59		0.913						
34	16:12		1.451						
35	17:34		1.003						
36	17:52	1.00	1.020	1.00	0.25	50.00	0.002	0.493	0.00
37	18:09		1.036						
38	19:03		1.088						
39	19:05	1.00	1.090	1.00	0.03	50.00	0.001	0.918	0.00
40	19:26		1.740						
41	20:37		1.177						
42	8:29	0.76	0.948	0.76	0.41	100.00	0.006	1.397	0.00
43	18:09	0.00	1.036	0.00	-0.00	150.00	-0.000	0.602	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot	
1	128	689	8:57	1	1.000	A BB	45118.	50.000	UG/L	16.42	
2	114	859	11:10	2	1.000	A BB	227334.	50.000	UG/L	16.42	
3	117	1347	17:31	3	1.000	A BB	205237.	50.000	UG/L	16.42	
4	65	783	10:11	1	1.136	A BB	59237.	45.740	UG/L	15.02	
5	98	1102	14:20	3	0.818	A BB	204640.	47.043	UG/L	15.45	
6	95	1558	20:15	3	1.157	A BB	157256.	46.724	UG/L	15.34	
7	NOT FOUND										
8	NOT FOUND										
9	NOT FOUND										
10	NOT FOUND										
11	NOT FOUND										
12	43	380	4:56	1	0.552	A*BB	1477.	7.684	UG/L	2.52	NA
13	NOT FOUND										
14	84	447	5:49	1	0.649	A BB	6728.	4.871	UG/L	1.60	yes B
15	96	493	6:25	1	0.716	A BB	517.	0.412	UG/L	0.14	BDL
16	NOT FOUND										
17	NOT FOUND										
18	NOT FOUND										
19	NOT FOUND										
20	97	733	9:32	2	0.853	A BB	337.	0.153	UG/L	0.05	BDL
21	NOT FOUND										
22	78	792	10:18	2	0.922	A BB	2040.	0.557	UG/L	0.18	BDL
23	NOT FOUND										
24	130	900	11:42	2	1.048	A BB	540.	0.250	UG/L	0.08	BDL
25	NOT FOUND										
26	NOT FOUND										
27	NOT FOUND										
28	91	1112	14:27	3	0.826	A BB	2345.	0.486	UG/L	0.16	BDL
29	NOT FOUND										
30	NOT FOUND										
31	NOT FOUND										
32	NOT FOUND										
33	NOT FOUND										
34	NOT FOUND										
35	NOT FOUND										
36	106	1374	17:52	3	1.020	A BB	499.	0.246	UG/L	0.08	BDL
37	NOT FOUND										
38	NOT FOUND										
39	104	1468	19:05	3	1.090	A BB	117.	0.031	UG/L	0.01	BDL
40	NOT FOUND										
41	NOT FOUND										
42	96	493	6:25	1	0.716	**B*	516.	0.409	UG/L	0.13	BDL
43	106	6724	0:00	3	0.000	****	-2.	-0.001	UG/L	-0.00	L

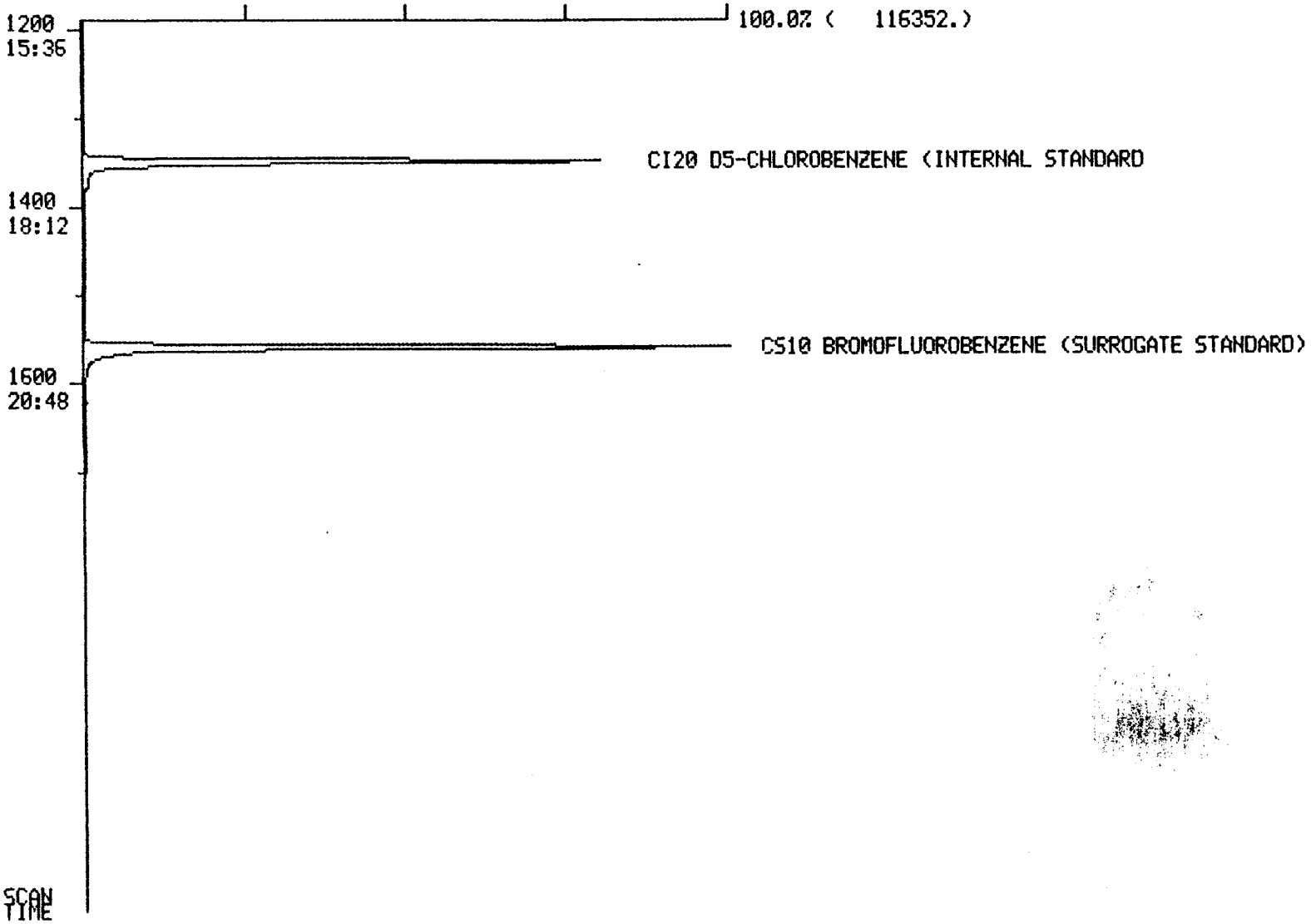
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:10	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	17:31	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:10	1.00	1.137	1.00	45.74	50.00	1.313	1.435	0.91
5	14:19	1.00	0.817	1.00	47.04	50.00	0.997	1.060	0.94
6	20:14	1.00	1.156	1.00	46.72	50.00	0.766	0.820	0.93
7	2:50		0.317						
8	2:57		0.330						
9	3:22		0.376						
10	3:32		0.395						
11	4:49		0.539						

Data: CN052450A53.TI
10/16/91 11:38:00
Sample: CLP,23861,10,BETWEEN,LOW,WATER,452450,VOA,EPA,F50053
Conds.: DB624,CT911015B53,BG911015B53,CB911016C53
Formula: NWSW Instrument: F50053 Weight: 0.000
Submitted by: 428 Analyst: 633 Acct. No.: SWB

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

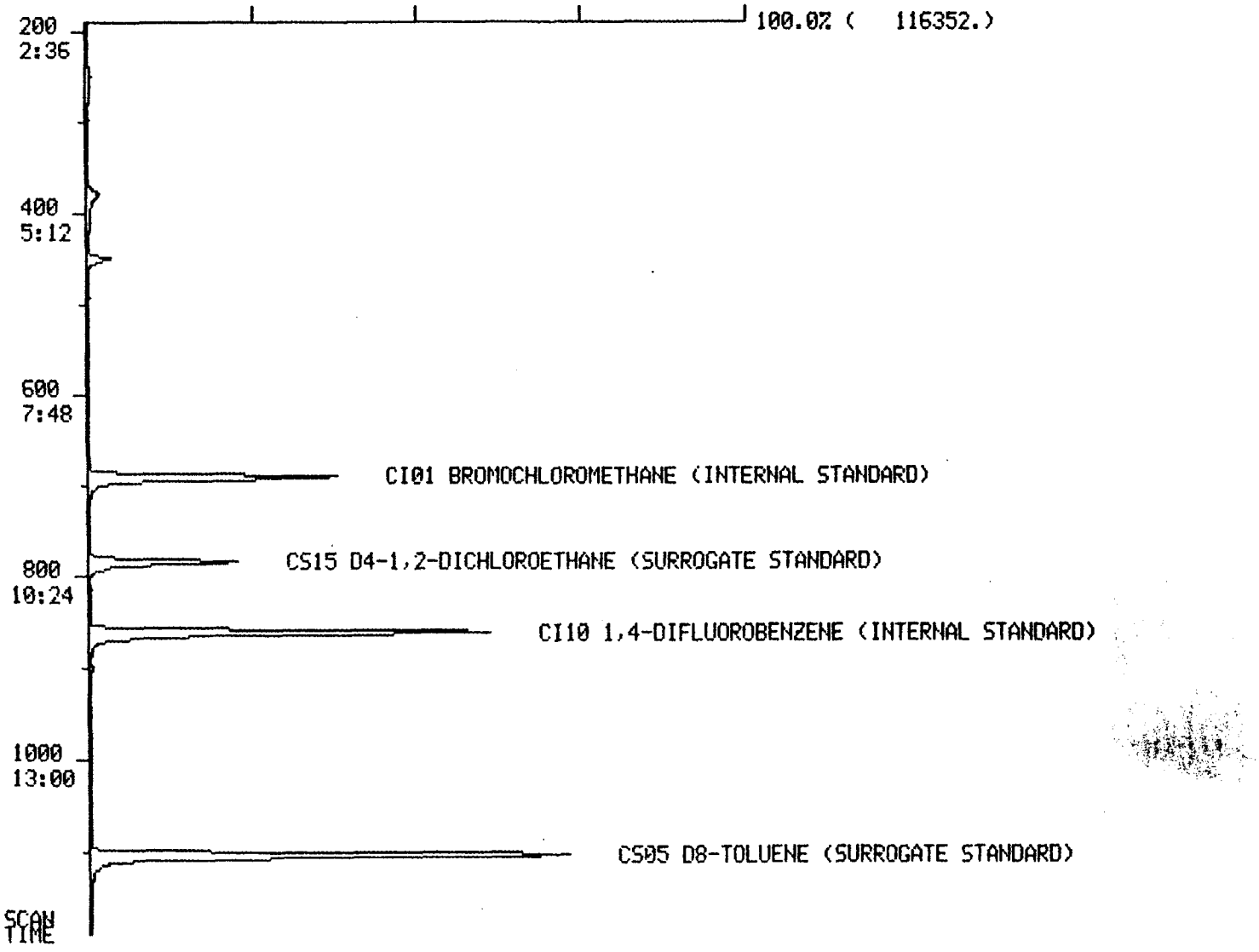
No	Name
1	CI01 BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CI10 1,4-DIFLUOROBENZENE (INTERNAL STANDARD)
3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
5	CS05 D8-TOLUENE (SURROGATE STANDARD)
6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
9	C015 BROMOMETHANE <74-83-9>
10	C025 CHLOROETHANE <75-00-3>
11	C045 1,1-DICHLOROETHENE <75-35-4>
12	C035 ACETONE <67-64-1>
13	C040 CARBON DISULFIDE <75-15-0>
14	C030 METHYLENE CHLORIDE <75-09-2>
15	C055 TRANS-1,2-DICHLOROETHENE <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C054 CIS-1,2-DICHLOROETHENE <156-59-2>
18	C110 2-BUTANONE <78-93-3>
19	C060 CHLOROFORM <67-66-3>
20	C115 1,1,1-TRICHLOROETHANE <71-55-6>
21	C120 CARBON TETRACHLORIDE <56-23-5>
22	C165 BENZENE <71-43-2>
23	C065 1,2-DICHLOROETHANE <107-06-2>
24	C150 TRICHLOROETHENE <79-01-6>
25	C140 1,2-DICHLOROPROPANE <78-87-5>
26	C130 BROMODICHLOROMETHAE <7-27-4>
27	C205 4-METHYL-2-PENTANONE <108-10-1>
28	C230 TOLUENE <108-88-3>
29	C143 CIS-1,3-DICHLOROPROPENE <10061-01-5>
30	C172 TRANS-1,3-DICHLOROPROPENE <10061-02-6>
31	C160 1,1,2-TRICHLOROETHANE <79-00-5>
32	C220 TETRACHLOROETHENE <127-18-4>
33	C210 2-HEXANONE <591-78-6>
34	C155 DIBROMOCHLOROMETHANE <124-48-2>
35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
37	C098 M,P-XYLENES <1330-20-7>
38	C999 O-XYLENE <1330-20-7>
39	C245 STYRENE <100-42-5>
40	C180 BROMOFORM <75-25-2>
41	C225 1,1,2,2-TETRACHLOROETHANE <79-34-5>
42	C053 TOTAL 1,2-DICHLOROETHENE <156-60-5>
43	C250 TOTAL XYLENES <1330-20-7>

DATA FROM FILE: CN052450A53 SCANS 1189 TO 1700 ACQUIRED: 10/16/91 11:38:00
CALI: CN052450A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,BETWEEN,LOW,WATER,452450,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



23861 10 SAMPLE DATA PACKAGE

DATA FROM FILE: CN052450A53 SCANS 189 TO 1189 ACQUIRED: 10/16/91 11:38:00
CALI: CN052450A53 #3 OUT OF 189 TO 1700
SAMPLE: CLP,23861,10,BETWEEN,LOW,WATER,452450,VOA,EPA,F50053
CONDS.: DB624,CT911015B53,BG911015B53,CB911016C53



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

BETWEEN

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452450

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052450A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

BETWEEN

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix: (soil/water) WATER Lab Sample ID: 452450

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN052450A53

Level: (low/med) LOW Date Received: 10/12/91

% Moisture: not dec. ____ Date Analyzed: 10/16/91

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	10	U
67-66-3	Chloroform	10	U
107-06-2	1,2-Dichloroethane	10	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-5	Carbon Tetrachloride	10	U
75-27-4	Bromodichloromethane	10	U
78-87-5	1,2-Dichloropropane	10	U
10061-01-5	cis-1,3-Dichloropropene	10	U
79-01-6	Trichloroethene	10	U
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	10	U
10061-02-6	Trans-1,3-Dichloropropene	10	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	10	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	10	U
108-90-7	Chlorobenzene	10	U
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

b. Sample data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I VOA, including Form I VOA – TIC), followed by the raw data for volatile samples. These sample packets should then be placed in increasing EPA number order, considering both letters and numbers in ordering samples.

- TCL Results – Organic Analysis Data Sheet (Form I VOA). Tabulated results (identification and quantitation) of the specified target compounds.

- Tentatively Identified Compounds (Form I VOA – TIC). This form must be included even if no compounds are found.

- Reconstruced total ion chromatograms (RIC) for each sample, sample extract, standard, blank and spiked sample.

- For each sample, by each compound identified.

(1) Copies of raw spectra and copies of background-substracted mass spectra of target compounds (TCL) that are identified in the sample and corresponding background-substracted TCL standard mass spectra. Compound names must be clearly marked on all spectra.

(2) Copies of mass spectra of nonsurrogate organic compounds (Tentatively Identified Compounds) which associated best-match spectra (three best matches).

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID (Standard): CU911016B53 Date Analyzed: 10/16/91

Instrument ID: F50053 Time Analyzed: 2331

GC Column: DB624 ID: 0.530(mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	51029	8.92	241297	11.14	220422	17.47
	UPPER LIMIT	102058	9.42	482594	11.64	440844	17.97
	LOWER LIMIT	25514	8.42	120648	10.64	110211	16.97
	EPA SAMPLE NO.						
01	INFLUENTMS	50657	8.95	222898	11.15	204807	17.47
02	INFLUENTMSD	50184	8.95	232310	11.15	208074	17.49
03	VBLKPK	52312	8.95	225378	11.15	222020	17.50

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

AREA UPPER LIMIT = + 100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT.
RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID (Standard): CT911016A53 Date Analyzed: 10/16/91

Instrument ID: F50053 Time Analyzed: 1402

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	55338	9.00	239433	11.20	218146	17.52
	UPPER LIMIT	110676	9.50	478866	11.70	436292	18.02
	LOWER LIMIT	27669	8.50	119716	10.70	109073	17.02
	EPA SAMPLE NO.						
01	EFFLUENT	55570	8.97	255341	11.19	227377	17.49
02	VBLKST	54250	8.95	239046	11.15	216558	17.47

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

AREA UPPER LIMIT = + 100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT.
RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID (Standard): CT911015B53 Date Analyzed: 10/15/91

Instrument ID: F50053 Time Analyzed: 2358

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

		IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
	12 HOUR STD	49559	8.95	243846	11.17	218266	17.52
	UPPER LIMIT	99118	9.45	487692	11.67	436532	18.02
	LOWER LIMIT	24780	8.45	121923	10.67	109133	17.02
	EPA SAMPLE NO.						
01	BETWEEN	45118	8.95	227334	11.17	205237	17.52
02	INFLUENT	47589	8.95	224444	11.15	200358	17.49
03	LABPURE	46573	8.90	237057	11.12	210340	17.44
04	VBLKPT	50836	8.94	248039	11.14	216902	17.47

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

AREA UPPER LIMIT = + 100% of internal standard area.
AREA LOWER LIMIT = - 50% of internal standard area.
RT UPPER LIMIT = +0.50 minutes of internal standard RT.
RT LOWER LIMIT = -0.50 minutes of internal standard RT.

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

(5) Internal Standard Area and RT Summary (Form VIII VOA)

(in chronological order; by instrument)

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: BH911016B53 BFB Injection Date: 10/16/91

Instrument ID: F50053 BFB Injection Time: 2236

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	14.0
75	30.0 - 66.0% of mass 95	35.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	78.4
175	4.0 - 9.0% of mass 174	5.9 (7.5)1
176	93.0 - 101.0% of mass 174	78.6 (100.3)1
177	5.0 - 9.0% of mass 176	5.4 (6.9)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	VSTD050		CU911016B53	10/16/91	2331
02	VBLKPK	VBLKPK	CB911017C53	10/17/91	038
03	INFLUENTMS	452447	CR052447A53	10/17/91	0858
04	INFLUENTMSD	452449	C2R52448A53	10/17/91	1006

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: BG911016A53 BFB Injection Date: 10/16/91

Instrument ID: F50053 BFB Injection Time: 1341

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	13.8
75	30.0 - 66.0% of mass 95	35.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	81.9
175	4.0 - 9.0% of mass 174	6.3 (7.7)1
176	93.0 - 101.0% of mass 174	79.9 (97.6)1
177	5.0 - 9.0% of mass 176	5.5 (6.9)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	VSTD050		CT911016A53	10/16/91	1402
02	VBLKST	VBLKST	CB911016A53	10/16/91	1453
03	EFFLUENT	452451	CN052451B53	10/16/91	1611

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: BG911015B53 BFB Injection Date: 10/15/91

Instrument ID: F50053 BFB Injection Time: 2346

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	14.3
75	30.0 - 66.0% of mass 95	35.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	50.0 - 120.0% of mass 95	75.1
175	4.0 - 9.0% of mass 174	5.6 (7.4)1
176	93.0 - 101.0% of mass 174	74.5 (99.2)1
177	5.0 - 9.0% of mass 176	5.1 (6.8)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	VSTD050		CT911015B53	10/15/91	2358
02	VBLKPT	VBLKPT	CB911016C53	10/16/91	052
03	LABPURE	452454	CN052454A53	10/16/91	1022
04	INFLUENT	452446	CN052446A53	10/16/91	1104
05	BETWEEN	452450	CN052450A53	10/16/91	1138

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: BF911010A53 BFB Injection Date: 10/10/91

Instrument ID: F50053 BFB Injection Time: 1048

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	16.2
75	30.0 - 66.0% of mass 95	40.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.3 (0.4)1
174	50.0 - 120.0% of mass 95	77.0
175	4.0 - 9.0% of mass 174	5.9 (7.7)1
176	93.0 - 101.0% of mass 174	77.5 (100.6)1
177	5.0 - 9.0% of mass 176	5.5 (7.1)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	VSTD050		CT911010A53	10/10/91	1155
02	VSTD200		CU911010A53	10/10/91	1333
03	VSTD100		CV911010A53	10/10/91	1406
04	VSTD020		CW911010A53	10/10/91	1439
05	VSTD010		CY911010A53	10/10/91	1724

(4) GC/MS Instrument Performance Check (Form V VOA)

(BFB in chronological order; by instrument)

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKPK

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: CB911017C53 Lab Sample ID: VBLKPK

Date Analyzed: 10/17/91 Time Analyzed: 038

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: F50053

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	INFLUENTMS	452447	CR052447A53	0858
02	INFLUENTMSD	452449	C2R52448A53	1006

COMMENTS: CLP,BLANK,,VBLKPK,LOW,WATER,,VOA,BLANK,F50053
DB624,CU911016B53,BH911016B53

FORM IV VOA 3/90

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKST

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: CB911016A53 Lab Sample ID: VBLKST

Date Analyzed: 10/16/91 Time Analyzed: 1453

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: F50053

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EFFLUENT	452451	CN052451B53	1611

COMMENTS: CLP,BLANK,,VBLKST,LOW,WATER,,VOA,VBLKST,F50053
DB624,CT911016A53,BG911016A53

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKPT

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Lab File ID: CB911016C53 Lab Sample ID: VBLKPT

Date Analyzed: 10/16/91 Time Analyzed: 052

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: F50053

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	BETWEEN	452450	CN052450A53	1138
02	INFLUENT	452446	CN052446A53	1104
03	LABPURE	452454	CN052454A53	1022

COMMENTS: CLP,BLANK,,VBLKPT,LOW,WATER,,VOA,BLANK,F50053
DB624,CT911015B53,BG911015B53

(3) Method Blank Summary (Form IV VOA)

(If more than a single form is necessary, forms must be arranged in chronological order by date of analysis of the blank.)

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

Matrix Spike - EPA Sample No.: INFLUENT

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	47.00	94	61-145
Trichloroethene	50.00	53.30	62.10	18 *	71-120
Benzene	50.00	0	49.90	100	76-127
Toluene	50.00	0	47.80	96	76-125
Chlorobenzene	50.00	0	49.90	100	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.00	51.30	103	9	14	61-145
Trichloroethene	50.00	59.70	13 *	32 *	14	71-120
Benzene	50.00	48.30	97	3	11	76-127
Toluene	50.00	47.50	95	1	13	76-125
Chlorobenzene	50.00	49.90	100	0	13	75-130

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: CLP,23861,10,INFLUENT,LOW,WATER,452446,VOA,EPA,F50053
DB624,CT911015B53,BG911015B53,CB911016C53

FORM III VOA-1 3/90

(2) Matrix Spike/Matrix Spike Duplicate Summary (Form III VOA)

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: COMPUCHEM,RTP Contract: (3-90)-REVS

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 10

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	BETWEEN	94	93	91	0	0
02	EFFLUENT	97	94	95	0	0
03	INFLUENT	94	92	86	0	0
04	LABPURE	92	91	89	0	0
05	INFLUENTMS	108	105	100	0	0
06	INFLUENTMSD	106	108	105	0	0
07	VBLKPT	102	98	99	0	0
08	VBLKST	100	97	100	0	0
09	VBLKPK	94	92	97	0	0

	QC LIMITS
SMC1 (TOL) = Toluene-d8	(88-110)
SMC2 (BFB) = Bromofluorobenzene	(86-115)
SMC3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

Continue

(I) System Monitoring Compound Summary (Form II VOA)