M60050.000046
MCAS EL TORO
SSIC # 5090.3

HADLEY INDUSTRIES

September 25, 1991

Southwest Division, NAVFACENGCOM
1220 Pacific Highway (Code 0214)
San Diego, California 92132-5190
Attn: Mr. Andy Piszkin, RPM

Reference: MCAS EL TORO
Santa Ana, California

Dear Mr. Piszkin:

Enclosed is the Sample Data Package of CLP analytical work and associated Quality Assurance/Quality Control data for the samples collected during the month of August, 1991.

Please feel free to call me at 1-800-345-4227 if you have any questions regarding this information.

Sincerely,

Donald A. Klemm
National Operations Manager

Enclosure

DAK:vlb

Eastern Regional Office
P.O. Box 40
Beaver Falls, Pennsylvania 15010
(412) 847-9847 • FAX (412) 847-3844

Central Regional Office
5900 West Fourth Street • P. O. Box 489
Ludington, Michigan 49431 • (616) 845-0537
(800) 345-4227 • FAX (616) 843-3882

Western Regional Office
Suite 388 • 5241 Mission Oaks Blvd
Camarillo, California 93012 • (805) 389-4755
(800) 676-6808 • FAX (805) 389-4789

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

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

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

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CLP,23861,1,PS4MSD,LOW,WATER,439021,VOA,MSD,F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039021C51

ANALYST(S): INJECTION 1050 Moelius WORKUP 1050 Moelius

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE Ok

DISPOSITION: [X] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

[ ] REINJECT NEAT
[ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

POSTED

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

GC/MS REVIEW UK DATE 8/28/91 AUDITOR _____ DATE ___/___/___

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REPORT INTEGRATION: TOTAL # OF INJECTIONS: ___

FINAL REPORTABLE PACKAGE(S): CN039021C51 / _____

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

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FINAL REVIEW: INITIALS _____ DATE ___/___/___

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	30.41	50.00	0.162	0.266	0.61
13	5:14	1.00	0.561	1.00	0.19	50.00	0.013	3.371	0.00
14	5:52	1.00	0.629	1.00	9.85	50.00	0.356	1.806	0.20
15	6:29	1.00	0.696	1.00	0.44	50.00	0.014	1.570	0.01
16	7:27	1.00	0.799	1.00	0.33	50.00	0.014	2.167	0.01
17	8:48	1.00	0.944	1.00	4.31	50.00	0.148	1.720	0.09
18	8:53		0.953						
19	9:33	1.00	1.026	1.00	1.25	50.00	0.081	3.230	0.03
20	9:55	1.00	0.850	1.00	0.06	50.00	0.001	0.642	0.00
21	10:17	1.00	0.882	1.00	0.07	50.00	0.001	0.630	0.00
22	10:44	1.00	0.920	1.00	45.72	50.00	0.805	0.881	0.91
23	10:47	1.00	1.157	1.00	1.28	50.00	0.049	1.901	0.03
24	12:12	1.00	1.045	1.00	89.08	50.00	0.856	0.481	1.78
25	12:40	1.00	1.085	1.00	0.08	50.00	0.001	0.309	0.00
26	13:19	1.00	1.142	1.00	0.14	50.00	0.002	0.655	0.00
27	14:42		0.812						
28	15:01	1.00	0.830	1.00	44.45	50.00	1.245	1.401	0.89
29	14:18	1.00	1.226	1.00	0.05	50.00	0.001	0.546	0.00
30	15:34		1.334						
31	15:57	1.00	1.367	1.00	0.71	50.00	0.005	0.374	0.01
32	16:14	1.00	0.897	1.00	24.73	50.00	0.239	0.483	0.49
33	16:35		0.916						
34	16:48	1.00	1.439	1.00	0.26	50.00	0.003	0.679	0.01
35	18:09	1.00	1.003	1.00	45.62	50.00	1.054	1.155	0.91
36	18:27	1.00	1.020	1.00	0.15	50.00	0.002	0.561	0.00
37	18:44	1.00	1.036	1.00	0.14	100.00	0.001	0.724	0.00
38	19:37	1.00	1.084	1.00	0.12	50.00	0.002	0.689	0.00
39	19:40	1.00	1.087	1.00	0.12	50.00	0.003	1.170	0.00
40	20:01		1.716						
41	21:12	1.00	1.172	1.00	0.19	50.00	0.002	0.564	0.00
42	8:48	1.00	0.944	1.00	4.93	100.00	0.081	1.645	0.05
43	18:44	1.00	1.036	1.00	0.17	100.00	0.002	1.069	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	740	9:21	1	1.000	A BB	41097.	50.000	UG/L	7.79
2	114	925	11:41	2	1.000	A BB	198307.	50.000	UG/L	7.79
3	117	1435	18:07	3	1.000	A BB	181679.	50.000	UG/L	7.79
4	65	842	10:38	1	1.138	A BB	59870.	47.072	UG/L	7.33
5	98	1181	14:55	3	0.823	A BB	210187.	47.344	UG/L	7.37
6	95	1650	20:50	3	1.150	A BB	145847.	45.984	UG/L	7.16
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	96	384	4:51	1	0.519	A BB	61477.	46.936	UG/L	7.31
12	43	393	4:58	1	0.531	A BB	6656.	30.413	UG/L	4.74 B
13	76	414	5:14	1	0.559	A BB	514.	0.186	UG/L	0.03
14	84	465	5:52	1	0.628	A BB	14619.	9.848	UG/L	1.53 B
15	96	514	6:29	1	0.695	A BB	570.	0.442	UG/L	0.07
16	63	592	7:28	1	0.800	A BB	586.	0.329	UG/L	0.05
17	96	698	8:49	1	0.943	A BB	6091.	4.308	UG/L	0.67
18	NOT FOUND									
19	83	759	9:35	1	1.026	A BB	3327.	1.253	UG/L	0.20
20	97	786	9:55	2	0.850	A BB	156.	0.061	UG/L	0.01
21	117	816	10:18	2	0.882	A BB	169.	0.068	UG/L	0.01
~~22~~	78	851	10:45	2	0.920	A BB	159713.	45.720	UG/L	7.12
23	62	853	10:46	1	1.153	A BB	1998.	1.279	UG/L	0.20 ND
~~24~~	130	967	12:13	2	1.045	A BB	169770.	89.078	UG/L	13.87
25	63	1004	12:41	2	1.085	A BB	101.	0.082	UG/L	0.01 BDL
26	83	1056	13:20	2	1.142	A BB	354.	0.136	UG/L	0.02 BDL
27	NOT FOUND									
28	91	1192	15:03	3	0.831	A BB	226223.	44.448	UG/L	6.92
29	75	1135	14:20	2	1.227	A BB	108.	0.050	UG/L	0.01 BDL
30	NOT FOUND									
31	97	1265	15:58	2	1.368	A BB	1061.	0.715	UG/L	0.11 BDL
32	164	1287	16:15	3	0.897	A BB	43380.	24.725	UG/L	3.85
33	NOT FOUND									
34	129	1332	16:49	2	1.440	A BB	690.	0.256	UG/L	0.04 BDL
35	112	1440	18:11	3	1.003	A BB	191511.	45.625	UG/L	7.10
36	106	1464	18:29	3	1.020	A BB	296.	0.145	UG/L	0.02 BDL
37	106	1486	18:46	3	1.036	A BB	360.	0.137	UG/L	0.02
38	106	1557	19:40	3	1.085	A BB	303.	0.121	UG/L	0.02
39	104	1559	19:41	3	1.086	A BB	513.	0.121	UG/L	0.02
40	NOT FOUND									
41	83	1681	21:13	3	1.171	A BB	397.	4,308 0.194	UG/L	0.03
42	96	698	8:49	1	0.943	A*BB	~~6661.~~ 604)	~~4.926~~	UG/L	0.77
43	106	1486	18:46	3	1.036	A*BB	663.	0.171	UG/L	0.03 BDL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	47.07	50.00	1.457	1.547	0.94
5	14:53	1.00	0.823	1.00	47.34	50.00	1.157	1.222	0.95
6	20:48	1.00	1.150	1.00	45.98	50.00	0.803	0.873	0.92
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50	1.00	0.519	1.00	46.94	50.00	1.496	1.594	0.94

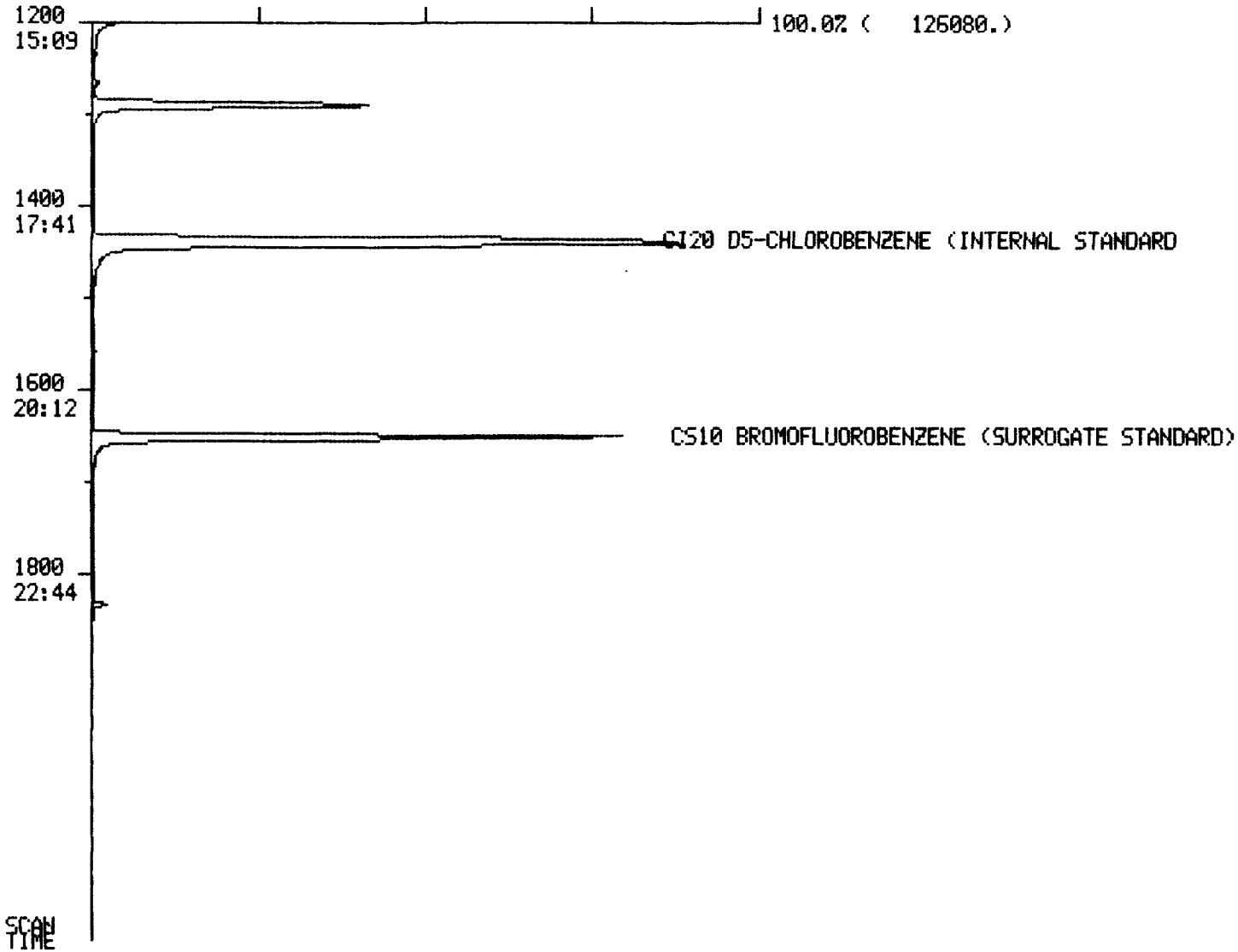
Quantitation Report File: CN039021C51

Data: CN039021C51.TI
08/28/91 5:47:00
Sample: CLP,23861,1,PS4MSD,LOW,WATER,439021,VOA,MSD,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

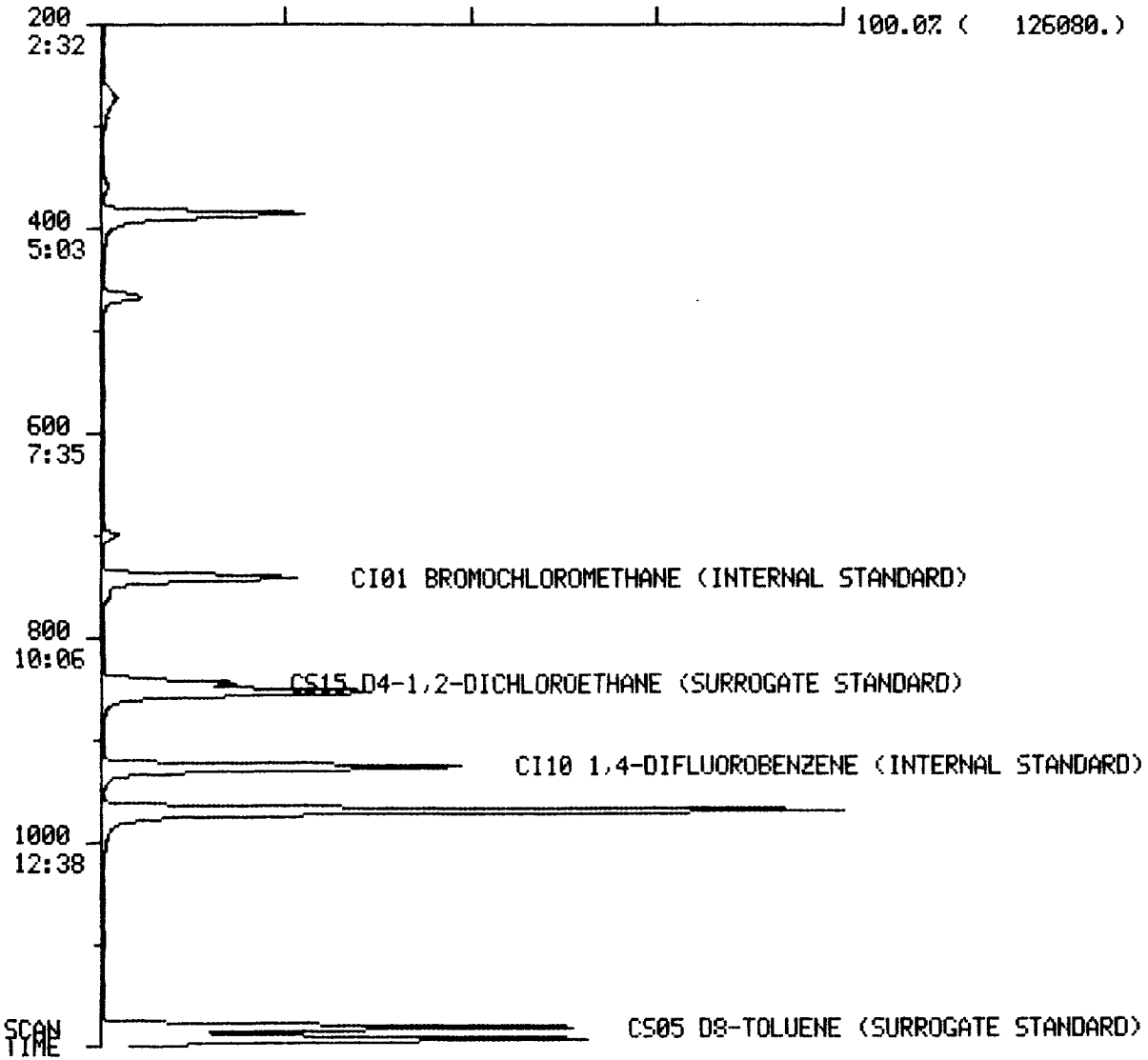
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039021C51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 5:47:00
CALI: CN039021C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4MSD,LOW,WATER,439021,VOA,MSD,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039021C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 5:47:00
CALI: CN039021C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4MSD,LOW,WATER,439021,VOA,MSD,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PS4MSD

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439021

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039021C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	10	B
67-64-1	Acetone	30	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)	4	J
67-66-3	Chloroform	1	J
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	89	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	46	
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	25	
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	44	
108-90-7	Chlorobenzene	46	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

(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.

LAB INSTRUCTIONS PPS#_____

VOA J( ) J3( ) D( ) (:1)
GC/MS WORKSHEET J2( ) J4( ) D2( ) (:1)

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CLP, 23861, 1, PS4MS, LOW, WATER, 439020, VOA, MS, F50051

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GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039020C51

ANALYST(S): INJECTION 1050 [illegible] WORKUP 1050 [illegible]

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [X] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS: [ ] REINJECT NEAT
OF PEAKS FOUND : 0 [ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

POSTED

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

GC/MS REVIEW [illegible] DATE 8/28/91 AUDITOR _____ DATE ___/___/___

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REPORT INTEGRATION: TOTAL # OF INJECTIONS: ___

FINAL REPORTABLE PACKAGE(S): CN039020C51 / _____

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QA COMMENTS:

INITIALS _____ DATE ___/___/___

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FINAL REVIEW: INITIALS _____ DATE ___/___/___

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	24.85	50.00	0.132	0.266	0.50
13	5:14	1.00	0.561	1.00	0.15	50.00	0.010	3.371	0.00
14	5:52	1.00	0.629	1.00	19.28	50.00	0.696	1.806	0.39
15	6:29	1.00	0.696	1.00	0.31	50.00	0.010	1.570	0.01
16	7:27	1.00	0.799	1.00	0.40	50.00	0.017	2.167	0.01
17	8:48	1.00	0.944	1.00	4.37	50.00	0.150	1.720	0.09
18	8:53		0.953						
19	9:33	1.00	1.026	1.00	1.32	50.00	0.085	3.230	0.03
20	9:55	1.00	0.850	1.00	0.07	50.00	0.001	0.642	0.00
21	10:17	1.00	0.882	1.00	0.09	50.00	0.001	0.630	0.00
22	10:44	1.00	0.920	1.00	44.39	50.00	0.782	0.881	0.89
23	10:47	1.00	1.157	1.00	1.20	50.00	0.046	1.901	0.02
24	12:12	1.00	1.045	1.00	88.85	50.00	0.854	0.481	1.78
25	12:40		1.085						
26	13:19	1.00	1.142	1.00	0.07	50.00	0.001	0.655	0.00
27	14:42		0.812						
28	15:01	1.00	0.830	1.00	42.43	50.00	1.189	1.401	0.85
29	14:18	1.00	1.226	1.00	0.08	50.00	0.001	0.546	0.00
30	15:34		1.334						
31	15:57	1.00	1.367	1.00	0.80	50.00	0.006	0.374	0.02
32	16:14	1.00	0.897	1.00	25.58	50.00	0.247	0.483	0.51
33	16:35		0.916						
34	16:48	1.00	1.439	1.00	0.19	50.00	0.003	0.679	0.00
35	18:09	1.00	1.003	1.00	43.27	50.00	1.000	1.155	0.87
36	18:27	1.00	1.020	1.00	0.10	50.00	0.001	0.561	0.00
37	18:44	1.00	1.036	1.00	0.15	100.00	0.001	0.724	0.00
38	19:37	1.00	1.084	1.00	0.10	50.00	0.001	0.689	0.00
39	19:40	1.00	1.087	1.00	0.13	50.00	0.003	1.170	0.00
40	20:01		1.716						
41	21:12	1.00	1.172	1.00	0.15	50.00	0.002	0.564	0.00
42	8:48	1.00	0.944	1.00	4.87	100.00	0.080	1.645	0.05
43	18:44	1.00	1.036	1.00	0.17	100.00	0.002	1.069	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	738	9:19	1	1.000	A BB	42335.	50.000 UG/L	7.86
2	114	924	11:40	2	1.000	A BB	201958.	50.000 UG/L	7.86
3	117	1433	18:06	3	1.000	A BB	187395.	50.000 UG/L	7.86
4	65	840	10:36	1	1.138	A BB	60630.	46.275 UG/L	7.28
5	98	1179	14:53	3	0.823	A BB	209758.	45.806 UG/L	7.20
6	95	1649	20:49	3	1.151	A BB	147365.	45.046 UG/L	7.08
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	383	4:50	1	0.519	A BB	61387.	45.496 UG/L	7.15
12	43	393	4:58	1	0.533	A BB	5602.	24.848 UG/L	3.91 B
13	76	415	5:14	1	0.562	A BB	415.	0.145 UG/L	0.02 BDL
14	84	463	5:51	1	0.627	A BB	29481.	19.279 UG/L	3.03 B
15	96	514	6:29	1	0.696	A BB	416.	0.313 UG/L	0.05 BDL
16	63	589	7:26	1	0.798	A BB	728.	0.397 UG/L	0.06 BDL
17	96	697	8:48	1	0.944	A BB	6369.	4.372 UG/L	0.69
18	NOT FOUND								
19	83	756	9:33	1	1.024	A BB	3605.	1.318 UG/L	0.21
20	97	786	9:55	2	0.851	A BB	191.	0.074 UG/L	0.01 BDL
21	117	813	10:16	2	0.880	A*BB	224.	0.088 UG/L	0.01
22	78	850	10:44	2	0.920	A BB	157919.	44.389 UG/L	6.98
23	62	850	10:44	1	1.152	A BB	1936.	1.203 UG/L	0.19 NO
24	130	966	12:12	2	1.045	A BB	172450.	88.849 UG/L	13.97
25	NOT FOUND								
26	83	1055	13:19	2	1.142	A BB	177.	0.067 UG/L	0.01 BDL
27	NOT FOUND								
28	91	1191	15:02	3	0.831	A BB	222738.	42.428 UG/L	6.67
29	75	1135	14:20	2	1.228	A BB	171.	0.078 UG/L	0.01 BDL
30	NOT FOUND								
31	97	1264	15:58	2	1.368	A BB	1209.	0.800 UG/L	0.13
32	164	1286	16:14	3	0.897	A BB	46288.	25.578 UG/L	4.02
33	NOT FOUND								
34	129	1331	16:48	2	1.440	A BB	533.	0.194 UG/L	0.03 BDL
35	112	1438	18:09	3	1.003	A BB	187329.	43.267 UG/L	6.80
36	106	1461	18:27	3	1.020	A BB	220.	0.105 UG/L	0.02 BDL
37	106	1483	18:43	3	1.035	A BB	417.	0.154 UG/L	0.02
38	106	1554	19:37	3	1.084	A BB	266.	0.103 UG/L	0.02
39	104	1557	19:40	3	1.087	A BB	564.	0.129 UG/L	0.02
40	NOT FOUND								
41	83	1680	21:13	3	1.172	A BB	319.	4.372 0.151 UG/L	0.02
42	96	697	8:48	1	0.944	A*BB	~~6785.~~	6369 ~~4.871~~ UG/L	0.77
43	106	1483	18:43	3	1.035	A*BB	683.	0.171 UG/L	0.03 BDL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	46.27	50.00	1.432	1.547	0.93
5	14:53	1.00	0.823	1.00	45.81	50.00	1.119	1.222	0.92
6	20:48	1.00	1.150	1.00	45.05	50.00	0.786	0.873	0.90
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50	1.00	0.519	1.00	45.50	50.00	1.450	1.594	0.91

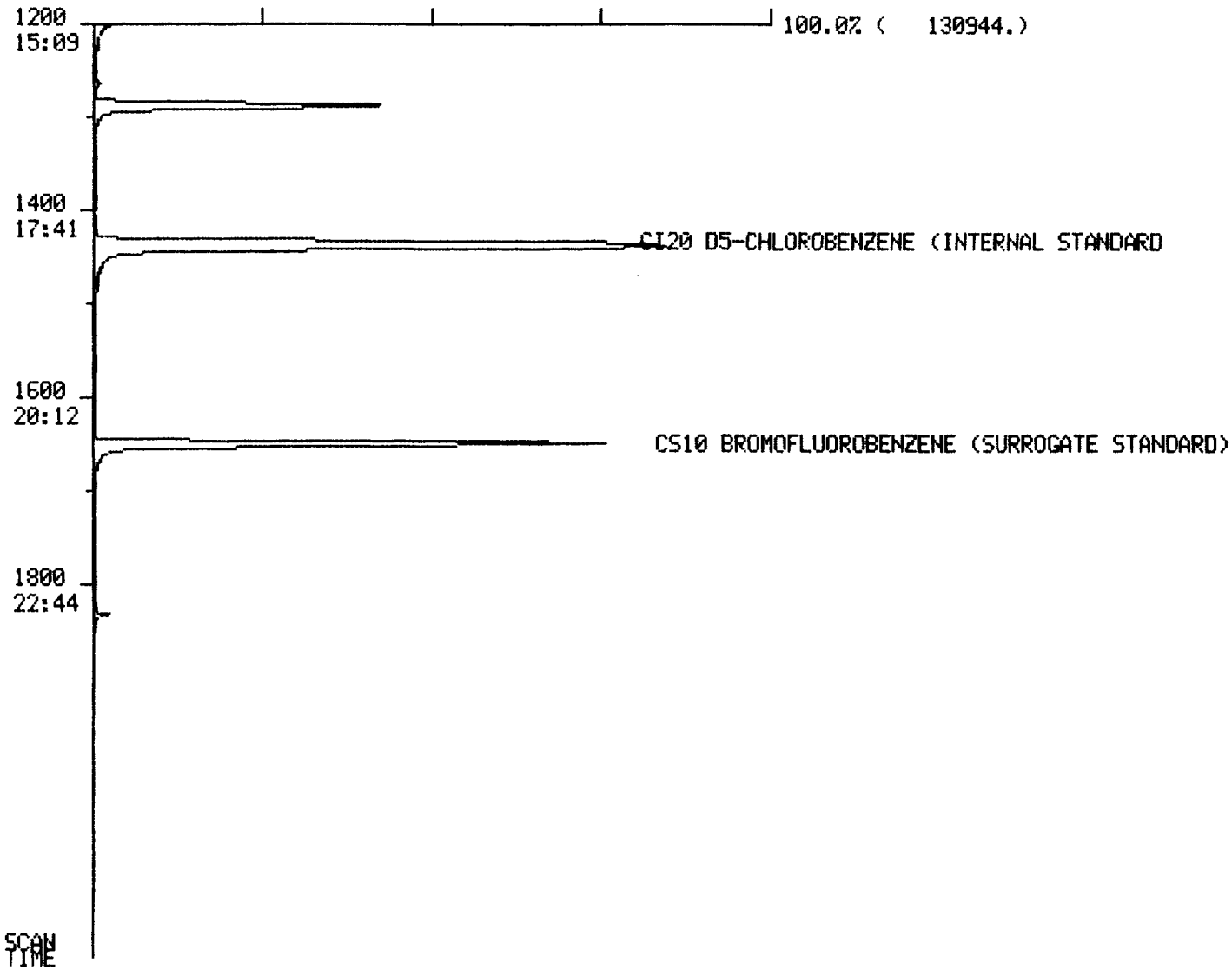
Quantitation Report File: CN039020C51

Data: CN039020C51.TI
08/28/91 5:09:00
Sample: CLP,23861,1,PS4MS,LOW,WATER,439020,VOA,MS,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

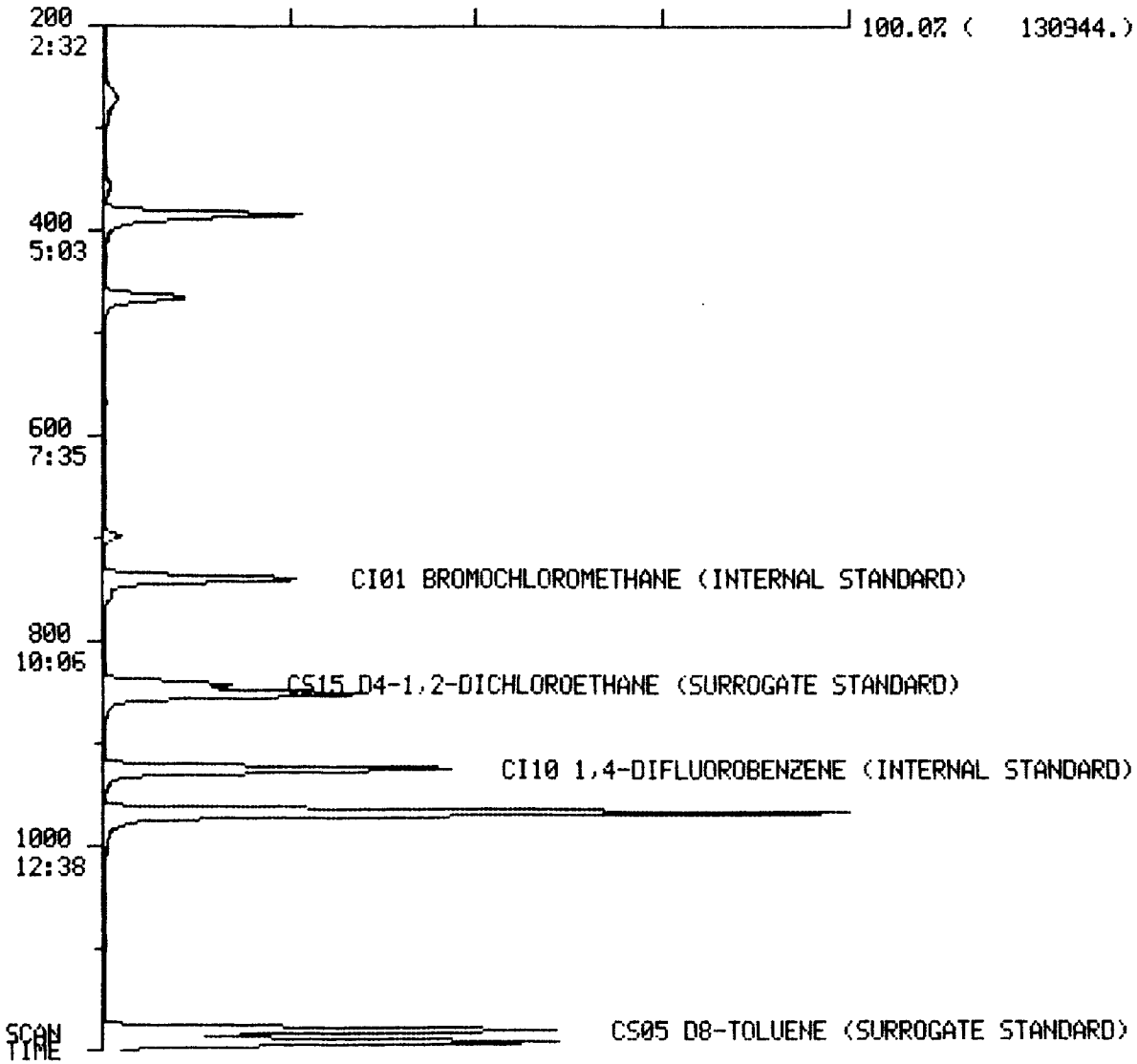
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039020C51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 5:09:00
CALI: CN039020C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4MS,LOW,WATER,439020,VOA,MS,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039020C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 5:09:00
CALI: CN039020C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4MS,LOW,WATER,439020,VOA,MS,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PS4MS

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439020

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039020C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	19	B
67-64-1	Acetone	25	B
75-15-0	Carbon Disulfide	10	U
75-35-4	1,1-Dichloroethene	46	
75-34-3	1,1-Dichloroethane	10	U
540-59-0	1,2-Dichloroethene (total)	4	J
67-66-3	Chloroform	1	J
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	89	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	10	U
71-43-2	Benzene	44	
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	26	
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	42	
108-90-7	Chlorobenzene	43	
100-41-4	Ethylbenzene	10	U
100-42-5	Styrene	10	U
1330-20-7	Xylene (total)	10	U

FORM I VOA 3/90

(3) Matrix Spike data

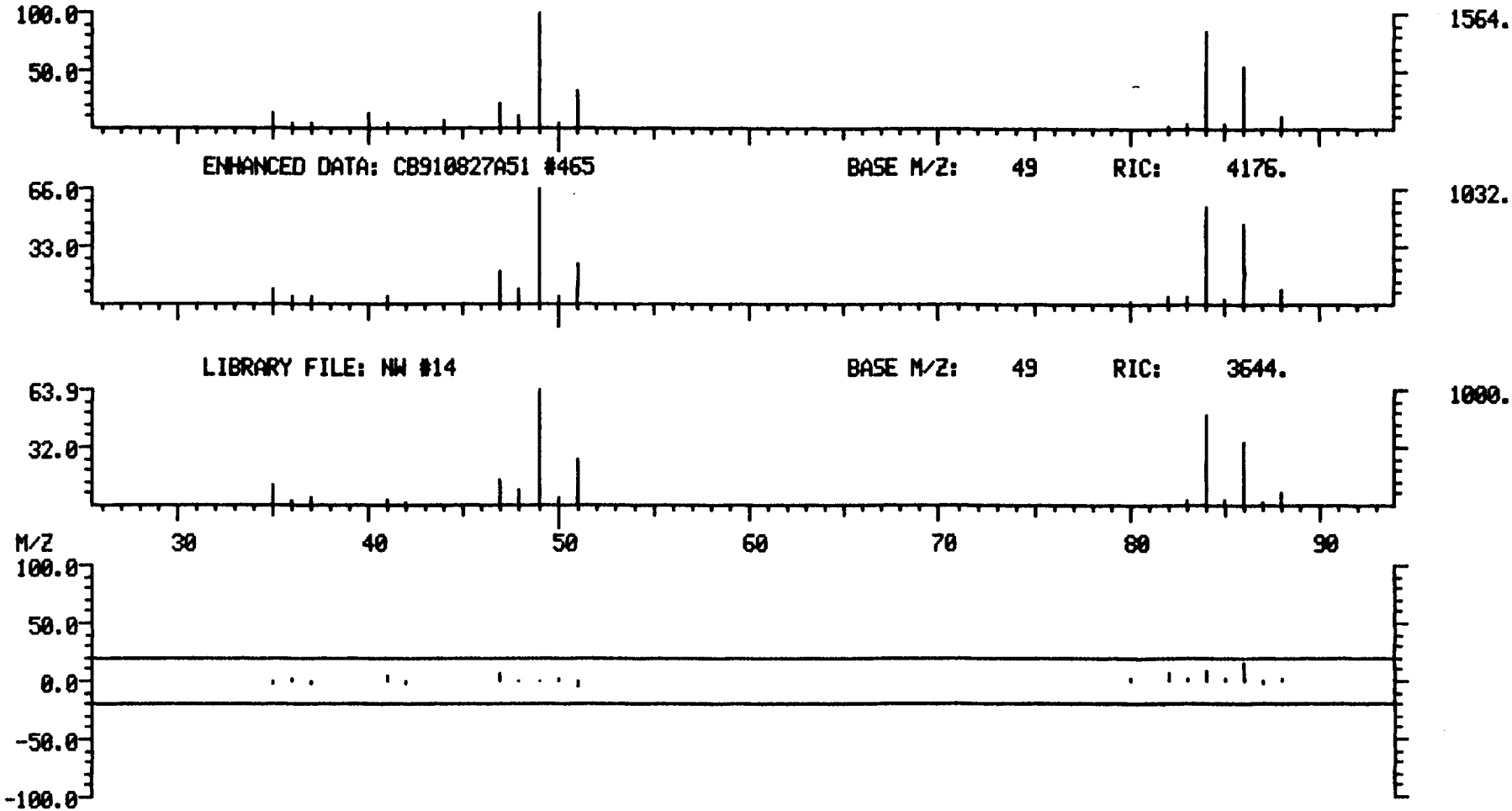
(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

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

TARGET COMPOUND COMPARISON

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

RAW DATA: CB910827A51 #465 BASE M/Z: 49 RIC: 5920.
08/27/91 11:58
SAMPLE: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910827A51,BF910827A51



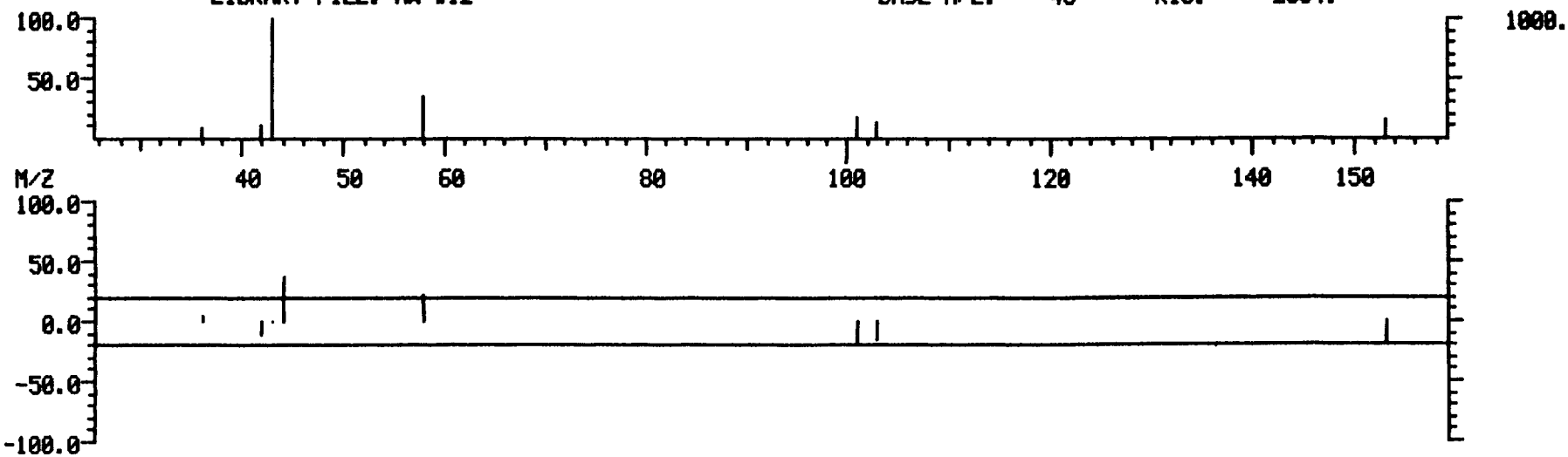
TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CB910827A51 #395 BASE M/Z: 43 RIC: 650.
08/27/91 11:58
SAMPLE: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910827A51,BF910827A51

ENHANCED DATA: CB910827A51 #395 BASE M/Z: 43 RIC: 285.

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	4:58	1.01	0.533	1.00	13.19	50.00	0.056	0.212	0.26
13	5:14	1.00	0.561	1.00	0.07	50.00	0.005	3.575	0.00
14	5:51	1.00	0.627	1.00	8.55	50.00	0.284	1.660	0.17
15	6:29		0.695						
16	7:27		0.799						
17	8:47		0.943						
18	8:52		0.951						
19	9:33		1.026						
20	9:55		0.852						
21	10:17	1.00	0.883	1.00	0.08	50.00	0.001	0.637	0.00
22	10:44	1.00	0.921	1.00	0.04	50.00	0.001	0.872	0.00
23	10:47		1.157						
24	12:12	1.00	1.047	1.00	0.09	50.00	0.001	0.460	0.00
25	12:40		1.087						
26	13:19		1.143						
27	14:43		0.812						
28	15:02	1.00	0.831	1.00	0.16	50.00	0.004	1.368	0.00
29	14:19		1.229						
30	15:34		1.336						
31	15:57		1.368						
32	16:15	1.00	0.897	1.00	0.19	50.00	0.002	0.470	0.00
33	16:35		0.916						
34	16:48		1.442						
35	18:10	1.00	1.003	1.00	0.17	50.00	0.004	1.121	0.00
36	18:28	1.00	1.020	1.00	0.26	50.00	0.003	0.551	0.01
37	18:44	1.00	1.035	1.00	0.36	100.00	0.002	0.681	0.00
38	19:38	1.00	1.084	1.00	0.14	50.00	0.002	0.666	0.00
39	19:40	1.00	1.086	1.00	0.18	50.00	0.004	1.129	0.00
40	20:02		1.719						
41	21:13	1.00	1.172	1.00	0.14	50.00	0.001	0.448	0.00
42	8:47	2.13	0.943	2.13	-0.00	100.00	-0.000	1.701	-0.00
43	18:44	1.00	1.035	1.00	0.33	100.00	0.003	1.014	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	739	9:20	1	1.000	A BB	44027.	50.000 UG/L	15.60
2	114	924	11:40	2	1.000	A BB	214989.	50.000 UG/L	15.60
3	117	1434	18:06	3	1.000	A BB	184699.	50.000 UG/L	15.60
4	65	841	10:37	1	1.138	A BB	61295.	46.391 UG/L	14.48
5	98	1179	14:53	3	0.822	A BB	223465.	50.792 UG/L	15.85
6	95	1649	20:49	3	1.150	A BB	153014.	49.323 UG/L	15.39
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	395	4:59	1	0.535	A BB	2465.	13.190 UG/L	4.12 yes
13	76	415	5:14	1	0.562	A BB	227.	0.072 UG/L	0.02 BDL
14	84	465	5:52	1	0.629	A BB	12494.	8.549 UG/L	2.67 yes
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	117	817	10:19	2	0.884	A*BB	213.	0.078 UG/L	0.02 BDL
22	78	850	10:44	2	0.920	A BB	166.	0.044 UG/L	0.01 BDL
23	NOT FOUND								
24	130	967	12:13	2	1.047	A BB	177.	0.089 UG/L	0.03 BDL
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1190	15:01	3	0.830	A BB	815.	0.161 UG/L	0.05 BDL
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	164	1284	16:13	3	0.895	A BB	323.	0.186 UG/L	0.06 BDL
33	NOT FOUND								
34	NOT FOUND								
35	112	1439	18:10	3	1.003	A BB	702.	0.170 UG/L	0.05 BDL
36	106	1462	18:28	3	1.020	A BB	522.	0.256 UG/L	0.08 BDL
37	106	1484	18:44	3	1.035	A BB	910.	0.362 UG/L	0.11 BDL
38	106	1557	19:40	3	1.086	A BB	336.	0.137 UG/L	0.04 BDL
39	104	1557	19:40	3	1.086	A BB	752.	0.180 UG/L	0.06 BDL
40	NOT FOUND								
41	83	1681	21:13	3	1.172	A BB	230.	0.139 UG/L	0.04 BDL
42	96	1484	18:44	1	2.008	****	-2.	-0.001 UG/L	-0.00
43	106	1484	18:44	3	1.035	A*BB	1246.	0.333 UG/L	0.10 BDL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:36	1.00	1.138	1.00	46.39	50.00	1.392	1.501	0.93
5	14:53	1.00	0.822	1.00	50.79	50.00	1.210	1.191	1.02
6	20:49	1.00	1.150	1.00	49.32	50.00	0.828	0.840	0.99
7	2:56		0.314						
8	3:03		0.328						
9	3:29		0.374						
10	3:33		0.381						
11	4:50		0.519						

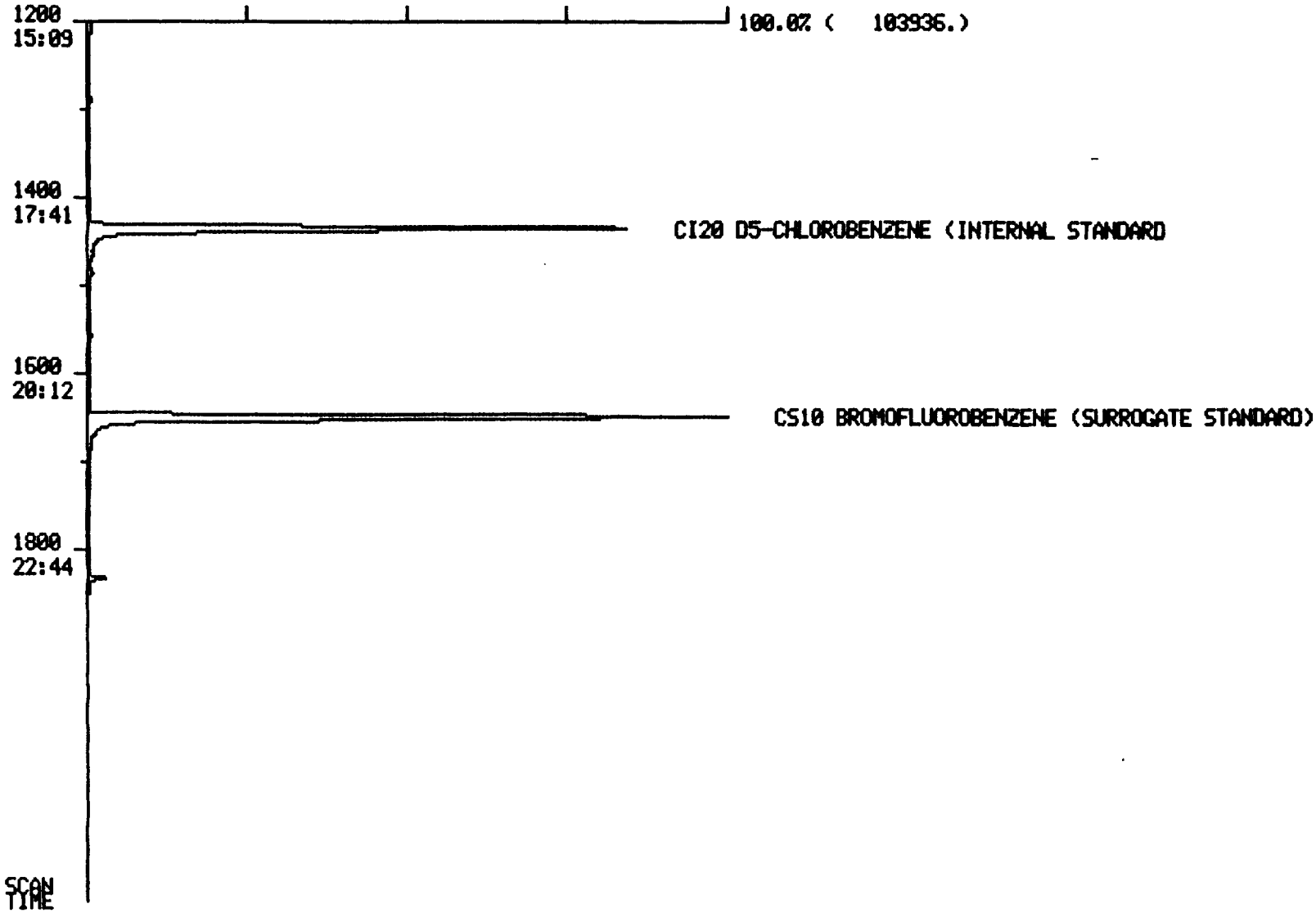
Quantitation Report File: CB910827A51

Data: CB910827A51.TI
08/27/91 11:58:00
Sample: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
Conds.: DB624,CS910827A51,BF910827A51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 428 Analyst: 1523 Acct. No.: RCA

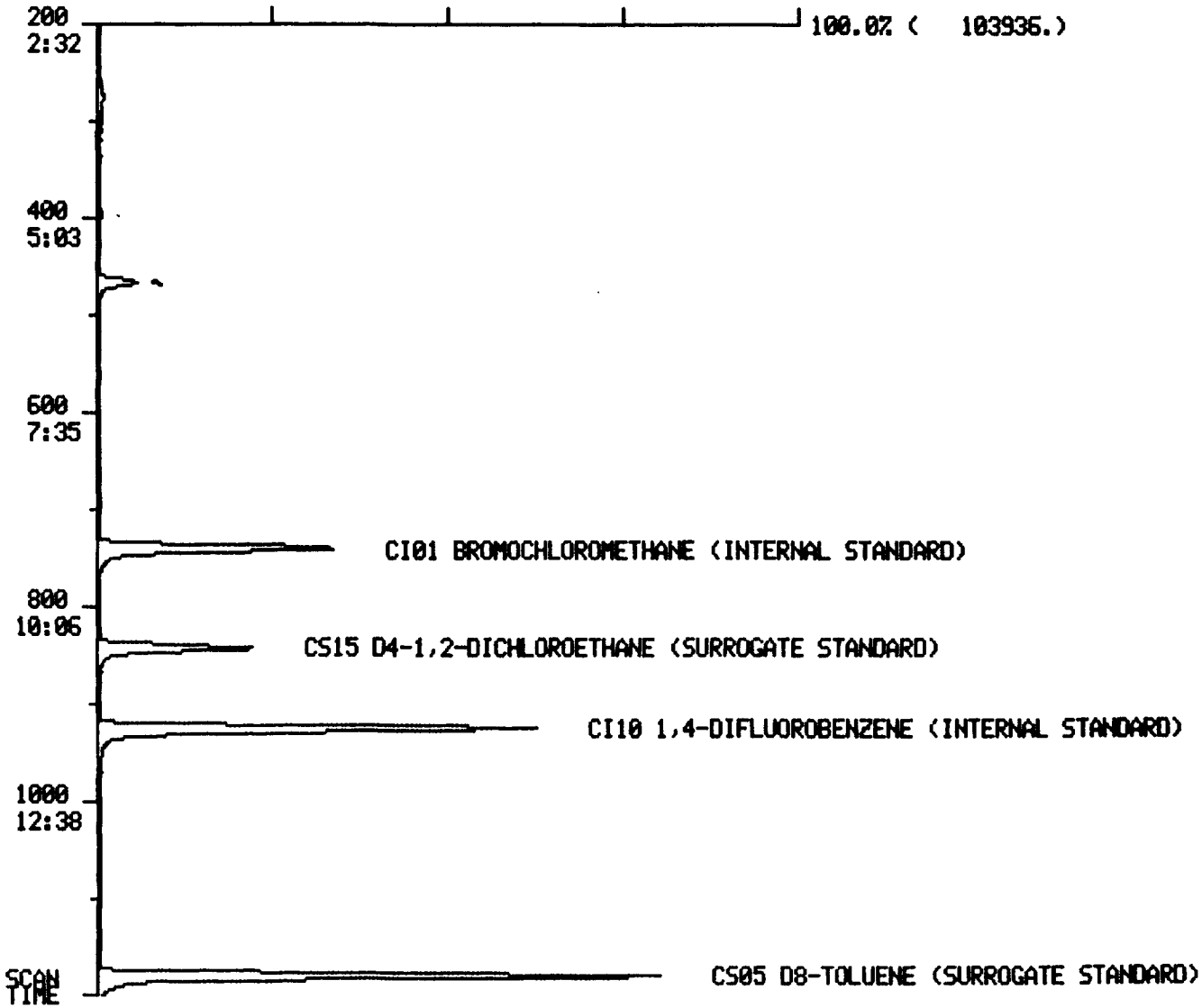
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CB910827A51 SCANS 1200 TO 1850 ACQUIRED: 08/27/91 11:58:00
CALI: CB910827A51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910827A51,BF910827A51



DATA FROM FILE: CB910827A51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 11:58:00
CALI: CB910827A51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910827A51,BF910827A51



1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKTB

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB910827A51

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

% Moisture: not dec. ____ Date Analyzed: 08/27/91

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.

VBLKTB

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB910827A51

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

% Moisture: not dec. ____ Date Analyzed: 08/27/91

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	9	J
67-64-1	Acetone	13	
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

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

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

==========

CLP, BLANK, , VBLKIC, LOW, WATER, , VOA, BLANK, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 0. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CB910828C51

ANALYST(S): INJECTION 1050 [illegible] WORKUP 1050 [illegible]

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE ok

DISPOSITION: [X] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

[ ] REINJECT NEAT
[ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED _____

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

GC/MS REVIEW [illegible] DATE 8/28/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: ___

FINAL REPORTABLE PACKAGE(S): CB910828C5T /

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

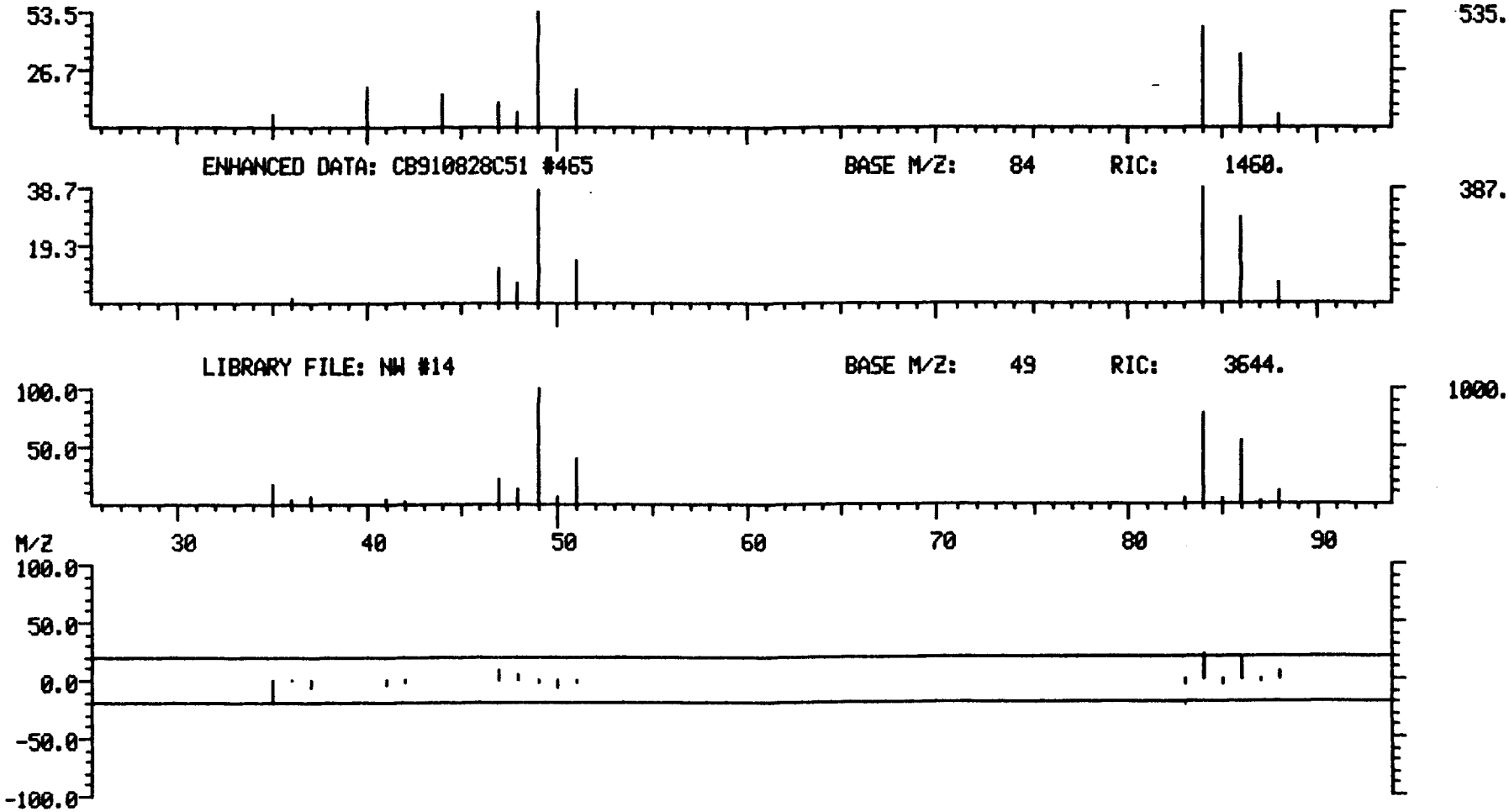
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

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

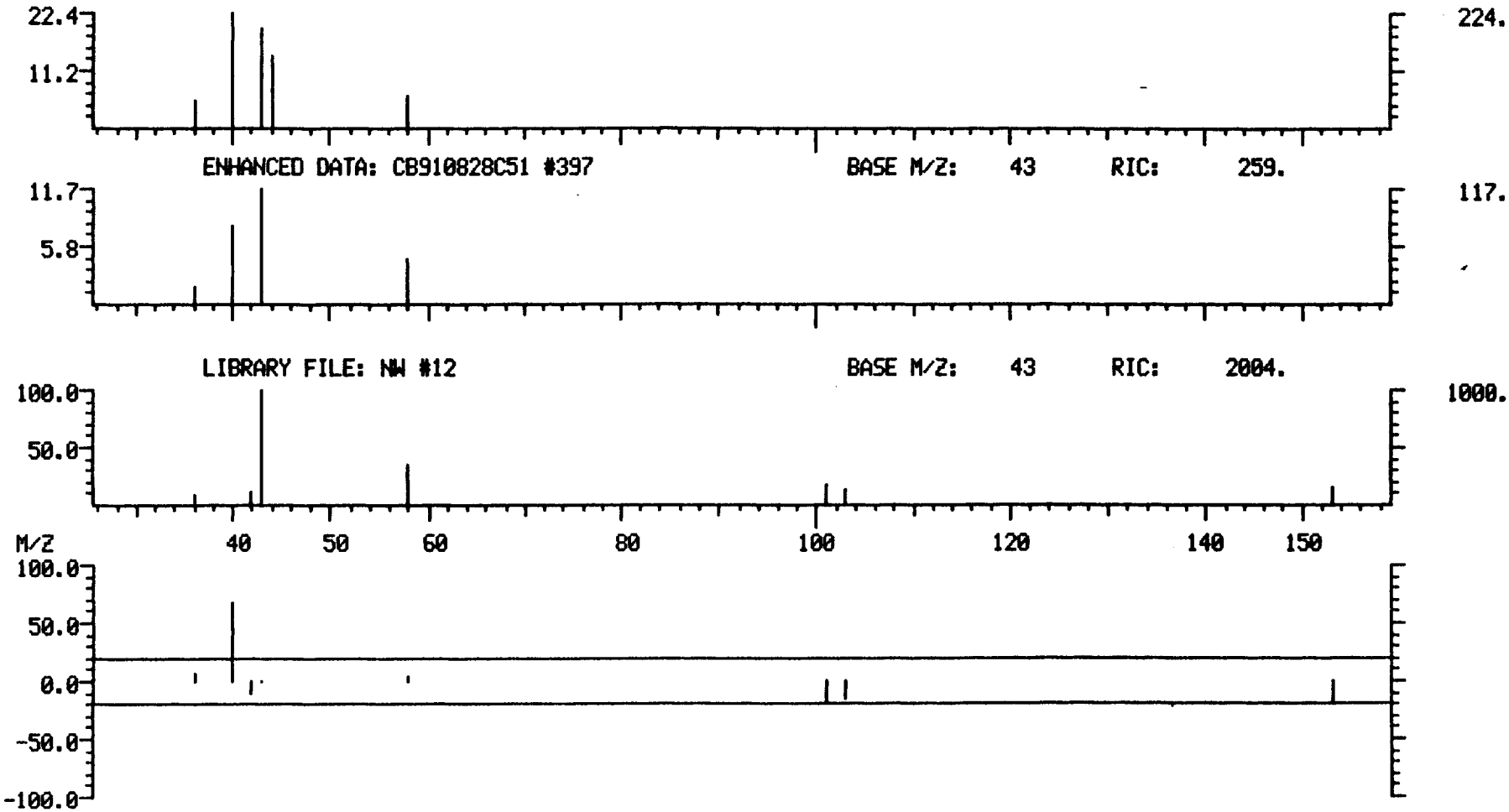
RAW DATA: CB910828C51 #465 BASE M/Z: 49 RIC: 2164.
08/28/91 1:51
SAMPLE: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910828C51,BF910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CB910828C51 #397 BASE M/Z: 40 RIC: 675.
08/28/91 1:51
SAMPLE: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910828C51,BF910828C51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.01	0.533	1.01	8.10	50.00	0.043	0.266	0.16
13	5:14		0.561						
14	5:52	1.00	0.629	1.00	2.67	50.00	0.096	1.806	0.05
15	6:29		0.696						
16	7:27		0.799						
17	8:48		0.944						
18	8:53		0.953						
19	9:33		1.026						
20	9:55		0.850						
21	10:17		0.882						
22	10:44		0.920						
23	10:47		1.157						
24	12:12		1.045						
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01	1.00	0.830	1.00	0.04	50.00	0.001	1.401	0.00
29	14:18		1.226						
30	15:34		1.334						
31	15:57		1.367						
32	16:14		0.897						
33	16:35		0.916						
34	16:48		1.439						
35	18:09		1.003						
36	18:27		1.020						
37	18:44	1.00	1.036	1.00	0.04	100.00	0.000	0.724	0.00
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	2.13	0.944	2.13	-0.00	100.00	-0.000	1.645	-0.00
43	18:44	1.00	1.036	1.00	0.02	100.00	0.000	1.069	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	739	9:20	1	1.000	A BB	45512.	50.000 UG/L	16.85
2	114	926	11:41	2	1.000	A BB	220808.	50.000 UG/L	16.85
3	117	1435	18:07	3	1.000	A BB	200444.	50.000 UG/L	16.85
4	65	842	10:38	1	1.139	A BB	61534.	43.686 UG/L	14.72
5	98	1181	14:55	3	0.823	A BB	224515.	45.837 UG/L	15.45
6	95	1651	20:51	3	1.151	A BB	162162.	46.342 UG/L	15.62
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	397	5:01	1	0.537	A BB	1963.	8.099 UG/L	2.73
13	NOT FOUND								
14	84	465	5:52	1	0.629	A BB	4386.	2.668 UG/L	0.90
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1192	15:03	3	0.831	A BB	217.	0.039 UG/L	0.01
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	1486	18:46	3	1.036	A BB	107.	0.037 UG/L	0.01
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	1486	18:46	1	2.011	****	-2.	-0.001 UG/L	-0.00
43	106	1486	18:46	3	1.036	**B*	106.	0.025 UG/L	0.01

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	43.69	50.00	1.352	1.547	0.87
5	14:53	1.00	0.823	1.00	45.84	50.00	1.120	1.222	0.92
6	20:48	1.00	1.150	1.00	46.34	50.00	0.809	0.873	0.93
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50		0.519						

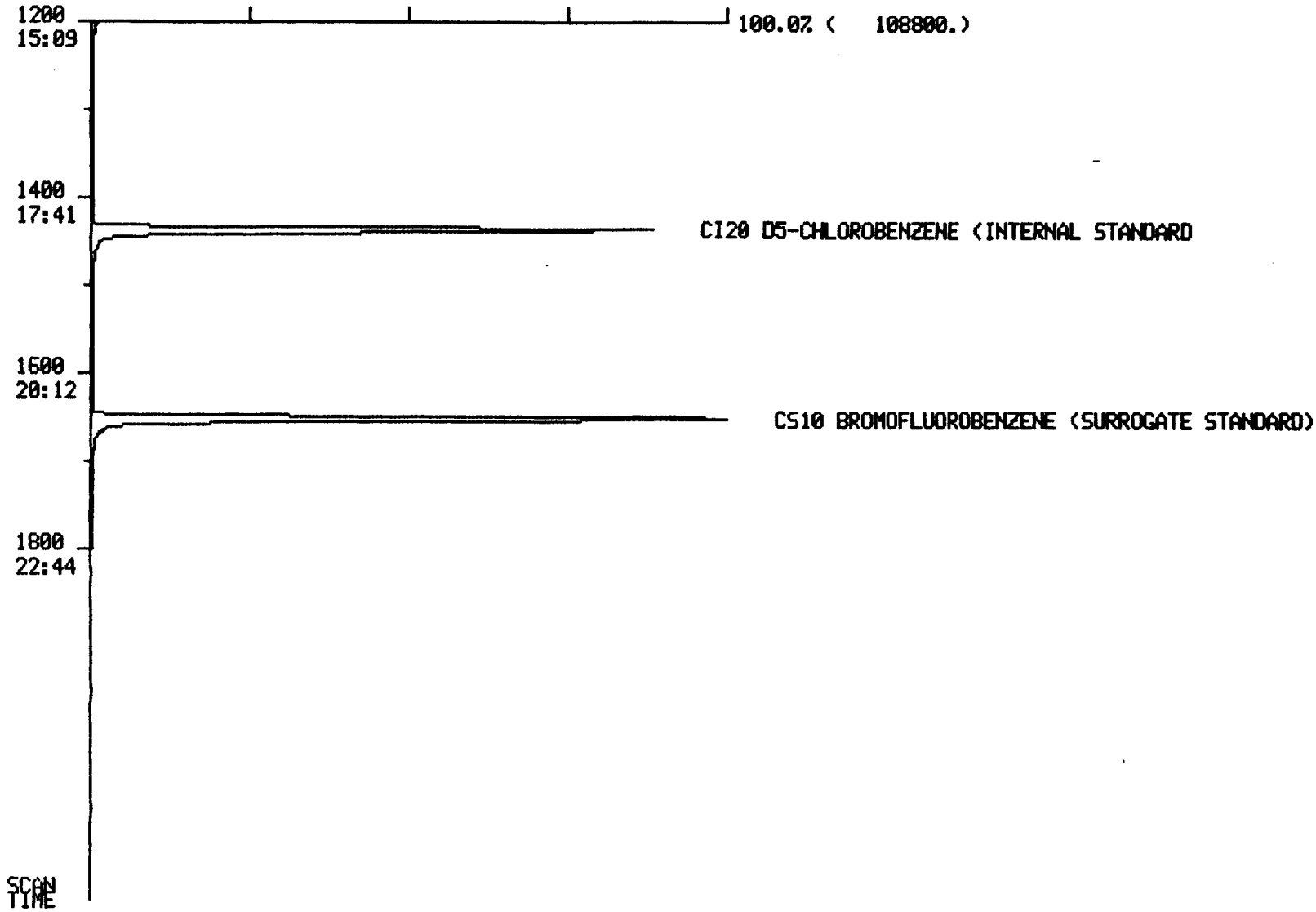
Quantitation Report File: CB910828C51

Data: CB910828C51.TI
08/28/91 1:51:00
Sample: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
Conds.: DB624,CS910828C51,BF910828C51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 7008 Analyst: 1050 Acct. No.: IHM

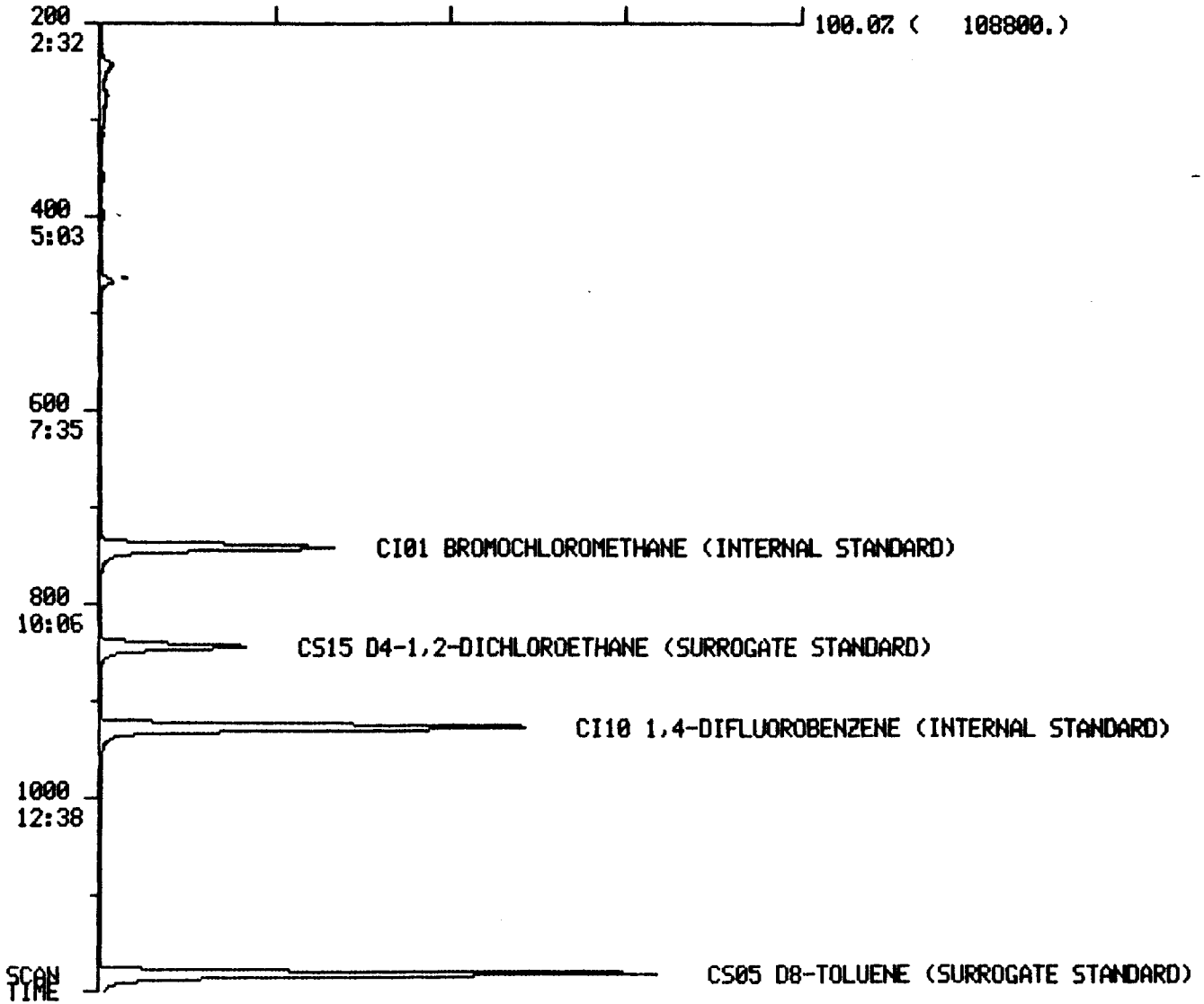
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CB910828C51 SCANS 1200 TO 1800 ACQUIRED: 08/28/91 1:51:00
CALI: CB910828C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910828C51,BF910828C51



DATA FROM FILE: CB910828C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 1:51:00
CALI: CB910828C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
CONDS.: DB624,CS910828C51,BF910828C51



1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKIC

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB910828C51

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

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.

VBLKIC

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB910828C51

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

% Moisture: not dec. _____ Date Analyzed: 08/28/91

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	J
67-64-1	Acetone	8	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

(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.

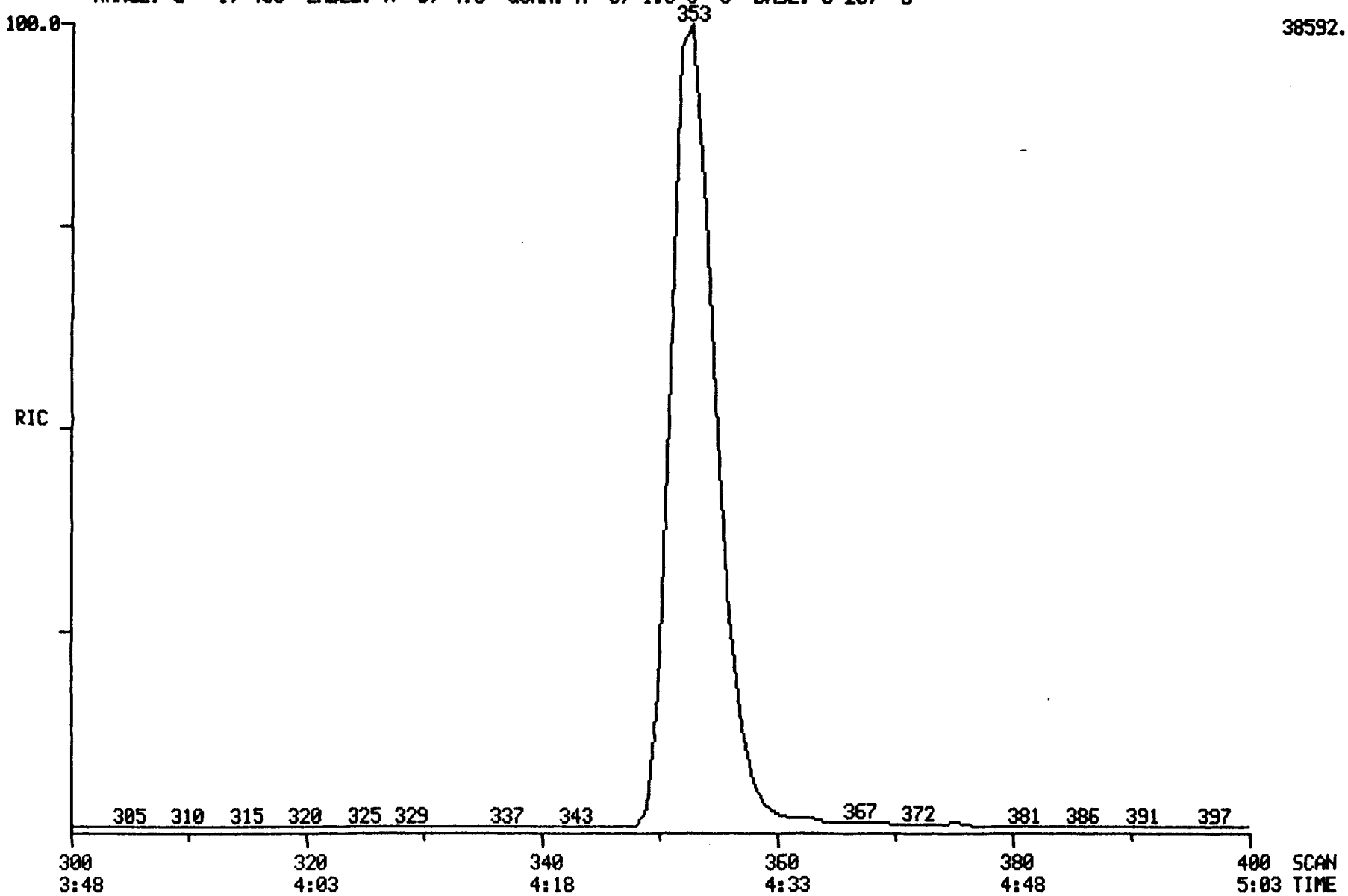
(c) Reconstructed ion chromatogram(s) and GC/MS quantitation report(s) or legible facsimile.

(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: BF910828C51 #352 SCANS 300 TO 400
08/28/91 0:26:00 CALI: CALTAB #3
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
RANGE: G 1, 435 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Mass List Data: BF910828C51 # 353 Base m/z: 95
08/28/91 0:26:00 + 4:28 Cali: CALTAB # 3 RIC: 105216.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
Conds.: DB624
#352 to #354 summed - #325

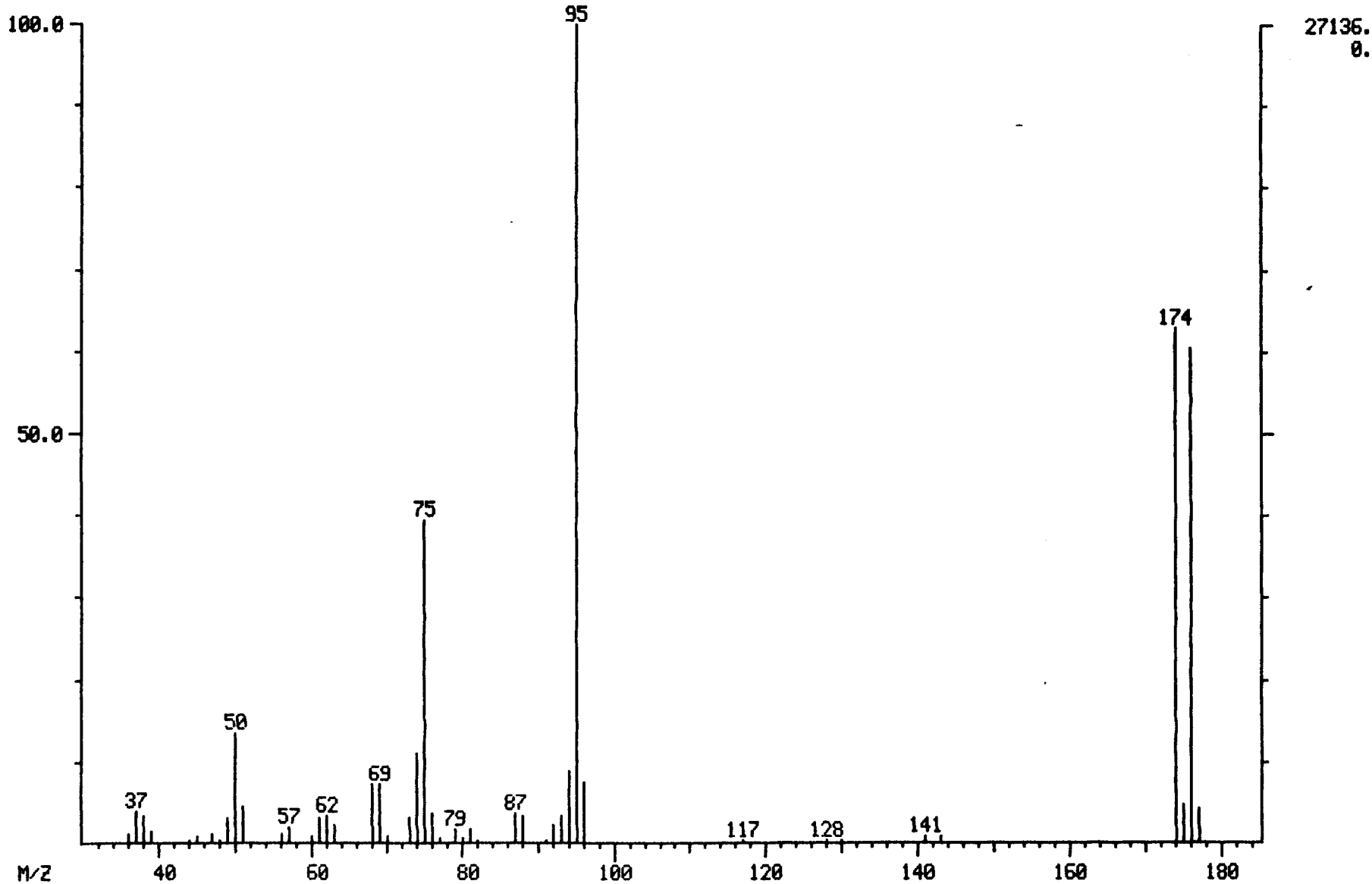
36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.
36?		1.01	274.
37?		3.94	1070.
38?		3.43	930.
39?		1.47	399.
40?	S	0.02	6.
44?	S	0.38	102.
45?		0.90	243.
47?		1.15	312.
48?		0.40	109.
49?		2.91	789.
50?		13.65	3704.
51?		4.43	1202.
56?		1.11	302.
57?		2.00	542.
60?		0.85	230.
61?		3.16	857.
62?		3.19	866.
63?		2.24	609.
68?		7.18	1948.
69		7.32	1986.
70		0.93	252.
73		3.11	845.
74		11.11	3016.
75		39.56	10736.
76		3.58	972.
77		0.50	136.
79		1.78	483.
80		0.48	130.
81		1.64	445.
82		0.19	51.
87		3.49	947.
88		3.30	895.
91		0.19	52.
92		2.23	604.
93		3.43	932.
94		8.79	2384.
95		100.00	27136.
96		7.36	1996.
117		0.25	67.
128		0.19	52.
130		0.18	50.
141		0.77	208.
143		0.74	200.
174		62.85	17056.
175		4.56	1238.
176		60.61	16448.
177		4.09	1110.

MASS SPECTRUM
08/28/91 0:26:00 + 4:28
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
TEMP: 180 DEG. C
#352 TO #354 SUMMED - #325

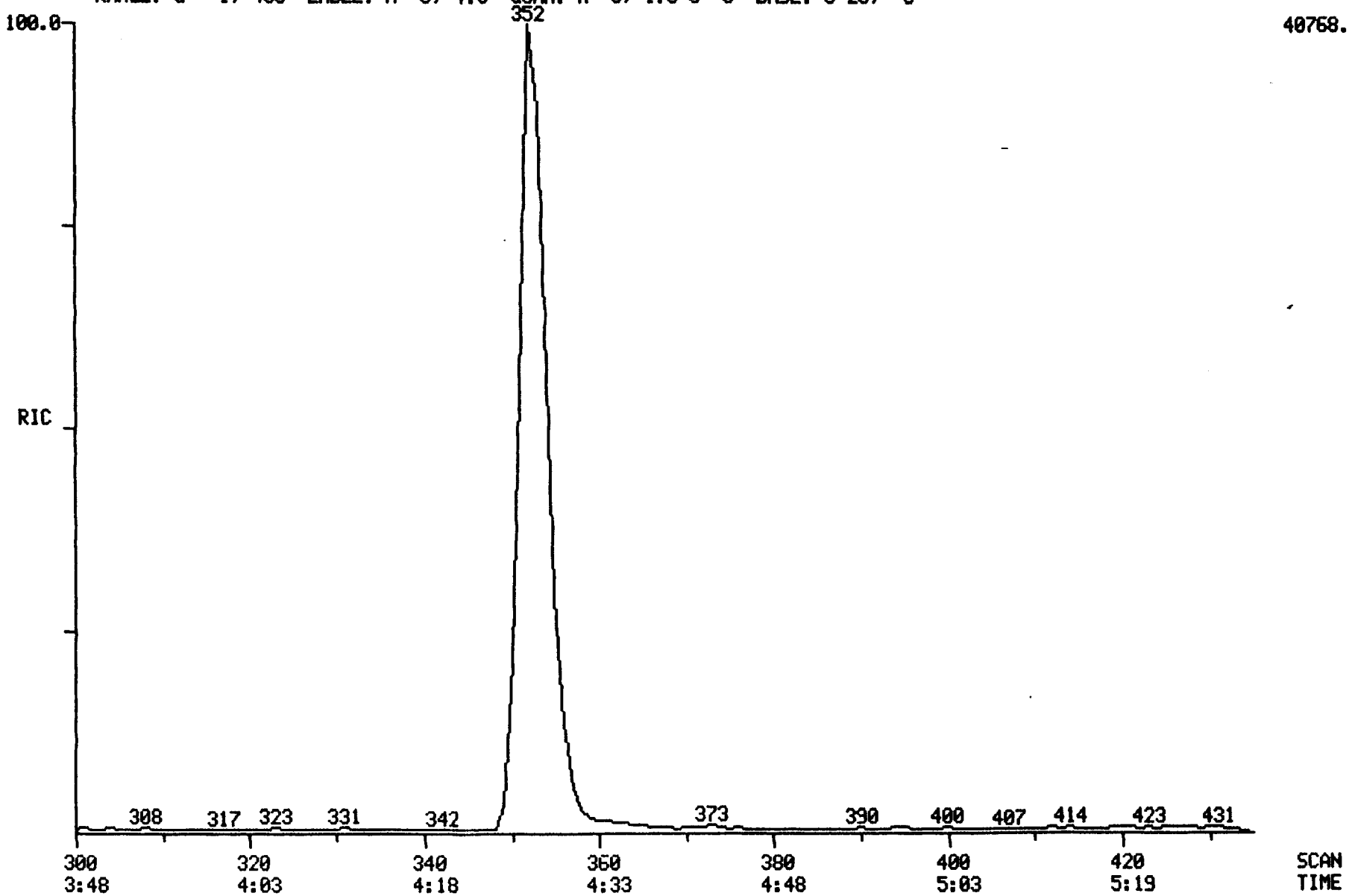
DATA: BF910828C51 #353
CALI: CALTAB #3

BASE M/Z: 95
RIC: 105216.



RIC
08/27/91 10:54:00
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
RANGE: G 1, 435 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BF910827A51 #351 SCANS 300 TO 435
CALI: CALTAB #3



Mass List Data: BF910827A51 # 352 Base m/z: 95
08/27/91 10:54:00 + 4:27 Cali: CALTAB # 3 RIC: 102528.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
Conds.: DB624
#351 to #353 summed - #332

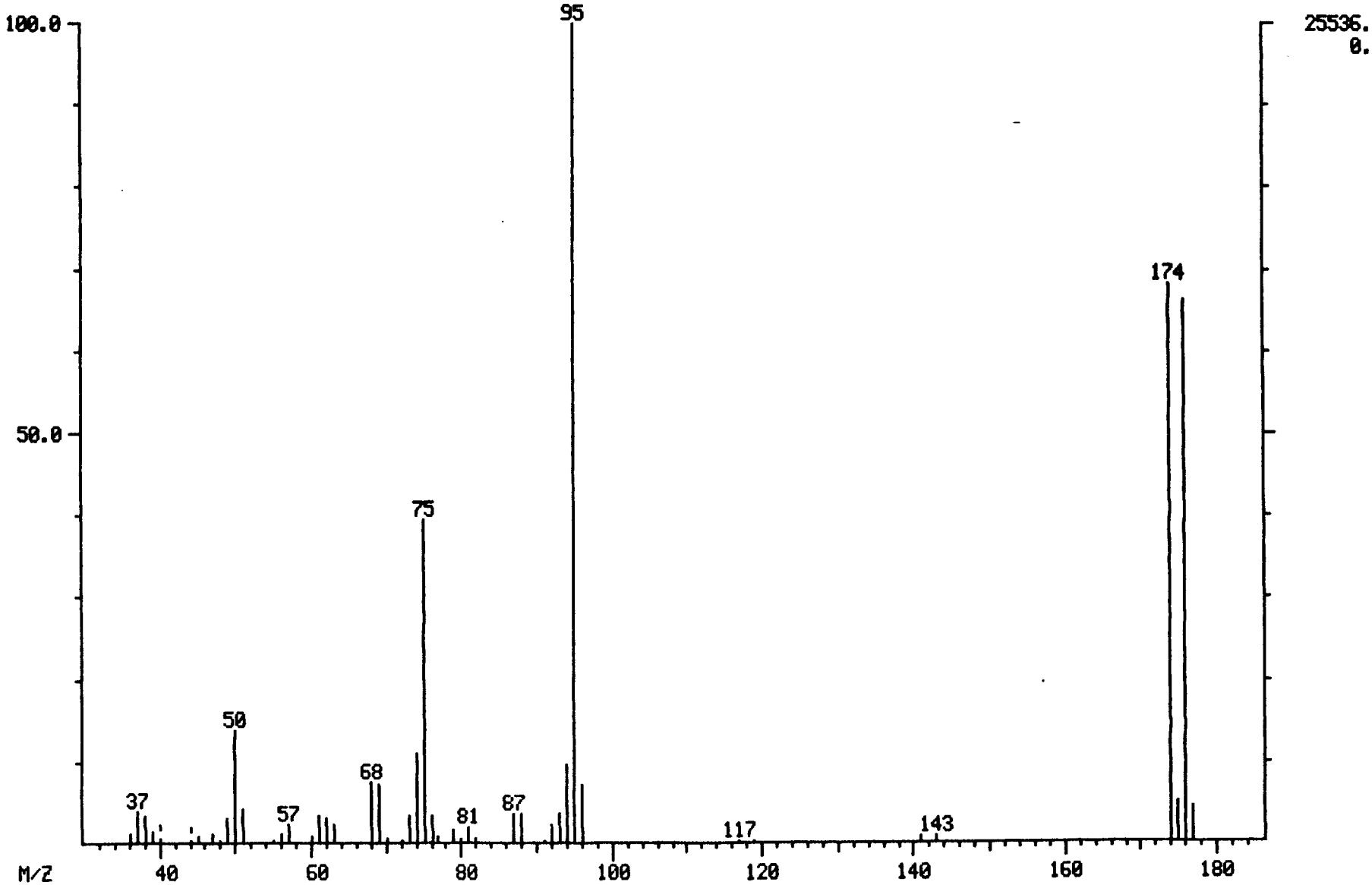
36 0.00 0. Minima Min Inten: 0.
177 Maxima # 0

Mass		% RA	Inten.
36?		1.09	278.
37?		3.96	1010.
38?		3.44	879.
39?		1.47	375.
40?	S	0.44	113.
44?	S	0.15	39.
45?		0.85	216.
47?		1.10	282.
48?		0.20	52.
49?		2.99	763.
50?		13.77	3516.
51?		4.25	1086.
55?		0.21	53.
56?		1.09	278.
57?		2.10	537.
60?		0.90	230.
61?		3.32	849.
62?		3.12	798.
63?		2.31	590.
68?		7.37	1882.
69		7.21	1840.
70		0.60	154.
72		0.21	54.
73		3.40	867.
74		11.18	2856.
75		39.54	10096.
76		3.44	879.
77		0.70	180.
79		1.73	443.
80		0.59	150.
81		1.85	472.
82		0.48	123.
87		3.61	921.
88		3.50	894.
91		0.25	65.
92		2.31	590.
93		3.45	882.
94		9.54	2436.
95		100.00	25536.
96		7.21	1842.
117		0.24	62.
119		0.24	61.
141		0.85	216.
143		0.88	225.
174		68.30	17440.
175		4.99	1274.
176		66.42	16960.
177		4.45	1136.

MASS SPECTRUM
08/27/91 10:54:00 + 4:27
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
TEMP: 180 DEG. C
#351 TO #353 SUMMED - #332

DATA: BF910827A51 #352
CALI: CALTAB #3

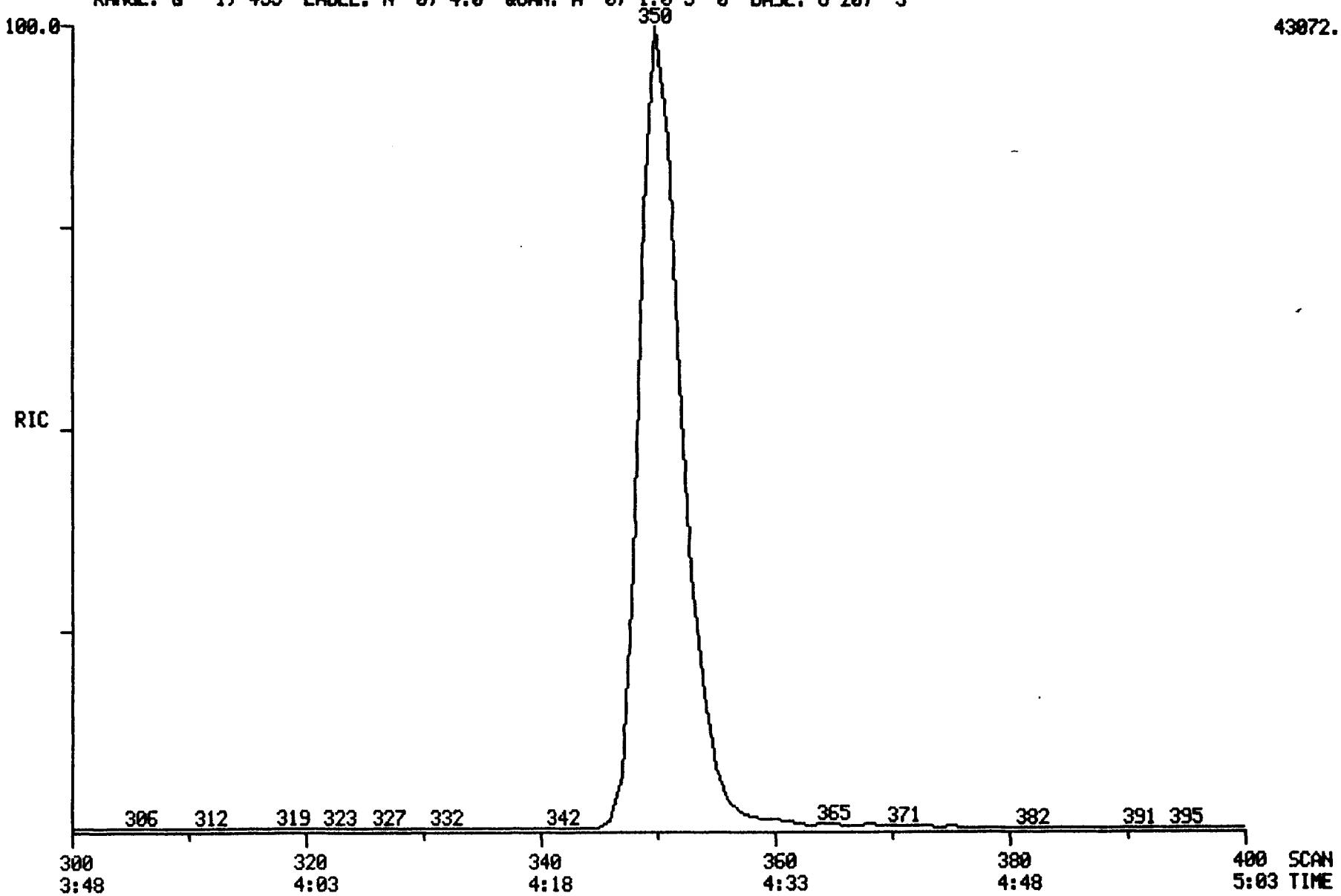
BASE M/Z: 95
RIC: 102528.



RIC
08/27/91 4:54:00
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
RANGE: G 1, 435 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BG910827C51 #349 SCANS 300 TO 400
CALI: CALTAB #3

JV 8-29-91



Mass List Data: BG910827C51 # 350 Base m/z: 95
08/27/91 4:54:00 + 4:26 Cali: CALTAB # 3 RIC: 112384.
Sample: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
Conds.: DB624
#349 to #351 summed - #325

4/8-29-91

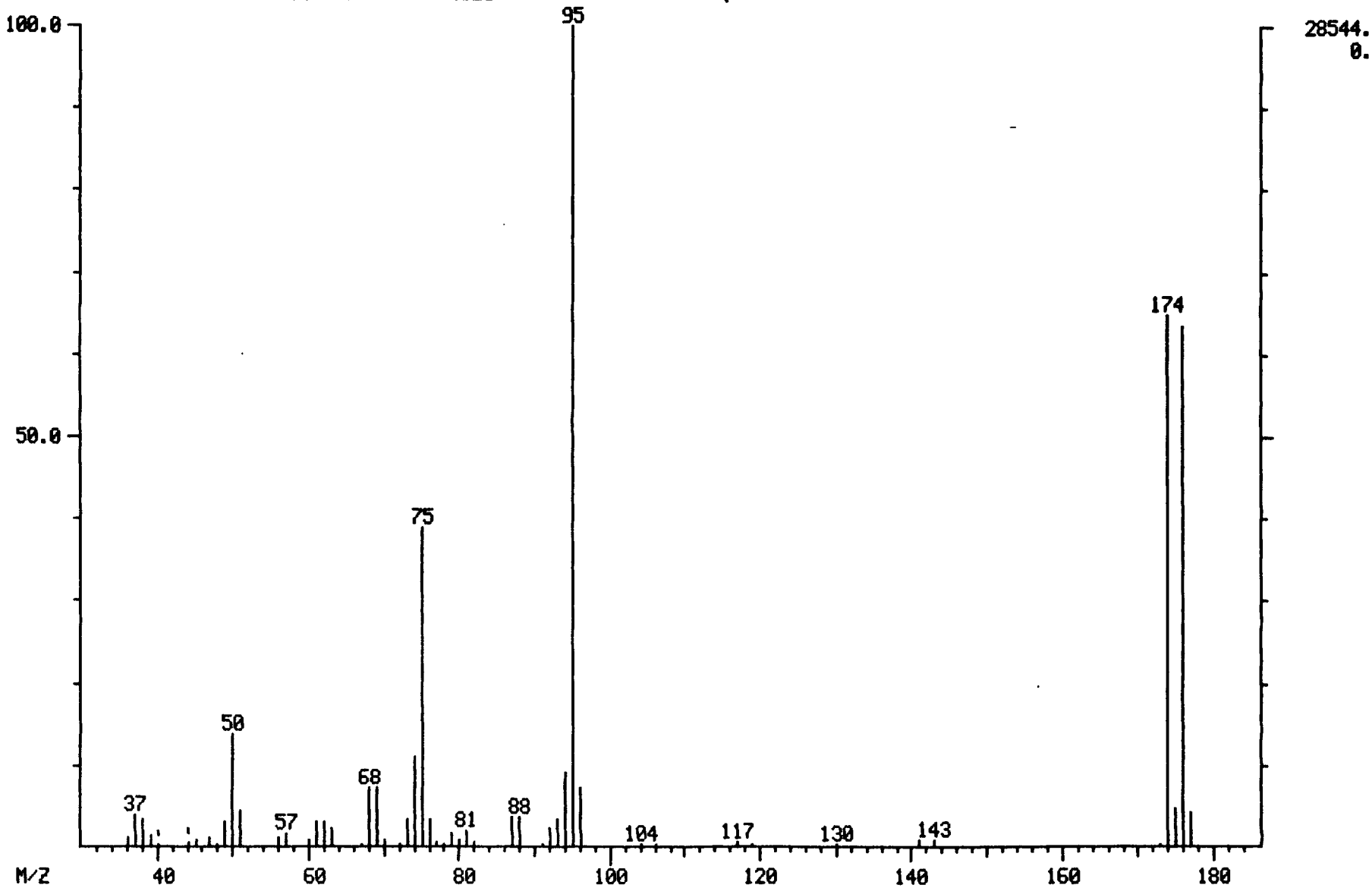
36	0.00	0.	Minima	Min Inten:	0.
177			Maxima	# 0	
Mass	% RA	Inten.	Mass	% RA	Inten.
36?	1.14	325.	175	4.79	1368.
37?	3.90	1114.	176	63.57	18144.
38?	3.41	974.	177	4.23	1208.
39?	1.47	419.			
40? S	0.30	85.			
44? S	0.46	131.			
45?	0.84	239.			
47?	0.99	282.			
48?	0.40	115.			
49?	2.96	845.			
50?	13.72	3916.			
51?	4.48	1278.			
56?	1.14	326.			
57?	1.74	498.			
60?	0.82	235.			
61?	3.11	889.			
62?	2.97	848.			
63?	2.31	660.			
67?	0.18	51.			
68?	7.24	2068.			
69	7.13	2036.			
70	0.78	223.			
72	0.39	112.			
73	3.22	920.			
74	11.11	3172.			
75	39.07	11152.			
76	3.35	957.			
77	0.64	183.			
78	0.19	54.			
79	1.66	475.			
80	0.70	200.			
81	1.89	539.			
82	0.43	124.			
87	3.50	999.			
88	3.63	1036.			
91	0.38	109.			
92	2.20	629.			
93	3.41	973.			
94	8.98	2564.			
95	100.00	28544.			
96	7.20	2056.			
104	0.19	53.			
106	0.18	52.			
117	0.66	187.			
119	0.21	60.			
130	0.19	54.			
141	0.79	225.			
143	0.91	259.			
173	0.18	51.			
174	65.02	18560.			

MASS SPECTRUM
08/27/91 4:54:00 + 4:26
SAMPLE: CLP,,,BFB,LOW,WATER,,VOA,TUNE,F50051
CONDS.: DB624
TEMP: 180 DEG. C
#349 TO #351 SUMMED - #325

DATA: BG910827C51 #350
CALI: CALTAB #3

BASE M/Z: 95
RIC: 112384.

4/8-29-91



(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 0:26
TIME TUNE EXPIRES 12:26
PREVENTIVE MAINTENANCE None 1050 YM

SHIFT(S) (A) ____ (B) ____ (C) ✓
DATE 08-28-91
ANALYSIS TYPE NWSW

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc
1		BF910828C51	✓	08/28/91	0:26	BFB	–	7008	2 µl	1050	
2		CS910828C51	✓	08/28/91	0:43	VSTD050	–		5ml	1050	
3		CB910828C51	✓	08/28/91	1:51	VBLKIC	–		5ml	1050	
4		CN039019C51	✓	08/28/91	3:13	PS4	23861.1	–	5ml	1050	
5		CN039024C51	✓	08/28/91	3:52	INFLUENT	23861.1	–	5ml	1050	
6		CN039025C51	✓	08/28/91	4:30	EFFLUENT	23861.1	–	5ml	1050	
7		CN039020C51	✓	08/28/91	5:09	PS4 MS	23861.1	–	5ml	1050	
8		CN039021C51	✓	08/28/91	5:47	PS4 MSD	23861.1	–	5ml	1050	
9		CN038876C51	✓	08/28/91	6:25	CAVPAQC01 MS	23776	–	5ml	1050	
10		CN038877C51	✓	08/28/91	7:04	CAVPAQC01 MSD	23776	–	5ml	1050	
11	✓	CN039004C51 [illegible]	DM	08/28/91	7:43	AAS42	17006-AAS42	–	1ml	1050	
12		CRO 39004AS1	✓	8/28/91	8:44	AAS42	17006-AAS42		5ml	1523	Reprocess
13	per 8/29/91	CRO 39005AS1	✓	8/28/91	9:25	AAS42MS	17006		5ml	1521	
14		CRO 39006AS1	✓	8/28/91	10:05	AAS42MSD	17006		5ml	1524	
15		CN039033AS1	✓	8/28/91	10:44	PS1	~~17006~~ 23861		5ml	1526	
16		CN039035AS1	✓	8/28/91	11:22	PS3	23861		5ml	1521	
17				/ /	:						
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						

VERIFIED ____
SUPERVISOR APPROVAL [illegible] 8/28/91
FORMME 08 28 1951

23861 1 SAMPLE DATA PACKAGE

48

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	62.73	50.00	0.266	0.212	1.25
13	5:14	1.00	0.561	1.00	47.14	50.00	3.371	3.575	0.94
14	5:51	1.00	0.627	1.00	54.41	50.00	1.806	1.660	1.09
15	6:29	1.00	0.695	1.00	48.15	50.00	1.570	1.631	0.96
16	7:27	1.00	0.799	1.00	47.14	50.00	2.167	2.298	0.94
17	8:47	1.00	0.943	1.00	48.56	50.00	1.720	1.771	0.97
18	8:52	1.00	0.951	1.00	67.27	50.00	0.365	0.271	1.35
19	9:33	1.00	1.026	1.00	48.29	50.00	3.230	3.344	0.97
20	9:55	1.00	0.852	1.00	49.30	50.00	0.642	0.651	0.99
21	10:17	1.00	0.883	1.00	49.47	50.00	0.630	0.637	0.99
22	10:44	1.00	0.921	1.00	50.52	50.00	0.881	0.872	1.01
23	10:47	1.00	1.157	1.00	50.13	50.00	1.901	1.896	1.00
24	12:12	1.00	1.047	1.00	52.20	50.00	0.481	0.460	1.04
25	12:40	1.00	1.087	1.00	50.13	50.00	0.309	0.308	1.00
26	13:19	1.00	1.143	1.00	51.19	50.00	0.655	0.640	1.02
27	14:43	1.00	0.812	1.00	62.37	50.00	0.248	0.199	1.25
28	15:02	1.00	0.831	1.00	51.18	50.00	1.401	1.368	1.02
29	14:19	1.00	1.229	1.00	51.34	50.00	0.546	0.531	1.03
30	15:34	1.00	1.336	1.00	55.68	50.00	0.422	0.379	1.11
31	15:57	1.00	1.368	1.00	57.75	50.00	0.374	0.324	1.16
32	16:15	1.00	0.897	1.00	51.37	50.00	0.483	0.470	1.03
33	16:35	1.00	0.916	1.00	69.14	50.00	0.183	0.132	1.38
34	16:48	1.00	1.442	1.00	56.64	50.00	0.679	0.600	1.13
35	18:10	1.00	1.003	1.00	51.54	50.00	1.155	1.121	1.03
36	18:28	1.00	1.020	1.00	50.92	50.00	0.561	0.551	1.02
37	18:44	1.00	1.035	1.00	106.31	100.00	0.724	0.681	1.06
38	19:38	1.00	1.084	1.00	51.76	50.00	0.689	0.666	1.04
39	19:40	1.00	1.086	1.00	51.80	50.00	1.170	1.129	1.04
40	20:02	1.00	1.719	1.00	60.46	50.00	0.412	0.341	1.21
41	21:13	1.00	1.172	1.00	62.93	50.00	0.564	0.448	1.26
42	8:47	1.00	0.943	1.00	96.73	100.00	1.645	1.701	0.97
43	18:44	1.00	1.035	1.00	105.40	100.00	1.069	1.014	1.05

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	738	9:19	1	1.000	A BB	44256.	50.000 UG/L	2.06
2	114	924	11:40	2	1.000	A BB	211288.	50.000 UG/L	2.06
3	117	1433	18:06	3	1.000	A BB	192718.	50.000 UG/L	2.06
4	65	841	10:37	1	1.140	A BB	68484.	51.563 UG/L	2.12
5	98	1179	14:53	3	0.823	A BB	235465.	51.292 UG/L	2.11
6	95	1648	20:48	3	1.150	A BB	168218.	51.968 UG/L	2.14
7	50	232	2:56	1	0.314	A BB	31875.	53.258 UG/L	2.19
8	62	241	3:03	1	0.327	A BB	38809.	45.484 UG/L	1.87
9	94	273	3:27	1	0.370	A BB	48231.	51.226 UG/L	2.11
10	64	282	3:34	1	0.382	A BB	31785.	56.935 UG/L	2.34
11	96	383	4:50	1	0.519	A BB	70524.	49.737 UG/L	2.05
12	43	393	4:58	1	0.533	A BB	11784.	62.730 UG/L	2.58
13	76	414	5:14	1	0.561	A BB	149188.	47.142 UG/L	1.94
14	84	464	5:52	1	0.629	A BB	79930.	54.407 UG/L	2.24
15	96	514	6:29	1	0.696	A BB	69493.	48.151 UG/L	1.98
16	63	590	7:27	1	0.799	A BB	95894.	47.139 UG/L	1.94
17	96	697	8:48	1	0.944	A BB	76135.	48.558 UG/L	2.00
18	43	703	8:53	1	0.953	A BB	16159.	67.272 UG/L	2.77
19	83	757	9:33	1	1.026	A BB	142950.	48.294 UG/L	1.99
20	97	785	9:55	2	0.850	A BB	135714.	49.302 UG/L	2.03
21	117	815	10:17	2	0.882	A BB	133216.	49.471 UG/L	2.03
22	78	850	10:44	2	0.920	A BB	186097.	50.518 UG/L	2.08
23	62	854	10:47	1	1.157	A BB	84122.	50.134 UG/L	2.06
24	130	966	12:12	2	1.045	A BB	101530.	52.197 UG/L	2.15
25	63	1003	12:40	2	1.085	A BB	65321.	50.126 UG/L	2.06
26	83	1055	13:19	2	1.142	A BB	138480.	51.194 UG/L	2.11
27	43	1164	14:42	3	0.812	A BV	47878.	62.369 UG/L	2.57
28	91	1190	15:01	3	0.830	A BB	269944.	51.182 UG/L	2.11
29	75	1133	14:18	2	1.226	A BB	115282.	51.336 UG/L	2.11
30	75	1233	15:34	2	1.334	A BB	89147.	55.678 UG/L	2.29
31	97	1263	15:57	2	1.367	A BB	79094.	57.754 UG/L	2.38
32	164	1286	16:14	3	0.897	A BB	93055.	51.367 UG/L	2.11
33	43	1313	16:35	3	0.916	A BB	35226.	69.144 UG/L	2.84
34	129	1330	16:48	2	1.439	A BB	143505.	56.640 UG/L	2.33
35	112	1438	18:09	3	1.003	A BB	222629.	51.536 UG/L	2.12
36	106	1461	18:27	3	1.020	A BB	108209.	50.920 UG/L	2.09
37	106	1484	18:44	3	1.036	A BB	279096.	106.315 UG/L	4.37
38	106	1554	19:37	3	1.084	A BB	132800.	51.757 UG/L	2.13
39	104	1557	19:40	3	1.087	A BB	225495.	51.802 UG/L	2.13
40	173	1586	20:01	2	1.716	A BB	87122.	60.458 UG/L	2.49
41	83	1679	21:12	3	1.172	A BB	108778.	62.931 UG/L	2.59
42	96	697	8:48	1	0.944	A*BB	145628.	96.726 UG/L	3.98
43	106	1484	18:44	3	1.036	A*BB	411897.	105.395 UG/L	4.33

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:36	1.00	1.138	1.00	51.56	50.00	1.547	1.501	1.03
5	14:53	1.00	0.822	1.00	51.29	50.00	1.222	1.191	1.03
6	20:49	1.00	1.150	1.00	51.97	50.00	0.873	0.840	1.04
7	2:56	1.00	0.314	1.00	53.26	50.00	0.720	0.676	1.07
8	3:03	1.00	0.328	1.00	45.48	50.00	0.877	0.964	0.91
9	3:29	0.99	0.374	0.99	51.23	50.00	1.090	1.064	1.02
10	3:33	1.00	0.381	1.00	56.94	50.00	0.718	0.631	1.14
11	4:50	1.00	0.519	1.00	49.74	50.00	1.594	1.602	0.99

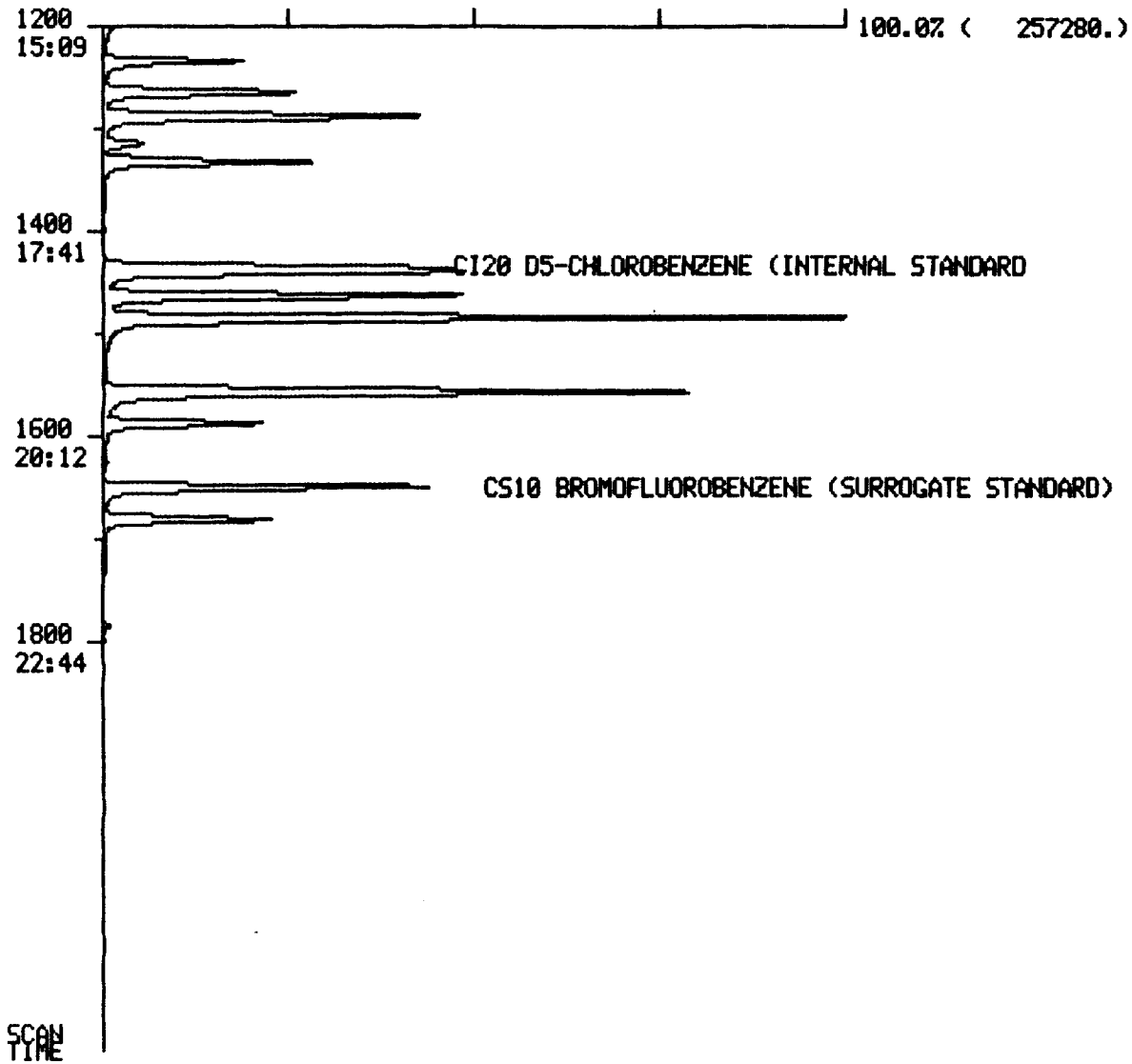
Quantitation Report File: CS910828C51

Data: CS910828C51.TI
08/28/91 0:43:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,STAND,,F50051
Conds.: DB624,,BF910828C51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 7008 Analyst: 1050 Acct. No.: IHM

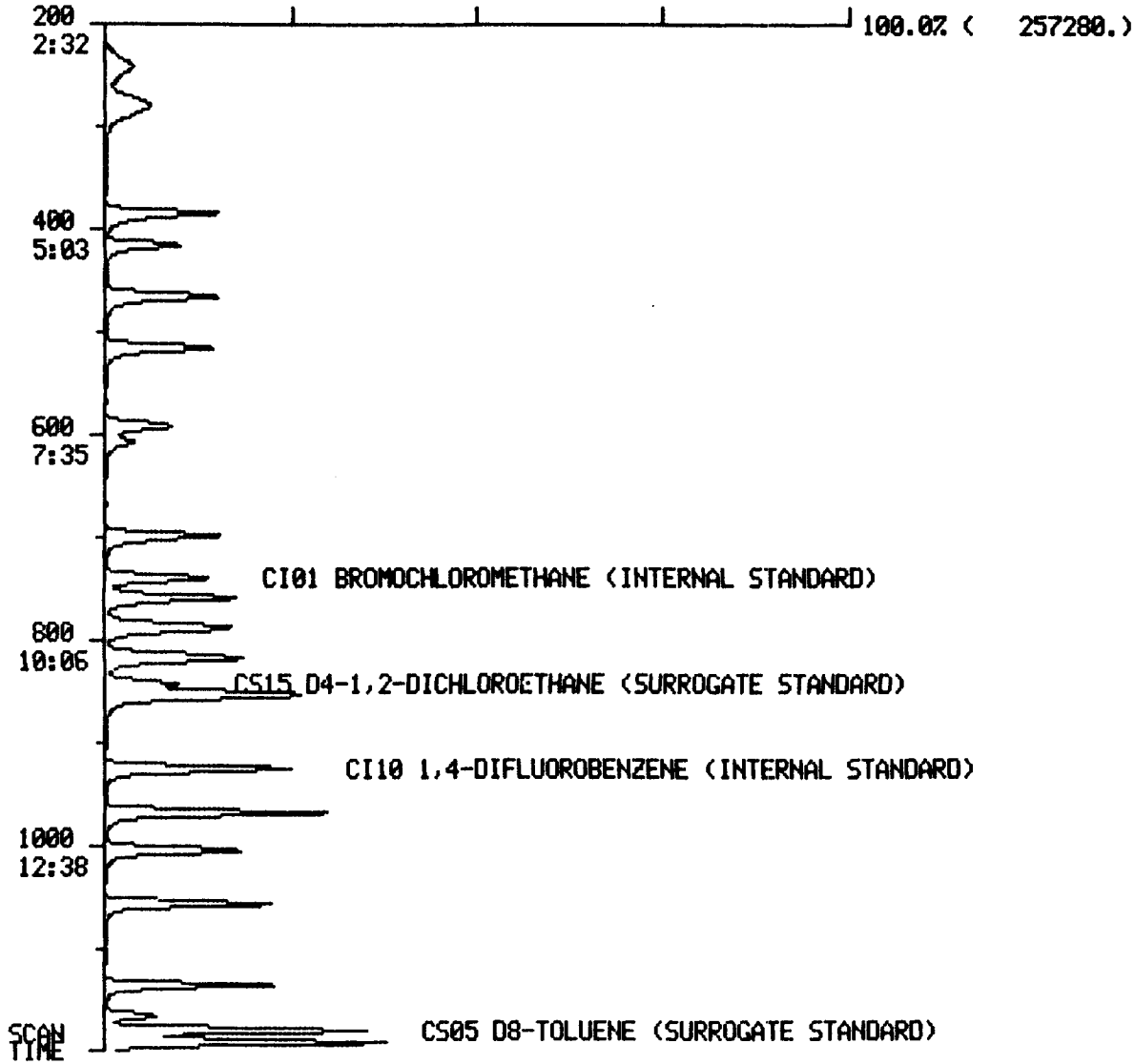
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CS910828C51 SCANS 1200 TO 1800 ACQUIRED: 08/28/91 0:43:00
CALI: CS910828C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,STAND,,F50051
CONDS.: DB624,,BF910828C51



DATA FROM FILE: CS910828C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 0:43:00
CALI: CS910828C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,STAND,,F50051
CONDS.: DB624,,BF910828C51



7A
VOLATILE CONTINUING CALIBRATION CHECK

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Instrument ID: F50051 Calibration date: 08/28/91 Time: 0043

Lab File ID: CS910828C51 Init. Calib. Date(s): 08/27/91 08/27/91

Heated Purge: (Y/N) N Init. Calib. Times: 0508 0839

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

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.682	0.720		-5.6	
Bromomethane	1.055	1.090	0.100	-3.3	25.0
Vinyl Chloride	0.889	0.877	0.100	1.4	25.0
Chloroethane	0.693	0.718		-3.6	
Methylene Chloride	1.904	1.806		5.1	
Acetone	0.372	0.266		28.5	
Carbon Disulfide	3.545	3.371		4.9	
1,1-Dichloroethene	1.620	1.594	0.100	1.6	25.0
1,1-Dichloroethane	2.346	2.167	0.200	7.6	25.0
1,2-Dichloroethene (total)	1.747	1.645		5.8	
Chloroform	3.406	3.230	0.200	5.2	25.0
1,2-Dichloroethane	2.046	1.901	0.100	7.1	25.0
2-Butanone	0.396	0.365		7.8	
1,1,1-Trichloroethane	0.690	0.642	0.100	7.0	25.0
Carbon Tetrachloride	0.671	0.630	0.100	6.1	25.0
Bromodichloromethane	0.697	0.655	0.200	6.0	25.0
1,2-Dichloropropane	0.341	0.309		9.4	
cis-1,3-Dichloropropene	0.577	0.546	0.200	5.4	25.0
Trichloroethene	0.500	0.481	0.300	3.8	25.0
Dibromochloromethane	0.690	0.679	0.100	1.6	25.0
1,1,2-Trichloroethane	0.381	0.374	0.100	1.8	25.0
Benzene	0.919	0.881	0.500	4.1	25.0
Trans-1,3-Dichloropropene	0.434	0.422	0.100	2.8	25.0
Bromoform	0.421	0.412	0.100	2.1	25.0
4-Methyl-2-Pentanone	0.272	0.248		8.8	
2-Hexanone	0.182	0.183		-0.5	
Tetrachloroethene	0.509	0.483	0.200	5.1	25.0
1,1,2,2-Tetrachloroethane	0.616	0.564	0.500	8.4	25.0
Toluene	1.443	1.401	0.400	2.9	25.0
Chlorobenzene	1.189	1.155	0.500	2.9	25.0
Ethylbenzene	0.574	0.561	0.100	2.3	25.0
Styrene	1.189	1.170	0.300	1.6	25.0
Xylene (total)	0.701	0.689	0.300	1.7	25.0
Toluene-d8	1.196	1.222		-2.2	
Bromofluorobenzene	0.860	0.873	0.200	-1.5	25.0
1,2-Dichloroethane-d4	1.489	1.547		-3.9	

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 10:54
TIME TUNE EXPIRES 22:54
PREVENTIVE MAINTENANCE Rea 8/27/91

SHIFT(S) (A) ✓ (B) ____ (C) ____
DATE 8/27/91
ANALYSIS TYPE NWSW

	REJECTED	RUN LOG FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF910827A51	✓	8/27/91	10:54	~~VSTD005~~ BTB 8/27/91		700K	2W	1521	
2		CS910827A51	✓	8/27/91	11:08	VSTD050		1	5ml	1521	
3		CB910827A51	✓	8/27/91	11:58	VBLKTB			5ml	1523	
4		CNO 38854A51	✓	8/27/91	13:39	DBB51	16882 RCA 8/27/91		5ml	1521	
5		CNO 38860A51	✓	8/27/91	14:25	DBB57	16982		5ml	1521	
6		CNO 38861A51	✓	8/27/91	15:13	DBB61	16982		5ml	1521	
7		CNO 38862A51	✓	8/27/91	15:57	DBB63	16982		5ml	1523	
8		CNO 38863A51	✓	8/27/91	16:29	DBB65	16982		5ml	1523	
9		CRO 38839A51	✓	8/27/91	17:08	DBB52MS	16982		5ml	1523	
10		CRO 38840A51	✓	8/27/91	17:47	DBB52MSD	16982		5ml	1521	
11		CN038832A51	✓	/ /	18:23	DBB49	16982	-	5ml	1523	LC=SC 8/27/91
12		CN038739B51	✓	/ /	19:10	CEA66	17000	-	5ml	1452	
13		CN038743B51	✓	/ /	19:45	CEA67	17000	-	5ml	1452	
14		CN038740B51	✓	/ /	20:24	CEA67MS	17000	-	5ml	1452	
15		CN038741B51	✓	/ /	21:06	CEA67MSD	17000	-	5ml	1452	
16		CN038875B51	✓	/ /	22:17	CAVPAQC01	23776	-	5ml	1452	
17		CN032036B51	✓	/ /	22:51	LABPURE	23861	-	5ml	1452	
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						
				/ /	:						

VERIFIED ____
SUPERVISOR APPROVAL 1452 Neptun
FORMME 10827C51

55

23861 1 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:57	1.00	0.532	1.00	60.46	200.00	0.053	0.176	0.30
13	5:14	1.00	0.564	1.00	51.56	200.00	0.894	3.467	0.26
14	5:52	1.00	0.630	1.00	61.36	200.00	0.415	1.352	0.31
15	6:29	1.00	0.697	1.00	52.38	200.00	0.408	1.557	0.26
16	7:26	1.00	0.800	1.00	51.30	200.00	0.575	2.240	0.26
17	8:48	1.00	0.945	1.00	51.68	200.00	0.443	1.714	0.26
18	8:52	1.00	0.953	1.00	50.20	200.00	0.068	0.270	0.25
19	9:33	1.00	1.026	1.00	50.94	200.00	0.836	3.283	0.25
20	9:55	1.00	0.851	1.00	49.19	200.00	0.163	0.662	0.25
21	10:18	1.00	0.883	1.00	48.69	200.00	0.159	0.654	0.24
22	10:45	1.00	0.920	1.00	48.89	200.00	0.218	0.891	0.24
23	10:47	1.00	1.157	1.00	49.40	200.00	0.474	1.919	0.25
24	12:12	1.00	1.045	1.00	50.65	200.00	0.115	0.454	0.25
25	12:41	1.00	1.085	1.00	47.63	200.00	0.077	0.324	0.24
26	13:19	1.00	1.140	1.00	47.71	200.00	0.160	0.671	0.24
27	14:43	1.00	0.813	1.00	46.75	200.00	0.050	0.213	0.23
28	15:02	1.00	0.831	1.00	49.52	200.00	0.342	1.382	0.25
29	14:19	1.00	1.226	1.00	47.35	200.00	0.133	0.561	0.24
30	15:34	1.00	1.334	1.00	45.57	200.00	0.095	0.416	0.23
31	15:58	1.00	1.366	1.00	48.77	200.00	0.081	0.332	0.24
32	16:15	1.00	0.898	1.00	51.11	200.00	0.118	0.460	0.26
33	16:35	1.00	0.916	1.00	46.72	200.00	0.033	0.141	0.23
34	16:48	1.00	1.440	1.00	47.20	200.00	0.150	0.635	0.24
35	18:10	1.00	1.003	1.00	52.49	200.00	0.280	1.068	0.26
36	18:28	1.00	1.020	1.00	51.83	200.00	0.138	0.532	0.26
37	18:44	1.00	1.036	1.00	109.74	400.00	0.170	0.621	0.27
38	19:38	1.00	1.084	1.00	53.52	200.00	0.166	0.622	0.27
39	19:40	1.00	1.086	1.00	52.46	200.00	0.282	1.076	0.26
40	20:01	1.00	1.715	1.00	43.61	200.00	0.085	0.391	0.22
41	21:13	1.00	1.171	1.00	42.95	200.00	0.112	0.522	0.21
42	8:48	1.00	0.945	1.00	104.02	400.00	0.425	1.635	0.26
43	18:44	1.00	1.036	1.00	108.84	400.00	0.253	0.932	0.27

SWB 8/28/91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	738	9:19	1	1.000	A BB	43495.	50.000	UG/L	2.12
2	114	923	11:39	2	1.000	A BB	215038.	50.000	UG/L	2.12
3	117	1434	18:06	3	1.000	A BB	189086.	50.000	UG/L	2.12
4	65	840	10:36	1	1.138	A BB	65265.	52.528	UG/L	2.22
5	98	1179	14:53	3	0.822	A BB	225208.	50.682	UG/L	2.15
6	95	1649	20:49	3	1.150	A BB	158797.	52.175	UG/L	2.21
7	50	232	2:56	1	0.314	A BB	29410.	55.700	UG/L	2.36
8	62	242	3:03	1	0.328	A BB	41928.	53.067	UG/L	2.25
9	94	276	3:29	1	0.374	A BB	46267.	57.889	UG/L	2.45
10	64	281	3:33	1	0.381	A BB	27433.	61.238	UG/L	2.59
11	96	383	4:50	1	0.519	A BB	69678.	54.630	UG/L	2.31
12	43	393	4:58	1	0.533	A BB	9231.	60.460	UG/L	2.56
13	76	414	5:14	1	0.561	A BB	155511.	51.561	UG/L	2.18
14	84	463	5:51	1	0.627	A BB	72192.	61.361	UG/L	2.60
15	96	513	6:29	1	0.695	A BB	70921.	52.375	UG/L	2.22
16	63	590	7:27	1	0.799	A BB	99965.	51.303	UG/L	2.17
17	96	696	8:47	1	0.943	A BB	77047.	51.677	UG/L	2.19
18	43	702	8:52	1	0.951	A BB	11803.	50.200	UG/L	2.12
19	83	757	9:33	1	1.026	A BB	145455.	50.938	UG/L	2.16
20	97	786	9:55	2	0.852	A BB	140078.	49.188	UG/L	2.08
21	117	815	10:17	2	0.883	A BB	137030.	48.688	UG/L	2.06
22	78	850	10:44	2	0.921	A BB	187457.	48.895	UG/L	2.07
23	62	854	10:47	1	1.157	A BB	82454.	49.402	UG/L	2.09
24	130	966	12:12	2	1.047	A BB	98983.	50.651	UG/L	2.14
25	63	1003	12:40	2	1.087	A BB	66313.	47.633	UG/L	2.02
26	83	1055	13:19	2	1.143	A BB	137650.	47.710	UG/L	2.02
27	43	1165	14:43	3	0.812	A BV	37660.	46.750	UG/L	1.98
28	91	1191	15:02	3	0.831	A BB	258738.	49.521	UG/L	2.10
29	75	1134	14:19	2	1.229	A BB	114274.	47.354	UG/L	2.00
30	75	1233	15:34	2	1.336	A BB	81477.	45.574	UG/L	1.93
31	97	1263	15:57	2	1.368	A BB	69690.	48.767	UG/L	2.06
32	164	1287	16:15	3	0.897	A BB	88871.	51.107	UG/L	2.16
33	43	1313	16:35	3	0.916	A BB	24993.	46.718	UG/L	1.98
34	129	1331	16:48	2	1.442	A BB	128930.	47.200	UG/L	2.00
35	112	1439	18:10	3	1.003	A BB	211921.	52.490	UG/L	2.22
36	106	1462	18:28	3	1.020	A BB	104252.	51.832	UG/L	2.19
37	106	1484	18:44	3	1.035	A BB	257571.	109.737	UG/L	4.65
38	106	1555	19:38	3	1.084	A BB	125874.	53.520	UG/L	2.27
39	104	1558	19:40	3	1.086	A BB	213549.	52.457	UG/L	2.22
40	173	1587	20:02	2	1.719	A BB	73330.	43.613	UG/L	1.85
41	83	1680	21:13	3	1.172	A BB	84798.	42.954	UG/L	1.82
42	96	696	8:47	1	0.943	A*BB	147968.	104.019	UG/L	4.40
43	106	1484	18:44	3	1.035	A*BB	383445.	108.837	UG/L	4.61

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.139	1.00	52.53	200.00	0.375	1.428	0.26
5	14:54	1.00	0.823	1.00	50.68	200.00	0.298	1.175	0.25
6	20:49	1.00	1.150	1.00	52.18	200.00	0.210	0.805	0.26
7	2:54	1.01	0.316	0.99	55.70	200.00	0.169	0.607	0.28
8	3:05	0.99	0.331	0.99	53.07	200.00	0.241	0.908	0.27
9	3:28	1.00	0.377	0.99	57.89	200.00	0.266	0.919	0.29
10	3:34	1.00	0.381	1.00	61.24	200.00	0.158	0.515	0.31
11	4:50	1.00	0.520	1.00	54.63	200.00	0.400	1.466	0.27

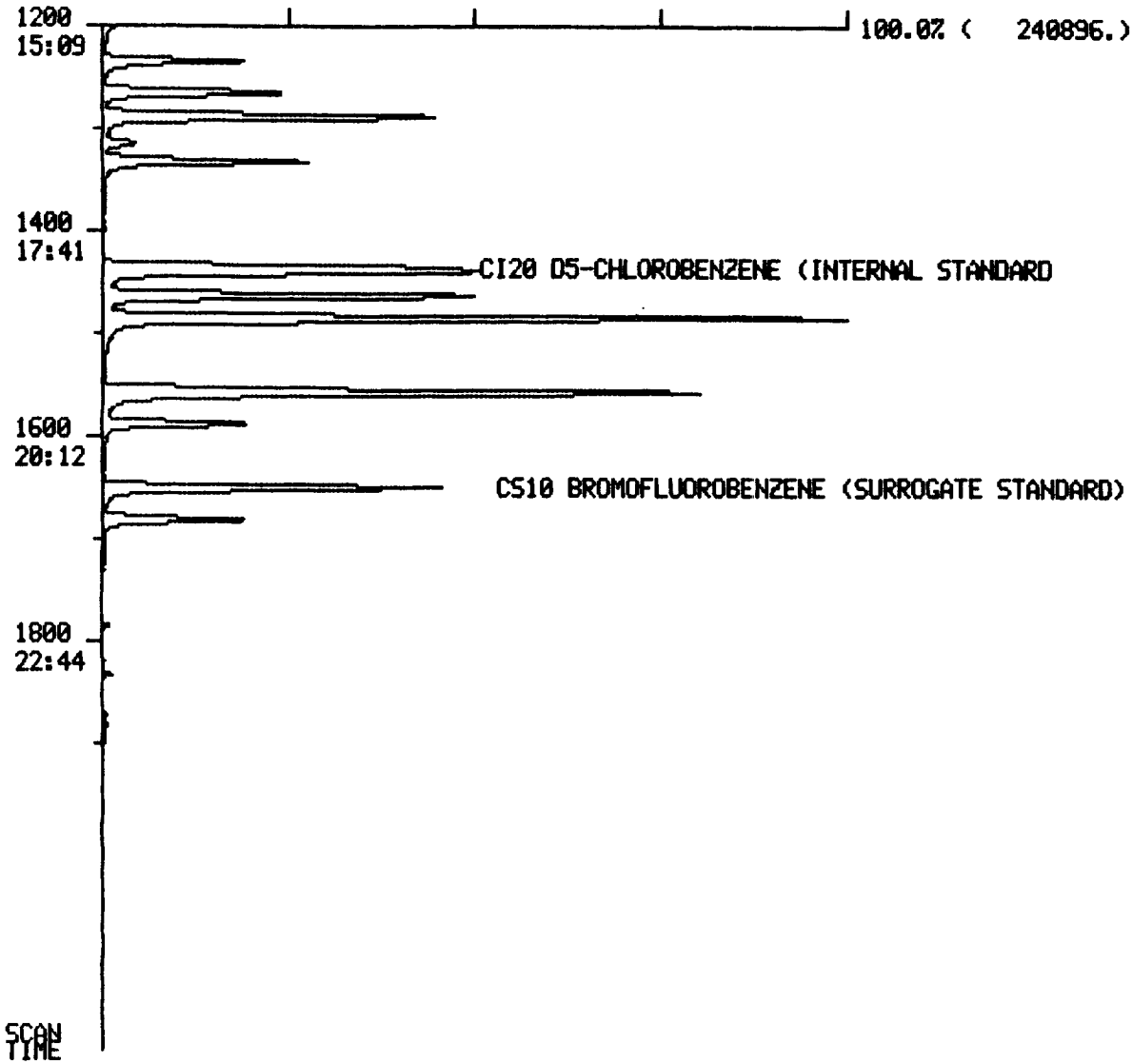
Quantitation Report File: CS910827A51

Data: CS910827A51.TI
08/27/91 11:08:00
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50051
Conds.: DB624,,BF910827A51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: - Analyst: 1523 Acct. No.: RCA

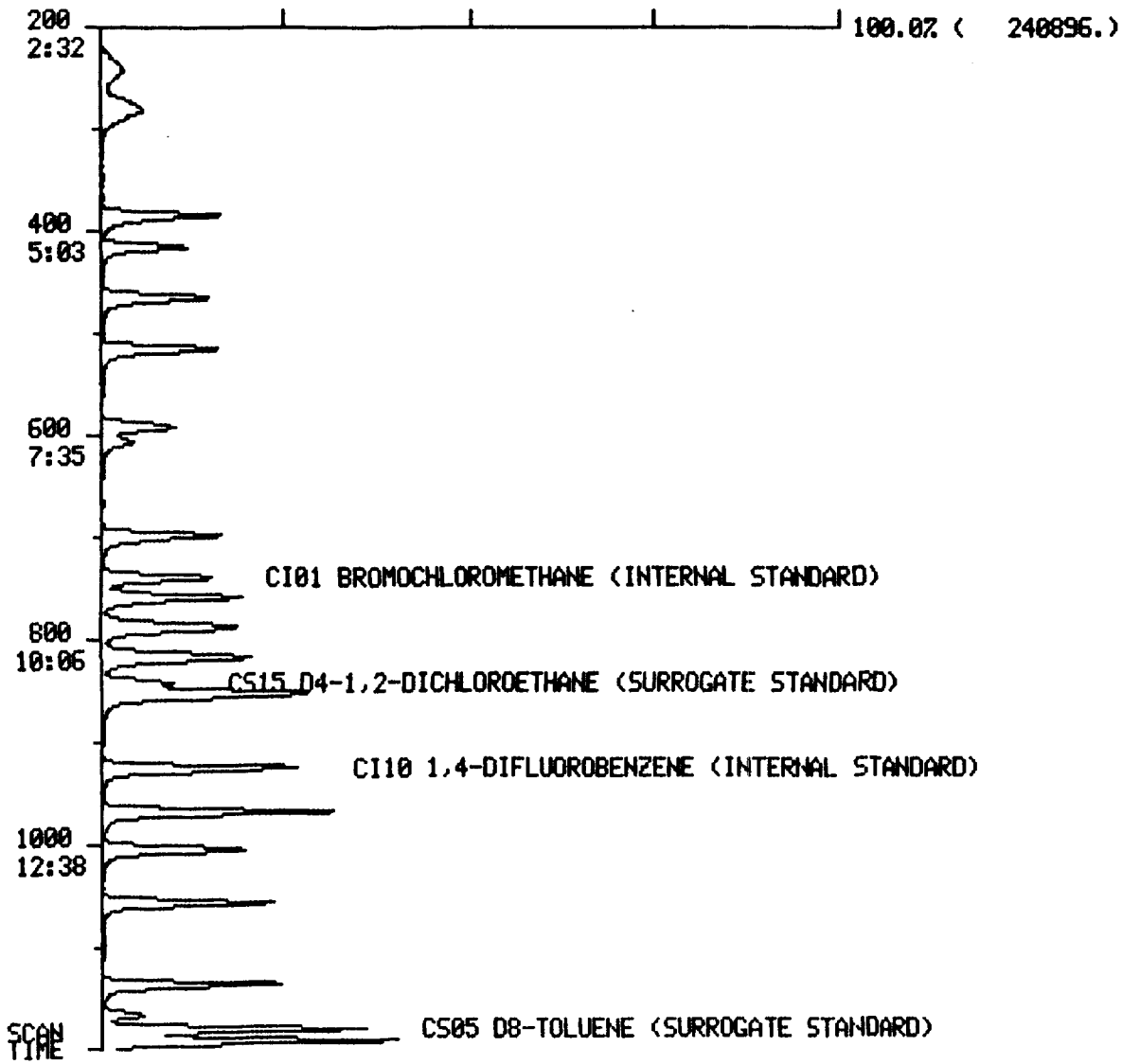
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CS910827A51 SCANS 1200 TO 1900 ACQUIRED: 08/27/91 11:08:00
CALI: CS910827A51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50051
CONDS.: DB624,,BF910827A51



DATA FROM FILE: CS910827A51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 11:08:00
CALI: CS910827A51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,CAL,F50051
CONDS.: DB624,,BF910827A51



7A

VOLATILE CONTINUING CALIBRATION CHECK

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Instrument ID: F50051 Calibration date: 08/27/91 Time: 1108

Lab File ID: CS910827A51 Init. Calib. Date(s): 08/27/91 08/27/91

Heated Purge: (Y/N) N Init. Calib. Times: 0508 0839

GC Column: DB624 ID: 0.530(mm)

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.682	0.676		0.9	
Bromomethane	1.055	1.064	0.100	-0.9	25.0
Vinyl Chloride	0.889	0.964	0.100	-8.4	25.0
Chloroethane	0.693	0.631		8.9	
Methylene Chloride	1.904	1.660		12.8	
Acetone	0.372	0.212		43.0	
Carbon Disulfide	3.545	3.575		-0.8	
1,1-Dichloroethene	1.620	1.602	0.100	1.1	25.0
1,1-Dichloroethane	2.346	2.298	0.200	2.0	25.0
1,2-Dichloroethene (total)	1.747	1.701		2.6	
Chloroform	3.406	3.344	0.200	1.8	25.0
1,2-Dichloroethane	2.046	1.896	0.100	7.3	25.0
2-Butanone	0.396	0.271		31.6	
1,1,1-Trichloroethane	0.690	0.651	0.100	5.7	25.0
Carbon Tetrachloride	0.671	0.637	0.100	5.1	25.0
Bromodichloromethane	0.697	0.640	0.200	8.2	25.0
1,2-Dichloropropane	0.341	0.308		9.7	
cis-1,3-Dichloropropene	0.577	0.531	0.200	8.0	25.0
Trichloroethene	0.500	0.460	0.300	8.0	25.0
Dibromochloromethane	0.690	0.600	0.100	13.0	25.0
1,1,2-Trichloroethane	0.381	0.324	0.100	15.0	25.0
Benzene	0.919	0.872	0.500	5.1	25.0
Trans-1,3-Dichloropropene	0.434	0.379	0.100	12.7	25.0
Bromoform	0.421	0.341	0.100	19.0	25.0
4-Methyl-2-Pentanone	0.272	0.199		26.8	
2-Hexanone	0.182	0.132		27.5	
Tetrachloroethene	0.509	0.470	0.200	7.7	25.0
1,1,2,2-Tetrachloroethane	0.616	0.448	0.500	27.3	25.0
Toluene	1.443	1.368	0.400	5.2	25.0
Chlorobenzene	1.189	1.121	0.500	5.7	25.0
Ethylbenzene	0.574	0.551	0.100	4.0	25.0
Styrene	1.189	1.129	0.300	5.0	25.0
Xylene (total)	0.701	0.666	0.300	5.0	25.0
Toluene-d8	1.196	1.191		0.4	
Bromofluorobenzene	0.860	0.840	0.200	2.3	25.0
1,2-Dichloroethane-d4	1.489	1.501		-0.8	

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 ~~2:31~~ 0457
TIME TUNE EXPIRES ~~4:51~~ 1654

SHIFT(S) (A) ____ (B) ____ (C) ✓
DATE 08-27-91
ANALYSIS TYPE NWSW

PREVENTIVE MAINTENANCE None 1050 ym

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF910827C51	/	08/27/91	2:31	BFB	–	7008	2µl	1050	
2	/	CS910827C51		08/27/91	2:48	VSTD050	–	19	5ml	1050	
3	/	CT910827C51		08/27/91	3:37	VSTD050	–		5ml	1050	
4				/ /	:	start over					
5		BG910827C51	/	08/27/91	4:54	BFB	–	7008	2µl	1050	
6		CU910827C51	/	08/27/91	5:08	VSTD050	–		5ml	1050	start multipoint
7		CV910827C51		08/27/91	6:01	VSTD200	–		5ml	1050	
8		CW910827C51		08/27/91	7:06	VSTD100	–		5ml	1050	
9		CX910827C51	/	08/27/91	7:53	VSTD020	–		5ml	1050	
10		CY910827C51	/	08/27/91	8:39	VSTD010	–		5ml	1050	
11				/ /	:	MY PASS					
12				/ /	:						
13				/ /	:						
14				/ /	:						
15				/ /	:						
16				/ /	:						
17				/ /	:						
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						
				/ /	:						

VERIFIED Jim M. Vanola 8-29-91
SUPERVISOR APPROVAL Ramac 8/27/91
FORMME 10827T51
10827B51 S 9/4/91

63

23861 1 SAMPLE DATA PACKAGE

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.532	1.00	131.69	50.00	0.702	0.267	2.63
13	5:16	0.99	0.564	0.99	190.70	50.00	13.869	3.636	3.81
14	5:53	0.99	0.630	1.00	173.05	50.00	5.410	1.563	3.46
15	6:31	0.99	0.697	1.00	182.05	50.00	6.226	1.710	3.64
16	7:28	0.99	0.800	1.00	191.40	50.00	8.960	2.341	3.83
17	8:50	1.00	0.945	1.00	186.83	50.00	6.856	1.835	3.74
18	8:54	1.00	0.953	1.00	133.83	50.00	1.081	0.404	2.68
19	9:35	1.00	1.026	1.00	190.58	50.00	13.130	3.445	3.81
20	9:57	1.00	0.851	1.00	191.75	50.00	2.649	0.691	3.84
21	10:20	1.00	0.883	1.00	196.24	50.00	2.618	0.667	3.92
22	10:45	1.00	0.920	1.00	191.95	50.00	3.566	0.929	3.84
23	10:48	1.00	1.157	1.00	194.63	50.00	7.675	1.972	3.89
24	12:13	1.00	1.045	1.00	187.33	50.00	1.818	0.485	3.75
25	12:41	1.00	1.085	1.00	192.34	50.00	1.295	0.337	3.85
26	13:20	1.00	1.140	1.00	191.59	50.00	2.683	0.700	3.83
27	14:44	1.00	0.813	1.00	165.96	50.00	0.852	0.257	3.32
28	15:03	1.00	0.831	1.00	191.63	50.00	5.526	1.442	3.83
29	14:20	1.00	1.226	1.00	191.93	50.00	2.244	0.585	3.84
30	15:36	1.00	1.334	1.00	190.74	50.00	1.663	0.436	3.81
31	15:58	1.00	1.366	1.00	171.74	50.00	1.329	0.387	3.43
32	16:16	1.00	0.898	1.00	189.32	50.00	1.839	0.486	3.79
33	16:36	1.00	0.916	1.00	153.20	50.00	0.566	0.185	3.06
34	16:50	1.00	1.440	1.00	182.02	50.00	2.541	0.698	3.64
35	18:11	1.00	1.003	1.00	175.93	50.00	4.270	1.214	3.52
36	18:29	1.00	1.020	1.00	180.88	50.00	2.127	0.588	3.62
37	18:46	1.00	1.036	1.00	341.33	100.00	2.483	0.727	3.41
38	19:39	1.00	1.084	1.00	173.61	50.00	2.488	0.716	3.47
39	19:41	1.00	1.086	1.00	171.25	50.00	4.306	1.257	3.42
40	20:03	1.00	1.715	1.00	187.30	50.00	1.564	0.417	3.75
41	21:13	1.00	1.171	1.00	175.01	50.00	2.088	0.597	3.50
42	8:50	1.00	0.945	1.00	369.05	100.00	6.541	1.772	3.69
43	18:46	1.00	1.036	1.00	343.28	100.00	3.726	1.086	3.43

8-29-91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	738	9:19	1	1.000	A BB	45549.	50.000	UG/L	0.64
2	114	923	11:39	2	1.000	A BB	216690.	50.000	UG/L	0.64
3	117	1433	18:06	3	1.000	A BB	189488.	50.000	UG/L	0.64
4	65	840	10:36	1	1.138	A BB	260234.	189.104	UG/L	2.41
5	98	1179	14:53	3	0.823	A BB	890604.	191.186	UG/L	2.43
6	95	1648	20:48	3	1.150	A BB	610004.	182.075	UG/L	2.32
7	50	233	2:57	1	0.316	A BB	110591.	171.852	UG/L	2.19
8	62	241	3:03	1	0.327	A BB	165487.	203.857	UG/L	2.60
9	94	273	3:27	1	0.370	A BB	167400.	161.747	UG/L	2.06
10	64	280	3:32	1	0.379	A BB	93828.	147.388	UG/L	1.88
11	96	382	4:49	1	0.518	A BB	267142.	176.084	UG/L	2.24
12	43	393	4:58	1	0.533	A BB	31978.	131.689	UG/L	1.68
13	76	413	5:13	1	0.560	A BB	631711.	190.699	UG/L	2.43
14	84	463	5:51	1	0.627	A BB	246417.	173.051	UG/L	2.20
15	96	513	6:29	1	0.695	A BB	283613.	182.049	UG/L	2.32
16	63	589	7:26	1	0.798	A BB	408115.	191.404	UG/L	2.44
17	96	696	8:47	1	0.943	A BB	312274.	186.834	UG/L	2.38
18	43	702	8:52	1	0.951	A BB	49248.	133.832	UG/L	1.70
19	83	757	9:33	1	1.026	A BB	598079.	190.580	UG/L	2.43
20	97	785	9:55	2	0.850	A BB	573938.	191.752	UG/L	2.44
21	117	815	10:17	2	0.883	A BB	567213.	196.243	UG/L	2.50
22	78	850	10:44	2	0.921	A BB	772673.	191.952	UG/L	2.44
23	62	854	10:47	1	1.157	A BB	349577.	194.635	UG/L	2.48
24	130	966	12:12	2	1.047	A BB	393846.	187.325	UG/L	2.39
25	63	1003	12:40	2	1.087	A BB	280576.	192.336	UG/L	2.45
26	83	1054	13:18	2	1.142	A BB	581466.	191.588	UG/L	2.44
27	43	1164	14:42	3	0.812	A BV	161453.	165.957	UG/L	2.11
28	91	1190	15:01	3	0.830	A BB	1047190.	191.632	UG/L	2.44
29	75	1133	14:18	2	1.228	A BB	486343.	191.927	UG/L	2.44
30	75	1232	15:33	2	1.335	A BB	360310.	190.740	UG/L	2.43
31	97	1263	15:57	2	1.368	A BB	288006.	171.744	UG/L	2.19
32	164	1286	16:14	3	0.897	A BB	348519.	189.317	UG/L	2.41
33	43	1313	16:35	3	0.916	A BB	107222.	153.198	UG/L	1.95
34	129	1330	16:48	2	1.441	A BB	550507.	182.016	UG/L	2.32
35	112	1438	18:09	3	1.003	A BB	809197.	175.928	UG/L	2.24
36	106	1461	18:27	3	1.020	A BB	403125.	180.884	UG/L	2.30
37	106	1484	18:44	3	1.036	A BB	940866.	341.332	UG/L	4.35
38	106	1554	19:37	3	1.084	A BB	471382.	173.610	UG/L	2.21
39	104	1557	19:40	3	1.087	A BB	815924.	171.249	UG/L	2.18
40	173	1585	20:01	2	1.717	A BB	338856.	187.297	UG/L	2.38
41	83	1679	21:12	3	1.172	A BB	395671.	175.005	UG/L	2.23
42	96	696	8:47	1	0.943	A*BB	595887.	369.049	UG/L	4.70
43	106	1484	18:44	3	1.036	A*BB	1412250.	343.275	UG/L	4.37

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:21	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:41	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:39	1.00	1.139	1.00	189.10	50.00	5.713	1.511	3.78
5	14:55	1.00	0.823	1.00	191.19	50.00	4.700	1.229	3.82
6	20:50	1.00	1.150	1.00	182.07	50.00	3.219	0.884	3.64
7	2:57	1.00	0.316	1.00	171.85	50.00	2.428	0.706	3.44
8	3:06	0.98	0.331	0.99	203.86	50.00	3.633	0.891	4.08
9	3:31	0.98	0.377	0.98	161.75	50.00	3.675	1.136	3.23
10	3:34	0.99	0.381	1.00	147.39	50.00	2.060	0.699	2.95
11	4:52	0.99	0.520	0.99	176.08	50.00	5.865	1.665	3.52

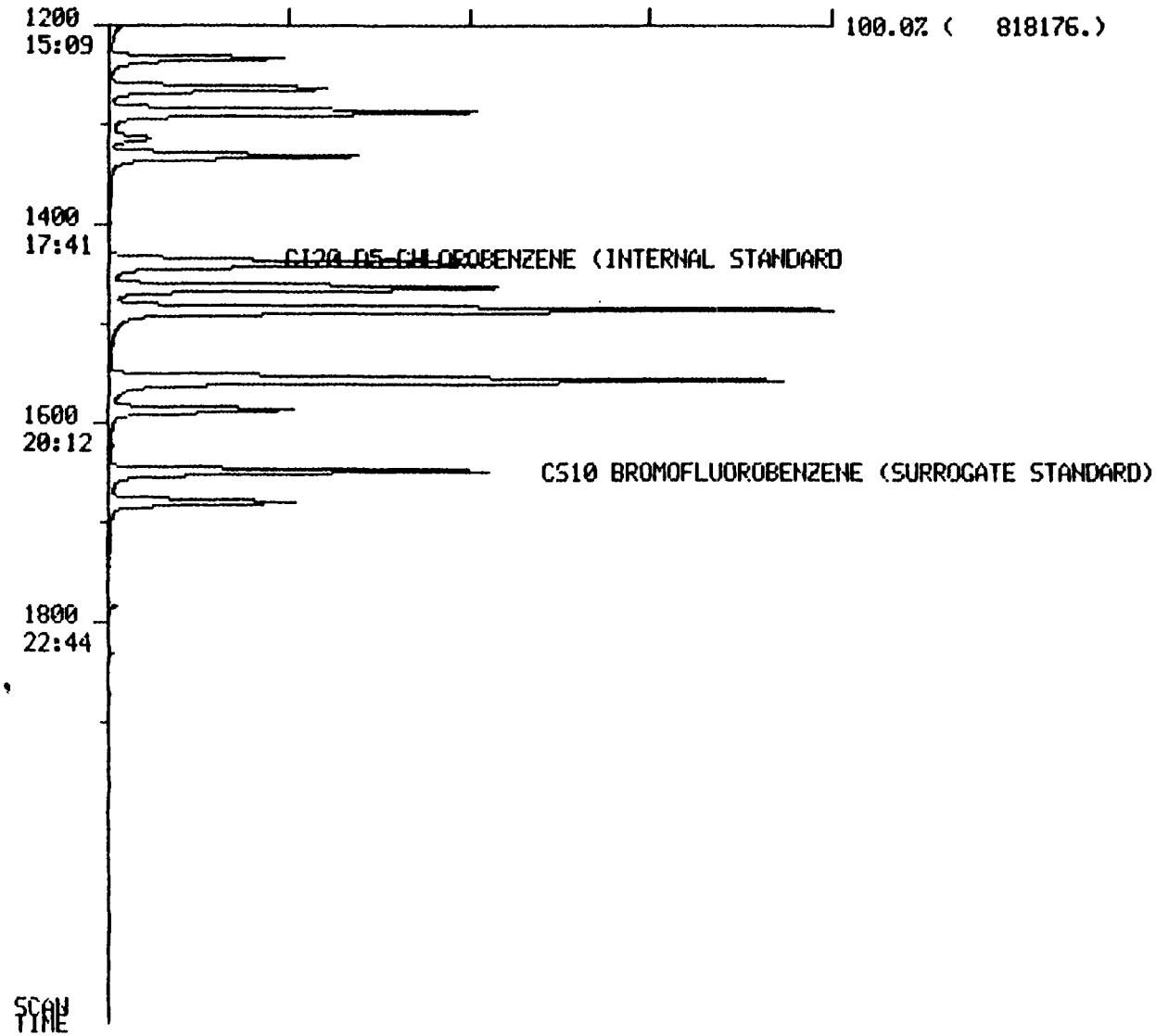
Quantitation Report File: CV910827C51

Data: CV910827C51.TI
08/27/91 6:01:00 IC200 1/8-29
Sample: CLP,STAND,,VSTD200,LOW,WATER,,VOA, ~~IGAL-200~~,F50051
Conds.: DB624,,BG910827C51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 7008 Analyst: 1050 Acct. No.: IHM

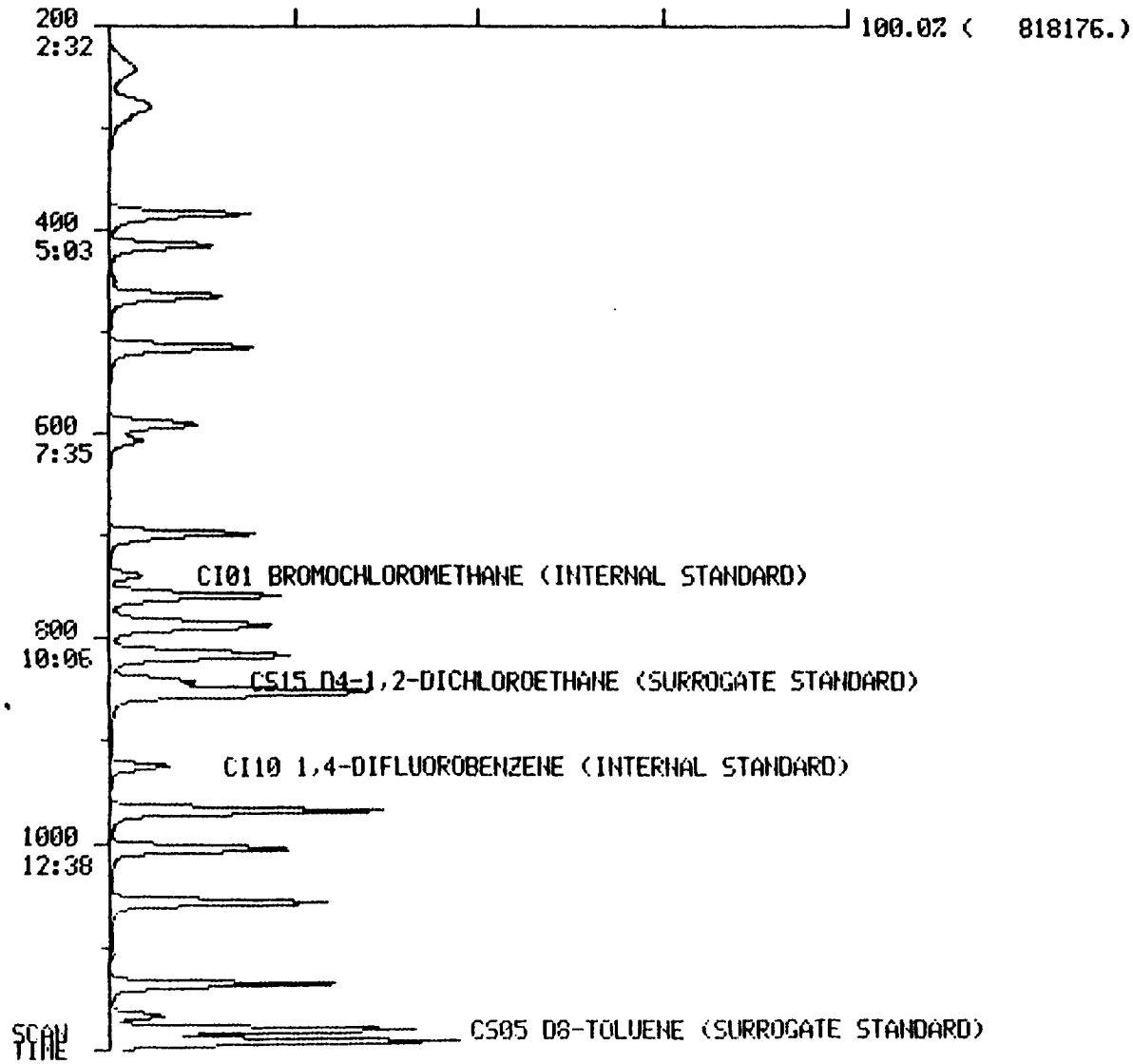
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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	C999 TRANS-1,2-DICHLOROETHEN <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C999 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	C999 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: CV910827C51 SCANS 1200 TO 1900 ACQUIRED: 08/27/91 6:01:00
CALI: CV910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD200,LOW,WATER,,VOA,~~ICAL 200~~,F50051
CONDS.: DB624,,BG910827C51 IC 200 JM 8/30/91



DATA FROM FILE: CV910827C51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 6:01:00
CALI: CV910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD200,LOW,WATER,,VOA,~~ICAL 200~~,F50051
CONDS.: DB624,,BG910827C51 ICAOO 8/30/91



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	0.99	0.532	1.00	91.80	50.00	0.489	0.267	1.84
13	5:16	0.99	0.564	0.99	95.76	50.00	6.964	3.636	1.92
14	5:53	0.99	0.630	1.00	89.54	50.00	2.799	1.563	1.79
15	6:31	0.99	0.697	1.00	89.19	50.00	3.051	1.710	1.78
16	7:28	0.99	0.800	1.00	93.52	50.00	4.378	2.341	1.87
17	8:50	0.99	0.945	1.00	91.04	50.00	3.341	1.835	1.82
18	8:54	1.00	0.953	1.00	85.72	50.00	0.693	0.404	1.71
19	9:35	1.00	1.026	1.00	91.80	50.00	6.324	3.445	1.84
20	9:57	0.99	0.851	1.00	95.14	50.00	1.314	0.691	1.90
21	10:20	1.00	0.883	1.00	95.85	50.00	1.278	0.667	1.92
22	10:45	1.00	0.920	1.00	93.53	50.00	1.738	0.929	1.87
23	10:48	1.00	1.157	1.00	94.26	50.00	3.717	1.972	1.89
24	12:13	1.00	1.045	1.00	96.78	50.00	0.939	0.485	1.94
25	12:41	1.00	1.085	1.00	94.35	50.00	0.635	0.337	1.89
26	13:20	1.00	1.140	1.00	95.63	50.00	1.339	0.700	1.91
27	14:44	1.00	0.813	1.00	104.21	50.00	0.535	0.257	2.08
28	15:03	1.00	0.831	1.00	93.58	50.00	2.699	1.442	1.87
29	14:20	1.00	1.226	1.00	96.70	50.00	1.131	0.585	1.93
30	15:36	1.00	1.334	1.00	99.66	50.00	0.869	0.436	1.99
31	15:58	1.00	1.366	1.00	93.50	50.00	0.724	0.387	1.87
32	16:16	1.00	0.898	1.00	96.95	50.00	0.942	0.486	1.94
33	16:36	1.00	0.916	1.00	98.87	50.00	0.365	0.185	1.98
34	16:50	1.00	1.440	1.00	98.45	50.00	1.374	0.698	1.97
35	18:11	1.00	1.003	1.00	92.45	50.00	2.244	1.214	1.85
36	18:29	1.00	1.020	1.00	92.27	50.00	1.085	0.588	1.85
37	18:46	1.00	1.036	1.00	179.44	100.00	1.305	0.727	1.79
38	19:39	1.00	1.084	1.00	91.11	50.00	1.305	0.716	1.82
39	19:41	1.00	1.086	1.00	89.58	50.00	2.252	1.257	1.79
40	20:03	1.00	1.715	1.00	105.32	50.00	0.879	0.417	2.11
41	21:13	1.00	1.171	1.00	100.10	50.00	1.194	0.597	2.00
42	8:50	0.99	0.945	1.00	180.30	100.00	3.196	1.772	1.80
43	18:46	1.00	1.036	1.00	180.36	100.00	1.958	1.086	1.80

8-29-91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	736	9:18	1	1.000	A BB	48067.	50.000	UG/L	1.23
2	114	922	11:38	2	1.000	A BB	222205.	50.000	UG/L	1.23
3	117	1432	18:05	3	1.000	A BB	199132.	50.000	UG/L	1.23
4	65	839	10:36	1	1.140	A BV	126757.	87.286	UG/L	2.14
5	98	1178	14:52	3	0.823	A BB	435801.	89.023	UG/L	2.18
6	95	1647	20:48	3	1.150	A BB	309651.	87.949	UG/L	2.16
7	50	231	2:55	1	0.314	A BB	48443.	71.335	UG/L	1.75
8	62	241	3:03	1	0.327	A BB	73160.	85.403	UG/L	2.10
9	94	273	3:27	1	0.371	A BB	70723.	64.756	UG/L	1.59
10	64	281	3:33	1	0.382	A BB	44271.	65.900	UG/L	1.62
11	96	381	4:49	1	0.518	A BB	140968.	88.051	UG/L	2.16
12	43	392	4:57	1	0.533	A BB	23523.	91.796	UG/L	2.25
13	76	412	5:12	1	0.560	A BB	334736.	95.756	UG/L	2.35
14	84	462	5:50	1	0.628	A BB	134551.	89.542	UG/L	2.20
15	96	512	6:28	1	0.696	A BB	146629.	89.191	UG/L	2.19
16	63	588	7:25	1	0.799	A BB	210416.	93.515	UG/L	2.29
17	96	695	8:46	1	0.944	A BB	160580.	91.043	UG/L	2.23
18	43	702	8:52	1	0.954	A BB	33287.	85.721	UG/L	2.10
19	83	756	9:33	1	1.027	A BB	303997.	91.796	UG/L	2.25
20	97	784	9:54	2	0.850	A BB	292007.	95.138	UG/L	2.33
21	117	814	10:17	2	0.883	A BB	284076.	95.845	UG/L	2.35
22	78	848	10:42	2	0.920	A BB	386087.	93.534	UG/L	2.29
23	62	852	10:45	1	1.158	A BB	178655.	94.260	UG/L	2.31
24	130	964	12:10	2	1.046	A BB	208664.	96.784	UG/L	2.37
25	63	1002	12:39	2	1.087	A BB	141138.	94.349	UG/L	2.31
26	83	1053	13:18	2	1.142	A BB	297626.	95.632	UG/L	2.35
27	43	1163	14:41	3	0.812	A BB	106543.	104.212	UG/L	2.56
28	91	1189	15:01	3	0.830	A BB	537414.	93.582	UG/L	2.30
29	75	1132	14:18	2	1.228	A BB	251269.	96.698	UG/L	2.37
30	75	1232	15:33	2	1.336	A BB	193058.	99.664	UG/L	2.44
31	97	1262	15:56	2	1.369	A BB	160788.	93.502	UG/L	2.29
32	164	1285	16:13	3	0.897	A BB	187555.	96.947	UG/L	2.38
33	43	1312	16:34	3	0.916	A BB	72722.	98.872	UG/L	2.43
34	129	1329	16:47	2	1.441	A BB	305334.	98.448	UG/L	2.42
35	112	1437	18:09	3	1.003	A BB	446882.	92.452	UG/L	2.27
36	106	1460	18:26	3	1.020	A BB	216105.	92.271	UG/L	2.26
37	106	1482	18:43	3	1.035	A BB	519794.	179.442	UG/L	4.40
38	106	1553	19:36	3	1.084	A BB	259959.	91.106	UG/L	2.23
39	104	1556	19:39	3	1.087	A BB	448514.	89.577	UG/L	2.20
40	173	1584	20:00	2	1.718	A BB	195392.	105.320	UG/L	2.58
41	83	1678	21:11	3	1.172	A BB	237824.	100.095	UG/L	2.46
42	96	695	8:46	1	0.944	A*BB	307209.	180.299	UG/L	4.42
43	106	1482	18:43	3	1.035	A*BB	779753.	180.356	UG/L	4.42

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:21	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:41	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:39	1.00	1.139	1.00	87.29	50.00	2.637	1.511	1.75
5	14:55	1.00	0.823	1.00	89.02	50.00	2.189	1.229	1.78
6	20:50	1.00	1.150	1.00	87.95	50.00	1.555	0.884	1.76
7	2:57	0.99	0.316	0.99	71.34	50.00	1.008	0.706	1.43
8	3:06	0.98	0.331	0.99	85.40	50.00	1.522	0.891	1.71
9	3:31	0.98	0.377	0.98	64.76	50.00	1.471	1.136	1.30
10	3:34	1.00	0.381	1.00	65.90	50.00	0.921	0.699	1.32
11	4:52	0.99	0.520	0.99	88.05	50.00	2.933	1.665	1.76

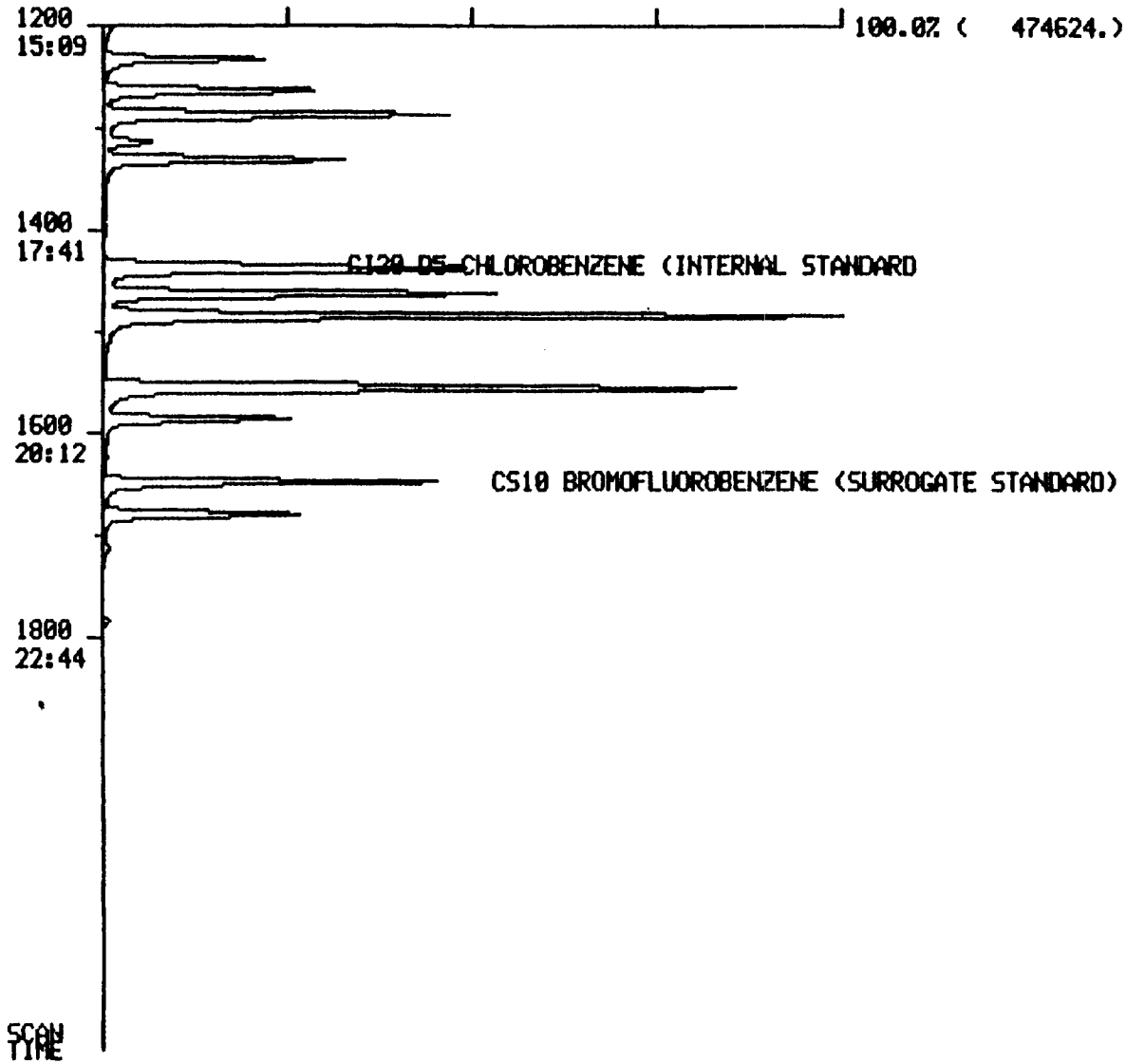
Quantitation Report File: CW910827C51

Data: CW910827C51.TI
08/27/91 7:06:00 IC100 8-29-91
Sample: CLP,STAND,,VSTD100,LOW,WATER,,VOA,~~ICAL100~~,F50051
Conds.: DB624,,BG910827C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

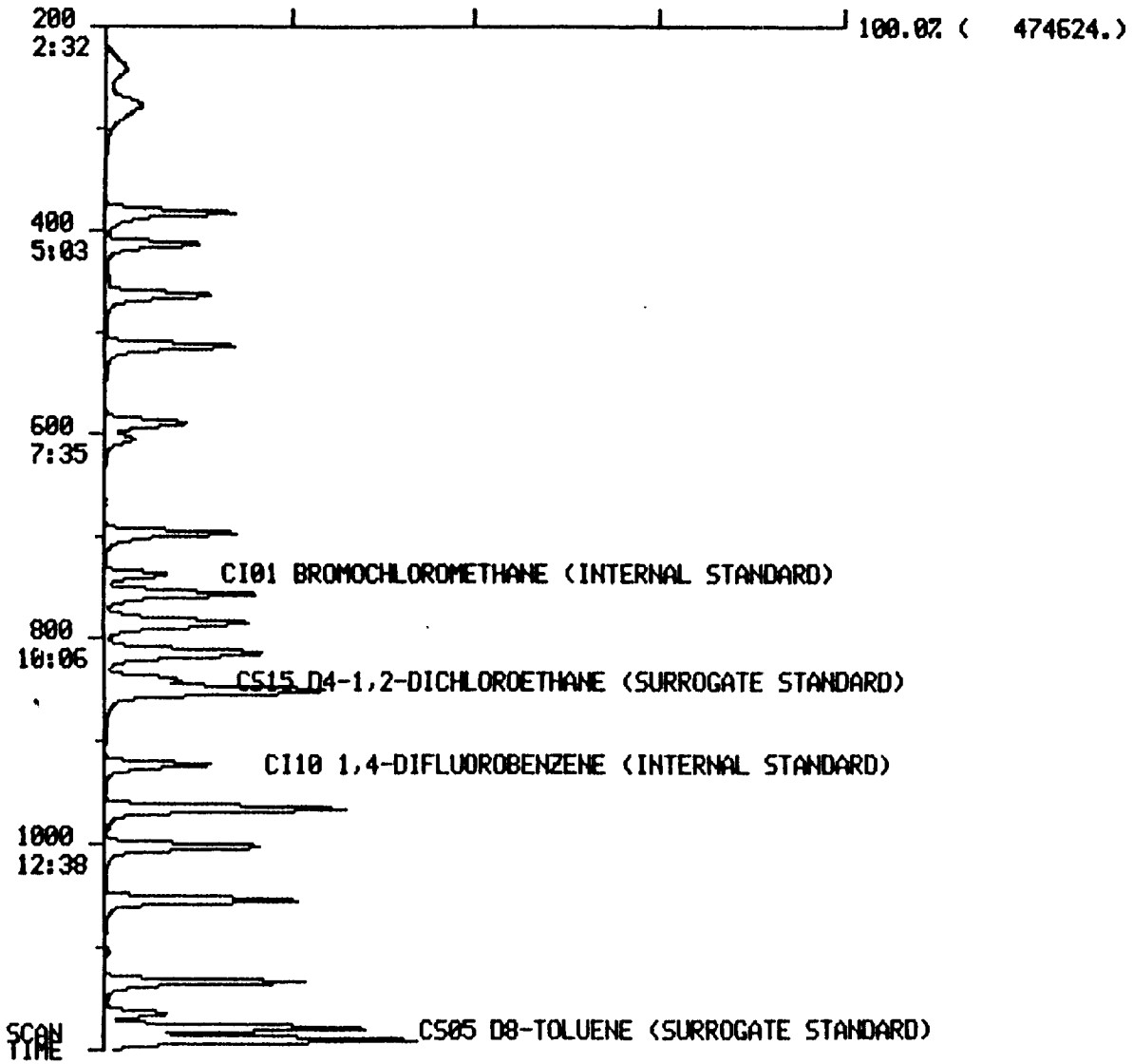
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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	C999 TRANS-1,2-DICHLOROETHEN <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C999 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	C999 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: CW910827C51 SCANS 1200 TO 1800 ACQUIRED: 08/27/91 7:06:00
CALI: CW910827C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD100,LOW,WATER,,VOA,~~ICAL100~~,F50051
CONDS.: DB624,,BG910827C51 IC100 1/8-29-91



DATA FROM FILE: CW910827C51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 7:06:00
CALI: CW910827C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD100,LOW,WATER,,VOA,ICAL100,F50051
CONDS.: DB624,,BG910827C51 IC 100 4/8-29-91



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.532	1.00	66.30	50.00	0.267	0.201	1.33
13	5:14	1.01	0.560	1.01	59.17	50.00	3.636	3.073	1.18
14	5:52	1.00	0.628	1.00	57.77	50.00	1.563	1.353	1.16
15	6:29	1.00	0.696	1.00	57.63	50.00	1.710	1.484	1.15
16	7:27	1.00	0.798	1.00	60.25	50.00	2.341	1.942	1.20
17	8:48	1.00	0.943	1.00	58.97	50.00	1.835	1.556	1.18
18	8:52	1.00	0.950	1.00	83.42	50.00	0.404	0.242	1.67
19	9:34	1.00	1.026	1.00	60.48	50.00	3.445	2.848	1.21
20	9:55	1.00	0.851	1.00	61.22	50.00	0.691	0.564	1.22
21	10:17	1.00	0.882	1.00	59.94	50.00	0.667	0.556	1.20
22	10:44	1.00	0.920	1.00	59.47	50.00	0.929	0.781	1.19
23	10:47	1.00	1.156	1.00	59.24	50.00	1.972	1.664	1.18
24	12:12	1.00	1.045	1.00	58.57	50.00	0.485	0.414	1.17
25	12:40	1.00	1.085	1.00	60.70	50.00	0.337	0.277	1.21
26	13:19	1.00	1.142	1.00	61.34	50.00	0.700	0.571	1.23
27	14:43	1.00	0.812	1.00	71.15	50.00	0.257	0.180	1.42
28	15:02	1.00	0.831	1.00	59.20	50.00	1.442	1.218	1.18
29	14:19	1.00	1.227	1.00	61.06	50.00	0.585	0.479	1.22
30	15:34	1.00	1.334	1.00	62.59	50.00	0.436	0.348	1.25
31	15:57	1.00	1.367	1.00	64.04	50.00	0.387	0.302	1.28
32	16:15	1.00	0.897	1.00	58.13	50.00	0.486	0.418	1.16
33	16:35	1.00	0.916	1.00	68.97	50.00	0.185	0.134	1.38
34	16:48	1.00	1.440	1.00	63.48	50.00	0.698	0.550	1.27
35	18:09	1.00	1.003	1.00	60.68	50.00	1.214	1.000	1.21
36	18:28	1.00	1.020	1.00	60.71	50.00	0.588	0.484	1.21
37	18:44	1.00	1.035	1.00	109.03	100.00	0.727	0.667	1.09
38	19:38	1.00	1.084	1.00	58.57	50.00	0.716	0.612	1.17
39	19:40	1.00	1.086	1.00	60.54	50.00	1.257	1.038	1.21
40	20:01	1.00	1.716	1.00	64.95	50.00	0.417	0.321	1.30
41	21:13	1.00	1.172	1.00	67.46	50.00	0.597	0.442	1.35
42	8:48	1.00	0.943	1.00	116.63	100.00	1.772	1.520	1.17
43	18:44	1.00	1.035	1.00	111.58	100.00	1.086	0.973	1.12

4/8-29-91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	740	9:21	1	1.000	A BB	40603.	50.000 UG/L	1.84
2	114	926	11:41	2	1.000	A BB	190373.	50.000 UG/L	1.84
3	117	1435	18:07	3	1.000	A BB	171617.	50.000 UG/L	1.84
4	65	843	10:39	1	1.139	A BB	61335.	50.877 UG/L	1.87
5	98	1181	14:55	3	0.823	A BB	210949.	50.708 UG/L	1.87
6	95	1650	20:50	3	1.150	A BB	151716.	51.567 UG/L	1.90
7	50	234	2:57	1	0.316	A BB	28682.	58.786 UG/L	2.17
8	62	245	3:06	1	0.331	A BB	36181.	49.540 UG/L	1.82
9	94	279	3:31	1	0.377	A BB	46128.	47.866 UG/L	1.76
10	64	282	3:34	1	0.381	A BB	28373.	52.433 UG/L	1.93
11	96	385	4:52	1	0.520	A BB	67619.	60.063 UG/L	2.21
12	43	394	4:58	1	0.532	A BB	10823.	66.299 UG/L	2.44
13	76	417	5:16	1	0.564	A BB	147644.	59.166 UG/L	2.18
14	84	466	5:53	1	0.630	A BB	63466.	57.773 UG/L	2.13
15	96	516	6:31	1	0.697	A BB	69436.	57.631 UG/L	2.12
16	63	592	7:28	1	0.800	A BB	95034.	60.248 UG/L	2.22
17	96	699	8:50	1	0.945	A BB	74495.	58.965 UG/L	2.17
18	43	705	8:54	1	0.953	A BB	16401.	83.420 UG/L	3.07
19	83	759	9:35	1	1.026	A BB	139871.	60.479 UG/L	2.23
20	97	788	9:57	2	0.851	A BB	131481.	61.220 UG/L	2.25
21	117	818	10:20	2	0.883	A BB	126966.	59.937 UG/L	2.21
22	78	852	10:45	2	0.920	A BB	176823.	59.468 UG/L	2.19
23	62	856	10:48	1	1.157	A BB	80051.	59.238 UG/L	2.18
24	130	968	12:13	2	1.045	A BB	92356.	58.569 UG/L	2.16
25	63	1005	12:41	2	1.085	A BB	64081.	60.697 UG/L	2.24
26	83	1056	13:20	2	1.140	A BB	133319.	61.343 UG/L	2.26
27	43	1167	14:44	3	0.813	A BV	44056.	71.146 UG/L	2.62
28	91	1192	15:03	3	0.831	A BB	247461.	59.203 UG/L	2.18
29	75	1135	14:20	2	1.226	A BB	111312.	61.063 UG/L	2.25
30	75	1235	15:36	2	1.334	A BB	82980.	62.592 UG/L	2.31
31	97	1265	15:58	2	1.366	A BB	73664.	64.044 UG/L	2.36
32	164	1288	16:16	3	0.898	A BB	83365.	58.128 UG/L	2.14
33	43	1315	16:36	3	0.916	A BB	31694.	68.970 UG/L	2.54
34	129	1333	16:50	2	1.440	A BB	132859.	63.479 UG/L	2.34
35	112	1440	18:11	3	1.003	A BB	208290.	60.684 UG/L	2.24
36	106	1464	18:29	3	1.020	A BB	100923.	60.713 UG/L	2.24
37	106	1486	18:46	3	1.036	A BB	249648.	109.034 UG/L	4.02
38	106	1556	19:39	3	1.084	A BB	122956.	58.570 UG/L	2.16
39	104	1559	19:41	3	1.086	A BB	215760.	60.542 UG/L	2.23
40	173	1588	20:03	2	1.715	A BB	79473.	64.946 UG/L	2.39
41	83	1681	21:13	3	1.171	A BB	102384.	67.464 UG/L	2.48
42	96	699	8:50	1	0.945	A*BB	143930.	116.628 UG/L	4.30
43	106	1486	18:46	3	1.036	A*BB	372604.	111.582 UG/L	4.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:20	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.138	1.00	50.88	50.00	1.511	1.485	1.02
5	14:53	1.00	0.822	1.00	50.71	50.00	1.229	1.212	1.01
6	20:49	1.00	1.150	1.00	51.57	50.00	0.884	0.857	1.03
7	2:56	1.01	0.314	1.01	58.79	50.00	0.706	0.601	1.18
8	3:04	1.01	0.329	1.01	49.54	50.00	0.891	0.899	0.99
9	3:29	1.01	0.373	1.01	47.87	50.00	1.136	1.187	0.96
10	3:34	1.00	0.382	1.00	52.43	50.00	0.699	0.666	1.05
11	4:51	1.00	0.520	1.00	60.06	50.00	1.665	1.386	1.20

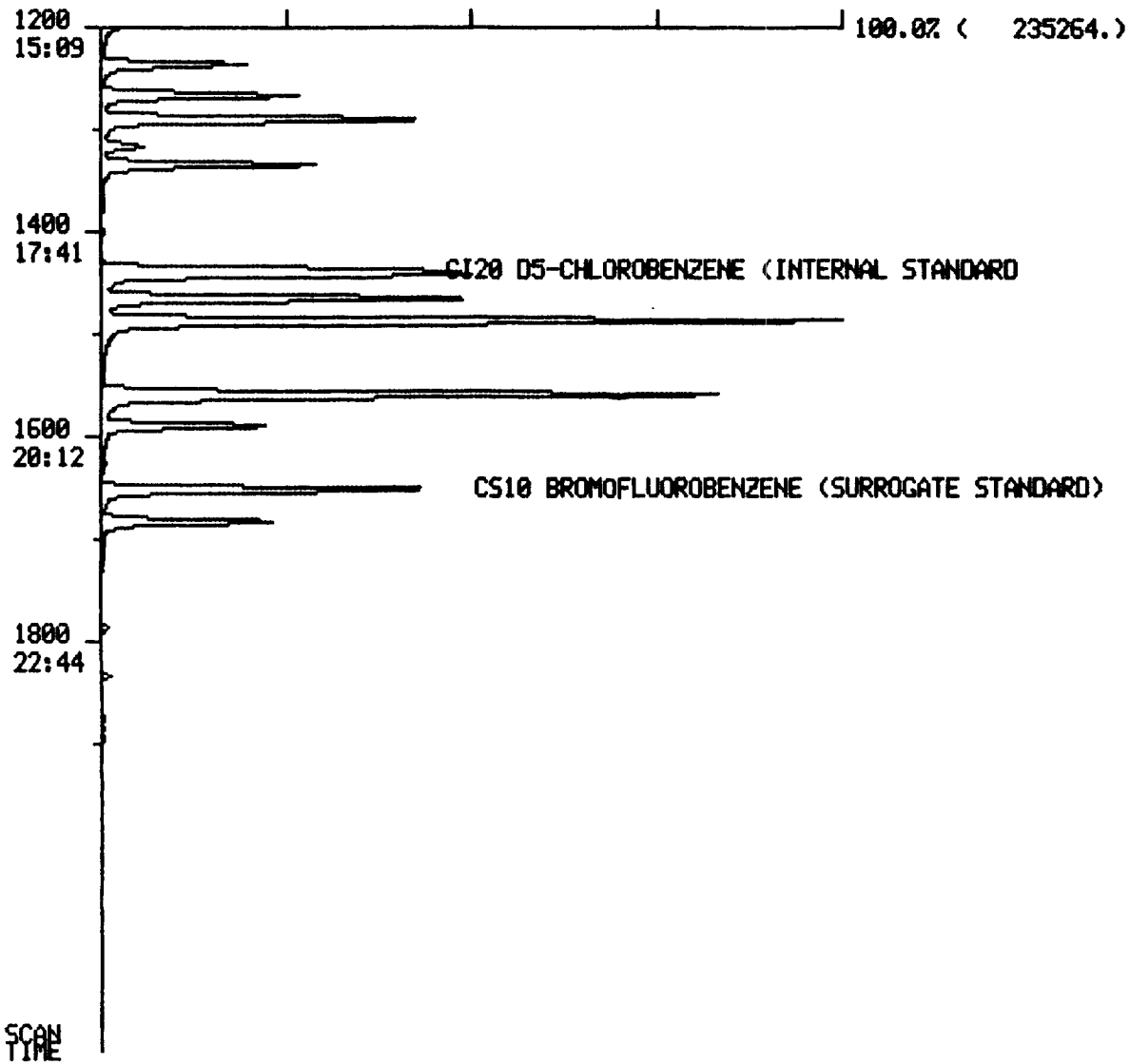
Quantitation Report File: CU910827C51

Data: CU910827C51.TI
08/27/91 5:08:00 ICOTO 4/8-2991
Sample: CLP,STAND,,VSTD050,LOW,WATER,,VOA,~~STAND~~,F50051
Conds.: DB624,,BG910827C51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 7008 Analyst: 1050 Acct. No.: IHM

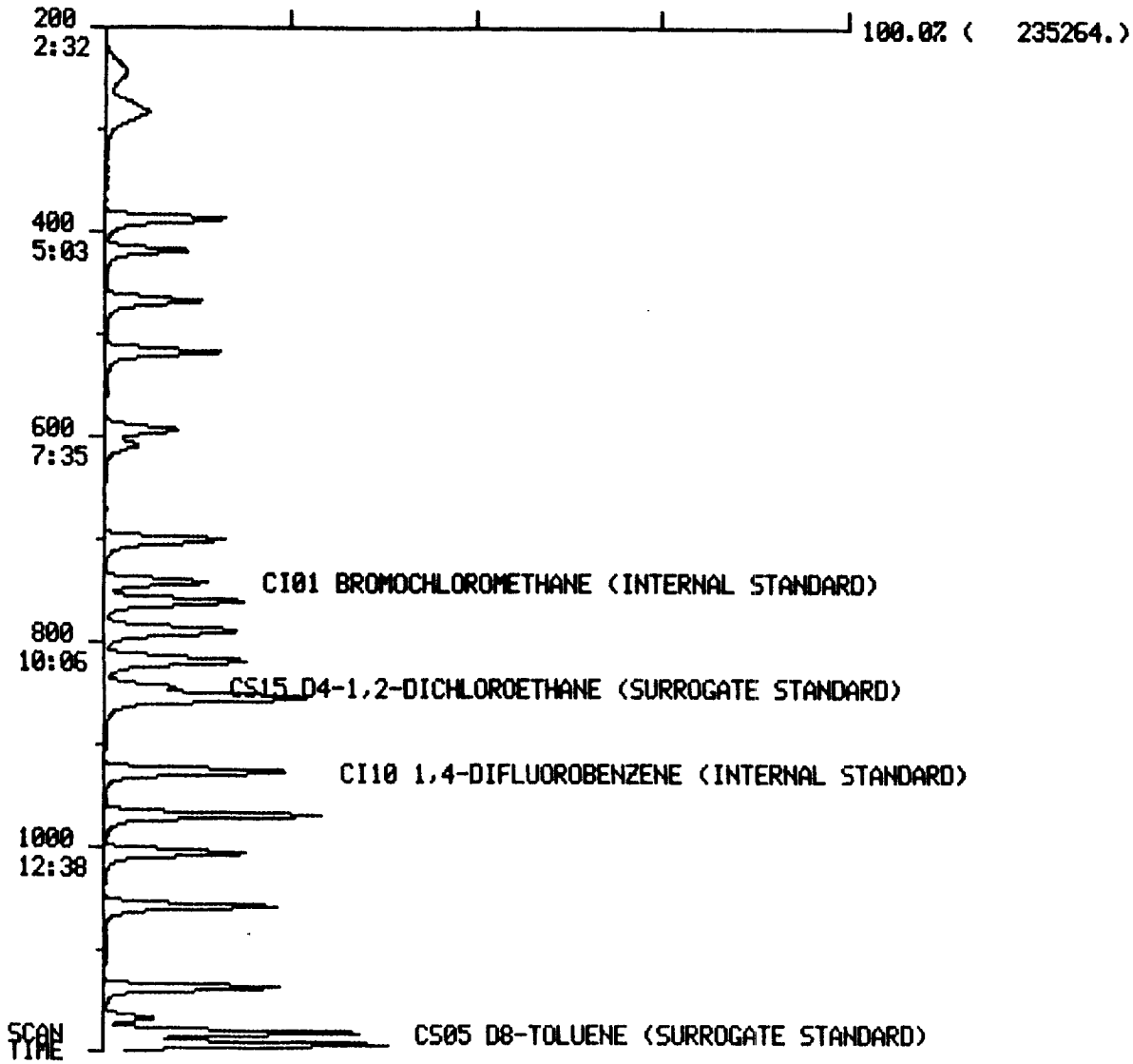
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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	C999 TRANS-1,2-DICHLOROETHEN <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C999 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	C999 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: CU910827C51 SCANS 1200 TO 1900 ACQUIRED: 08/27/91 5:08:00
CALI: CU910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,STAND,F50051
CONDS.: DB624,,BG910827C51 Icoso 1/8-29-91



DATA FROM FILE: CU910827C51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 5:08:00
CALI: CU910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD050,LOW,WATER,,VOA,STAND,F50051
CONDS.: DB624,,BG910827C51 IC050 9/8-29-91



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:57	1.00	0.532	1.00	36.06	50.00	0.192	0.267	0.72
13	5:14	1.00	0.564	0.99	19.31	50.00	1.404	3.636	0.39
14	5:52	1.00	0.630	1.00	28.28	50.00	0.884	1.563	0.57
15	6:29	1.00	0.697	1.00	19.58	50.00	0.670	1.710	0.39
16	7:26	1.00	0.800	1.00	20.24	50.00	0.948	2.341	0.40
17	8:48	1.00	0.945	1.00	20.27	50.00	0.744	1.835	0.41
18	8:52	1.00	0.953	1.00	25.40	50.00	0.205	0.404	0.51
19	9:33	1.00	1.026	1.00	19.87	50.00	1.369	3.445	0.40
20	9:55	1.00	0.851	1.00	19.92	50.00	0.275	0.691	0.40
21	10:18	1.00	0.883	1.00	20.38	50.00	0.272	0.667	0.41
22	10:45	1.00	0.920	1.00	20.27	50.00	0.377	0.929	0.41
23	10:47	1.00	1.157	1.00	21.73	50.00	0.857	1.972	0.43
24	12:12	1.00	1.045	1.00	21.46	50.00	0.208	0.485	0.43
25	12:41	1.00	1.085	1.00	20.41	50.00	0.137	0.337	0.41
26	13:19	1.00	1.140	1.00	19.88	50.00	0.278	0.700	0.40
27	14:43	1.00	0.813	1.00	24.84	50.00	0.128	0.257	0.50
28	15:02	1.00	0.831	1.00	20.61	50.00	0.594	1.442	0.41
29	14:19	1.00	1.226	1.00	19.87	50.00	0.232	0.585	0.40
30	15:34	1.00	1.334	1.00	20.14	50.00	0.176	0.436	0.40
31	15:58	1.00	1.366	1.00	20.65	50.00	0.160	0.387	0.41
32	16:15	1.00	0.898	1.00	22.39	50.00	0.218	0.486	0.45
33	16:35	1.00	0.916	1.00	25.70	50.00	0.095	0.185	0.51
34	16:48	1.00	1.440	1.00	19.81	50.00	0.277	0.698	0.40
35	18:10	1.00	1.003	1.00	20.71	50.00	0.503	1.214	0.41
36	18:28	1.00	1.020	1.00	20.10	50.00	0.236	0.588	0.40
37	18:44	1.00	1.036	1.00	40.54	100.00	0.295	0.727	0.41
38	19:38	1.00	1.084	1.00	20.04	50.00	0.287	0.716	0.40
39	19:40	1.00	1.086	1.00	19.65	50.00	0.494	1.257	0.39
40	20:01	1.00	1.715	1.00	21.14	50.00	0.176	0.417	0.42
41	21:13	1.00	1.171	1.00	23.51	50.00	0.280	0.597	0.47
42	8:48	1.00	0.945	1.00	39.87	100.00	0.707	1.772	0.40
43	18:44	1.00	1.036	1.00	40.39	100.00	0.438	1.086	0.40

4/8-29-91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	739	9:20	1	1.000	A BB	44689.	50.000	UG/L	4.70
2	114	925	11:41	2	1.000	A BB	205838.	50.000	UG/L	4.70
3	117	1434	18:06	3	1.000	A BB	180188.	50.000	UG/L	4.70
4	65	842	10:38	1	1.139	A BB	28170.	20.864	UG/L	1.96
5	98	1180	14:54	3	0.823	A BB	90814.	20.501	UG/L	1.93
6	95	1650	20:50	3	1.151	A BB	63745.	20.009	UG/L	1.88
7	50	232	2:56	1	0.314	A BB	12199.	19.322	UG/L	1.82
8	62	244	3:05	1	0.330	A BB	15652.	19.652	UG/L	1.85
9	94	276	3:29	1	0.373	A BB	19396.	19.101	UG/L	1.80
10	64	282	3:34	1	0.382	A BB	13510.	21.631	UG/L	2.03
11	96	384	4:51	1	0.520	A BB	28154.	18.914	UG/L	1.78
12	43	393	4:58	1	0.532	A BB	8591.	36.059	UG/L	3.39
13	76	414	5:14	1	0.560	A BB	62754.	19.308	UG/L	1.82
14	84	464	5:52	1	0.628	A BB	39508.	28.279	UG/L	2.66
15	96	514	6:29	1	0.696	A BB	29920.	19.575	UG/L	1.84
16	63	590	7:27	1	0.798	A BB	42348.	20.243	UG/L	1.90
17	96	698	8:49	1	0.945	A BB	33236.	20.268	UG/L	1.91
18	43	703	8:53	1	0.951	A BB	9172.	25.405	UG/L	2.39
19	83	758	9:34	1	1.026	A BB	61165.	19.865	UG/L	1.87
20	97	786	9:55	2	0.850	A BB	56634.	19.919	UG/L	1.87
21	117	816	10:18	2	0.882	A BB	55966.	20.384	UG/L	1.92
22	78	851	10:45	2	0.920	A BB	77505.	20.269	UG/L	1.91
23	62	855	10:48	1	1.157	A BB	38292.	21.730	UG/L	2.04
24	130	967	12:13	2	1.045	A BB	42868.	21.464	UG/L	2.02
25	63	1004	12:41	2	1.085	A BB	28284.	20.411	UG/L	1.92
26	83	1056	13:20	2	1.142	A BB	57319.	19.882	UG/L	1.87
27	43	1166	14:43	3	0.813	A BB	22976.	24.836	UG/L	2.34
28	91	1191	15:02	3	0.831	A BB	107105.	20.611	UG/L	1.94
29	75	1135	14:20	2	1.227	A BB	47841.	19.875	UG/L	1.87
30	75	1234	15:35	2	1.334	A BB	36143.	20.142	UG/L	1.89
31	97	1264	15:58	2	1.366	A BB	32896.	20.651	UG/L	1.94
32	164	1287	16:15	3	0.897	A BV	39202.	22.394	UG/L	2.11
33	43	1314	16:35	3	0.916	A BB	17102.	25.696	UG/L	2.42
34	129	1332	16:49	2	1.440	A BB	56926.	19.814	UG/L	1.86
35	112	1439	18:10	3	1.003	A BB	90593.	20.713	UG/L	1.95
36	106	1463	18:28	3	1.020	A BB	42589.	20.096	UG/L	1.89
37	106	1485	18:45	3	1.036	A BB	106255.	40.538	UG/L	3.81
38	106	1555	19:38	3	1.084	A BB	51736.	20.038	UG/L	1.89
39	104	1558	19:40	3	1.086	A BB	89047.	19.654	UG/L	1.85
40	173	1587	20:02	2	1.716	A BB	36327.	21.138	UG/L	1.99
41	83	1681	21:13	3	1.172	A BB	50541.	23.508	UG/L	2.21
42	96	698	8:49	1	0.945	A*BB	63156.	39.867	UG/L	3.75
43	106	1485	18:45	3	1.036	A*BB	157991.	40.385	UG/L	3.80

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.139	1.00	20.86	50.00	0.630	1.511	0.42
5	14:54	1.00	0.823	1.00	20.50	50.00	0.504	1.229	0.41
6	20:49	1.00	1.150	1.00	20.01	50.00	0.354	0.884	0.40
7	2:54	1.01	0.316	0.99	19.32	50.00	0.273	0.706	0.39
8	3:05	1.00	0.331	1.00	19.65	50.00	0.350	0.891	0.39
9	3:28	1.00	0.377	0.99	19.10	50.00	0.434	1.136	0.38
10	3:34	1.00	0.381	1.00	21.63	50.00	0.302	0.699	0.43
11	4:50	1.00	0.520	1.00	18.91	50.00	0.630	1.665	0.38

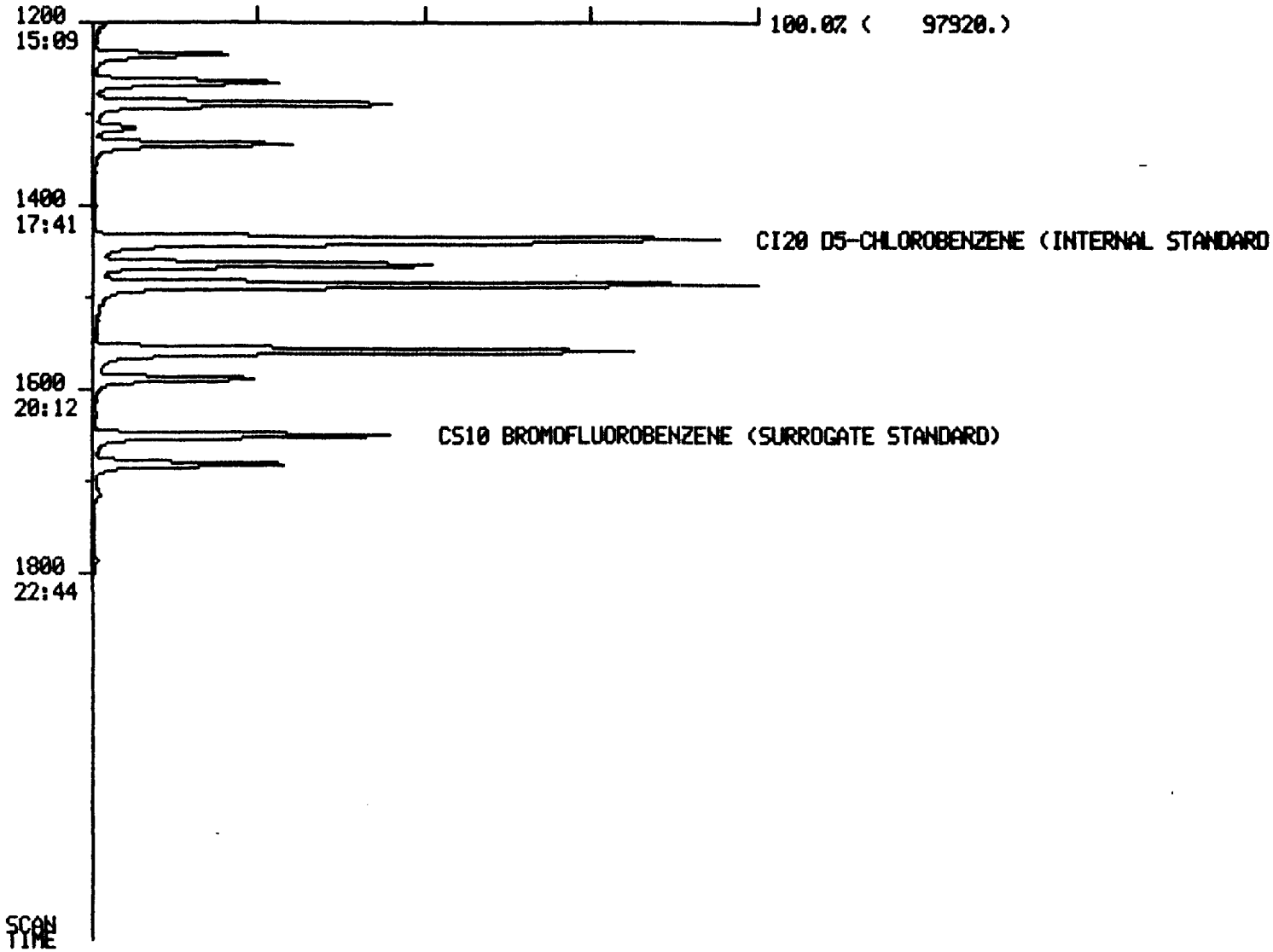
Quantitation Report File: CX910827C51

Data: CX910827C51.TI
08/27/91 7:53:00 IC020 8/28-29-91
Sample: CLP,STAND,,VSTD020,LOW,WATER,,VOA,~~ICAL020~~,F50051
Conds.: DB624,,BG910827C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

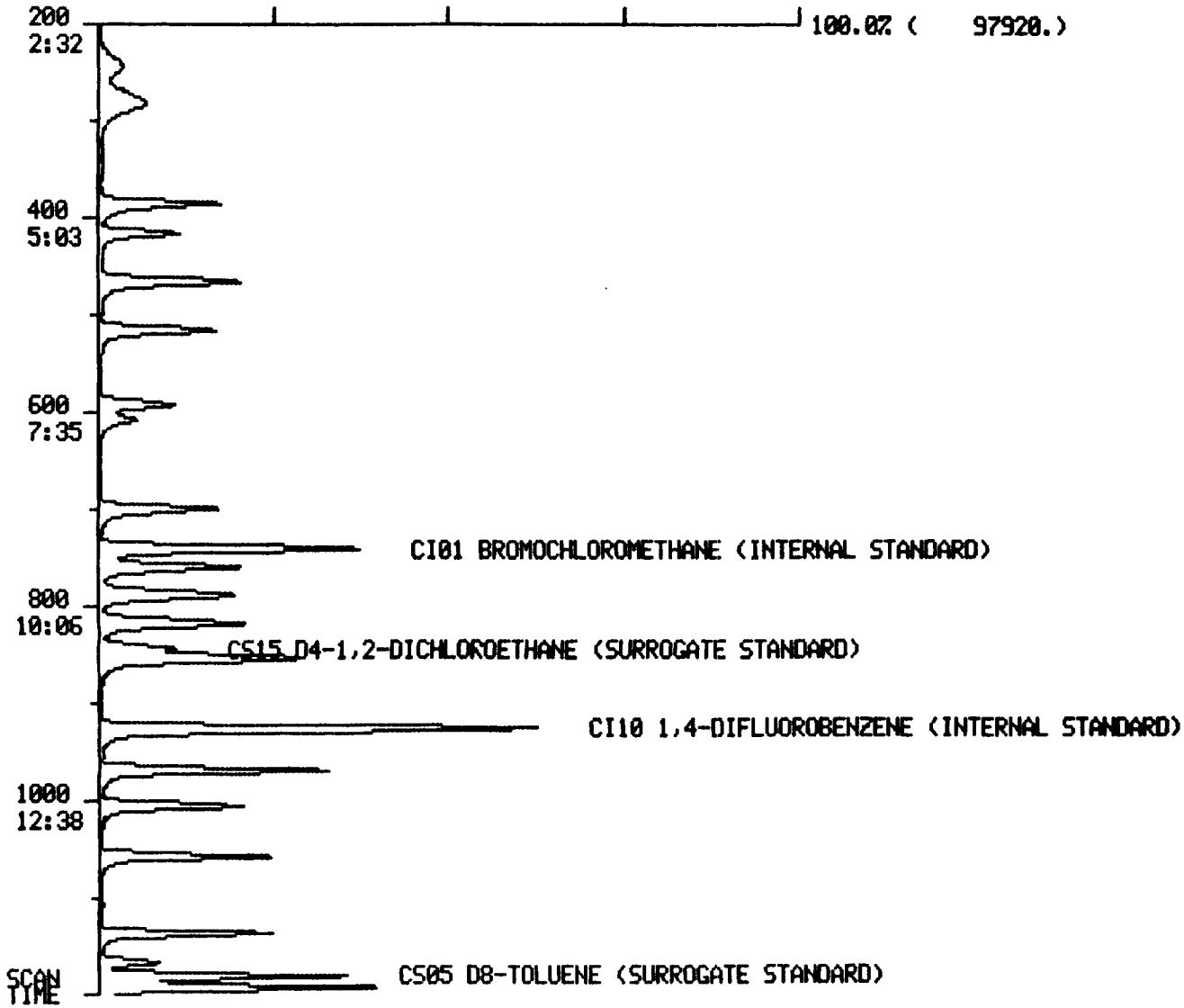
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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	C999 TRANS-1,2-DICHLOROETHEN <156-60-5> C055
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C999 CIS-1,2-DICHLOROETHENE <156-59-2> ~~C057~~ C054
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	C999 M,P-XYLENES <1330-20-7> C094
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: CX910827C51 SCANS 1200 TO 1800 ACQUIRED: 08/27/91 7:53:00
CALI: CX910827C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD020,LOW,WATER,,VOA,ICAL020,F50051
CONDS.: DB624,,BG910827C51 IC020 4/8-29-91



DATA FROM FILE: CX910827C51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 7:53:00
CALI: CX910827C51 #3 OUT OF 200 TO 1800
SAMPLE: CLP,STAND,,VSTD020,LOW,WATER,,VOA,ICAL020,F50051
CONDS.: DB624,,BG910827C51 IC020 4/8-29-91



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:57	1.00	0.532	1.00	25.87	50.00	0.138	0.267	0.52
13	5:14	1.00	0.564	1.00	9.98	50.00	0.726	3.636	0.20
14	5:52	1.00	0.630	1.00	19.15	50.00	0.599	1.563	0.38
15	6:29	1.00	0.697	1.00	10.70	50.00	0.366	1.710	0.21
16	7:26	1.00	0.800	1.00	11.07	50.00	0.518	2.341	0.22
17	8:48	1.00	0.945	1.00	11.44	50.00	0.420	1.835	0.23
18	8:52	1.00	0.953	1.00	11.10	50.00	0.090	0.404	0.22
19	9:33	1.00	1.026	1.00	10.79	50.00	0.744	3.445	0.22
20	9:55	1.00	0.851	1.00	10.89	50.00	0.150	0.691	0.22
21	10:18	1.00	0.883	1.00	10.72	50.00	0.143	0.667	0.21
22	10:45	1.00	0.920	1.00	10.38	50.00	0.193	0.929	0.21
23	10:47	1.00	1.157	1.00	11.86	50.00	0.468	1.972	0.24
24	12:12	1.00	1.045	1.00	11.74	50.00	0.114	0.485	0.23
25	12:41	1.00	1.085	1.00	11.42	50.00	0.077	0.337	0.23
26	13:19	1.00	1.140	1.00	10.66	50.00	0.149	0.700	0.21
27	14:43	1.00	0.813	1.00	11.72	50.00	0.060	0.257	0.23
28	15:02	1.00	0.831	1.00	10.78	50.00	0.311	1.442	0.22
29	14:19	1.00	1.226	1.00	10.17	50.00	0.119	0.585	0.20
30	15:34	1.00	1.334	1.00	10.25	50.00	0.089	0.436	0.20
31	15:58	1.00	1.366	1.00	11.02	50.00	0.085	0.387	0.22
32	16:15	1.00	0.898	1.00	12.05	50.00	0.117	0.486	0.24
33	16:35	1.00	0.916	1.00	8.99	50.00	0.033	0.185	0.18
34	16:48	1.00	1.440	1.00	10.57	50.00	0.147	0.698	0.21
35	18:10	1.00	1.003	1.00	10.58	50.00	0.257	1.214	0.21
36	18:28	1.00	1.020	1.00	10.46	50.00	0.123	0.588	0.21
37	18:44	1.00	1.036	1.00	10.52	100.00	0.077	0.727	0.11
38	19:38	1.00	1.084	1.00	11.14	50.00	0.160	0.716	0.22
39	19:40	1.00	1.086	1.00	9.94	50.00	0.250	1.257	0.20
40	20:01	1.00	1.715	1.00	10.00	50.00	0.084	0.417	0.20
41	21:13	1.00	1.171	1.00	11.15	50.00	0.133	0.597	0.22
42	8:48	1.00	0.945	1.00	22.18	100.00	0.393	1.772	0.22
43	18:44	1.00	1.036	1.00	14.40	100.00	0.156	1.086	0.14

4/8-29

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	739	9:20	1	1.000	A BB	44252.	50.000	UG/L	7.96
2	114	924	11:40	2	1.000	A BB	211907.	50.000	UG/L	7.96
3	117	1434	18:06	3	1.000	A BB	184961.	50.000	UG/L	7.96
4	65	842	10:38	1	1.139	A BV	14239.	10.650	UG/L	1.70
5	98	1179	14:53	3	0.822	A BB	45140.	9.927	UG/L	1.58
6	95	1649	20:49	3	1.150	A BB	35027.	10.711	UG/L	1.71
7	50	234	2:57	1	0.317	A BB	8054.	12.882	UG/L	2.05
8	62	242	3:03	1	0.327	A BB	8944.	11.341	UG/L	1.81
9	94	275	3:28	1	0.372	A BB	12363.	12.296	UG/L	1.96
10	64	284	3:35	1	0.384	A BB	9137.	14.773	UG/L	2.35
11	96	384	4:51	1	0.520	A BB	17043.	11.563	UG/L	1.84
12	43	393	4:58	1	0.532	A BB	6104.	25.874	UG/L	4.12
13	76	415	5:14	1	0.562	A BB	32130.	9.984	UG/L	1.59
14	84	465	5:52	1	0.629	A BB	26497.	19.153	UG/L	3.05
15	96	515	6:30	1	0.697	A BB	16202.	10.705	UG/L	1.70
16	63	590	7:27	1	0.798	A BB	22931.	11.070	UG/L	1.76
17	96	697	8:48	1	0.943	A BB	18584.	11.445	UG/L	1.82
18	43	703	8:53	1	0.951	A BV	3970.	11.105	UG/L	1.77
19	83	758	9:34	1	1.026	A BB	32902.	10.792	UG/L	1.72
20	97	787	9:56	2	0.852	A BB	31890.	10.895	UG/L	1.74
21	117	816	10:18	2	0.883	A BB	30302.	10.721	UG/L	1.71
22	78	851	10:45	2	0.921	A BB	40862.	10.380	UG/L	1.65
23	62	854	10:47	1	1.156	A BB	20690.	11.857	UG/L	1.89
24	130	966	12:12	2	1.045	A BB	24128.	11.735	UG/L	1.87
25	63	1003	12:40	2	1.085	A BB	16293.	11.421	UG/L	1.82
26	83	1055	13:19	2	1.142	A BB	31639.	10.660	UG/L	1.70
27	43	1165	14:43	3	0.812	A BB	11129.	11.719	UG/L	1.87
28	91	1191	15:02	3	0.831	A BB	57481.	10.776	UG/L	1.72
29	75	1134	14:19	2	1.227	A BB	25214.	10.175	UG/L	1.62
30	75	1233	15:34	2	1.334	A BB	18931.	10.248	UG/L	1.63
31	97	1264	15:58	2	1.368	A BB	18073.	11.021	UG/L	1.76
32	164	1287	16:15	3	0.897	A BB	21654.	12.050	UG/L	1.92
33	43	1313	16:35	3	0.916	A BB	6144.	8.993	UG/L	1.43
34	129	1331	16:48	2	1.440	A BB	31255.	10.567	UG/L	1.68
35	112	1438	18:09	3	1.003	A BB	47486.	10.577	UG/L	1.68
36	106	1462	18:28	3	1.020	A BB	22756.	10.461	UG/L	1.67
37	106	1484	18:44	3	1.035	A BB	28302.	10.519	UG/L	1.68
38	106	1554	19:37	3	1.084	A BB	29518.	11.138	UG/L	1.77
39	104	1558	19:40	3	1.086	A BB	46225.	9.939	UG/L	1.58
40	173	1586	20:01	2	1.716	A BB	17696.	10.002	UG/L	1.59
41	83	1680	21:13	3	1.172	A BB	24598.	11.146	UG/L	1.78
42	96	697	8:48	1	0.943	A*BB	34786.	22.175	UG/L	3.53
43	106	1484	18:44	3	1.035	A*BB	57820.	14.398	UG/L	2.29

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.139	1.00	10.65	50.00	0.322	1.511	0.21
5	14:54	1.00	0.823	1.00	9.93	50.00	0.244	1.229	0.20
6	20:49	1.00	1.150	1.00	10.71	50.00	0.189	0.884	0.21
7	2:54	1.02	0.316	1.00	12.88	50.00	0.182	0.706	0.26
8	3:05	0.99	0.331	0.99	11.34	50.00	0.202	0.891	0.23
9	3:28	1.00	0.377	0.99	12.30	50.00	0.279	1.136	0.25
10	3:34	1.01	0.381	1.01	14.77	50.00	0.206	0.699	0.30
11	4:50	1.00	0.520	1.00	11.56	50.00	0.385	1.665	0.23

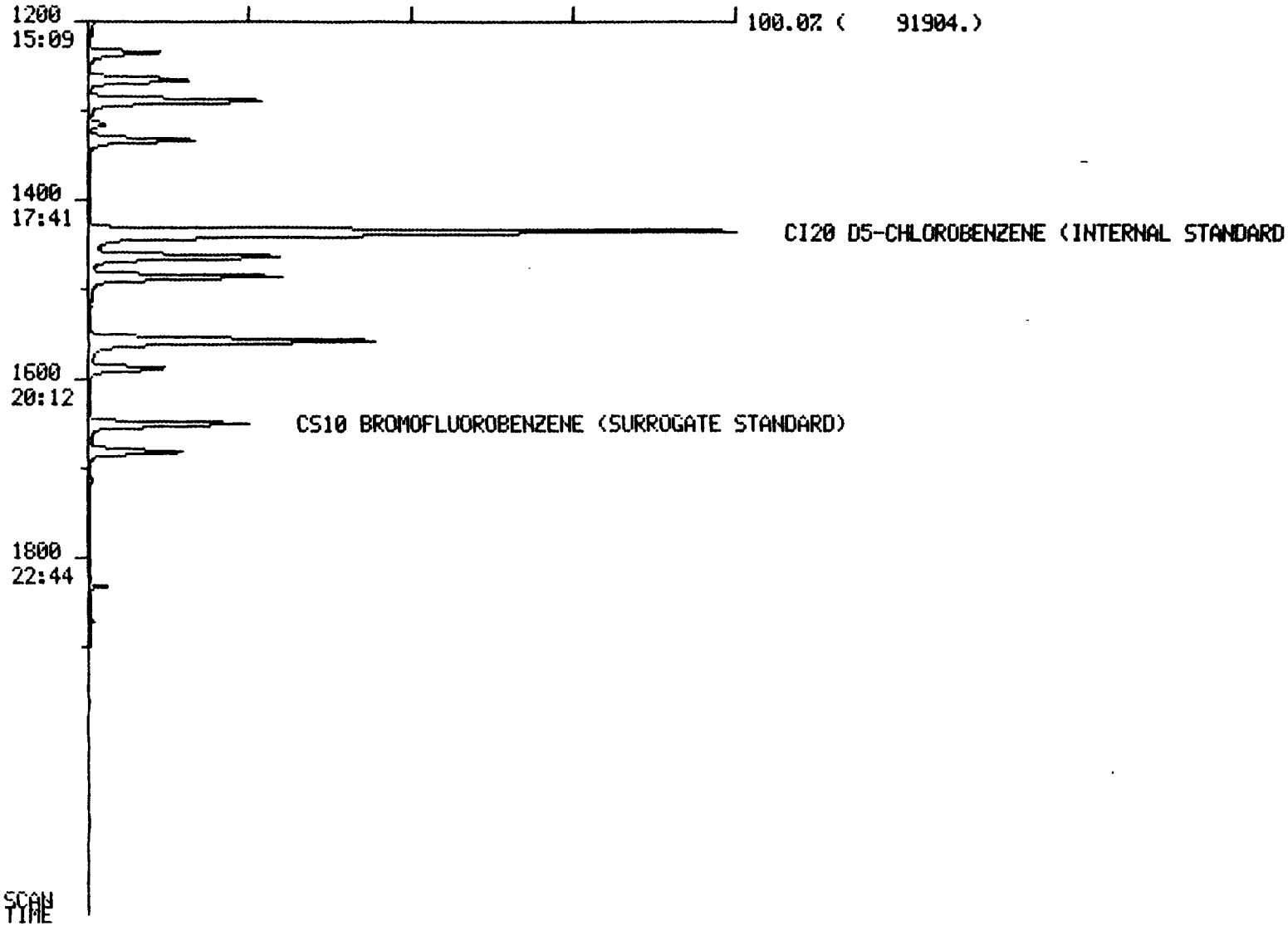
Quantitation Report File: CY910827C51

Data: CY910827C51.TI
08/27/91 8:39:00 ICC010 4/8-29-91
Sample: CLP,STAND,,VSTD010,LOW,WATER,,VOA,~~ICALC~~10,F50051
Conds.: DB624,,BG910827C51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

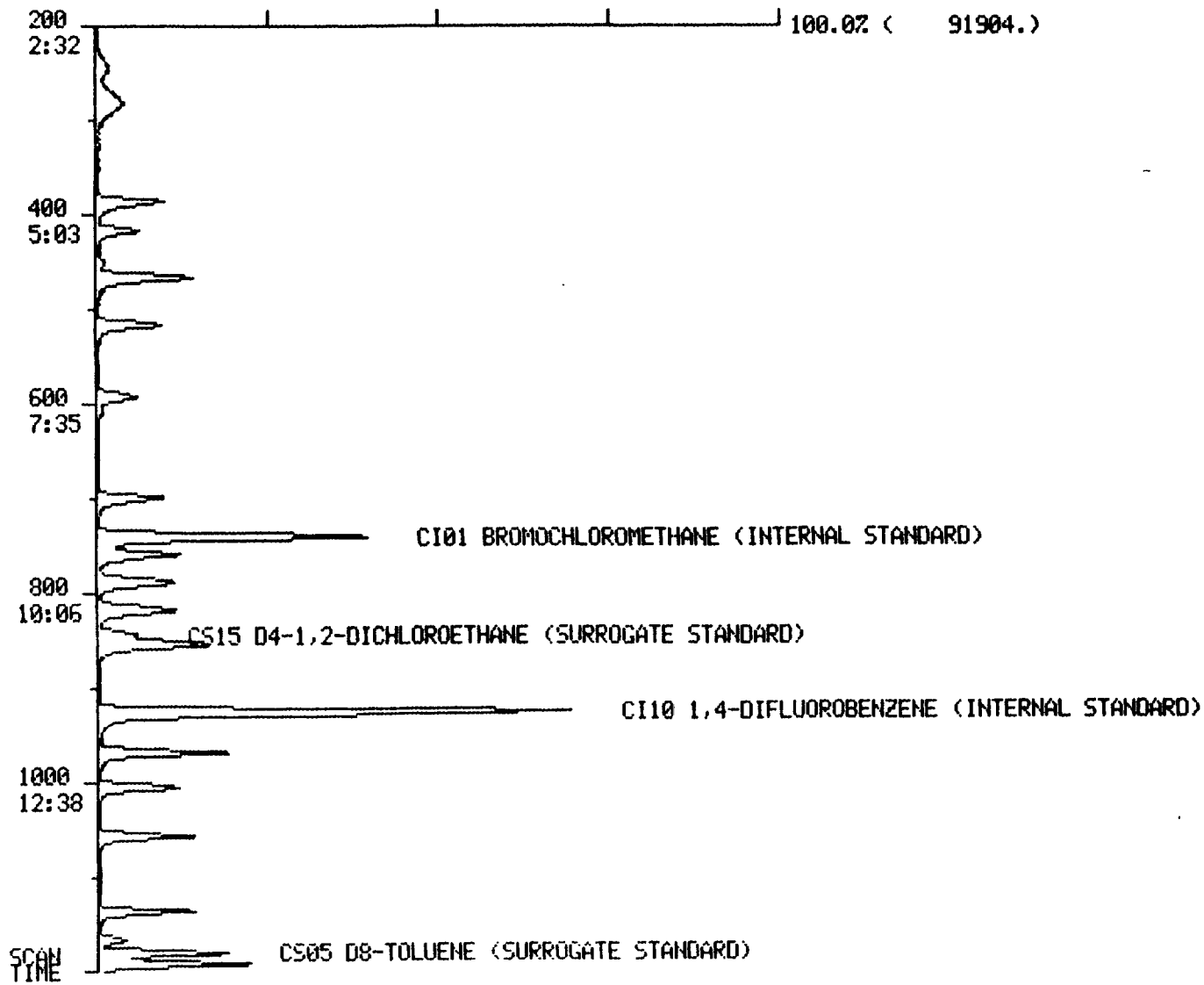
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry·

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	C999 TRANS-1,2-DICHLOROETHEN <156-60-5>
16	C050 1,1 DICHLOROETHANE <75-34-3>
17	C999 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	C999 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: CY910827C51 SCANS 1200 TO 1900 ACQUIRED: 08/27/91 8:39:00
CALI: CY910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD010,LOW,WATER,,VOA,~~ICAL010~~,F50051,
CONDS.: DB624,,BG910827C51 ICO10 JWC 8/30/91



DATA FROM FILE: CY910827C51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 8:39:00
CALI: CY910827C51 #3 OUT OF 200 TO 1900
SAMPLE: CLP,STAND,,VSTD010,LOW,WATER,,VOA,~~ICAL010,~~F50051
CONDS.: DB624,,BG910827C51 ICO10 JM 8/30/91



6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Instrument ID: F50051 Calibration Date(s): 08/27/91 08/27/91

Heated Purge: (Y/N): N Calibration Times: 0508 0839

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

LAB FILE ID: RRF10 = CY910827C51 RRF20 = CX910827C51
RRF50= CU910827C51 RRF100= CW910827C51 RRF200= CV910827C51

COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	$\overline{RRF}$	% RSD
Chloromethane	0.910	0.682	0.706	0.504	0.607	0.682	22.0
Bromomethane *	1.397	1.085	1.136	0.736	0.919	1.055	23.4*
Vinyl Chloride *	1.011	0.876	0.891	0.761	0.908	0.889	10.0*
Chloroethane	1.032	0.756	0.699	0.461	0.515	0.693	32.6
Methylene Chloride	2.994	2.210	1.563	1.400	1.352	1.904	36.7
Acetone	0.690	0.481	0.267	0.245	0.176	0.372	56.8
Carbon Disulfide	3.630	3.511	3.636	3.482	3.467	3.545	2.3
1,1-Dichloroethene *	1.926	1.575	1.665	1.466	1.466	1.620	11.8*
1,1-Dichloroethane *	2.591	2.369	2.341	2.189	2.240	2.346	6.6*
1,2-Dichloroethene (total)	1.965	1.767	1.772	1.598	1.635	1.747	8.3
Chloroform *	3.718	3.422	3.445	3.162	3.283	3.406	6.1*
1,2-Dichloroethane *	2.338	2.142	1.972	1.858	1.919	2.046	9.5*
2-Butanone	0.449	0.513	0.404	0.346	0.270	0.396	23.6
1,1,1-Trichloroethane *	0.752	0.688	0.691	0.657	0.662	0.690	5.5*
Carbon Tetrachloride *	0.715	0.680	0.667	0.639	0.654	0.671	4.3*
Bromodichloromethane *	0.747	0.696	0.700	0.670	0.671	0.697	4.5*
1,2-Dichloropropane	0.384	0.344	0.337	0.318	0.324	0.341	7.6
cis-1,3-Dichloropropene *	0.595	0.581	0.585	0.565	0.561	0.577	2.5*
Trichloroethene *	0.569	0.521	0.485	0.470	0.454	0.500	9.2*
Dibromochloromethane *	0.737	0.691	0.698	0.687	0.635	0.690	5.3*
1,1,2-Trichloroethane *	0.426	0.400	0.387	0.362	0.332	0.381	9.4*
Benzene *	0.964	0.941	0.929	0.869	0.891	0.919	4.2*
Trans-1,3-Dichloropropene *	0.447	0.439	0.436	0.434	0.416	0.434	2.6*
Bromoform *	0.418	0.441	0.417	0.440	0.391	0.421	4.9*
4-Methyl-2-Pentanone	0.301	0.319	0.257	0.268	0.213	0.272	15.1
2-Hexanone	0.166	0.237	0.185	0.183	0.141	0.182	19.4
Tetrachloroethene *	0.585	0.544	0.486	0.471	0.460	0.509	10.5*
1,1,2,2-Tetrachloroethane *	0.665	0.701	0.597	0.597	0.522	0.616	11.2*
Toluene *	1.554	1.486	1.442	1.349	1.382	1.443	5.7*
Chlorobenzene *	1.284	1.257	1.214	1.122	1.068	1.189	7.7*
Ethylbenzene *	0.615	0.591	0.588	0.543	0.532	0.574	6.1*
Styrene *	1.250	1.235	1.257	1.126	1.076	1.189	6.9*
Xylene (total) *	0.798	0.718	0.716	0.653	0.622	0.701	9.7*
Toluene-d8	1.220	1.260	1.229	1.094	1.175	1.196	5.4
Bromofluorobenzene *	0.947	0.884	0.884	0.778	0.805	0.860	7.9*
1,2-Dichloroethane-d4	1.609	1.576	1.511	1.319	1.428	1.489	7.9

* 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.

LAB INSTRUCTIONS PPS#_____

VOA J( ) J3( ) D( ) (:1)
GC/MS WORKSHEET
J2( ) J4( ) D2( ) (:1)

==========

CLP, 23861, 1, PS4, LOW, WATER, 439019, VOA, EPA, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039019C51

ANALYST(S): INJECTION LOSO/Moelmus WORKUP LOSO/Moelmus

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE ok

DISPOSITION: [X] COMPLETE

POSTED

EXTRANEOUS PEAKS SEARCH RESULTS: [ ] REINJECT NEAT
OF PEAKS FOUND : 0 [ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

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

GC/MS REVIEW WK DATE 8/28/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: ____

FINAL REPORTABLE PACKAGE(S): CN039019C51 / _____

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

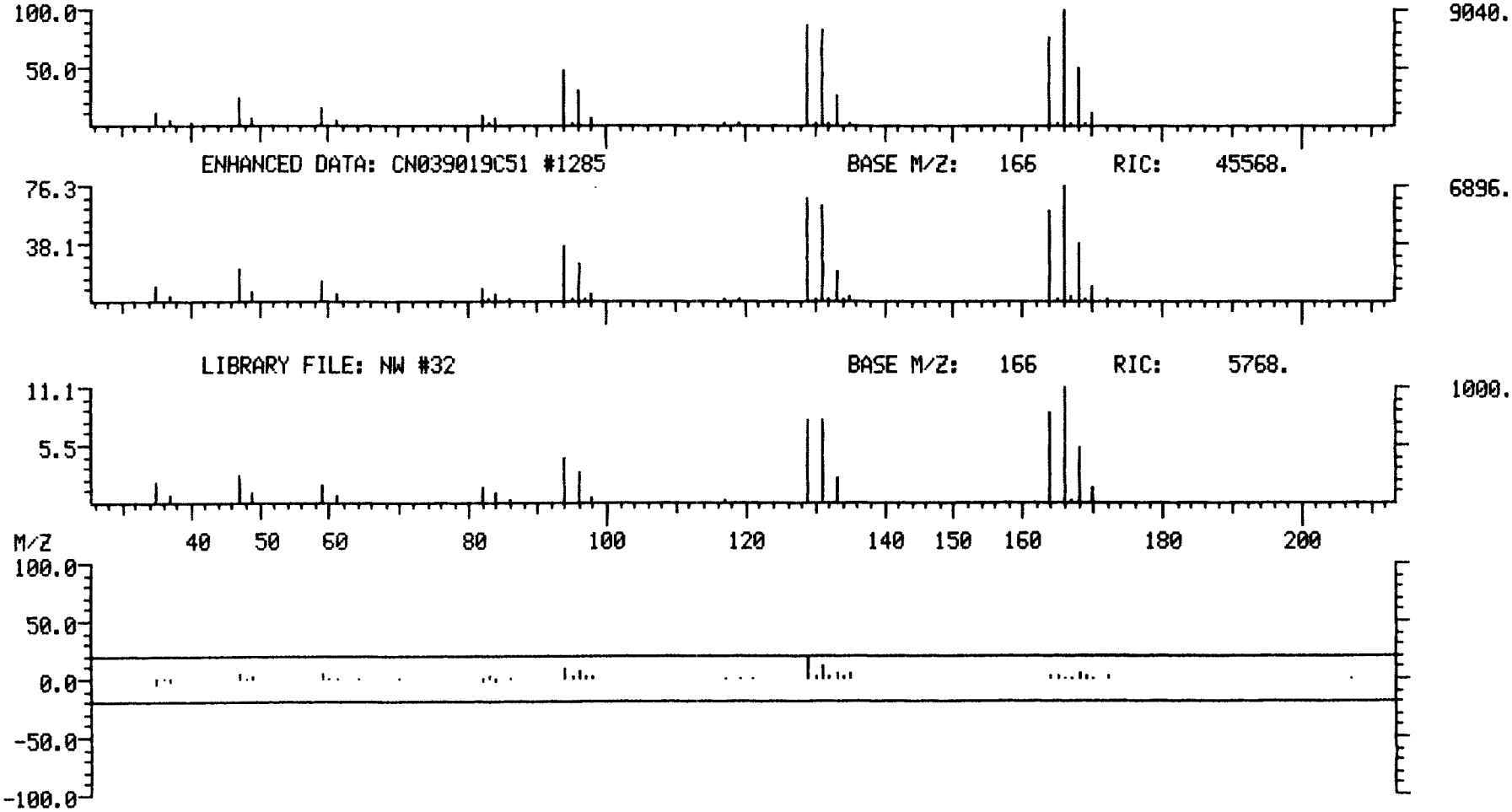
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE <127-18-4>

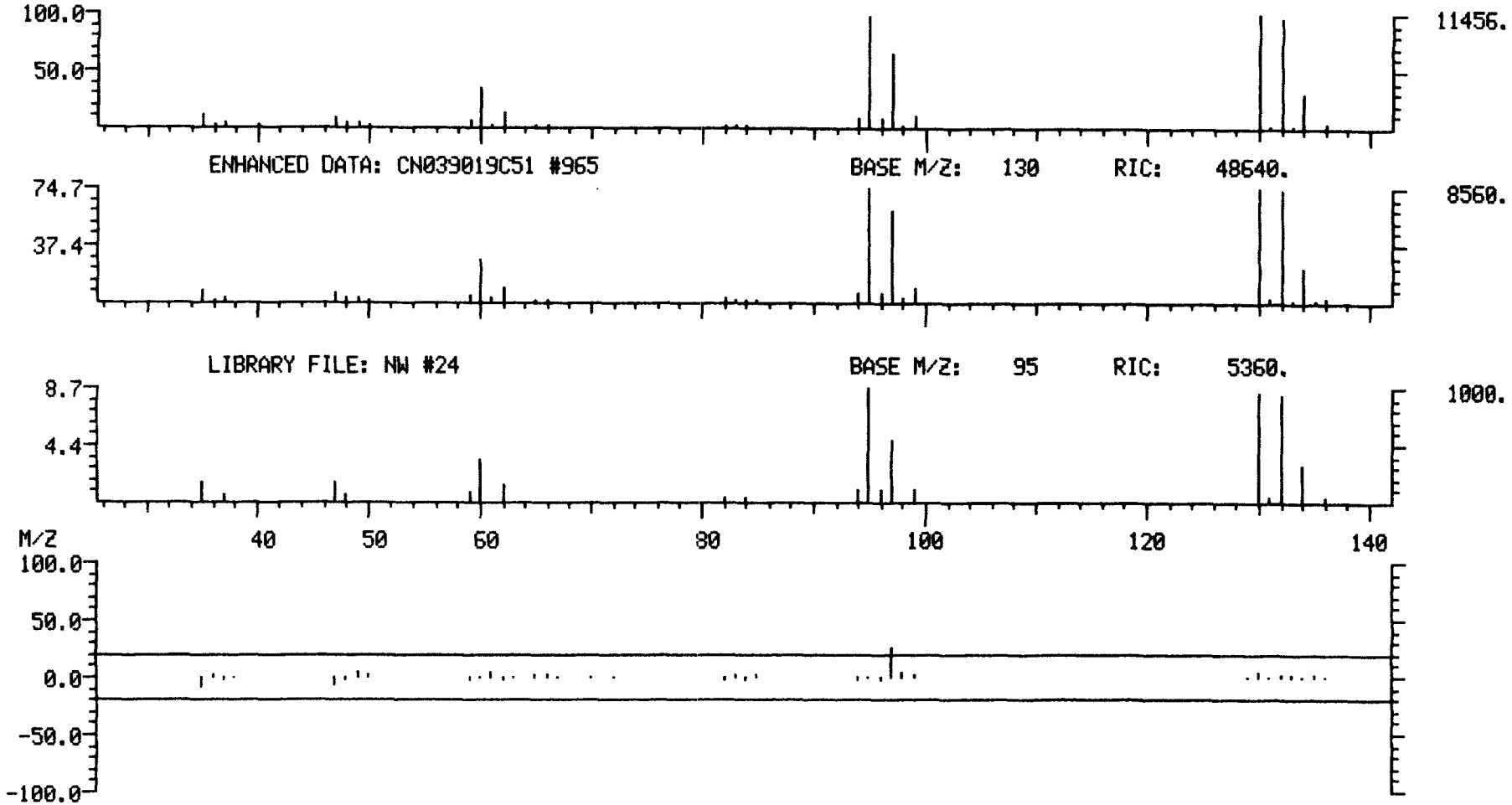
RAW DATA: CN039019C51 #1285 BASE M/Z: 166 RIC: 56384.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE <79-01-6>

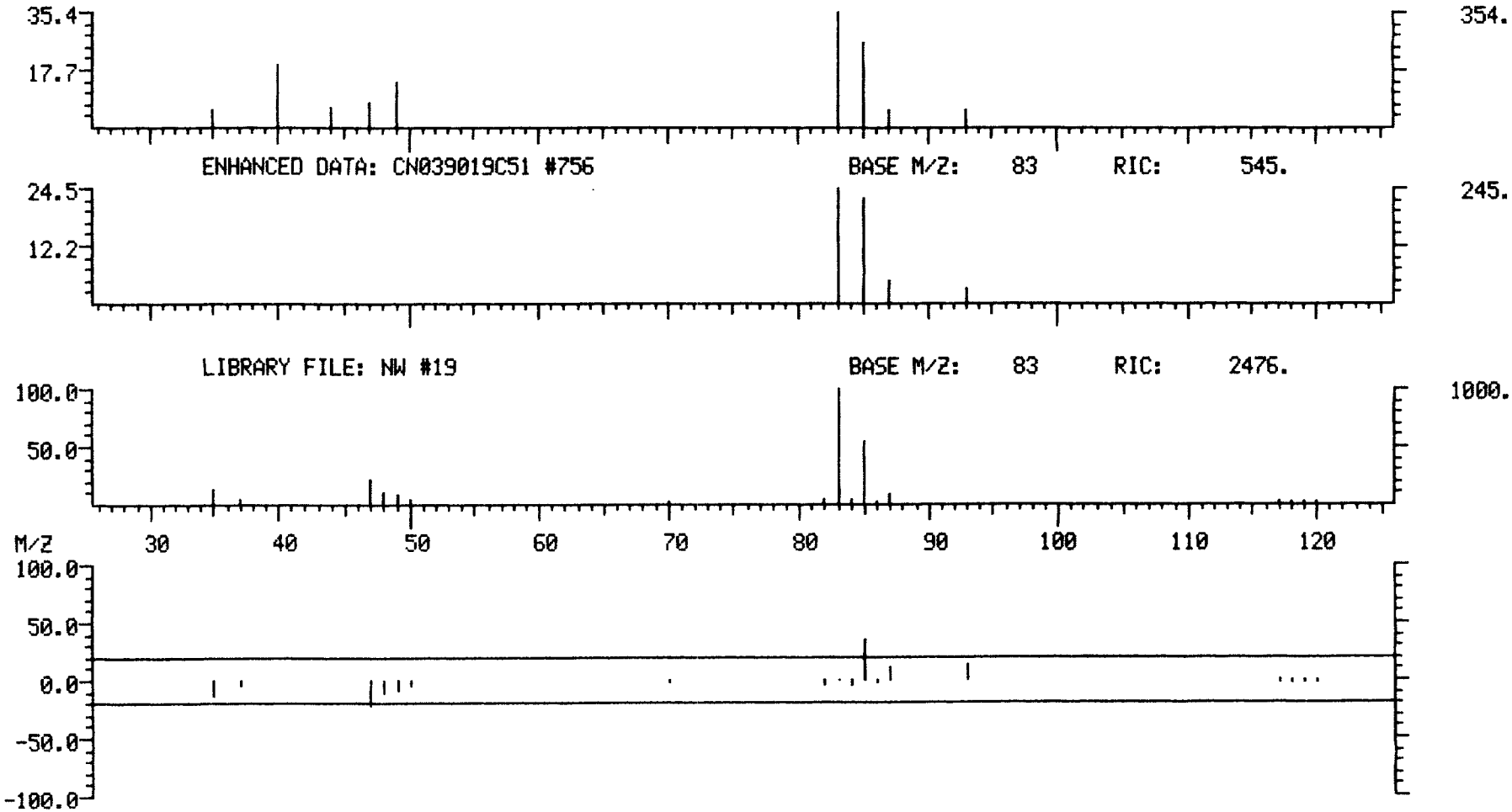
RAW DATA: CN039019C51 #965 BASE M/Z: 130 RIC: 61632.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C060 CHLOROFORM <67-66-3>

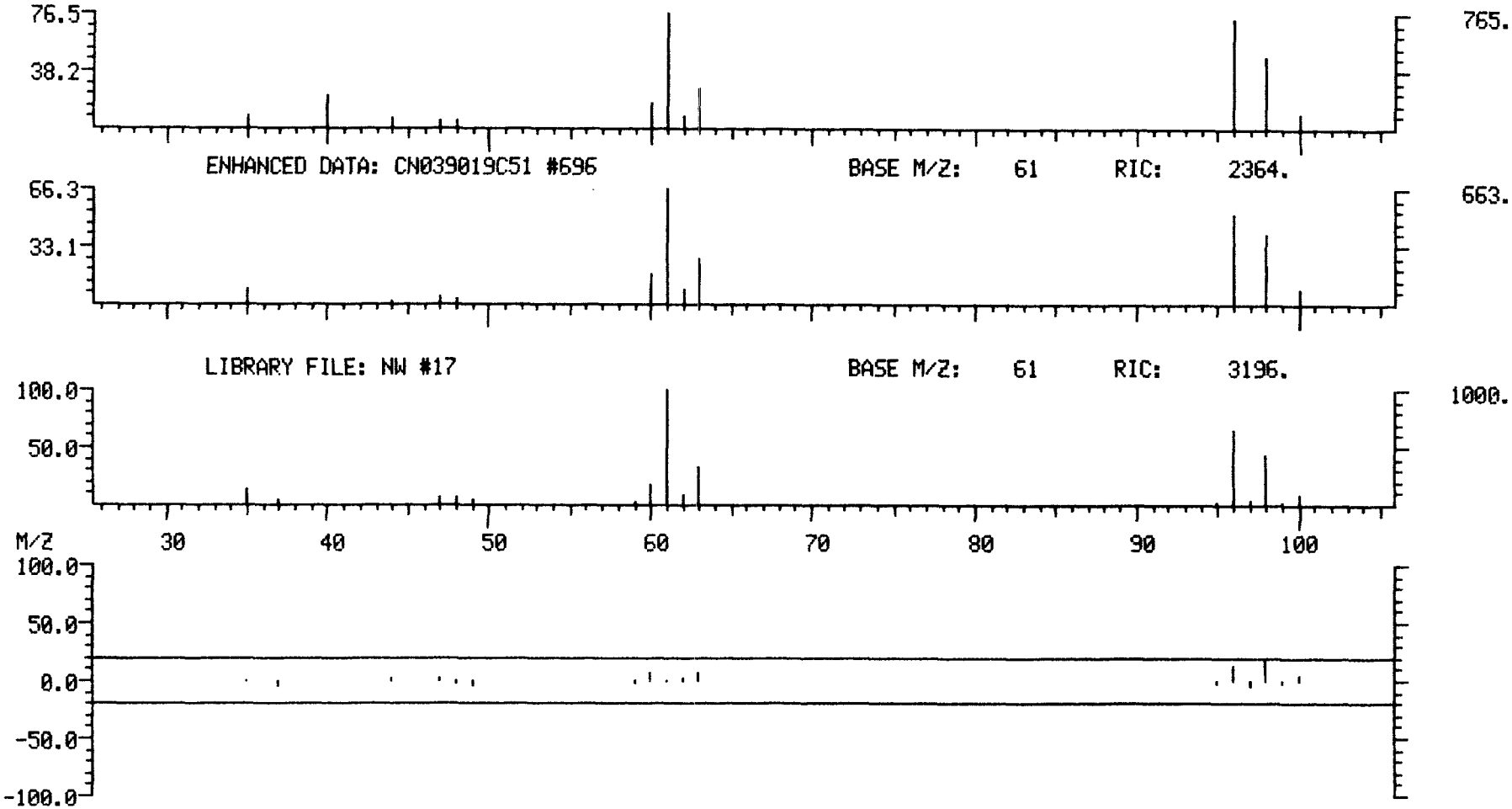
RAW DATA: CN039019C51 #756 BASE M/Z: 83 RIC: 1474.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

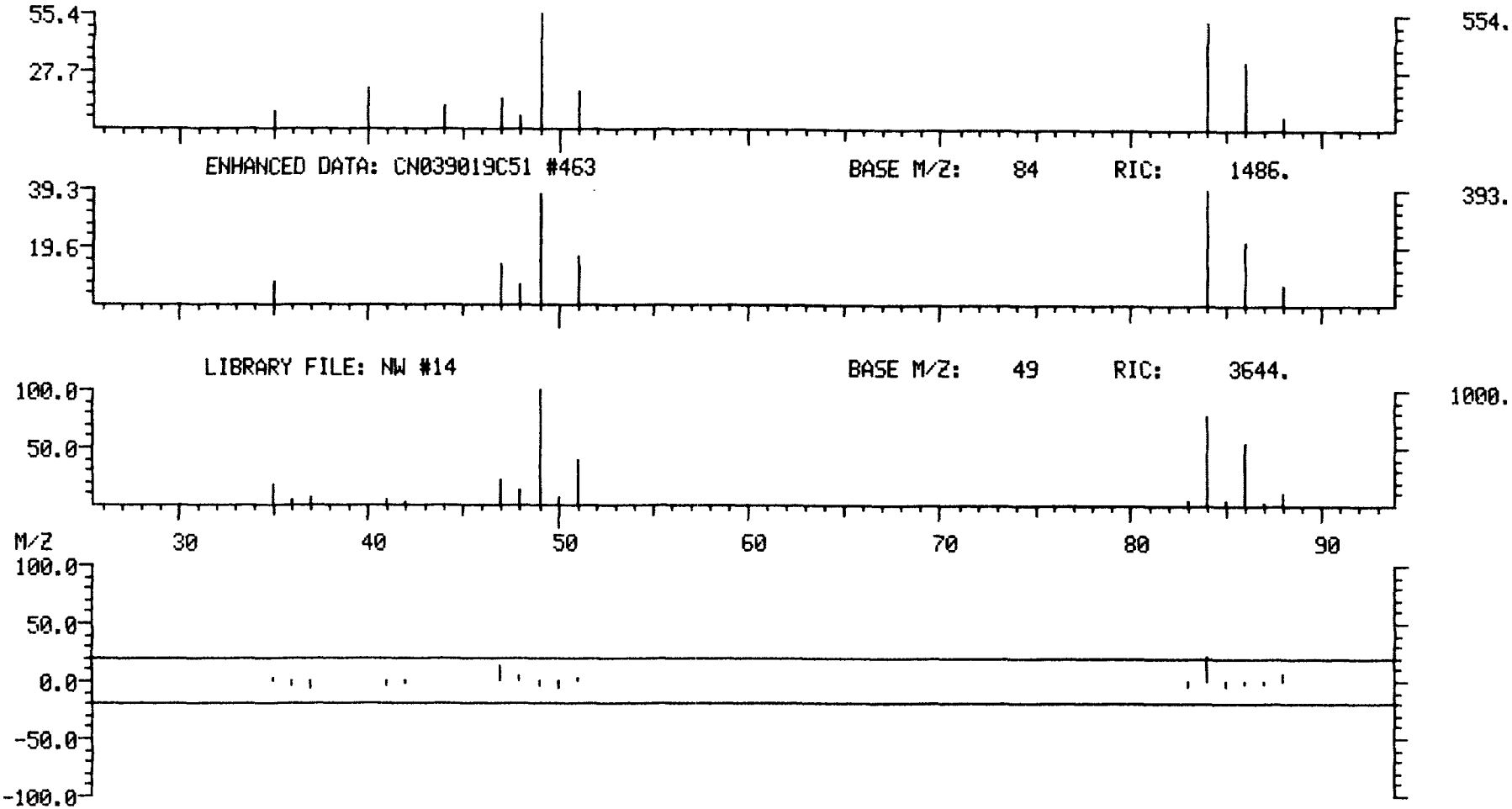
RAW DATA: CN039019C51 #696 BASE M/Z: 61 RIC: 3064.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

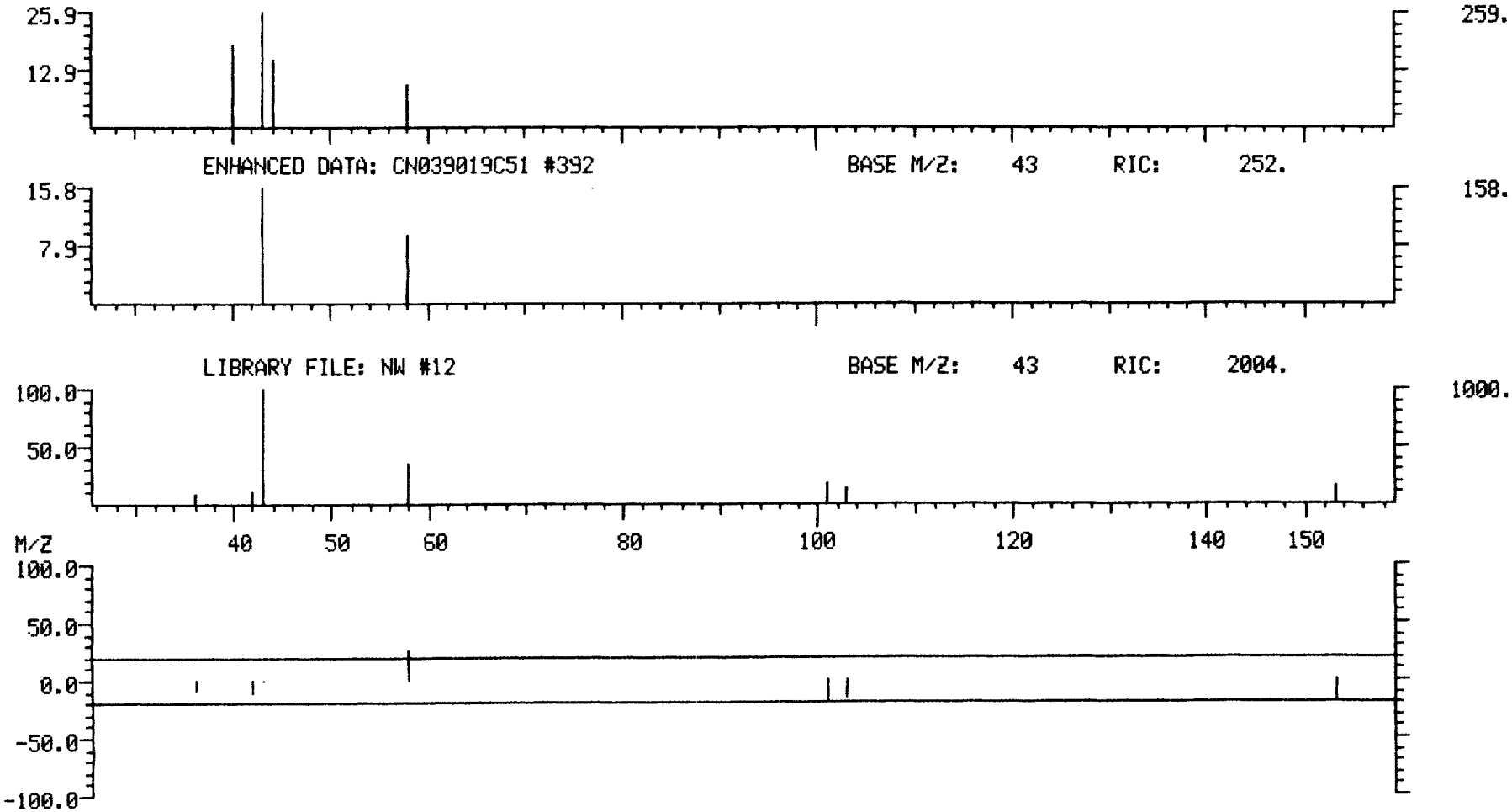
RAW DATA: CN039019C51 #463 BASE M/Z: 49 RIC: 2240.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CN039019C51 #392 BASE M/Z: 43 RIC: 692.
08/28/91 3:13
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	12.95	50.00	0.069	0.266	0.26
13	5:14		0.561						
14	5:52	1.00	0.629	1.00	2.97	50.00	0.107	1.806	0.06
15	6:29		0.696						
16	7:27	0.99	0.799	1.00	0.09	50.00	0.004	2.167	0.00
17	8:48	1.00	0.944	1.00	4.07	50.00	0.140	1.720	0.08
18	8:53		0.953						
19	9:33	1.00	1.026	1.00	1.06	50.00	0.069	3.230	0.02
20	9:55		0.850						
21	10:17		0.882						
22	10:44		0.920						
23	10:47	1.00	1.157	1.00	0.08	50.00	0.003	1.901	0.00
24	12:12	1.00	1.045	1.00	39.75	50.00	0.382	0.481	0.80
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01	1.00	0.830	1.00	0.04	50.00	0.001	1.401	0.00
29	14:18		1.226						
30	15:34		1.334						
31	15:57	1.00	1.367	1.00	0.47	50.00	0.004	0.374	0.01
32	16:14	1.00	0.897	1.00	24.87	50.00	0.240	0.483	0.50
33	16:35		0.916						
34	16:48		1.439						
35	18:09	1.00	1.003	1.00	0.05	50.00	0.001	1.155	0.00
36	18:27		1.020						
37	18:44		1.036						
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	1.00	0.944	1.00	4.25	100.00	0.070	1.645	0.04
43	18:44	0.00	1.036	0.00	-0.00	100.00	-0.000	1.069	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	737	9:18	1	1.000	A BB	45156.	50.000 UG/L	13.27
2	114	923	11:39	2	1.000	A BB	218162.	50.000 UG/L	13.27
3	117	1432	18:05	3	1.000	A BB	192365.	50.000 UG/L	13.27
4	65	839	10:36	1	1.138	A BB	61237.	43.818 UG/L	11.63
5	98	1178	14:52	3	0.823	A BB	220683.	46.947 UG/L	12.46
6	95	1647	20:48	3	1.150	A BB	152521.	45.417 UG/L	12.05
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	392	4:57	1	0.532	A BB	3115.	12.954 UG/L	3.44 B
13	NOT FOUND								
14	84	463	5:51	1	0.628	A BB	4837.	2.965 UG/L	0.79 B
15	NOT FOUND								
16	63	587	7:25	1	0.796	A BB	168.	0.086 UG/L	0.02 BDL
17	96	696	8:47	1	0.944	A BB	6316.	4.065 UG/L	1.08
18	NOT FOUND								
19	83	756	9:33	1	1.026	A BB	3102.	1.063 UG/L	0.28
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	62	853	10:46	1	1.157	A BB	134.	0.078 UG/L	0.02 BDL
24	130	965	12:11	2	1.046	A BB	83347.	39.752 UG/L	10.55
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1188	15:00	3	0.830	A BB	223.	0.041 UG/L	0.01 BDL
29	NOT FOUND								
30	NOT FOUND								
31	97	1263	15:57	2	1.368	A BB	774.	0.474 UG/L	0.13 BDL
32	164	1285	16:13	3	0.897	A BB	46198.	24.869 UG/L	6.60
33	NOT FOUND								
34	NOT FOUND								
35	112	1436	18:08	3	1.003	A BB	242.	0.054 UG/L	0.01 BDL
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND						6316	4.065	8/25/91
42	96	696	8:47	1	0.944	A**B	~~8315.~~	~~4.250~~ UG/L	1.13
43	106	6724	0:00	3	0.000	****	-2.	-0.000 UG/L	-0.00 BDL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	43.82	50.00	1.356	1.547	0.88
5	14:53	1.00	0.823	1.00	46.95	50.00	1.147	1.222	0.94
6	20:48	1.00	1.150	1.00	45.42	50.00	0.793	0.873	0.91
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50		0.519						

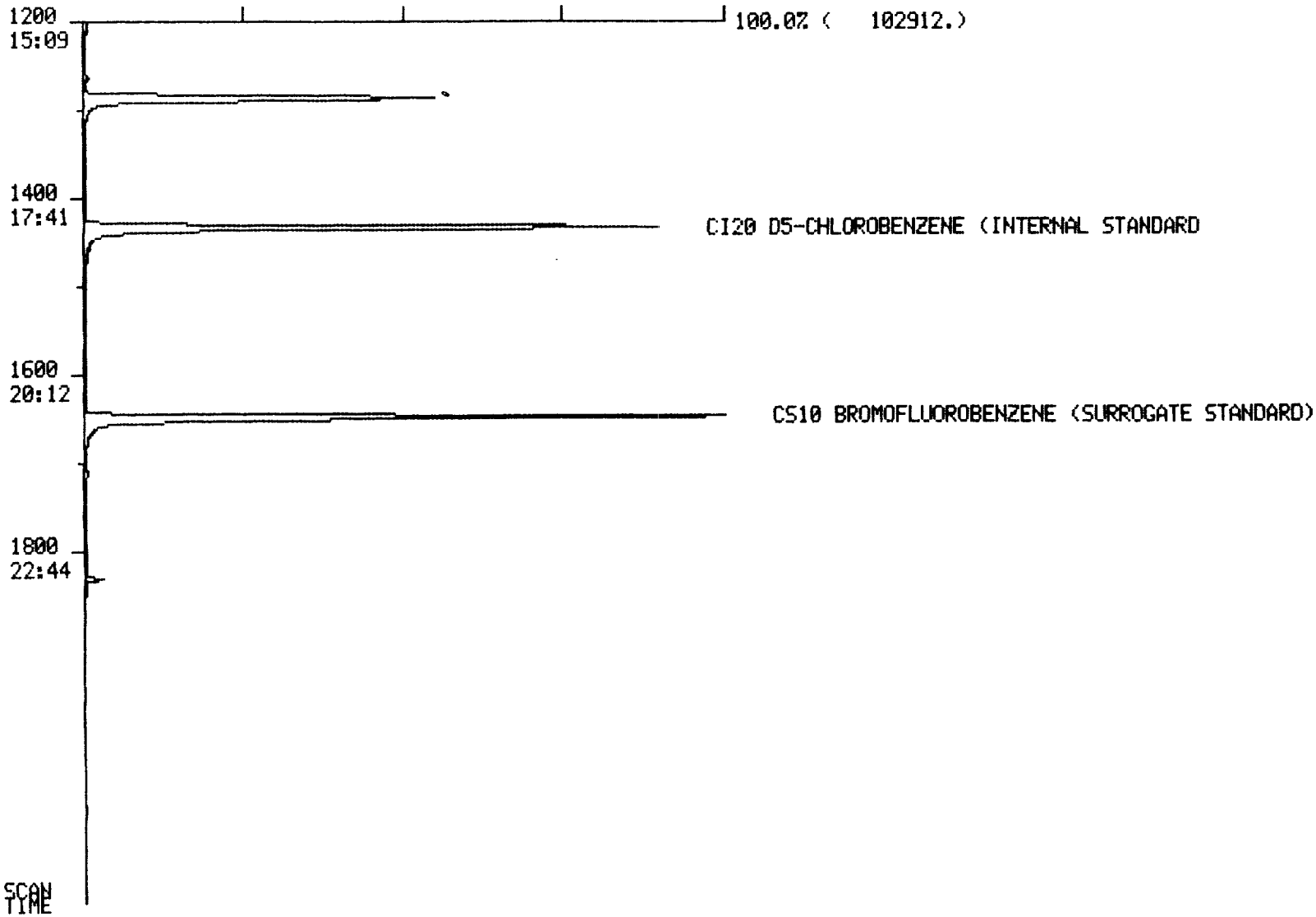
Quantitation Report File: CN039019C51

Data: CN039019C51.TI
08/28/91 3:13:00
Sample: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

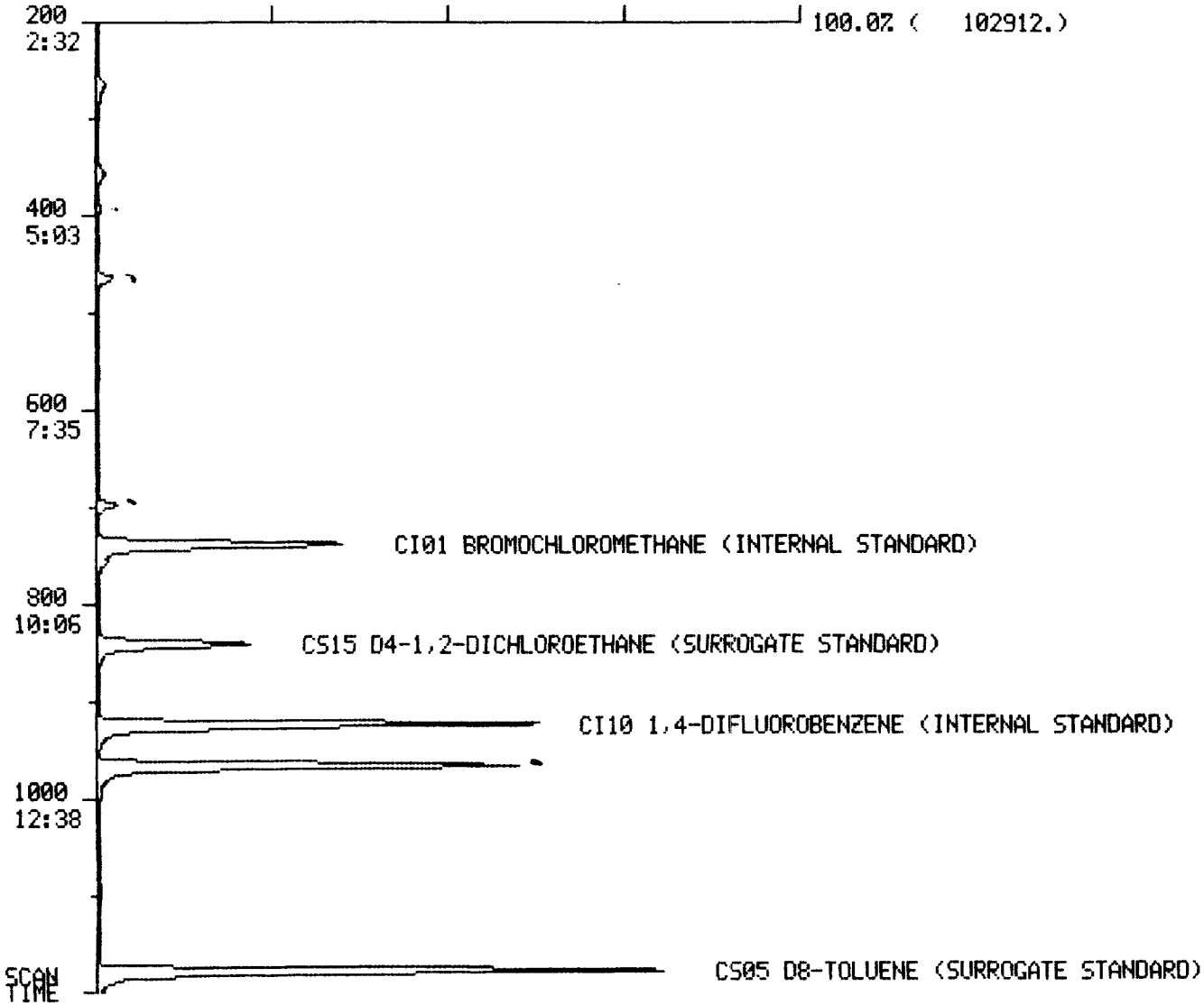
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039019C51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 3:13:00
CALI: CN039019C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039019C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 3:13:00
CALI: CN039019C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PS4

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439019

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039019C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.

PS4

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439019

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039019C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	13	B
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)	4	J
67-66-3	Chloroform	1	J
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	40	
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	25	
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

LAB INSTRUCTIONS PPS#_____

VOA J( ) J3( ) D( ) (:1)
GC/MS WORKSHEET
J2( ) J4( ) D2( ) (:1)

==========

CLP, 23861, 1, PS3, LOW, WATER, 439035, VOA, EPA, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039035A51

ANALYST(S): INJECTION _____ WORKUP 1527

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

[ ] REINJECT NEAT
[ ] DILUTE ( )

POSTED

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

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

GC/MS REVIEW [illegible] DATE 8/28/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 0

FINAL REPORTABLE PACKAGE(S): CN039035A51 /

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

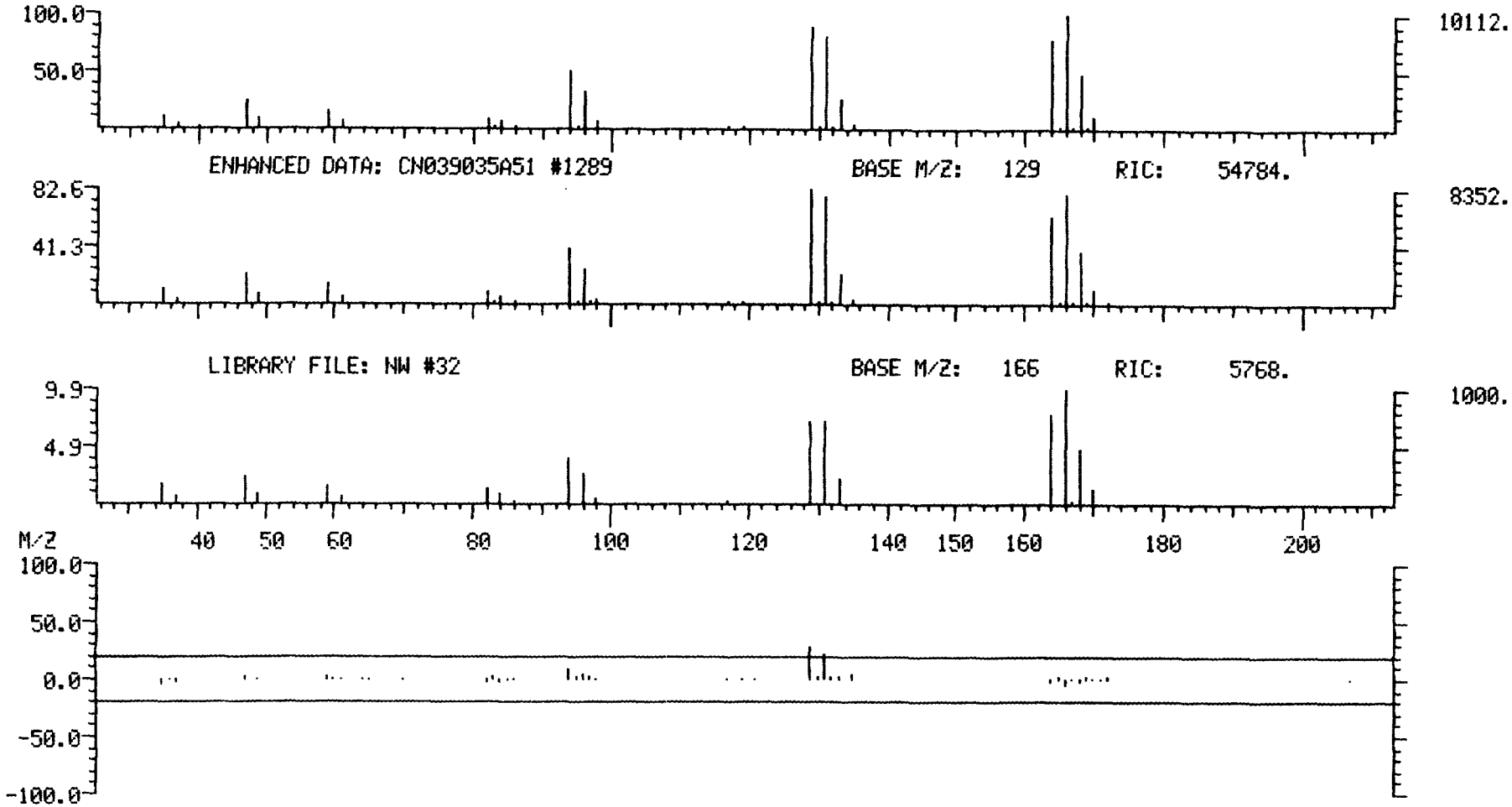
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE <127-18-4>

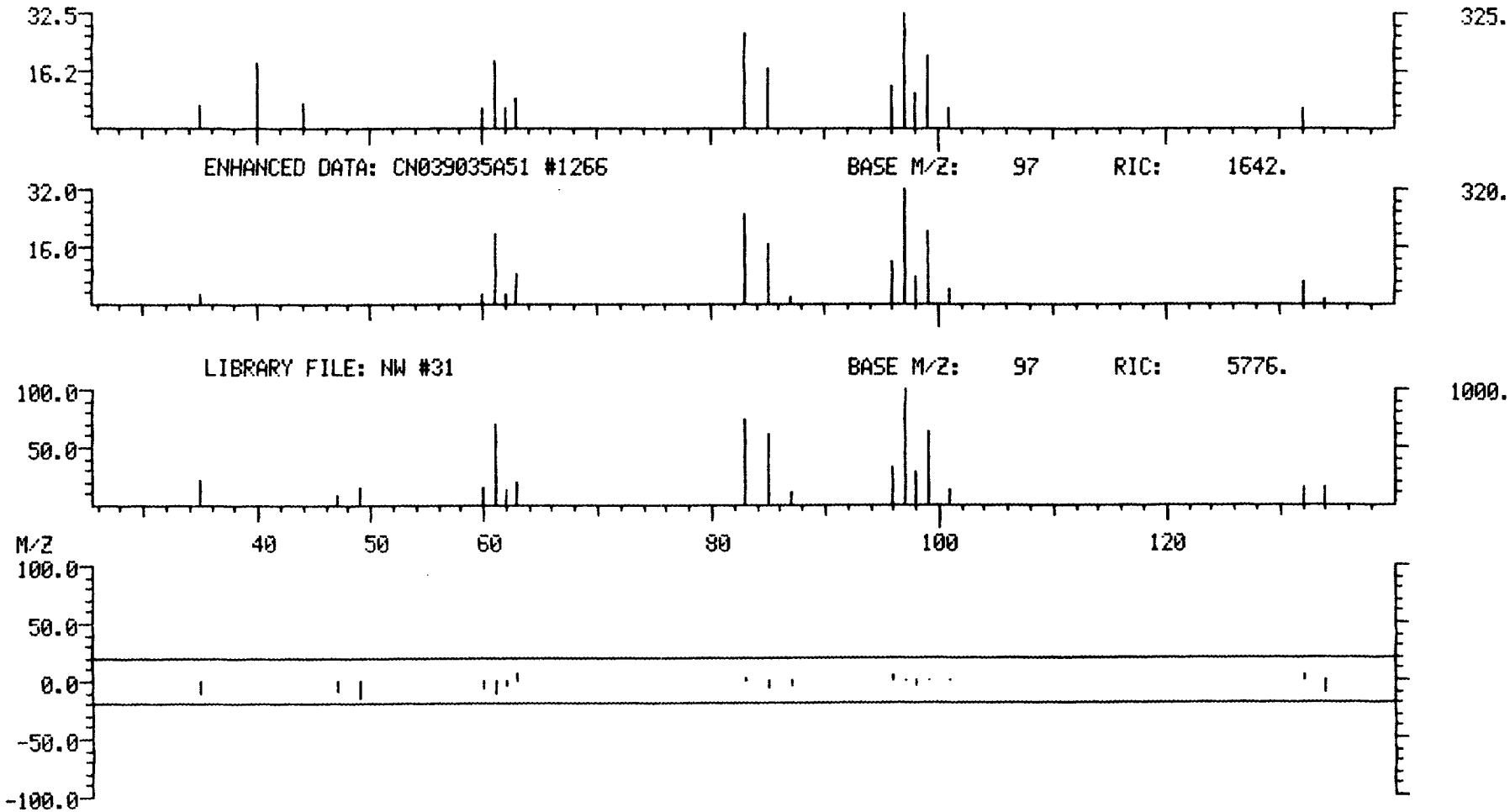
RAW DATA: CN039035A51 #1289 BASE M/Z: 166 RIC: 64384.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C160 1,1,2-TRICHLOROETHANE <79-00-5>

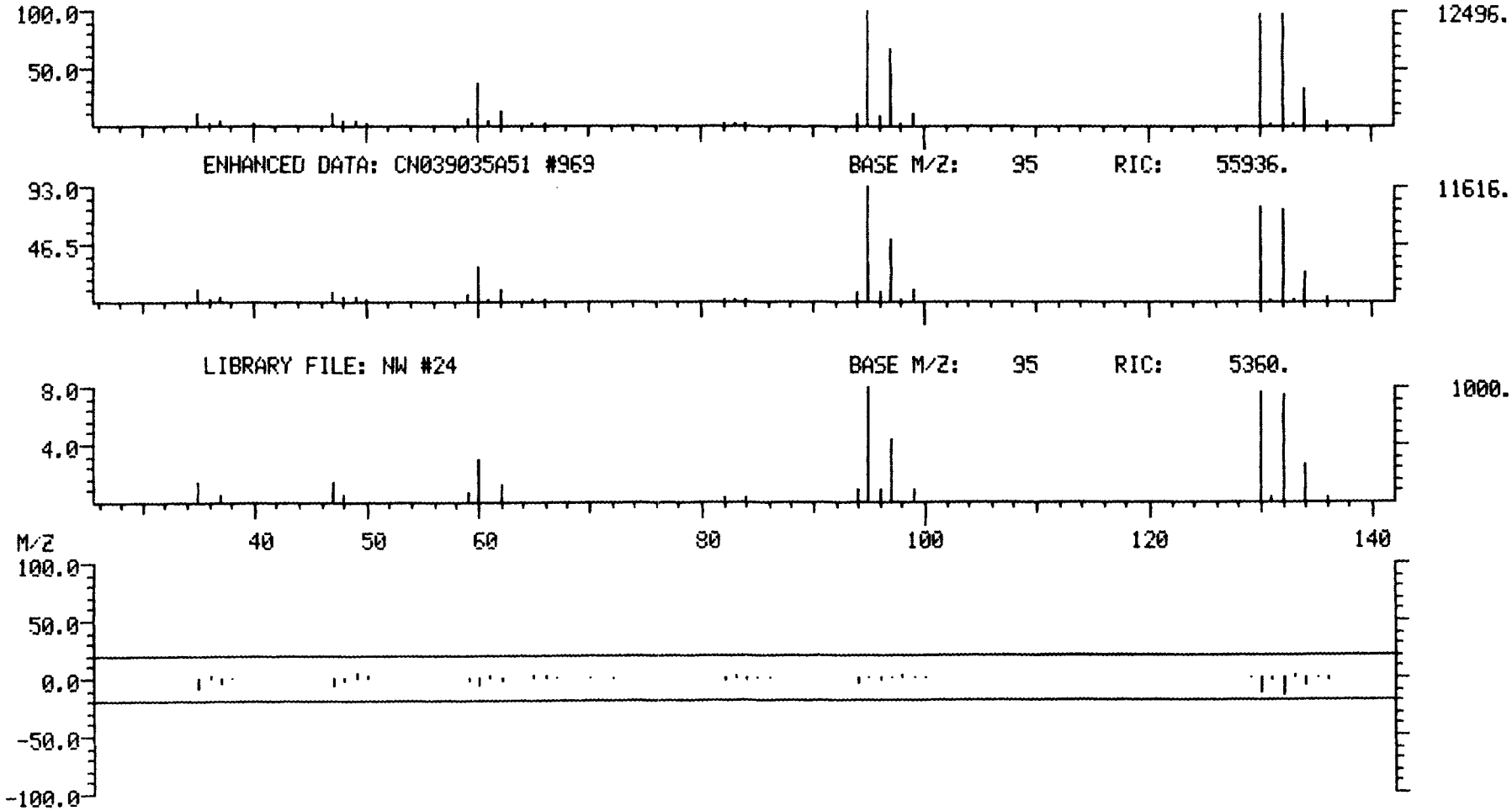
RAW DATA: CN039035A51 #1266 BASE M/Z: 97 RIC: 1998.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE <79-01-6>

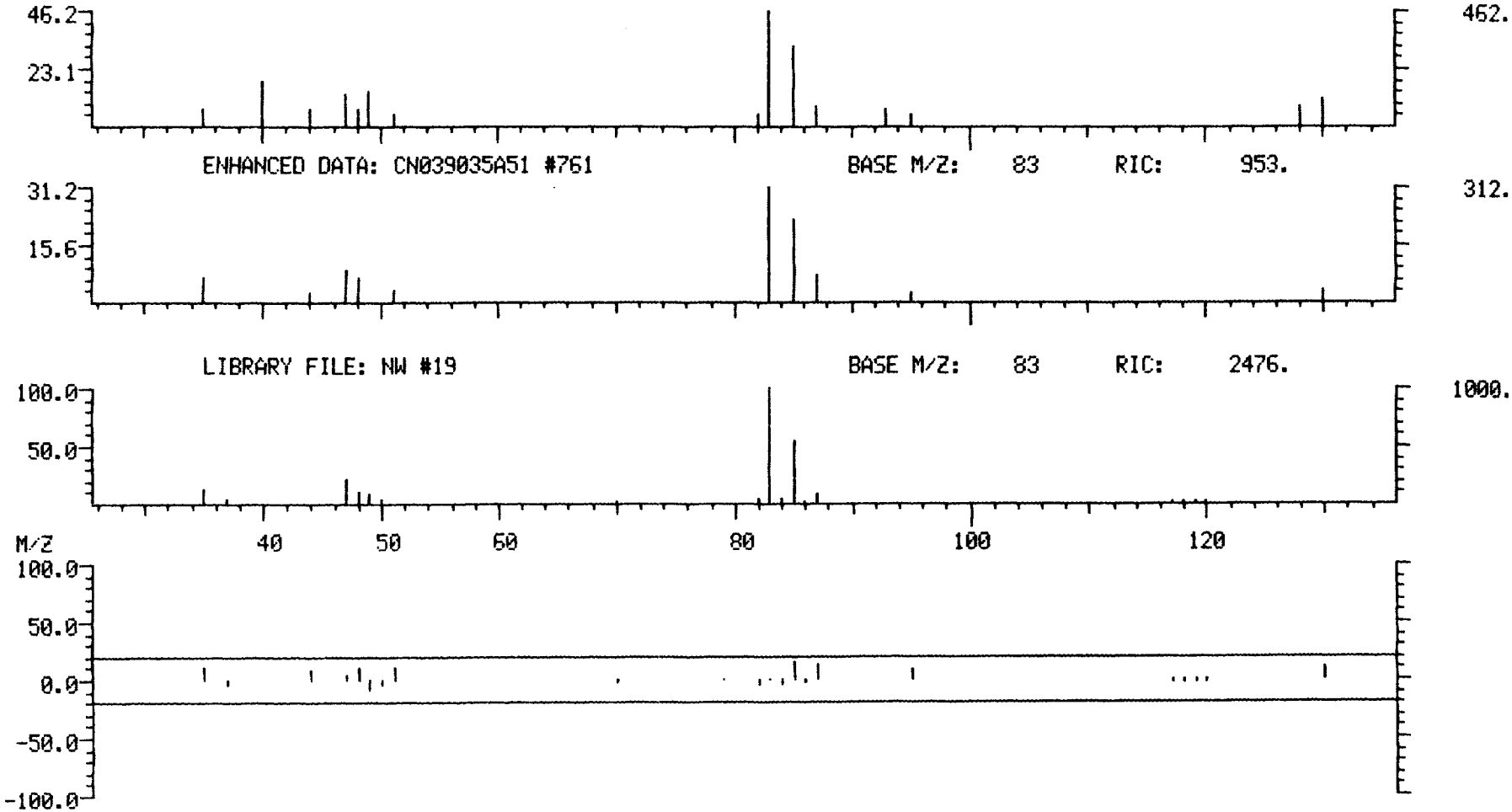
RAW DATA: CN039035A51 #969 BASE M/Z: 95 RIC: 68736.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C060 CHLOROFORM <67-66-3>

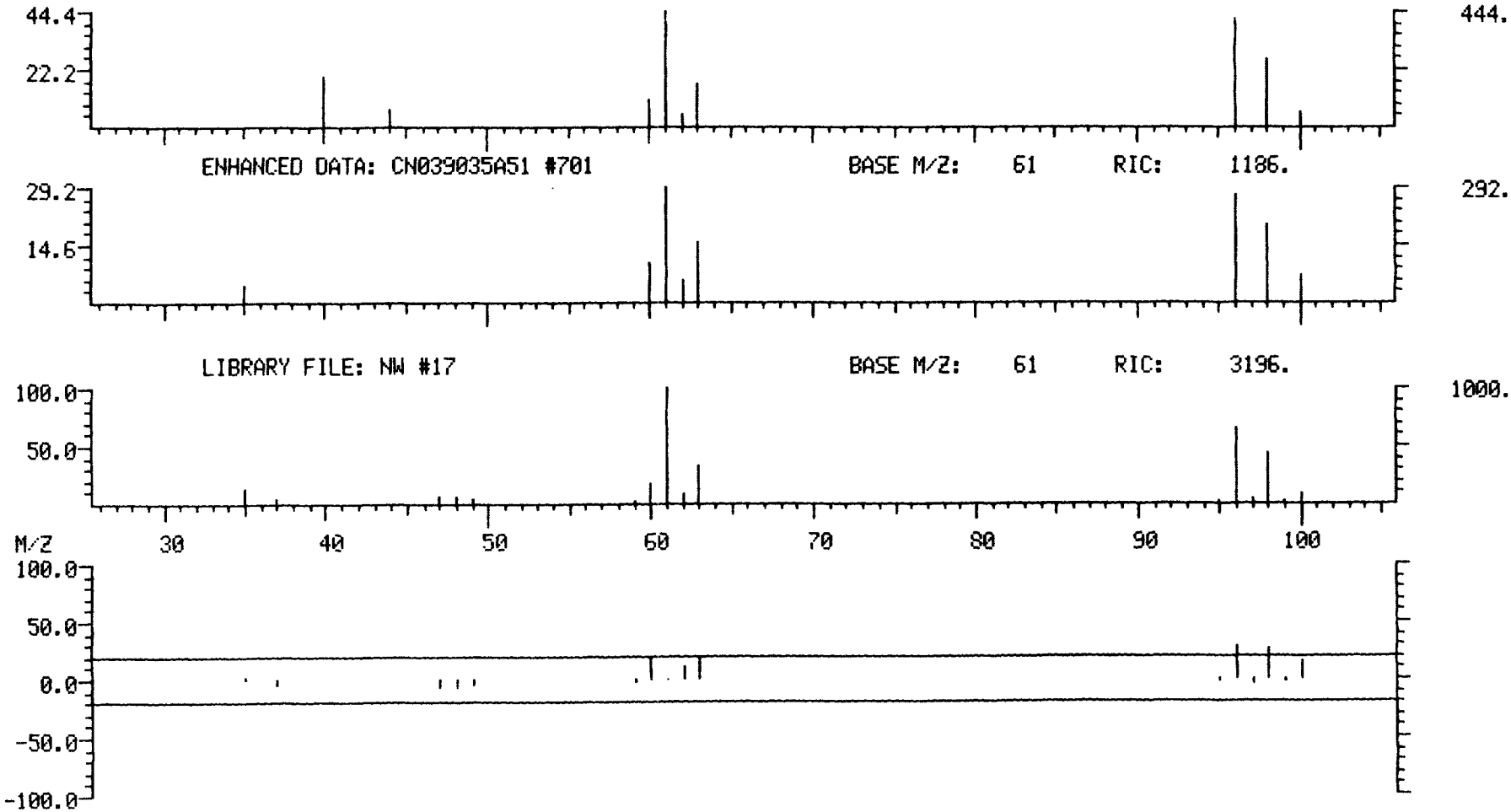
RAW DATA: CN039035A51 #761 BASE M/Z: 83 RIC: 1954.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

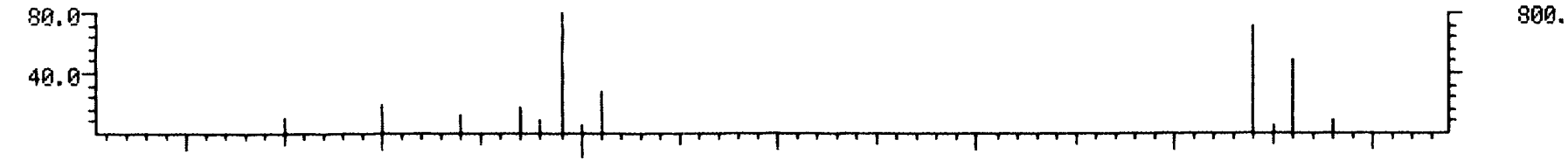
RAW DATA: CN039035A51 #701 BASE M/Z: 61 RIC: 1756.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



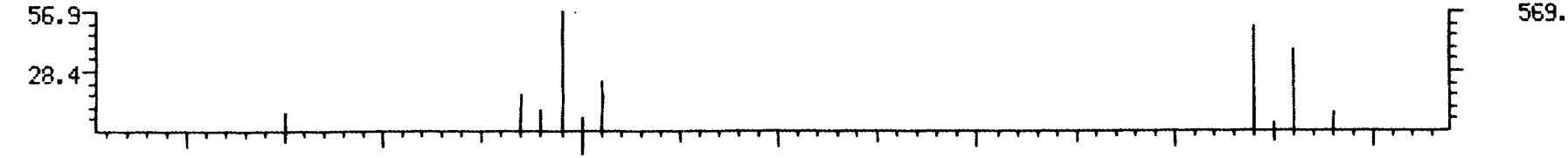
TARGET COMPOUND COMPARISON

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

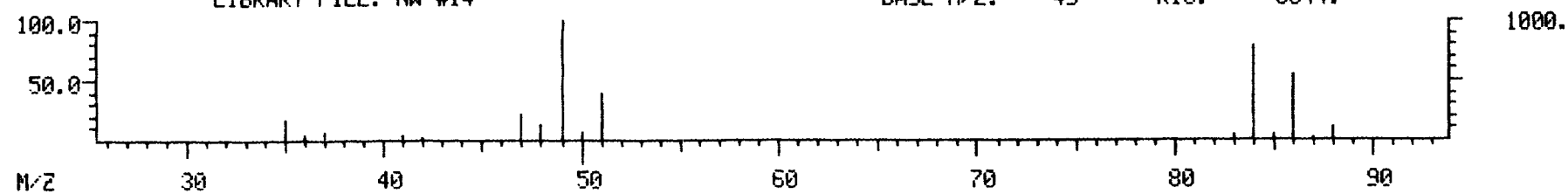
RAW DATA: CN039035A51 #467 BASE M/Z: 49 RIC: 3160.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51

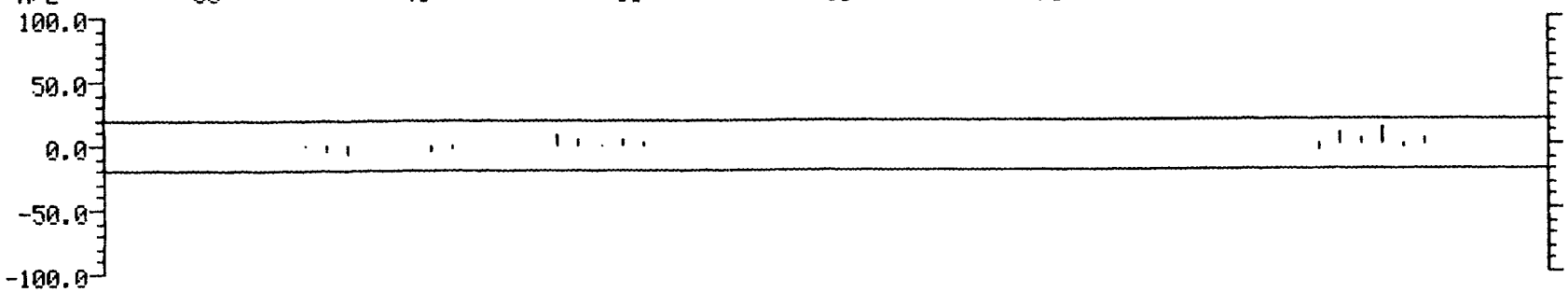


ENHANCED DATA: CN039035A51 #467 BASE M/Z: 49 RIC: 2220.



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

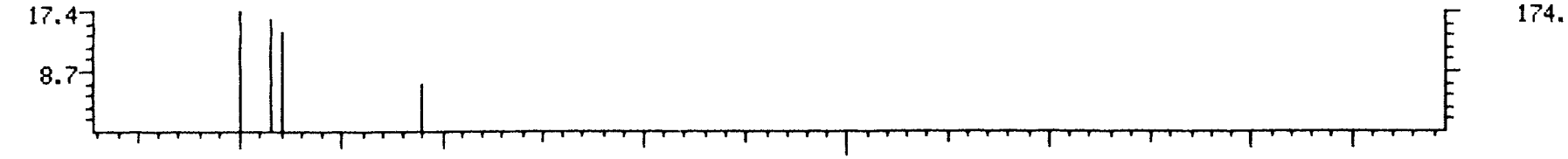




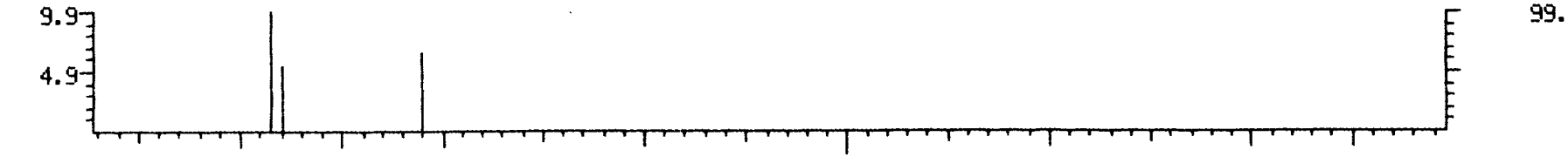
TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

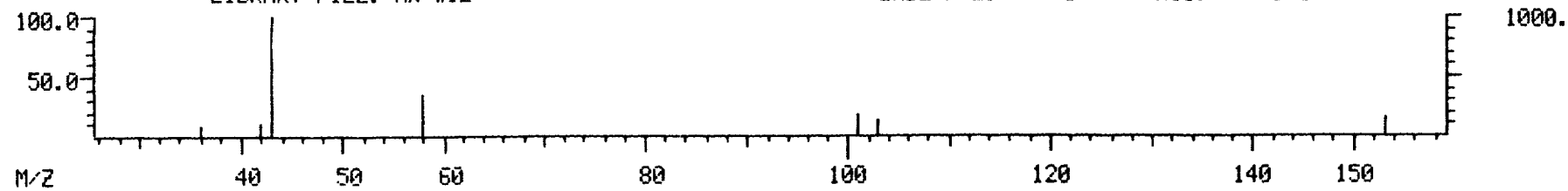
RAW DATA: CN039035A51 #397 BASE M/Z: 40 RIC: 548.
08/28/91 11:22
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51

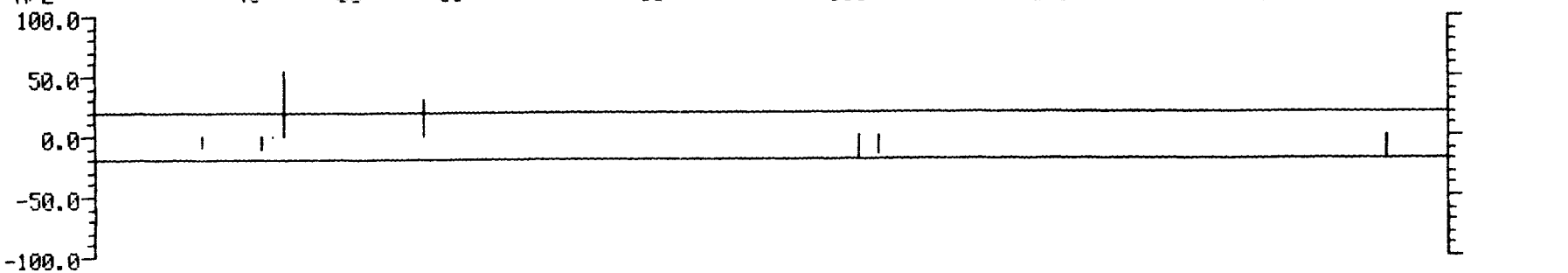


ENHANCED DATA: CN039035A51 #397 BASE M/Z: 43 RIC: 217.



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	4:58	1.01	0.533	1.01	9.12	50.00	0.049	0.266	0.18
13	5:14		0.561						
14	5:52	1.01	0.629	1.00	5.06	50.00	0.183	1.806	0.10
15	6:29	1.01	0.696	1.00	0.08	50.00	0.003	1.570	0.00
16	7:27	1.01	0.799	1.00	0.27	50.00	0.012	2.167	0.01
17	8:48	1.01	0.944	1.00	2.71	50.00	0.093	1.720	0.05
18	8:53		0.953						
19	9:33	1.01	1.026	1.00	1.63	50.00	0.105	3.230	0.03
20	9:55		0.850						
21	10:17		0.882						
22	10:44		0.920						
23	10:47	1.00	1.157	1.00	0.30	50.00	0.011	1.901	0.01
24	12:12	1.00	1.045	1.00	49.57	50.00	0.476	0.481	0.99
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01		0.830						
29	14:18		1.226						
30	15:34		1.334						
31	15:57	1.00	1.367	1.00	1.54	50.00	0.011	0.374	0.03
32	16:14	1.00	0.897	1.00	34.01	50.00	0.328	0.483	0.68
33	16:35		0.916						
34	16:48		1.439						
35	18:09		1.003						
36	18:27		1.020						
37	18:44		1.036						
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	1.01	0.944	1.00	2.91	100.00	0.048	1.645	0.03
43	18:44	0.00	1.036	0.00	-0.00	100.00	-0.000	1.069	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	741	9:21	1	1.000	A BB	38695.	50.000 UG/L	12.52
2	114	926	11:41	2	1.000	A BB	183974.	50.000 UG/L	12.52
3	117	1436	18:08	3	1.000	A BB	160113.	50.000 UG/L	12.52
4	65	844	10:39	1	1.139	A BB	55716.	46.524 UG/L	11.65
5	98	1182	14:55	3	0.823	A BB	188034.	48.059 UG/L	12.03
6	95	1652	20:51	3	1.150	A BB	131818.	47.159 UG/L	11.81
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	387	4:53	1	0.522	A BB	644.	0.522 UG/L	0.13
12	43	397	5:01	1	0.536	A BB	1879.	9.119 UG/L	2.28
13	NOT FOUND								
14	84	467	5:54	1	0.630	A BB	7072.	5.060 UG/L	1.27
15	96	517	6:32	1	0.698	A BB	100.	0.082 UG/L	0.02
16	63	593	7:29	1	0.800	A BB	456.	0.272 UG/L	0.07
17	96	701	8:51	1	0.946	A BB	3608.	2.710 UG/L	0.68
18	NOT FOUND								
19	83	761	9:36	1	1.027	A BB	4075.	1.630 UG/L	0.41
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	62	857	10:49	1	1.157	A BB	438.	0.298 UG/L	0.07
24	130	969	12:14	2	1.046	A BB	87639.	49.567 UG/L	12.41
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	97	1266	15:59	2	1.367	A BB	2115.	1.536 UG/L	0.38
32	164	1289	16:16	3	0.898	A BB	52591.	34.013 UG/L	8.52
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						3706	2.710 8/28/91	
42	96	701	8:51	1	0.946	A*BB	~~3708.~~	~~2.912 UG~~/L	0.73
43	106	6724	0:00	3	0.000	****	-2.	-0.001 UG/L	-0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	46.52	50.00	1.440	1.547	0.93
5	14:53	1.00	0.823	1.00	48.06	50.00	1.174	1.222	0.96
6	20:48	1.00	1.150	1.00	47.16	50.00	0.823	0.873	0.94
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50	1.01	0.519	1.01	0.52	50.00	0.017	1.594	0.01

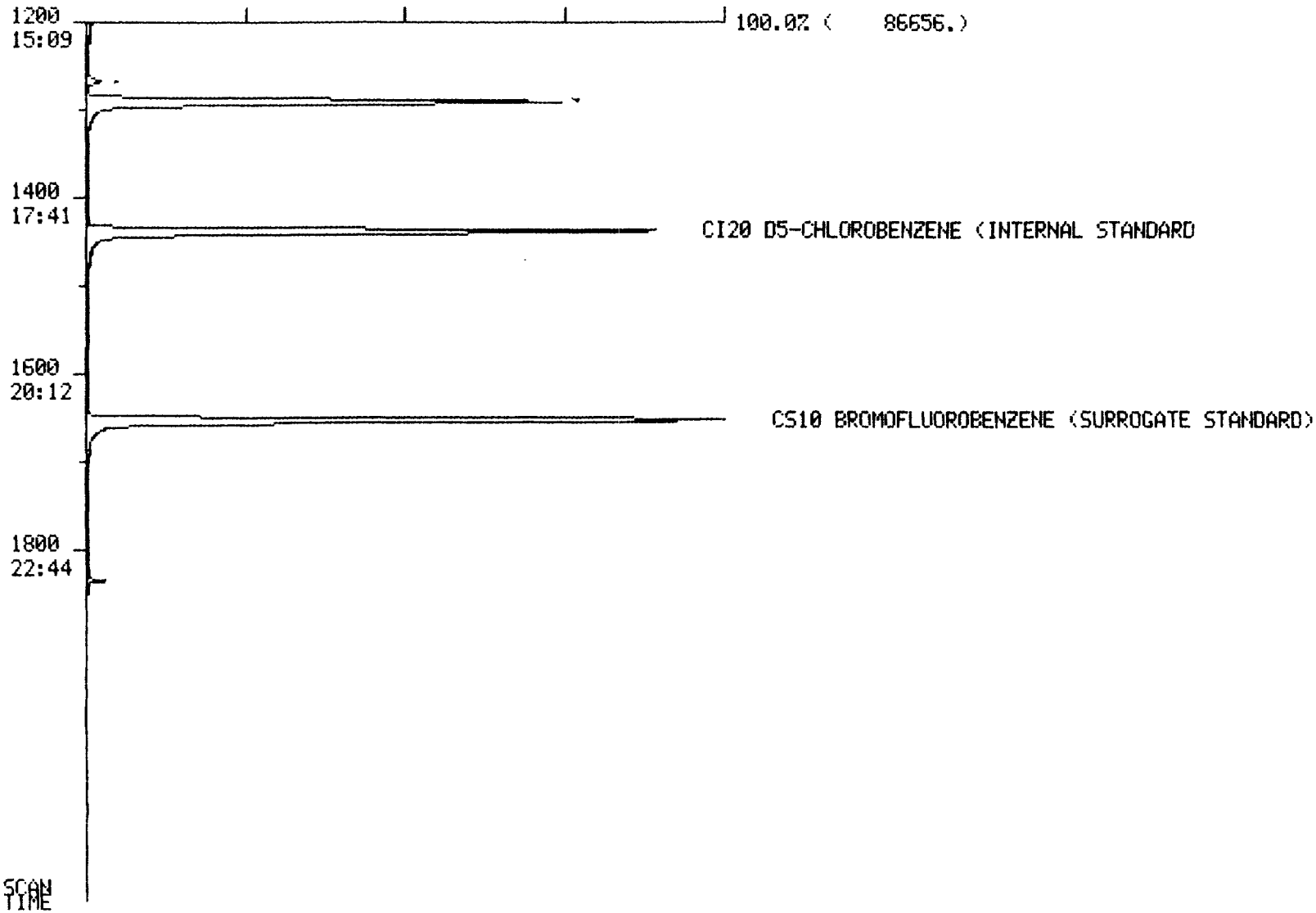
Quantitation Report File: CN039035A51

Data: CN039035A51.TI
08/28/91 11:22:00
Sample: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1523 Acct. No.: RCA

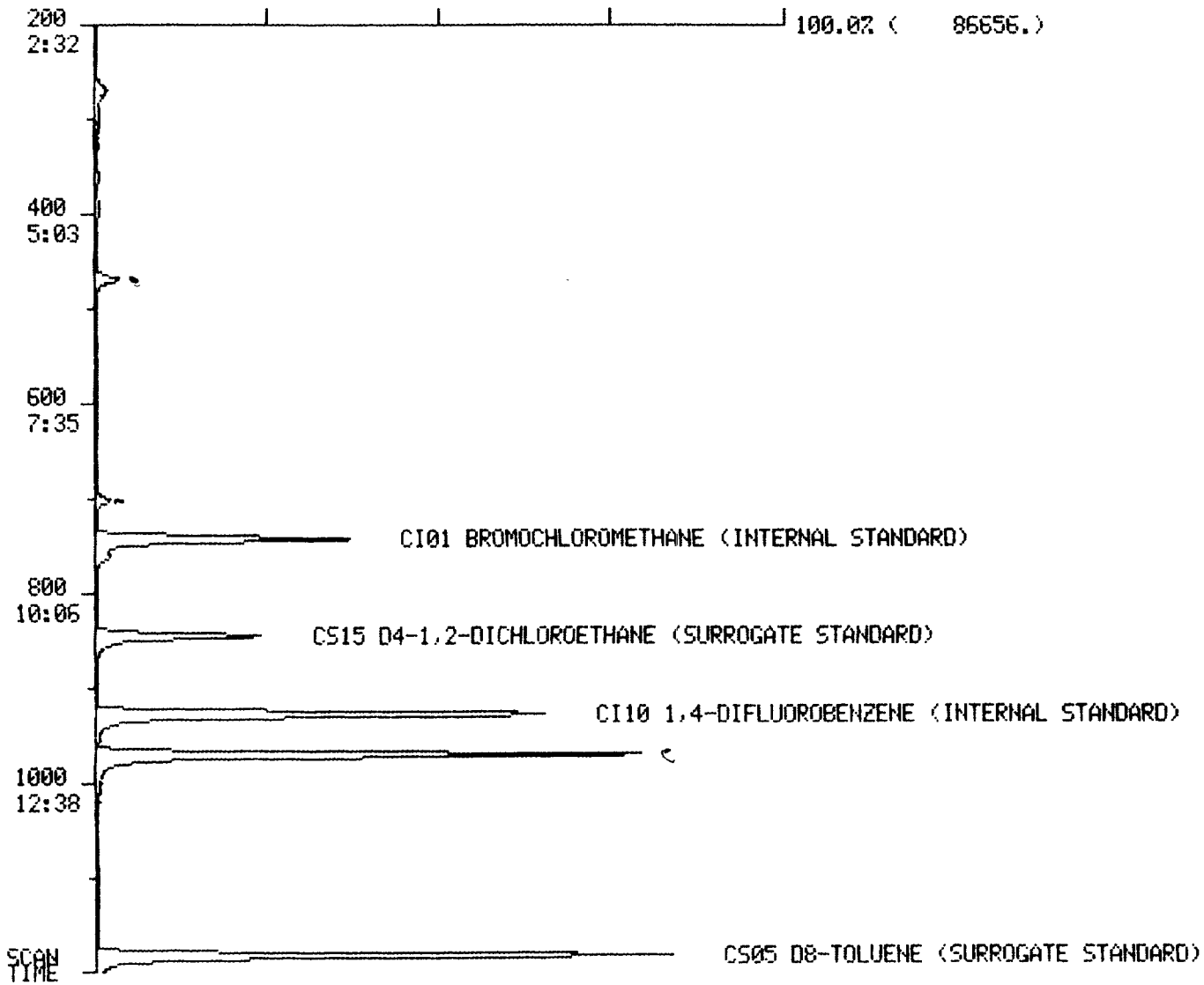
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039035A51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 11:22:00
CALI: CN039035A51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039035A51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 11:22:00
CALI: CN039035A51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS3,LOW,WATER,439035,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PS3

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439035

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039035A51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.

PS3

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439035

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039035A51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	9	BJ
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)	3	J
67-66-3	Chloroform	2	J
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	50	
124-48-1	Dibromochloromethane	10	U
79-00-5	1,1,2-Trichloroethane	2	J
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	34	
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

LAB INSTRUCTIONS PPS#_____

VOA
GC/MS WORKSHEET

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

==========

CLP, 23861, 1, PS1, LOW, WATER, 439033, VOA, EPA, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039033A51

ANALYST(S): INJECTION _____ WORKUP 1527

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

[ ] REINJECT NEAT
[ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

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

GC/MS REVIEW [signature] DATE 6/24/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 2

FINAL REPORTABLE PACKAGE(S): CN039033A51 / _____

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

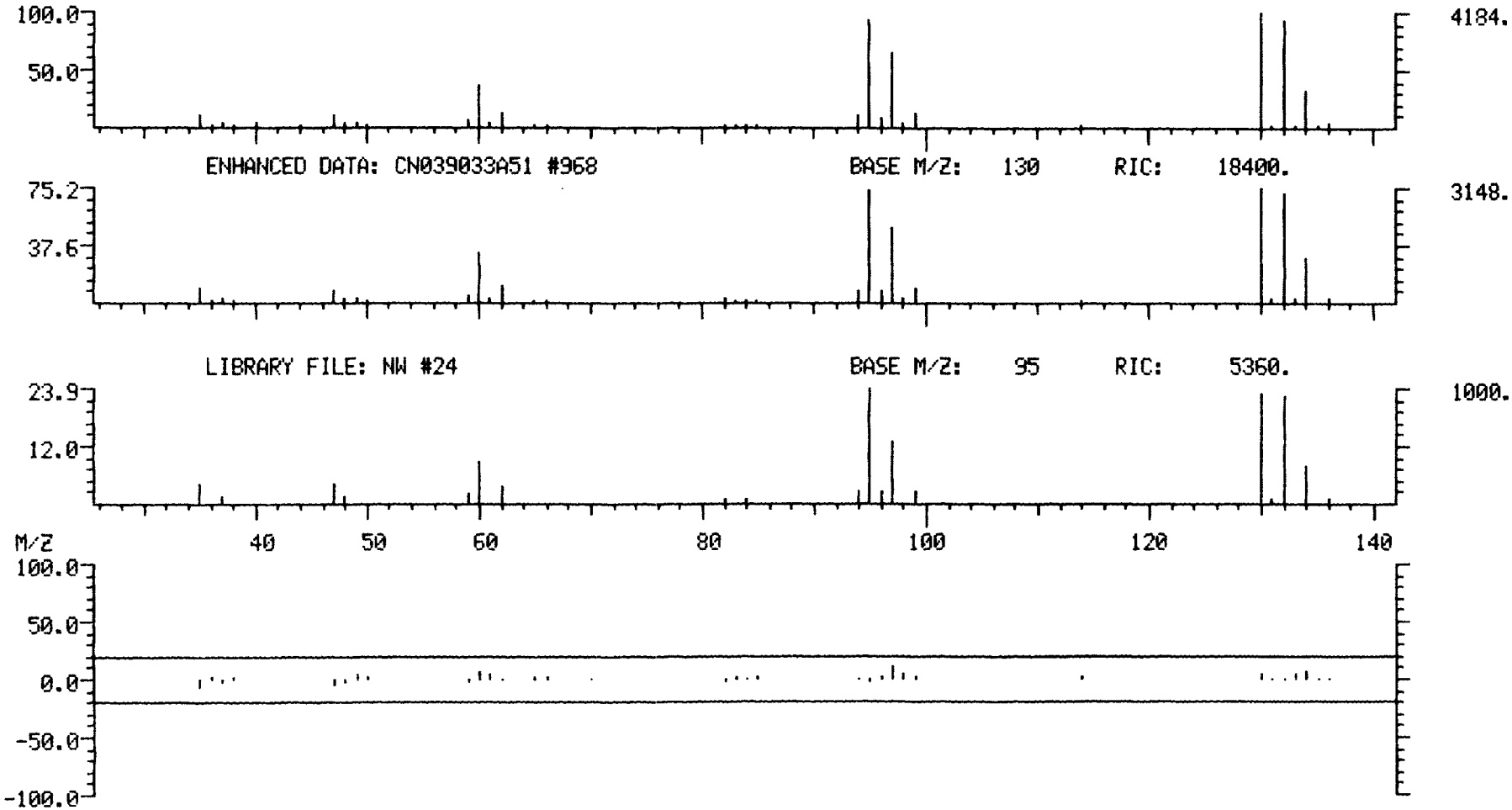
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE <79-01-6>

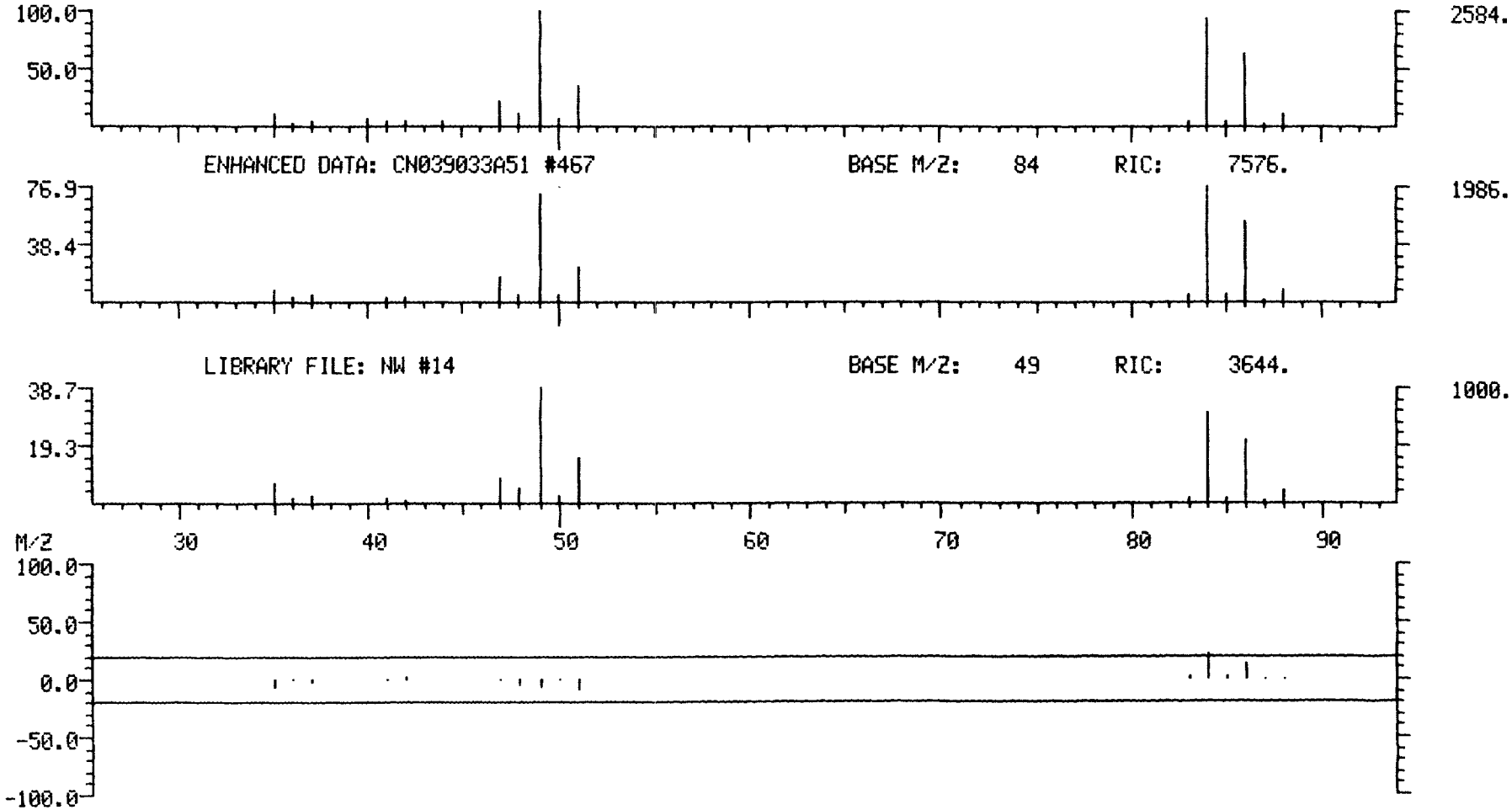
RAW DATA: CN039033A51 #968 BASE M/Z: 130 RIC: 23008.
08/28/91 10:44
SAMPLE: CLP,23861,1,PS1,LOW,WATER,439033,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

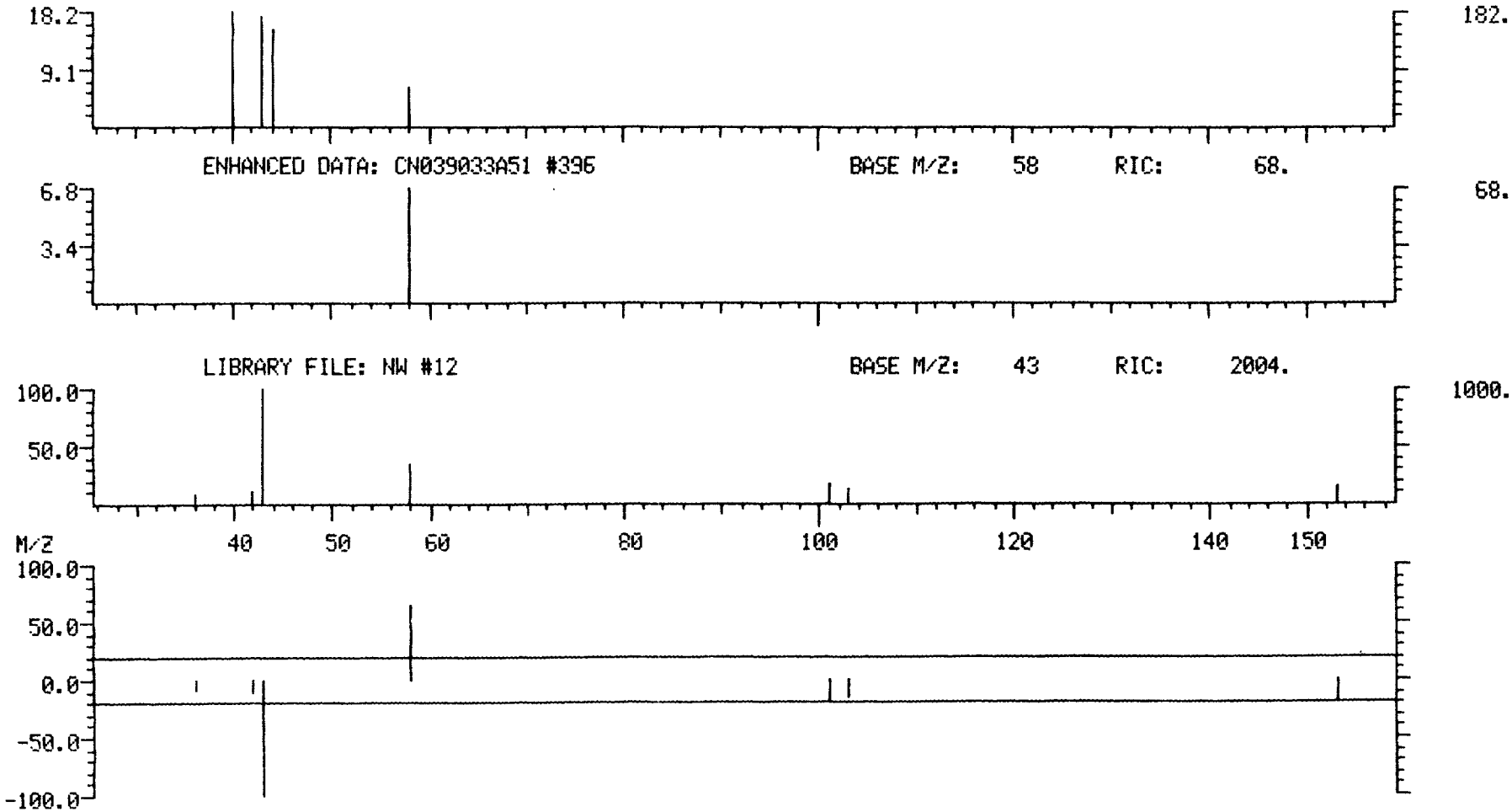
RAW DATA: CN039033A51 #467 BASE M/Z: 49 RIC: 10032.
08/28/91 10:44
SAMPLE: CLP,23861,1,PS1,LOW,WATER,439033,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CN039033A51 #396 BASE M/Z: 40 RIC: 572.
08/28/91 10:44
SAMPLE: CLP,23861,1,PS1,LOW,WATER,439033,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.01	0.533	1.00	8.38	50.00	0.045	0.266	0.17
13	5:14		0.561						
14	5:52	1.01	0.629	1.00	14.86	50.00	0.537	1.806	0.30
15	6:29		0.696						
16	7:27		0.799						
17	8:48	1.00	0.944	1.00	0.45	50.00	0.015	1.720	0.01
18	8:53		0.953						
19	9:33		1.026						
20	9:55		0.850						
21	10:17		0.882						
22	10:44	1.00	0.920	1.00	0.03	50.00	0.001	0.881	0.00
23	10:47		1.157						
24	12:12	1.00	1.045	1.00	16.82	50.00	0.162	0.481	0.34
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01	1.00	0.830	1.00	0.17	50.00	0.005	1.401	0.00
29	14:18		1.226						
30	15:34		1.334						
31	15:57		1.367						
32	16:14		0.897						
33	16:35		0.916						
34	16:48		1.439						
35	18:09	1.00	1.003	1.00	0.21	50.00	0.005	1.155	0.00
36	18:27		1.020						
37	18:44		1.036						
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	1.00	0.944	1.00	0.47	100.00	0.008	1.645	0.00
43	18:44	0.00	1.036	0.00	-0.00	100.00	-0.000	1.069	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	741	9:21	1	1.000	A BB	38807.	50.000 UG/L	14.87
2	114	926	11:41	2	1.000	A BB	186284.	50.000 UG/L	14.87
3	117	1436	18:08	3	1.000	A BB	164126.	50.000 UG/L	14.87
4	65	844	10:39	1	1.139	A BB	58436.	48.655 UG/L	14.47
5	98	1181	14:55	3	0.822	A BB	195755.	48.809 UG/L	14.51
6	95	1651	20:51	3	1.150	A BB	135567.	47.315 UG/L	14.07
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	386	4:52	1	0.521	A BB	224.	0.181 UG/L	0.05 BDL
12	43	396	5:00	1	0.534	A BB	1732.	8.381 UG/L	2.49 yes B
13	NOT FOUND								
14	84	467	5:54	1	0.630	A BB	20832.	14.861 UG/L	4.42 yes B
15	NOT FOUND								
16	NOT FOUND								
17	96	700	8:50	1	0.945	A BB	597.	0.447 UG/L	0.13 BDL
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	78	852	10:45	2	0.920	A BB	112.	0.034 UG/L	0.01 BDL
23	NOT FOUND								
24	130	968	12:13	2	1.045	A BB	30113.	16.820 UG/L	5.00 yes
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1193	15:04	3	0.831	A BB	789.	0.172 UG/L	0.05
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	112	1439	18:10	3	1.002	A BB	808.	0.213 UG/L	0.06
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	700	8:50	1	0.945	A**B	596.	0.467 UG/L	0.14
43	106	6724	0:00	3	0.000	****	-2.	-0.001 UG/L	-0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	48.65	50.00	1.506	1.547	0.97
5	14:53	1.00	0.823	1.00	48.81	50.00	1.193	1.222	0.98
6	20:48	1.00	1.150	1.00	47.31	50.00	0.826	0.873	0.95
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50	1.01	0.519	1.00	0.18	50.00	0.006	1.594	0.00

Quantitation Report File: CN039033A51

Data: CN039033A51.TI
08/28/91 10:44:00
Sample: CLP,23861,1,PS1,LOW,WATER,439033,VOA,EPA,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1523 Acct. No.: RCA

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

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3	CI20 D5-CHLOROBENZENE (INTERNAL STANDARD
4	CS15 D4-1,2-DICHLOROETHANE (SURROGATE STANDARD)
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6	CS10 BROMOFLUOROBENZENE (SURROGATE STANDARD)
7	C010 CHLOROMETHANE <74-87-3>
8	C020 VINYL CHLORIDE <75-01-4>
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28	C230 TOLUENE <108-88-3>
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35	C235 CHLOROBENZENE <108-90-7>
36	C240 ETHYLBENZENE <100-41-4>
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DATA FROM FILE: CN039033A51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 10:44:00
CALI: CN039033A51 #3 OUT OF 200 TO 1850
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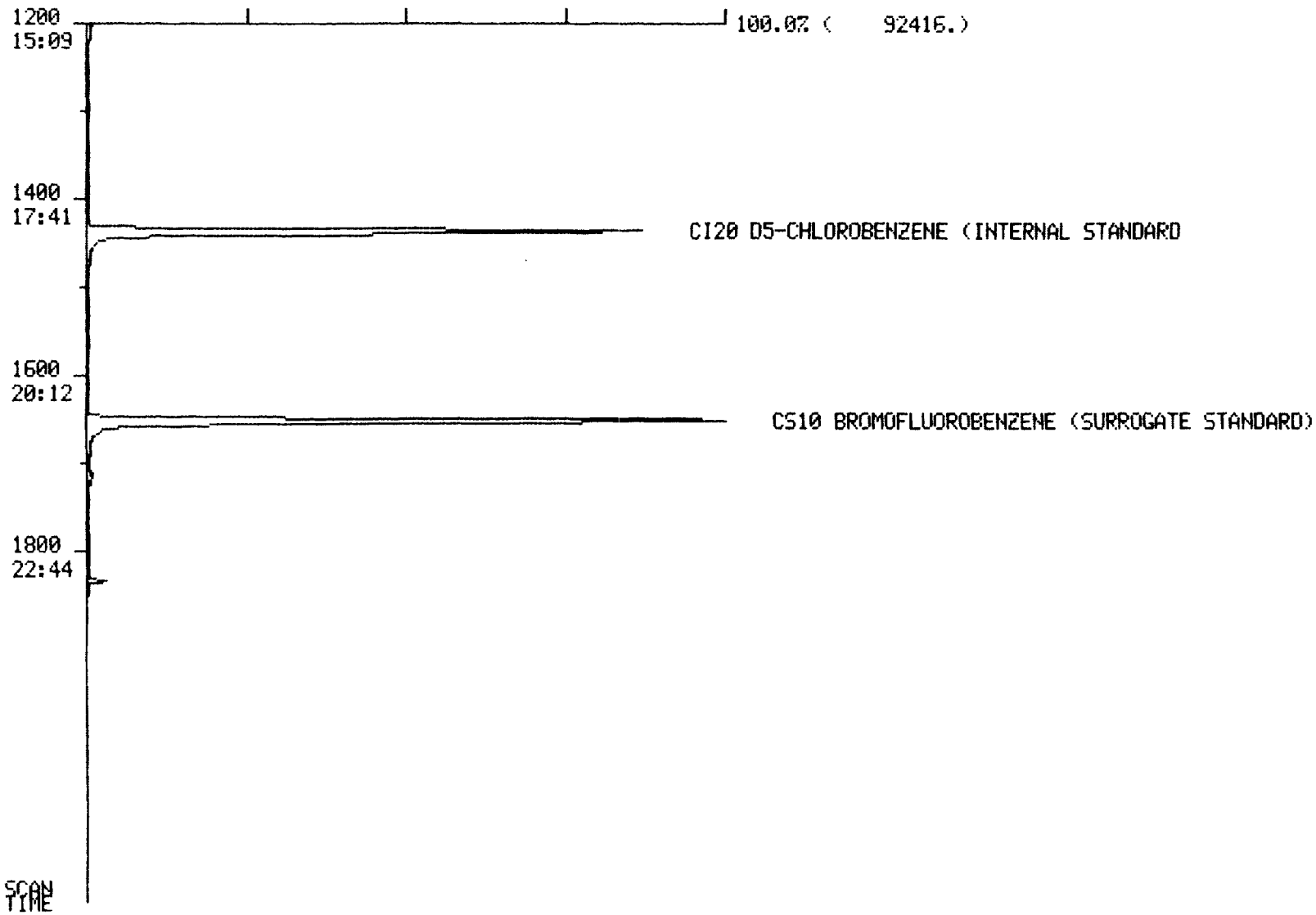
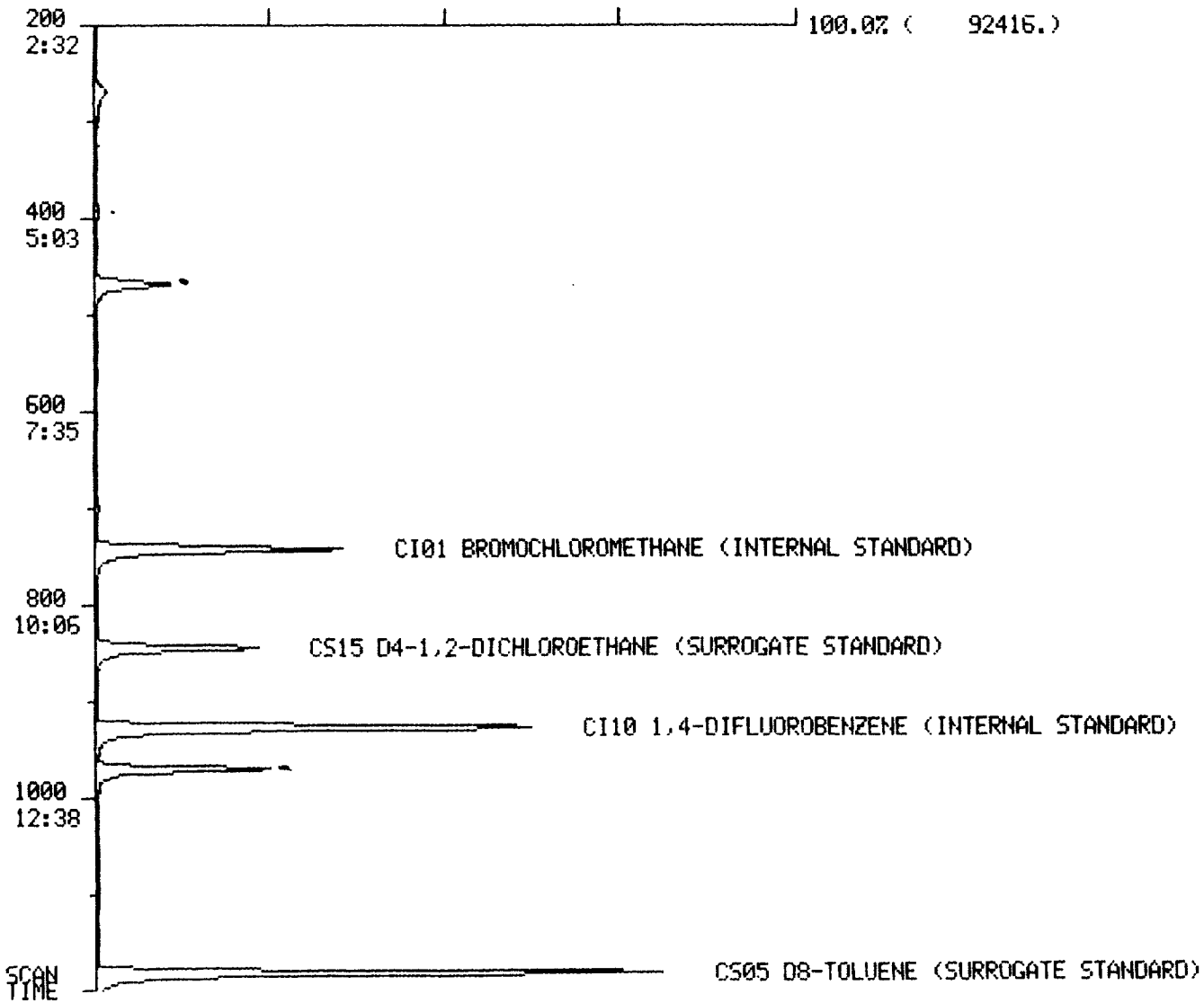


DATA FROM FILE: CN039033A51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 10:44:00
CALI: CN039033A51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,PS1,LOW,WATER,439033,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

PS1

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439033

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039033A51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.

PS1

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439033

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039033A51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	15	B
67-64-1	Acetone	8	BJ
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	17	
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

LAB INSTRUCTIONS PPS#_____

VOA J( ) J3( ) D( ) (:1)
GC/MS WORKSHEET
J2( ) J4( ) D2( ) (:1)

==========

CLP, 23861, 1, LABPURE, LOW, WATER, 439036, VOA, EPA, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: ~~0~~ 5 ml UL SVBass 8/28/91
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910827A51
BLANK FILENAME: CB910827A51
STANDARD FILENAME: CS910827A51
SAMPLE FILENAME: CN039036B51

ANALYST(S): INJECTION 1452 WORKUP 1452 [illegible]

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [✓] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS: [ ] REINJECT NEAT
OF PEAKS FOUND : 0 [ ] DILUTE ( )

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED _____

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

POSTED

GC/MS REVIEW SVBass DATE 8/28/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: 1

FINAL REPORTABLE PACKAGE(S): CN039036B51 / _____

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

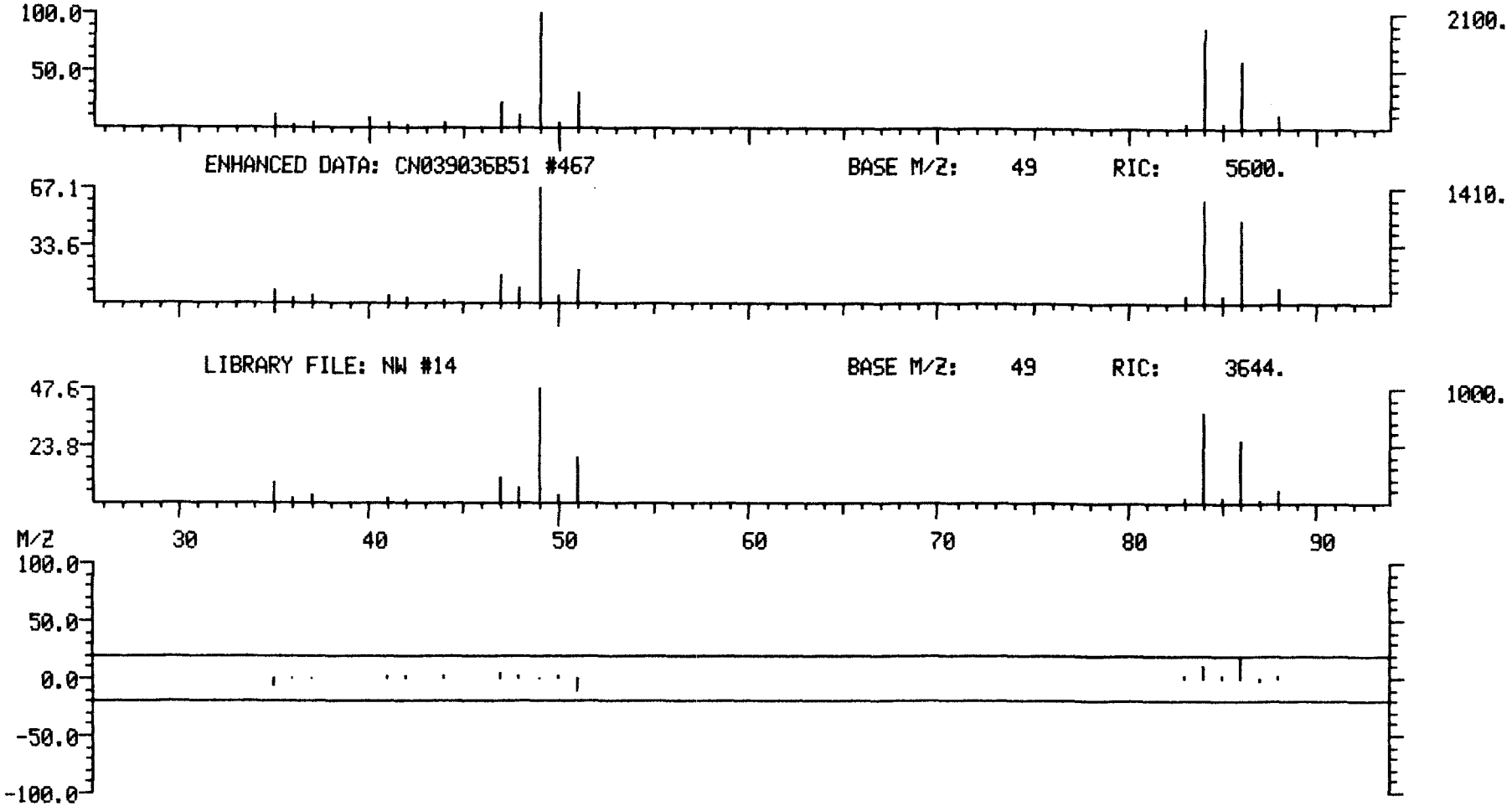
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

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

RAW DATA: CN039036B51 #467 BASE M/Z: 49 RIC: 7808.
08/27/91 22:51
SAMPLE: CLP,23861,1,LABPURE,LOW,WATER,439036,VOA,EPA,F50051
CONDS.: DB624,CS910827A51,BF910827A51,CB910827A51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.01	0.533	1.00	2.77	50.00	0.012	0.212	0.06
13	5:14		0.561						
14	5:51	1.01	0.627	1.01	12.70	50.00	0.422	1.660	0.25
15	6:29		0.695						
16	7:27		0.799						
17	8:47		0.943						
18	8:52		0.951						
19	9:33		1.026						
20	9:55		0.852						
21	10:17		0.883						
22	10:44		0.921						
23	10:47		1.157						
24	12:12		1.047						
25	12:40		1.087						
26	13:19		1.143						
27	14:43		0.812						
28	15:02	1.00	0.831	1.00	0.12	50.00	0.003	1.368	0.00
29	14:19		1.229						
30	15:34		1.336						
31	15:57		1.368						
32	16:15		0.897						
33	16:35		0.916						
34	16:48		1.442						
35	18:10	1.00	1.003	1.00	0.06	50.00	0.001	1.121	0.00
36	18:28		1.020						
37	18:44	1.00	1.035	1.00	0.05	100.00	0.000	0.681	0.00
38	19:38		1.084						
39	19:40		1.086						
40	20:02		1.719						
41	21:13		1.172						
42	8:47	2.14	0.943	2.13	-0.00	100.00	-0.000	1.701	-0.00
43	18:44	1.00	1.035	1.00	0.03	100.00	0.000	1.014	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	740	9:21	1	1.000	A BB	38959.	50.000 UG/L	16.35
2	114	926	11:41	2	1.000	A BB	194809.	50.000 UG/L	16.35
3	117	1435	18:07	3	1.000	A BB	172873.	50.000 UG/L	16.35
4	65	843	10:39	1	1.139	A BB	51682.	44.203 UG/L	14.45
5	98	1181	14:55	3	0.823	A BB	200061.	48.583 UG/L	15.88
6	95	1651	20:51	3	1.151	A BB	137659.	47.409 UG/L	15.50
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	395	4:59	1	0.534	A BB	458.	2.770 UG/L	0.91 NO
13	NOT FOUND								
14	84	467	5:54	1	0.631	A BB	16426.	12.701 UG/L	4.15 yes B
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	91	1193	15:04	3	0.831	A BB	581.	0.123 UG/L	0.04 BDL
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	112	1439	18:10	3	1.003	A BB	239.	0.062 UG/L	0.02 BDL
36	NOT FOUND								
37	106	1486	18:46	3	1.036	A BB	116.	0.049 UG/L	0.02 BDL
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	1486	18:46	1	2.008	****	-2.	-0.002 UG/L	-0.00
43	106	1486	18:46	3	1.036	**B*	115.	0.033 UG/L	0.01 BDL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:39	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:36	1.00	1.138	1.00	44.20	50.00	1.327	1.501	0.88
5	14:53	1.00	0.822	1.00	48.58	50.00	1.157	1.191	0.97
6	20:49	1.00	1.150	1.00	47.41	50.00	0.796	0.840	0.95
7	2:56		0.314						
8	3:03		0.328						
9	3:29		0.374						
10	3:33		0.381						
11	4:50		0.519						

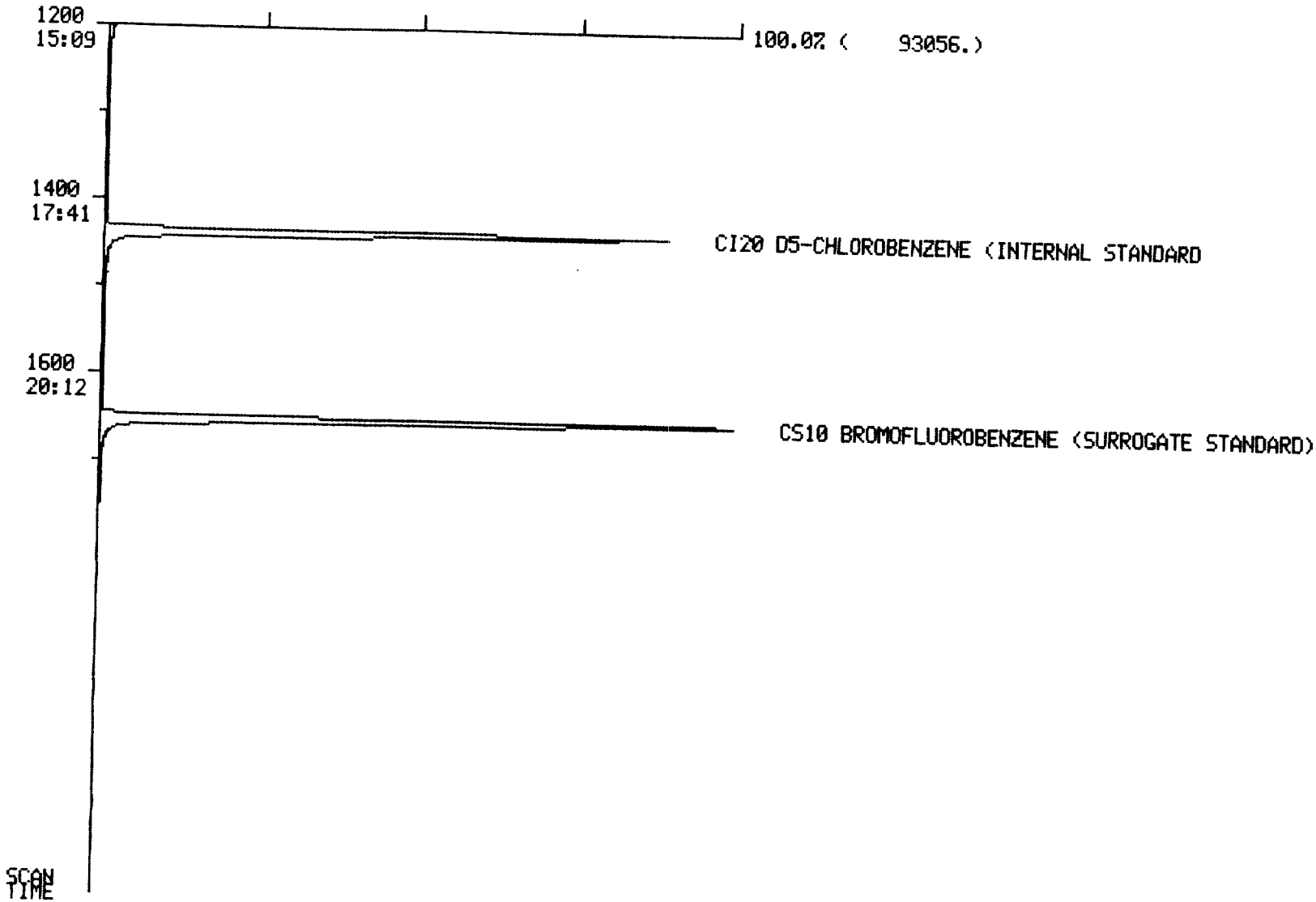
Quantitation Report File: CN039036B51

Data: CN039036B51.TI
08/27/91 22:51:00
Sample: CLP,23861,1,LABPURE,LOW,WATER,439036,VOA,EPA,F50051
Conds.: DB624,CS910827A51,BF910827A51,CB910827A51
Formula: NWSW Instrument: F50051 Weight: 0.000
Submitted by: 428 Analyst: 1452 Acct. No.: BN

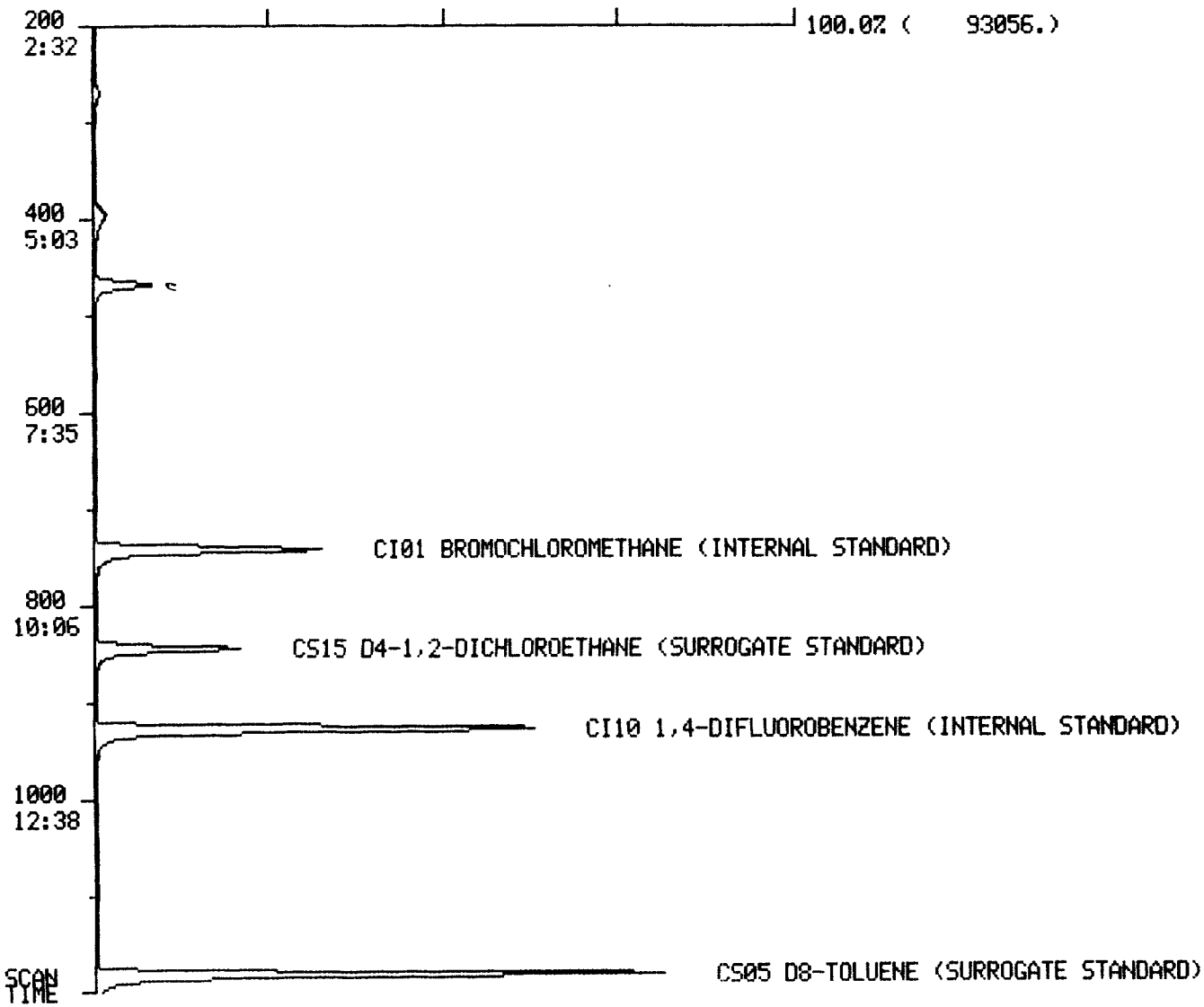
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039036B51 SCANS 1200 TO 1750 ACQUIRED: 08/27/91 22:51:00
CALI: CN039036B51 #3 OUT OF 200 TO 1750
SAMPLE: CLP,23861,1,LABPURE,LOW,WATER,439036,VOA,EPA,F50051
CONDS.: DB624,CS910827A51,BF910827A51,CB910827A51



DATA FROM FILE: CN039036B51 SCANS 200 TO 1200 ACQUIRED: 08/27/91 22:51:00
CALI: CN039036B51 #3 OUT OF 200 TO 1750
SAMPLE: CLP,23861,1,LABPURE,LOW,WATER,439036,VOA,EPA,F50051
CONDS.: DB624,CS910827A51,BF910827A51,CB910827A51



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.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439036

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039036B51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/27/91

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.

LABPURE

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439036

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039036B51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/27/91

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	B
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

LAB INSTRUCTIONS PPS#_____

VOA J( ) J3( ) D( ) (:1)
GC/MS WORKSHEET
J2( ) J4( ) D2( ) (:1)

==========

CLP, 23861, 1, INFLUENT, LOW, WATER, 439024, VOA, EPA, F50051

==========

GC/MS ANALYSIS
AMOUNT PURGED: 5000. UL
INTERNAL STANDARD/SURROGATE MIX VOLUME ADDED 5UL OR ___ UL
BFB FILENAME: BF910828C51
BLANK FILENAME: CB910828C51
STANDARD FILENAME: CS910828C51
SAMPLE FILENAME: CN039024C51

ANALYST(S): INJECTION 1050 [illegible] WORKUP 1050 [illegible]

==========

GC/MS REVIEW

OK JA DI SH SL
IH IL DA DW OT*

CONDITION CODE OK

DISPOSITION: [X] COMPLETE

EXTRANEOUS PEAKS SEARCH RESULTS:
OF PEAKS FOUND : 0

[ ] REINJECT NEAT
[ ] DILUTE ( )

POSTED

QUALITY ASSURANCE NOTICE(S):
NOTICES REQUIRED 0

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

GC/MS REVIEW [illegible] DATE 8/28/91 AUDITOR _____ DATE ___/___/___

==========

REPORT INTEGRATION: TOTAL # OF INJECTIONS: ____

FINAL REPORTABLE PACKAGE(S): _____/_____

==========

QA COMMENTS:

INITIALS _____ DATE ___/___/___

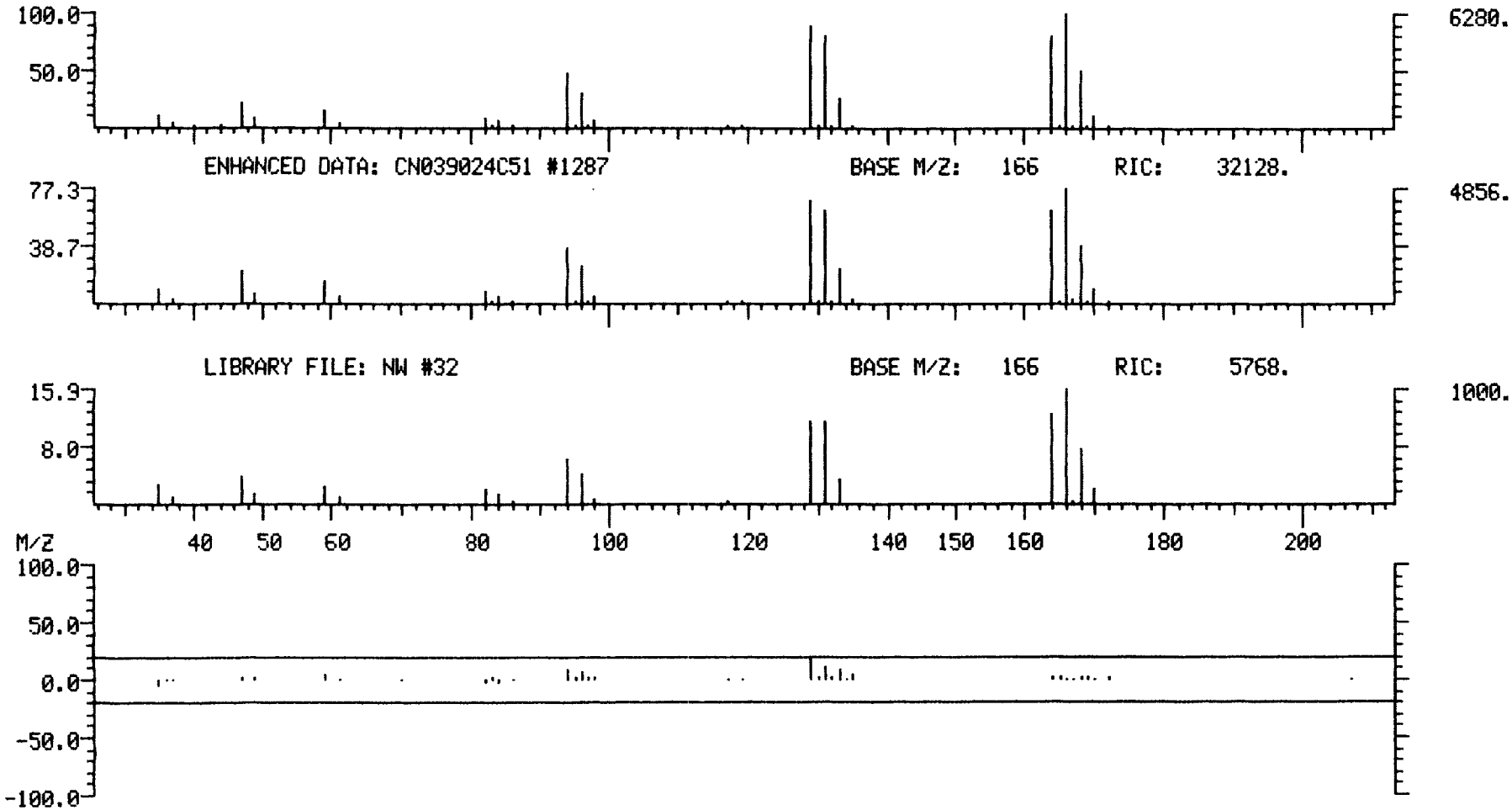
==========

FINAL REVIEW: INITIALS _____ DATE ___/___/___

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE <127-18-4>

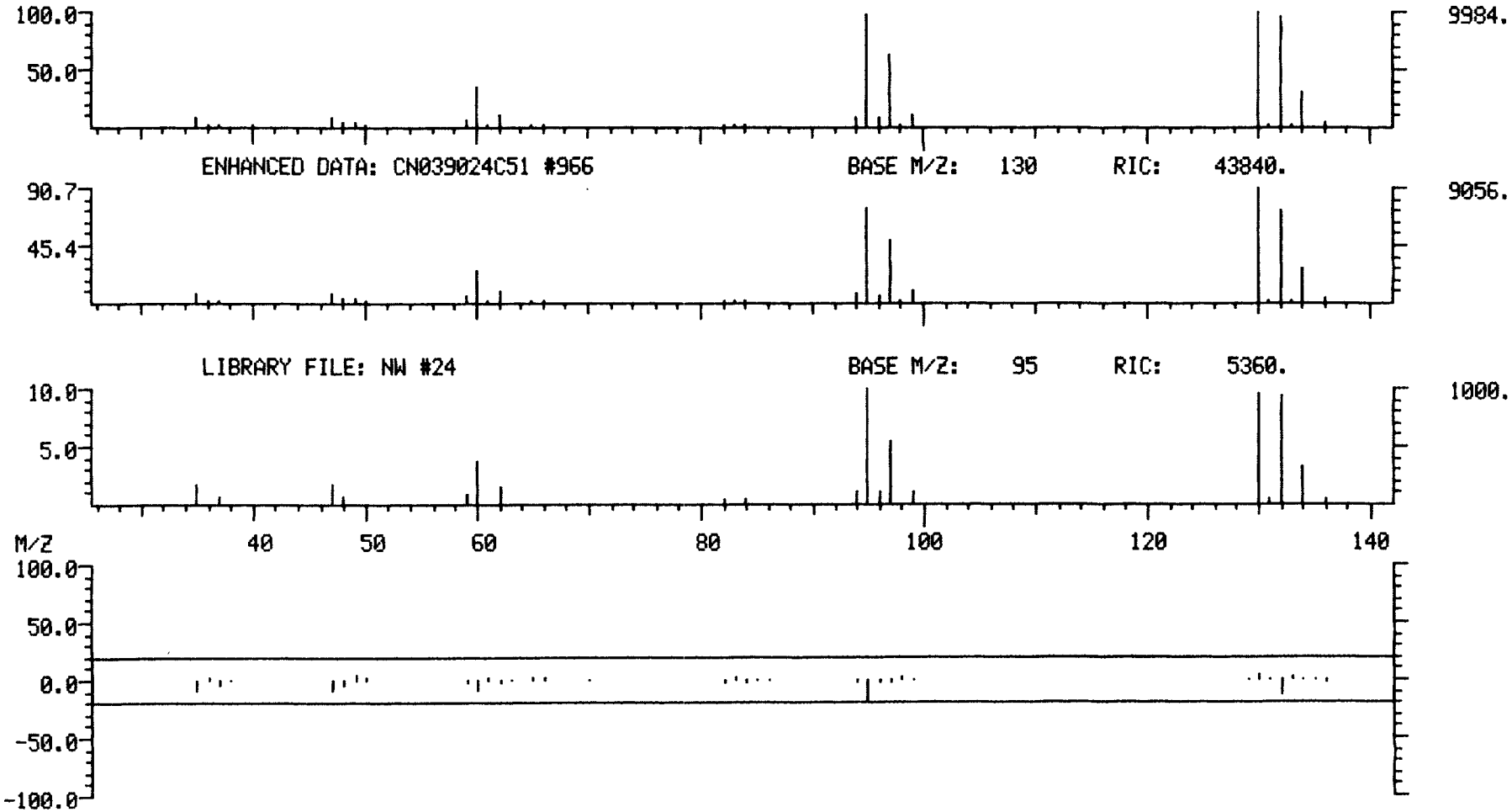
RAW DATA: CN039024C51 #1287 BASE M/Z: 166 RIC: 39616.
08/28/91 3:52
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE <79-01-6>

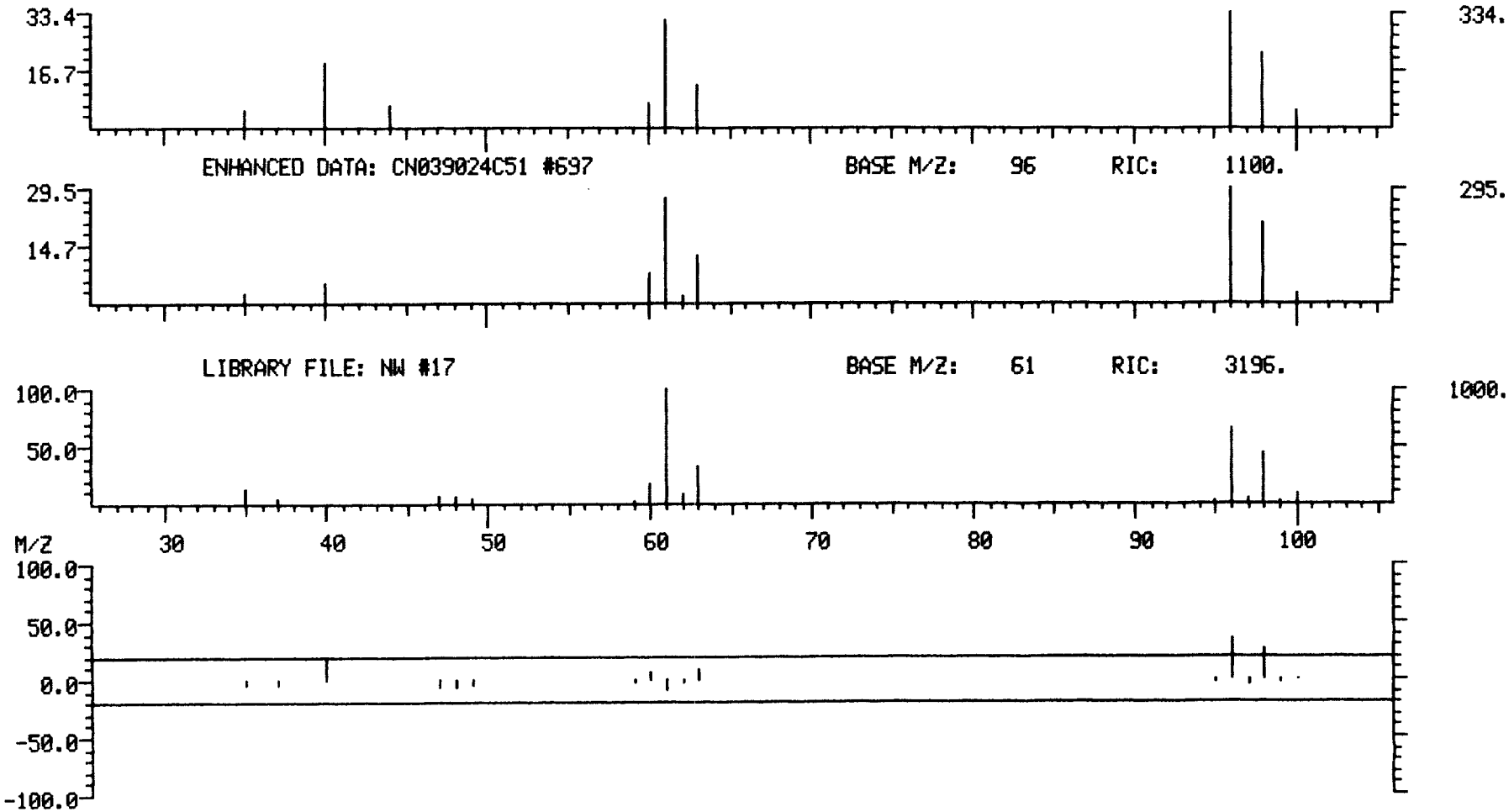
RAW DATA: CN039024C51 #966 BASE M/Z: 130 RIC: 53056.
08/28/91 3:52
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

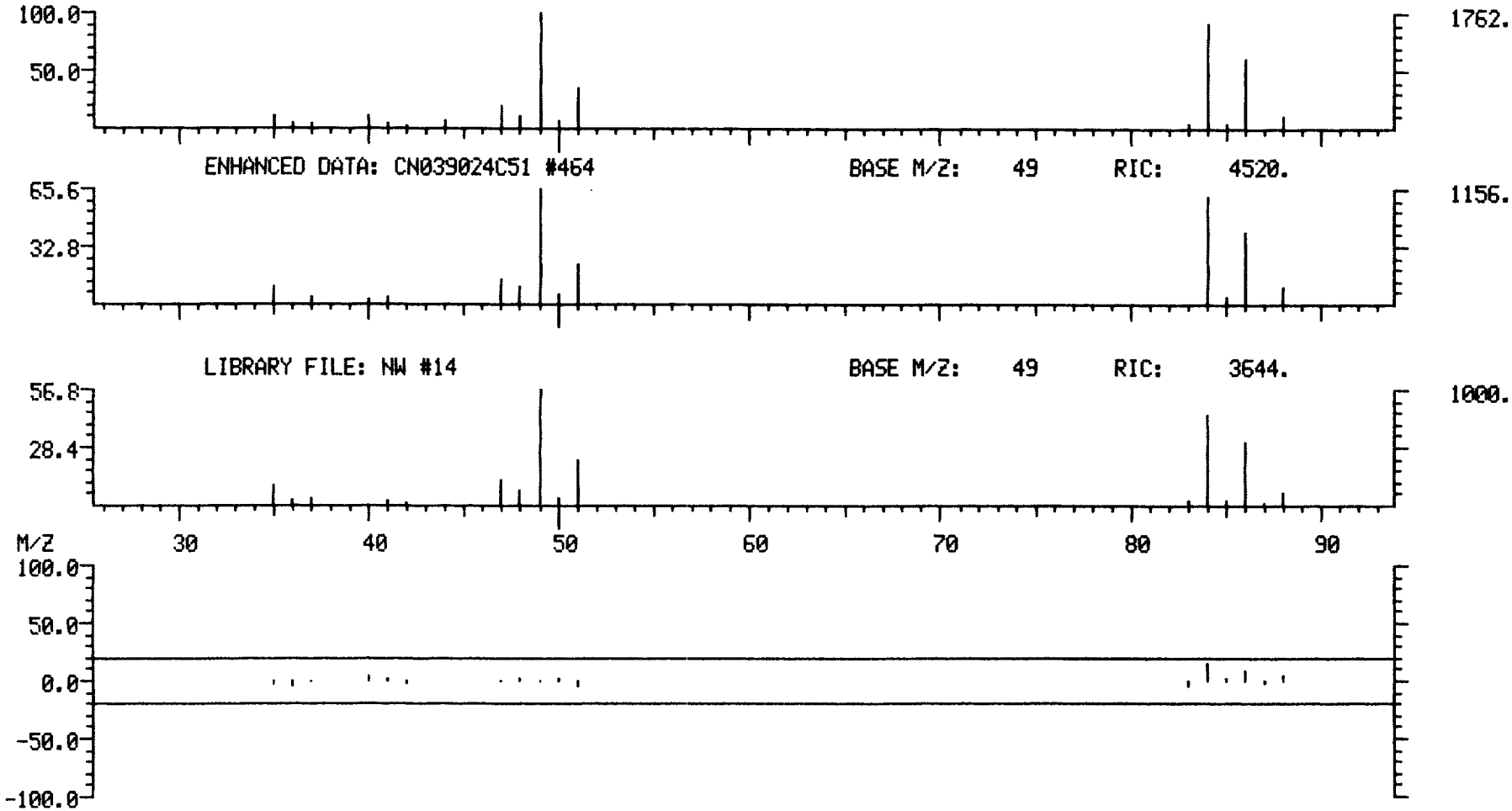
RAW DATA: CN039024C51 #697 BASE M/Z: 96 RIC: 1424.
08/28/91 3:52
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

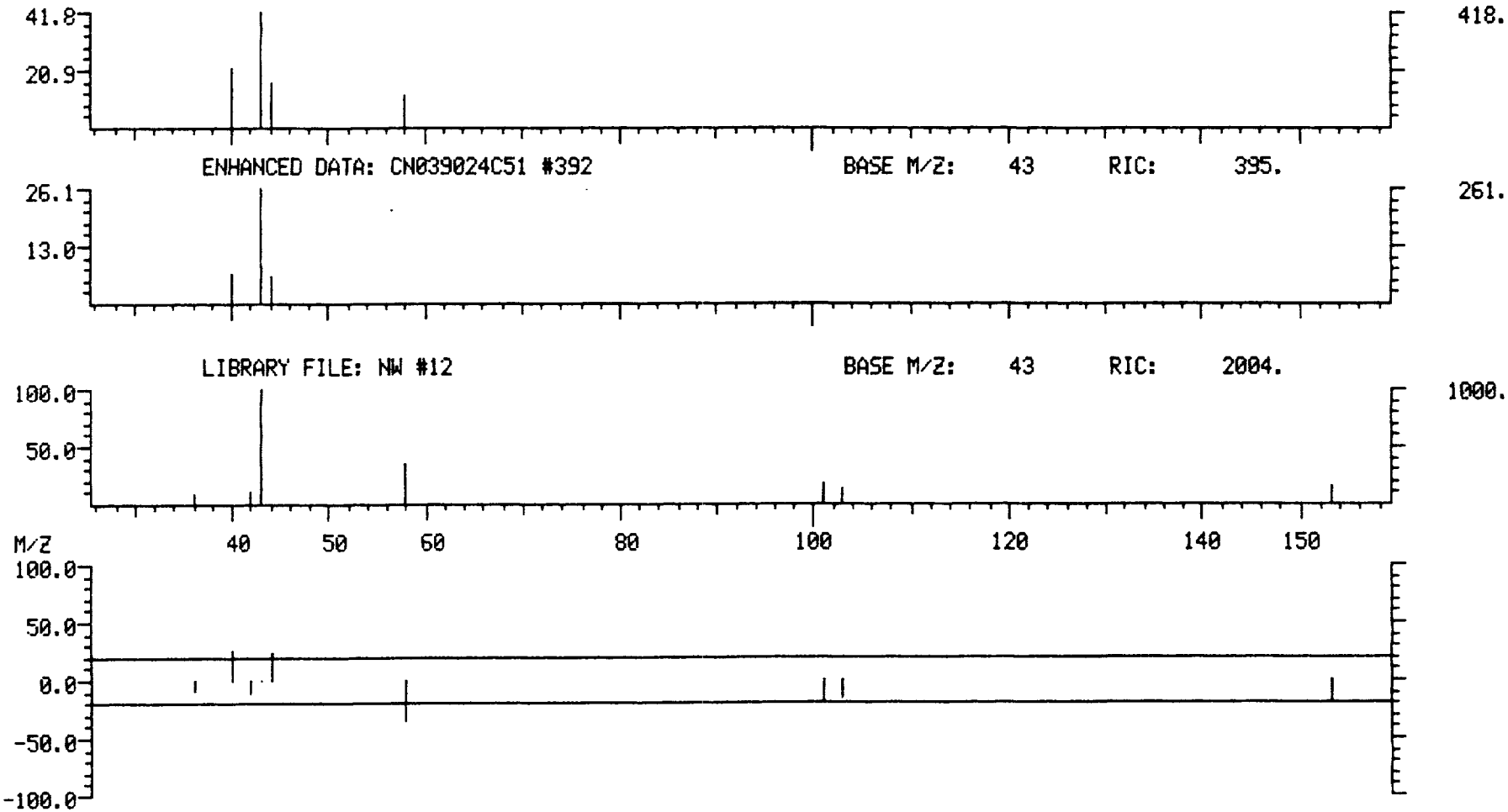
RAW DATA: CN039024C51 #464 BASE M/Z: 49 RIC: 6832.
08/28/91 3:52
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CN039024C51 #392 BASE M/Z: 43 RIC: 920.
08/28/91 3:52
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	21.76	50.00	0.116	0.266	0.44
13	5:14		0.561						
14	5:52	1.00	0.629	1.00	9.80	50.00	0.354	1.806	0.20
15	6:29		0.696						
16	7:27		0.799						
17	8:48	1.00	0.944	1.00	1.81	50.00	0.062	1.720	0.04
18	8:53		0.953						
19	9:33	1.00	1.026	1.00	0.91	50.00	0.059	3.230	0.02
20	9:55		0.850						
21	10:17		0.882						
22	10:44		0.920						
23	10:47		1.157						
24	12:12	1.00	1.045	1.00	36.22	50.00	0.348	0.481	0.72
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01		0.830						
29	14:18		1.226						
30	15:34		1.334						
31	15:57	1.00	1.367	1.00	0.84	50.00	0.006	0.374	0.02
32	16:14	1.00	0.897	1.00	19.06	50.00	0.184	0.483	0.38
33	16:35		0.916						
34	16:48		1.439						
35	18:09		1.003						
36	18:27		1.020						
37	18:44		1.036						
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	1.00	0.944	1.00	1.89	100.00	0.031	1.645	0.02
43	18:44	0.00	1.036	0.00	-0.00	100.00	-0.000	1.069	-0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	738	9:19	1	1.000	A BB	42778.	50.000 UG/L	13.24
2	114	924	11:40	2	1.000	A BB	204692.	50.000 UG/L	13.24
3	117	1434	18:06	3	1.000	A BB	179704.	50.000 UG/L	13.24
4	65	841	10:37	1	1.140	A BB	58162.	43.932 UG/L	11.63
5	98	1180	14:54	3	0.823	A BB	204705.	46.616 UG/L	12.34
6	95	1649	20:49	3	1.150	A BB	140136.	44.670 UG/L	11.83
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	96	383	4:50	1	0.519	A BB	179.	0.131 UG/L	0.03 BR
12	43	392	4:57	1	0.531	A BB	4957.	21.760 UG/L	5.76
13	NOT FOUND								
14	84	464	5:52	1	0.629	A BB	15143.	9.800 UG/L	2.60
15	NOT FOUND								
16	NOT FOUND								
17	96	697	8:48	1	0.944	A BB	2665.	1.811 UG/L	0.48
18	NOT FOUND								
19	83	757	9:33	1	1.026	A BB	2528.	0.915 UG/L	0.24 BR
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	966	12:12	2	1.045	A BB	71256.	36.222 UG/L	9.59
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	97	1263	15:57	2	1.367	A BB	1283.	0.837 UG/L	0.22 BR
32	164	1287	16:15	3	0.897	A BB	33076.	19.059 UG/L	5.05
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	697	8:48	1	0.944	A**B	~~2664.~~ 2665	~~1.893~~ 1.811 UG/L	0.50
43	106	6724	0:00	3	0.000	****	-2.	-0.001 UG/L	-0.00 BR

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	43.93	50.00	1.360	1.547	0.88
5	14:53	1.00	0.823	1.00	46.62	50.00	1.139	1.222	0.93
6	20:48	1.00	1.150	1.00	44.67	50.00	0.780	0.873	0.89
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50	1.00	0.519	1.00	0.13	50.00	0.004	1.594	0.00

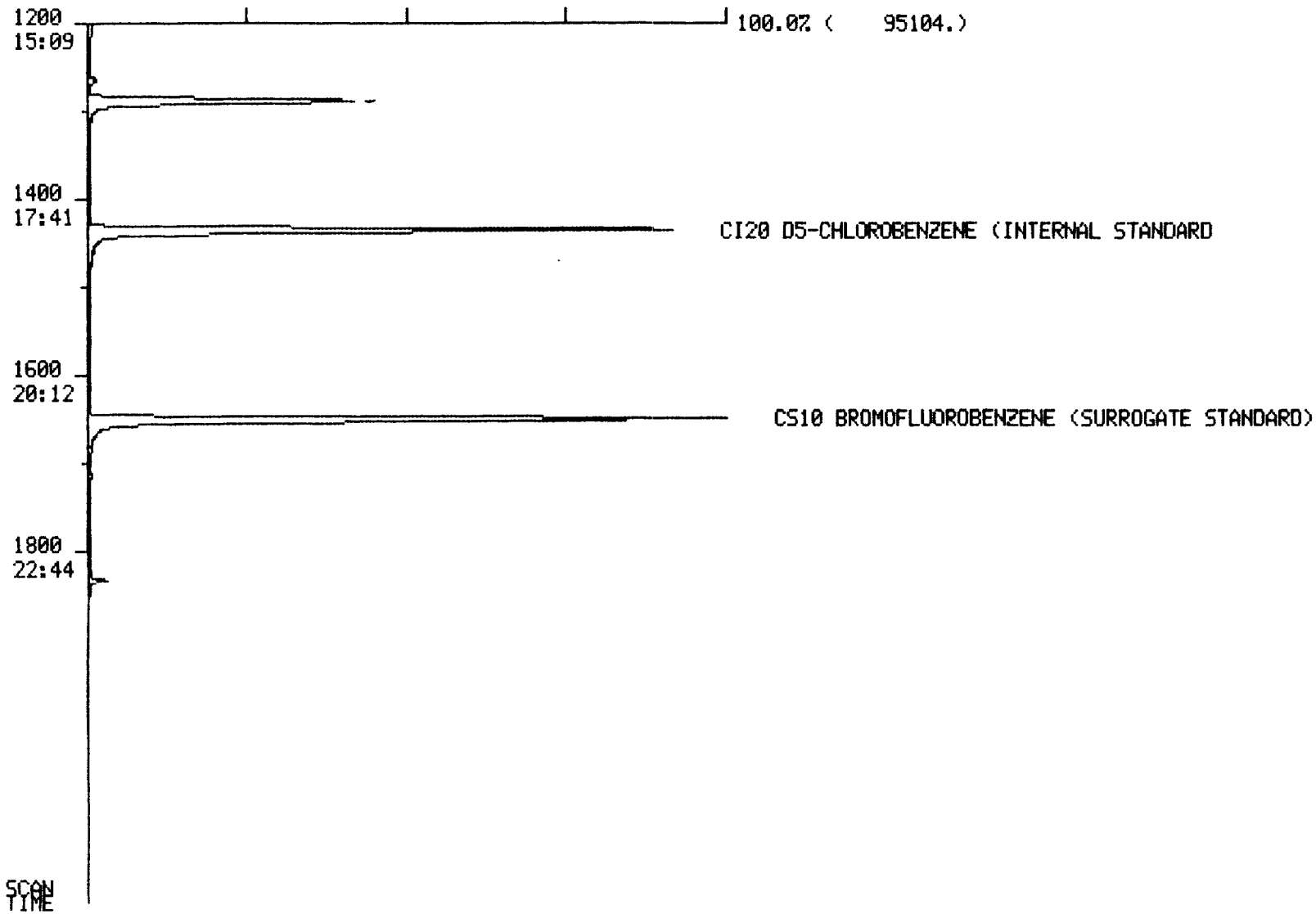
Quantitation Report File: CN039024C51

Data: CN039024C51.TI
08/28/91 3:52:00
Sample: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

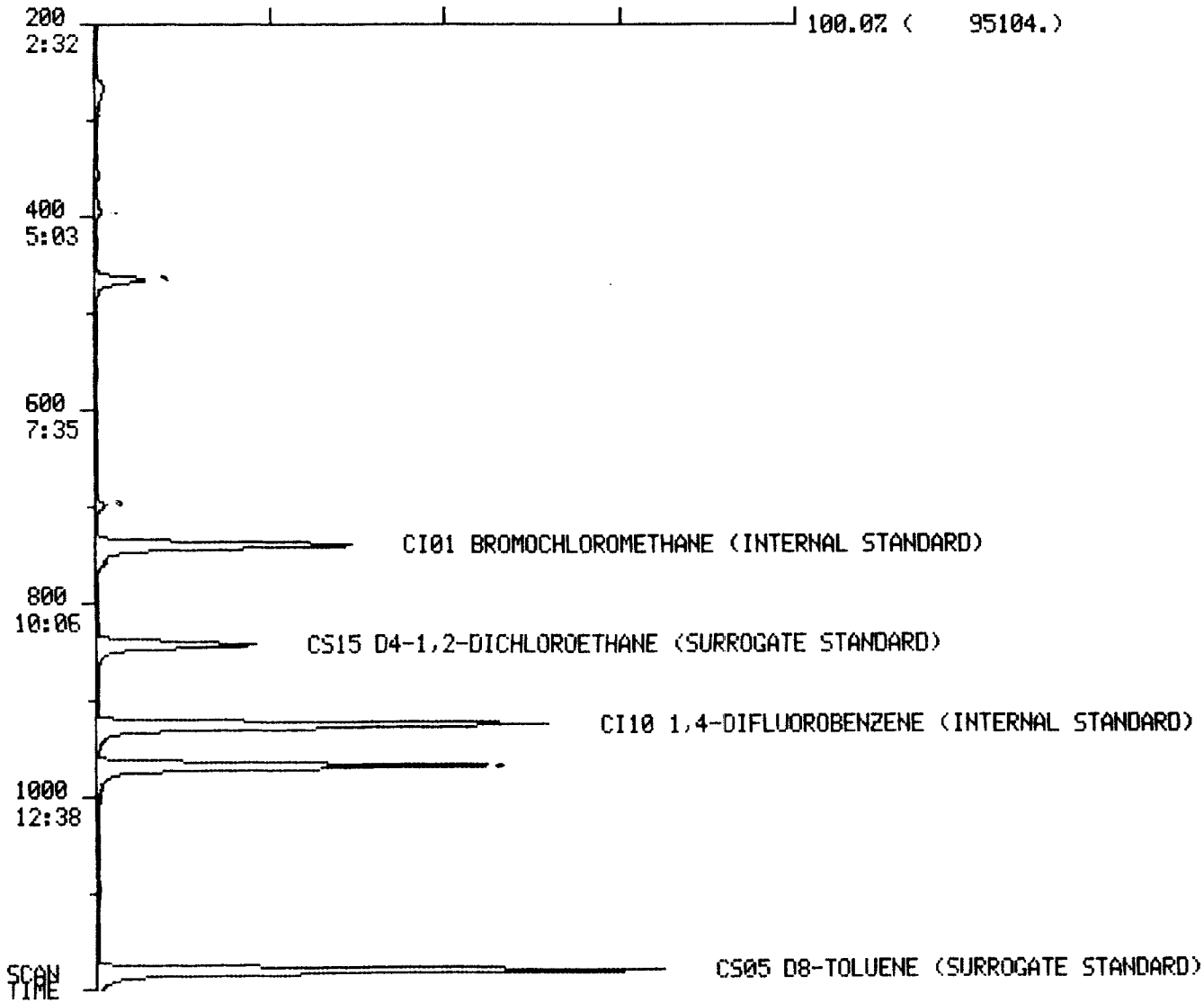
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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: CN039024C51 SCANS 1200 TO 1850 ACQUIRED: 08/28/91 3:52:00
CALI: CN039024C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039024C51 SCANS 200 TO 1200 ACQUIRED: 08/28/91 3:52:00
CALI: CN039024C51 #3 OUT OF 200 TO 1850
SAMPLE: CLP,23861,1,INFLUENT,LOW,WATER,439024,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



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.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439024

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039024C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.

INFLUENT

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439024

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039024C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	10	B
67-64-1	Acetone	22	B
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)	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	36	
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	19	
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

LAB INSTRUCTIONS: PFS#: _____
14-DAY VERBALS PER A. FLAHERTY

RECEIPT DATE: 08/21/91 CASE#: 23861 1

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 439025
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WA; 3/90 SOW(#1)

Sample date: 081991 Report type: 0

Sample Prep Code--- 0
Instrument Code---- 421
Compound List------ 643
Surrogate Std------ 424
Internal Std------- 36

SAMPLE ID#: EFFLUENT

GC/MS ANALYSIS
Amount Purged: [ ] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added _____ ul
Surrogate Standard Volume Added _____ ul
BFB Filename BF90624CST Disk ( )
Blank Filename CB90625CST Disk ( )
Standard Filename CS910828AST Disk ( )
Sample Filename CN039025AST Disk ( )
C 8/28/91

ANALYST(S): Injection JSD Work-up JSD

GC/MS REVIEW

CONDITION CODE [ ]

Disposition: [X] Complete

Extraneous Peak Search Results:
# of Peaks Found: 0 [ ] Reinject Neat

Quality Assurance Notice(s): [ ] Dilute (:1)
Notices Required 0

COMMENTS:

#GC/MS Review [illegible] Date 8/28/91 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN039025AS CST /

QA COMMENTS:

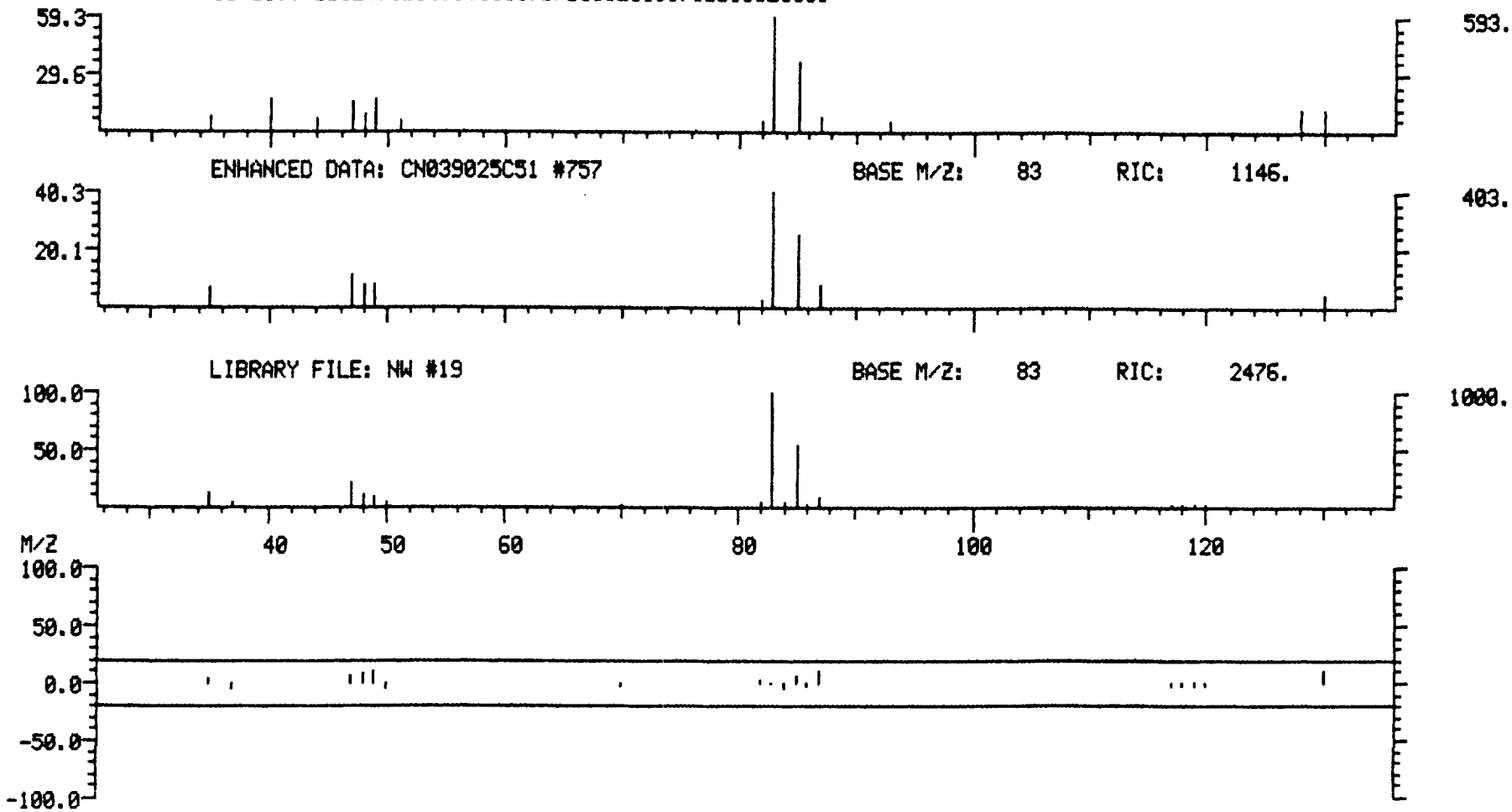
Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___
AC1162

TARGET COMPOUND COMPARISON

COMPOUND: C060 CHLOROFORM <67-66-3>

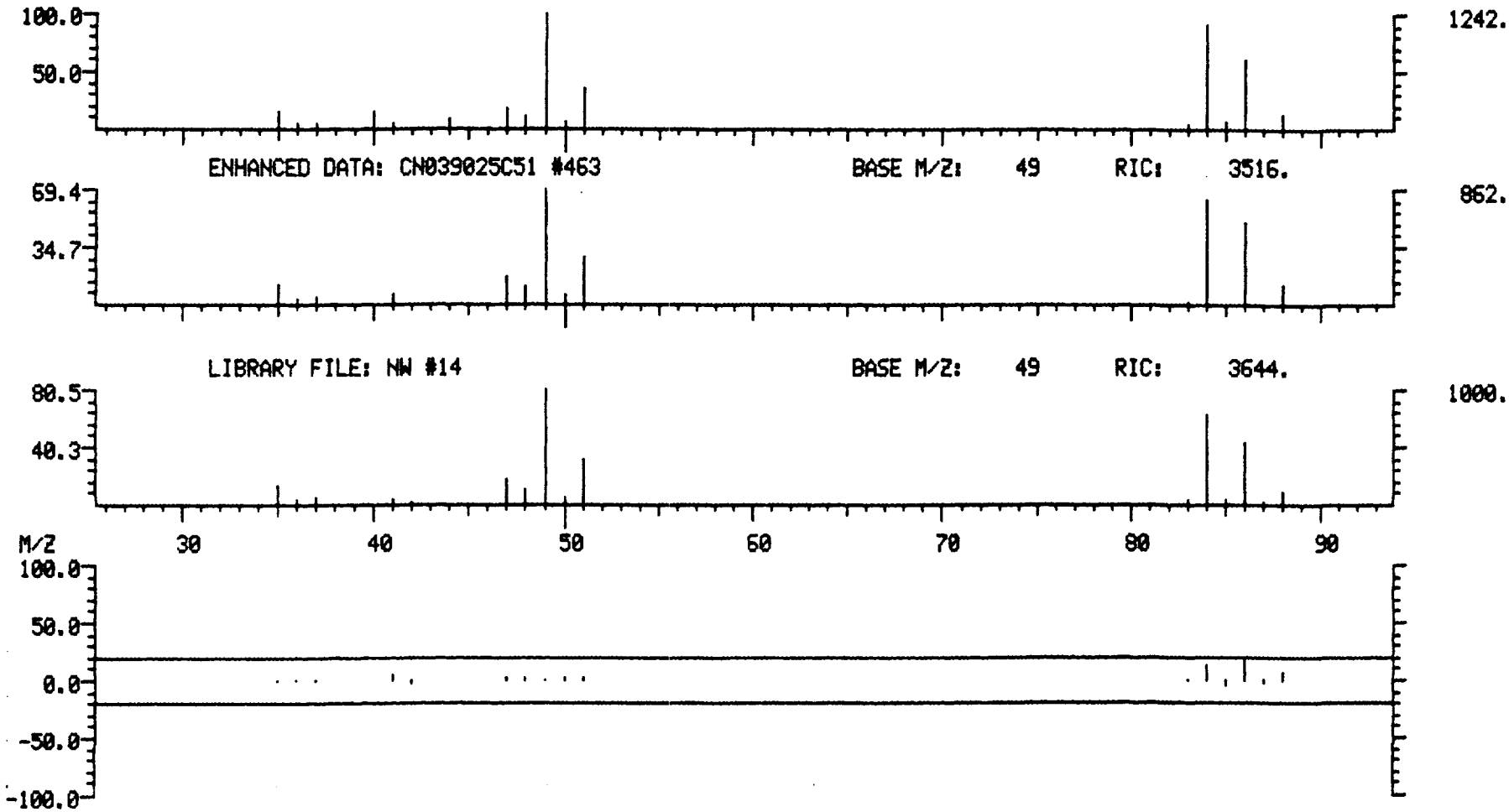
RAW DATA: CN039025C51 #757 BASE M/Z: 83 RIC: 2128.
08/28/91 4:30
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

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

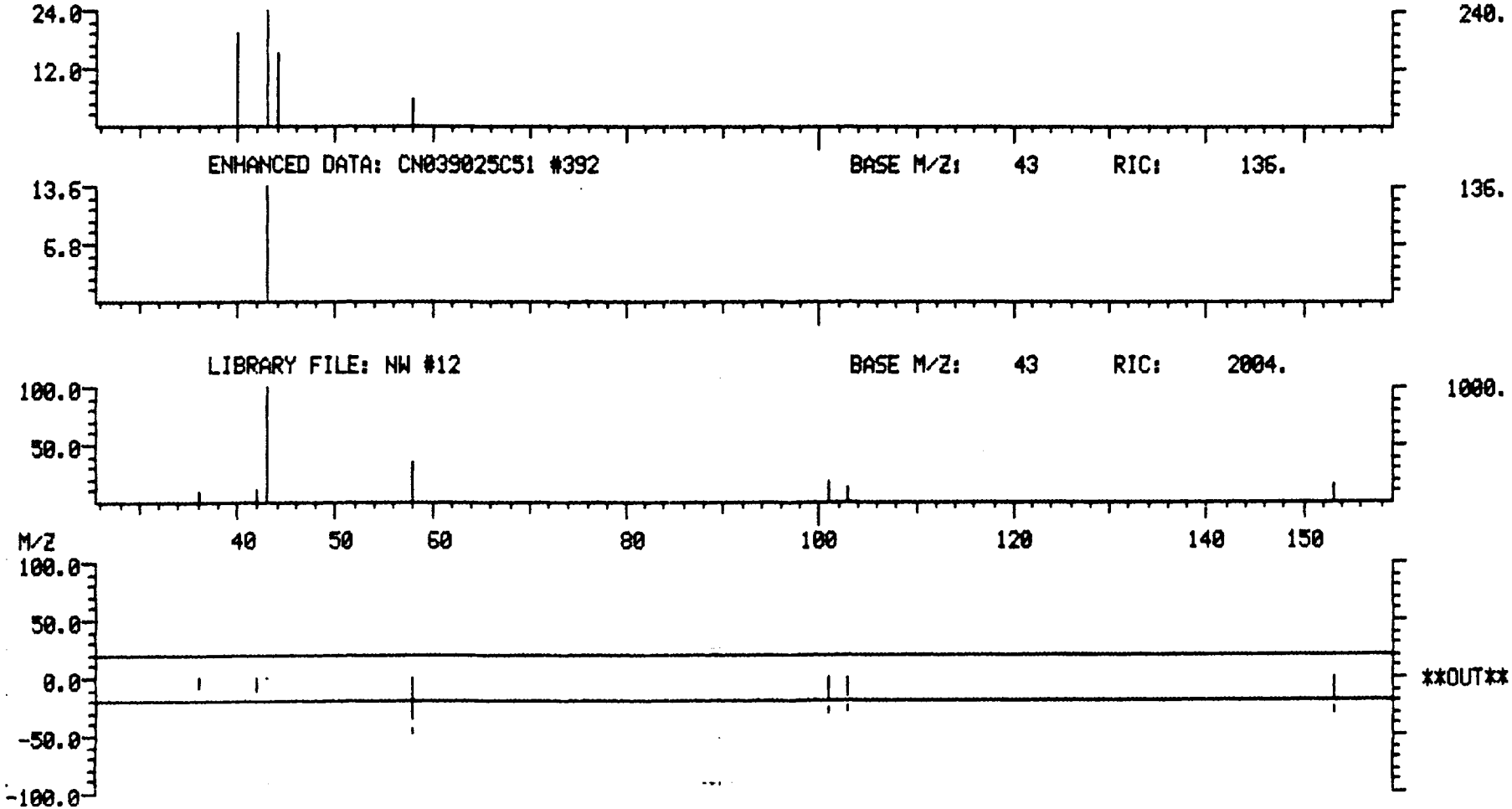
RAW DATA: CN039025C51 #463 BASE M/Z: 49 RIC: 4920.
08/28/91 4:30
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE <67-64-1>

RAW DATA: CN039025C51 #392 BASE M/Z: 43 RIC: 645.
08/28/91 4:30
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	4:58	1.00	0.533	1.00	11.75	50.00	0.063	0.266	0.23
13	5:14		0.561						
14	5:52	1.00	0.629	1.00	7.10	50.00	0.256	1.806	0.14
15	6:29		0.696						
16	7:27	1.00	0.799	1.00	0.36	50.00	0.016	2.167	0.01
17	8:48	1.00	0.944	1.00	0.44	50.00	0.015	1.720	0.01
18	8:53		0.953						
19	9:33	1.00	1.026	1.00	1.86	50.00	0.120	3.230	0.04
20	9:55		0.850						
21	10:17		0.882						
22	10:44		0.920						
23	10:47	1.00	1.157	1.00	0.39	50.00	0.015	1.901	0.01
24	12:12		1.045						
25	12:40		1.085						
26	13:19		1.142						
27	14:42		0.812						
28	15:01		0.830						
29	14:18		1.226						
30	15:34		1.334						
31	15:57		1.367						
32	16:14		0.897						
33	16:35		0.916						
34	16:48		1.439						
35	18:09		1.003						
36	18:27		1.020						
37	18:44		1.036						
38	19:37		1.084						
39	19:40		1.087						
40	20:01		1.716						
41	21:12		1.172						
42	8:48	1.00	0.944	1.00	0.46	100.00	0.007	1.645	0.00
43	18:44	0.00	1.036	0.00	0.00	100.00	0.000	1.069	0.00

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	737	9:18	1	1.000	A BB	42278.	50.000 UG/L	16.31
2	114	922	11:38	2	1.000	A BB	201223.	50.000 UG/L	16.31
3	117	1432	18:05	3	1.000	A BB	178925.	50.000 UG/L	16.31
4	65	840	10:36	1	1.140	A BB	57725.	44.117 UG/L	14.39
5	98	1178	14:52	3	0.823	A BB	203746.	46.600 UG/L	15.20
6	95	1648	20:48	3	1.151	A BB	135848.	43.491 UG/L	14.19
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	43	392	4:57	1	0.532	A BB	2645.	11.748 UG/L	3.83 JB
13	NOT FOUND								
14	84	463	5:51	1	0.628	A BB	10838.	7.097 UG/L	2.32 JB
15	NOT FOUND								
16	63	589	7:26	1	0.799	A BB	660.	0.360 UG/L	0.12
17	96	697	8:48	1	0.946	A BB	635.	0.437 UG/L	0.14
18	NOT FOUND								
19	83	757	9:33	1	1.027	A BB	5080.	1.860 UG/L	0.64
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	62	853	10:46	1	1.157	A BB	619.	0.385 UG/L	0.13
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
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	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	96	697	8:48	1	0.946	A**B	634.	0.456 UG/L	0.15
43	106	6724	0:00	3	0.000	****	-1.	-0.000 UG/L	0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:19	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	11:40	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	18:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	10:37	1.00	1.140	1.00	44.12	50.00	1.365	1.547	0.88
5	14:53	1.00	0.823	1.00	46.60	50.00	1.139	1.222	0.93
6	20:48	1.00	1.150	1.00	43.49	50.00	0.759	0.873	0.87
7	2:56		0.314						
8	3:03		0.327						
9	3:27		0.370						
10	3:34		0.382						
11	4:50		0.519						

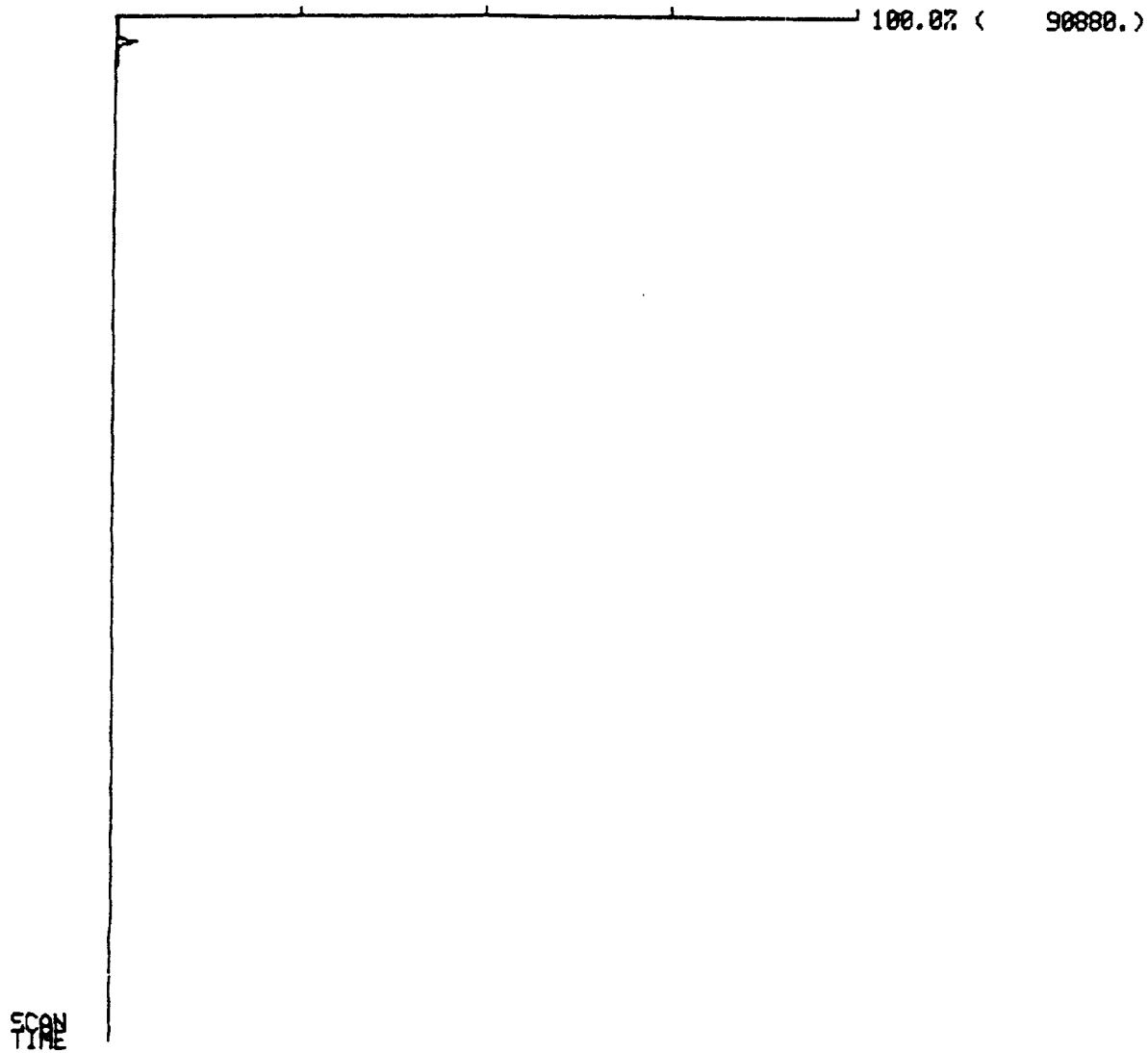
Quantitation Report File: CN039025C51

Data: CN039025C51.TI
08/28/91 4:30:00
Sample: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
Conds.: DB624,CS910828C51,BF910828C51,CB910828C51
Formula: NWSW Instrument: F50051 Weight: 5000.000
Submitted by: 428 Analyst: 1050 Acct. No.: IHM

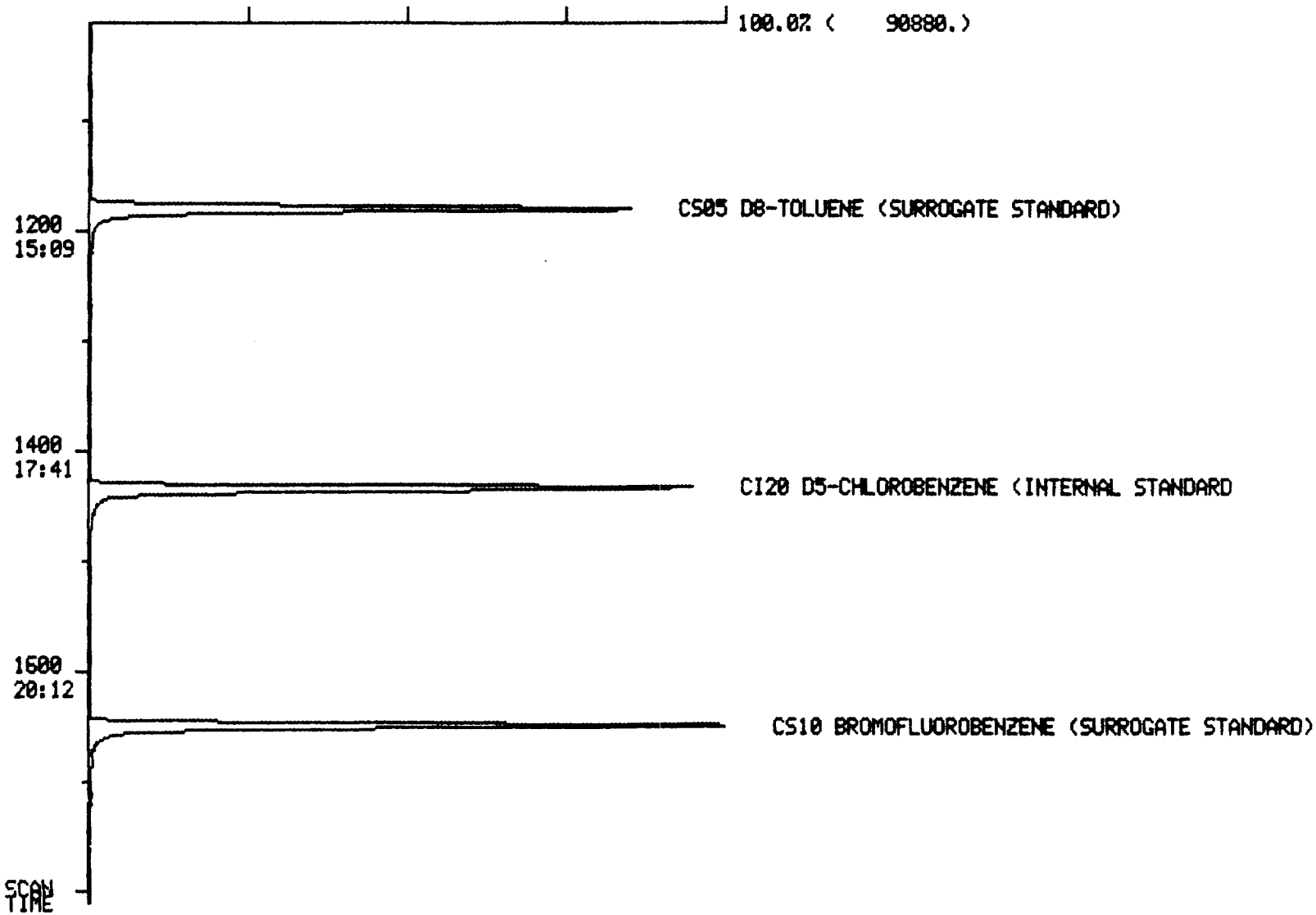
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

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>

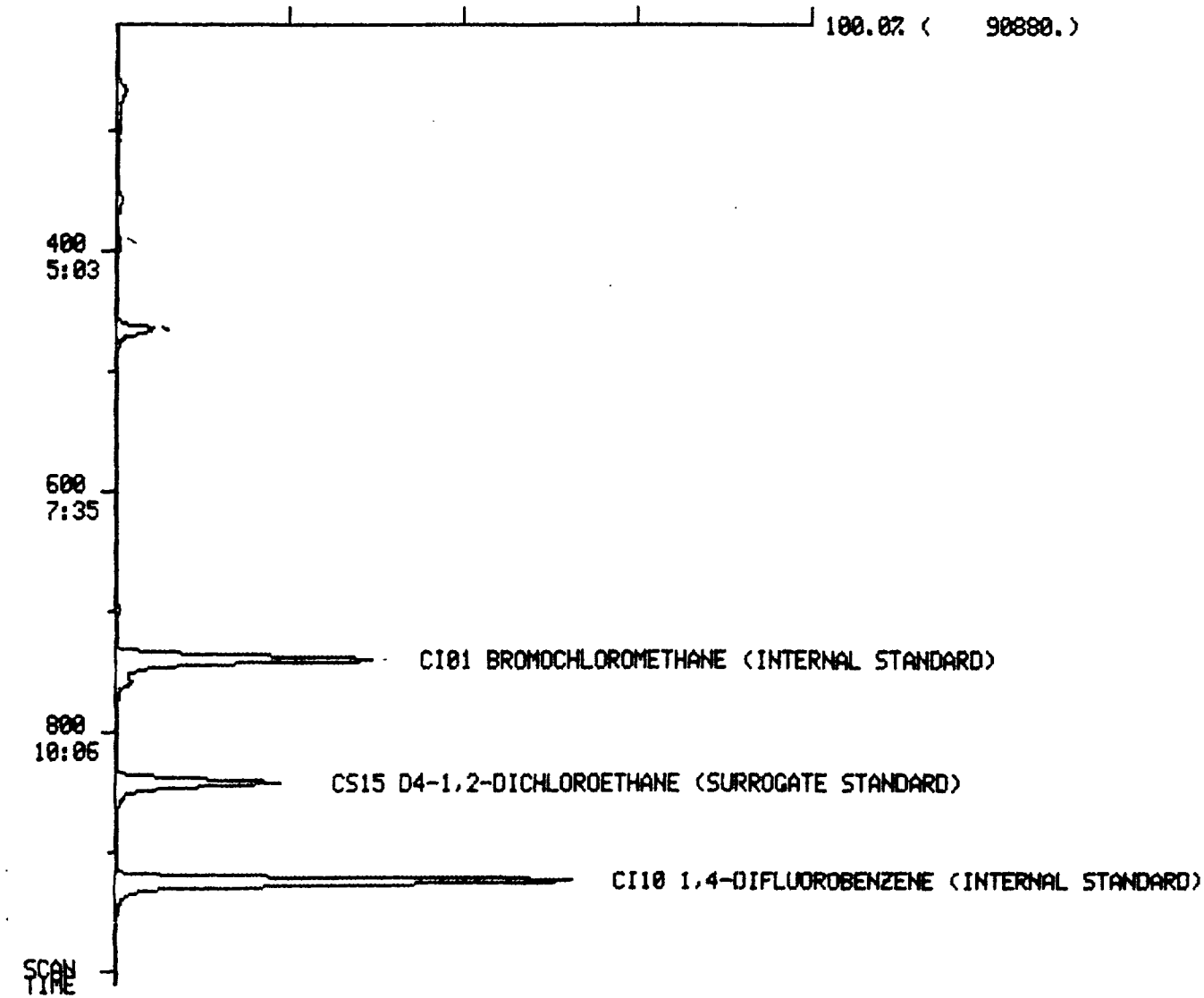
DATA FROM FILE: CN039025C51 SCANS 1810 TO 1850 ACQUIRED: 08/28/91 4:30:00
CALI: CN039025C51 #3 OUT OF 210 TO 1850
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039025C51 SCANS 1010 TO 1810 ACQUIRED: 08/28/91 4:30:00
CALI: CN039025C51 #3 OUT OF 210 TO 1850
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



DATA FROM FILE: CN039025C51 SCANS 210 TO 1010 ACQUIRED: 08/28/91 4:30:00
CALI: CN039025C51 #3 OUT OF 210 TO 1850
SAMPLE: CLP,23861,1,EFFLUENT,LOW,WATER,439025,VOA,EPA,F50051
CONDS.: DB624,CS910828C51,BF910828C51,CB910828C51



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.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439025

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039025C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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.: 1

Matrix: (soil/water) WATER Lab Sample ID: 439025

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN039025C51

Level: (low/med) LOW Date Received: 08/21/91

% Moisture: not dec. ____ Date Analyzed: 08/28/91

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	BJ
67-64-1	Acetone	12	B
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	2	J
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.: 1

Lab File ID (Standard): CS910828C51 Date Analyzed: 08/28/91

Instrument ID: F50051 Time Analyzed: 043

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	44256	9.32	211288	11.67	192718	18.10
	UPPER LIMIT	88512	9.82	422576	12.17	385436	18.60
	LOWER LIMIT	22128	8.82	105644	11.17	96359	17.60
	EPA SAMPLE NO.						
01	EFFLUENT	42278	9.30	201223	11.64	178925	18.09
02	INFLUENT	42778	9.32	204692	11.67	179704	18.10
03	PS1	38807	9.35	186284	11.69	164126	18.14
04	PS3	38695	9.35	183974	11.69	160113	18.14
05	PS4	45156	9.30	218162	11.65	192365	18.09
06	PS4MS	42335	9.32	201958	11.67	187395	18.10
07	PS4MSD	41097	9.35	198307	11.69	181679	18.12
08	VBLKIC	45512	9.34	220808	11.69	200444	18.12

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.: 1

Lab File ID (Standard): CS910827A51 Date Analyzed: 08/27/91

Instrument ID: F50051 Time Analyzed: 1108

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	43495	9.32	215038	11.65	189086	18.10
	UPPER LIMIT	86990	9.82	430076	12.15	378172	18.60
	LOWER LIMIT	21748	8.82	107519	11.15	94543	17.60
	EPA SAMPLE NO.						
01	LABPURE	38959	9.35	194809	11.69	172873	18.12
02	VBLKTB	44027	9.34	214989	11.67	184699	18.10

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.: 1

Lab File ID: BF910828C51 BFB Injection Date: 08/28/91

Instrument ID: F50051 BFB Injection Time: 0026

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	13.6
75	30.0 - 66.0% of mass 95	39.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	62.8
175	4.0 - 9.0% of mass 174	4.6 (7.3)1
176	93.0 - 101.0% of mass 174	60.5 (96.4)1
177	5.0 - 9.0% of mass 176	4.1 (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		CS910828C51	08/28/91	0043
02	VBLKIC	VBLKIC	CB910828C51	08/28/91	0151
03	PS4	439019	CN039019C51	08/28/91	0313
04	INFLUENT	439024	CN039024C51	08/28/91	0352
05	EFFLUENT	439025	CN039025C51	08/28/91	0430
06	PS4MS	439020	CN039020C51	08/28/91	0509
07	PS4MSD	439021	CN039021C51	08/28/91	0547
08	PS1	439033	CN039033A51	08/28/91	1044
09	PS3	439035	CN039035A51	08/28/91	1122

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.: 1

Lab File ID: BF910827A51 BFB Injection Date: 08/27/91

Instrument ID: F50051 BFB Injection Time: 1054

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	39.5
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	68.3
175	4.0 - 9.0% of mass 174	5.0 (7.3)1
176	93.0 - 101.0% of mass 174	66.4 (97.2)1
177	5.0 - 9.0% of mass 176	4.4 (6.7)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		CS910827A51	08/27/91	1108
02	VBLKTB	VBLKTB	CB910827A51	08/27/91	1158
03	LABPURE	439036	CN039036B51	08/27/91	2251

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.: 1

Lab File ID: BG910827C51 BFB Injection Date: 08/27/91

Instrument ID: F50051 BFB Injection Time: 0454

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	13.7
75	30.0 - 66.0% of mass 95	39.1
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	0.2 (0.3)1
174	50.0 - 120.0% of mass 95	65.0
175	4.0 - 9.0% of mass 174	4.8 (7.4)1
176	93.0 - 101.0% of mass 174	63.6 (97.8)1
177	5.0 - 9.0% of mass 176	4.3 (6.7)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		CU910827C51	08/27/91	0508
02	VSTD200		CV910827C51	08/27/91	0601
03	VSTD100		CW910827C51	08/27/91	0706
04	VSTD020		CX910827C51	08/27/91	0753
05	VSTD010		CY910827C51	08/27/91	0839

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

(BFB in chronological order; by instrument)

4A

VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKTB

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Lab File ID: CB910827A51 Lab Sample ID: VBLKTB

Date Analyzed: 08/27/91 Time Analyzed: 1158

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

Instrument ID: F50051

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LABPURE	439036	CN039036B51	2251

COMMENTS: CLP,BLANK,,VBLKTB,LOW,WATER,,VOA,BLANK,F50051
DB624,CS910827A51,BF910827A51

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLKIC

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

Lab Code: COMPU Case No.: 23861 SAS No.: _____ SDG No.: 1

Lab File ID: CB910828C51 Lab Sample ID: VBLKIC

Date Analyzed: 08/28/91 Time Analyzed: 0151

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

Instrument ID: F50051

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	EFFLUENT	439025	CN039025C51	0430
02	INFLUENT	439024	CN039024C51	0352
03	PS1	439033	CN039033A51	1044
04	PS3	439035	CN039035A51	1122
05	PS4	439019	CN039019C51	0313
06	PS4MS	439020	CN039020C51	0509
07	PS4MSD	439021	CN039021C51	0547

COMMENTS: CLP,BLANK,,VBLKIC,LOW,WATER,,VOA,BLANK,F50051
DB624,CS910828C51,BF910828C51

(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.: 1

Matrix Spike - EPA Sample No.: PS4

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.00	0	45.50	91	61-145
Trichloroethene	50.00	39.80	88.80	98	71-120
Benzene	50.00	0	44.40	89	76-127
Toluene	50.00	0	42.40	85	76-125
Chlorobenzene	50.00	0	43.30	87	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	46.90	94	3	14	61-145
Trichloroethene	50.00	89.10	99	1	14	71-120
Benzene	50.00	45.70	91	2	11	76-127
Toluene	50.00	44.40	89	5	13	76-125
Chlorobenzene	50.00	45.60	91	4	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,23861,1,PS4,LOW,WATER,439019,VOA,EPA,F50051
DB624,CS910828C51,BF910828C51,CB910828C51

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.: 1

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	EFFLUENT	93	87	88	0	0
02	INFLUENT	93	89	88	0	0
03	LABPURE	97	95	88	0	0
04	PS1	98	95	97	0	0
05	PS3	96	94	93	0	0
06	PS4	94	91	88	0	0
07	PS4MS	92	90	93	0	0
08	PS4MSD	95	92	94	0	0
09	VBLKTB	102	99	93	0	0
10	VBLKIC	92	93	87	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

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

a. QC summary

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

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

(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.)

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

(BFB in chronological order; by instrument)

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

(In chronological order; by instrument)

3. Volatile data

a. QC summary

b. Sample data

c. Standards data

d. Raw QC data

LAB CODE : COMPU

CASE # : 23861

SDG # : 1

SAS # :

CONTRACT# : (3-90)-REVS

183

23861 1 SAMPLE DATA PACKAGE

№ 021777

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

439024 439025 439033 439035 439019 *439036

PROJECT NAME: MCAS EL TORO
PROJECT NUMBER: 311146
SAMPLERS (SIGNATURE)
RICHARD SOCIN
PRINTED NAME

CLIENT ID (9 CHARACTERS) 1	2	3	4	5	6	7	8	9	# No. of Bottles/Vials	GC/MS 624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	GC 601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	INORGANICS Metals	Cyanide	TAL Metals	Other:	OTHER TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols							MATRIX: Water/Soil	SAMPLING INFO DATE	TIME	REMARKS
																																						8/19	16:34	
L	N	F	L	U	E	N	T		2	X																											W	↓		
E	F	F	L	U	E	N	T		2	X																											W	↓		
P	S	1							1	X																											W			
P	S	3							1	X																											W			
P	S	4							2	X																											W			

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
Chris Mitchell	1810				
COMPANY NAME: MCAS EL TORO	8/19/91	COMPANY NAME:		COMPANY NAME:	
RECEIVED BY: Richard Socin	19:47	RECEIVED BY: Reginald Dawkins	8/21/91 11:30am	RECEIVED BY:	
COMPANY NAME: MACCEY	8/19/91	COMPANY NAME: Compuchem		COMPANY NAME:	
RELINQUISHED BY: Richard Socin	19:47	RELINQUISHED BY:		RELINQUISHED BY:	
COMPANY NAME: MACCEY	8/19/91	COMPANY NAME:		COMPANY NAME:	

SHIPPING INFORMATION
Number of Shipping Containers-
Method of Shipment
RECEIVED IN GOOD CONDITION
Special Handling Requirements

2. Traffic Reports

A copy of the Sample Traffic Reports for all of the samples in the SDG. The Traffic Reports shall be arranged in increasing EPA number order, considering both letters and numbering in ordering samples.

COMPUCHEM
LABORATORIES, INC.

3) CompuChem provides, with OWA-generated hardcopy, mass spectral information on target analytes detected in samples. The OWA-generated spectra are presented on two pages, while the same spectral information is presented on one page from the Incos-500 system.

In some cases, minor differences may be apparent in the retention time (scan number) of a detected target analyte as it appears on the Incos 500 Quantitation Report and the scan number appearing on the mass spectrum for that compound. The differences (no more than a few scans) are a result of the software algorithm which presents the scan number of the apex of the quantitation ion peak on the Quantitation Report and presents, on the mass spectrum, the scan number which produces the spectrum of the target analyte most closely matching the reference spectrum of that same target analyte.

4) For those clients choosing to have library searches performed for Tentatively Identified Compounds (TICs), minor differences may be apparent in the deliverables documentation. The differences specifically relate to the retention time of a TIC as it appears on the actual library search display versus the retention time appearing on the TIC summary form. These differences apply to situations in which more than one compound is present underneath the peak visible on the RIC. The retention time differences (no more than a few scans) are a result of the Incos 500 library search software algorithm which can differentiate changes in total ion intensity and distinguish an apex of a smaller peak coeluting with other constituents within a single visible peak.

We hope this information is beneficial. However, should there be any question regarding the Incos 500 GC/MS deliverables documentation, please feel free to contact your Account Administrator at 1-800-833-5097.

Robert E. Meierer

Robert E. Meierer
Vice President of QA

BE/jhp

COMPUCHEM
LABORATORIES, INC.

Notification To Clients Regarding Deliverables Generated By
New Gas Chromatograph / Mass Spectrometer (GC/MS) System

CompuChem has recently purchased several of the Finnigan Incos 500 GC/MS systems to complement our Finnigan OWA GC/MS systems. We are excited about the performance of these instruments and their compatibility with our instrumentation network system.

Depending on the type of deliverables packages requested, a variety of instrument-generated raw data may be included in our reports. As a service to our clients, the following is a listing of the major differences that will be apparent when comparing our current raw data deliverables to those generated by the new Incos 500 systems.

1) One of the most apparent changes in the Incos 500-generated raw data pertains to the Reconstructed Ion Chromatogram (RIC). In viewing a hardcopy of an OWA-generated RIC the baseline is presented at the bottom of the page, peaks rise and, for internal standards and surrogates the peaks are labelled with alpha-numeric identifiers, e.g. - IS #1 means Internal Standard #1. The identifiers are keyed to descriptions on the GC/MS Quantitation Report. At the very top of the RIC the OWA-generated hardcopy contains "header" information similar to that presented on the Quantitation Report. In viewing a hardcopy of an Incos 500-generated RIC, the baseline is presented along the left-hand side of the page, peaks are presented horizontally, and the internal standards and surrogates are labelled with the actual compound names on the RIC. The header information is presented at the top of the RIC.

Regarding the RIC, whereas the OWA-generated volatile RIC is a single page, the Incos-500 RIC presentation for volatiles contains two pages and the semi-volatile RIC contains three pages.

2) The RIC header information generated by the Incos 500 system contains many data elements and includes GC/MS data file numbers for the tune, calibration and blank associated with the sample being reported. As is normal convention, the instrument identifier (number) is included in the sample file number for both the Incos 500 and the Finnigan OWA systems.

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QUALITY ASSURANCE NOTICE
D10-Pyrene Surrogate
Contract Laboratory Program 3/90 and 4/90 SOWs

D10-pyrene is an advisory surrogate which is included in the semivolatile CLP analysis under the 2/88 statement-of-work (SOW). Although not required, we have continued to add this surrogate (for advisory purposes only) to semivolatile samples analyzed under the 3/90 and 4/90 SOWs.

This surrogate is not included on the Surrogate Recovery Summary Form (Form II). To avoid confusion with non-target analytes that may be present in a sample, we have included the Library Search for the D10-pyrene peak in the data deliverables. This has not been counted as part of the twenty most intense Tentatively Identified Compounds requiring Library Search.

Robert J. Whitehead
Manager, Quality Assurance
January 16, 1991

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QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demostrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler
Sr. Quality Assurance Specialist

Robert E. Meierer
Vice President, Quality Assurance

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DATA REPORTING QUALIFIERS - PAGE 2

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but unsuccessful, do not apply this flag, instead use a laboratory-defined flag, discussed below.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the SDG Narrative. If more than one flag is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample. The laboratory-defined flags are limited to the letters "X", "Y", and "Z".

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DATA REPORTING QUALIFIERS

VALUE - If the result is a value greater than or equal to the Contract Required Quantitation Limit (CRQL), report the value.

U - Indicates compound was analyzed for but not detected. The sample Quantitation Limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U) \times df}{D} \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{At 24\% moisture, } D = \frac{100 - 24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil samples subjected to GPC clean-up procedures, the extract must be concentrated to 0.5 ml, and the sensitivity of the analysis is not compromised by the cleanup procedures. Therefore, the CRQL values will apply to all samples, regardless of cleanup. However if a sample extract cannot be concentratred to the protocol-specifed volume, this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/l, but a concentration of 3 ug/l is calculated, report it as 3J. The sample quantitation limit must be adjusted for dilution as dicussed for the U flag. The J flag is also applied to pesticide/Aroclor results where the pesticide/Aroclor is confirmed to be present but the concentration is less than the CRQL.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results.

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pH Summary

COMPUCHEM #	SAMPLE ID	pH
439025	EFFLUENT	1
439024	INFLUENT	1
439036	LABPURE	7
439033	PS1	1
439035	PS3	1
439019	PS4	1

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

SDG NARRATIVE -- CASE 23861
SDG NO. 01
Contract No. (3-90)-REVS
Compuchem Laboratories, Inc.

Samples: EFFLUENT, INFLUENT, LABPURE, PS1, PS3, PS4

Attached are pertinent Quality Assurance Notices dealing with the analysis of (6) water samples associated with Case 23861, SDG No. 01. The samples listed above were received intact on August 21, 1991 in properly sealed shipping containers with the corresponding chain-of-custody document. The courier was Express Mail. The samples were logged into the Compuchem Laboratory Management system and scheduled for the analysis of the volatile fraction. Attached is a summary of the pH values for all samples. The pH values of all samples except sample LABPURE was 1. The pH of sample LABPURE was 7.

The samples were analyzed within the proper holding time requirements. EPA target compound list (TCL) analytes were detected in all of the samples ranging in number per sample from one (1) to seven (7). None of the samples contained tentatively identified compounds (TICs).

Recovery and RPD values met QC limits in the matrix spike, PS4MS, and the matrix spike duplicate, PS4MSD. In addition to the spiking compounds, methylene chloride, acetone, 1,2-dichloroethene, chloroform, and tetrachloroethene were present in the MS and the MSD. Methylene chloride and acetone were also detected in the two instrument blanks.

Surrogate recovery values for the samples, the blanks, and the sample spikes met contract required 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 this hardcopy data package and in the computer readable data submitted on floppy diskette has been authorized by the Laboratory Manager or his designee, as verified by the following signature:

Jean M. Zimmerman
Jean M. Zimmerman 09/12/91
Technical Reviewer

Audited by: Cynthia E. Edwards 09/17/91
Cynthia Edwards
Final Technical Reviewer

Note: This report is paginated for reference and accountability.