146357

CLOW

HYDRO RESEARCH SERVICES
Water Management Division
Clow Corporation

408 Auburn Avenue
Pontiac, MI 48058

313 334-1630
313 334-4747

RECEIVED
FEB 04 1985
WASTE MANAGEMENT BRANCH

Chemical Recovery of Ohio
36345 Van Born Road
Romulus, MI 48174
Attn: Mr. Pete Shagena

Samples received: 11/29/84

Client I.D.: Downstream, Sewer Outfall, Upstream

Hydro Numbers: 86115,86116,86117

Methodology: PCB's - EPA Method 608
Volatile Organics - Gas Chromatography/Mass Spectroscopy-Method 624

Data Submitted: 1/11/85

Susan K. Scott
Laboratory Supervisor

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FEB 07 1985
WASTE MANAGEMENT BRANCH

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EPA, REGION V

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Chemical Recovery of Ohio
36345 Van Born Road
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1/11/85

Sample received: 11/29/84

Hydro Numbers:	86115	86116	86117
Client I.D.	Down-stream	Sewer Outfall	Upstream

Analysis performed by gas chromotography.

PCBs, mg/l as

Aroclor 1242	<0.05	<0.05	<0.05
Aroclor 1254	--	--	--
Aroclor 1260	<0.05	<0.05	<0.05

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Attn: Mr. Pete Shagena

1/11/85

PRIORITY POLLUTANT ANALYSIS

Concentration, ug/l

Sample received: 11/29/84

Hydro Numbers:	86115	86116	86117
Client I.D.	Down-stream	Sewer Outfall	Upstream
Volatile Organic Compounds			
Acrolein	<100	<100	<100
Acrylonitrile	<100	<100	<100
Benzene	<10	<10	<10
BIs(Chloromethyl)ether	<10	<10	<10
Bromoform	<10	<10	<10
Carbon Tetrachloride	<10	<10	<10
Chlorobenzene	<10	<10	<10
Chlorodibromomethane	<10	<10	<10
Chloroethane	<10	<10	<10
2-Chloroethylvinyl ether	<10	<10	<10
Chloroform	<10	<10	<10
Dichlrobromomethane	<10	<10	<10
Dichlorodifluoromethane	<10	40-50	<10
1,1-Dichloroethane	<10	<10	<10
1,2-Dichloroethane	<10	<10	<10
1,1-Dichloroethylene	<10	<10	<10
1,2-Dichloropropane	<10	<10	<10
1,3-Dichloropropene	<10	<10	<10

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1/11/85

PRIORITY POLLUTANT ANALYSIS

Concentration, ug/l

Sample received: 11/29/84

Hydro Numbers:	86115	86116	86117
Client I.D.	Down-stream	Sewer Outfall	Upstream
Volatile Organic Compounds			
Ethylbenzene	<10	<10	<10
Methyl Bromide	<10	<10	<10
Methyl Chloride	<10	<10	<10
Methylene Chloride	<10	<10	<10
1,1,2,2-Tetrachloroethane	<10	<10	<10
Tetrachloroethylene	<10	30-40	<10
Toluene	<10	<10	<10
trans-1,2-dichloroethylene	<10	170-200	<10
1,1,1-Trichloroethane	<10	240-270	<10
1,1,2-Trichloroethane	<10	<10	<10
Trichloroethylene	<10	100-120	<10
Trichlorofluoromethane	<10	<10	<10
Vinyl Chloride	<10	<10	<10

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Chemical Recovery of Ohio
36345 Van Born Road
Romulus, MI 48174
Attn: Mr. Pete Shagena

1/11/85

Samples received: 1/11/85

Field Notes & Observations:

Hydro Numbers:	86115	86116	86117
Client I.D.	Downstream	Sewer Outfall	Upstream
Weather Conditions: 11/29/84	Mostly Sunny Mid 30's,Rain on evening of 11/27/84 and morning of 11/28/84	Mostly Sunny Mid 30's Rain on evening of 11/27/84 and morning of 11/28/84	Mostly Sunny Mid 30's, Rain on evening of 11/27/84 and morning of 11/28/84
Grab Sample			
Time:	8:30 AM-9:15 AM 11/29/84	8:30 AM-9:15 AM 11/29/84	8:30 AM-9:15 AM 11/29/84

All samples were taken by Hydro Research personnel, Brian Trombley

Sewer Source

tical Recovery 11/29/84

	86115 Downstream	86116 Sewer Outfall	86117 Upstream
PCBs ug/l			
Aroclor 1242	<0.05	<0.05	<0.05
1254	—	—	—
1260	<0.05	<0.05	<0.05

GC/MS VOA Scan - see attached sheets

FN

✓ W/ Bruce on xylene, toluene

Transmittal from organics lab

Acid Recovery 12/29/84

	86115	86116	86117
	Downstream	Downstream	Upstream
PCBs ug/l			
1016	<0.05	<0.05	<0.05
1254	—	—	—
1260	<0.05	<0.05	<0.05

See Back JSC 12/10

QC/MS

Returned 12/12/84

This copy is given in our lab operation LCE 4-18-86

Date Received 12/13

Date Released 12/12/84

Method Total PCB

Matrix 6 VOA

Comments

FN

all of the terms and conditions. This adding to, modifying, proved by an officer or terms will be effected — containing printed

ORGANICS BENCH SHEET

HYDRO #86115
CUST ID Chem Rec.

Date In 12/3
Date Out 12/6
Analyst [illegible]

Compound	Units (HW)
	ug/l
P.C.B.	
Aroclor 1242	<0.05
1254	—
1260	<0.05

ORGANICS BENCH SHEET

HYDRO # 56116
CUST ID Chem Lec

Date In 12/3
Date Out 12/6
Analyst [illegible]

Compound	Units (H2O)
	ug/l
P.C.B.	
Aroclor 1242	<0.05
1254	—
1260	<0.05

ORGANICS BENCH SHEET

HYDRO #861117
CUST ID Chem Bac

Date In 12/5
Date Out 12/6
Analyst [illegible]

Compound	H_2O Units
	ug/l
P.C.B. Aroclor 1242	<0.05
1254	—
1260	<0.05

AREA PERCENT REPORT

****
* Sample Name: 86116 0% 7.5UL Operator Initials: BCB
* Date: 12-05-1984 13:02:35 Method:608 DATA FILE: B:608-5.PTS
* Interface: 5 Cycle#: 5 Channel#: 0 Vial#: N.A.
* Starting Peak Width: 5 Threshold: .1
****

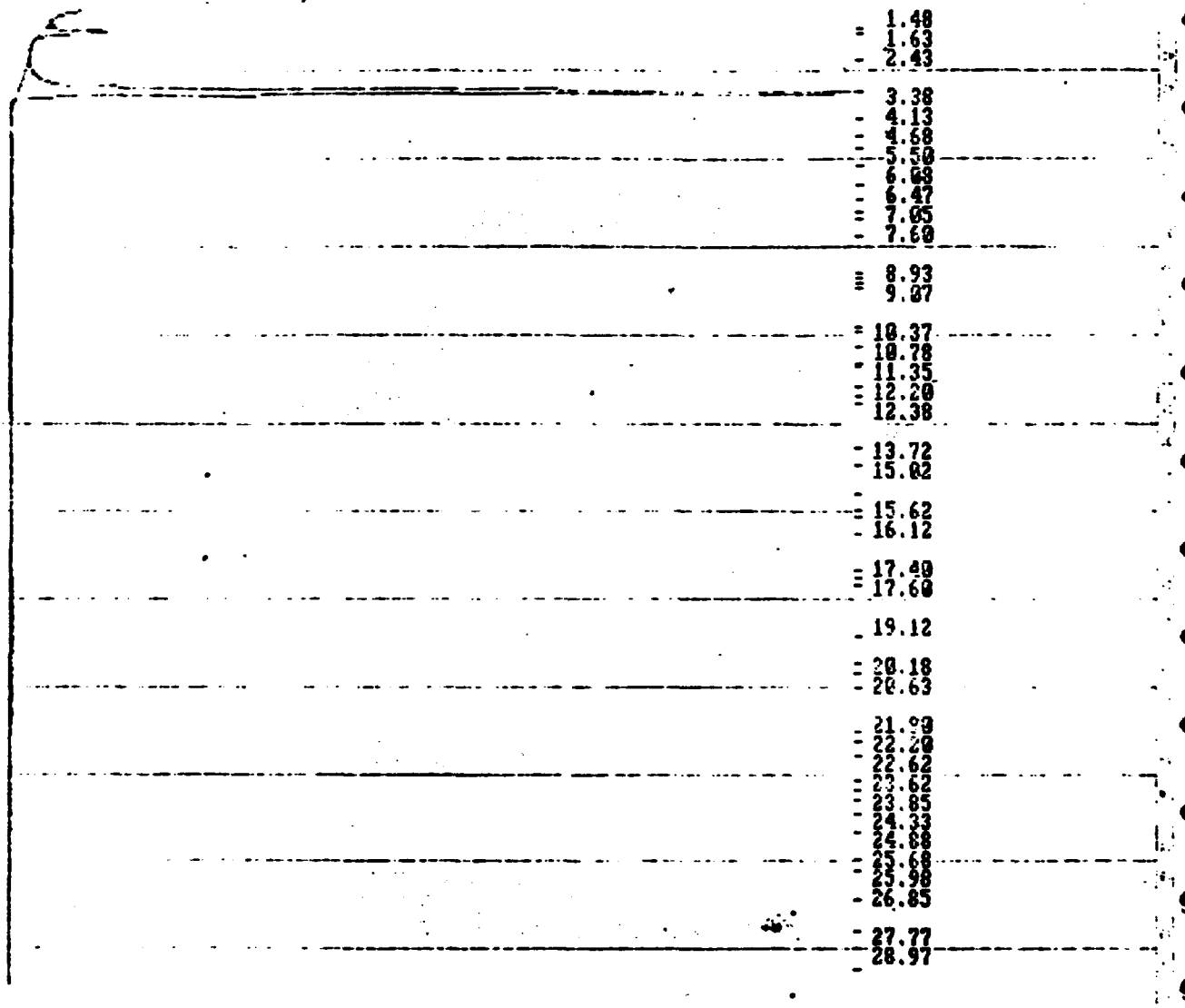
Starting Delay: 1.00 Ending Retention Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.43	31874	0.3237	2	5579	0.365	5.7
2	1.62	556339	5.6496	2	83854	6.372	6.6
3	3.40	8731363	88.6669	1	638402	100.000	13.7
4	4.55	725	0.0074	1	194	0.008	3.7
5	4.88	3623	0.0368	1	69	0.041	52.2
6	5.90	1962	0.0199	1	153	0.022	12.8
7	6.70	4425	0.0449	2	168	0.051	26.4
8	7.18	12902	0.1310	2	382	0.148	33.8
9	8.18	572	0.0058	2	124	0.007	4.6
10	8.43	1374	0.0140	2	124	0.016	11.1
11	8.78	4204	0.0427	2	197	0.048	21.3
12	9.23	10634	0.1080	2	565	0.122	18.8
13	9.83	5114	0.0519	1	151	0.059	34.0
14	10.68	1997	0.0203	1	65	0.023	30.5
15	11.68	340	0.0034	2	93	0.004	3.6
16	11.78	1394	0.0142	2	137	0.016	10.2
17	12.32	2328	0.0236	2	294	0.027	7.9
18	12.52	4633	0.0471	2	561	0.053	8.3
19	12.68	11089	0.1126	2	596	0.127	18.6
20	13.05	8286	0.0841	2	456	0.095	18.2
21	13.58	2931	0.0298	2	226	0.034	13.0
22	13.93	21793	0.2213	2	327	0.250	66.6
23	15.33	524	0.0053	2	133	0.006	4.0
24	15.43	1923	0.0195	2	179	0.022	10.8
25	15.68	36232	0.3679	2	263	0.415	137.8
26	17.32	5917	0.0601	2	504	0.068	11.7
27	17.68	6331	0.0643	2	668	0.073	9.5
28	17.87	4606	0.0468	2	677	0.053	6.8
29	17.97	4698	0.0477	2	731	0.054	6.4
30	18.15	20334	0.2065	2	653	0.233	31.2
31	18.63	5353	0.0544	2	606	0.061	8.8
32	18.83	17993	0.1827	2	686	0.206	26.2
33	19.55	10436	0.1060	2	709	0.120	14.7
34	19.83	22337	0.2268	2	705	0.256	31.7
35	20.48	14820	0.1505	2	709	0.170	20.9
36	21.22	12966	0.1317	2	732	0.148	17.7
37	21.63	28819	0.2927	2	732	0.330	39.4
38	22.47	6940	0.0705	2	670	0.079	10.4
39	22.75	19336	0.1964	2	645	0.221	30.0
40	23.28	56577	0.5745	2	727	0.648	77.9
41	24.57	23830	0.2420	2	784	0.273	30.4
42	25.10	19707	0.2001	2	778	0.226	25.3
43	25.70	10625	0.1079	2	623	0.122	17.1
44	26.13	7069	0.0718	2	539	0.081	13.1

47	25.68	4169	0.0307	2	344	0.093	12.1
48	25.99	12551	0.2430	2	248	0.279	50.5
49	26.85	8952	0.1733	2	297	0.199	30.1
50	27.77	5964	0.1155	2	227	0.132	26.3
51	28.30	3684	0.0713	2	216	0.082	17.0
52	28.97	839	0.0162	1	147	0.019	5.7

Total Area: 5164570 Area Reject: 0 One sample per 1.000 sec.

Start time: 1.00 Stop time: 29.37 Offset: 0
Low Value: 1479 High Value: 477213 Scale Factor: 1



N.BLANK JPT/12/3/84 Processed: 12-05-1984 14:32:02, segment 7 , cycle 7
Raw Data Stored in Files: B:608-7.HDR B:608-7.PTS

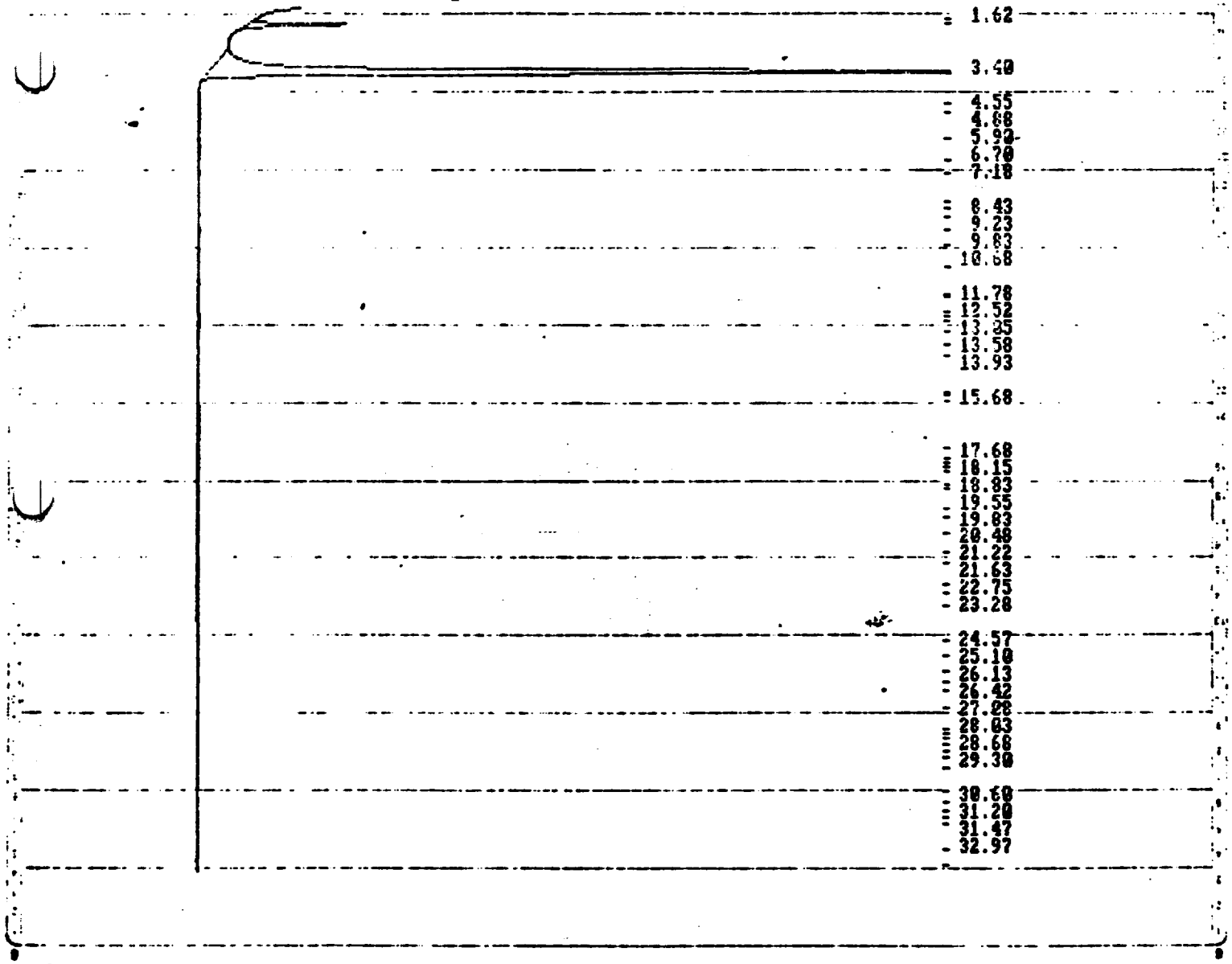
******** AREA PERCENT REPORT ********

Operator Initials: RFB

[illegible]	[illegible]	[illegible]	0.0547	2	484	0.062	11.1
48	28.03	3187	0.0324	2	439	0.036	7.3
49	28.13	3536	0.0359	2	509	0.040	8.7
50	28.43	6530	0.0663	2	483	0.075	13.5
51	28.68	5702	0.0579	2	407	0.065	14.0
52	28.92	6708	0.0681	2	432	0.077	15.5
53	29.30	11054	0.1123	2	249	0.127	44.4
54	30.25	2484	0.0252	2	177	0.028	14.0
55	30.60	646	0.0066	2	113	0.007	5.7
56	30.95	390	0.0040	2	145	0.004	2.7
57	31.20	1672	0.0170	2	161	0.019	10.4
58	31.47	3388	0.0344	2	135	0.039	25.2
59	32.40	2901	0.0295	2	166	0.033	17.5
60	32.97	473	0.0048	1	99	0.005	4.8

Total Area: 9847378 Area Reject: 0 One sample per 1.000 sec.

Start time: 1.00 Stop time: 33.22 Offset: 0
Low Value: 19170 High Value: 665654 Scale factor: 1



[illegible]

[illegible] PERKIN-ELMER REPORT [illegible]

```
*****************************************************************************
* Sample Name: 86117 0% 7.5UL                    Operator Initials: BEB      *
* Date: 12-05-1984 13:49:49 Method:608           DATA FILE: B:608-6.PTS      *
* Interface: 5              Cycle#:  6           Channel#: 0    Vial#: N.A.  *
* Starting Peak Width:  5   Threshold:  .1                                   *
*****************************************************************************
Starting Delay:   1.00                      Ending Retention Time:   35.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.48	27882	0.5399	2	4352	0.619	6.4
2	1.63	227680	4.4085	2	34295	5.057	6.6
3	2.43	3179	0.0616	2	710	0.071	4.5
4	3.38	4502359	87.1778	2	454140	100.000	9.9
[illegible]	4.13	3338	0.0646	2	250	0.074	13.4
6	4.68	2920	0.0565	2	349	0.065	8.4
7	5.02	7772	0.1505	2	333	0.173	23.0
8	5.50	7265	0.1407	2	222	0.161	32.7
9	6.08	4902	0.0949	2	326	0.109	15.1
10	6.47	4693	0.0909	2	186	0.104	25.3
11	6.87	2530	0.0490	2	289	0.056	8.8
12	7.03	10314	0.1997	2	529	0.229	19.5
13	7.60	13395	0.2594	2	542	0.298	24.7
14	8.67	1802	0.0349	2	235	0.040	7.7
15	8.77	3047	0.0590	2	324	0.068	9.4
16	8.93	3208	0.0621	2	618	0.071	5.2
17	9.07	21823	0.4225	2	862	0.485	25.3
18	10.23	958	0.0186	2	183	0.021	5.2
19	10.37	3691	0.0715	2	179	0.082	20.6
20	10.78	6448	0.1248	2	371	0.143	17.4
[illegible]	11.25	1178	0.0228	2	142	0.026	8.3
[illegible]	11.35	686	0.0133	1	95	0.015	7.2
23	11.88	3266	0.0632	2	206	0.073	15.8
24	12.20	2317	0.0449	2	490	0.051	4.7
25	12.38	21943	0.4249	2	572	0.487	38.4
26	13.72	518	0.0100	1	169	0.012	3.1
27	14.17	5326	0.1031	1	203	0.118	26.2
28	15.02	2494	0.0483	2	163	0.055	15.3
29	15.42	1634	0.0316	2	283	0.036	5.8
30	15.62	7573	0.1466	2	401	0.168	18.9
31	16.12	18671	0.3615	2	411	0.415	45.4
32	17.20	5982	0.1158	2	571	0.133	10.5
33	17.40	7243	0.1403	2	620	0.161	11.7
34	17.60	49757	0.9634	2	714	1.105	69.7
35	19.12	23929	0.4633	2	504	0.531	47.5
36	19.92	3445	0.0667	2	545	0.077	6.3
37	20.18	9501	0.1840	2	481	0.211	19.8
38	20.63	36183	0.7006	2	567	0.804	63.9
39	21.90	2450	0.0474	2	367	0.054	6.7
40	22.20	8433	0.1633	2	439	0.187	19.2
41	22.62	14065	0.2723	2	407	0.312	34.6
42	23.32	5290	0.1024	2	450	0.117	11.7
43	23.62	3518	0.0681	2	463	0.078	7.6
44	23.85	10730	0.2078	2	451	0.238	23.8

****

* Sample Name: 86115 0% 7.5UL Operator Initials: WEB

* Date: 12-05-1984 12:21:44 Method:608 DATA FILE: B:608-4.PTS

* Interface: 5 Cycle#: 4 Channel#: 0 Vial#: N.A.

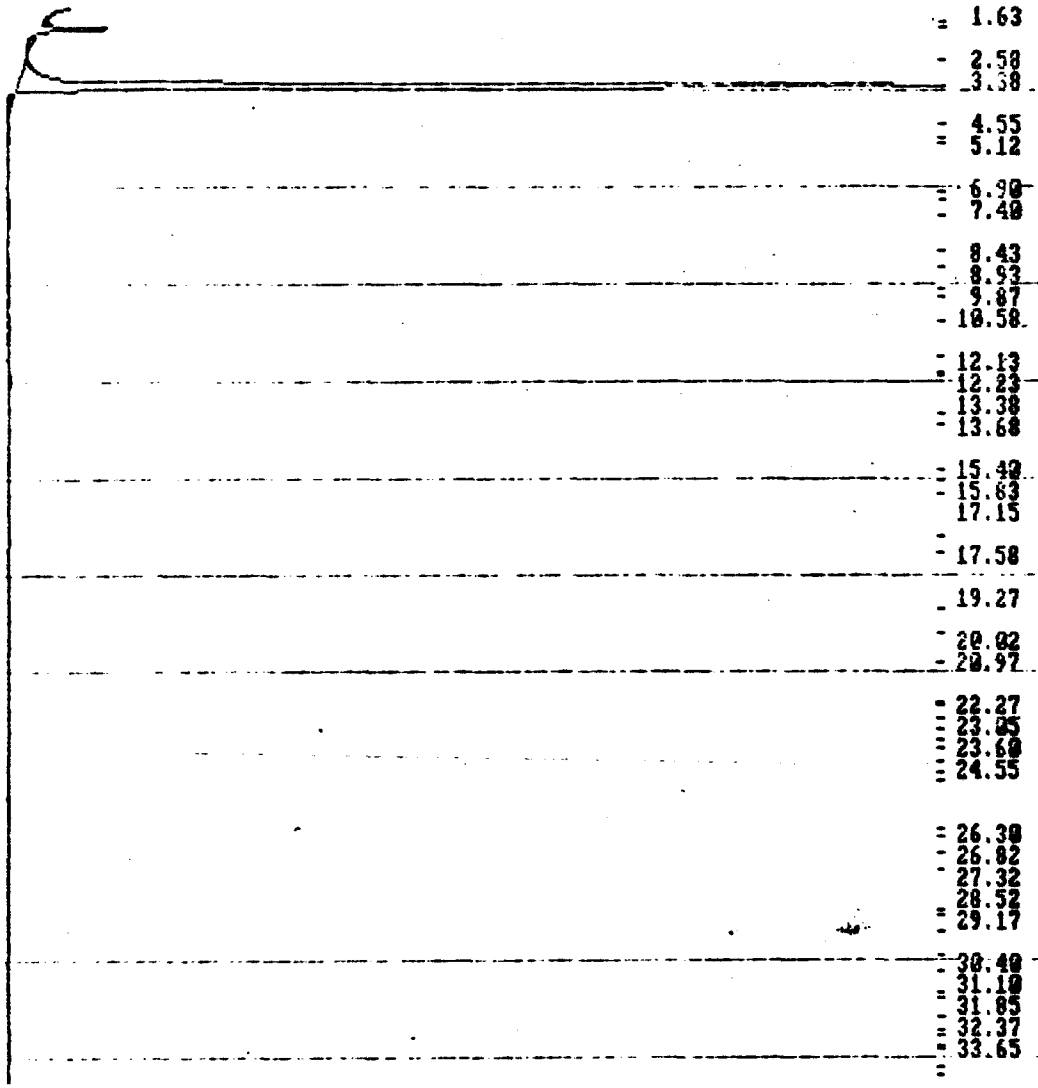
* Starting Peak Width: 5 Threshold: .1

****

Starting Delay: 1.00 Ending Retention Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	1.42	18203	0.3244	2	2593	0.355	7.0
2	1.63	182176	3.2475	2	37278	3.550	4.9
3	2.58	8209	0.1463	2	888	0.160	9.2
4	3.38	5132328	91.4795	2	515410	100.000	10.0
5	4.55	889	0.0158	2	65	0.017	13.7
6	4.97	1539	0.0274	2	261	0.030	5.9
7	5.12	10962	0.1954	2	327	0.214	33.6
8	6.62	421	0.0075	2	144	0.008	2.9
9	6.90	11059	0.1971	2	594	0.215	18.6
10	7.40	12809	0.2283	2	461	0.250	27.8
11	8.43	739	0.0132	2	128	0.014	5.8
12	8.93	19531	0.3479	2	691	0.380	28.3
13	9.55	278	0.0050	2	133	0.005	2.1
14	9.87	1523	0.0271	1	108	0.030	14.1
15	10.58	4006	0.0714	1	86	0.078	46.6
16	11.63	1460	0.0260	2	96	0.028	15.2
17	12.13	8032	0.1432	2	788	0.156	10.2
18	12.23	37620	0.6705	2	922	0.733	40.8
19	13.38	2014	0.0359	2	267	0.039	7.6
20	13.68	18268	0.3256	2	361	0.356	50.7
21	15.12	4131	0.0736	2	270	0.080	15.3
22	15.40	3500	0.0624	2	287	0.068	12.2
23	15.83	18597	0.3315	2	343	0.362	54.2
24	17.15	10964	0.1954	2	369	0.214	29.7
25	17.58	28313	0.5047	2	484	0.552	58.5
26	19.27	8135	0.1450	2	255	0.159	31.9
27	20.02	4723	0.0842	2	190	0.092	24.9
28	20.97	8509	0.1517	2	243	0.166	35.0
29	22.17	372	0.0066	1	87	0.007	4.3
30	22.27	155	0.0028	1	53	0.003	2.9
31	22.70	1246	0.0222	1	127	0.024	9.8
32	23.05	1144	0.0204	1	192	0.022	6.0
33	23.30	1438	0.0256	2	227	0.028	6.3
34	23.60	2676	0.0477	2	169	0.052	15.9
35	24.03	1513	0.0270	2	158	0.029	9.5
36	24.35	1202	0.0214	2	226	0.023	5.3
37	24.55	1422	0.0253	1	150	0.028	9.5
38	26.07	2456	0.0438	1	262	0.048	9.4
39	26.30	2449	0.0437	2	107	0.048	22.9
40	26.82	3671	0.0654	2	124	0.072	29.7
41	27.32	7578	0.1351	2	200	0.148	37.9
42	28.52	1130	0.0201	2	200	0.022	5.6
43	28.67	2017	0.0359	2	25	0.039	81.0
44	29.17	3386	0.0604	2	213	0.066	15.9

46	30.40	1957	0.0349	1	105	0.038	18.0
47	31.10	107	0.0019	1	100	0.002	1.1
49	31.85	2084	0.0371	1	221	0.041	9.4
50	32.27	770	0.0137	2	214	0.015	3.6
51	32.37	3933	0.0701	2	276	0.077	14.3
52	32.70	1170	0.0208	2	251	0.023	4.7
53	32.78	3817	0.0680	2	224	0.074	17.0
54	33.42	2625	0.0468	2	220	0.051	11.9
55	33.65	567	0.0101	1	109	0.011	5.2

Total Area: 5610359 Area Reject: 0 One sample per 1.000 sec.

Start time: 1.00 Stop time: 33.80 Offset: 0
Low Value: 18449 High Value: 537142 Scale factor: 1