OMC

OUTBOARD MARINE CORPORATION

100 Sea Horse Drive
Waukegan, Illinois 60085-2195
Phone 847/689-6200

US EPA RECORDS CENTER REGION 5
396647

9 June 1997

Mr. Michael E. Bellott
Remedial Project Manager
/Waukegan Harbor Site On-Scene Coordinator
U.S. Environmental Protection Agency
77 W. Jackson Boulevard SR-6J
Chicago, IL 60604-3590

JUN 16 1997

VIA OVERNIGHT COURIER

RE: Waukegan Harbor Superfund Site
United States of America and the People of the State of Illinois
vs. the Outboard Marine Corporation
Civil Action #88 C 8571
Transmittal of Quarterly Report

Dear Mr. Schmitt:

As called for in the subject consent decree, OMC herein submits a quarterly report for the period ending May 31, 1997. If you have any questions, please feel free to call me at 847/689-5228 or Roger Crawford at 847/689-5219.

Sincerely,

Tricia Sutton
Senior Environmental Specialist
Manager - Remediation

enclosure

ts/h:\remedial\harbor\corresp\1997\QTR-02.97

cc: See distribution list (attached)

QUARTERLY PROGRESS REPORT
COPY DISTRIBUTION LIST

NAME/ADDRESS	SHIPPED VIA	TYPE OF COPY
Mr. Arlyn E. Albrecht, P.E. Project Coordinator Waukegan Harbor Site Trust Clark Dietz, Inc. 1817 S. Neil, Suite 100 Champaign, IL 61820	US MAIL	Report w/Attachments
Mr. Roger Crawford, OMC (C25)	INTEROFFICE E-MAIL	Report w/out Attachments
Mr. Joseph Moran, Esq., OMC (C923)	INTEROFFICE MAIL	Report w/out Attachments
Chief Environmental Control Division Attention: Howard O. Chinn, P.E. Illinois Attorney General's Office 100 W. Randolph St., 11th Floor Chicago, IL 60601	US MAIL	Report w/Attachments
Mr. F. Henry Kleschen III Vice President American National Bank & Trust Co. 13th Floor/Corporate Trust Dept. 33 N. LaSalle St. Chicago, IL 60690	US MAIL	Report w/out Attachments
Mr. Sean Mulroney, Esq. Regional Counsel US EPA 111 W. Jackson Blvd. CS-3T Chicago, IL 60604	US MAIL	Report w/Attachments
Mr. Jim MacMorran U.S. Army Corps of Engineers 666 Dundee Rd. Ste. 1605 Northbrook, IL 60062	US MAIL	Report w/Attachments
Assistant Attorney General Attention: Steve Willey, Esq. Land & Natural Resources Division U.S. Department of Justice 10th & Constitution Ave. NW, Rm. 2143 Washington, DC 20530	US MAIL	Report w/Attachments
Mr. Gerald E. Willman Federal Sites Management Unit Illinois Environmental Protection Agency Division of Land Pollution Control 2200 Churchill Rd. Springfield, IL 62702	US MAIL	Report w/Attachments

JUN 1 6 1997

QUARTERLY PROGRESS REPORT

MARCH 1, 1997
THROUGH
MAY 31, 1997

WAUKEGAN HARBOR REMEDIAL ACTION

QUARTERLY PROGRESS REPORT
MARCH 1, 1997 THROUGH MAY 30, 1997
WAUKEGAN HARBOR REMEDIAL ACTION

This report presents a quarterly report for the above specified period for the Waukegan Harbor Superfund Site pursuant to the Consent Decree for remedial action.

WORK COMPLETED, NEW DATA AND TEST RESULTS

Attachment 1 contains copies of Discharge Monitoring Reports for NPDES Permit No. IL0002267 for February, March, and April 1997 plus two revised pages for the January 1997 report transmitted with the last quarterly report.

Pumping of the containment cells occurred only to allow inspection, maintenance, and repairs to the three fixed Category 5 water treatment systems. Dewatering was not conducted during this period. Table 1 summarizes the analytical results received during the quarter for samples collected from the West Containment Cell Category 5 water treatment system. Attachment 2 contains copies of the analytical reports for these treatment plant samples. The East and Slip No. 3 Containment cell treatment systems were not sampled because they were only pumped enough to test the recovery well pumps and wet the carbon beds. The systems will be sampled in accordance with the Operations and Maintenance Plan (O&M Plan) schedules when dewatering occurs. Tables 2a, 2b, and 2c summarize the Category 5 water treatment plant operational and inspection data for the Slip No. 3, East, and West Containment Cells respectively.

Groundwater sampling was completed April 21-22, 1997. The sampling was completed successfully, but some field equipment problems occurred that necessitated procedural changes described below. Attachment 3A presents the analytical data review report, including a summary table of the results and the validated analytical data packet. All project-specific quality control criteria were met. Attachment 3B contains copies of the field records for this sampling event. Polychlorinated biphenyl (PCB) results were below the background average for all containment cell monitoring wells. Furthermore, the results were below detection except well W-10 (1 ug/l Aroclor 1016, 2 ug/l Aroclor 1248, 3 ug/l total). These results are discussed further in Attachment 3A.

Problems occurred with the peristaltic pump used for the groundwater sampling. The peristaltic pump repeatedly had air leaks and inadequate flow. It was used to collect samples W-3, W-9, W-10, W-10D, W-10MS, and W-10MSD. The peristaltic pump then had an internal electrical failure

and would no longer function. The breakdown of the peristaltic pump required a change in sampling and cleaning procedure to use the suction lift pump for the sampling. Sampling with the suction lift pump was completed using the following procedure:

- Dedicated Teflon™-lined polyethylene hose for each monitoring well was connected to the suction of the pump.
- New Teflon™-lined polyethylene hose was placed on the pump discharge for each monitoring well and discarded after sampling.
- The samples were collected from the suction lift pump with the new dedicated discharge hosing.
- The suction lift pump was cleaned before each use by circulating a tap water and detergent mixture (Alconox™) through the non-dedicated pump and hose for three to five minutes.
- Clear tap water was then circulated through the pump and hose for three to five minutes as a rinse.

These procedures will be incorporated into the O&M Plan as alternatives to provide future operational flexibility.

Minor modifications to cleaning procedures for the groundwater sampling that have been proposed in the O&M Plan revisions were tested during the event. The procedure includes a rinse of non-dedicated equipment with hexane. When the peristaltic pump is used to collect samples, the only non-dedicated equipment is a stainless steel "T"-connector and valve assembly that allows flow to be directed through the suction lift pump or the peristaltic pump. This connector has Teflon™ tape to seal the threads and prevent air leaks through the fittings. The hexane, however, degraded the tape and made it brittle, apparently causing the air leaks in the peristaltic pump connector and sampling lines. This damage caused difficulty in creating an adequate flow to the peristaltic pump. Once the problem was identiified, the hexane rinse was discontinued and a detergent and water cleaning procedure used as in past sampling events. The suction lift pump used for purging the wells also has tape fittings so a hexane rinse was also not used for cleaning it. The equipment blanks collected during the sampling event were non-detect for PCBs, confirming that the cleaning procedure was acceptable without a hexane rinse step.

Attachment 3C contains a copy of the volatile organic compound (VOC) analytical data for the samples collected around the East and West containment cells. The VOC samples were collected for the Illinois Site Remediation Program (SRP) Project for OMC's Waukegan Plant 2 facility. The SRP rules become effective this summer and will be followed to evaluate the presence of chlorinated VOCs in groundwater outside the containment cells. The results are provided to US EPA as courtesy because of the overlapping areas of interest. During the past quarter, progress on the SRP Project included a historical records review including evaluations of potential onsite and offsite sources, development of scope of work for additional field assessment, and preparation of the formal enrollment application, now that the program rules are finalized.

Tables 3, 4, and 5 present water level measurements collected this quarter for the Slip No. 3,

East, and West Containment Cells respectively. An inward hydraulic gradient was maintained at the containment cells throughout the quarter. Table 6 presents water level measurements for the Temporary Designated Soil Stockpile. Due to problems with seagulls nesting on the sump manhole for the stockpile and on the road leading into the stockpile, water level readings for the sump will be delayed until after hatching.

The annual inspection of the containment cells, wells, and treatment systems was completed. The cell covers were in good condition, with grass filling in well along the areas disturbed last fall during construction of the three fixed treatment systems. Maintenance of the treatment systems occurred including repair of a minor leak in the influent line at recovery well R-5 (West Containment Cell), loosening of the carbon beds, and repairs to a valve and meter in the Slip No. 3 Containment Cell treatment system that occurred due to freezing. Tables 2A, 2B, and 2C describe these maintenance activities in more detail. The flush-mounted protective cover and locking well cap for monitoring well W-4 do not sit evenly with the pavement preventing the locking cap from sealing the the well standpipe properly. Modifications to this well's protective casing and/or standpipe will be scheduled so the cap fits correctly and the well is more secure.

PLANS AND PROCEDURES SUBMITTED

US EPA comments on a comprehensive revision to the O&M Plan were received March 26, 1997. Responses to US EPA comments on the proposed O&M Plan revisions were submitted April 24, 1997.

During March, US EPA transmitted a letter accepting the July 1996 "Construction Completion Report, Waukegan Harbor Remedial Action, Waukegan, Illinois" into the public record without specific approval or comment. OMC is working with Smith Technologies Corporation (formerly Canonie Environmental Services) to incorporate a number of minor corrections and clarifications into the report. Upon completion of these revisions, additional copies will be submitted to US EPA for its file records and for the public repositories.

PLANS FOR NEXT QUARTER

Upon acceptance of the responses or additional comments by US EPA, the O&M Plan will be finalized and submitted in full.

LEGAL ISSUES

During the quarter, there were no new legal issues or developments. There have been no further discussions between U.S. EPA and OMC regarding contested oversight costs, and none are planned.

h:\remedial\harbor\corresp\1997\QTR-02.97

TABLES

TABLE 1

FOURTH QUARTER 1996
CATEGORY 5 WATER TREATMENT
PCB ANALYTICAL RESULTS

WEST CONTAINMENT CELL
WAUKEGAN HARBOR REMEDIAL ACTION

Sample I.D.	Sample Results: PCB (ug/l) 4/22/97
T5E	ND
T5I-R5	4 (1248)
T5-I-R6	ND
T5-LC	ND

Notes:

T5 = Category 5 Water Treatment System
E = System Effluent
LC = Lead Carbon Effluent
I = Influent
D = Duplicate
B = Blank
-- = Not collected
ND = Not detected/below laboratory detection limit
R = Recovery well and number (Influent samples for the treatment systems may be collected either from a combined influent port or for individual recovery wells.)

Discharge Monitoring Data Certified by
Patricia Anne Sutton
OMC Project Coordinator

TABLE 2a
CATEGORY 5 WATER TREATMENT PLANT
OPERATIONAL DATA
SLIP NO. 3 CONTAINMENT CELL

DATE/TIME	TOTALIZER R-1	TOTALIZER R-2	GALLONS PER PERIOD	GALLONS TOTAL	COMMENT
4/22-23/97 2:36 p.m.	0172780	0147870	–	–	Great Lakes Carbon Treatment completed inspection and repairs of system. Bottom header valve (#8) broken. It apparently froze because the heater was not set high enough. Meter on recovery well R-1 influent line plugged with sand. Some red film/crust build up in Rosedale filter and top of carbon in the lead tank. Removed encrusted carbon and replaced with fresh material. Used compressed air to loosen both carbon vessels. Then tested recovery well pumps and wetted down carbon to prepare treatment system for use. Minor wind damage on moldings/siding on outside of building from wind storm. Building exterior repaired.
4/23/97 // 2:30 p.m.	0172814	0148170.6	34.6	34.6	Repairs and tests completed, including pressure shut-offs and alarms. System functioning properly.

TABLE 2b
CATEGORY 5 WATER TREATMENT PLANT
OPERATIONAL DATA
EAST CONTAINMENT CELL

DATE // TIME	TOTALIZER R-3	TOTALIZER R-4	GALLONS PER PERIOD	GALLONS TOTAL	COMMENT
4/22/97 // 11:19 a.m.	0237,570-0237,771	0273,750-0273,978	429	429	Great Lakes Carbon Treatment inspected system, including pressure shut-offs and alarms. Used compressed air to loosen both carbon vessels. Then tested recovery well pumps and wetted down carbon to prepare treatment system for use. Changed Rosedale filter. System working properly.

TABLE 2c
CATEGORY 5 WATER TREATMENT PLANT
OPERATIONAL DATA
WEST CONTAINMENT CELL

DATE/TIME	TOTALIZER R-5	TOTALIZER R-6	GALLONS PER PERIOD	GALLONS TOTAL	COMMENT
4/21/97			–	–	Great Lakes Carbon Treatment uncovered small portion of influent line at recovery well R-5 where minor leaks occurred last fall, including opening exterior double containment pipe. Identified and repaired a small leak; replaced and resealed line. Pressure tested line successfully. Replaced soil cover and placed grass seed and mulch material.
4/22/97 // 8:40	0219,392.9	0173295.2	–	–	Used compressed air to loosen both carbon vessels. Then tested recovery well pumps and wetted down carbon to prepare treatment system for use. Tested system, including pressure shut-offs and alarms. Floor sump shut-off was sticky. Great Lakes loosed mechanism. System working properly.
4/22/97 // 9:05 a.m.	0219,562	0173,530	2517.1	25171.1	Collected samples of system for analysis.

TABLE 3

SLIP 3 CONTAINMENT CELL GROUND WATER DATA
WAUKEGAN HARBOR REMEDIAL ACTION

		W-1	P-1	W-2	P-2	W-3	P-3	W-4	P-4	R-1	R-2
	T.O.R.	586.49	587.59	587.52	587.94	585.97	588.61	583.00	587.54	590.60	591.17
DATE		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
03/26/97	DEPTH	4.67	12.37	5.40	13.40	3.91	14.20	0.95	13.53	16.20	17.36
1:30 pm	ELEV.	581.82	575.22	582.12	574.54	582.06	574.41	582.05	577.49	574.40	573.81
	DIFF.	6.60		7.58		7.65		4.56			
04/22/97	DEPTH	4.59	11.38	5.18	12.31	3.65	13.05	1.41	12.27	15.40	16.14
2:40 pm	ELEV.	581.90	576.21	582.34	575.63	582.32	575.56	581.59	578.75	575.20	575.03
	DIFF.	5.69		6.71		6.76		2.84			
Note: W-3 / P-3 measured 4/21/97 at 10:50 a.m.											

TABLE 4

EAST CONTAINMENT GROUND WATER DATA
WAUKEGAN HARBOR REMEDIAL ACTION

		W-5	P-5	W-6	P-6	W-7	P-7	W-8	P-8	R-3	R-4
	T.O.R.	588.80	587.90	588.31	587.96	586.71	587.08	586.67	587.86	591.93	591.98
DATE		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
03/26/97	DEPTH	5.46	9.41	5.47	9.30	4.47	8.29	4.30	9.31	13.29	13.47
1:30 pm	ELEV.	583.34	578.49	582.84	578.66	582.24	578.79	582.37	578.55	578.64	578.51
	DIFF.	4.85		4.18		3.45		3.82			
04/22/97	DEPTH	6.02	9.14	5.82	9.06	4.70	8.28	4.44	9.09	13.10	13.22
10:30 am	ELEV.	582.78	578.76	582.49	578.90	582.01	578.80	582.23	578.77	578.83	578.76
to	DIFF.	4.02		3.59		3.21		3.46			
5:15 pm											

TABLE 5

WEST CONTAINMENT GROUND WATER DATA
WAUKEGAN HARBOR REMEDIAL ACTION

		W-9	P-9	W-10	P-10	W-11	P-11	W-12	P-12	R-5	R-6
	T.O.R.	587.81	588.01	587.51	587.52	589.26	588.12	587.13	587.80	603.83	601.56
DATE		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
03/26/97	DEPTH	4.80	8.10	4.06	8.10	5.27	8.70	4.46	7.40	24.43	21.89
12:00 pm	ELEV.	583.01	579.91	583.45	579.42	583.99	579.42	582.67	580.40	579.40	579.67
	DIFF.	3.10		4.03		4.57		2.27			
04/21/97	DEPTH	5.60	7.00	4.53	7.36	6.05	7.53	Not Taken	Not Taken	Not Taken	Not Taken
12:10 pm	ELEV.	582.21	581.01	582.98	580.16	583.21	580.59	587.13	587.80	603.83	601.56
to	DIFF.	1.20		2.82		2.62		--			
9:10 pm											
04/22/97	DEPTH	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	4.75	6.52	23.17	20.70
10:05 am	ELEV.	587.81	588.01	587.51	587.52	589.26	588.12	582.38	581.28	580.66	580.86
&	DIFF.	--		--		--		1.10			
5:30 pm											
05/01/97	DEPTH	4.66	7.11	4.08	6.86	5.79	7.48	3.97	6.45	23.23	20.80
8:10 am	ELEV.	583.15	580.90	583.43	580.66	583.47	580.64	583.16	581.35	580.60	580.76
	DIFF.	2.25		2.77		2.83		1.81			
05/20/97	DEPTH	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	4.01	6.17	Not Taken	Not Taken
4:10 pm	ELEV.	587.81	588.01	587.51	587.52	589.26	588.12	583.12	581.63	603.83	601.56
	DIFF.	--		--		--		1.49			

TABLE 4

EAST CONTAINMENT GROUND WATER DATA
WAUKEGAN HARBOR REMEDIAL ACTION

		W-5	P-5	W-6	P-6	W-7	P-7	W-8	P-8	R-3	R-4
	T.O.R.	588.80	587.90	588.31	587.96	586.71	587.08	586.67	587.86	591.93	591.98
DATE		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
03/26/97	DEPTH	5.46	9.41	5.47	9.30	4.47	8.29	4.30	9.31	13.29	13.47
1:30 pm	ELEV.	583.34	578.49	582.84	578.66	582.24	578.79	582.37	578.55	578.64	578.51
	DIFF.	4.85		4.18		3.45		3.82			
04/22/97	DEPTH	6.02	9.14	5.82	9.06	4.70	8.28	4.44	9.09	13.10	13.22
10:30 am	ELEV.	582.78	578.76	582.49	578.90	582.01	578.80	582.23	578.77	578.83	578.76
to	DIFF.	4.02		3.59		3.21		3.46			
5:15 pm											

TABLE 5

WEST CONTAINMENT GROUND WATER DATA
WAUKEGAN HARBOR REMEDIAL ACTION

		W-9	P-9	W-10	P-10	W-11	P-11	W-12	P-12	R-5	R-6
	T.O.R.	587.81	588.01	587.51	587.52	589.26	588.12	587.13	587.80	603.83	601.56
DATE		(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)	(ft)
03/26/97	DEPTH	4.80	8.10	4.06	8.10	5.27	8.70	4.46	7.40	24.43	21.89
12:00 pm	ELEV.	583.01	579.91	583.45	579.42	583.99	579.42	582.67	580.40	579.40	579.67
	DIFF.	3.10		4.03		4.57		2.27			
04/21/97	DEPTH	5.60	7.00	4.53	7.36	6.05	7.53	Not Taken	Not Taken	Not Taken	Not Taken
12:10 pm	ELEV.	582.21	581.01	582.98	580.16	583.21	580.59	587.13	587.80	603.83	601.56
to	DIFF.	1.20		2.82		2.62		--			
9:10 pm											
04/22/97	DEPTH	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	4.75	6.52	23.17	20.70
10:05 am	ELEV.	587.81	588.01	587.51	587.52	589.26	588.12	582.38	581.28	580.66	580.86
&	DIFF.	--		--		--		1.10			
5:30 pm											
05/01/97	DEPTH	4.66	7.11	4.08	6.86	5.79	7.48	3.97	6.45	23.23	20.80
8:10 am	ELEV.	583.15	580.90	583.43	580.66	583.47	580.64	583.16	581.35	580.60	580.76
	DIFF.	2.25		2.77		2.83		1.81			
05/20/97	DEPTH	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	Not Taken	4.01	6.17	Not Taken	Not Taken
4:10 pm	ELEV.	587.81	588.01	587.51	587.52	589.26	588.12	583.12	581.63	603.83	601.56
	DIFF.	--		--		--		1.49			

TABLE 6

TEMPORARY DESIGNATED SOIL STOCKPILE (PNA Cell)
WATER LEVEL READINGS
WAUKEGAN HARBOR REMEDIAL ACTION

READING DATE	READING ABOVE SUMP (IN INCHES)	ELEVATION (feet MSL)	ACTION LEVEL (feet MSL)	DIFFERENCE (IN INCHES)	COMMENTS/ INSPECTION NOTES
03/26/97	33.50	585.60	586.14	-6.46	Cover looks good.
04/21/97	32.50	585.52	586.14	-7.46	Cover and fencing look good. Seagull protection grid consisting of rows of high test monofilament line attached to fence installed in early April. Working generally well.
05/30/97	--	--	--	--	Could not collect sump reading. A seagull is nesting on top of sump manhole so access was restricted. Seagulls are also nesting all along the internal roadway to the stockpile making access overall difficult. Readings will be delayed until eggs hatch, likely later in June. Cover looked fine.

ATTACHMENT 1

DISCHARGE MONITORING REPORTS

OMC

OUTBOARD MARINE CORPORATION

100 Sea Horse Drive
Waukegan, Illinois 60085-2195
Phone 847/689-6200

February 27, 1997

Mr. Dan Ray
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, IL 62794-9276

Re: Discharge Monitoring Report - January 1997 - **Amended Report**
NPDES Permit No. IL 0002267

Dear Mr. Ray:

Enclosed are corrected report pages for OMC Waukegan's January 1997, Discharge Monitoring Report. As we discussed during our phone conversation on February 26, 1997, it was determined that typographical errors existed on two of the pages from the original report filed earlier this week.

Per your suggestion, I have highlighted the corrections on the enclosed pages.

If you have any questions regarding this matter, I can be contacted at 847 / 689-5363.

Sincerely,

Anthony M. Montemurro, CHMM
Environmental Control Specialist
OMC Waukegan

cc: L. Keller
B. Kuester
J. Moran

encl.

dray0511.97

RECEIVED
FEB 28 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

EPA Region II

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	001	3519	42°21'48"	87°49'18"

Corrected Report Page

REPORTING PERIOD FROM YEAR 97 MO 01 DAY 01 TO YEAR 97 MO 02 DAY 01

PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	QUANTITY UNITS	NO EX	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	CONCENTRATION UNITS	NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
FLOW	REPORTED	0.334	0.354	0.374	10^6 Gallons	0						4/30	24 hr
	PERMIT CONDITION											1/30	24 hr.
pH (00440)	REPORTED						7.3	7.3	7.3		0	1/30	Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED						38.0	38.0	38.0		0	1/30	Grab
	PERMIT CONDITION									°F		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED						<0.0005	<0.0005	<0.0005		0	1/7	24 hr.
	PERMIT CONDITION								0.005	mg/1		1/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	97 02 27 (YEAR MO DAY)

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management

DISCHARGE MONITORING REPORT

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	007	3519	42°22'6"	87°48'54"

Corrected Report Page

REPORTING PERIOD FROM (20-21) YEAR 9|7 (22-23) MO 0|1 (24-25) DAY 0|1 TO (26-27) YEAR 9|7 (28-29) MO 0|2 (30-31) DAY 0|1

PARAMETER (32-37)		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-69) FREQUENCY OF ANALYSIS	(66-70) SAMPLE TYPE
FLOW	REPORTED	0.030	0.105	0.155	10^6 Gallons	0						2/7	24 hr.
	PERMIT CONDITION											2/7	24 hr.
pH (00440)	REPORTED						7.2	7.2	7.2		0	1/30	Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED						34.7	34.7	34.7		0	1/30	Grab
	PERMIT CONDITION									°F		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED						<0.0005	<0.0005	<0.0005		0	2/7	24 hr.
	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	9|7 0|2 2|7 (YEAR MO DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.*

G. E. Poole
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management

044 020

OMC

OUTBOARD MARINE CORPORATION

100 Sea Horse Drive
Waukegan, Illinois 60085-2195
Phone 847/689-6200

March 27, 1997

Mr. Dan Ray
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, IL 62794-9276

Re: Discharge Monitoring Report - February 1997
NPDES Permit No. IL 0002267

Dear Mr. Ray:

Enclosed is the February 1997, Discharge Monitoring Report for the OMC Waukegan facility.

If you have any questions regarding this matter, I can be contacted at 847 / 689-5363.

Sincerely,

Anthony M. Montemurro, CHMM
Environmental Control Specialist
OMC Waukegan

cc: L. Keller
B. Kuester
J. Moran

encl.

dray086.97

RECEIVED
MAR 31 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.

ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro

PHONE: 708/689-5363

COMMENTS

(1-2) ST	(4-18) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	001	3519	42°21'48"	87°49'18"

REPORTING PERIOD FROM (20-21) YEAR 9|7 (22-23) MO 0|2 (24-25) DAY 0|1 TO (26-27) YEAR 9|7 (28-29) MO 0|3 (30-31) DAY 0|1

(32-37) PARAMETER		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
FLOW	REPORTED	0.365	0.367	0.371	10^6	0						4/30	24 hr
	PERMIT CONDITION				Gallons							1/30	24 hr.
pH (00440)	REPORTED						7.34	7.34	7.34		0	1/30	Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED						41.0	41.0	41.0		0	1/30	Grab
	PERMIT CONDITION									°F		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED						<0.0005	<0.0005	<0.0005		0	1/7	24 hr.
	PERMIT CONDITION								0.005	mg/1		1/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	9|7 0|3 2|7 (YEAR MO DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.* G Poole (SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT)

IL 532-0097
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044 020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

* DUE TO THE INSTALLATION OF A CLOSED LOOP COOLING SYSTEM IN DECEMBER 1993, DISCHARGE FROM THIS OUT FALL HAS BEEN ELIMINATED.

(1-2) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	006	3519	42°21'51"	87°49'17"

REPORTING PERIOD FROM (20-21) YEAR 97 (22-23) MO 02 (24-25) DAY 01 TO (26-27) YEAR 97 (28-29) MO 03 (30-31) DAY 01

(32-37) PARAMETER		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
FLOW	REPORTED	*	*	*	10^6 Gallons		*	*	*				24 hr.
	PERMIT CONDITION											1/7	24 hr.
pH (00440)	REPORTED						*	*	*				Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED						*	*	*				Grab
	PERMIT CONDITION									°F		1/30	Grab
OIL & GREASE (00550)	REPORTED						*	*	*				Grab
	PERMIT CONDITION							15	30	mg/1		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED						*	*	*				24 hr
	PERMIT CONDITION								0.005	mg/1		1/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	97 03 27 (YEAR MO DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.*

G. Poole (signature)
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

L 632-0097
NPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.

ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro

PHONE: 708/689-5363

COMMENTS

ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	007	3519	42°22'6"	87°48'54"

REPORTING PERIOD FROM 9 7 (YEAR) 0 2 (MO) 0 1 (DAY) TO 9 7 (YEAR) 0 3 (MO) 0 1 (DAY)

PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	UNITS	NO EX	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	UNITS	NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
FLOW	REPORTED	0.026	0.074	0.237	10^6 Gallons	0						2/7	24 hr.
	PERMIT CONDITION											2/7	24 hr.
pH (00440)	REPORTED						7.04	7.04	7.04		0	1/30	Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED						39.5	39.5	39.5		0	1/30	Grab
	PERMIT CONDITION									°F		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED						<0.0005	<0.0005	<0.0005		0	2/7	24 hr.
	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	9 7 (YEAR) 0 3 (MO) 2 7 (DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.* G. Poole / [illegible] SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044 020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.

ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro

PHONE: 708/689-5363

COMMENTS

(2-3) ST	(4-10) PERMIT NUMBER	(11-13) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	008	3519	42°22'4"	87°49'14"

REPORTING PERIOD FROM (20-21) YEAR 97 (22-23) MO 02 (24-25) DAY 01 TO (26-27) YEAR 97 (28-29) MO 03 (30-31) DAY 01

(32-37) PARAMETER		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
FLOW	REPORTED	0.000	0.035	0.235	10^6	0						2/7	24 hr.
	PERMIT CONDITION											2/7	24 Hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	97 03 27 (YEAR MO DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.*

G. Poole / OM
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044 020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(1-2) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	014	3519	42°22'15"	87°49'18"

REPORTING PERIOD FROM (20-21) YEAR 91 (22-23) MO 02 (24-25) DAY 01 TO (26-27) YEAR 91 (28-29) MO 03 (30-31) DAY 01

(32-37) PARAMETER		QUANTITY (3 card only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION (4 card only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-66) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
FLOW	REPORTED	NO FLOW AT THIS		OUTFALL.									24 hr.
	PERMIT CONDITION											2/7	24 hr.
pH (00440)	REPORTED												Grab
	PERMIT CONDITION						6		9			1/30	Grab
TEMPERATURE (00010)	REPORTED												Grab
	PERMIT CONDITION									°F		1/30	Grab
POLYCHLORINATED BIPHENYLS	REPORTED												24 hr.
	PERMIT CONDITION							0.001	0.005	mg/1		2/7	24 hr.
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	91 03 27 (YEAR MO DAY)	*I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.* G. Poole / [illegible] SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0097
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

*SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD

STORM WATER DISCHARGES FROM THIS OURFALL HAVE BEEN DIRECTED TO THE STORM RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	015	3519	42°22'19"	87°48'59"

REPORTING PERIOD FROM 97 02 01 (YEAR MO DAY) TO 97 03 01 (YEAR MO DAY)

PARAMETER		QUANTITY MINIMUM	QUANTITY AVERAGE	QUANTITY MAXIMUM	UNITS	NO EX	CONCENTRATION MINIMUM	CONCENTRATION AVERAGE	CONCENTRATION MAXIMUM	UNITS	NO EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
FLOW	REPORTED	NO FLOW AT THIS OUTFALL.			10^6 Gallons								Calculation
	PERMIT CONDITION											*/30	Calculation
pH (00440)	REPORTED												Grab
	PERMIT CONDITION						6		9			*/30	Grab
TOTAL SUSP. SOLIDS	REPORTED												Storm Composite
	PERMIT CONDITION								30	mg/1		*/30	Storm Composite
POLYCHLORINATED BIPHENYLS	REPORTED												Storm Composite
	PERMIT CONDITION								0.005	mg/1		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	97 03 27 (YEAR MO DAY)

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

G. Poole / [signature]
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0097
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.
ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro
PHONE: 708/689-5363

COMMENTS

* SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD

STORM WATER DISCHARGES FROM THIS OURFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	016	3519	42°22'19"	87°49'15"

REPORTING PERIOD FROM 9 7 (YEAR) 0 2 (MO) 0 1 (DAY) TO 9 7 (YEAR) 0 3 (MO) 0 1 (DAY)

(32-37) PARAMETER		3 card only (38-45) QUANTITY MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	4 card only (38-45) CONCENTRATION MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	(64-66) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
FLOW	REPORTED	NO FLOW AT THIS OUTFALL.			10^6 Gallons								Calculation
	PERMIT CONDITION											*/30	Calculation
pH (00440)	REPORTED												Grab
	PERMIT CONDITION						6		9			*/30	Grab
TOTAL SUSP. SOLIDS	REPORTED												Storm Composite
	PERMIT CONDITION								30	mg/1		*/30	Storm Composite
POLYCHLORINATED BIPHENYLS	REPORTED												Storm Composite
	PERMIT CONDITION								0.005	mg/1		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE		
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	9 7 (YEAR)	0 3 (MO)	2 7 (DAY)

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

G. Poole / Otn
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044 020

PERMITTEE NAME: OMC Waukegan - Facility of Outboard Marine Corp.

ADDRESS: 100 Sea Horse Drive
Waukegan, IL 60085 - Attn: Anthony Montemurro

PHONE: 708/689-5363

(2-3)	(4-16)	(17-19)			
IL	00002267	017	3519	42°22'19"	87°49'15"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM (20-21) (22-23) (24-25) 91 02 01 (YEAR MO DAY) TO (26-27) (28-29) (30-31) 91 03 01 (YEAR MO DAY)

COMMENTS

*Samples required for each precipitation event greater than 0.3 inches in a 24 hour period.

This discharge is from the storm retention pond, constructed as agreed to in the consent decree entered in NRDC V. OMC, N.D. ILL. 87 C 4648

** No precipitaion event exceeding 0.3" in 24 hour period during this reporting period.

PARAMETER (32-37)		QUANTITY 3 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	CONCENTRATION 4 card only (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX	FREQUENCY OF ANALYSIS (64-69)	SAMPLE TYPE (68-70)
FLOW	REPORTED	**	**	**	10^6 Gallons								Calculation
	PERMIT CONDITION											*/30	Calculation
pH (00440)	REPORTED						**	**	**				Grab
	PERMIT CONDITION						6		9			*/30	Grab
TOTAL SUSP. SOLIDS	REPORTED						**	**	**				Storm Composite
	PERMIT CONDITION									mg/l		*/30	Storm Composite
POLYCHLORINATED BIPHENYLS	REPORTED						**	**	**				Storm Composite
	PERMIT CONDITION									mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
Poole, Glenn E. (LAST FIRST MI)	Plant Manager (TITLE)	91 03 27 (YEAR MO DAY)	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

G. Poole — SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL 532-0097
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 1/2, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management

OMC

OUTBOARD MARINE CORPORATION

100 Sea Horse Drive
Waukegan, Illinois 60085-2195
Phone 847/689-6200

April 28, 1997

United States Environmental Protection Agency
Region 5
NPDES Compliance Unit
77 W. Jackson
Chicago, IL 60604

Re: NPDES Discharge Monitoring Reports
IEPA Permit No. IL0002267

To Whom It May Concern:

Enclosed are copies of the Discharge Monitoring Reports for January, February, and March 1997 for the OMC Waukegan facility.

If you have any questions regarding this matter, I can be contacted at 847 / 689-5363.

Sincerely,

Anthony M. Montemurro

Anthony M. Montemurro, CHMM
Environmental Control Specialist
OMC Waukegan

RECEIVED
APR 29 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

encl.

cc: L. Keller
B. Kuester
J. Moran

usepa118.97

OMC

OUTBOARD MARINE CORPORATION

100 Sea Horse Drive
Waukegan, Illinois 60085-2195
Phone 847/689-6200

April 28, 1997

Mr. Dan Ray
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, IL 62794-9276

Re: Discharge Monitoring Report - March 1997
NPDES Permit No. IL 0002267

Dear Mr. Ray:

Enclosed is the March 1997, Discharge Monitoring Report for the OMC Waukegan facility.

If you have any questions regarding this matter, I can be contacted at 847 / 689-5363.

Sincerely,

Anthony Montemurro

Anthony M. Montemurro, CHMM
Environmental Control Specialist
OMC Waukegan

cc: L. Keller
B. Kuester
J. Moran

encl.

dray118.97

RECEIVED
APR 29 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	001	3519	42° 21' 48"	87° 49' 18"

REPORTING PERIOD FROM (20-21) YEAR 97 (22-23) MO 03 (24-25) DAY 01 TO (26-27) YEAR 97 (28-29) MO 04 (30-31) DAY 01

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
	REPORTED	0.330	0.394	0.459	10^6	0						4/30	24 HOUR
FLOW	PERMIT CONDITION				Gallons							1/30	24 HOUR
pH	REPORTED						7.7	7.7	7.7		0	1/30	GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						61.7	61.7	61.7		0	1/30	GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED						<0.0005	<0.0005	<0.0005		0	1/7	24 HOUR
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		1/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
POOLE, GLENN E. (LAST FIRST MI)	PLANT MANAGER (TITLE)	97 04 24 (YEAR MO DAY)

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

G. E. Poole
SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC-242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** DUE TO THE INSTALLATION OF A CLOSED LOOP COOLING SYSTEM IN DECEMBER 1993, DISCHARGE FROM THIS OUTFALL HAS BEEN ELIMINATED.*

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	006	3519	42° 21' 51"	87° 49' 17"

REPORTING PERIOD FROM	(20-21) YEAR	(22-23) MO	(24-25) DAY	(26-27) YEAR	(28-29) MO	(30-31) DAY
	97	03	01	97	04	01

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	*	*	*	10^6		*	*	*				24 HOUR
FLOW	PERMIT CONDITION				Gallons							1/7	24 HOUR
pH	REPORTED						*	*	*				GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						*	*	*				GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
OIL & GREASE	REPORTED						*	*	*				GRAB
(00550)	PERMIT CONDITION							15	30	mg/l		1/30	GRAB
POLYCHLORINATED	REPORTED						*	*	*				24 HOUR
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		1/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
POOLE, GLENN E.	PLANT MANAGER	97 04 24
LAST FIRST MI	TITLE	YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3) ST	(4-10) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	007	3519	42° 22' 6"	87° 48' 54"

REPORTING PERIOD FROM (20-21) YEAR 9 7 (22-23) MO 0 3 (24-25) DAY 0 1 TO (26-27) YEAR 9 7 (28-29) MO 0 4 (30-31) DAY 0 1

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-66) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	0.030	0.072	0.201	10^6	0						2/7	24 HOUR
FLOW	PERMIT CONDITION				Gallons							2/7	24 HOUR
pH	REPORTED						7.7	7.7	7.7		0	1/30	GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						57.0	57.0	57.0		0	1/30	GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED						<0.0005	<0.0005	<0.0005		0	2/7	24 HOUR
BIPHENYLS	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE	
POOLE, GLENN E.	PLANT MANAGER	9 7 0 4 2 4	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate
LAST FIRST MI	TITLE	YEAR MO DAY	SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	008	3519	42° 22' 4"	87° 49' 14"

REPORTING PERIOD FROM (20-21) YEAR 9 7 (22-23) MO 0 3 (24-25) DAY 0 1 TO (26-27) YEAR 9 7 (28-29) MO 0 4 (30-31) DAY 0 1

(32-37) PARAMETER		QUANTITY (3 card only) (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	CONCENTRATION (4 card only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(69-70) SAMPLE TYPE
	REPORTED	0.000	0.000	0.001	10^6	0						2/7	24 HOUR
FLOW	PERMIT CONDITION				Gallons							2/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	9 7	0 4	2 4
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED TO OUTFALL 017.

(2-3)	(4-10)	(17-19)			
IL	0002267	014	3519	42° 22' 15"	87° 49' 18"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM 9 7 (YEAR) 0 3 (MO) 0 1 (DAY) TO 9 7 (YEAR) 0 4 (MO) 0 1 (DAY)

(32-37) PARAMETER		QUANTITY (3 card only) (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	CONCENTRATION (4 card only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(66-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								24 HOUR
FLOW	PERMIT CONDITION				Gallons							2/7	24 HOUR
pH	REPORTED												GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED												GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED												24 HOUR
BIPHENYLS	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	9 7	0 4	2 4
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD*

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(2-3)	(4-16)	(17-19)			
IL	0002267	015	3519	42° 22' 19"	87° 48' 59"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM

(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)
9 7	0 3	0 1	TO	9 7	0 4	0 1
YEAR	MO	DAY		YEAR	MO	DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								Calculation
FLOW	PERMIT CONDITION				Gallons							*/30	Calculation
pH	REPORTED												Grab
(00440)	PERMIT CONDITION						6		9			*/30	Grab
TOTAL	REPORTED												Storm Composite
SUSPENDED SOLIDS	PERMIT CONDITION								30	mg/l		*/30	Storm Composite
POLYCHLORINATED	REPORTED												Storm Composite
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	9 7	0 4	2 4
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required, Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD*

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	016	3519	42° 22' 19"	87° 49' 15"

REPORTING PERIOD FROM (20-21) YEAR 97 (22-23) MO 03 (24-25) DAY 01 TO (26-27) YEAR 97 (28-29) MO 04 (30-31) DAY 01

(32-37) PARAMETER		QUANTITY (3 card only) (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	CONCENTRATION (4 card only) (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(66-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								Calculation
FLOW	PERMIT CONDITION				Gallons							*/30	Calculation
pH	REPORTED												Grab
(00440)	PERMIT CONDITION						6		9			*/30	Grab
TOTAL	REPORTED												Storm Composite
SUSPENDED SOLIDS	PERMIT CONDITION								30	mg/l		*/30	Storm Composite
POLYCHLORINATED	REPORTED												Storm Composite
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER	TITLE OF THE OFFICER	DATE
POOLE, GLENN E.	PLANT MANAGER	97 04 24
LAST FIRST MI	TITLE	YEAR MO DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD. No precipitation events during this reporting period.*
THIS DISCHARGE IS FROM THE STORM RETENTION POND, CONSTRUCTED AS AGREED TO IN THE CONSENT DECREE ENTERED IN NRDC V. OMC, N.D. ILL. 87 C 4648

(2-3)	(4-16)	(17-19)			
IL	0002267	017	3519	42° 22' 19"	87° 49' 15"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM	(20-21)	(22-23)	(24-25)	TO	(26-27)	(28-29)	(30-31)
	9 7	0 3	0 1		9 7	0 4	0 1
	YEAR	MO	DAY		YEAR	MO	DAY

(32-37) PARAMETER		3 card only QUANTITY (38 34) MINIMUM	(46 53) AVERAGE	(54 61) MAXIMUM	UNITS	(62 62) NO EX.	4 card only CONCENTRATION (38 45) MINIMUM	(46 53) AVERAGE	(54 61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	*	*	*	10^6								Calculation
FLOW	PERMIT CONDITION				Gallons							*/30	Calculation
pH	REPORTED						*	*	*				Grab
(00440)	PERMIT CONDITION						6		9			*/30	Grab
TOTAL	REPORTED						*	*	*				Storm Composite
SUSPENDED SOLIDS	PERMIT CONDITION									mg/l		*/30	Storm Composite
POLYCHLORINATED	REPORTED						*	*	*				Storm Composite
BIPHENYLS	PERMIT CONDITION									mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE			I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.	SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT
POOLE,	GLENN	E.	PLANT MANAGER	9 7	0 4	2 4		
LAST	FIRST	MI	TITLE	YEAR	MO	DAY		

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center

044-020

May 29, 1997

Mr. Dan Ray
Illinois Environmental Protection Agency
Division of Water Pollution Control
Compliance Assurance Section
2200 Churchill Road
Springfield, IL 62794-9276

Re: Discharge Monitoring Report - April 1997
NPDES Permit No. IL 0002267

Dear Mr. Ray:

Enclosed is the April 1997, Discharge Monitoring Report for the OMC Waukegan facility.

If you have any questions regarding this matter, I can be contacted at 847 / 689-5363.

Sincerely,

Anthony M. Montemurro, CHMM
Environmental Control Specialist
OMC Waukegan

encl.

cc: L. Keller
B. Kuester
J. Moran

cray149.97

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3)	(4-16)	(17-19)			
IL	0002267	001	3519	42° 21' 48"	87° 49' 18"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM (20-21) 97 YEAR (22-23) 04 MO (24-25) 01 DAY TO (26-27) 97 YEAR (28-29) 05 MO (30-31) 01 DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	0.384	0.514	0.776	10^6	0						5/30	24 HOUR
FLOW	PERMIT CONDITION				Gallons							1/30	24 HOUR
pH	REPORTED						7.3	7.3	7.3		0	1/30	GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						62	60	60		0	1/30	GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED						< 0.0005	< 0.0005	< 0.0005		0	1/7	24 HOUR
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		1/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE			
POOLE,	GLENN	E.	PLANT MANAGER	97	05	29	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** DUE TO THE INSTALLATION OF A CLOSED LOOP COOLING SYSTEM IN DECEMBER 1993, DISCHARGE FROM THIS OUTFALL HAS BEEN ELIMINATED.*

(2-3)	(4-16)	(17-19)			
IL	0002267	006	3519	42° 21' 51"	87° 49' 17"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM	(20-21) YEAR	(22-23) MO	(24-25) DAY	TO	(26-27) YEAR	(28-29) MO	(30-31) DAY
	97	04	01		97	05	01

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	*	*	*	10^6		*	*	*				24 HOUR
FLOW	PERMIT CONDITION				Gallons							1/7	24 HOUR
pH	REPORTED						*	*	*				GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						*	*	*				GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
OIL & GREASE	REPORTED						*	*	*				GRAB
(00550)	PERMIT CONDITION							15	30	mg/l		1/30	GRAB
POLYCHLORINATED	REPORTED						*	*	*				24 HOUR
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		1/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	97	05	29
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3) ST	(4-16) PERMIT NUMBER	(17-19) DIS	SIC	LATITUDE	LONGITUDE
IL	0002267	007	3519	42° 22' 6"	87° 48' 54"

REPORTING PERIOD FROM (20-21) YEAR 97 (22-23) MO 04 (24-25) DAY 01 TO (26-27) YEAR 97 (28-29) MO 05 (30-31) DAY 01

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	0.018	0.058	0.114	10^6	0						2/7	24 HOUR
FLOW	PERMIT CONDITION				Gallons							2/7	24 HOUR
pH	REPORTED						6.9	6.9	6.9		0	1/30	GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED						66	66	66		0	1/30	GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED						< 0.0005	< 0.0005	< 0.0005				24 HOUR
BIPHENYLS	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE			
POOLE,	GLENN	E.	PLANT MANAGER	97	05	29	
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

(2-3)	(4-16)	(17-19)			
IL	*0002267*	*008*	*3519*	*42° 22' 4"*	*87° 49' 14"*
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM	(20-21)	(22-23)	(24-25)	TO	(26-27)	(28-29)	(30-31)
	9 7	*0 4*	*0 1*		*9 7*	*0 5*	*0 1*
	YEAR	MO	DAY		YEAR	MO	DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	*0.0*	*0.0*	*0.0*	*10^6*	*0*						*2/7*	*24 HOUR*
FLOW	PERMIT CONDITION				*Gallons*							*2/7*	*24 HOUR*
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	*GLENN*	*E.*	*PLANT MANAGER*	*9 7*	*0 6*	*2 9*
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED TO OUTFALL 017.

(2-3)	(4-16)	(17-19)			
IL	0002267	014	3519	42° 22' 15"	87° 49' 18"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM

(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)
9 7	0 4	0 1	TO	9 7	0 5	0 1
YEAR	MO	DAY		YEAR	MO	DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								24 HOUR
FLOW	PERMIT CONDITION				Gallons							2/7	24 HOUR
pH	REPORTED												GRAB
(00440)	PERMIT CONDITION						6		9			1/30	GRAB
TEMPERATURE	REPORTED												GRAB
(00010)	PERMIT CONDITION									°F		1/30	GRAB
POLYCHLORINATED	REPORTED												24 HOUR
BIPHENYLS	PERMIT CONDITION							0.001	0.005	mg/l		2/7	24 HOUR
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	9 7	0 5	2 9
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD*

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(2-3)	(4-16)	(17-19)			
IL	0002267	015	3519	42° 22' 19"	87° 48' 59"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM (20-21) 97 YEAR (22-23) 04 MO (24-25) 01 DAY TO (26-27) 97 YEAR (28-29) 05 MO (30-31) 01 DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								Calculation
FLOW	PERMIT CONDITION				Gallons							*/30	Calculation
pH	REPORTED												Grab
(00440)	PERMIT CONDITION						6		9			*/30	Grab
TOTAL	REPORTED												Storm Composite
SUSPENDED SOLIDS	PERMIT CONDITION								30	mg/l		*/30	Storm Composite
POLYCHLORINATED	REPORTED												Storm Composite
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	GLENN	E.	PLANT MANAGER	97	05	29
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)623-5303*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD*

STORM WATER DISCHARGES FROM THIS OUTFALL HAVE BEEN DIRECTED TO THE STORM WATER RETENTION POND. THE POND DISCHARGE HAS BEEN DESIGNATED OUTFALL 017.

(2-3)	(4-16)	(17-19)			
IL	0002267	016	3519	42° 22' 19"	87° 49' 15"
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM (20-21) 97 YEAR (22-23) 04 MO (24-25) 01 DAY TO (26-27) 97 YEAR (28-29) 05 MO (30-31) 01 DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED	NO FLOW AT THIS OUTFALL.			10^6								Calculation
FLOW	PERMIT CONDITION				Gallons							*/30	Calculation
pH	REPORTED												Grab
(00440)	PERMIT CONDITION						6		9			*/30	Grab
TOTAL	REPORTED												Storm Composite
SUSPENDED SOLIDS	PERMIT CONDITION								30	mg/l		*/30	Storm Composite
POLYCHLORINATED	REPORTED												Storm Composite
BIPHENYLS	PERMIT CONDITION								0.005	mg/l		*/30	Storm Composite
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE			
POOLE,	GLENN	E.	PLANT MANAGER	97	05	29	I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.
LAST	FIRST	MI	TITLE	YEAR	MO	DAY	SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

DISCHARGE MONITORING REPORT

IEPA - Region II

PERMITTEE NAME: *OMC WAUKEGAN - FACILITY OF OUTBOARD MARINE CORPORATION*

ADDRESS: *100 SEA-HORSE DRIVE*
WAUKEGAN, IL 60085 *ATTN: ANTHONY MONTEMURRO*

PHONE: *(847)689-5363*

COMMENTS

** SAMPLES REQUIRED FOR EACH PRECIPITATION EVENT GREATER THAN 0.3 INCHES IN A 24 HOUR PERIOD. No events during this reporting period.*

THIS DISCHARGE IS FROM THE STORM RETENTION POND, CONSTRUCTED AS AGREED TO IN THE CONSENT DECREE ENTERED IN NRDC V. OMC, N.D. ILL. 87 C 4648

(2-3)	(4-16)	(17-19)			
IL	*0002267*	*017*	*3519*	*42° 22' 19"*	*87° 49' 15"*
ST	PERMIT NUMBER	DIS	SIC	LATITUDE	LONGITUDE

REPORTING PERIOD FROM

(20-21)	(22-23)	(24-25)		(26-27)	(28-29)	(30-31)
9 7	*0 4*	*0 1*	TO	*9 7*	*0 5*	*0 1*
YEAR	MO	DAY		YEAR	MO	DAY

(32-37) PARAMETER		3 card only QUANTITY (38-34) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-62) NO EX.	4 card only CONCENTRATION (38-45) MINIMUM	(46-53) AVERAGE	(54-61) MAXIMUM	UNITS	(62-63) NO EX.	(64-68) FREQUENCY OF ANALYSIS	(68-70) SAMPLE TYPE
	REPORTED				*10^6*								*Calculation*
FLOW	PERMIT CONDITION				*Gallons*							**/30*	*Calculation*
pH	REPORTED												*Grab*
(00440)	PERMIT CONDITION						*6*		*9*			**/30*	*Grab*
TOTAL	REPORTED												*Storm Composite*
SUSPENDED SOLIDS	PERMIT CONDITION									*mg/l*		**/30*	*Storm Composite*
POLYCHLORINATED	REPORTED												*Storm Composite*
BIPHENYLS	PERMIT CONDITION									*mg/l*		**/30*	*Storm Composite*
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												
	REPORTED												
	PERMIT CONDITION												

NAME OF PRINCIPAL EXECUTIVE OFFICER			TITLE OF THE OFFICER	DATE		
POOLE,	*GLENN*	*E.*	*PLANT MANAGER*	*9 7*	*0 5*	*2 9*
LAST	FIRST	MI	TITLE	YEAR	MO	DAY

I certify that I am familiar with the information contained in this report and that to the best of my knowledge and belief such information is true, complete, and accurate.

SIGNATURE OF PRINCIPLE EXECUTIVE OFFICER OR AUTHORIZED AGENT

IL532-0092
WPC 242 11/79

This Agency is authorized to require this information under Illinois Revised Statutes, 1979, Chapter 111 ½, Section 1042. Disclosure of this information is required. Failure to do so may result in a civil penalty up to $10,000.00 per day of violation or a fine up to $25,000.00 per day of violation and imprisonment up to one year. This form has been approved by the Forms Management Center.

044-020

ATTACHMENT 2

CATEGORY 5 TREATMENT PLANT ANALYTICAL RESULTS

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Outboard Marine Corporation
190 Sea Horse Drive
Waukegan, IL 60085

Attn: Tricia Sutton

Login #: 97-04-403
Date Received: 04/23/97
Date Completed: 04/30/97
Date Reported: 04/30/97 13:14
Work ID: OMC WAUKEGAN HARBOR RA

Client Code: OUTBOARD-379

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	WT5I-R5	02	WT5I-R6
03	WT5E	04	WT5LC

All results for soils/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the prior written approval of KEMRON.

Certified by
Leslie Bucina

RECEIVED
MAY 05 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **01** Collected: **04/22/97 1100**
Sample Description: **WT5I-R5** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 064R0101
Instrument: HP4 Injected: 04/24/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	4	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	102 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	108 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **02** Collected: **04/22/97 1100**
Sample Description: **WT5I-R6** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 065R0101
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	66 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	64 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **03** Collected: **04/22/97 1100**
Sample Description: **WT5E** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 066R0101
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	92 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	67 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **04** Collected: **04/22/97 1100**
Sample Description: **WT5LC** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 067R0101
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	80 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	45 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ANALYST LIST

Ohio Valley Laboratory

04/29/97

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BC - - Becky Cutlip
BWH - - Ben W. Haynes
CEB - - Chad E. Barnes
CMS - - Crystal M. Stevens
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
ENH - - E. Nick Hamner
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
HV - - Hema Vilasagar
JEC - - Jesse E. Chapman
JKM - - June K. Morris
JLI - - Janice L. Inghram
JMM - - Jim M. Monk
JWR - - John W. Richards
JYH - - Ji Y. Hu
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
KRA - - Kathy R. Albertson
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MES - - Mary E. Schiling
MLS - - Michael L. Schimmel
MMB - - Maren M. Beery
REB - - Russell E. Burton
REF - - Ron E. Fertile
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLT - - Stephanie L. Tepe
SPL - - Steve P. Learn
TLD - - Teresa L. Davis
VC - - Vicki Collier
WCD - - Wade C. Dawson

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY /PCB WATERS , FRONT

EXT'N DATE : 4/23/97	INSTRUMENT : HP4	BLK FLNM : 012F0101	SMPL ID : 04-404-09
EXT'N BENCH SHT : V73P30	ANALYST : ECL	LCS FLNM : 013F0101	SMPL FLNM : 030F0301
EXT'N WORK GRP : WG22059	RUN DATE : 4/24/97	LCS Dup FLNM : NA	MS FLNM : 033F0301
	ANAL WORK GRP : WG22123		MSD FLNM : 034F0301

COMPOUND	RDL	CONCENTRATION , ug/L						% RECOVERY								PERCENT		
		Blank	LCS	LCS Dup	Sample	MS	MSD	Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	48-125	NA	#VALUE!	#VALUE!	48-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	9.1	NA	ND	9.3	8.7	ND	90.8	NA	NA	NA	93.3	87.4	NA	NA	6.6	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.27	0.32	0.00	0.29	0.29	0.28	54.2	63.2	0.0	16-99	58.4	57.8	55.0	16-99			
DECACHLOROBIPHENYL		0.54	0.55	0.00	0.33	0.40	0.38	108.6	110.6	0.0	30-133	66.6	80.8	72.4	30-133			

NOTES & DEFINITIONS :

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY /PCB WATERS, REAR

EXT'N DATE : 4/23/97
EXT'N BENCH SHT : V73P30
EXT'N WORK GRP : WG22059

INSTRUMENT : HP4
ANALYST : ECL
RUN DATE : 4/24/97
ANAL WORK GRP : WG22123

BLK FLNM : 062R0101
LCS FLNM : 063R0101
LCS Dup FLNM : NA

SMPL ID : 04-404-09
SMPL FLNM : 080R0301
MS FLNM : 083R0301
MSD FLNM : 084R0301

COMPOUND	RDL	CONCENTRATION, ug/L						% RECOVERY								PERCENT		
		Blank	LCS	LCS Dup	Sample	MS	MSD	Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	48-125	NA	#VALUE!	#VALUE!	48-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	10.2	NA	ND	9.6	9.0	ND	102.0	NA	NA	NA	95.2	90.1	NA	NA	5.5	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.28	0.32	0.00	0.31	0.32	0.27	55.8	63.6	0.0	16-99	62.2	63.2	64.4	16-99			
DECACHLOROBIPHENYL		0.56	0.57	0.00	0.32	0.37	0.32	112.6	113.4	0.0	30-133	63.2	73.8	64.4	30-133			

NOTES & DEFINITIONS :

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

KEMRON
ENVIRONMENTAL SERVICES

CHAIN-OF-CUSTODY RECORD

№ 82765

Page 1 of 1

Project Contact: Tricia Sutton — OUTBOARD_379

Turn Around Requirements: Standard (7 day)

Project No.:

Project Name: OMC Waukegan Harbor RA

Sampler (print): T. Sutton

Signature:

Sample I.D. No.	Comp*	Grab	Date	Time	Protocol CWA	Protocol SW846	NUMBER OF SAMPLE Bottles	Hold	PCBs (8081)	ADDITIONAL REQUIREMENTS
WT5I-R5		X*	4/22/97	11:00		X	2		X	
WT5I-R6		X	4/22/97	11:00		X	2		X	
WT5E		X	4/22/97	11:00		X	2		X	
WT5LC		X	4/22/97	11:00		X	2		X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
	4/22/97	5:50pm					

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks
			Angelina Pacotl	4/22/97	9:45	Data Packet Required: Basic (Monthly) Send Report unbound to Tricia Sutton, OMC Composite both bottles for each Sample ID#s. Analyze the composite.

*Homogenize all composite samples prior to analysis

White – Lab Yellow – Office Pink – Field

Cooler temp: 4.0 C of C Sealed intact

ATTACHMENT 3

GROUNDWATER MONITORING

ATTACHMENT 3A

VALIDATED GROUNDWATER MONITORING DATA - POLYCHLORINATED BIPHENYLS (PCBs)

SMITH
TECHNOLOGY CORPORATION

TO: Tricia Sutton
OMC Environmental Affairs
Waukegan Harbor, Illinois

DATE: May 23, 1997

FROM: Mark Traxler MT
Senior Quality Assurance Scientist
Smith Technology Corporation
Plymouth Meeting, Pennsylvania

SUBJECT: PCB Data Review
April 21 and 22, 1997 Groundwater Sampling Event
Waukegan Harbor Superfund Site

INTRODUCTION

A data review of the first half, 1997 polychlorinated biphenyls (PCBs) groundwater sampling data package that was prepared for the April 21 and 22, 1997 sampling event has been performed. The data package consisted of 12 groundwater samples, 1 field blank, 2 field duplicates, 1 matrix spike (MS) and 1 matrix spike duplicate (MSD) that were analyzed for PCBs following SW-846 Method 8080. The samples were analyzed by Kemron Environmental Services (Kemron), located in Marietta, Ohio under Kemron project Order Number 97-04-404. The data package contained raw instrument data for the initial and continuing calibration standards; field samples and quality control (QC); tabulated calibration results; and tabulated MS/MSD and surrogate spike results. The data package (along with the addition of two revised results and a few missing calibration pages that were submitted later) was in good condition, containing all of the required deliverables, as defined by the proposed project-specific Quality Assurance Project Plan (QAPjP) for the Operation and Maintenance Plan.

REVIEW

The samples were collected by Kevin Brissette on April 21 and 22 and shipped under one chain-of-custody in five shipment coolers containing the samples (identified as Batch 97-04-404). The samples collected on April 21 were stored in an onsite locked refrigerator maintained at 4 degrees Celsius (°C) overnight and were shipped with the samples collected on April 22 overnight on ice to the laboratory by Federal Express, received with custody seals intact, and logged into their computer system on April 23. Cooler temperatures were recorded at 4.0, 4.0, 3.0, 3.0, and 6.0 °C. Method 8080 recommends preservation at 4 (±2)°C.

One Plymouth Meeting • Plymouth Meeting, PA 19462 • (610) 825-3800 • fax (610) 834-8236

Revisions to the sampling procedure were made in the field due to two problems encountered. The peristaltic pump and trash pump were used together in accordance with the QAPjP for samples W-3, W-9, W-10, W-10D, W-10MS and W-10MSD. The peristaltic pump then broke, and the trash pump alone was used to collect the remaining samples. The cleaning procedure was modified to remove hexane as a solvent because hexane was degrading the teflon tape, impairing the integrity of the tape.

All samples were analyzed within the analytical holding times for aqueous samples for PCBs of 7-days from sample collection to sample extraction and 40 days from extraction to laboratory analysis. The aqueous PCB samples were extracted following SW-846 Method 3510 and were analyzed by Gas Chromatography/Electronic Capture Detector (GC/ECD) following SW-846 Method 8080.

All initial and continuing calibrations were within the method acceptance criteria. The rear column results of the dual column setup (GC instrument HP4) were used by Kemron to report all Order -404 sample data. All positive results were confirmed on two columns.

The laboratory initially identified and reported only Aroclor-1016 in samples W-10 and W-10D based on the best match to their Aroclor calibration standards. After a review of the chromatograms and a discussion with the laboratory, the laboratory analyzed a Aroclor-1016 standard without Aroclor-1260 and concluded that Aroclor-1248 was definitely present in samples W-10 and W-10D. The results were revised to include both Aroclor-1016 and Aroclor-1248. The total PCBs for W-10 and W-10D from this sampling event is 3.0 and 2.8 µg/L, respectively. Although Aroclor-1016 has never been observed or reported for W-10 in the past, it is not unusual for a laboratory to report more than one Aroclor when a sample PCB pattern does not exactly match their calibration standards.

Surrogate spike recoveries were within the project-specific acceptance criteria of 50-150% for at least one of the two surrogate spike compounds for all samples, except W-1 and W-6. W-1 and W-6 were reported to contain no PCBs, so the detection limits are considered estimated due to poor surrogate recoveries. Kemron's laboratory acceptance criteria for surrogate recoveries are 25-140% for decachlorobiphenyl (DCB) and 13-154% for tetra-chloro-meta-xylene (TCMX), and thus did not flag DCB or TCMX recoveries for samples that were outside of the project-specific acceptance criteria, but within Kemron's internal criteria.

The laboratory control sample (LCS) recovery for Aroclor-1248 (102%) was within the laboratory acceptance criteria. It is noted that the laboratory did not account for the Aroclor-1248 in W-10 and incorrectly calculated the percent recoveries and relative percent difference (RPD) for the MS/MSD results. The corrected MS/MSD recoveries for Aroclor-1248 (W-10MS/W-10MSD, 76.7 & 71.7%) were within the proposed project-specific acceptance criteria of 50-150%. The corrected RPD for the MS/MSD results (5.8%) was within the proposed project-specific acceptance criteria of 35%.

One field blank and two field duplicates were collected with the groundwater samples and submitted to Kemron for analysis. These samples were collected for quality assurance/quality control (QA/QC) purposes in accordance with the proposed QAPjP guidelines. The laboratory method blank and the field blank (EQ. BL.) were found to contain no reportable PCBs, and are acceptable without qualification. Field duplicates W-12/W-12DUP (ND 0.5/ND 0.5 µg/L, 0% RPD) and W-10/W-10D (1.2/1.1 µg/L Aroclor-1016, 12% RPD and 1.8/1.7 µg/L Aroclor-1248, 10% RPD) are within the proposed project-specific acceptance criteria of 35%.

This data validation report covers the first half, 1997 groundwater sampling data package. All project-specific quality control criteria have been met, as identified and discussed above. Corrections to the data (reporting positive results to two significant figures, correctly calculating MS/MSD recoveries, and estimating the detection limits for W-1 and W-6) have been made in this report. If you have any questions regarding this data review, please contact me at (610) 825-3800.

TABLE 1

SECOND QUARTER 1997 GROUNDWATER SAMPLES
SUMMARY OF PCB RESULTS
WAUKEGAN HARBOR SUPERFUND SITE

Results in ug/L

Sample Number:		W-1	W-2	W-3	W-4	W-5	W-6	W-7	W-8	W-9
Background Average (ug/L):		1.9	1.3	1.7	2.1	6.3	2.6	1.0	1.0	1.3
Sample Order Number:		97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404
Laboratory Number:	DL	01	02	03	04	05	06	07	08	13
COMPOUND	(ug/L)									
Aroclor-1016	0.5	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1221	0.5	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1232	0.5	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1242	0.5	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1248	0.5	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1254	1.0	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Aroclor-1260	1.0	***ND J***	ND	ND	ND	ND	***ND J***	ND	ND	ND
Surrogate Recoveries, %	Range									
TCMX	50-150	44 *	55	50	43 *	41 *	45 *	57	52	56
DCB	50-150	41 *	58	62	54	59	40 *	63	52	56
Date Sampled:		4/22/97	4/22/97	4/21/97	4/22/97	4/22/97	4/22/97	4/22/97	4/22/97	4/21/97
Date Received:		4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Date Extracted:		4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97
Date Analyzed:		4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97

Initial Calibration Date:		4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97
Continuing Calibration Date:		4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97

Qualifier Key

DL: Detection limit. J : Estimated value

ND: Compound was not detected at, or above, the DL.

* : Outside project advisory criteria of 50-150%. If both surrogates are out of criteria, results are qualified as estimated (J).

Kemron acceptance criteria for DCB is 25-140 %, TCMX is 13-154 %.

Sample results have been validated in accordance with the proposed QAPP for the O&M Plan.

Results reported in bold italics have been modified by the data validation process.

TABLE 1

SECOND QUARTER 1997 GROUNDWATER SAMPLES
SUMMARY OF PCB RESULTS
WAUKEGAN HARBOR SUPERFUND SITE

Results in ug/L

Sample Number:		W-10	W 10D	W 10MS	W-10MSD	W-11	W-12	W-12D	EQ. BL.		
Background Average (ug/L):		18.6	-	-	-	1.8	1.5	-	-		
Sample Order Number:		97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404	97-04-404		
Laboratory Number:	DL	09	10	11	12	14	15	16	17		
COMPOUND	(ug/L)										
Aroclor-1016	0.5	***1.2***	***1.1***			ND	ND	ND	ND		
Aroclor-1221	0.5	ND	ND			ND	ND	ND	ND		
Aroclor-1232	0.5	ND	ND			ND	ND	ND	ND		
Aroclor-1242	0.5	ND	ND			ND	ND	ND	ND		
Aroclor-1248	0.5	***1.8***	***1.7***	***76.7%***	***71.7%***	ND	ND	ND	ND		
Aroclor-1254	1.0	ND	ND			ND	ND	ND	ND		
Aroclor-1260	1.0	ND	ND			ND	ND	ND	ND		
Surrogate Recoveries, %	Range										
TCMX	50-150	53	47 *	63	54	67	65	63	73		
DCB	50-150	58	64	74	64	40 *	58	60	92		
Date Sampled:		4/21/97	4/21/97	4/21/97	4/21/97	4/22/97	4/22/97	4/22/97	4/22/97		
Date Received:		4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97		
Date Extracted:		4/26/97	4/26/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97	4/23/97		
Date Analyzed:		4/28/97	4/28/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97		

Initial Calibration Date:		4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97	4/24/97		
Continuing Calibration Date:		4/28/97	4/28/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97	4/25/97		

Qualifier Key

DL: Detection limit. J : Estimated value

ND: Compound was not detected at, or above, the DL.

* : Outside project advisory criteria of 50-150%. If both surrogates are out of criteria, results are qualified as estimated (J).

Kemron acceptance criteria for DCB is 25-140 %, TCMX is 13-154 %.

Sample results have been validated in accordance with the proposed QAPP for the O&M Plan.

Results reported in bold italics have been modified by the data validation process.

TABLE 6

DATA VALIDATION CHECKLIST
OPERATION AND MAINTENANCE PLAN
WAUKEGAN HARBOR, ILLINOIS

Project # 90-407-73

[X] Yes [ ] No	1	Chain-of-Custody Documentation		
[X] Yes [ ] No	2	Laboratory Chronicle/Case Narrative	Laboratory:	Kemron
[X] Yes [ ] No	3	Sample Results		
[X] Yes [ ] No	4	Surrogate Recovery Summary	Lab Report Number:	97-04-404
[X] Yes [ ] No	5	Reagent Blank Summary		
[X] Yes [ ] No	6	Matrix Spike/Matrix Spike Duplicate Summary	Lab Report Date:	5/1/97
[X] Yes [ ] No	7	Initial Calibration Summary		
[X] Yes [ ] No	8	Continuing Calibration Summary	Validation Date:	5/22/97
[X] Yes [ ] No	9	Sample Run Logs		
[X] Yes [ ] No	10	Sample Chromatograms and Reports	Initials:	DMC
[X] Yes [ ] No	11	Calibration Chromatograms and Reports		
[X] Yes [ ] No	12	Reagent Blank Chromatograms and Reports		
[X] Yes [ ] No	13	Matrix Spike/Matrix Spike Duplicate Chromatograms and Reports		

Matrix:	Compounds:	Other:	Other:
Soil ( )	PCBs (X)	_____ ( )	_____ ( )
Water (X)	VOCs ( )	_____ ( )	_____ ( )

[X] This narrative covers the analysis of the following sample(s) in accordance with the Waukegan Harbor Superfund Site Operation and Maintence Plan ~~W-1 & W-12, with~~ through W-12, W-10D, W-12D, W-10MS, W-10MSD, EQ. BL. DMC

[X] The specified holding time for this analysis (14 days to extract/40 days to analyze) was met.

[ ] The specified holding time for this analysis was not met for sample(s): _____

[ ] Secondary dilutions are reported for sample(s): _____

[ ] Surrogate recoveries (except diluted samples) were within acceptable limits (50-150%).

[X] Surrogate recoveries (except diluted samples) were not within acceptable limits for sample(s): TCMX and DCB recoveries were low for W-1 & W-6

[ ] Surrogates were not used in this analysis.

[ ] _____

[X] Spike recoveries were within acceptable limits (50-150%).

[ ] Spike recoveries were not within acceptable limits for sample(s): _____

[ ] Interferences in the following samples exceeded the spike concentration and required a diluted analysis, which qualifies the recovery data: _____

[ ] The presence of target compounds in the following samples exceeded the spike concentration and required a diluted analysis, which qualifies the recovery data: _____

[X] The method blank(s) did not contain any target compounds or interfering peaks at or above the reporting limits (1 ug/L).

[ ] The following method blank(s) contained the following compounds or interfering peaks at or above the reporting limits: _____

[X] Field duplicate results for W-10 & W-12 met acceptance criteria of 35%. DMC

[X] Initial calibration criteria were met for this analysis.

[ ] Initial calibration criteria were not met for this analysis for the following: _____

[X] Continuing calibration criteria were met for this analysis.

[ ] Continuing calibration criteria were not met for this analysis for the following: _____

[ ] _____

SUMMARY DATA

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Outboard Marine Corporation
190 Sea Horse Drive
Waukegan, IL 60085

Attn: Tricia Sutton

Login #: 97-04-404
Date Received: 04/23/97
Date Completed: 04/30/97
Date Reported: 05/01/97 14:57
Work ID: OUTBOARD MARINE CORP.

Client Code: OUTBOARD-379

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	W-1	02	W-2
03	W-3	04	W-4
05	W-5	06	W-6
07	W-7	08	W-8
09	W-10	10	W-10/DUP
11	W-10/MS	12	W-10/MSD
13	W-9	14	W-11
15	W-12	16	W-12/DUP
17	EQ. BL.		

VALIDATED DATA PACKAGE

RECEIVED BY QA Mark Harder 5/21/97
SIGNATURE DATE

** REVISED REPORT **

VALIDATED BY Danielle Leauby 5/21/97
SIGNATURE DATE

RELINQUISHED TO [illegible] 6/4/97
SIGNATURE DATE

All results for soils/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the prior written approval of KEMRON.

Leslie Bucina

Certified by
Leslie Bucina

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Outboard Marine Corporation
190 Sea Horse Drive
Waukegan, IL 60085

Attn: Tricia Sutton

Login #: 97-04-404
Date Received: 04/23/97
Date Completed: 04/30/97
Date Reported: 05/23/97 15:18
Work ID: OUTBOARD MARINE CORP.

Client Code: OUTBOARD-379

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	W-1	02	W-2
03	W-3	04	W-4
05	W-5	06	W-6
07	W-7	08	W-8
09	W-10	10	W-10/DUP
11	W-10/MS	12	W-10/MSD
13	W-9	14	W-11
15	W-12	16	W-12/DUP
17	EQ. BL.		

** REVISED REPORT **

All results for soils/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the prior written approval of KEMRON.

Certified by
David L. Bumgarner

SUMMARY REPORT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **01** Collected: **04/22/97 1510**
Sample Description: **W-1** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 072R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	41 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	44 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **02** Collected: **04/22/97 1635**
Sample Description: **W-2** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 073R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	58 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	55 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **03** Collected: **04/22/97 1125**
Sample Description: **W-3** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 074R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	62 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	50 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **04** Collected: **04/22/97 1550**
Sample Description: **W-4** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 075R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	54 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	43 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **05** Collected: **04/22/97 1245**
Sample Description: **W-5** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 076R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	59 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	41 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **06** Collected: **04/22/97 1135**
Sample Description: **W-6** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 077R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	40 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	45 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **07** Collected: **04/22/97 1050**
Sample Description: **W-7** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 078R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	63 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	57 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **08** Collected: **04/22/97 1210**
Sample Description: **W-8** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 079R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	52 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	52 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **09** Collected: **04/21/97 1755**
Sample Description: **W-10** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/26/97 File: 066R0101
Instrument: HP4 Injected: 04/28/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	1	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	2	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	58 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	53 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:
ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **10** Collected: **04/21/97 1755**
Sample Description: **W-10/DUP** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/26/97 File: 067R0101
Instrument: HP4 Injected: 04/28/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	1	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	2	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	64 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	47 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **11** Collected: **04/21/97 1755**
Sample Description: **W-10/MS** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 083R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: % Recovery

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	95	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	74 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	63 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **12** Collected: **04/21/97 1755**
Sample Description: **W-10/MSD** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 084R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: % Recovery

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	90	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	64 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	54 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **13** Collected: **04/21/97 2010**
Sample Description: **W-9** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 085R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	56 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	56 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **14** Collected: **04/22/97 930**
Sample Description: **W-11** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 086R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	40 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	67 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **15** Collected: **04/22/97 1015**
Sample Description: **W-12** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 087R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	58 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	65 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **16** Collected: **04/22/97 1015**
Sample Description: **W-12/DUP** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 088R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	60 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	63 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **808-PCB-W** Lab No: **17** Collected: **04/22/97 900**
Sample Description: **EQ. BL.** Category: **Water**
Test Description: **PCB's (Water)** Method: **8081\3510**

Analyst: ECL Extracted: 04/23/97 File: 089R0301
Instrument: HP4 Injected: 04/25/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
12674-11-2	Aroclor-1016	ND	0.5
11104-28-2	Aroclor-1221	ND	0.5
11141-16-5	Aroclor-1232	ND	0.5
53469-21-9	Aroclor-1242	ND	0.5
12672-29-6	Aroclor-1248	ND	0.5
11097-69-1	Aroclor-1254	ND	1
11096-82-5	Aroclor-1260	ND	1

SURROGATES:

Decachlorobiphenyl	92 % Recovery	(25% - 140%)
2,4,5,6-Tetrachloro-m-xylene	73 % Recovery	(13% - 154%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
REPORT COMMENTS

PCB Analysis:

Two samples in the original extraction batch contained what appeared to be Ar1016. Because of the history on this site the two samples were re-extracted and re-analyzed. The re-analysis of the samples confirms the presence of what appears to be Ar1016. The laboratory is reporting the results for Ar1016 because this is the Aroclor which the samples most resemble. Ar1016 and Ar1248 differ only by the ratios of the congeners. Both contain the same congeners and can only be accurately distinguished by examining and comparing congener ratios. Weathering of samples can often result in variations of the naturally occurring ratios. Kemron's policy is to report all Aroclor identifications by using the most appropriate standards regardless of sample history.

KEMRON ANALYST LIST

Ohio Valley Laboratory

05/07/97

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BWH - - Ben W. Haynes
CEB - - Chad E. Barnes
CMS - - Crystal M. Stevens
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
ENH - - E. Nick Hamner
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
HV - - Hema Vilasagar
JEC - - Jesse E. Chapman
JKM - - June K. Morris
JLI - - Janice L. Inghram
JMM - - Jim M. Monk
JWR - - John W. Richards
JYH - - Ji Y. Hu
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
KRA - - Kathy R. Albertson
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MES - - Mary E. Schiling
MLS - - Michael L. Schimmel
MMB - - Maren M. Beery
RDC - - Rebecca D. Cutlip
REB - - Russell E. Burton
REF - - Ron E. Fertile
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLT - - Stephanie L. Tepe
SPL - - Steve P. Learn
TLD - - Teresa L. Davis
VC - - Vicki Collier
WCD - - Wade C. Dawson

KEMRON
ENVIRONMENTAL SERVICES

87278

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Contact: TRICIA SUTTON/OUTBOARD-379

Turn Around Requirements: Standard (7 day)

Project No.:

Project Name: Waukegan Harbor RA OUTBOARD MARINE CORP

Sampler (print): KEVIN BRISSETTE

Signature: Kevin M. Brissette

Cooler Temps: 4.0, 4.0, 3.0, 3.0+6.0
C of C Sealed
Sxs recd intact

Sample I.D. No.	Comp*	Grab	Date	Time	Protocol CWA	Protocol SW846	NUMBER OF SAMPLES	Hold	808-PCB-W(8081)	ADDITIONAL REQUIREMENTS
W-1		X	4-22-97	1510		X	2		X	COOLER 1 OF 4
W-2		X	4-22-97	1635		X	2		X	COOLER 1 OF 4
W-3		X	4-21-97	1125		X	2		X	COOLER 1 OF 4
W-4		X	4-22-97	1550		X	2		X	COOLER 1 OF 4
W-5		X	4-22-97	1245		X	2		X	COOLER 2 OF 4
W-6		X	4-22-97	1135		X	2		X	COOLER 2 OF 4
W-7		X	4-22-97	1050		X	2		X	COOLER 2 OF 4
W-8		X	4-22-97	1210		X	2		X	COOLER 2 OF 4
W-10 *1		X	4-21-97	1755		X	2		X	COOLER 3 OF 4
W-10 DUP *1		X	4-21-97	1755		X	2		X	COOLER 3 OF 4
W-10 MS		X	4-21-97	1755		X	2		X	COOLER 3 OF 4
W-10 MSD		X	4-21-97	1755		X	2		X	COOLER 3 OF 4
W-9		X	4-21-97	2010		X	2		X	COOLER 4 OF 4
W-11		X	4-22-97	930		X	2		X	COOLER 4 OF 4
W-12		X	4-22-97	1015		X	2		X	COOLER 4 OF 4
W-12 DUP		X	4-22-97	1015		X	2		X	COOLER 4 OF 4
EQ. BL.		X	4-22-97	900		X	2		X	RED COOLER

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Kevin M. Brissette	4/22/97	1830					

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks:
			Angelina K. Scott	4/23/97	945	DATA PACKET REQUIRED: FULL SEND FULL PACKET to Mark TRAXLER, Smith Technology → UNBOUND REPORT.

*Homogenize all composite samples prior to analysis

White – Lab Yellow – Office Pink – Field

*1 Composite these bottles before analyzing + Analyze samples from [illegible]

Send Copy of Summary Report to OMC

QC SUMMARY

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY /PCB WATERS , FRONT

EXT'N DATE : 4/23/97
EXT'N BENCH SHT : V73P30
EXT'N WORK GRP : WG22059

INSTRUMENT : HP4
ANALYST : ECL
RUN DATE : 4/24/97
ANAL WORK GRP : WG22123

BLK FLNM : 012F0101
LCS FLNM : 013F0101
LCS Dup FLNM : NA

SMPL ID . 04-404-09
SMPL FLNM : 030F0301
MS FLNM : 033F0301
MSD FLNM . 034F0301

COMPOUND	RDL	CONCENTRATION , ug/L						% RECOVERY								PERCENT		
		Blank	LCS	LCS Dup	Sample	MS	MSD	Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	48-125	NA	#VALUE!	#VALUE!	48-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	9.1	NA	ND	9.3	8.7	ND	90.8	NA	NA	NA	93.3	87.4	NA	NA	6.6	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.27	0.32	0.00	0.29	0.29	0.28	54.2	63.2	0.0	16-99	58.4	57.8	55.0	16-99			
DECACHLOROBIPHENYL		0.54	0.55	0.00	0.33	0.40	0.36	108.6	110.6	0.0	30-133	66.6	80.8	72.4	30-133			

NOTES & DEFINITIONS :

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY/PCB WATERS, REAR

EXT'N DATE: 4/23/97
EXT'N BENCH SHT: V73P30
EXT'N WORK GRP: WG22059

INSTRUMENT: HP4
ANALYST: ECL
RUN DATE: 4/24/97
ANAL WORK GRP: WG22123

BLK FLNM: 062R0101
LCS FLNM: 063R0101
LCS Dup FLNM: NA

SMPL ID: 04-404-09
SMPL FLNM: 060R0301
MS FLNM: 063R0301
MSD FLNM: 064R0301

COMPOUND	RDL	CONCENTRATION, ug/L						% RECOVERY								PERCENT		
		Blank	LCS	LCS Dup	Sample	MS	MSD	Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	46-125	NA	#VALUE!	#VALUE!	46-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	10.2	NA	ND	9.5	9.0	ND	102.0	NA	NA	NA	95.2	90.1	NA	NA	5.5	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.28	0.32	0.00	0.31	0.32	0.27	55.8	63.6	0.0	16-99	62.2	63.2	64.4	16-99			
DECACHLOROBIPHENYL		0.56	0.57	0.00	0.32	0.37	0.32	112.6	113.4	0.0	30-133	63.2	73.8	64.4	30-133			

NOTES & DEFINITIONS:

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

000002

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY /PCB WATERS, FRONT

EXT'N DATE: 4/26/97
EXT'N BENCH SHT: V73P43
EXT'N WORK GRP: WG22200

INSTRUMENT: HP4
ANALYST: ECL
RUN DATE: 4/28/97
ANAL WORK GRP: WG22201

BLK FLNM: 013F0101
LCS FLNM: 014F0101
LCS Dup FLNM: 015F0101

SMPL ID: NA
SMPL FLNM: NA
MS FLNM: NA
MSD FLNM: NA

COMPOUND	RDL	CONCENTRATION, ug/l: Blank	LCS	LCS Dup	Sample	MS	MSD	% RECOVERY Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	PERCENT LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	48-125	NA	#VALUE!	#VALUE!	48-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	7.7	6.6	ND	NA	NA	ND	76.6	67.6	NA	NA	#VALUE!	#VALUE!	NA	12.15	NA	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.28	0.24	0.21	0.00	0.00	0.00	56.6	47.8	42.8	16-99	0.0	0.0	0.0	16-99			
DECACHLOROBIPHENYL		0.41	0.37	0.38	0.00	0.00	0.00	82.4	74.4	76.0	30-133	0.0	0.0	0.0	30-133			

NOTES & DEFINITIONS:

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

000003

KEMRON ENVIRONMENTAL SERVICES
MARIETTA, OH
QUALITY CONTROL SUMMARY /PCB WATERS, REAR

EXT'N DATE: 4/26/97
EXT'N BENCH SHT: V73P43
EXT'N WORK GRP: WG22200

INSTRUMENT: HP4
ANALYST: ECL
RUN DATE: 4/28/97
ANAL WORK GRP: WG22201

BLK FLNM: 063R0101
LCS FLNM: 064R0101
LCS Dup FLNM: 065R0101

SMPL ID: NA
SMPL FLNM: NA
MS FLNM: NA
MSD FLNM: NA

COMPOUND	RDL	CONCENTRATION, ug/L						% RECOVERY								PERCENT		
		Blank	LCS	LCS Dup	Sample	MS	MSD	Blank	LCS	LCS Dup	LCS Limits	Sample	MS	MSD	MS/MSD Advisory Limits	LCS/LCS Dup RPD	MS/MSD RPD	RPD Advisory Limits
AROCLOR 1016	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	48-125	NA	#VALUE!	#VALUE!	48-125	NA	NA	0-40
AROCLOR 1221	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1232	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1242	0.50	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1248	0.50	ND	7.9	7.1	ND	NA	NA	ND	78.7	71.4	NA	NA	#VALUE!	#VALUE!	NA	9.7	NA	0-40
AROCLOR 1254	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	NA	NA	#VALUE!	#VALUE!	NA	NA	NA	0-40
AROCLOR 1260	1.00	ND	NA	NA	ND	NA	NA	ND	NA	NA	59-122	NA	#VALUE!	#VALUE!	59-122	NA	NA	0-40
SURROGATES																		
6-TETRACHLORO-M-XYLENE		0.29	0.25	0.22	0.00	0.00	0.00	57.0	49.6	43.4	16-99	0.0	0.0	0.0	16-99			
DECACHLOROBIPHENYL		0.39	0.36	0.37	0.00	0.00	0.00	78.8	72.6	73.8	30-133	0.0	0.0	0.0	30-133			

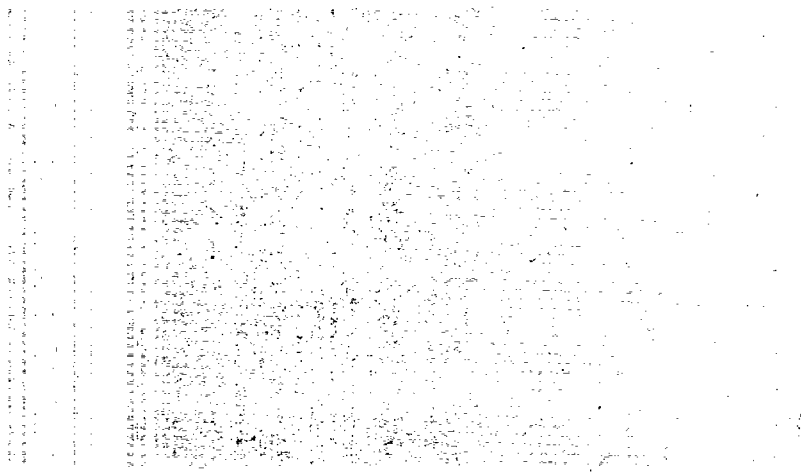
NOTES & DEFINITIONS:

LCS=LABORATORY CONTROL SAMPLE
MS=MATRIX SPIKE
MSD=MATRIX SPIKE DUPLICATE

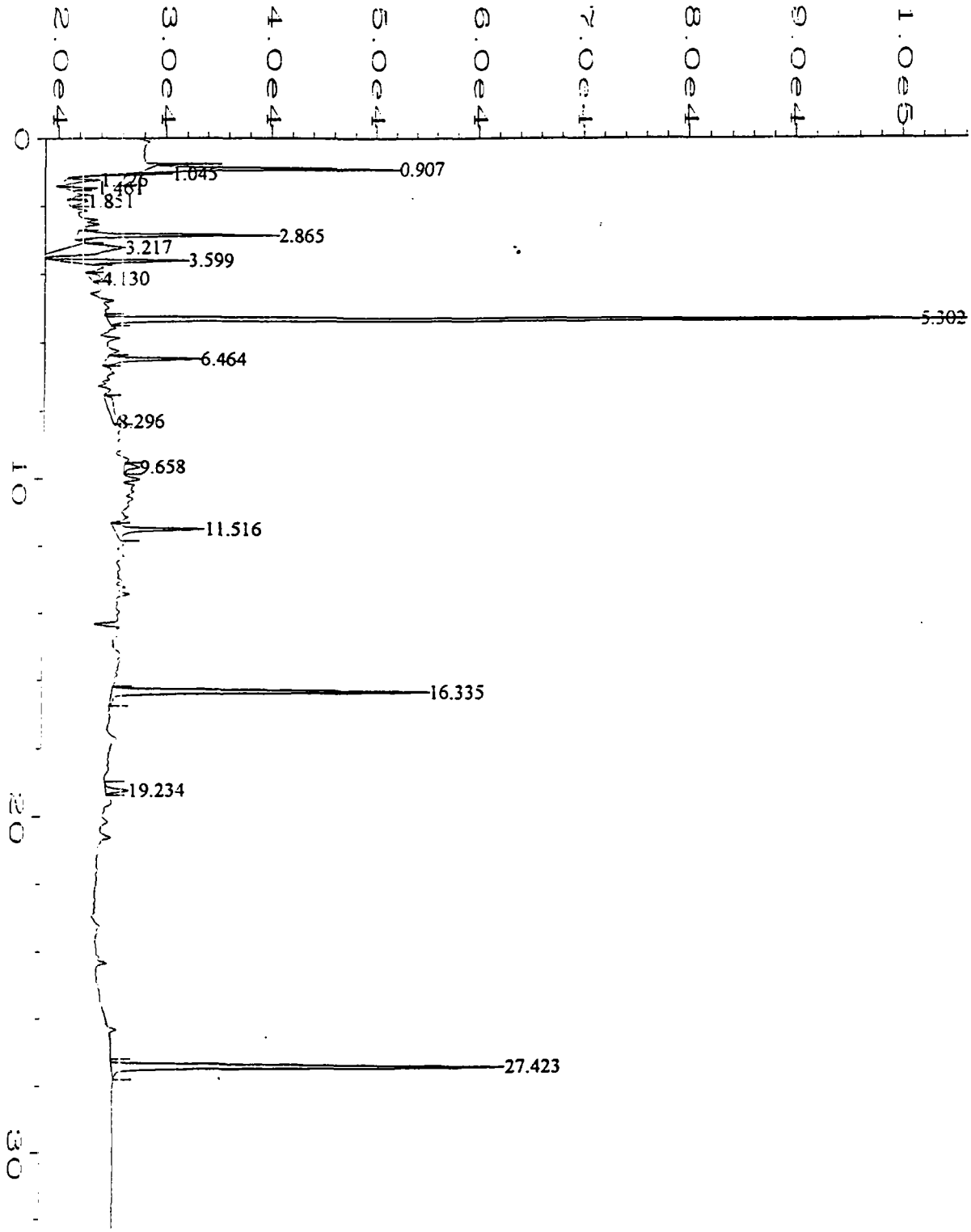
NA = NOT APPLICABLE
DL = DILUTED OUT
ND = NOT DETECTED
RDL=REPORTING DETECTION LIMIT

HARDCOPY DELIVERABLES

PCB'S



SAMPLE DATA



a File Name	: C:\HPCHEM\1\DATA\042497\022F0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 22
ple Name	: 04-404-01	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
uired on	: 25 Apr 97 05:23 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:35 PM	Analysis Method	: 1248F.MTH
t Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

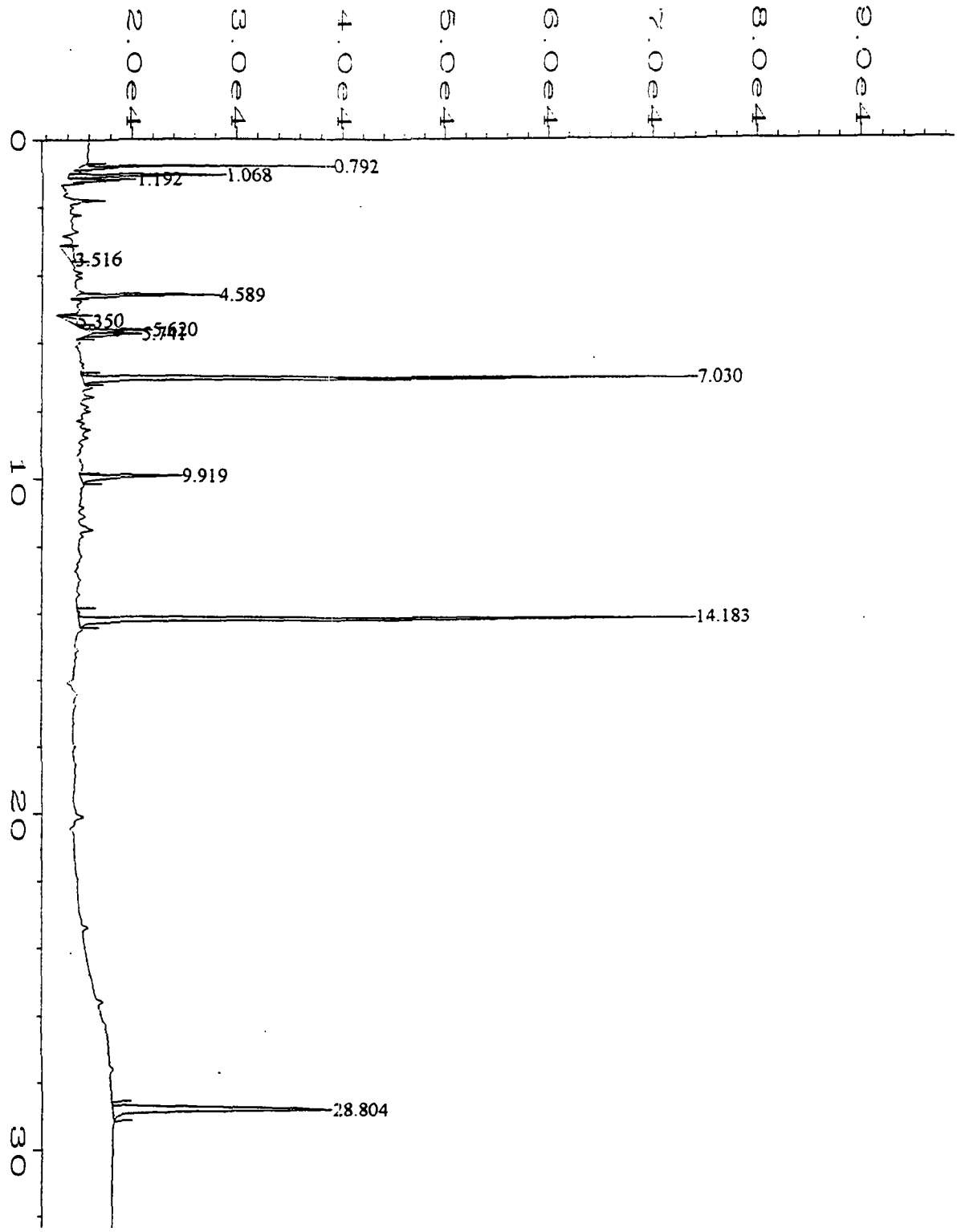
External Standard Report

ta File Name	: C:\HPCHEM\1\DATA\042497\022F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 22
ple Name	: 04-404-01	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 05:23 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:35 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042497\022F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name	
5.302	498361	BB	0.065	1	0.219	TETRACHLORO-M-XYLENE	447
8.757	* not found *			1		AR 1248 #1	
0.016	* not found *			1		AR 1248 #2	
2.285	* not found *			1		AR 1248 #3	
3.429	* not found *			1		AR 1248 #4	
4.423	* not found *			1		AR 1248 #5	
7.423	252716	BB	0.104	1	0.208	DECACHLOROBIPHENYL	427

all calibrated peaks were found



a File Name	: C:\HPCHEM\1\DATA\042497\072R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 72
ple Name	: 04-404-01	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
uired on	: 25 Apr 97 05:23 AM	Instrument Method:	1660F.MTH
ort Created on:	25 Apr 97 02:46 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

000007

External Standard Report

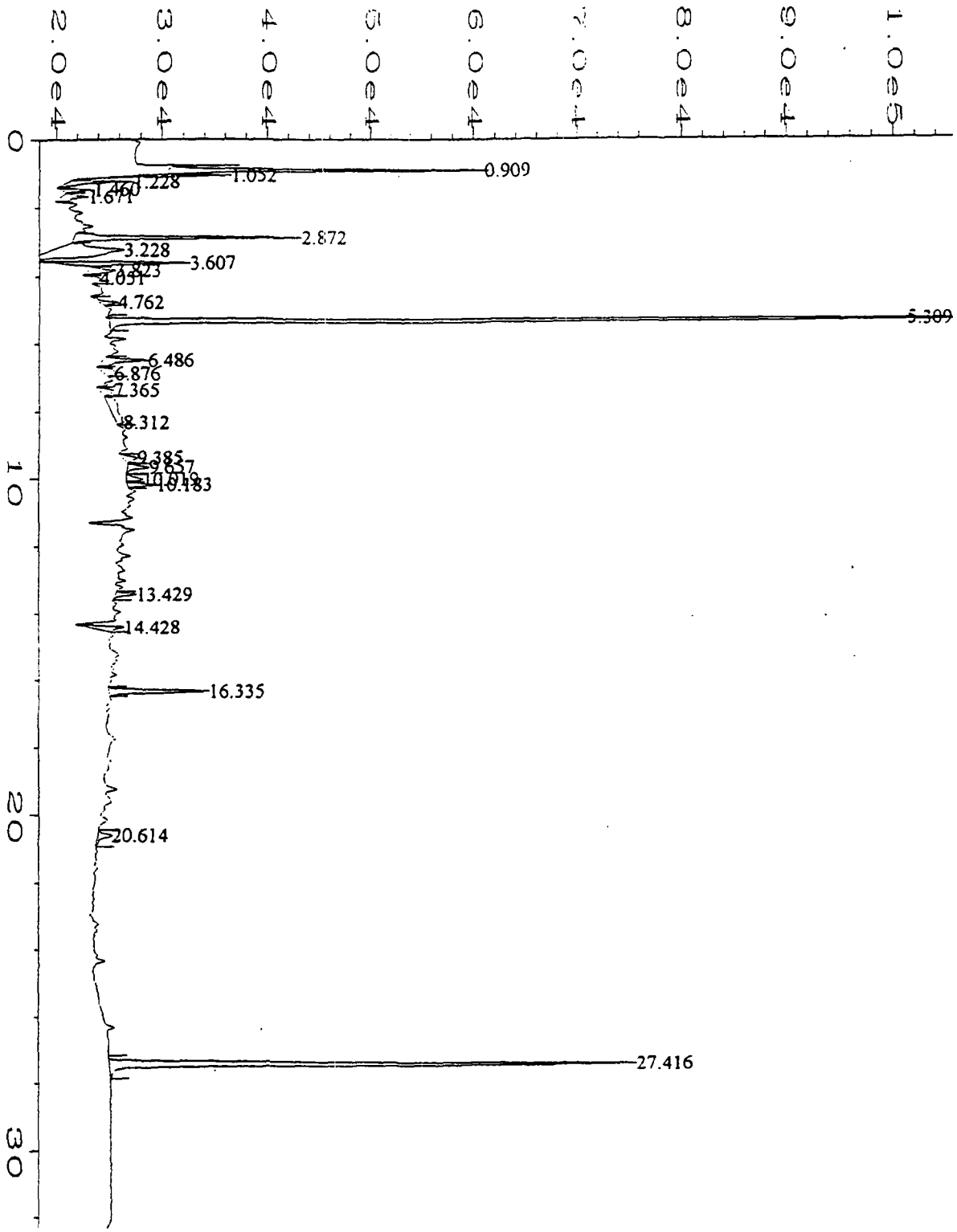
:a File Name : C:\HPCHEM\1\DATA\042497\072R0301.D
erator : ECL
strument : HP4
nple Name : 04-404-01
1 Time Bar Code:
quired on : 25 Apr 97 05:23 AM
port Created on: 25 Apr 97 02:46 PM
st Recalib on : 25 APR 97 11:15 AM
.tiplier : 0.01

Page Number : 1
Vial Number : 72
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\072R0301.D

: Time	Area	Type	Width	Ref#	UG/L	Name
7.030	249859	BB	0.066	1	0.221	TETRACHLORO-M-XYLENE 44%
9.547	* not found *			1		AR 1248 #1
.1.102	* not found *			1		AR 1248 #2
.2.269	* not found *			1		AR 1248 #3
.3.427	* not found *			1		AR 1248 #4
.5.094	* not found *			1		AR 1248 #5
28.804	168763	BB	0.125	1	0.207	DECACHLOROBIPHENYL 41%

: all calibrated peaks were found



:a File Name	: C:\HPCHEM\1\DATA\042497\023F0301.D		
:rator	: ECL	Page Number	: 1
:trument	: HP4	Vial Number	: 23
:ple Name	: 04-404-02	Injection Number	: 1
1 Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 05:59 AM	Instrument Method:	1660F.MTH
ort Created on:	25 Apr 97 02:36 PM	Analysis Method	: 1248F.MTH
:t Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
.tiplier	: 0.01	ISTD Amount	:

==========

External Standard Report

==========

a File Name : C:\HPCHEM\1\DATA\042497\023F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-02
. Time Bar Code:
uired on : 25 Apr 97 05:59 AM
ort Created on: 25 Apr 97 02:36 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

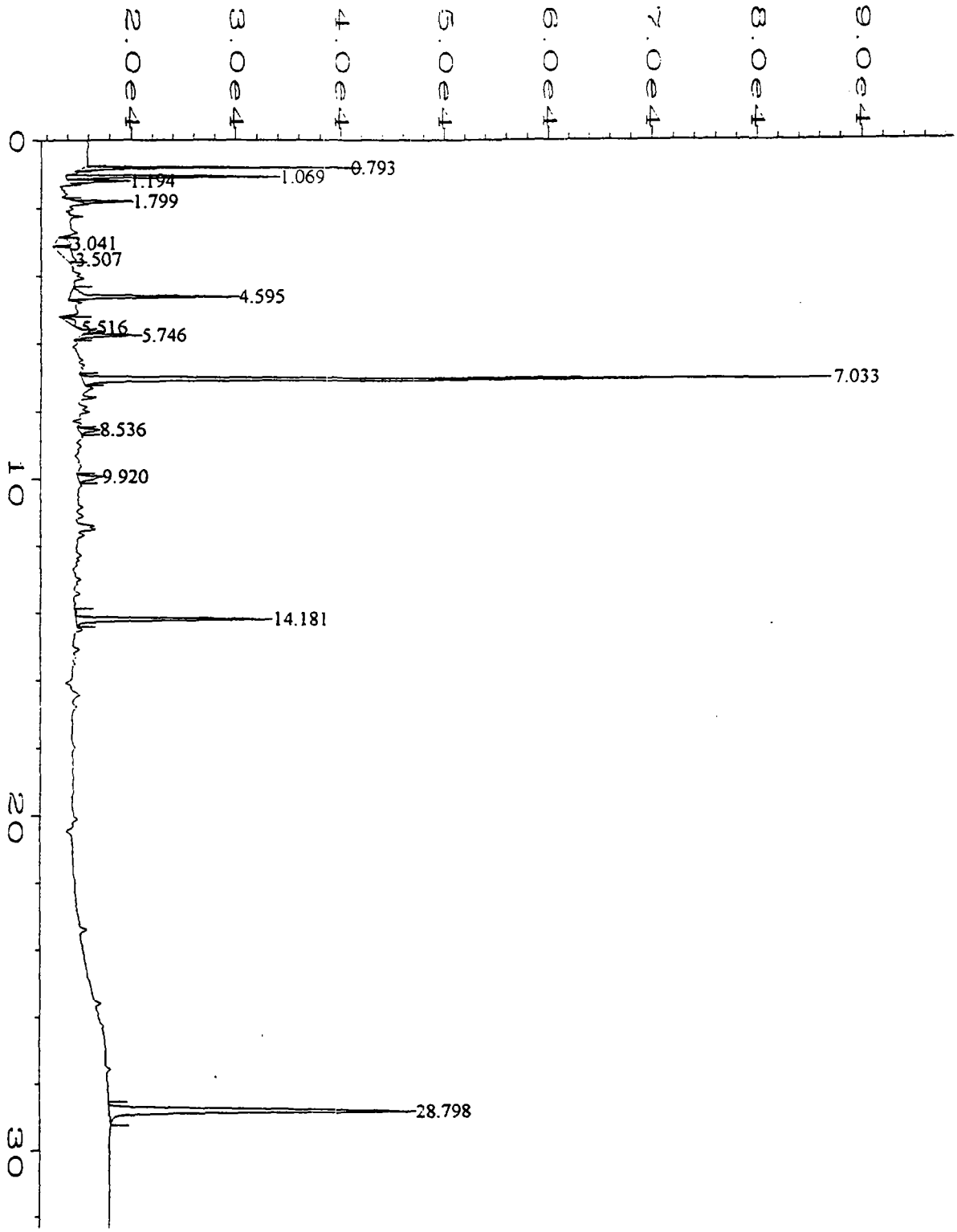
Page Number : 1
Vial Number : 23
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

. 1 in C:\HPCHEM\1\DATA\042497\023F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.309	617826	BB	0.066	1	0.272	TETRACHLORO-M-XYLENE 547
8.757	* not found *			1		AR 1248 #1
0.019	10260	BB	0.102	1	0.0858	AR 1248 #2
2.285	* not found *			1		AR 1248 #3
3.429	10531	BB	0.085	1	0.143	AR 1248 #4
4.428	22464	BB	0.107	1	0.307	AR 1248 #5
7.416	347782	BB	0.108	1	0.287	DECACHLOROBIPHENYL 572

all calibrated peaks were found

==========



ta File Name	: C:\HPCHEM\1\DATA\042497\073R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 73
mple Name	: 04-404-02	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 05:59 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:47 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

==========

External Standard Report

==========

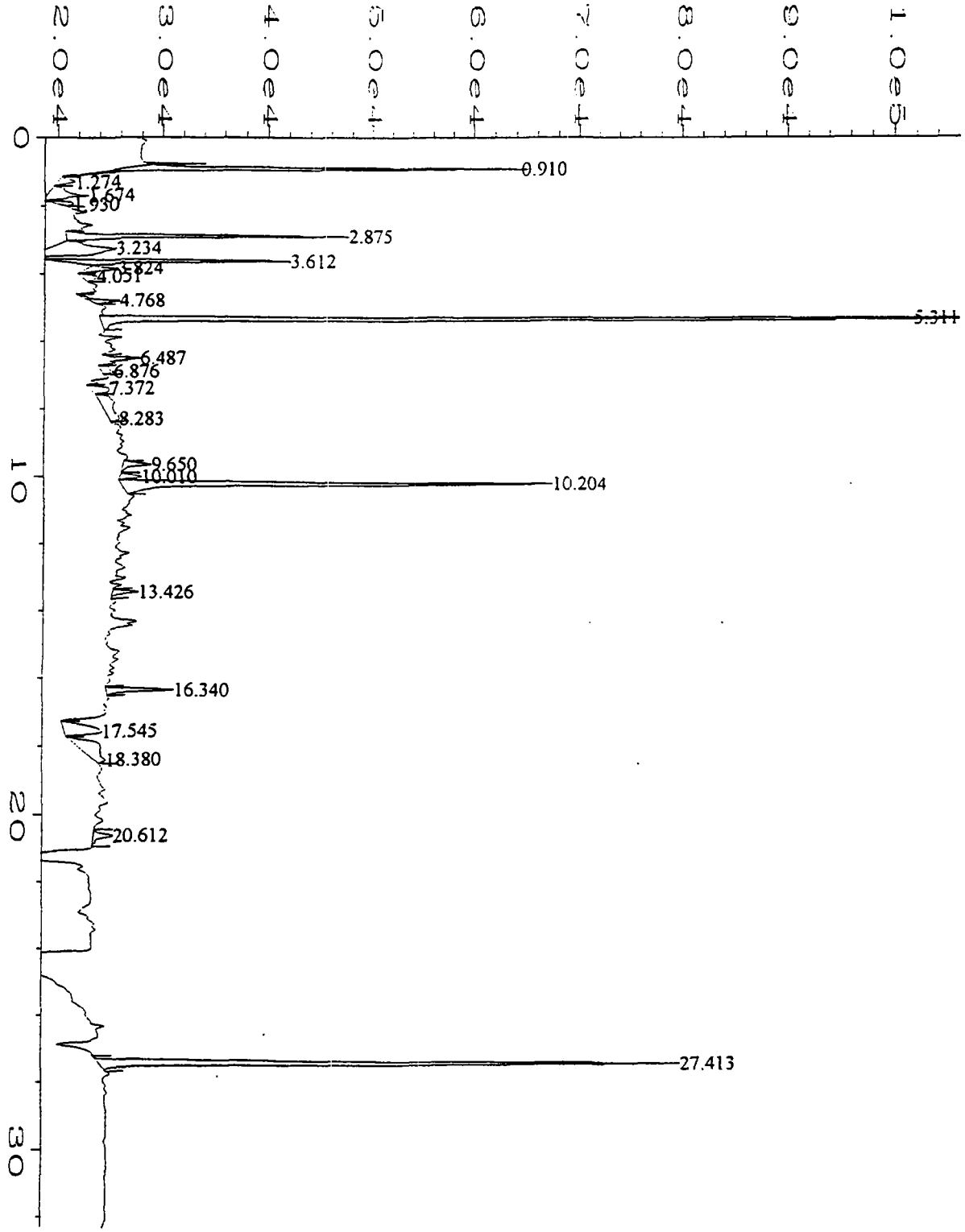
ta File Name	: C:\HPCHEM\1\DATA\042497\073R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 73
nple Name	: 04-404-02	Injection Number	: 1
1 Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 05:59 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:47 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

g. 2 in C:\HPCHEM\1\DATA\042497\073R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name	
7.033	312360	BB	0.067	1	0.276	TETRACHLORO-M-XYLENE	557
9.547	* not found *			1		AR 1248 #1	
11.102	* not found *			1		AR 1248 #2	
12.269	* not found *			1		AR 1248 #3	
13.427	* not found *			1		AR 1248 #4	
15.094	* not found *			1		AR 1248 #5	
28.798	236243	BB	0.124	1	0.289	DECACHLOROBIPHENYL	587

t all calibrated peaks were found

==========



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\024F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 24
mple Name	: 04-404-03	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 06:35 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:36 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

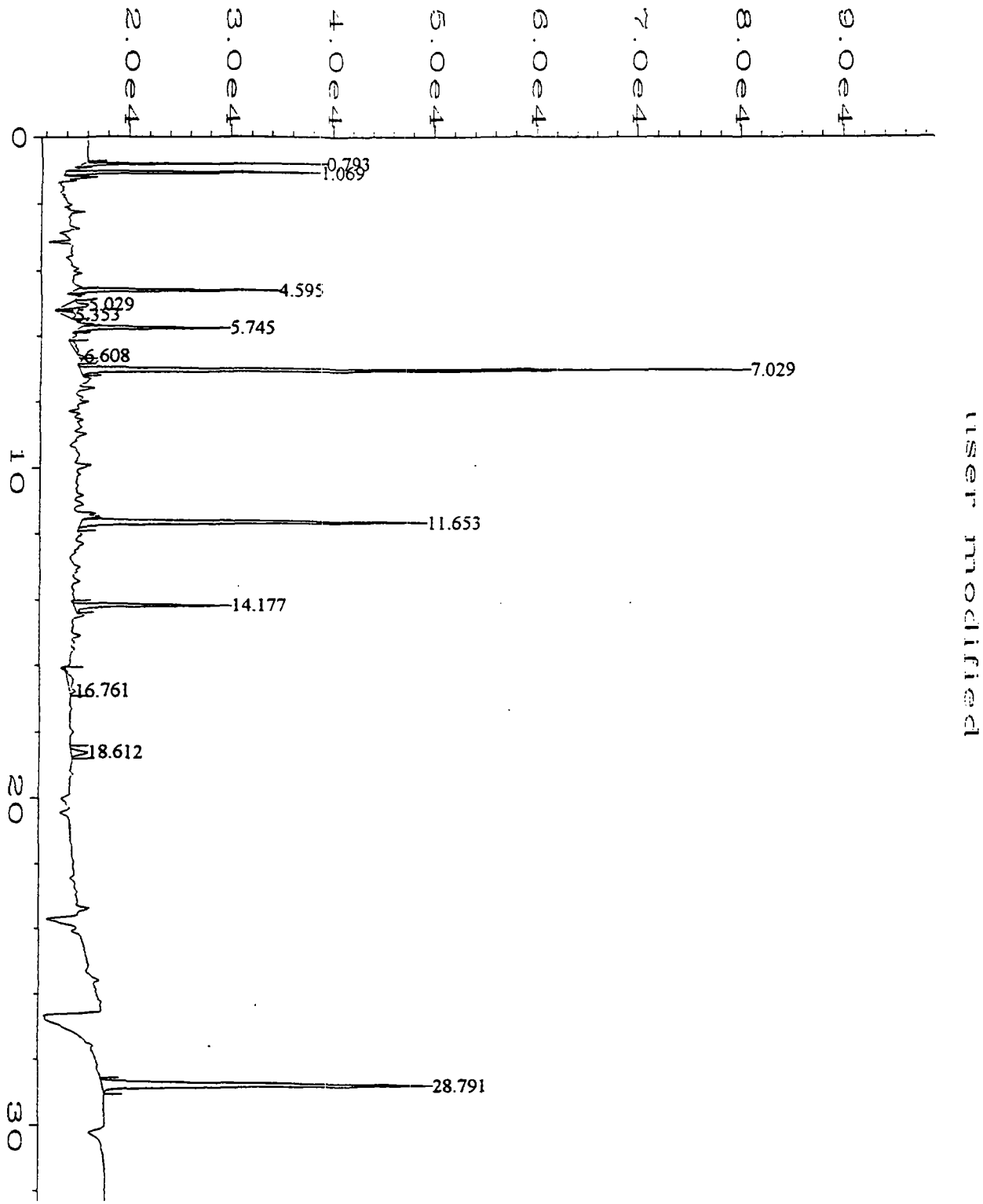
a File Name	: C:\HPCHEM\1\DATA\042497\024F0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 24
ple Name	: 04-404-03	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
uired on	: 25 Apr 97 06:35 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:36 PM	Analysis Method	: 1248F.MTH
t Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

1 in C:\HPCHEM\1\DATA\042497\024F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.311	572265	BB	0.066	1	0.252	TETRACHLORO-M-XYLENE 507
8.757	* not found *			1		AR 1248 #1
0.010	12162	BB	0.092	1	0.102	AR 1248 #2
2.285	* not found *			1		AR 1248 #3
3.426	14149	BB	0.088	1	0.191	AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.413	370948	MM	0.111	1	0.306	DECACHLOROBIPHENYL 617

all calibrated peaks were found

r Modified



User Modified

ta File Name	: C:\HPCHEM\1\DATA\042497\074R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 74
mple Name	: 04-404-03	Injection Number	: 1
1 Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 06:35 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:47 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

.a File Name : C:\HPCHEM\1\DATA\042497\074R0301.D
:rator : ECL
:trument : HP4
ıple Name : 04-404-03
: Time Bar Code:
;uired on : 25 Apr 97 06:35 AM
ort Created on: 25 Apr 97 02:47 PM
:t Recalib on : 25 APR 97 11:15 AM
.tiplier : 0.01

Page Number : 1
Vial Number : 74
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

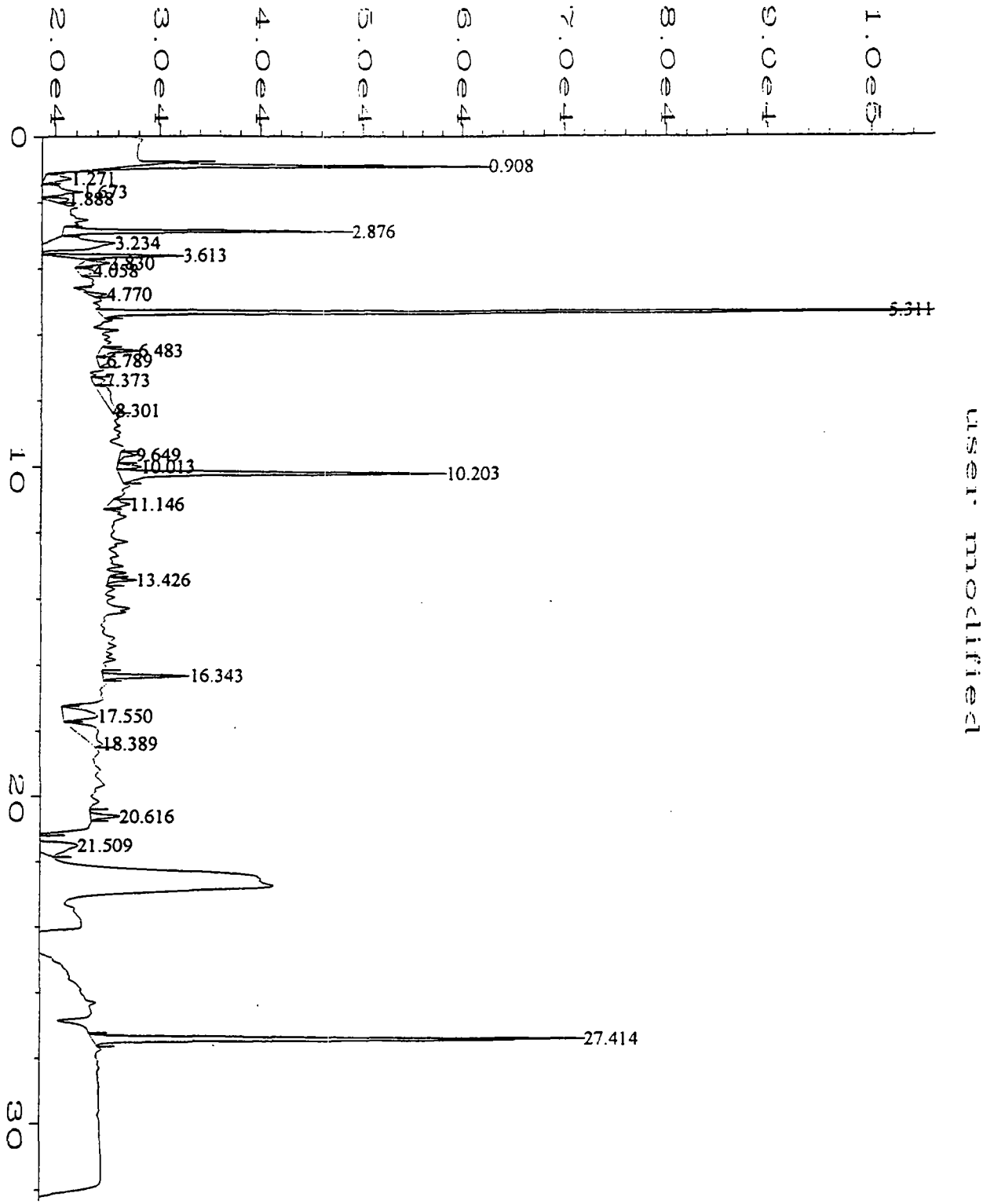
:. 2 in C:\HPCHEM\1\DATA\042497\074R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
7.029	279150	BB	0.066	1	0.247	TETRACHLORO-M-XYLENE 507
9.547	* not found *			1		AR 1248 #1
.1.102	* not found *			1		AR 1248 #2
.2.269	* not found *			1		AR 1248 #3
.3.427	* not found *			1		AR 1248 #4
.5.094	* not found *			1		AR 1248 #5
.8.791	255077	MM	0.131	1	0.312	DECACHLOROBIPHENYL 627

. all calibrated peaks were found

:r Modified

000016



User Modified

a File Name	: C:\HPCHEM\1\DATA\042497\025F0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 25
ple Name	: 04-404-04	Injection Number	: 1
. Time Bar Code:		Sequence Line	: 3
uired on	: 25 Apr 97 07:10 AM	Instrument Method:	1660F.MTH
ort Created on:	25 Apr 97 02:37 PM	Analysis Method	: 1248F.MTH
t Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

.a File Name : C:\HPCHEM\1\DATA\042497\025F0301.D
:rator : ECL
:trument : HP4
ıple Name : 04-404-04
: Time Bar Code:
quired on : 25 Apr 97 07:10 AM
:ort Created on: 25 Apr 97 02:37 PM
:t Recalib on : 25 APR 97 11:08 AM
.tiplier : 0.01

Page Number : 1
Vial Number : 25
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

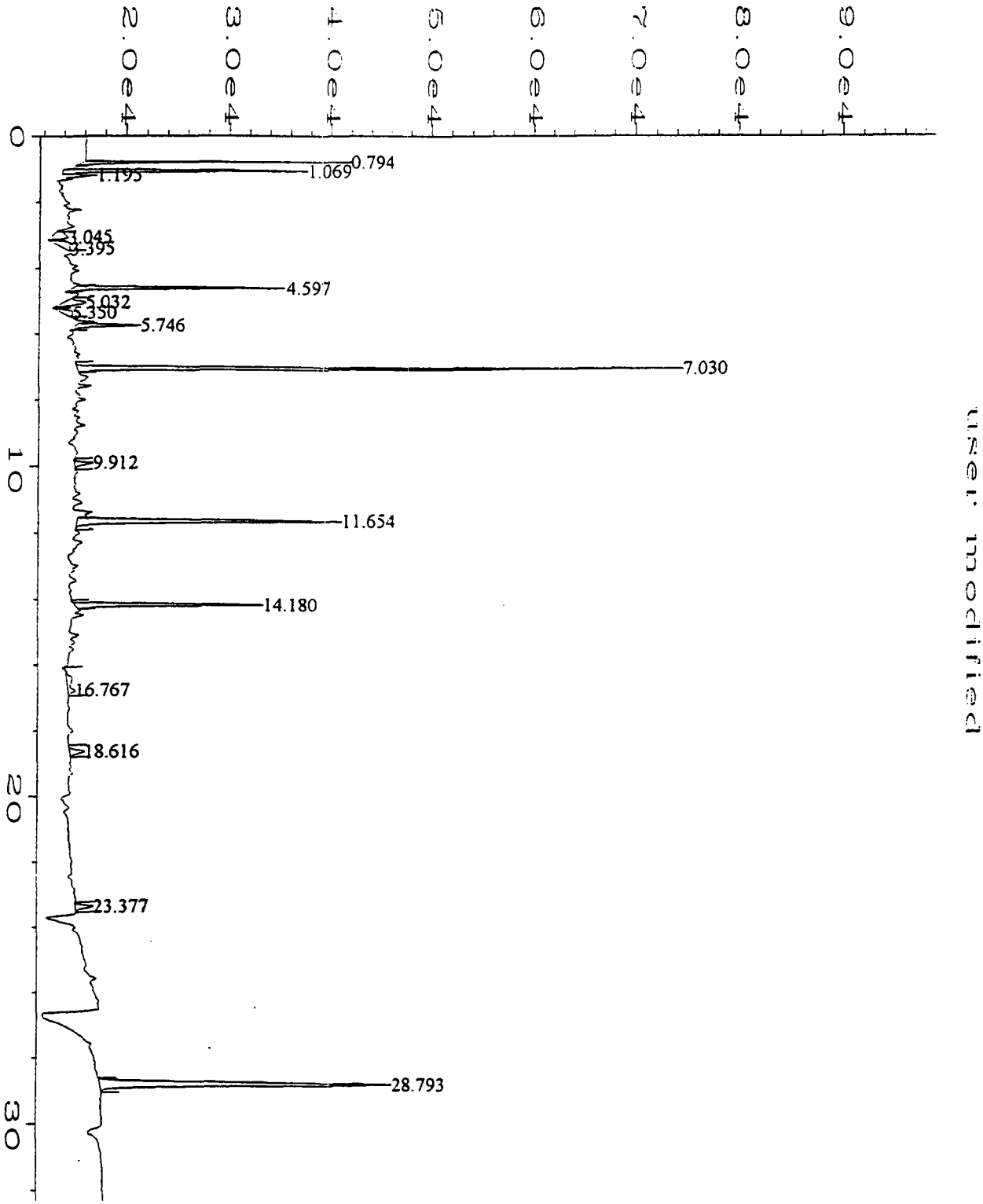
:. 1 in C:\HPCHEM\1\DATA\042497\025F0301.D

. Time	Area	Type	Width	Ref#	UG/L	Name	
5.311	506145	BB	0.065	1	0.223	TETRACHLORO-M-XYLENE	467
8.757	* not found *			1		AR 1248 #1	
.0.013	13384	BB	0.095	1	0.112	AR 1248 #2	
.2.285	* not found *			1		AR 1248 #3	
.3.426	15039	BB	0.085	1	0.204	AR 1248 #4	
4.423	* not found *			1		AR 1248 #5	
7.414	323990	MM	0.111	1	0.267	DECACHLOROBIPHENYL	537

. all calibrated peaks were found

.r Modified

000018



.a File Name	: C:\HPCHEM\1\DATA\042497\075R0301.D		
:rator	: ECL	Page Number	: 1
:trument	: HP4	Vial Number	: 75
ıple Name	: 04-404-04	Injection Number	: 1
ı Time Bar Code:		Sequence Line	: 3
ɥuired on	: 25 Apr 97 07:10 AM	Instrument Method:	1660F.MTH
›ort Created on:	25 Apr 97 02:48 PM	Analysis Method	: 1248R.MTH
:t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
.tiplier	: 0.01	ISTD Amount	:

000019

==========

External Standard Report

==========

a File Name : C:\HPCHEM\1\DATA\042497\075R0301.D
rator : ECL
trument : HP4
ple Name : 04-404-04
Time Bar Code:
uired on : 25 Apr 97 07:10 AM
ort Created on: 25 Apr 97 02:48 PM
t Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

Page Number : 1
Vial Number : 75
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

. 2 in C:\HPCHEM\1\DATA\042497\075R0301.D

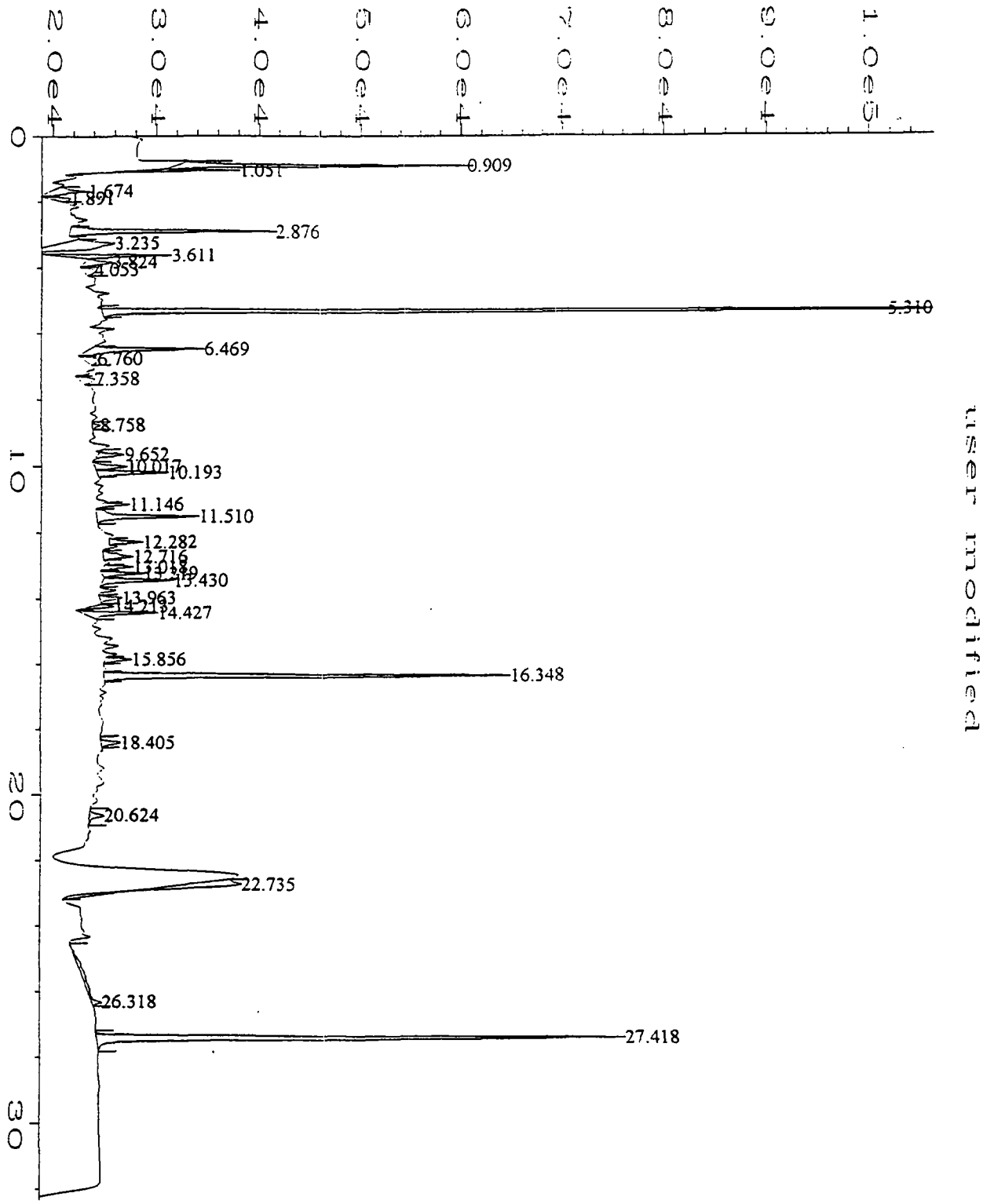
Time	Area	Type	Width	Ref#	UG/L	Name
7.030	245939	BB	0.065	1	0.217	TETRACHLORO-M-XYLENE 437
9.547	* not found *			1		AR 1248 #1
1.102	* not found *			1		AR 1248 #2
2.269	* not found *			1		AR 1248 #3
3.427	* not found *			1		AR 1248 #4
5.094	* not found *			1		AR 1248 #5
8.793	222415	MM	0.130	1	0.272	DECACHLOROBIPHENYL 547

all calibrated peaks were found

r Modified

==========

000020



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\026F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 26
mple Name	: 04-404-05	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 07:46 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:38 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\026F0301.D
erator : ECL
strument : HP4
mple Name : 04-404-05
n Time Bar Code:
quired on : 25 Apr 97 07:46 AM
port Created on: 25 Apr 97 02:38 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 26
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

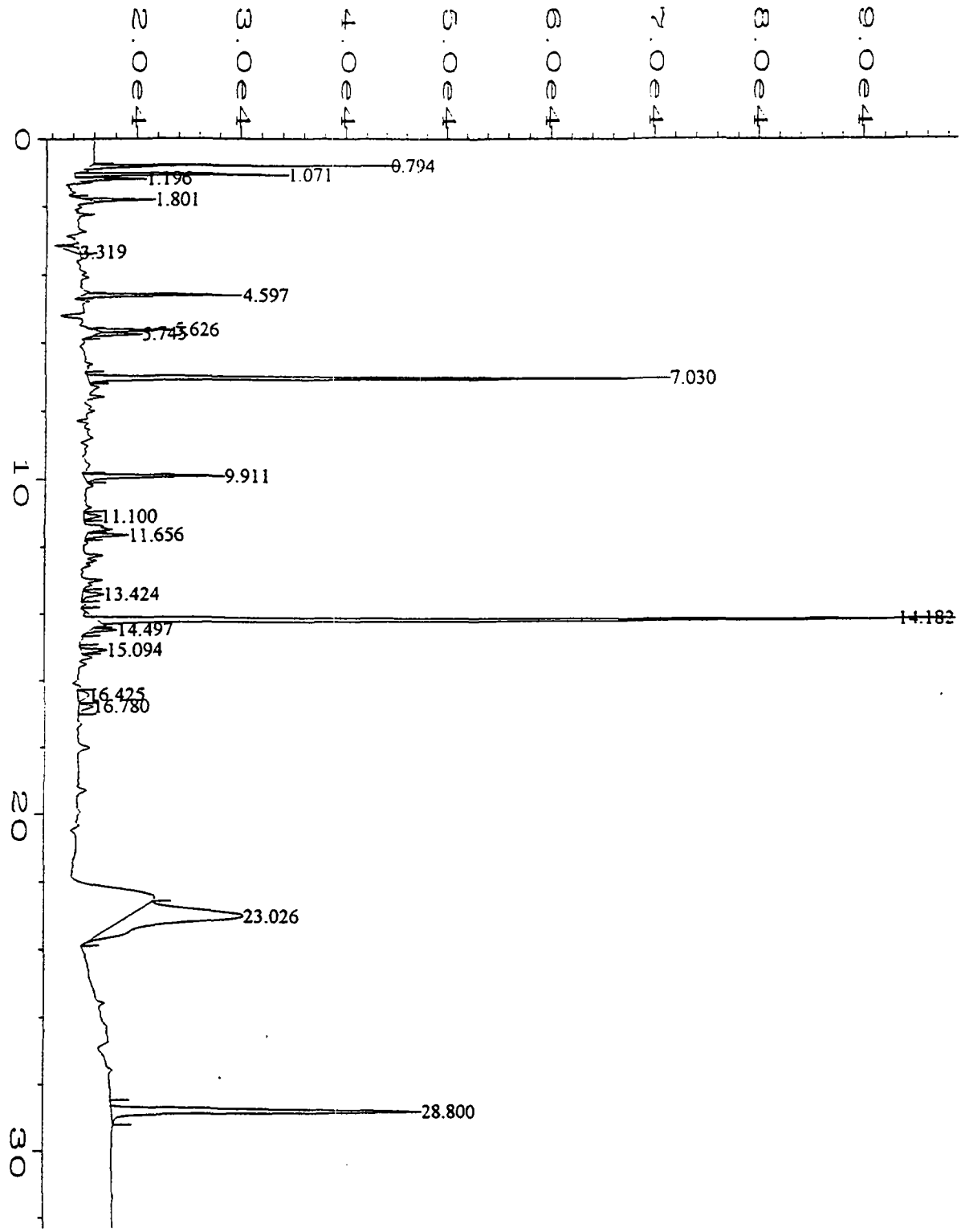
g. 1 in C:\HPCHEM\1\DATA\042497\026F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name	
5.310	480116	BB	0.065	1	0.211	TETRACHLORO-M-XYLENE	423
8.758	4052	MM	0.087	1	0.111	AR 1248 #1	
10.017	19415	BB	0.098	1	0.162	AR 1248 #2	
12.282	16450	BB	0.078	1	0.309	AR 1248 #3	
13.430	36909	BB	0.083	1	0.500	AR 1248 #4	
14.427	42642	BB	0.091	1	0.582	AR 1248 #5	
27.418	352445	BB	0.105	1	0.291	DECACHLOROBIPHENYL	582

er Modified

AR 1248 Average Concentration: ~~.333~~

BDL



a File Name : C:\HPCHEM\1\DATA\042497\076R0301.D
rator : ECL
trument : HP4
ple Name : 04-404-05
Time Bar Code:
uired on : 25 Apr 97 07:46 AM
ort Created on: 25 Apr 97 02:48 PM
t Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

Page Number : 1
Vial Number : 76
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

External Standard Report

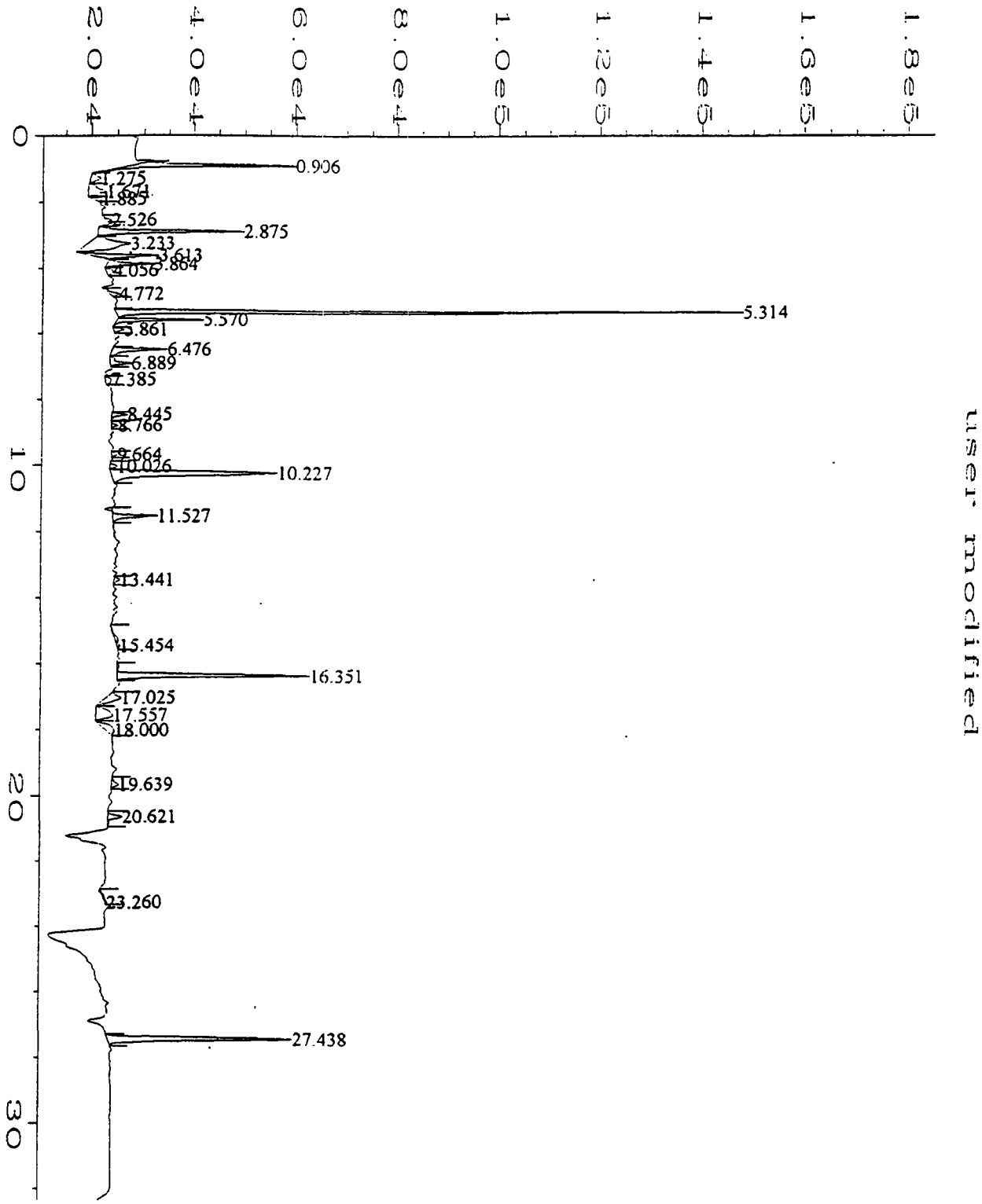
ta File Name : C:\HPCHEM\1\DATA\042497\076R0301.D
erator : ECL
strument : HP4
nple Name : 04-404-05
n Time Bar Code:
quired on : 25 Apr 97 07:46 AM
port Created on: 25 Apr 97 02:48 PM
st Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

Page Number : 1
Vial Number : 76
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\076R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.030	234601	BB	0.065	1	0.207	TETRACHLORO-M-XYLENE 417
9.547	* not found *			1		AR 1248 #1
11.100	10712	BB	0.113	1	0.179	AR 1248 #2
12.269	* not found *			1		AR 1248 #3
13.424	14571	BB	0.110	1	0.410	AR 1248 #4
15.094	13257	BB	0.090	1	0.456	AR 1248 #5
28.800	239587	BB	0.126	1	0.293	DECACHLOROBIPHENYL 597

t all calibrated peaks were found



user modified

a File Name : C:\HPCHEM\1\DATA\042497\027F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-06
Time Bar Code:
uired on : 25 Apr 97 08:22 AM
ort Created on: 25 Apr 97 02:38 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

Page Number : 1
Vial Number : 27
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

External Standard Report

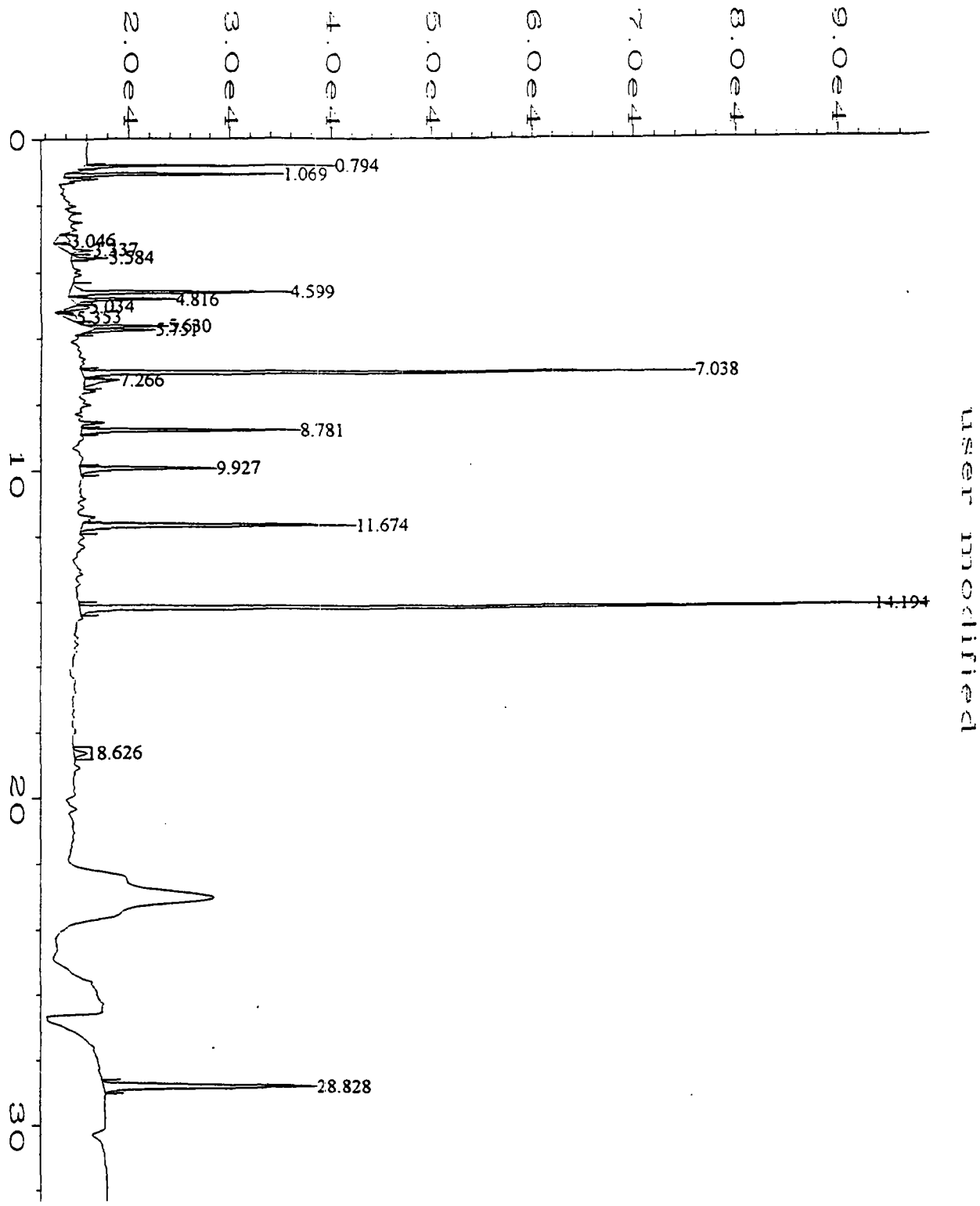
a File Name	: C:\HPCHEM\1\DATA\042497\027F0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 27
ple Name	: 04-404-06	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
lired on	: 25 Apr 97 08:22 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:38 PM	Analysis Method	: 1248F.MTH
Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

1 in C:\HPCHEM\1\DATA\042497\027F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.314	518674	BB	0.066	1	0.228	TETRACHLORO-M-XYLENE 463
3.766	5110	BB	0.068	1	0.139	AR 1248 #1
0.026	8052	BB	0.097	1	0.0674	AR 1248 #2
2.285	* not found *			1		AR 1248 #3
3.441	6586	BB	0.096	1	0.0891	AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.438	242619	MM	0.111	1	0.200	DECACHLOROBIPHENYL 403

all calibrated peaks were found

Modified



User modified

a File Name	: C:\HPCHEM\1\DATA\042497\077R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 77
ple Name	: 04-404-06	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
uired on	: 25 Apr 97 08:22 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:48 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

000027

External Standard Report

.a File Name : C:\HPCHEM\1\DATA\042497\077R0301.D
:rator : ECL
:trument : HP4
:ple Name : 04-404-06
: Time Bar Code:
quired on : 25 Apr 97 08:22 AM
port Created on: 25 Apr 97 02:48 PM
:t Recalib on : 25 APR 97 11:15 AM
.tiplier : 0.01

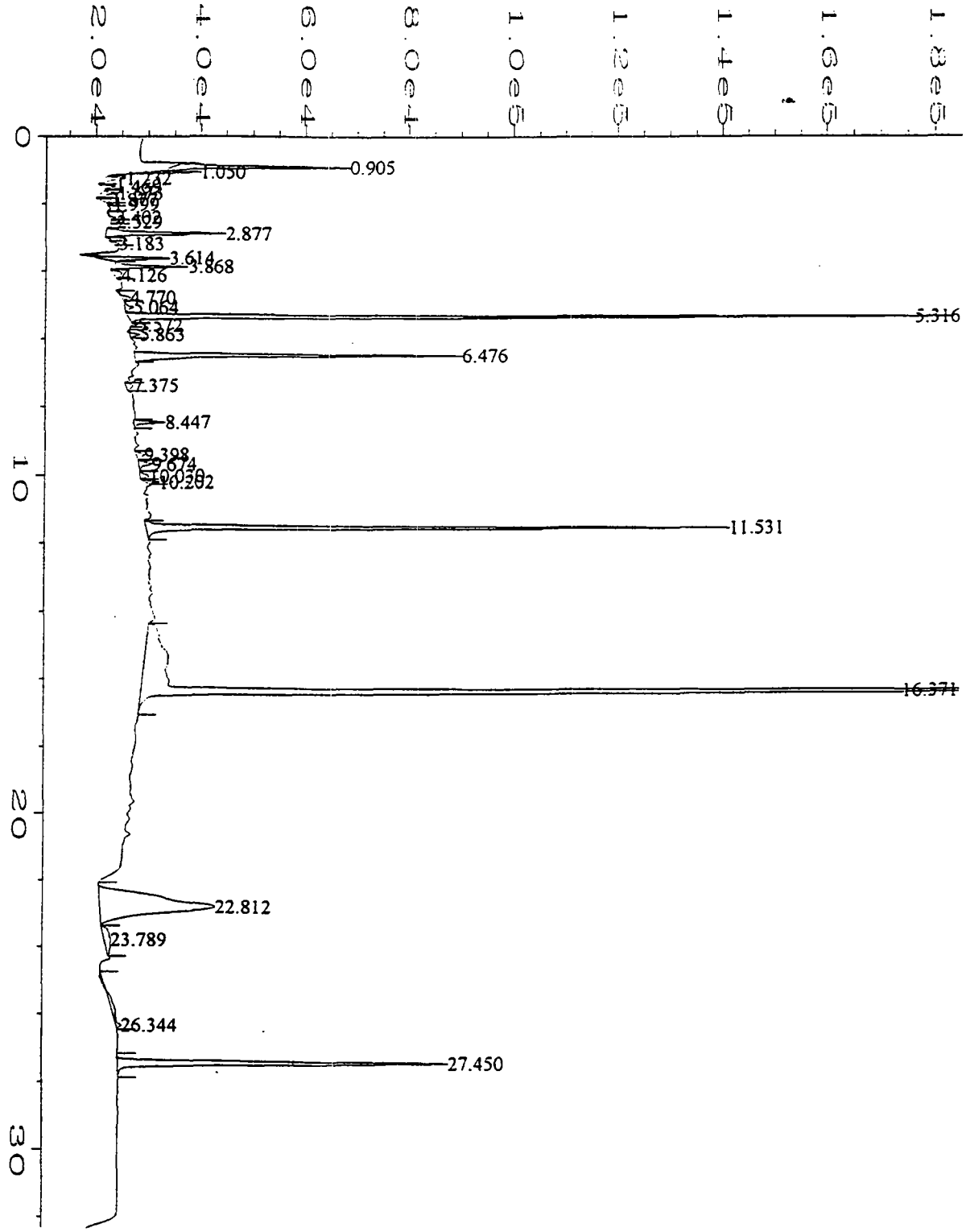
Page Number : 1
Vial Number : 77
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

:. 2 in C:\HPCHEM\1\DATA\042497\077R0301.D

. Time	Area	Type	Width	Ref#	UG/L	Name
7.038	254745	BB	0.066	1	0.225	TETRACHLORO-M-XYLENE 457
9.547	* not found *			1		AR 1248 #1
.1.102	* not found *			1		AR 1248 #2
.2.269	* not found *			1		AR 1248 #3
.3.427	* not found *			1		AR 1248 #4
.5.094	* not found *			1		AR 1248 #5
.8.828	161442	MM	0.128	1	0.198	DECACHLOROBIPHENYL 407

. all calibrated peaks were found

:r Modified



ta File Name	: C:\HPCHEM\1\DATA\042497\028F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 28
mple Name	: 04-404-07	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 08:58 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:39 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

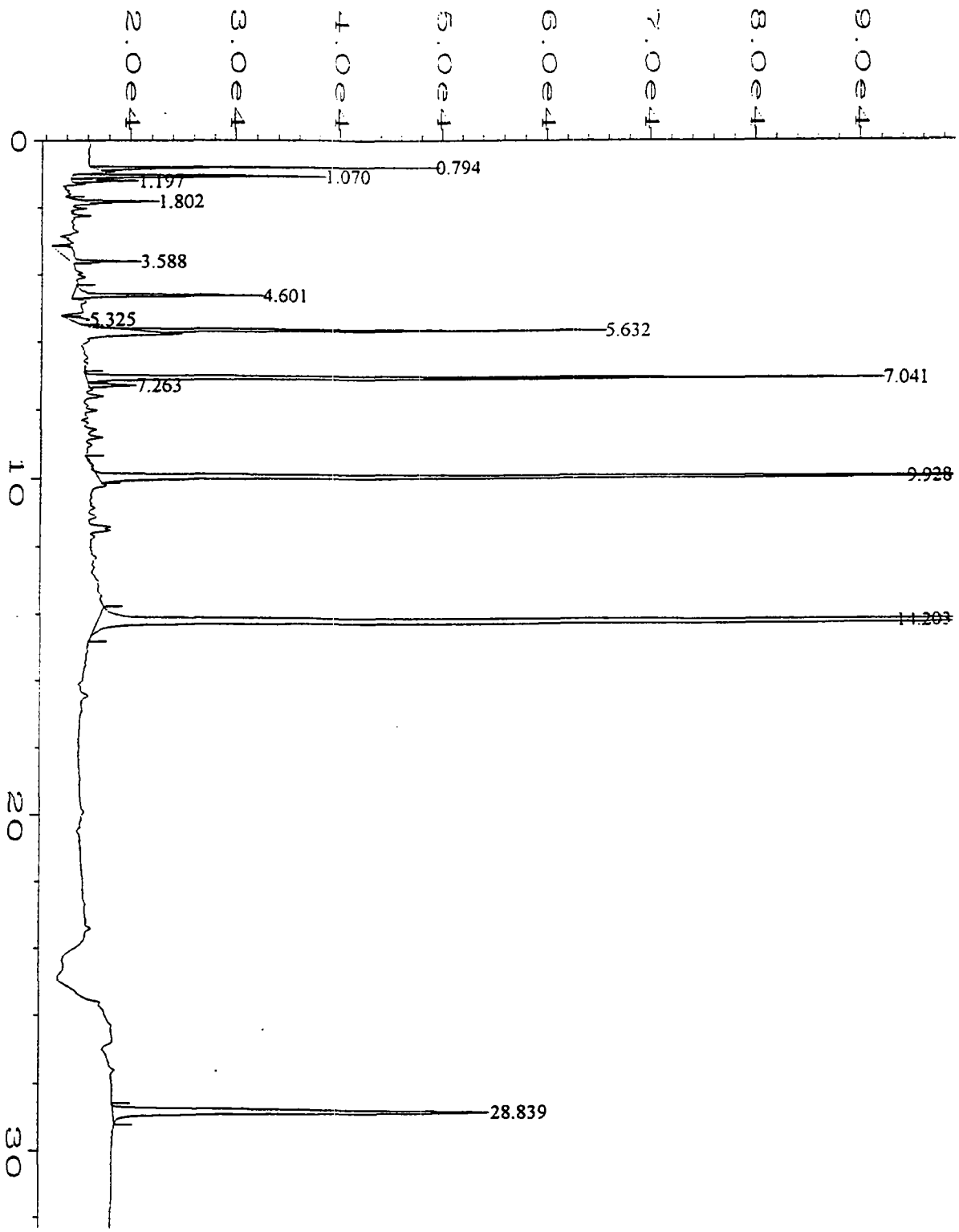
a File Name : C:\HPCHEM\1\DATA\042497\028F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-07
. Time Bar Code:
uired on : 25 Apr 97 08:58 AM
ort Created on: 25 Apr 97 02:39 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

Page Number : 1
Vial Number : 28
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

. 1 in C:\HPCHEM\1\DATA\042497\028F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.316	663275	BB	0.066	1	0.292	TETRACHLORO-M-XYLENE 587
8.757	* not found *			1		AR 1248 #1
0.030	12053	BB	0.108	1	0.101	AR 1248 #2
2.285	* not found *			1		AR 1248 #3
3.429	* not found *			1		AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.450	434235	BB	0.107	1	0.358	DECACHLOROBIPHENYL 722

all calibrated peaks were found



a File Name	: C:\HPCHEM\1\DATA\042497\078R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 78
ple Name	: 04-404-07	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 08:58 AM	Instrument Method:	1660F.MTH
ort Created on:	25 Apr 97 02:49 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

==========

External Standard Report

==========

a File Name : C:\HPCHEM\1\DATA\042497\078R0301.D
rator : ECL
trument : HP4
ple Name : 04-404-07
Time Bar Code:
uired on : 25 Apr 97 08:58 AM
ort Created on: 25 Apr 97 02:49 PM
t Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

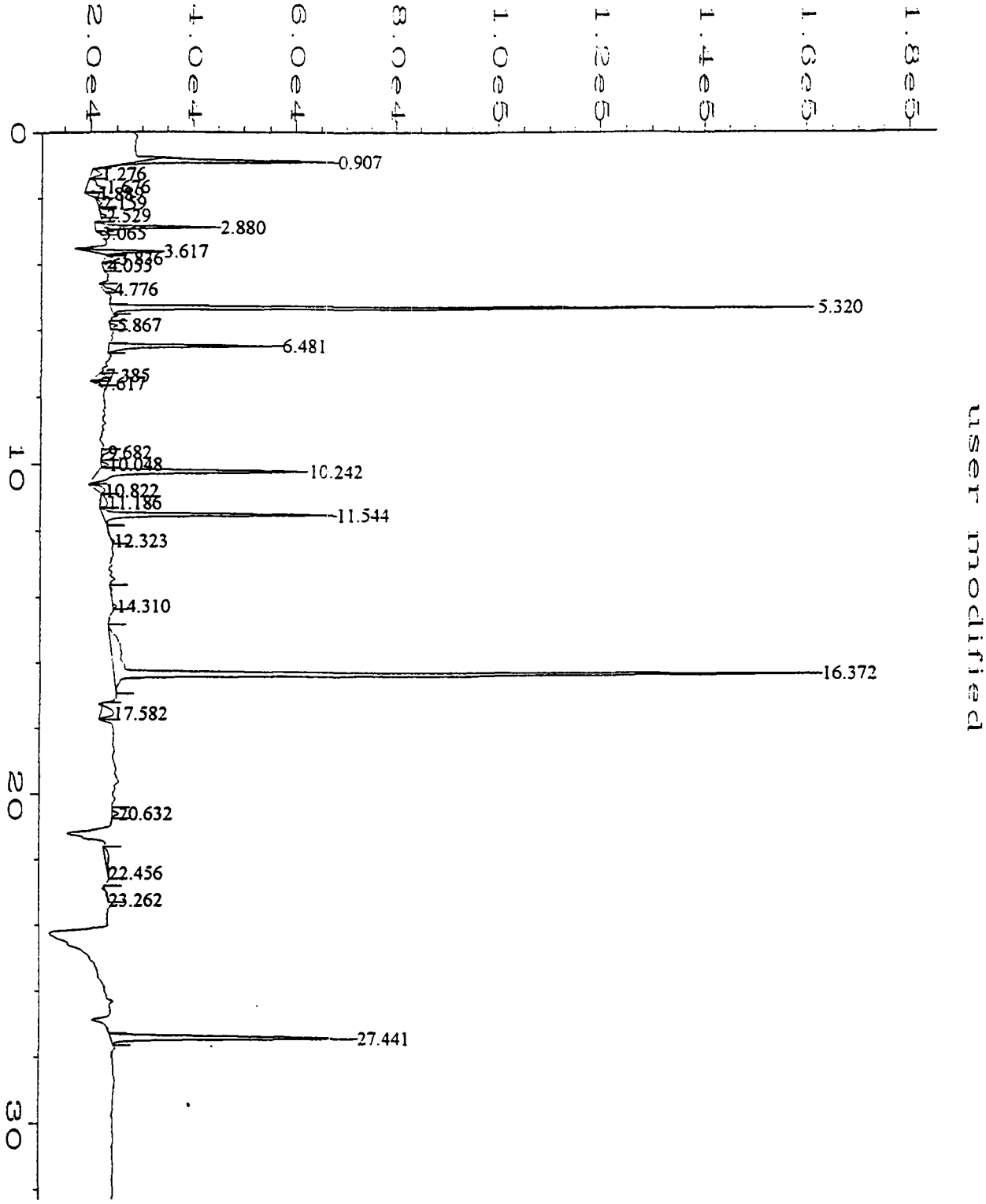
Page Number : 1
Vial Number : 78
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

. 2 in C:\HPCHEM\1\DATA\042497\078R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name	
7.041	322186	BB	0.065	1	0.285	TETRACHLORO-M-XYLENE	573
9.547	* not found *			1		AR 1248 #1	
1.102	* not found *			1		AR 1248 #2	
2.269	* not found *			1		AR 1248 #3	
3.427	* not found *			1		AR 1248 #4	
5.094	* not found *			1		AR 1248 #5	
8.839	296318	BB	0.127	1	0.363	DECACHLOROBIPHENYL	637

all calibrated peaks were found

==========



a File Name	: C:\HPCHEM\1\DATA\042497\029F0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 29
ple Name	: 04-404-08	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 09:34 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:39 PM	Analysis Method	: 1248F.MTH
t Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

==========

External Standard Report

==========

a File Name : C:\HPCHEM\1\DATA\042497\029F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-08
Time Bar Code:
uired on : 25 Apr 97 09:34 AM
ort Created on: 25 Apr 97 02:39 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

Page Number : 1
Vial Number : 29
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

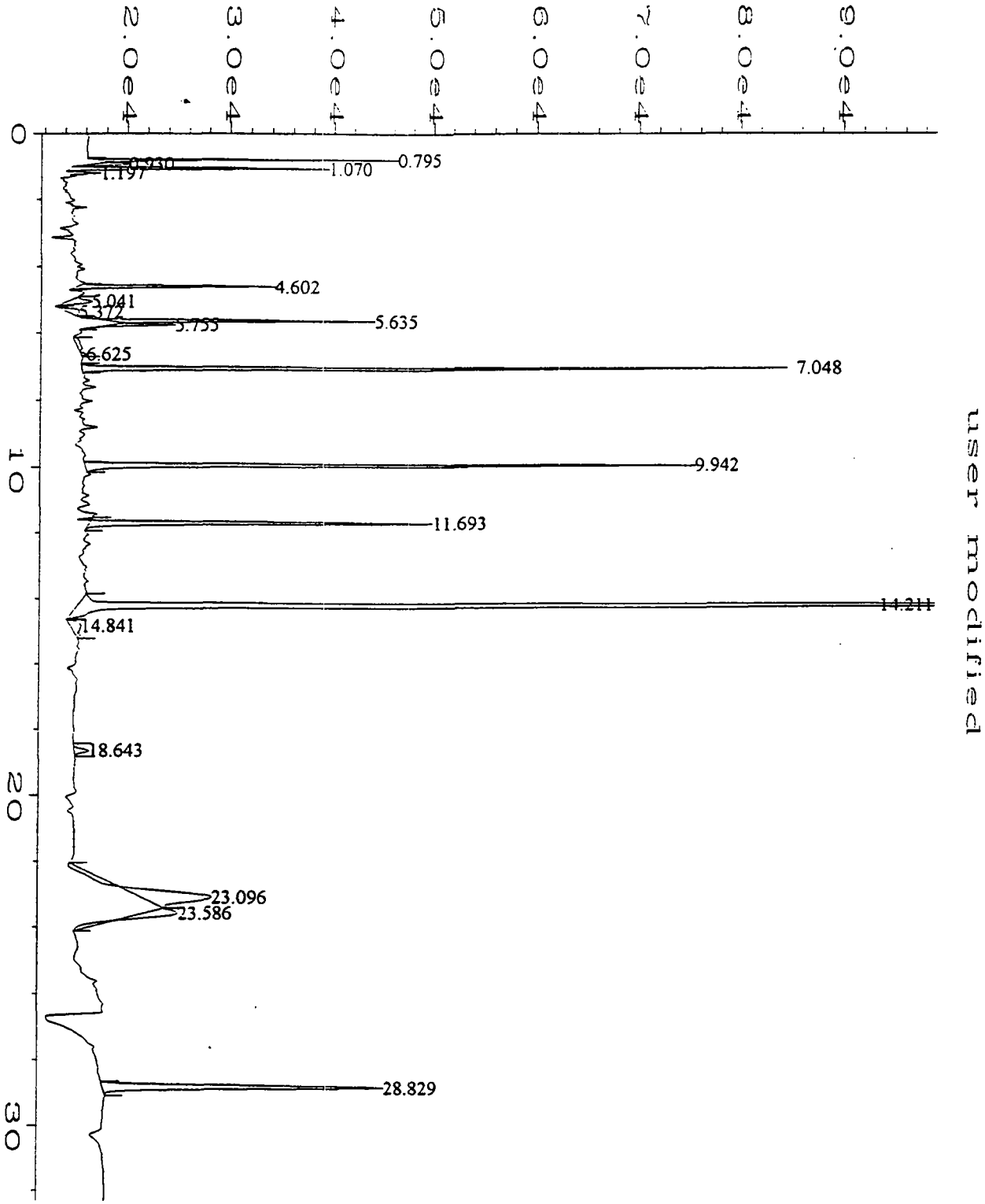
. 1 in C:\HPCHEM\1\DATA\042497\029F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.320	582500	BB	0.065	1	0.256	TETRACHLORO-M-XYLENE 519
8.757	* not found *			1		AR 1248 #1
0.048	8535	BB	0.098	1	0.0714	AR 1248 #2
2.323	1690	BB	0.057	1	0.0317	AR 1248 #3
3.429	* not found *			1		AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.441	326100	MM	0.112	1	0.269	DECACHLOROBIPHENYL 549

all calibrated peaks were found

r Modified

==========



:a File Name : C:\HPCHEM\1\DATA\042497\079R0301.D

:rator	: ECL	Page Number	: 1
:trument	: HP4	Vial Number	: 79
:ple Name	: 04-404-08	Injection Number	: 1
1 Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 09:34 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:49 PM	Analysis Method	: 1248R.MTH
:t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
.tiplier	: 0.01	ISTD Amount	:

External Standard Report

:a File Name : C:\HPCHEM\1\DATA\042497\079R0301.D
erator : ECL
strument : HP4
nple Name : 04-404-08
Time Bar Code:
quired on : 25 Apr 97 09:34 AM
port Created on: 25 Apr 97 02:49 PM
st Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

Page Number : 1
Vial Number : 79
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

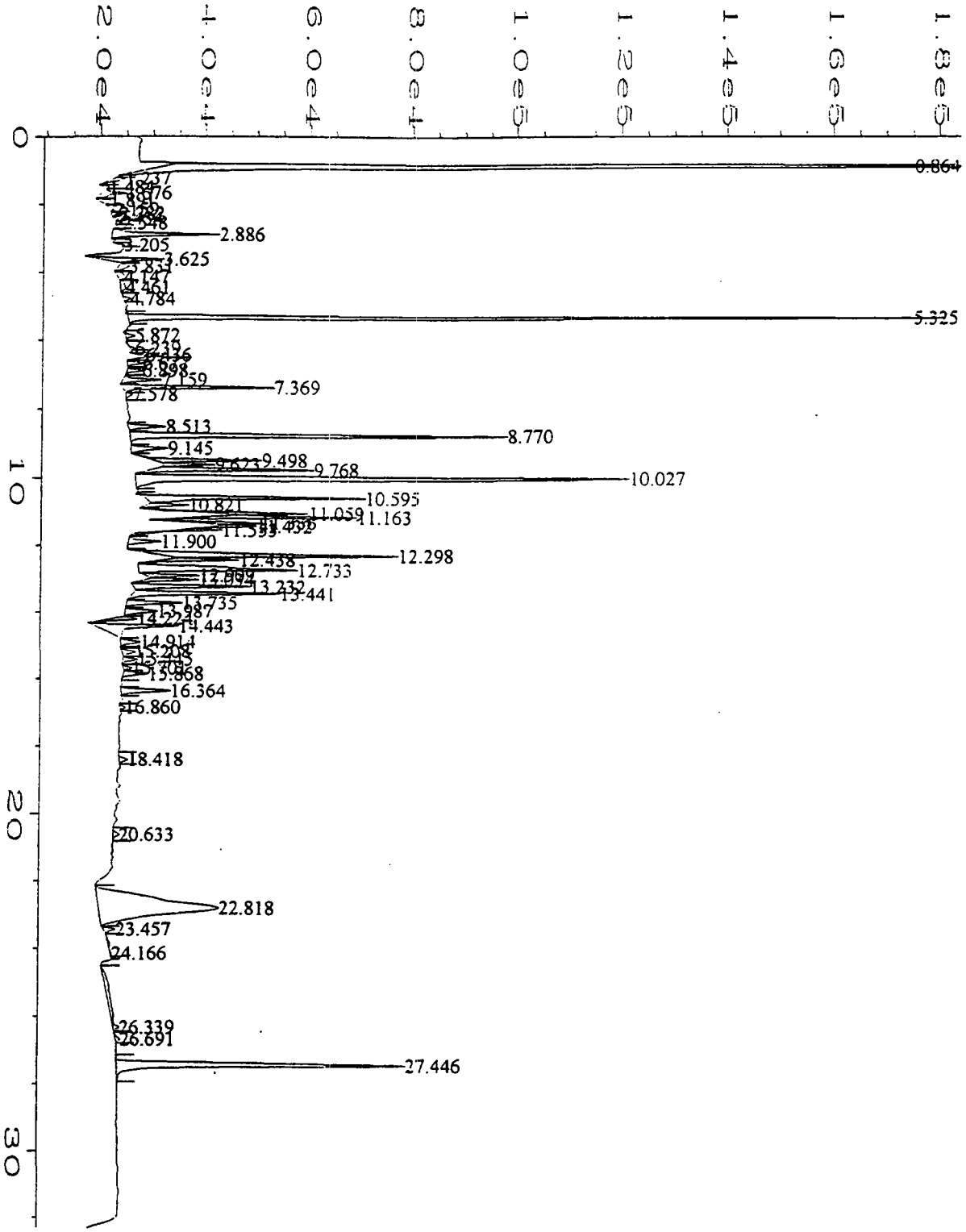
g. 2 in C:\HPCHEM\1\DATA\042497\079R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
7.048	294764	BB	0.066	1	0.261	TETRACHLORO-M-XYLENE 527
9.547	* not found *			1		AR 1248 #1
11.102	* not found *			1		AR 1248 #2
12.269	* not found *			1		AR 1248 #3
13.427	* not found *			1		AR 1248 #4
15.094	* not found *			1		AR 1248 #5
28.829	212453	MM	0.129	1	0.260	DECACHLOROBIPHENYL 527

all calibrated peaks were found

er Modified

000036



ta File Name	: C:\HPCHEM\1\DATA\042497\030F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 30
mple Name	: 04-404-09	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 10:10 AM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:39 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

.ta File Name	: C:\HPCHEM\1\DATA\042497\030F0301.D		
erator	: ECL	Page Number	: 1
.strument	: HP4	Vial Number	: 30
.mple Name	: 04-404-09	Injection Number	: 1
.n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 10:10 AM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:39 PM	Analysis Method	: 1248F.MTH
.st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
.ltiplier	: 0.01	ISTD Amount	:

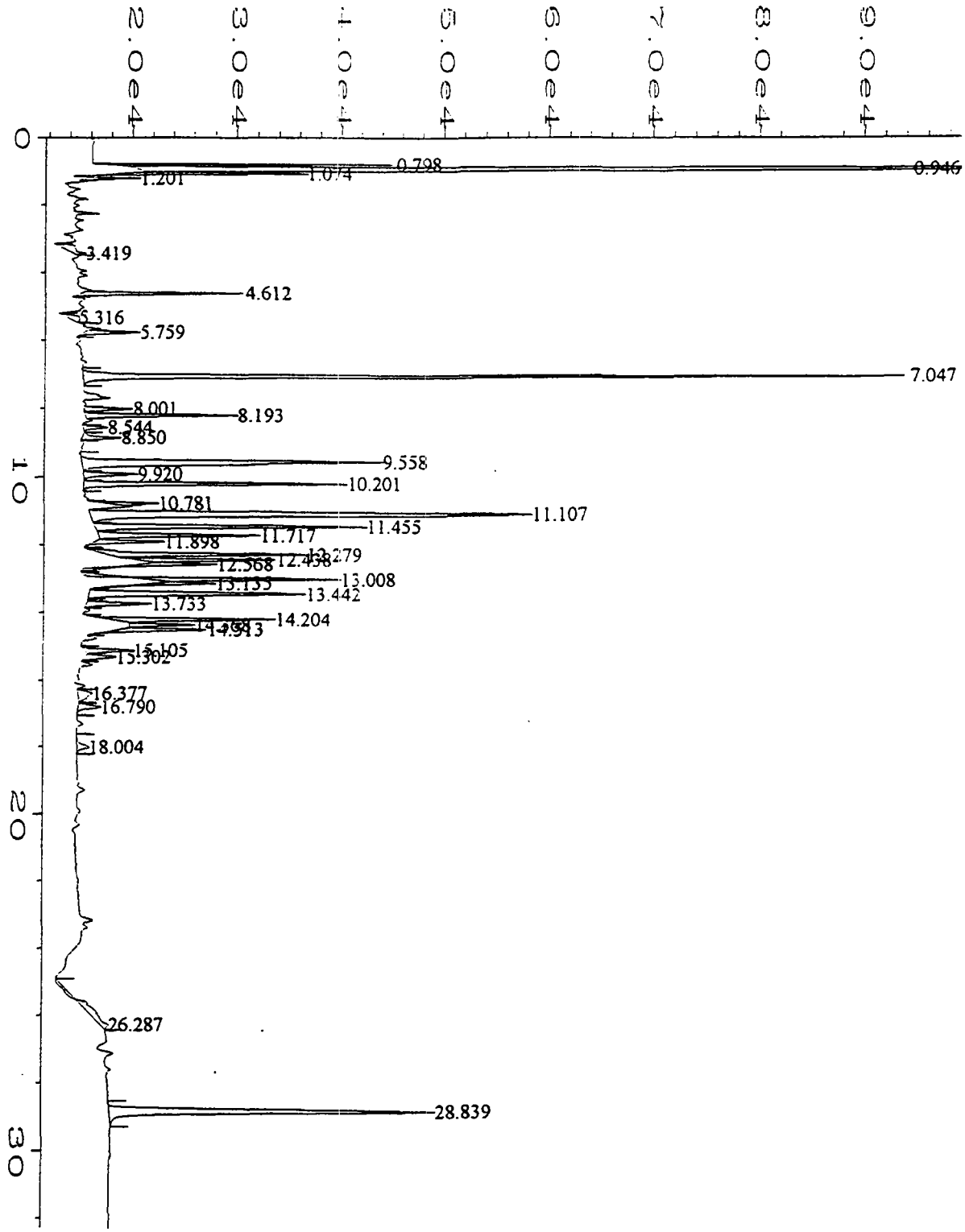
.g. 1 in C:\HPCHEM\1\DATA\042497\030F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name	
5.325	664093	BB	0.065	1	0.292	TETRACHLORO-M-XYLENE	587
8.770	388834	BB	0.084	1	10.614	AR 1248 #1	
10.027	677903	BB	0.115	1	5.672	AR 1248 #2	
12.298	258557	BB	0.087	1	4.854	AR 1248 #3	
13.441	155682	BB	0.086	1	2.107	AR 1248 #4	
14.443	127784	BB	0.116	1	1.744	AR 1248 #5	
27.446	403427	BB	0.112	1	0.333	DECACHLOROBIPHENYL	679

AR 1248 Average Concentration: ~~4.998~~

possible Ar 1016 contamination

000038



a File Name	: C:\HPCHEM\1\DATA\042497\080R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 80
ple Name	: 04-404-09	Injection Number	: 1
Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 10:10 AM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:49 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\080R0301.D
erator : ECL
strument : HP4
mple Name : 04-404-09
n Time Bar Code:
quired on : 25 Apr 97 10:10 AM
port Created on: 25 Apr 97 02:49 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 80
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\080R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.047	351422	BB	0.068	1	0.311	TETRACHLORO-M-XYLENE 627
9.558	216434	BB	0.104	1	10.811	AR 1248 #1
11.107	330149	BB	0.126	1	5.531	AR 1248 #2
12.279	100985	BB	0.083	1	4.558	AR 1248 #3
13.442	135585	BB	0.104	1	3.818	AR 1248 #4
15.105	26196	BB	0.089	1	0.900	AR 1248 #5
28.839	258430	BB	0.131	1	0.316	DECACHLOROBIPHENYL 632

AR 1248 Average Concentration: 5.124

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\080R0301.D
erator : ECL
strument : HP4
mple Name : 04-404-09
n Time Bar Code:
quired on : 25 Apr 97 10:10 AM
port Created on: 29 Apr 97 01:39 PM
st Recalib on : 22 APR 97 10:00 AM
ltiplier : 0.01

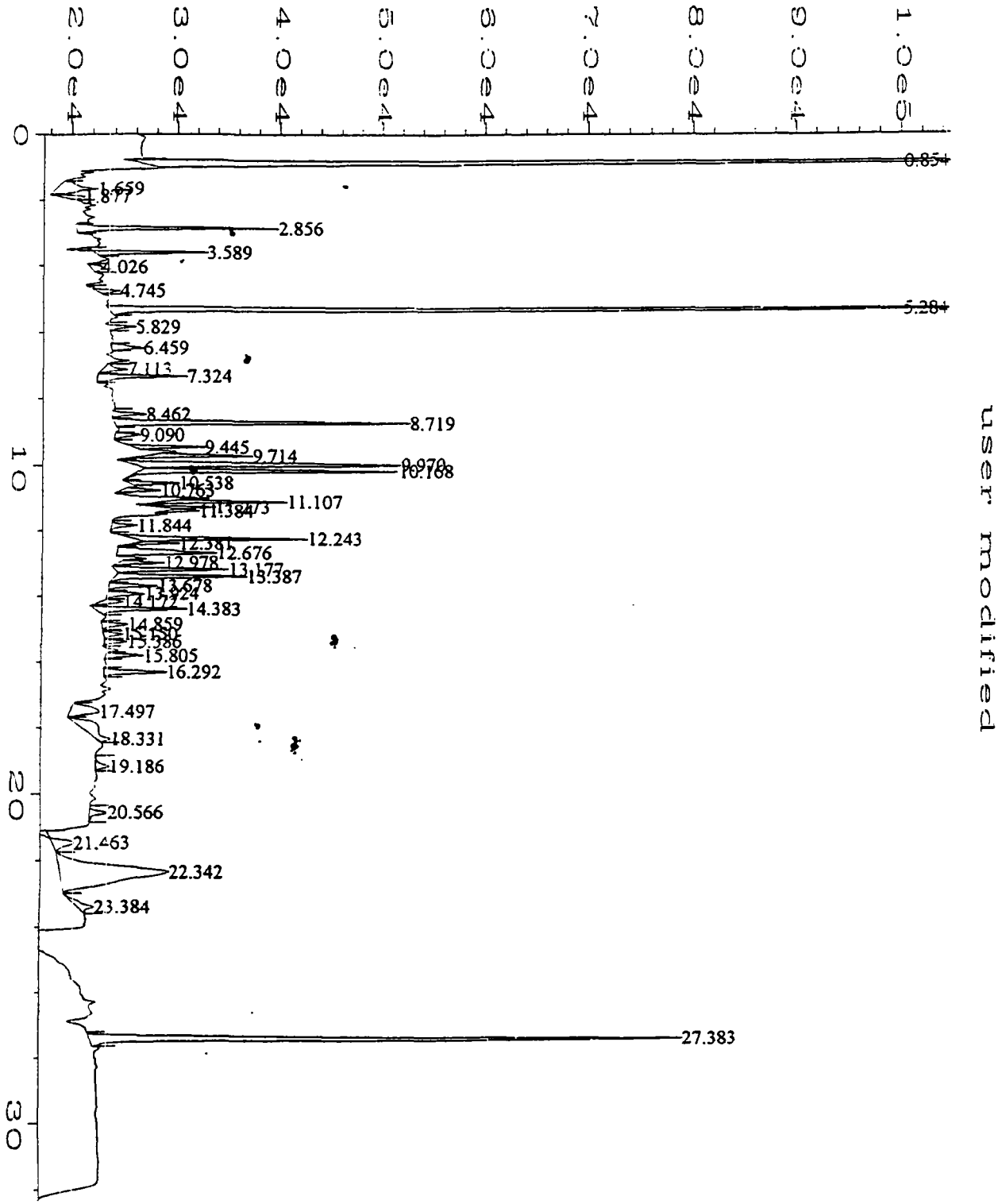
Page Number : 1
Vial Number : 80
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\080R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.047	351422	BB	0.068	1	0.295	TETRACHLORO-M-XYLENE
8.193	66528	BB	0.071	1	2.796	AR 1016 #1
10.201	126321	BB	0.078	1	4.141	AR 1016 #2
11.107	330149	BB	0.126	1	3.557	AR 1016 #3
11.455	142207	BB	0.086	1	3.779	AR 1016 #4
13.442	135585	BB	0.104	1	4.902	AR 1016 #5
17.745	* not found *			1		AR 1260 #1 <--NOT AVERAGED
20.182	* not found *			1		AR 1260 #2 <--NOT AVERAGED
21.857	* not found *			1		AR 1260 #3 <--NOT AVERAGED
22.925	* not found *			1		AR 1260 #4 <--NOT AVERAGED
24.018	* not found *			1		AR 1260 #5 <--NOT AVERAGED
28.839	258430	BB	0.131	1	0.295	DECACHLOROBIPHENYL

t all calibrated peaks were found

AR 1016 Average Concentration: 3.835
Average Concentration: 0



user modified

ta File Name	: C:\HPCHEM\1\DATA\042897\016F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 16
mple Name	: 04-404-09	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 05:45 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 03:19 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042897\016F0101.D
erator : ECL
strument : HP4
mple Name : 04-404-09
n Time Bar Code:
quired on : 28 Apr 97 05:45 PM
port Created on: 29 Apr 97 03:21 PM
st Recalib on : 22 APR 97 09:52 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 16
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042897\016F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.284	621722	BB	0.065	1	0.280	TETRACHLORO-M-XYLENE 567
7.324	47004	BB	0.082	1	1.171	AR 1016 #1
8.719	149848	BB	0.081	1	1.725	AR 1016 #2
9.970	169284	BB	0.107	1	0.980	AR 1016 #3
10.538	20766	BB	0.069	1	0.358	AR 1016 #4
12.243	89750	BB	0.083	1	1.986	AR 1016 #5
16.467	* not found *			1		AR 1260 #1 <--NOT AVERAGED
16.880	* not found *			1		AR 1260 #2 <--NOT AVERAGED
18.489	* not found *			1		AR 1260 #3 <--NOT AVERAGED
19.013	* not found *			1		AR 1260 #4 <--NOT AVERAGED
21.463	10479	BB	0.120	1	0.0665	AR 1260 #5
27.383	390747	MV	0.114	1	0.320	DECACHLOROBIPHENYL 647

t all calibrated peaks were found

er Modified

AR 1016 Average Concentration: 1.244
AR 1260 Average Concentration: .067

External Standard Report

ta File Name	: C:\HPCHEM\1\DATA\042897\016F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 16
mple Name	: 04-404-09	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 05:45 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 03:19 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

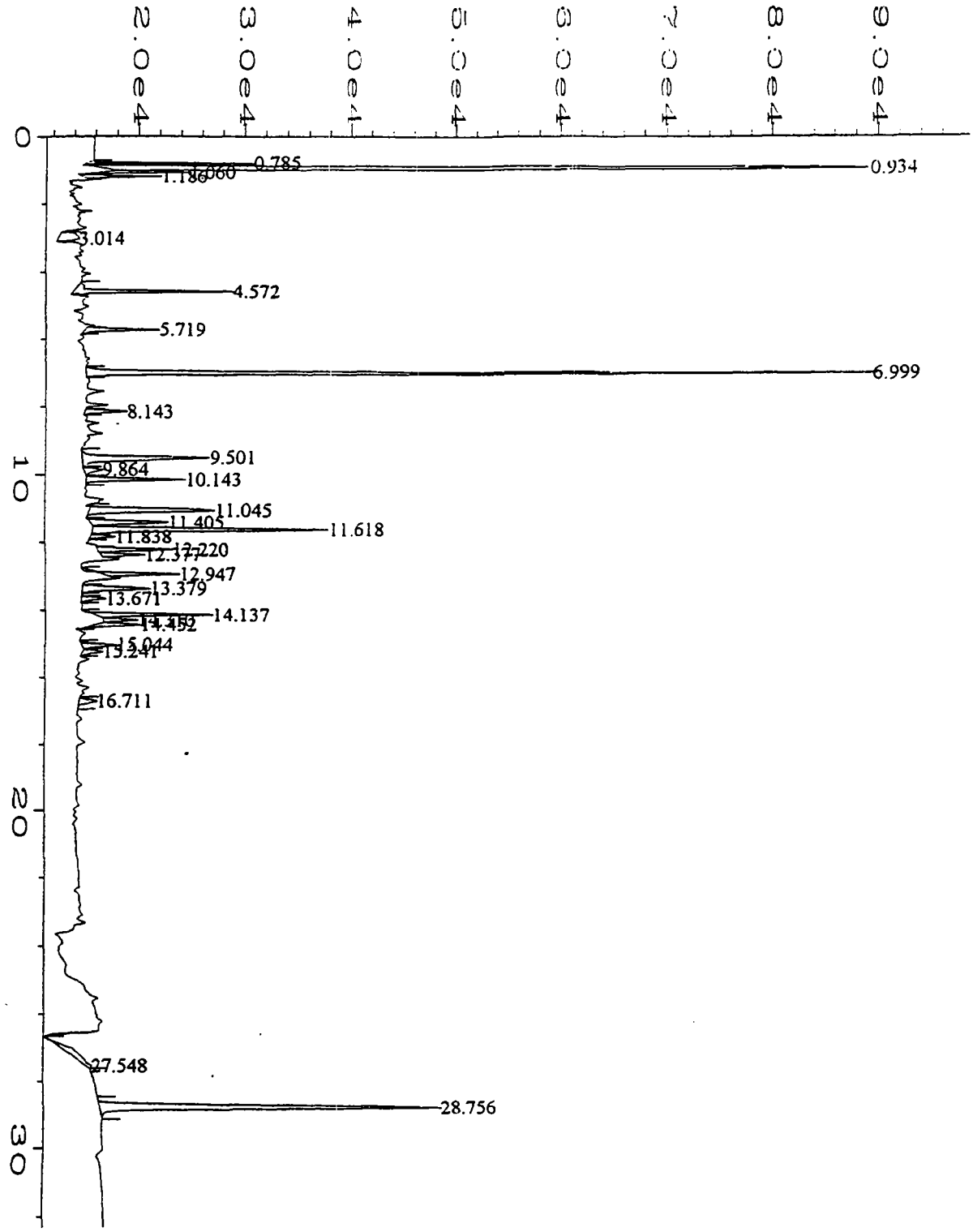
g. 1 in C:\HPCHEM\1\DATA\042897\016F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.284	621722	BB	0.065	1	0.274	TETRACHLORO-M-XYLENE ~~557~~
8.719	149848	BB	0.081	1	4.090	AR 1248 #1
9.970	169284	BB	0.107	1	1.416	AR 1248 #2
12.243	89750	BB	0.083	1	1.685	AR 1248 #3
13.387	69869	BB	0.085	1	0.946	AR 1248 #4
14.383	49982	BB	0.086	1	0.682	AR 1248 #5
27.383	390747	MV	0.114	1	0.322	DECACHLOROBIPHENYL ~~657~~

er Modified

AR 1248 Average Concentration: 1.764

Ar 1016



ta File Name : C:\HPCHEM\1\DATA\042897\066R0101.D
erator : ECL
strument : HP4
mple Name : 04-404-09
n Time Bar Code:
quired on : 28 Apr 97 05:45 PM
port Created on: 29 Apr 97 03:25 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 66
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

External Standard Report

.ta File Name : C:\HPCHEM\1\DATA\042897\066R0101.D
›erator : ECL
:strument : HP4
.mple Name : 04-404-09
.n Time Bar Code:
:quired on : 28 Apr 97 05:45 PM
:port Created on: 29 Apr 97 03:28 PM
:st Recalib on : 22 APR 97 10:00 AM
.ltiplier : 0.01

Page Number : 1
Vial Number : 66
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

.g. 2 in C:\HPCHEM\1\DATA\042897\066R0101.D

:t Time	Area	Type	Width	Ref#	UG/L	Name
6.999	316892	BB	0.066	1	0.266	TETRACHLORO-M-XYLENE 537
8.143	18437	BB	0.072	1	0.775	AR 1016 #1
10.143	45847	BB	0.077	1	1.503	AR 1016 #2
11.045	88447	BB	0.122	1	0.953	AR 1016 #3
11.405	44473	BB	0.097	1	1.182	AR 1016 #4
13.379	41615	BB	0.101	1	1.505	AR 1016 #5
17.745	* not found *			1		AR 1260 #1 <--NOT AVERAGED
20.182	* not found *			1		AR 1260 #2 <--NOT AVERAGED
21.857	* not found *			1		AR 1260 #3 <--NOT AVERAGED
22.925	* not found *			1		AR 1260 #4 <--NOT AVERAGED
24.018	* not found *			1		AR 1260 #5 <--NOT AVERAGED
28.756	254085	BB	0.122	1	0.290	DECACHLOROBIPHENYL 587

.t all calibrated peaks were found

AR 1016 Average Concentration: 1.184
Average Concentration: 0

External Standard Report

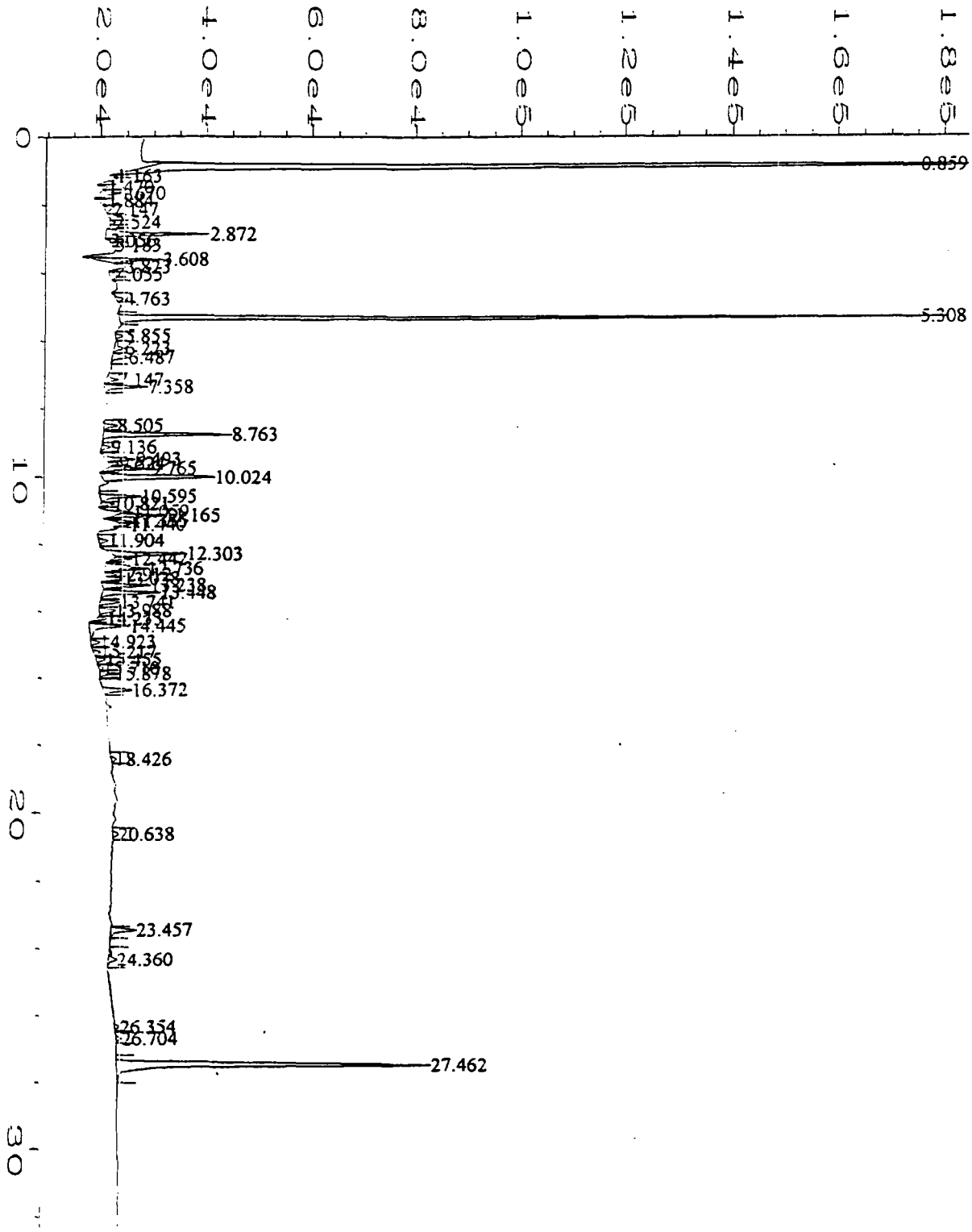
ta File Name	: C:\HPCHEM\1\DATA\042897\066R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 66
mple Name	: 04-404-09	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 05:45 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 03:25 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 2 in C:\HPCHEM\1\DATA\042897\066R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.999	316892	BB	0.066	1	0.280	TETRACHLORO-M-XYLENE
9.501	89934	BB	0.104	1	4.492	AR 1248 #1
11.045	88447	BB	0.122	1	1.482	AR 1248 #2
12.220	32605	BB	0.075	1	1.472	AR 1248 #3
13.379	41615	BB	0.101	1	1.172	AR 1248 #4
15.044	17580	BB	0.088	1	0.604	AR 1248 #5
28.756	254085	BB	0.122	1	0.311	DECACHLOROBIPHENYL

AR 1248 Average Concentration: 1.844

Ar 1016.



ta File Name	: C:\HPCHEM\1\DATA\042497\031F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 31
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 10:46 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:43 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

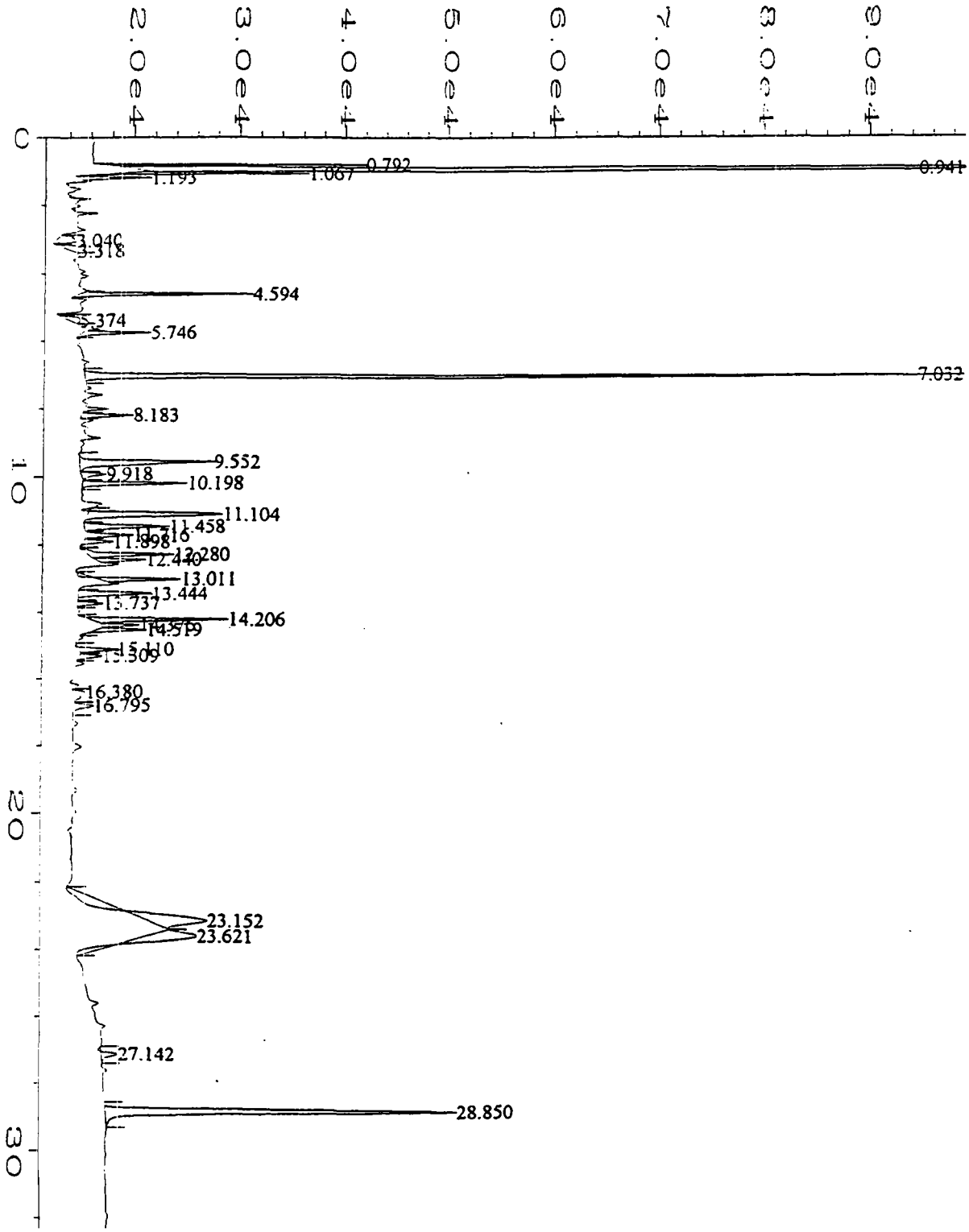
ta File Name	: C:\HPCHEM\1\DATA\042497\031F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 31
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 10:46 AM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:43 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042497\031F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.308	669082	BB	0.065	1	0.294	TETRACHLORO-M-XYLENE 597
8.763	126979	BB	0.081	1	3.466	AR 1248 #1
10.024	144146	BB	0.110	1	1.206	AR 1248 #2
12.303	73306	BB	0.081	1	1.376	AR 1248 #3
13.448	59700	BB	0.084	1	0.808	AR 1248 #4
14.445	54502	BB	0.103	1	0.744	AR 1248 #5
27.462	446167	BB	0.114	1	0.368	DECACHLOROBIPHENYL 747

AR 1248 Average Concentration: ~~1.52~~

possible Ar 1016 contamination



ta File Name	: C:\HPCHEM\1\DATA\042497\081R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 81
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 10:46 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:49 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

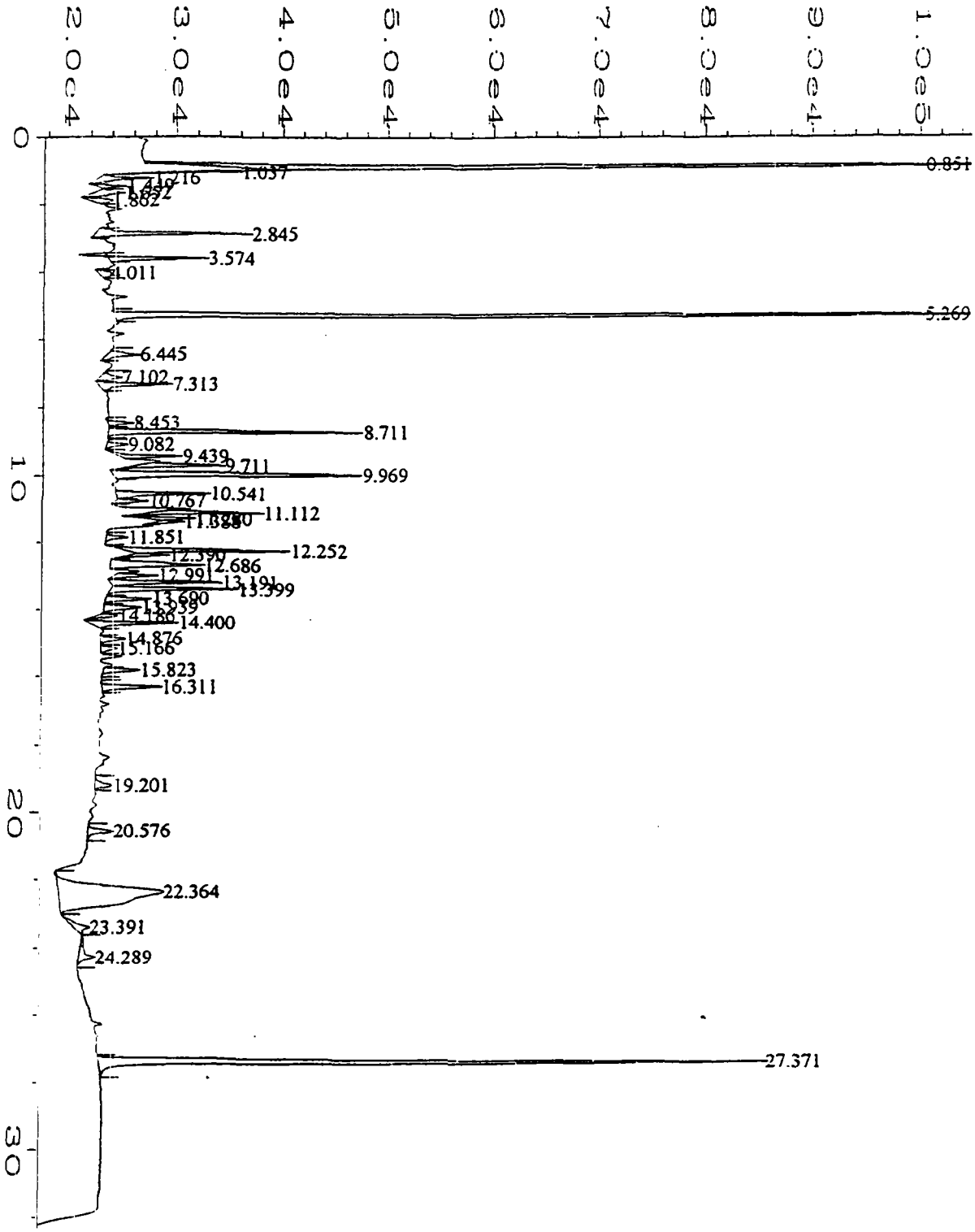
ta File Name : C:\HPCHEM\1\DATA\042497\081R0301.D
erator : ECL
strument : HP4
mple Name : 04-404-10
n Time Bar Code:
quired on : 25 Apr 97 10:46 AM
port Created on: 25 Apr 97 02:49 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 81
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\081R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.032	358746	BB	0.066	1	0.317	TETRACHLORO-M-XYLENE 637
9.552	92605	BB	0.103	1	4.626	AR 1248 #1
11.104	93805	BB	0.121	1	1.572	AR 1248 #2
12.280	42270	BB	0.082	1	1.908	AR 1248 #3
13.444	44013	BB	0.103	1	1.239	AR 1248 #4
15.110	18685	BB	0.085	1	0.642	AR 1248 #5
28.850	278797	BB	0.131	1	0.341	DECACHLOROBIPHENYL 687

AR 1248 Average Concentration: 1.997



ta File Name	: C:\HPCHEM\1\DATA\042897\017F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 17
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 06:21 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 03:22 PM	Analysis Method	: 1660F.MTH
st Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

000052

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042897\017F0101.D
erator : ECL
strument : HP4
mple Name : 04-404-10
n Time Bar Code:
quired on : 28 Apr 97 06:21 PM
port Created on: 29 Apr 97 03:22 PM
st Recalib on : 22 APR 97 09:52 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 17
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042897\017F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.269	536973	BB	0.064	1	0.242	TETRACHLORO-M-XYLENE 48%
7.313	37095	BB	0.081	1	0.924	AR 1016 #1
8.711	125274	BB	0.081	1	1.442	AR 1016 #2
9.969	160743	BB	0.112	1	0.931	AR 1016 #3
10.541	48271	BB	0.082	1	0.832	AR 1016 #4
12.252	81027	BB	0.082	1	1.793	AR 1016 #5
16.467	* not found *			1		AR 1260 #1 <--NOT AVERAGED
16.880	* not found *			1		AR 1260 #2 <--NOT AVERAGED
18.489	* not found *			1		AR 1260 #3 <--NOT AVERAGED
19.013	* not found *			1		AR 1260 #4 <--NOT AVERAGED
21.440	* not found *			1		AR 1260 #5 <--NOT AVERAGED
27.371	430723	BB	0.107	1	0.352	DECACHLOROBIPHENYL 70%

t all calibrated peaks were found

AR 1016 Average Concentration: 1.184
Average Concentration: 0

External Standard Report

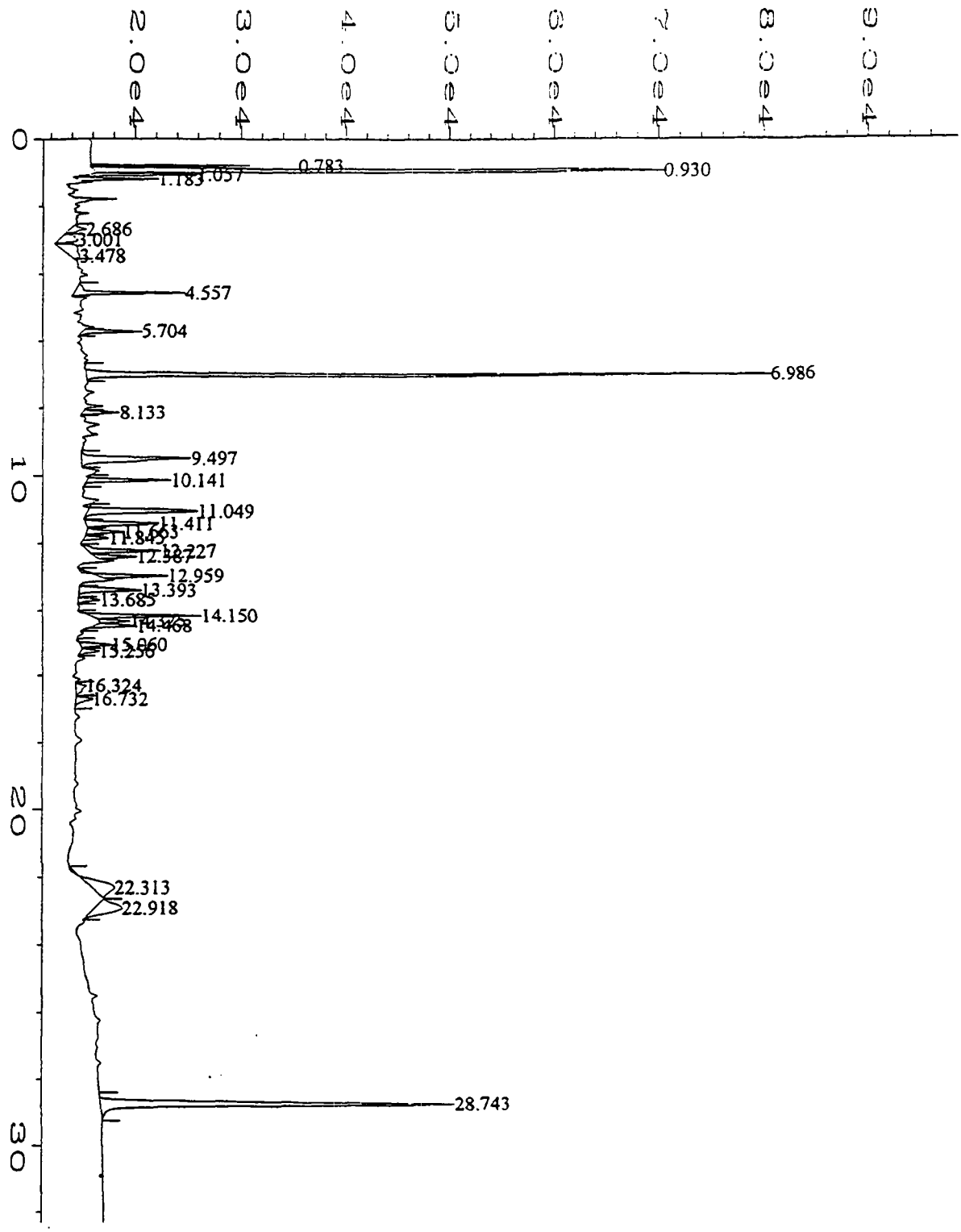
ta File Name	: C:\HPCHEM\1\DATA\042897\017F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 17
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 06:21 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 03:23 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042897\017F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.269	536973	BB	0.064	1	0.236	TETRACHLORO-M-XYLENE
8.711	125274	BB	0.081	1	3.420	AR 1248 #1
9.969	160743	BB	0.112	1	1.345	AR 1248 #2
12.252	81027	BB	0.082	1	1.521	AR 1248 #3
13.399	65202	BB	0.086	1	0.882	AR 1248 #4
14.400	47793	BB	0.089	1	0.652	AR 1248 #5
27.371	430723	BB	0.107	1	0.355	DECACHLOROBIPHENYL

AR 1248 Average Concentration: 1.564

Ar 1016



ta File Name	: C:\HPCHEM\1\DATA\042897\067R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 67
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 06:21 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 03:29 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

==========

External Standard Report

==========

ta File Name : C:\HPCHEM\1\DATA\042897\067R0101.D
erator : ECL
strument : HP4
mple Name : 04-404-10
n Time Bar Code:
quired on : 28 Apr 97 06:21 PM
port Created on: 29 Apr 97 03:28 PM
st Recalib on : 22 APR 97 10:00 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 67
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042897\067R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.986	281054	BB	0.066	1	0.236	TETRACHLORO-M-XYLENE 477
8.133	16129	BB	0.072	1	0.678	AR 1016 #1
10.141	36824	BB	0.074	1	1.207	AR 1016 #2
11.049	76753	BB	0.121	1	0.827	AR 1016 #3
11.411	43792	BB	0.100	1	1.164	AR 1016 #4
13.393	38196	BB	0.103	1	1.381	AR 1016 #5
17.745	* not found *			1		AR 1260 #1 <--NOT AVERAGED
20.182	* not found *			1		AR 1260 #2 <--NOT AVERAGED
21.857	* not found *			1		AR 1260 #3 <--NOT AVERAGED
22.918	51244	BB	0.270	1	0.634	AR 1260 #4
24.018	* not found *			1		AR 1260 #5 <--NOT AVERAGED
28.743	280951	BB	0.130	1	0.321	DECACHLOROBIPHENYL 647

t all calibrated peaks were found

==========

AR 1016 Average Concentration: 1.051
AR 1260 Average Concentration: ~~.634~~

External Standard Report

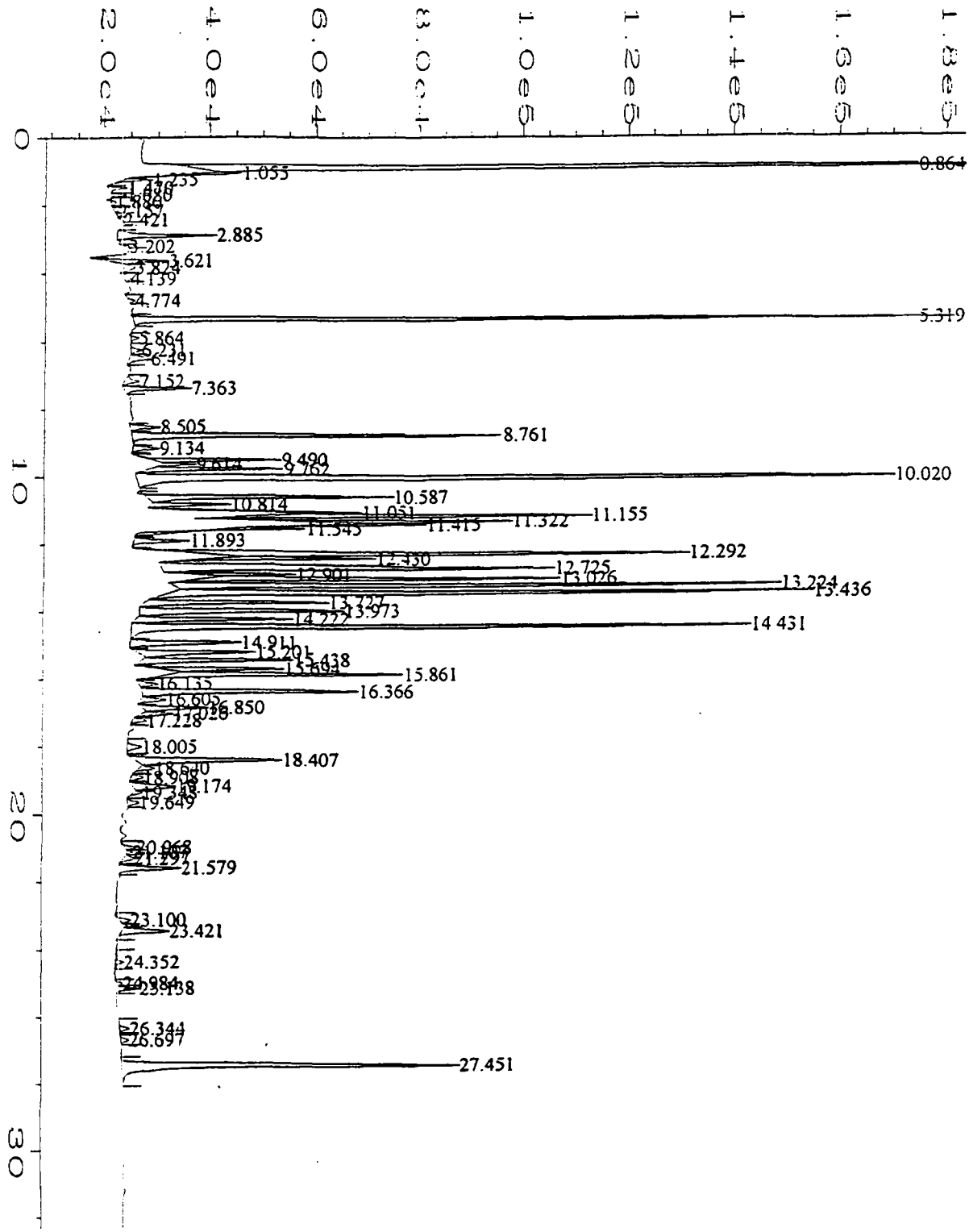
ta File Name	: C:\HPCHEM\1\DATA\042897\067R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 67
mple Name	: 04-404-10	Injection Number	: 1
n Time Bar Code	:	Sequence Line	: 1
quired on	: 28 Apr 97 06:21 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 03:29 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 2 in C:\HPCHEM\1\DATA\042897\067R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.986	281054	BB	0.066	1	0.248	TETRACHLORO-M-XYLENE
9.497	75816	BB	0.103	1	3.787	AR 1248 #1
11.049	76753	BB	0.121	1	1.286	AR 1248 #2
12.227	36422	BB	0.083	1	1.644	AR 1248 #3
13.393	38196	BB	0.103	1	1.076	AR 1248 #4
15.060	15719	BB	0.085	1	0.540	AR 1248 #5
28.743	280951	BB	0.130	1	0.344	DECACHLOROBIPHENYL

AR 1248 Average Concentration: 1.667

Ar 1016



.a File Name	: C:\HPCHEM\1\DATA\042497\033F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 33
ple Name	: 04-404-11 MS	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 11:57 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:44 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

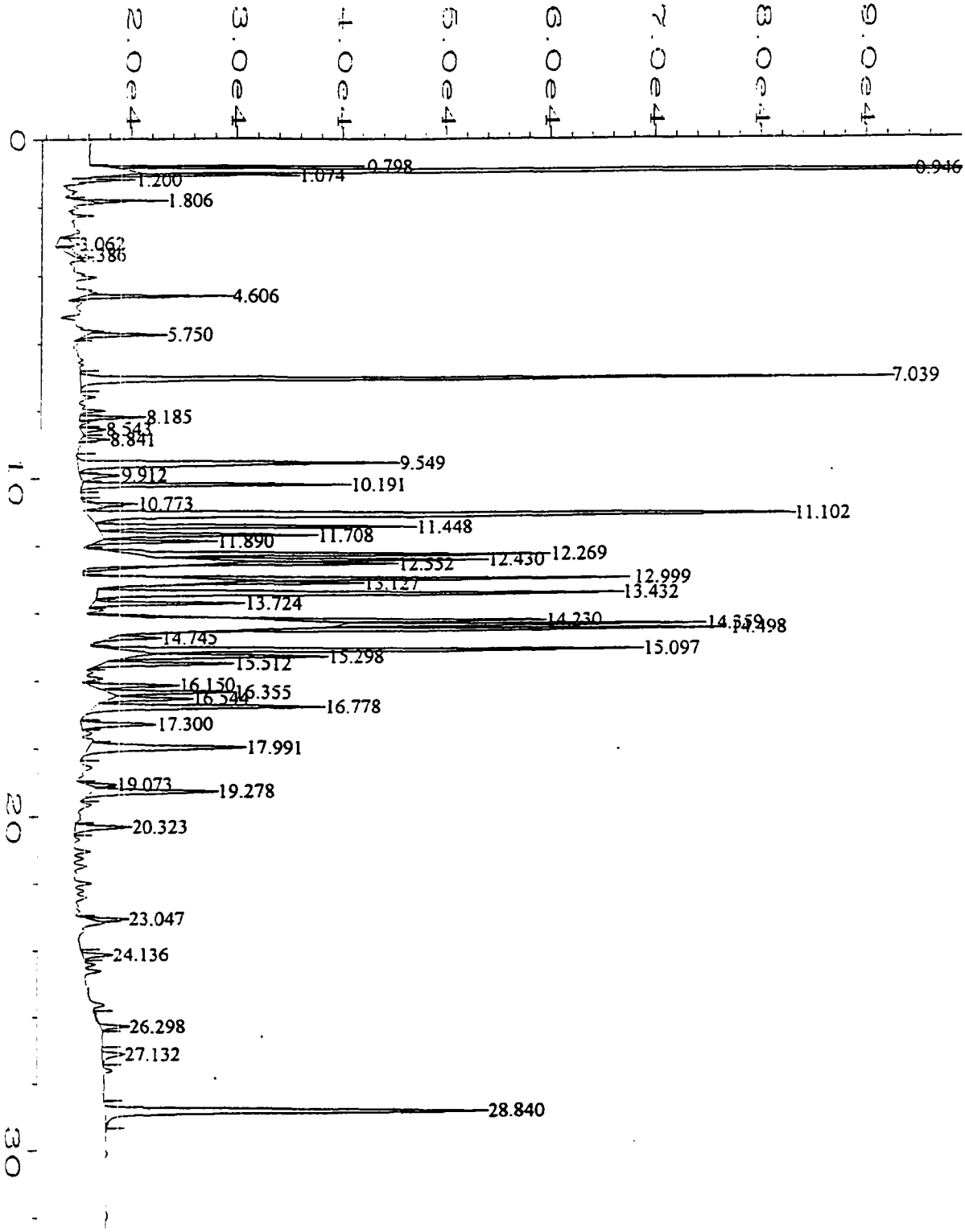
External Standard Report

ta File Name	: C:\HPCHEM\1\DATA\042497\033F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 33
mple Name	: 04-404-11 MS	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 11:57 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:44 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042497\033F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.319	656914	BB	0.066	1	0.289	TETRACHLORO-M-XYLENE 587
8.761	383978	BB	0.084	1	10.481	AR 1248 #1
10.020	1021772	BB	0.114	1	8.549	AR 1248 #2
12.292	498677	BB	0.085	1	9.361	AR 1248 #3
13.436	676571	BB	0.086	1	9.157	AR 1248 #4
14.431	668116	BB	0.088	1	9.120	AR 1248 #5
27.451	489842	BB	0.113	1	0.404	DECACHLOROBIPHENYL 817

AR 1248 Average Concentration: 9.334



ta File Name	: C:\HPCHEM\1\DATA\042497\083R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 83
ple Name	: 04-404-11 MS	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 11:57 AM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:50 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

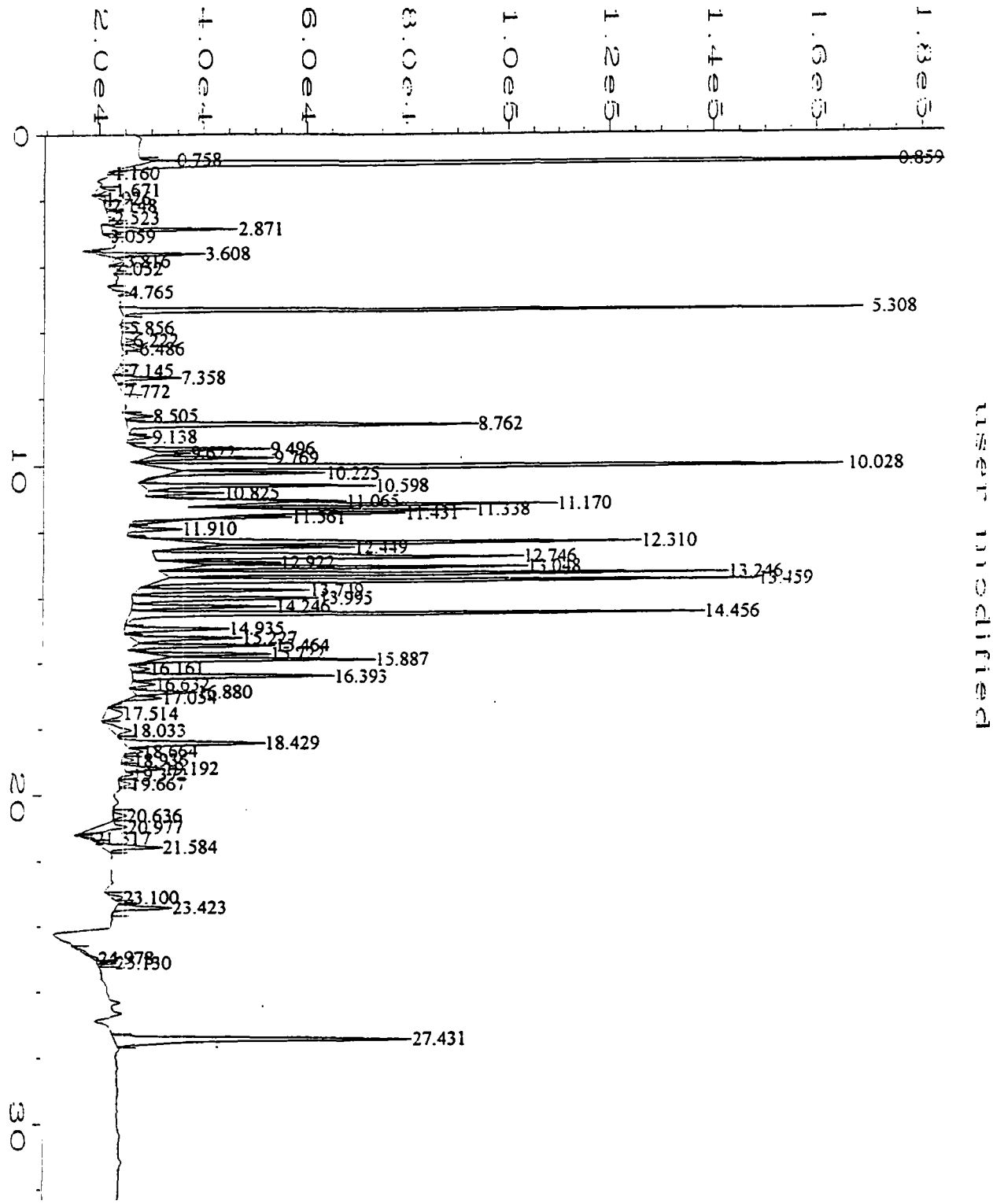
External Standard Report

ta File Name	: C:\HPCHEM\1\DATA\042497\083R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 83
mple Name	: 04-404-11 MS	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 11:57 AM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:50 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 2 in C:\HPCHEM\1\DATA\042497\083R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name	
7.039	356993	BB	0.070	1	0.316	TETRACHLORO-M-XYLENE	63%
9.549	215237	BB	0.099	1	10.752	AR 1248 #1	
11.102	518487	BB	0.126	1	8.687	AR 1248 #2	
12.269	202331	BB	0.081	1	9.133	AR 1248 #3	
13.432	326984	BB	0.103	1	9.208	AR 1248 #4	
15.097	285308	BB	0.091	1	9.807	AR 1248 #5	
28.840	301482	BB	0.129	1	0.369	DECACHLOROBIPHENYL	74%

AR 1248 Average Concentration: 9.517



a File Name : C:\HPCHEM\1\DATA\042497\034F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-12 MSD
Time Bar Code:
uired on : 25 Apr 97 12:33 PM
ort Created on: 25 Apr 97 02:45 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

Page Number : 1
Vial Number : 34
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

External Standard Report

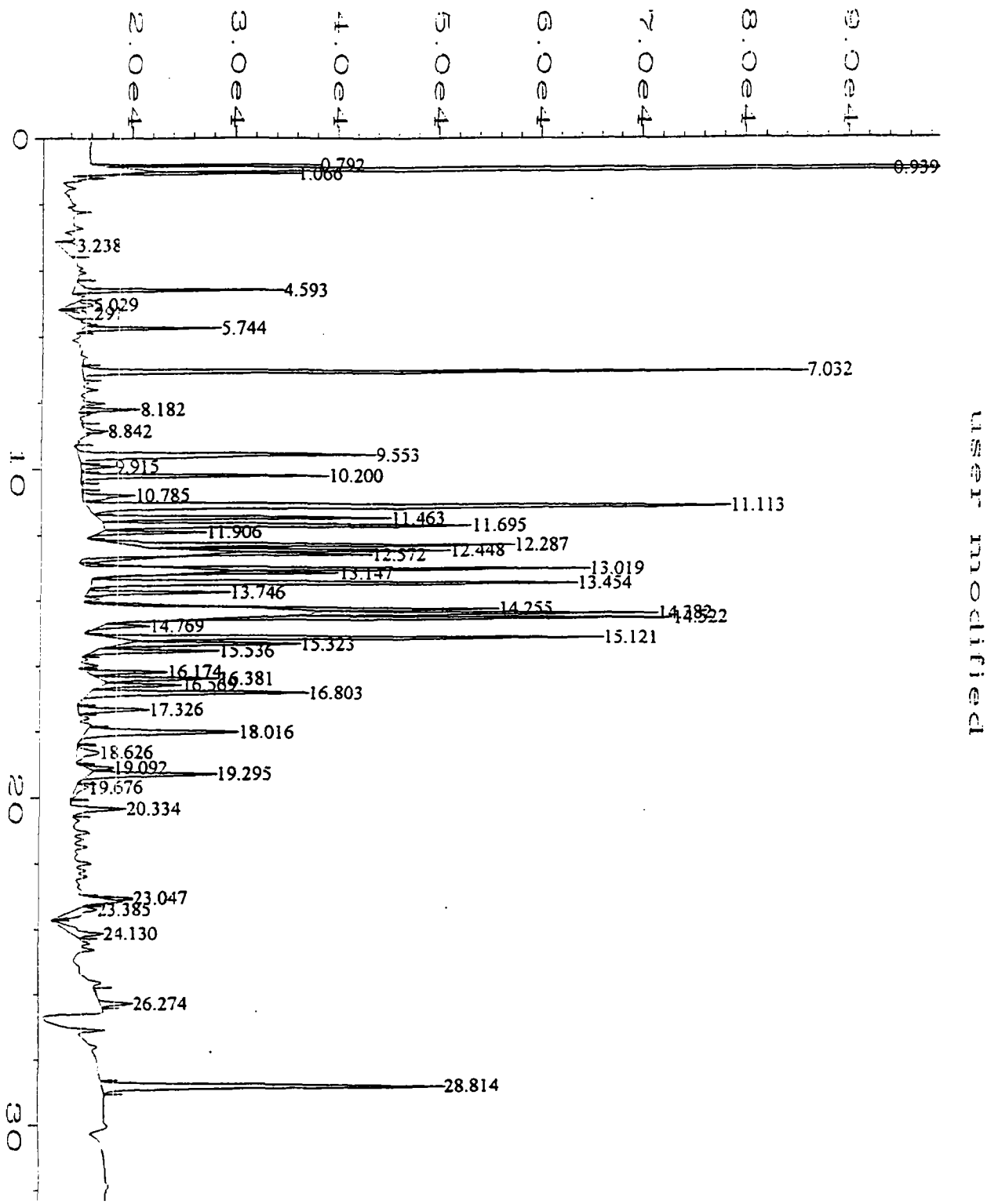
ta File Name	: C:\HPCHEM\1\DATA\042497\034F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 34
mple Name	: 04-404-12 MSD	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 12:33 PM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:45 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042497\034F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.308	624213	BB	0.066	1	0.275	TETRACHLORO-M-XYLENE 557
8.762	373123	BB	0.085	1	10.185	AR 1248 #1
10.028	891778	BB	0.110	1	7.461	AR 1248 #2
12.310	476182	BB	0.085	1	8.939	AR 1248 #3
13.459	642223	BB	0.086	1	8.692	AR 1248 #4
14.456	617317	BB	0.087	1	8.427	AR 1248 #5
27.431	438607	MM	0.125	1	0.362	DECACHLOROBIPHENYL 727

er Modified

AR 1248 Average Concentration: 8.741



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\084R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 84
mple Name	: 04-404-12 MSD	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 12:33 PM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:50 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

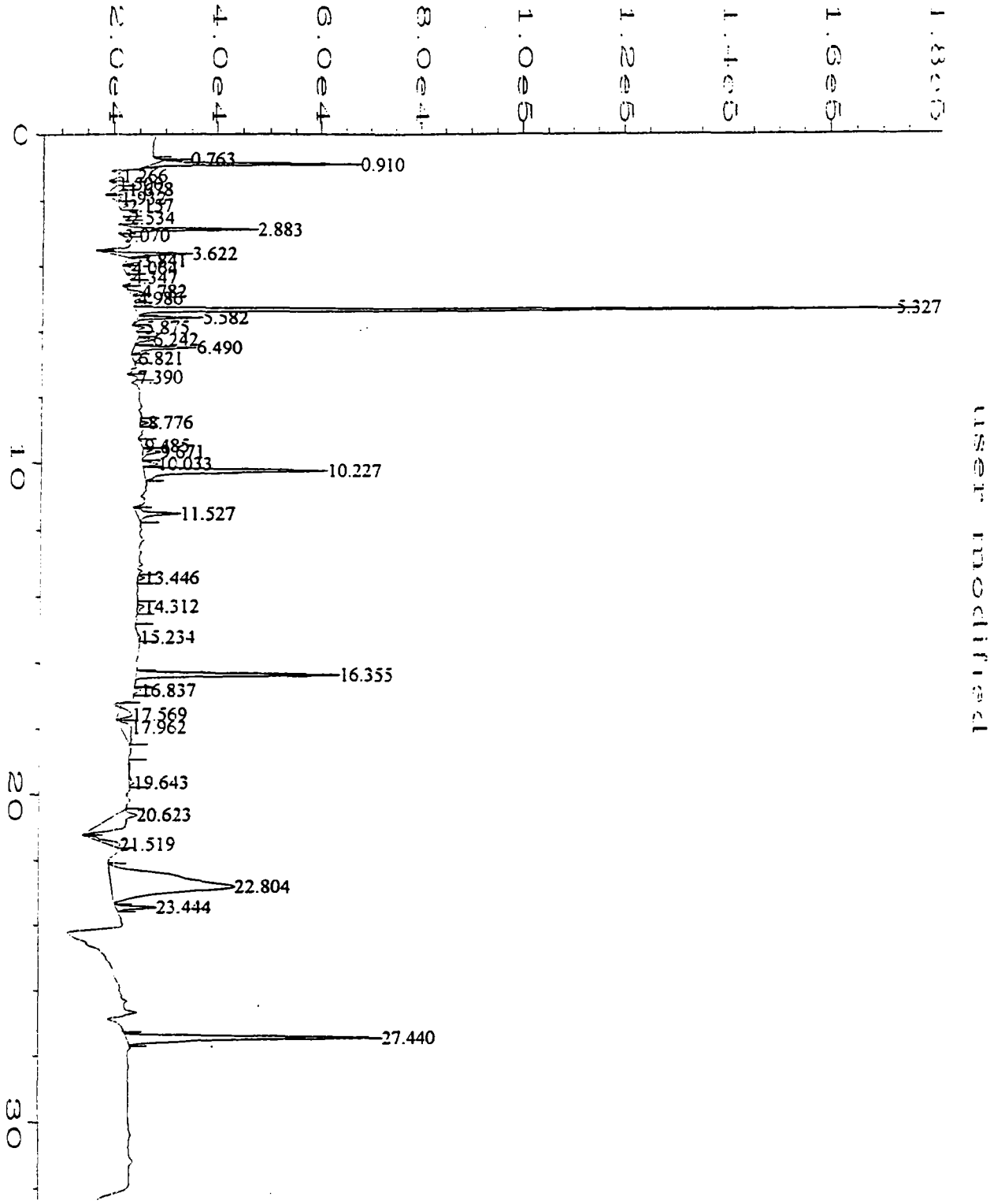
ta File Name	: C:\HPCHEM\1\DATA\042497\084R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 84
mple Name	: 04-404-12 MSD	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 12:33 PM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:50 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

g. 2 in C:\HPCHEM\1\DATA\042497\084R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.032	307355	BB	0.067	1	0.272	TETRACHLORO-M-XYLENE 557
9.553	203939	BB	0.099	1	10.187	AR 1248 #1
11.113	488334	BB	0.127	1	8.182	AR 1248 #2
12.287	190917	BB	0.081	1	8.618	AR 1248 #3
13.454	309291	BB	0.103	1	8.710	AR 1248 #4
15.121	272427	BB	0.091	1	9.364	AR 1248 #5
28.814	263458	MM	0.131	1	0.322	DECACHLOROBIPHENYL 647

er Modified

AR 1248 Average Concentration: 9.012



:a File Name	: C:\HPCHEM\1\DATA\042497\035F0301.D		
:rator	: ECL	Page Number	: 1
:trument	: HP4	Vial Number	: 35
ıple Name	: 04-404-13	Injection Number	: 1
ı Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 01:09 PM	Instrument Method:	1660F.MTH
›ort Created on:	25 Apr 97 02:45 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
.tiplier	: 0.01	ISTD Amount	:

External Standard Report

a File Name : C:\HPCHEM\1\DATA\042497\035F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-13
Time Bar Code:
uired on : 25 Apr 97 01:09 PM
ort Created on: 25 Apr 97 02:45 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

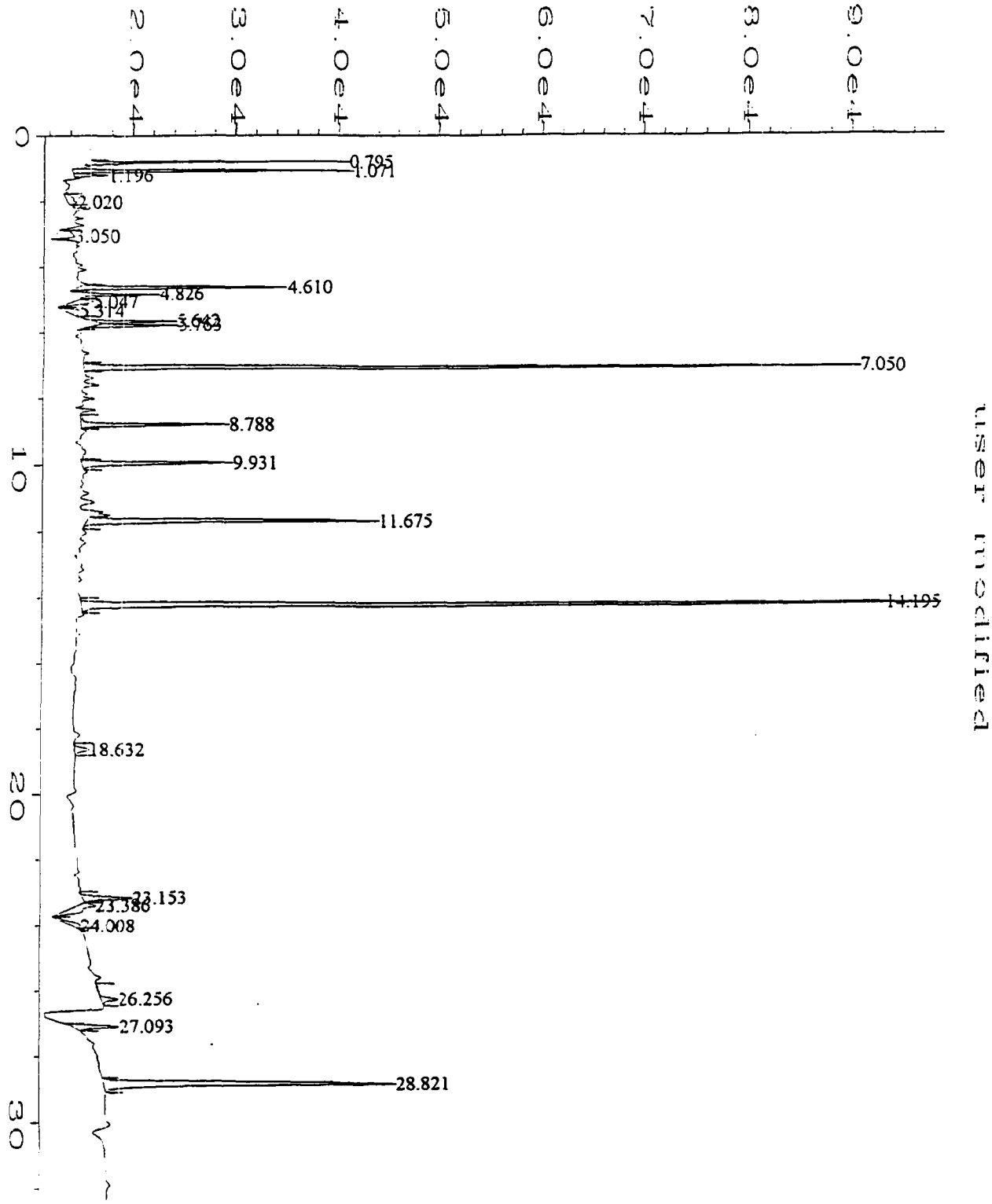
Page Number : 1
Vial Number : 35
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

. 1 in C:\HPCHEM\1\DATA\042497\035F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.327	637485	BB	0.065	1	0.280	TETRACHLORO-M-XYLENE 567
8.776	6812	BB	0.070	1	0.186	AR 1248 #1
0.033	17114	BB	0.098	1	0.143	AR 1248 #2
2.285	* not found *			1		AR 1248 #3
3.446	7876	BB	0.091	1	0.107	AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.440	390195	MM	0.130	1	0.322	DECACHLOROBIPHENYL 657

all calibrated peaks were found

r Modified



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\085R0301.D		
rator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 85
ple Name	: 04-404-13	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 01:09 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:50 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

a File Name : C:\HPCHEM\1\DATA\042497\085R0301.D
rator : ECL
trument : HP4
ple Name : 04-404-13
. Time Bar Code:
uired on : 25 Apr 97 01:09 PM
ort Created on: 25 Apr 97 02:50 PM
t Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

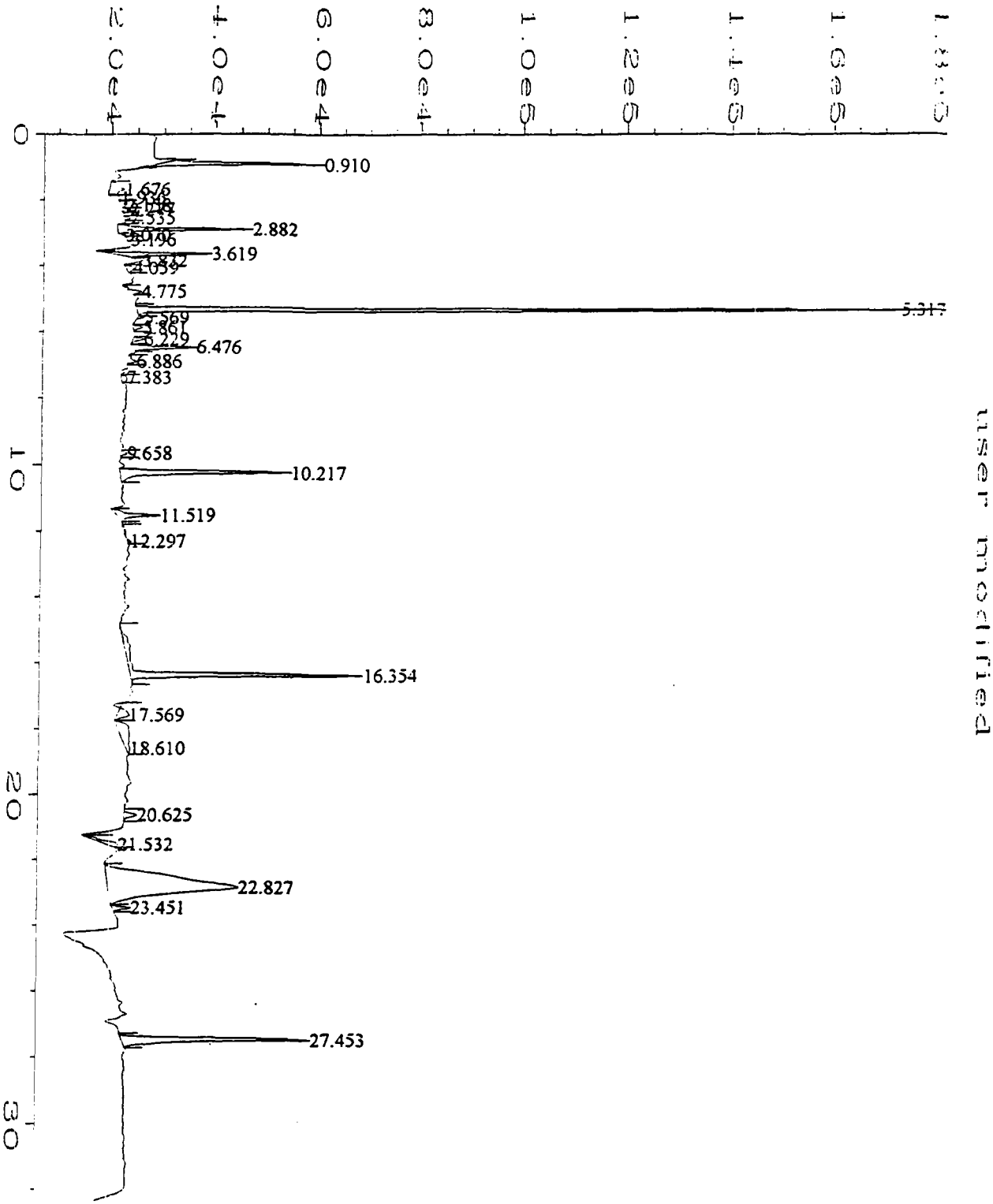
Page Number : 1
Vial Number : 85
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

. 2 in C:\HPCHEM\1\DATA\042497\085R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
7.050	317827	BB	0.066	1	0.281	TETRACHLORO-M-XYLENE 567
9.547	* not found *			1		AR 1248 #1
1.102	* not found *			1		AR 1248 #2
2.269	* not found *			1		AR 1248 #3
3.427	* not found *			1		AR 1248 #4
5.094	* not found *			1		AR 1248 #5
8.821	228251	MM	0.133	1	0.279	DECACHLOROBIPHENYL 567

all calibrated peaks were found

r Modified



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\036F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 36
mple Name	: 04-404-14	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 01:44 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 02:45 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

060070

External Standard Report

a File Name : C:\HPCHEM\1\DATA\042497\036F0301.D
rator : ECL
trument : HP4
ple Name : 04-404-14
Time Bar Code:
uired on : 25 Apr 97 01:44 PM
ort Created on: 25 Apr 97 02:45 PM
t Recalib on : 25 APR 97 11:08 AM
tiplier : 0.01

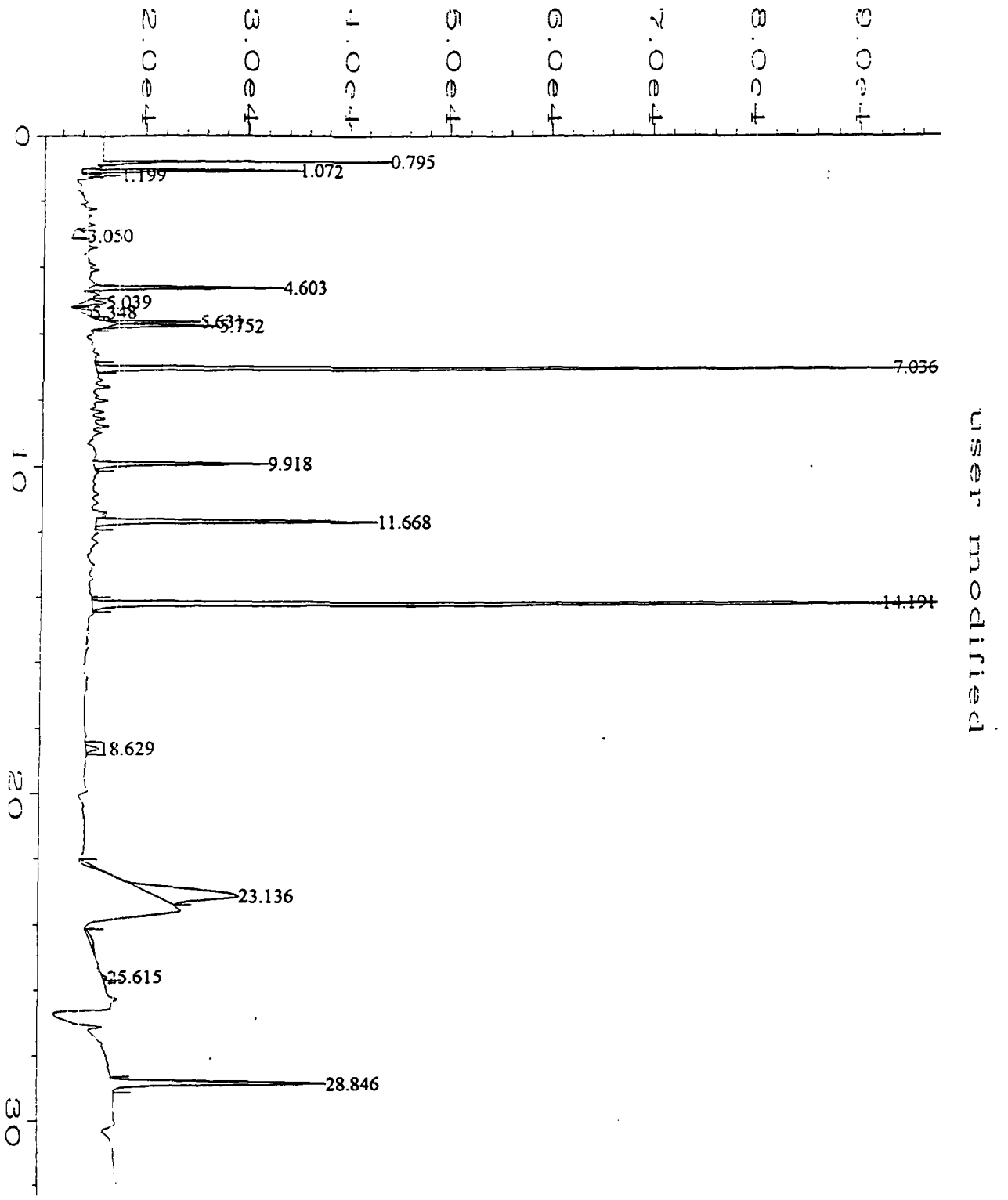
Page Number : 1
Vial Number : 36
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

. 1 in C:\HPCHEM\1\DATA\042497\036F0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
5.317	766712	BB	0.065	1	0.337	TETRACHLORO-M-XYLENE 677
8.757	* not found *			1		AR 1248 #1
0.016	* not found *			1		AR 1248 #2
2.297	1673	BB	0.057	1	0.0314	AR 1248 #3
3.429	* not found *			1		AR 1248 #4
4.423	* not found *			1		AR 1248 #5
7.453	275556	MV	0.126	1	0.227	DECACHLOROBIPHENYL 452

all calibrated peaks were found

r Modified



a File Name	: C:\HPCHEM\1\DATA\042497\086R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 86
ple Name	: 04-404-14	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
uired on	: 25 Apr 97 01:44 PM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 02:51 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

a File Name : C:\HPCHEM\1\DATA\042497\086R0301.D
rator : ECL
trument : HP4
ple Name : 04-404-14
Time Bar Code:
uired on : 25 Apr 97 01:44 PM
ort Created on: 25 Apr 97 02:51 PM
t Recalib on : 25 APR 97 11:15 AM
tiplier : 0.01

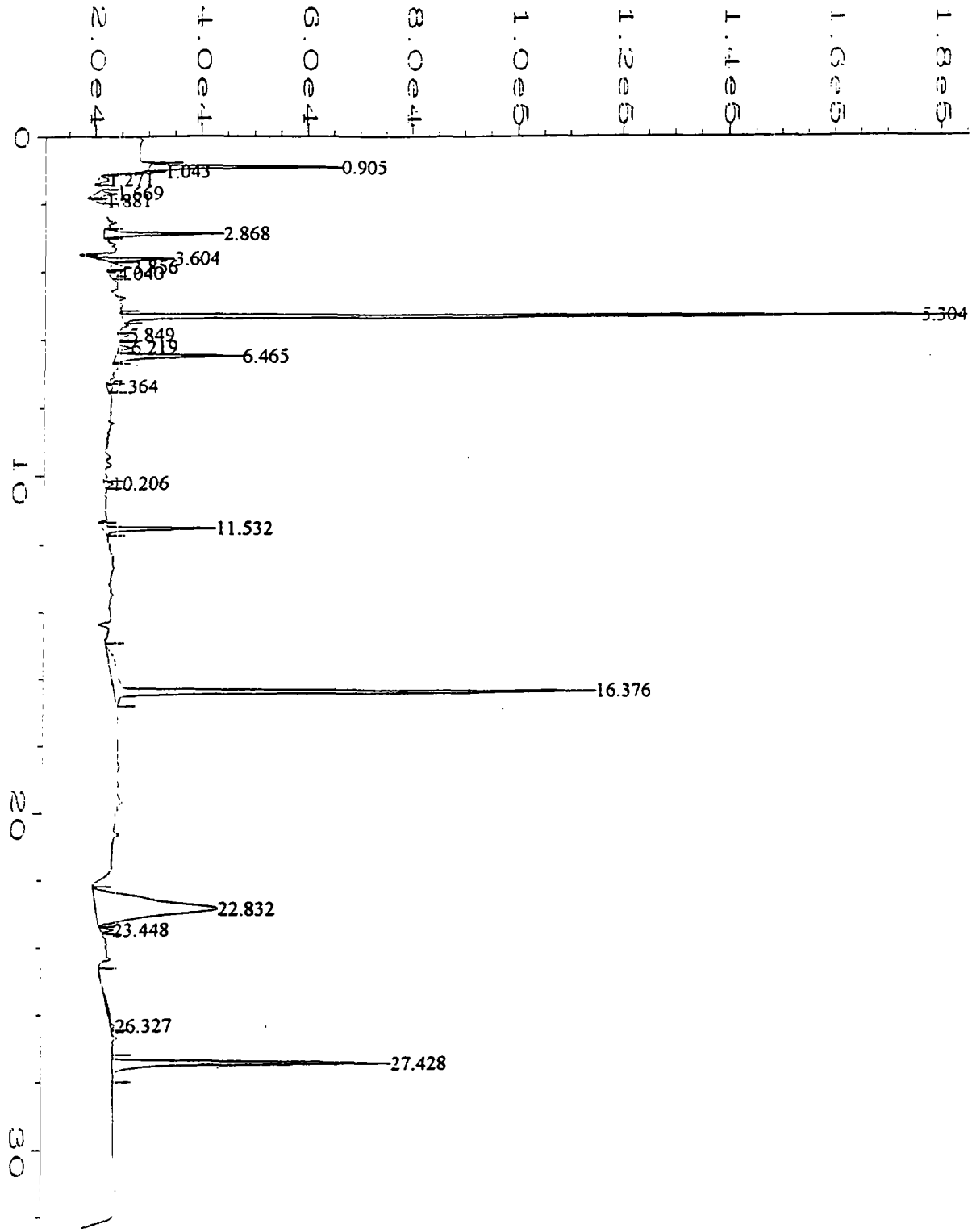
Page Number : 1
Vial Number : 86
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

. 2 in C:\HPCHEM\1\DATA\042497\086R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
7.036	378320	BB	0.066	1	0.334	TETRACHLORO-M-XYLENE 677
9.547	* not found *			1		AR 1248 #1
1.102	* not found *			1		AR 1248 #2
2.269	* not found *			1		AR 1248 #3
3.427	* not found *			1		AR 1248 #4
5.094	* not found *			1		AR 1248 #5
8.846	163786	MM	0.130	1	0.200	DECACHLOROBIPHENYL 407

all calibrated peaks were found

r Modified



ta File Name	: C:\HPCHEM\1\DATA\042497\037F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 37
mple Name	: 04-404-15	Injection Number	: 1
n Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 02:20 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 03:03 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

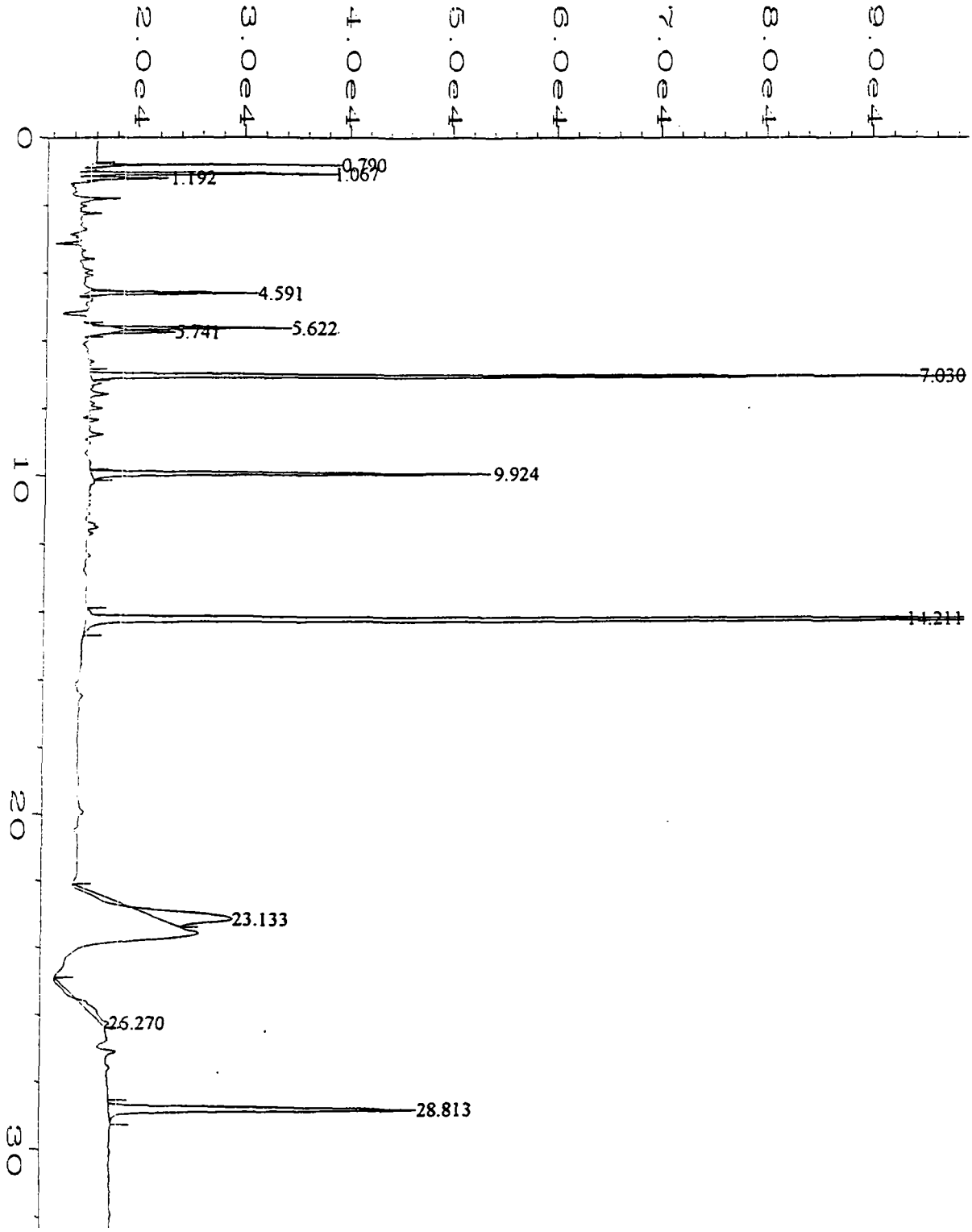
:a File Name : C:\HPCHEM\1\DATA\042497\037F0301.D
erator : ECL
strument : HP4
mple Name : 04-404-15
1 Time Bar Code:
quired on : 25 Apr 97 02:20 PM
port Created on: 25 Apr 97 03:03 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042497\037F0301.D

: Time	Area	Type	Width	Ref#	UG/L	Name
5.304	737787	BB	0.066	1	0.325	TETRACHLORO-M-XYLENE 657
8.757	* not found *			1		AR 1248 #1
10.016	* not found *			1		AR 1248 #2
12.285	* not found *			1		AR 1248 #3
13.429	* not found *			1		AR 1248 #4
14.423	* not found *			1		AR 1248 #5
27.428	386014	BB	0.114	1	0.318	DECACHLOROBIPHENYL 647

: all calibrated peaks were found



a File Name	: C:\HPCHEM\1\DATA\042497\087R0301.D		
rator	: ECL	Page Number	: 1
trument	: HP4	Vial Number	: 87
ple Name	: 04-404-15	Injection Number	: 1
Time Bar Code	:	Sequence Line	: 3
uired on	: 25 Apr 97 02:20 PM	Instrument Method	: 1660F.MTH
ort Created on	: 25 Apr 97 03:02 PM	Analysis Method	: 1248R.MTH
t Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
tiplier	: 0.01	ISTD Amount	:

External Standard Report

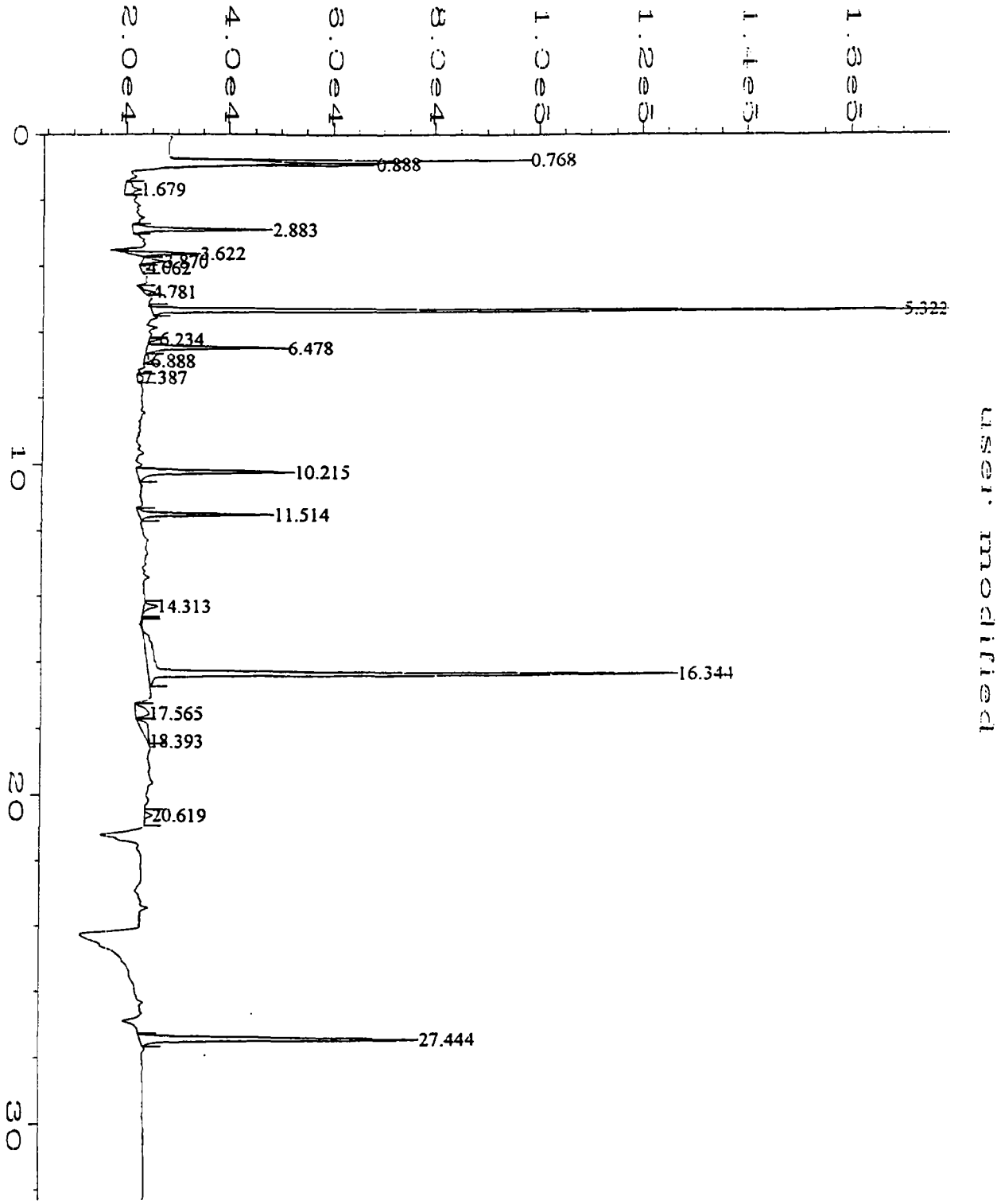
:a File Name : C:\HPCHEM\1\DATA\042497\087R0301.D
:rator : ECL
:trument : HP4
ıple Name : 04-404-15
ı Time Bar Code:
quired on : 25 Apr 97 02:20 PM
ort Created on: 25 Apr 97 03:02 PM
:t Recalib on : 25 APR 97 11:15 AM
.tiplier : 0.01

Page Number : 1
Vial Number : 87
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

;. 2 in C:\HPCHEM\1\DATA\042497\087R0301.D

Time	Area	Type	Width	Ref#	UG/L	Name
7.030	366028	BB	0.065	1	0.324	TETRACHLORO-M-XYLENE 657
9.547	* not found *			1		AR 1248 #1
.1.102	* not found *			1		AR 1248 #2
.2.269	* not found *			1		AR 1248 #3
.3.427	* not found *			1		AR 1248 #4
.5.094	* not found *			1		AR 1248 #5
8.813	238619	BB	0.128	1	0.292	DECACHLOROBIPHENYL 587

: all calibrated peaks were found



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\038F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 38
mple Name	: 04-404-16	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 02:56 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 03:40 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

000078

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\038F0301.D
erator : ECL
strument : HP4
mple Name : 04-404-16
n Time Bar Code:
quired on : 25 Apr 97 02:56 PM
port Created on: 25 Apr 97 03:39 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 0.01

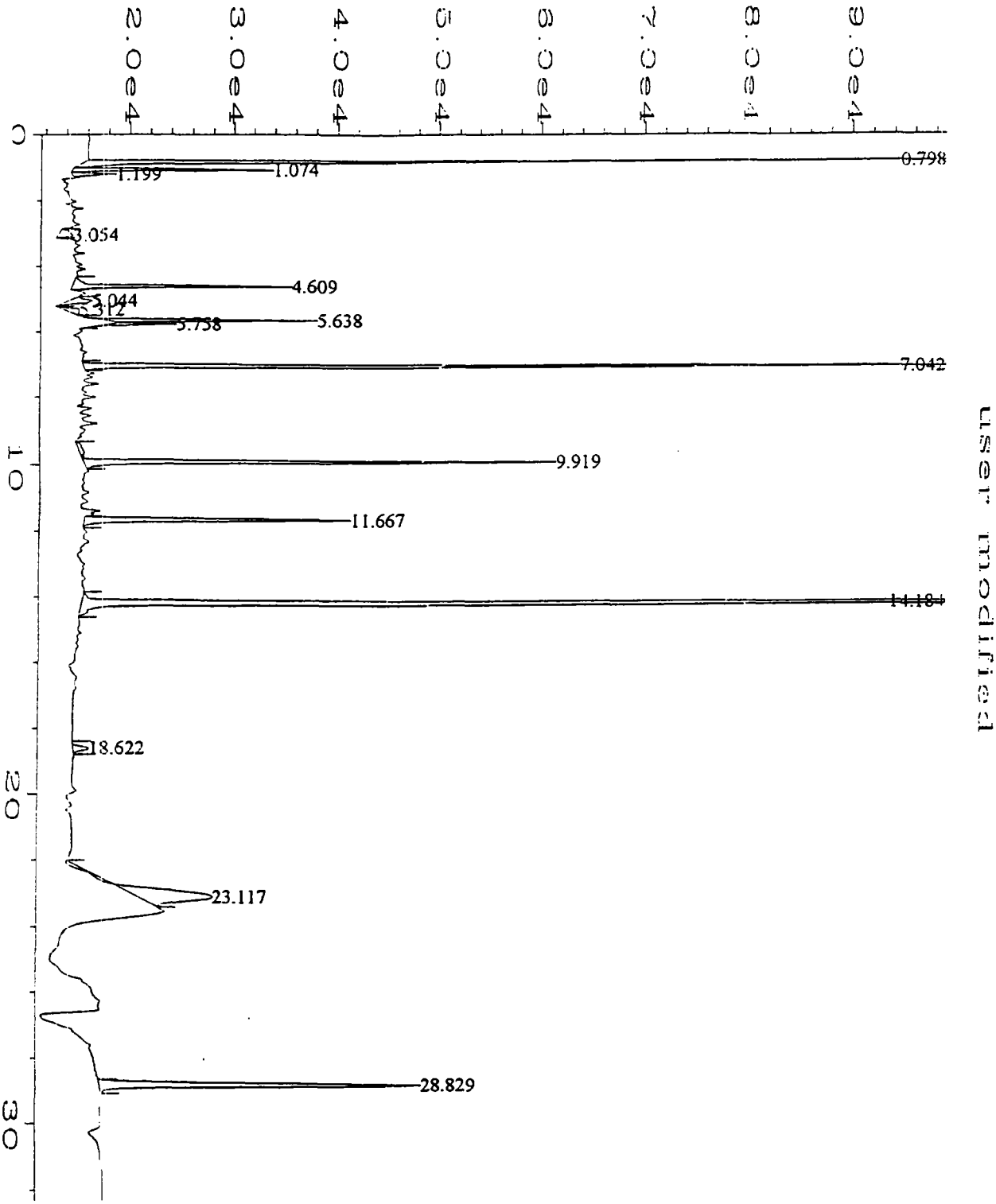
Page Number : 1
Vial Number : 38
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042497\038F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.322	707831	BB	0.066	1	0.311	TETRACHLORO-M-XYLENE 627
8.757	* not found *			1		AR 1248 #1
10.016	* not found *			1		AR 1248 #2
12.285	* not found *			1		AR 1248 #3
13.429	* not found *			1		AR 1248 #4
14.423	* not found *			1		AR 1248 #5
27.444	375024	MM	0.115	1	0.309	DECACHLOROBIPHENYL 629

t all calibrated peaks were found

er Modified



ta File Name	: C:\HPCHEM\1\DATA\042497\088R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 88
mple Name	: 04-404-16	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 02:56 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 03:40 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\088R0301.D
erator : ECL
strument : HP4
mple Name : 04-404-16
n Time Bar Code:
quired on : 25 Apr 97 02:56 PM
port Created on: 25 Apr 97 03:40 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 0.01

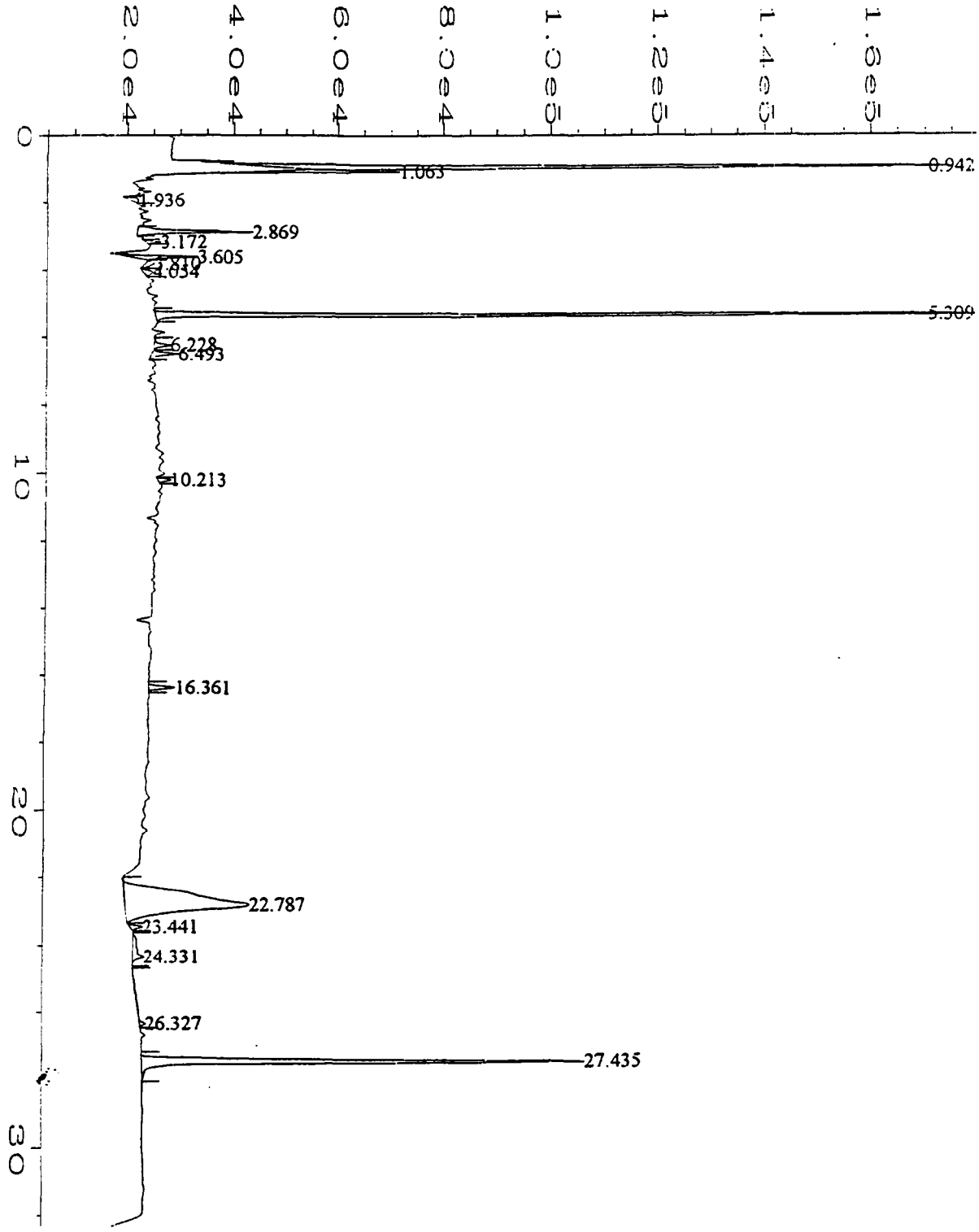
Page Number : 1
Vial Number : 88
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\088R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.042	357003	BB	0.065	1	0.316	TETRACHLORO-M-XYLENE 637
9.547	* not found *			1		AR 1248 #1
11.102	* not found *			1		AR 1248 #2
12.269	* not found *			1		AR 1248 #3
13.427	* not found *			1		AR 1248 #4
15.094	* not found *			1		AR 1248 #5
28.829	244941	MM	0.131	1	0.300	DECACHLOROBIPHENYL 607

t all calibrated peaks were found

er Modified



ta File Name	: C:\HPCHEM\1\DATA\042497\039F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 39
mple Name	: 04-404-17	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 03:32 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 04:08 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

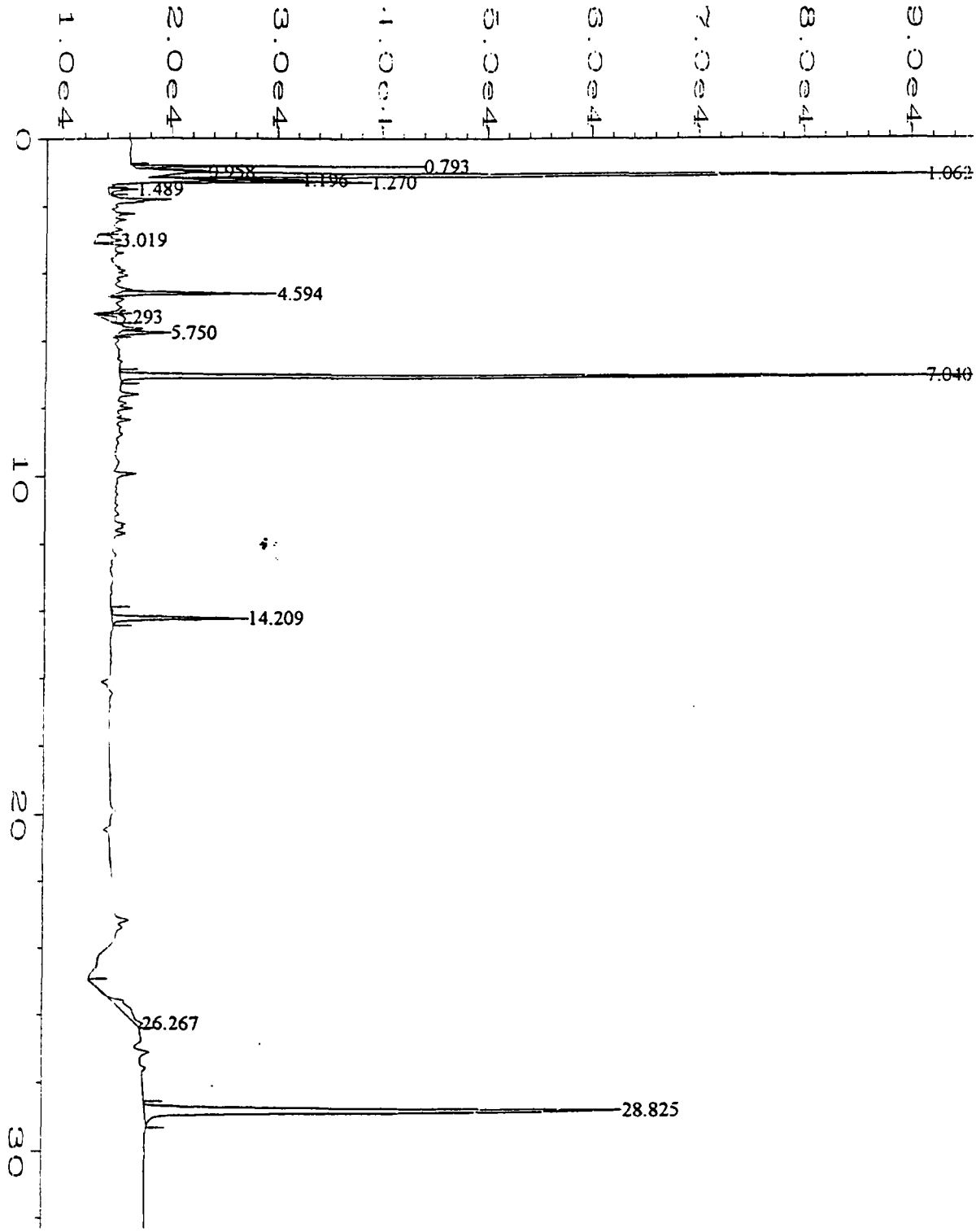
ta File Name : C:\HPCHEM\1\DATA\042497\039F0301.D
erator : ECL
strument : HP4
mple Name : 04-404-17
n Time Bar Code:
quired on : 25 Apr 97 03:32 PM
port Created on: 25 Apr 97 04:08 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 0.01

Page Number : 1
Vial Number : 39
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042497\039F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.309	869718	BB	0.066	1	0.383	TETRACHLORO-M-XYLENE 77?
8.757	* not found *			1		AR 1248 #1
10.016	* not found *			1		AR 1248 #2
12.285	* not found *			1		AR 1248 #3
13.429	* not found *			1		AR 1248 #4
14.423	* not found *			1		AR 1248 #5
27.435	593083	BB	0.110	1	0.489	DECACHLOROBIPHENYL 98?

t all calibrated peaks were found



ta File Name	: C:\HPCHEM\1\DATA\042497\089R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 89
mple Name	: 04-404-17	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 03:32 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 04:08 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 0.01	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\089R0301.D
erator : ECL
strument : HP4
mple Name : 04-404-17
n Time Bar Code:
quired on : 25 Apr 97 03:32 PM
port Created on: 25 Apr 97 04:08 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 0.01

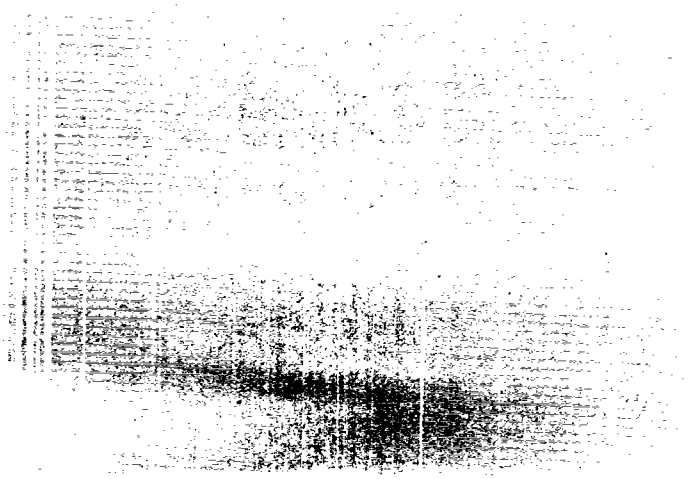
Page Number : 1
Vial Number : 89
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\089R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.040	410188	BB	0.066	1	0.363	TETRACHLORO-M-XYLENE 732
9.547	* not found *			1		AR 1248 #1
11.102	* not found *			1		AR 1248 #2
12.269	* not found *			1		AR 1248 #3
13.427	* not found *			1		AR 1248 #4
15.094	* not found *			1		AR 1248 #5
28.825	375235	BB	0.130	1	0.459	DECACHLOROBIPHENYL 927

t all calibrated peaks were found

STANDARDS DATA



AVERAGE RESPONSE FACTOR CALIBRATION DATA

Calculation Type : External Standard
5-Pt. Calibration Date : 25 Apr 97 11:07 AM
Method File : c:\hpchem\1\methods\1248f.mth
Instrument Name : HP4
Report Date : 25 Apr 97 11:08 AM
%RSD Limit : 20.0

Compound Name	Level Response Factor Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Avg. RF	%RSD
TETRACHLORO-M-XYLENE	2.718E+04	2.487E+04	2.186E+04	1.993E+04	1.980E+04		2.273E+04	14.18
AR 1248 #1	4.101E+02	4.274E+02	3.653E+02	3.191E+02	3.098E+02		3.663E+02	14.36
AR 1248 #2	1.419E+03	1.438E+03	1.148E+03	9.983E+02	9.732E+02		1.195E+03	18.66
AR 1248 #3	6.065E+02	6.285E+02	5.276E+02	4.587E+02	4.423E+02		5.327E+02	15.79
AR 1248 #4	8.416E+02	8.603E+02	7.198E+02	6.371E+02	6.357E+02		7.389E+02	14.62
AR 1248 #5	8.566E+02	8.590E+02	6.948E+02	6.226E+02	6.299E+02		7.326E+02	16.07
DECACHLOROBIPHENYL	1.293E+04	1.341E+04	1.204E+04	1.099E+04	1.124E+04		1.212E+04	8.63

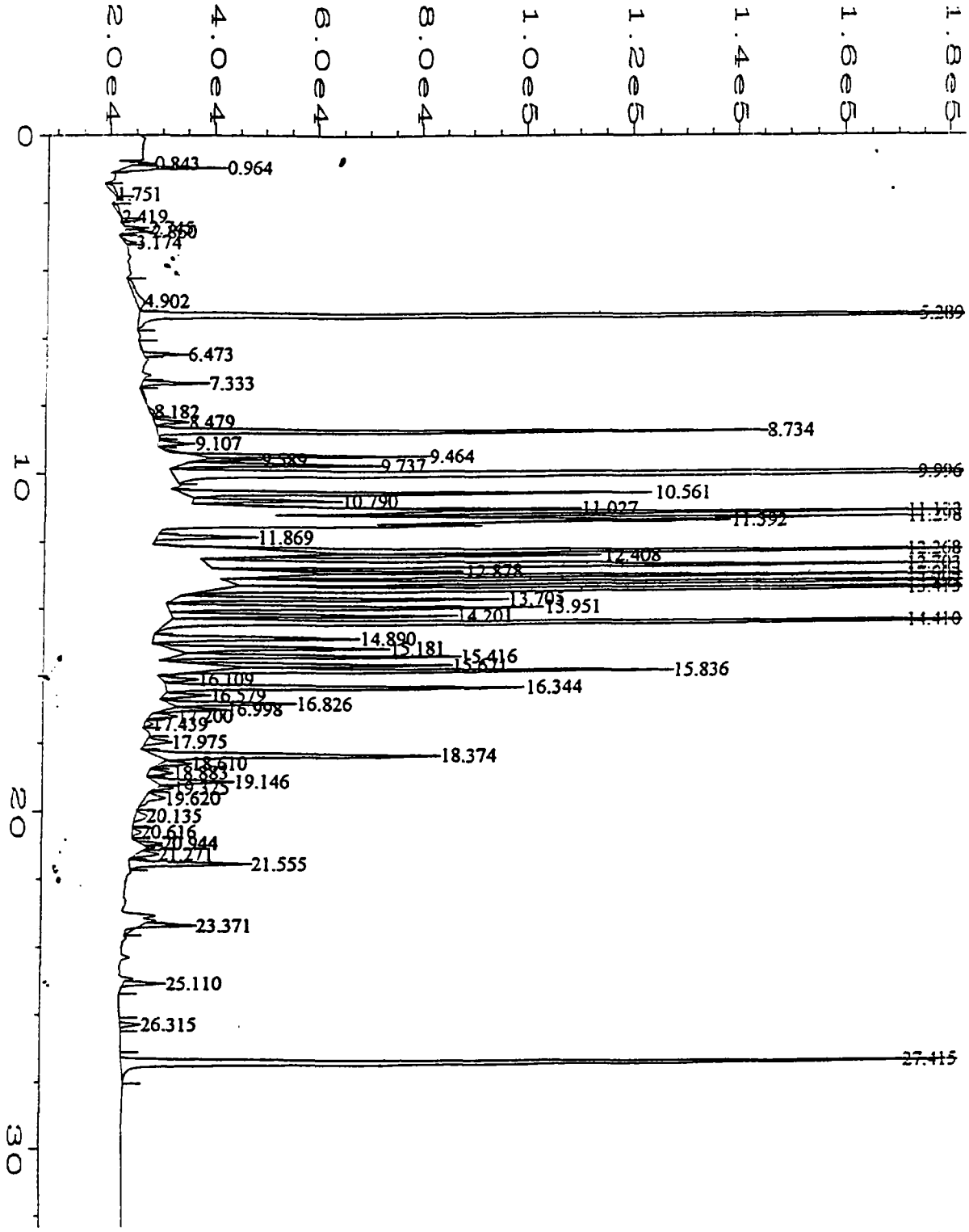
-- = Exceeds %RSD Limit Level(s) 6 Excluded From Report

AVERAGE RESPONSE FACTOR CALIBRATION DATA

Calculation Type : External Standard
5-Pt. Calibration Date : 25 Apr 97 11:14 AM
Method File : c:\hpchem\1\methods\1248r.mth
Instrument Name : HP4
Report Date : 25 Apr 97 11:15 AM
%RSD Limit : 20.0

Compound Name	Level Response Factor Level 1	Level 2	Level 3	Level 4	Level 5	Avg. RF	%RSD
TETRACHLORO-M-XYLENE	1.241E+04	1.251E+04	1.112E+04	9.988E+03	1.053E+04	1.131E+04	9.93
AR 1248 #1	2.044E+02	2.169E+02	2.112E+02	1.867E+02	1.818E+02	2.002E+02	7.66
AR 1248 #2	6.897E+02	6.797E+02	5.871E+02	5.126E+02	5.152E+02	5.969E+02	14.35
AR 1248 #3	2.556E+02	2.502E+02	2.180E+02	1.927E+02	1.912E+02	2.215E+02	13.81
AR 1248 #4	3.955E+02	3.860E+02	3.524E+02	3.158E+02	3.259E+02	3.551E+02	9.95
AR 1248 #5	2.932E+02	2.969E+02	2.983E+02	2.716E+02	2.946E+02	2.909E+02	3.78
DECACHLOROBIPHENYL	8.627E+03	8.668E+03	8.305E+03	7.558E+03	7.691E+03	8.170E+03	6.36

-- = Exceeds %RSD Limit



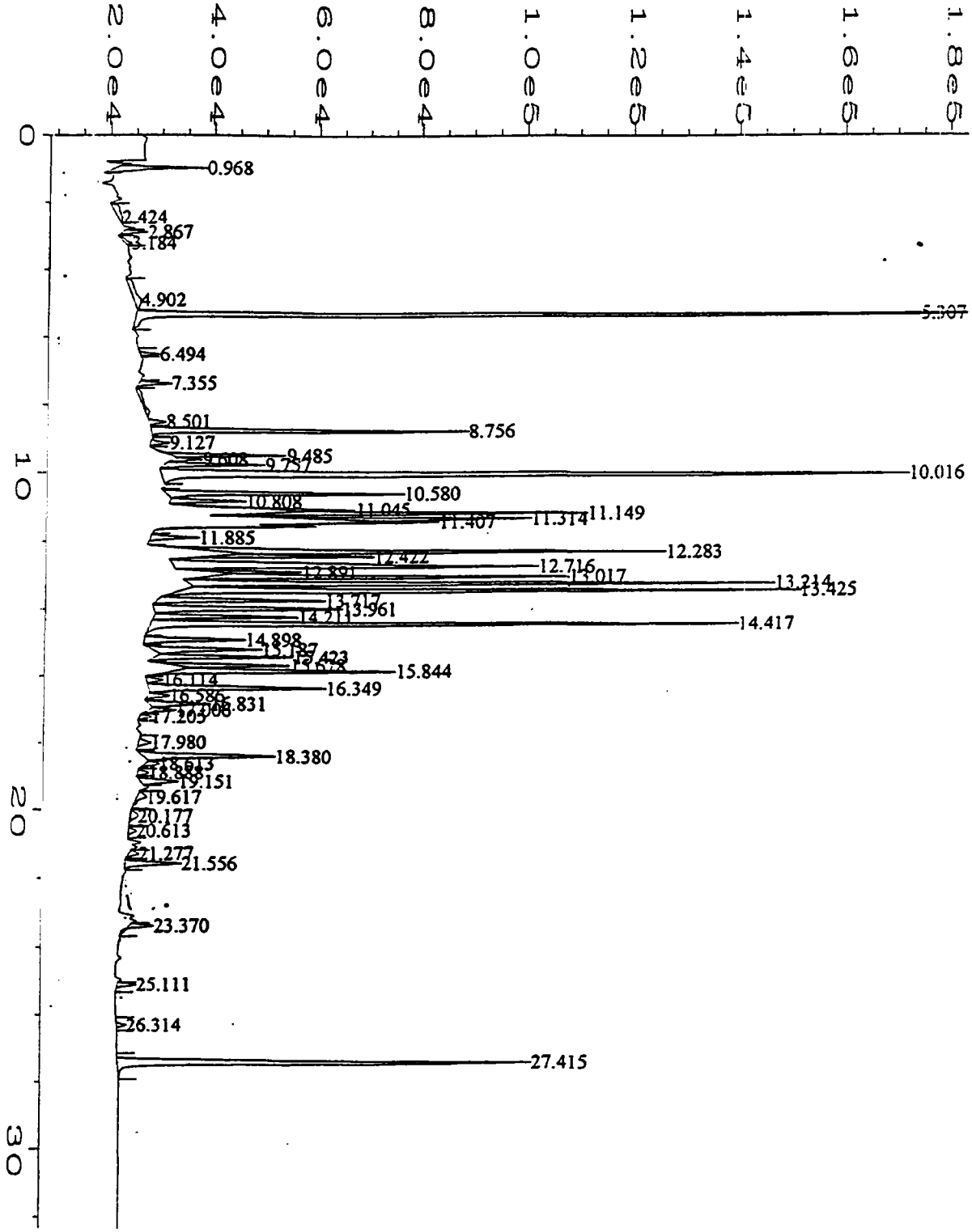
ata File Name	: C:\HPCHEM\1\DATA\042497\003F0101.D		
perator	: ECL	Page Number	: 1
nstrument	: HP4	Vial Number	: 3
ample Name	: 1248 2.0 PPM	Injection Number	: 1
un Time Bar Code:		Sequence Line	: 1
cquired on	: 24 Apr 97 05:24 PM	Instrument Method	: 1660F.MTH
eport Created on	: 25 Apr 97 11:05 AM	Analysis Method	: 1248F.MTH
ast Recalib on	: 14 MAR 97 08:38 AM	Sample Amount	: 0
ultiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\003F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 3
Sample Name	: 1248 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 05:24 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:08 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\003F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.289	1980172	BB	0.068	1	87.121	TETRACHLORO-M-XYLENE
8.734	619660	BB	0.083	1	1691.475	AR 1248 #1
9.996	1946488	BB	0.115	1	1628.534	AR 1248 #2
12.268	884672	BB	0.082	1	1660.719	AR 1248 #3
13.413	1271370	BB	0.085	1	1720.649	AR 1248 #4
14.410	1259793	BB	0.087	1	1719.674	AR 1248 #5
27.415	1124415	BB	0.109	1	92.755	DECACHLOROBIPHENYL



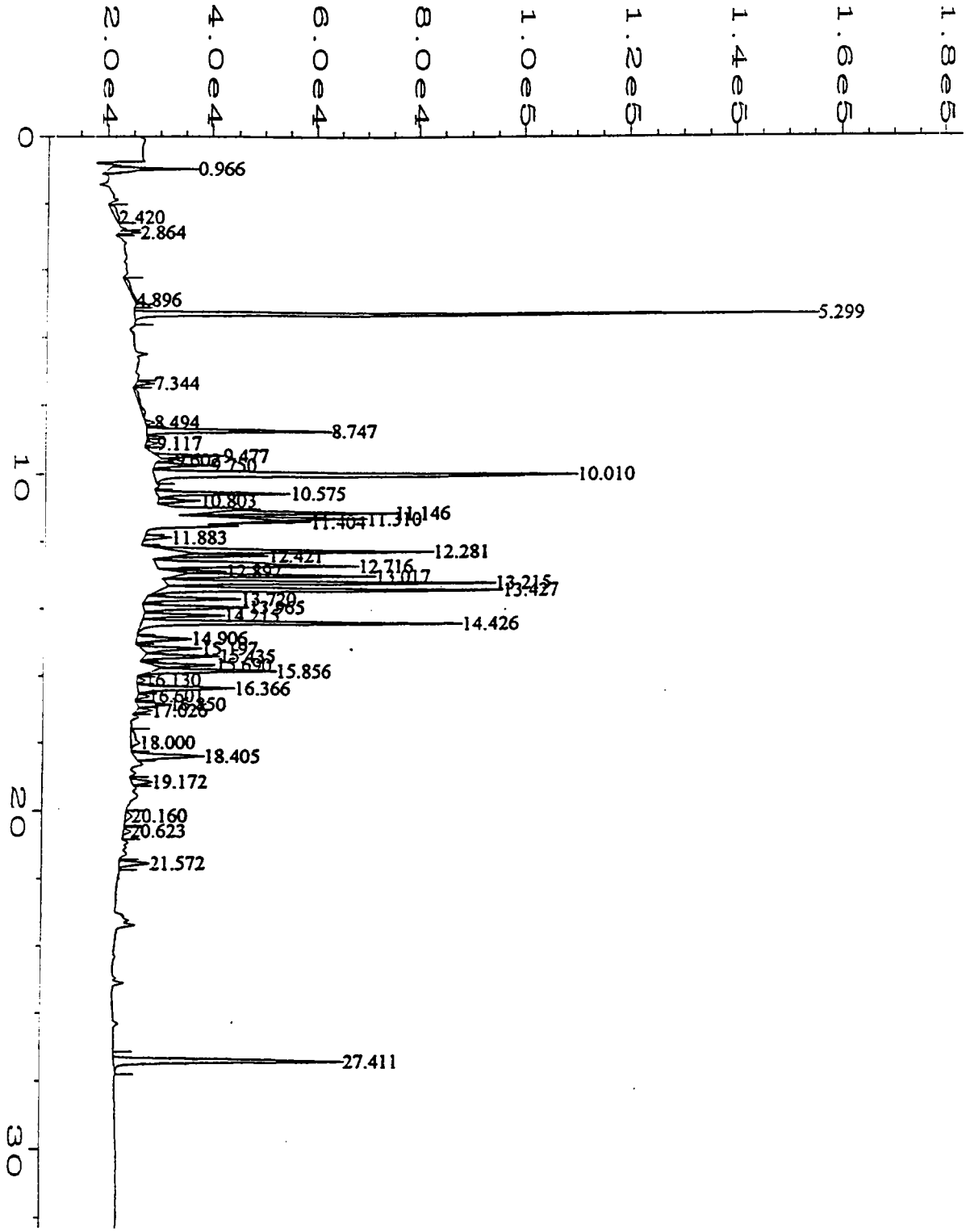
Data File Name	: C:\HPCHEM\1\DATA\042497\004F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 4
Sample Name	: 1248 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:00 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\004F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 4
Sample Name	: 1248 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:00 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\004F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.307	996604	BB	0.067	1	43.847	TETRACHLORO-M-XYLENE
8.756	319074	BB	0.082	1	870.970	AR 1248 #1
10.016	998287	BB	0.114	1	835.220	AR 1248 #2
12.283	458666	BB	0.083	1	861.014	AR 1248 #3
13.425	637103	BB	0.083	1	862.243	AR 1248 #4
14.417	622577	BB	0.086	1	849.845	AR 1248 #5
27.415	549444	BB	0.109	1	45.324	DECACHLOROBIPHENYL



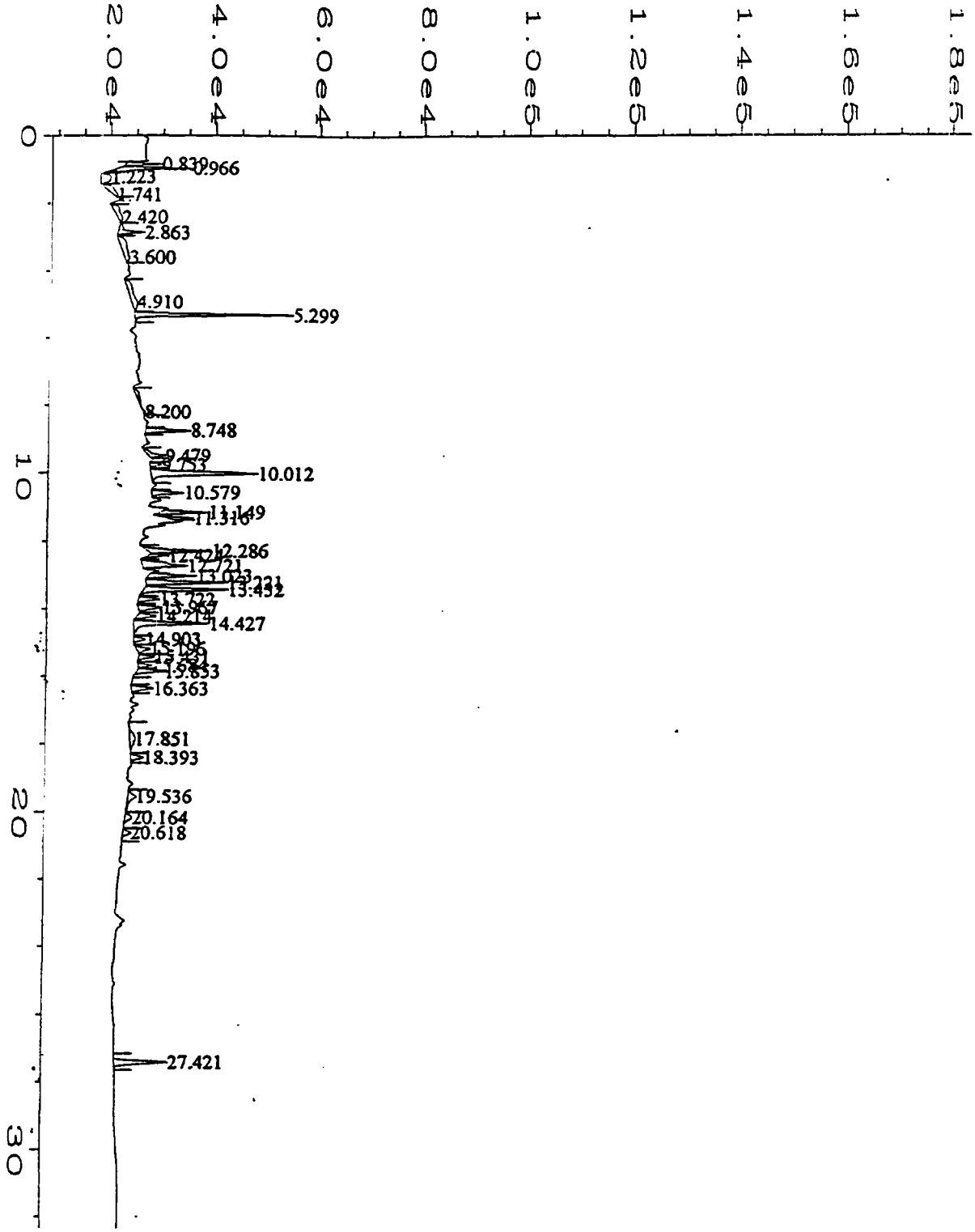
Data File Name	: C:\HPCHEM\1\DATA\042497\005F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 5
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:36 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\005F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 5
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:36 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\005F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.299	546428	BB	0.065	1	24.041	TETRACHLORO-M-XYLENE
8.747	182645	BB	0.080	1	498.564	AR 1248 #1
10.010	574069	BB	0.114	1	480.297	AR 1248 #2
12.281	263792	BB	0.084	1	495.195	AR 1248 #3
13.427	359889	BB	0.086	1	487.067	AR 1248 #4
14.426	347397	BB	0.088	1	474.212	AR 1248 #5
27.411	300907	BB	0.109	1	24.822	DECACHLOROBIPHENYL



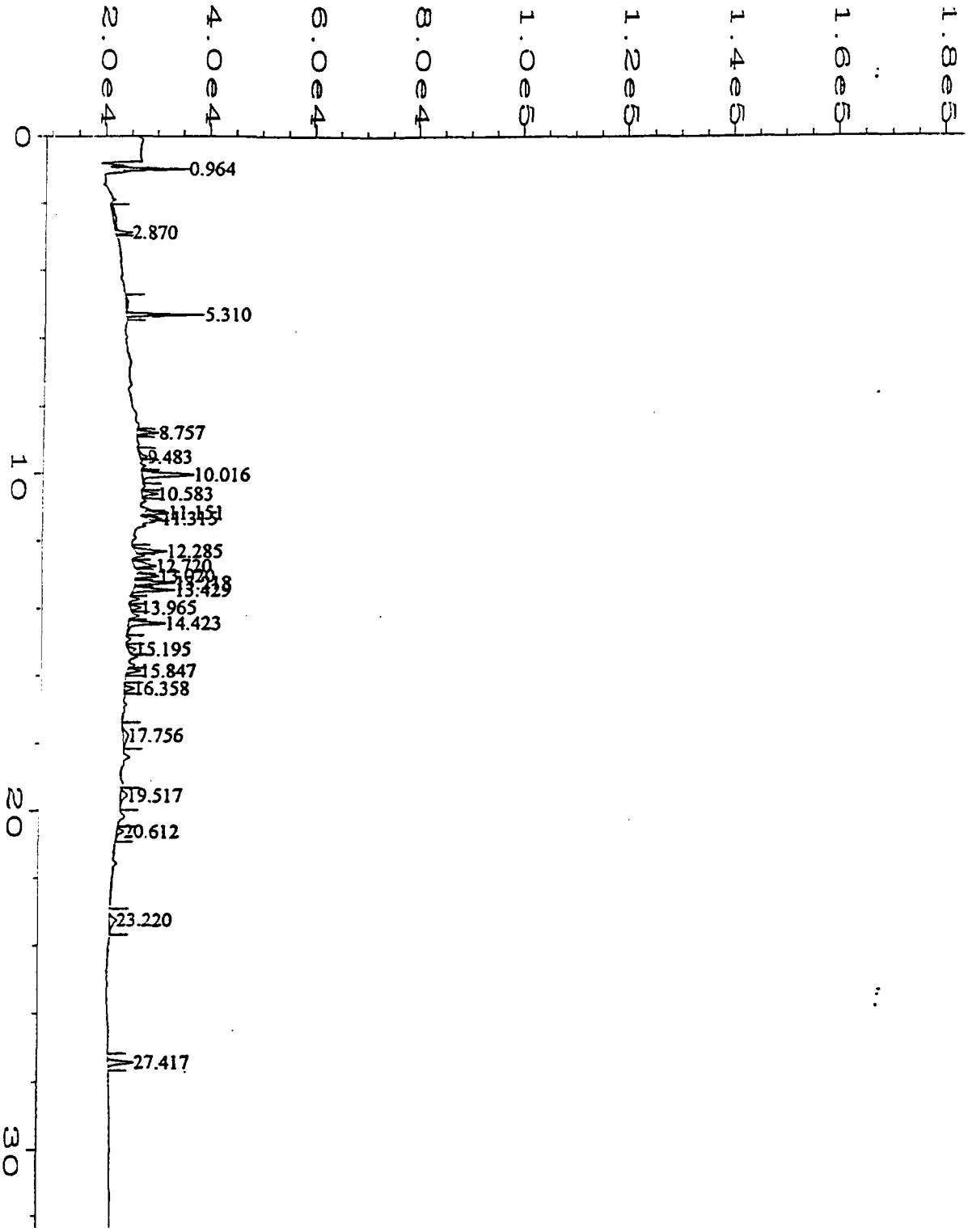
ata File Name	: C:\HPCHEM\1\DATA\042497\006F0101.D		
perator	: ECL	Page Number	: 1
nstrument	: HP4	Vial Number	: 6
ample Name	: 1248 0.1 PPM	Injection Number	: 1
un Time Bar Code:		Sequence Line	: 1
cquired on	: 24 Apr 97 07:12 PM	Instrument Method:	1660F.MTH
eport Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
ast Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ultiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\006F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 6
Sample Name	: 1248 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:12 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\006F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.299	124359	BB	0.064	1	5.471	TETRACHLORO-M-XYLENE
8.748	42741	BB	0.077	1	116.670	AR 1248 #1
10.012	143793	BB	0.113	1	120.305	AR 1248 #2
12.286	62846	BB	0.080	1	117.976	AR 1248 #3
13.432	86032	BB	0.083	1	116.435	AR 1248 #4
14.427	85904	BB	0.090	1	117.262	AR 1248 #5
27.421	67050	BB	0.104	1	5.531	DECACHLOROBIPHENYL



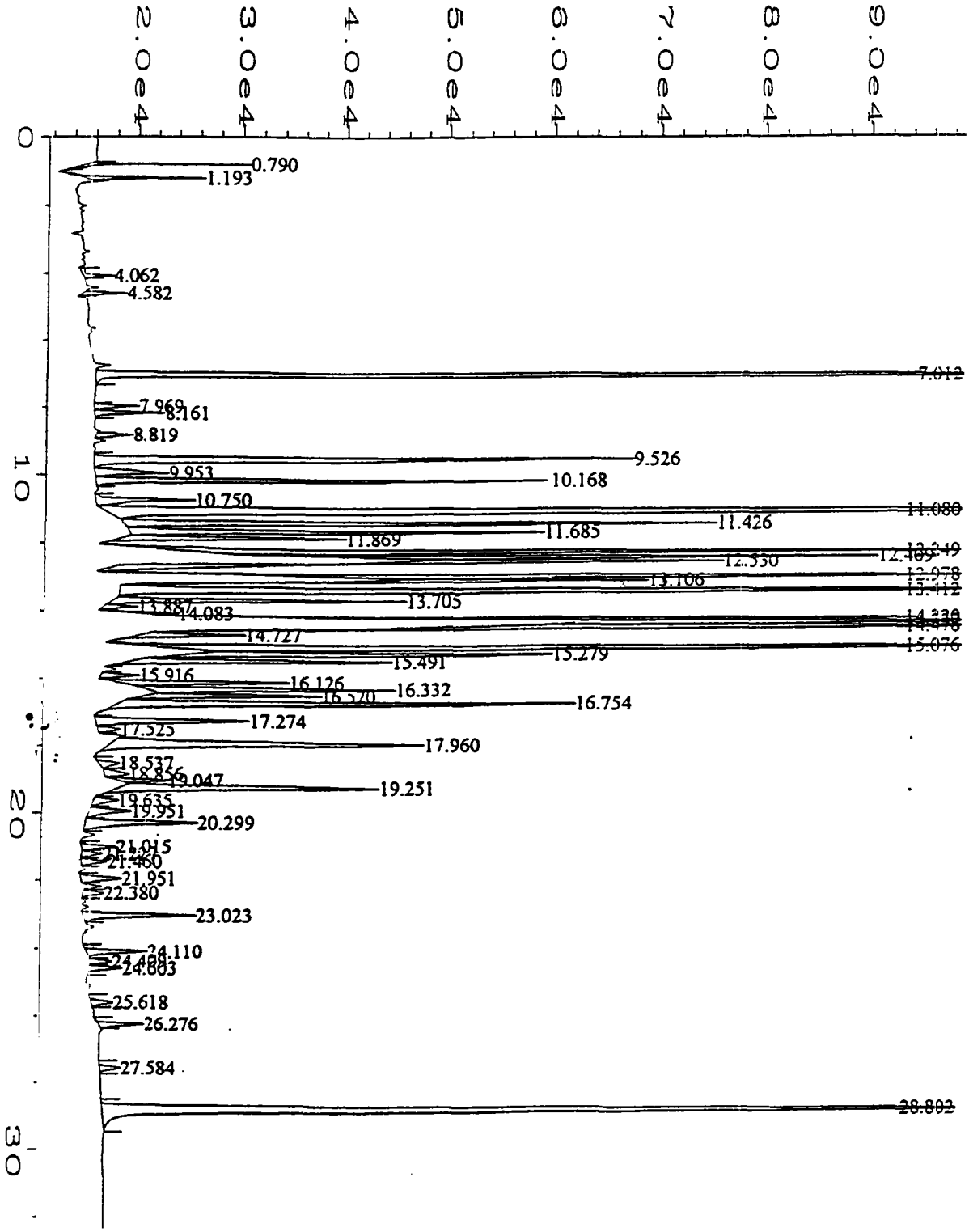
Data File Name	: C:\HPCHEM\1\DATA\042497\007F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 7
Sample Name	: 1248 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:47 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\007F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 7
Sample Name	: 1248 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:47 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:09 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\007F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.310	67956	BB	0.069	1	2.990	TETRACHLORO-M-XYLENE
8.757	20505	BB	0.075	1	55.973	AR 1248 #1
10.016	70930	BB	0.114	1	59.344	AR 1248 #2
12.285	30324	BB	0.078	1	56.924	AR 1248 #3
13.429	42078	BB	0.083	1	56.948	AR 1248 #4
14.423	42829	BB	0.090	1	58.464	AR 1248 #5
27.417	32333	BB	0.103	1	2.667	DECACHLOROBIPHENYL



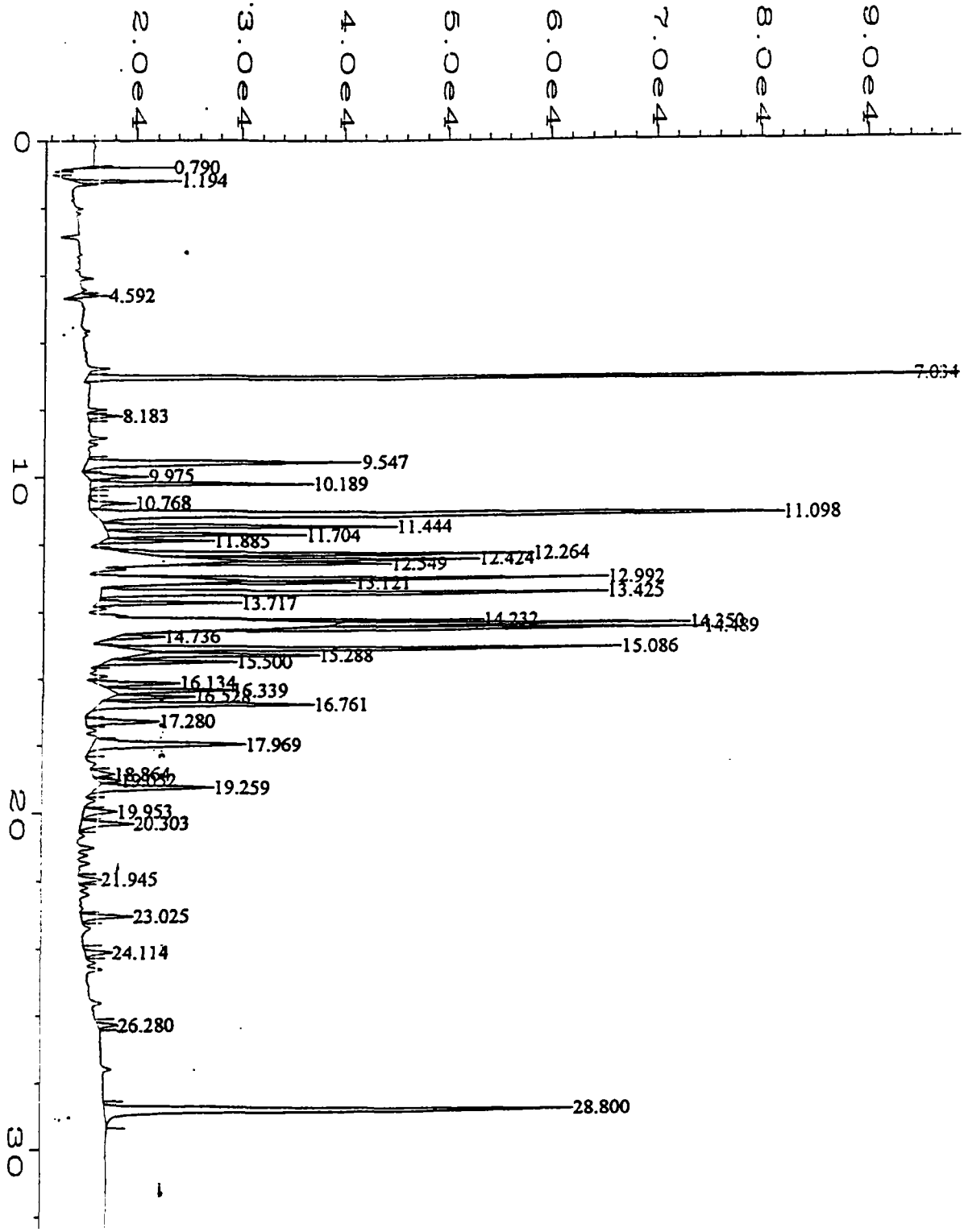
Data File Name	: C:\HPCHEM\1\DATA\042497\053R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 53
Sample Name	: 1248 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 05:24 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:11 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 14 MAR 97 08:45 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\053R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 53
Sample Name	: 1248 2.0 PPM	Injection Number	: 1
Run Time Bar Code	:	Sequence Line	: 1
Acquired on	: 24 Apr 97 05:24 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:15 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\053R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.012	1052586	BB	0.066	1	93.057	TETRACHLORO-M-XYLENE
9.526	363518	BB	0.100	1	1815.844	AR 1248 #1
11.080	1030453	BB	0.125	1	1726.437	AR 1248 #2
12.249	382445	BB	0.082	1	1726.361	AR 1248 #3
13.412	651704	BB	0.097	1	1835.234	AR 1248 #4
15.076	589141	BB	0.091	1	2025.110	AR 1248 #5
28.802	769108	BB	0.131	1	94.142	DECACHLOROBIPHENYL



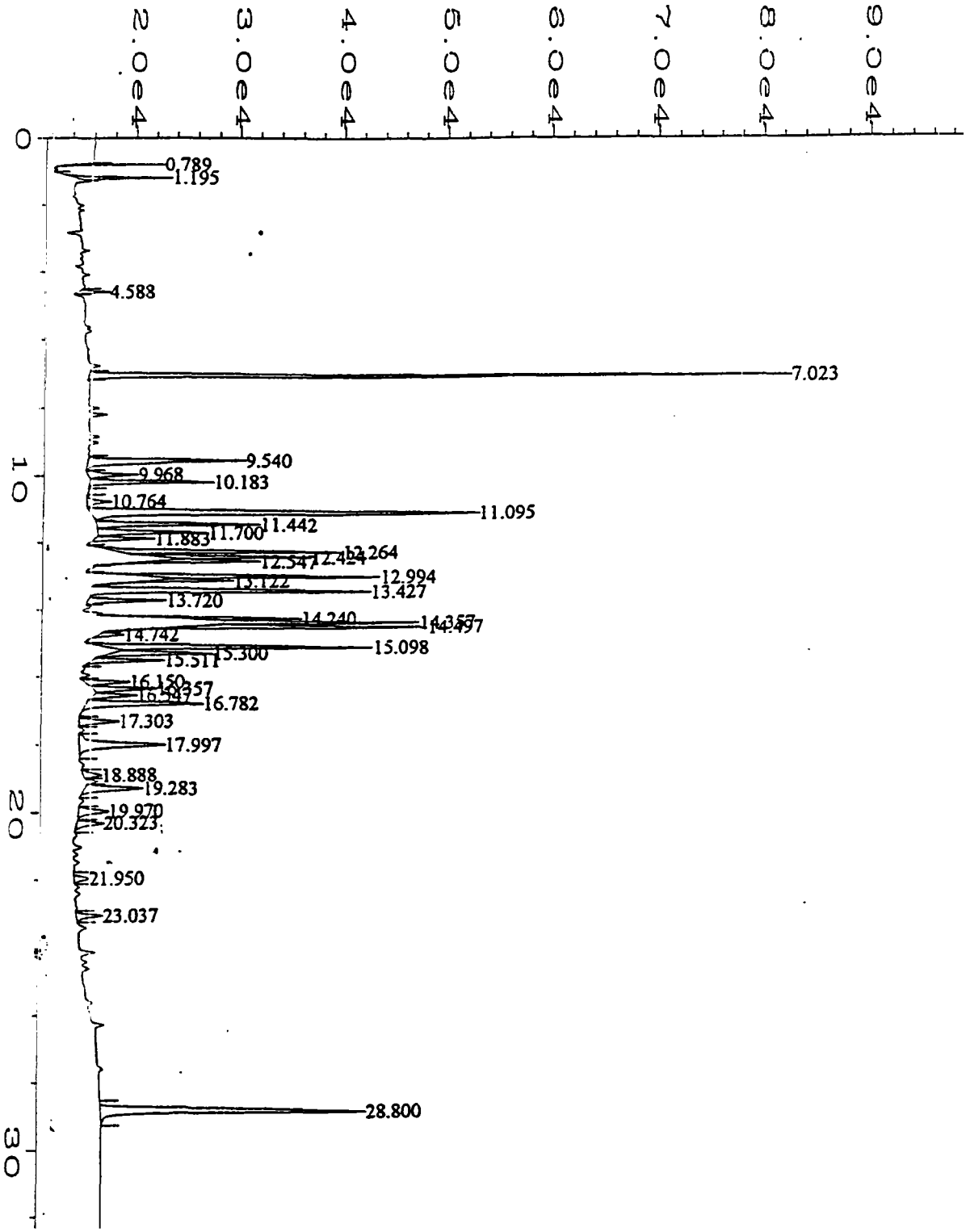
ata File Name	: C:\HPCHEM\1\DATA\042497\054R0101.D		
perator	: ECL	Page Number	: 1
nstrument	: HP4	Vial Number	: 54
ample Name	: 1248 1.0 PPM	Injection Number	: 1
un Time Bar Code:		Sequence Line	: 1
cquired on	: 24 Apr 97 06:00 PM	Instrument Method:	1660F.MTH
eport Created on:	25 Apr 97 11:16 AM	Analysis Method	: 1248R.MTH
ast Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ultiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\054R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 54
Sample Name	: 1248 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:00 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:16 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\054R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.034	499410	BB	0.065	1	44.152	TETRACHLORO-M-XYLENE
9.547	186690	BB	0.100	1	932.556	AR 1248 #1
11.098	512619	BB	0.126	1	858.850	AR 1248 #2
12.264	192674	BB	0.080	1	869.731	AR 1248 #3
13.425	315758	BB	0.102	1	889.193	AR 1248 #4
15.086	271568	BB	0.092	1	933.488	AR 1248 #5
28.800	377901	BB	0.130	1	46.257	DECACHLOROBIPHENYL



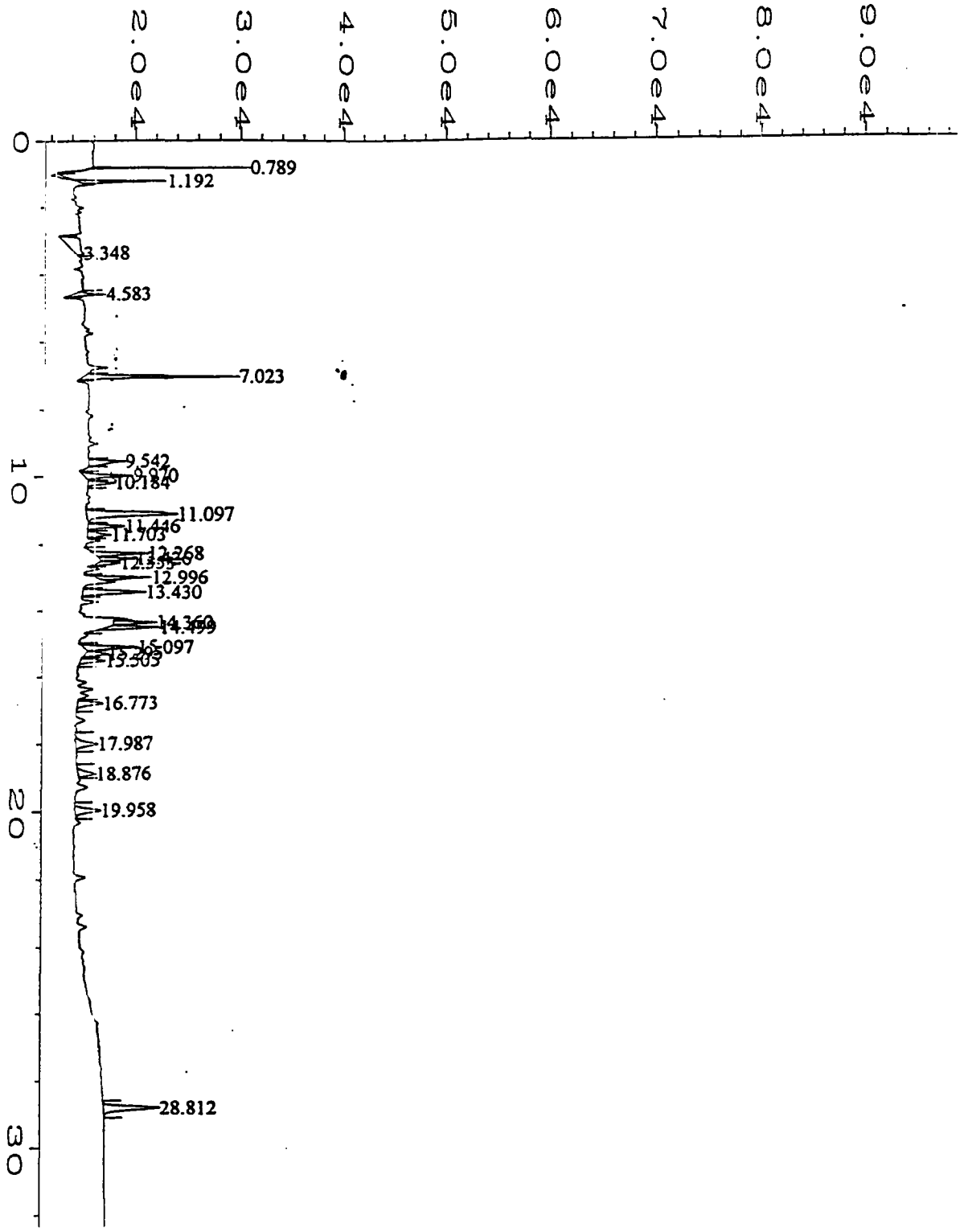
Data File Name	: C:\HPCHEM\1\DATA\042497\055R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 55
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:36 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:16 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\055R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 55
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 06:36 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:16 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\055R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.023	278097	BB	0.065	1	24.586	TETRACHLORO-M-XYLENE
9.540	105602	BB	0.099	1	527.503	AR 1248 #1
11.095	293544	BB	0.127	1	491.809	AR 1248 #2
12.264	108987	BB	0.081	1	491.967	AR 1248 #3
13.427	176205	BB	0.103	1	496.202	AR 1248 #4
15.098	149157	BB	0.092	1	512.710	AR 1248 #5
28.800	207616	BB	0.128	1	25.413	DECACHLOROBIPHENYL



user modified

Data File Name	: C:\HPCHEM\1\DATA\042497\056R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 56
Sample Name	: 1248 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:12 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:14 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 Apr 97 11:14 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

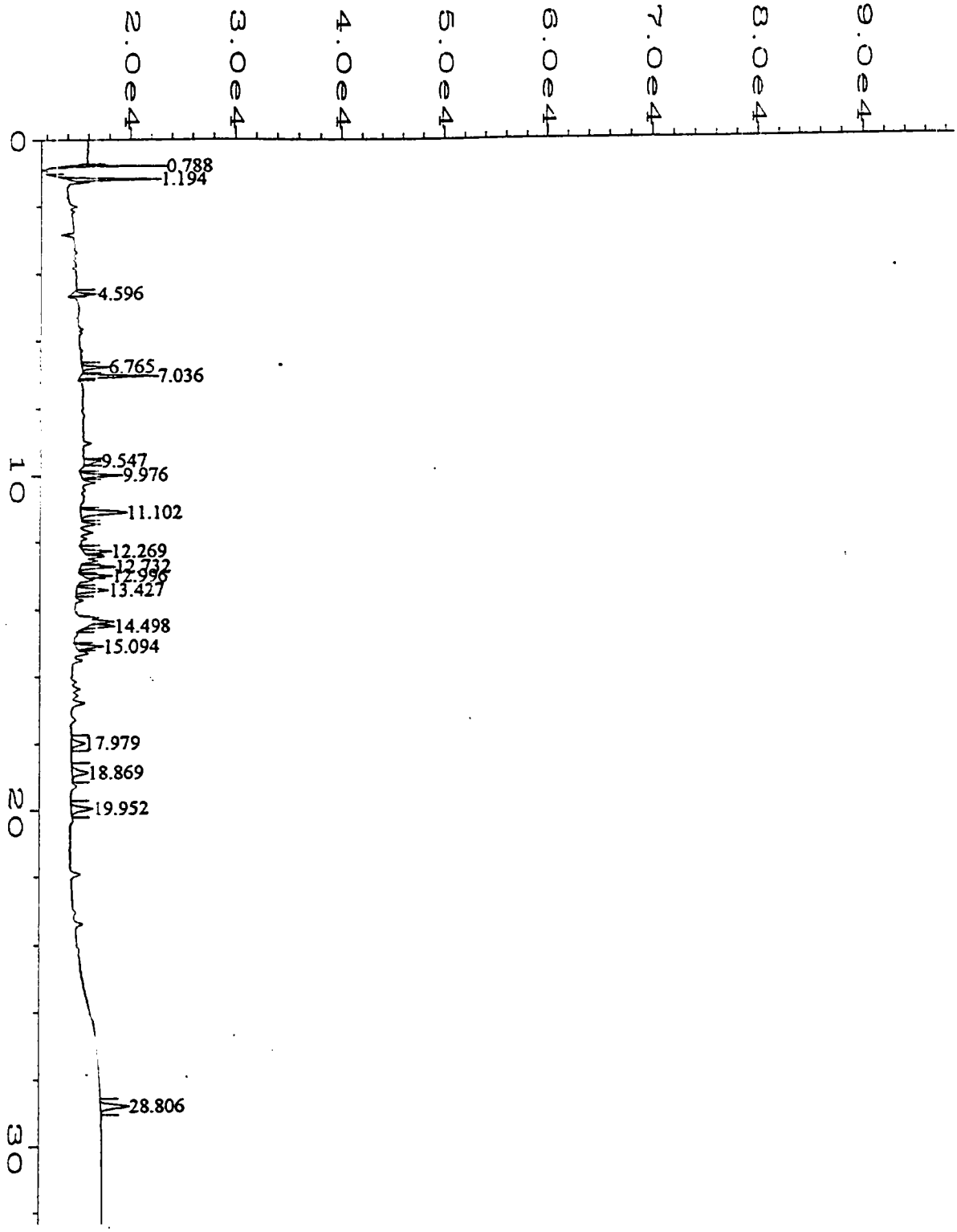
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\056R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 56
Sample Name	: 1248 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:12 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:14 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 Apr 97 11:14 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\056R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.023	62559	BB	0.065	1	5.434	TETRACHLORO-M-XYLENE
9.542	21693	MM	0.105	1	77.217	AR 1248 #1
11.097	67966	BB	0.127	1	97.268	AR 1248 #2
12.268	25021	BB	0.077	1	94.826	AR 1248 #3
13.430	38599	BB	0.101	1	101.814	AR 1248 #4
15.097	29694	BB	0.092	1	109.569	AR 1248 #5
28.812	43340	BB	0.125	1	4.905	DECACHLOROBIPHENYL

User Modified



user modified

Data File Name	: C:\HPCHEM\1\DATA\042497\057R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 57
Sample Name	: 1248 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:47 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:17 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\057R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 57
Sample Name	: 1248 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 07:47 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:17 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\057R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.036	31016	BB	0.065	1	2.742	TETRACHLORO-M-XYLENE
9.547	10061	MM	0.099	1	50.255	AR 1248 #1
11.102	34487	BB	0.126	1	57.780	AR 1248 #2
12.269	12779	BB	0.075	1	57.684	AR 1248 #3
13.427	19776	BB	0.100	1	55.690	AR 1248 #4
15.094	14660	BB	0.089	1	50.393	AR 1248 #5
28.806	21567	BB	0.119	1	2.640	DECACHLOROBIPHENYL

User Modified

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042497\008F0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1248 ALT CHK
Acquisition Date : 24 Apr 97 08:23 PM
Last Calibration Date : 25 APR 97 11:08 AM
Analysis Method : 1248F.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 25 Apr 97 11:18 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	526666	2.107E+04	2.273E+04	1.662E+03	7.3
AR 1248 #1	5.000E+02	170270	3.405E+02	3.663E+02	2.580E+01	7.0
AR 1248 #2	5.000E+02	479799	9.596E+02	1.195E+03	2.356E+02	19.7<--
AR 1248 #3	5.000E+02	249278	4.986E+02	5.327E+02	3.415E+01	6.4
AR 1248 #4	5.000E+02	376574	7.531E+02	7.389E+02	1.426E+01	1.9
AR 1248 #5	5.000E+02	317305	6.346E+02	7.326E+02	9.797E+01	13.4
DECACHLOROBIPHENYL	2.500E+01	319423	1.278E+04	1.212E+04	6.544E+02	5.4

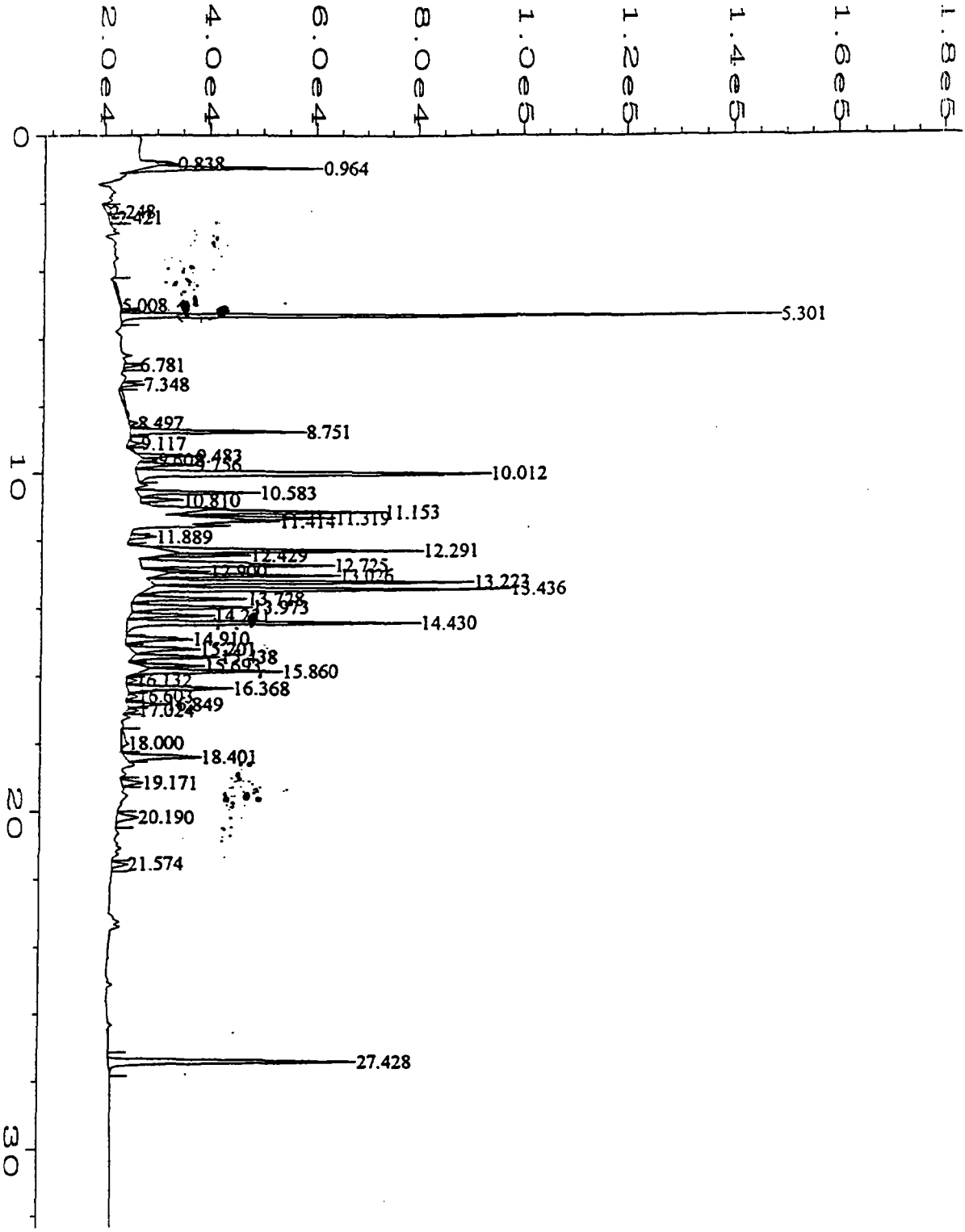
<-- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042497\058R0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1248 ALT CHK
Acquisition Date : 24 Apr 97 08:23 PM
Last Calibration Date : 25 APR 97 11:15 AM
Analysis Method : 1248R.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 25 Apr 97 11:18 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	277129	1.109E+04	1.131E+04	2.260E+02	2.0
AR 1248 #1	5.000E+02	103242	2.065E+02	2.002E+02	6.292E+00	3.1
AR 1248 #2	5.000E+02	250115	5.002E+02	5.969E+02	9.664E+01	16.2<--
AR 1248 #3	5.000E+02	114904	2.298E+02	2.215E+02	8.276E+00	3.7
AR 1248 #4	5.000E+02	169019	3.380E+02	3.551E+02	1.707E+01	4.8
AR 1248 #5	5.000E+02	134827	2.697E+02	2.909E+02	2.126E+01	7.3
DECACHLOROBIPHENYL	2.500E+01	219346	8.774E+03	8.170E+03	6.042E+02	7.4

<-- = Exceeds %Difference Limit



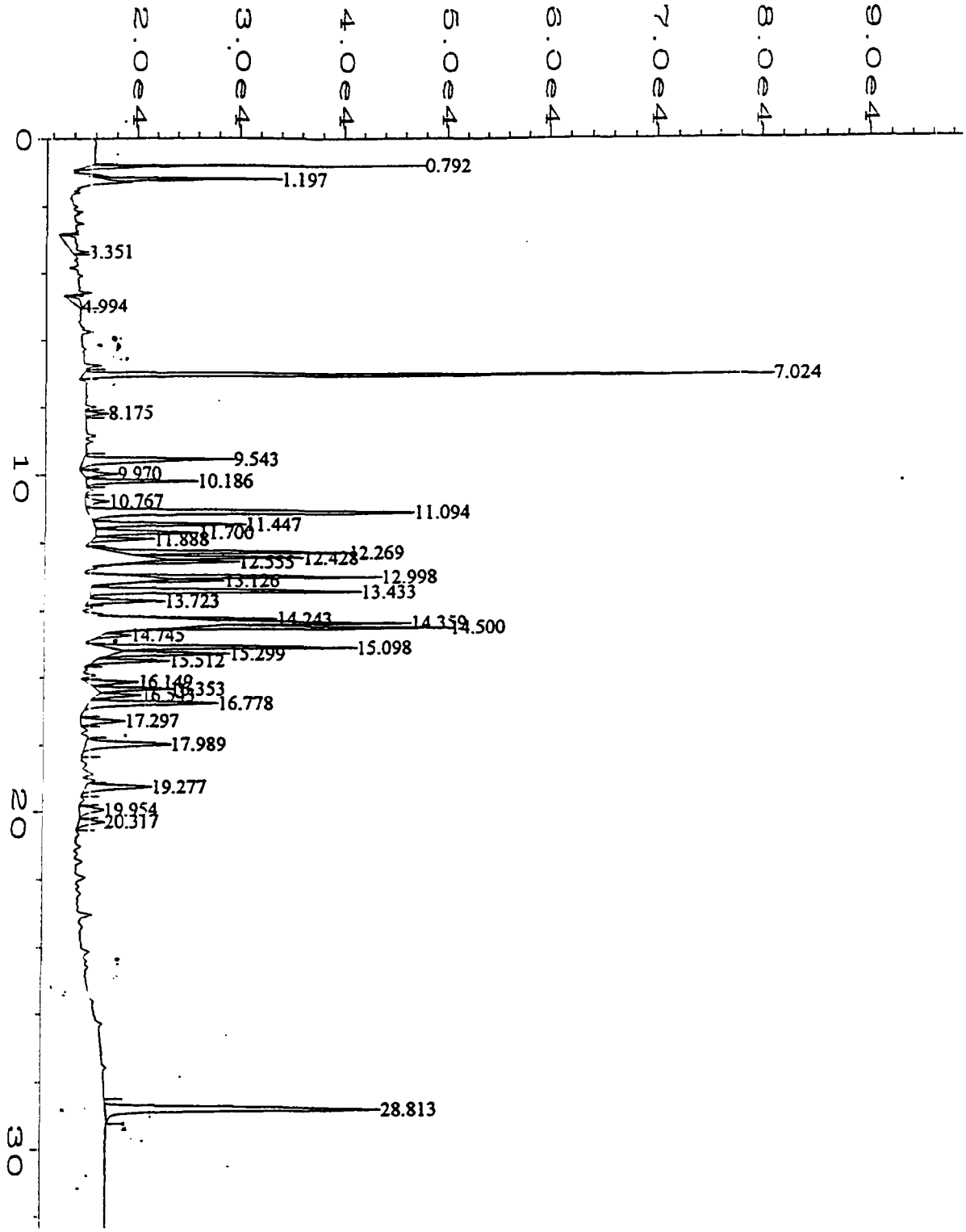
Data File Name	: C:\HPCHEM\1\DATA\042497\008F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 8
Sample Name	: 1248 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 08:23 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:10 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\008F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 8
Sample Name	: 1248 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 08:23 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:10 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\008F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.301	526666	BB	0.065	1	23.171	TETRACHLORO-M-XYLENE
8.751	170270	BB	0.081	1	464.782	AR 1248 #1
10.012	479799	BB	0.114	1	401.425	AR 1248 #2
12.291	249278	BB	0.081	1	467.949	AR 1248 #3
13.436	376574	BB	0.085	1	509.648	AR 1248 #4
14.430	317305	BB	0.088	1	433.136	AR 1248 #5
27.428	319423	BB	0.106	1	26.350	DECACHLOROBIPHENYL



Data File Name	: C:\HPCHEM\1\DATA\042497\058R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 58
Sample Name	: 1248 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 08:23 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:17 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\058R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 58
Sample Name	: 1248 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 08:23 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:17 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\058R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.024	277129	BB	0.065	1	24.500	TETRACHLORO-M-XYLENE
9.543	103242	BB	0.100	1	515.716	AR 1248 #1
11.094	250115	BB	0.128	1	419.046	AR 1248 #2
12.269	114904	BB	0.081	1	518.676	AR 1248 #3
13.433	169019	BB	0.100	1	475.967	AR 1248 #4
15.098	134827	BB	0.089	1	463.455	AR 1248 #5
28.813	219346	BB	0.130	1	26.849	DECACHLOROBIPHENYL

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042497\020F0301.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1248 0.5 PPM
Acquisition Date : 25 Apr 97 04:12 AM
Last Calibration Date : 25 APR 97 11:08 AM
Analysis Method : 1248F.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 25 Apr 97 11:21 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	565929	2.264E+04	2.273E+04	9.189E+01	0.4
AR 1248 #1	5.000E+02	194189	3.884E+02	3.663E+02	2.203E+01	6.0
AR 1248 #2	5.000E+02	599297	1.199E+03	1.195E+03	3.355E+00	0.3
AR 1248 #3	5.000E+02	261877	5.238E+02	5.327E+02	8.950E+00	1.7
AR 1248 #4	5.000E+02	365053	7.301E+02	7.389E+02	8.784E+00	1.2
AR 1248 #5	5.000E+02	356513	7.130E+02	7.326E+02	1.955E+01	2.7
DECACHLOROBIPHENYL	2.500E+01	312778	1.251E+04	1.212E+04	3.886E+02	3.2

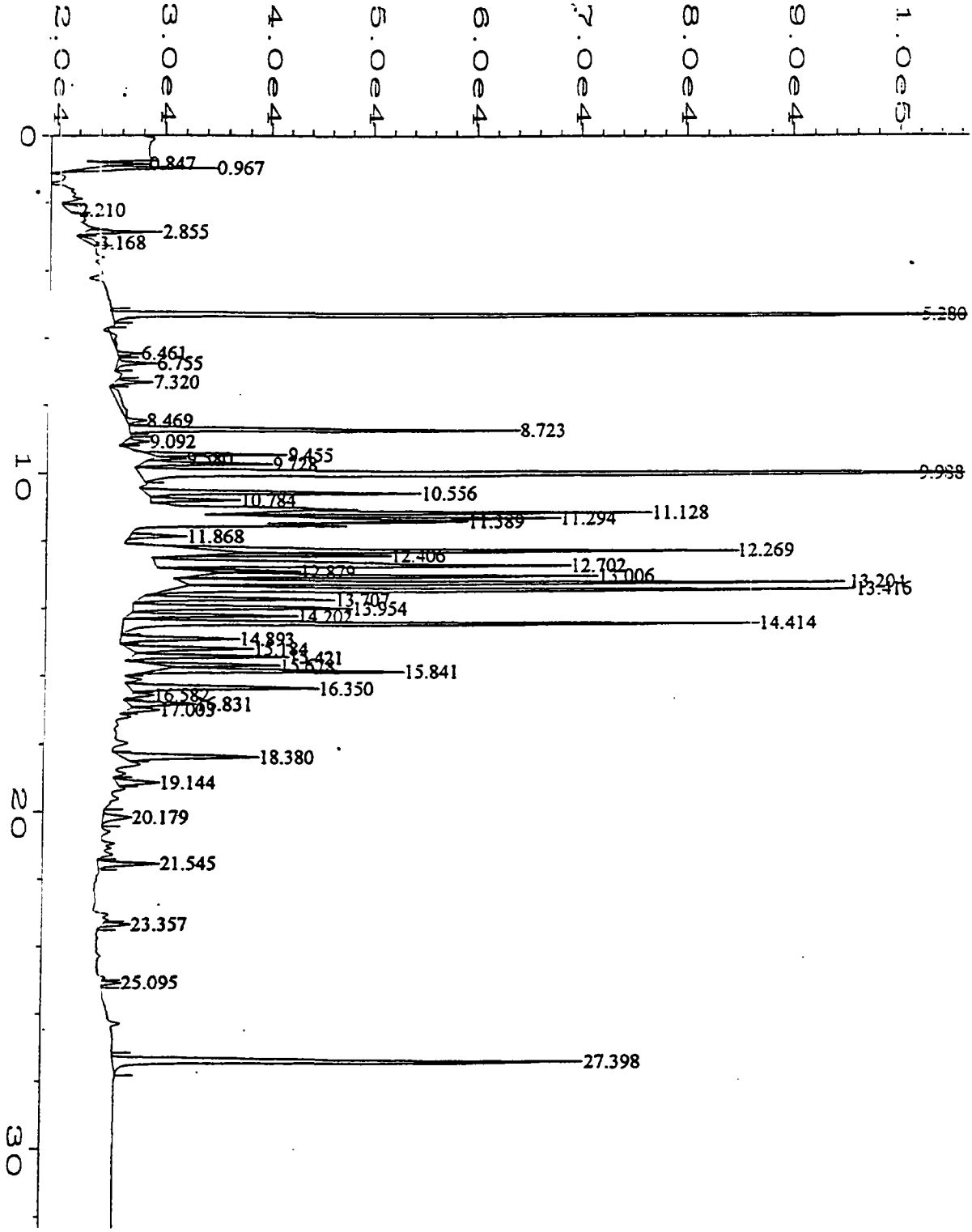
<-- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042497\070R0301.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1248 0.5 PPM
Acquisition Date : 25 Apr 97 04:12 AM
Last Calibration Date : 25 APR 97 11:15 AM
Analysis Method : 1248R.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 25 Apr 97 11:21 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	276355	1.105E+04	1.131E+04	2.570E+02	2.3
AR 1248 #1	5.000E+02	107881	2.158E+02	2.002E+02	1.557E+01	7.8
AR 1248 #2	5.000E+02	282839	5.657E+02	5.969E+02	3.119E+01	5.2
AR 1248 #3	5.000E+02	104585	2.092E+02	2.215E+02	1.236E+01	5.6
AR 1248 #4	5.000E+02	169139	3.383E+02	3.551E+02	1.683E+01	4.7
AR 1248 #5	5.000E+02	128703	2.574E+02	2.909E+02	3.351E+01	11.5
DECACHLOROBIPHENYL	2.500E+01	211578	8.463E+03	8.170E+03	2.934E+02	3.6

<-- = Exceeds %Difference Limit



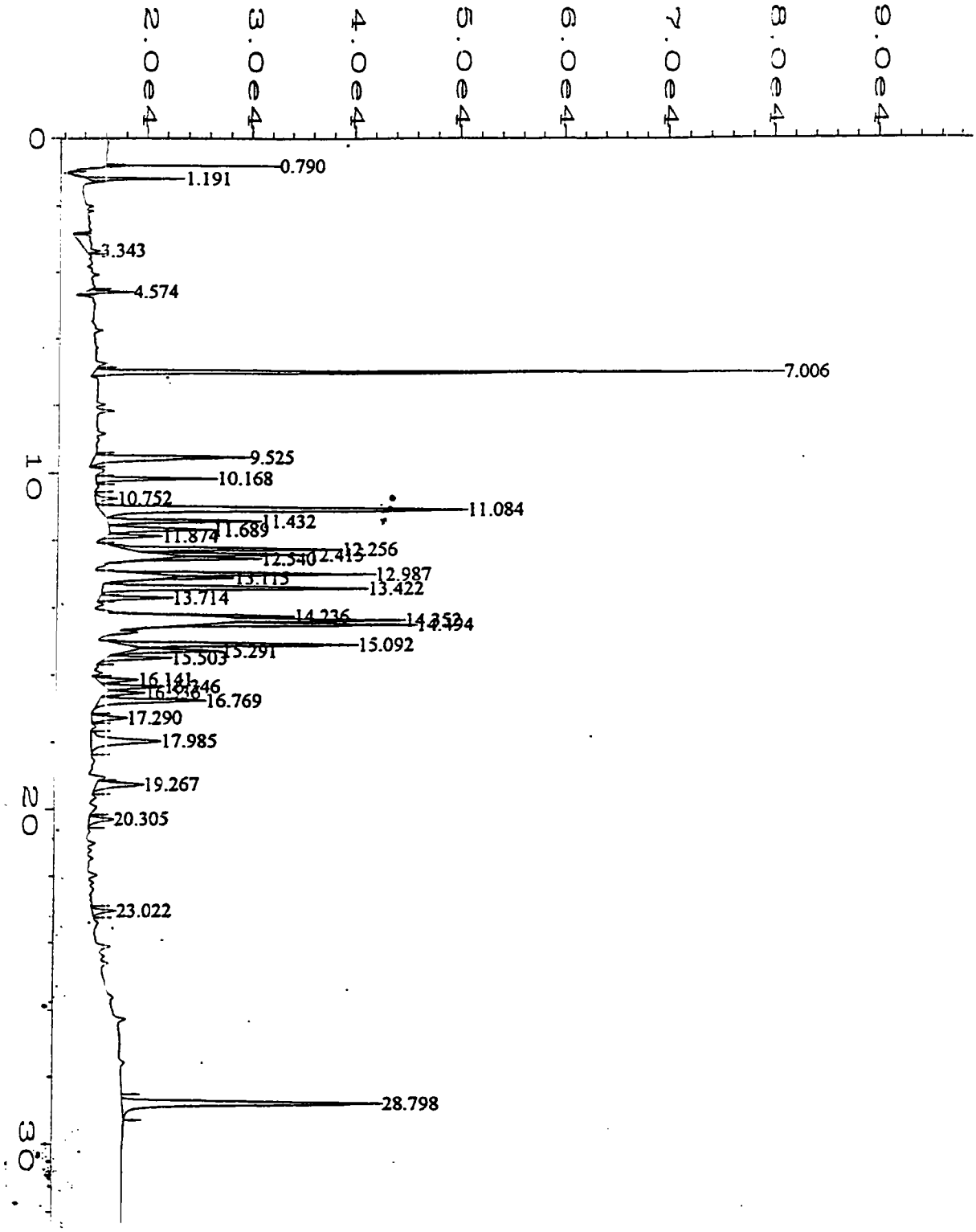
ata File Name	: C:\HPCHEM\1\DATA\042497\020F0301.D		
perator	: ECL	Page Number	: 1
nstrument	: HP4	Vial Number	: 20
ample Name	: 1248 0.5 PPM	Injection Number	: 1
un Time Bar Code	:	Sequence Line	: 3
cquired on	: 25 Apr 97 04:12 AM	Instrument Method	: 1660F.MTH
eport Created on	: 25 Apr 97 11:20 AM	Analysis Method	: 1248F.MTH
ast Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ultiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\020F0301.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 20
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Apr 97 04:12 AM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:20 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\020F0301.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.280	565929	BB	0.066	1	24.899	TETRACHLORO-M-XYLENE
8.723	194189	BB	0.081	1	530.073	AR 1248 #1
9.988	599297	BB	0.116	1	501.403	AR 1248 #2
12.269	261877	BB	0.082	1	491.598	AR 1248 #3
13.416	365053	BB	0.088	1	494.056	AR 1248 #4
14.414	356513	BB	0.090	1	486.656	AR 1248 #5
27.398	312778	BB	0.109	1	25.801	DECACHLOROBIPHENYL



Data File Name	: C:\HPCHEM\1\DATA\042497\070R0301.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 70
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Apr 97 04:12 AM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:20 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\070R0301.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 70
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 25 Apr 97 04:12 AM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:20 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\070R0301.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.006	276355	BB	0.065	1	24.432	TETRACHLORO-M-XYLENE
9.525	107881	BB	0.102	1	538.888	AR 1248 #1
11.084	282839	BB	0.129	1	473.872	AR 1248 #2
12.256	104585	BB	0.081	1	472.099	AR 1248 #3
13.422	169139	BB	0.102	1	476.304	AR 1248 #4
15.092	128703	BB	0.091	1	442.402	AR 1248 #5
28.798	211578	BB	0.130	1	25.898	DECACHLOROBIPHENYL

CONTINUING CALIBRATION DATA

ata File : C:\HPCHEM\1\DATA\042497\032F0301.D
alibration Check Level : 3
nstrument : HP4
ample Name : 1248 0.5 PPM
cquisition Date : 25 Apr 97 11:21 AM
ast Calibration Date : 25 APR 97 11:08 AM
nalysis Method : 1248F.MTH
alculation Type : External Standard
ample Amount : .0
eport Date : 25 Apr 97 03:49 PM
Difference Limit : 15.0

ompound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	563335	2.253E+04	2.273E+04	1.957E+02	0.9
1248 #1	5.000E+02	193552	3.871E+02	3.663E+02	2.076E+01	5.7
1248 #2	5.000E+02	560708	1.121E+03	1.195E+03	7.382E+01	6.2
1248 #3	5.000E+02	259173	5.183E+02	5.327E+02	1.436E+01	2.7
1248 #4	5.000E+02	372590	7.452E+02	7.389E+02	6.290E+00	0.9
1248 #5	5.000E+02	360683	7.214E+02	7.326E+02	1.121E+01	1.5
CACHLOROBIPHENYL	2.500E+01	327743	1.311E+04	1.212E+04	9.872E+02	8.1

-- = Exceeds %Difference Limit

000120A

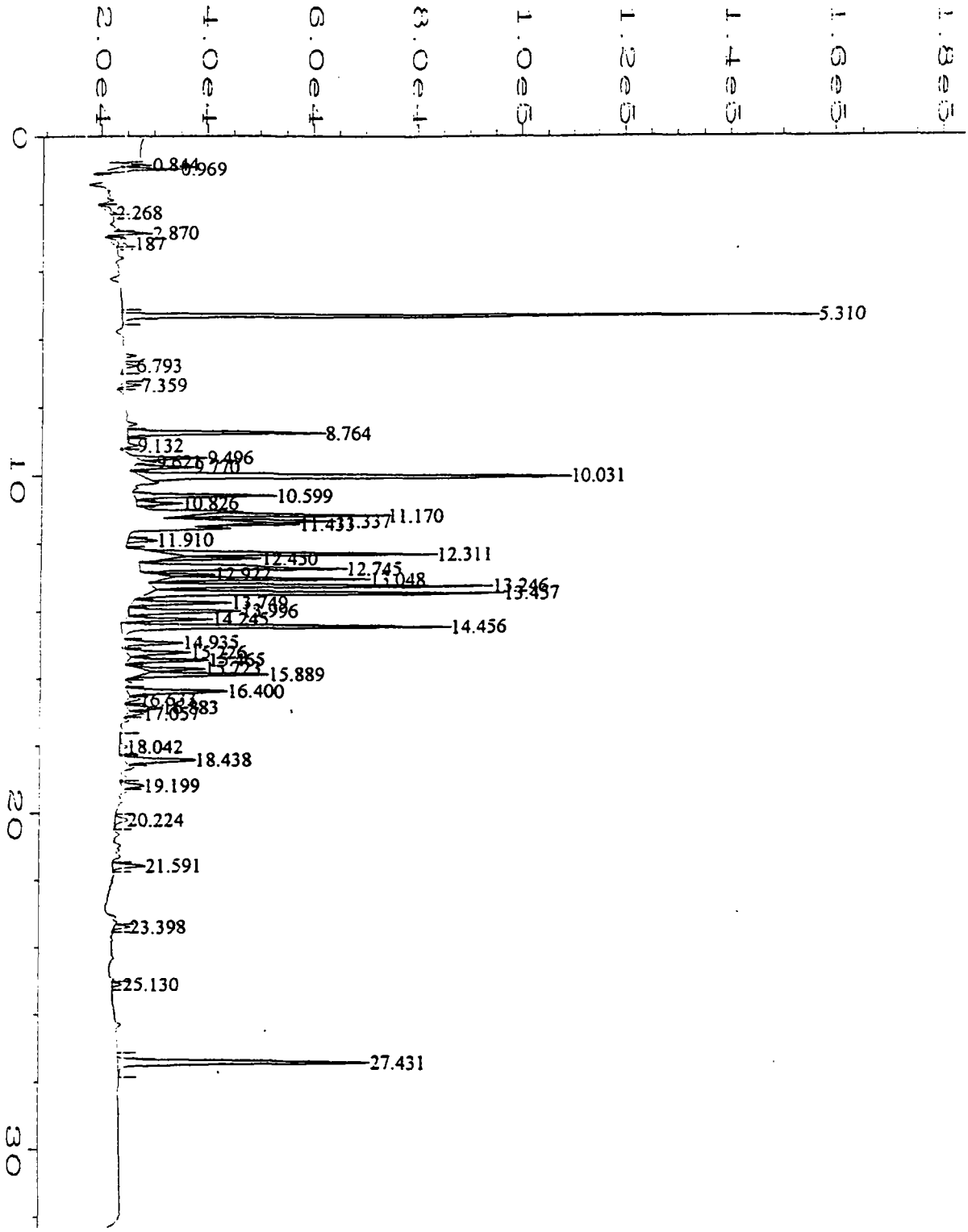
CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042497\082R0301.D
libration Check Level : 3
strument : HP4
mple Name : 1248 0.5 PPM
quisition Date : 25 Apr 97 11:21 AM
st Calibration Date : 25 APR 97 11:15 AM
alysis Method : 1248R.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 25 Apr 97 03:49 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	283351	1.133E+04	1.131E+04	2.284E+01	0.2
1248 #1	5.000E+02	108250	2.165E+02	2.002E+02	1.631E+01	8.1
1248 #2	5.000E+02	292294	5.846E+02	5.969E+02	1.228E+01	2.1
1248 #3	5.000E+02	107657	2.153E+02	2.215E+02	6.218E+00	2.8
1248 #4	5.000E+02	174500	3.490E+02	3.551E+02	6.107E+00	1.7
1248 #5	5.000E+02	138468	2.769E+02	2.909E+02	1.398E+01	4.8
CACHLOROBIPHENYL	2.500E+01	218815	8.753E+03	8.170E+03	5.829E+02	7.1

- = Exceeds %Difference Limit

000120B



ta File Name : C:\HPCHEM\1\DATA\042497\032F0301.D
erator : ECL
strument : HP4
mple Name : 1248 0.5 PPM
n Time Bar Code:
quired on : 25 Apr 97 11:21 AM
port Created on: 25 Apr 97 02:30 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 1

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

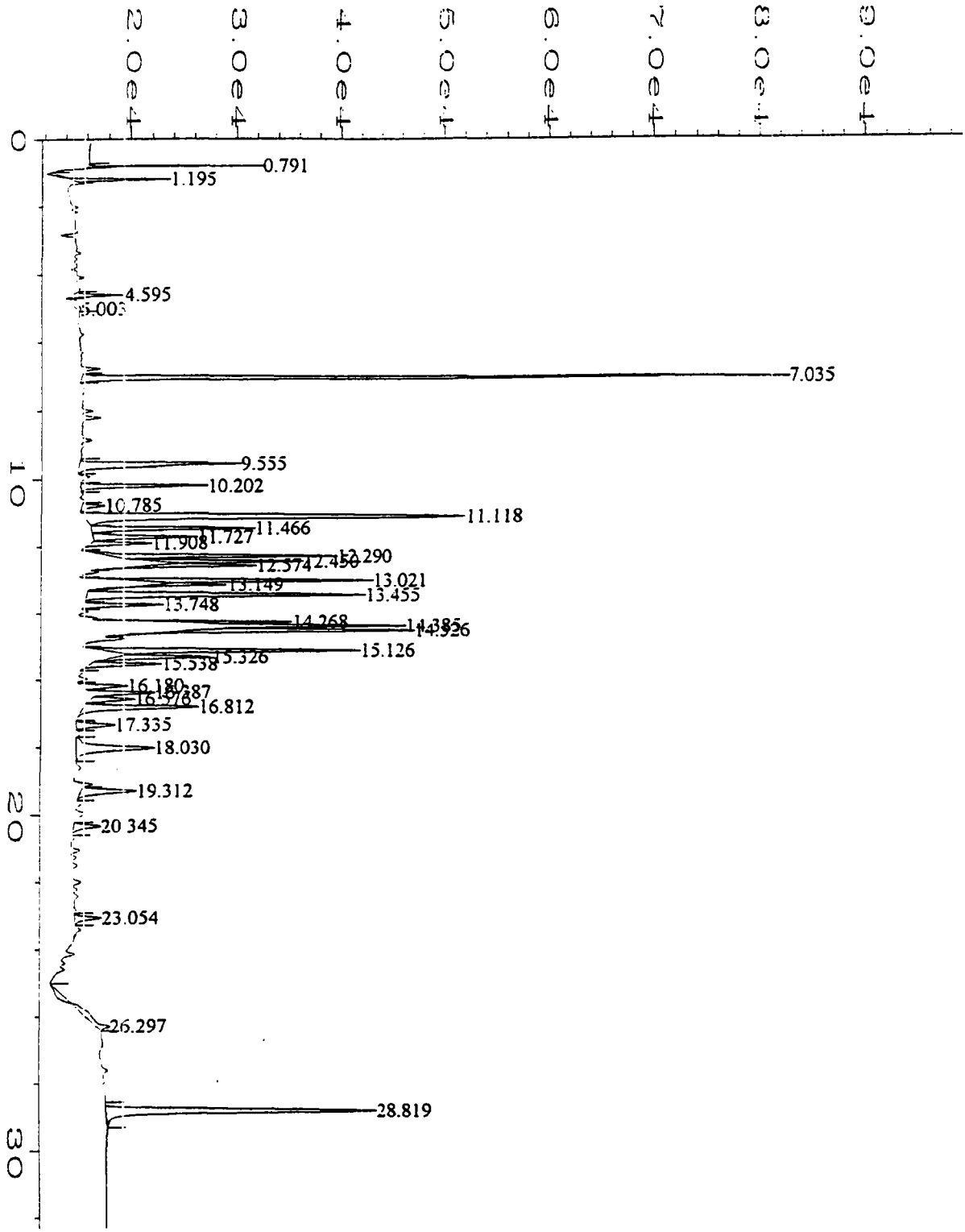
External Standard Report

:a File Name : C:\HPCHEM\1\DATA\042497\032F0301.D
:rator : ECL
:trument : HP4
ıple Name : 1248 0.5 PPM
ı Time Bar Code:
ıuired on : 25 Apr 97 11:21 AM
ıort Created on: 25 Apr 97 02:30 PM
:t Recalib on : 25 APR 97 11:08 AM
.tiplier : 1

Page Number : 1
Vial Number : 32
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

:. 1 in C:\HPCHEM\1\DATA\042497\032F0301.D

. Time	Area	Type	Width	Ref#	UG/L	Name
5.310	563335	BB	0.066	1	24.785	TETRACHLORO-M-XYLENE
8.764	193552	BB	0.081	1	528.335	AR 1248 #1
.0.031	560708	BB	0.111	1	469.118	AR 1248 #2
.2.311	259173	BB	0.080	1	486.524	AR 1248 #3
.3.457	372590	BB	0.088	1	504.257	AR 1248 #4
.4.456	360683	BB	0.089	1	492.348	AR 1248 #5
.7.431	327743	BB	0.107	1	27.036	DECACHLOROBIPHENYL



ta File Name	: C:\HPCHEM\1\DATA\042497\082R0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 82
mple Name	: 1248 0.5 PPM	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 3
quired on	: 25 Apr 97 11:21 AM	Instrument Method:	1660F.MTH
port Created on:	25 Apr 97 02:29 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

000123

External Standard Report

:a File Name : C:\HPCHEM\1\DATA\042497\082R0301.D
erator : ECL
strument : HP4
ıple Name : 1248 0.5 PPM
ı Time Bar Code:
quired on : 25 Apr 97 11:21 AM
port Created on: 25 Apr 97 02:29 PM
st Recalib on : 25 APR 97 11:15 AM
tiplier : 1

Page Number : 1
Vial Number : 82
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\082R0301.D

: Time	Area	Type	Width	Ref#	UG/L	Name
7.035	283351	BB	0.065	1	25.050	TETRACHLORO-M-XYLENE
9.555	108250	BB	0.101	1	540.731	AR 1248 #1
1.118	292294	BB	0.130	1	489.714	AR 1248 #2
2.290	107657	BB	0.080	1	485.963	AR 1248 #3
3.455	174500	BB	0.101	1	491.402	AR 1248 #4
5.126	138468	BB	0.092	1	475.968	AR 1248 #5
8.819	218815	BB	0.134	1	26.784	DECACHLOROBIPHENYL

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042497\040F0301.D
libration Check Level : 3
strument : HP4
mple Name : 1248 0.5 PPM
quisition Date : 25 Apr 97 04:08 PM
st Calibration Date : 25 APR 97 11:08 AM
alysis Method : 1248F.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 25 Apr 97 05:29 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	559667	2.239E+04	2.273E+04	3.424E+02	1.5
1248 #1	5.000E+02	163526	3.271E+02	3.663E+02	3.929E+01	10.7
1248 #2	5.000E+02	480332	9.607E+02	1.195E+03	2.346E+02	19.6<--
1248 #3	5.000E+02	238461	4.769E+02	5.327E+02	5.578E+01	10.5
1248 #4	5.000E+02	319925	6.399E+02	7.389E+02	9.904E+01	13.4
1248 #5	5.000E+02	310641	6.213E+02	7.326E+02	1.113E+02	15.2<--
CACHLOROBIPHENYL	2.500E+01	327741	1.311E+04	1.212E+04	9.872E+02	8.1

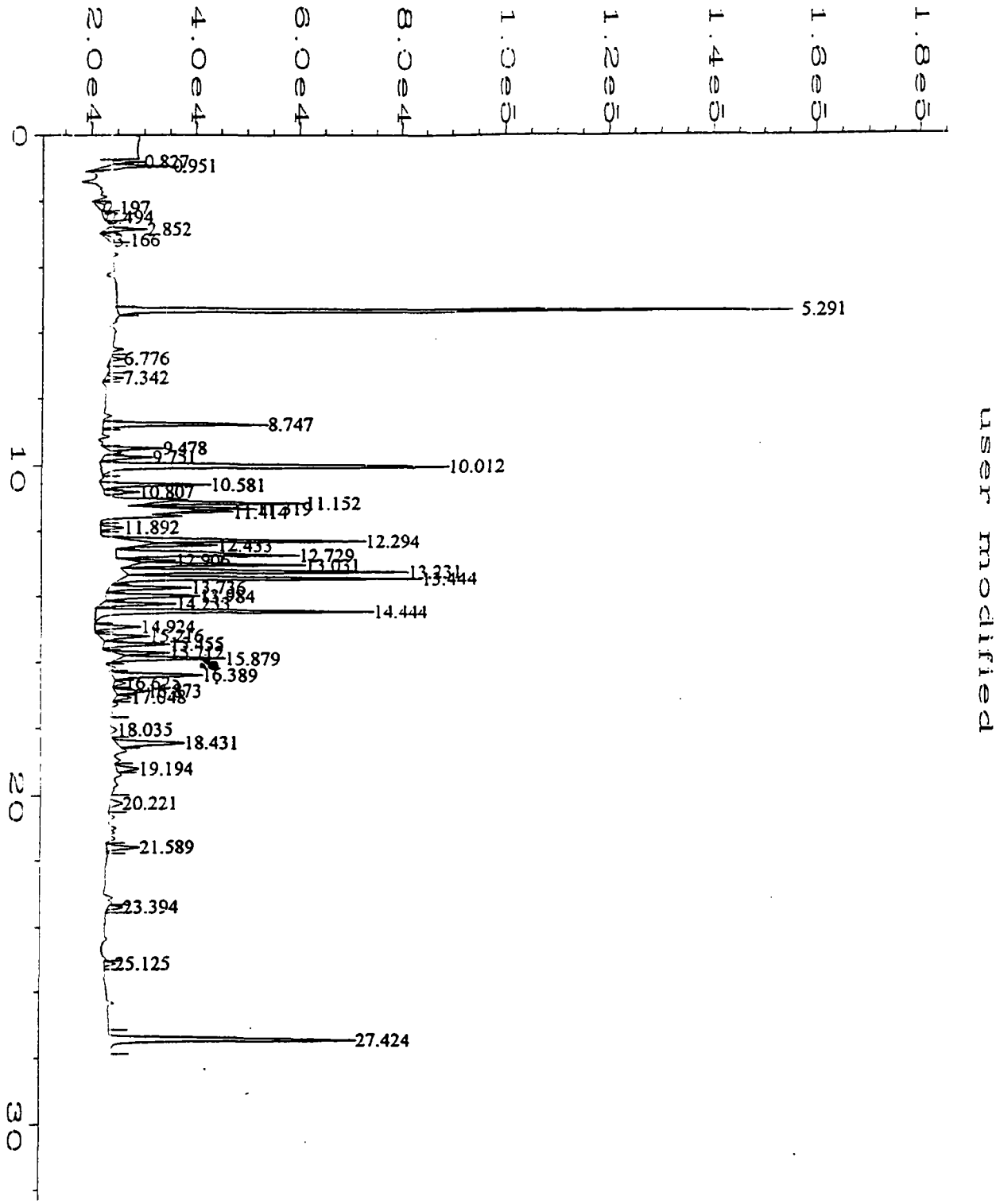
- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042497\090R0301.D
libration Check Level : 3
strument : HP4
mple Name : 1248 0.5 PPM
quisition Date : 25 Apr 97 04:08 PM
st Calibration Date : 25 APR 97 11:15 AM
alysis Method : 1248R.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 25 Apr 97 05:29 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	278777	1.115E+04	1.131E+04	1.601E+02	1.4
1248 #1	5.000E+02	101220	2.024E+02	2.002E+02	2.248E+00	1.1
1248 #2	5.000E+02	292079	5.842E+02	5.969E+02	1.271E+01	2.1
1248 #3	5.000E+02	107434	2.149E+02	2.215E+02	6.664E+00	3.0
1248 #4	5.000E+02	174203	3.484E+02	3.551E+02	6.701E+00	1.9
1248 #5	5.000E+02	139074	2.781E+02	2.909E+02	1.277E+01	4.4
CACHLOROBIPHENYL	2.500E+01	214521	8.581E+03	8.170E+03	4.112E+02	5.0

- = Exceeds %Difference Limit



user modified

ta File Name	: C:\HPCHEM\1\DATA\042497\040F0301.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 40
mple Name	: 1248 0.5 PPM	Injection Number	: 1
n Time Bar Code	:	Sequence Line	: 3
quired on	: 25 Apr 97 04:08 PM	Instrument Method	: 1660F.MTH
port Created on	: 25 Apr 97 05:16 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

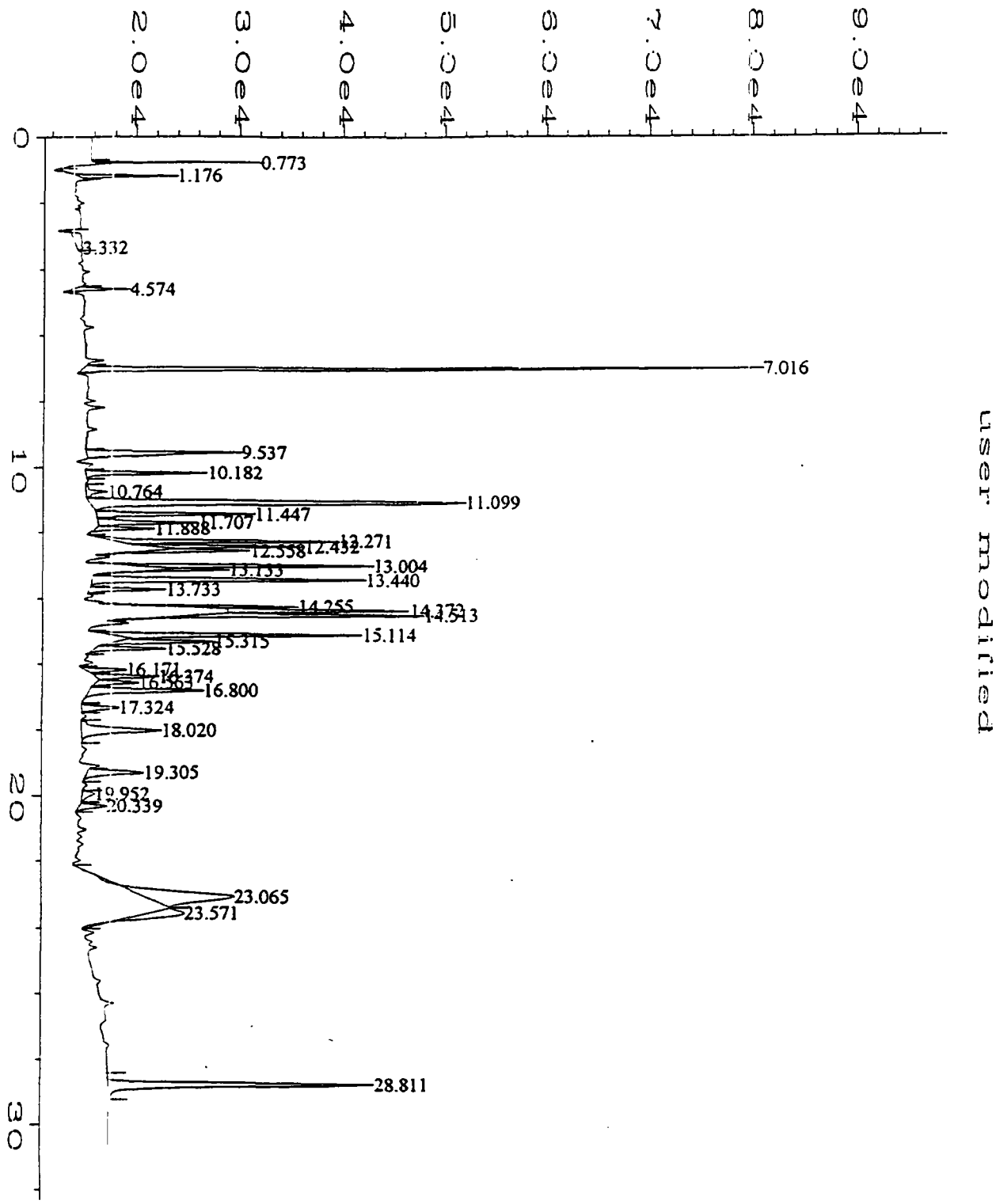
ta File Name : C:\HPCHEM\1\DATA\042497\040F0301.D
erator : ECL
strument : HP4
mple Name : 1248 0.5 PPM
n Time Bar Code:
quired on : 25 Apr 97 04:08 PM
port Created on: 25 Apr 97 05:16 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 1

Page Number : 1
Vial Number : 40
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042497\040F0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.291	559667	MM	0.070	1	24.623	TETRACHLORO-M-XYLENE
8.747	163526	BB	0.081	1	446.373	AR 1248 #1
10.012	480332	BB	0.114	1	401.872	AR 1248 #2
12.294	238461	MM	0.091	1	447.643	AR 1248 #3
13.444	319925	BB	0.086	1	432.980	AR 1248 #4
14.444	310641	BB	0.089	1	424.039	AR 1248 #5
27.424	327741	BB	0.109	1	27.036	DECACHLOROBIPHENYL

er Modified



ata File Name : C:\HPCHEM\1\DATA\042497\090R0301.D
perator : ECL
nstrument : HP4
ample Name : 1248 0.5 PPM
in Time Bar Code:
cquired on : 25 Apr 97 04:08 PM
eport Created on: 25 Apr 97 05:15 PM
ast Recalib on : 25 APR 97 11:15 AM
ultiplier : 1

Page Number : 1
Vial Number : 90
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042497\090R0301.D
erator : ECL
strument : HP4
mple Name : 1248 0.5 PPM
n Time Bar Code:
quired on : 25 Apr 97 04:08 PM
port Created on: 25 Apr 97 05:15 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 1

Page Number : 1
Vial Number : 90
Injection Number : 1
Sequence Line : 3
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042497\090R0301.D

t Time	Area	Type	Width	Ref#	UG/L	Name
7.016	278777	BB	0.066	1	24.646	TETRACHLORO-M-XYLENE
9.537	101220	MM	0.113	1	505.613	AR 1248 #1
11.099	292079	BB	0.129	1	489.354	AR 1248 #2
12.271	107434	BB	0.079	1	484.958	AR 1248 #3
13.440	174203	BB	0.100	1	490.565	AR 1248 #4
15.114	139074	BB	0.093	1	478.053	AR 1248 #5
28.811	214521	BB	0.132	1	26.258	DECACHLOROBIPHENYL

er Modified

CONTINUING CALIBRATION DATA

.ta File : C:\HPCHEM\1\DATA\042897\012F0101.D
.libration Check Level : 3
:strument : HP4
.mple Name : AR 1248 CONT CHK
:quisition Date : 28 Apr 97 03:22 PM
.st Calibration Date : 25 APR 97 11:08 AM
.alysis Method : 1248F.MTH
.lculation Type : External Standard
.mple Amount : .0
:port Date : 29 Apr 97 02:21 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	514499	2.058E+04	2.273E+04	2.149E+03	9.5
1248 #1	5.000E+02	179521	3.590E+02	3.663E+02	7.301E+00	2.0
1248 #2	5.000E+02	548562	1.097E+03	1.195E+03	9.811E+01	8.2
1248 #3	5.000E+02	235559	4.711E+02	5.327E+02	6.159E+01	11.6
1248 #4	5.000E+02	340694	6.814E+02	7.389E+02	5.750E+01	7.8
1248 #5	5.000E+02	331822	6.636E+02	7.326E+02	6.893E+01	9.4
CACHLOROBIPHENYL	2.500E+01	302539	1.210E+04	1.212E+04	2.092E+01	0.2

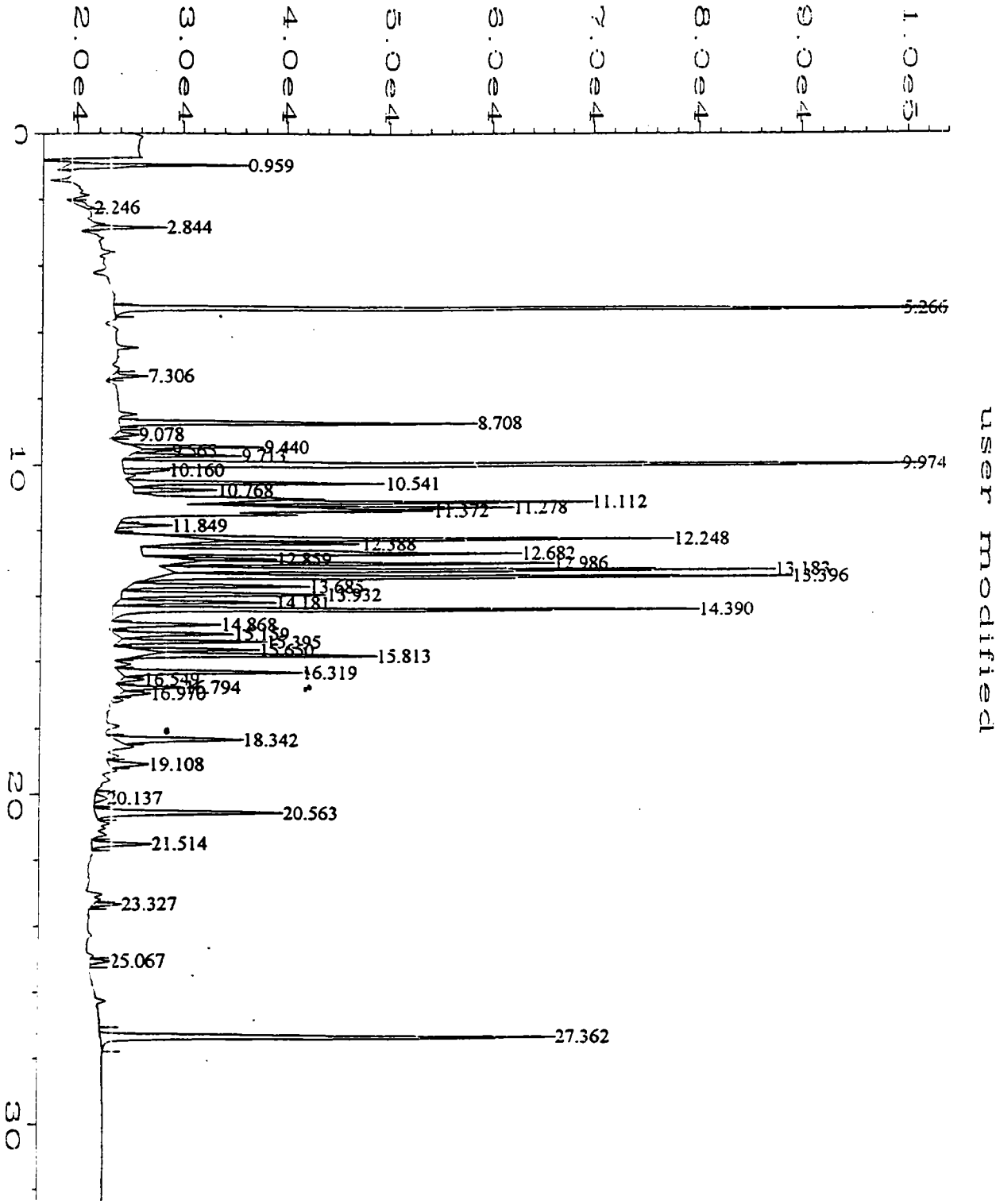
- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042897\062R0101.D
libration Check Level : 3
strument : HP4
mple Name : AR 1248 CONT CHK
quisition Date : 28 Apr 97 03:22 PM
st Calibration Date : 25 APR 97 11:15 AM
alysis Method : 1248R.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 29 Apr 97 02:21 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	262808	1.051E+04	1.131E+04	7.989E+02	7.1
1248 #1	5.000E+02	100333	2.007E+02	2.002E+02	4.739E-01	0.2
1248 #2	5.000E+02	272805	5.456E+02	5.969E+02	5.126E+01	8.6
1248 #3	5.000E+02	102611	2.052E+02	2.215E+02	1.631E+01	7.4
1248 #4	5.000E+02	163331	3.267E+02	3.551E+02	2.844E+01	8.0
1248 #5	5.000E+02	129040	2.581E+02	2.909E+02	3.284E+01	11.3
:ACHLOROBIPHENYL	2.500E+01	194484	7.779E+03	8.170E+03	3.903E+02	4.8

- = Exceeds %Difference Limit



ta File Name	: C:\HPCHEM\1\DATA\042897\012F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 12
mple Name	: AR 1248 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 03:22 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 02:12 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

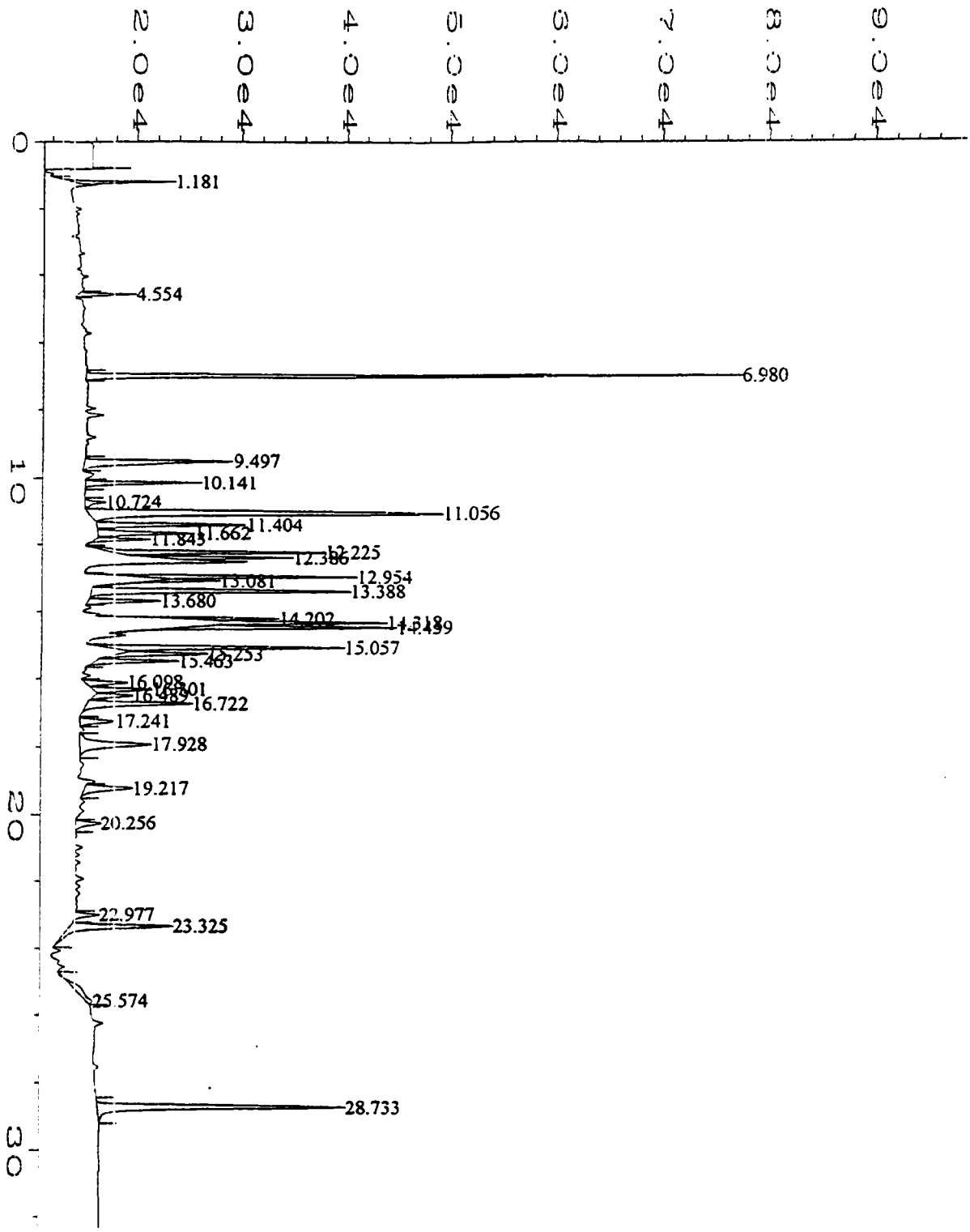
ta File Name : C:\HPCHEM\1\DATA\042897\012F0101.D
erator : ECL
strument : HP4
mple Name : AR 1248 CONT CHK
n Time Bar Code:
quired on : 28 Apr 97 03:22 PM
port Created on: 29 Apr 97 02:12 PM
st Recalib on : 25 APR 97 11:08 AM
ltiplier : 1

Page Number : 1
Vial Number : 12
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1248F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042897\012F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.266	514499	BB	0.065	1	22.636	TETRACHLORO-M-XYLENE
8.708	179521	BB	0.081	1	490.034	AR 1248 #1
9.974	548562	MV	0.118	1	458.956	AR 1248 #2
12.248	235559	BB	0.080	1	442.194	AR 1248 #3
13.396	340694	BB	0.086	1	461.088	AR 1248 #4
14.390	331822	BB	0.090	1	452.952	AR 1248 #5
27.362	302539	BB	0.108	1	24.957	DECACHLOROBIPHENYL

er Modified



ta File Name	: C:\HPCHEM\1\DATA\042897\062R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 62
mple Name	: AR 1248 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 03:22 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 02:18 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042897\062R0101.D
erator : ECL
strument : HP4
mple Name : AR 1248 CONT CHK
n Time Bar Code:
quired on : 28 Apr 97 03:22 PM
port Created on: 29 Apr 97 02:18 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 1

Page Number : 1
Vial Number : 62
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042897\062R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.980	262808	BB	0.066	1	23.234	TETRACHLORO-M-XYLENE
9.497	100333	BB	0.100	1	501.182	AR 1248 #1
11.056	272805	BB	0.130	1	457.062	AR 1248 #2
12.225	102611	BB	0.081	1	463.187	AR 1248 #3
13.388	163331	BB	0.100	1	459.949	AR 1248 #4
15.057	129040	BB	0.092	1	443.563	AR 1248 #5
28.733	194484	BB	0.127	1	23.806	DECACHLOROBIPHENYL

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042897\010F0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : AR 1660 CONT CHK
Acquisition Date : 28 Apr 97 02:10 PM
Last Calibration Date : 22 APR 97 09:52 AM
Analysis Method : 1660F.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 29 Apr 97 02:08 PM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
ETRACHLORO-M-XYLENE	2.500E+01	561026	2.244E+04	2.217E+04	2.673E+02	1.2
R 1016 #1	5.000E+02	199652	3.993E+02	4.014E+02	2.119E+00	0.5
R 1016 #2	5.000E+02	435968	8.719E+02	8.686E+02	3.307E+00	0.4
R 1016 #3	5.000E+02	793271	1.587E+03	1.727E+03	1.402E+02	8.1
R 1016 #4	5.000E+02	301789	6.036E+02	5.803E+02	2.327E+01	4.0
R 1016 #5	5.000E+02	224851	4.497E+02	4.520E+02	2.307E+00	0.5
R 1260 #1	5.000E+02	549857	1.100E+03	1.106E+03	6.160E+00	0.6
R 1260 #2	5.000E+02	579777	1.160E+03	1.173E+03	1.326E+01	1.1
R 1260 #3	5.000E+02	267494	5.350E+02	5.439E+02	8.927E+00	1.6
R 1260 #4	5.000E+02	330804	6.616E+02	7.017E+02	4.007E+01	5.7
R 1260 #5	5.000E+02	592496	1.185E+03	1.576E+03	3.907E+02	24.8<--
ECACHLOROBIPHENYL	2.500E+01	334673	1.339E+04	1.222E+04	1.168E+03	9.6

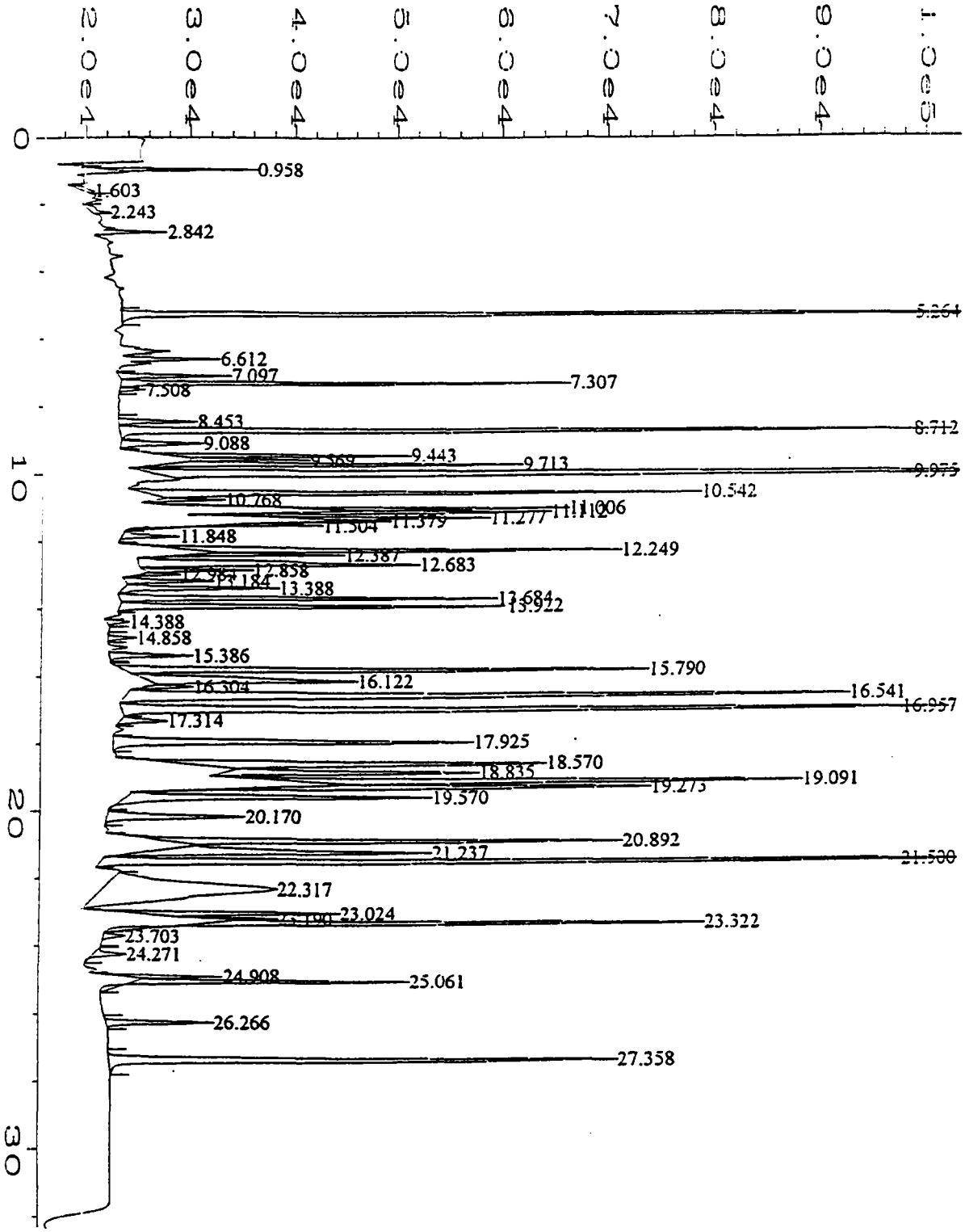
-- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042897\060R0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : AR 1660 CONT CHK
Acquisition Date : 28 Apr 97 02:10 PM
Last Calibration Date : 22 APR 97 10:00 AM
Analysis Method : 1660R.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 29 Apr 97 02:08 PM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	300068	1.200E+04	1.193E+04	7.620E+01	0.6
AR 1016 #1	5.000E+02	117901	2.358E+02	2.380E+02	2.168E+00	0.9
AR 1016 #2	5.000E+02	148280	2.966E+02	3.050E+02	8.488E+00	2.8
AR 1016 #3	5.000E+02	436669	8.733E+02	9.282E+02	5.484E+01	5.9
AR 1016 #4	5.000E+02	169366	3.387E+02	3.763E+02	3.761E+01	10.0
AR 1016 #5	5.000E+02	127676	2.554E+02	2.766E+02	2.124E+01	7.7
AR 1260 #1	5.000E+02	276335	5.527E+02	5.796E+02	2.693E+01	4.6
AR 1260 #2	5.000E+02	330089	6.602E+02	7.164E+02	5.627E+01	7.9
AR 1260 #3	5.000E+02	128051	2.561E+02	3.293E+02	7.325E+01	22.2<--
AR 1260 #4	5.000E+02	400053	8.001E+02	8.077E+02	7.606E+00	0.9
AR 1260 #5	5.000E+02	135077	2.702E+02	3.817E+02	1.116E+02	29.2<--
DECACHLOROBIPHENYL	2.500E+01	218241	8.730E+03	8.758E+03	2.869E+01	0.3

<-- = Exceeds %Difference Limit



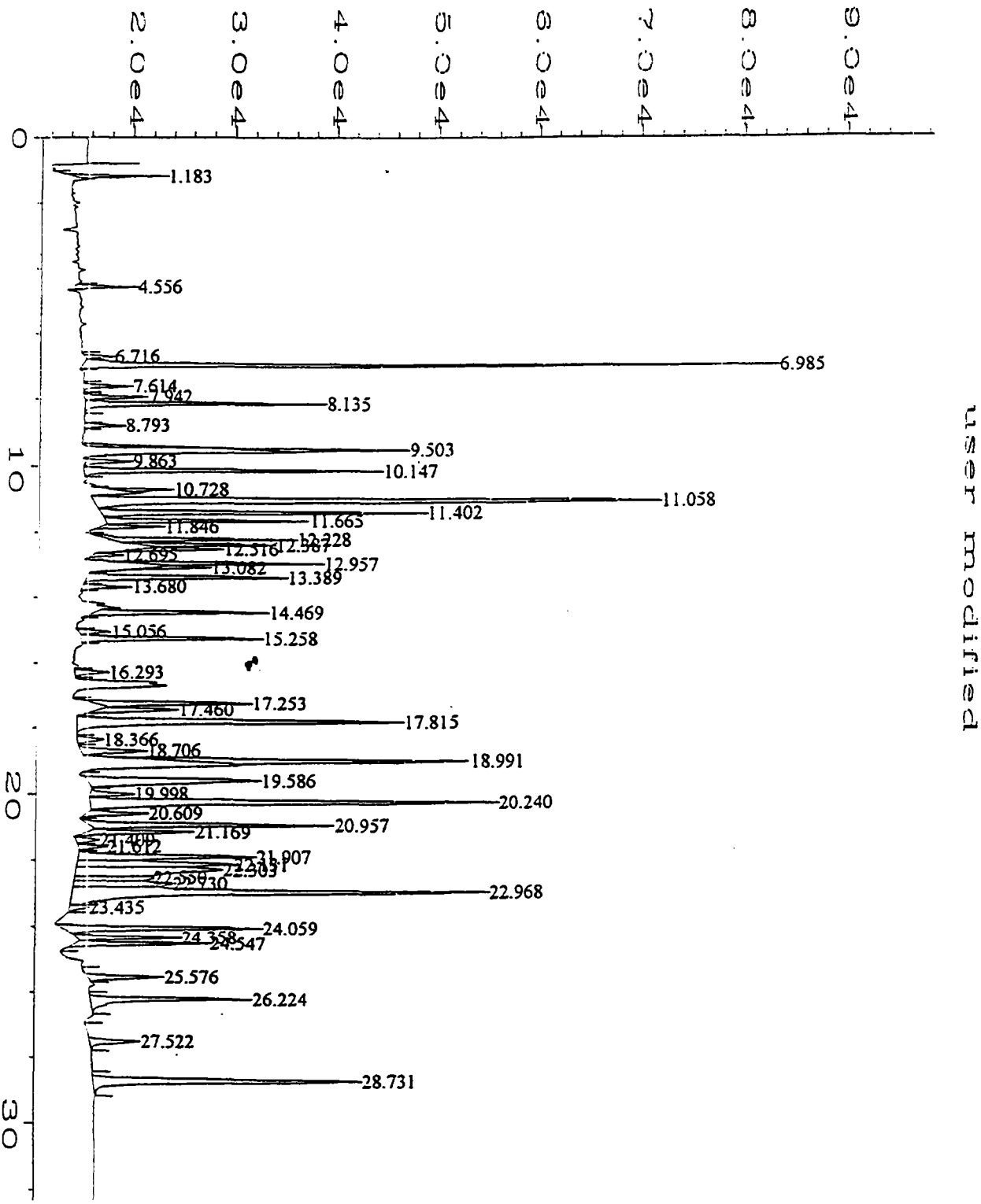
Data File Name	: C:\HPCHEM\1\DATA\042897\010F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 10
Sample Name	: AR 1660 CONT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 02:10 PM	Instrument Method:	1660F.MTH
Report Created on:	28 Apr 97 03:30 PM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\010F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 10
Sample Name	: AR 1660 CONT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 02:10 PM	Instrument Method	: 1660F.MTH
Report Created on	: 28 Apr 97 03:30 PM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042897\010F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.264	561026	BB	0.065	1	25.301	TETRACHLORO-M-XYLENE
7.307	199652	BB	0.072	1	497.360	AR 1016 #1
8.712	435968	BB	0.086	1	501.904	AR 1016 #2
9.975	793271	BB	0.111	1	459.416	AR 1016 #3
10.542	301789	BB	0.086	1	520.051	AR 1016 #4
12.249	224851	BB	0.085	1	497.449	AR 1016 #5
16.541	549857	BB	0.119	1	497.215	AR 1260 #1
16.957	579777	BB	0.116	1	494.345	AR 1260 #2
18.570	267494	BB	0.121	1	491.794	AR 1260 #3
19.091	330804	BB	0.108	1	471.450	AR 1260 #4
21.500	592496	BB	0.100	1	376.018	AR 1260 #5
27.358	334673	BB	0.108	1	27.389	DECACHLOROBIPHENYL



Data File Name	: C:\HPCHEM\1\DATA\042897\060R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 60
Sample Name	: AR 1660 CONT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 02:10 PM	Instrument Method	: 1660F.MTH
Report Created on	: 29 Apr 97 02:04 PM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\060R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 60
Sample Name	: AR 1660 CONT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 02:10 PM	Instrument Method	: 1660F.MTH
Report Created on	: 29 Apr 97 02:04 PM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042897\060R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
6.985	300068	BB	0.068	1	25.160	TETRACHLORO-M-XYLENE
8.135	117901	BB	0.077	1	495.443	AR 1016 #1
10.147	148280	BB	0.079	1	486.088	AR 1016 #2
11.058	436669	BB	0.127	1	470.457	AR 1016 #3
11.402	169366	BB	0.083	1	450.029	AR 1016 #4
13.389	127676	BB	0.101	1	461.600	AR 1016 #5
17.815	276335	BB	0.133	1	476.773	AR 1260 #1
20.240	330089	BB	0.124	1	460.730	AR 1260 #2
21.907	128051	MV	0.123	1	388.801	AR 1260 #3
22.968	400053	VV	0.163	1	495.292	AR 1260 #4
24.059	135077	BB	0.109	1	353.841	AR 1260 #5
28.731	218241	BB	0.130	1	24.918	DECACHLOROBIPHENYL

User Modified

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042897\019F0101.D
libration Check Level : 3
strument : HP4
mple Name : AR 1248 CONT CHK
quisition Date : 28 Apr 97 07:32 PM
st Calibration Date : 25 APR 97 11:08 AM
alysis Method : 1248F.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 29 Apr 97 02:21 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	504279	2.017E+04	2.273E+04	2.558E+03	11.3
1248 #1	5.000E+02	181960	3.639E+02	3.663E+02	2.423E+00	0.7
1248 #2	5.000E+02	524838	1.050E+03	1.195E+03	1.456E+02	12.2
1248 #3	5.000E+02	232046	4.641E+02	5.327E+02	6.861E+01	12.9
1248 #4	5.000E+02	348919	6.978E+02	7.389E+02	4.105E+01	5.6
1248 #5	5.000E+02	326565	6.531E+02	7.326E+02	7.945E+01	10.8
CACHLOROBIPHENYL	2.500E+01	305519	1.222E+04	1.212E+04	9.828E+01	0.8

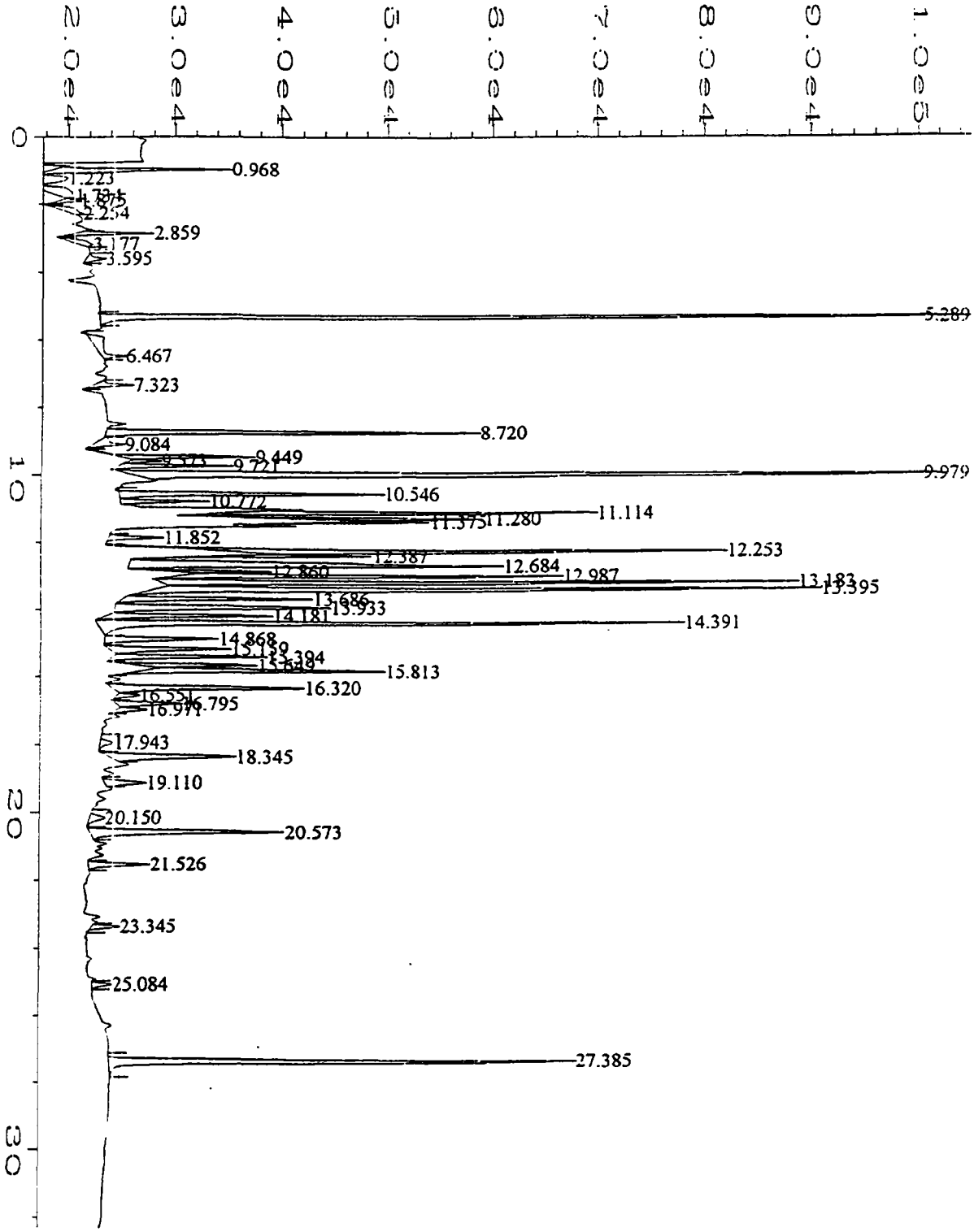
-- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

ıta File : C:\HPCHEM\1\DATA\042897\069R0101.D
ılibration Check Level : 3
ıstrument : HP4
ımple Name : AR 1248 CONT CHK
:quisition Date : 28 Apr 97 07:32 PM
ıst Calibration Date : 25 APR 97 11:15 AM
ıalysis Method : 1248R.MTH
ılculation Type : External Standard
ımple Amount : .0
:port Date : 29 Apr 97 02:22 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	265745	1.063E+04	1.131E+04	6.814E+02	6.0
1248 #1	5.000E+02	101372	2.027E+02	2.002E+02	2.552E+00	1.3
1248 #2	5.000E+02	276349	5.527E+02	5.969E+02	4.417E+01	7.4
1248 #3	5.000E+02	104777	2.096E+02	2.215E+02	1.198E+01	5.4
1248 #4	5.000E+02	166195	3.324E+02	3.551E+02	2.272E+01	6.4
1248 #5	5.000E+02	128063	2.561E+02	2.909E+02	3.479E+01	12.0
CACHLOROBIPHENYL	2.500E+01	201947	8.078E+03	8.170E+03	9.180E+01	1.1

-- = Exceeds %Difference Limit



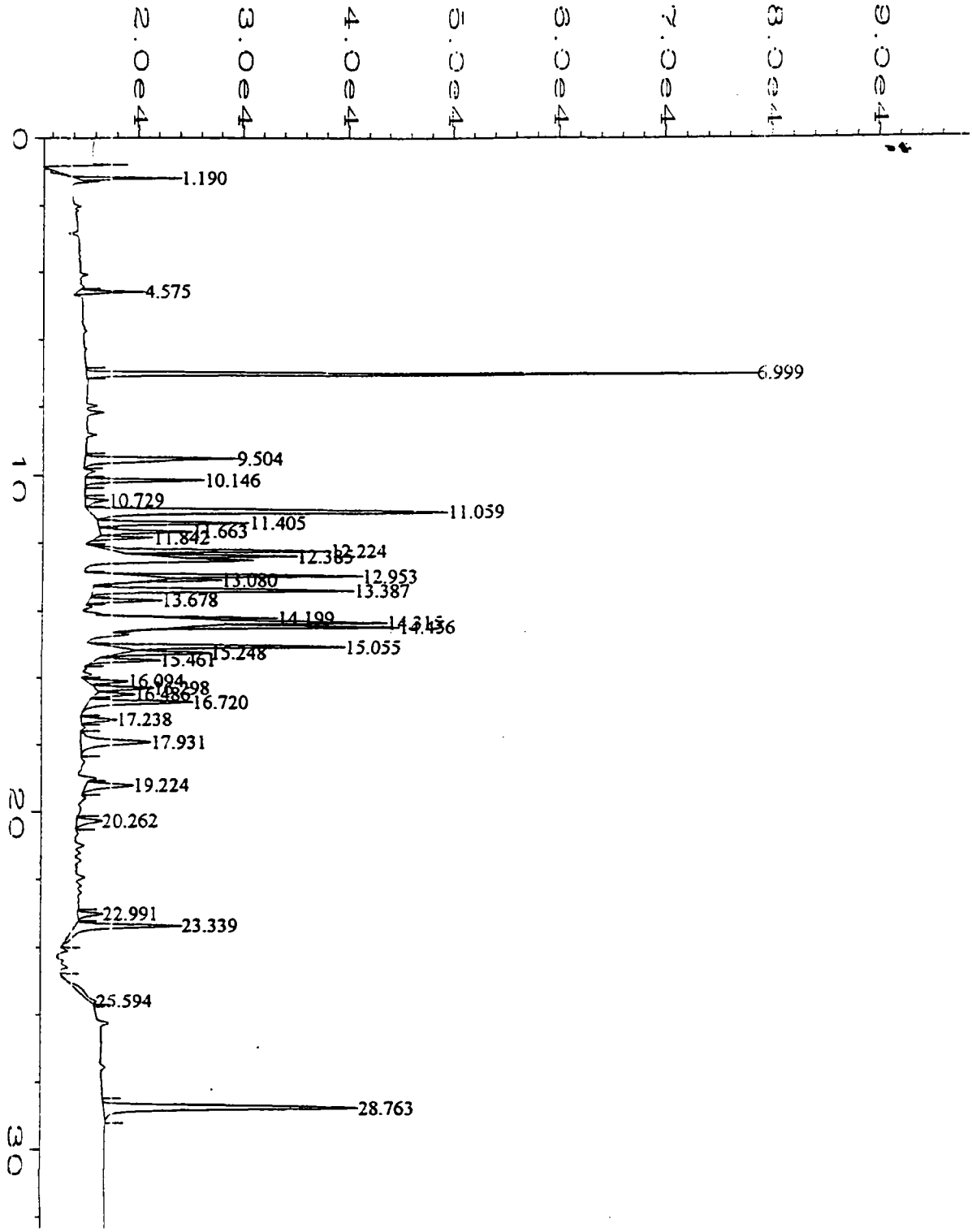
ta File Name	: C:\HPCHEM\1\DATA\042897\019F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 19
mple Name	: AR 1248 CONT CHK	Injection Number	: 1
n Time Bar Code	:	Sequence Line	: 1
quired on	: 28 Apr 97 07:32 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 02:15 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

ta File Name	: C:\HPCHEM\1\DATA\042897\019F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 19
mple Name	: AR 1248 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 07:32 PM	Instrument Method	: 1660F.MTH
port Created on	: 29 Apr 97 02:15 PM	Analysis Method	: 1248F.MTH
st Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

g. 1 in C:\HPCHEM\1\DATA\042897\019F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.289	504279	BB	0.065	1	22.187	TETRACHLORO-M-XYLENE
8.720	181960	BB	0.080	1	496.692	AR 1248 #1
9.979	524838	BB	0.111	1	439.107	AR 1248 #2
12.253	232046	BB	0.079	1	435.601	AR 1248 #3
13.395	348919	BB	0.086	1	472.220	AR 1248 #4
14.391	326565	BB	0.092	1	445.775	AR 1248 #5
27.385	305519	BB	0.110	1	25.203	DECACHLOROBIPHENYL



ta File Name	: C:\HPCHEM\1\DATA\042897\069R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 69
mple Name	: AR 1248 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 07:32 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 02:19 PM	Analysis Method	: 1248R.MTH
st Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

ta File Name : C:\HPCHEM\1\DATA\042897\069R0101.D
erator : ECL
strument : HP4
mple Name : AR 1248 CONT CHK
n Time Bar Code:
quired on : 28 Apr 97 07:32 PM
port Created on: 29 Apr 97 02:19 PM
st Recalib on : 25 APR 97 11:15 AM
ltiplier : 1

Page Number : 1
Vial Number : 69
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1248R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042897\069R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.999	265745	BB	0.065	1	23.494	TETRACHLORO-M-XYLENE
9.504	101372	BB	0.100	1	506.376	AR 1248 #1
11.059	276349	BB	0.131	1	463.000	AR 1248 #2
12.224	104777	BB	0.080	1	472.966	AR 1248 #3
13.387	166195	BB	0.103	1	468.013	AR 1248 #4
15.055	128063	BB	0.093	1	440.203	AR 1248 #5
28.763	201947	BB	0.130	1	24.719	DECACHLOROBIPHENYL

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042897\020F0101.D
libration Check Level : 3
strument : HP4
mple Name : AR 1660 CONT CHK
quisition Date : 28 Apr 97 08:08 PM
st Calibration Date : 22 APR 97 09:52 AM
alysis Method : 1660F.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 29 Apr 97 02:08 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	590527	2.362E+04	2.217E+04	1.447E+03	6.5
1016 #1	5.000E+02	215287	4.306E+02	4.014E+02	2.915E+01	7.3
1016 #2	5.000E+02	474025	9.481E+02	8.686E+02	7.942E+01	9.1
1016 #3	5.000E+02	923597	1.847E+03	1.727E+03	1.205E+02	7.0
1016 #4	5.000E+02	329518	6.590E+02	5.803E+02	7.873E+01	13.6
1016 #5	5.000E+02	242074	4.841E+02	4.520E+02	3.214E+01	7.1
1260 #1	5.000E+02	582858	1.166E+03	1.106E+03	5.984E+01	5.4
1260 #2	5.000E+02	614726	1.229E+03	1.173E+03	5.663E+01	4.8
1260 #3	5.000E+02	282372	5.647E+02	5.439E+02	2.083E+01	3.8
1260 #4	5.000E+02	351234	7.025E+02	7.017E+02	7.938E-01	0.1
1260 #5	5.000E+02	826179	1.652E+03	1.576E+03	7.665E+01	4.9
CACHLOROBIPHENYL	2.500E+01	340723	1.363E+04	1.222E+04	1.410E+03	11.5

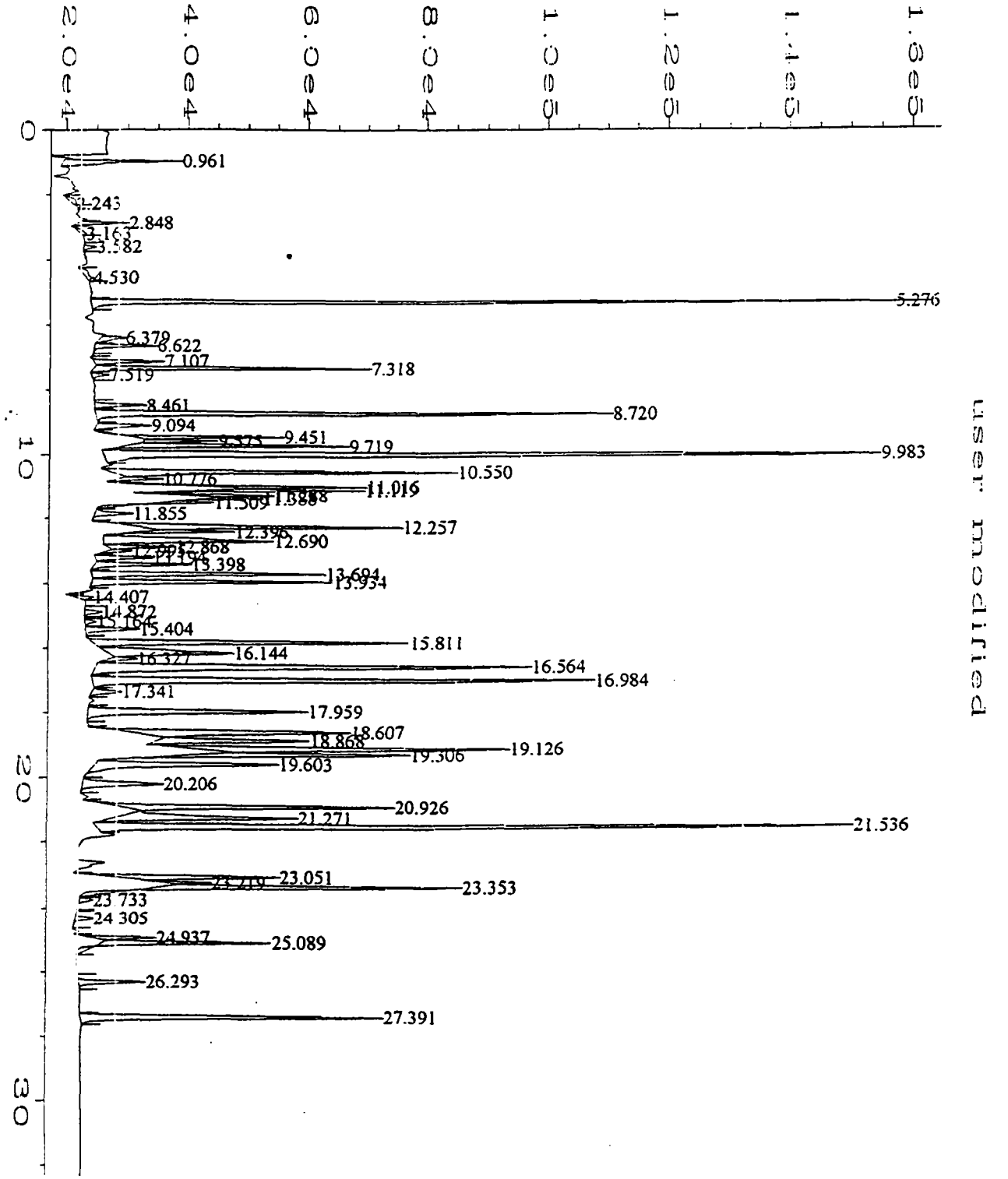
- = Exceeds %Difference Limit

CONTINUING CALIBRATION DATA

ta File : C:\HPCHEM\1\DATA\042897\070R0101.D
libration Check Level : 3
strument : HP4
mple Name : AR 1660 CONT CHK
quisition Date : 28 Apr 97 08:08 PM
st Calibration Date : 22 APR 97 10:00 AM
alysis Method : 1660R.MTH
lculation Type : External Standard
mple Amount : .0
port Date : 29 Apr 97 02:09 PM
Difference Limit : 15.0

mpound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TRACHLORO-M-XYLENE	2.500E+01	308019	1.232E+04	1.193E+04	3.942E+02	3.3
1016 #1	5.000E+02	120233	2.405E+02	2.380E+02	2.496E+00	1.0
1016 #2	5.000E+02	151609	3.032E+02	3.050E+02	1.830E+00	0.6
1016 #3	5.000E+02	439859	8.797E+02	9.282E+02	4.846E+01	5.2
1016 #4	5.000E+02	170444	3.409E+02	3.763E+02	3.546E+01	9.4
1016 #5	5.000E+02	129052	2.581E+02	2.766E+02	1.849E+01	6.7
1260 #1	5.000E+02	279653	5.593E+02	5.796E+02	2.029E+01	3.5
1260 #2	5.000E+02	330957	6.619E+02	7.164E+02	5.453E+01	7.6
1260 #3	5.000E+02	152239	3.045E+02	3.293E+02	2.487E+01	7.6
1260 #4	5.000E+02	377525	7.551E+02	8.077E+02	5.266E+01	6.5
1260 #5	5.000E+02	176900	3.538E+02	3.817E+02	2.794E+01	7.3
CACHLOROBIPHENYL	2.500E+01	227256	9.090E+03	8.758E+03	3.319E+02	3.8

- = Exceeds %Difference Limit



ta File Name	: C:\HPCHEM\1\DATA\042897\020F0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 20
mple Name	: AR 1660 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 08:08 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 02:06 PM	Analysis Method	: 1660F.MTH
st Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

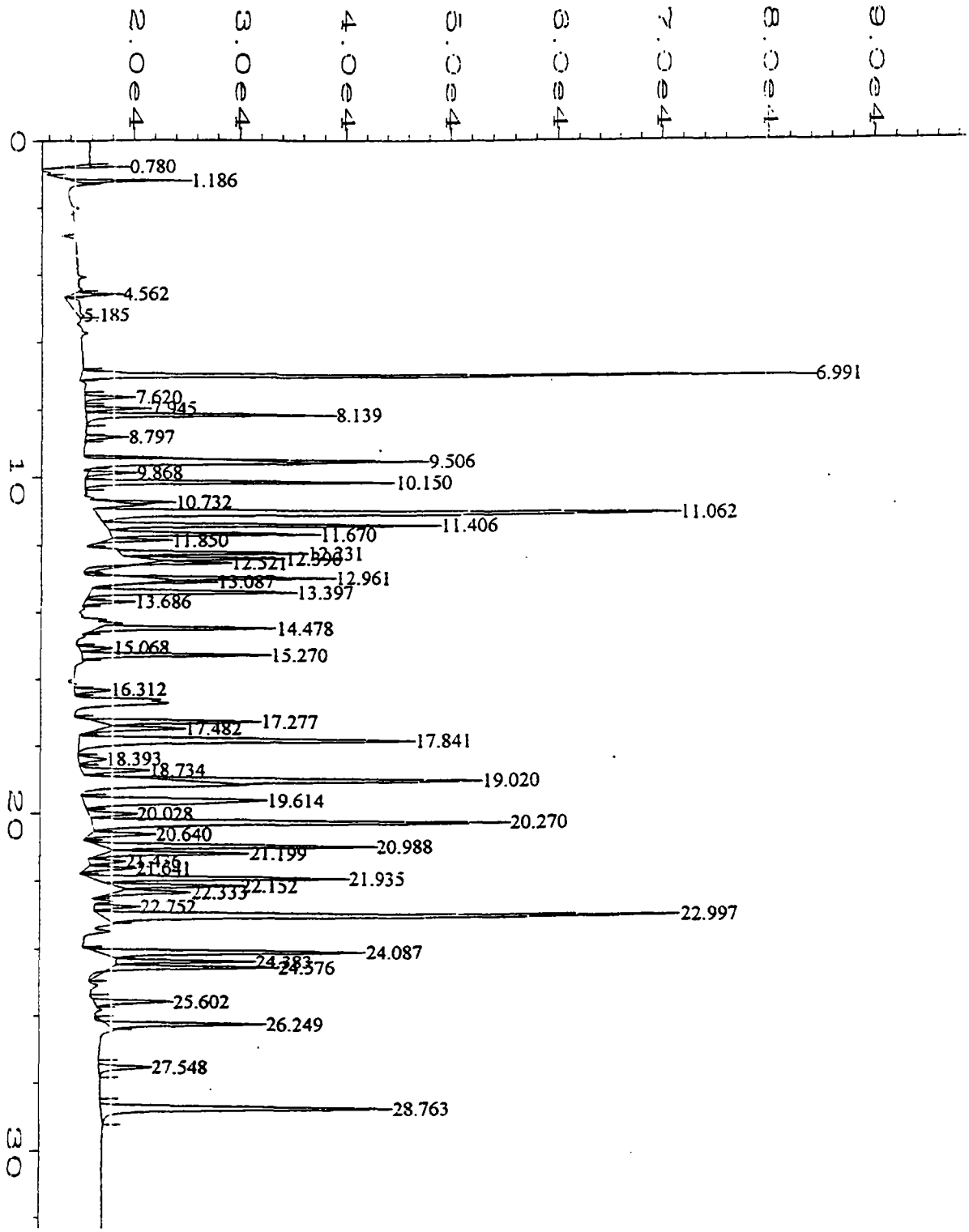
ta File Name : C:\HPCHEM\1\DATA\042897\020F0101.D
erator : ECL
strument : HP4
mple Name : AR 1660 CONT CHK
n Time Bar Code:
quired on : 28 Apr 97 08:08 PM
port Created on: 29 Apr 97 02:07 PM
st Recalib on : 22 APR 97 09:52 AM
ltiplier : 1

Page Number : 1
Vial Number : 20
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660F.MTH
Sample Amount : 0
ISTD Amount :

g. 1 in C:\HPCHEM\1\DATA\042897\020F0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
5.276	590527	MM	0.071	1	26.632	TETRACHLORO-M-XYLENE
7.318	215287	BB	0.073	1	536.310	AR 1016 #1
8.720	474025	BB	0.086	1	545.716	AR 1016 #2
9.983	923597	BB	0.116	1	534.893	AR 1016 #3
10.550	329518	BB	0.087	1	567.834	AR 1016 #4
12.257	242074	BB	0.085	1	535.550	AR 1016 #5
16.564	582858	BB	0.121	1	527.057	AR 1260 #1
16.984	614726	BB	0.115	1	524.144	AR 1260 #2
18.607	282372	BB	0.123	1	519.147	AR 1260 #3
19.126	351234	BB	0.108	1	500.565	AR 1260 #4
21.536	326179	BB	0.104	1	524.321	AR 1260 #5
27.391	340723	MM	0.113	1	27.884	DECACHLOROBIPHENYL

er Modified



ta File Name	: C:\HPCHEM\1\DATA\042897\070R0101.D		
erator	: ECL	Page Number	: 1
strument	: HP4	Vial Number	: 70
mple Name	: AR 1660 CONT CHK	Injection Number	: 1
n Time Bar Code:		Sequence Line	: 1
quired on	: 28 Apr 97 08:08 PM	Instrument Method:	1660F.MTH
port Created on:	29 Apr 97 02:04 PM	Analysis Method	: 1660R.MTH
st Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
ltiplier	: 1	ISTD Amount	:

External Standard Report

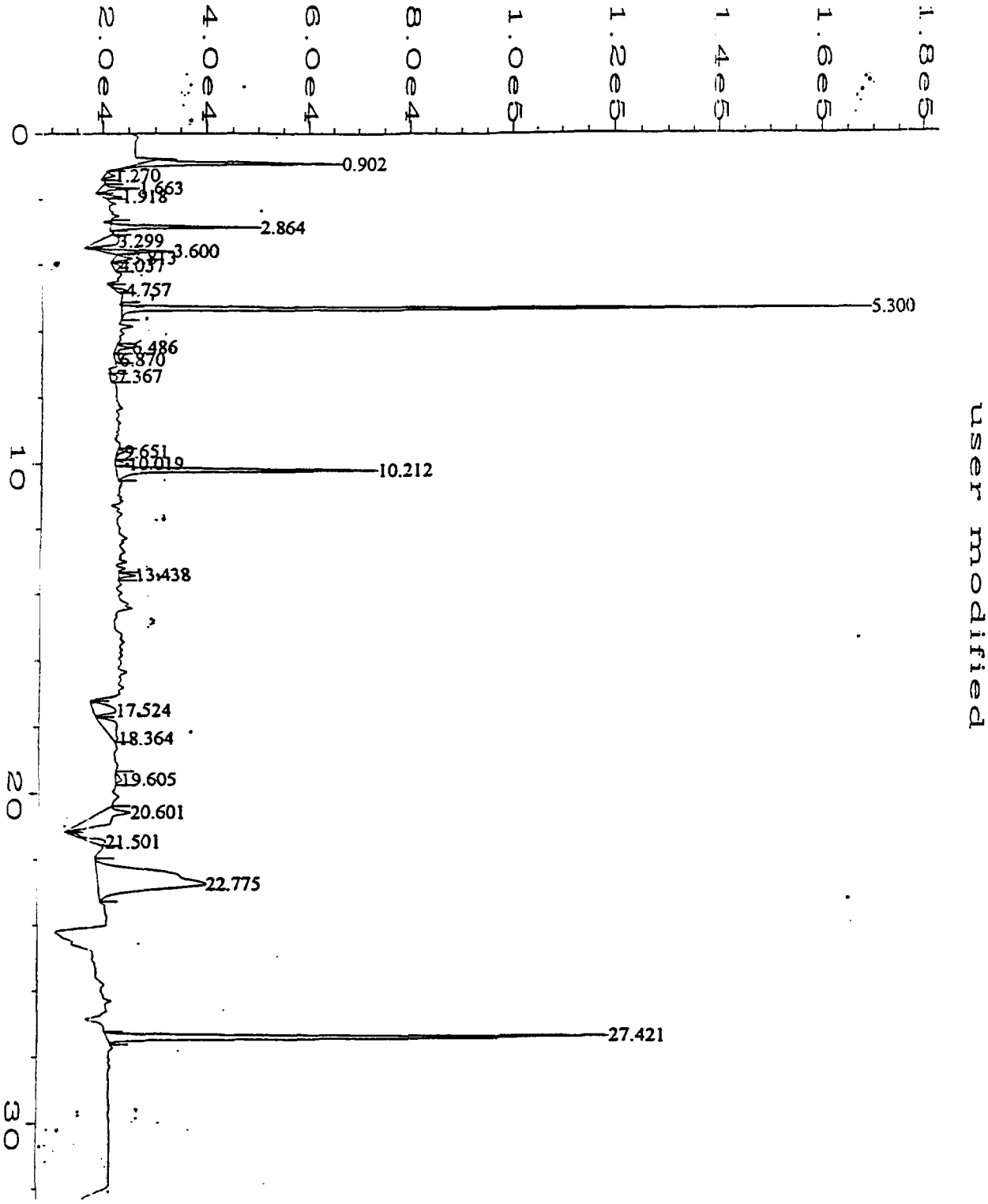
ta File Name : C:\HPCHEM\1\DATA\042897\070R0101.D
erator : ECL
strument : HP4
mple Name : AR 1660 CONT CHK
n Time Bar Code:
quired on : 28 Apr 97 08:08 PM
port Created on: 29 Apr 97 02:04 PM
st Recalib on : 22 APR 97 10:00 AM
ltiplier : 1

Page Number : 1
Vial Number : 70
Injection Number : 1
Sequence Line : 1
Instrument Method: 1660F.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

g. 2 in C:\HPCHEM\1\DATA\042897\070R0101.D

t Time	Area	Type	Width	Ref#	UG/L	Name
6.991	308019	BB	0.068	1	25.826	TETRACHLORO-M-XYLENE
8.139	120233	BB	0.079	1	505.245	AR 1016 #1
10.150	151609	BB	0.080	1	497.002	AR 1016 #2
11.062	439859	BB	0.128	1	473.894	AR 1016 #3
11.406	170444	BB	0.084	1	452.891	AR 1016 #4
13.397	129052	BB	0.103	1	466.574	AR 1016 #5
17.841	279653	BB	0.135	1	482.497	AR 1260 #1
20.270	330957	BB	0.126	1	461.942	AR 1260 #2
21.935	152239	BB	0.099	1	462.240	AR 1260 #3
22.997	377525	BB	0.106	1	467.400	AR 1260 #4
24.087	176900	BB	0.107	1	463.399	AR 1260 #5
28.763	227256	BB	0.128	1	25.947	DECACHLOROBIPHENYL

RAW QC DATA



Data File Name	: C:\HPCHEM\1\DATA\042497\012F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 12
Sample Name	: BLANK 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 10:47 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:26 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

External Standard Report

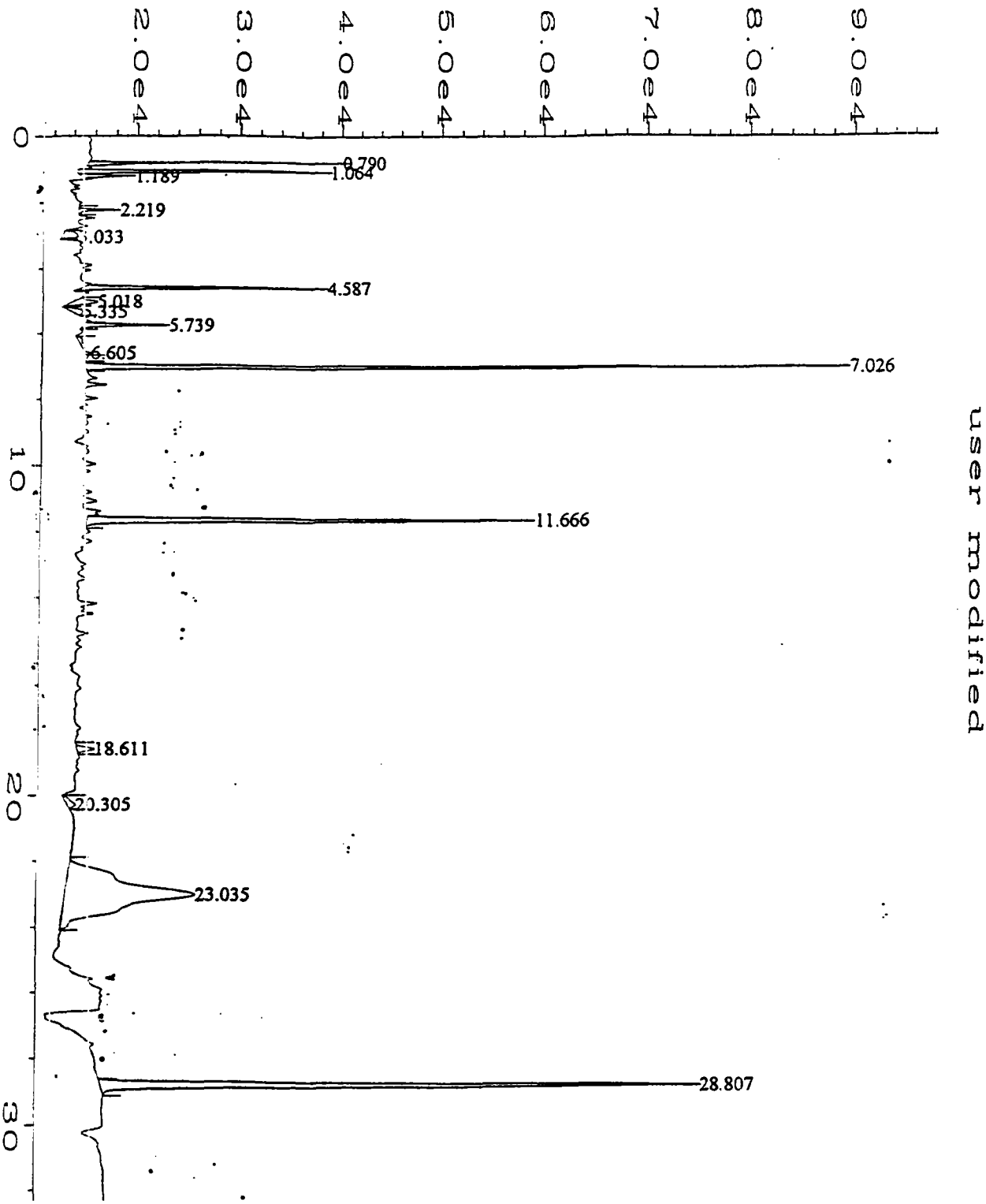
Data File Name	: C:\HPCHEM\1\DATA\042497\012F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 12
Sample Name	: BLANK 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 10:47 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:26 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\012F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
5.300	616817	BB	0.066	1	0.271	TETRACHLORO-M-XYLENE	547
8.757	* not found *			1		AR 1248 #1	
10.019	14921	BB	0.097	1	0.125	AR 1248 #2	
12.285	* not found *			1		AR 1248 #3	
13.438	17688	BB	0.084	1	0.239	AR 1248 #4	
14.423	* not found *			1		AR 1248 #5	
27.421	658705	MM	0.112	1	0.543	DECACHLOROBIPHENYL	1097

Not all calibrated peaks were found

User Modified



user modified

Data File Name	: C:\HPCHEM\1\DATA\042497\062R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 62
Sample Name	: BLANK 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 10:47 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:22 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

External Standard Report

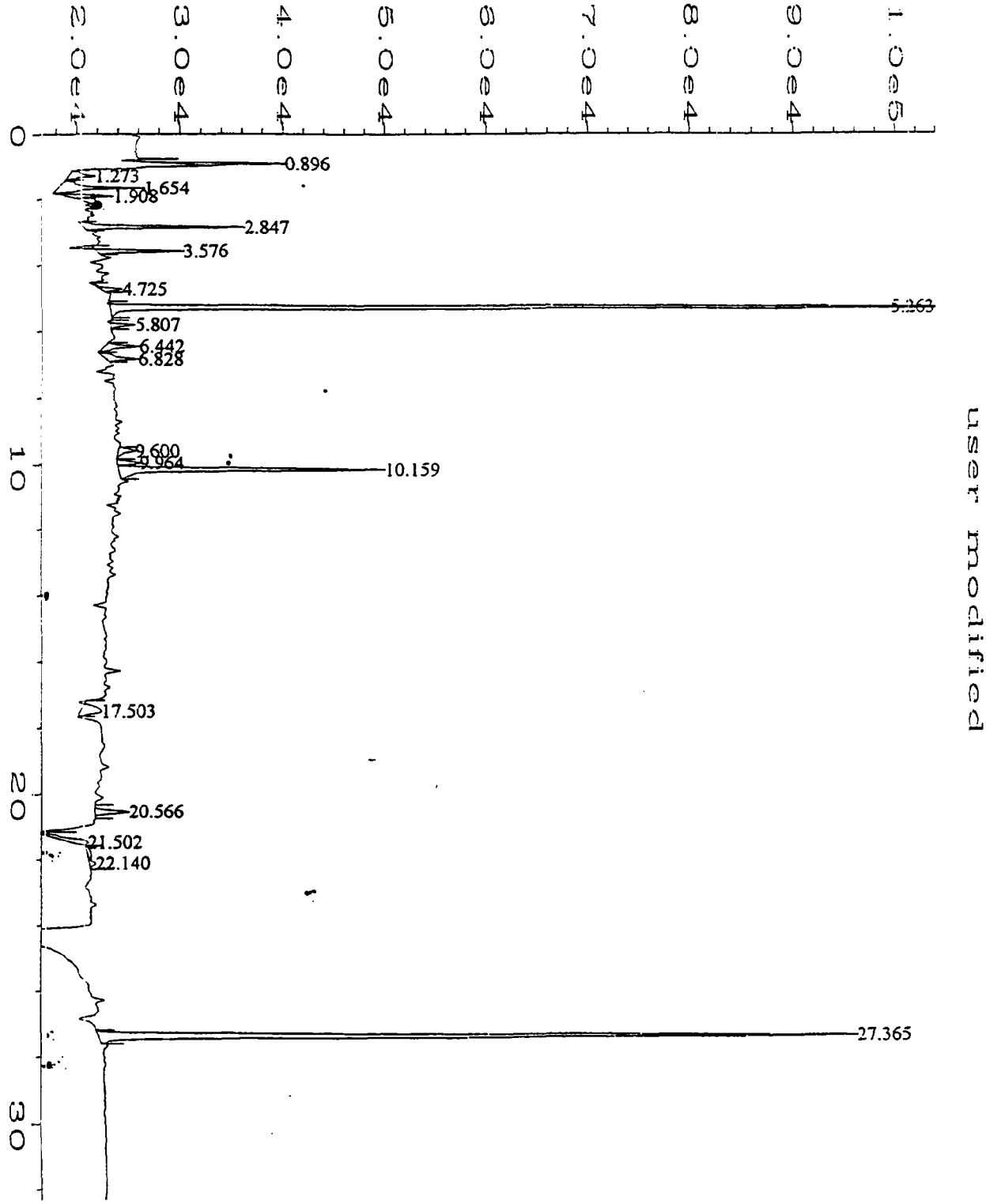
Data File Name	: C:\HPCHEM\1\DATA\042497\062R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 62
Sample Name	: BLANK 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 10:47 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:22 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\062R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.026	315122	BB	0.066	1	0.279	TETRACHLORO-M-XYLENE 567
9.547	* not found *			1		AR 1248 #1
11.102	* not found *			1		AR 1248 #2
12.269	* not found *			1		AR 1248 #3
13.427	* not found *			1		AR 1248 #4
15.094	* not found *			1		AR 1248 #5
28.807	459685	MM	0.131	1	0.563	DECACHLOROBIPHENYL 1132

Not all calibrated peaks were found

User Modified



Data File Name	: C:\HPCHEM\1\DATA\042897\013F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 13
Sample Name	: BLK V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 03:57 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:18 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

External Standard Report

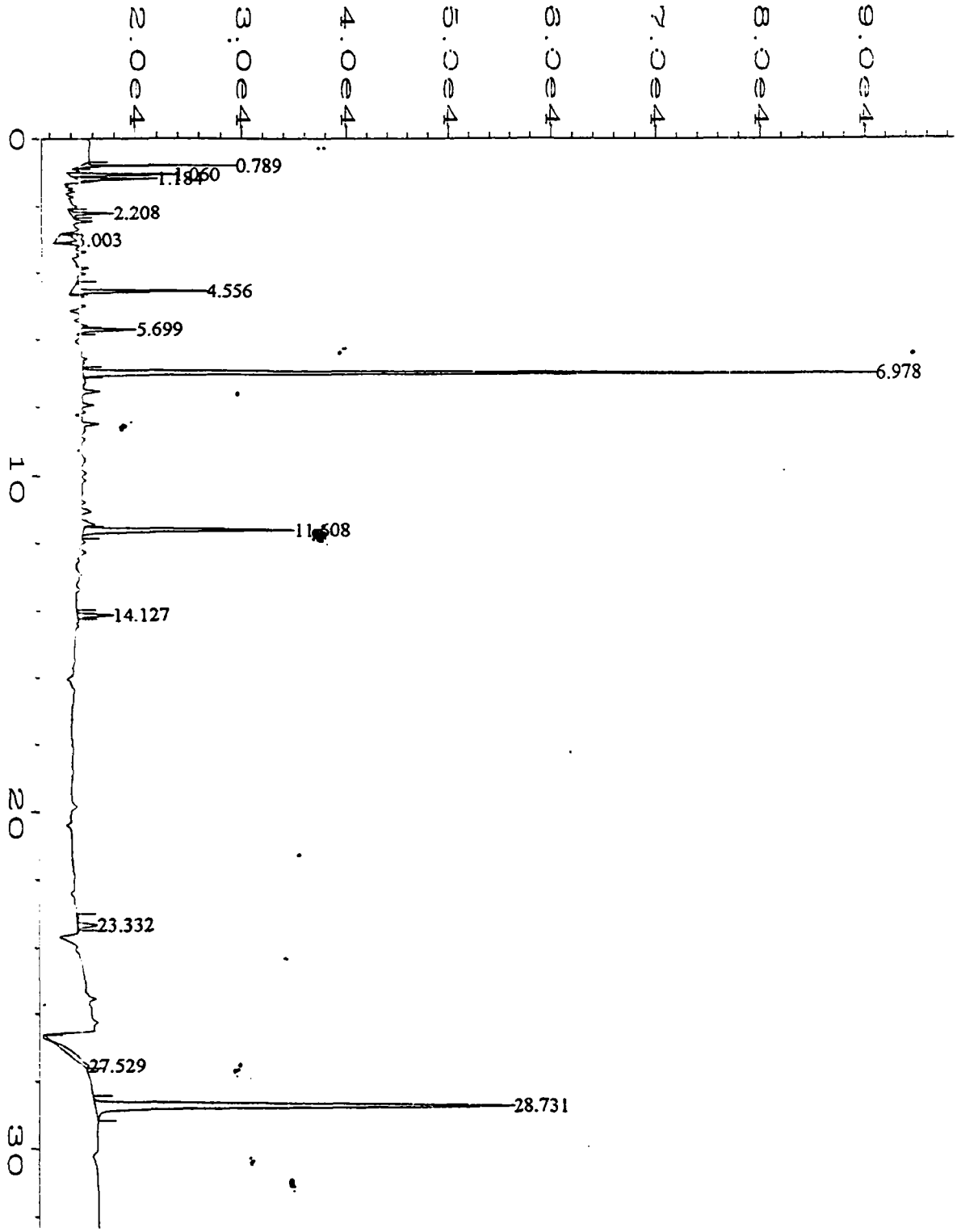
Data File Name	: C:\HPCHEM\1\DATA\042897\013F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 13
Sample Name	: BLK V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 03:57 PM	Instrument Method	: 1660F.MTH
Report Created on	: 29 Apr 97 03:18 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042897\013F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
5.263	643186	BB	0.066	1	0.283	TETRACHLORO-M-XYLENE	57%
8.757	* not found *			1		AR 1248 #1	
9.964	13103	BB	0.099	1	0.110	AR 1248 #2	
12.285	* not found *			1		AR 1248 #3	
13.429	* not found *			1		AR 1248 #4	
14.423	* not found *			1		AR 1248 #5	
27.365	498858	MV	0.112	1	0.412	DECACHLOROBIPHENYL	82%

Not all calibrated peaks were found

User Modified



Data File Name	: C:\HPCHEM\1\DATA\042897\063R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 63
Sample Name	: BLK V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 03:57 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:23 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

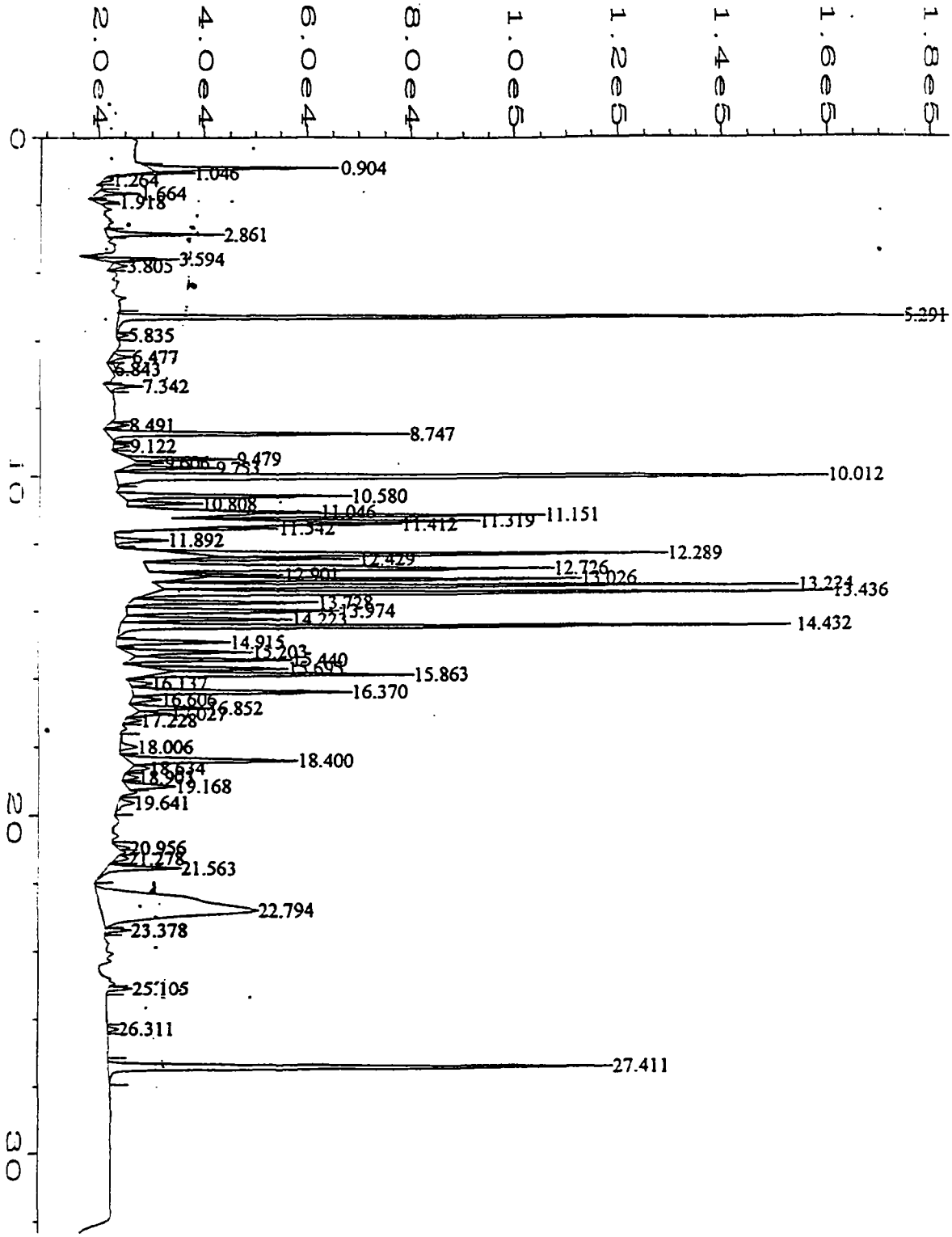
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\063R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 63
Sample Name	: BLK V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 03:57 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:23 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042897\063R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
6.978	321951	BB	0.066	1	0.285	TETRACHLORO-M-XYLENE	577
9.547	* not found *			1		AR 1248 #1	
11.102	* not found *			1		AR 1248 #2	
12.269	* not found *			1		AR 1248 #3	
13.427	* not found *			1		AR 1248 #4	
15.094	* not found *			1		AR 1248 #5	
28.731	321513	BB	0.127	1	0.394	DECACHLOROBIPHENYL	799

Not all calibrated peaks were found



Data File Name	: C:\HPCHEM\1\DATA\042497\013F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 13
Sample Name	: LCS 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 11:22 PM	Instrument Method:	1660F.MTH
Report Created on:	25 Apr 97 11:27 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

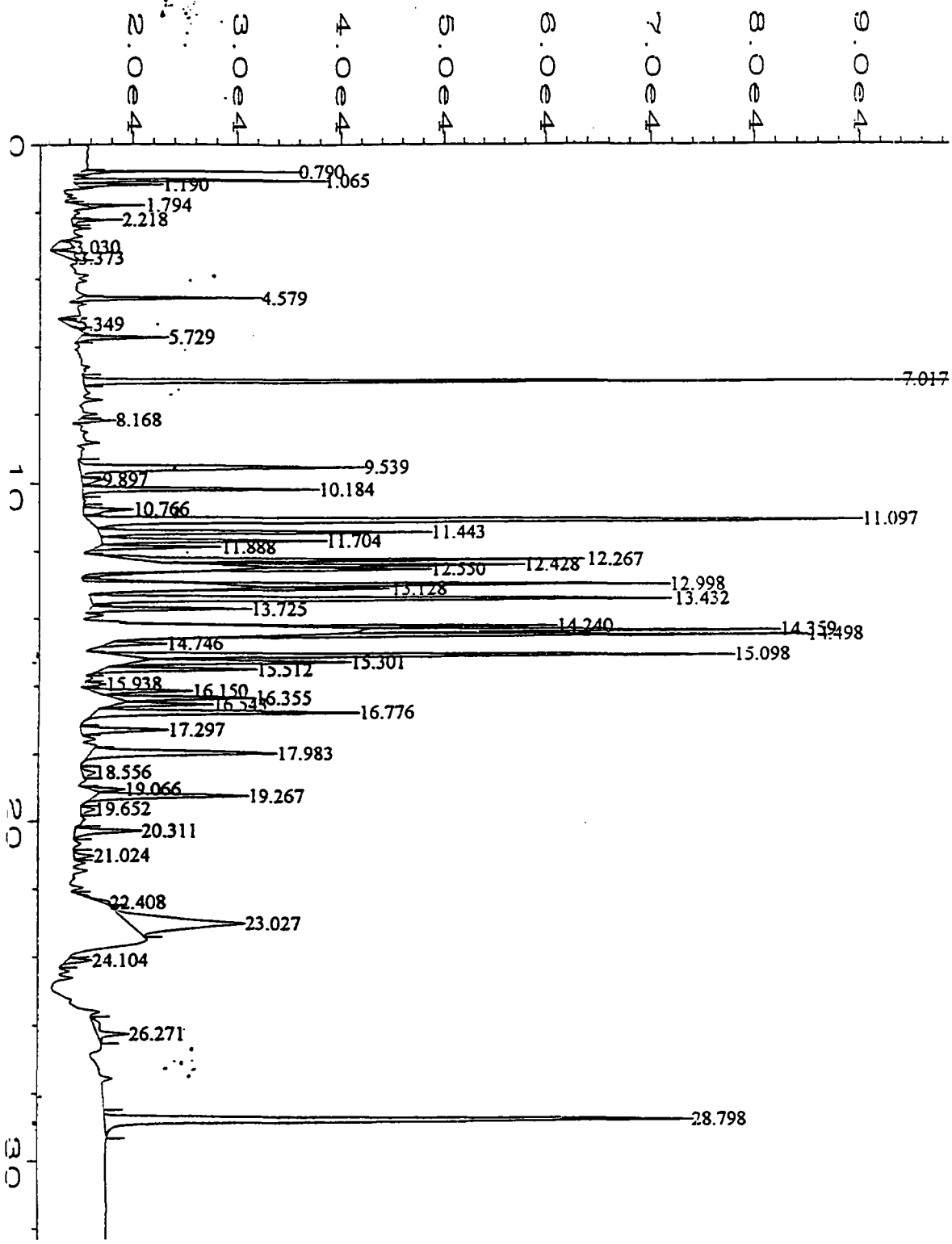
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\013F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 13
Sample Name	: LCS 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 11:22 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:27 AM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042497\013F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.291	717569	BB	0.066	1	0.316	TETRACHLORO-M-XYLENE 635
8.747	317073	BB	0.085	1	8.655	AR 1248 #1
10.012	975292	BB	0.115	1	8.160	AR 1248 #2
12.289	495111	BB	0.084	1	9.294	AR 1248 #3
13.436	709919	BB	0.086	1	9.608	AR 1248 #4
14.432	708862	BB	0.084	1	9.676	AR 1248 #5
27.411	670648	BB	0.108	1	0.553	DECACHLOROBIPHENYL 1112

AR 1248 Average Concentration: 9.079



Data File Name	: C:\HPCHEM\1\DATA\042497\063R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 63
Sample Name	: LCS-73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 11:22 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:22 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

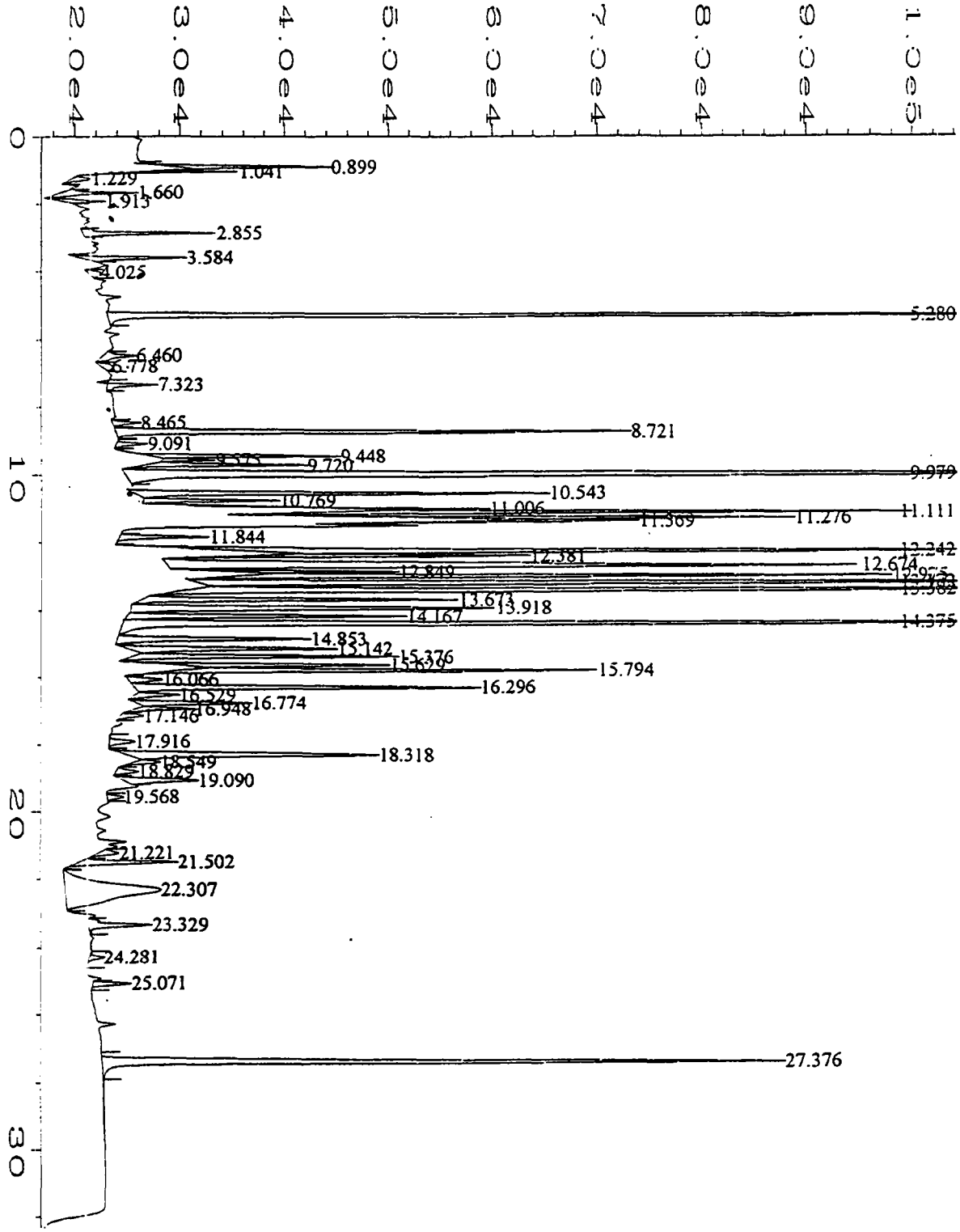
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042497\063R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 63
Sample Name	: LCS 73-30	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 24 Apr 97 11:22 PM	Instrument Method	: 1660F.MTH
Report Created on	: 25 Apr 97 11:22 AM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042497\063R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.017	360090	BB	0.066	1	0.318	TETRACHLORO-M-XYLENE 647
9.539	193548	BB	0.101	1	9.668	AR 1248 #1
11.097	566293	BB	0.124	1	9.488	AR 1248 #2
12.267	222285	BB	0.081	1	10.034	AR 1248 #3
13.432	366947	BB	0.103	1	10.333	AR 1248 #4
15.098	333752	BB	0.091	1	11.472	AR 1248 #5
28.798	463081	BB	0.129	1	0.567	DECACHLOROBIPHENYL 1137

AR 1248 Average Concentration: 10.199



Data File Name	: C:\HPCHEM\1\DATA\042897\014F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 14
Sample Name	: LCS V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 04:33 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:18 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

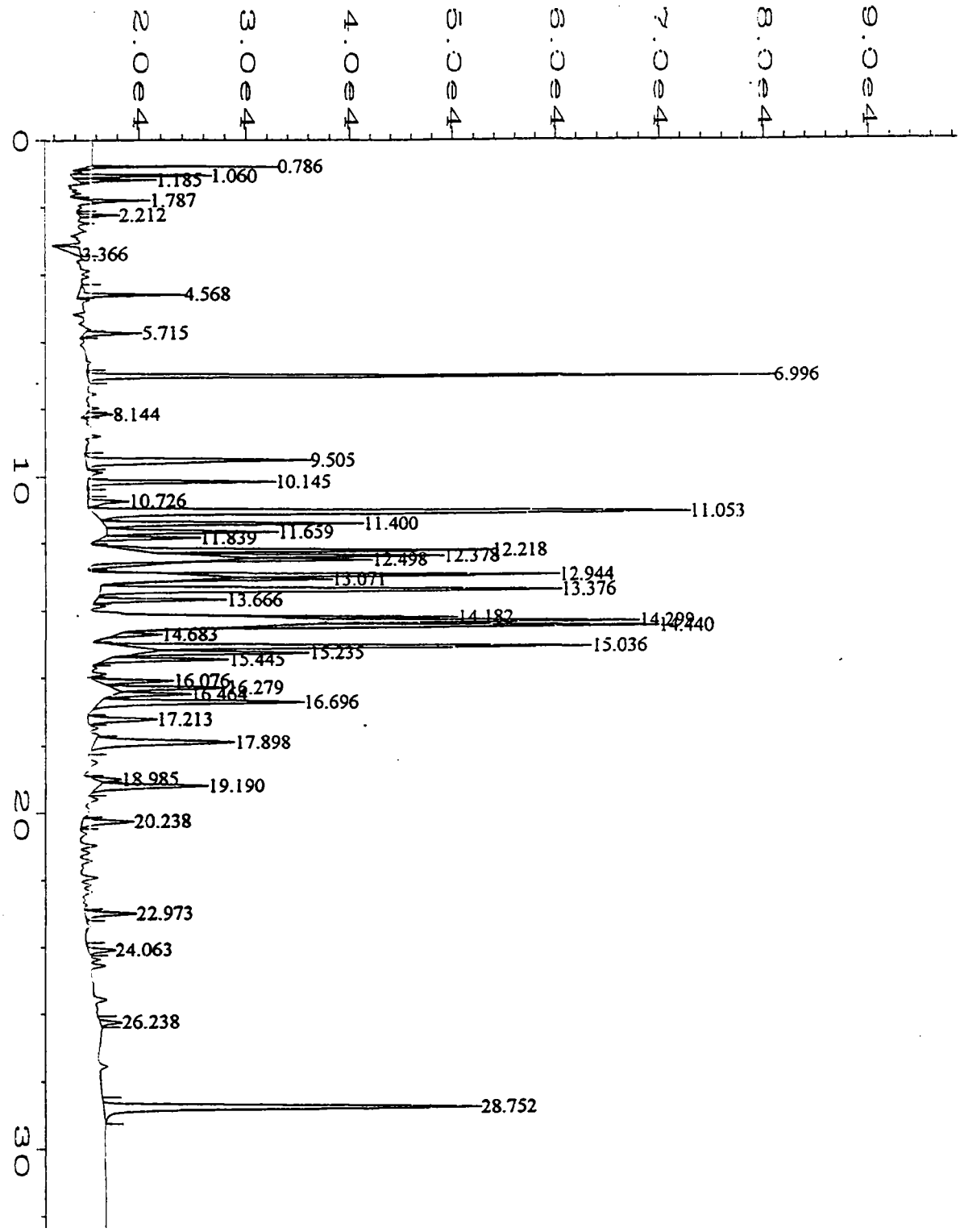
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\014F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 14
Sample Name	: LCS V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 04:33 PM	Instrument Method	: 1660F.MTH
Report Created on	: 29 Apr 97 03:18 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042897\014F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
5.280	543464	BB	0.065	1	0.239	TETRACHLORO-M-XYLENE	487
8.721	259602	BB	0.082	1	7.086	AR 1248 #1	
9.979	871464	BB	0.115	1	7.291	AR 1248 #2	
12.242	419325	BB	0.084	1	7.872	AR 1248 #3	
13.382	588873	BB	0.087	1	7.970	AR 1248 #4	
14.375	591154	BB	0.087	1	8.070	AR 1248 #5	
27.376	451292	BB	0.107	1	0.372	DECACHLOROBIPHENYL	747

AR 1248 Average Concentration: 7.658



Data File Name	: C:\HPCHEM\1\DATA\042897\064R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 64
Sample Name	: LCS V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 04:33 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:25 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

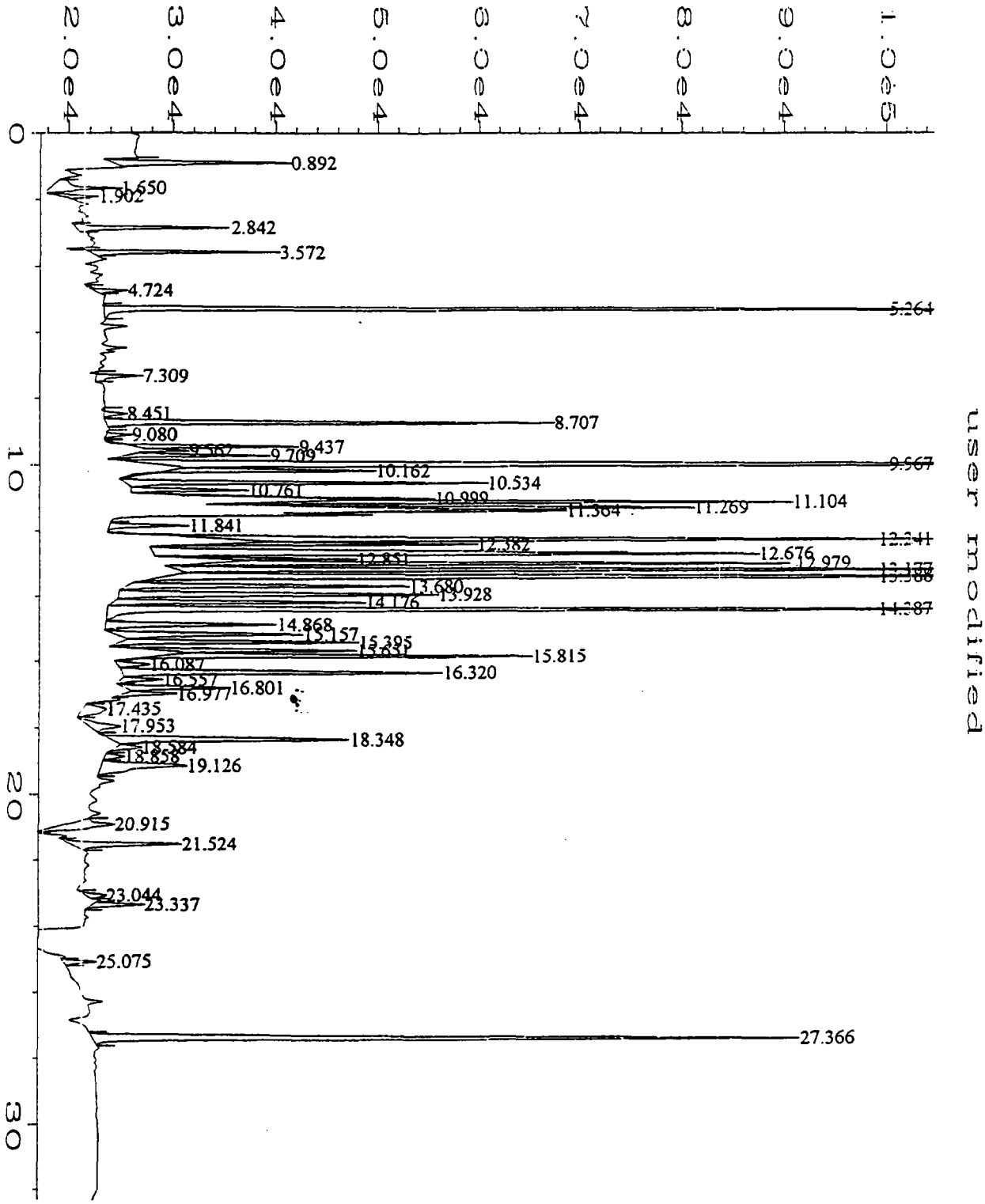
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\064R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 64
Sample Name	: LCS V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 04:33 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:25 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042897\064R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
6.996	279985	BB	0.066	1	0.248	TETRACHLORO-M-XYLENE	507
9.505	148815	BB	0.099	1	7.434	AR 1248 #1	
11.053	446390	BB	0.127	1	7.479	AR 1248 #2	
12.218	170752	BB	0.080	1	7.708	AR 1248 #3	
13.376	288049	BB	0.102	1	8.112	AR 1248 #4	
15.036	250565	BB	0.091	1	8.613	AR 1248 #5	
28.752	296313	BB	0.128	1	0.363	DECACHLOROBIPHENYL	737

AR 1248 Average Concentration: 7.869



Data File Name	: C:\HPCHEM\1\DATA\042897\015F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 15
Sample Name	: LCS DUP V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 05:09 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:19 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

External Standard Report

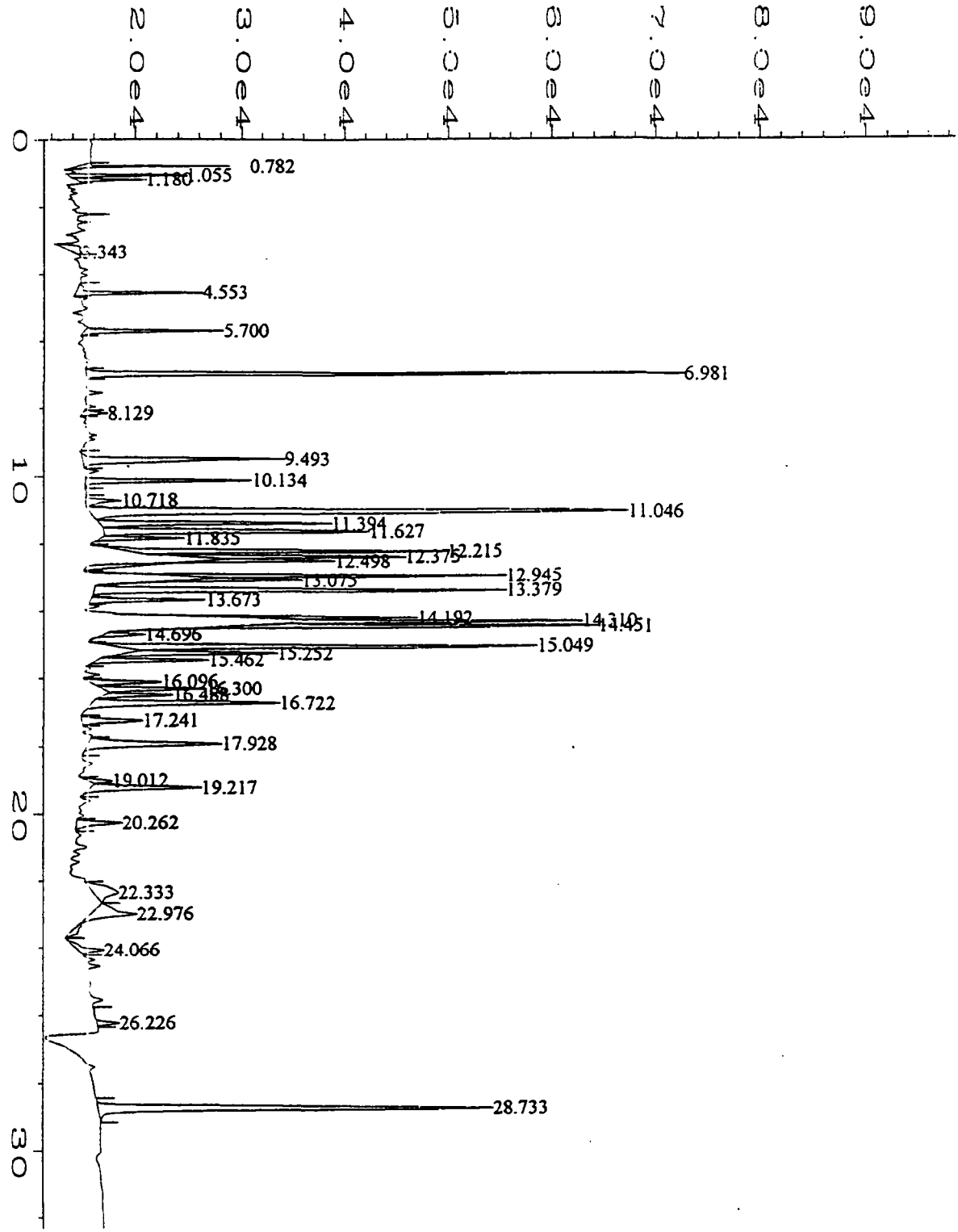
Data File Name	: C:\HPCHEM\1\DATA\042897\015F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 15
Sample Name	: LCS DUP V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 05:09 PM	Instrument Method	: 1660F.MTH
Report Created on	: 29 Apr 97 03:19 PM	Analysis Method	: 1248F.MTH
Last Recalib on	: 25 APR 97 11:08 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042897\015F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
5.264	485903	BB	0.065	1	0.214	TETRACHLORO-M-XYLENE	43%
8.707	230756	BB	0.083	1	6.299	AR 1248 #1	
9.967	702216	BB	0.109	1	5.875	AR 1248 #2	
12.241	378283	BB	0.085	1	7.101	AR 1248 #3	
13.388	537407	BB	0.086	1	7.273	AR 1248 #4	
14.387	538857	BB	0.088	1	7.356	AR 1248 #5	
27.366	460992	MM	0.111	1	0.380	DECACHLOROBIPHENYL	76%

User Modified

AR 1248 Average Concentration: 6.781



Data File Name	: C:\HPCHEM\1\DATA\042897\065R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 65
Sample Name	: LCS DUP V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 05:09 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:25 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042897\065R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 65
Sample Name	: LCS DUP V73P43	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 28 Apr 97 05:09 PM	Instrument Method:	1660F.MTH
Report Created on:	29 Apr 97 03:25 PM	Analysis Method	: 1248R.MTH
Last Recalib on	: 25 APR 97 11:15 AM	Sample Amount	: 0
Multiplier	: 0.01	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042897\065R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name	
6.981	245245	BB	0.066	1	0.217	TETRACHLORO-M-XYLENE	437
9.493	135775	BB	0.100	1	6.782	AR 1248 #1	
11.046	402974	BB	0.127	1	6.751	AR 1248 #2	
12.215	153946	BB	0.080	1	6.949	AR 1248 #3	
13.379	258737	BB	0.103	1	7.286	AR 1248 #4	
15.049	230979	BB	0.092	1	7.940	AR 1248 #5	
28.733	301225	BB	0.126	1	0.369	DECACHLOROBIPHENYL	743

AR 1248 Average Concentration: 7.142

Semivolatile Laboratory

Runlog

DATE 4/24/97 COLUMN ID DB 608

ANALYST ECL INSTRUMENT ID HP 4

DATA SUBDIRECTORY 042497

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
001F0101	Hexane /Primer		1660F	
002	PCB 1660 ✓ 0.5 PPM			WS 0101-F
003	PCB 1248 2.0 PPM			WS 0103-A
004	1.0			B
005	0.5			C
006	0.1			D
007	0.05			E
008	PCB 1248 Alt. ✓ Std			GCS 22-04
009	Blank 73-35	1		
010	LCS 73-35	1		
011	LCS Dup 73-35	1		
012	Blank 73-30	1		
013	LCS 73-30	1		
014	04-403-01	1		
015	02	1		
016	03	1		
017	04	1		
018	04-426-01	1		
019F0201	PCB 1248 ✓ 0.5 PPM			
020F0301	PCB 1248 ✓ 0.5 PPM			WS 0103-F
021	PCB 1660 ✓ 0.5 PPM			WS 0101-F
022	04-404-01	1		
023	04-404-02	1		

066175

HP4 042497 DB 608

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
024 F 0301	04-404-03	1	1660F	
026 F 0301	04	1		
026	05	1		
026	06	1		
028	07	1		
028	08	1		
030	09	1		
030	10	1		
032	PCB 1248 ✓ 0.5 PPM			WS 0103-F
034	04-404-11 MS	1		
034	12 MSD	1		
036	13	1		
036	14	1		
038	15	1		
038	16	1		
040	17	1		
040	PCB 1248 ✓ 0.5 PPM			

000176

000177

Semivolatile Laboratory

Runlog

DATE 4/28/97 COLUMN ID DB 608

ANALYST ECL INSTRUMENT ID HP 4

DATA SUBDIRECTORY 042897

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
001F0101	Primer		1660F	
002	Hexane			
003	PCB 1660 ✓ 0.5 PPM			WS0101-F
004	04-428-01	1		
005	02	1		
006	03	1		
007	04	1		
008	05	1		
009	06	1		
010	PCB 1660 ✓ 0.5 PPM			
011	PCB 1242 ✓ 0.5 PPM			WS0108-F
012	PCB 1248 ✓ 0.5 PPM			WS0103-F
013	Blank 73-43	1		
014	LCS 73-43	1		
015	LCS DUP 73-43	1		
016	04-404-09	1		
017	04-404-10	1		
018	PCB 1242 ✓ 0.5 PPM			
019	PCB 1248 ✓ 0.5 PPM			
020	PCB 1660 ✓ 0.5 PPM			

Semivolatile Laboratory

Runlog

DATE 4/24/97 COLUMN ID DB 5

ANALYST ECL INSTRUMENT ID HP4

DATA SUBDIRECTORY 042497

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
051 R0101	Hexane		1660R	
052	PCB 1660 ✓ 0.5 PPM			WS 0101-F
053	PCB 1248 2.0 PPM			WS 0103-A
054	1.0			B
055	0.5			C
056	0.1			D
057	0.05			E
058	PCB 1248 AH ✓ Std			GCS 22-04
059	Blank 73-35			
060	LCS 73-35			
061	LCS Dup 73-35			
062	Blank 73-30			
063	LCS 73-30			
064	04-403-01			
065	02			
066	03			
067	04			
068	04-426-01			
069 R0201	PCB 1248 ✓ 0.5 PPM			
070 R0301	PCB 1248 ✓ 0.5 PPM			WS 0103-F
071	PCB 1660 ✓ 0.5 PPM			WS 0101-F
072	04-404-01			
073	04-404-02			

HP4 042497 PB 5

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
074R0301	04-404-03	1	1660R	
075	04	1		
076	05	1		
077	06	1		
078	07	1		
079	08	1		
080	09	1		
081	10	1		
082	PCB 1248 ✓ 0.5 PPM			WS0103-F
083	04-404-11 MS	1		
084	12 MSD	1		
085	13	1		
086	14	1		
087	15	1		
088	16	1		
089	17	1		
090	PCB 1248 ✓ 0.5 PPM			

001783

Semivolatile Laboratory

Runlog

DATE 4/28/97 COLUMN ID DB 608

ANALYST ECL INSTRUMENT ID HP 4

DATA SUBDIRECTORY 042897

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
001 F 0101	Primer		1660F	
002	Hexane			
003	PCB 1660 ✓ 0.5 PPM			WS0101-F
004	04-428-01			
005	02			
006	03			
007	04			
008	05			
009	06			
010	PCB 1660 ✓ 0.5 PPM			
011	PCB 1242 ✓ 0.5 PPM			WS0108-F
012	PCB 1248 ✓ 0.5 PPM			WS0108-F
013	Blank 73-43			
014	LCS 73-43			
015	LCS DUP 73-43			
016	04-404-09			
017	04-404-10			
018	PCB 1242 ✓ 0.5 PPM			
019	PCB 1248 ✓ 0.5 PPM			
020	PCB 1660 ✓ 0.5 PPM			

000179

000180

Semivolatile Laboratory

Runlog

DATE 4/28/97 COLUMN ID DB 5

ANALYST ECL INSTRUMENT ID HP 4

DATA SUBDIRECTORY 042897

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
051 RO101	Hexane/Primer		1660R	
052	Hexane			
053	PCB 1660 ✓ 0.5 PPM			WS0101-F
054	04-428-01			
055	02			
056	03			
057	04			
058	05			
059	06			
060	PCB 1660 ✓ 0.5 PPM			
061	ES 4/29/97 PCB 1242 ✓ 0.5 PPM			WS01-08 F
062	PCB 1248 ~~PCB 1660~~ ✓ 0.5 PPM			WS0103-F
063	Blank 73-43			
064	LCS 73-43			
065	LCS DUP 73-43			
066	04-404-09			
067	04-404-10			
068	PCB 1242 ✓ 0.5 PPM			
069	PCB 1248 ✓ 0.5 PPM			
070	PCB 1660 ✓ 0.5 PPM			

000181

Semivolatile Laboratory

Runlog

DATE 4/28/97 COLUMN ID DB 5

ANALYST ECL INSTRUMENT ID HP 4

DATA SUBDIRECTORY 042897

RUN #	SAMPLE DESCRIPTION	DIL FACTOR	METHOD	COMMENTS
051 R0101	Hexane/Primer		1660R	
052	Hexane			
053	PCB 1660 ✓ 0.5 PPM			WS0101-F
054	04-428-01	1		
055	02	1		
056	03	1		
057	04	1		
058	05	1		
059	06	1		
060	PCB 1660 ✓ 0.5 PPM			
061	6/24/97 PCB 1242 ✓ 0.5 PPM			WS 01-08 F
062	PCB 1248 ~~PCB 1660~~ ✓ 0.5 PPM			WS 0103-F
063	Blank 73-43	1		
064	LCS 73-43	1		
065	LCS DUP 73-43	1		
066	04-404-09	1		
067	04-404-10	1		
068	PCB 1242 ✓ 0.5 PPM			
069	PCB 1248 ✓ 0.5 PPM			
070	PCB 1660 ✓ 0.5 PPM			

Volume 73
Page 30

SAMPLE EXTRACT LOG SHEET

Analyst(s): KPO, REK, MES, SJK
Date: 04-23-97
SOP #: EXP01
Spike/Surrogate Analyst: REK
Solvent CH_2Cl_2 Lot # K49296

Extract Relinquished By: REK
Extract Received By: MES
Date Extract Received: 4/24/97
Florisil Lot #: K42553

SW-846 METHOD			ON	OFF	ON	OFF
CONT.	3520					
SOX.	3540					
SEP.	3510	X				
SON.	3550					
WASTE	3580					

Ext Work Group WG22059
Analytical Work Group 22123

	PROJECT I.D.	SAMPLE I.D.	TEST CODE	INITIAL VOLUME	SURROGATE	AMOUNT SPIKED	FINAL VOLUME	CLEANUP	COMMENTS
1	PCB H_2O	BLK		1L	500µl ES-20-49		10mL	Acid/Florisil	T.V. 04-23-97 SJK, MES
2		QC			1	100µl ES-21-07 04-23-97 SJK			
3	Outboard	04-403-01	8082 PCB W		1ml ES-20-49				
4		-02			500µl ES-20-49				
5		-03							
6		-04							
7		04-404-01							
8		-02							
9		-03							
10		-04							
11		-05							
12		-06							
13		-07							
14		-08							
15		-09							
16		-10							
17		-11 MS				100µl ES-21-07			MS of 04-404-09
18		-12 MSD				1			MSD of 04-404-09
19		-13							
20		-14							
21		-15							
22		-16							
23		-17							
24									

04-23-97 SJK

Reviewed By: [signature]

SAMPLE EXTRACT LOG SHEET

Analyst(s): RCK
Date: 4-26-97
SOP #: EXP01
Spike/Surrogate Analyst: RCK
Solvent CH2Cl2 Lot # K44296

Extract Relinquished By: RCK
Extract Received By: DLI
Date Extract Received: 4/28/97
Florisil Lot #: K42533

SW-846 METHOD			ON	OFF	ON	OFF
CONT.	3520					
SOX.	3540					
SEP.	3510	✓				
SON.	3550					
WASTE	3580					

Ext Work Group WG222
Analytical Work Group WG222 01

	PROJECT I.D.	SAMPLE I.D.	TEST CODE	INITIAL VOLUME	SURROGATE	AMOUNT SPIKED	FINAL VOLUME	CLEANUP	COMMENTS
1	MB-W	BLK		1L	500mL ES-20-49		10mL	Acid/Florisil	T.V. RCK 4-26-97
2		DC				100mL ES-21-07			
3		QC DUP							
4	OUTBOARD	04-404-09	ACBW						Re-extract
5		-10							
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
20									
21									
22									
23									
24									

RCK 4-26-97

Reviewed By: [signature]

AVERAGE RESPONSE FACTOR CALIBRATION DATA

Calculation Type : External Standard
5-Pt. Calibration Date : 22 Apr 97 09:51 AM
Method File : c:\hpchem\1\methods\1660f.mth
Instrument Name : HP4
Report Date : 22 Apr 97 09:52 AM
%RSD Limit : 20.0

Compound Name	Level Response Factor Level 1	Level 2	Level 3	Level 4	Level 5	Avg. RF	%RSD
TETRACHLORO-M-XYLENE	2.507E+04	2.478E+04	2.232E+04	2.001E+04	1.868E+04	2.217E+04	12.77
AR 1016 #1	4.896E+02	4.540E+02	4.100E+02	3.465E+02	3.071E+02	4.014E+02	18.69
AR 1016 #2	1.011E+03	1.017E+03	8.989E+02	7.545E+02	6.617E+02	8.686E+02	18.12
AR 1016 #3	2.029E+03	2.020E+03	1.746E+03	1.501E+03	1.338E+03	1.727E+03	17.84
AR 1016 #4	6.330E+02	6.011E+02	6.292E+02	5.463E+02	4.919E+02	5.803E+02	10.40
AR 1016 #5	5.559E+02	4.691E+02	4.801E+02	3.906E+02	3.644E+02	4.520E+02	16.89
AR 1260 #1	1.261E+03	1.323E+03	1.098E+03	9.647E+02	8.824E+02	1.106E+03	16.99
AR 1260 #2	1.392E+03	1.378E+03	1.152E+03	1.013E+03	9.289E+02	1.173E+03	17.87
AR 1260 #3	6.588E+02	6.354E+02	5.338E+02	4.651E+02	4.265E+02	5.439E+02	18.77
AR 1260 #4	8.375E+02	8.138E+02	6.716E+02	6.095E+02	5.760E+02	7.017E+02	16.90
AR 1260 #5	1.875E+03	1.805E+03	1.528E+03	1.367E+03	1.304E+03	1.576E+03	16.23
DECACHLOROBIPHENYL	1.369E+04	1.372E+04	1.225E+04	1.103E+04	1.040E+04	1.222E+04	12.38

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

<-- = Exceeds %RSD Limit

000184A

AVERAGE RESPONSE FACTOR CALIBRATION DATA

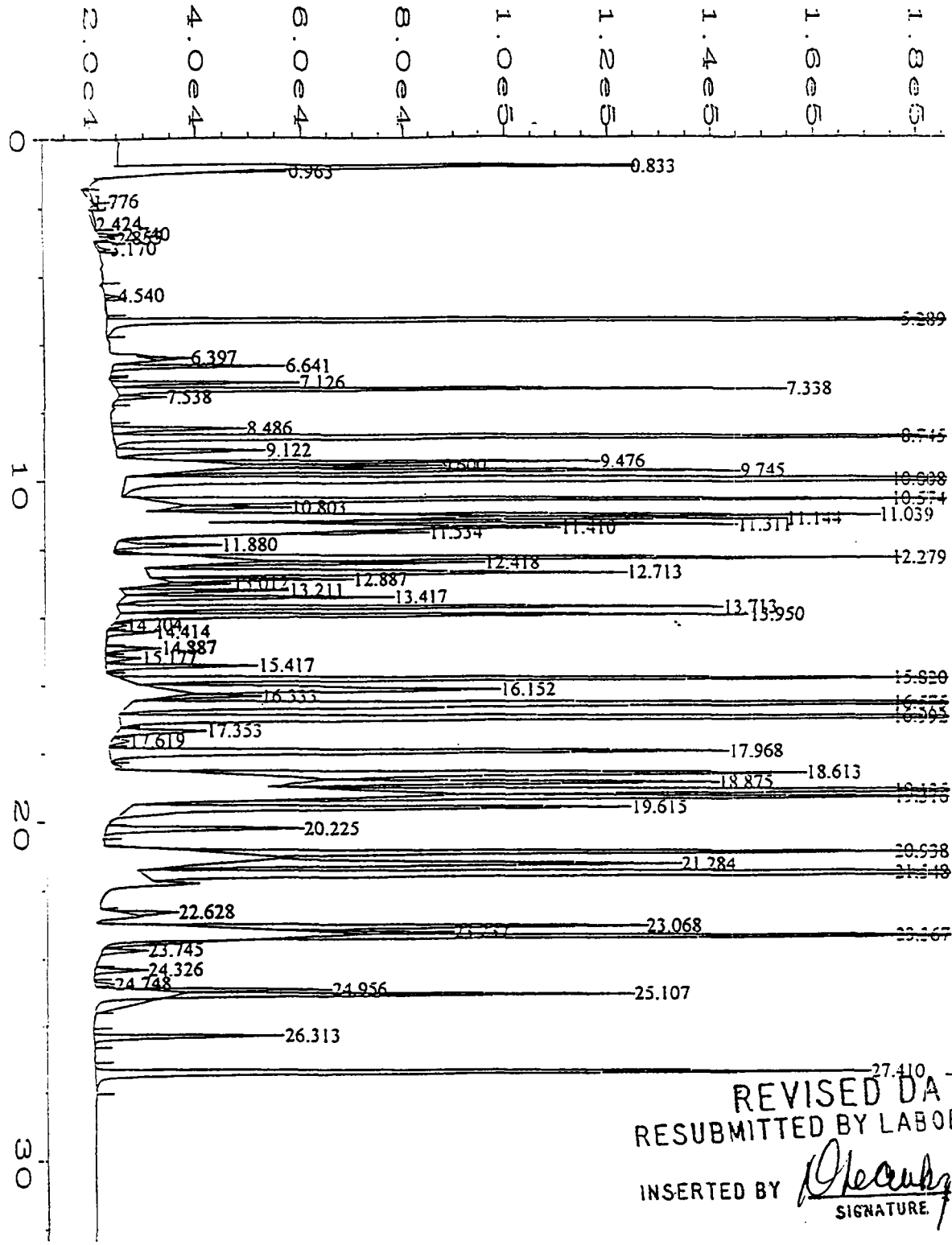
Calculation Type : External Standard
5-Pt. Calibration Date : 22 Apr 97 09:59 AM
Method File : c:\hpchem\1\methods\1660r.mth
Instrument Name : HP4
Report Date : 22 Apr 97 10:00 AM
%RSD Limit : 20.0

Compound Name	Level Response Factor Level 1	Level 2	Level 3	Level 4	Level 5	Avg. RF	%RSD
TETRACHLORO-M-XYLENE	1.344E+04	1.341E+04	1.180E+04	1.056E+04	1.042E+04	1.193E+04	12.33
AR 1016 #1	2.696E+02	2.788E+02	2.423E+02	2.099E+02	1.893E+02	2.380E+02	16.06
AR 1016 #2	3.536E+02	3.419E+02	3.126E+02	2.690E+02	2.481E+02	3.050E+02	14.94
AR 1016 #3	1.118E+03	1.013E+03	9.470E+02	8.158E+02	7.474E+02	9.282E+02	16.05
AR 1016 #4	4.156E+02	3.999E+02	4.023E+02	3.460E+02	3.180E+02	3.763E+02	11.19
AR 1016 #5	2.969E+02	2.899E+02	2.893E+02	2.587E+02	2.481E+02	2.766E+02	7.85
AR 1260 #1	6.685E+02	6.744E+02	5.816E+02	5.089E+02	4.645E+02	5.796E+02	16.18
AR 1260 #2	7.757E+02	7.692E+02	7.448E+02	6.648E+02	6.278E+02	7.164E+02	9.26
AR 1260 #3	3.555E+02	3.483E+02	3.436E+02	3.074E+02	2.920E+02	3.293E+02	8.49
AR 1260 #4	8.679E+02	8.443E+02	8.454E+02	7.584E+02	7.225E+02	8.077E+02	7.85
AR 1260 #5	3.631E+02	3.669E+02	4.236E+02	3.865E+02	3.686E+02	3.817E+02	6.57
DECACHLOROBIPHENYL	9.410E+03	9.510E+03	9.060E+03	8.203E+03	7.608E+03	8.758E+03	9.40

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] SIGNATURE 5/22/97 DATE

<-- = Exceeds %RSD Limit

000184 B



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\021F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 21
Sample Name	: 1660 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 00:53 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:37 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

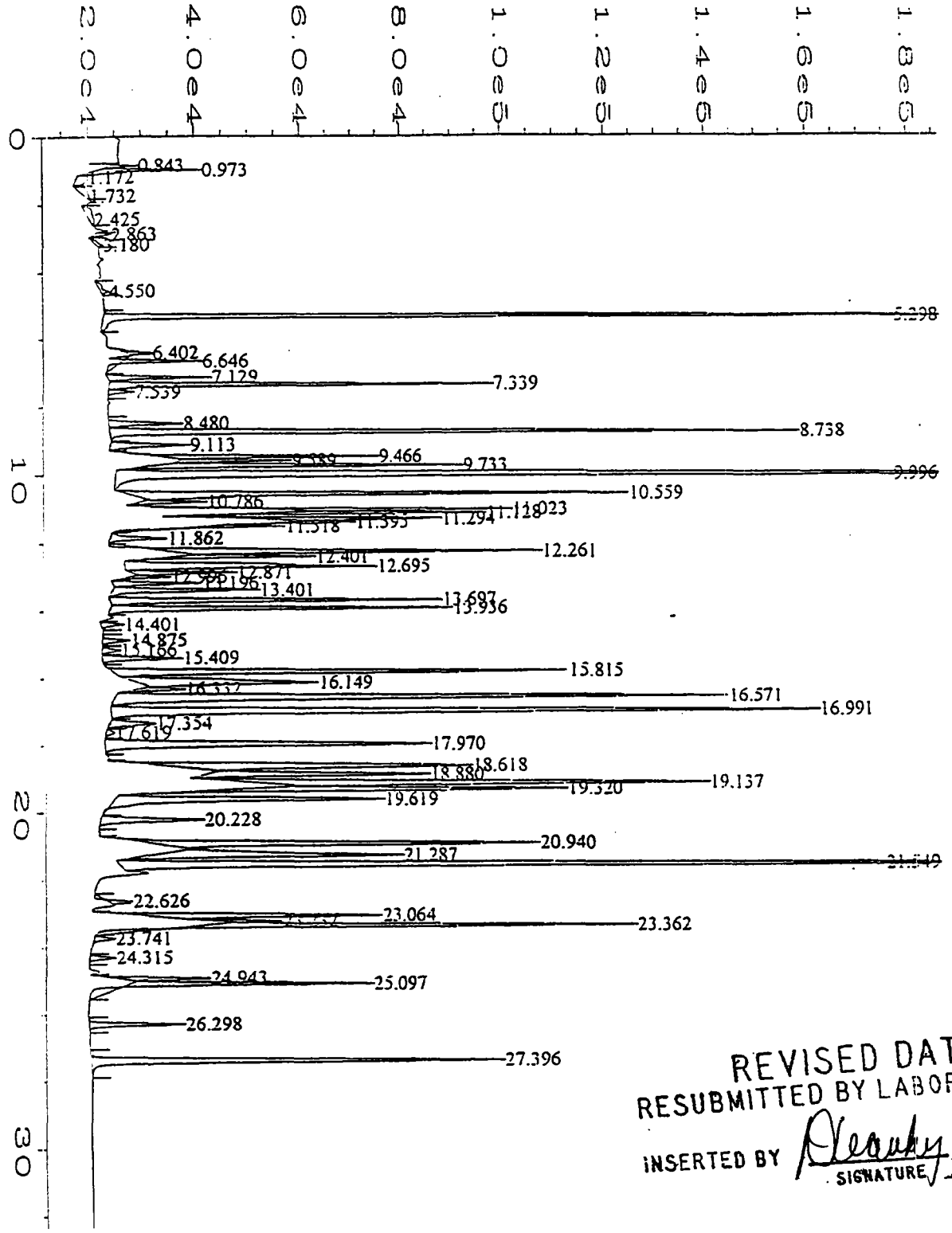
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\021F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 21
Sample Name	: 1660 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 00:53 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:37 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\021F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.289	1868257	BB	0.067	1	100.669	TETRACHLORO-M-XYLENE
7.338	614172	BB	0.074	1	2008.207	AR 1016 #1
8.745	1323332	BB	0.089	1	1993.004	AR 1016 #2
10.008	2676693	BB	0.115	1	1993.484	AR 1016 #3
10.574	983871	BB	0.086	1	2008.049	AR 1016 #4
12.279	728777	BB	0.086	1	1979.673	AR 1016 #5
16.575	1764710	BB	0.120	1	1986.218	AR 1260 #1
16.992	1857735	BB	0.112	1	1984.100	AR 1260 #2
18.613	852904	BB	0.120	1	1996.364	AR 1260 #3
19.135	1151938	BB	0.110	1	1998.029	AR 1260 #4
21.548	2608257	BB	0.104	1	2000.516	AR 1260 #5
27.410	1039706	BB	0.108	1	97.912	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] SIGNATURE 5/22/97 DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/21/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\022F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 22
Sample Name	: 1660 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 01:28 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:38 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

000187

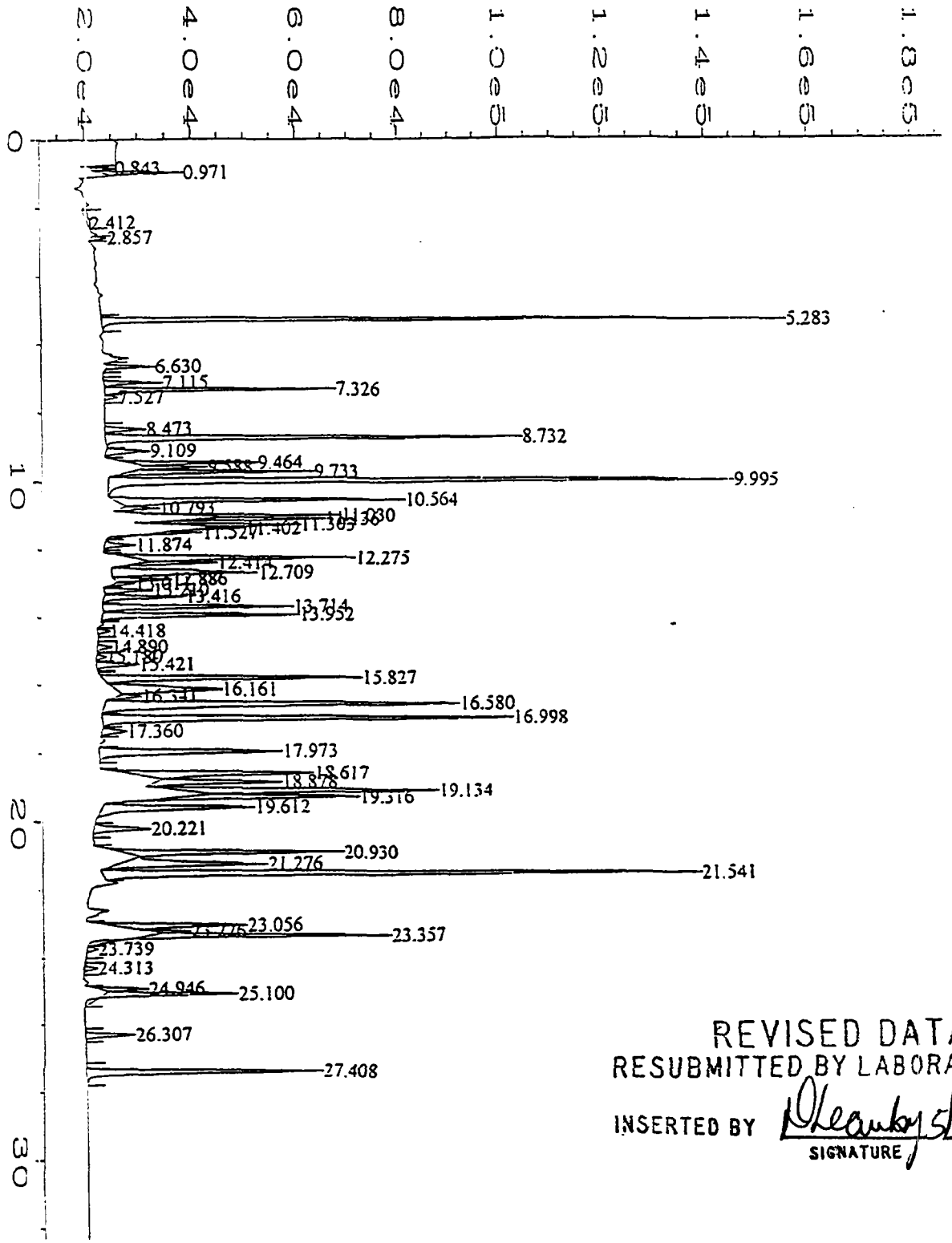
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\022F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 22
Sample Name	: 1660 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 01:28 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:38 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\022F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.298	1000675	BB	0.067	1	52.840	TETRACHLORO-M-XYLENE
7.339	346524	BB	0.073	1	1085.815	AR 1016 #1
8.738	754518	BB	0.087	1	1090.241	AR 1016 #2
9.996	1500816	BB	0.115	1	1080.476	AR 1016 #3
10.559	546265	BB	0.087	1	1076.232	AR 1016 #4
12.261	390565	BB	0.084	1	1039.421	AR 1016 #5
16.571	964702	BB	0.120	1	1057.067	AR 1260 #1
16.991	1012966	BB	0.113	1	1053.808	AR 1260 #2
18.618	465084	BB	0.125	1	1060.913	AR 1260 #3
19.137	609474	BB	0.109	1	1035.609	AR 1260 #4
21.549	1366901	BB	0.102	1	1030.125	AR 1260 #5
27.396	551675	BB	0.109	1	51.436	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\023F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 23
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:04 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:38 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

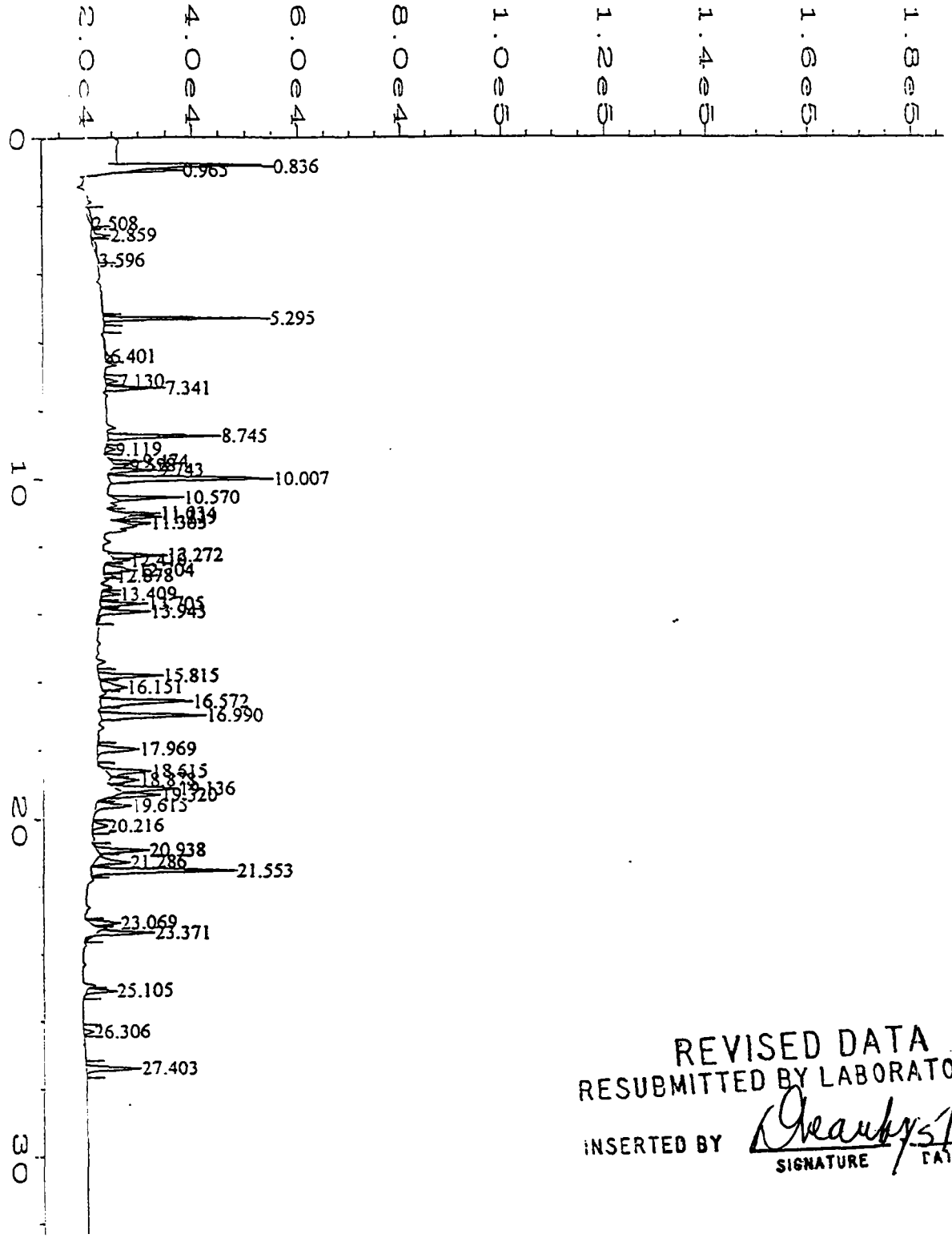
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\023F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 23
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:04 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:38 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:38 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\023F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.283	557903	BB	0.066	1	27.993	TETRACHLORO-M-XYLENE
7.326	204990	BB	0.073	1	597.163	AR 1016 #1
8.732	449432	BB	0.086	1	600.655	AR 1016 #2
9.995	872852	BB	0.116	1	584.203	AR 1016 #3
10.564	314584	BB	0.086	1	580.541	AR 1016 #4
12.275	240053	BB	0.086	1	598.917	AR 1016 #5
16.580	549064	BB	0.119	1	565.039	AR 1260 #1
16.998	576032	BB	0.112	1	562.930	AR 1260 #2
18.617	266907	BB	0.123	1	574.404	AR 1260 #3
19.134	335790	BB	0.110	1	544.388	AR 1260 #4
21.541	763910	BB	0.103	1	550.532	AR 1260 #5
27.408	306316	BB	0.105	1	27.423	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\024F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 24
Sample Name	: 1660 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:40 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:43 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:43 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

000191

External Standard Report

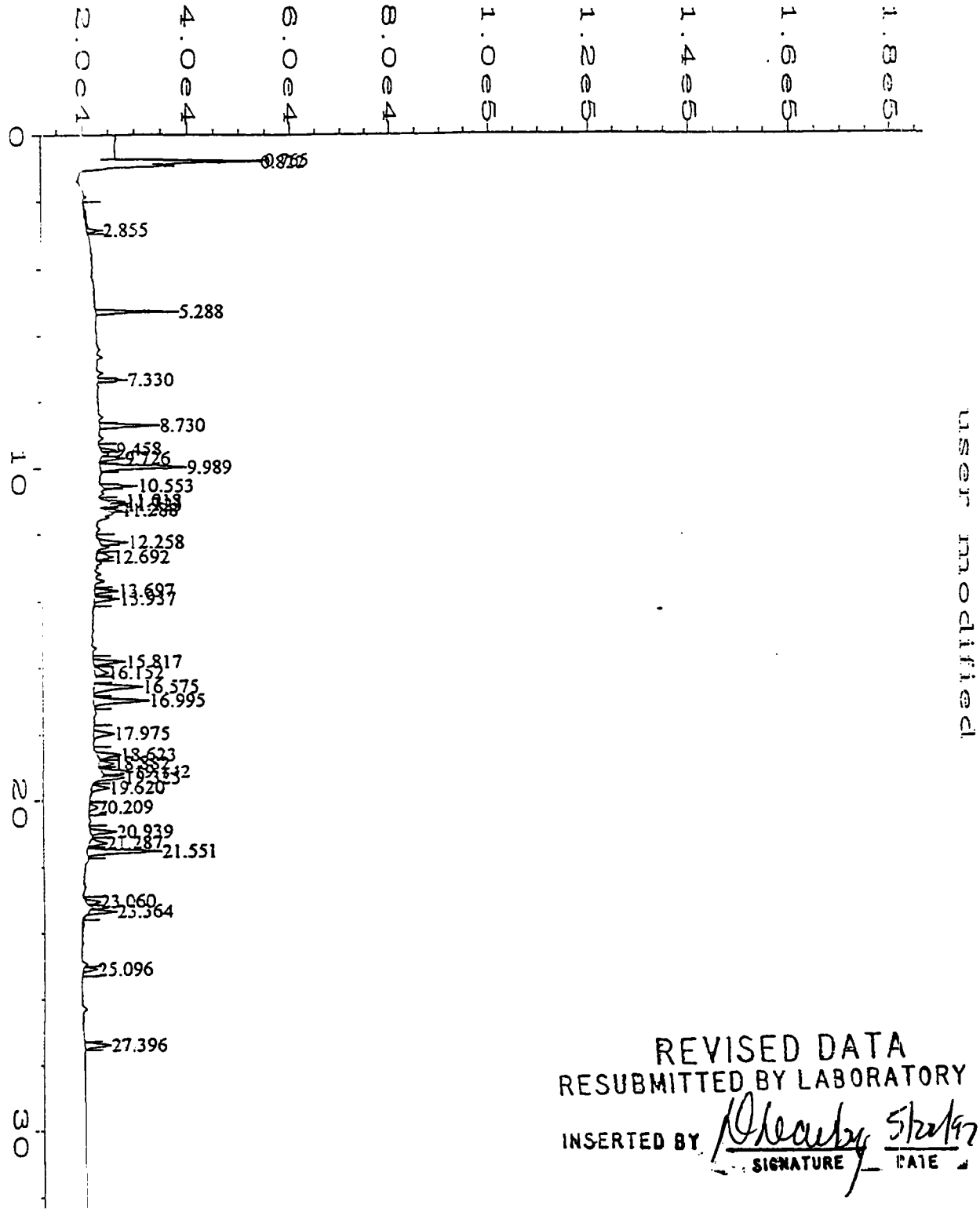
Data File Name	: C:\HPCHEM\1\DATA\042197\024F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 24
Sample Name	: 1660 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:40 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:47 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:46 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\024F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.295	123915	MM	0.066	1	3.971	TETRACHLORO-M-XYLENE
7.341	45396	MM	0.069	1	56.933	AR 1016 #1
8.745	101663	MM	0.082	1	53.628	AR 1016 #2
10.007	201957	MM	0.110	1	63.261	AR 1016 #3
10.570	60112	MM	0.076	1	52.504	AR 1016 #4
12.272	46910	MM	0.080	1	57.873	AR 1016 #5
16.572	132270	MM	0.127	1	76.064	AR 1260 #1
16.990	137815	MM	0.115	1	75.733	AR 1260 #2
18.615	63543	BB	0.114	1	76.914	AR 1260 #3
19.136	81382	BB	0.113	1	89.202	AR 1260 #4
21.553	180453	BB	0.101	1	88.227	AR 1260 #5
27.403	68591	BB	0.102	1	4.141	DECACHLOROBIPHENYL

User Modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Sherry Stefan
SIGNATURE DATE



user modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY O'Leary 5/20/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\025F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 25
Sample Name	: 1660 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:16 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 09:49 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 Apr 97 09:46 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

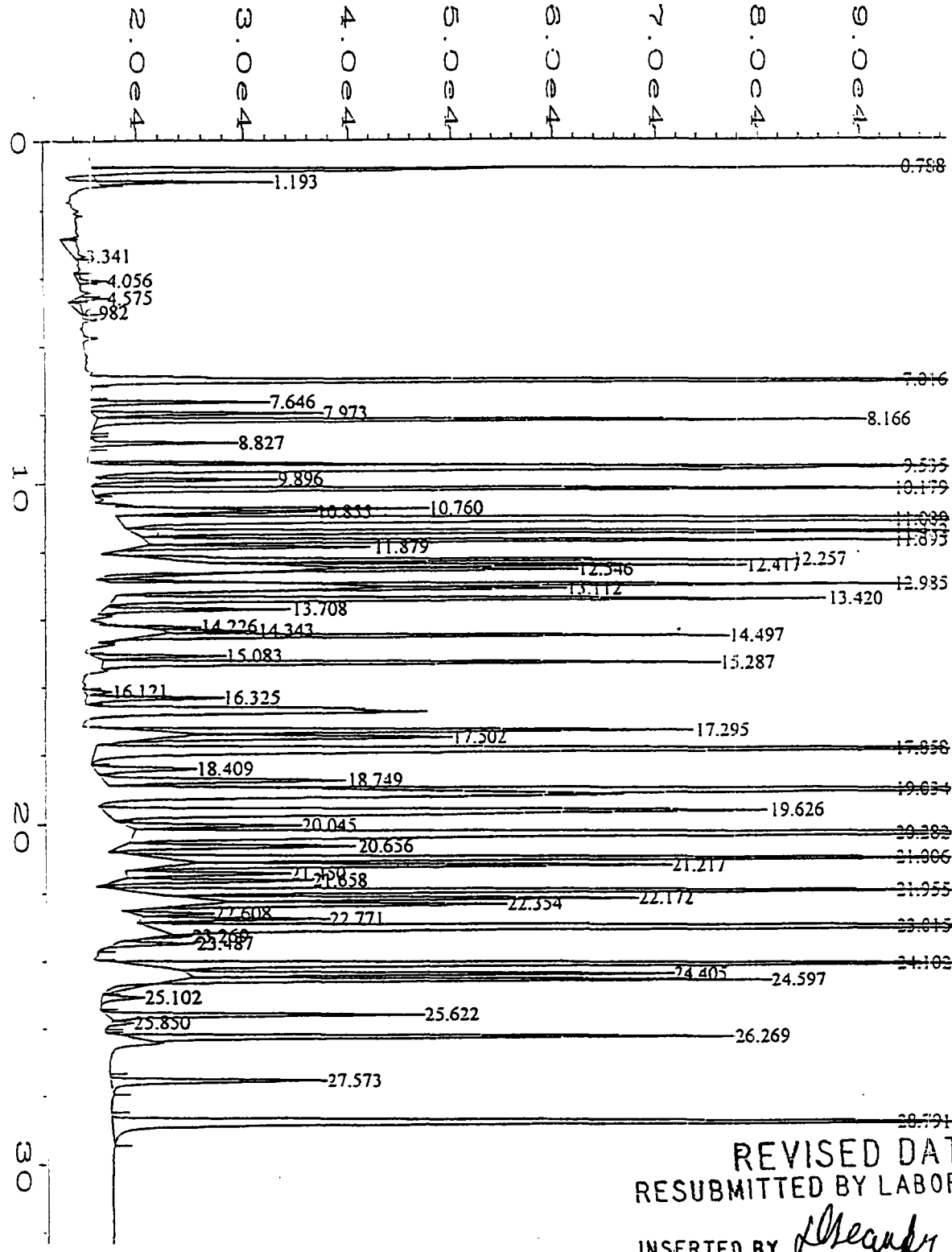
Data File Name	: C:\HPCHEM\1\DATA\042197\025F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 25
Sample Name	: 1660 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:16 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:52 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\025F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.288	62683	MM	0.066	1	2.827	TETRACHLORO-M-XYLENE
7.330	24479	MM	0.070	1	60.979	AR 1016 #1
8.730	50573	MM	0.078	1	58.222	AR 1016 #2
9.989	101452	MM	0.106	1	58.755	AR 1016 #3
10.553	31652	MM	0.076	1	54.544	AR 1016 #4
12.258	27794	BB	0.079	1	61.490	AR 1016 #5
16.576	63074	MM	0.117	1	57.035	AR 1260 #1
16.996	69602	MM	0.113	1	59.346	AR 1260 #2
18.623	32940	BB	0.117	1	60.560	AR 1260 #3
19.142	41876	BB	0.111	1	59.680	AR 1260 #4
21.551	93759	BB	0.103	1	59.503	AR 1260 #5
27.396	34237	MM	0.107	1	2.802	DECACHLOROBIPHENYL

User Modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Oleary 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY [signature] [illegible]
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\071R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 71
Sample Name	: 1660 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 00:53 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:53 AM	Analysis Method	: 166CR.MTH
Last Recalib on	: 14 APR 97 01:17 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

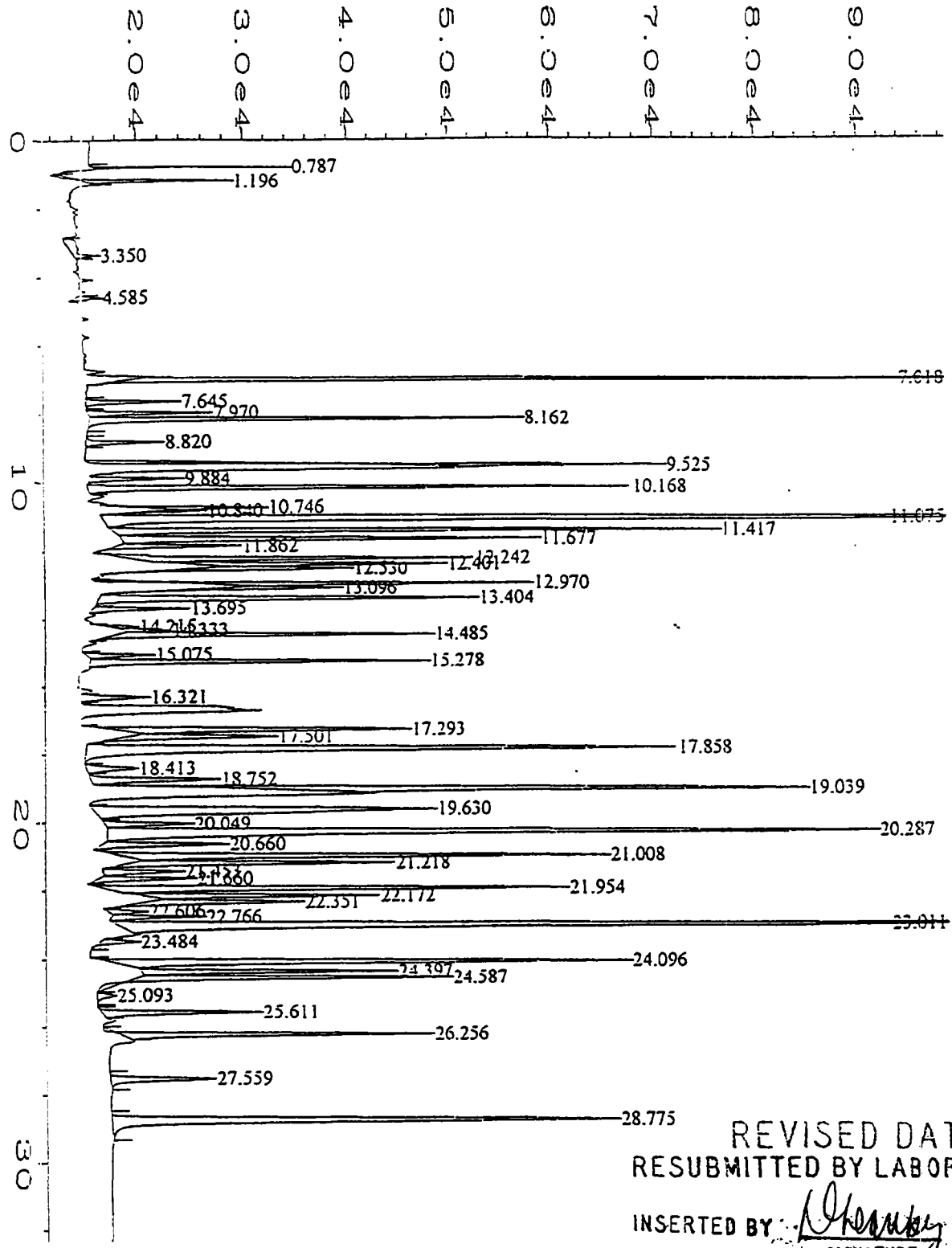
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\071R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 71
Sample Name	: 1660 2.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 00:53 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:56 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 Apr 97 09:55 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042197\071R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.016	1041861	VV	0.069	1	99.330	TETRACHLORO-M-XYLENE
8.166	378635	VB	0.078	1	1916.405	AR 1016 #1
10.179	496252	VV	0.081	1	1924.968	AR 1016 #2
11.088	1494774	VV	0.127	1	1920.898	AR 1016 #3
11.432	635964	VV	0.086	1	1944.770	AR 1016 #4
13.420	496249	VV	0.103	1	1960.251	AR 1016 #5
17.858	928923	VV	0.133	1	1908.110	AR 1260 #1
20.282	1255600	VV	0.128	1	1926.875	AR 1260 #2
21.955	583923	VV	0.102	1	1934.294	AR 1260 #3
23.015	1445076	VV	0.106	1	1909.978	AR 1260 #4
24.102	737190	BV	0.112	1	1946.025	AR 1260 #5
28.791	760804	BB	0.128	1	94.965	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY DLeauby 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY [signature] 5/02/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\072R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 72
Sample Name	: 1660 1.0 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 01:28 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 09:56 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 Apr 97 09:56 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

000197

External Standard Report

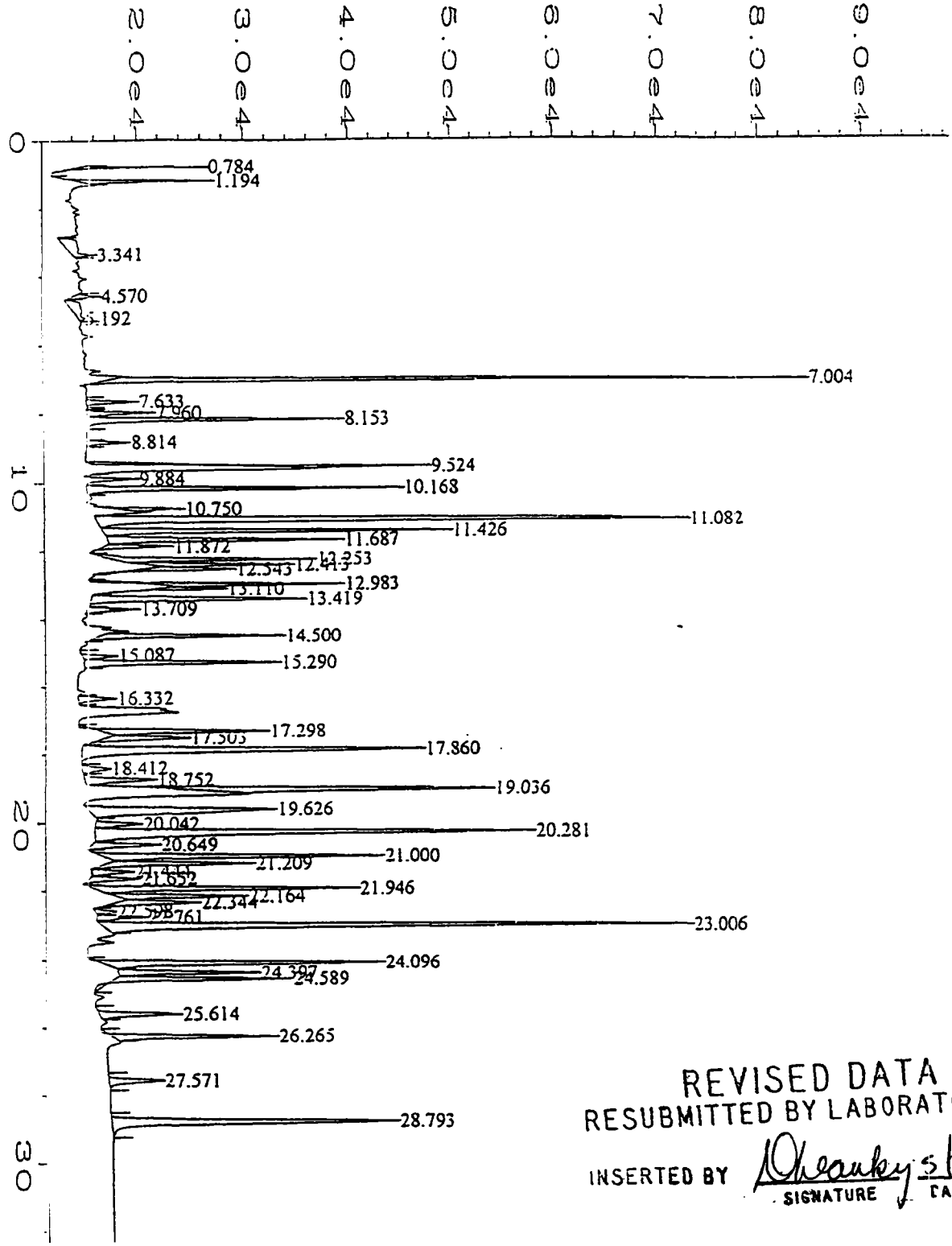
Data File Name : C:\HPCHEM\1\DATA\042197\072R0101.D
Operator : ECL
Instrument : HP4
Sample Name : 1660 1.0 PPM
Run Time Bar Code:
Acquired on : 22 Apr 97 01:28 AM
Report Created on: 22 Apr 97 09:56 AM
Last Recalib on : 22 Apr 97 09:56 AM
Multiplier : 1

Page Number : 1
Vial Number : 72
Injection Number : 1
Sequence Line : 1
Instrument Method: PESTF.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\042197\072R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.018	528096	VV	0.066	1	49.677	TETRACHLORO-M-XYLENE
8.162	209875	VB	0.076	1	1038.632	AR 1016 #1
10.168	269023	VV	0.079	1	1025.766	AR 1016 #2
11.075	815784	VV	0.128	1	1027.647	AR 1016 #3
11.417	345966	VV	0.087	1	1033.700	AR 1016 #4
13.404	258699	VV	0.103	1	1009.218	AR 1016 #5
17.858	508926	VV	0.134	1	1025.827	AR 1260 #1
20.287	664767	VV	0.128	1	1010.111	AR 1260 #2
21.954	307392	PV	0.103	1	1009.334	AR 1260 #3
23.011	758421	VV	0.106	1	1000.857	AR 1260 #4
24.096	386479	BV	0.114	1	1011.316	AR 1260 #5
28.775	410171	BB	0.126	1	50.887	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\073R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 73
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:04 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:57 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 Apr 97 09:56 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

000199

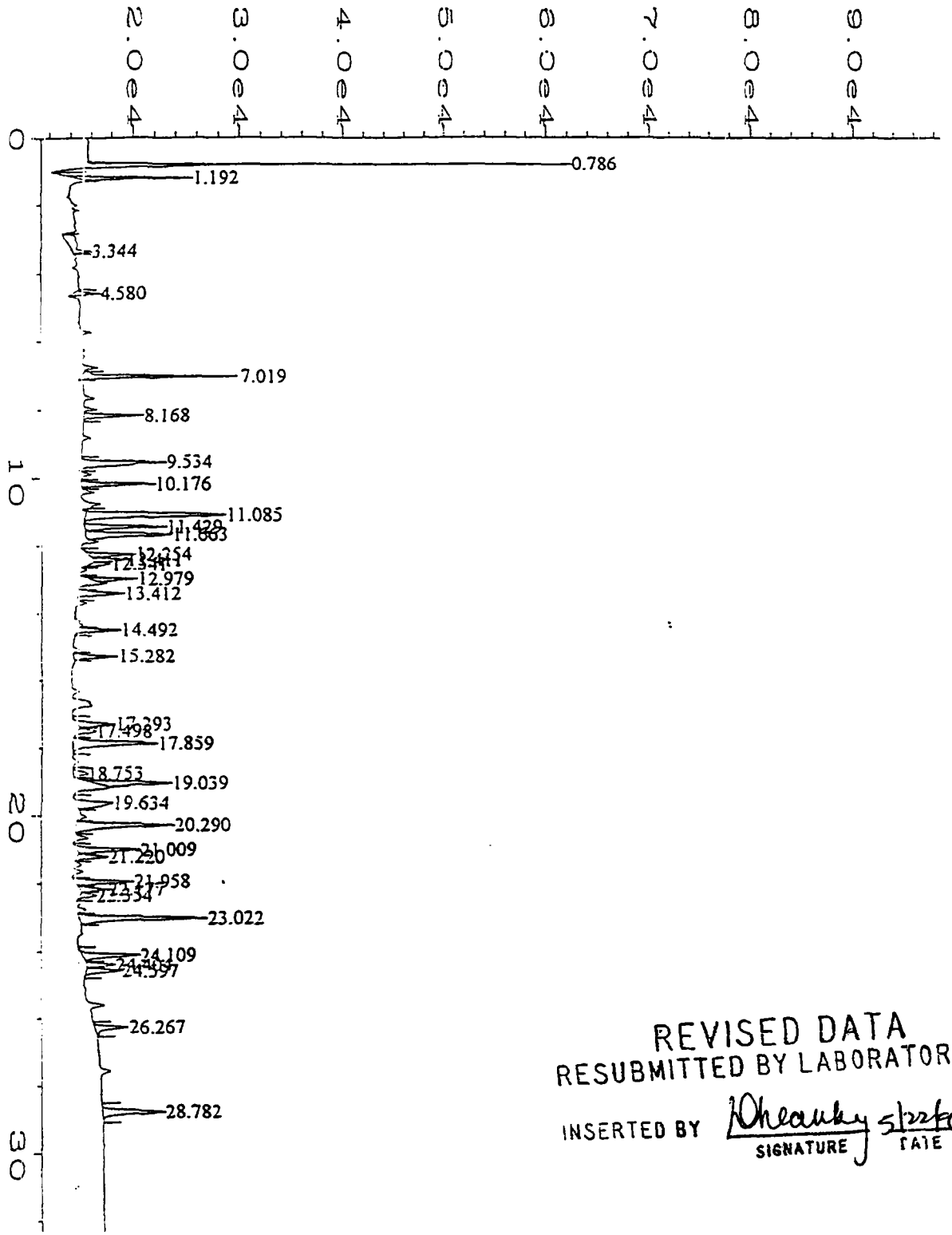
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\073R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 73
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:04 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:57 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 Apr 97 09:57 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042197\073R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.004	294953	VV	0.065	1	26.853	TETRACHLORO-M-XYLENE
8.153	121127	VB	0.077	1	566.398	AR 1016 #1
10.168	156293	VV	0.080	1	567.236	AR 1016 #2
11.082	473519	VV	0.131	1	566.723	AR 1016 #3
11.426	201158	VV	0.087	1	569.569	AR 1016 #4
13.419	144640	VV	0.109	1	545.480	AR 1016 #5
17.860	290804	VV	0.137	1	556.666	AR 1260 #1
20.281	372421	VV	0.128	1	545.514	AR 1260 #2
21.946	171818	PV	0.104	1	544.821	AR 1260 #3
23.006	422703	VV	0.109	1	541.583	AR 1260 #4
24.096	211817	BV	0.115	1	540.555	AR 1260 #5
28.793	226496	BB	0.129	1	27.226	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Cheaubry Stokes
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\074R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 74
Sample Name	: 1660 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:40 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 10:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	: 000201

External Standard Report

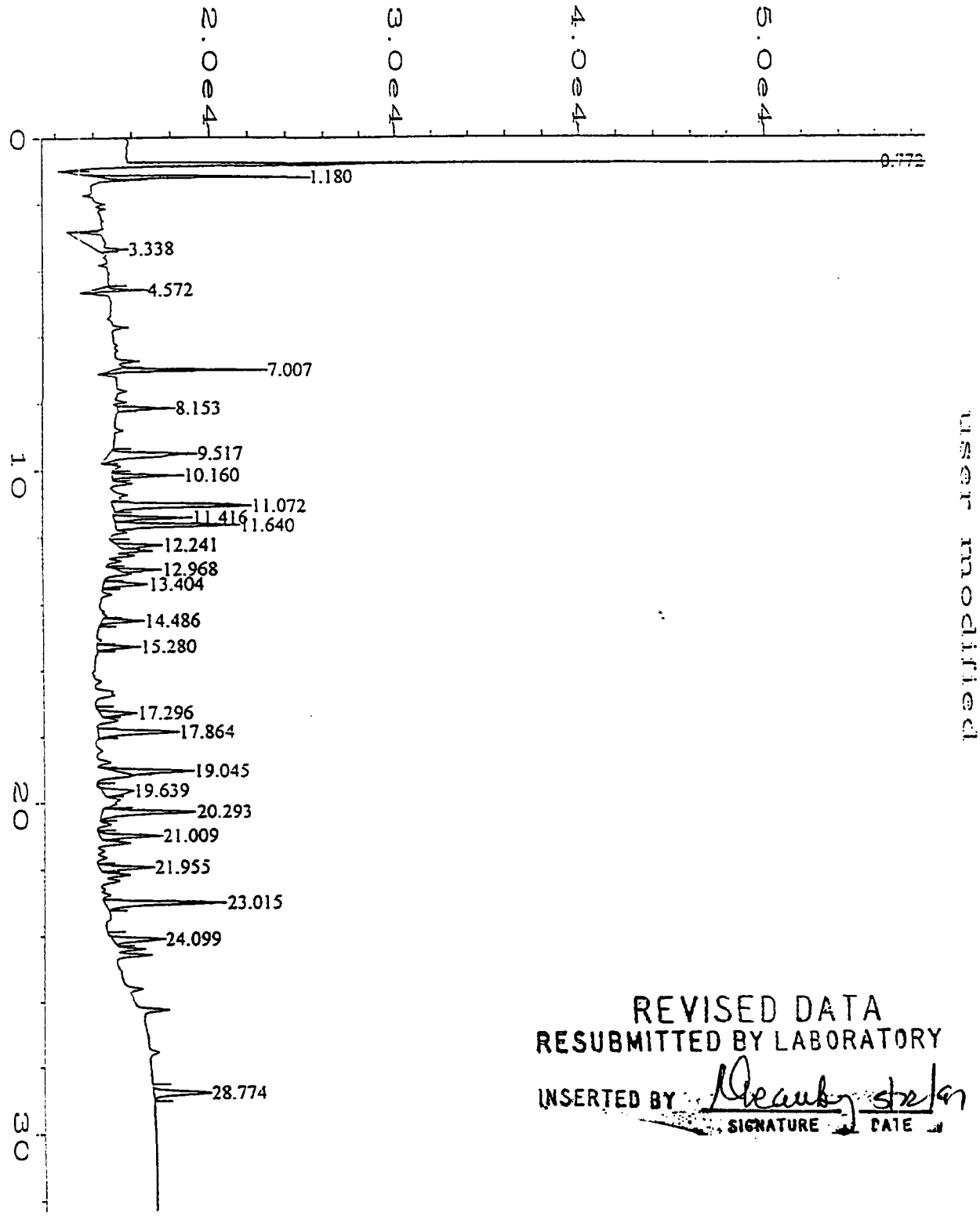
Data File Name	: C:\HPCHEM\1\DATA\042197\074R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 74
Sample Name	: 1660 0.1 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 02:40 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 10:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042197\074R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.019	67049	BB	0.068	1	5.622	TETRACHLORO-M-XYLENE
8.168	27878	BB	0.074	1	117.150	AR 1016 #1
10.176	34189	BB	0.076	1	112.076	AR 1016 #2
11.085	101319	BB	0.124	1	109.158	AR 1016 #3
11.429	39987	BB	0.081	1	106.250	AR 1016 #4
13.412	28993	BB	0.102	1	104.820	AR 1016 #5
17.859	67444	BB	0.129	1	116.364	AR 1260 #1
20.290	76916	BB	0.120	1	107.357	AR 1260 #2
21.958	34826	BB	0.096	1	105.740	AR 1260 #3
23.022	84431	BB	0.107	1	104.531	AR 1260 #4
24.109	36695	BB	0.104	1	96.124	AR 1260 #5
28.782	47552	BB	0.122	1	5.429	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY [signature] 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\075R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 75
Sample Name	: 1660 0.05 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:16 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 10:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\042197\075R0101.D
Operator : ECL
Instrument : HP4
Sample Name : 1660 0.05 PPM
Run Time Bar Code:
Acquired on : 22 Apr 97 03:16 AM
Report Created on: 22 Apr 97 10:00 AM
Last Recalib on : 22 APR 97 10:00 AM
Multiplier : 1

Page Number : 1
Vial Number : 75
Injection Number : 1
Sequence Line : 1
Instrument Method: PESTF.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\042197\075R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.007	33611	MM	0.069	1	2.818	TETRACHLORO-M-XYLENE
8.153	13481	MM	0.074	1	56.650	AR 1016 #1
10.160	17681	BB	0.075	1	57.961	AR 1016 #2
11.072	55875	MM	0.129	1	60.199	AR 1016 #3
11.416	20780	BB	0.079	1	55.215	AR 1016 #4
13.404	14847	BB	0.099	1	53.679	AR 1016 #5
17.864	33427	MM	0.132	1	57.673	AR 1260 #1
20.293	38783	BB	0.121	1	54.133	AR 1260 #2
21.955	17775	BB	0.098	1	53.971	AR 1260 #3
23.015	43394	BB	0.104	1	53.725	AR 1260 #4
24.099	18153	BB	0.104	1	47.554	AR 1260 #5
28.774	23525	BB	0.122	1	2.686	DECACHLOROBIPHENYL

User Modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] SIGNATURE [date] DATE

CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042197\026F0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1660 ALT CHK
Acquisition Date : 22 Apr 97 03:51 AM
Last Calibration Date : 22 APR 97 09:52 AM
Analysis Method : 1660F.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 22 Apr 97 10:04 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	584395	2.338E+04	2.217E+04	1.202E+03	5.4
AR 1016 #1	5.000E+02	198759	3.975E+02	4.014E+02	3.905E+00	1.0
AR 1016 #2	5.000E+02	436585	8.732E+02	8.686E+02	4.541E+00	0.5
AR 1016 #3	5.000E+02	798420	1.597E+03	1.727E+03	1.299E+02	7.5
AR 1016 #4	5.000E+02	305448	6.109E+02	5.803E+02	3.059E+01	5.3
AR 1016 #5	5.000E+02	227125	4.543E+02	4.520E+02	2.241E+00	0.5
AR 1260 #1	5.000E+02	534401	1.069E+03	1.106E+03	3.707E+01	3.4
AR 1260 #2	5.000E+02	561798	1.124E+03	1.173E+03	4.922E+01	4.2
AR 1260 #3	5.000E+02	257570	5.151E+02	5.439E+02	2.878E+01	5.3
AR 1260 #4	5.000E+02	329183	6.584E+02	7.017E+02	4.331E+01	6.2
AR 1260 #5	5.000E+02	749381	1.499E+03	1.576E+03	7.695E+01	4.9
DECACHLOROBIPHENYL	2.500E+01	326208	1.305E+04	1.222E+04	8.291E+02	6.8

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] SIGNATURE [date] DATE

<-- = Exceeds %Difference Limit

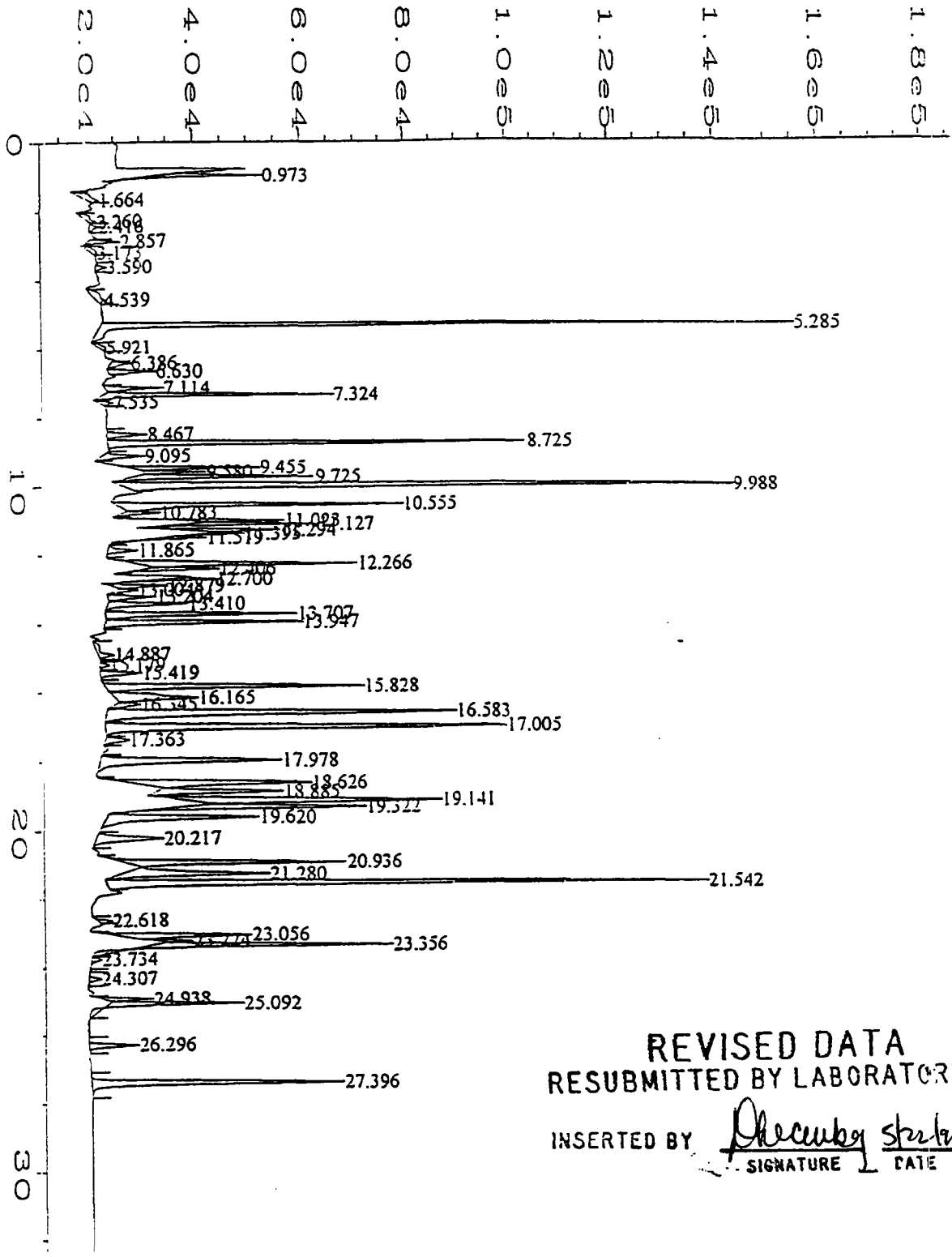
CONTINUING CALIBRATION DATA

Data File : C:\HPCHEM\1\DATA\042197\076R0101.D
Calibration Check Level : 3
Instrument : HP4
Sample Name : 1660 ALT CHK
Acquisition Date : 22 Apr 97 03:51 AM
Last Calibration Date : 22 APR 97 10:00 AM
Analysis Method : 1660R.MTH
Calculation Type : External Standard
Sample Amount : .0
Report Date : 22 Apr 97 10:05 AM
% Difference Limit : 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	270649	1.083E+04	1.193E+04	1.101E+03	9.2
AR 1016 #1	5.000E+02	112886	2.258E+02	2.380E+02	1.220E+01	5.1
AR 1016 #2	5.000E+02	143570	2.871E+02	3.050E+02	1.791E+01	5.9
AR 1016 #3	5.000E+02	422590	8.452E+02	9.282E+02	8.300E+01	8.9
AR 1016 #4	5.000E+02	167127	3.343E+02	3.763E+02	4.209E+01	11.2
AR 1016 #5	5.000E+02	125562	2.511E+02	2.766E+02	2.547E+01	9.2
AR 1260 #1	5.000E+02	266456	5.329E+02	5.796E+02	4.668E+01	8.1
AR 1260 #2	5.000E+02	322911	6.458E+02	7.164E+02	7.062E+01	9.9
AR 1260 #3	5.000E+02	147757	2.955E+02	3.293E+02	3.384E+01	10.3
AR 1260 #4	5.000E+02	365558	7.311E+02	8.077E+02	7.660E+01	9.5
AR 1260 #5	5.000E+02	174870	3.497E+02	3.817E+02	3.200E+01	8.4
DECACHLOROBIPHENYL	2.500E+01	230431	9.217E+03	8.758E+03	4.589E+02	5.2

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

<-- = Exceeds %Difference Limit



REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\026F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 26
Sample Name	: 1660 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:51 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:53 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

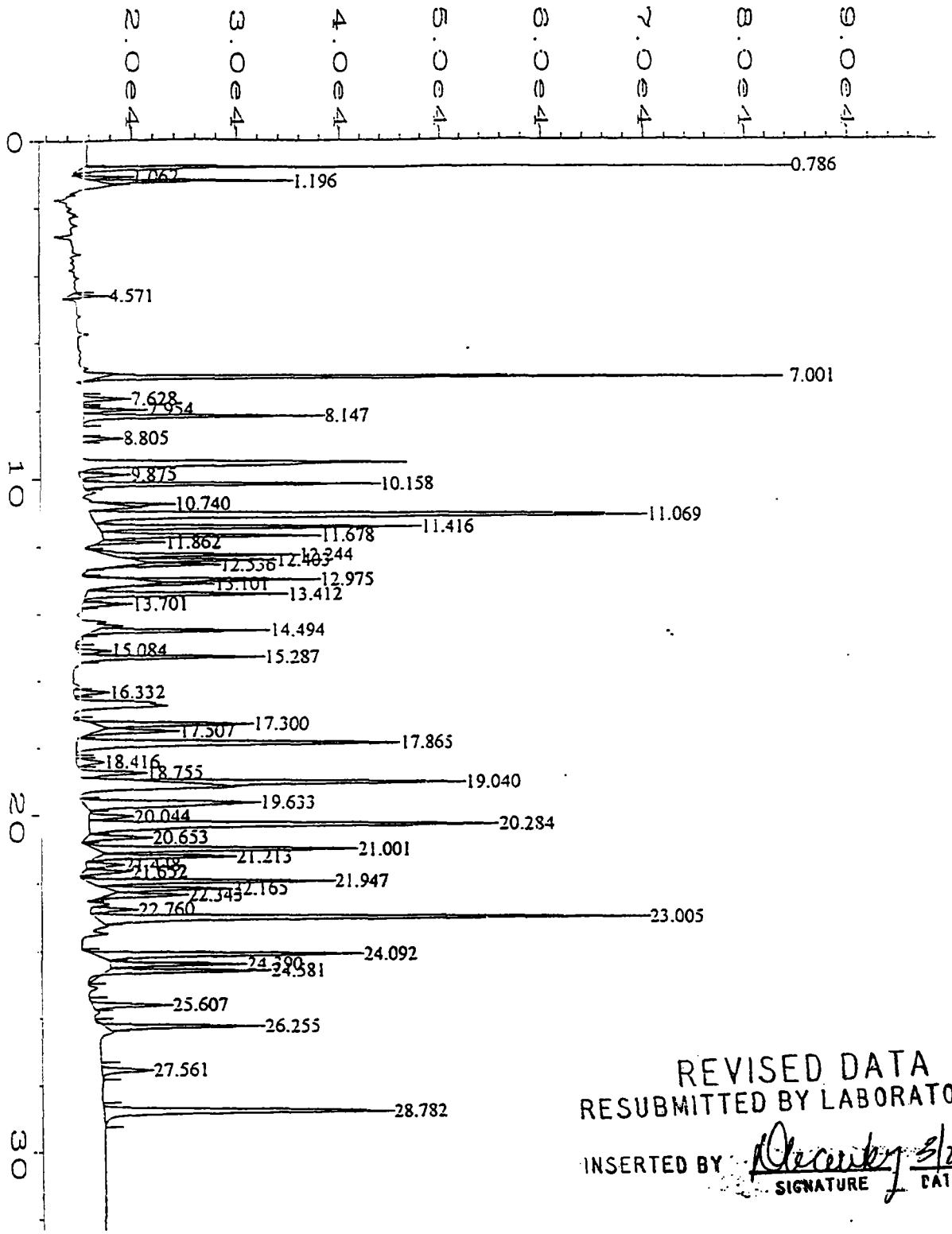
External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\026F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 26
Sample Name	: 1660 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:51 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 09:53 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 1 in C:\HPCHEM\1\DATA\042197\026F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.285	584395	BB	0.067	1	26.355	TETRACHLORO-M-XYLENE
7.324	198759	BB	0.071	1	495.135	AR 1016 #1
8.725	436585	BB	0.084	1	502.614	AR 1016 #2
9.988	798420	BB	0.111	1	462.398	AR 1016 #3
10.555	305448	BB	0.085	1	526.356	AR 1016 #4
12.266	227125	BB	0.085	1	502.480	AR 1016 #5
16.583	534401	BB	0.119	1	483.239	AR 1260 #1
17.005	561798	BB	0.115	1	479.015	AR 1260 #2
18.626	257570	BB	0.120	1	473.549	AR 1260 #3
19.141	329183	BB	0.110	1	469.139	AR 1260 #4
21.542	749381	BB	0.101	1	475.583	AR 1260 #5
27.396	326208	BB	0.108	1	26.696	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY

INSERTED BY [signature] 3/20/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\076R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 76
Sample Name	: 1660 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:51 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 10:01 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name	: C:\HPCHEM\1\DATA\042197\076R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 76
Sample Name	: 1660 ALT CHK	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 03:51 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 10:01 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

Sig. 2 in C:\HPCHEM\1\DATA\042197\076R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.001	270649	BB	0.063	1	22.693	TETRACHLORO-M-XYLENE
8.147	112886	BB	0.076	1	474.371	AR 1016 #1
10.158	143570	BB	0.079	1	470.646	AR 1016 #2
11.069	422590	BB	0.126	1	455.288	AR 1016 #3
11.416	167127	BB	0.084	1	444.078	AR 1016 #4
13.412	125562	BB	0.101	1	453.957	AR 1016 #5
17.865	266456	BB	0.132	1	459.727	AR 1260 #1
20.284	322911	BB	0.123	1	450.712	AR 1260 #2
21.947	147757	BB	0.100	1	448.632	AR 1260 #3
23.005	365558	BB	0.104	1	452.585	AR 1260 #4
24.092	174870	BB	0.105	1	458.082	AR 1260 #5
28.782	230431	BB	0.128	1	26.310	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

CONTINUING CALIBRATION DATA

Data File	: C:\HPCHEM\1\DATA\042197\037F0101.D
Calibration Check Level	: 3
Instrument	: HP4
Sample Name	: 1660 0.5 PPM
Acquisition Date	: 22 Apr 97 10:25 AM
Last Calibration Date	: 22 APR 97 09:52 AM
Analysis Method	: 1660F.MTH
Calculation Type	: External Standard
Sample Amount	: .0
Report Date	: 22 Apr 97 01:51 PM
% Difference Limit	: 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	538426	2.154E+04	2.217E+04	6.367E+02	2.9
AR 1016 #1	5.000E+02	143499	2.870E+02	4.014E+02	1.144E+02	28.5<--
AR 1016 #2	5.000E+02	281324	5.626E+02	8.686E+02	3.060E+02	35.2<--
AR 1016 #3	5.000E+02	518952	1.038E+03	1.727E+03	6.888E+02	39.9<--
AR 1016 #4	5.000E+02	194784	3.896E+02	5.803E+02	1.907E+02	32.9<--
AR 1016 #5	5.000E+02	224246	4.485E+02	4.520E+02	3.517E+00	0.8
AR 1260 #1	5.000E+02	545237	1.090E+03	1.106E+03	1.540E+01	1.4
AR 1260 #2	5.000E+02	579398	1.159E+03	1.173E+03	1.402E+01	1.2
AR 1260 #3	5.000E+02	237904	4.758E+02	5.439E+02	6.811E+01	12.5
AR 1260 #4	5.000E+02	349186	6.984E+02	7.017E+02	3.302E+00	0.5
AR 1260 #5	5.000E+02	781544	1.563E+03	1.576E+03	1.262E+01	0.8
DECACHLOROBIPHENYL	2.500E+01	319295	1.277E+04	1.222E+04	5.526E+02	4.5

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

<-- = Exceeds %Difference Limit

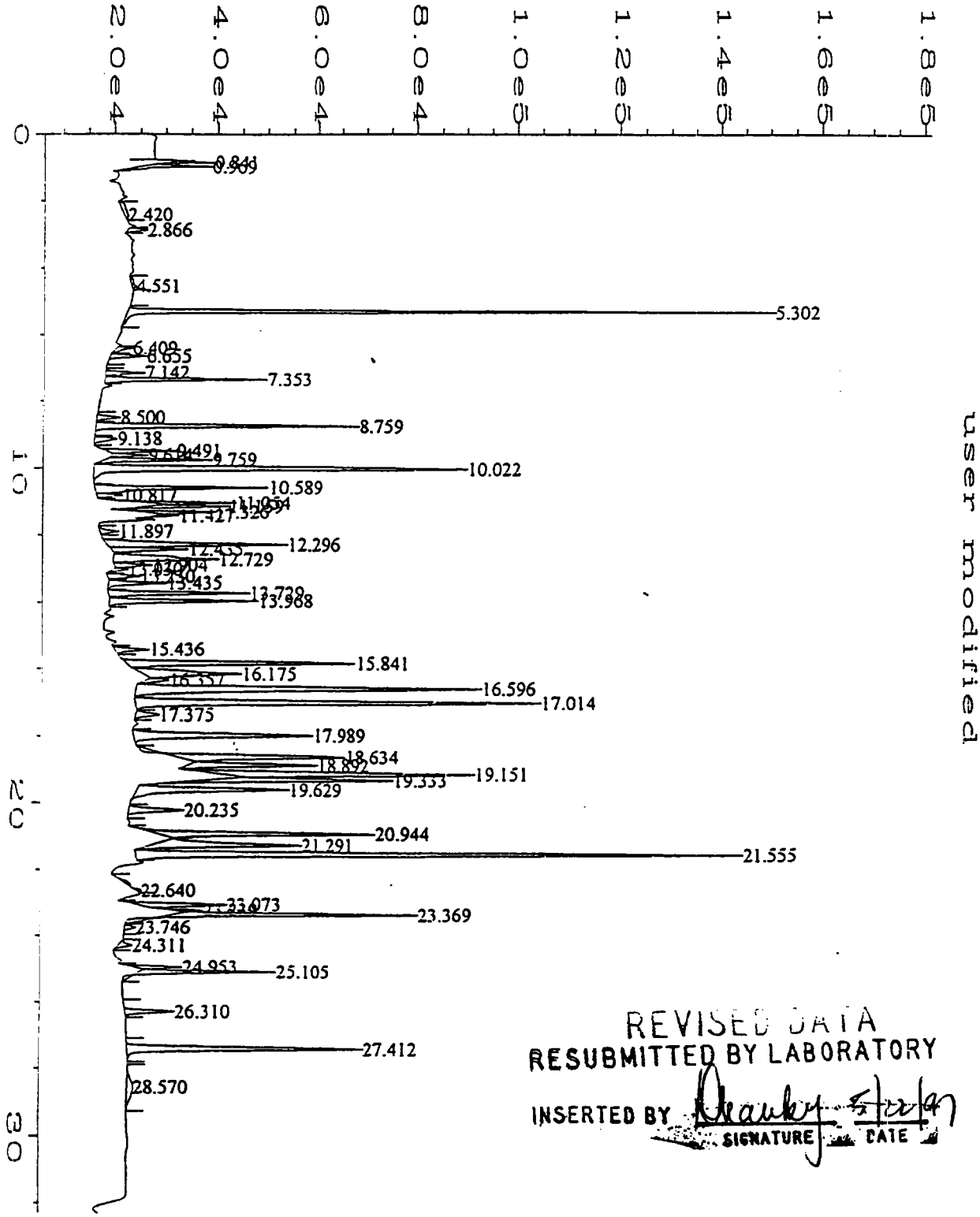
CONTINUING CALIBRATION DATA

Data File	: C:\HPCHEM\1\DATA\042197\087R0101.D
Calibration Check Level	: 3
Instrument	: HP4
Sample Name	: 1660 0.5 PPM
Acquisition Date	: 22 Apr 97 10:25 AM
Last Calibration Date	: 22 APR 97 10:00 AM
Analysis Method	: 1660R.MTH
Calculation Type	: External Standard
Sample Amount	: .0
Report Date	: 22 Apr 97 01:52 PM
% Difference Limit	: 15.0

Compound Name	Amount	Continue Area	Continue RF	Average RF	Absolute RF Dif.	Percent Differ.
TETRACHLORO-M-XYLENE	2.500E+01	278320	1.113E+04	1.193E+04	7.937E+02	6.7
AR 1016 #1	5.000E+02	120797	2.416E+02	2.380E+02	3.624E+00	1.5
AR 1016 #2	5.000E+02	151138	3.023E+02	3.050E+02	2.772E+00	0.9
AR 1016 #3	5.000E+02	453719	9.074E+02	9.282E+02	2.074E+01	2.2
AR 1016 #4	5.000E+02	178190	3.564E+02	3.763E+02	1.997E+01	5.3
AR 1016 #5	5.000E+02	131721	2.634E+02	2.766E+02	1.315E+01	4.8
AR 1260 #1	5.000E+02	280965	5.619E+02	5.796E+02	1.767E+01	3.0
AR 1260 #2	5.000E+02	343235	6.865E+02	7.164E+02	2.998E+01	4.2
AR 1260 #3	5.000E+02	149769	2.995E+02	3.293E+02	2.981E+01	9.1
AR 1260 #4	5.000E+02	285593	5.712E+02	8.077E+02	2.365E+02	29.3<--
AR 1260 #5	5.000E+02	125686	2.514E+02	3.817E+02	1.304E+02	34.2<--
DECACHLOROBIPHENYL	2.500E+01	215061	8.602E+03	8.758E+03	1.559E+02	1.8

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

<-- = Exceeds %Difference Limit



user modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\037F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 37
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 10:25 AM	Instrument Method:	PESTF.MTH
Report Created on:	22 Apr 97 11:58 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 22 APR 97 09:52 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\042197\037F0101.D
Operator : ECL
Instrument : HP4
Sample Name : 1660 0.5 PPM
Run Time Bar Code:
Acquired on : 22 Apr 97 10:25 AM
Report Created on: 22 Apr 97 11:58 AM
Last Recalib on : 22 APR 97 09:52 AM
Multiplier : 1

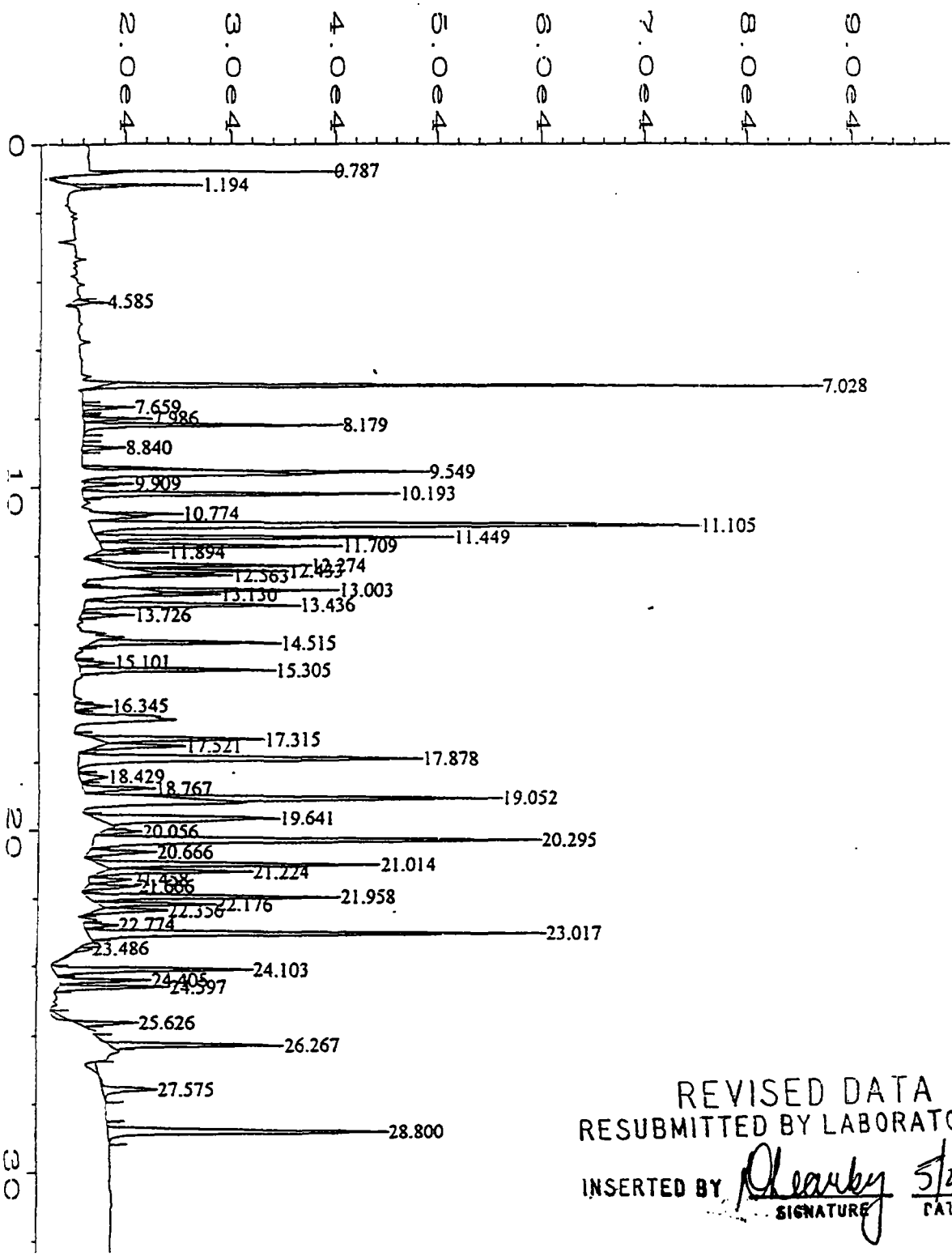
Page Number : 1
Vial Number : 37
Injection Number : 1
Sequence Line : 1
Instrument Method: PESTF.MTH
Analysis Method : 1660F.MTH
Sample Amount : 0
ISTD Amount :

Sig. 1 in C:\HPCHEM\1\DATA\042197\037F0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
5.302	538426	BB	0.065	1	24.282	TETRACHLORO-M-XYLENE
7.353	143499	BB	0.071	1	357.476	AR 1016 #1
8.759	281324	BB	0.083	1	323.871	AR 1016 #2
10.022	518952	BB	0.113	1	300.546	AR 1016 #3
10.589	194784	MV	0.095	1	335.657	AR 1016 #4
12.296	224246	MV	0.106	1	496.109	AR 1016 #5
16.596	545237	BB	0.120	1	493.037	AR 1260 #1
17.014	579398	BB	0.114	1	494.022	AR 1260 #2
18.634	237904	BB	0.116	1	437.392	AR 1260 #3
19.151	349186	BB	0.108	1	497.647	AR 1260 #4
21.555	781544	BB	0.106	1	495.995	AR 1260 #5
27.412	319295	BB	0.109	1	26.130	DECACHLOROBIPHENYL

User Modified

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY [signature] 5/22/97
SIGNATURE DATE



REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Clearby 5/22/97
SIGNATURE DATE

Data File Name	: C:\HPCHEM\1\DATA\042197\087R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 87
Sample Name	: 1660 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 22 Apr 97 10:25 AM	Instrument Method	: PESTF.MTH
Report Created on	: 22 Apr 97 11:59 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 22 APR 97 10:00 AM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

External Standard Report

Data File Name : C:\HPCHEM\1\DATA\042197\087R0101.D
Operator : ECL
Instrument : HP4
Sample Name : 1660 0.5 PPM
Run Time Bar Code:
Acquired on : 22 Apr 97 10:25 AM
Report Created on: 22 Apr 97 11:59 AM
Last Recalib on : 22 APR 97 10:00 AM
Multiplier : 1

Page Number : 1
Vial Number : 87
Injection Number : 1
Sequence Line : 1
Instrument Method: PESTF.MTH
Analysis Method : 1660R.MTH
Sample Amount : 0
ISTD Amount :

Sig. 2 in C:\HPCHEM\1\DATA\042197\087R0101.D

Ret Time	Area	Type	Width	Ref#	UG/L	Name
7.028	278320	BB	0.063	1	23.336	TETRACHLORO-M-XYLENE
8.179	120797	BB	0.076	1	507.616	AR 1016 #1
10.193	151138	BB	0.078	1	495.457	AR 1016 #2
11.105	453719	BB	0.126	1	488.826	AR 1016 #3
11.449	178190	BB	0.082	1	473.475	AR 1016 #4
13.436	131721	BB	0.100	1	476.222	AR 1016 #5
17.878	280965	BB	0.132	1	484.761	AR 1260 #1
20.295	343235	BB	0.122	1	479.080	AR 1260 #2
21.958	149769	BB	0.099	1	454.743	AR 1260 #3
23.017	285593	BB	0.100	1	353.583	AR 1260 #4
24.103	125686	BB	0.105	1	329.240	AR 1260 #5
28.800	215061	BB	0.125	1	24.555	DECACHLOROBIPHENYL

REVISED DATA
RESUBMITTED BY LABORATORY
INSERTED BY Oheavby 5/22/97
SIGNATURE DATE

Kemron Fax Cover Sheet

Kemron Environmental Services
109 Starlite Park
Marietta, Ohio 45750

PROTECTING OUR ENVIRONMENTAL FUTURE

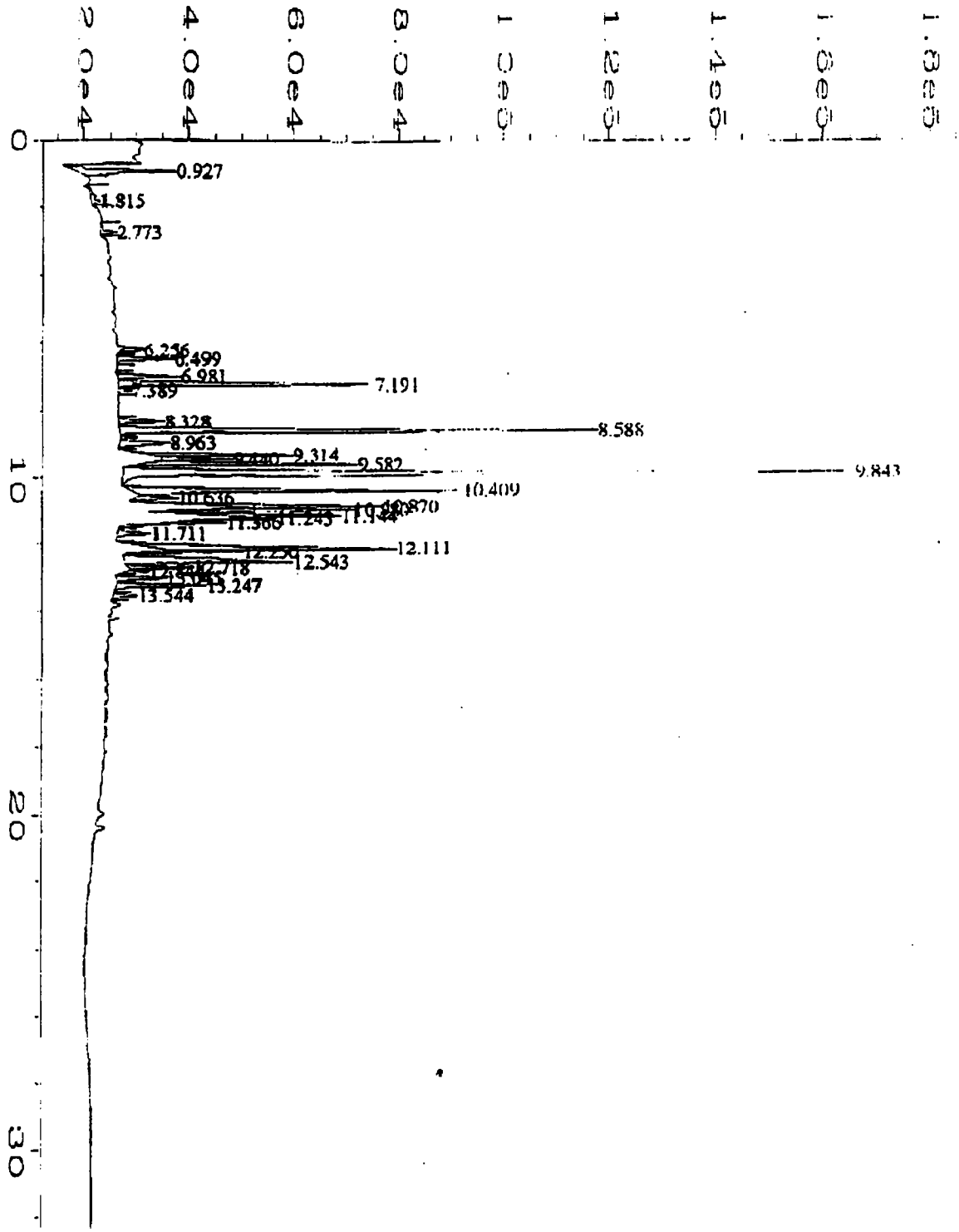
Company Name:	Smith
Telecopied to:	Mark Traxler
Receiver's Fax Number:	610-828-3347

Sender:	D. Tepe
Description:	Sample chromatograms, Ar1016
	Ar1242, Ar1248

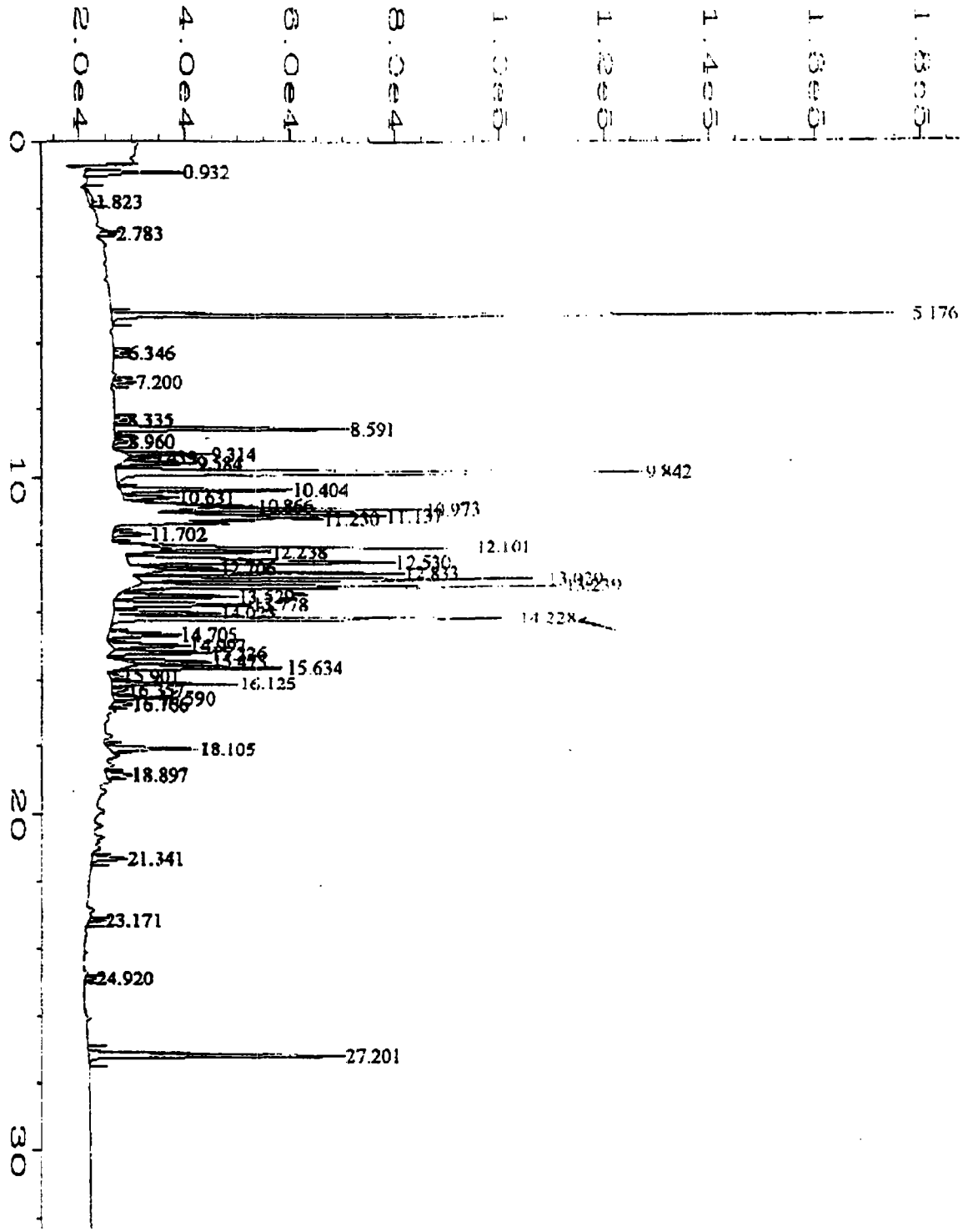
Number of Pages: (Including Transmittal Sheet)	7
Date Sent:	5/19/97

Sent from telecopier # (614)373-4835

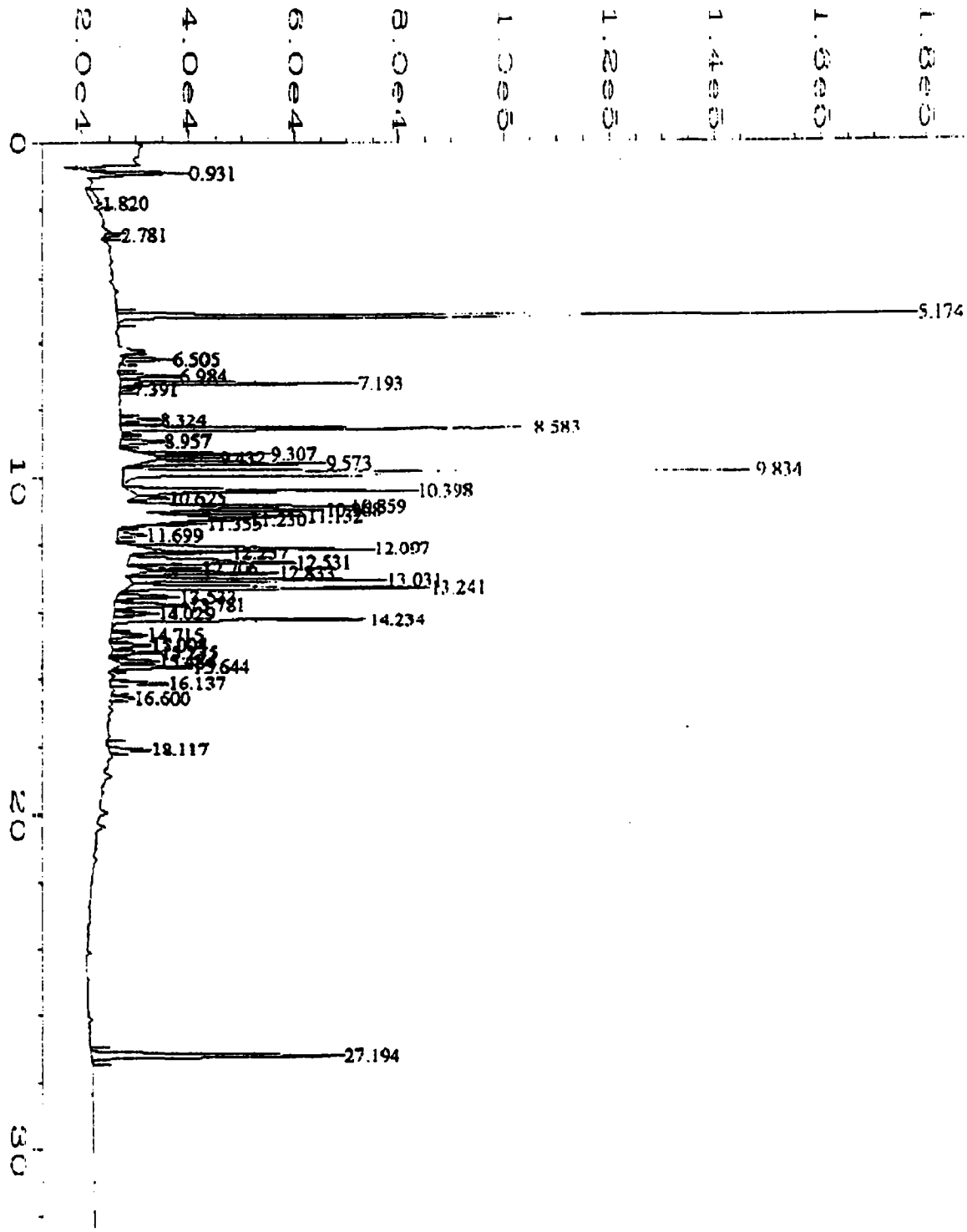
If there are any problems with this transmission, please call us at: (614)373-4071



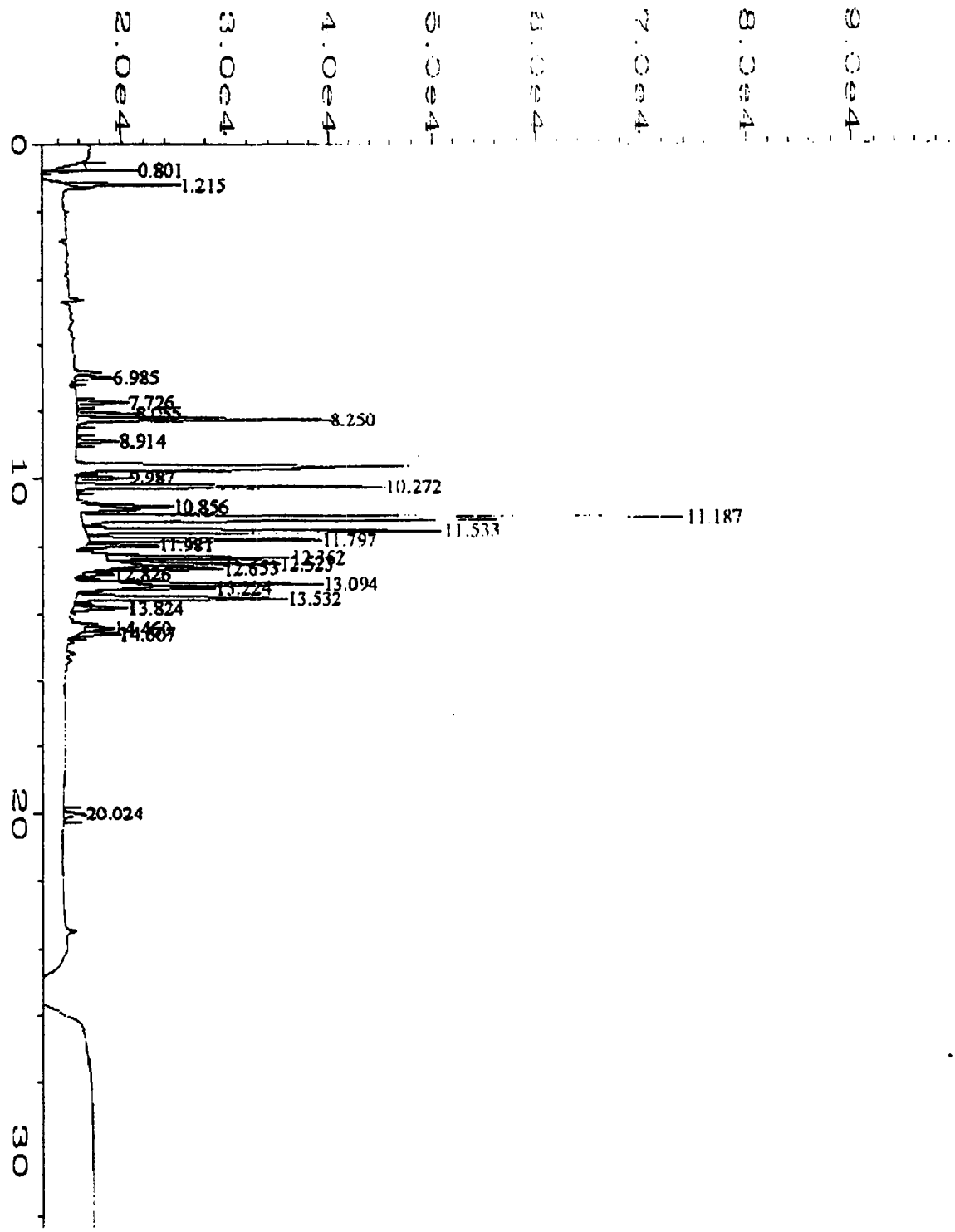
Data File Name	: C:\HPCHEM\1\DATA\050997\024F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 24
Sample Name	: 1016 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 09 May 97 11:16 PM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 08:59 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 02 MAY 97 01:54 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



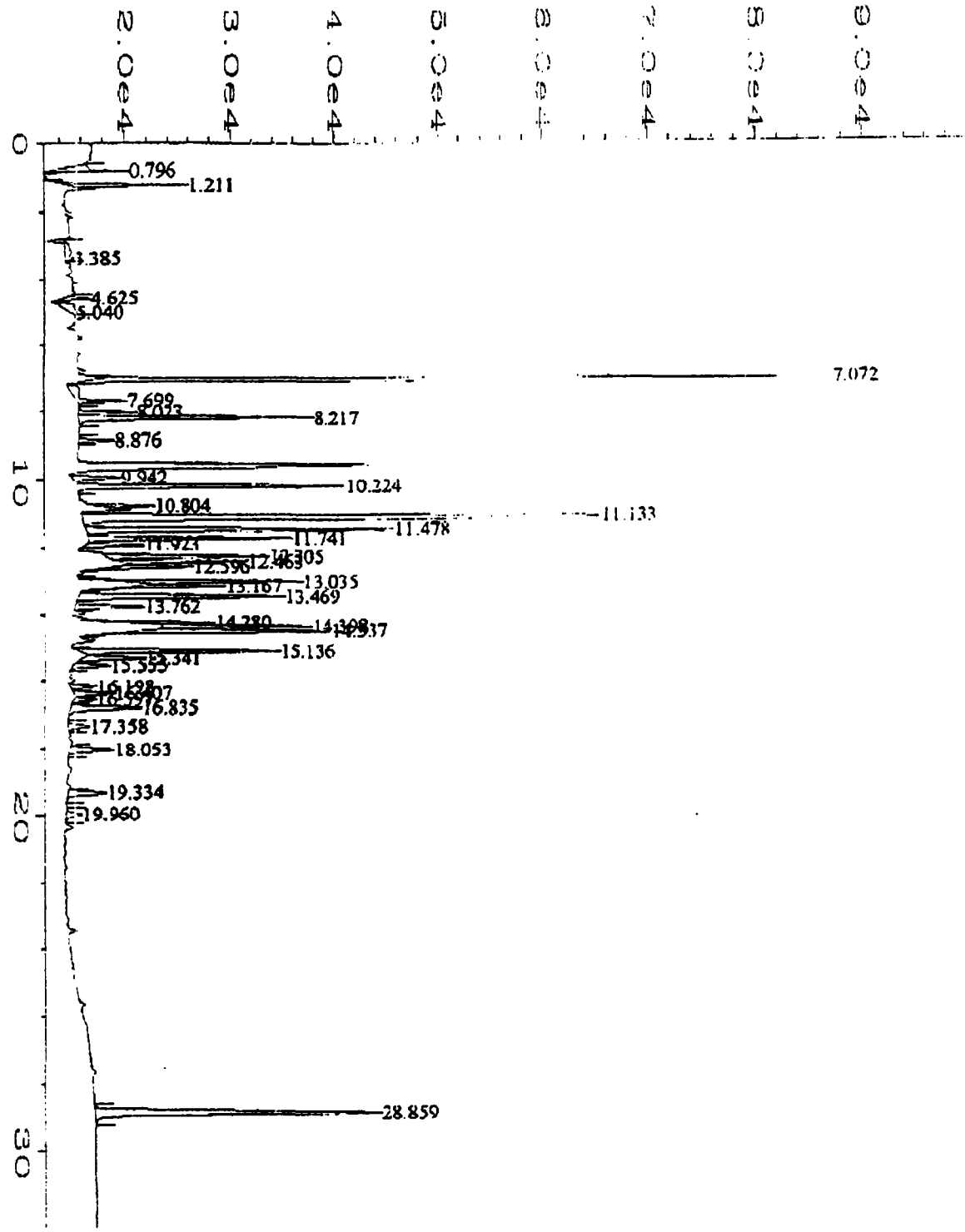
Data File Name	: C:\HPCHEM\1\DATA\050997\026F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 26
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 10 May 97 00:28 AM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 08:59 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 02 MAY 97 01:54 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



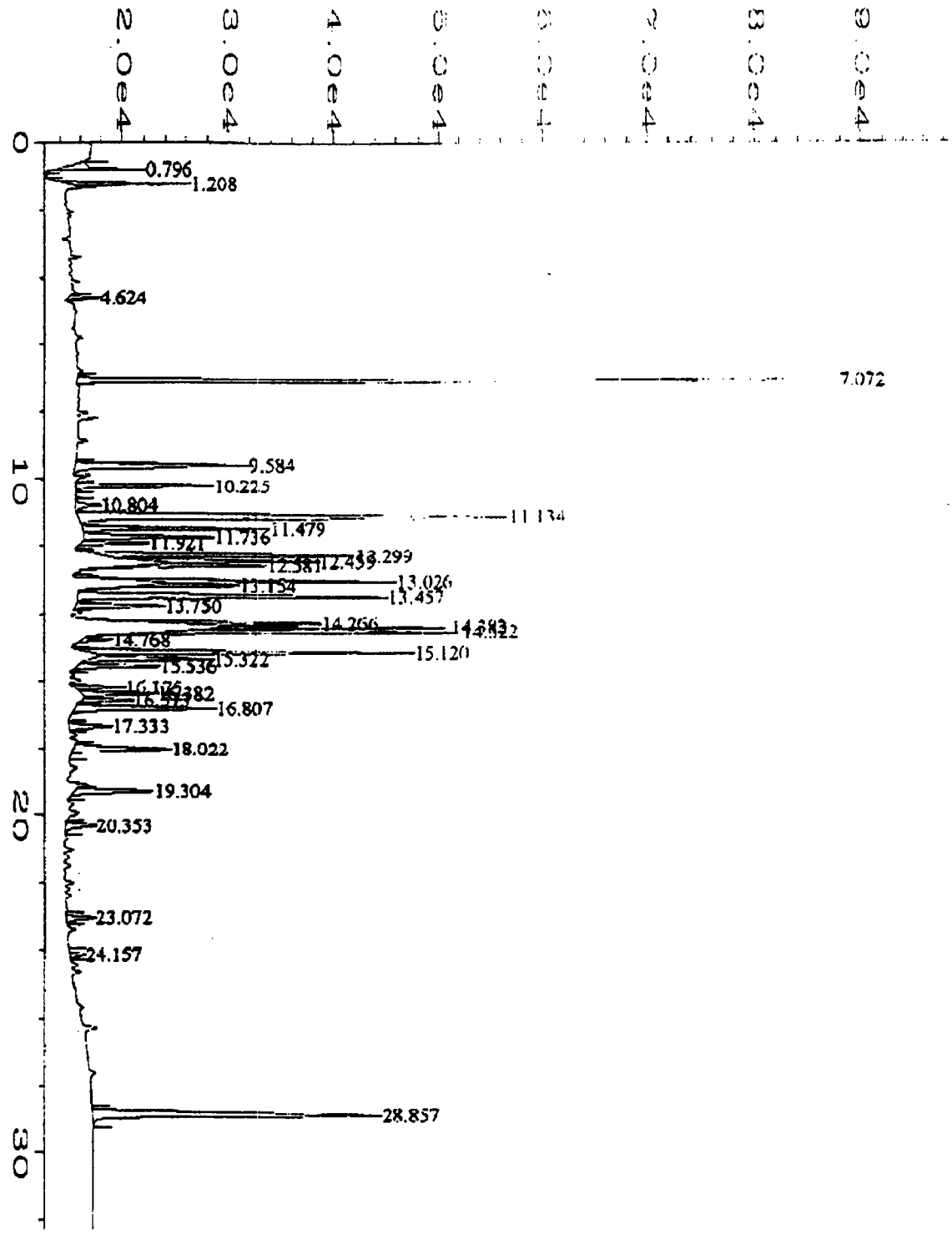
Data File Name	: C:\HPCHEM\1\DATA\050997\025F0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 25
Sample Name	: 1242 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 09 May 97 11:52 PM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 08:59 AM	Analysis Method	: 1660F.MTH
Last Recalib on	: 02 MAY 97 01:54 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



Data File Name	: C:\HPCHEM\1\DATA\050997\074R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 74
Sample Name	: 1016 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 09 May 97 11:16 PM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 09:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 02 MAY 97 01:58 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



Data File Name	: C:\HPCHEM\1\DATA\050997\075R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 75
Sample Name	: 1242 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 09 May 97 11:52 PM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 09:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 02 MAY 97 01:58 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:



Data File Name	: C:\HPCHEM\1\DATA\050997\076R0101.D		
Operator	: ECL	Page Number	: 1
Instrument	: HP4	Vial Number	: 76
Sample Name	: 1248 0.5 PPM	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 1
Acquired on	: 10 May 97 00:28 AM	Instrument Method:	PESTF.MTH
Report Created on:	12 May 97 09:00 AM	Analysis Method	: 1660R.MTH
Last Recalib on	: 02 MAY 97 01:58 PM	Sample Amount	: 0
Multiplier	: 1	ISTD Amount	:

ATTACHMENT 3B

FIELD SAMPLING RECORDS

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4/22/97

WELL #: W-1

FIELD SAMPLERS: KMB + MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 4.59 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1450	~2	2	54.7	1420	7.61	47.8	
1453	~2	5	54.3	1520	6.80	2.59	
1457	~2	10	54.3	1470	6.93	5.69	
1502	~2	15	54.9	1520	6.69	3.55	

TOTAL VOLUME PURGED: 15

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: NO PVC CAP ON P-1

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adapter.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwlm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-2

FIELD SAMPLERS: KLB + HAM

DEPTH TO GROUNDWATER FROM TOC (FT): 5.18 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W:

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1615	~2	5	52.3	1950	7.03	316	
1618	~2	10	51.4	1890	6.81	44.0	
1621	~2	15	51.1	1970	6.78	30.4	
1623	~2	20	51.0	1980	6.70	13.3	
1625	~2	25	51.0	1970	6.65	6.8	
1626	~2	30	51.0	1970	6.67	12.8	
1628	~2	35	50.6	1990	6.58	10.5	
1630	~2	40	50.5	1990	6.62	7.5	
1632	~2	45	50.7	1970	6.62	6.9	

TOTAL VOLUME PURGED: 45

ANALYTICAL SAMPLE COLLECTED:

WEATHER:

COMMENTS: PROTECTIVE CASING W-2 UNLOCKED (when arrived) pal

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4/21/97

WELL #: W-3

FIELD SAMPLERS: KLB+MHM

DEPTH TO GROUNDWATER FROM TOC (FT): ~~24.1~~ 3.65

DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): 24.1

MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): 20.45

Vw (GALS) WHERE Vw = 0.12*(d*d)*W: 9.8 GAL

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1100	0	2	54.1	2180	7.3	29.7	
1103	2	5	53.8	1920	6.95	13.9	
1105	2	10	53.6	1990	6.60	10.4	
1100	2	15	54.4	1800	6.45	33.0	SLIGHTLY CLOUDY
1110	2	20	54.2	1980	6.44	12.0	PULLED HOSE UP
		25	54.3	1980	6.5	13.2	

TOTAL VOLUME PURGED: 25

ANALYTICAL SAMPLE COLLECTED:

WEATHER:

COMMENTS:

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\..\harbor\hbrjwfm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-4

FIELD SAMPLERS: KMB + MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 1.41

DIAMETER OF WELL, d (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____

MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____

Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1530	~2	5	53.4	1270	7.56	780	
1533	~2	10	51.8	1320	7.25	83.4	
1535	~2	15	51.2	1330	7.05	39.5	
1537	~2	20	50.8	1330	6.96	34.7	
1539	~2	25	51.1	1320	6.88	19.8	
1541	~2	30	51.1	1300	6.89	16.6	
1543	~2	35	50.6	1350	6.67	10.3	
1546	~2	40	50.5	1330	6.83	11.5	
1549	~2	45	51.0	1320	6.80	8.2	

TOTAL VOLUME PURGED: 45

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: CAPS MISSING FROM W-4 + P-4
Cap will not fit under protective cover.
Needs maintenance [illegible] 4/22/97

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling test, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-5

FIELD SAMPLERS: KMB+MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 6.02 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1227	~2	2	50.6	1040	7.60	160	
1230	~2	5	52.6	1060	7.01	49.0	
1233	~2	10	52.9	1040	6.57	57.7	
1235	~2	15	52.5	1090	6.59	37.4	
1237	~2	20	52.4	1060	6.58	18.4	
1239	~2	25	52.4	1090	6.56	11.2	
1241	~2	30	52.6	1100	6.58	8.5	
1243	~2	35	52.4	1070	6.58	6.3	

TOTAL VOLUME PURGED: 35

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: _____

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hrgwfm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-6

FIELD SAMPLERS: KMB + MAM

DEPTH TO GROUNDWATER FROM TOC (FT): _____ DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): 5.82 MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1115 ~~1045~~	~2	1	53.7	1380	5.92	335	
1117 ~~1047~~	~2	5	53.7	1370	5.77	28.5	
1119 ~~1049~~	~2	10	53.8	1370	5.58	33.5	
1121 1051	~2	15	53.1	1400	5.75	22.0	
1123 1053	~2	20	52.5	1370	5.78	14.4	
1125 ~~10~~	~2	25	52.7	1370	5.89	12.1	
1130	~2	30	52.2	1370	6.25		
1132	~2	35	51.8	1360	6.29	8.2	

TOTAL VOLUME PURGED: 35

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: NO PVC CAP EITHER P-6 OR W-6

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedures.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soapwater and DI and hexane rinses, between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling test, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-7

FIELD SAMPLERS: KMB + MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 4.70 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1040	~2	3	53.5	1500	6.38	24.8	
1043	~2	10	53.2	1530	6.25	50.5	SILT PARTICLES
1045	~2	15	53.0	1580	6.18	15.6	
1047	~2	20	53.0	1590	6.18	8.6	
1049	~2	25	53.3	1610	6.23	2.7	

TOTAL VOLUME PURGED: 25

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: _____

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling test, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...harbor\hbrgwfm.xls2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

WELL #: W-~~18~~ 8 HMB 4/22/97

DATE: 4-22-97

FIELD SAMPLERS: DMB + MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 4.44 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): 9. MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL , W (FT): Vw (GALS) WHERE Vw = 0.12*(d*d)*W:

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1200	~2	3.0	50.0	1300	6.64	70.0	
1202	~2	8.0	50.4	1310	6.65	37.0	
1205	~2	12.0	51.1	1340	6.75	16.3	
1207	~2	17.0	51.0	1300	6.66	9.3	
1209	~2	22.0	51.0	1340	6.60	4.4	

TOTAL VOLUME PURGED: 22

ANALYTICAL SAMPLE COLLECTED:

WEATHER:

COMMENTS:

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless filting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-21-97

WELL #: W-9

FIELD SAMPLERS: KM B YMAIN

DEPTH TO GROUNDWATER FROM TOC (FT): 5.60 DIAMETER OF WELL, d, (IN): 2 PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): 27.7 MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): Vw (GALS) WHERE Vw = 0.12*(d*d)*W: 10.6

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
755	2	5	47.7	2270	6.58	35.3	
758	2	10	48.5	2160	6.56	2.11	
800	~2	15	48.8	2230	6.60	1.89	

TOTAL VOLUME PURGED: 15

ANALYTICAL SAMPLE COLLECTED:

WEATHER:

COMMENTS:

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adapter.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-21-97

WELL #: W-10

FIELD SAMPLERS: KMB + MA-11

DEPTH TO GROUNDWATER FROM TOC (FT): 4.53 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 2

TOTAL WELL DEPTH FROM TOC (FT): 25.0 MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): 20.47 Vw (GALS) WHERE Vw = 0.12*(d*d)*W: 9.86

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1220	2	1	54.5	1990	7.0	499	
1223	2	5	54.6	1770	6.34	49.3	
1225						16.6	GENERATOR OUT OF GAS
1310	2	1	54.8	1920	7.00	96.0	RESTART PURGING
1313	2	5	55.4	1820	6.45	5.22	
1315	2	10	55.5	1850	6.47	2.8	
1318	2	15	55.6	1960	6.34	14.6	
1320	2	20	55.8	2000	6.71	1.8	
1323	2	25	55.8	1940	6.70	2.2	

TOTAL VOLUME PURGED: 25

ANALYTICAL SAMPLE COLLECTED:

WEATHER:

COMMENTS:

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Filtting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-21-97

WELL #: W-10

FIELD SAMPLERS: KMB + MHM

DEPTH TO GROUNDWATER FROM TOC (FT): _____ DIAMETER OF WELL, d, (IN): 2

PAGE 2 OF 2

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1605 ~~1605~~	2	5 1/2	58.8	1960	7.02	300	RESTART PURGING
1608 ~~1608~~	~~5~~ 2	5	55.2	1700	6.55	18.8	
1610 ~~1610~~	2	10	54.6	1770	6.36	8.0	REPLACED HOSE IN WELL
1625 ~~1625~~	2					11.7	
1740 ~~1740~~	2	5 3/4	52.8	1730	6.85	69	RE START PURGING
1745 ~~1745~~	2	7	53.9	1770	6.60	26.6	
1748 ~~1748~~	2	10	54.5	1740	6.32	19.0	
1751 ~~1751~~	2	15	54.1	1700	6.34	12	
1754 ~~1754~~	2	20	53.3	1730	6.39	1.9	

KMB 4/22/97

TOTAL VOLUME PURGED: 20

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: _____

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\...\harbor\hb\gwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-11

FIELD SAMPLERS: KMB & MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 5

DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): 6.05 MAM

MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL , W (FT):

Vw (GALS) WHERE Vw = 0.12*(d*d)*W:

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
920	2	1	56.0	2410	6.91	102	
924	~2	7	54.7	2430	6.45	3.3	
926	~2	12	54.6	2360	6.25	1.4	
928	~2	20	54.0	2390	6.15	1.11	

TOTAL VOLUME PURGED: 20

ANALYTICAL SAMPLE COLLECTED:

WEATHER: PC

COMMENTS: NO CAP ON P-11

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with soap/water and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling last, in order of increasing concentration.
Generally, sample W-10 last, or at least collect rinsate after stainless fitting is cleaned (pour DI water through it).

h:\..\harbor\hbrgwfrm.wb2

GROUNDWATER MONITORING
FIELD DATA LOG
WAUKEGAN HARBOR SUPERFUND SITE
REMEDIAL ACTION/OPERATIONS & MAINTENANCE

DATE: 4-22-97

WELL #: W-12

FIELD SAMPLERS: KMB / MAM

DEPTH TO GROUNDWATER FROM TOC (FT): 4.75 DIAMETER OF WELL, d, (IN): 2

PAGE 1 OF 1

TOTAL WELL DEPTH FROM TOC (FT): _____ MINIMUM QUANTITY OF WATER TO BE PURGED:

HEIGHT OF WATER COLUMN IN WELL, W (FT): _____ Vw (GALS) WHERE Vw = 0.12*(d*d)*W: _____

PURGING EQUIPMENT USED: Suction Lift (Trash Pump)

SAMPLING EQUIPMENT USED: Peristaltic pump

TUBING TYPES:

In well/to pumps: Teflon lined polyethylene

In peristaltic pump: Silicon

WELL PURGING SUMMARY

TIME SAMPLED	PUMPING RATE (GPM)	TOTAL VOLUME (GAL)	TEMPERATURE DEGREES F	SPECIFIC CONDUCTANCE uS/cm	pH	TURBIDITY (ntu)	SAMPLE APPEARANCE & NOTES
1005	~2	5	49.5	1300	6.75	18.7	
1008	~2	10	49.6	1310	6.62	10.2	
1010	~2	15	49.5	1290	6.63	5.1	
1012	~2	20	48.9	1290	6.42	3.3	
1014	~2	25	48.7	1320	6.52	3.0	

TOTAL VOLUME PURGED: 25

ANALYTICAL SAMPLE COLLECTED:

WEATHER: _____

COMMENTS: _____

NOTES: Refer to Project Operations & Maintenance Manual and Quality Assurance Project Plan for specific procedures.
Purging and sampling are to be completed in same day.
If equipment is different than above, specify what was used and why.
Refer to meter calibration log and instrument manual for calibration procedure.
All persons involved in the sampling should sign logs.
Tubing is dedicated to well. Only non-dedicated equipment that sample water contacts is stainless fitting/adaptor.
Fitting cleaned with sampWater and DI and hexane rinses between each use.
Collect water levels first from all monitoring and recovery wells plus piezometers
If sample results from previous event were non detect, sample order may vary.
Prefer to sample wells that had detections in past sampling test, in order of increasing concentration.
Generally, sample W-10 last, or at least collect meets after stainless fitting is cleaned (pour DI water through it).

h:_harbor\hbnjwlm.wb2

ATTACHMENT 3C

GROUNDWATER MONITORING DATA - VOLATILE ORGANIC COMPOUNDS (VOCs)

EAST AND WEST CONTAINMENT CELLS

ILLINOIS SITE REMEDIATION PROGRAM

(Information Copy)

KEMRON Environmental Services
109 Starlite Park
Marietta, Ohio 45750

Phone: (614) 373-4071

Kemron ENVIRONMENTAL SERVICES

Outboard Marine Corporation
190 Seahorse Drive
Waukegan, IL 60085

Attn: Tricia Sutton

Login #: 97-04-405
Date Received: 04/23/97
Date Completed: 04/29/97
Date Reported: 04/29/97 15:46
Work ID: PLT2-GW/OUTBOARD MARINE CORP.

Client Code: OUTBOARD-379

SAMPLE IDENTIFICATION

Sample Number	Sample Description	Sample Number	Sample Description
01	W-5	02	W-6
03	W-7	04	W-8
05	W-9	06	W-10
07	W-11	08	W-12
09	TRIP BLANK		

All results for soils/sludges are reported on a dry weight basis, where applicable, unless otherwise specified. This report shall not be reproduced, except in full, without the prior written approval of KEMRON.

Certified by:
Leslie Bucina

RECEIVED
MAY 05 1997
OMC ENVIRONMENTAL AFFAIRS DEPT

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **01** Collected: **04/22/97 1245**
Sample Description: **W-5** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: MBJ File: 1OB20966
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	109 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	114 % Recovery	(80% - 120%)
Toluene-d8	106 % Recovery	(88% - 110%)
4-Bromofluorobenzene	111 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:
ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **02** Collected: **04/22/97 1135**
Sample Description: **W-6** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: MBJ File: 1OB20967
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	12	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	2700D,J	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	200	10
540-59-0	1,2-Dichloroethene (Total)	54000D	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	12000D	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	111 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	115 % Recovery	(80% - 120%)
Toluene-d8	104 % Recovery	(88% - 110%)
4-Bromofluorobenzene	110 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit
D = The analyte was quantified at a secondary dilution factor
J = Present below nominal reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **03** Collected: **04/22/97 1050**
Sample Description: **W-7** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: SLT File: 1OB20983
Instrument: HPMS1 Injected: 04/28/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	110	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	102 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	102 % Recovery	(80% - 120%)
Toluene-d8	99 % Recovery	(88% - 110%)
4-Bromofluorobenzene	107 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:
ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **04** Collected: **04/22/97 1210**
Sample Description: **W-8** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: SLT File: 1OB20987
Instrument: HPMS1 Injected: 04/28/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	107 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	110 % Recovery	(80% - 120%)
Toluene-d8	100 % Recovery	(88% - 110%)
4-Bromofluorobenzene	105 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **05** Collected: **04/21/97 2010**
Sample Description: **W-9** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: MBJ File: 1OB20970
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	120	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	130	10
540-59-0	1,2-Dichloroethene (Total)	20000D	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	3600D	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	115 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	119 % Recovery	(80% - 120%)
Toluene-d8	108 % Recovery	(88% - 110%)
4-Bromofluorobenzene	113 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit
D = The analyte was quantified at a secondary dilution factor

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **06** Collected: **04/21/97 1755**
Sample Description: **W-10** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: SLT File: 1OB20971
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	2000D	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	660D	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	107 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	110 % Recovery	(80% - 120%)
Toluene-d8	103 % Recovery	(88% - 110%)
4-Bromofluorobenzene	110 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit
D = The analyte was quantified at a secondary dilution factor

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **07** Collected: **04/22/97 930**
Sample Description: **W-11** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: SLT File: 1OB20990
Instrument: HPMS1 Injected: 04/28/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	102 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	107 % Recovery	(80% - 120%)
Toluene-d8	99 % Recovery	(88% - 110%)
4-Bromofluorobenzene	109 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:
ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **08** Collected: **04/22/97 1015**
Sample Description: **W-12** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: MBJ File: 1OB20973
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	22	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	150	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	16	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	109 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	113 % Recovery	(80% - 120%)
Toluene-d8	106 % Recovery	(88% - 110%)
4-Bromofluorobenzene	111 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:
ND = Not detected at or above the reporting limit

KEMRON ENVIRONMENTAL SERVICES
TEST RESULTS BY SAMPLE

Test Code: **826-IL3A** Lab No: **09** Collected: **04/22/97**
Sample Description: **TRIP BLANK** Category: **Water**
Test Description: **Volatile Organics** Method: **8260A**

Analyst: MBJ File: 1OB20974
Instrument: HPMS1 Injected: 04/27/97 Factor: 1 Units: ug/L

CAS#	COMPOUND	RESULT	REPORTING LIMIT
67-64-1	Acetone	ND	10
71-43-2	Benzene	ND	10
75-27-4	Bromodichloromethane	ND	10
75-25-2	Bromoform	ND	10
74-83-9	Bromomethane	ND	10
78-93-3	2-Butanone	ND	10
75-15-0	Carbon disulfide	ND	10
56-23-5	Carbon tetrachloride	ND	10
108-90-7	Chlorobenzene	ND	10
124-48-1	Chlorodibromomethane	ND	10
75-00-3	Chloroethane	ND	10
67-66-3	Chloroform	ND	10
74-87-3	Chloromethane	ND	10
75-34-3	1,1-Dichloroethane	ND	10
107-06-2	1,2-Dichloroethane	ND	10
75-35-4	1,1-Dichloroethene	ND	10
540-59-0	1,2-Dichloroethene (Total)	ND	10
78-87-5	1,2-Dichloropropane	ND	10
10061-01-5	cis-1,3-Dichloropropene	ND	10
10061-02-6	trans-1,3-Dichloropropene	ND	10
100-41-4	Ethylbenzene	ND	10
591-78-6	2-Hexanone	ND	10
108-10-1	4-Methyl-2-pentanone	ND	10
75-09-2	Methylene chloride	ND	10
100-42-5	Styrene	ND	10
79-34-5	1,1,2,2-Tetrachloroethane	ND	10
127-18-4	Tetrachloroethene	ND	10
108-88-3	Toluene	ND	10
71-55-6	1,1,1-Trichloroethane	ND	10
79-00-5	1,1,2-Trichloroethane	ND	10
79-01-6	Trichloroethene	ND	10
75-01-4	Vinyl chloride	ND	10
1330-20-7	Xylenes, Total	ND	10

SURROGATES:

Dibromofluoromethane	108 % Recovery	(86% - 118%)
1,2-Dichloroethane-d4	112 % Recovery	(80% - 120%)
Toluene-d8	106 % Recovery	(88% - 110%)
4-Bromofluorobenzene	114 % Recovery	(86% - 115%)

NOTES AND DEFINITIONS FOR THIS SAMPLE:

ND = Not detected at or above the reporting limit

KEMRON ANALYST LIST

Ohio Valley Laboratory

04/29/97

AJS - - Ashlee J. Scott
ALC - - Ann L. Clark
BC - - Becky Cutlip
BWH - - Ben W. Haynes
CEB - - Chad E. Barnes
CMS - - Crystal M. Stevens
DIH - - Deanna I. Hesson
DJP - - Douglas J. Poling
DLP - - Dorothy L. Payne
DST - - Dennis S. Tepe
ECL - - Eric C. Lawson
EDG - - Eric D. Gerkin
ENH - - E. Nick Hamner
FEH - - Fay E. Harmon
FRM - - Fred R. Montgomery
GWH - - George W. Hutchison
HV - - Hema Vilasagar
JEC - - Jesse E. Chapman
JKM - - June K. Morris
JLI - - Janice L. Inghram
JMM - - Jim M. Monk
JWR - - John W. Richards
JYH - - Ji Y. Hu
KHA - - Kim H. Archer
KMM - - Kevin M. McDonald
KPO - - Kevin P. Overstreet
KRA - - Kathy R. Albertson
LMW - - Lisa M. Wagner
MBJ - - Matthew B. Jarrell
MDA - - Mike D. Albertson
MDC - - Michael D. Cochran
MES - - Mary E. Schiling
MLS - - Michael L. Schimmel
MMB - - Maren M. Beery
REB - - Russell E. Burton
REF - - Ron E. Fertile
REK - - Robert E. Kyer
RJS - - Rick J. Santos
RWC - - Rodney W. Campbell
SCM - - Susan C. Moellendick
SCW - - Stephen C. West
SLT - - Stephanie L. Tepe
SPL - - Steve P. Learn
TLD - - Teresa L. Davis
VC - - Vicki Collier
WCD - - Wade C. Dawson

ORGANIC QA/QC

Kemron
ENVIRONMENTAL SERVICES

KEMRON ENVIRONMENTAL SERVICES, INC.

MARIETTA, OH

QUALITY CONTROL / METHOD 8260

RUN DATE:	04/27/97	BLK FLNM:	1BK20959	SMPL NAME:	04-372-01
INSTRUMENT:	HPMS_1	LCS FLNM:	1QC20960	FILE NAME:	1SH20961
ANALYST(S):	MBJ	SHIFT:	AM	MS FLNM.	1SH20962
		WORK GROUP:	WG22207	MSD FLNM.	1SH20963

NOTES

Control limits from SW-846 and statistically determined

MS/MSD ranges from SW-846 when applicable

VOA COMPOUND	REPORTING DETECTION LIMIT (RDL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
DICHLORODIFLUOROMETHANE	10	ND	20.6	103.1	50-150	0.0	51.6	51.6	103.5	103.6	50-150	0.1	25
CHLOROMETHANE	10	ND	19.6	97.9	50-150	0.0	48.8	49.8	97.7	99.6	50-150	1.9	25
VINYL CHLORIDE	10	ND	19.9	99.6	50-150	0.0	52.5	52.0	104.9	103.9	50-150	1.0	25
BROMOMETHANE	10	ND	21.8	109.2	50-150	0.0	50.8	52.4	101.7	104.7	50-150	2.9	25
CHLOROETHANE	10	ND	19.5	97.7	50-150	0.0	53.4	52.5	106.7	105.1	50-150	1.6	25
TRICHLOROFLUOROMETHANE	10	ND	19.9	99.7	50-150	0.0	52.4	51.8	104.8	103.6	50-150	1.1	25
1,1-DICHLOROETHENE	5	ND	20.5	102.6	50-150	0.0	71.8	72.3	143.7	144.7	50-150	0.7	25
METHYLENE CHLORIDE	5	ND	20.7	103.7	50-150	0.0	55.1	54.2	110.2	108.4	50-150	1.6	25
TRANS-1,2-DICHLOROETHENE	5	ND	24.6	123.1	50-150	0.0	68.1	66.3	136.1	132.5	50-150	2.7	25
1,1-DICHLOROETHANE	5	ND	22.9	114.7	50-150	0.0	63.0	62.0	125.9	124.1	50-150	1.5	25
2,2-DICHLOROPROPANE	5	ND	23.8	118.9	50-150	0.0	62.5	61.0	124.9	122.0	50-150	2.4	25
CIS-1,2-DICHLOROETHENE	5	ND	22.7	113.7	50-150	0.0	60.9	59.8	121.9	119.3	50-150	2.1	25
BROMOCHLOROMETHANE	5	ND	21.2	106.1	50-150	0.0	55.9	55.5	111.8	111.0	50-150	0.7	25
CHLOROFORM	5	ND	22.8	114.0	50-150	0.0	59.6	58.4	119.2	116.7	50-150	2.1	25
1,1,1-TRICHLOROETHANE	5	ND	22.5	112.7	50-150	12.9	73.7	72.3	121.7	118.7	50-150	2.4	25
1,1-DICHLOROPROPENE	5	ND	22.1	110.6	50-150	0.0	59.6	57.6	119.2	115.2	50-150	3.4	25
CARBON TETRACHLORIDE	5	ND	23.0	115.2	50-150	0.0	61.4	60.1	122.9	120.3	50-150	2.2	25
1,2-DICHLOROETHANE	5	ND	22.1	110.3	50-150	0.0	58.5	57.9	116.9	115.9	50-150	0.9	25
BENZENE	5	ND	21.3	106.3	50-150	0.0	56.3	55.2	112.6	110.3	50-150	2.1	25
TRICHLOROETHENE	5	ND	20.8	104.1	50-150	0.0	55.5	54.9	110.9	109.7	50-150	1.1	25
1,2-DICHLOROPROPANE	5	ND	21.6	108.2	50-150	0.0	58.1	57.4	116.3	114.8	50-150	1.3	25
BROMODICHLOROMETHANE	5	ND	21.0	104.9	50-150	0.0	55.3	54.3	110.7	108.6	50-150	1.9	25
DIBROMOMETHANE	5	ND	21.6	107.9	50-150	0.0	57.1	55.9	114.2	111.8	50-150	2.1	25
CIS-1,3 DICHLOROPROPENE	5	ND	21.3	106.4	50-150	0.0	56.2	55.3	112.4	110.6	50-150	1.6	25
TOLUENE	5	ND	21.3	106.3	50-150	0.0	57.8	55.5	115.5	110.9	50-150	4.1	25
TRANS-1,3-DICHLOROPROPENE	5	ND	20.9	104.5	50-150	0.0	57.0	54.4	114.0	108.8	50-150	4.6	25
1,1,2-TRICHLOROETHANE	5	ND	19.6	98.0	50-150	0.0	52.5	49.9	105.1	99.9	50-150	5.1	25
1,3-DICHLOROPROPANE	5	ND	20.8	104.0	50-150	0.0	55.2	53.3	110.3	106.6	50-150	3.4	25
TETRACHLOROETHENE	5	ND	21.1	105.6	50-150	0.0	56.4	53.6	112.8	107.1	50-150	5.1	25
DIBROMOCHLOROMETHANE	5	ND	19.7	98.7	50-150	0.0	54.1	50.7	108.2	101.3	50-150	6.6	25
1,2-DIBROMOETHANE	5	ND	19.8	99.1	50-150	0.0	53.6	51.6	107.3	103.2	50-150	3.8	25
CHLOROBENZENE	5	ND	21.7	108.3	50-150	0.0	58.2	54.8	116.3	109.7	50-150	5.9	25
1,1,1,2-TETRACHLOROETHANE	5	ND	20.2	101.1	50-150	0.0	55.7	52.6	111.5	105.1	50-150	5.8	25
ETHYLBENZENE	5	ND	20.9	104.4	50-150	0.0	56.8	54.6	113.7	109.2	50-150	4.0	25
M+P-XYLENE	5	ND	42.1	105.3	50-150	0.0	114.7	109.2	114.7	109.2	50-150	4.9	25
O-XYLENE	5	ND	20.9	104.4	50-150	0.0	56.8	54.3	113.5	108.6	50-150	4.4	25

KEMRON ENVIRONMENTAL SERVICES, INC.

MARIETTA, OH

QUALITY CONTROL / METHOD 8260

RUN DATE:	04/27/97	BLK FLNM.	1BK20959	SMPL NAME:	04-372-01
INSTRUMENT:	HPMS_1	LCS FLNM:	1QC20960	FILE NAME:	1SH20961
ANALYST(S):	MBJ	SHIFT:	AM	MS FLNM:	1SH20962
		WORK GROUP:	WG22207	MSD FLNM:	1SH20963

VOA COMPOUND	REPORTING DETECTION LIMIT (RDL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
ISOPROPYL-BENZENE	5	ND	21.6	108.2	50-150	0.0	58.8	55.5	117.6	111.0	50-150	5.8	25
BROMOFORM	5	ND	19.5	97.5	50-150	0.0	52.8	50.1	105.6	100.2	50-150	5.3	25
1,1,2,2-TETRACHLOROETHANE	5	ND	20.0	100.1	50-150	0.0	55.1	52.2	110.2	104.4	50-150	5.4	25
1,2,3-TRICHLOROPROPANE	5	ND	20.0	99.8	50-150	0.0	55.2	54.0	110.4	108.1	50-150	2.2	25
PROPYL-BENZENE	5	ND	21.6	107.9	50-150	0.0	59.1	58.0	118.2	112.1	50-150	5.3	25
BROMOBENZENE	5	ND	21.4	107.1	50-150	0.0	58.5	55.0	116.9	110.0	50-150	6.1	25
1,3,5-TRIMETHYLBENZENE	5	ND	21.1	105.7	50-150	0.0	59.5	55.8	119.1	111.6	50-150	6.4	25
2-CHLOROTOLUENE	5	ND	21.5	107.3	50-150	0.0	56.6	58.6	113.1	117.1	50-150	3.5	25
4-CHLOROTOLUENE	5	ND	22.7	113.3	50-150	0.0	63.3	54.2	126.6	108.4	50-150	15.5	25
TERT-BUTYL-BENZENE	5	ND	20.9	104.6	50-150	0.0	57.1	53.7	114.2	107.4	50-150	6.2	25
1,2,4-TRIMETHYLBENZENE	5	ND	21.4	106.8	50-150	0.0	59.8	56.4	119.7	112.7	50-150	6.0	25
SEC-BUTYL-BENZENE	5	ND	22.2	110.8	50-150	0.0	61.8	58.3	123.6	116.6	50-150	5.8	25
PARA-ISOPROPYL-TOLUENE	5	ND	21.5	107.3	50-150	0.0	60.3	56.7	120.6	113.3	50-150	6.2	25
1,3-DICHLOROBENZENE	5	ND	21.5	107.4	50-150	0.0	59.2	55.6	118.4	111.2	50-150	6.3	25
1,4-DICHLOROBENZENE	5	ND	21.8	109.1	50-150	0.0	60.8	56.6	121.7	113.2	50-150	7.2	25
N-BUTYL-BENZENE	5	ND	22.2	111.2	50-150	0.0	63.4	58.8	126.7	117.6	50-150	7.5	25
1,2-DICHLOROBENZENE	5	ND	20.8	103.9	50-150	0.0	57.6	53.8	115.2	107.6	50-150	6.8	25
1,2-DIBROMO-3-CHLOROPROPA	5	ND	20.2	101.1	50-150	0.0	57.9	55.2	115.8	110.5	50-150	4.7	25
1,2,4-TRICHLOROBENZENE	5	ND	21.0	105.0	50-150	0.0	58.6	55.0	117.2	109.9	50-150	6.4	25
HEXACHLOROBUTADIENE	5	ND	20.1	100.3	50-150	0.0	60.6	55.6	121.2	111.2	50-150	8.7	25
NAPHTHALENE	10	ND	20.2	100.8	50-150	0.0	57.8	54.8	115.5	109.7	50-150	5.2	25
1,2,3-TRICHLOROBENZENE	5	ND	20.5	102.7	50-150	0.0	58.4	55.5	116.8	110.9	50-150	5.2	25
STYRENE	5	ND	20.8	103.9	50-150	0.0	56.4	53.9	112.9	107.7	50-150	4.7	25
ACETONE	100	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IODOMETHANE	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FREON 113	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	100	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYLVINYLETHER	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VINYL ACETATE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

KEMRON ENVIRONMENTAL SERVICES, INC.

MARIETTA, OH

QUALITY CONTROL / METHOD 8260

NOTES
Control limits from SW 846 and statistically determined
MS/MSD ranges from SW-846 when applicable

RUN DATE: 04/28/07
INSTRUMENT: HPMS_1
ANALYST(S): SLT

BLK FLNM: 1BK20980
LCS FLNM 1QC20981
SHIFT: AM
WORK GROUP: WG22246

SMPL NAME: 04 405 03
FILE NAME: 1OB20983
MS FLNM: 1OB20984
MSD FLNM: 1OB20985

VOA COMPOUND	REPORTING DETECTION LIMIT (RDL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
DICHLORODIFLUOROMETHANE	10	ND	21.4	107.2	50-150	0.0	47.3	48.5	94.6	97.0	50-150	2.5	25
CHLOROMETHANE	10	ND	19.9	99.5	50-150	0.0	44.7	46.3	89.5	92.6	50-150	3.4	25
VINYL CHLORIDE	10	ND	20.7	103.7	50-150	0.0	50.9	53.7	101.7	107.5	50-150	5.5	25
BROMOMETHANE	10	ND	19.7	98.3	50-150	0.0	45.8	50.0	91.7	100.0	50-150	8.6	25
CHLOROETHANE	10	ND	20.1	100.4	50-150	0.0	57.2	59.9	114.5	119.8	50-150	4.5	25
TRICHLOROFLUOROMETHANE	10	ND	21.3	106.7	50-150	0.0	48.0	49.5	96.0	99.0	50-150	3.0	25
1,1-DICHLOROETHENE	5	ND	20.3	101.6	50-150	0.0	62.3	65.2	124.7	130.5	50-150	4.5	25
METHYLENE CHLORIDE	5	ND	21.3	106.6	50-150	0.0	49.8	51.1	99.7	102.2	50-150	2.5	25
TRANS-1,2-DICHLOROETHENE	5	ND	24.5	122.7	50-150	0.0	61.0	63.6	121.9	127.2	50-150	4.3	25
1,1-DICHLOROETHANE	5	ND	22.9	114.6	50-150	105.5	167.2	170.9	123.4	130.8	50-150	5.8	25
2,2-DICHLOROPROPANE	5	ND	23.6	118.2	50-150	0.0	57.0	59.0	114.1	118.0	50-150	3.4	25
CIS-1,2-DICHLOROETHENE	5	ND	22.2	110.8	50-150	0.0	59.6	61.5	119.1	123.0	50-150	3.2	25
BROMOCHLOROMETHANE	5	ND	20.2	100.9	50-150	0.0	50.2	51.6	100.4	103.1	50-150	2.7	25
CHLOROFORM	5	ND	22.5	112.4	50-150	0.0	55.3	56.7	110.7	113.3	50-150	2.4	25
1,1,1-TRICHLOROETHANE	5	ND	22.5	112.7	50-150	0.0	53.7	56.1	107.5	112.2	50-150	4.3	25
1,1-DICHLOROPROPENE	5	ND	22.3	111.5	50-150	0.0	53.2	56.2	106.3	112.4	50-150	5.6	25
CARBON TETRACHLORIDE	5	ND	22.9	114.3	50-150	0.0	54.5	57.2	109.0	114.3	50-150	4.7	25
1,2-DICHLOROETHANE	5	ND	21.2	105.8	50-150	0.0	53.0	54.0	106.0	108.0	50-150	1.9	25
BENZENE	5	ND	21.0	104.6	50-150	0.0	49.7	52.3	99.4	104.6	50-150	5.1	25
TRICHLOROETHENE	5	ND	21.1	105.7	50-150	0.0	48.9	50.7	97.8	101.3	50-150	3.6	25
1,2-DICHLOROPROPANE	5	ND	21.4	107.2	50-150	0.0	52.0	53.5	104.0	107.0	50-150	2.9	25
BROMODICHLOROMETHANE	5	ND	20.4	101.9	50-150	0.0	49.6	51.6	99.1	103.1	50-150	4.0	25
DIBROMOMETHANE	5	ND	20.5	102.7	50-150	0.0	50.7	52.5	101.4	105.0	50-150	3.5	25
CIS-1,3-DICHLOROPROPENE	5	ND	20.6	103.0	50-150	0.0	50.1	51.0	100.3	101.9	50-150	1.6	25
TOLUENE	5	ND	21.3	106.4	50-150	0.0	50.8	52.7	101.6	105.5	50-150	3.8	25
TRANS-1,3-DICHLOROPROPENE	5	ND	20.3	101.3	50-150	0.0	48.6	51.9	97.5	103.8	50-150	6.2	25
1,1,2-TRICHLOROETHANE	5	ND	18.0	90.2	50-150	0.0	44.0	45.7	88.0	91.4	50-150	3.8	25
1,3-DICHLOROPROPANE	5	ND	20.1	100.3	50-150	0.0	48.4	50.3	96.7	100.6	50-150	3.9	25
TETRACHLOROETHENE	5	ND	20.9	104.3	50-150	0.0	49.0	51.4	98.1	102.8	50-150	4.7	25
DIBROMOCHLOROMETHANE	5	ND	18.6	92.8	50-150	0.0	45.7	47.1	91.4	94.3	50-150	3.1	25
1,2-DIBROMOETHANE	5	ND	18.5	92.6	50-150	0.0	45.8	47.3	91.6	94.5	50-150	3.2	25
CHLOROBENZENE	5	ND	21.3	106.6	50-150	0.0	51.1	52.8	102.3	105.6	50-150	3.2	25
1,1,1,2-TETRACHLOROETHANE	5	ND	19.8	99.1	50-150	0.0	48.3	49.9	96.7	99.8	50-150	3.2	25
ETHYLBENZENE	5	ND	20.9	104.4	50-150	0.0	49.1	51.8	98.2	103.6	50-150	5.4	25
M+P-XYLENE	5	ND	41.6	104.0	50-150	0.0	100.7	103.2	100.7	103.2	50-150	2.4	25
O-XYLENE	5	ND	20.3	101.5	50-150	0.0	49.3	51.2	98.6	102.4	50-150	3.7	25

KEMRON ENVIRONMENTAL SERVICES, INC.

MARIETTA, OH

QUALITY CONTROL / METHOD 8260

RUN DATE:	04/28/97	BLK FLNM:	1BK20980	SMPL NAME:	04-405-03
INSTRUMENT:	HPMS_1	LCS FLNM:	1QC20981	FILE NAME:	1OB20983
ANALYST(S):	SLT	SHIFT:	AM	MS FLNM:	1OB20984
		WORK GROUP:	WG22246	MSD FLNM:	1OB20985

VOA COMPOUND	REPORTING DETECTION LIMIT (RDL) ug/L	METHOD BLANK ug/L	LCS 20 ug/L ug/L	LCS PERCENT RECOVERY %	CONTROL LIMITS %REC	SAMPLE RESULT ug/L	MS 50 ug/L ug/L	MSD 50 ug/L ug/L	MS PERCENT RECOVERY %	MSD PERCENT RECOVERY %	ADVISORY LIMITS %	PERCENT RPD %	ADVISORY LIMITS %
ISOPROPYL-BENZENE	5	ND	21.2	105.8	50-150	0.0	51.0	53.0	101.9	106.1	50-150	4.0	25
BROMOFORM	5	ND	18.7	93.3	50-150	0.0	43.9	46.0	87.8	92.1	50-150	4.7	25
1,1,2,2-TETRACHLOROETHANE	5	ND	17.1	85.7	50-150	0.0	45.5	47.7	91.0	95.3	50-150	4.6	25
1,2,3-TRICHLOROPROPANE	5	ND	18.4	92.2	50-150	0.0	45.6	48.9	91.1	97.8	50-150	7.1	25
PROPYL-BENZENE	5	ND	21.7	108.7	50-150	0.0	51.3	53.8	102.5	107.6	50-150	4.9	25
BROMOBENZENE	5	ND	20.6	102.9	50-150	0.0	49.9	51.6	99.8	103.3	50-150	3.4	25
1,3,5-TRIMETHYLBENZENE	5	ND	21.5	107.5	50-150	0.0	51.6	53.6	103.1	107.1	50-150	3.8	25
2-CHLOROTOLUENE	5	ND	22.4	112.0	50-150	0.0	51.9	53.0	103.7	106.0	50-150	2.2	25
4-CHLOROTOLUENE	5	ND	21.7	108.6	50-150	0.0	52.5	55.8	104.9	111.6	50-150	6.2	25
TERT-BUTYL-BENZENE	5	ND	20.9	104.6	50-150	0.0	49.3	51.6	98.6	103.2	50-150	4.5	25
1,2,4-TRIMETHYLBENZENE	5	ND	21.5	107.3	50-150	0.0	51.4	53.9	102.6	107.9	50-150	4.8	25
SEC-BUTYL-BENZENE	5	ND	22.6	113.2	50-150	0.0	53.4	55.9	106.8	111.8	50-150	4.6	25
PARA-ISOPROPYL-TOLUENE	5	ND	21.9	109.5	50-150	0.0	51.6	54.2	103.2	108.4	50-150	4.9	25
1,3-DICHLOROBENZENE	5	ND	20.9	104.6	50-150	0.0	50.4	52.4	100.7	104.7	50-150	3.9	25
1,4-DICHLOROBENZENE	5	ND	21.4	106.9	50-150	0.0	51.7	53.4	103.5	106.8	50-150	3.1	25
N-BUTYL-BENZENE	5	ND	22.9	114.4	50-150	0.0	54.2	56.7	108.5	113.3	50-150	4.4	25
1,2-DICHLOROBENZENE	5	ND	20.4	102.0	50-150	0.0	48.4	50.5	96.8	100.9	50-150	4.1	25
1,2-DIBROMO-3-CHLOROPROPA	5	ND	18.2	90.8	50-150	0.0	45.7	49.7	91.4	99.4	50-150	8.3	25
1,2,4-TRICHLOROBENZENE	5	ND	20.9	104.7	50-150	0.0	50.3	51.4	100.7	102.7	50-150	2.0	25
HEXACHLOROBUTADIENE	5	ND	22.2	111.0	50-150	0.0	49.8	54.2	99.7	108.5	50-150	8.5	25
NAPHTHALENE	10	ND	19.0	95.0	50-150	0.0	47.8	50.2	95.5	100.4	50-150	5.0	25
1,2,3-TRICHLOROBENZENE	5	ND	20.4	102.2	50-150	0.0	49.0	51.1	98.0	102.3	50-150	4.3	25
STYRENE	5	ND	19.9	99.7	50-150	0.0	48.5	50.1	97.0	100.2	50-150	3.2	25
ACETONE	100	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
IODOMETHANE	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
FREON 113	NA	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
CARBON DISULFIDE	5	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-BUTANONE	100	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
4-METHYL-2-PENTANONE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-HEXANONE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
2-CHLOROETHYLVINYLETHER	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
VINYL ACETATE	10	ND	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

KEMRON
ENVIRONMENTAL SERVICES

87279

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project Contact: TRICIA SUTTON // Outboard - 379

Turn Around Requirements: Standard (7 day)

Project No.: RT2-GW

Project Name: OUTBOARD MARINE CORP.

Sampler (print): KEVIN BRISSETTE

Signature: Kevin M Brissette

Sample I.D. No.	Comp*	Grab	Date	Time	Protocol CWA	Protocol SW846	NUMBER OF SAMPLES	Hold	EPA METHOD 8260	ADDITIONAL REQUIREMENTS
W-5		X	4-22-97	1245		X	2		X	
W-6		X	4-22-97	1135		X	2		X	
W-7		X	4-22-97	1050		X	2		X	
W-8		X	4-22-97	1210		X	2		X	
W-9		X	4-21-97	2010		X	2		X	
W-10		X	4-21-97	1755		X	2		X	
W-11		X	4-22-97	930		X	2		X	
W-12		X	4-22-97	1015		X	2		X	
TRIP BLANK			4-14-97	1400			2		X	

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Relinquished by: (Signature)	Date	Time	Received by: (Signature)
Kevin M. Brissette	4/22/97	1830					

Relinquished by: (Signature)	Date	Time	Received for Laboratory by: (Signature)	Date	Time	Remarks
			Angelina R. Scott	4/23/97	945	Data Packet Required - Basic. Send Report (unbound) to UMC (ONLY) TRICIA Sutton) Cooler Temp: 5.0 COC Sealed Sx's rec'd intact

*Homogenize all composite samples prior to analysis

White – Lab Yellow – Office Pink – Field