McBride-Ratcliff
and Associates, Inc.

Geotechnical Consultants
7220 Langtry
Houston, Texas 77040
713-460-3766

March 14, 1986
MRA File No. 85-317

City of Houston
Public Works Department
Wastewater Division
P.O. Box 1562
306 McGowen
Houston, Texas 77251

ATTENTION: Mr. Lorenzo Alonzo
Assistant Manager

SUBJECT: Request for Wastewater Discharge Permit
South Cavalcade Site
Houston, Texas

Dear Mr. Alonzo:

As a followup to our letter dated February 26, 1986, we are submitting appropriate analytical testing data pursuant to our application for a temporary wastewater discharge permit.

On February 27, 1986, a wastewater sample was collected from an onsite storage tank. The sample was containerized, preserved, and transported in accordance with EPA protocol. Analytical testing was conducted by the Spectrix Corporation for the compounds requested at our meeting on February 26, 1986. A copy of the complete Spectrix analytical report is attached for your records.

A review of the analytical data indicates that a total of 10 organic compounds were reported above detection limits. However, all organic compounds were less than about 1 ppm. A total of 5 inorganic compounds were reported above detection limits, and were less than 1 ppm. All metal compounds were less than the maximum allowable concentration defined by Section 49-153 of the Industrial Waste Ordinance.

002289

1012242

079

Therefore, based on the analytical test results, we propose to periodically discharge this waste stream into an onsite sanitary sewer. As a further condition to our permit application, we will conduct the following:

1. Maintain records on the amount of wastewater disposed and the dates of disposal.

2. Provide your department with documentation of our disposal activities.

3. Visually monitor the waste stream for any observable changes in quality or composition.

If convenient, we prefer to start disposal by March 24, 1986, provided that you find our proposal acceptable. I will call you early next week to arrange a brief meeting to discuss any additional conditions that you may have. We appreciate your assistance in expediting our permit application.

Sincerely,

McBRIDE-RATCLIFF AND ASSOCIATES, INC.

William R. Tobin

William R. Tobin, P.E.
Project Manager

WRT:kc

002290

Received: 02/27/86 03/13/86 11:45:20

REPORT TO
Koppers Company, Inc.
409 Texas Blvd. Suite #1
Texarkana, TX 75501

ATTEN Bill Tobin

CLIENT KOPPERS SAMPLES 1
COMPANY Koppers Company, Inc.
FACILITY McBride-Ratcliff & Assoc.

WORK ID Water
TAKEN Client
TRANS Client
TYPE Water
P O # 14-5-50106
INV. # 1261

PREPARED BY
Spectrix Corporation
3911 Fondren
Suite 100
Houston, Texas 77063-5841

ATTEN Sample Control
PHONE (713) 266-6000

CERTIFIED BY

CONTACT FOSTER

Please call the above number if you have any questions.
NOTE: ALL SAMPLES WILL BE RETAINED FOR 90 DAYS AND THEN DISCARDED. IF YOU WISH YOUR SAMPLES RETURNED TO YOUR FACILITY CALL SAMPLE CONTROL AT THE ABOVE NUMBER

SAMPLE IDENTIFICATION

1 SCK-WW01-01

TEST CODES and NAMES used on this report

ACRO	Acrolein
ACRYL	Acrylonitrile
AG	Silver
AS	Arsenic
B	Boron
BA	Barium
BE	Beryllium
CD	Cadmium
CN	Cyanide in Water
CR	Chromium
CU	Copper
HG	Mercury
MN	Manganese
NI	Nickel
OG SU	Oil and Grease
PB	Lead
PH	pH in Water
S	Sulfide
SB	Antimony
SE	Selenium
TL	Thallium
ZN	Zinc

002291

ORGANICS ANALYSIS DATA SHEET

VOLATILES

Laboratory Name: Spectrix

Sample Number: SCK WW01

Lab Sample ID No.: 860206001

Sample Matrix: Water

Data Release Authorized By: TTD

Date Sample Received: 2/27/86

Concentration: Low

Units: ug/L

Date Extracted/Prepared: 3/4/86

Conc/Dil Factor: 100

Date Analyzed: 3/4/86

NPDES #	CAS #	COMPOUND	RESULT
021V	74-87-3	CHLOROMETHANE-	1000 U
020V	74-83-9	BROMOMETHANE	1000 U
031V	75-01-4	VINYL CHLORIDE	1000 U
009V	75-00-3	CHLOROETHANE	1000 U
	75-69-4	TRICHLOROFLUOROMETHANE	1000 U
022V	75-09-2	METHYLENE CHLORIDE	500 U
016V	75-35-4	1,1-DICHLOROETHENE	500 U
014V	75-34-3	1,1-DICHLOROETHANE	500 U
026V	156-60-5	TRANS-1,2-DICHLOROETHENE	500 U
011V	67-66-3	CHLOROFORM	500 U
015V	107-06-2	1,2-DICHLOROETHANE	500 U
027V	71-55-6	1,1,1-TRICHLOROETHANE	500 U
006V	56-23-5	CARBON TETRACHLORIDE	500 U
012V	75-27-4	BROMODICHLORMETHANE	500 U
017V	78-87-5	1,2-DICHLOROPROPANE	500 U
	10061-02-6	TRANS-1,3-DICHLOROPROPENE	500 U
029V	79-01-6	TRICHLOROETHENE	500 U
008V	124-48-1	DIBROMOCHLOROMETHANE	500 U
028V	79-00-5	1,1,2-TRICHLOROETHANE	500 U
003V	71-43-2	BENZENE	500 U
	10061-01-5	CIS-1,3-DICHLOROPROPENE	500 U
010V	110-75-8	2-CHLOROETHYLVINYLETHER	1000 U
005V	75-25-2	BROMOFORM	500 U
024V	127-18-4	TETRACHLOROETHENE	500 U
023V	79-34-5	1,1,2,2-TETRACHLOROETHANE	500 U
025V	108-88-3	TOLUENE	500 U
007V	108-90-7	CHLOROBENZENE	500 U
019V	100-41-4	ETHYLBENZENE	500 U

U = UNDETECTED AT THE LISTED DETECTION LIMIT
J = COMPOUND IS PRESENT, BUT BELOW THE LISTED DETECTION LIMIT
B = COMPOUND ALSO FOUND IN BLANK

002292

VOA QUANTITATION REPORT

SAMPLE ID.	SCK WW01		
FILENAME	.4U02060V01	INST	4000
CLIENT	KOPPERS	ANALYST	JCL
DATE INJECTED	03/04/86 17:22:00	VERIFIED BY	JCL
CALIB STD DATE	03-03-86	CORR. FACTOR	100.00

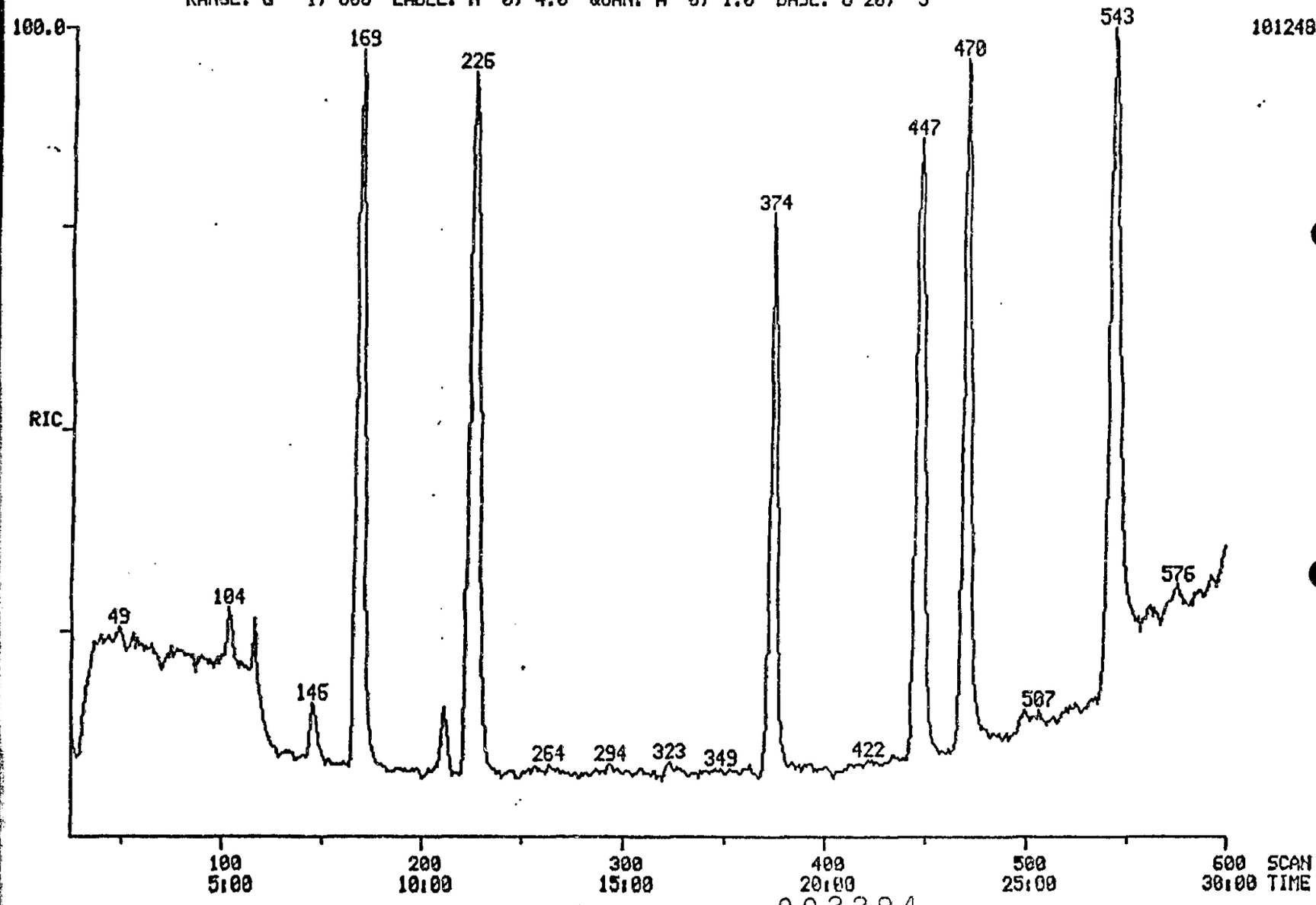
SCAN#		VOA COMPOUNDS	M/E	AMOUNT	RRT	AREA
169	CI01	BROMOCHLOROMETHANE ** IS1 **	128	5000 UG/L	1.000	37565
374	CI10	1,4-DIFLUOROBENZENE ** IS2 **	114	5000 UG/L	1.000	138638
470	CI20	D5-CHLOROBENZENE ** IS3 **	117	5000 UG/L	1.000	130589
225	CS15	D4-1,2-DICHLOROETHANE	65	79 %	1.331	69227
447	CS05	D8-TOLUENE	98	98 %	0.951	133672
543	CS10	P-BROMOFLUOROBENZENE	95	90 %	1.155	97105
104	C030	METHYLENE CHLORIDE	84	287 UG/L	0.615	4782
451	C230	TOLUENE	92	126 UG/L	0.960	2620

002293

RIC
03/04/86 17:22:00
SAMPLE: SCK WW01
RANGE: G 1, 600 LABEL: N 0, 4.0 QUAN: A 0, 1.0 BASE: U 20, 3

DATA: 4U02050V01 #1
CALI: 4C030486 #3

SCANS 25 TO 600



002294

ORGANICS ANALYSIS DATA SHEET

BASE/NEUTRALS

Laboratory Name: Spectrix

Sample Number: SCK-NW01-01

Lab Sample ID No.: 86-02-060-01

Sample Matrix: Water

Data Release Authorized By: RAJ

Date Sample Received: 2/27/86

Concentration: Low

Units: ug/L

Date Extracted: 2/28/86

Conc/Dil Factor: 1.0

Date Analyzed: 3/11/86

Compounds Detected: 10

NPDES #	CAS #	COMPOUND	RESULT
41B	62-75-9	N-Nitrosodimethylamine	10U
11B	111-44-4	Bis (2-Chloroethyl) Ether	10U
21B	541-73-1	1,3-Dichlorobenzene	10U
22B	106-46-7	1,4-Dichlorobenzene	10U
20B	95-50-1	1,2-Dichlorobenzene	10U
12B	39638-32-9	Bis (2-Chloroisopropyl) Ether	10U
42B	621-64-7	N-Nitrosodipropylamine	10U
36B	67-72-1	Hexachloroethane	10U
40B	98-95-3	Nitrobenzene	10U
38B	78-59-1	Isophorone	10U
10B	111-91-1	Bis (2-Chloroethoxy) Methane	10U
48B	120-82-1	1,2,4-Trichlorobenzene	10U
39B	91-20-3	Naphthalene	400
34B	87-68-3	Hexachlorobutadiene	10U
35B	77-47-4	Hexachlorocyclopentadiene	10U
16B	91-58-7	2-Chloronaphthalene	10U
25B	131-11-3	Dimethyl Phthalate	10U
2B	208-96-8	Acenaphthylene	10
1B	83-32-9	Acenaphthene	170
27B	121-14-2	2,4-Dinitrotoluene	10U
28B	606-20-2	2,6-Dinitrotoluene	10U
24B	84-66-2	Diethyl Phthalate	10U
17B	7005-72-3	4-Chlorophenyl Phenyl Ether	10U
32B	86-73-7	Fluorene	140
43B	86-30-6	N-Nitrosodiphenylamine	10U
14B	101-55-3	4-Bromophenyl Phenyl Ether	10U
33B	118-74-1	Hexachlorobenzene	10U
44B	85-01-8	Phenanthrene	260
3B	120-12-7	Anthracene	21
26B	84-74-2	Di-N-Butyl Phthalate	10U
31B	206-44-0	Fluoranthene	24
4B	92-87-5	Benzidine	100U
45B	129-00-0	Pyrene	27

002295

Sample # SK-WW01-01

ORGANICS ANALYSES DATA SHEET - BASE/NEUTRALS CONTINUED

NPDES #	CAS #	COMPOUND	RESULT
15B	85-68-7	Butyl Benzyl Phthalate	10U
23B	91-94-1	3,3-Dichlorobenzidine	20U
5B	56-55-3	Benzo (a) Anthracene	4J
13B	117-81-7	Bis (2-Ethylhexyl) Phthalate	10U
18B	218-01-9	Chrysene	3J
29B	117-84-0	Di-N-Octyl Phthalate	10U
7B	205-99-2	Benzo (b) Fluoranthene	10U
9B	207-08-9	Benzo (k) Fluoranthene	10U
6B	50-32-8	Benzo (a) Pyrene	10U
37B	193-39-5	Indeno (1,2,3-cd) Pyrene	10U
19B	53-70-3	Dibenzo (ah) Anthracene	10U
8B	191-24-2	Benzo (ghi) Perylene	10U
30B	122-66-7	1,2-Diphenyl Hydrazine	10U

U = Undetected at the listed detection limit
J = Compound is present, but below the listed detection limit
B = Compound also found in blank

002296

ORGANICS ANALYSIS DATA SHEET

ACIDS

Laboratory Name: Spectrix

Lab Sample ID No.: 86-02060-01

Data Release Authorized By: RAJ

Concentration: Low

Date Extracted: 2/28/86

Date Analyzed: 3/11/86

Sample Number: SLL-VW01-01

Sample Matrix: Water

Date Sample Received: 2/27

Units: ug/L

Conc/Dil Factor: 1.0

Compounds Detected: 1

NPDES #	CAS #	COMPOUND	RESULT
10A	108-95-2	Phenol	10U
1A	95-57-8	2-Chlorophenol	10U
6A	88-75-5	2-Nitrophenol	20U
3A	105-67-9	2,4-Dimethyphenol	17
2A	120-83-2	2,4-Dichlorophenol	10U
8A	59-50-7	p-Chloro-m-cresol	10U
11A	88-06-2	2,4,6-Trichlorophenol	10U
5A	51-28-5	2,4-Dinitrophenol	50U
7A	100-02-7	4-Nitrophenol	50U
4A	534-52-1	4,6-Dinitro-2-Methylphenol	50U
9A	87-86-5	Pentachlorophenol	50U

U = Undetected at the listed detection limit
J = Compound is present, but below the listed detection limit
B = Compound also found in blank

ORGANICS ANALYSIS DATA SHEET

PESTICIDE/PCB'S.

Laboratory Name: Spectrix

Sample Number: SCK-WW01-01

Lab Sample ID No.: 86020601

Sample Matrix: Water

Data Release Authorized By: RAJ

Date Sample Received: 2/27/86

Concentration: Low

Units: ug/L

Date Extracted: 2/28/86

Conc/Dil Factor: 1.0

Date Analyzed: 3/11/86

CAS #	COMPOUND	RESULT
309-00-2	Aldrin	10U
319-84-6	a-BHC	10U
319-85-7	b-BHC	10U
58-89-9	g-BHC	10U
319-86-8	d-BHC	10U
57-74-9	Chlordane	100U
72-54-8	4,4-DDE	20U
50-29-3	4,4-DDT	20U
60-57-1	Dieldrin	10U
959-98-8	Endosulfan I	20U
33212-65-9	Endosulfan II	20U
1031-07-8	Endosulfan Sulfate	20U
72-20-8	Endrin	20U
7421-93-4	Endrin Aldehyde	20U
76-44-8	Heptachlor	10U
1024-57-3	Heptachlor Epoxide	10U
8001-35-2	Toxaphene	200U
12674-11-2	PCB 1016	100U
11104-28-2	PCB 1221	200U
11141-16-5	PCB 1232	100U
53469-21-9	PCB 1242	100U
12672-29-6	PCB 1248	200U
11097-69-1	PCB 1254	200U
11096-82-5	PCB 1260	200U
72-54-8	4,4-DDD	20U

002298

ORGANICS ANALYSIS DATA SHEET

DIOXIN SCREEN

Laboratory Name: Spectrix

Sample Number: SCK-WW01-01

Lab Sample ID NO.: 8-02060-01

Sample Matrix: Water

Data Release Authorized By: [signature]

Date Sample Received: 2/27/86

Concentration: Low

Units: ug/L

Date Extracted: 2/28/86

Cond/Dil Factor: 1.0

Date Analyzed: 3/11/86

CAS #	COMPOUND	RESULT
1746-01-6	2,3,7,8-Tetrachloro dibenzo-p-dioxin (TCDD)	10U

U = Undetected at the listed detection limit

002299

SPECTR[illegible] DC # ----14

SEMIVOLATILE WATER REPORT

AMPLE ID. SCK-WW01-01

ILENAME 5U02060C01

LIENT KOPPERS

ATE INJECTED 03/11/86 17:43:00

ALIB STD DATE 3/7/86

INST ID. 5100

ANALYST RAJ

VERIFIED BY Raj

CORR. FACTOR 1.00

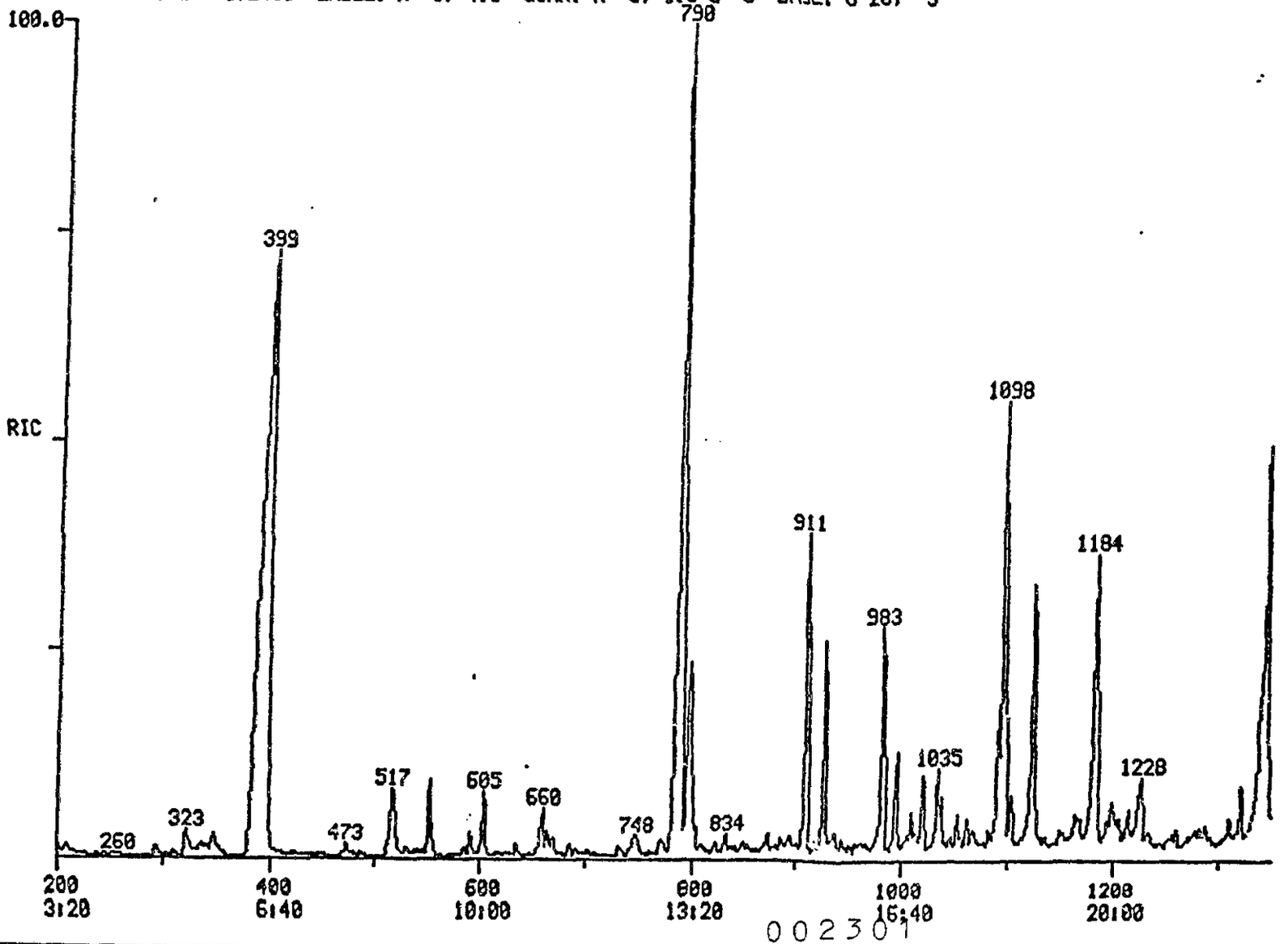
CAN#		SEMIVOLATILE COMPOUNDS	M/E	AMOUNT	RRT	AREA
553	CI30	1,4-DICHLOROBENZEND-D4 ** IS1 **	152	40 UG/L	1.000	12975
785	CI40	NAPHTHALENE-D8 ** IS2 **	136	40 UG/L	1.000	50348
091	CI50	ACENAPHTHENE-D10 ** IS3 **	164	40 UG/L	1.000	24973
341	CI60	PHENANTHRENE-D10 ** IS4 **	188	40 UG/L	1.000	41962
796	CI70	CHRYSENE-D12 ** IS5 **	240	40 UG/L	1.000	17725
022	CI75	PERYLENE-D12 ** IS6 **	264	40 UG/L	1.000	8614
323	CS50	2-FLUOROPHENOL ** SU1 **	112	163 %	0.584	22384
517	CS45	PHENOL-D5 ** SU2 **	99	96 %	0.935	34692
228	CS55	2,4,6-TRIBROMOPHENOL ** SU5 **	330	93 %	1.126	10817
660	CS20	NITROBENZENE-D5 ** SU3 **	82	71 %	0.841	17238
983	CS25	2-FLUUOROBIPHENYL ** SU4 **	172	77 %	0.901	75772
626	CS30	TERPHENYL-D14 ** SU6 **	244	109 %	0.905	19312
748	C425	2,4-DIMETHYLPHENOL	122	17 UG/L	0.953	5134
790	C450	NAPHTHALENE	128	403 UG/L	1.006	561319
063	C540	ACENAPHTHYLENE	152	10 UG/L	0.974	11758
098	C550	ACENAPHTHENE	153	173 UG/L	1.006	155713
.184	C590	FLUORENE	166	142 UG/L	1.085	117723
.347	C640	PHENANTHRENE	178	257 UG/L	1.004	284032
.352	C645	ANTHRACENE	178	21 UG/L	1.008	20924
.548	C653	FLUORANTHENE	202	24 UG/L	1.154	27102
.584	C715	PYRENE	202	27 UG/L	0.882	17605
.793	C730	BENZO(A)ANTHRACENE	228	4 UG/L	0.998	1562
.800	C740	CHRYSENE	228	3 UG/L	1.002	1264

RIC
03/11/86 17:43:00
SAMPLE: SCK-WW01-01
CONDS.: ----
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 5U02060C01 #1
CALI: 5U02060C01 #3

SCANS 200 TO 1350

SPECTRIX DC # ----14



330132.

002301

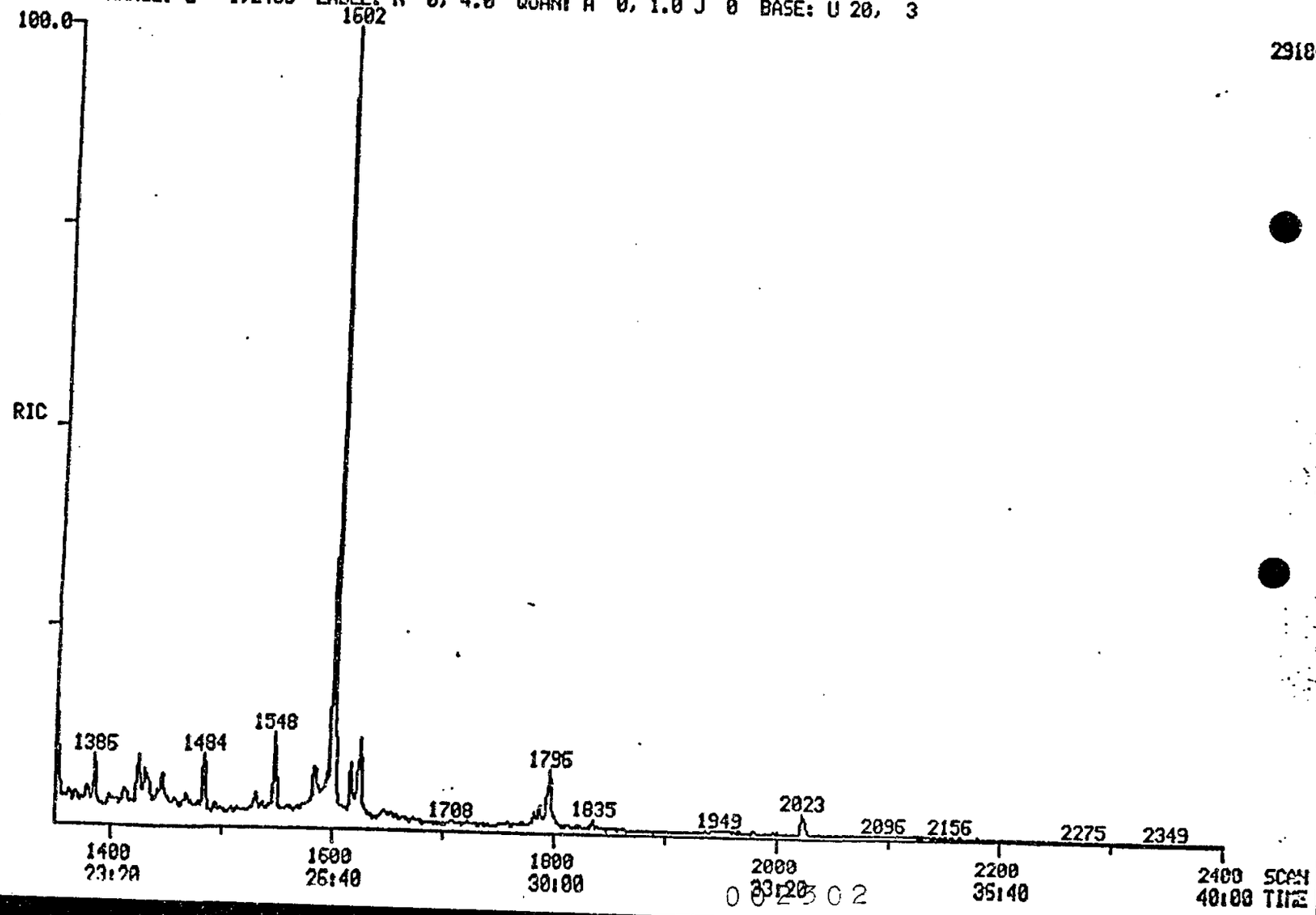
RIC
03/11/86 17:43:00
SAMPLE: SCK-WW01-01
CONDS.: ——
RANGE: G 1,2400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 5U02060C01 #1
CALI: 5U02060C01 #3

SCANS 1350 TO 2400

SPECTRIX DC # ——14

INST ID: 5100



291840.

0 0 2 3 0 2

002302

ceived: 02/27/86

Results By Test

SAMPLE Sample Id	Test: ACRD ug/l	Test: ACRYL ug/l	Test: AG ug/l	Test: AS ug/l	Test: B ug/l
01 SCK-WW01-01	ND <30	ND <10	<10	<10	145

SAMPLE Sample Id	Test: BA ug/l	Test: BE ug/l	Test: CD ug/l	Test: CN ug/l	Test: CR ug/l
01 SCK-WW01-01	27	<2	<5	<3	29

SAMPLE Sample Id	Test: CU ug/l	Test: HG ug/l	Test: MN ug/l	Test: NI ug/l	Test: OG SU mg/l
01 SCK-WW01-01	<7	<0.12	<3	<28	<1

SAMPLE Sample Id	Test: PB ug/l	Test: PH pH units	Test: S mg/l	Test: SB ug/l	Test: SE ug/l
01 SCK-WW01-01	10	8.00	<0.1	<10	<5

SAMPLE Sample Id	Test: TL ug/l	Test: ZN ug/l
01 SCK-WW01-01	<10	27

002303