McBride-Ratcliff
and Associates, Inc

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

April 10, 1986
MRA Project No. 85-317

Mr. Dick Martin
Texas Water Commission
Industrial Solid Waste
P.O. Box 13087
Capitol Station
Austin, Texas 78711

Dear Mr. Martin:

As a followup to our telephone conversation on March 26, 1986, we were submitting analytical data from samples of two waste materials for classification and assignment of Texas waste identification numbers.

McBride-Ratcliff and Associates is currently conducting a RI/FS at the South Cavalcade CERCLA site located in Houston, Texas. As I discussed, we are required by the Region VI EPA to contain all excess soil samples, drilling fluids, and decontamination wash waters that are generated as a result of our site investigation activities. These waste materials are temporarily stored onsite (no RCRA permit required). The wastes generated primarily consist of: (1) bulk solid wastes (soils, drilling muds, disposeable items); and (2) aqueous wastes (decontamination water, groundwater). We are planning to periodically dispose these materials offsite.

A sample of the wastewater (SCK-WW01-01) was obtained on February 27, 1986 and analyzed fc complete EPA priority pollutants, oil and grease, pH, sulfide, boron, manganese, and barium. Results of the wastewater analysis are shown on the attached Spectrix report dated March 13, 1986.

002347

1012245

032

A composite soil sample of the drilling mud and cuttings (SCK-WS01-01) was obtained on March 11, 1986 and analyzed for EPA priority pollutant metals, TOC, percent solids, cyanide, EPA pesticides/PCB, phenols, pH, TOX, specific gravity, flashpoint, and sulfide. Results of the soil analysis are shown on the attached Spectrix report dated March 14, 1986.

Please call if you need any additional information. We appreciate your assistance.

Sincerely,

McBRIDE-RATCLIFF AND ASSOCIATES, INC.

William R. Tobin

William R. Tobin, P.E.
Project Manger

WRT:kc
Attachments - 2
Copy: Joe Brown - TWC

002348

Page 1 SPECTRIX CORP. REPORT Work Order # 86-02-060
Received: 02/27/86 03/13/86 1..59:42

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 # 1251

PREPARED BY Spectrix Corporation
3911 Fondren
Suite 100
Houston, Texas 77063-5821
ATTEN Sample Control
PHONE (713) 780-0050

CERTIFIED BY

CONTACT PERSON

Please call the above number if you have any questions.
NOTE: ALL SAMPLES WILL BE RETAINED FOR 30 DAYS AND THEN DISCARDED. IF YOU WISH YOUR SAMPLES RETURNED TO YOUR FACILITY CALL SAMPLE CONTROL AT THE ABOVE NUMBER.

SAMPLE IDENTIFICATION

01 DCK-WW01-01

MAR 17

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

002349

ORGANICS ANALYSIS DATA SHEET

VOLATILES

Laboratory Name: Spectrix

Sample Number: SCK WW01

Lab Sample ID No.: 860206001

Sample Matrix: Water

Data Release Authorized By: TTO

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	BROMODICHLOROMETHANE	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

5/21/85 (VOAOAD)

002350

VOA QUANTITATION REPORT

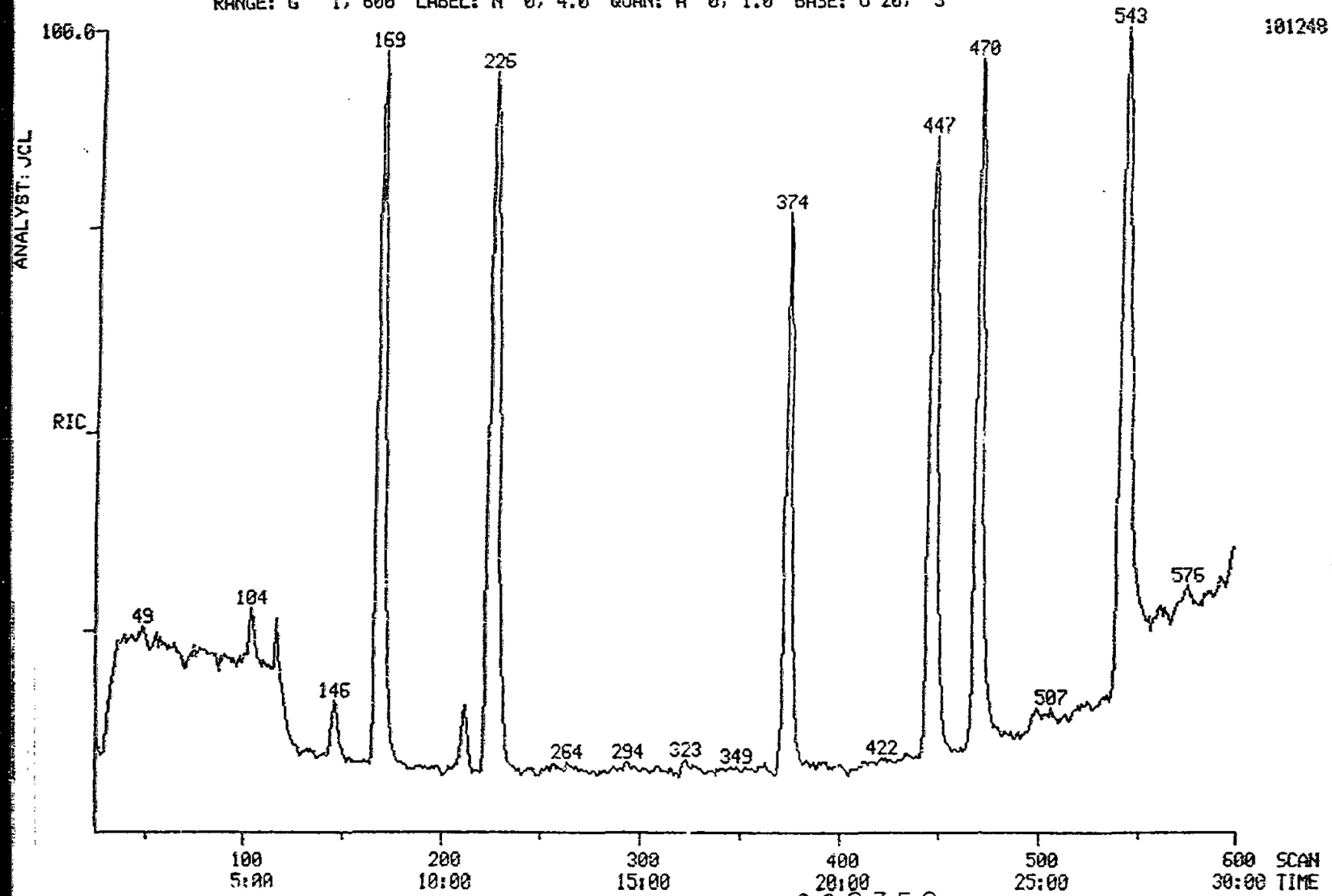
SAMPLE ID.	SCK WW01		
FILENAME	4U02060V01	INST	4000
CLIENT	KOPPERS	ANALYST	JCL
DATE INJECTED	03/04/86 17:22:00	VERIFIED BY	JCL
CALIB STD DATE	03-03-86	CORR. FACTOR	100.00

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

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: 4U02060V01 #1
CALI: 4C030486 #3

SCANS 25 TO 600



ORGANICS ANALYSIS DATA SHEET

BASE/NEUTRALS

Laboratory Name: Spectrix

Sample Number: SCK-NW01-0

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

Cond/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
46B	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

002353

Sample # SCR-WW01-C

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) Fluorathene	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

002354

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

002355

ORGANICS ANALYSIS DATA SHEET

DIOXIN SCREEN

Laboratory Name: Spectrix

Sample Number: SCK-WSW01-01

Lab Sample ID NO.: 86-02060-01

Sample Matrix: Water

Data Release Authorized By: RCJ

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

002356

ORGANICS ANALYSIS DATA SHEET

ACIDS

Laboratory Name: Spectrix

Sample Number: SCL-NW01-

Lab Sample ID No.: 86-02060-01

Sample Matrix: Water

Data Release Authorized By: RAJ

Date Sample Received: 2/2

Concentration: Low

Units: ug/L

Date Extracted: 2/28/86

Conc/Dil Factor: 1.0

Date Analyzed: 3/11/86

Compounds Detected: 1

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

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

002357

SPEC[illegible]X DC # ----14

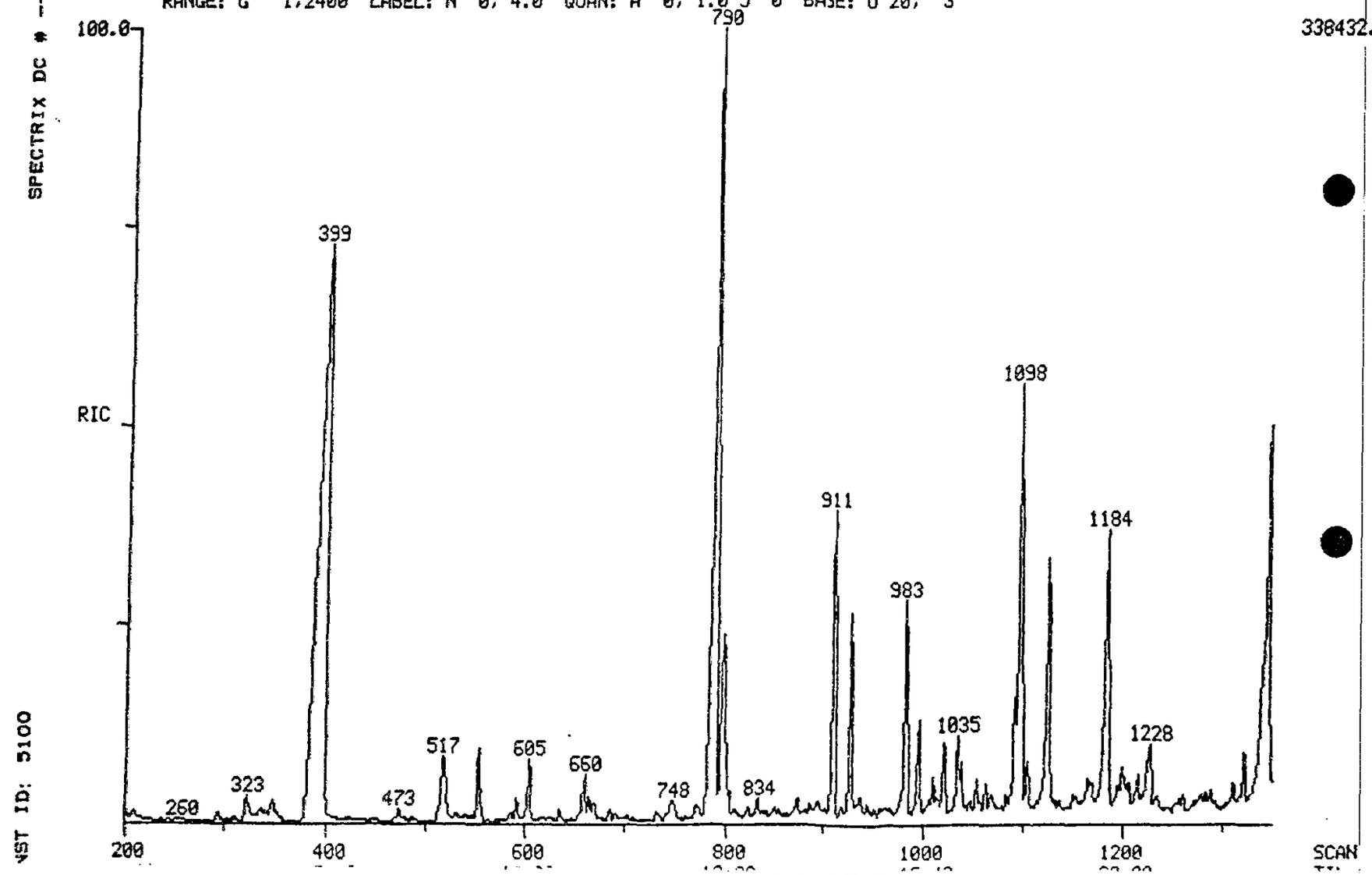
SEMIVOLATILE WATER REPORT

SAMPLE ID.	SCK-WW01-01		
FILENAME	5U02060C01	INST ID.	5100
CLIENT	KOPPERS	ANALYST	RAJ
DATE INJECTED	03/11/86 17:43:00	VERIFIED BY	RAJ
CALIB STD DATE	3/7/86	CORR. FACTOR	1.00

SCAN#		SEMIVOLATILE COMPOUNDS	M/E	AMOUNT	RRT	AREA
553	CI30	1,4-DICHLOROBENZEND-D4 ** IS1 **	152	40 UG/L	1.000	1297
785	CI40	NAPHTHALENE-D8 ** IS2 **	136	40 UG/L	1.000	5034
1091	CI50	ACENAPHTHENE-D10 ** IS3 **	164	40 UG/L	1.000	2497
1341	CI60	PHENANTHRENE-D10 ** IS4 **	188	40 UG/L	1.000	4196
1796	CI70	CHRYSENE-D12 ** IS5 **	240	40 UG/L	1.000	1772
2022	CI75	PERYLENE-D12 ** IS6 **	264	40 UG/L	1.000	861
323	CS50	2-FLUOROPHENOL ** SU1 **	112	163 %	0.584	2238
517	CS45	PHENOL-D5 ** SU2 **	99	96 %	0.935	3469
1228	CS55	2,4,6-TRIBROMOPHENOL ** SU5 **	330	93 %	1.126	1081
660	CS20	NITROBENZENE-D5 ** SU3 **	82	71 %	0.841	1723
983	CS25	2-FLUUOROBIPHENYL ** SU4 **	172	77 %	0.901	7577
1626	CS30	TERPHENYL-D14 ** SU6 **	244	109 %	0.905	1931
748	C425	2,4-DIMETHYLPHENOL	122	17 UG/L	0.953	513
0	C450	NAPHTHALENE	128	403 UG/L	1.006	56131
1063	C540	ACENAPHTHYLENE	152	10 UG/L	0.974	1175
1098	C550	ACENAPHTHENE	153	173 UG/L	1.006	15571
1184	C590	FLUORENE	166	142 UG/L	1.085	11772
1347	C640	PHENANTHRENE	178	257 UG/L	1.004	28403
1352	C645	ANTHRACENE	178	21 UG/L	1.008	2092
1548	C655	FLUORANTHENE	202	24 UG/L	1.154	2710
1584	C715	PYRENE	202	27 UG/L	0.882	1760
1793	C730	BENZO(A)ANTHRACENE	228	4 UG/L	0.998	156
1800	C740	CHRYSENE	228	3 UG/L	1.002	126

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 SCANS 200 TO 1350
CALI: 5U02060C01 #3

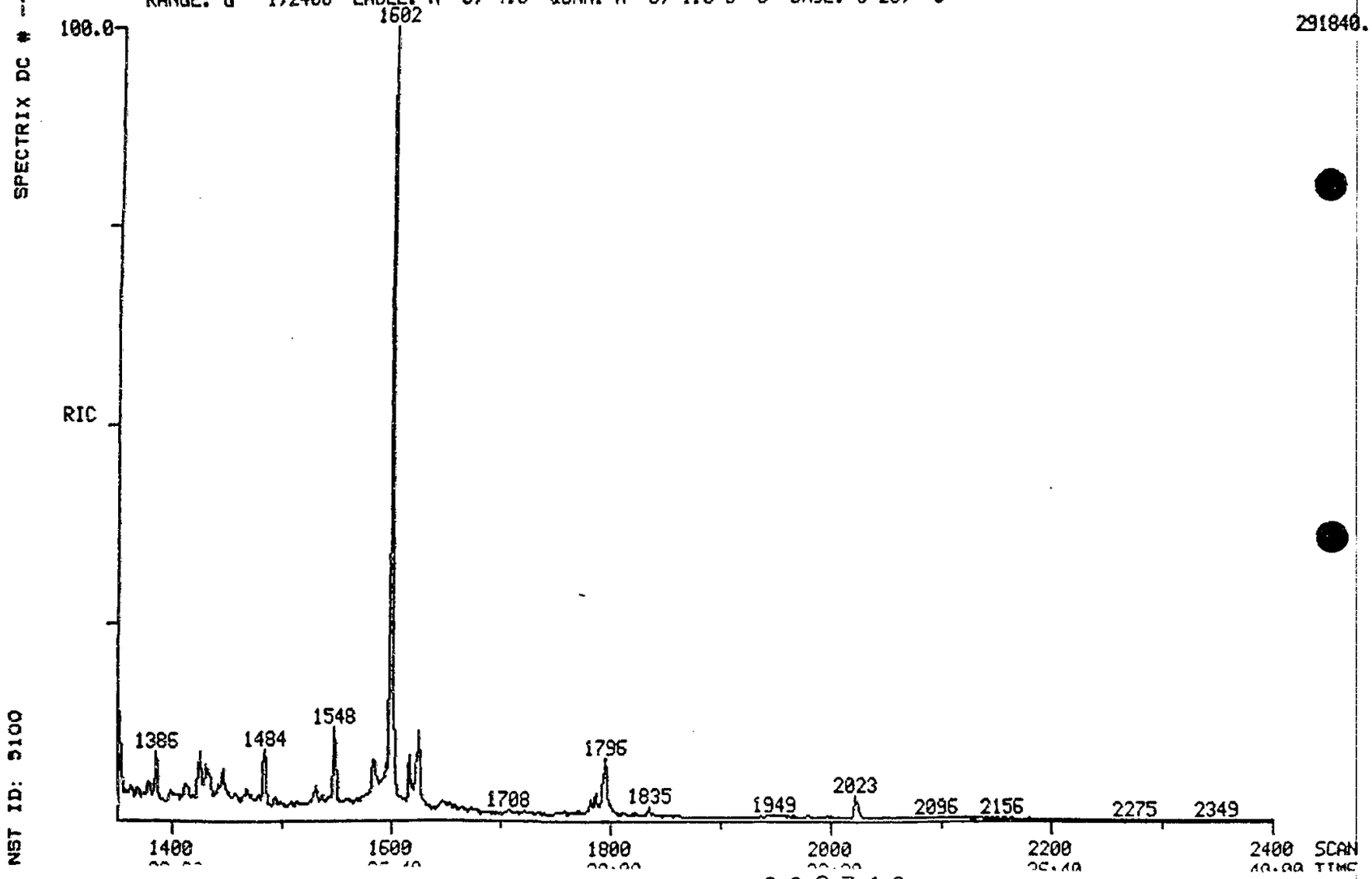


002359

002359

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 SCANS 1350 TO 2400
CALI: 5U02060C01 #3



002360

002360

SPECTRIX CORP. REPORT

Work Order # 86-02-060

Received: 2/27/86

Results by Test

SAMPLE Sample Id	Test: ACRO 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	24

SAMPLE Sample Id	Test: CU ug/l	Test: HG ug/l	Test: MN ug/l	Test: NI ug/l	Test: UG SU ug/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

002361

Page 1 SPECTRIX CORP. REPORT Work Order # 60-[illegible]
Received: 03/11/86 03/14/86 6:52:07

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

ATTN Shannon Craig

CLIENT KOPPERS SAMPLES 1
COMPANY Koppers Company, Inc.
FACILITY

WORK ID Soil
TAKEN Client
TRANS Client
TYPE Soil
P.O. # 14-5-50106
INVOICE under separate cover

PREPARED BY Spectrix Corporation
Will Gordon
Suite 100
Houston, Texas 770[illegible]
ATTN Sample Control
PHONE (713) 365-[illegible]

Ken U. [illegible]
CERTIFIED BY

CONTACT CRUZ

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 [illegible]-WS-01-01

TEST CODES and NAMES used on this report

PSOLID Percent Solids
TOC Total Organic Carbon

002362

Received: 0. 11/86 03/21/86 08. .:46

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

ATTEN: Shannon Craig

CLIENT: KOPPERS SAMPLES: 1
COMPANY: Koppers Company, Inc.
FACILITY:

WORK ID: Soil
TAKEN: Client
TRANS: Client
TYPE: Soil
P.O. #: 14-5-50106
INVOICE: under separate cover

PREPARED BY: Spectrix Corporation
3911 Fondren
Suite 100
Houston, Texas 77063-5821

ATTEN: Sample Control
PHONE: (713) 266-6800

CERTIFIED BY

CONTACT: CRUZ

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-WS-01-01

TEST CODES and NAMES used on this report

AG S	Silver - Soil
AS S	Arsenic - Soil
BE S	Berylium - Soil
CD S	Cadmium - Soil
CN S	Cyanide in Soil
CR S	Chromium (Soil)
CU S	Copper - Soil
HG S	Mercury - Soil
NI S	Nickel - Soil
PB S	Lead - Soil
PEST S	EPA Pesticides/PCB's-Soils
PHENLS	Total Phenols in Soil
PH SU	pH
PSOLID	Percent Solid
SB S	Antimony - Soil
SE S	Selenium - Soil
SU	Special work - SU
S S	Sulfide - Soil
TL S	Thallium - Soil
TOX	Total Organic Halogen
ZN S	Zinc - Soil

002363

Received: ('11/86

Results By Test

SAMPLE Sample Id	Test: AG S mg/kg dry wt.	Test: AS S mg/kg dry wt.	Test: BE S mg/kg dry wt.	Test: CD S mg/kg dry wt.	Test: CN S ug/kg dry wt.
01 SCK-WS-01-01	<5.8	11.3	<1.2	5.85	<2 mg/kg

SAMPLE Sample Id	Test: CR S mg/kg dry wt.	Test: CU S mg/kg dry wt.	Test: HG S mg/kg dry wt.	Test: NI S mg/kg dry wt.	Test: PB S mg/kg dry wt.
01 SCK-WS-01-01	21.6	<4.1	0.668	26.3	9.64

SAMPLE Sample Id	Test: PHENLS mg/kg	Test: PH SU pH units	Test: PSOLID %	Test: SB S mg/kg dry wt.	Test: SE S mg/kg dry wt.
01 SCK-WS-01-01	4.0 ug/g	9.4	85.50	<35	<15

SAMPLE Sample Id	Test: SU date complete	Test: S S mg/kg dry wt.	Test: TL S mg/kg dry wt.	Test: TOX ug/l	Test: ZN S mg/kg dry wt.
01 SCK-WS-01-01	2.2 sp. grav. units	<1.0 ug/g	<5.8	ND <0.01 mg/l	36.2

002364

ORGANICS ANALYSIS DATA SHEET

PESTICIDE/PCB'S

Laboratory Name: Spectrix

Sample Number: SCK-WS-01-

Lab Sample ID No.: 86-03-026-01B

Sample Matrix: ~~Water~~ Soil

Data Release Authorized By: [illegible]

Date Sample Received: 3-11-86

Concentration: Low

Units: ug/kg

Date Extracted: 3-14-86

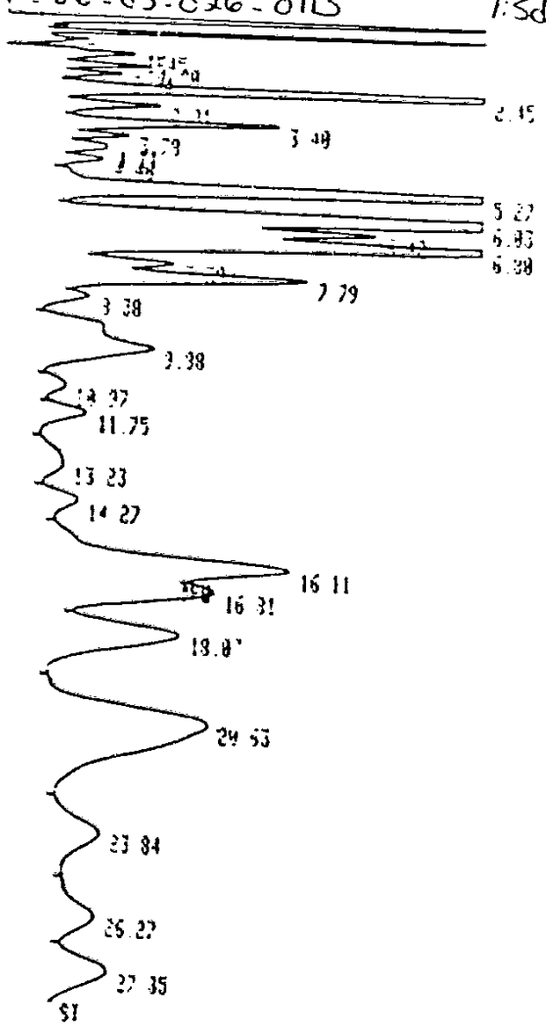
Conc/Dil Factor: 5

Date Analyzed: 3-17-86

CAS #	COMPOUND	RESULT
309-00-2	Aldrin	5 U
319-84-6	a-BHC	5 U
319-85-7	b-BHC	10 U
58-89-9	g-BHC	5 U
319-86-8	d-BHC	10 U
57-74-9	Chlordane	10 U
72-54-8	4,4-DDE	10 U
50-29-3	4,4-DDT	39 U
60-57-1	Dieldrin	10 U
959-98-8	Endosulfan I	10 U
33212-65-9	Endosulfan II	19 U
1031-07-8	Endosulfan Sulfate	19 U
72-20-8	Endrin	19 U
7421-93-4	Endrin Aldehyde	19 U
76-44-8	Heptachlor	5 U
1024-57-3	Heptachlor Epoxide	10 U
8001-35-2	Toxaphene	450 U
12674-11-2	PCB 1016	350 U
11104-28-2	PCB 1221	350 U
11141-16-5	PCB 1232	350 U
53469-21-9	PCB 1242	350 U
12672-29-6	PCB 1248	350 U
11097-69-1	PCB 1254	350 U
11096-82-5	PCB 1260	350 U
72-54-8	4,4-DDD	10 U

002365

86-03-026-013 1:5d.1 NA.



CC # _____ - _____

SPECTRIX CORPORATION

CASE NO. Kopper

SAMPLE NO. SCK-WS-01-01

PESTICIDE FRACTION

1st Column - 1A

1.8m X 4mm ID X 6mm OD

1.5% SP 2250

1.95% SP2401

100/120 Supelcoport

Column Temp. 205°C

Volume Inj. 1.0ul

Instrument ID VARIAN 6CC

002366

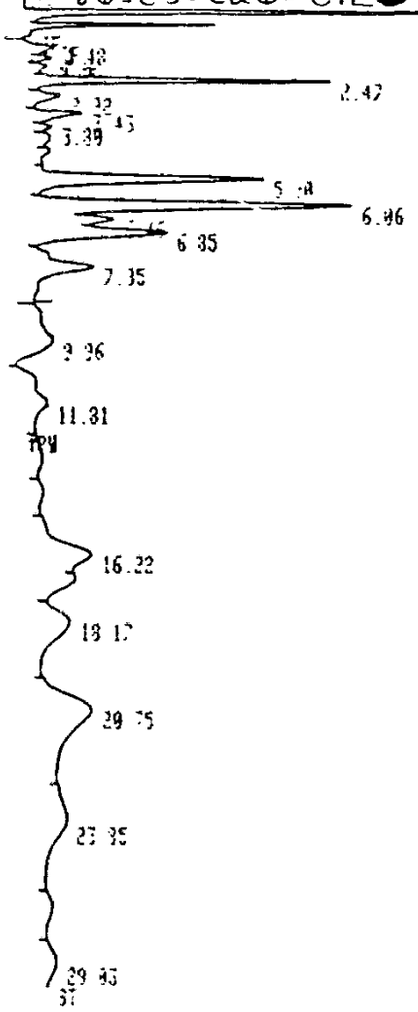
RUN # 384
WORKFILE ID: C
WORKFILE NAME:

MAR/13/86 15:32:25

HEIGHT%

RT	HEIGHT	TYPE	AR/HT	HEIGH
1.45	13644	PV	0.255	1.3
1.80	15337	VV	0.177	1.476
2.04	11971	D VV	0.184	1.152
2.45	193018	VV	0.131	18.576
2.91	17029	VV	0.268	1.639
3.40	32247	VV	0.243	3.104
3.78	13022	VV	0.203	1.253
4.11	10248	VV	0.338	0.986
4.46	9765	VV	0.271	0.940
5.27	140502	VV	0.246	13.522
6.03	209005	VV	0.243	20.115
6.42	45035	VV	0.263	4.334
6.80	87005	VV	0.310	8.374
7.79	19029	VV	0.301	1.831
3.38	36183	VV	0.379	3.482
3.88	8249	VV	0.401	0.794
10.97	16504	VV	1.011	1.588
11.75	5542	VV	0.615	0.533
13.23	8127	VV	0.607	0.782
14.27	5312	VV	1.103	0.511
16.11	7148	VV	0.745	0.688
16.31	34354	VV	0.827	3.306
18.07	24757	D VV	0.655	2.383
20.63	29306	VV	0.978	1.954
[illegible]	24138	VV	1.767	2.323
[illegible]	10321	VV	1.569	0.993
[illegible]	9823	VV	1.596	0.945
[illegible]	11430	I VH	1.306	1.100

86-03-026-01L 1:30 NA
dil.



OC # _____ - _____

SPECTRIX CORPORATION

CASE NO. Kopper

SAMPLE NO. SCK-WS-01-6

PESTICIDE FRACTION

1st Column - IA

1.8m X 4mm ID X 6mm OD

1.5% SP 2250

1.95% SP2401

100/120 Supelcoport

Column Temp. 205°C

Volume Inj. 1.0µl

Instrument ID VARIAN 6CX

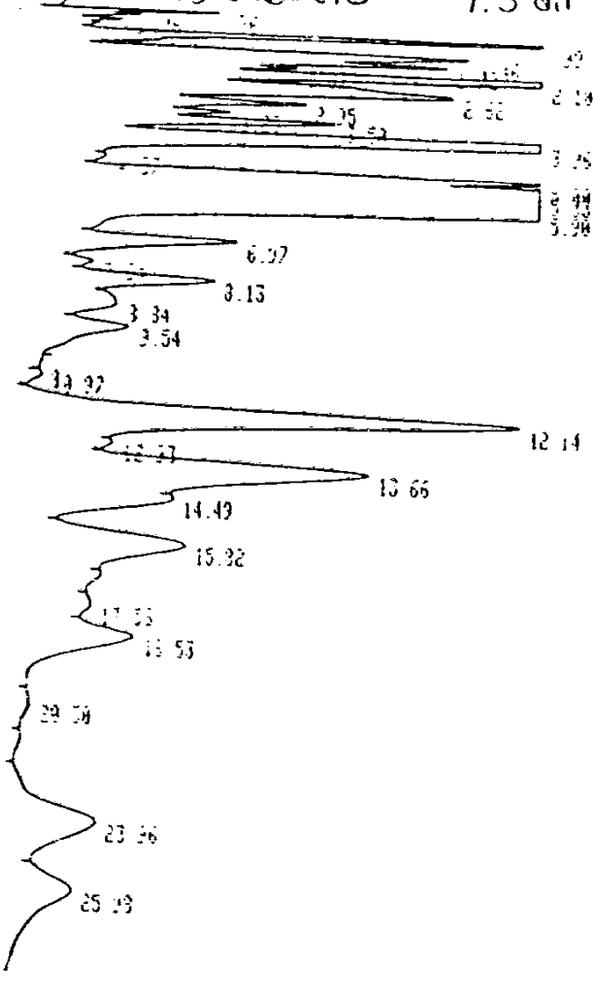
002367

ANA # 376 MAR/13/86 11:18:14
WORKFILE ID: C
WORKFILE NAME

HEIGHT%

RT	HEIGHT	TYPE	AR/HT	HEIGHT%
1.48	4442	BV	0.267	2.093
1.81	4006	VV	0.170	1.888
2.05	3312	VV	0.225	1.560
2.47	39356	VV	0.145	18.824
2.92	4804	VV	0.293	2.263
3.43	7469	VV	0.251	3.519
3.80	3438	VV	0.293	1.640
5.30	30452	VV	0.273	14.346
5.06	41873	VV	0.252	19.727
5.45	10835	VV	0.279	5.105
5.85	17627	VV	0.308	8.304
7.85	7899	VB	0.475	3.721
9.96	4020	BP	0.953	1.894
11.81	3960	PV	1.142	1.866
15.22	8766	VV	1.044	4.130
18.17	5572	VV	1.258	2.625
19.75	7833	VV	1.694	3.690
23.85	4083	VV	2.003	1.924
29.83	1873	I VH	1.048	0.882

86-03-026-01B 1.5 dil NA



DC # _____ - _____

SPECTRIX CORPORATION

CASE NO. Kopper

SAMPLE NO. SCK-WS-01-C

PESTICIDE FRACTION

2nd Column Confirmation

2nd Column _____

1.8m X 4mm ID X 6mm OD

3% SP-2100

100/120 Supelcoport

Column Temp. 195°C

Volumn Inj. 1.0ul

Instrument ID Varian 3400

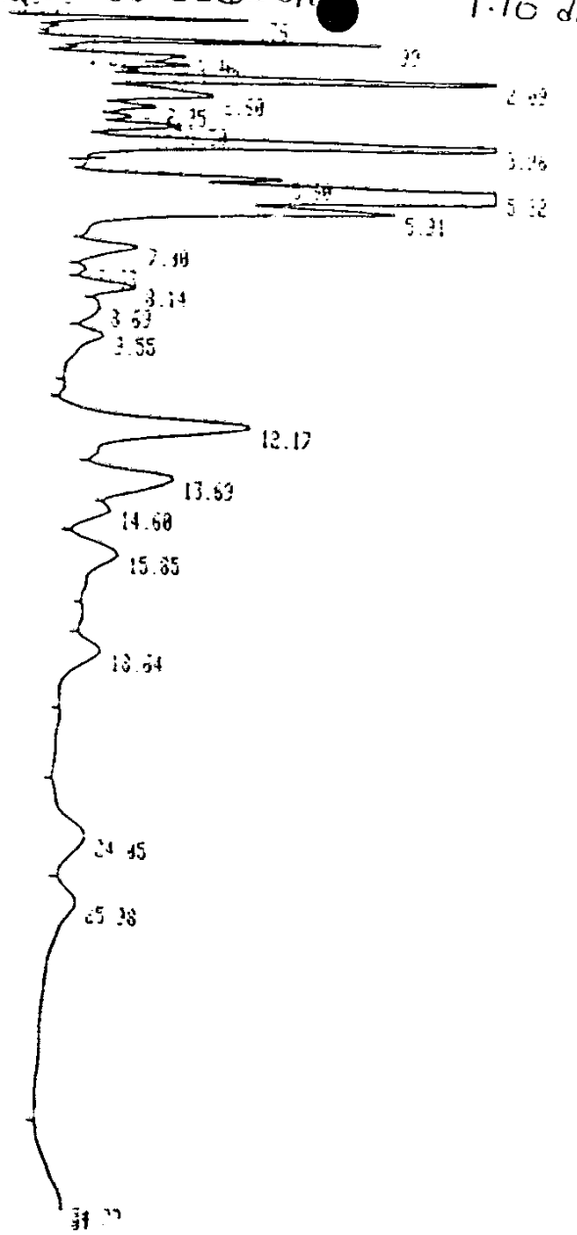
002368

RUN # 724 MAR/18/86 22:30:15
WORKFILE ID: C
WORKFILE NAME:

HEIGHT%

RT	HEIGHT	TYPE	AR/HT	HEIGHT%
0.36	82213	D PV	0.024	1.046
0.46	41867	D VV	0.096	0.533
0.61	32302	D VV	0.101	0.411
0.72	20914	D VV	0.142	0.266
0.99	485017	D VV	0.107	6.169
1.46	212744	VV	0.239	2.706
1.72	201730	D VV	0.132	2.566
1.87	122945	D VH	0.125	1.564
2.10	1331061	SHH	0.191	16.931
2.62	129782	TBP	0.284	1.651
2.95	67209	TPV	0.158	0.855
3.25	36349	TVV	0.139	0.462
3.50	99064	TVB	0.136	1.260
3.96	1239761	SHH	0.231	15.769
4.57	3069	DTBP	0.167	0.039
5.00	132844	TPB	0.110	1.690
5.33	2171515	SHB	0.406	27.621
5.90	327634	TBB	0.225	4.167
6.97	78936	TBP	0.300	1.004
7.64	11319	TPV	0.226	0.144
8.13	76490	TVV	0.360	0.973
8.84	30105	TVV	0.609	0.383
9.54	39404	TVB	0.529	0.501
10.97	3779	BP	0.279	0.048
12.14	256625	PV	0.586	3.264
12.93	46042	VV	0.332	0.586
13.66	180293	VV	0.773	2.293
14.49	78722	VV	0.545	1.001
15.82	86758	VV	0.949	1.104
17.58	40656	VV	0.765	0.517
18.53	62902	VV	1.012	0.800
20.50	12244	VV	1.259	0.156
23.96	50524	VV	1.470	0.643
25.09	40698	VB	2.218	0.518
28.37	28374	I BH	1.265	0.361

86-03-0226-01 1:10 dil 1A



DC # _____ - _____

SPECTRIX CORPORATION

CASE NO. Kopper

SAMPLE NO. SCK-WS-01-01

PESTICIDE FRACTION

2nd Column Confirmation

2nd Column _____

1.8m X 4mm ID X 6mm OD

3% SP-2100

100/120 Supelcoport

Column Temp. 195°C

Volumn Inj. 1.0ul

Instrument ID Varian 3400

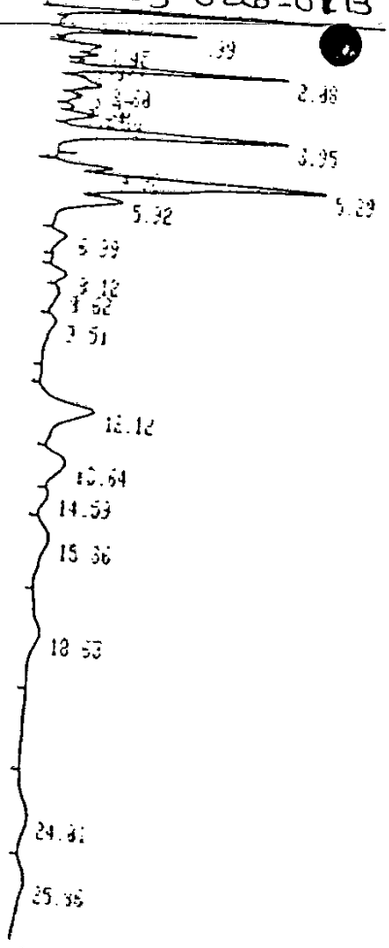
002369

RUN # 721 MAR/13/86 20 37 29
WORKFILE ID: C
WORKFILE NAME:

HEIGHT%

RT	HEIGHT	TYPE	AR/HT	HEIGHT%
0.36	115215	D PV	0.098	3.371
0.61	14882	D VV	0.141	0.435
0.99	180411	D VV	0.094	5.279
1.21	19807	D VV	0.115	0.580
1.46	74191	VV	0.243	2.171
1.72	74295	D VV	0.133	2.174
1.87	46409	D VV	0.125	1.358
2.09	557636	D VV	0.117	16.316
2.60	79964	VV	0.362	2.340
2.95	47086	VV	0.255	1.378
3.24	31871	VV	0.181	0.933
3.50	54056	VV	0.233	1.582
3.96	518537	VB	0.178	15.172
5.00	104530	PV	0.177	3.059
5.32	937880	VV	0.279	27.439
5.91	165662	VV	0.327	4.847
7.00	32369	VV	0.356	0.947
7.63	7154	VV	0.276	0.209
8.14	33222	VV	0.374	0.972
8.69	16291	VV	0.655	0.477
9.55	19790	VV	0.618	0.579
12.17	99830	PV	0.693	2.921
13.69	60301	VV	0.808	1.764
14.60	28398	VV	0.591	0.831
15.85	33090	VV	1.253	0.968
18.64	25966	VV	1.059	0.760
24.85	21330	VV	1.505	0.624
25.98	17643	VB	1.849	0.516

86-03-0260-01B 1.30 NA. dil.



RUN # 703
WORKFILE ID: C
WORKFILE NAME:

MAR/17/86 02 23:03

HEIGHT:

RT	HEIGHT	TYPE	AR/HT	HEIGHT%
0.36	183228	D BV	0.083	19.063
0.99	77791	D VV	0.099	8.094
1.45	25621	VV	0.250	2.666
1.71	23205	D VV	0.133	2.414
1.87	16213	D VV	0.130	1.687
2.08	124933	VV	0.127	12.998
2.60	24279	VV	0.351	2.526
2.93	13680	VV	0.262	1.423
3.24	9776	VV	0.187	1.017
3.49	18323	VV	0.233	1.906
3.95	122111	VB	0.193	12.705
4.98	28065	PV	0.183	2.920
5.29	143335	VV	0.316	14.913
5.92	35086	VV	0.342	3.650
6.99	8305	VV	0.373	0.864
8.12	10000	VV	0.371	1.040
8.62	6767	VV	0.578	0.704
9.51	6246	VV	0.617	0.650
12.12	28158	PV	0.748	2.930
13.64	15734	VV	0.837	1.637
14.59	8000	VV	0.624	0.832
15.86	9679	VV	1.271	1.007
18.63	8113	VV	1.488	0.844
24.01	7119	VV	1.600	0.741
25.86	7388	VP	2.008	0.769

DC # _____ - _____

SPECTRIX CORPORATION

CASE NO. Koppers

SAMPLE NO. SCK-WS-01-01

PESTICIDE FRACTION

2nd Column Confirmation

2nd Column _____

1.8m X 4mm ID X 6mm OD

2% SP-2100

100/120 Supelcoport

Column Temp. 195°C

Volumn Inj. 1.0ul

Instrument ID Varian 3400

002370

Received: 03/11/88

Results by Test

SAMPLE Sample Id	Test: PSOLID %	Test: TOC (mg/l)
01 SCR-WS-01-01	72.65	50.0 mg/g

002371

SPECTRIX CORPORATION

NARRATIVE - INORGANIC ANALYSES

CLIENT: Koppers
LAB NO: 86-03-026

I. RECEIPT

A. DATE: 3-11-86
B. NO. OF SAMPLES: 1
C. SAMPLE TYPE: Soil
D. ANALYSIS REQUESTED: Priority Pollutant metals, CN - etc

II. PREPARATION

A. REFERENCE METHOD: EPA - CLP Protocol

B. ANALYTICAL LEVELS: Low Level

C. DIGESTION PROBLEMS: None

III. ANALYSIS

A. REFERENCE METHOD: EPA - CLP Protocol

B. ANALYSIS PROBLEMS: Attempt ~~Ato~~ was made to determine flashpoint of sample unsuccessfully. No data for flashpoint.

C. SPIKE RECOVERIES: N/A

IV. OTHER PROBLEMS None

Ken U- [illegible]
Department Supervisor

002372