WORK REQUEST

APPLIED SCIEN' SECTION
RESEARCH AND DEVELOPMENT LABORATORIES
ORGANIC CHEMICALS DIVISION

WORK REQUESTED

GC/mass identification of PCBs, et al in
hexane extracts.

REASON/COMMENTS

Absolute confirmation of PCBs, et al
present in extracts.

DSW 152560

SAMPLE IDENTIFICATION

1. HCl comp. # 228, 229, & 234
2. HCl # 230
3. Fumaric acid comp 232, & 231
4. Stack comp 223, 224, 225, 226, & 227
5. Wet Stack comp 208 & 209

Tucker
REQUESTER

PRODUCT Orlon - Barrier

BUSINESS GROUP

DATE SUBMITTED 5/20-70

☐ 1700 SO. 2ND ST.
BLDG. _____ LAB./OFFICE _____

DATE NEEDED BY

☐ RESEARCH CENTER
BLDG. _____ LAB./OFFICE _____

JOB NUMBER 13480 96

☐

R-108 REV. 2-68

(SUBMIT WHITE, YELLOW AND GREEN COPIES)

STLCOPCB4039908

REPORT SHEET

DSW 152561

SIGNATURE

DATE

HCl comp. #228,229,234 WBK

After reducing the sample volume to 1/20th of the original by evaporating the hexane solvent, 5 micro liters of this hexane soln. was injected into the GC/Mass; and the following identification of GC peaks was made.(refer to enclosed GC trace)

Peak #	
1	Heptane
2,3,4,5	aliphatic hydrocarbons but not identified
6	Ethylbenzene
7	background
8	not identified
9	background
10	not identified
11	trichlorophenol
12and13	tetra chloro ethylbenzene
14	dibromo-monochlorotoluene and monochlorobiphenyl
15	dibromo-monochlorotoluene
16and17	not identified
18	dichlorobiphenyl
19	monobromobiphenyl and dichlorobiphenyl
20	not identified
21	trichlorobiphenyl and a small amount of monochloro-monobromobiphenyl
22	trichlorobiphenyl
23	trichlorobiphenyl and a small amount of dichloro-monobromobiphenyl
24	tetra chlorobiphenyl
25	Tetrachlorobiphenyl and monobromo-dichloro biphenyl in about equal amounts.

HCl #232 Carbon Dummy

This sample contained heptane and a very small,marginally identifiable peak which may be chlorobenzene. Sample was reducedin volume to 1/20th

Fumaric comp. 230, 231

GC/Mass of this sample showed no identifiable peaks. Sample was reduced in volume to 1/20th.

Saccharin comp. 223,224,225,226,227

This sample was reduced in volume to 1/20th and was analyzed by GC/Mass. It was found to contain heptane, other aliphatic hydrocarbons, and some alkyl substituted benzenes such as xylene. No evidence of biphenyls or chlorinated biphenyls was found.

DSW 152562

STLCOPCB4039910

Wisconsin Steel comp. 202, 203

The GC/Mass of this sample(reduced in volume 1/20th) gave the following identification of GC peaks. (refer to enclosed GC trace)

A.	pentane
B.	hexane
C.	methylcyclopentane
D.	Benzene
4.	Probably tetra chloro benzene
5.	not identified
6and7.	dinitrochlorobenzene
8,	not identified
9.	dichloro biphenyl
10. t	trichlorobiphenyl
11.	trichlorobiphenyl
12.	" " " "
13.	tetrachlorobiphenyl
14.	" " " "
15.	" " " "
16,	" " " "
17.	tetraand penta chlorobiphenyl

S. W. Mappe
6-4-70

DSW 152563

STLCOPCB4039911

Wisconsin Steel Sample "E.S.T."

B

Hexane

Methylcyclopentane

A

Benzene

Toluene

Ethylbenzene

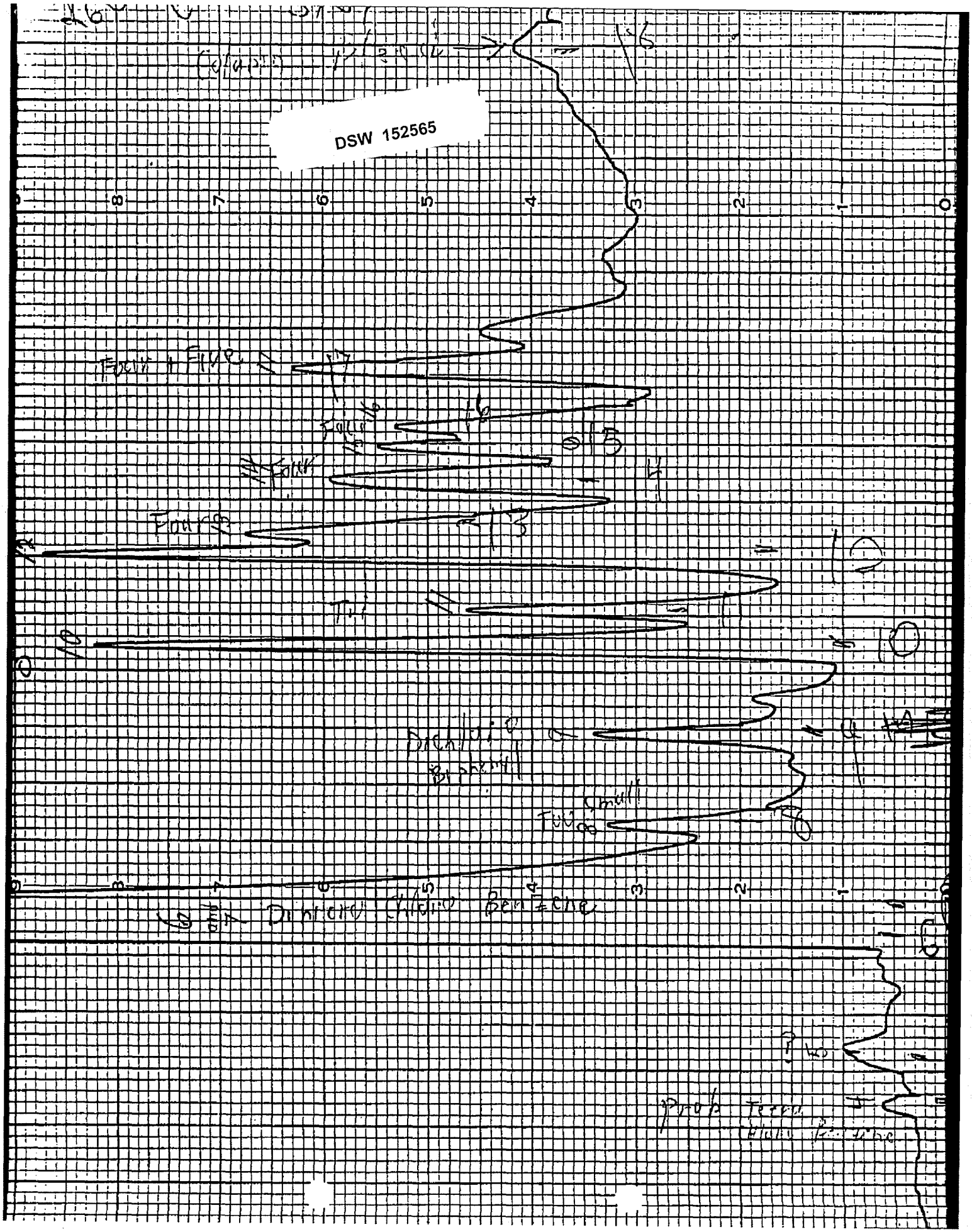
Xylenes

Styrene

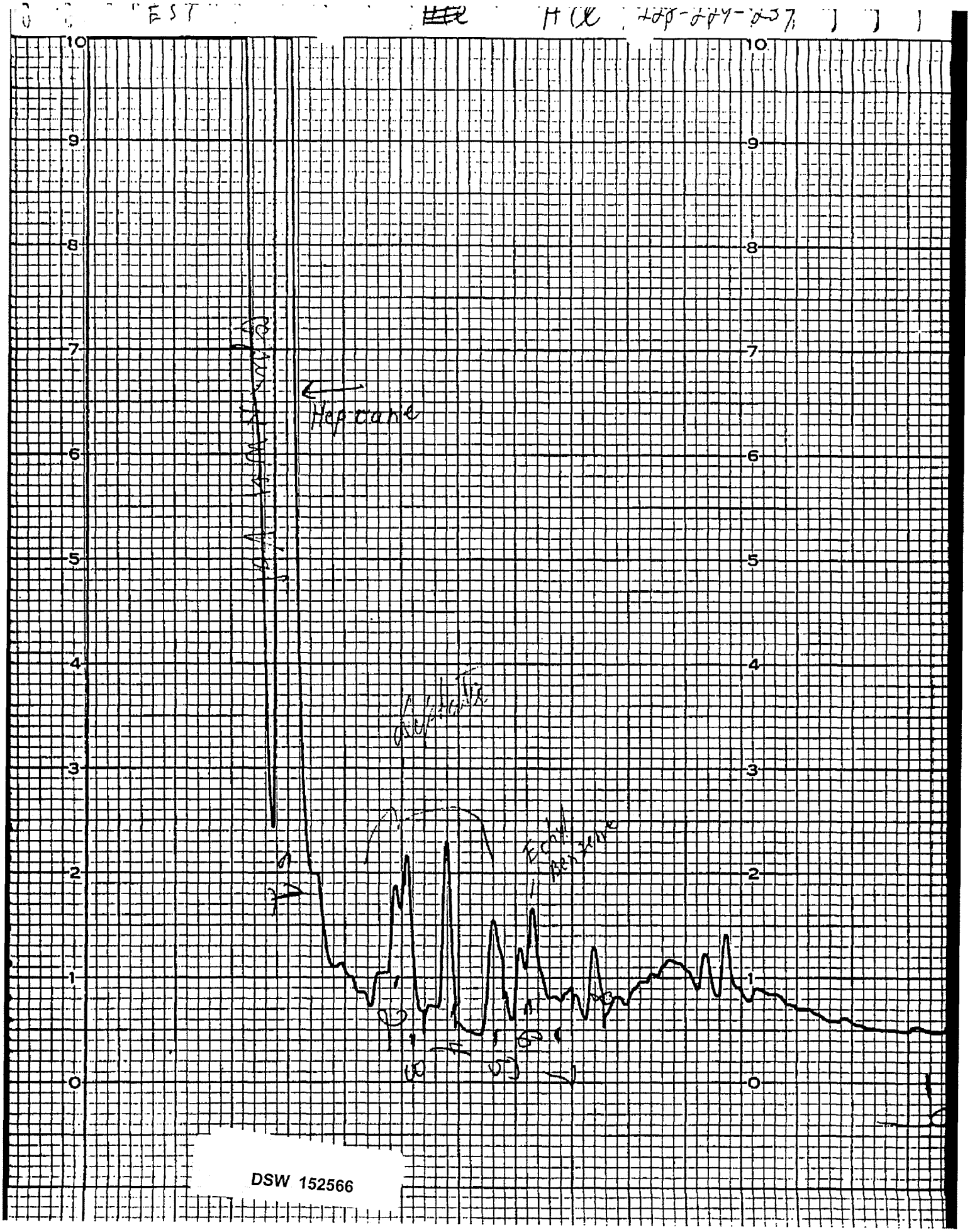
Benzene

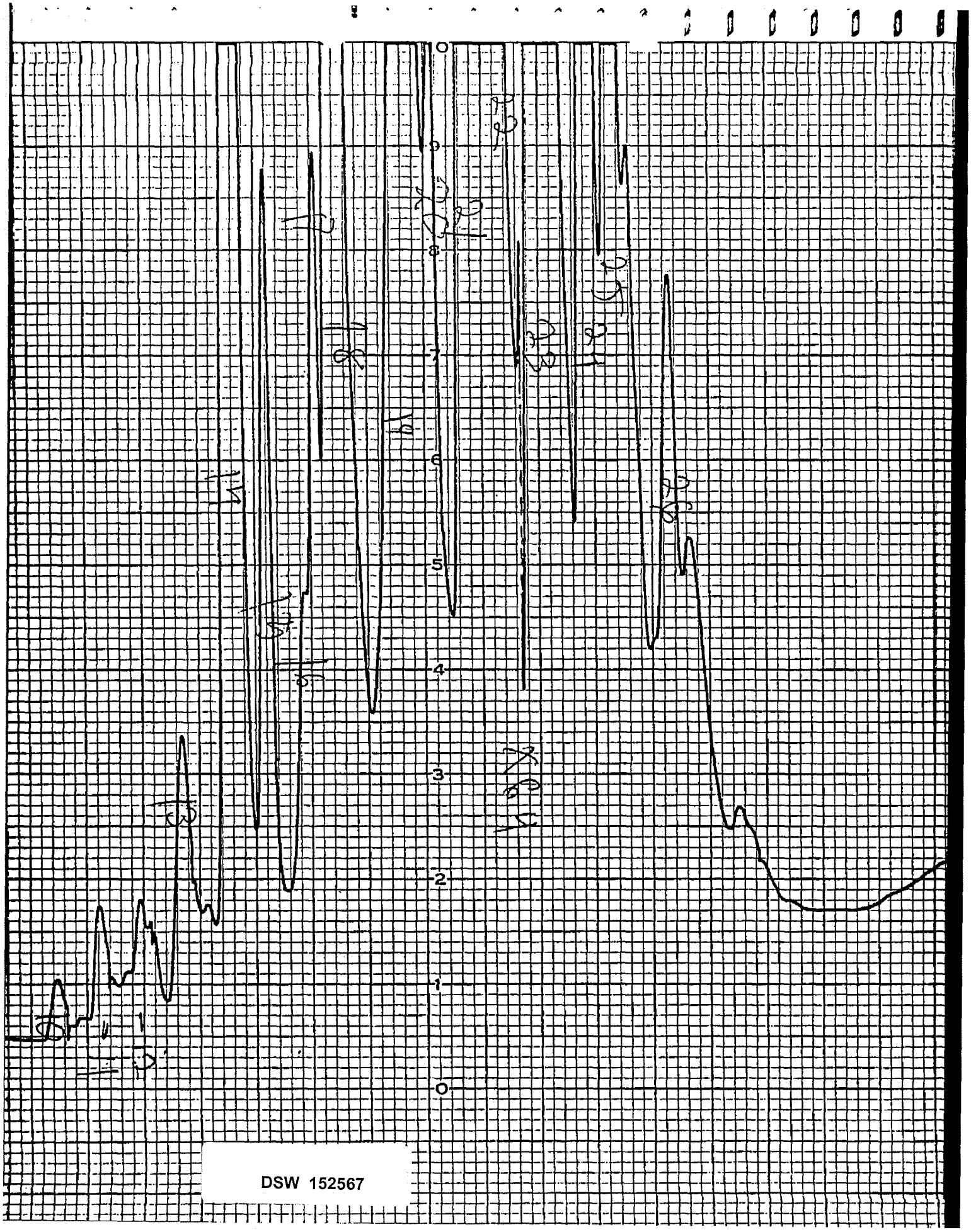
DSW 152564

STLCOPCB4039912



STLCOPCB4039913


DSW 152566


DSW 152567