

Wash

Plat/Plat

Totaling spec stream

(Range)

146-11

15-1200000000

147-49-52

31-8500000000

148-53-55

50-1000000000

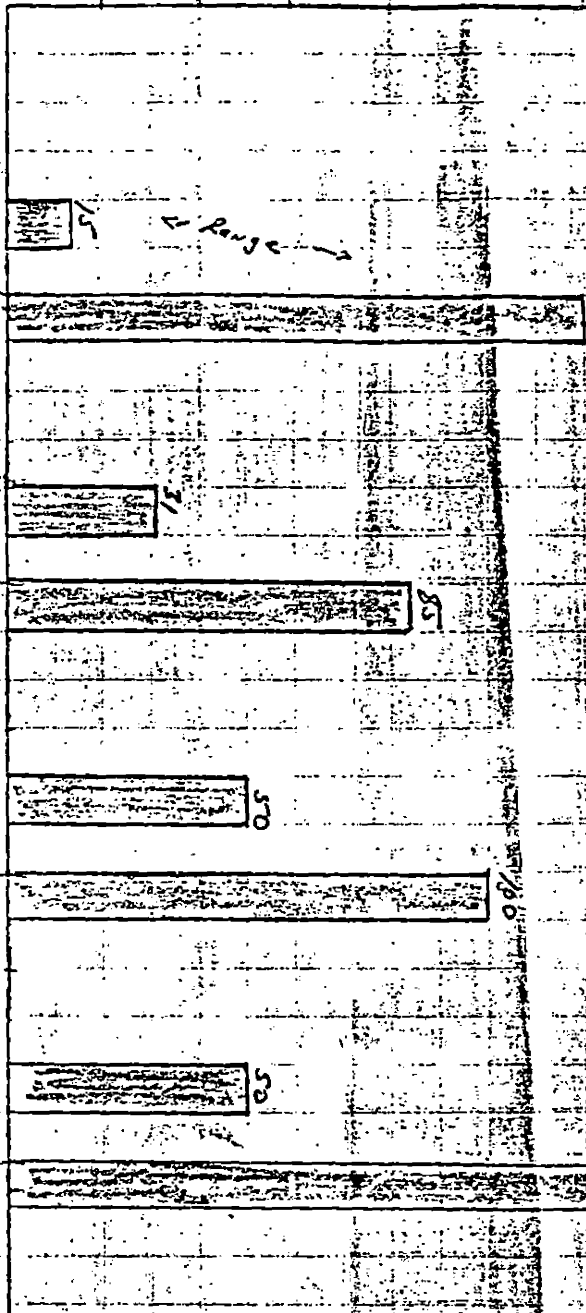
149-56-62

50-1450000000

150-63-69

50-1450000000

140
130
120
110
100
90
80
70
60
50
40
30
20
10



Plat 12

Plat 2A

Plat 2B

Plat 3

10/48-12/52

11/53-1/55

1/56-3/63

8/63-8/69

Ref: Godt, Weber
memo 8/3/83

SECRET TO PROTECTIVE ORDER.

004403

1953 1-5
1956 5-10

<u>1953 IHS Survey</u>	Sample Vol. Ft ³ air	2,4,5-T mg/m ³	TCDD ppm
Rotex and drum filling	75.0	1.38	$2.93 \times 10^{-6} - 1.47 \times 10^{-5}$
weighing drums	40.7	0.93	$1.07 \times 10^{-6} - 5.36 \times 10^{-6}$
Conveyor end of drier (open)	82.5	0.48	$1.12 \times 10^{-6} - 5.61 \times 10^{-6}$
Top of hopper, feeding drier	75.0	2.0	$4.25 \times 10^{-6} - 2.13 \times 10^{-5}$
Rotary drier feed conveyor to hopper	113.0	0.71	$2.27 \times 10^{-6} - 1.14 \times 10^{-5}$

<u>1956 IHS Survey</u>			
In dryer room, 5 ft from Rotex feeder near scale	1,140	2.57	$4.15 \times 10^{-4} - 8.30 \times 10^{-4}$
Top of dryer of feed hopper	1,140	0.35	$5.65 \times 10^{-5} - 1.13 \times 10^{-4}$
Near stairway to acidifier platform	1,140	0.20	$3.23 \times 10^{-5} - 6.46 \times 10^{-5}$
Unloading #1 centrifuge	1,605	0.76	$1.73 \times 10^{-7} - 3.46 \times 10^{-7}$
On plant premises, 100 ft down wind of B-34	6,840	0.07	$6.78 \times 10^{-5} - 1.36 \times 10^{-4}$

G04471

SUBJECT

8 WGK-T-A tubes for Chlorophenols (Spill Site Sturgeon, Mo.)

JOB NO.

Log No. 609

PREPARED BY (SIGNATURE)

Ronald McEntee

DATE

1-17-7

Problem: Analyze Air Sample for Chlorophenols taken in & AROUND TANK CAR Spill in Sturgeon, Mo 1-11-79.

Discussion: RAN Sample on VARIAN 3700 in Lab Service (sec III) Used Method 13355.

Standardization - Col A File #6 (236-237)

Component	mg/m ³ Std	mg/m ³ found	Ave. Fact
DOH	1.377	1.376	0.981
OCP	0.982	1.146	1.477
PCP	1.813	1.860	1.388
DCP	1.286	1.497	1.660
TCP	1.157	1.282	2.129

adjusted Ave. Fact. on Components OCP, DCP & TCP

New Ave. Fact

Components

1.266

OCP

1.426

DCP

1.921

TCP

Sample No.	Tube No.	DOH	OCP	PCP	DCP	TCP	Total Org's (mg/m ³)
1	WGK 23-T-A	0.01	0.05	0.02	0.01	—	0.37
2	18	<0.01	0.04	0.01	0.01	—	0.28
3	19	<0.01	0.06	0.02	0.01	—	0.38
5	21	<0.01	0.01	0.01	0.01	—	0.32
6	25	0.05	0.15	0.19	0.05	0.07	0.58
7	11	0.01	0.06	0.02	0.01	0.03	0.17
8	17	0.02	0.16	—	—	TRACE <0.01	0.21
* 9	15	No Organics Present					

* Sample No. 9, tube No. WGK 15-T-A was A Blank tube

CONFIDENTIAL

C13270

SUBJECT TO PROTECTIVE ORDER.

READ AND UNDERSTOOD BY

J. L. Schutzenhofer

DATE

11-8-7

SUBJECT

11 WSK-T-A Tubes for Chlorophenols (Spill Site Sturgeon, Mo)

JOB NO.

King No. 614

PREPARED BY (SIGNATURE)

Remala McRae

DATE

1-17-79

Problem: Analyze Air Samples for Chlorophenols taken in Area.
TANK CAR Spill in Sturgeon, Mo 1-16-79.

Discussion: Run Samples on Varian 3700 in Lab Services (Sec. III)
Used Method 13305.

Standardization: All A. Std #6 (236-237)

Compounds	DOH	DCP	PCP	DCP	TCF	Ave. Fac.
mg/m ³ STD	1.374	1.982	1.813	1.286	1.157	1.344
mg/m ³ found	1.344	1.002	1.809	1.301	1.134	1.344
						1.981
						1.266
						1.388
						1.426
						1.921

Sample No	Tube No.	DOH	DCP	PCP	DCP	TCF	Total Org's (mg/L)
1	WSK-T-A	0.03	0.01	0.17	0.05	0.06	0.48
2	27	<0.01	—	<0.01	0.02	0.01	0.22
3	37	<0.01	0.01	0.03	<0.01	—	0.17
4	34	<0.01	0.02	—	0.02	0.01	0.43
5	26	<0.01	0.03	0.03	<0.01	—	0.19
6	10	0.05	0.46	0.02	<0.01	—	0.59
7	1	<0.01	0.03	0.04	0.01	—	0.53
8	24	0.02	0.11	0.02	<0.01	—	0.19
9	28	0.01	0.01	0.02	<0.01	—	0.20
10	22	0.30	3.71	0.01	0.08	—	4.27
11	11	—	0.03	—	—	—	0.07

* SAMPLE No. 11, Tube No. 006-11-T-A was a BLANK Tube

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013371

READ AND UNDERSTOOD BY

DATE

11-8-79

P. I.

10 January 1984

Here to Ide Orange Information

Carville

Enclosed is a copy of a table which refers to the origin of the data which you are interested. This data shows Monsanto's Herbicide Orange with a 7.62 ppm concentration of TCDD. Note that this value is based solely upon a sample taken by Dow Chemical Co. under USAF Contract No. F41608-73-C-1629 and is reported in Dow Report No. IAS-246, dated 26 December 1972. Unfortunately, the Monsanto Herbicide Orange TCDD distribution was not determined as a part of the AF report which shows Dow, Hercules and Thompson TCDD concentration distributions in over 240 barrels of Herbicide Orange. This was probably due to the fact that the Air Force thought that Dow's value of 7.6 ppm was correct and that there was little need to demonstrate the uniformity of the Monsanto Herbicide Orange since Dow's data indicated that it could not be reformulated due to its "high" TCDD content. The main thrust of the AF report was to determine the TCDD concentration distribution in the "low" TCDD samples and to compare these distributions with a possible, earlier release of the F41608-73-C-1629 data to the AF for its use in brush control.

[illegible]

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C17157

Messrs. Udell and Roark vaguely remember something about sending 2,4,5-T samples to Dow, but could remember no details. Mr. Udell also thought he might have attended a meeting during which Dow offered to analyze 2,4,5-T samples for TCDD. He thought a trip report was written covering the meeting, but no such report has been found.

Mr. Garrett remembers nothing about any 2,4,5-T samples being sent to Dow.

Max Galloway was asked to check with appropriate plant personnel and with the plant Shipping Department for records during 1964-1965 that would identify any 2,4,5-T sample shipments to Dow. His efforts were not successful.

Dr. Kelly thought he remembered a sample of 2,4,5-T being sent to the University of Cincinnati and later to either Mellon Institute or to Dow, but he wasn't positive. He thought that if material was sent, the purpose was for use in rabbit-ear tests.

I still have one additional source to check. Dr. John Stephens, Bill Udell's Research Manager during the period in question, may have some knowledge in this area. However, Dr. Stephens is on vacation and is not scheduled to return until July 6. I will check with him then.

Finally, Owen Dolin, Lab and Industrial Hygiene Superintendent at the Nitro plant, describes the plant's system for assigning lot numbers to finished product as follows: If the lot number reads ND-11-032,

N - stands for manufactured at Nitro

D - stands for the year the material was produced. For this designation, the letters A,B,C,D,E,H,I,K,L, and M are used. "A" equals 1 and "M" equals 10. Thus every ten years the letters are reused. In this case, "D" would stand for either 1964 or 1974. Mr. Dolin states that the Nitro plant adopted this system sometime after 1958. He thinks it probably happened in 1961 or 1962. I have asked him to be more specific on when the present system was installed and to describe the prior one. I expect his answers within the next week or so.

11 - stands for the month of production (November)

032 - stands for the thirty-second batch produced during that month.

C05081

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23. U. S. Rubber Company
Naugatuck, Connecticut

Dr. C. D. McCleary
Other Staff Members

24. Spencer Chemical
Kansas City, Kansas

Dr. T. R. Hopkins and Staff

25. Monsanto Chemical
St. Louis, Missouri

- a. Dr. R. Gordon, Director of Agricultural
Chemical Division
- b. Other Staff Members

26. Geigy Chemical Company
Ardsley, New York

- a. Dr. George Ferguson, Pres. Agric. Chem. Div.
- b. Mr. J. J. Hood, Dir. of Research

27. Penn Salt Chemical Company
Philadelphia, Pennsylvania

Dr. G. McCoy, Res. Manager

28. Hooker Chemical Company
Buffalo, New York

- a. Dr. J. Sconce, Technical Assistant to the
President
- b. Dr. Dale Young, Herbicide Manager

29. Niagara Chemical Company
(Food Machinery Chemical Corporation)

- a. Dr. J. Gates, Director of Research
- b. Dr. K. Dorschner, Herbicide Manager

30. University of Michigan
Ann Arbor, Michigan

Professor A. G. Norman

31. Eli Lilly Co.
Indianapolis, Indiana

Dr. T. P. Carney

32. Union Carbide Chemical Co.
South Charleston, West Virginia

Dr. H. R. Guest, Manager, Agricultural
Chemicals Division

33. Velsicol Corp.

Mr. Joseph Noone

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