

	Initial	Aqueous 1st Extr	Ether 1st Extr	Calc Ether Σ	Aqueous 2nd Extr	Ether 2nd Extr	Calc Ether	% Ether Calc
6.1	0.800	0.720	0.065	0.82785	.690	0.54	.030	4.2
5.1	0.790	0.710	0.071	0.82781	.673	0.071	.040	5.7
4.1	0.780	0.695	0.085	0.82780	.650	0.088	.045	6.5
2.8	0.770	0.680	0.094	0.82774	.635	0.080	.045	6.6
1.8	0.790	0.660	0.135	0.82795	.530	0.175	.130	19.7
1.0	Acidified to 1.8 above to pH=1.0 after ether extr				0.440	0.130	.090	17.0

1 extr 0.82
 2 0.67
 3 0.55
 4 0.45
 5 0.37
 6 0.30

0.4 m/d/dia 0.2 correctd
 pH 7 pH=4 pH=1.0
 1.33 1.23 1.15 1.075

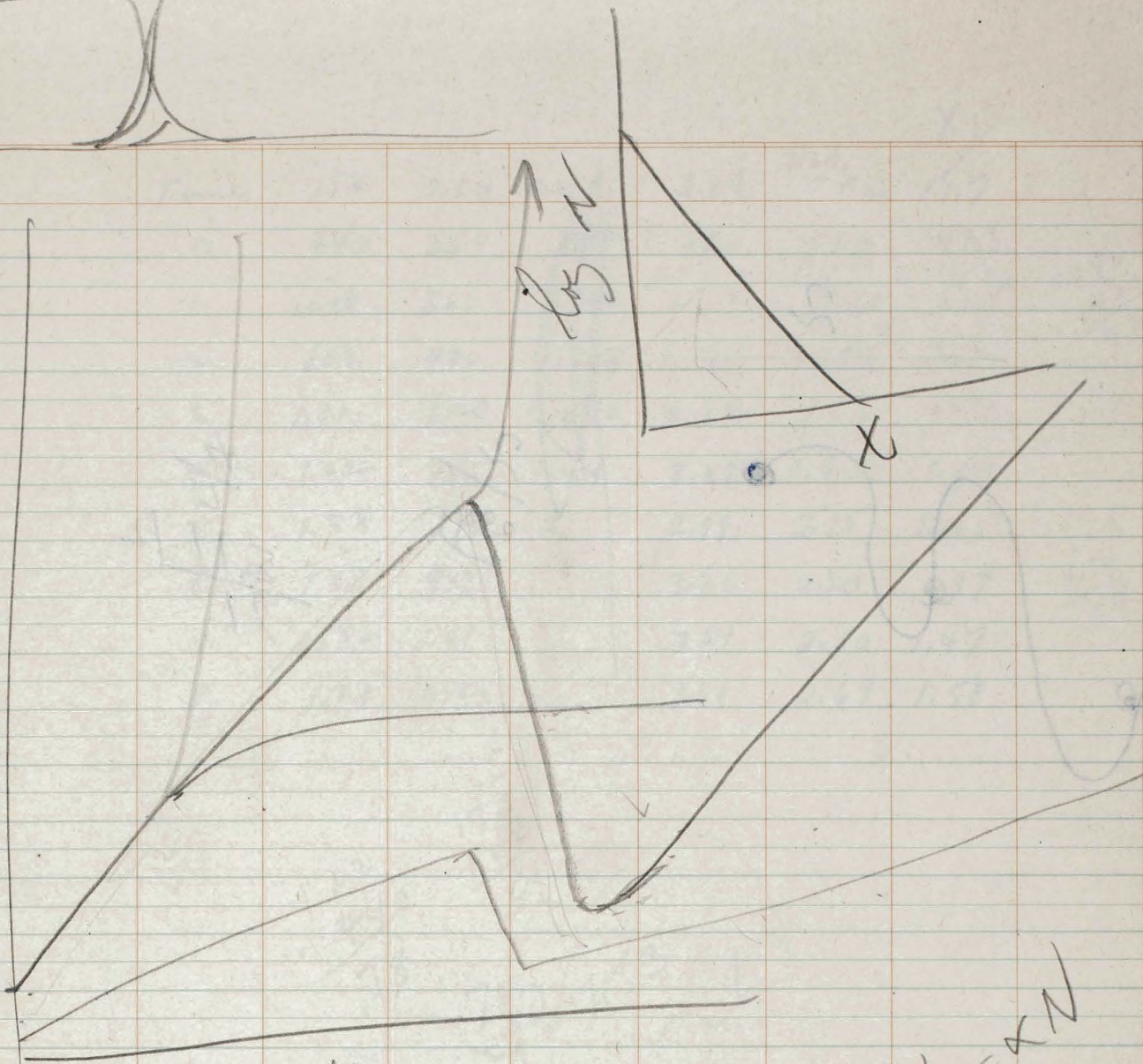
$$\begin{array}{r} 1.220 \\ 0.440 \\ \hline .780 \end{array}$$

$$\begin{array}{r} 1.73 \\ 1.220 \\ \hline .510 \end{array}$$

$$\begin{array}{r} 0.435 \\ 0.785 \end{array} \times \begin{array}{r} 2.63 \\ 145 \end{array}$$

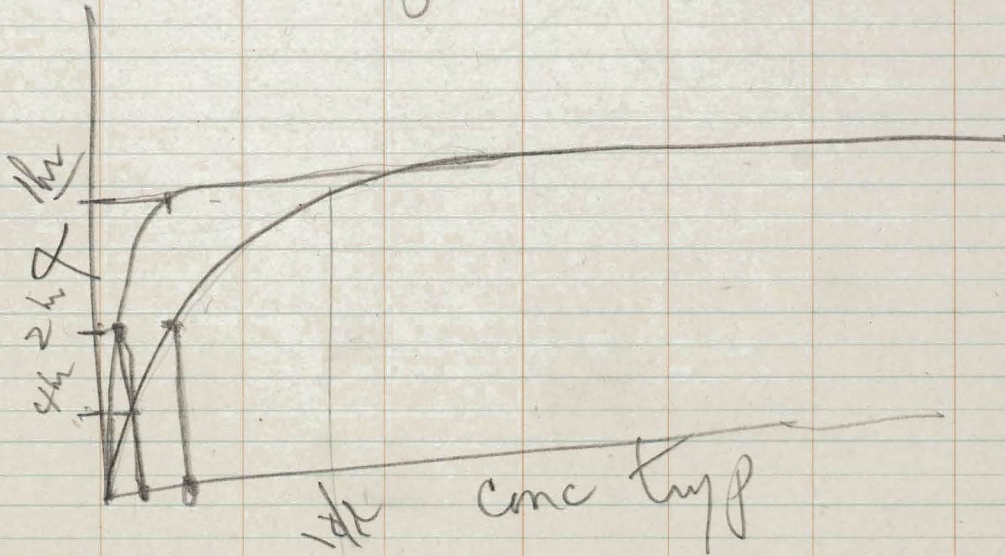
 0.60

~~g~~



t
g

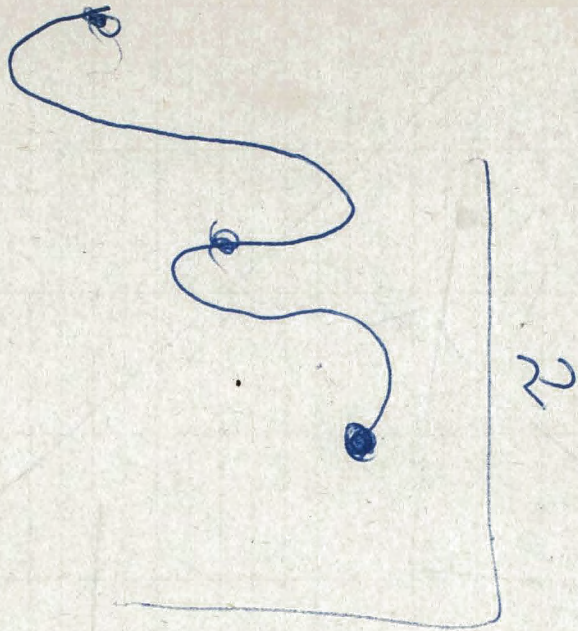
$$\frac{dN}{dt} = \lambda N$$



269
25
1.94

1.75

1.58



$\frac{2}{2}$

$\frac{16}{113}$
 $\frac{2}{4}$

Time	250	250	2.2 A ₁	2.2 A ₁	2.2 A ₁ - A ₂	X ₁ / 1.7
0	440	250	850	970	.720	423
1	.600	360	1.200	1.32	.960	565
2	.802	490	1.604	1.765	1.275	.951
3	1.010	620	2.020	2.22	1.60	.942
4	1.22	755	2.44	2.69	1.935	1.14
5	1.36	840	2.	2.99	2.15	1.265
6	1.48	933		3.26	2.33	1.37
7	1.592	1.01		3.51	2.50	1.47
8	1.73	1.123		3.81	2.69	1.58

$$\begin{array}{r} 1.140 \\ .423 \\ \hline .72 \end{array}$$

$$\begin{array}{r} 1.558 \\ 1.14 \\ \hline .44 \end{array}$$

$$\begin{array}{r} 122 \\ 440 \\ \hline .78 \end{array}$$

$$\begin{array}{r} 173 \\ 122 \\ \hline .51 \end{array}$$

$$\frac{78}{51} = 1.53$$

$$\frac{125}{28}$$

$$\frac{125}{146}$$

Fig 1

$$\frac{200}{250} = 2.2$$

$$\frac{11}{5}$$

2.

Fig 4

$$\frac{5300}{250} = \begin{matrix} 1.92 \\ 1.86 \\ 1.87 \end{matrix}$$

$$\frac{1.66}{1.68}$$

$$I = I_0 10^{-\sigma x} \quad [1200] \quad \text{Fig 2}$$

For Beckman $x = 1 \text{ cm}$ $.998$

$$\text{For typ in } H_2O \quad 20 \text{ mg/l} = 0.620 \quad \sigma$$

Boat density

Fig 2A

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Insert on page 4

If the compound is poured out at the rate A_1 at \bar{t}_1 and at the ~~higher~~ ^{higher} rate A_2 at \bar{t}_2 and if we switch at zero time from \bar{t}_1 to \bar{t}_2 the optical density of the supernatant at 200 μ

is given by

N3
$$D = A_1 \bar{t}_1 e^{-\frac{t}{\bar{t}_1}} + A_1 (\bar{t}_2 - \bar{t}_1) (1 - e^{-\frac{t}{\bar{t}_2}}) + \bar{t}_2 (A_2 - A_1) (1 - e^{-\frac{t}{\bar{t}_2}})$$

If we plot the optical density against $(1 - e^{-\frac{t}{\bar{t}_2}})$ we should therefore obtain a straight line

~~$$D = A_1 \bar{t}_1 e^{-\frac{t}{\bar{t}_1}} + \bar{t}_2 (A_2 - A_1) (1 - e^{-\frac{t}{\bar{t}_2}})$$~~

$$D = A_1 \bar{t}_1 - A_1 \bar{t}_1 e^{-\frac{t}{\bar{t}_1}} + A_1 \bar{t}_1 e^{-\frac{t}{\bar{t}_2}} + \bar{t}_2 (A_2 - A_1) (1 - e^{-\frac{t}{\bar{t}_2}})$$

U.094

Exp 4

at 25°C

$\tau_1 = 7$ $\tau_2 = 14$

..601

stable water

0.044

primary out tube at $\tau_2 = 0.044$

" " " "

at $\tau_1 = 0.022$

0.028

500 g/l

Exp 3 [341]

1000 g/l

raised to about 4 mg/l

$\frac{320}{2}$ mg in P.

"Iris" $\frac{1}{50}$ meter

1000 mg in ppt.

+100 g/l
+1000 g/l

at $\tau = 3.5$ hr no pumping

adding excess of less than (mg/l)
ppt at $P_{lim} = \tau$ no pumping

20 mg/ml of indol in
a prep. controlled down
does not suppress primary but
neither does anthranilic
acid. —

Indol is not converted to
precursor 345 ammonia and
tryptophan Ltd. —

286a 500 μ g. Trypt. low ammonia
20 mg/ml Anthranilic no
change

297a 35 mg/ml NH_4Cl
1 mg/ml of indol
 $\tau = 3.97$ does not suppress
precursor

312 Anthranilic in (1 gm/l)
not converted into indol
in B nitrogen Ltd $\tau = 6.5$

321 C Dec 15/52

P limited outpouring expressed
by hypot. w/ unpaired dorsal dunes
not produce precursors.