40·55 ml.
47·56
~

3M NaH$_2$PO$_4$

pH. 8·60.

+ 1 vol. pH 6.6 – 6.8

+ 2 drops 10N NaOH pH 7.1 & 7.15

+ 7 cc .4 M Na$_2$HPO$_4$ buffer. pH

(also 1 cc dilute 6.2M → pH 7.2) 7.18

37.1
35·8
1·3

Monday: by 10 am had filled 12 tubes: so stopped.

just

measurements over

Saturday. 5th Feb 55

Egg white column

decided to repeat the egg white experiment, with modifications ① to adjust pH of egg white
② to pour on less, and absorb for longer
③ to run more slowly.

Took ½ Some egg white from an egg opened a few days ago and put kept in the frig. Weighed = 7 grams.
Titrated. (details opposite)
Added 7cc - 4M Na Phos. Final pH 7.18.

used the same 23½ cm column ? used before (appeared to have a flaw in it ⅓ way down). no temp. control.

The head flowed quite a bit of buffer through. checked no U.V. absorbing in evergreen buffer.

Added 2 ml of diluted (as above) egg white.

When the head zone is added ~ 1 ml of buffer to wash walls etc. Centred, to allow time to be absorbed. (for about ¾ hour)

Collected effluent from the moment that buffer was fully in the Column. Vol. before 1st tube = 1.3 ml.

Set to 1 drop in 2 minutes started ~ to 2.25 pm.
Head ~ 5½ cm. ½ - fraction as before (took 4½ ml)
1st collected ~ 6.15 ?, so reduced head slightly (6½ cm).

Sunday 11.45 cm. ~ 5⅓ fraction. drops every 6 minutes : salt crystals round top. !!
increase pressure to ~ 5 cm : - wiped away. not clear for reason.

←

r.d. 281 mμ Spur less d acidity.

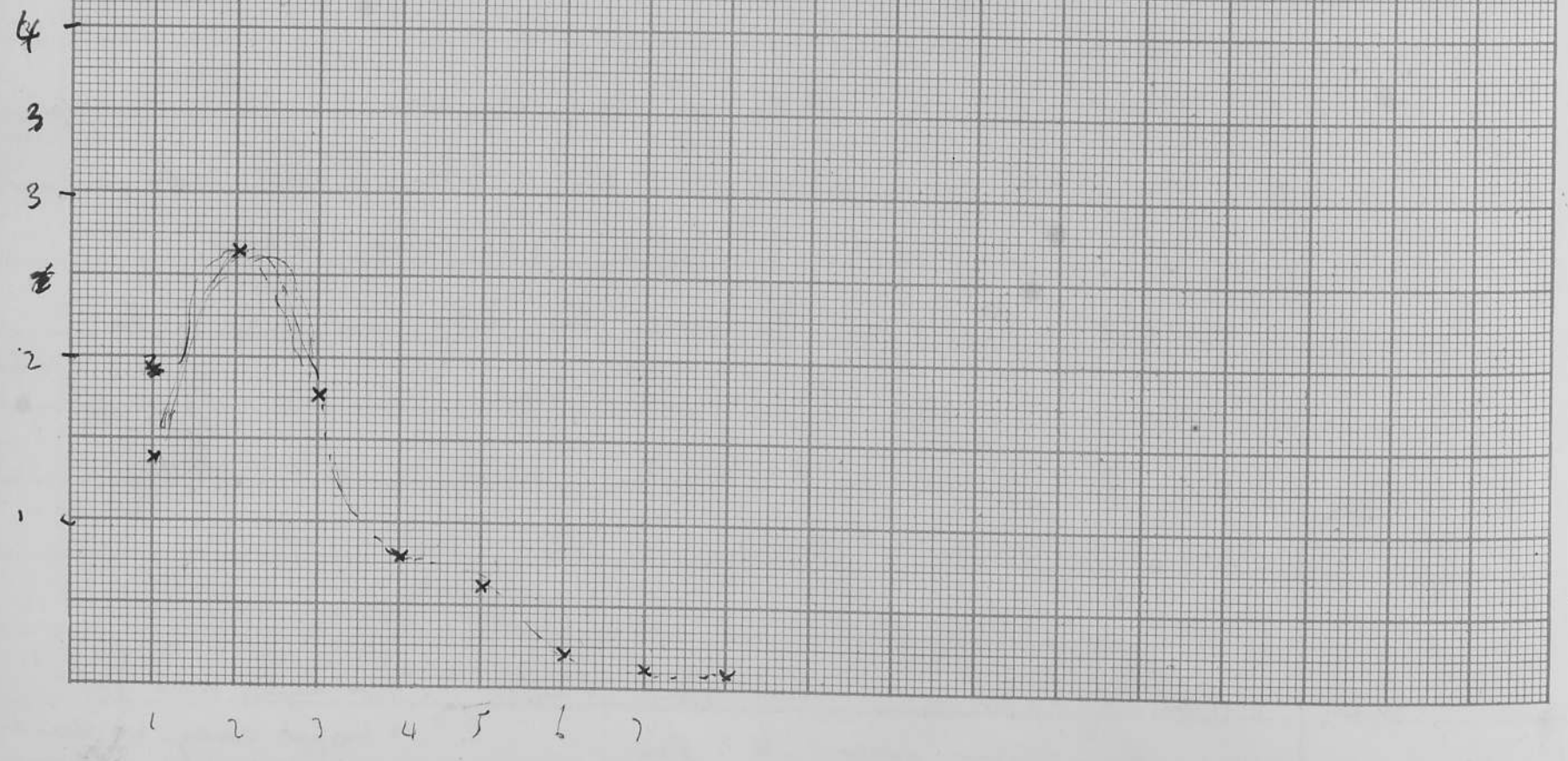
1	1·41	Some.
2	(2·67)	~~Less~~ Some more
3	1·77	ditto.
4	·785	Some
5	·63	Some
6	·221	a little
7	·129	less
8	·090	
9	·065	
10	·048	
11	·037	
12	·034	

not tested.

10. diacaproxity:

Run mixture to ech with
ⓐ smaller fraction
ⓑ less loading
still.

70
35-8



Monday 7th Feb '55

Tears

weight of tube + cork 2·186 gms.

+ true tears 2·206

20 mg.

make up to 1·50 ml with ·2M Na Phos. buffer pH 7·2.

U.V. absorption.

300	295	290	285	280	275	270	265	260	255	250	245
·120	·161	·216	·255	·272	·268	·251	·223	·198	·175	·167	·184

281	274	290	240	235	310	320	330
·272	·268	·216	·255	·460	·074	·061	·055

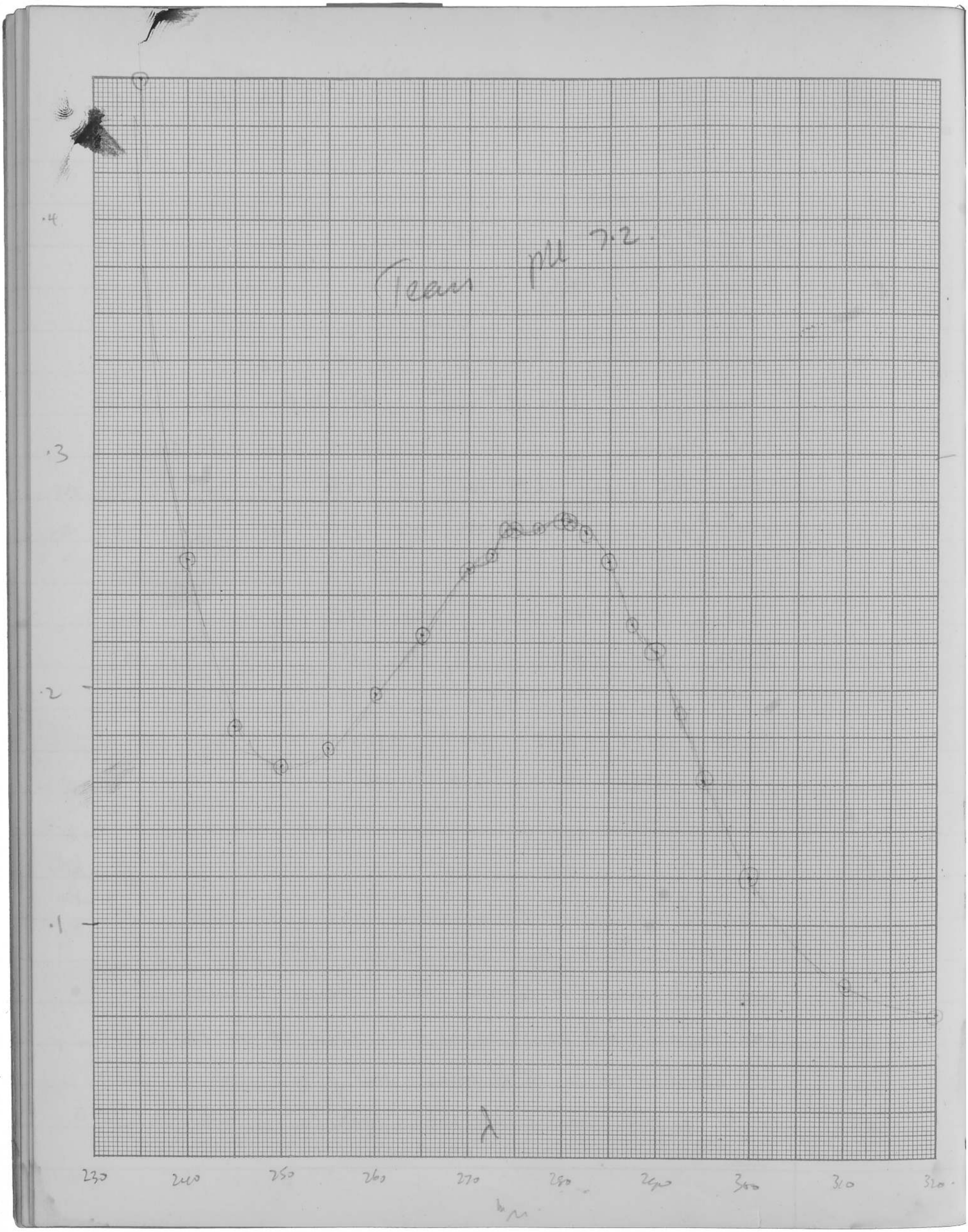
272·5	277·5	282·5	287·5	292·5
·258	·269	·267	·228	·190

Egg white

diluted egg white with buffer

280

Started to run my column (the good one) for small amount of egg white test. Diluted egg white with buffer. Used egg white pH adjusted, buffer added, left over from Saturday. But formed a gel on top of column + would go on! Took off. Washed over the top several times + left with a quick flow of buffer overnight to clear.


.4
.3
.2
.1
230
240
250
260
270
280
290
300
310
320
λ
nm

Tuesday 8th Feb '55

Ilex Egg White

Used column flushed out overnight.

Took a new egg (from our original batch)

Took 0.4 ml egg white. Added 1.6 ml buffer (Na P. .2M pH 7.2)

Put 1.0 ml of this on top of column. Again wouldn't go in.

0.12ml? Decided to use compressed air. Pushed in rapidly with this.

2.2.30. Added a wash. (5 ml?) It sank in.

Added a second wash. Corked & allowed to stagnate to allow time for the egg-white to equilibriate. (Ran should have pushed in with air more slowly)

Used to apply air to force in the second wash.

Fitted up. Used to put a more pressure. Left with a head of ~ 25cm. (Used pressure pushed the column?)

Used started to collect the moment all the egg white had sunk into the column. Rate 2 c

Fraction had been adjusted to about 1/2 ml. Rate ~ 1 fraction in 50 min??

Ran Cold water running : Exit temperature 11.8° C

(P.S. ran at about 1 fraction per hour)

1 ml ≙ 3·3 (2)

·2 ml cap. urine
should have ≙ 660 μ

Tables & Stain

Sp. density from 0·2 ml casts.

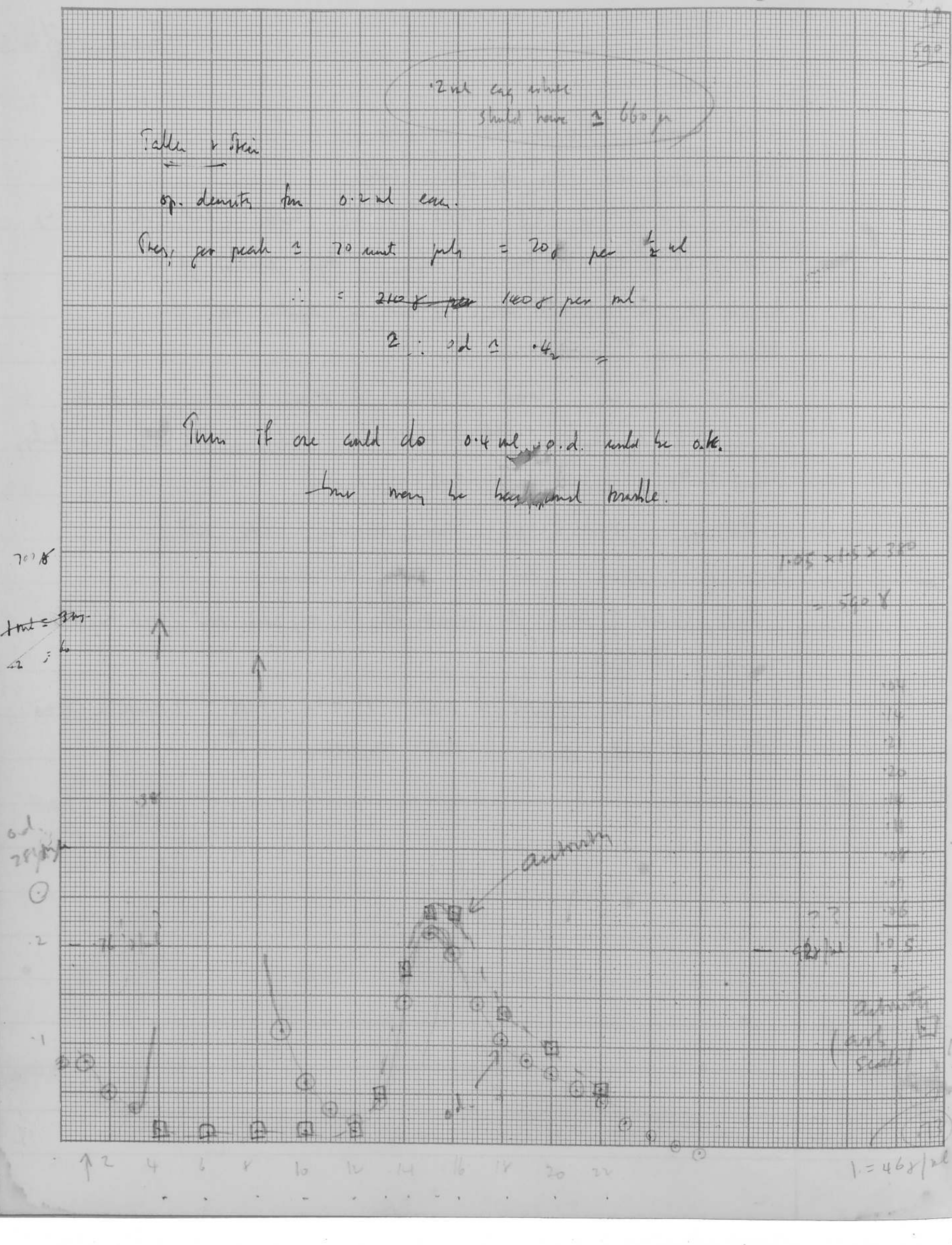
Prot. per peak ≙ 70 mmt pulp = 20 g per ½ ml

∴ = ~~240 g per~~ 1400 g per ml

2 : 2d ≙ ·4 =

Then if one could do 0·4 ml in o.d. would be o.k.

Urine may be kept cool trouble.



		o.d. 281 mμ	
	Blank	·005	
51 =	1	·082 !! added 2 drops of water to raise level: recalc = ·070 ∴ level o.k.	
	2	·050	29 = 28 − ·005
	3	·034	29
	4	·61₂	30
	5	(2·8)	31 − ·015
	6	—	32
	7	(3·0)	33
	8	·61₂ !	34 − ·018
	9	·113	35
	10	·060	36
	11	·034	37 − ·020
	12	·020	38
	13	·043	39
	14	·144	40 − ·020
	15	·21₃	41
	16	·195	42
	17	·14₂	43 − ·020
	18	·10₇	44
	19	·085	45
	20	·072	46 − ·015
	21	·056 Blank − ·003	47
52 =	22	·034	48
54 =	23	·013	49
	24	·001	
48	25	−·011	
2	26	−·020 !	

Thunder Blank +·008

But blanks cloudy. Hence no readings