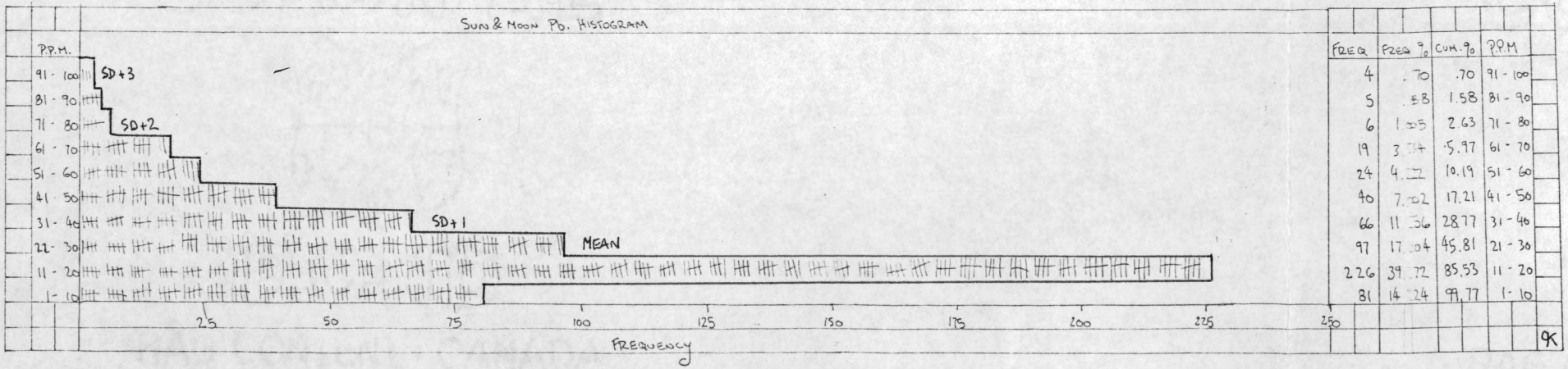
SUN & MOON Pb.

- dec 16/81 PK

013319

over 100 - ||| (of a total of 579 samples 26% were over 100 p.p.m)
TOTAL 569



FREQ	FREQ %	CUM. %	P.P.M
4	.70	.70	91 - 100
5	.88	1.58	81 - 90
6	1.05	2.63	71 - 80
19	3.34	5.97	61 - 70
24	4.22	10.19	51 - 60
40	7.02	17.21	41 - 50
66	11.56	28.77	31 - 40
97	17.04	45.81	21 - 30
226	39.72	85.53	11 - 20
81	14.24	99.77	1 - 10

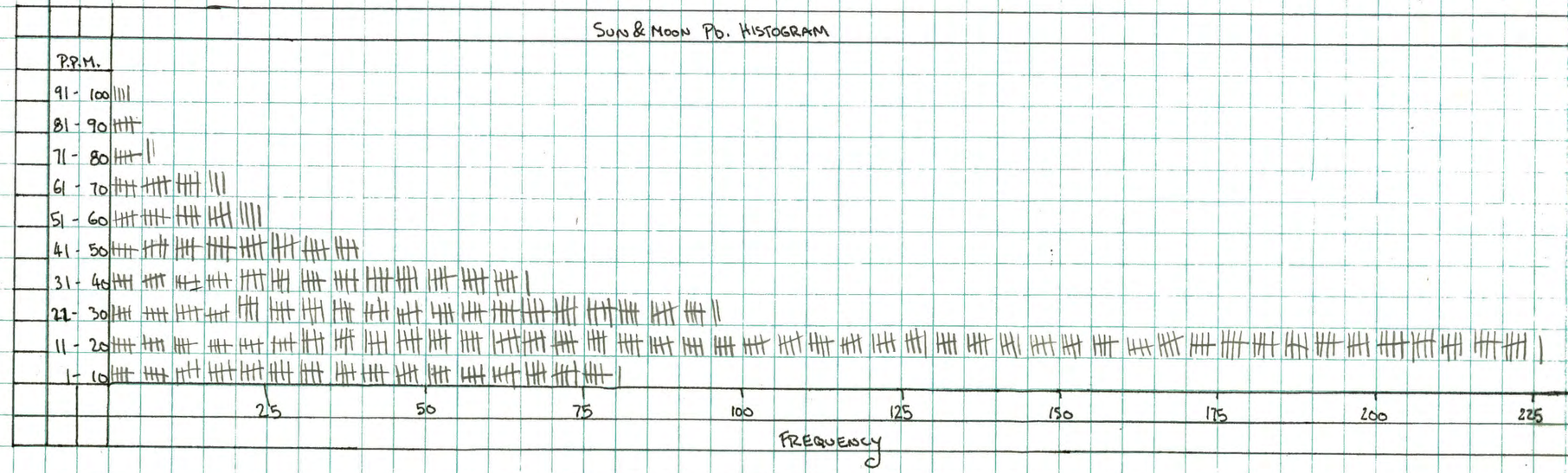
PK

SUN & MOON Pb.

- dec 16/81 PK

over 100 - |||| |||| (of a total of 579 samples 2.6% were over 100 p.p.m)
TOTAL 569

SUN & MOON Pb. HISTOGRAM



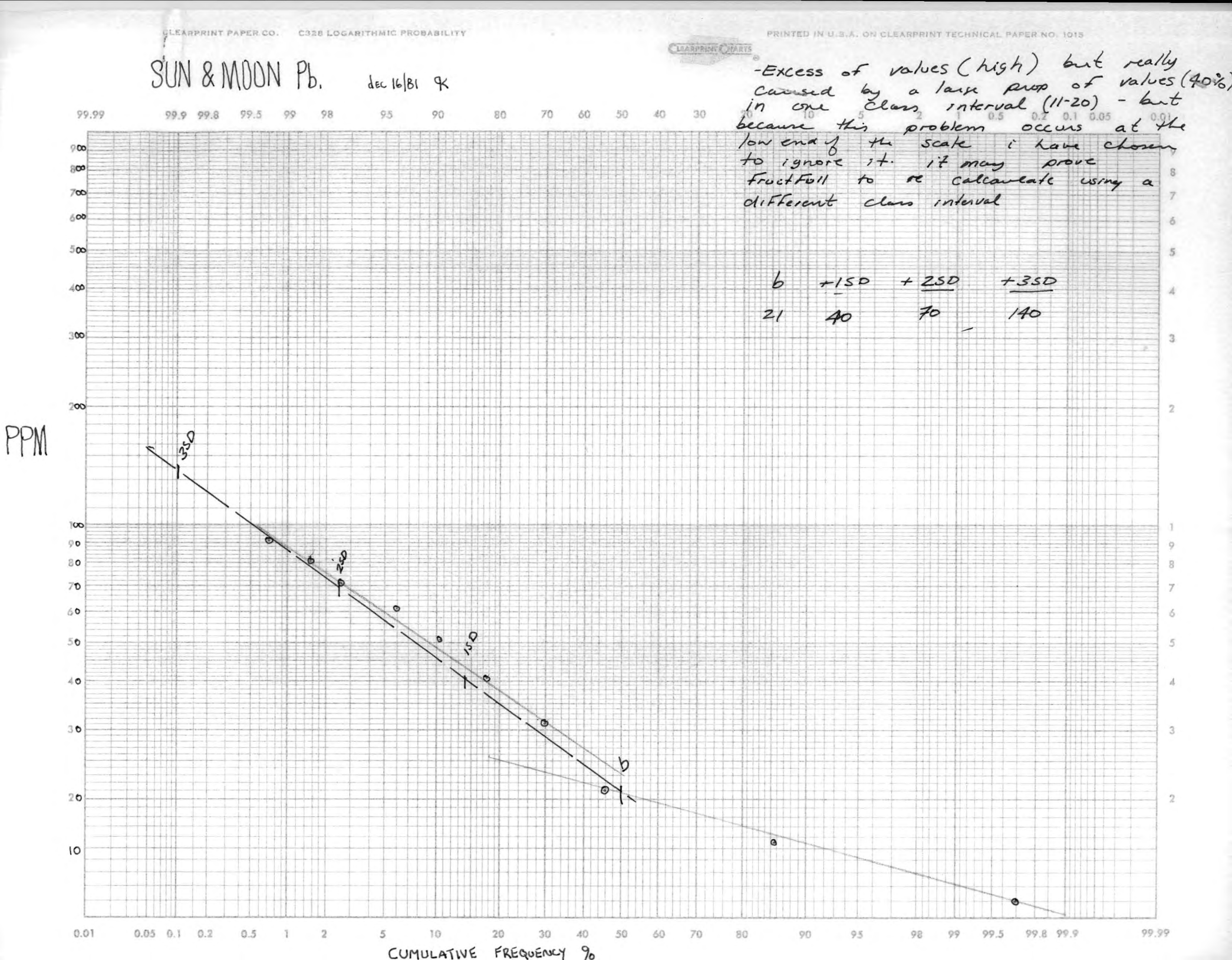
FREQ	FREQ %	CUM. %	P.P.M
4	.70	.70	91 - 100
5	.88	1.58	81 - 90
6	1.05	2.63	71 - 80
19	3.34	5.97	61 - 70
24	4.22	10.19	51 - 60
40	7.02	17.21	41 - 50
66	11.56	28.77	31 - 40
97	17.04	45.81	21 - 30
226	39.72	85.53	11 - 20
81	14.24	99.77	1 - 10

PK

SUN & MOON Pb. dec 16/81 PK

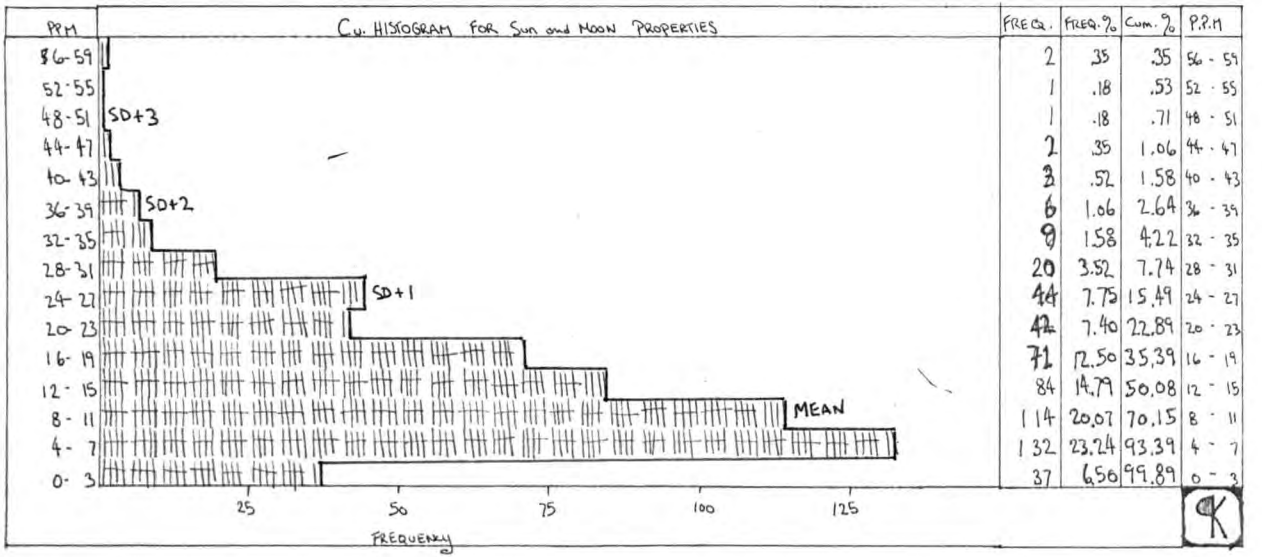
-Excess of values (high) but really caused by a large prop of values (40%) in one class interval (11-20) - but because this problem occurs at the low end of the scale i have chosen to ignore it. it may prove fruitfull to re calculate using a different class interval

b	+1SD	+2SD	+3SD
21	40	70	140



SUN MOON Cu. dec 16/81 PK

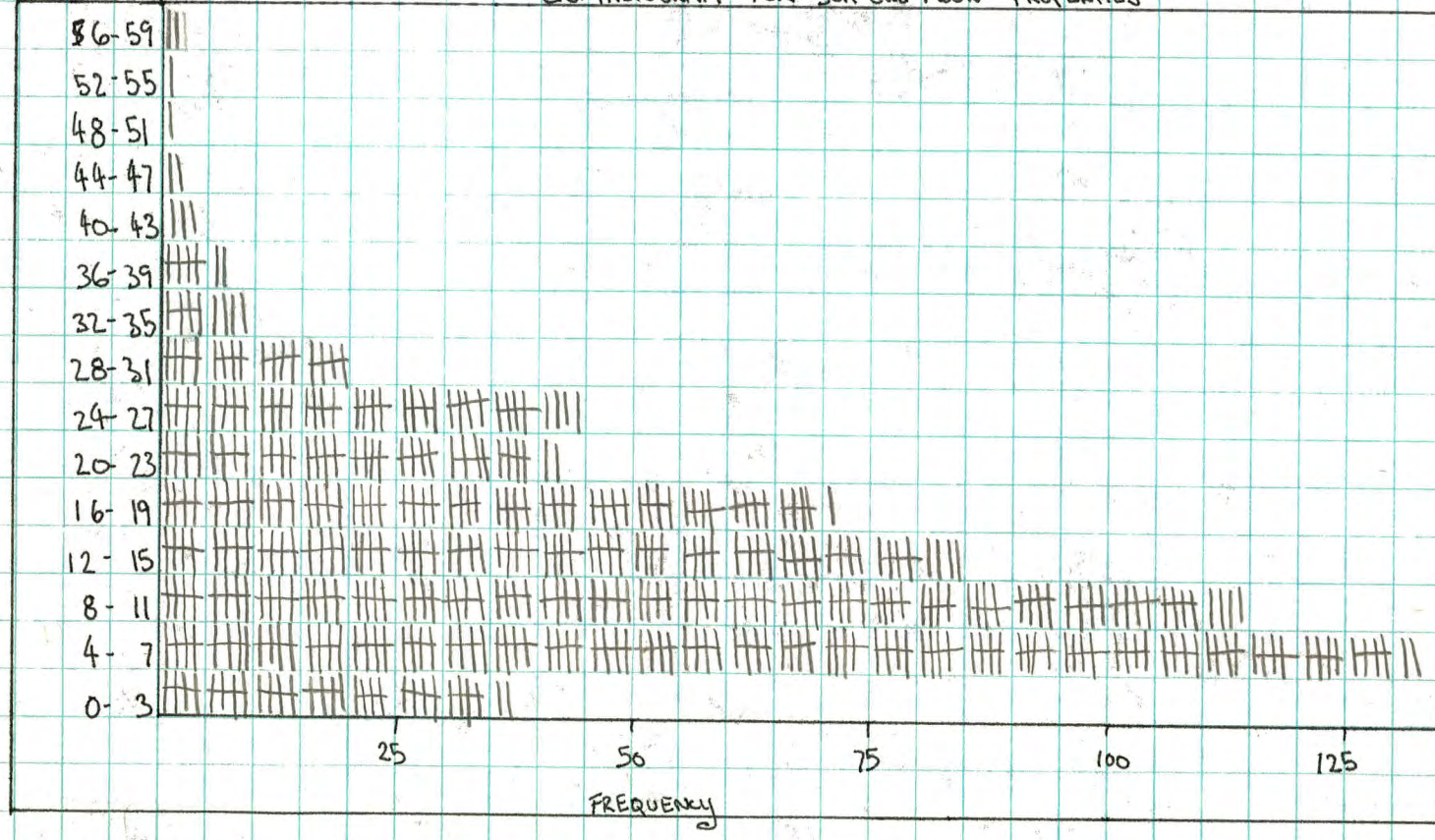
over 60 ||||| (of 578 samples 1.8% are over 60ppm.)
TOTAL-568



SUN MOON Cu. dec 16/81 K

over 60 |||| (of 578 samples 1.8% are over 60ppm.)
TOTAL-568

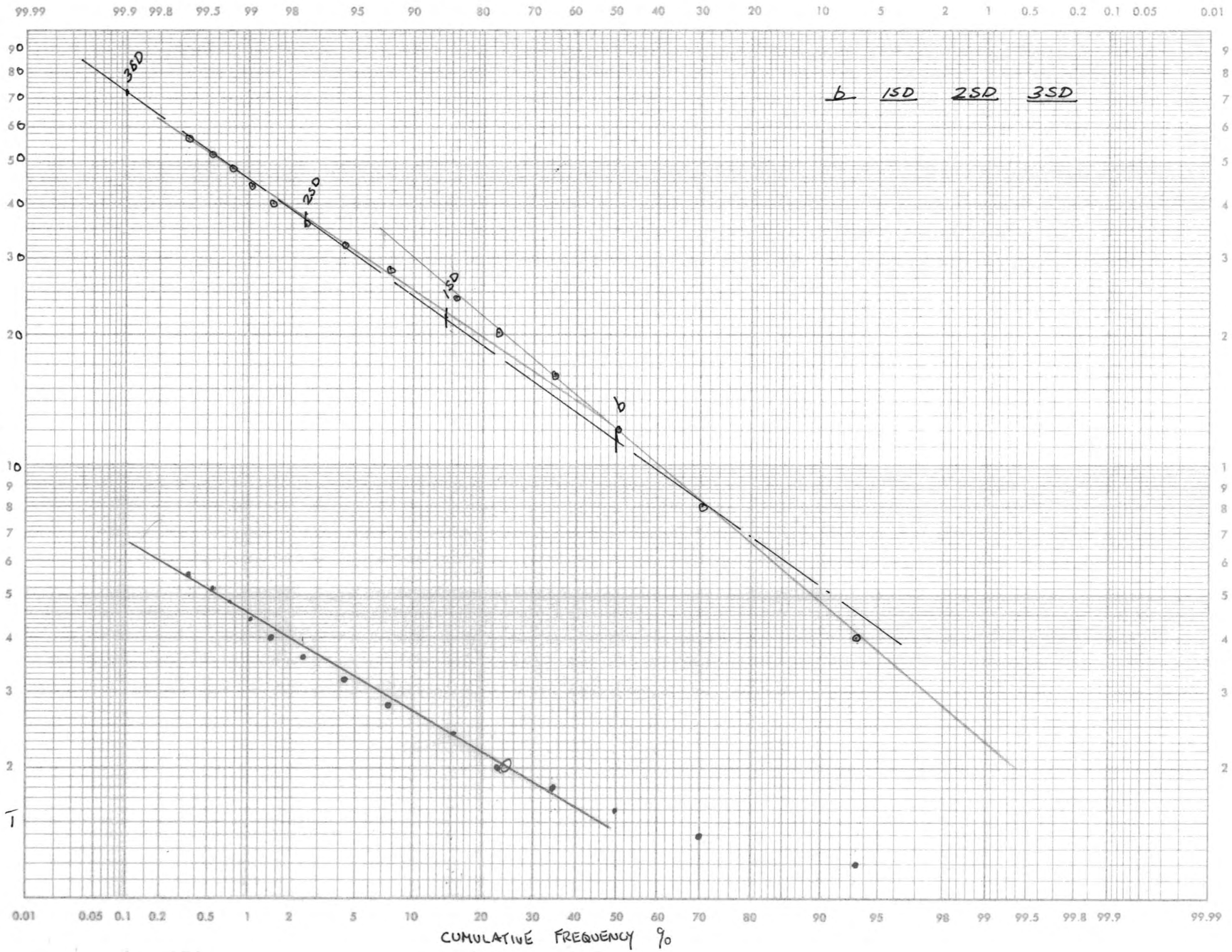
Cu. HISTOGRAM FOR Sun and MOON PROPERTIES



PPM	FREQ.	FREQ.%	CUM.%	P.P.M
56-59	2	.35	.35	56 - 59
52-55	1	.18	.53	52 - 55
48-51	1	.18	.71	48 - 51
44-47	2	.35	1.06	44 - 47
40-43	3	.52	1.58	40 - 43
36-39	6	1.06	2.64	36 - 39
32-35	9	1.58	4.22	32 - 35
28-31	20	3.52	7.74	28 - 31
24-27	44	7.75	15.49	24 - 27
20-23	42	7.40	22.89	20 - 23
16-19	71	12.50	35.39	16 - 19
12-15	84	14.79	50.08	12 - 15
8-11	114	20.07	70.15	8 - 11
4-7	132	23.24	93.39	4 - 7
0-3	37	6.50	99.89	0 - 3

K

SUN & MOON Co. dec 16/81 K



SUN/MOON - USED IN FILING DOCUMENTS.

Pb	84-112	ABOVE BACKGROUND	m+2SD
SD=28	112-140	POSSIBLY ANOMALOUS	m+3SD
	140-168	ANOMALOUS	> m+4SD

Zn	140-210	SLIGHTLY ABOVE BACKGROUND	m+1SD
70 = SD	210-280	ABOVE BACKGROUND	m+2SD
	280-350	POSSIBLY ANOMALOUS	7m+3SD

Cu		this is prob sl.	
31=SD	38-69	Slightly above background	m+1SD
	51-69	Above background	m+2SD
	69-87	Possibly Anomalous	7m+3SD

something here!
Strong

RECONTOUR SUN/MOON ? (1:5,000)

Zn normal dist.

65 - 95
96 - 125
126 - 155
> 155

mean + 1
+ 2
+ 3

Pb

21 - 40 +1
41 - 70 +2
71 - 140 +3
> 141

Cu

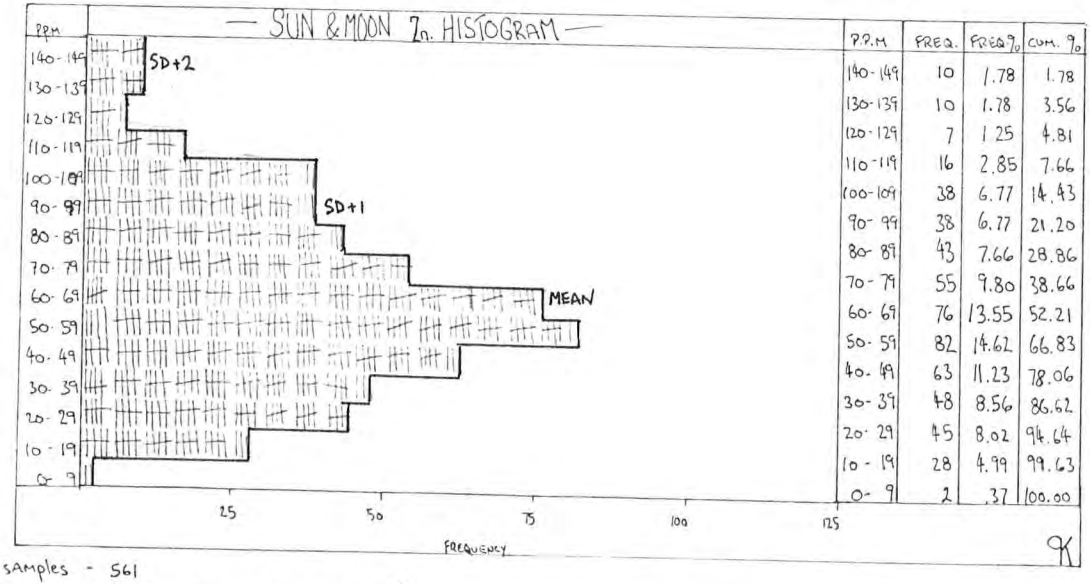
10 - 20 +1
21 - 40 +2
41 - 70 +3
> 70

Ba

Mean + 1 Std Dev 05
" 2 170
3 350

SUN & MOON Zn.

DEC. 17/81 PK



P.P.M	FREQ.	FREQ %	CUM. %
140-149	10	1.78	1.78
130-139	10	1.78	3.56
120-129	7	1.25	4.81
110-119	16	2.85	7.66
100-109	38	6.77	14.43
90-99	38	6.77	21.20
80-89	43	7.66	28.86
70-79	55	9.80	38.66
60-69	76	13.55	52.21
50-59	82	14.62	66.83
40-49	63	11.23	78.06
30-39	48	8.56	86.62
20-29	45	8.02	94.64
10-19	28	4.99	99.63
0-9	2	.37	100.00

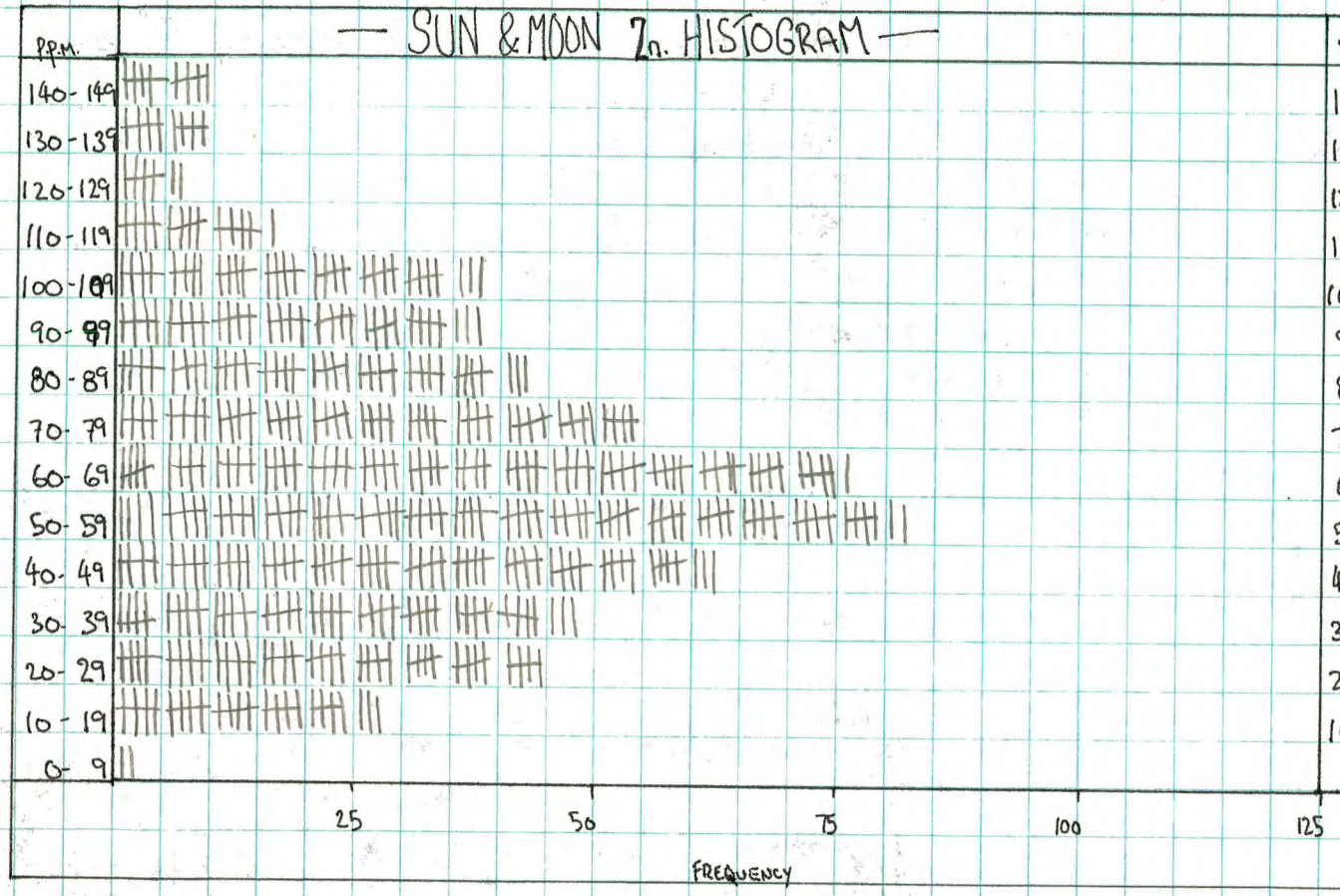
PK

TOTAL SAMPLES - 561

(over 150 - 17 of 578 samples, 2.9 % were > 149)

SUN & MOON Zn.

DEC. 17/81 9K



P.P.M	FREQ.	FREQ.%	CUM. %	x. freq
140-149	10	1.78	1.78	145
130-139	10	1.78	3.56	135
120-129	7	1.25	4.81	125
110-119	16	2.85	7.66	115
100-109	38	6.77	14.43	105
90-99	38	6.77	21.20	95
80-89	43	7.66	28.86	85
70-79	55	9.80	38.66	75
60-69	76	13.55	52.21	65
50-59	82	14.62	66.83	55
40-49	63	11.23	78.06	45
30-39	48	8.56	86.62	35
20-29	45	8.02	94.64	25
10-19	28	4.99	99.63	15
0-9	2	.37	100.00	5

10

9K

TOTAL SAMPLES - 561

(over 150 - 17 : of 578 samples, 2.9 % were > 149)

$n = 561$

Sun/Moon Zn.

SUN MOON Zinc

$f_i x_i$	$(x_i - \bar{x})^2$	$f_i (x_i - \bar{x})^2$
1,450	6,400	64,000
1,350	4,900	49,000
875	3,600	25,200
1,840	2,500	40,000
3,990	1,600	60,800
3610	900	34,200
3655	400	17,200
4,125	100	5,500
4,940	0	0
4,510	100	8,200
2835	400	25,200
1,680	900	43,200
1125	1600	72,000
420	2,500	70,000
10	3,600	7.200
$\Sigma f_i x_i$ 36,415		$\Sigma f_i (x_i - \bar{x})^2$ = 521,700

$$\bar{x} = \frac{\Sigma f_i x_i}{n}$$

$$\bar{x} = 65$$

$$s^2 = \frac{\Sigma f_i (x_i - \bar{x})^2}{n-1}$$

$$= \frac{521,700}{561-1}$$

$$= 931.6$$

$$s = 30.5$$

thus mean: background = 65

$6 + 1s$ = 95

$6 + 2s$ = 125

$6 + 3s$ = 155

CLEARPRINT PAPER CO. C328 LOGARITHMIC PROBABILITY

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SUN & MOON Zn. dec 17/81 PK

Histogram may suggest an arithmetic normal distribution

b	1SD	2SD	3SD
57	92	138	230

P.P.M.

3SD

2SD

1SD

D

99.99 99.9 99.8 99.5 99 98 95 90 80 70 60 50 40 30 20 10 5 2 1 0.5 0.2 0.1 0.05 0.01

900 800 700 600 500 400 300 200 150 100 90 80 70 60 50 40 30 20 10

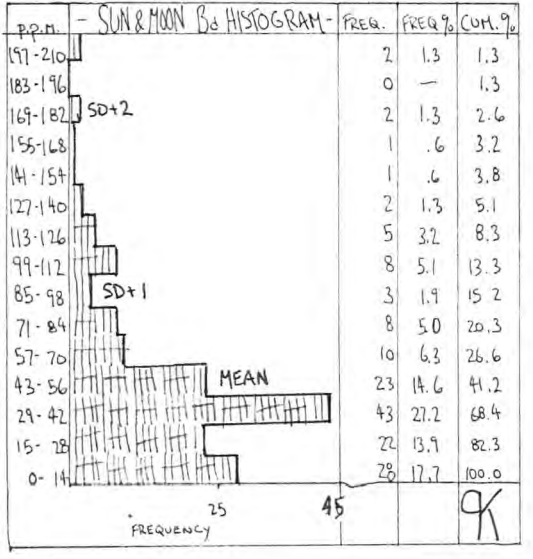
9 8 7 6 5 4 3 2 1 9 8 7 6 5 4 3 2

0.01 0.05 0.1 0.2 0.5 1 2 5 10 20 30 40 50 60 70 80 90 95 98 99 99.5 99.8 99.9 99.99

CUMULATIVE FREQUENCY %

SUN & MOON Ba.

dec 8/81 QK



TOTAL SAMPLES - 158

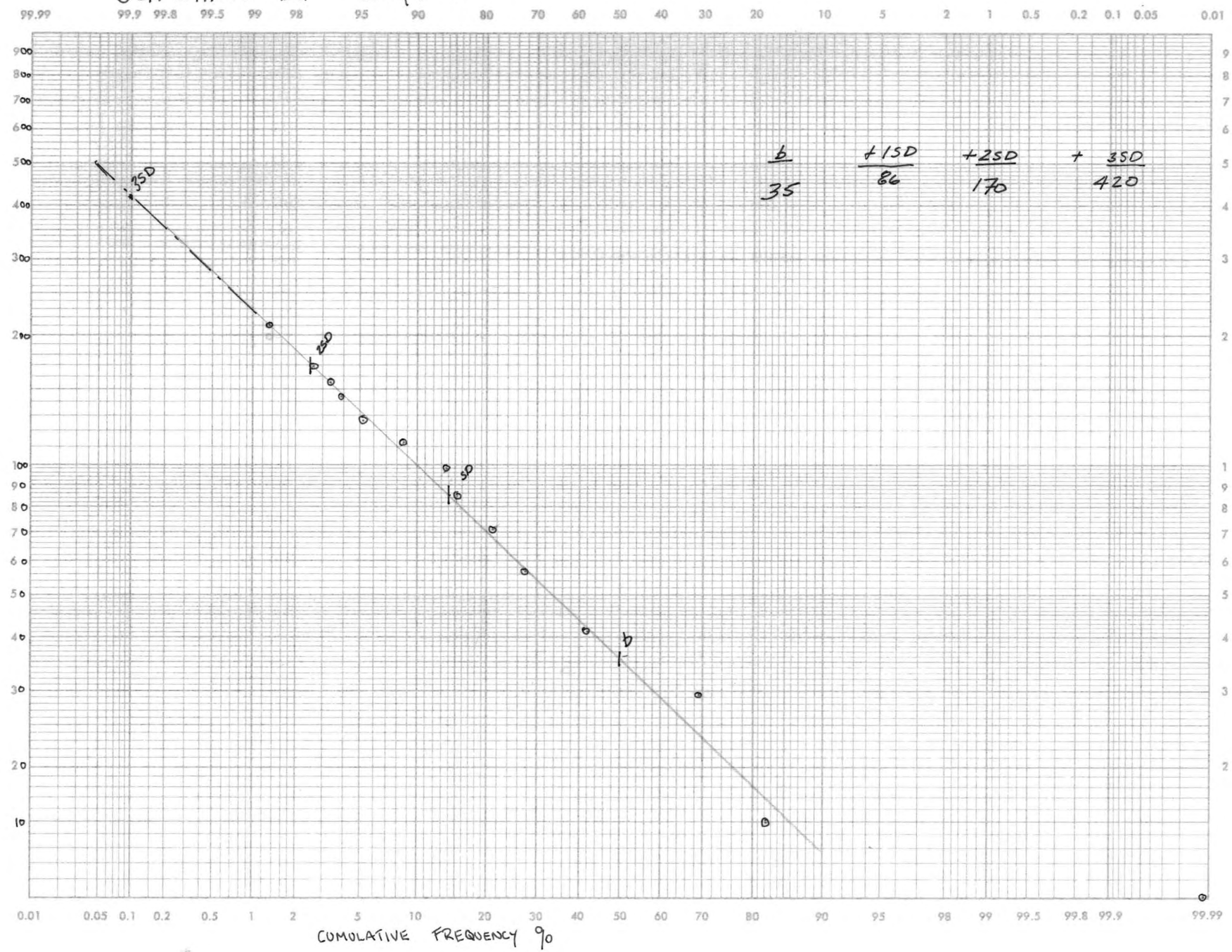
SUN & MOON Ba.

dec 8/81 9K

P.P.M.	- SUN & MOON Ba HISTOGRAM -	FREQ.	FREQ %	CUM. %
197-210		2	1.3	1.3
183-196		0	—	1.3
169-182		2	1.3	2.6
155-168		1	.6	3.2
141-154		1	.6	3.8
127-140		2	1.3	5.1
113-126		5	3.2	8.3
99-112		8	5.1	13.3
85-98		3	1.9	15.2
71-84		8	5.0	20.3
57-70		10	6.3	26.6
43-56		23	14.6	41.2
29-42		43	27.2	68.4
15-28		22	13.9	82.3
0-14		28	17.7	100.0
	25 45 FREQUENCY			

TOTAL SAMPLES - 158

SUN & MOON Ba dec. 8/81 4K



P.P.M.

SUN / MOON

ok. Baaa

b	1SD	2SD	3SD
35	86	170	420 – high.

Znnnn

b	1SD	2SD	3SD
57	92	138	230

should plot do arithmetic dist.

ok. Cuuuu

b	1SD	2SD	3SD
11	22	37	72

ok. Pbbbb

b	1SD	2SD	3SD
21	40	70	140

these values appear to be lognormal - Zn may be ~~be~~ normal - but this may be a result of chopping high range values.

NOTE Ba + 3SD may be somewhat high due to an extension of bulk of data +3SD may be more realistically taken at ≈ 350 ppm?

FOR Znnnn

using an arithmetic distribution gives the following which is more realistic.

b	b+1S	b+2S	b+3S
65	95	125	155

– these values are much better than above.