

108801

VALIDATION SHEET

CRF #

PAGE

OF

FORMULATION:

% a.i.

SC #

CHEMICAL NAME

Tech.

Metolachlor
(CGA-24705)

IA

IB

T

FW

EC

R

Validator:

Labuda

Date:

31 October, 1977

Test Type:

Avian Acute Oral LD₅₀
(Mallard Ducks)

Test ID.# ESC1

CITATION:

Truslow Farms, Inc., Wildlife Research Division
Acute Oral LD₅₀ - Mallard Ducks, CGA-24705 Technical,
Project # 108-117, 19 May, 1976.

RESULTS:

(?) LD₅₀ $\hat{=}$ 4640 mg/kg (2398 to 9877 mg/kg)
or

VALIDATION CATEGORY: Core

VALIDATION CATEGORY RATIONALE: N.A.

CATEGORY REPAIRABILITY/RATIONALE: N.A.

% a.i.

SC #

CHEMICAL NAME

Validator:

Date:

Tech.

Metolachlor
(CGA-24705)

Labuda

31 Oct 197

Test Type:

Avian acute oral LD₅₀
(Mallard ducks)

Test ID.# ESCI

CITATION:

Truslow Farms, Inc., Wildlife Research Division
Acute Oral LD₅₀ - Mallard Ducks, CGA-24705
Technical, Project # 108-117, 19 May 1976.

Results: (?) LD₅₀ = 1750 mg/kg (1337 to 2289 mg/kg)
or 4640 mg/kg (2398 to 9877 mg/kg)

Validation category: Invalid

Validation category rationale: Two sets of conclusions based evidently on the same test, are presented (see "Results").

~~Validation~~ Category reparability/rationale:

The study is repairable to the core category if the registrant can satisfactorily explain the discrepancy reported above.

Test Species Mallard

PROBIT ANALYSIS WORK SHEET

Chemical Metolachlor (CGA-247)Source Truslow Farms Incubated

Date Tested

o. Period 8 daysAnalysis by: Fink, Wildlife Toxicol., 19 May 1976

(Name)

(Title)

(Date)

Concentration	No. dead/ No. tested	Observed % Mortality	Expected % Mortality	O-E	Contributions to Chi (Nomo #1)
4640 mg/kg	5/10	50	56.0	6	0.015
2150	1/10	10	9.0	1	0.0013
1000	6/16	0 (0.10)	0.30	0.20	0.0013
464	0/10	0	0	—	—
215	0/10	0	0	—	—

Total Fish Tested = 30Total 0.0176Number of Doses (K) = 3Chi² = Total Cont. x $\frac{\text{Total fish}}{K}$ = 0.176Degrees of freedom (K-2) = 1Chi² (p=.05) for 1 deg of freedom = 3.84DETERMINE FLC₅₀:LC₈₄ _____LC₅₀ _____LC₁₆ _____

$$S = \frac{LC_{91}/LC_{50} + LC_{50}/LC_{16}}{2}$$

N' (Fish used between 16% and 84% E) = _____

 $\sqrt{N'}$ = _____

$$fLC_{50} = S^{2.77/\sqrt{N'}} = S$$

(Nomo. #2) = _____

DETERMINE fS:

R (Largest/Smallest dose plotted) _____

S (As determined above) _____

A (Nomo. #3 using R and S) _____

$$fS = A^{10(K-1)/K\sqrt{N'}} = A$$

(Nomo. #2) = _____

DETERMINE fLC_y:

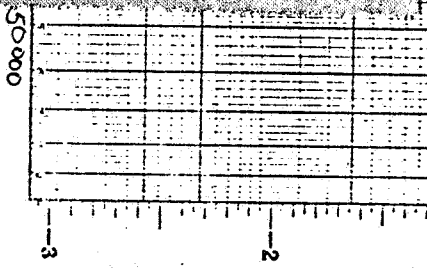
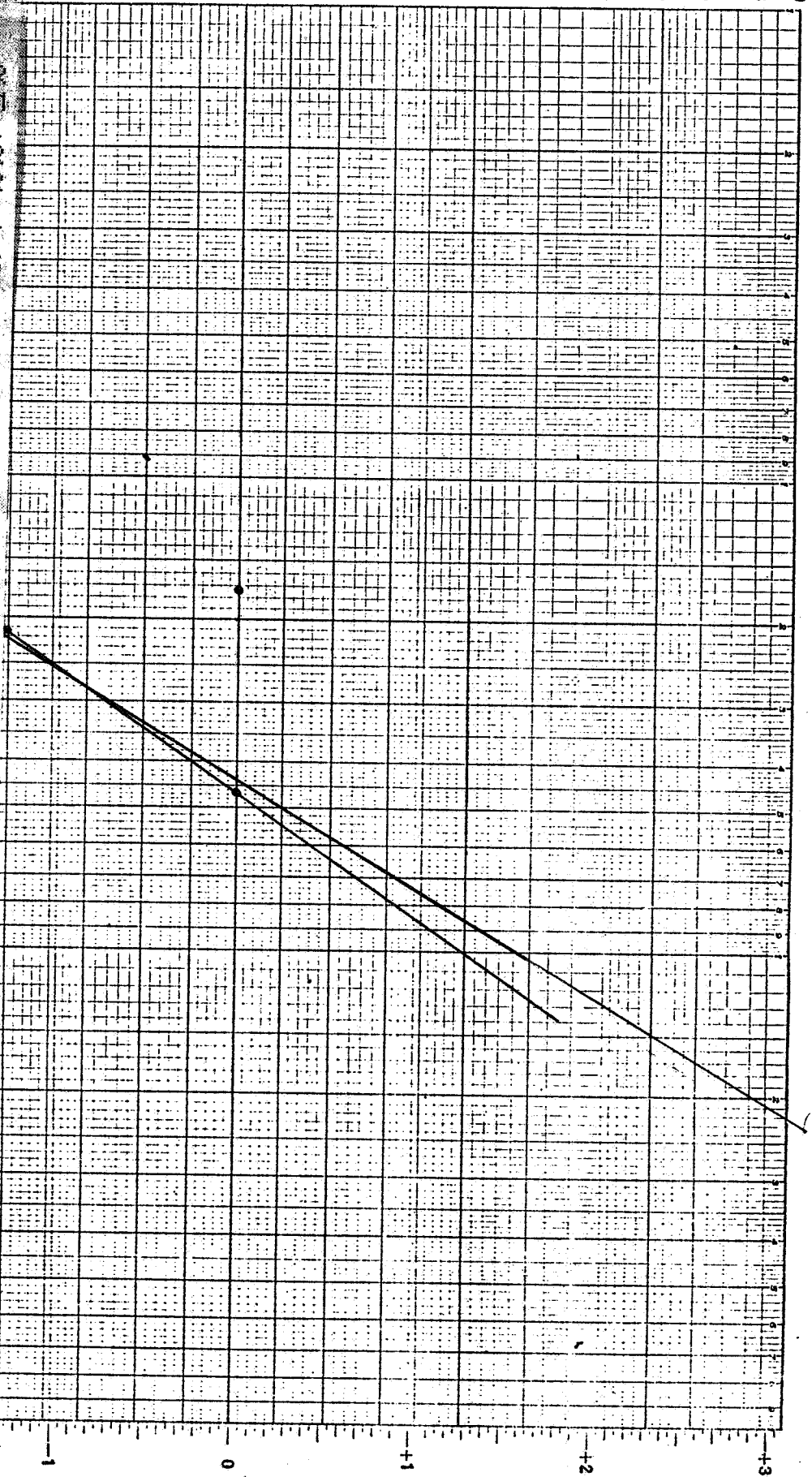
$$(fS)^x = fS^{2.33 \text{ or } 1.30} \text{ (Table 3 and Nomo. #2)} =$$

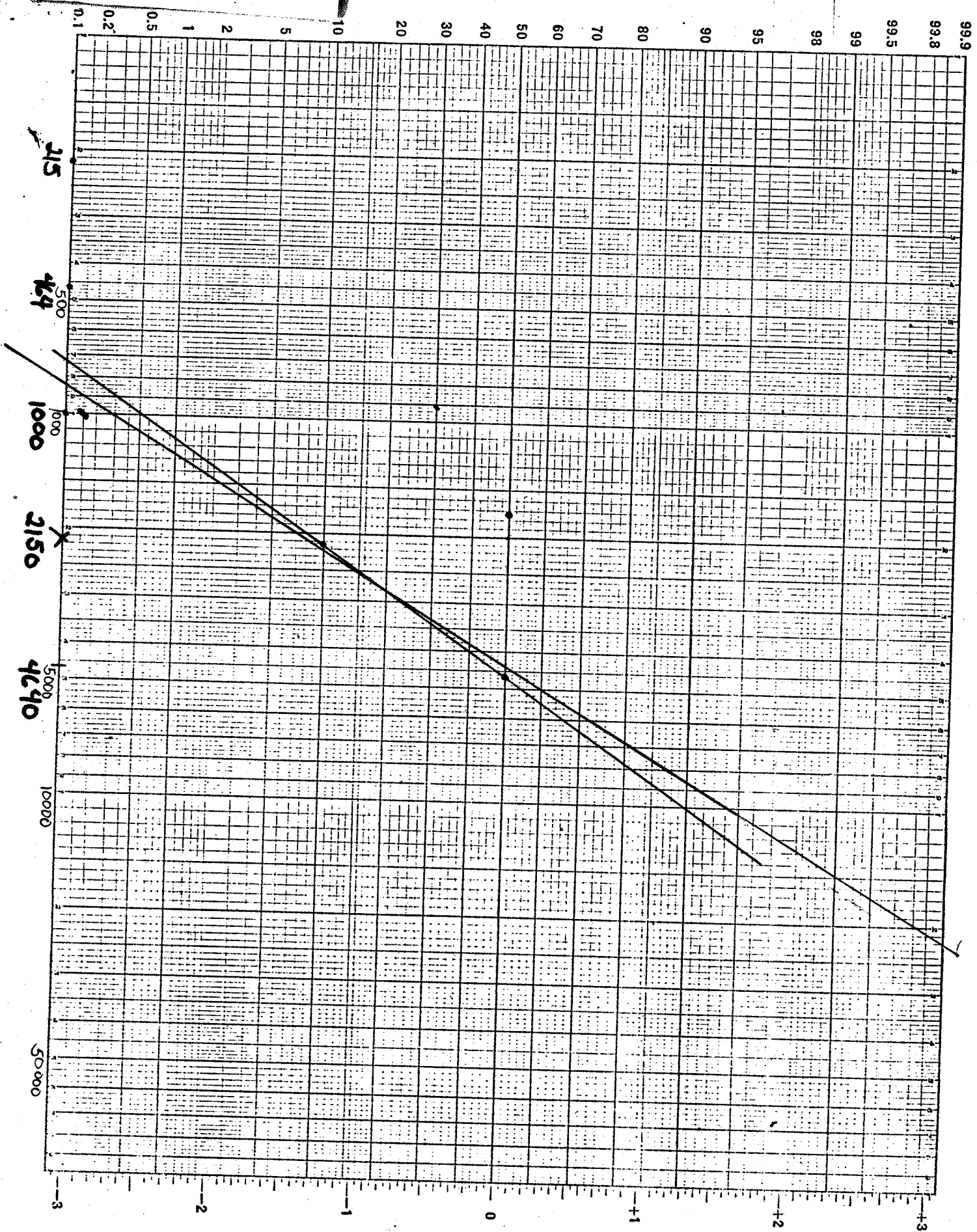
$$fLC_y \text{ (Nomo. #4 using } (fS)^x \text{ and } fLC_{50}) =$$

RESULTS (LC_x and Confidence Limits at p = .05):LC₁ = _____Lower Limit (LC₁/LC_y) _____Upper Limit (LC₁ x LC_y) _____LC₅₀ = _____Lower Limit (LC₅₀/fLC₅₀) _____Upper Limit (LC₅₀ x fLC₅₀) _____LC₉₉ = _____Lower Limit (LC₉₉/LC_y) _____Upper Limit (LC₉₉ x LC_y) _____

99.9
99.8
99.5
99
98
95
90
80
70
60
50
40
30
20

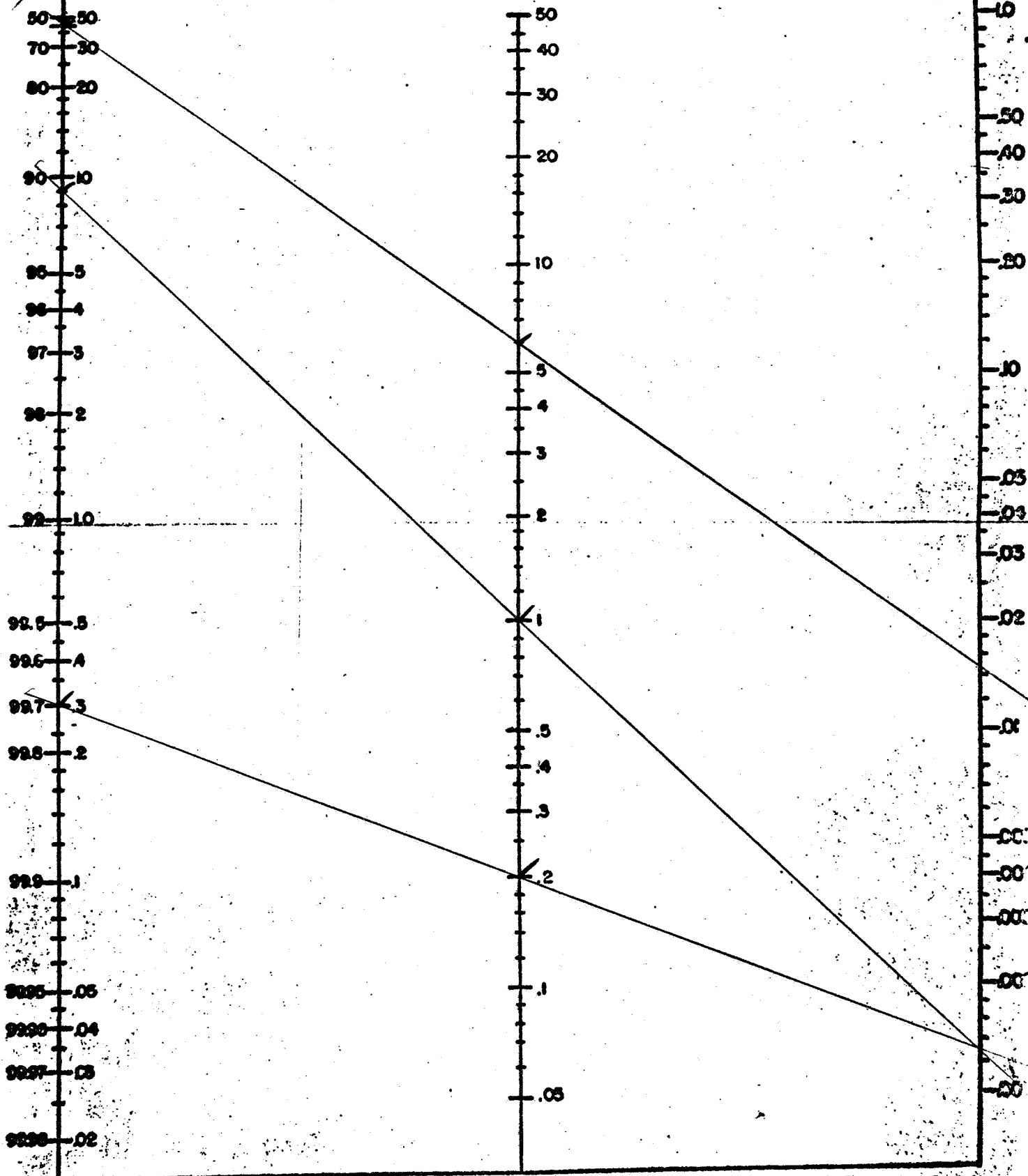
0. CLR
0. PGM
0. SBR
0. CLR
1000. RST
3. LOG
3. X:IT
0. $\Sigma+$
1.9098
1. LOG
2150.
3.33243846
3.33243846 X:IT
4. $\Sigma+$
3.7184
2. LOG
4640.
3.666517981
3.666517981 X:IT
4.33243846
5. $\Sigma+$
3. STD DEV I Σ
1.552571445 Y
1.552571445 STD DEV X:IT
0.333259327
5. DP
3.647344539 15
3.647344539 ILOG
4439.607118 LD 50
4439.607118 DP
-11.90790664 Y INTERCEPT
-11.90790664 X:IT
4.635675752 Slope





EXPECTED

$\frac{O}{E} - 1$
OBSERVED MINUS
EXPECTED % EFFECT



No. 1. NOMOGRAPH FOR OBTAINING $(Chi)^2$ FROM EXPECTED % EFFECT AND OBSERVED-EXPECTED % EFFECT