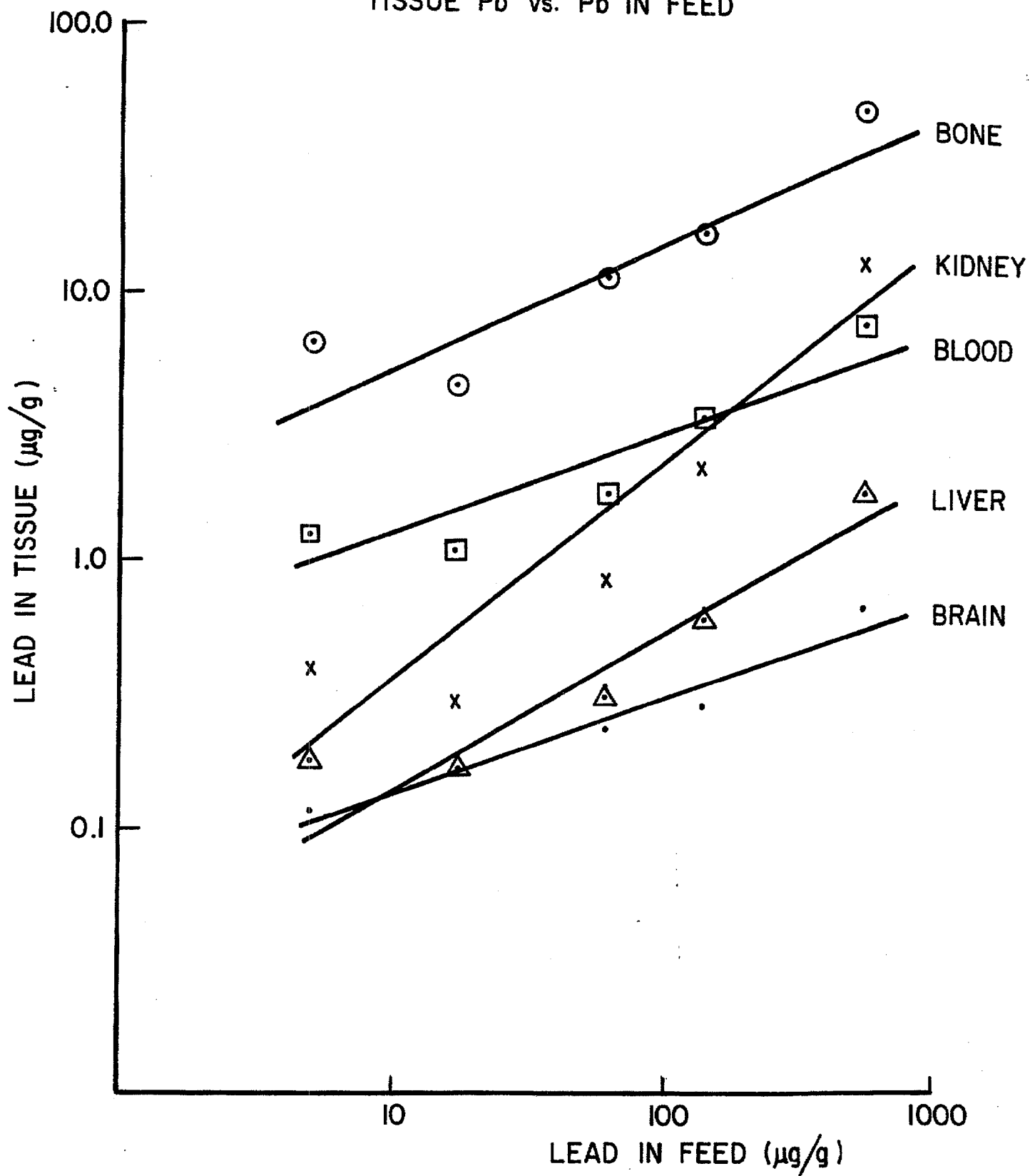


TWO YEAR LEAD FEEDING STUDY (RATS)

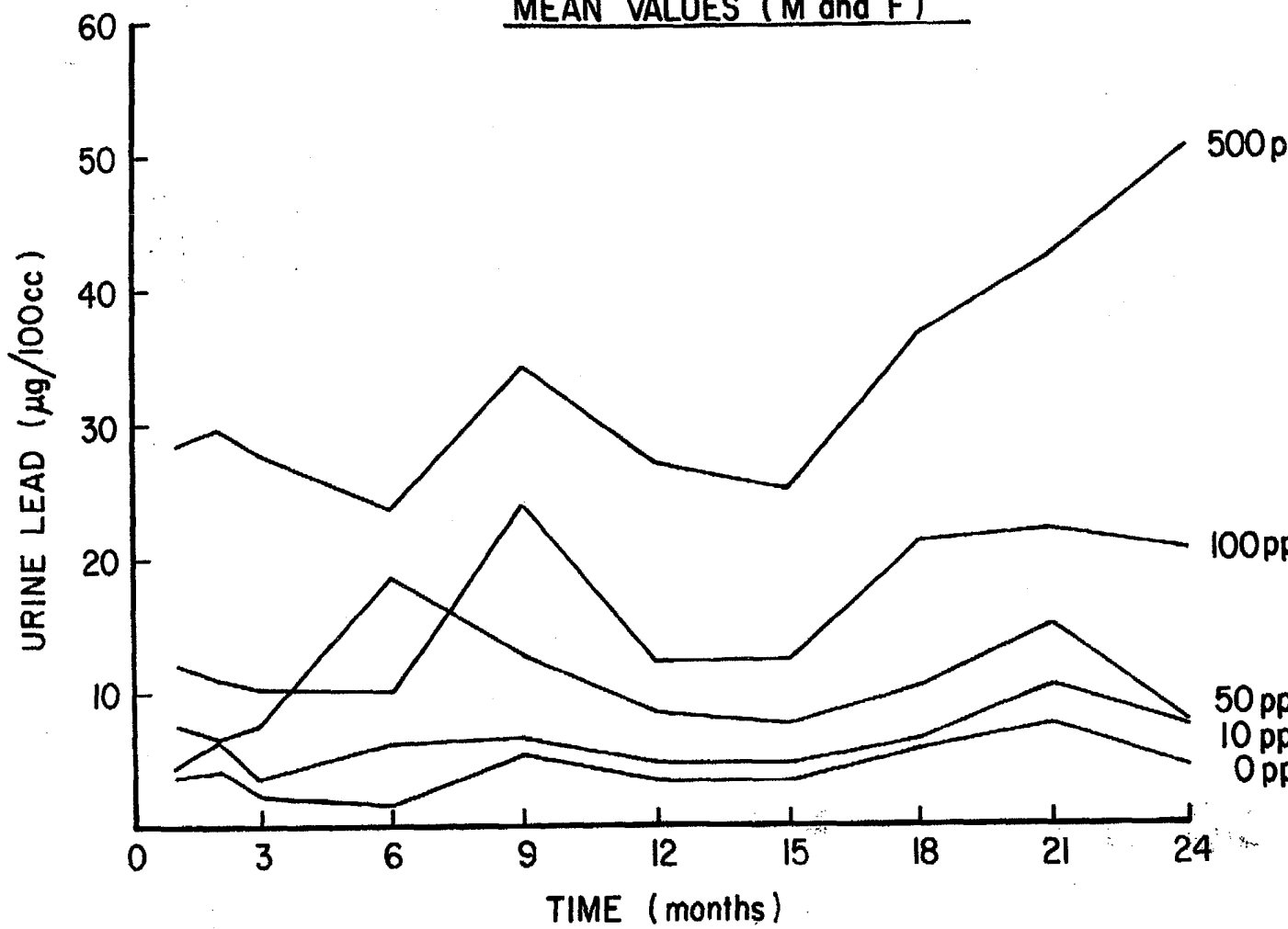
TISSUE Pb vs. Pb IN FEED





TWO YEAR LEAD FEEDING STUDY IN DOGS

URINE LEAD vs. TIME
MEAN VALUES (M and F)



PB LEVELS IN BLOOD, KIDNEY, AND BONE
(MEAN VALUES AT 24 MOS.)

DIETARY Pb (ppm)	BLOOD Pb ($\mu\text{g}/100\text{ ml}$)		KIDNEY Pb ($\mu\text{g}/\text{g}$)		BONE ($\mu\text{g}/\text{g}$)
	DOG	RAT	DOG	RAT	DOG
0	15.8	12.5	0.2	0.4	4.9
10	16.7	11.1	0.4	0.3	6.2
50	31.5	18.8	0.7	0.9	6.4
100	42.6	35.9	1.2	2.7	10.4
500	80.4	78.4	2.9	15.1	17.4
HUMAN (NORMAL RANGE)	11-40		0.3-1.4		4.7

SUMMARY TWO-YEAR LEAD FEEDING STUDY (RATS & DOGS)

SIGNIFICANT EFFECTS OF DIETARY LEAD

DOSE LEVEL	DOGS	RATS
0	NONE	NONE
10	↑ Pb IN BLOOD, URINE, FECES, LIVER AND KIDNEY	↑ Pb IN URINE, FECES, AND KIDNEY ↑ STIPPLED CELLS
50	↑ Pb IN BRAIN	↑ Pb IN BLOOD, BONE, BRAIN, AND LIVER
100	↓ ALA-D	↓ ALA-D
	II	II

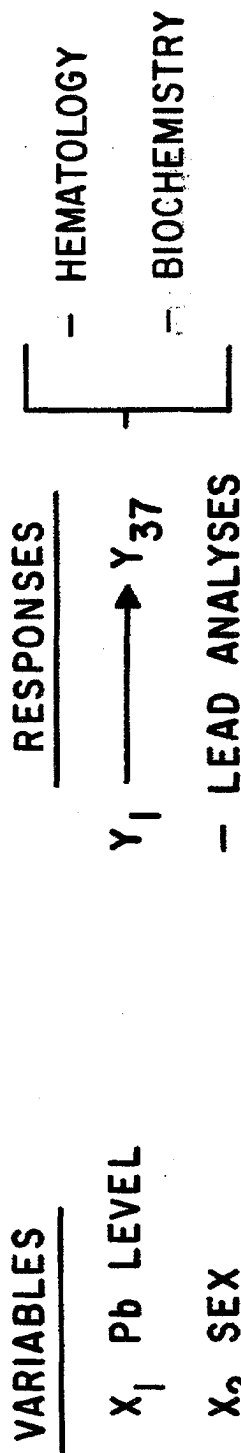
CONTINUED

SUMMARY · TWO-YEAR LEAD FEEDING STUDY (RATS & DOGS)

SIGNIFICANT EFFECTS OF DIETARY LEAD

<u>DOSE LEVEL</u>	<u>DOGS</u>	<u>RATS</u>
500	↑ Pb IN BONE ↑ DALA AND STIPPLED CELLS	↑ MORTALITY (♂) ↑ KIDNEY CHANGES AND TUMORS (♂) ↑ DALA
1000	_____	↓ Hb AND Hct. ↓ WT. GAIN IN ADULTS
2000	_____	[↓ WT. OF WEANLINGS ↓ KIDNEY LESIONS OF WEANLINGS
		KIDNEY TUMORS (♀)

STATISTICAL ANALYSIS **ANALYSIS OF VARIANCE**

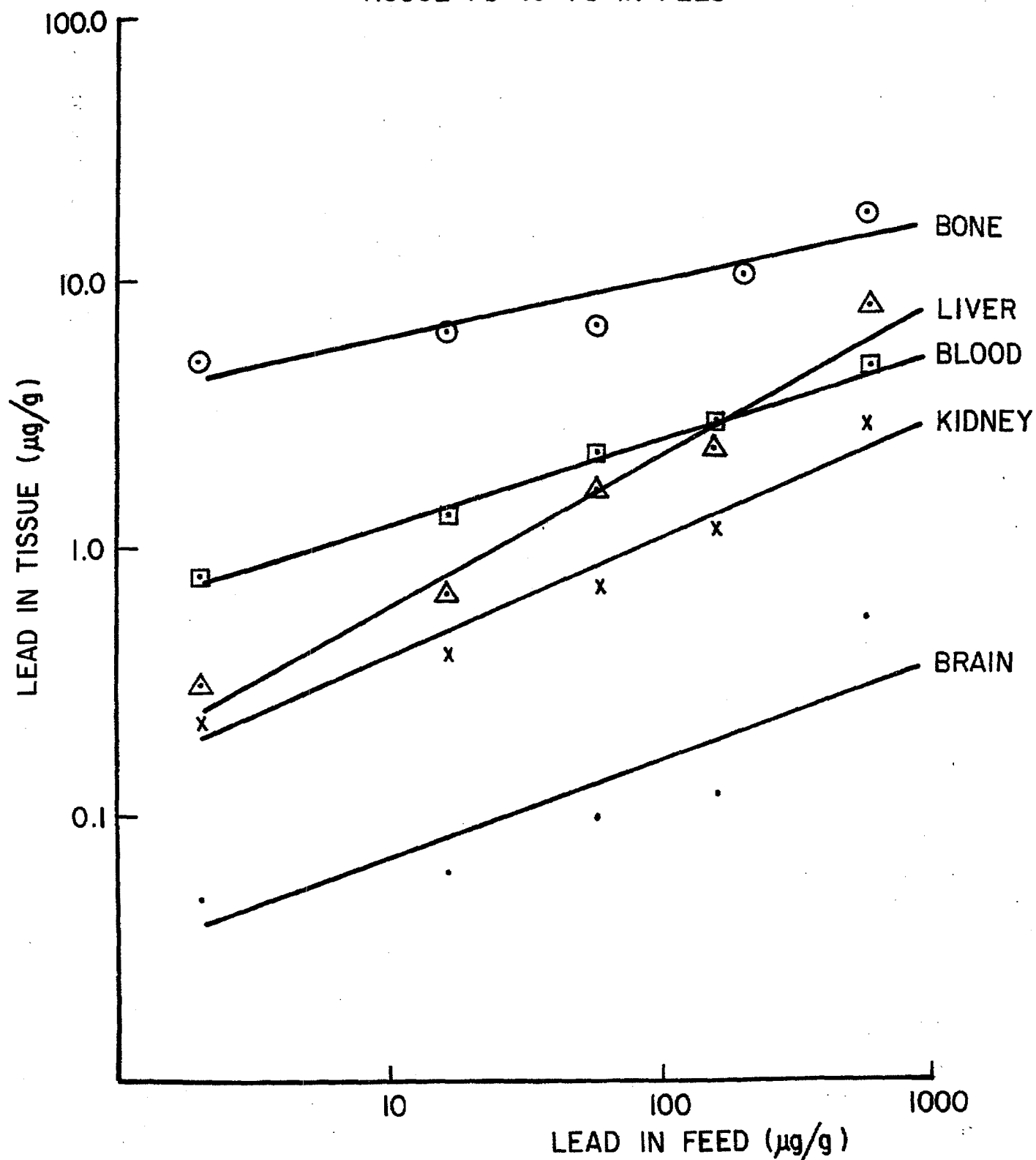


DOGS — PARTIALLY NESTED AND CROSSED DESIGN

RATS — METHOD OF UNWEIGHTED MEANS

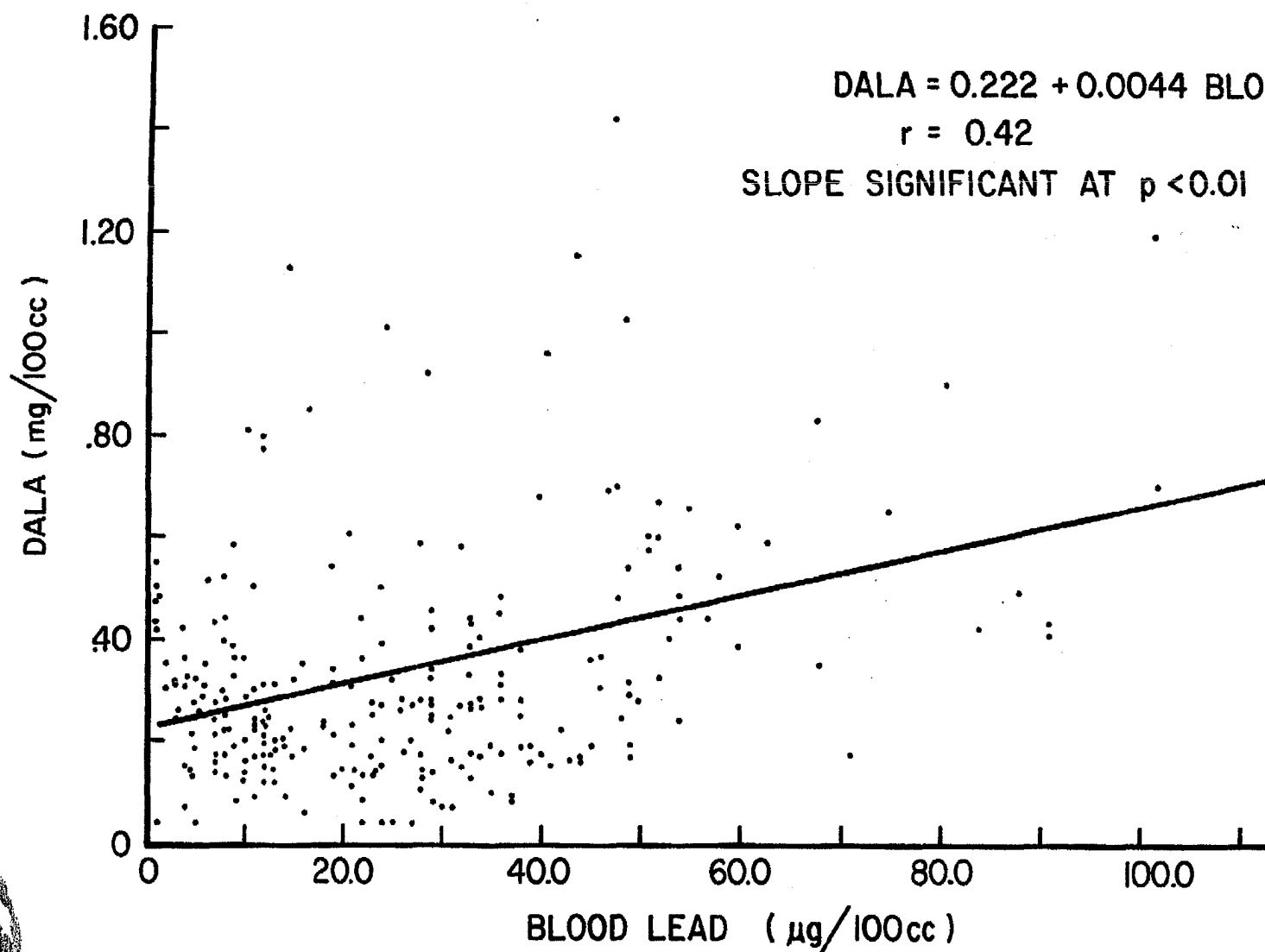
TWO YEAR LEAD FEEDING STUDY (DOGS)

TISSUE Pb vs. Pb IN FEED



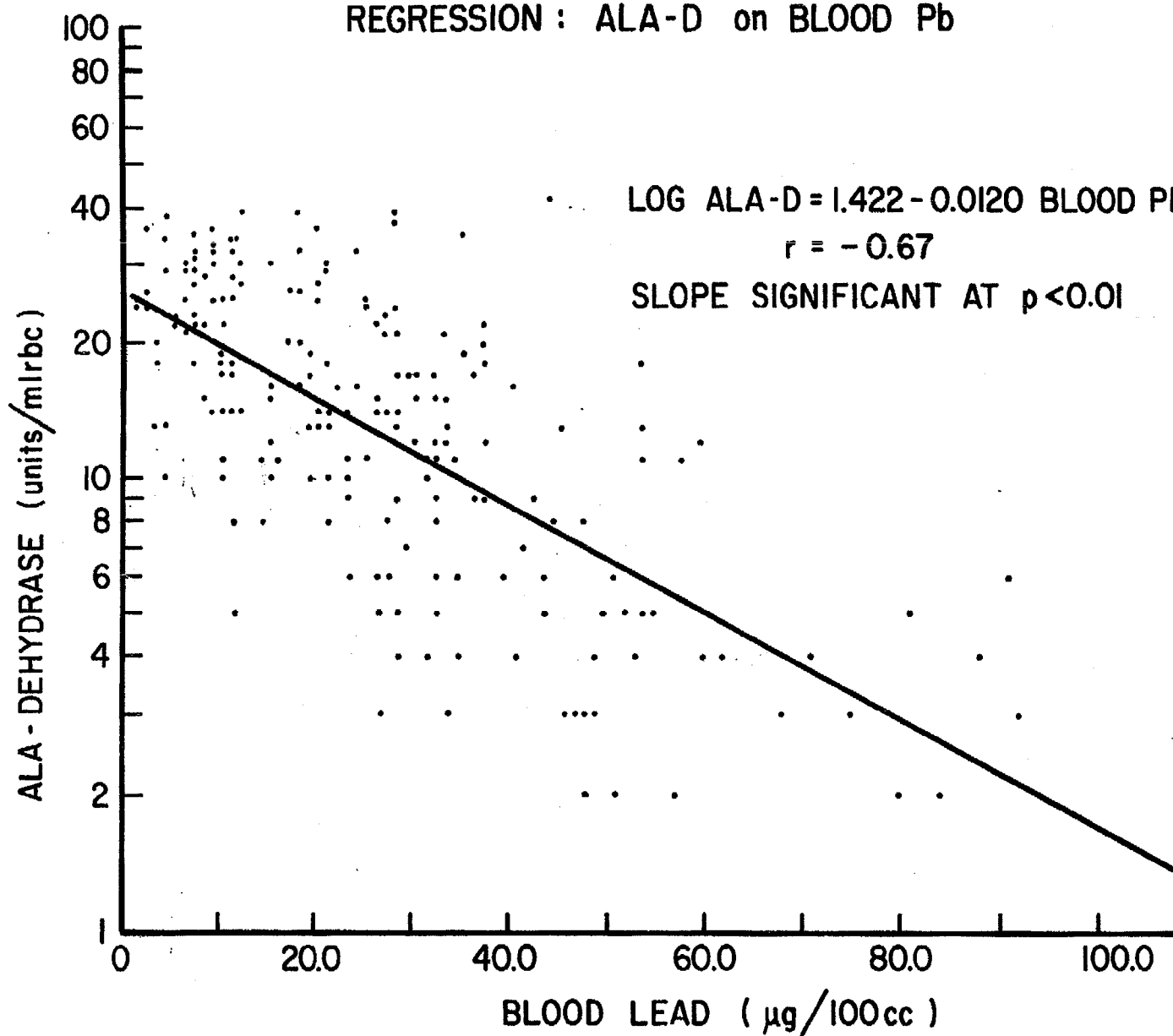
TWO YEAR LEAD FEEDING STUDY (DOGS)

REGRESSION : DALA on BLOOD Pb



TWO YEAR LEAD FEEDING STUDY (DOGS)

REGRESSION : ALA-D on BLOOD Pb



Day 1 two year lead finding study Urine Pb⁽³⁾ Regression Equations y = a + bx

N	y	Intercept (a)	Slope (b)	r ⁽¹⁾	r ² (2)	N
Urine Pb	ALA-Dehydro	19.96	-.306**	-.482	.232	231
Urine Pb	DALA	.181	.0106**	.694	.482	350
Urine Pb	Feces Pb	64.630	20.078**	.530	.281	389
Urine Pb	Urine Pb	.0323	.139**	.877	.768	37
Urine Pb	Bone Pb	4.495	.258**	.587	.345	37
Urine Pb	Brain Pb	.0256	.00840**	.709	.507	37
Urine Pb	Kidney Pb	.351	.0401**	.725	.525	37

(1) r = Correlation Coefficient

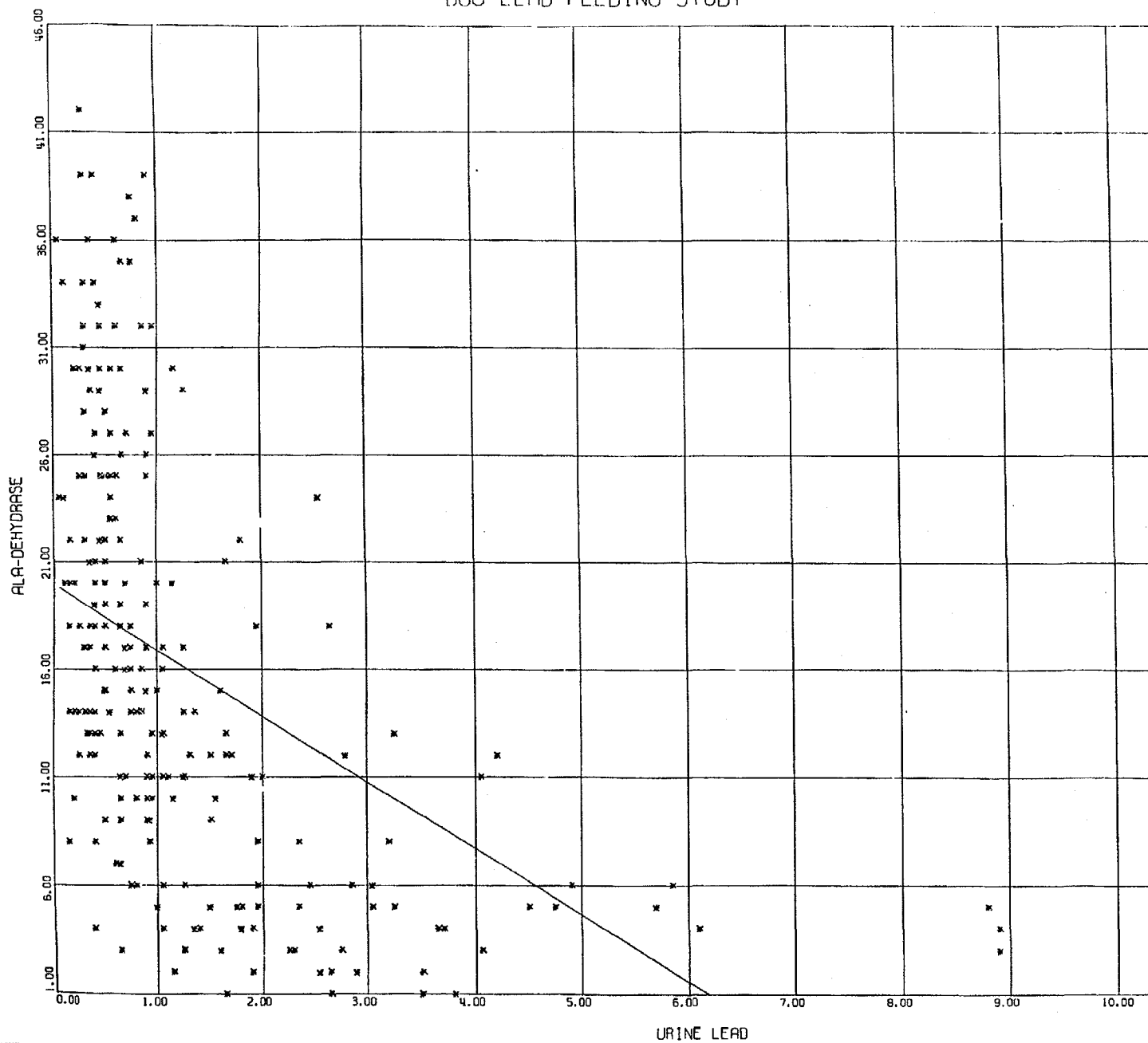
(2) r² = fraction of total variability in y explained by x

(**) Significantly different from zero at the .01 probability level

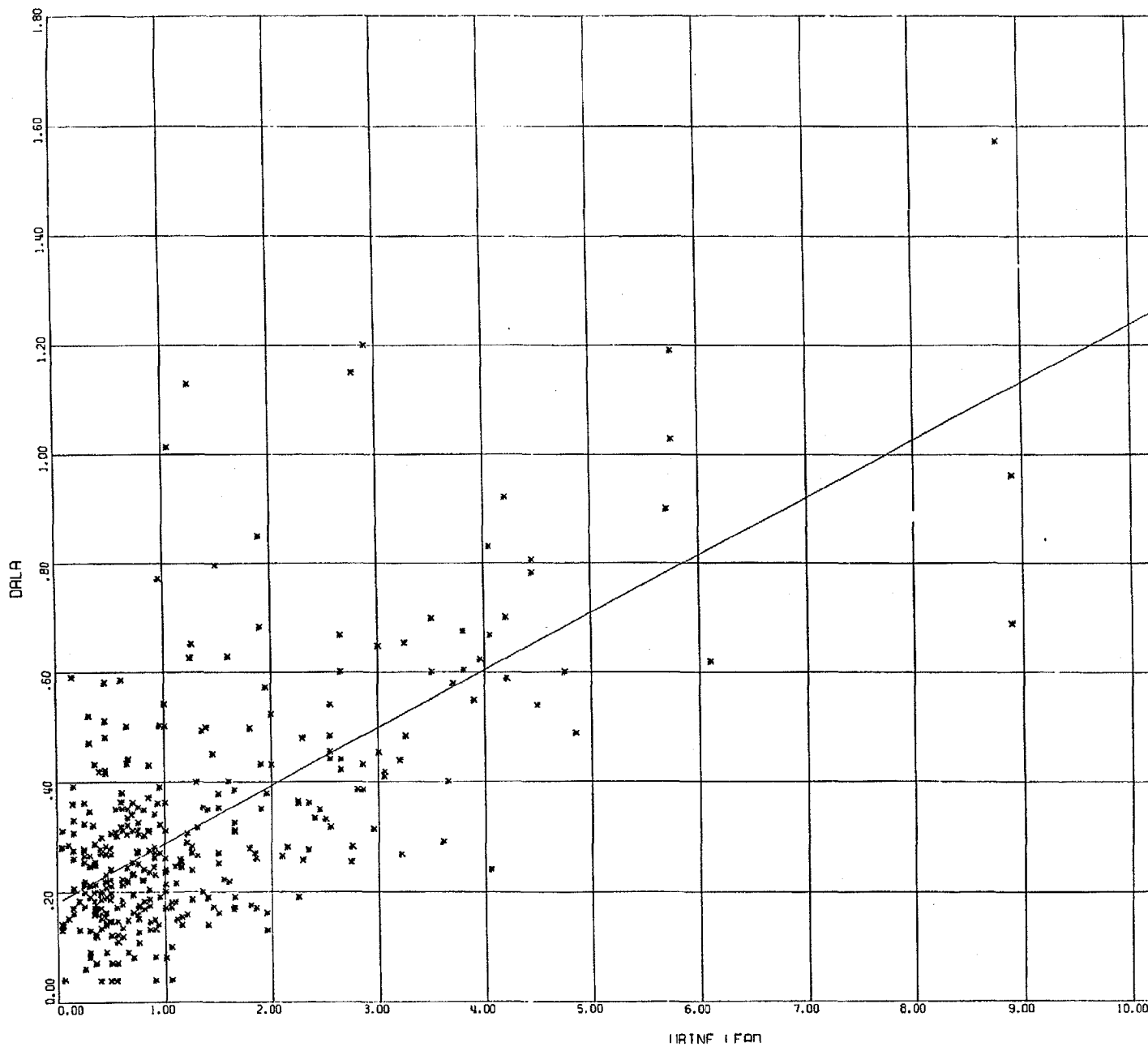
(3) Urine Pb multiplied by 10 in all regression analyses

N36834.01

DOG LEAD FEEDING STUDY

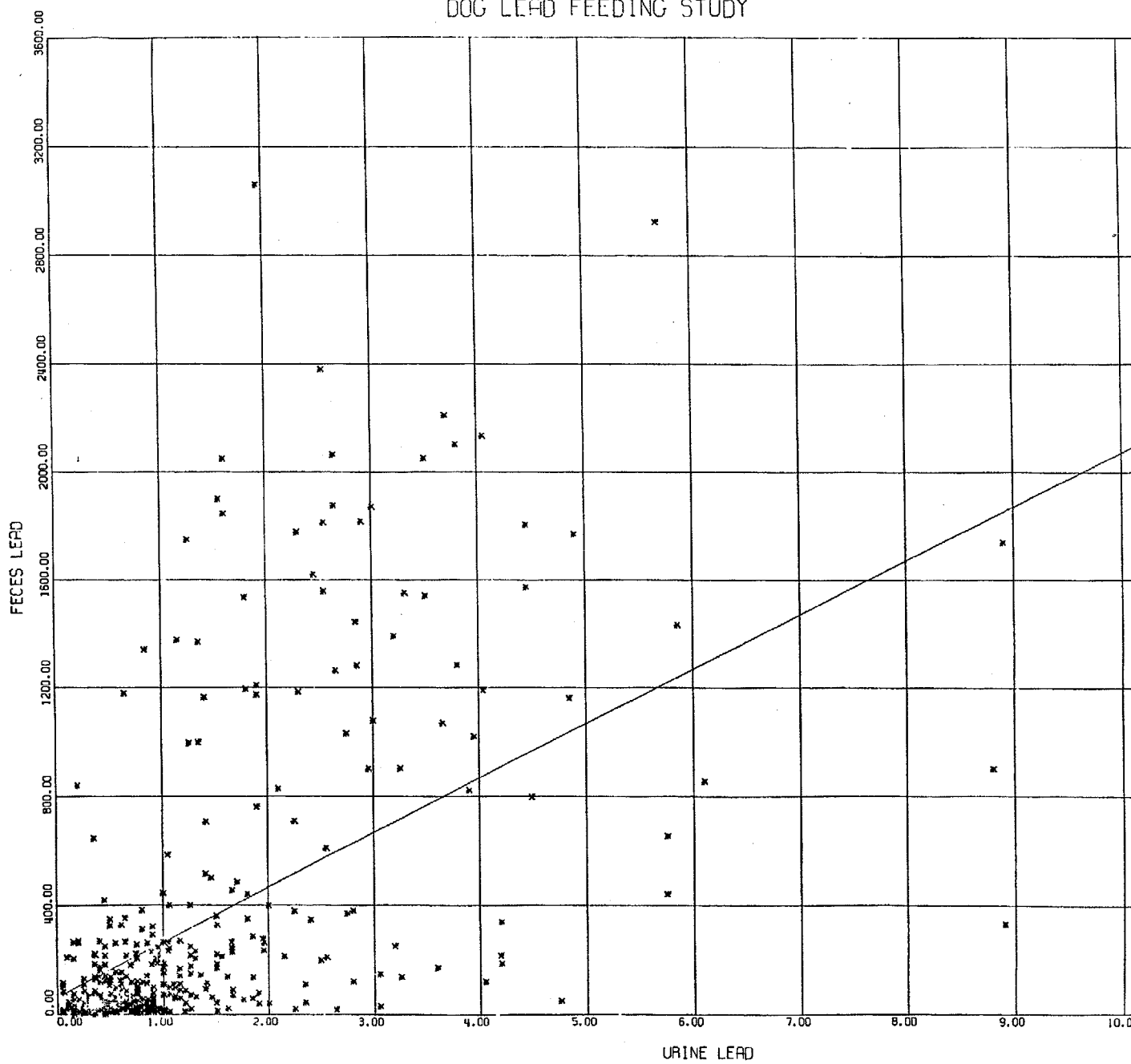


DOG LEAD FEEDING STUDY



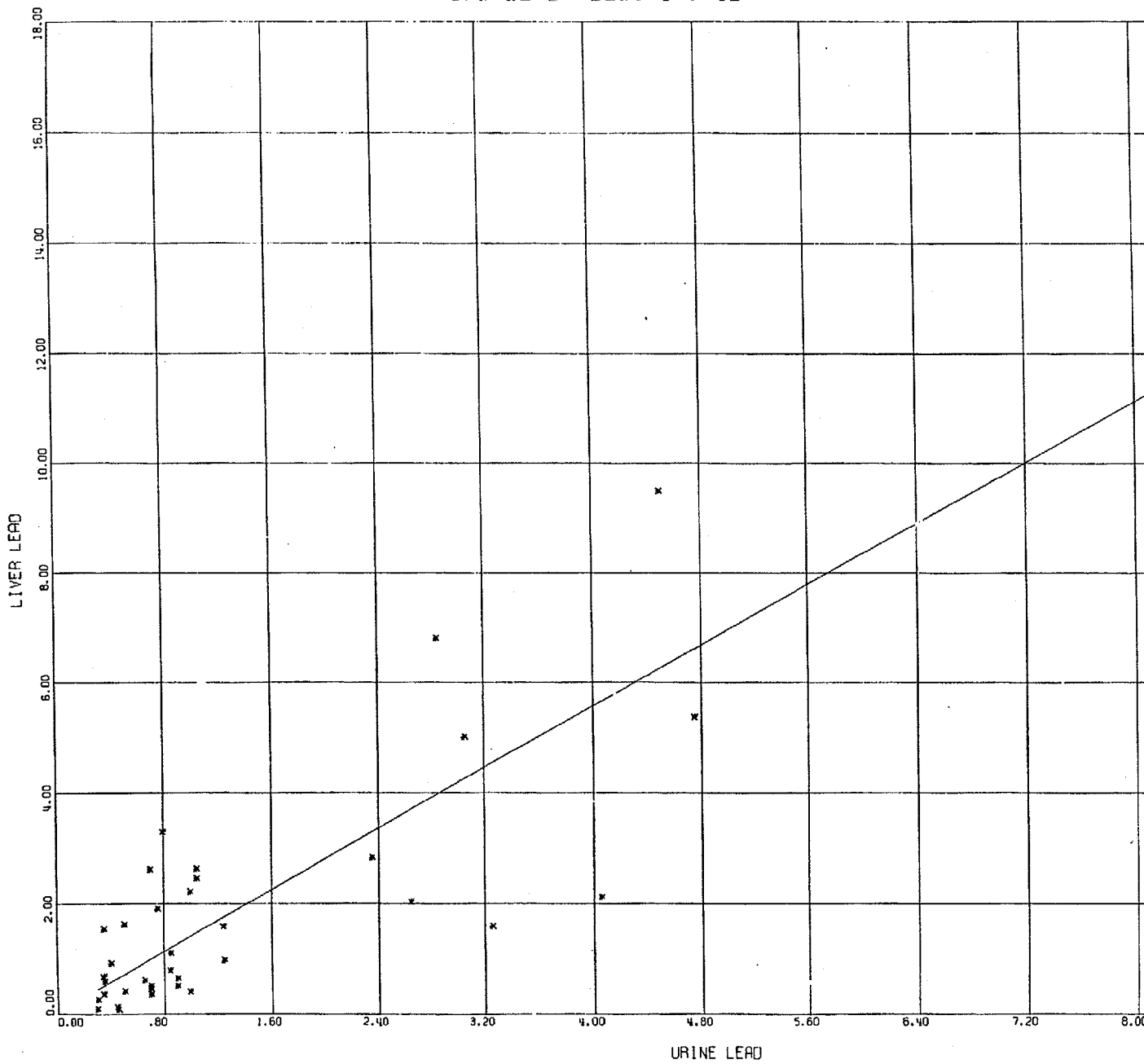
DUP050308477

DOG LEAD FEEDING STUDY



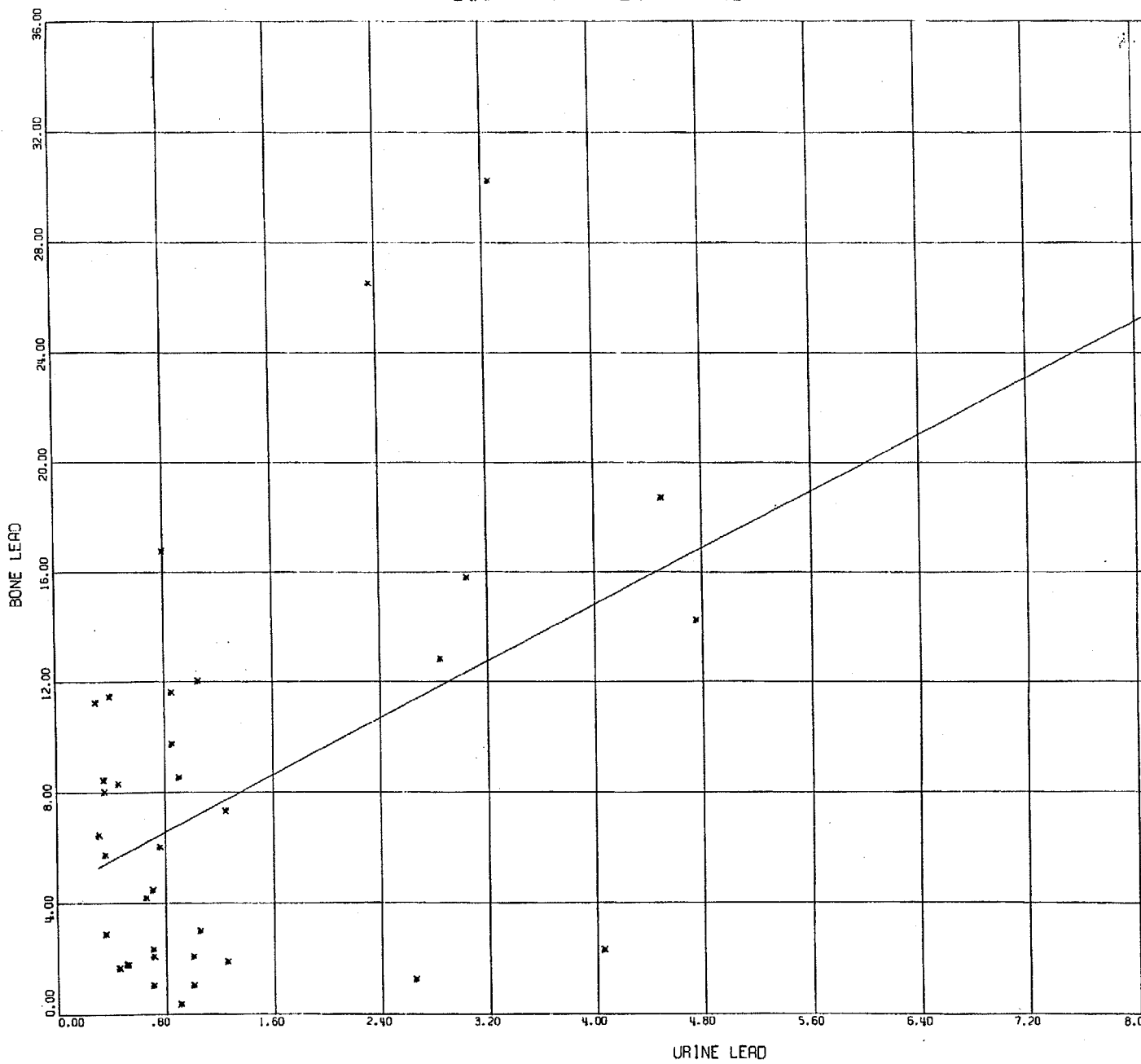
DUP050308478

DOG LEAD FEEDING STUDY



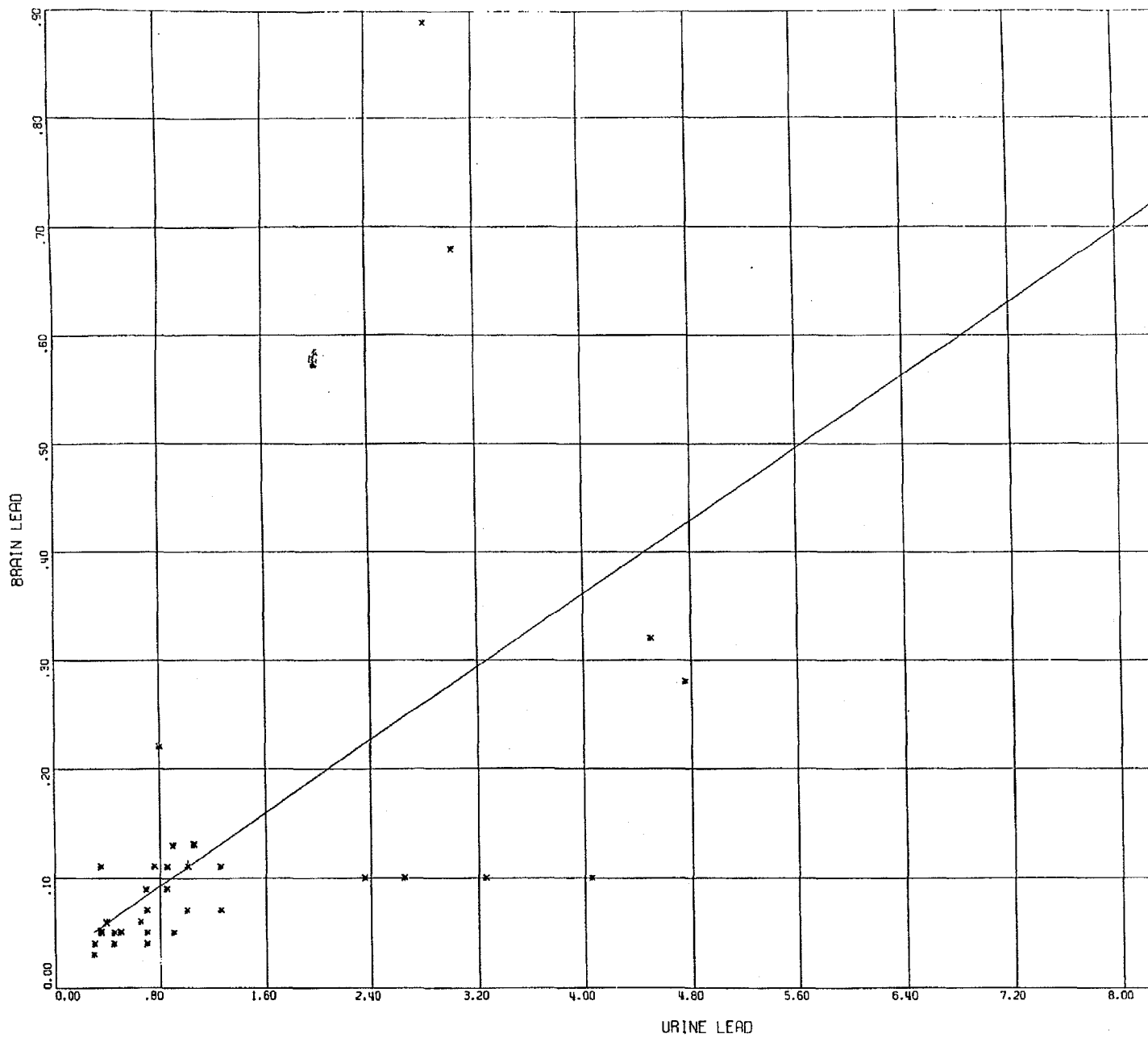
DUP050308479

DOG LEAD FEEDING STUDY



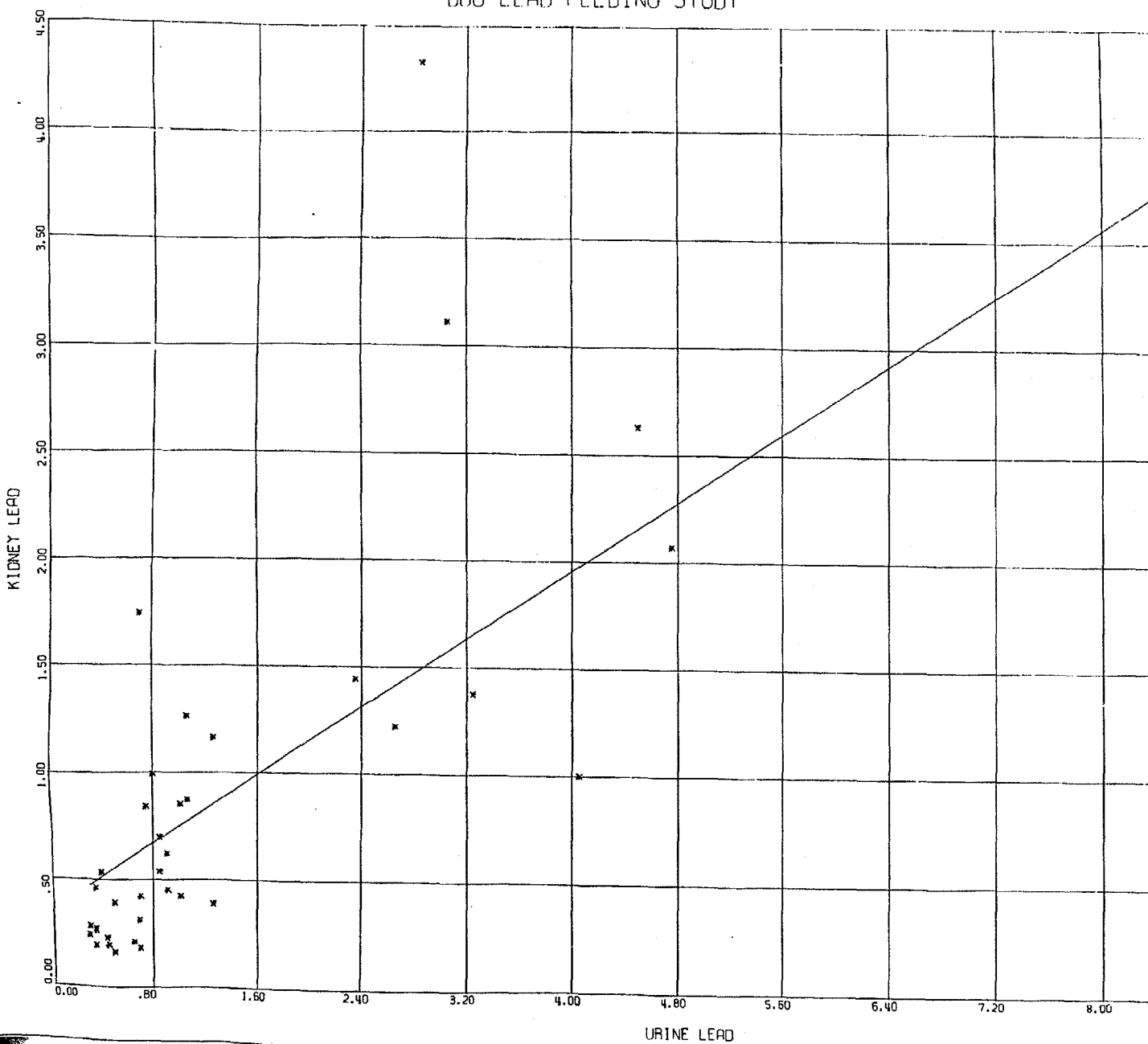
DUP050308480

DOG LEAD FEEDING STUDY



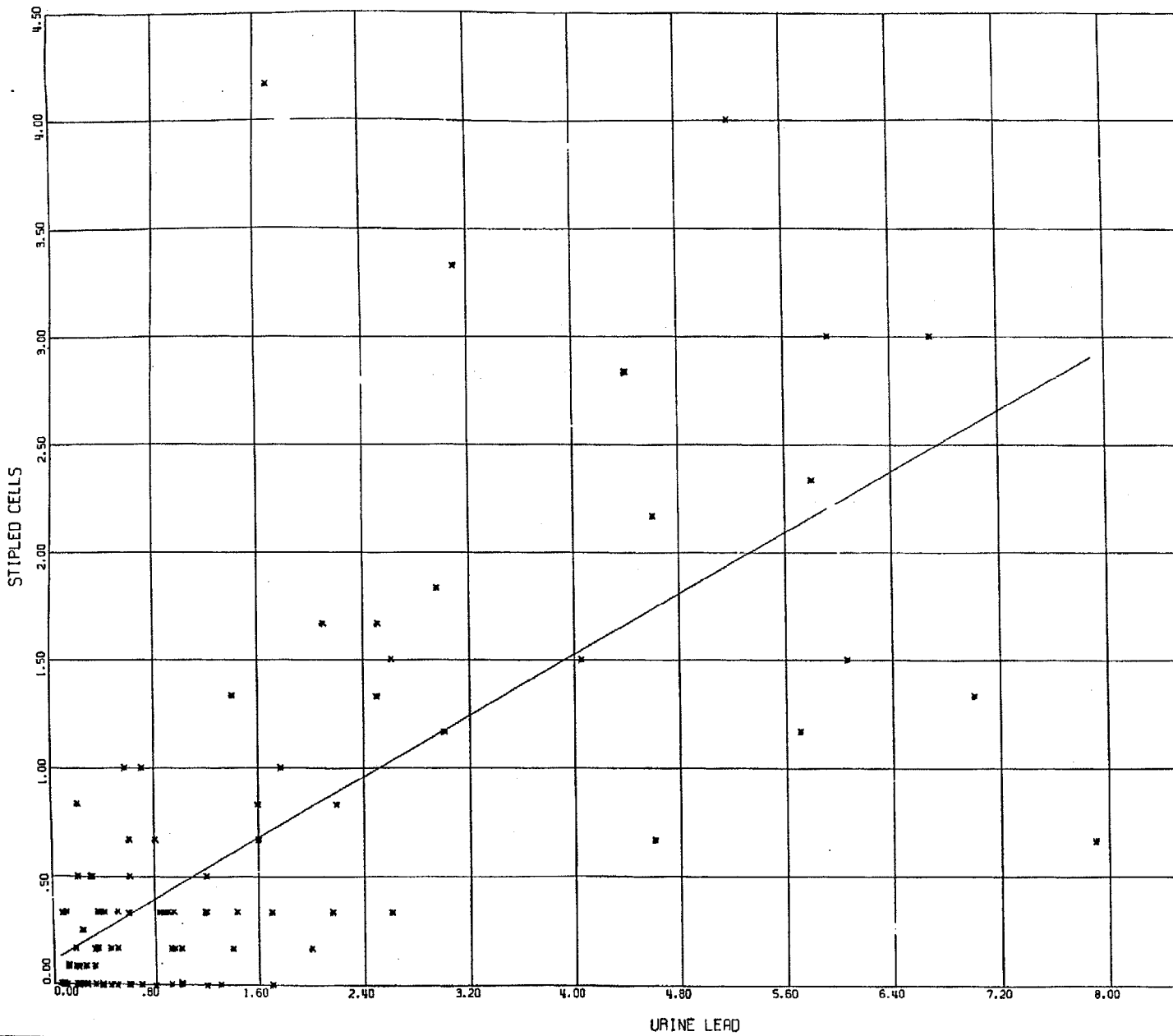
DUP050308481

DOG LEAD FEEDING STUDY

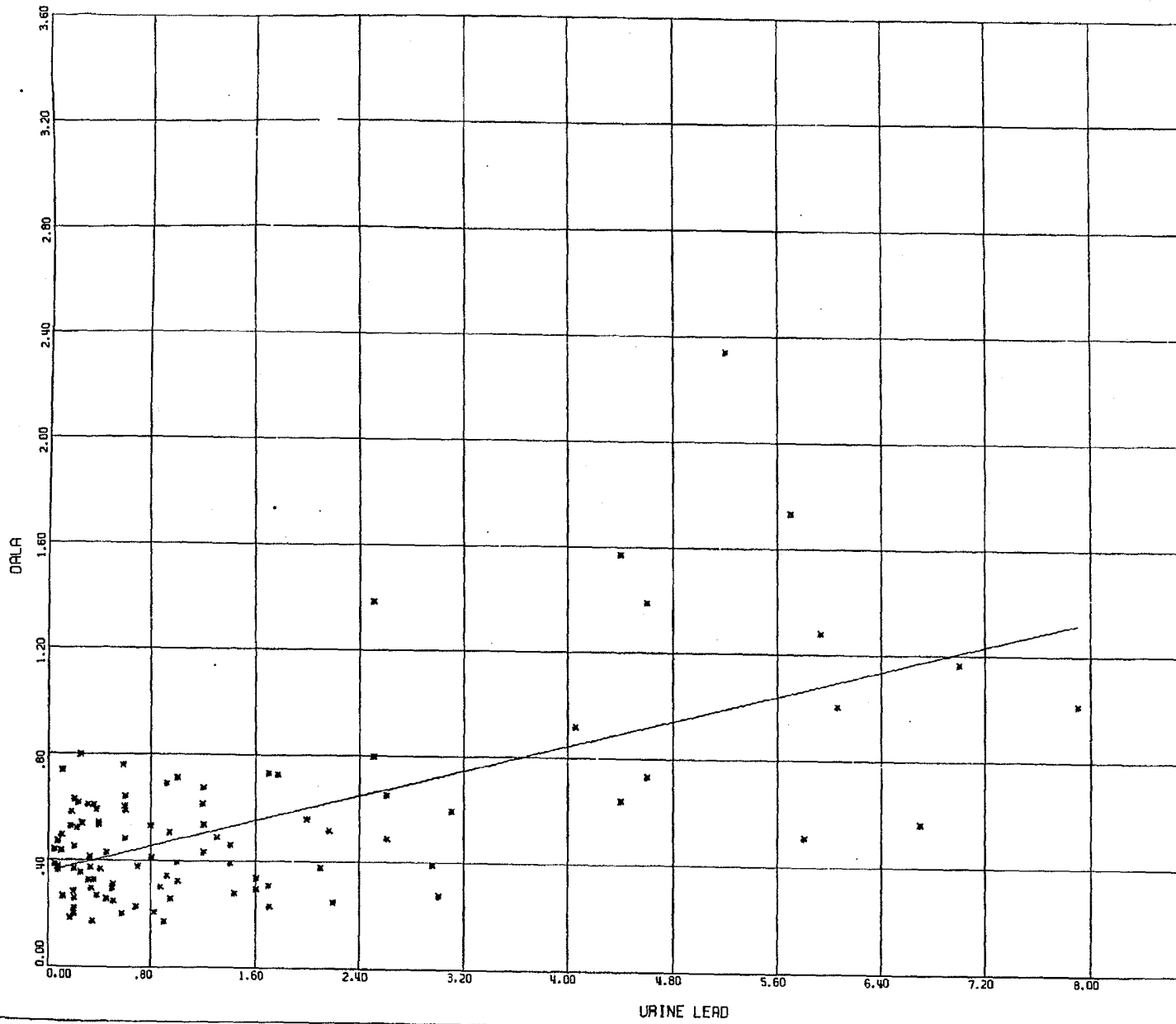


DUP050308482

RAT LEAD FEEDING STUDY

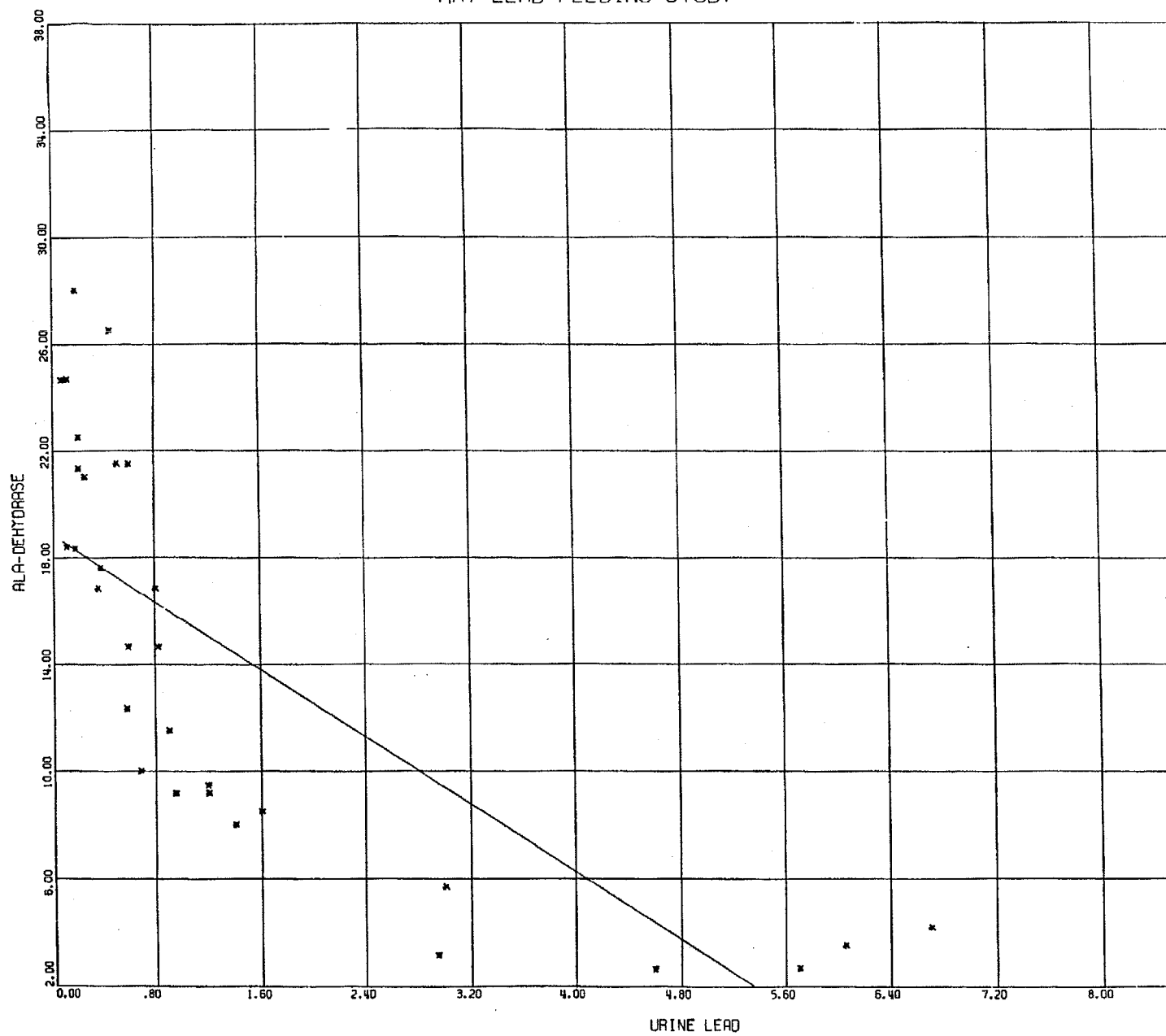


RAT LEAD FEEDING STUDY

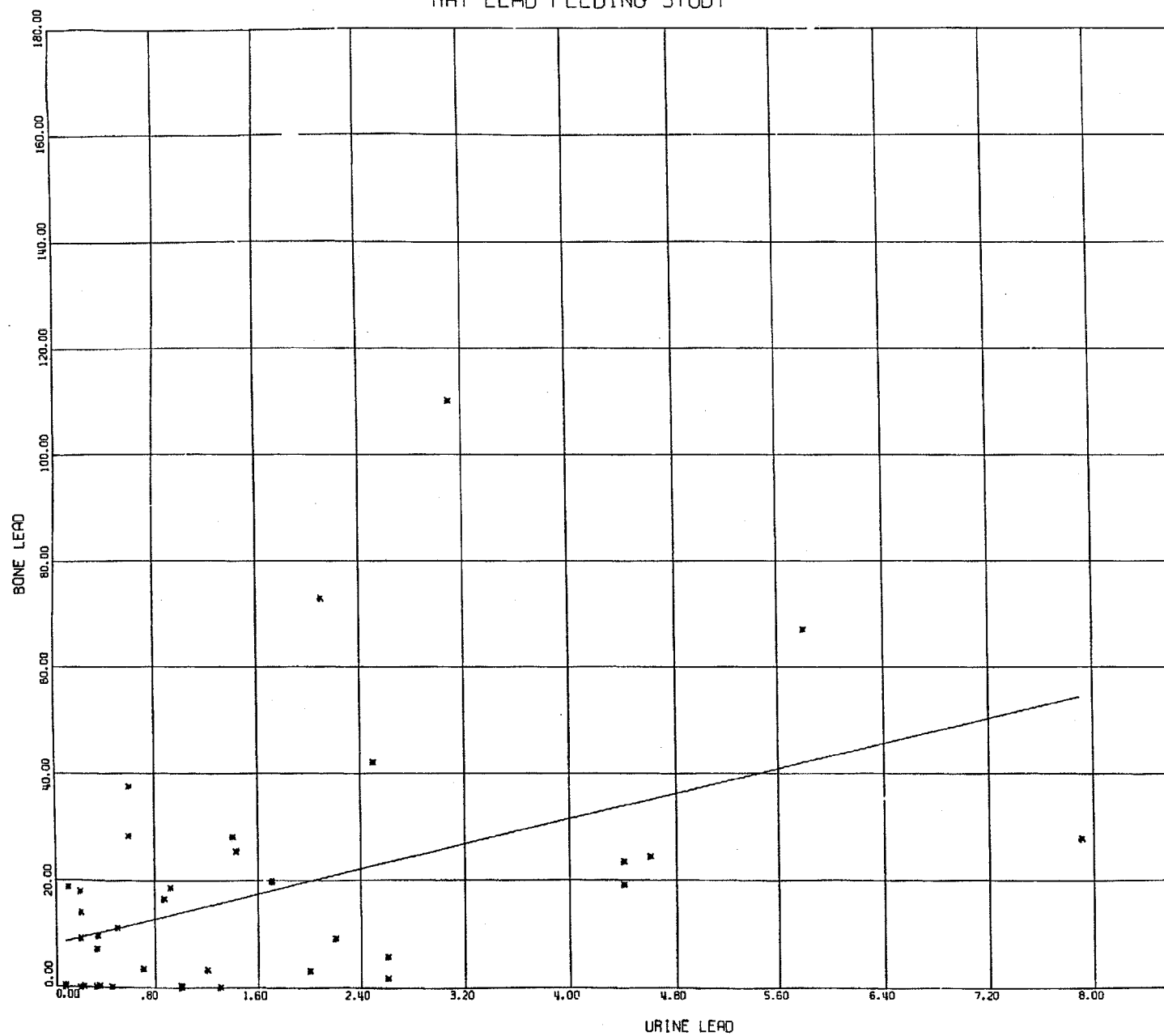


DUP050308484

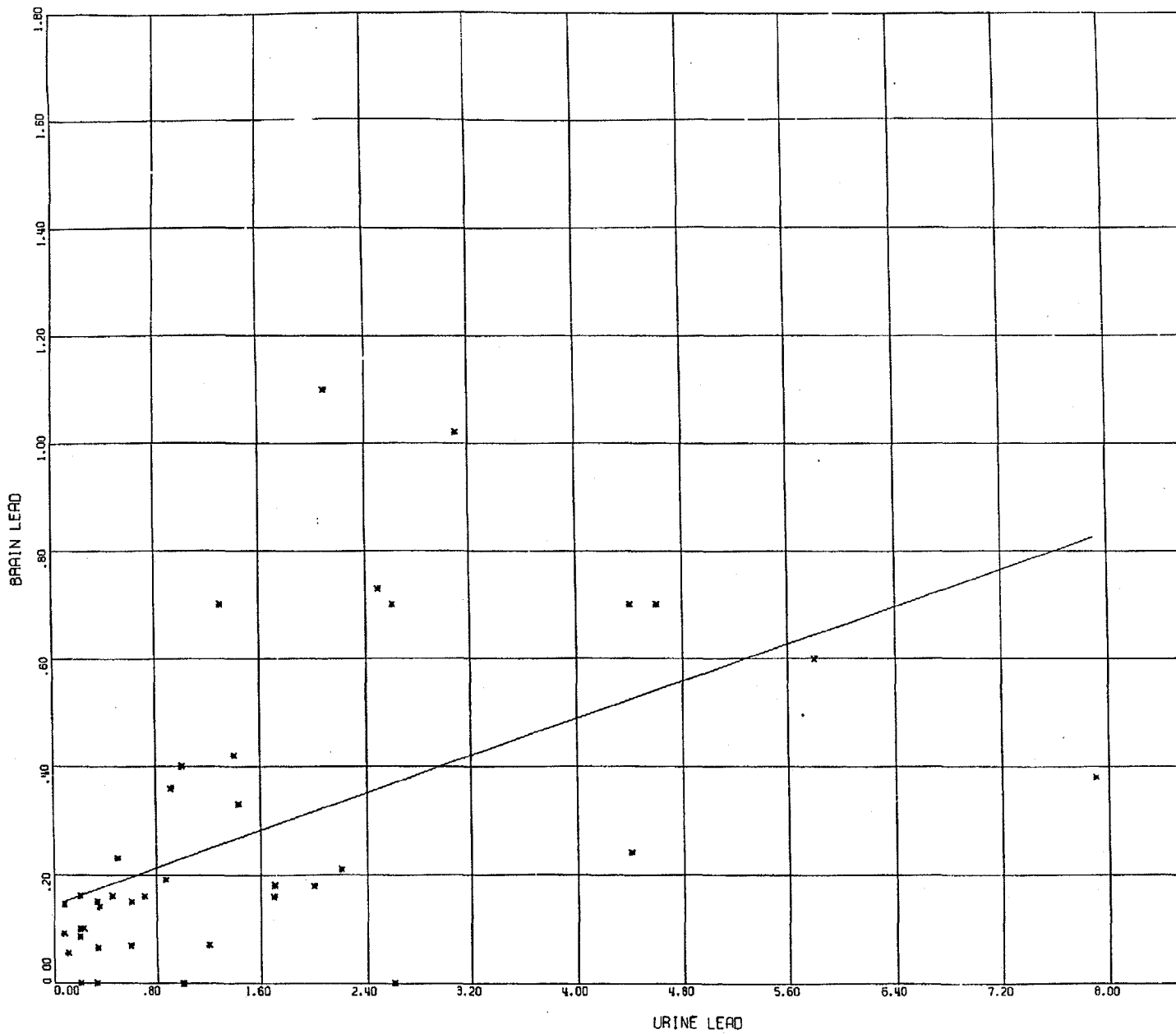
RAT LEAD FEEDING STUDY



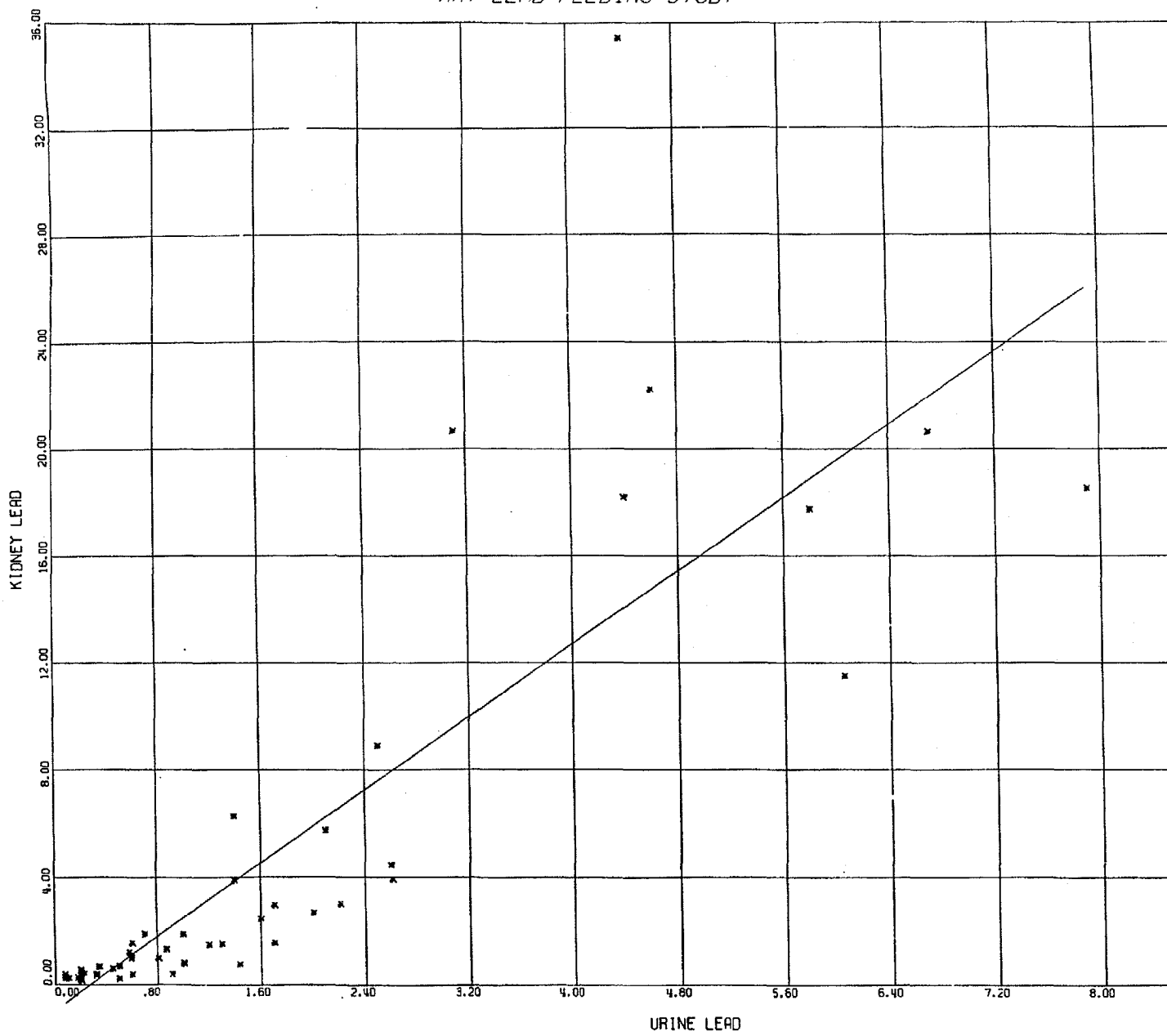
RAT LEAD FEEDING STUDY



RAT LEAD FEEDING STUDY

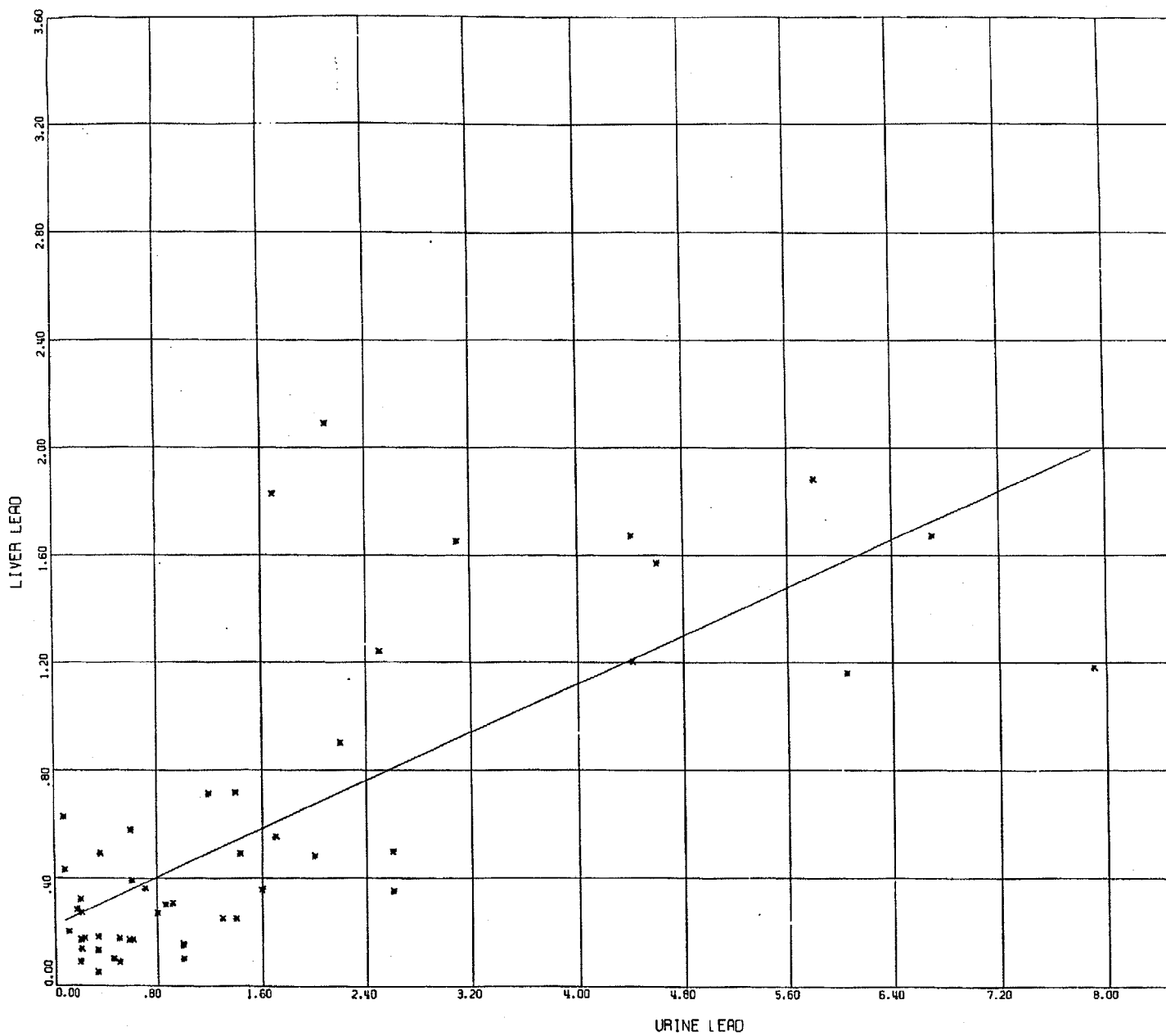


RAT LEAD FEEDING STUDY



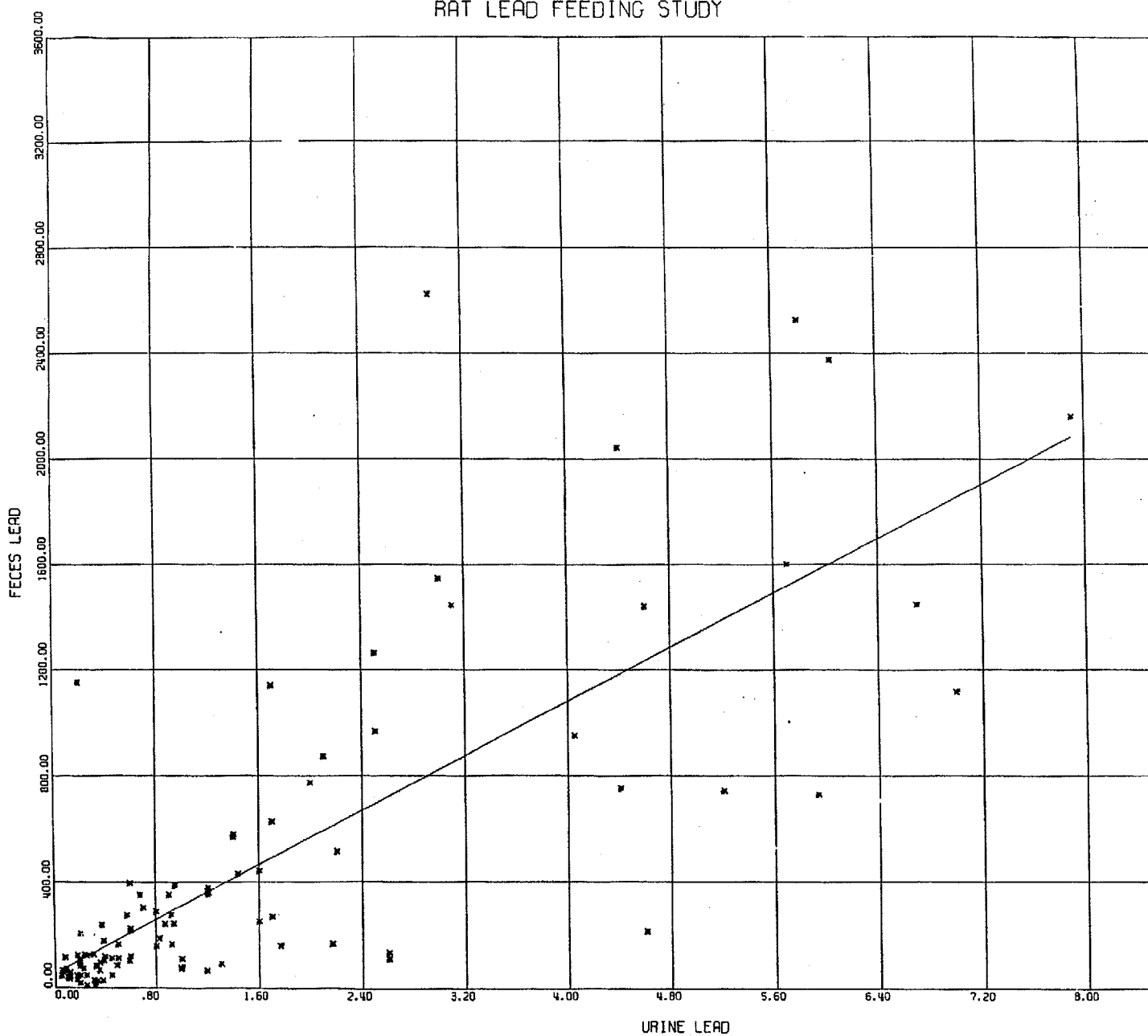
DUP050308488

RAT LEAD FEEDING STUDY

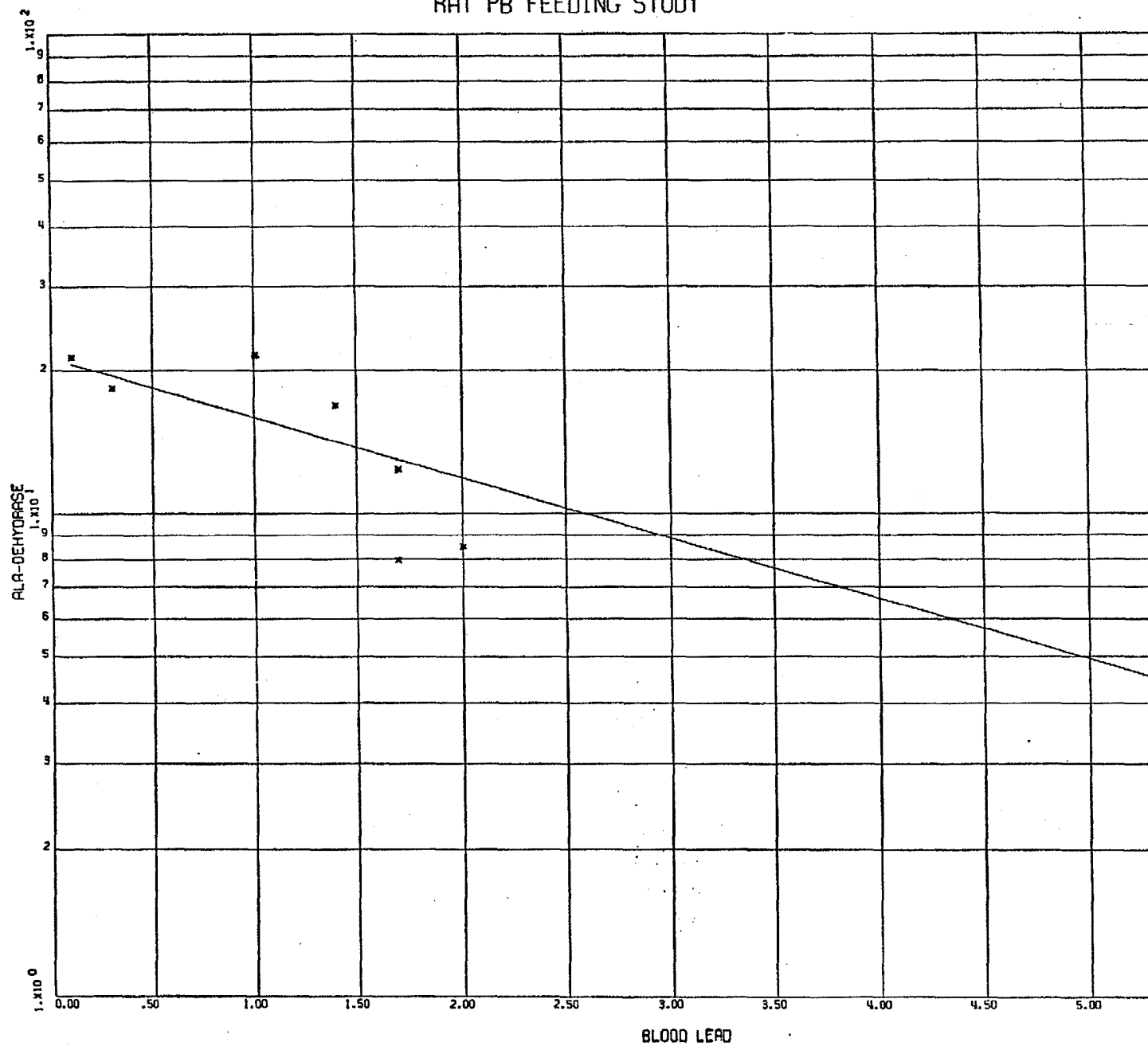


DUP050308489

RAT LEAD FEEDING STUDY

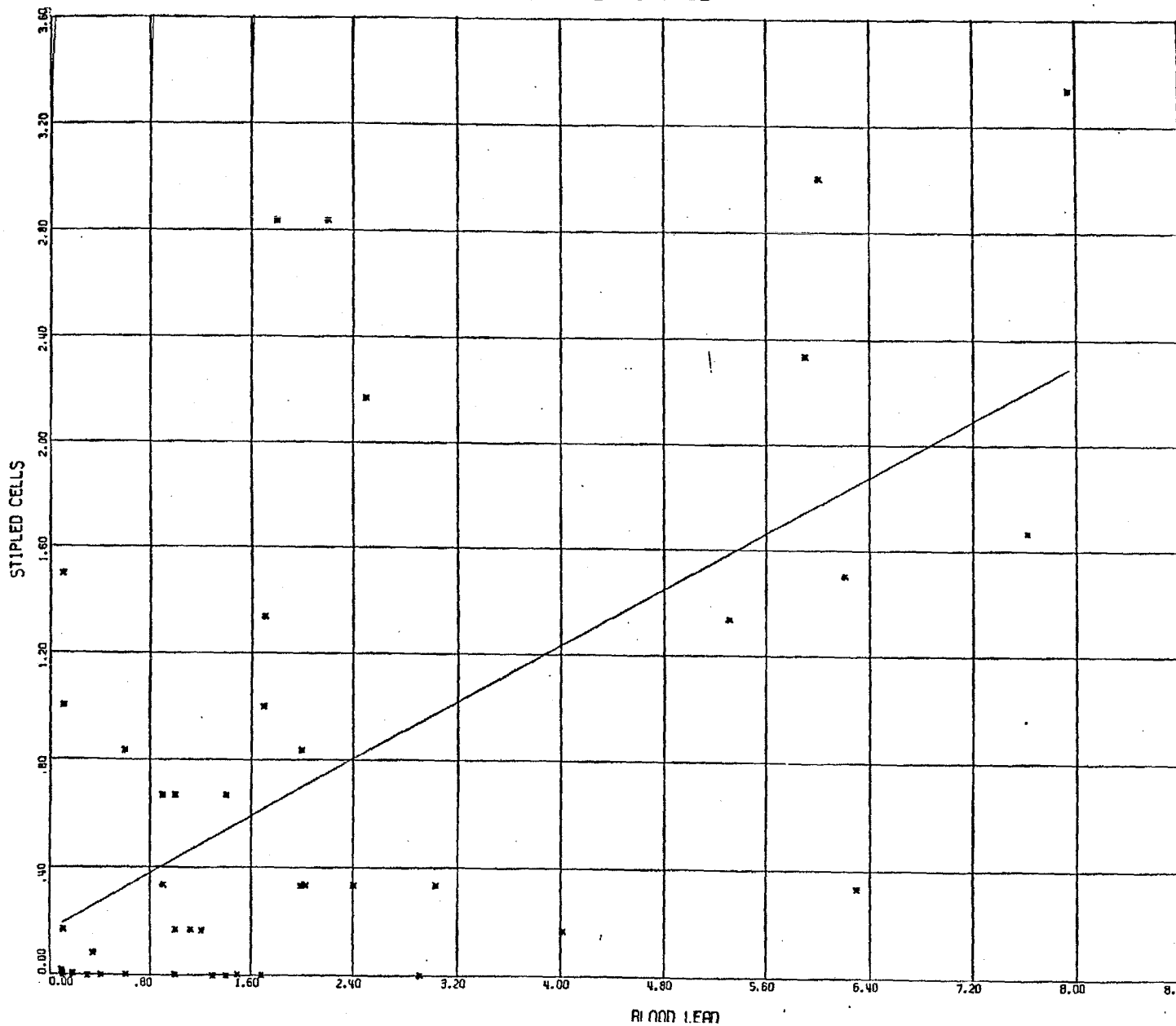


RAT PB FEEDING STUDY



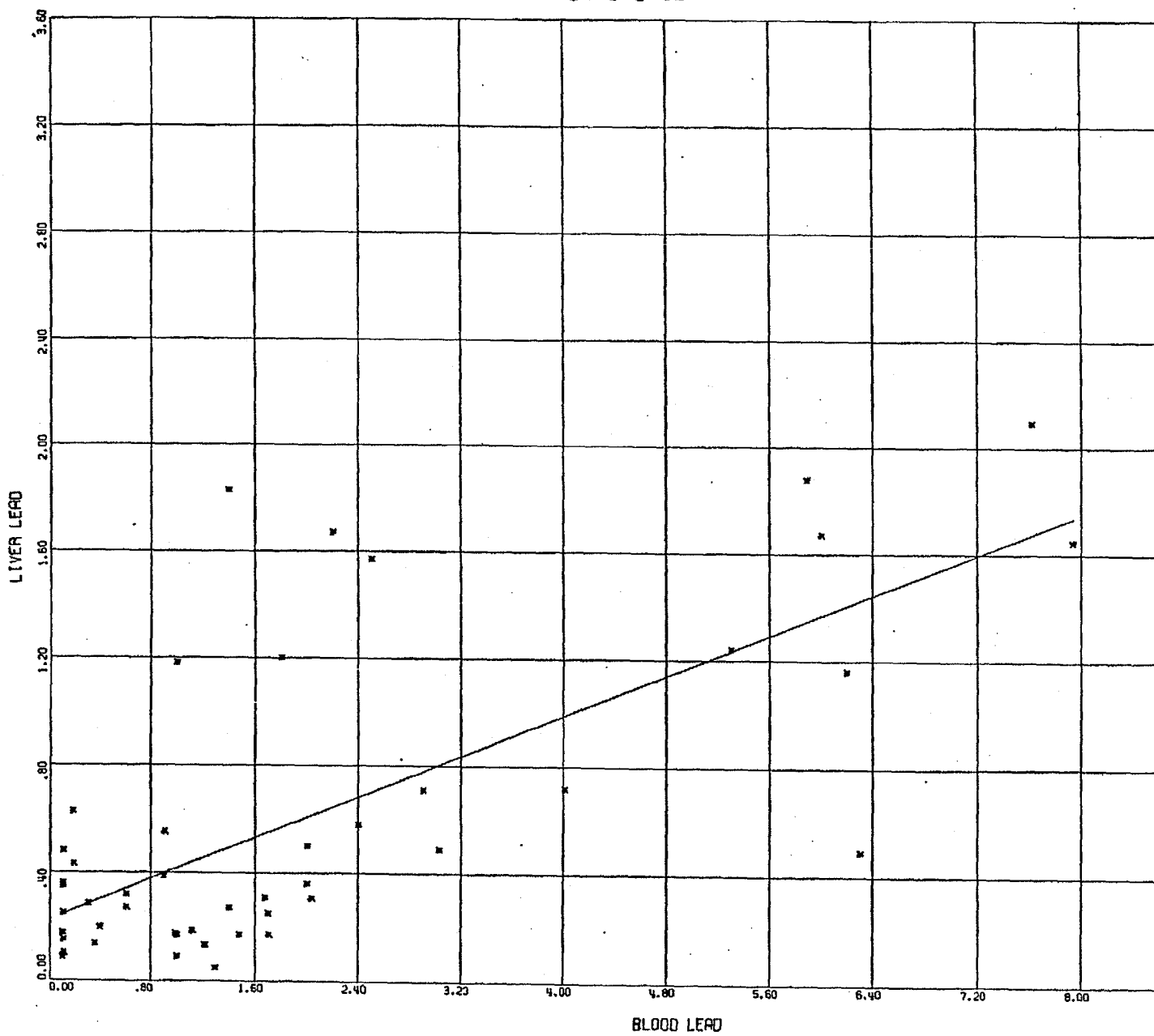
DUP050308491

RAT LEAD FEEDING STUDY



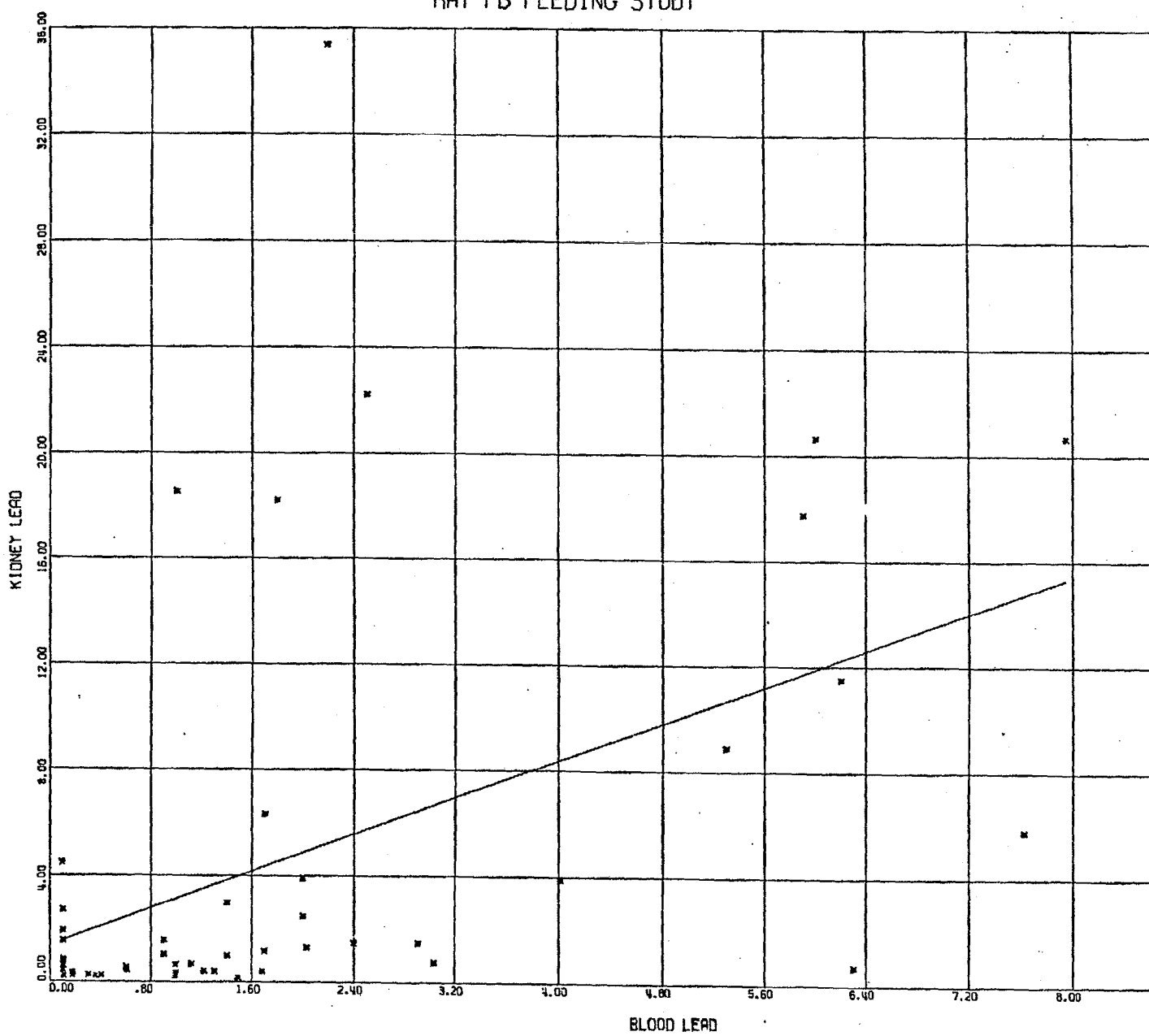
DUP050308492

RAT PB FEEDING STUDY



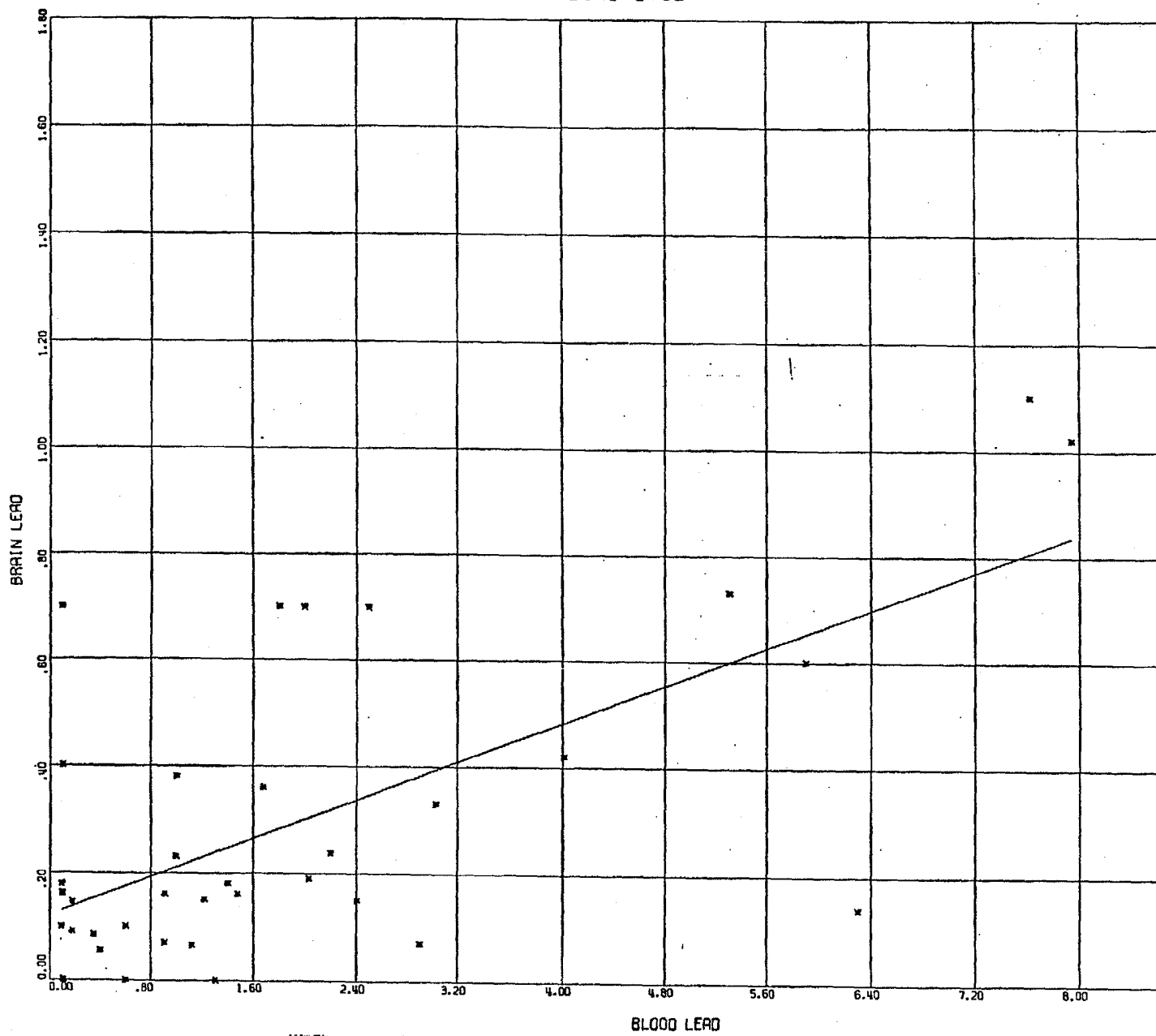
DUP050308493

RAT PB FEEDING STUDY



DUP050308494

RAT PB FEEDING STUDY



DUP050308495

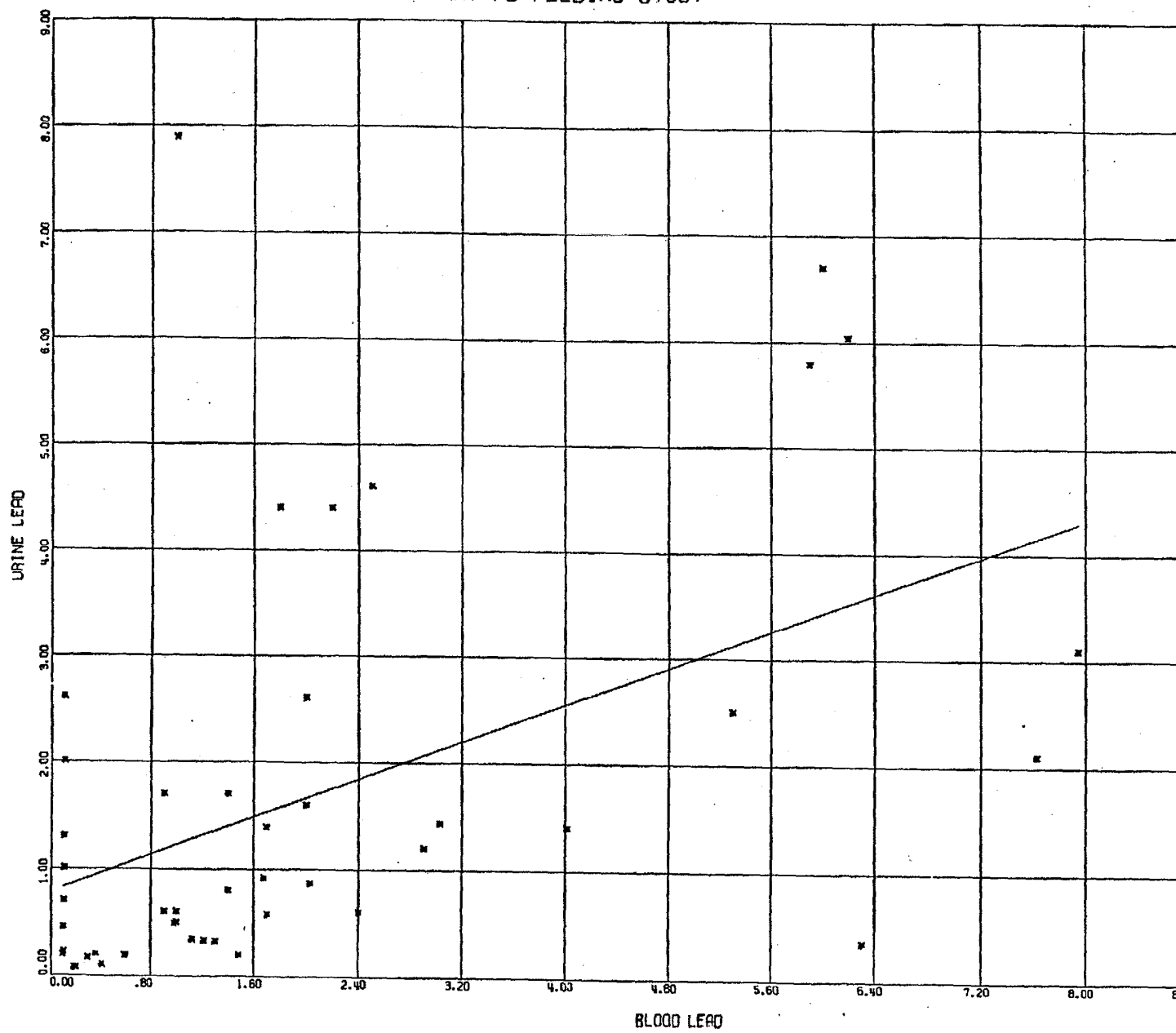
RAT PB FEEDING STUDY

The graph displays a positive linear correlation between Blood Lead and Bone Lead levels in rats. The data points are as follows:

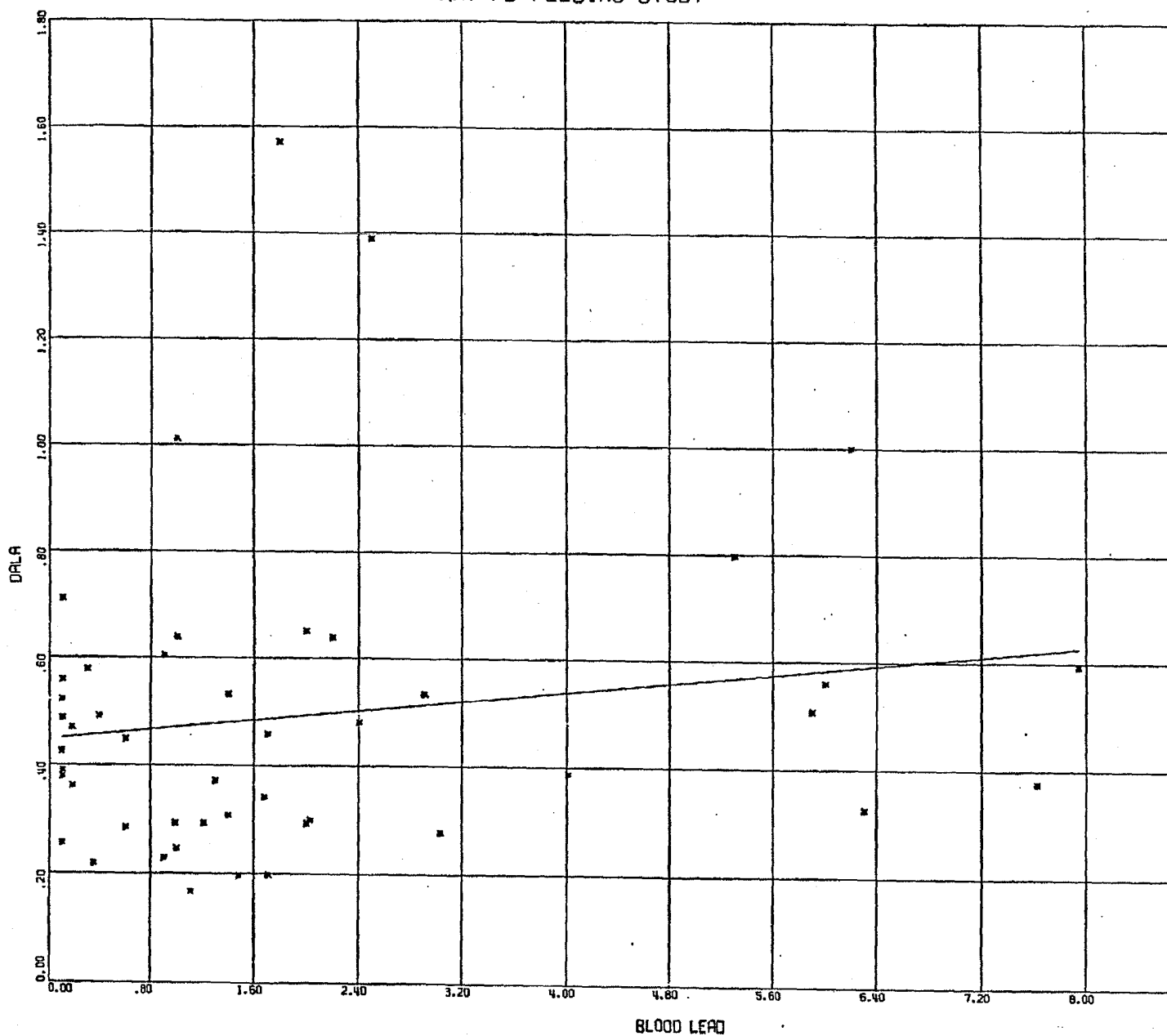
Blood Lead (X)	Bone Lead (Y)
0.1	5
0.2	2
0.3	15
0.4	18
0.5	12
0.6	19
0.7	10
0.8	20
0.9	28
1.0	27
1.1	10
1.2	18
1.3	10
1.4	20
1.5	18
1.6	10
1.7	20
1.8	18
1.9	18
2.0	18
2.1	18
2.2	18
2.3	18
2.4	18
2.5	18
2.6	18
2.7	18
2.8	18
2.9	18
3.0	18
3.1	18
3.2	18
3.3	18
3.4	18
3.5	18
3.6	18
3.7	18
3.8	18
3.9	18
4.0	18
4.1	18
4.2	18
4.3	18
4.4	18
4.5	18
4.6	18
4.7	18
4.8	18
4.9	18
5.0	18
5.1	18
5.2	18
5.3	18
5.4	18
5.5	18
5.6	18
5.7	18
5.8	18
5.9	18
6.0	18
6.1	18
6.2	18
6.3	18
6.4	18
6.5	18
6.6	18
6.7	18
6.8	18
6.9	18
7.0	18
7.1	18
7.2	18
7.3	18
7.4	18
7.5	18
7.6	18
7.7	18
7.8	18
7.9	18
8.0	18

DUP050308496

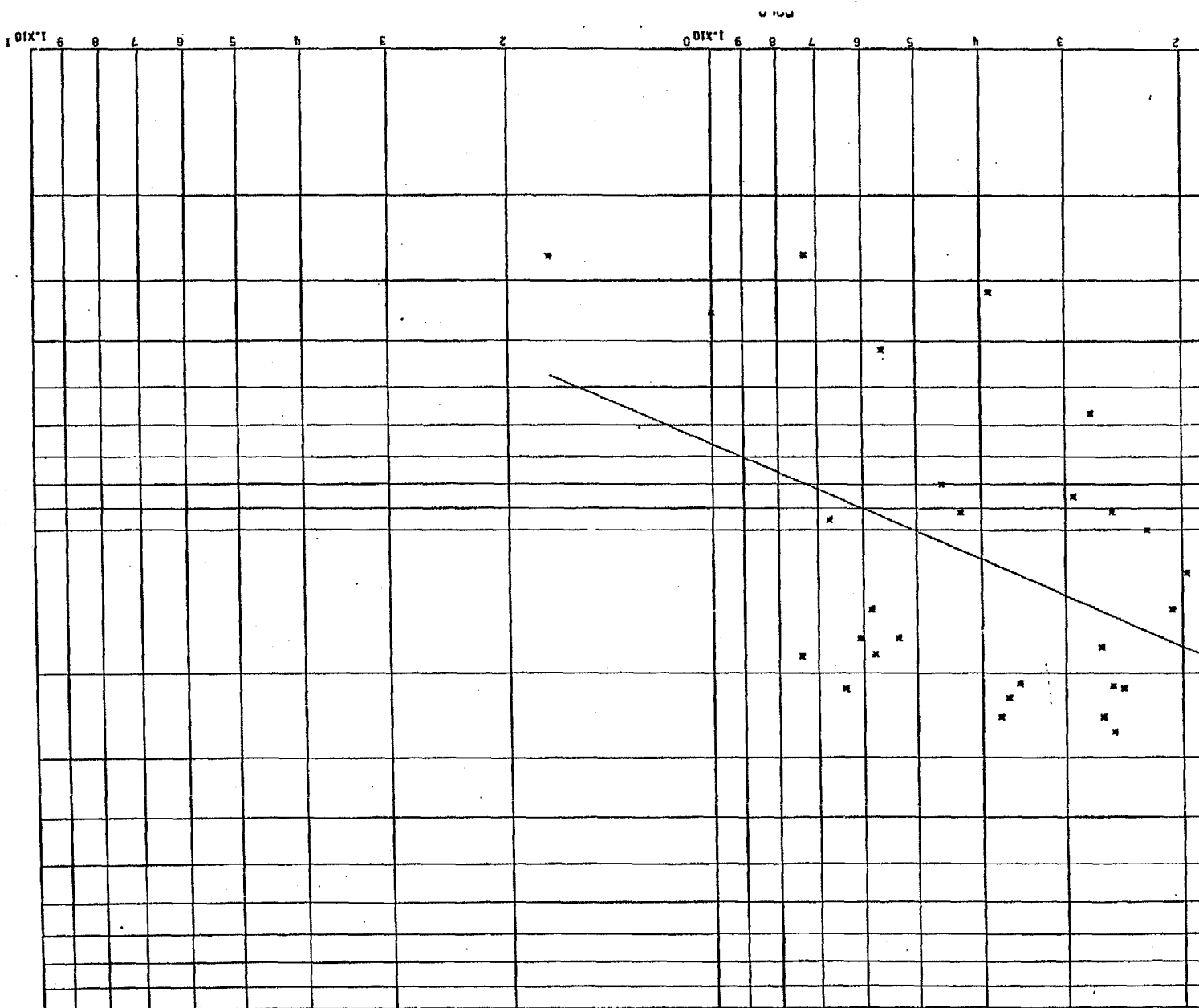
RAT PB FEEDING STUDY



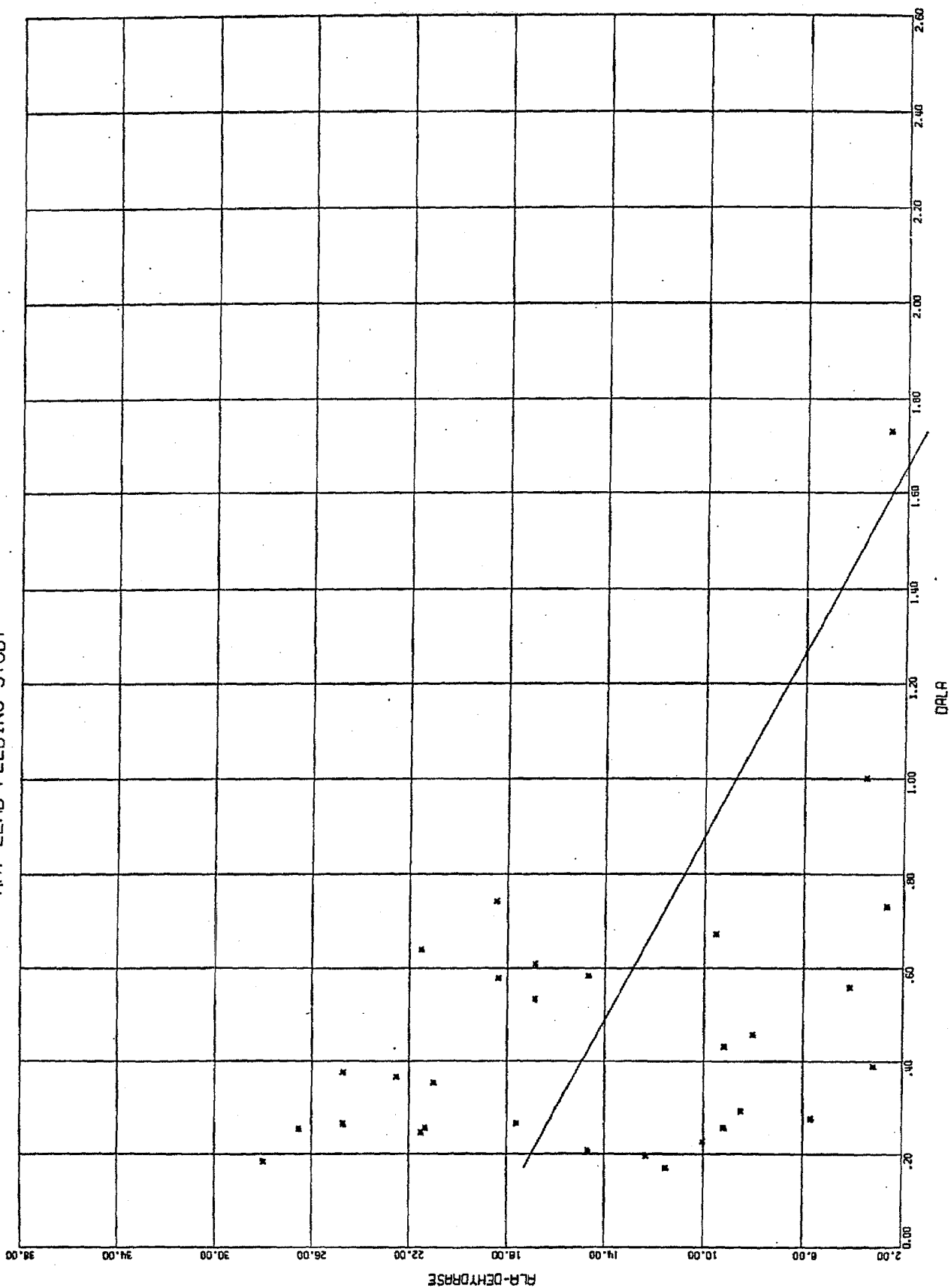
RAT PB FEEDING STUDY



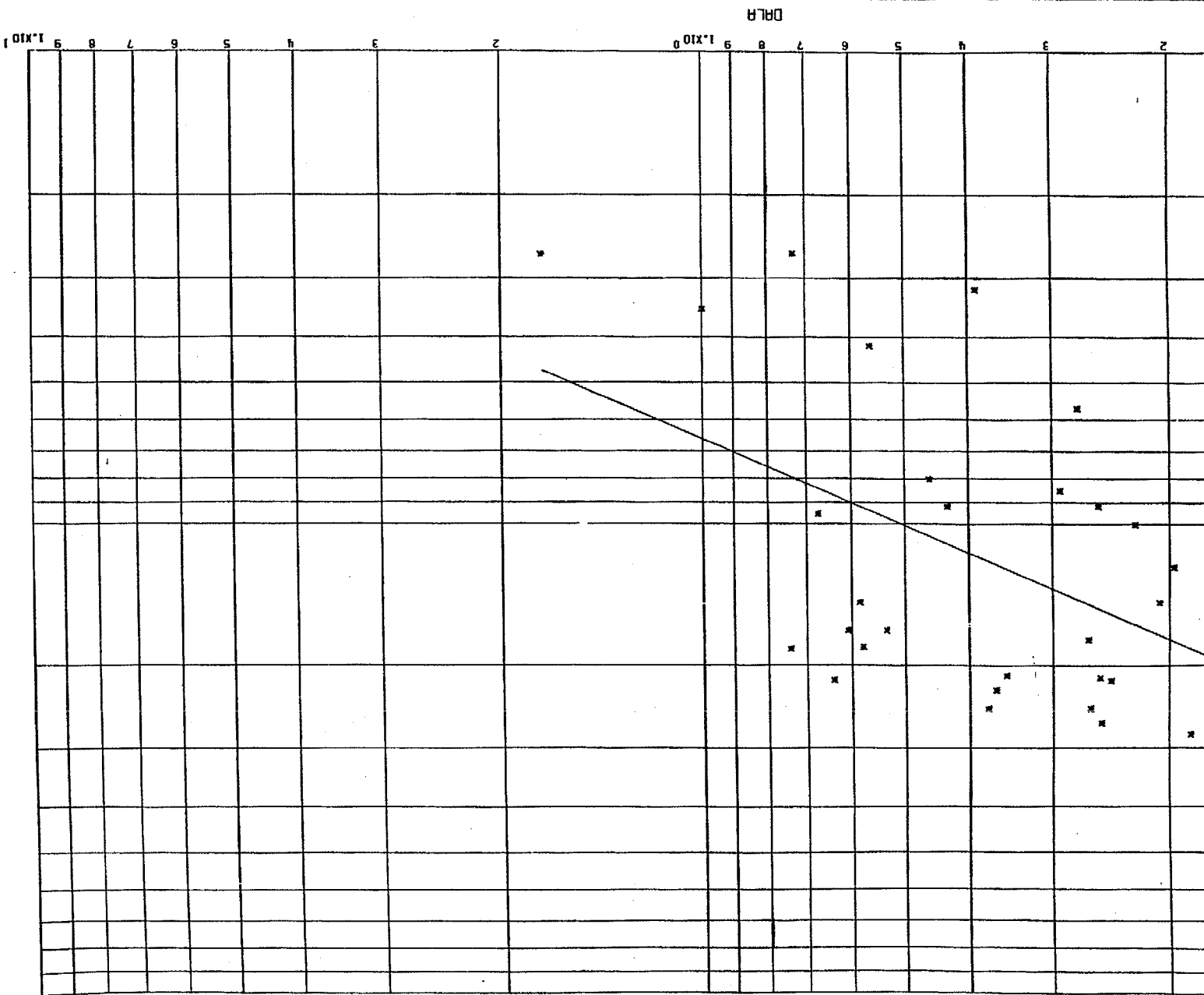
RAT LEAD FEEDING STUDY



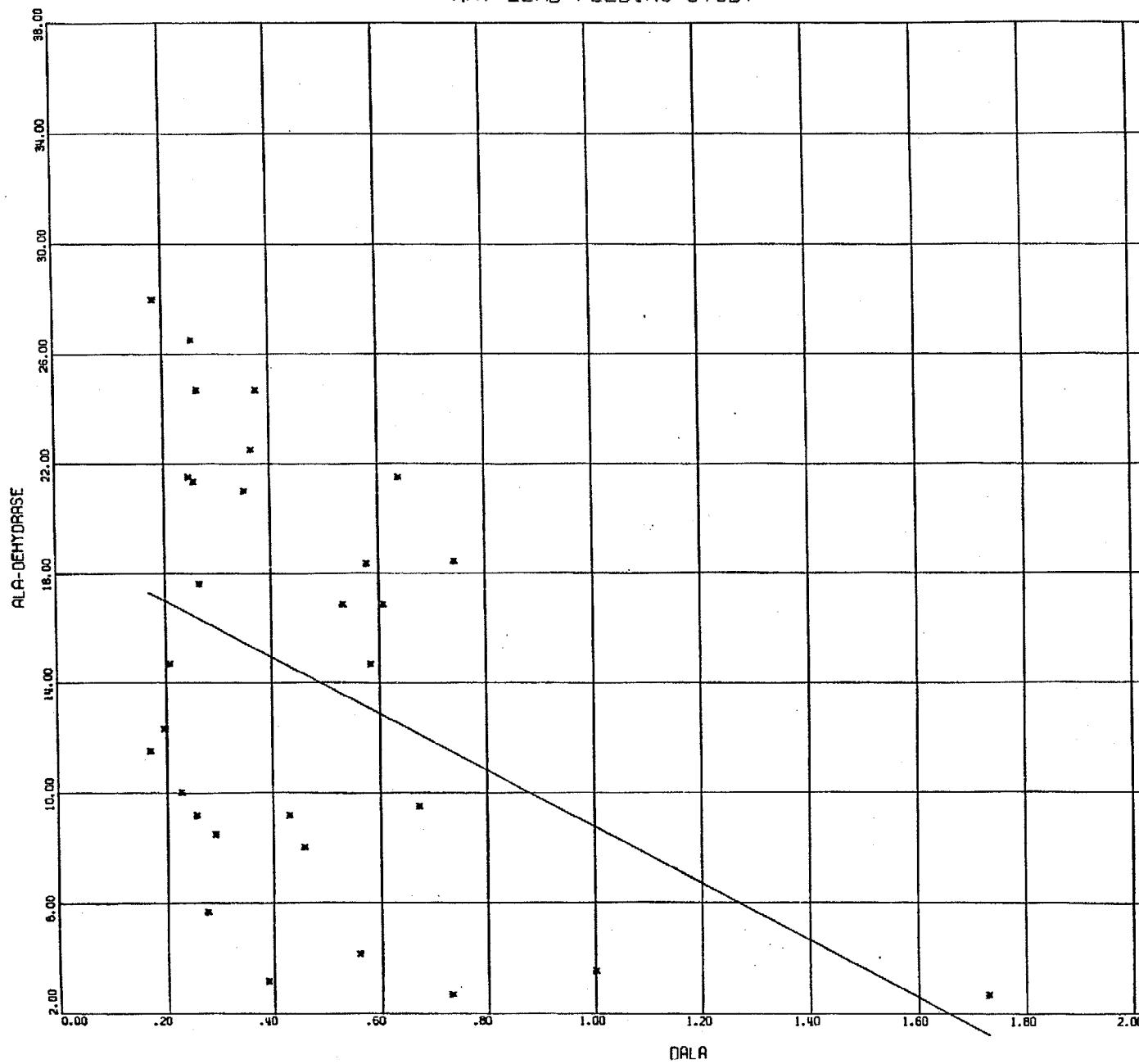
RAT LEAD FEEDING STUDY



RAT LEAD FEEDING STUDY

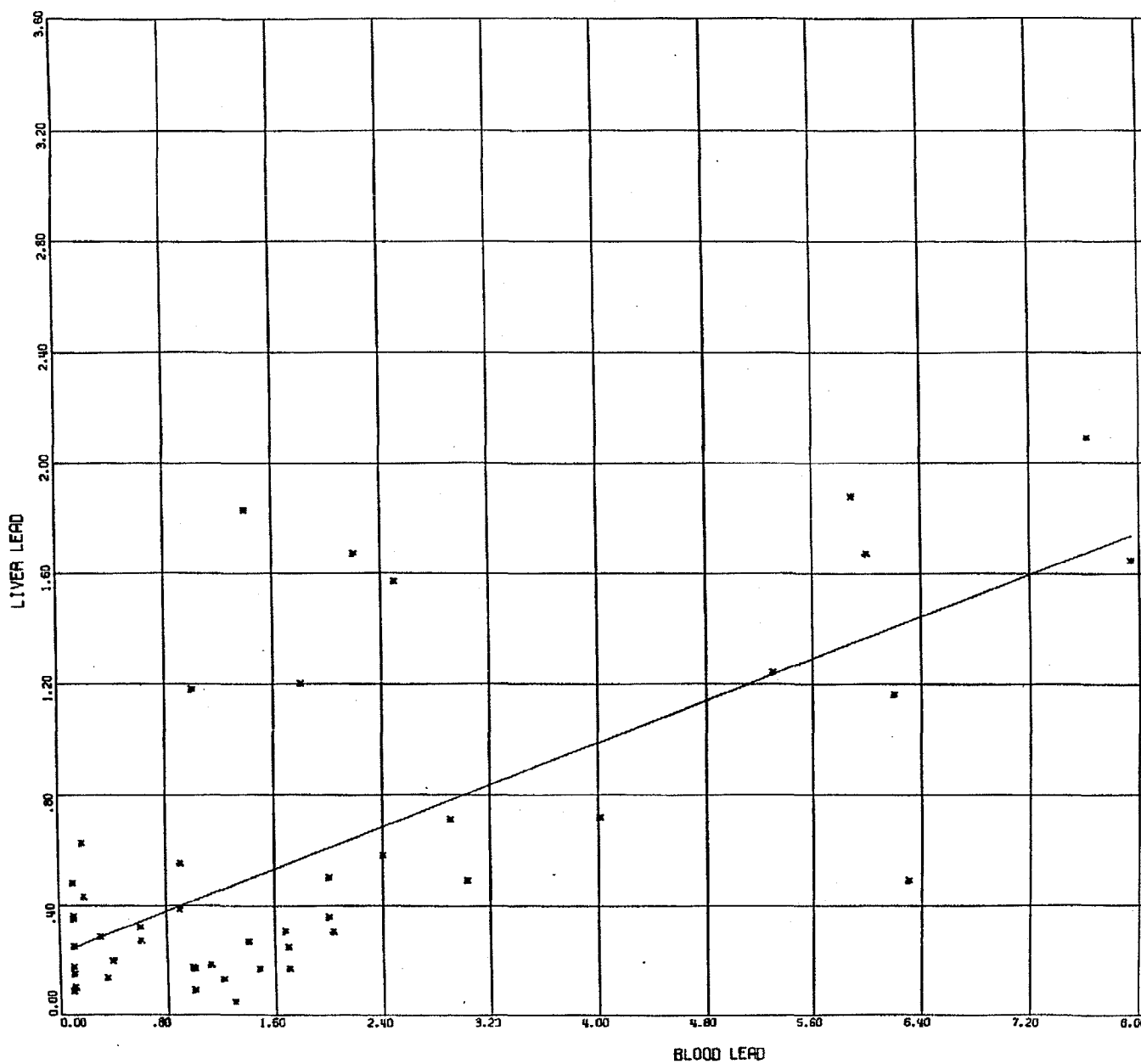


RAT LEAD FEEDING STUDY



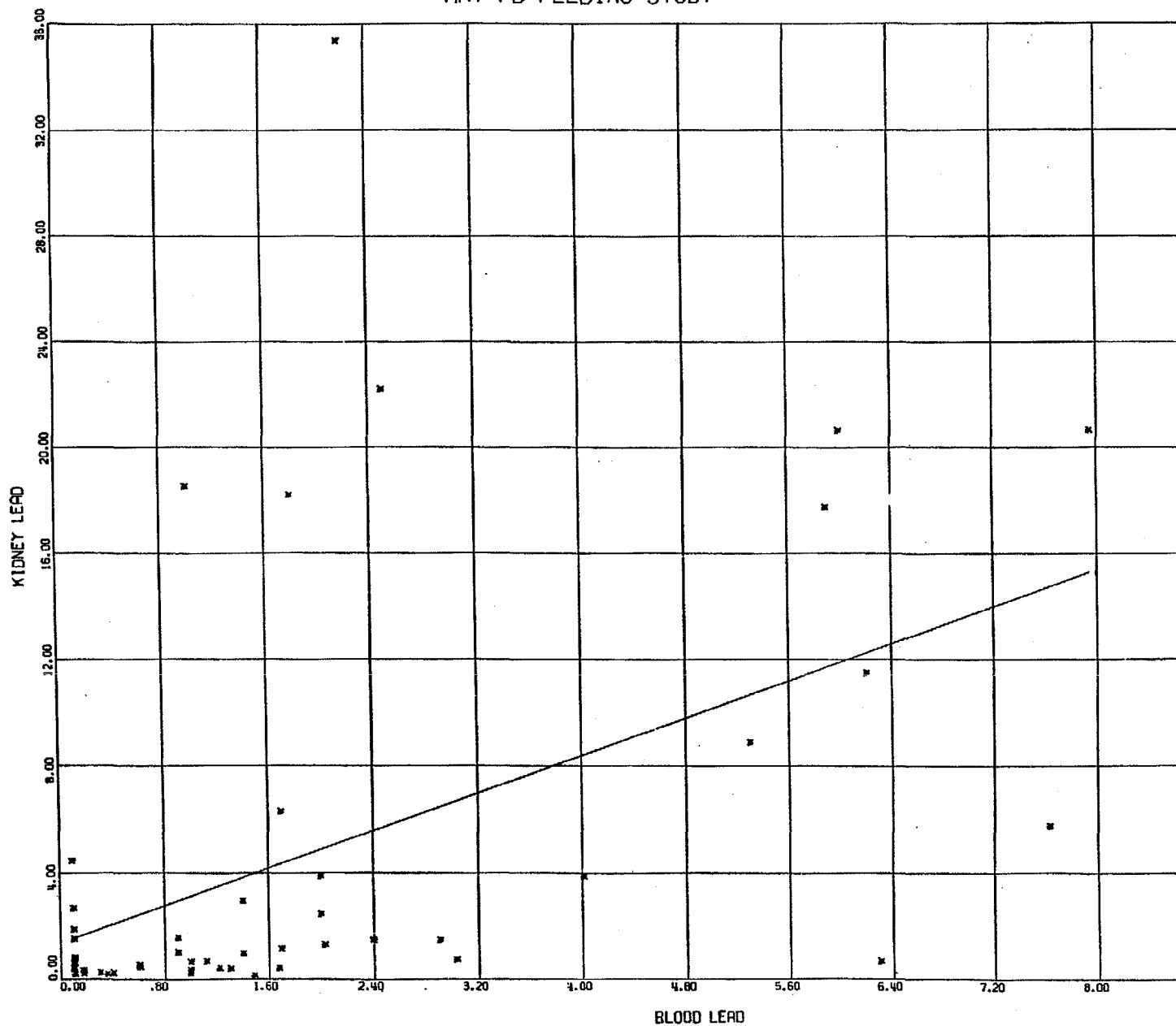
DUP050308502

RAT PB FEEDING STUDY

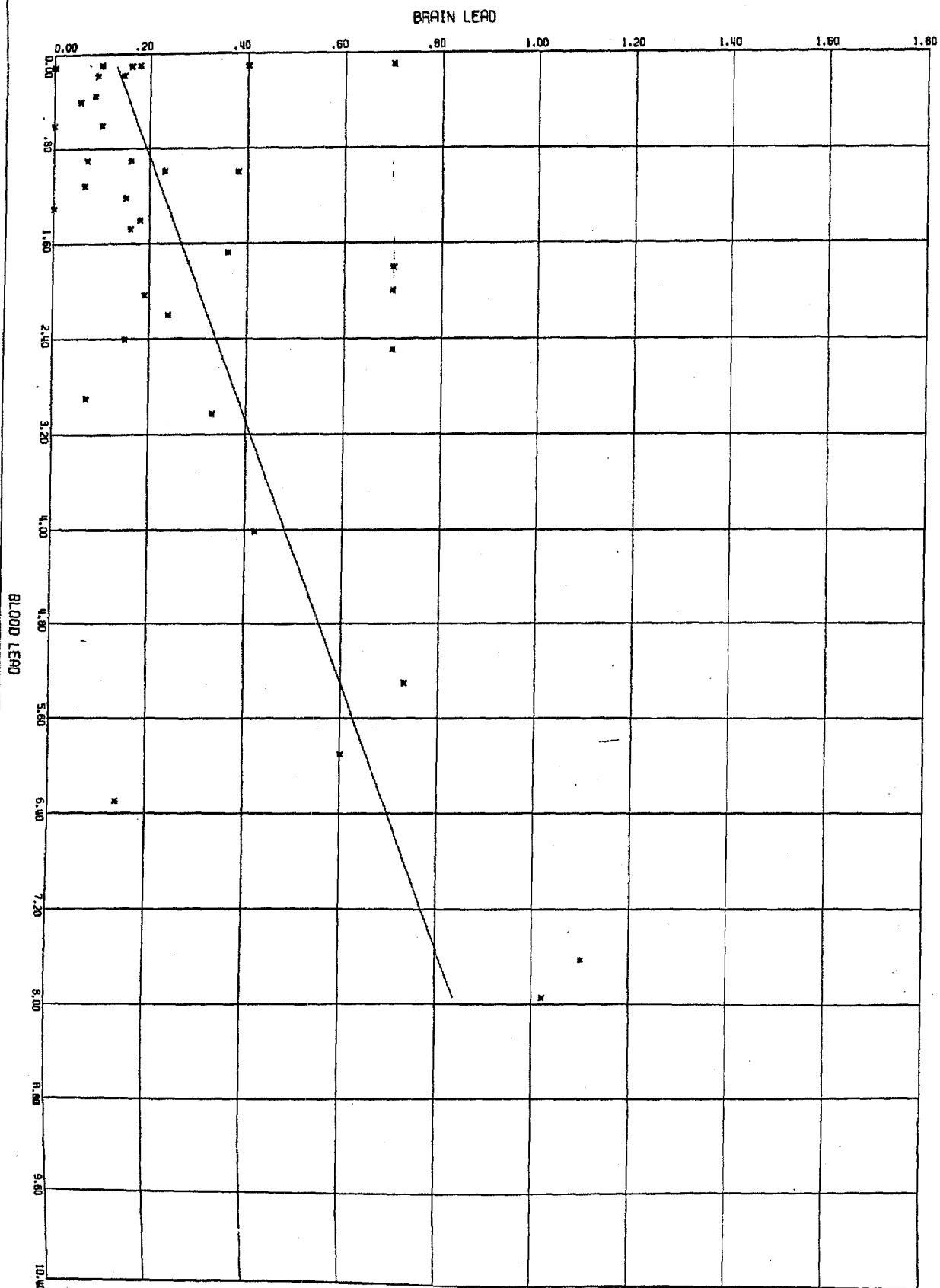


DUP050308503

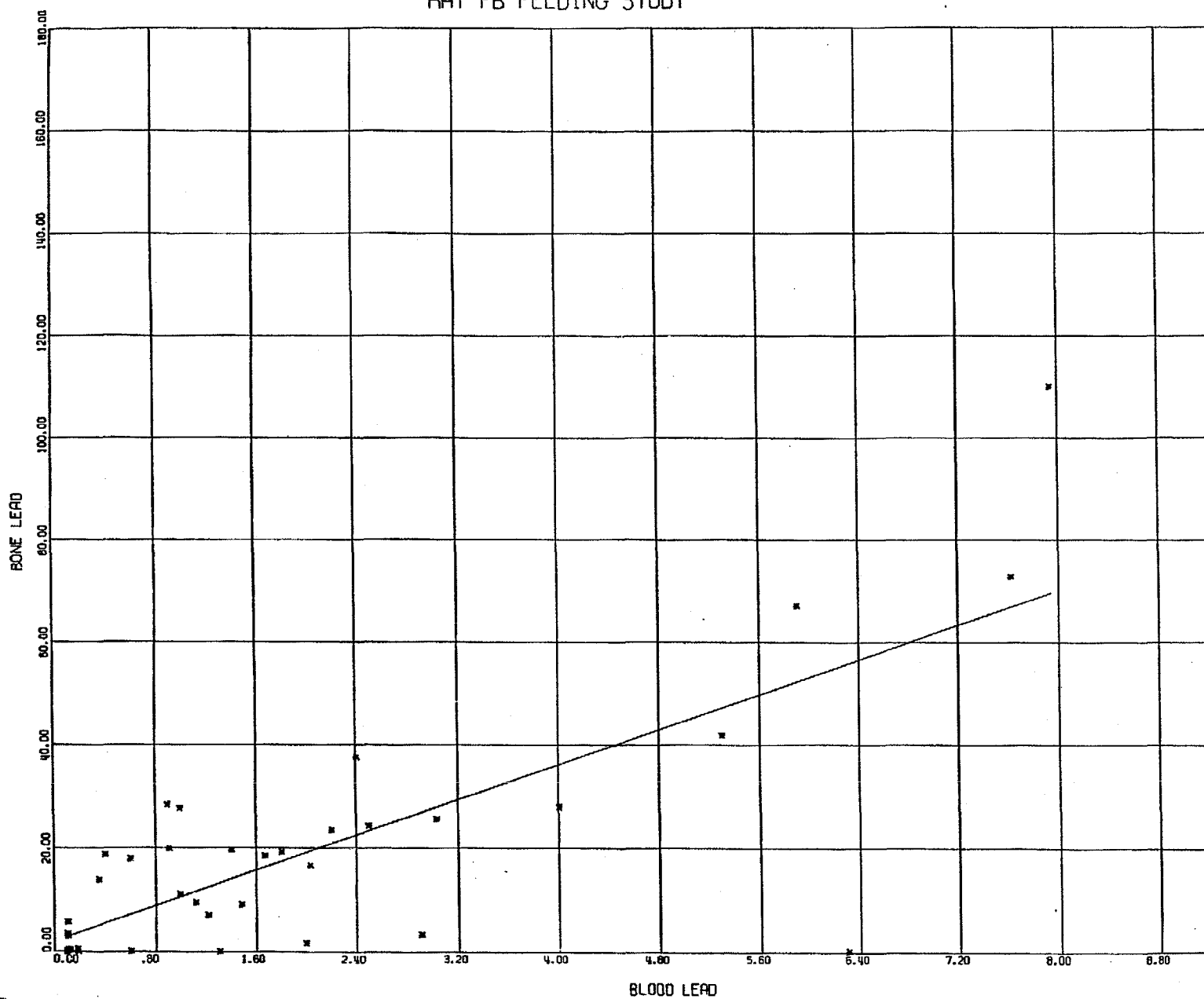
RAT PB FEEDING STUDY



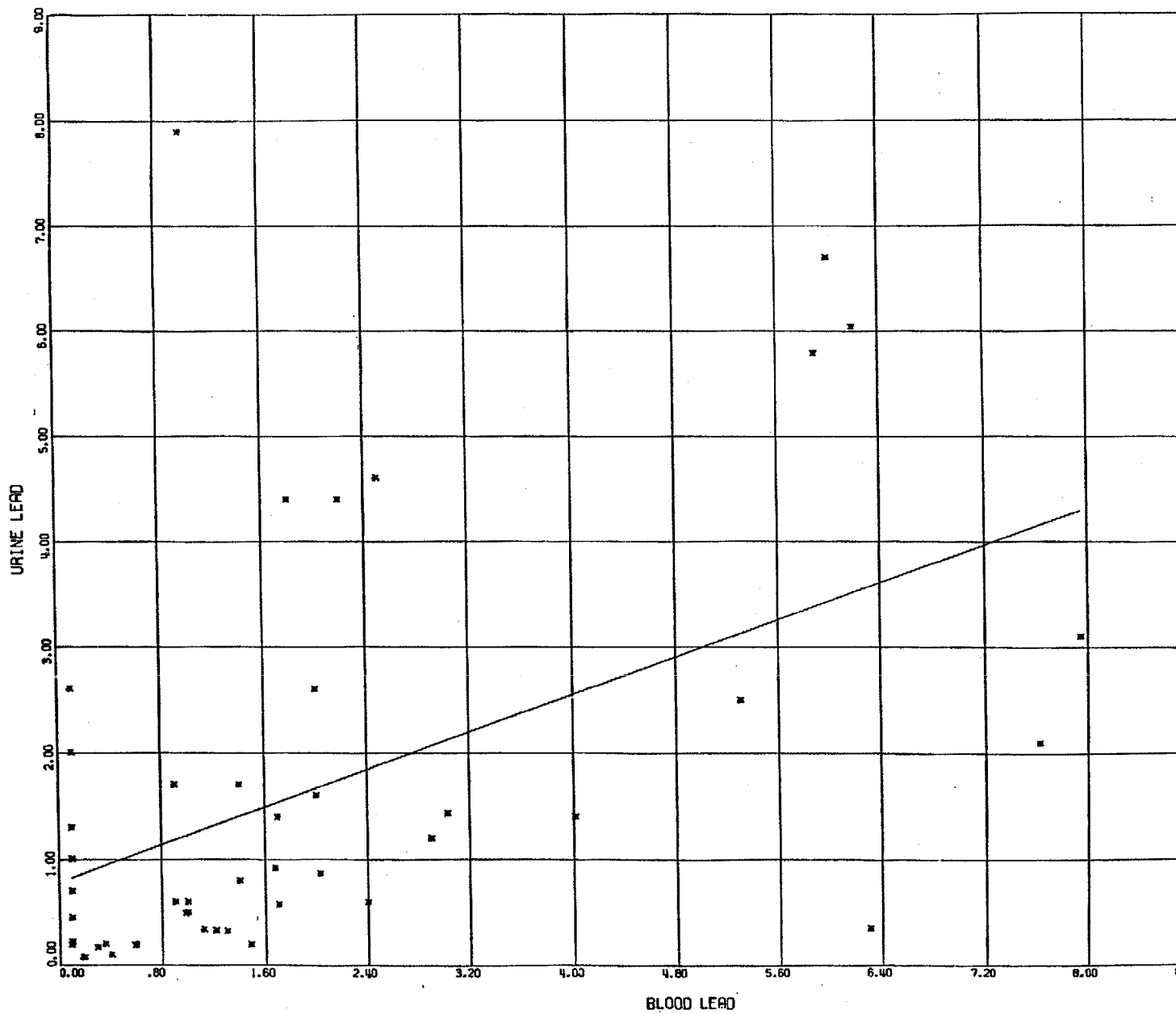
RAT PB FEEDING STUDY



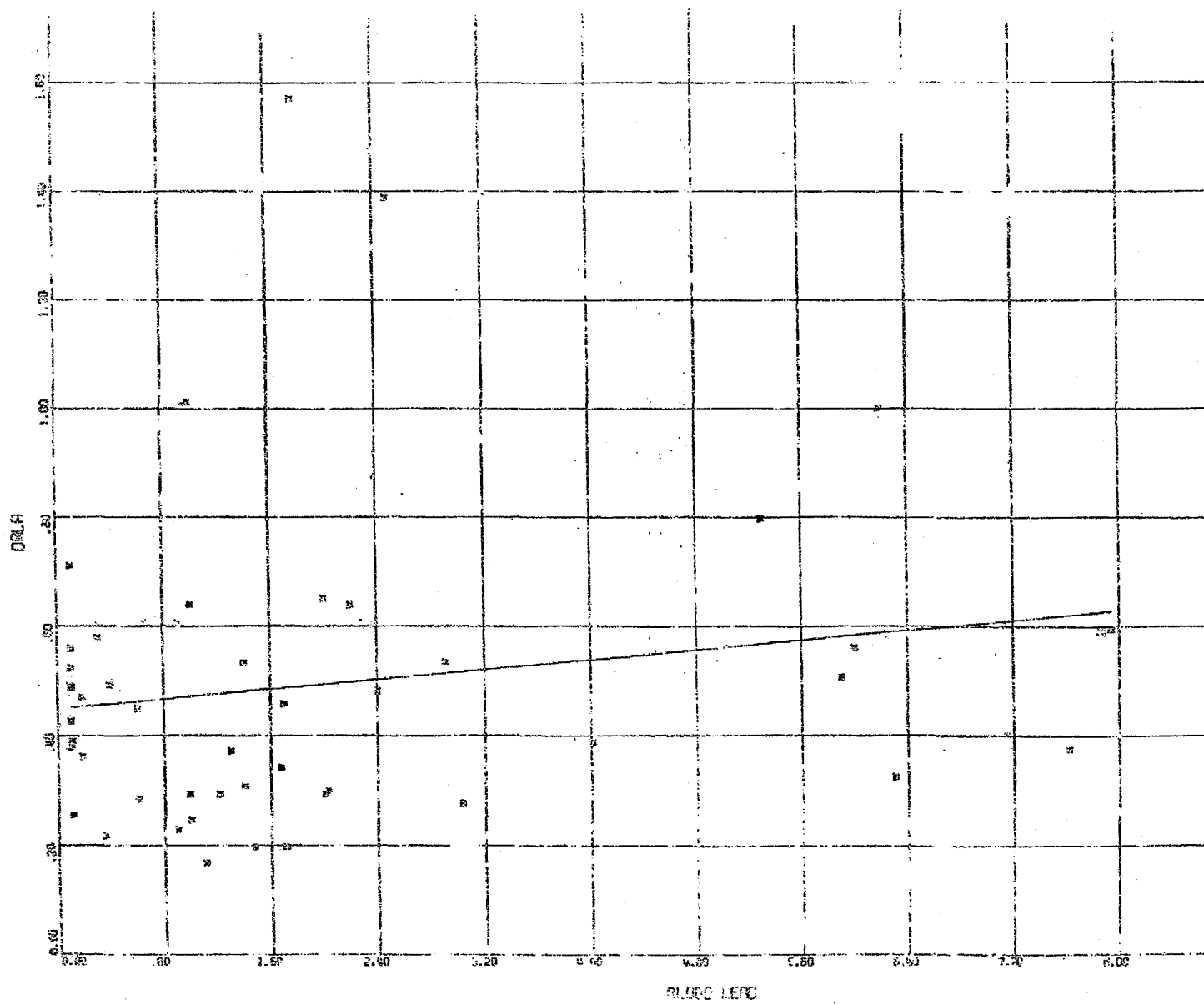
RAT PB FEEDING STUDY



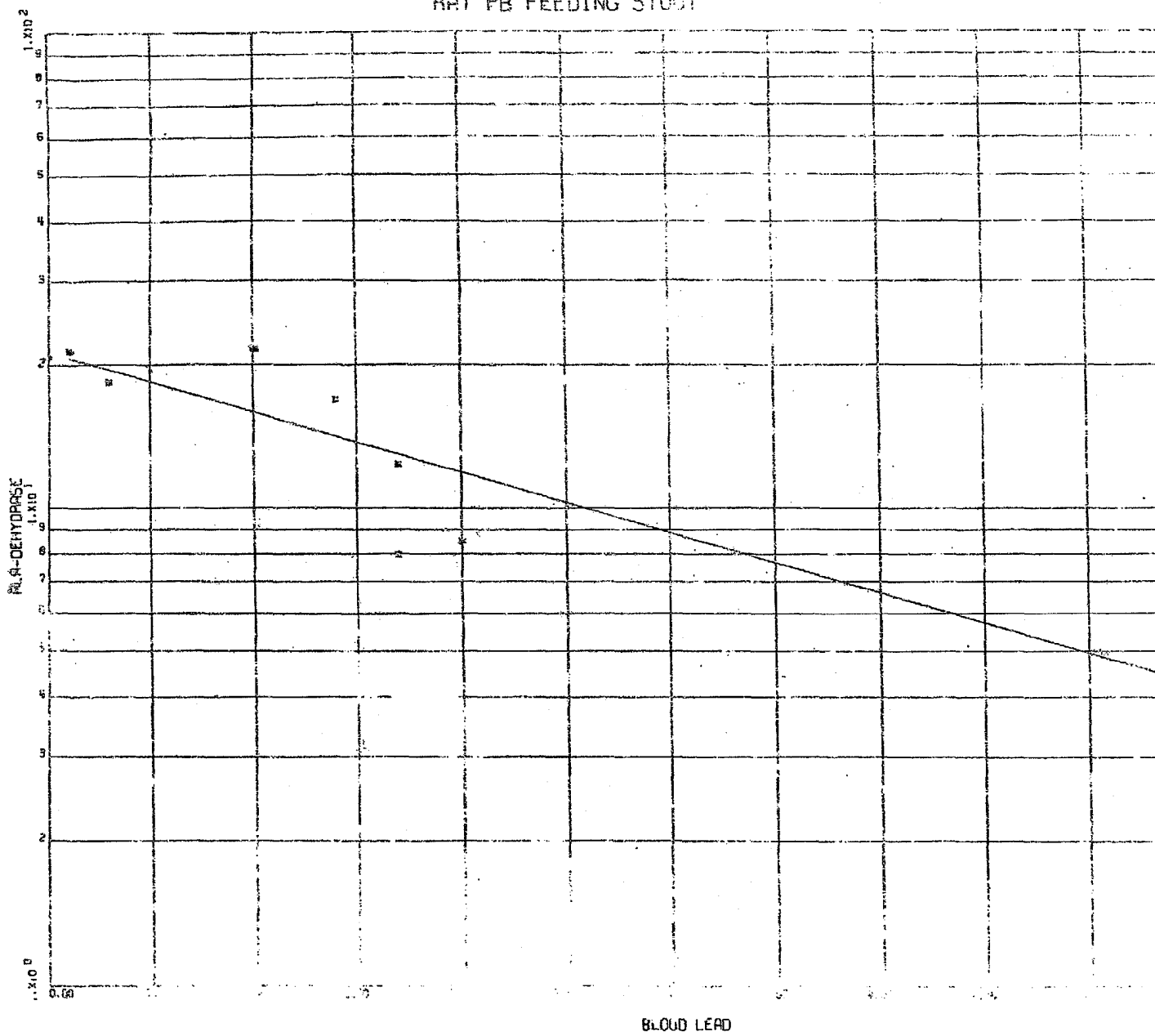
RAT PB FEEDING STUDY



RAT PB FEEDING STUDY



RAT PB FEEDING STUDY



DUP050308509

RAT LEAD FEEDING STUDY

The graph displays the relationship between Blood Lead levels and Stippled Cells. The X-axis represents BLOOD LEAD (0.00 to 8.00) and the Y-axis represents STIPLED CELLS (0.00 to 3.60). A positive linear trend is evident, supported by a regression line.

BLOOD LEAD	STIPLED CELLS
0.00	0.00
0.00	0.05
0.00	1.00
0.00	1.40
0.40	0.00
0.40	0.05
0.40	0.85
0.80	0.00
0.80	0.85
1.00	0.00
1.00	0.10
1.00	0.15
1.00	0.20
1.00	0.25
1.00	0.30
1.00	0.35
1.00	0.40
1.00	0.45
1.00	0.50
1.00	0.55
1.00	0.60
1.00	0.65
1.00	0.70
1.00	0.75
1.00	0.80
1.00	0.85
1.00	0.90
1.00	0.95
1.00	1.00
1.00	1.05
1.00	1.10
1.00	1.15
1.00	1.20
1.00	1.25
1.00	1.30
1.00	1.35
1.00	1.40
1.00	1.45
1.00	1.50
1.00	1.55
1.00	1.60
1.00	1.65
1.00	1.70
1.00	1.75
1.00	1.80
1.00	1.85
1.00	1.90
1.00	1.95
1.00	2.00
1.00	2.05
1.00	2.10
1.00	2.15
1.00	2.20
1.00	2.25
1.00	2.30
1.00	2.35
1.00	2.40
1.00	2.45
1.00	2.50
1.00	2.55
1.00	2.60
1.00	2.65
1.00	2.70
1.00	2.75
1.00	2.80
1.00	2.85
1.00	2.90
1.00	2.95
1.00	3.00
1.00	3.05
1.00	3.10
1.00	3.15
1.00	3.20
1.00	3.25
1.00	3.30
1.00	3.35
1.00	3.40
1.00	3.45
1.00	3.50
1.00	3.55
1.00	3.60
1.40	0.00
1.40	0.05
1.40	0.10
1.40	0.15
1.40	0.20
1.40	0.25
1.40	0.30
1.40	0.35
1.40	0.40
1.40	0.45
1.40	0.50
1.40	0.55
1.40	0.60
1.40	0.65
1.40	0.70
1.40	0.75
1.40	0.80
1.40	0.85
1.40	0.90
1.40	0.95
1.40	1.00
1.40	1.05
1.40	1.10
1.40	1.15
1.40	1.20
1.40	1.25
1.40	1.30
1.40	1.35
1.40	1.40
1.40	1.45
1.40	1.50
1.40	1.55
1.40	1.60
1.40	1.65
1.40	1.70
1.40	1.75
1.40	1.80
1.40	1.85
1.40	1.90
1.40	1.95
1.40	2.00
1.40	2.05
1.40	2.10
1.40	2.15
1.40	2.20
1.40	2.25
1.40	2.30
1.40	2.35
1.40	2.40
1.40	2.45
1.40	2.50
1.40	2.55
1.40	2.60
1.40	2.65
1.40	2.70
1.40	2.75
1.40	2.80
1.40	2.85
1.40	2.90
1.40	2.95
1.40	3.00
1.40	3.05
1.40	3.10
1.40	3.15
1.40	3.20
1.40	3.25
1.40	3.30
1.40	3.35
1.40	3.40
1.40	3.45
1.40	3.50
1.40	3.55
1.40	3.60
1.80	0.00
1.80	0.05
1.80	0.10
1.80	0.15
1.80	0.20
1.80	0.25
1.80	0.30
1.80	0.35
1.80	0.40
1.80	0.45
1.80	0.50
1.80	0.55
1.80	0.60
1.80	0.65

DUP050308510

RECEIVED

APR 13 1972

HASKELL LAB.

DUP050308511

TWO YEAR LEAD FEEDING STUDY IN DOGS

URINE LEAD vs. TIME
MEAN VALUES (M and F)

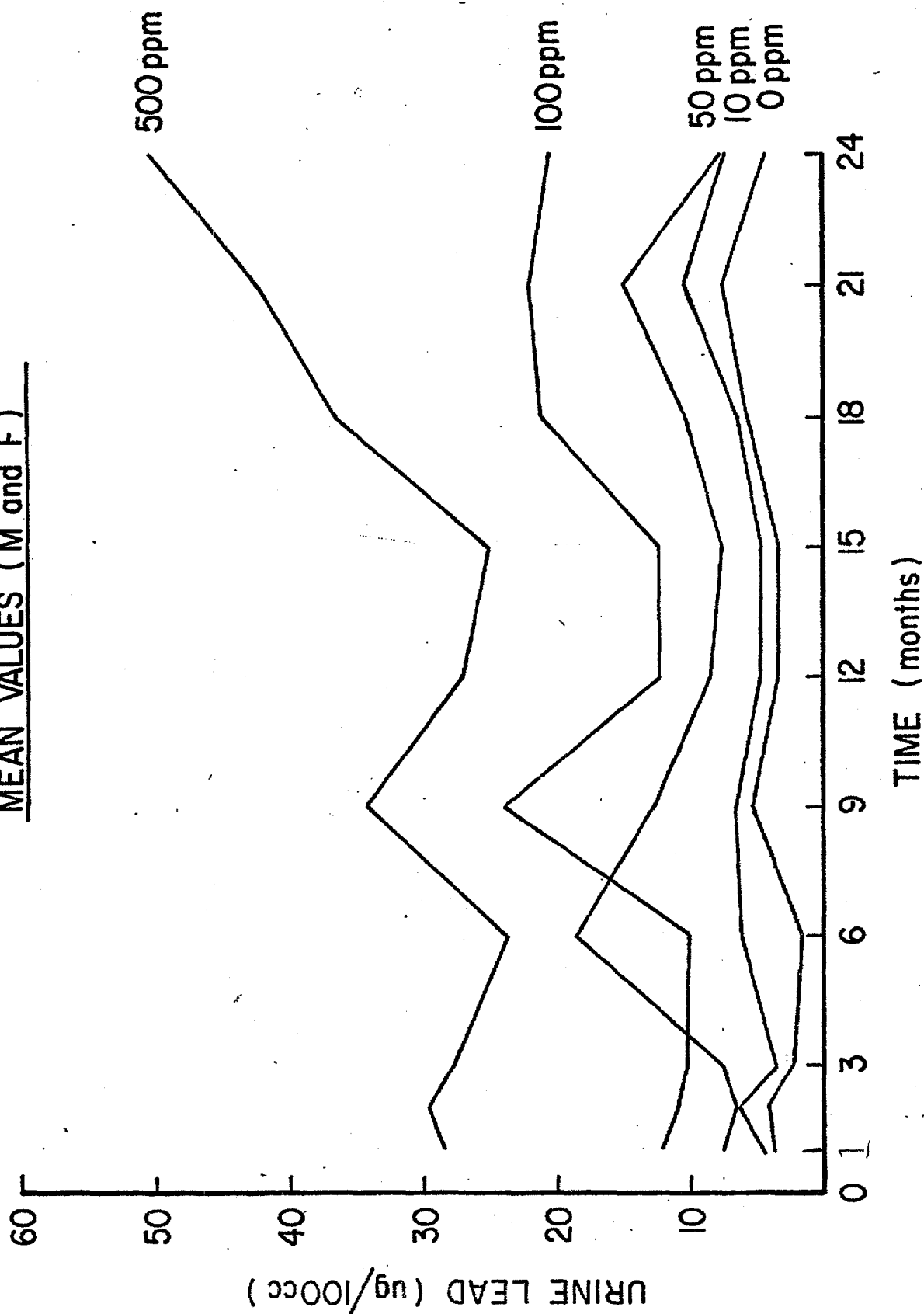
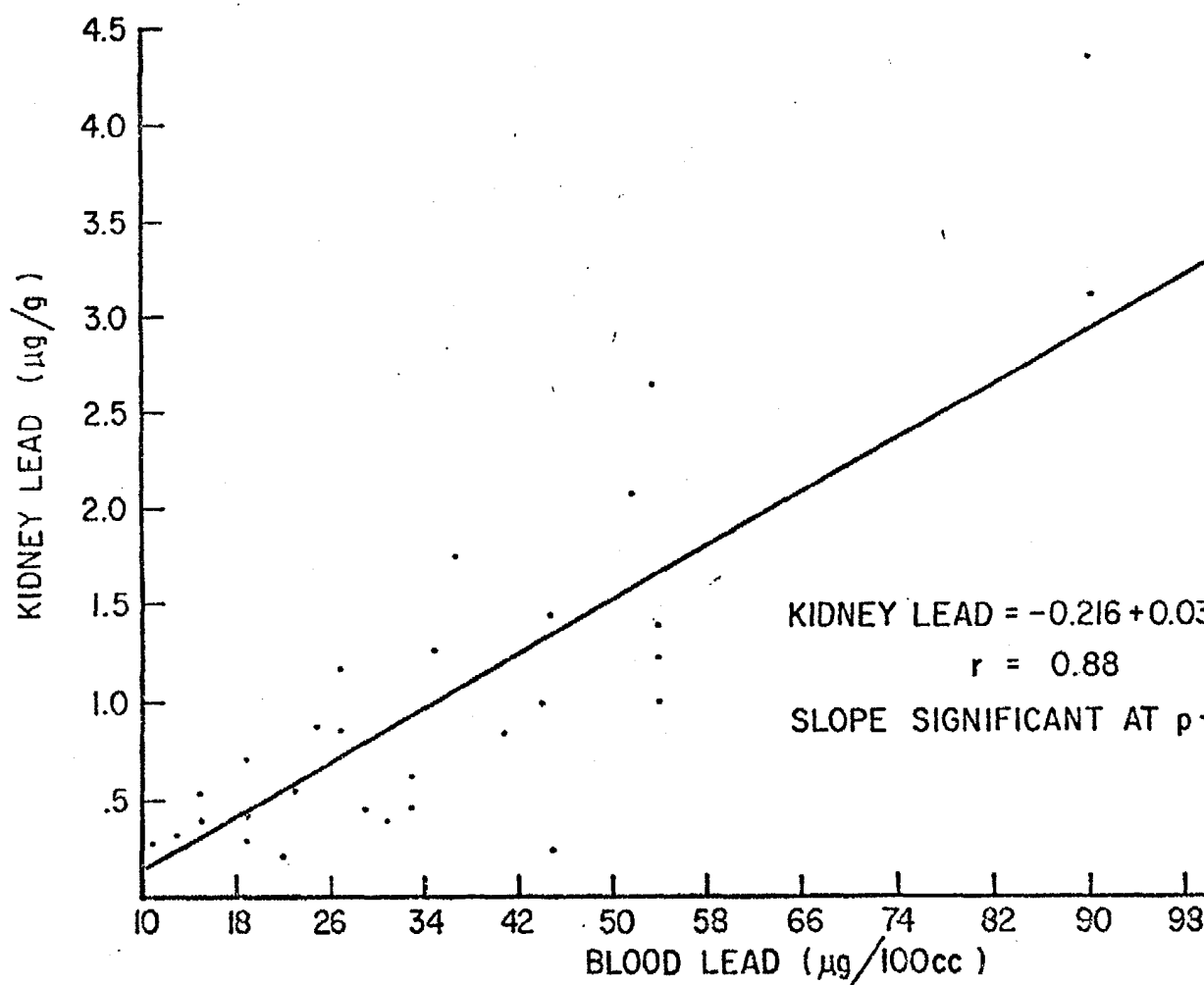
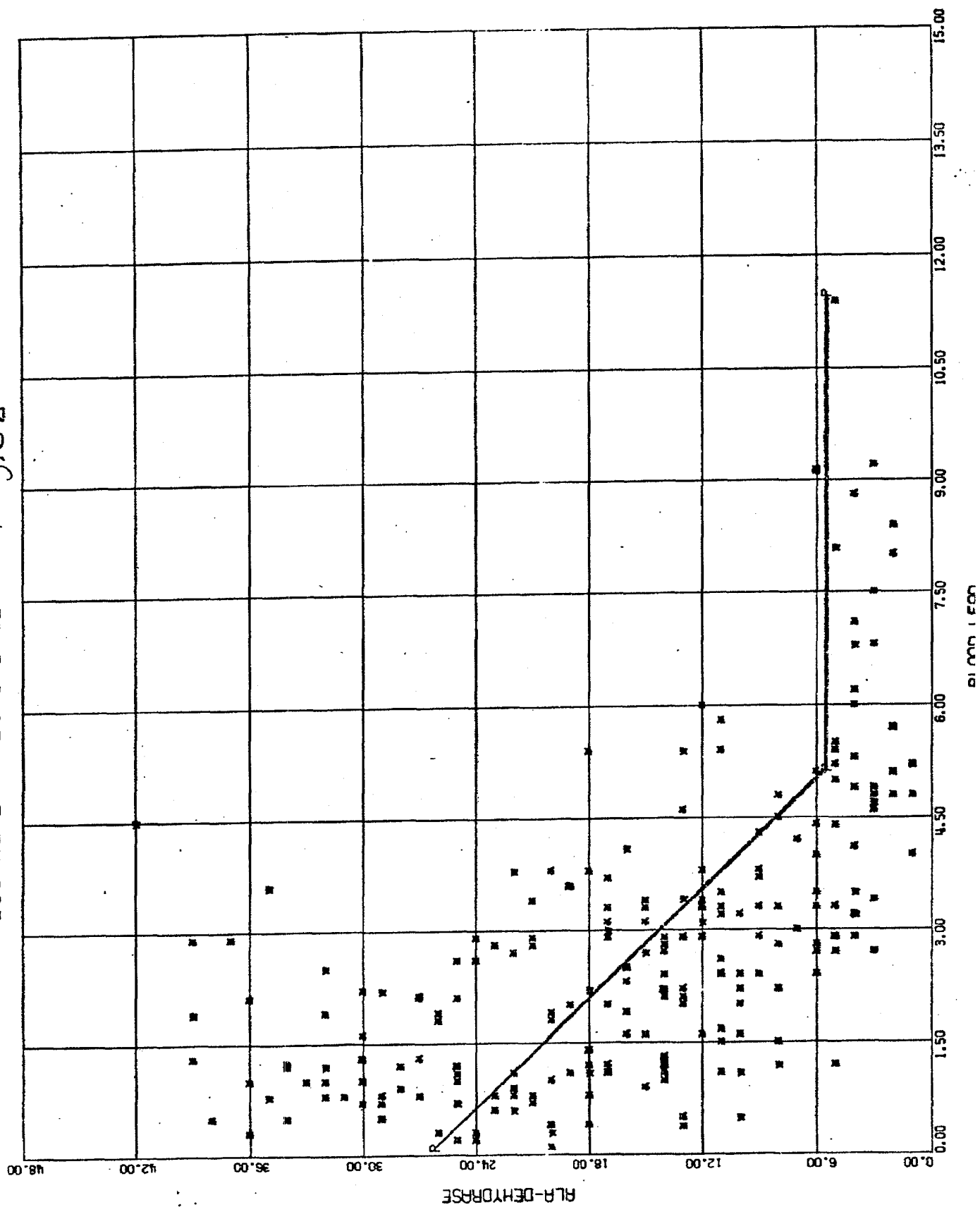


Figure 3

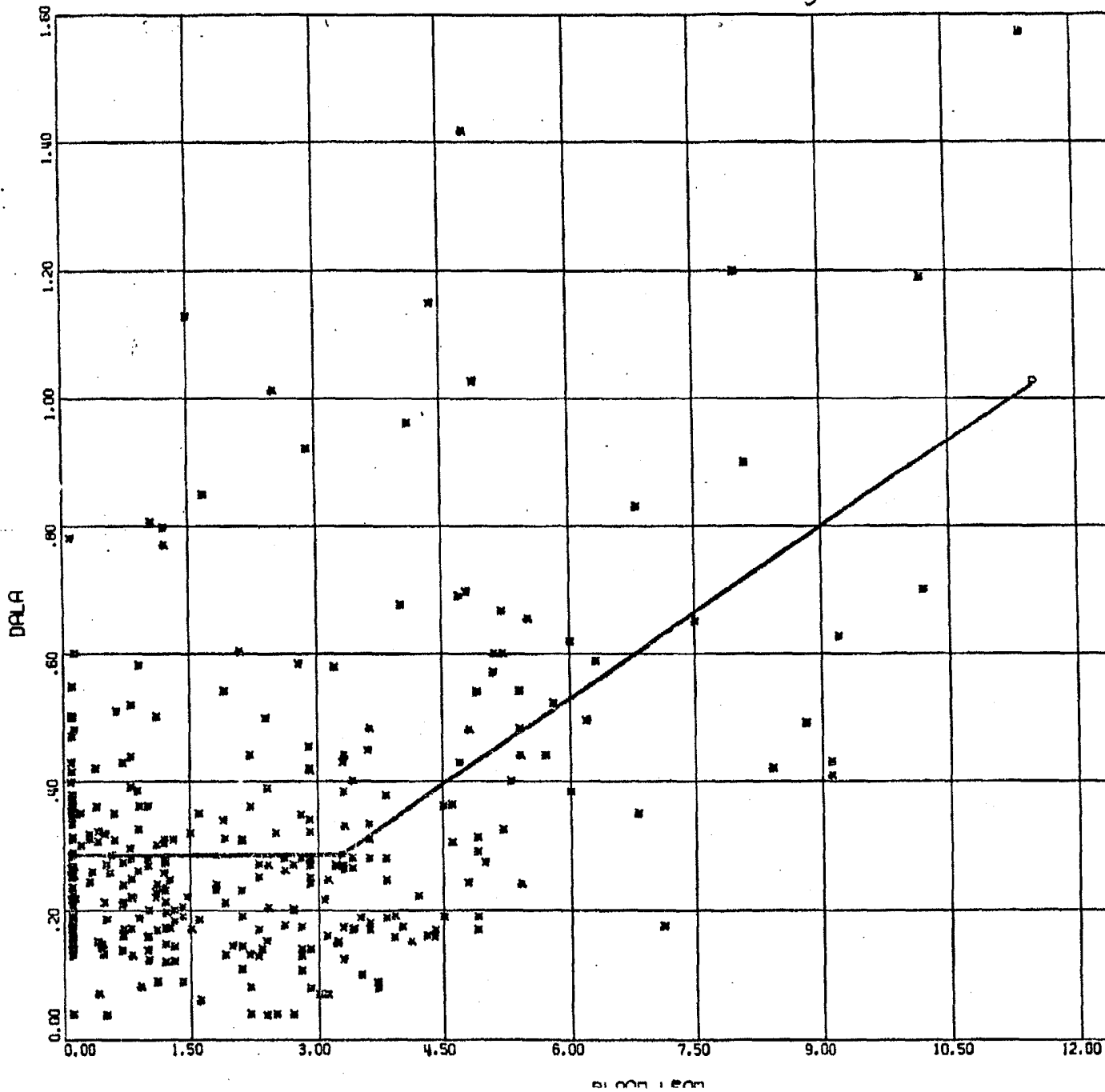
TWO YEAR LEAD FEEDING STUDY (DOGS)

REGRESSION : KIDNEY Pb on BLOOD Pb





DUG LEAD FEEDING STUDY P. 5. 6a



DUP050308515

Figure 4)

DOG LEAD FEEDING STUDY

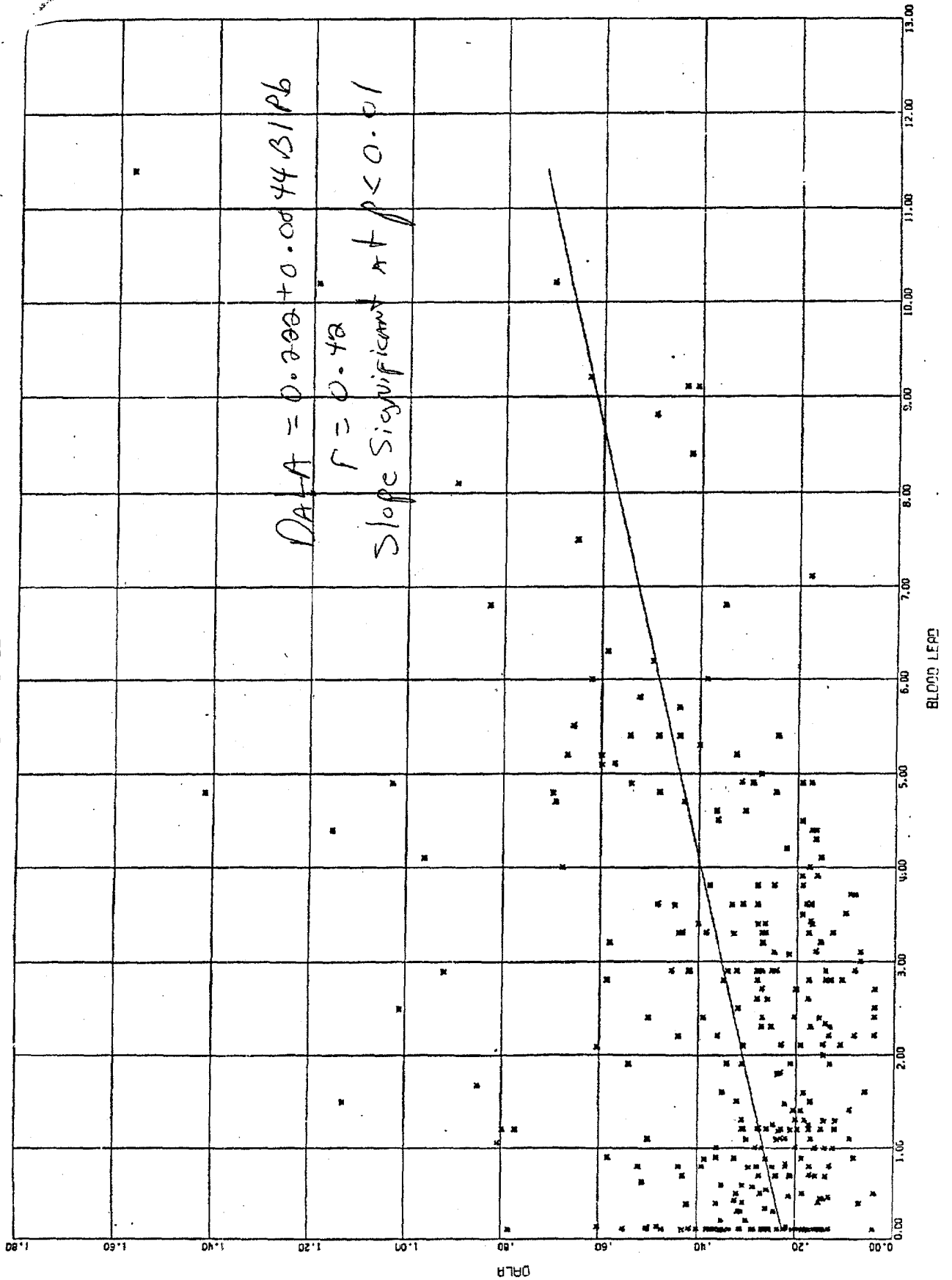


Figure 5

DOG LEAD FEEDING STUDY

