

AMPIRAN 1

DATA KANDUNGAN LOGAM Pb DALAM BANDENG DURI LUNAK

no	kode sampel	Pb (ppm)	brt abu (g)	brt krg (g)	kandungan logam Pb (ug/g)		
					dalam brt abu	dalam brt krg	dim brt segar
1	PtS1	1	0,46	2,21	21,92	4,53	1,81
2	PtS2	1	0,60	2,84	16,62	3,53	1,40
3	PtS3	1	0,68	3,18	14,66	3,14	1,30
				average	17,73	3,73	1,50
				std	3,75	0,72	0,27
4	PtL1	1	0,57	2,71	17,52	3,69	1,50
5	PtL2	1	0,54	2,97	18,42	3,36	1,40
5	PtL3	1	0,43	2,79	23,46	3,58	1,40
				average	19,80	3,54	1,43
				std	3,20	0,17	0,06
7	JhAS1	1	0,52	2,67	19,36	3,75	1,50
8	JhAS2	1	0,31	2,29	31,97	4,36	1,70
9	JhAS3	2	0,83	3,37	23,97	5,94	2,40
16	JhBS1	1	0,52	2,64	19,42	3,79	0,50
17	JhBS2	1	0,83	3,54	12,02	2,82	1,13
18	JhBS3	1	0,43	2,49	23,28	4,01	1,60
				average	21,67	4,11	1,47
				std	6,60	1,03	0,63
10	JhAM1	1	0,36	2,61	28,04	3,83	1,50
11	JhAM2	1	0,56	3,20	18,02	3,13	1,30
12	JhAM3	1	0,40	2,54	25,17	3,93	1,60
19	JhBM1	1	0,62	3,10	16,23	3,22	1,30
20	JhBM2	1	0,68	3,06	14,71	3,27	1,30
21	JhBM3	1	0,65	3,27	15,46	3,06	1,20
				average	19,60	3,41	1,37
				std	5,61	0,38	0,15
13	JhAL1	1	0,49	2,80	20,34	3,58	0,43
14	JhAL2	1	0,58	3,11	17,20	3,22	1,28
15	JhAL3	1	0,43	2,85	23,39	3,50	1,40
22	JhBL1	1	0,48	3,30	20,69	3,03	1,20
23	JhBL2	1	0,71	3,68	14,17	2,72	1,09
24	JhBL3	1	0,68	3,19	14,81	3,14	1,26
				average	18,43	3,20	1,11
				std	3,64	0,32	0,35
25	AS1	1	0,38	2,51	25,99	3,99	1,60

3	AS2	1	0,48	3,68	20,69	2,71	1,10
7	AS3	1	0,32	2,58	31,50	3,88	1,50
4	BS1	1	0,44	2,91	22,78	3,44	1,40
5	BS2	1	0,43	3,04	23,26	3,29	1,30
6	BS3	1	0,41	3,41	24,62	2,93	1,20
				average	24,81	3,37	1,35
				std	3,73	0,51	0,19

8	AM1	1	0,42	2,67	23,55	3,75	1,50
9	AM2	1	0,47	3,91	21,13	2,56	1,02
0	AM3	1	0,46	3,07	21,61	3,25	1,30
7	BM1	1	0,39	2,85	25,52	3,51	0,43
8	BM2	1	0,48	3,79	20,95	2,64	1,06
9	BM3	0	0,38	2,70	0,00	0,00	0,00
				average	18,79	2,62	0,89
				std	9,37	1,37	0,56

31	AL1	1	0,40	2,89	25,10	3,46	1,30
32	AL2	1	0,43	3,45	23,08	2,90	1,20
33	AL3	1	0,31	2,42	32,21	4,13	1,60
40	BL1	1	0,34	3,01	29,29	3,32	1,30
41	BL2	0	0,43	3,98	0,00	0,00	0,00
42	BL3	1	0,45	4,64	22,23	2,15	0,90
				average	21,99	2,66	1,05
				std	11,42	1,46	0,56

43	R1	0	0,25949	2,07612	0	0
44	R2	0	0,31232	2,24667	0	0
				average	0	0
				std	0	0

Pada Pb, Cd, Cu, dan Zn dilakukan pengenceran pada konsentrasi larutan standar  
 Pada Zn dilakukan pengenceran (10\*) pada konsentrasi larutan sampel  
 Pada Cd dilakukan pengenceran (5\*) pada konsentrasi larutan sampel reference material  
 Kandungan logam (ug/g) = (volume sampel lrtan(10)  
 x hasil pengukuran logam dlm ppm )/brt sampel (abu/kg) dlm g  
 dalam sampel segar =kandungan logam dalam sampel krg (ug/g ) \* (100-60)/100

AMPIRAN 2

DATA KANDUNGAN LOGAM Cd DALAM BANDENG DURI LUNAK

no	kode sampel	Cd (ppm)	brt abu (g)	brt krg (g)	kandungan logam Cd (ug/g)		
					dalam brt abu	dalam brt krg	dlm brt segar
1	PtS1	0,08	0,46	2,21	1,75	0,36	0,15
2	PtS2	0,09	0,60	2,84	1,50	0,32	0,13
3	PtS3	0,10	0,68	3,18	1,47	0,31	0,13
				average	1,57	0,33	0,13
				std	0,16	0,03	0,01
4	PtL1	0,06	0,57	2,71	1,05	0,22	0,09
5	PtL2	0,08	0,54	2,97	1,47	0,27	0,11
6	PtL3	0,07	0,43	2,79	1,64	0,25	0,10
				average	1,39	0,25	0,10
				std	0,30	0,02	0,01
7	JhAS1	0,09	0,52	2,67	1,74	0,34	0,14
8	JhAS2	0,06	0,31	2,29	1,92	0,26	0,10
9	JhAS3	0,12	0,83	3,37	1,44	0,36	0,14
16	JhBS1	0,08	0,52	2,64	1,55	0,30	0,12
17	JhBS2	0,12	0,83	3,54	1,44	0,34	0,14
18	JhBS3	0,07	0,43	2,49	1,63	0,28	0,11
				average	1,62	0,31	0,13
				std	0,19	0,04	0,01
10	JhAM1	0,06	0,36	2,61	1,68	0,23	0,09
11	JhAM2	0,09	0,56	3,20	1,62	0,28	0,11
12	JhAM3	0,06	0,40	2,54	1,51	0,24	0,09
19	JhBM1	0,07	0,62	3,10	1,14	0,23	0,09
20	JhBM2	0,09	0,68	3,06	1,32	0,29	0,12
21	JhBM3	0,09	0,65	3,27	1,39	0,28	0,11
				average	1,44	0,26	0,10
				std	0,20	0,03	0,01
13	JhAL1	0,08	0,49	2,80	1,63	0,29	0,11
14	JhAL2	0,09	0,58	3,11	1,55	0,29	0,12
15	JhAL3	0,07	0,43	2,85	1,64	0,25	0,10
22	JhBL1	0,07	0,48	3,30	1,45	0,21	0,09
23	JhBL2	0,11	0,71	3,68	1,56	0,30	0,12
24	JhBL3	0,11	0,68	3,19	1,63	0,35	0,14
				average	1,57	0,28	0,11
				std	0,07	0,05	0,02
25	AS1	0,05	0,38	2,51	1,30	0,20	0,08
26	AS2	0,07	0,48	3,68	1,45	0,19	0,08
27	AS3	0,06	0,32	2,58	1,89	0,23	0,09

4	BS1	0,07	0,44	2,91	1,59	0,24	0,10
5	BS2	0,05	0,43	3,04	1,16	0,16	0,07
6	BS3	0,05	0,41	3,41	1,23	0,15	0,06
				average	1,44	0,20	0,08
				std	0,27	0,04	0,01

8	AM1	0,05	0,42	2,67	1,18	0,19	0,08
9	AM2	0,07	0,47	3,91	1,48	0,18	0,07
10	AM3	0,07	0,46	3,07	1,51	0,23	0,09
17	BM1	0,06	0,39	2,85	1,53	0,21	0,08
18	BM2	0,06	0,48	3,79	1,26	0,16	0,06
19	BM3	0,04	0,38	2,70	1,06	0,15	0,06
				average	1,34	0,19	0,07
				std	0,20	0,03	0,01

31	AL1	0,06	0,40	2,89	1,51	0,21	0,08
32	AL2	0,06	0,43	3,45	1,38	0,17	0,07
33	AL3	0,06	0,31	2,42	1,93	0,25	0,10
40	BL1	0,08	0,34	3,01	2,34	0,27	0,11
41	BL2	0,07	0,43	3,98	1,63	0,18	0,07
42	BL3	0,07	0,45	4,64	1,56	0,15	0,06
				average	1,72	0,20	0,08
				std	0,35	0,05	0,02

43	R1	0,06	0,26	2,08	11,56	1,45
44	R2	0,08	0,31	2,25	12,81	1,78
				average	12,18	1,61
				std	0,88	0,24

pada Pb, Cd, Cu, dan Zn dilakukan pengenceran pada konsentrasi larutan standar  
 pada Zn dilakukan pengenceran (10\*) pada konsentrasi larutan sampel  
 pada Cd dilakukan pengenceran (5\*) pada konsentrasi larutan sampel reference material  
 kandungan logam ( ug/g) = (volume sampel lrtan(10)x  
 hasil pengukuran logam dlm ppm)/ brt sampel (abu/krig) dlm g  
 dalam sampel segar =kandungan logam dalam sampel krg (ug/g) \* (100-60)/100

AMPIRAN 3

DATA KANDUNGAN LOGAM Cu DALAM BANDENG DURI LUNAK

No	kode sampel	Cu (ppm)	brt abu (g)	brt krg (g)	kandungan logam Cu (ug/g)			
					dalam brt abu	dalam brt krg	dlm brt segar	
1	PtS1	0,56	0,46	2,21	12,27	2,53	1,01	
2	PtS2	0,56	0,60	2,84	9,31	1,98	0,79	
3	PtS3	0,87	0,68	3,18	12,76	2,73	1,09	
					average	11,45	2,41	0,97
					std	1,87	0,39	0,16

4	PtL1	0,68	0,57	2,71	11,91	2,51	1,00	
5	PtL2	0,64	0,54	2,97	11,79	2,15	0,86	
6	PtL3	0,77	0,43	2,79	18,06	2,76	1,10	
					average	13,92	2,47	0,99
					std	3,59	0,30	0,12

8	JhAS1	0,62	0,52	2,67	12,00	2,32	0,93	
9	JhAS2	0,44	0,31	2,29	14,07	1,92	0,77	
10	JhAS3	0,70	0,83	3,37	8,39	2,08	0,83	
18	JhBS1	0,59	0,52	2,64	11,46	2,24	0,89	
19	JhBS2	0,65	0,83	3,54	7,81	1,83	0,73	
20	JhBS3	0,49	0,43	2,49	11,41	1,96	0,78	
					average	10,86	2,06	0,82
					std	2,35	0,19	0,08

11	JhAM1	0,64	0,36	2,61	17,94	2,45	0,98	
12	JhAM2	0,61	0,56	3,20	10,99	1,91	0,76	
13	JhAM3	0,46	0,40	2,54	11,58	1,81	0,72	
21	JhBM1	0,46	0,62	3,10	7,46	1,48	0,59	
22	JhBM2	0,51	0,68	3,06	7,50	1,67	0,66	
23	JhBM3	0,63	0,65	3,27	9,74	1,93	0,77	
					average	10,87	1,87	0,75
					std	3,87	0,33	0,13

14	JhAL1	0,72	0,49	2,80	14,64	2,57	1,03	
15	JhAL2	0,76	0,58	3,11	13,07	2,45	0,98	
16	JhAL3	0,63	0,43	2,85	14,74	2,21	0,88	
24	JhBL1	0,69	0,48	3,30	14,28	2,09	0,84	
25	JhBL2	0,77	0,71	3,68	10,91	2,09	0,84	
26	JhBL3	0,48	0,68	3,19	7,11	1,51	0,60	
					average	12,46	2,15	0,86
					std	2,99	0,37	0,15

27	AS1	0,34	0,38	2,51	8,84	1,36	0,54
28	AS2	0,54	0,48	3,68	11,18	1,47	0,59
29	AS3	0,59	0,32	2,58	18,58	2,29	0,92

36	BS1	0,59	0,44	2,91	13,44	2,03	0,81
37	BS2	0,49	0,43	3,04	11,40	1,61	0,64
38	BS3	0,49	0,41	3,41	12,06	1,44	0,57
				average	12,58	1,70	0,68
				std	3,30	0,38	0,15

30	AM1	0,41	0,42	2,67	9,65	1,54	0,61
31	AM2	0,48	0,47	3,91	10,14	1,23	0,49
32	AM3	0,52	0,46	3,07	11,24	1,69	0,68
39	BM1	0,50	0,39	2,85	12,76	1,75	0,70
40	BM2	0,43	0,48	3,79	9,01	1,13	0,45
41	BM3	0,52	0,38	2,70	13,76	1,93	0,77
				average	11,09	1,55	0,62
				std	1,86	0,31	0,13

33	AL1	0,40	0,40	2,89	10,04	1,38	0,55
34	AL2	0,43	0,43	3,45	9,92	1,25	0,49
35	AL3	0,46	0,31	2,42	14,82	1,90	0,76
42	BL1	0,40	0,34	3,01	11,71	1,33	0,53
43	BL2	1,09	0,43	3,98	25,31	2,74	1,10
44	BL3	0,73	0,45	4,64	16,23	1,57	0,63
				average	14,67	1,69	0,68
				std	5,80	0,56	0,23

45	R1	0,84	0,26	2,08	32,37	4,05	
46	R2	1,06	0,31	2,25	33,94	4,72	
				average	33,16	4,38	
				std	1,11	0,48	

ada Pb, Cd, Cu, dan Zn dilakukan pengenceran pada konsentrasi larutan standar  
ada Zn dilakukan pengenceran (10\*) pada konsentrasi larutan sampel  
ada Cd dilakukan pengenceran (5\*) pada konsentrasi larutan sampel reference material  
kandungan logam (ug/g) = (volume sampel lrtan(10)x  
hasil pengukuran logam dlm ppm)/brt sampel (abu/kg) dlm g  
dalam sampel segar =kandungan logam dalam sampel krg (ug/g) \* (100-60)/100

AMPIRAN 4

DATA KANDUNGAN LOGAM Zn DALAM BANDENG DURI LUNAK

No	kode sampel	Zn (ppm)	brt abu (g)	brt krg (g)	kandungan logam Zn (ug/g)		
					dalam brt abu	dalam brt krg	dlm brt segar
1	PtS1	1,40	0,46	2,21	306,82	63,37	25,35
2	PtS2	1,30	0,60	2,84	216,10	45,85	18,34
3	PtS3	1,70	0,68	3,18	249,27	53,39	21,35
				average	257,39	54,20	21,68
				std	45,90	8,79	3,52
4	PtL1	1,50	0,57	2,71	262,80	55,35	22,14
5	PtL2	1,40	0,54	2,97	257,88	47,07	18,83
6	PtL3	1,10	0,43	2,79	258,02	39,36	15,75
				average	259,57	47,26	18,91
				std	2,80	8,00	3,20
7	JhAS1	1,30	0,52	2,67	251,71	48,74	19,49
8	JhAS2	0,90	0,31	2,29	287,73	39,25	15,70
9	JhAS3	2,10	0,83	3,37	251,70	62,38	24,95
16	JhBS1	1,20	0,52	2,64	233,01	45,46	8,19
17	JhBS2	1,40	0,83	3,54	168,26	39,50	15,79
18	JhBS3	1,10	0,43	2,49	256,06	44,11	17,64
				average	241,41	46,57	16,96
				std	39,99	8,55	5,49
10	JhAM1	1,10	0,36	2,61	308,41	42,08	16,83
11	JhAM2	1,70	0,56	3,20	306,30	53,17	21,27
12	JhAM3	0,90	0,40	2,54	226,54	35,40	14,16
19	JhBM1	1,10	0,62	3,10	178,48	35,43	14,17
20	JhBM2	0,90	0,68	3,06	132,39	29,41	11,76
21	JhBM3	1,10	0,65	3,27	170,09	33,62	13,45
				average	220,37	38,18	15,27
				std	73,75	8,40	3,36
13	JhAL1	0,90	0,49	2,80	183,06	32,18	12,87
14	JhAL2	1,20	0,58	3,11	206,41	38,61	15,44
15	JhAL3	1,20	0,43	2,85	280,70	42,04	16,82
22	JhBL1	1,40	0,48	3,30	289,69	42,48	16,99
23	JhBL2	2,00	0,71	3,68	283,41	54,35	21,74
24	JhBL3	1,20	0,68	3,19	177,71	37,65	15,06
				average	236,83	41,22	16,49
				std	53,29	7,43	2,97
25	AS1	1,00	0,38	2,51	259,94	39,90	5,96
26	AS2	1,50	0,48	3,68	310,42	40,71	16,28
27	AS3	1,10	0,32	2,58	346,48	42,71	17,08

34	BS1	1,30	0,44	2,91	296,15	44,72	17,89
35	BS2	1,50	0,43	3,04	348,89	49,40	19,76
36	BS3	1,10	0,41	3,41	270,83	32,23	12,89
					average	305,45	14,98
					std	37,29	6,19

28	AM1	0,90	0,42	2,67	211,92	33,73	13,49
29	AM2	1,30	0,47	3,91	274,68	33,29	13,31
30	AM3	1,10	0,46	3,07	237,75	35,78	14,31
37	BM1	1,10	0,39	2,85	280,73	38,60	15,44
38	BM2	1,20	0,48	3,79	251,39	31,67	12,67
39	BM3	0,80	0,38	2,70	211,74	29,66	11,86
					average	244,70	13,51
					std	29,84	1,25

31	AL1	1,20	0,40	2,89	301,21	41,51	16,60
32	AL2	1,00	0,43	3,45	230,78	29,00	11,60
33	AL3	0,80	0,31	2,42	257,70	33,00	13,20
40	BL1	0,80	0,34	3,01	234,28	26,55	10,62
41	BL2	1,30	0,43	3,98	301,82	32,64	13,06
42	BL3	1,10	0,45	4,64	244,58	23,68	9,47
					average	261,73	12,43
					std	32,21	2,49

43	R1	1,60	0,26	2,08	616,59	77,07
44	R2	1,70	0,31	2,25	544,31	75,67
					average	580,45
					std	51,11

IB :

- pada Pb, Cd, Cu, dan Zn dilakukan pengenceran pada konsentrasi larutan standar
  - pada Zn dilakukan pengenceran (10\*) pada konsentrasi larutan sampel
  - pada Cd dilakukan pengenceran (5\*) pada konsentrasi larutan sampel reference material
- Kandungan logam (ug/g) = (volume sampel lrtan(10)x  
hasil pengukuran logam dlm ppm/brt sampel (abu/krig) dlm g  
Dalam sampel segar =kandungan logam dalam sampel krg (ug/g) \* (100-60)/100

LAMPIRAN 5

**ANALISIS REGRESI ANTARA BERAT BANDENG DURI LUNAK  
DENGAN KANDUNGAN LOGAM Pb**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	BERAT <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: LOAD\_PB

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,772 <sup>a</sup>	,595	,585	87,0288

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_PB

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	445670,2	1	445670,232	58,842	,000 <sup>a</sup>
	Residual	302960,3	40	7574,008		
	Total	748630,5	41			

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_PB

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	10,087	26,799		,376	,709
	BERAT	1,255	,164	,772	7,671	,000

a. Dependent Variable: LOAD\_PB

**Casewise Diagnostics<sup>a</sup>**

Case Number	Std. Residual	LOAD_PB
41	-4,030	,00

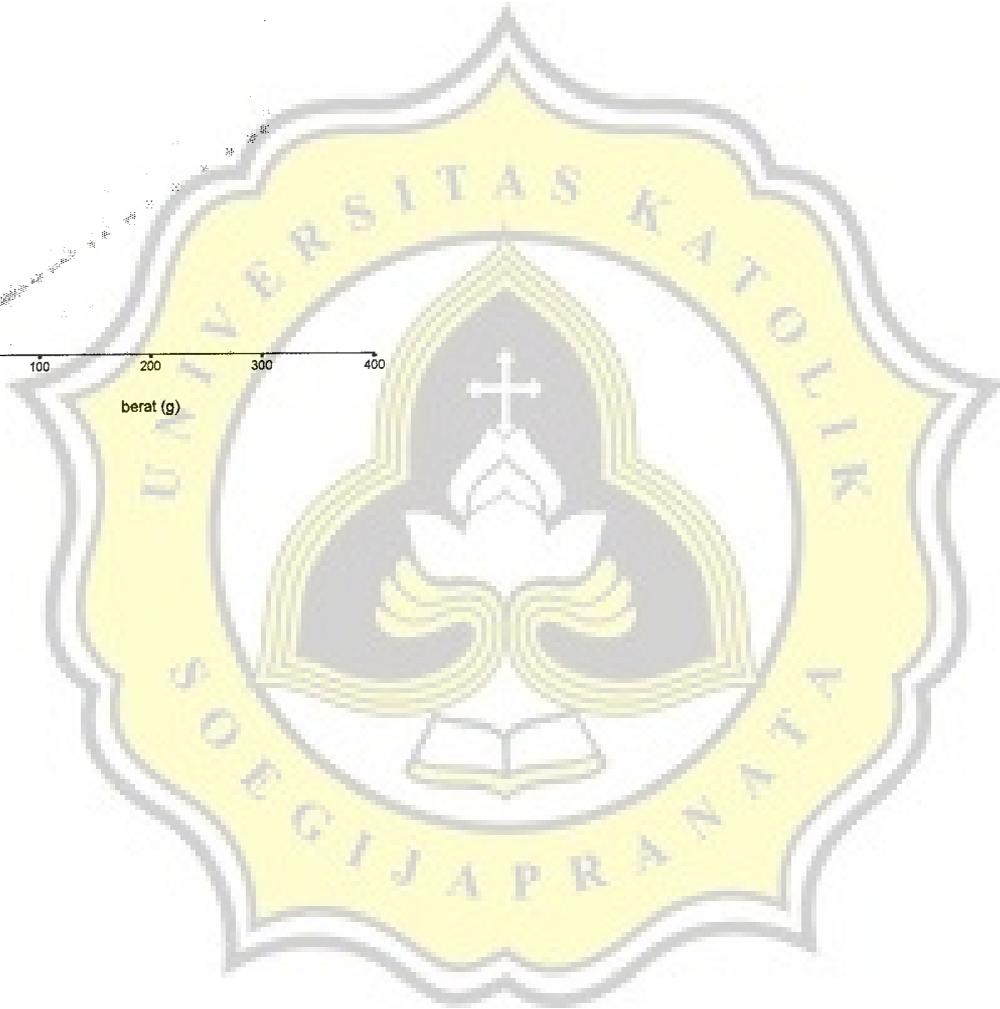
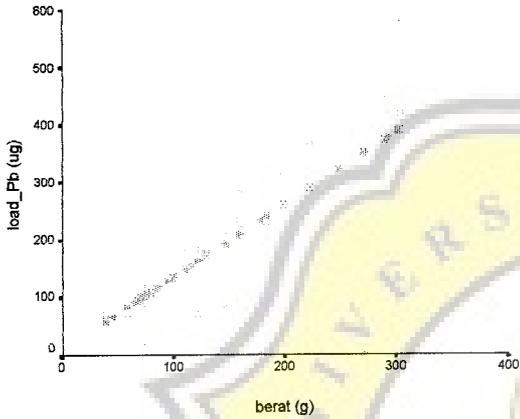
a. Dependent Variable: LOAD\_PB

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	57,9870	390,1976	187,9833	104,2593	42
Residual	-350,7288	189,1003	-9,47E-15	85,9609	42
Std. Predicted Value	-1,247	1,940	,000	1,000	42
Std. Residual	-4,030	2,173	,000	,988	42

a. Dependent Variable: LOAD\_PB

### Graph



LAMPIRAN 6

**ANALISIS REGRESI ANTARA BERAT BANDENG DURI LUNAK DENGAN KANDUNGAN LOGAM Cd**

**Regression**

**Variables Entered/Removed<sup>d</sup>**

Model	Variables Entered	Variables Removed	Method
1	BERAT <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: LOAD\_CD

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,902 <sup>a</sup>	,814	,810	3,2567

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_CD

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1858,563	1	1858,563	175,233	,000 <sup>a</sup>
	Residual	424,249	40	10,606		
	Total	2282,812	41			

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_CD

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2,686	1,003		2,678	,011
	BERAT	8,102E-02	,006	,902	13,238	,000

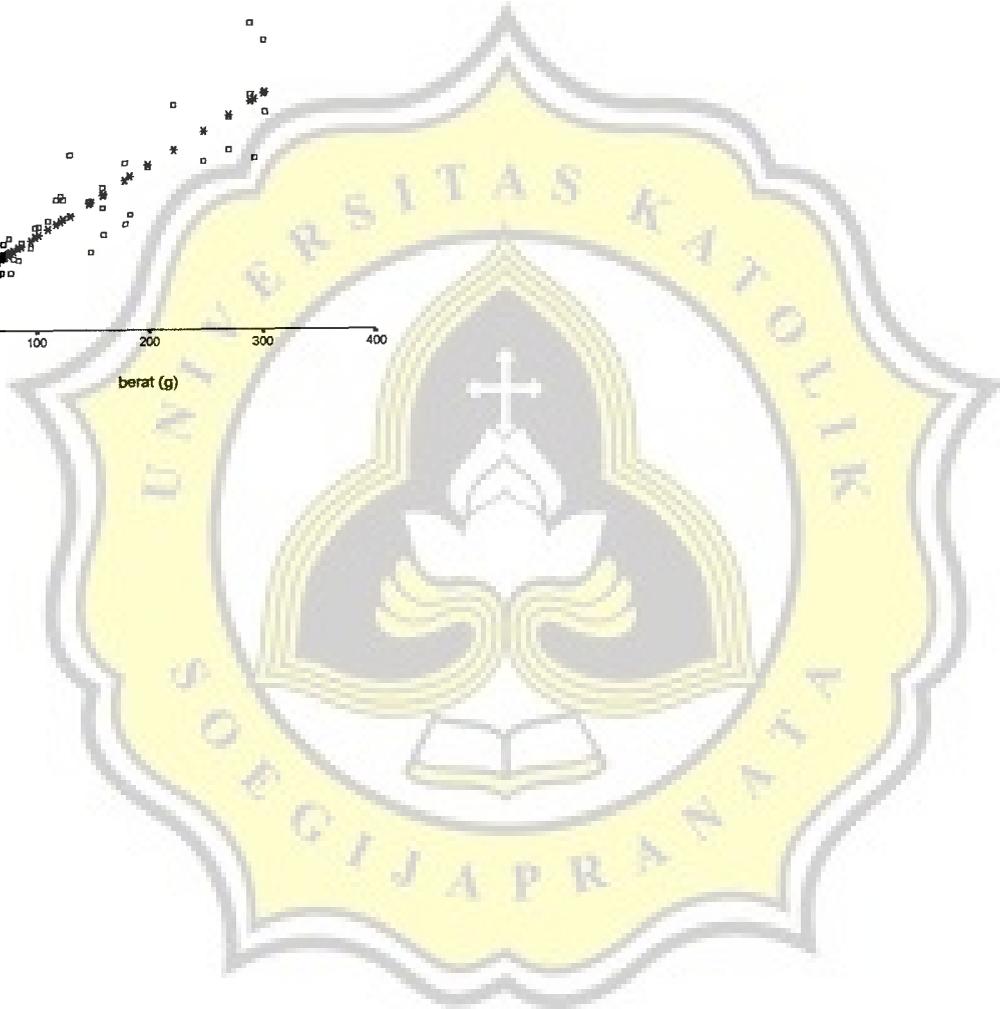
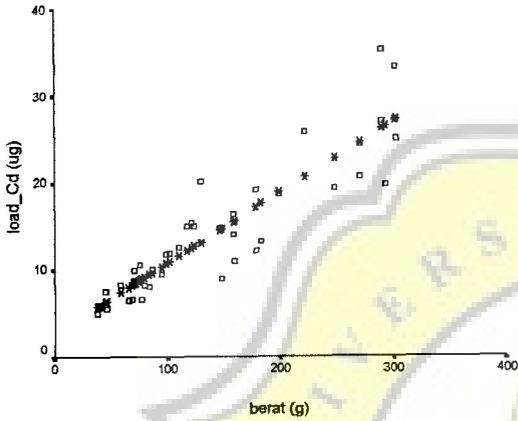
a. Dependent Variable: LOAD\_CD

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	5,7790	27,2323	14,1738	6,7328	42
Residual	-6,7484	9,0736	-1,69E-15	3,2168	42
Std. Predicted Value	-1,247	1,940	,000	1,000	42
Std. Residual	-2,072	2,786	,000	,988	42

a. Dependent Variable: LOAD\_CD

### Graph



LAMPIRAN 7

**ANALISIS REGRESI ANTARA BERAT BANDENG DURI LUNAK DENGAN KANDUNGAN LOGAM Cu**

**Regression**

**Variables Entered/Removed<sup>d</sup>**

Model	Variables Entered	Variables Removed	Method
1	BERAT <sup>a</sup>		Enter

- a. All requested variables entered.
- b. Dependent Variable: LOAD\_CU

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,785 <sup>a</sup>	,616	,607	41,9869

- a. Predictors: (Constant), BERAT
- b. Dependent Variable: LOAD\_CU

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	113208,2	1	113208,173	64,217	,000 <sup>a</sup>
	Residual	70515,925	40	1762,898		
	Total	183724,1	41			

- a. Predictors: (Constant), BERAT
- b. Dependent Variable: LOAD\_CU

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	11,994	12,929		,928	,359
	BERAT	,632	,079	,785	8,014	,000

- a. Dependent Variable: LOAD\_CU

**Casewise Diagnostics<sup>a</sup>**

Case Number	Std. Residual	LOAD_CU
41	3,277	321,25

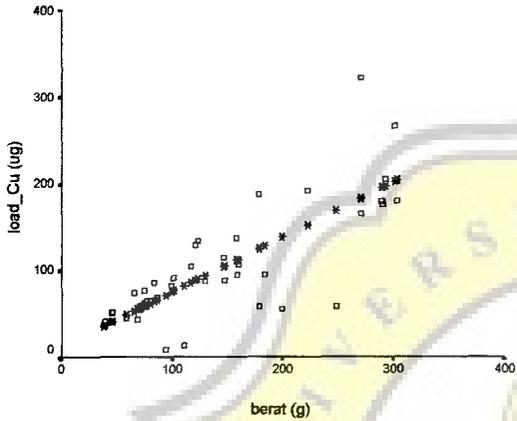
- a. Dependent Variable: LOAD\_CU

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	36,1352	203,5699	101,6536	52,5469	42
Residual	-110,0575	137,5724	-7,44E-15	41,4717	42
Std. Predicted Value	-1,247	1,940	,000	1,000	42
Std. Residual	-2,621	3,277	,000	,988	42

a. Dependent Variable: LOAD\_CU

### Graph



LAMPIRAN 8

**ANALISIS REGRESI ANTARA BERAT BANDENG DURI LUNAK DENGAN KANDUNGAN LOGAM Zn**

**Regression**

**Variables Entered/Removed<sup>d</sup>**

Model	Variables Entered	Variables Removed	Method
1	BERAT <sup>a</sup>		Enter

a. All requested variables entered.

b. Dependent Variable: LOAD\_ZN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,924 <sup>a</sup>	,854	,851	460,2349

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_ZN

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	49716941	1	49716940,94	234,717	,000 <sup>a</sup>
	Residual	8472645	40	211816,131		
	Total	58189586	41			

a. Predictors: (Constant), BERAT

b. Dependent Variable: LOAD\_ZN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	476,448	141,719		3,362	,002
	BERAT	13,251	,865	,924	15,320	,000

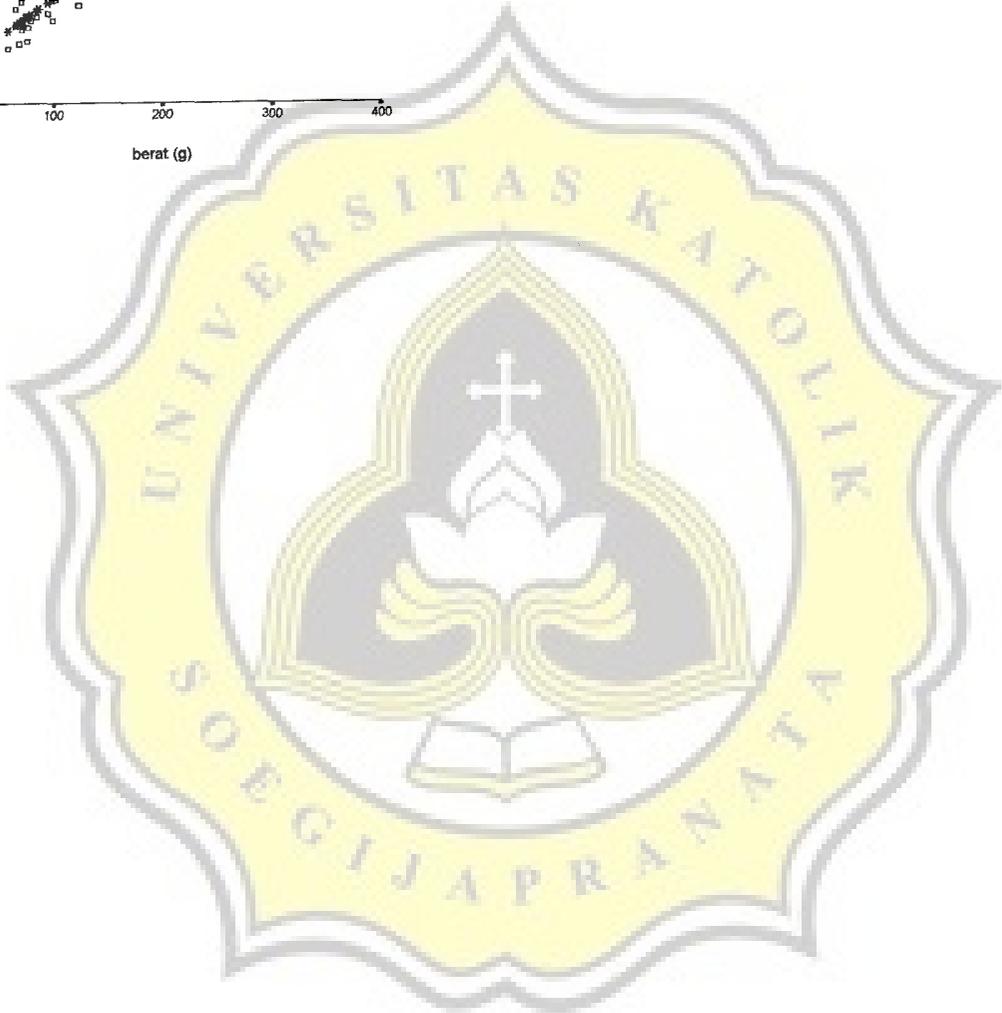
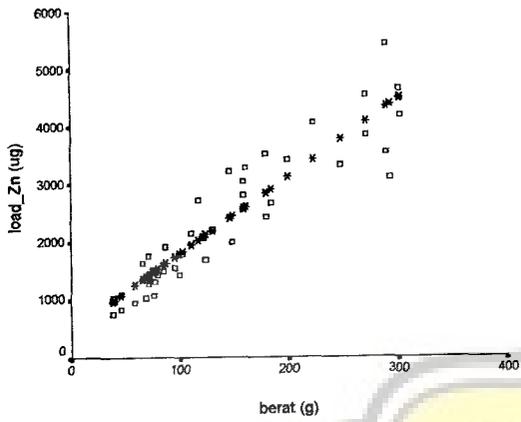
a. Dependent Variable: LOAD\_ZN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	982,3620	4491,1636	2355,3807	1101,1850	42
Residual	-1268,11	1079,8633	-3,90E-13	454,5876	42
Std. Predicted Value	-1,247	1,940	,000	1,000	42
Std. Residual	-2,755	2,346	,000	,988	42

a. Dependent Variable: LOAD\_ZN

# Graph



LAMPIRAN 9

**ANALISIS REGRESI ANTARA PANJANG BANDENG DURI LUNAK DENGAN KANDUNGAN LOGAM Pb**

**Regression**

**Variables Entered/Removed<sup>b</sup>**

Model	Variables Entered	Variables Removed	Method
1	PANJANG		Enter

- a. All requested variables entered.  
 b. Dependent Variable: LOAD\_PB

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,619 <sup>a</sup>	,383	,368	107,4283

- a. Predictors: (Constant), PANJANG  
 b. Dependent Variable: LOAD\_PB

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	286996,8	1	286996,792	24,868	,000 <sup>a</sup>
	Residual	461633,8	40	11540,844		
	Total	748630,5	41			

- a. Predictors: (Constant), PANJANG  
 b. Dependent Variable: LOAD\_PB

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-704,302	179,696		-3,919	,000
	PANJANG	34,726	6,964	,619	4,987	,000

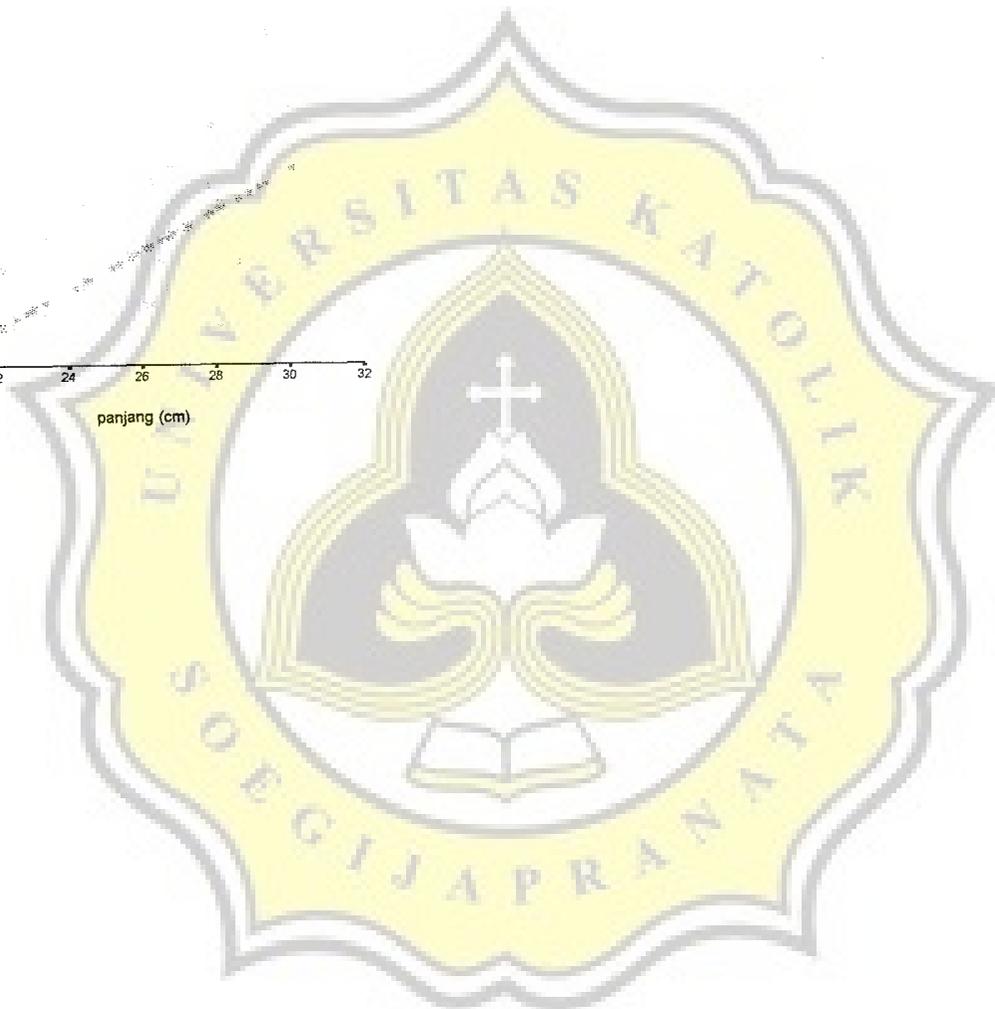
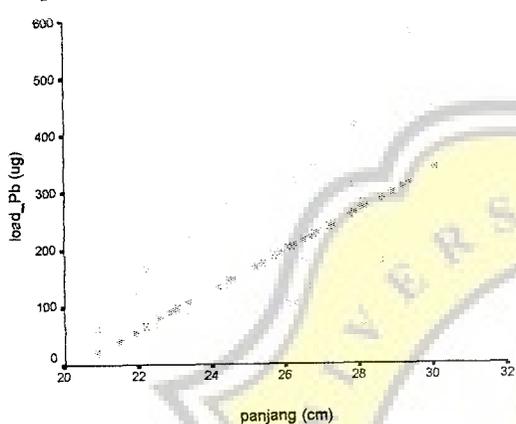
- a. Dependent Variable: LOAD\_PB

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	21,4654	340,9417	187,9833	83,6655	42
Residual	-240,2372	261,1963	-3,30E-13	106,1101	42
Std. Predicted Value	-1,990	1,828	,000	1,000	42
Std. Residual	-2,236	2,431	,000	,988	42

a. Dependent Variable: LOAD\_PB

### Graph



LAMPIRAN 10

**ANALISIS REGRESI ANTARA PANJANG BANDENG DURI LUNAK  
DENGAN KANDUNGAN LOGAM Cd**

**Regression**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PANJANG		Enter

- a. All requested variables entered.
- b. Dependent Variable: LOAD\_CD

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,741 <sup>a</sup>	,549	,537	5,0750

- a. Predictors: (Constant), PANJANG
- b. Dependent Variable: LOAD\_CD

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1252,574	1	1252,574	48,632	,000 <sup>a</sup>
	Residual	1030,238	40	25,756		
	Total	2282,812	41			

- a. Predictors: (Constant), PANJANG
- b. Dependent Variable: LOAD\_CD

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-44,774	8,489		-5,274	,000
	PANJANG	2,294	,329	,741	6,974	,000

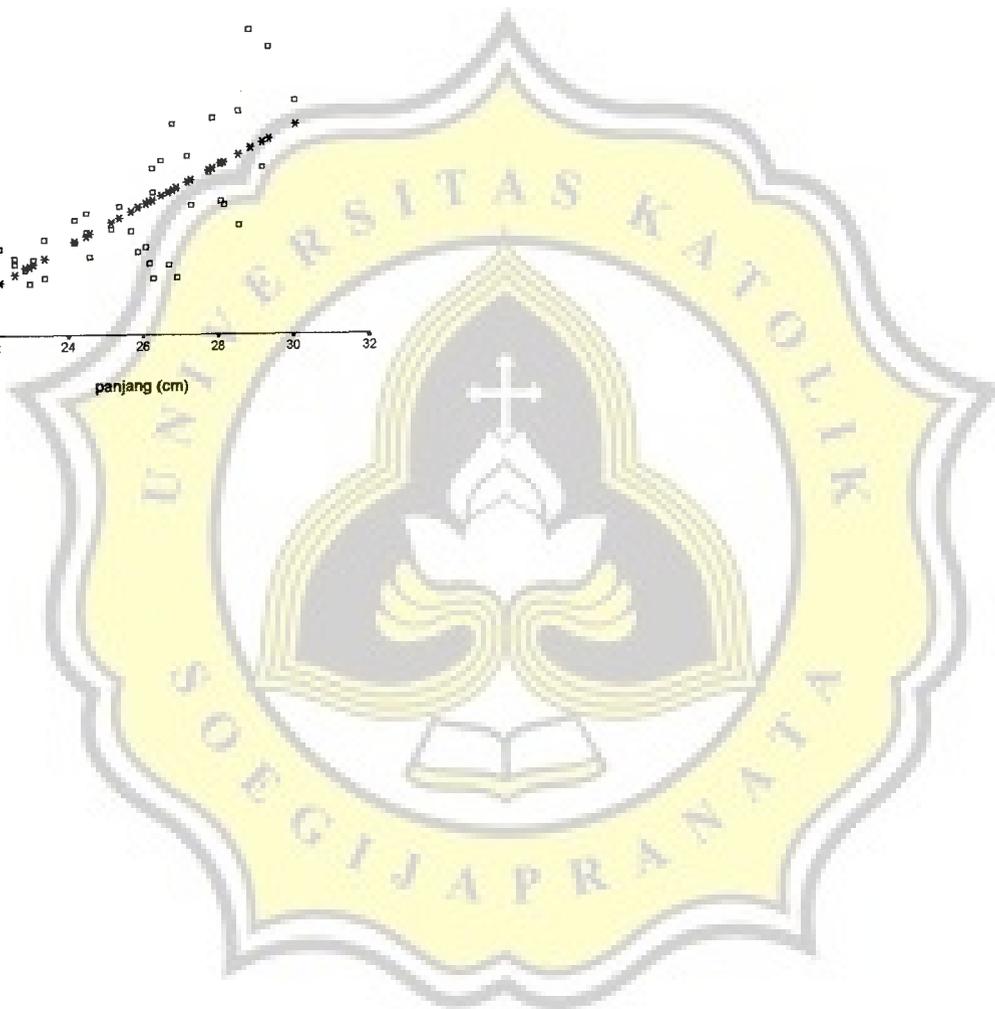
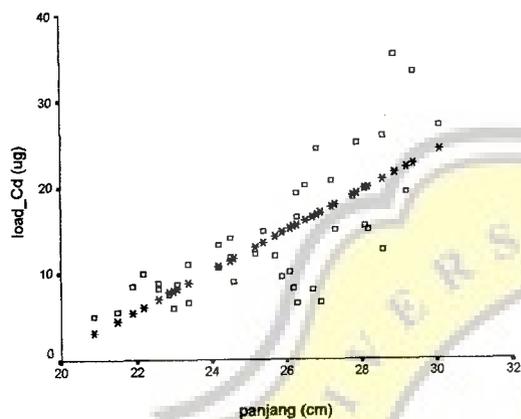
- a. Dependent Variable: LOAD\_CD

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3,1730	24,2788	14,1738	5,5273	42
Residual	-10,3477	13,7641	-2,39E-14	5,0128	42
Std. Predicted Value	-1,990	1,828	,000	1,000	42
Std. Residual	-2,039	2,712	,000	,988	42

a. Dependent Variable: LOAD\_CD

### Graph



LAMPIRAN 11

**ANALISIS REGRESI ANTARA PANJANG BANDENG PRESTO DENGAN KANDUNGAN LOGAM Cu**

**Regression**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PANJANG <sup>c</sup>		Enter

- a. All requested variables entered.
- b. Dependent Variable: LOAD\_CU

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,555 <sup>a</sup>	,308	,291	56,3624

- a. Predictors: (Constant), PANJANG
- b. Dependent Variable: LOAD\_CU

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	56655,074	1	56655,074	17,834	,000 <sup>a</sup>
	Residual	127069,0	40	3176,726		
	Total	183724,1	41			

- a. Predictors: (Constant), PANJANG
- b. Dependent Variable: LOAD\_CU

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-294,793	94,278		-3,127	,003
	PANJANG	15,429	3,653	,555	4,223	,000

- a. Dependent Variable: LOAD\_CU

**Casewise Diagnostics<sup>a</sup>**

Case Number	Std. Residual	LOAD CU
41	3,484	321,25

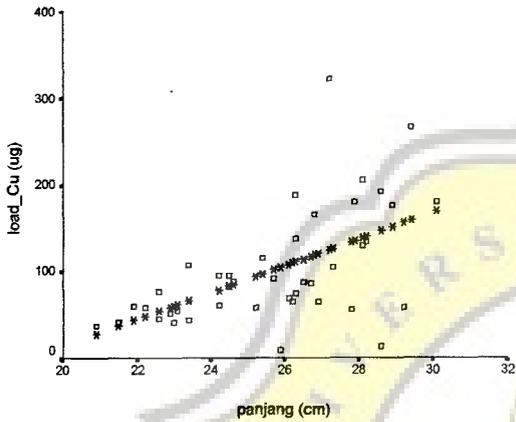
- a. Dependent Variable: LOAD\_CU

### Residuals Statistics<sup>a</sup>

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	27,6689	169,6137	101,6536	37,1730	42
Residual	-133,4105	196,3798	-1,48E-13	55,6709	42
Std. Predicted Value	-1,990	1,828	,000	1,000	42
Std. Residual	-2,367	3,484	,000	,988	42

a. Dependent Variable: LOAD\_CU

### Graph



LAMPIRAN 12

**ANALISIS REGRESI ANTARA PANJANG BANDENG DURI LUNAK  
DENGAN KANDUNGAN LOGAM Zn**

**Regression**

**Variables Entered/Removed<sup>a</sup>**

Model	Variables Entered	Variables Removed	Method
1	PANJANG		Enter

- a. All requested variables entered.  
b. Dependent Variable: LOAD\_ZN

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,694 <sup>a</sup>	,482	,469	868,2176

- a. Predictors: (Constant), PANJANG  
b. Dependent Variable: LOAD\_ZN

**ANOVA<sup>b</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28037516	1	28037516,05	37,195	,000 <sup>a</sup>
	Residual	30152070	40	753801,754		
	Total	58189586	41			

- a. Predictors: (Constant), PANJANG  
b. Dependent Variable: LOAD\_ZN

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6463,933	1452,277		-4,451	,000
	PANJANG	343,228	56,278	,694	6,099	,000

- a. Dependent Variable: LOAD\_ZN

**Residuals Statistics<sup>a</sup>**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	709,5228	3867,2166	2355,3807	826,9473	42
Residual	-1535,99	1785,4146	-3,36E-12	857,5642	42
Std. Predicted Value	-1,990	1,828	,000	1,000	42
Std. Residual	-1,769	2,056	,000	,988	42

- a. Dependent Variable: LOAD\_ZN

# Graph

