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LAMPIRAN 1

PETA LOKASI PENELITIAN

LAMPIRAN 2

PERHITUNGAN KOEFISIEN KORELASI

1. Korelasi antara ukuran butir dengan kadar AuCN

n	x (Ukuran butir)	y (kadar)	xy	x^2	y^2
1	24	86.76	2093	582	7527
2	23	88.16	2070	551	7772
3	21	89.60	1884	442	8028
4	21	89.60	1909	454	8028
5	29	78.32	2265	836	6134
6	24	86.76	2053	560	7527
7	35	60.10	2087	1206	3612
8	22	89.16	1933	470	7949
9	23	88.16	1991	510	7772
10	21	89.60	1924	461	8028
11	22	89.16	1952	480	7949
12	26	87.38	2238	656	7634
13	21	89.60	1878	439	8028
14	25	88.00	2200	625	7744
15	14	91.50	1281	196	8372
16	24	86.76	2086	578	7527
17	27	84.18	2241	709	7085
18	26	87.38	2308	698	7634
19	24	86.76	2091	581	7527
20	22	89.16	1922	465	7949
21	37	56.74	2095	1364	3219
22	24	86.76	2082	576	7527
23	30	75.62	2292	919	5719
24	31	78.15	2451	984	6107
25	28	81.17	2264	778	6588
26	29	78.32	2277	845	6134
27	25	88.00	2202	626	7744
28	24	86.76	2093	582	7527
29	24	86.76	2086	578	7527
30	26	87.38	2299	692	7634
31	27	84.18	2273	729	7085
32	25	88.00	2189	619	7744
	23	88.16	2028	529	7772
	24	86.76	2125	600	7527
	26	87.38	2288	686	7634
	22	89.16	1961	484	7949
	27	84.18	2277	732	7085

n	x (Ukuran butir)	y (kadar)	xy	x^2	y^2
38	26	87.38	2274	677	7634
39	24	86.76	2066	567	7527
40	33	83.00	2756	1103	6889
41	29	78.32	2242	819	6134
42	26	87.38	2232	652	7634
43	24	86.76	2092	582	7527
44	28	81.17	2259	774	6588
45	24	86.76	2066	567	7527
46	33	83.00	2756	1103	6889
47	29	78.32	2242	819	6134
48	29	78.32	2277	845	6134
49	27	84.18	2290	740	7085
50	24	86.76	2091	581	7527
51	26	87.38	2272	676	7634
52	27	84.18	2236	706	7085
53	27	84.18	2313	755	7085
54	27	84.18	2232	703	7085
55	21	89.60	1882	441	8028
56	25	88.00	2200	625	7744
57	30	75.62	2269	900	5719
58	36	58.42	2113	1308	3413
∑	**1,501**	**4,879**	**124,848**	**39,765**	**413,381**

Keterangan:

n : Jumlah pasang data

x : Ukuran Butir

y : Kadar AuCN

Diketahui :

n = 58

$\sum x$ = 1,501

$\sum y$ = 4,879

$\sum xy$ = 124,848

$\sum x^2$ = 39,765

$\sum y^2$ = 413,381

$(\sum x)^2$ = 2,252,362

$(\sum y)^2$ = 23,806,266

an : Koefisien korelasi (r)…?

Penyelesaian: $r_{x,y} = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2}}$

$$r_{x,y} = \frac{58(124{,}848) - (1{,}501)(4{,}879)}{\sqrt{(58\ (39{,}765) - (2{,}252{,}362))(58\ (413{,}381) - (23{,}806{,}266))}}$$

$$= \frac{(72.411{,}84) - (73.233{,}79)}{\sqrt{((23.063{,}70) - (2{,}252{,}362)((23.976{,}098) - (23{,}806{,}266))}}$$

$$= \frac{(178{,}05)}{\sqrt{(20.811)(169.832)}}$$

$$= \frac{(178{,}05)}{\sqrt{3.534{,}37}}$$

$$= \frac{178{,}05}{594.506}$$

$$= -0.849$$

2. Korelasi antara jam kerja dengan produktivitas crusher

n	X (jam kerja)	Y (Pdty Crusher)	xy	x^2	y^2
1	9	171	1470	74	29122
2	8	142	1163	67	20061
3	10	132	1286	95	17378
4	7	147	988	45	21578
5	10	140	1419	102	19660
6	9	152	1389	83	23183
7	5	144	739	26	20871
8	6	145	892	38	21040
9	4	183	786	18	33541
10	3	117	402	12	13618
11	3	318	856	7	101339
12	5	124	614	24	15484
13	4	116	410	13	13378
14	3	169	529	10	28640
15	3	176	543	10	31001
16	7	135	886	43	18114
17	8	135	1141	72	18174
18	5	121	613	26	14609
19	7	100	655	43	9965
20	5	109	573	28	11825
21	7	101	659	42	10253
22	6	141	780	30	19973
[illegible]	7	99	662	44	9857
[illegible]	8	106	884	70	11192
[illegible]	10	80	783	95	6474
[illegible]	7	83	604	53	6854
[illegible]	6	76	475	39	5849

n	X (jam kerja)	Y (Pdty Crusher)	xy	x^2	y^2
28	6	86	539	40	7332
29	4	111	408	14	12257
30	11	84	942	125	7099
31	6	53	315	35	2843
32	5	85	460	29	7199
33	2	168	262	2	28074
34	5	93	465	25	8633
35	2	120	182	2	14372
36	1	136	191	2	18627
37	4	89	315	13	7846
38	6	91	588	42	8250
39	6	140	772	30	19540
40	5	138	744	29	19162
41	4	134	506	14	18013
42	4	125	523	18	15620
43	5	133	613	21	17708
44	5	64	294	21	4048
45	5	108	576	29	11565
46	6	83	482	34	6838
47	5	75	364	24	5616
48	8	71	576	67	4971
49	9	86	810	89	7336
50	7	94	693	55	8792
51	1	87	123	2	7534
52	4	296	1159	15	87586
53	7	93	673	53	8607
54	8	121	1020	72	14535
55	3	191	647	11	36469
56	5	149	694	22	22094
57	5	221	1027	22	48898
58	5	154	745	23	23763
∑	331	7,338	39,907	2,190	1,064,261

Keterangan:

n : Jumlah pasang data

x : Jam Kerja

y : Produktivitas Crusher

i :

n = 58

∑x = 331

$\sum y$ = 7,338

$\sum xy$ = 39,907

$\sum x^2$ = 2,190

$\sum y^2$ = 1,064,261

$(\sum x)^2$ = 109,481

$(\sum y)^2$ = 53,845,782

Ditanyakan : Koefisien korelasi (r)…?

Penyelesaian: $r_{x,y} = \frac{n\sum xy - \sum x \sum y}{\sqrt{(n\sum x^2 - (\sum x)^2)(n\sum y^2 - (\sum y)^2}}$

$$r_{x,y} = \frac{58(39,907) - (331)(7,338)}{\sqrt{(58\ (166,46) - (109,481))(58(1,064,261) - (53,845,782))}}$$

$$= \frac{(2,341,606) - (2,282,118)}{\sqrt{((9,655) - (109,481))((60,683) - (53,845,782))}}$$

$$= \frac{(59,488)}{\sqrt{(99,826)(53,785)}}$$

$$= \frac{(59,488)}{\sqrt{5,369,141}}$$

$$= \frac{299,09}{2,317}$$

= 0,305

LAMPIRAN 3

ANALISIS VALIDASI/UJI SIGNIFIKANSI DATA KORELASI

1. Validasi antara ukuran butir dengan kadar AuCN

Nilai Korelasi (rxy)	t Hitung	t Tabel	Keterangan
0,849	12,036	1.67	valid

Keterangan : rxy = nilai korelasi antara variable x dan y

n = jumlah sampel

Diketahui: rxy = 0,849

n = 58

Ditanyakan: t_{hitung} =…?

Penyelesaian: $t = \frac{rxy\sqrt{n-2}}{\sqrt{1-r^2xy}}$

Hitung = $\sqrt{n-2}$

= $\sqrt{58-2} = \sqrt{56}$ = 7,483

Hitung = $\sqrt{1-r^2}xy = \sqrt{1-0{,}849^2} = \sqrt{1-0{,}7218} = \sqrt{0{,}2781}$

$t = \frac{0{,}894\ x\ 7{,}483}{0{,}527}$

$t = \frac{6{,}3532}{0{,}527}$

t= 12,036

2. Korelasi antara jam kerja dengan produktivitas crusher

Nilai Korelasi (rxy)	t Hitung	t Tabel	Keterangan
0,305	2,397	1,67	Valid

Keterangan : rxy = nilai korelasi antara variable x dan y

n = jumlah sampel

Diketahui: rxy = 0,305

n = 58

ıyakan: t_{hitung} =…?

elesaian: $t = \frac{rxy\sqrt{n-2}}{\sqrt{1-r^2xy}}$

Hitung = $\sqrt{n-2}$

= $\sqrt{58-2}$ = $\sqrt{56}$ = 7,483

Hitung = $\sqrt{1-r^2xy}$ = $\sqrt{1-0{,}305^2}$ = $\sqrt{1-0{,}0930}$ = $\sqrt{0{,}9069}$ =

0,9526

t = $\frac{0{,}305\ x\ 7{,}483}{0{,}9526}$

t= $\frac{2{,}2854}{0{,}95267}$

t= 2,397

Lampiran B 10

Kartu Konsultasi Tugas Akhir

JUDUL: Analisis kinerja Crushing plant pada Pengolahan Bijih Emas PT. J. Resources Bolaang Mongondow, Sulawesi Utara, Site-Bakan

(Konsultasi minimal 8 kali)

TANGGAL	MATERI KONSULTASI	PARAF DOSEN
Jumat/ 17-NOV-2023	- Penulisan pendahuluan, isi laporan TA - Tujuan penelitian - Daftar Pustaka	
Senin/ 20-NOV-2023	- Bimbingan pengolahan data	
Rabu/ 27 DES - 2023	- Metode Penelitian - Tujuan penelitian - Pendahuluan - Bimbingan pengolahan Data	
Jumat/ 29, - DES - 2023	- Metode penelitian direvisi - Pemeriksaan Bab 2.	
Selasa/ 19 - DES - 2023	- Tujuan Penelitian - Flow chart Penelitian - pengolahan data	
Kamis/ 21, DES, 2023	- Tujuan Penelitian - Kesimpulan - Penyelesaian Donlon	
Rabu/ 27 DES - 2023	- Pemeriksaan revisi - Penulisan tabel - Kesimpulan. - Penulisan ABSTRAK - Pemeriksaan Bab 1 sampai Bab 5	

TANGGAL	MATERI KONSULTASI	PARAF DOSEN
Jumat 5-Jan-2024	- Penulisan abstrak - Penulisan Daftar pustaka - Penambahan tabel Bab 4	

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