

LAMPIRAN

Alat dan Bahan Penelitian



pH meter Digital



Tds 3



Capit Buaya



logbook



Naniura Resistivity Meter
Model NRD 300 HF



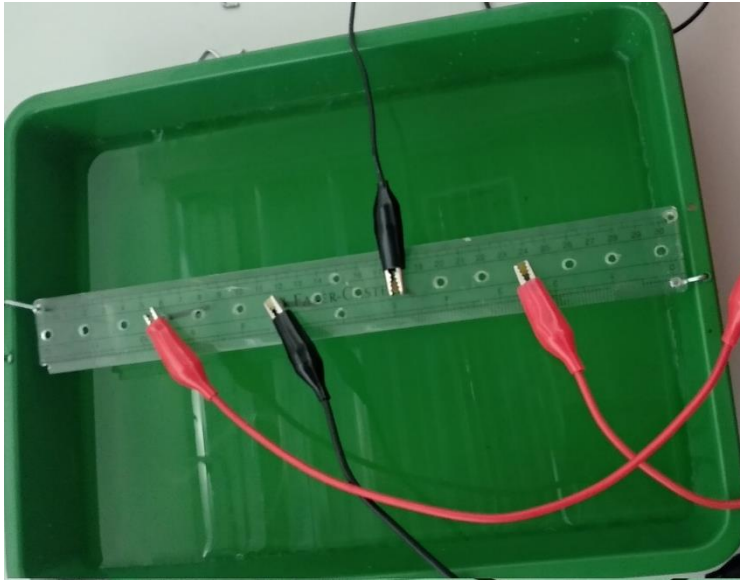
Aki 12 volt



Paku



Penggaris 30 cm

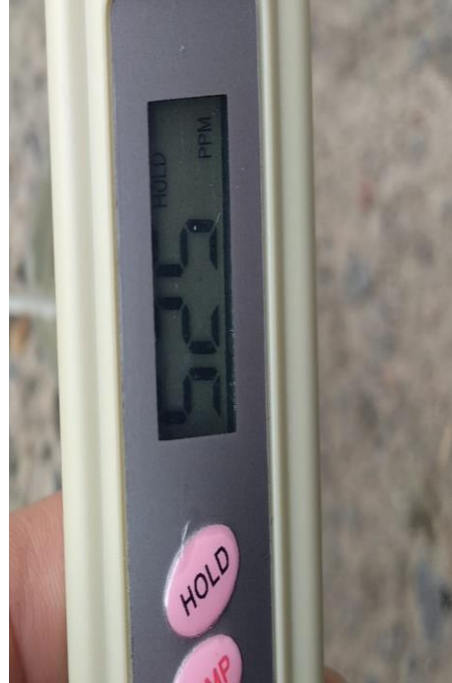


Tempat penampung sampel

Proses Pengambilan Sampel Data



Lokasi pengambilan sampel



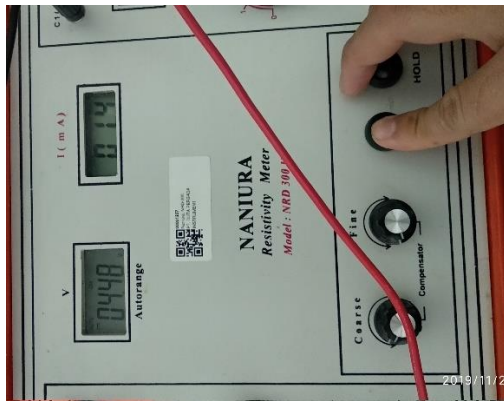
Pengukuran Tds



Pengukuran Ph



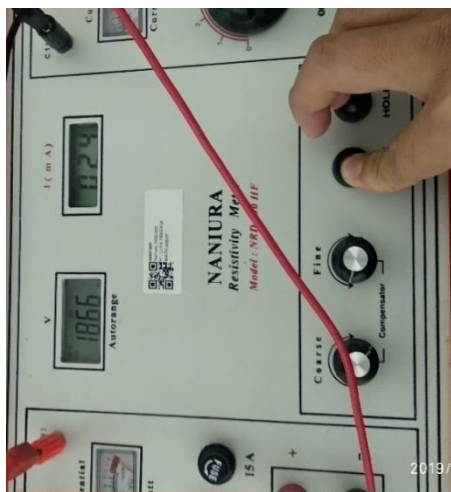
Pengukuran Suhu



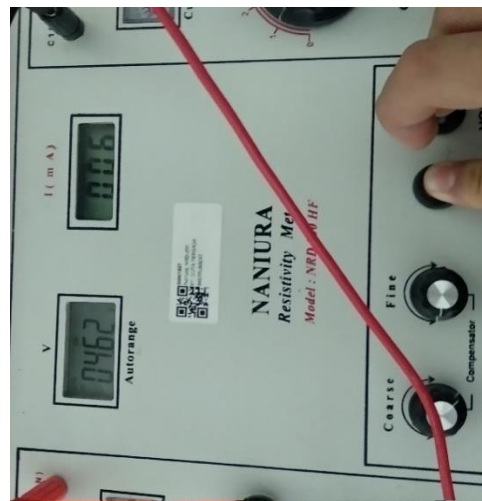
Pengukuran Resistivitas



Pengukuran Resistivitas



Pengukuran Resistivitas



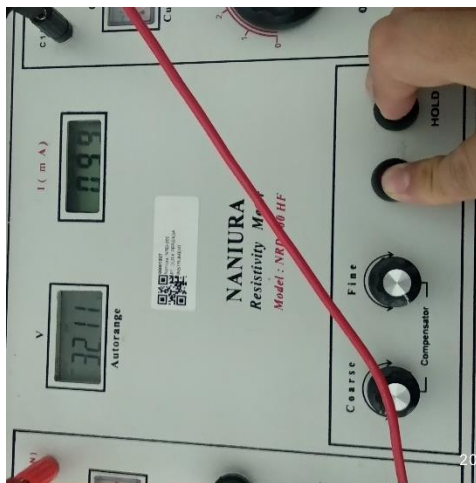
Pengukuran Resistivitas



Pengukuran Resistivitas



Pengukuran Resistivitas



Pengukuran Resistivitas



Pengukuran Resistivitas



Pengukuran Logam Berat Menggunakan AAS/SSA



Pengambilan Resistivitas



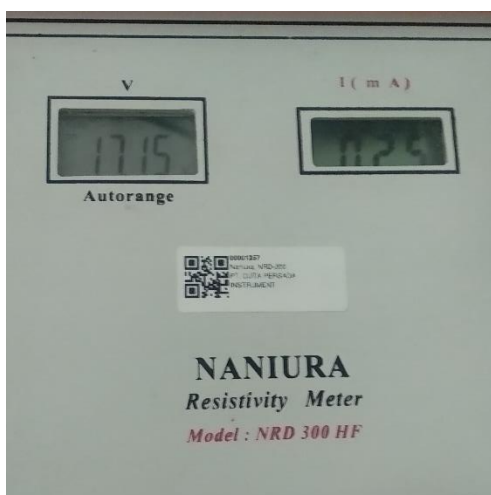
Pengambilan Resistivitas



Pengambilan Resistivitas



Pengambilan Resistivitas



Pengambilan Resistivitas



Pengambilan Resistivitas



Pengambilan Resistivitas



Pengambilan Resistivitas

Tabel Resistivitas

Tabel 4. 7 Hasil Pengambilan Data Resistivitas di Titik 3.1.1

Sampel ke 3.1.1 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	06,46	7	0,922	12.56	11,580
2	3	5	7	9	05,14	5	1,028	12.56	12,911
3	5	7	9	11	04,44	3	1,48	12.56	18,588
Sampel ke 3.1.1 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	34,33	38	0,903	12.56	11,341
2	3	5	7	9	23,67	23	1,029	12.56	12,924
3	5	7	9	11	16,72	12	1,393	12.56	17,496
Sampel ke 3.1.1 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ

1	1	3	5	7	05,06	58	0,087	12.56	1,092
2	3	5	7	9	34,51	36	0,958	12.56	12,032
3	5	7	9	11	24,76	18	1,375	12.56	17,27

Tabel 4. 8 Hasil Pengambilan Data Resistivitas di Titik 3.2.2

Sampel ke 3.2.2 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,38	11	0,489	12.56	6,141
2	3	5	7	9	05,12	6	0,853	12.56	10,713
3	5	7	9	11	04,29	3	1,43	12.56	17,960
Sampel ke 3.2.2 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	19,30	40	0,482	12.56	6,141
2	3	5	7	9	20,22	25	0,808	12.56	10,148
3	5	7	9	11	15,27	15	1,018	12.56	12,786
Sampel ke 3.2.2 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	25,23	79	0,319	12.56	4,006
2	3	5	7	9	30,52	54	0,565	12.56	7,096
3	5	7	9	11	28,83	31	0,93	12.56	11,680

Tabel 4. 9 Hasil Pengambilan Data Resistivitas di Titik 3.3.3

Sampel ke 3.3.3 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,14	11	0,376	12.56	4,722
2	3	5	7	9	05,43	6	0,905	12.56	11,366
3	5	7	9	11	04,59	5	0.918	12.56	11,530
Sampel ke 3.3.3 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	19,30	52	0,371	12.56	4,659
2	3	5	7	9	18,32	31	0,590	12.56	7,410
3	5	7	9	11	17,49	20	0,874	12.56	10,977
Sampel ke 3.3.3 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	28,62	79	0,362	12.56	4,546
2	3	5	7	9	31,61	54	0,585	12.56	7,347
3	5	7	9	11	26,64	31	0,859	12.56	10,789

Tabel 4. 10 Hasil Pengambilan Data Resistivitas di Titik 3.1.9

Sampel ke 3.1.9 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,41	12	0,367	12.56	4,609
2	3	5	7	9	05,26	6	0,876	12.56	11,002
3	5	7	9	11	03,71	3	1,236	12.56	15,524

Sampel ke 3.1.9 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	15,22	45	0,338	12.56	4,245
2	3	5	7	9	20,24	29	0,697	12.56	8,754
3	5	7	9	11	17,30	17	1,017	12.56	12,773
Sampel ke 3.1.9 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	34,14	71	0,480	12.56	6,028
2	3	5	7	9	32,07	46	0,697	12.56	8,754
3	5	7	9	11	28,54	28	1,019	12.56	12,798

Tabel 4. 11 Hasil Pengambilan Data Resistivitas Di Titik 3.2.10

Sampel ke 3.2.10 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,78	13	0,367	12.56	4,609
2	3	5	7	9	05,37	19	0,282	12.56	3,541
3	5	7	9	11	04,50	5	0,9	12.56	11,304
Sampel ke 3.2.10 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	15,79	51	0,309	12.56	3,881
2	3	5	7	9	20,42	33	0,618	12.56	7,762
3	5	7	9	11	16,92	20	0,846	12.56	10,625
Sampel ke 3.2.10 output (3)									

No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	29,96	54	0,554	12.56	6,958
2	3	5	7	9	32,98	36	0,916	12.56	11,504
3	5	7	9	11	32,78	24	1,365	12.56	17,144

Tabel 4. 12 Hasil Pengambilan Data Resistivitas di Titik 3.3.11

Sampel ke 3.3.11 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,41	12	0,367	12.56	4,245
2	3	5	7	9	05,26	6	0,876	12.56	11,002
3	5	7	9	11	03,71	3	1,236	12.56	15,524
Sampel ke 3.3.11 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	15,22	45	0,338	12.56	4,245
2	3	5	7	9	20,24	29	0,44	12.56	5,526
3	5	7	9	11	17,30	17	1,017	12.56	12,773
Sampel ke 3.3.11 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	34,14	71	0,480	12.56	6,028
2	3	5	7	9	32,07	46	0,697	12.56	8,754
3	5	7	9	11	28,54	28	1,019	12.56	12,798

Tabel 4. 13 Hasil Pengambilan Data Resistivitas di Titik 4.1.9

Sampel ke 4.1.9 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,88	14	0,42	12.56	5,275
2	3	5	7	9	04,84	9	0,537	12.56	6,754
3	5	7	9	11	04,74	5	0,948	12.56	11,906
Sampel ke 4.1.9 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	17,69	58	0,305	12.56	3,830
2	3	5	7	9	18,67	41	0,455	12.56	5,719
3	5	7	9	11	17,75	26	0,682	12.56	8,574
Sampel ke 4.1.9 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	37,52	114	0,329	12.56	4,133
2	3	5	7	9	33,49	72	0,465	12.56	5,842
3	5	7	9	11	30,11	45	0,669	12.56	8,404

Tabel 4. 14 Hasil Pengambilan Data Resistivitas di Titik 4.2.10

Sampel ke 4.2.10 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,55	13	0,426	12.56	5,362
2	3	5	7	9	04,90	5	0,98	12.56	12,308
3	5	7	9	11	04,52	3	1,506	12.56	18,923

Sampel ke 4.2.10 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	20,28	53	0,382	12.56	4,797
2	3	5	7	9	19,03	33	0,576	12.56	7,242
3	5	7	9	11	18,65	21	0,888	12.56	11,153
Sampel ke 4.2.10 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	33,58	90	0,373	12.56	4,684
2	3	5	7	9	32,01	57	0,561	12.56	7,046
3	5	7	9	11	30,03	35	0,858	12.56	10,776

Tabel 4. 15 Hasil Pengambilan Data Resistivitas di Titik 4.1.11

Sampel ke 4.1.11 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,12	11	0,374	12.56	4,704
2	3	5	7	9	04,71	7	0,672	12.56	8,451
3	5	7	9	11	04,37	4	1,092	12.56	13,721
Sampel ke 4.2.11 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	20,18	48	0,420	12.56	5,280
2	3	5	7	9	19,95	30	0,665	12.56	8,352
3	5	7	9	11	18,05	19	0,95	12.56	11,932
Sampel ke 4.3.11 output (3)									

No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	32,52	84	0,387	12.56	4,862
2	3	5	7	9	33,63	53	0,634	12.56	7,969
3	5	7	9	11	35,42	39	0,908	12.56	11,407

Tabel 4. 16 Hasil Pengambilan Data Resistivitas di Titik 4.1.1

Sampel ke 4.1.1 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,21	11	0,473	12.56	5,948
2	3	5	7	9	04,93	7	0,704	12.56	8,845
3	5	7	9	11	04,63	5	0,926	12.56	11,630
Sampel ke 4.2.1 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	22,32	47	0,474	12.56	5,964
2	3	5	7	9	20,65	29	0,712	12.56	8,943
3	5	7	9	11	18,05	19	0,95	12.56	11,932
Sampel ke 4.3.1 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	36,93	81	0,455	12.56	5,726
2	3	5	7	9	35,53	52	1,110	12.56	13,945
3	5	7	9	11	31,01	32	0,969	12.56	12,171

Tabel 4. 17 Hasil Pengambilan Data Resistivitas di Titik 4.2.1

Sampel ke 4.2.1 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,48	14	0,32	12.56	4,019
2	3	5	7	9	04,92	9	0,546	12.56	6,866
3	5	7	9	11	04,62	6	0,77	12.56	9,671
Sampel ke 4.2.2 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	20,32	59	0,344	12.56	4,325
2	3	5	7	9	21,12	37	0,570	12.56	7,169
3	5	7	9	11	18,66	24	0,777	12.56	9,765
Sampel ke 4.2.3 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	32,11	99	0,324	12.56	4,069
2	3	5	7	9	34,72	63	0,551	12.56	6,921
3	5	7	9	11	32,25	41	0,786	12.56	9,879

Tabel 4. 18 Hasil Pengambilan Data Resistivitas di Titik 4.3.1

Sampel ke 4.3.1 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,18	13	0,398	12.56	5,004
2	3	5	7	9	04,93	8	0,616	12.56	7,740
3	5	7	9	11	04,63	5	0,926	12.56	11,630
Sampel ke 4.3.2 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	21,10	55	0,383	12.56	4,818
2	3	5	7	9	21,76	36	0,604	12.56	7,591
3	5	7	9	11	19,81	22	0,900	12.56	11,309
Sampel ke 4.3.3 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	33,37	99	0,337	12.56	4,232
2	3	5	7	9	34,72	63	0,551	12.56	6,921
3	5	7	9	11	33,72	41	0,822	12.56	10,329

Tabel 4. 19 Hasil Pengambilan Data Resistivitas di Titik 5.1.9

Sampel ke 5.1.9 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	05,31	15	0,354	12.56	4,446
2	3	5	7	9	05,12	9	0,568	12.56	7,145
3	5	7	9	11	04,86	6	0,81	12.56	10,173

Sampel ke 5.1.9 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	18,87	62	0,304	12.56	3,818
2	3	5	7	9	21,77	39	0,558	12.56	7,008
3	5	7	9	11	20,04	25	0,801	12.56	10,060
Sampel ke 5.1.9 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	31,84	108	0,294	12.56	3,692
2	3	5	7	9	35,86	68	0,527	12.56	6,619
3	5	7	9	11	33,19	44	0,754	12.56	9,495

Tabel 4. 20 Hasil Pengambilan Data Resistivitas di Titik 5.1.10

Sampel ke 5.1.10 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,98	13	0,383	12.56	4,810
2	3	5	7	9	05,06	8	0,632	12.56	7,937
3	5	7	9	11	04,77	5	0,954	12.56	11,982
Sampel ke 5.2.10 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	18,29	62	0,295	12.56	3,705
2	3	5	7	9	21,15	39	0,542	12.56	6,807
3	5	7	9	11	19,75	25	0,79	12.56	9,922
Sampel ke 5.3.10 output (3)									

No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	31,39	108	0,290	12.56	3,642
2	3	5	7	9	37,08	61	0,607	12.56	7,623
3	5	7	9	11	33,19	44	0,754	12.56	9,470

Tabel 4. 21 Hasil Pengambilan Data Resistivitas di Titik 5.1.11

Sampel ke 5.1.11 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,85	10	0,485	12.56	6,091
2	3	5	7	9	05,05	8	0,631	12.56	7,925
3	5	7	9	11	04,06	5	0,812	12.56	10,198
Sampel ke 5.2.11 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	20,58	55	0,374	12.56	4,697
2	3	5	7	9	18,88	34	0,555	12.56	6,970
3	5	7	9	11	16,92	24	0,704	12.56	8,842
Sampel ke 5.3.11 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	34,40	93	0,369	12.56	4,634
2	3	5	7	9	34,03	50	0,680	12.56	8,540
3	5	7	9	11	36,90	33	1,118	12.56	14,044

Tabel 4. 22 Hasil Pengambilan Data Resistivitas di Titik 5.1.1

Sampel ke 5.1.1 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	06,46	15	0,102	12.56	1,281
2	3	5	7	9	05,15	9	0,572	12.56	7,184
3	5	7	9	11	05,55	6	0,925	12.56	11,618
Sampel ke 5.2.1 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	22,34	63	0,354	12.56	4,446
2	3	5	7	9	22,46	39	0,575	12.56	7.222
3	5	7	9	11	22,79	25	0,911	12.56	11,442
Sampel ke 5.3.1 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	34,21	104	0,328	12.56	4,119
2	3	5	7	9	37,25	67	0,555	12.56	6,970
3	5	7	9	11	33,28	42	0,792	12.56	9,947

Tabel 4. 23 Hasil Pengambilan Data Resistivitas di Titik 5.1.2

Sampel ke 5.1.2 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	04,05	16	0,253	12.56	3,177
2	3	5	7	9	04,59	10	0,459	12.56	5,765
3	5	7	9	11	04,19	6	0,698	12.56	8,766

Sampel ke 5.2.2 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	14,32	69	0,207	12.56	2,599
2	3	5	7	9	19,12	42	0,455	12.56	5,714
3	5	7	9	11	17,15	25	0,686	12.56	8,616
Sampel ke 5.3.2 output (3)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	22,91	92	0,249	12.56	3,127
2	3	5	7	9	34,16	72	0,474	12.56	5,953
3	5	7	9	11	30,39	44	0,690	12.56	8,666

Tabel 4. 24 Hasil Pengambilan Data Resistivitas di Titik 5.1.3

Sampel ke 5.1.3 output (1)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	03,75	12	0,312	12.56	3,918
2	3	5	7	9	03,72	7	0,531	12.56	6,669
3	5	7	9	11	03,92	4	0,915	12.56	11,492
Sampel ke 5.2.3 output (2)									
No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	13,99	52	0,269	12.56	3,378
2	3	5	7	9	16,93	33	0,513	12.56	6,443
3	5	7	9	11	15,66	20	0,783	12.56	9,834
Sampel ke 5.3.3 output (3)									

No	C1 (cm)	P1 (cm)	P2 (cm)	C2 (cm)	V (mV)	I (mA)	R	K	ρ
1	1	3	5	7	22,63	92	0,245	12.56	3,077
2	3	5	7	9	30,06	56	0,536	12.56	6,732
3	5	7	9	11	25,81	33	0,782	12.56	9,821