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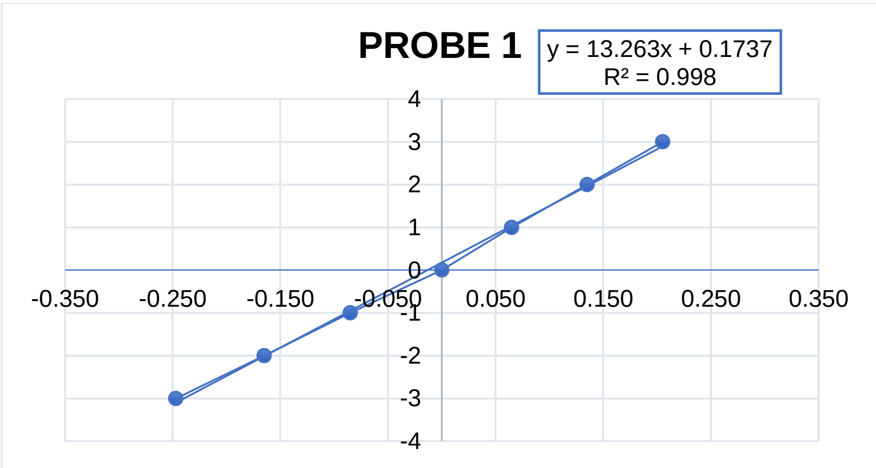
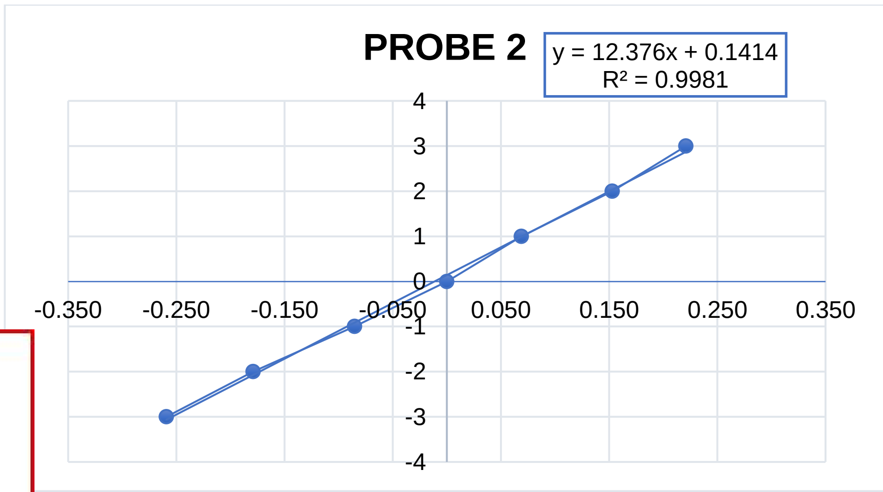
LAMPIRAN

Lampiran 1. Hasil Kalibrasi *Wave Probe*

a. Kalibrasi *wave probe* pada kedalaman 18 cm

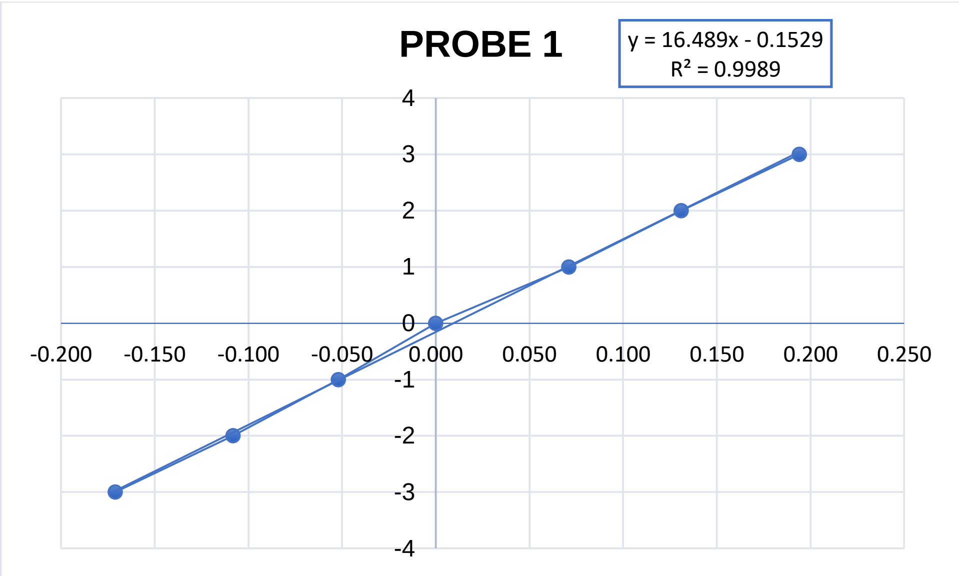
Elevasi *Wave Probe* (cm)	**Konduktivitas (Volt)**	
	Probe 1	**Probe 2**
3	-0.247	-0.259
2	-0.165	-0.179
1	-0.085	-0.085
0	0.000	0.000
-1	0.065	0.069
-2	0.135	0.153
-3	0.205	0.221

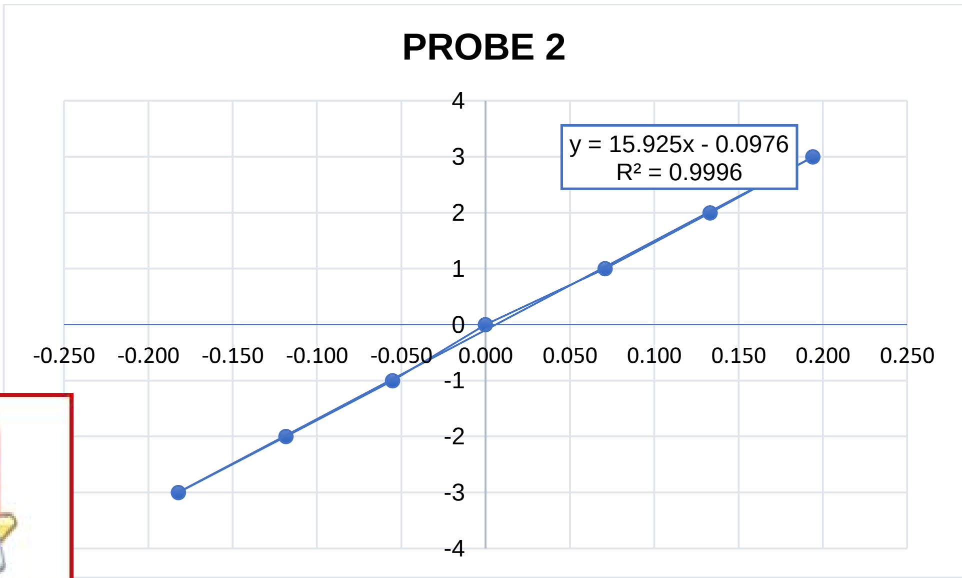




b. Kalibrasi *wave probe* pada kedalaman 21 cm

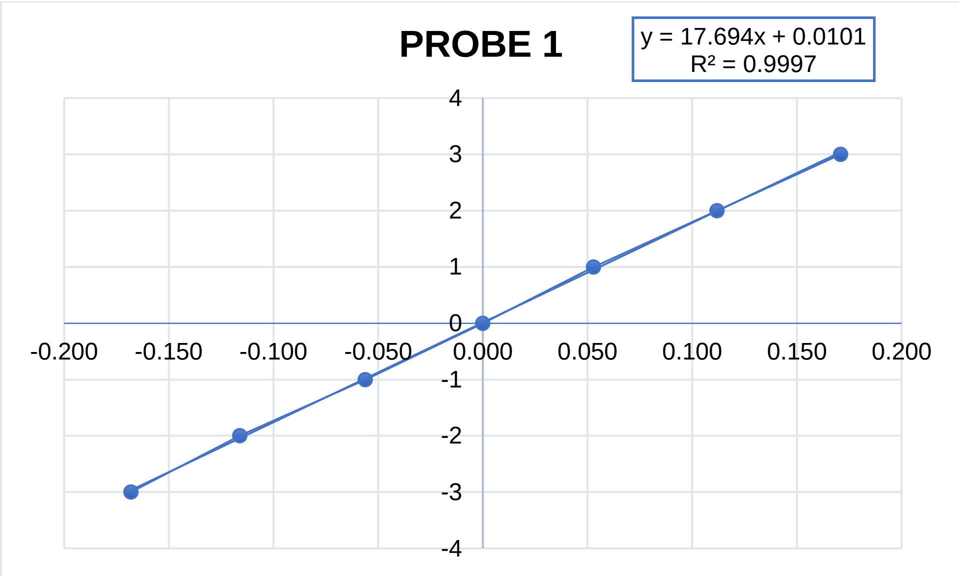
Elevasi *Wave Probe* (cm)	Konduktivitas (Volt)	
	Probe 1	Probe 2
3	-0.171	-0.182
2	-0.108	-0.118
1	-0.052	-0.055
0	0.000	0.000
-1	0.071	0.071
-2	0.131	0.133
-3	0.194	0.194

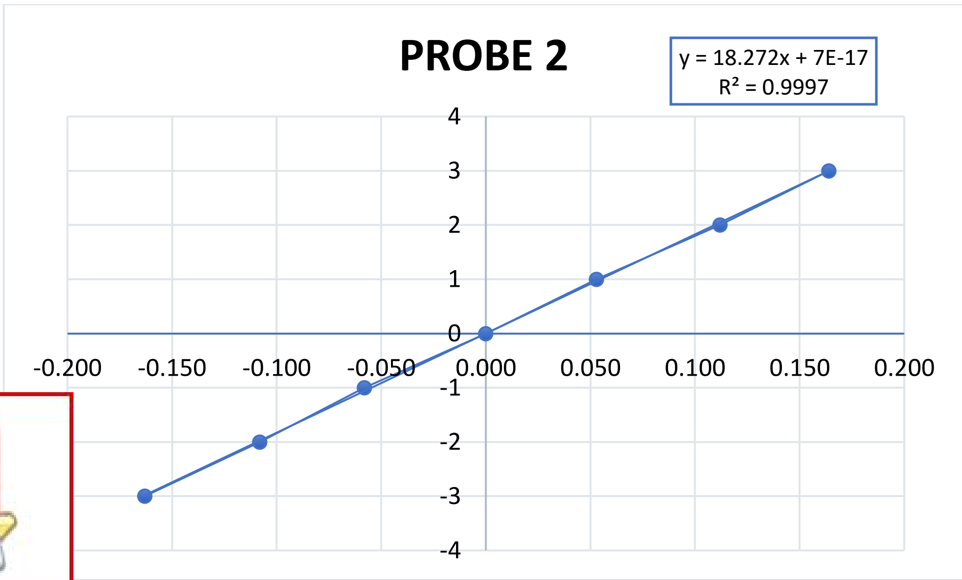




c. Kalibrasi *wave probe* pada kedalaman 24 cm

Elevasi *Wave Probe* (cm)	Konduktivitas (Volt)	
	Probe 1	Probe 2
3	-0.168	-0.163
2	-0.116	-0.108
1	-0.056	-0.058
0	0.000	0.000
-1	0.053	0.053
-2	0.112	0.112
-3	0.171	0.164





Lampiran 2. Hasil Analisa Data

a. Permukaan Halus

No.	k	Kemiringan	d	T	L_o	L	Hmax	Hmin	Hi	Ru	Rd	Ru/Hi	Rd/Hi	Hi/L	Ir
1	0.001	45	18	1.1	188.760	131.452	4.363	0.591	2.477	2.9	-2.2	1.171	-0.893	0.019	8.730
2	0.001	45	18	1.1	188.760	131.452	6.095	1.040	3.568	4.4	-3.0	1.233	-0.846	0.027	7.274
3	0.001	45	18	1.1	188.760	131.452	6.653	1.312	3.982	4.8	-3.6	1.205	-0.910	0.030	6.885
4	0.001	45	18	1.3	263.640	160.267	4.523	0.996	2.759	4.0	-2.7	1.450	-0.979	0.017	9.775
5	0.001	45	18	1.3	263.640	160.267	5.852	1.495	3.673	5.0	-3.1	1.361	-0.855	0.023	8.472
6	0.001	45	18	1.3	263.640	160.267	7.020	1.819	4.420	6.3	-3.8	1.425	-0.860	0.028	7.724
7	0.001	45	21	1.1	188.760	139.362	3.997	0.851	2.424	2.9	-2.5	1.196	-1.031	0.017	8.825
8	0.001	45	21	1.1	188.760	139.362	4.727	1.106	2.917	3.6	-3.2	1.232	-1.097	0.021	8.045
9	0.001	45	21	1.1	188.760	139.362	5.564	1.800	3.682	4.2	-3.7	1.141	-1.005	0.026	7.160
10	0.001	45	21	1.3	263.640	170.891	3.518	0.657	2.087	2.6	-2.3	1.246	-1.102	0.012	11.238
11	0.001	45	21	1.3	263.640	170.891	4.532	0.959	2.746	3.2	-2.7	1.165	-0.983	0.016	9.799
12	0.001	45	21	1.3	263.640	170.891	5.450	1.464	3.457	4.0	-3.4	1.157	-0.984	0.020	8.733
13	0.001	45	24	1.1	188.760	146.195	5.645	1.346	3.495	4.1	-3.5	1.169	-1.001	0.024	7.349
14	0.001	45	24	1.1	188.760	146.195	7.317	2.053	4.685	5.6	-4.0	1.205	-0.854	0.032	6.348
15	0.001	45	24	1.1	188.760	146.195	9.037	2.407	5.722	7.1	-5.0	1.237	-0.874	0.039	5.743
16	0.001	45	24	1.3	263.640	180.277	5.118	1.227	3.172	4.2	-3.2	1.310	-1.009	0.018	9.116
17	0.001	45	24	1.3	263.640	180.277	6.012	1.832	3.922	5.0	-3.8	1.277	-0.969	0.022	8.199
18	0.001	45	24	1.3	263.640	180.277	8.196	2.973	5.584	7.0	-4.4	1.251	-0.788	0.031	6.871
19	0.001	55	18	1.1	188.760	131.452	4.152	0.554	2.353	2.9	-2.6	1.222	-1.105	0.018	12.791
20	0.001	55	18	1.1	188.760	131.452	4.970	0.841	2.905	3.7	-3.0	1.287	-1.033	0.022	11.511
21	0.001	55	18	1.1	188.760	131.452	5.833	1.265	3.549	4.2	-3.2	1.183	-0.902	0.027	10.415
22	0.001	55	18	1.3	263.640	160.267	4.558	1.023	2.790	4.0	-2.5	1.434	-0.896	0.017	13.882
23	0.001	55	18	1.3	263.640	160.267	5.530	1.323	3.427	5.2	-2.7	1.518	-0.788	0.021	12.527
24	0.001	55	18	1.3	263.640	160.267	6.166	1.749	3.958	5.8	-3.3	1.465	-0.834	0.025	11.656
25	0.001	55	21	1.1	188.760	139.362	4.474	0.943	2.709	3.1	-3.4	1.144	-1.255	0.019	11.921
26	0.001	55	21	1.1	188.760	139.362	5.361	1.338	3.349	3.9	-3.8	1.164	-1.135	0.024	10.721
27	0.001	55	21	1.1	188.760	139.362	7.089	1.830	4.459	5.1	-4.8	1.144	-1.076	0.032	9.292
28	0.001	55	21	1.3	263.640	170.891	4.785	0.684	2.735	3.4	-3.2	1.243	-1.170	0.016	14.023
29	0.001	55	21	1.3	263.640	170.891	5.026	1.136	3.081	4.5	-3.5	1.461	-1.136	0.018	13.211
30	0.001	55	21	1.3	263.640	170.891	6.211	1.699	3.955	5.8	-4.4	1.467	-1.113	0.023	11.660
31	0.001	55	24	1.1	188.760	146.195	5.489	1.935	3.712	5.2	-4.7	1.403	-1.266	0.025	10.184
32	0.001	55	24	1.1	188.760	146.195	8.315	2.836	5.576	6.9	-5.0	1.246	-0.897	0.038	8.309
33	0.001	55	24	1.1	188.760	146.195	11.465	3.562	7.513	8.5	-7.2	1.137	-0.958	0.051	7.158
34	0.001	55	24	1.3	263.640	180.277	3.183	0.639	1.911	2.7	-2.5	1.409	-1.308	0.011	16.773
35	0.001	55	24	1.3	263.640	180.277	4.119	0.792	2.455	3.5	-3.0	1.415	-1.222	0.014	14.799
36	0.001	55	24	1.3	263.640	180.277	5.029	1.259	3.144	4.5	-3.5	1.416	-1.113	0.017	13.077
[illegible]	[illegible]	65	18	1.1	188.760	131.452	3.605	0.409	2.007	2.5	-2.5	1.258	-1.246	0.015	20.798
[illegible]	[illegible]	65	18	1.1	188.760	131.452	4.622	0.687	2.655	3.5	-3.0	1.310	-1.130	0.020	18.084
[illegible]	[illegible]	65	18	1.1	188.760	131.452	2.655	6.056	3.539	4.7	-3.4	1.328	-0.961	0.027	15.662
[illegible]	[illegible]	65	18	1.3	263.640	160.267	3.640	0.695	2.167	3.3	-2.3	1.523	-1.061	0.014	23.652

No.	k	Kemiringan	d	T	L_o	L	Hmax	Hmin	Hi	Ru	Rd	Ru/Hi	Rd/Hi	Hi/L	Ir
41	0.001	65	18	1.3	263.640	160.267	4.376	1.256	2.816	4.5	-2.7	1.585	-0.959	0.018	20.750
42	0.001	65	18	1.3	263.640	160.267	4.887	1.555	3.221	5.4	-3.1	1.692	-0.962	0.020	19.402
43	0.001	65	21	1.1	188.760	139.362	3.087	0.489	1.788	3.5	-2.4	1.957	-1.342	0.013	22.034
44	0.001	65	21	1.1	188.760	139.362	3.909	0.828	2.369	4.3	-3.2	1.815	-1.351	0.017	19.144
45	0.001	65	21	1.1	188.760	139.362	4.697	1.209	2.953	4.7	-3.8	1.592	-1.287	0.021	17.145
46	0.001	65	21	1.3	263.640	170.891	4.574	0.733	2.654	3.7	-3.7	1.394	-1.394	0.016	21.374
47	0.001	65	21	1.3	263.640	170.891	4.749	1.150	2.949	4.5	-4.3	1.526	-1.458	0.017	20.277
48	0.001	65	21	1.3	263.640	170.891	5.365	1.717	3.541	5.7	-4.5	1.610	-1.271	0.021	18.504
49	0.001	65	24	1.1	188.760	146.195	4.347	0.968	2.658	4.3	-3.5	1.618	-1.317	0.018	18.073
50	0.001	65	24	1.1	188.760	146.195	6.245	1.444	3.844	5.7	-4.7	1.483	-1.223	0.026	15.027
51	0.001	65	24	1.1	188.760	146.195	10.190	2.000	6.095	7.5	-5.6	1.231	-0.919	0.042	11.934
52	0.001	65	24	1.3	263.640	180.277	3.979	0.611	2.295	3.6	-2.5	1.569	-1.089	0.013	22.985
53	0.001	65	24	1.3	263.640	180.277	4.154	0.971	2.562	4.0	-3.1	1.561	-1.210	0.014	21.754
54	0.001	65	24	1.3	263.640	180.277	4.321	1.432	2.877	4.5	-3.5	1.564	-1.217	0.016	20.530

b. Permukaan Kasar

No.	k	Kemiringan	d	T	L_o	L	Hmax	Hmin	Hi	Ru	Rd	Ru/Hi	Rd/Hi	Hi/L	Ir
1	0.5	45	18	1.1	188.760	131.452	3.308	0.607	1.957	2.5	-2.0	1.277	-1.022	0.015	9.821
2	0.5	45	18	1.1	188.760	131.452	3.798	0.796	2.297	3.5	-2.5	1.524	-1.088	0.017	9.065
3	0.5	45	18	1.1	188.760	131.452	4.704	1.418	3.061	3.9	-2.7	1.274	-0.882	0.023	7.853
4	0.5	45	18	1.3	263.640	160.267	3.331	0.771	2.051	3.0	-2.2	1.463	-1.073	0.013	11.337
5	0.5	45	18	1.3	263.640	160.267	4.038	0.954	2.496	3.9	-2.8	1.563	-1.122	0.016	10.278
6	0.5	45	18	1.3	263.640	160.267	4.373	1.152	2.763	4.2	-3.0	1.520	-1.086	0.017	9.768
7	0.5	45	21	1.1	188.760	139.362	3.387	0.767	2.077	2.0	-2.0	0.963	-0.963	0.015	9.534
8	0.5	45	21	1.1	188.760	139.362	4.676	1.066	2.871	3.7	-2.4	1.289	-0.836	0.021	8.109
9	0.5	45	21	1.1	188.760	139.362	6.442	1.481	3.961	4.0	-3.4	1.010	-0.858	0.028	6.903
10	0.5	45	21	1.3	263.640	170.891	3.256	0.562	1.909	2.6	-1.8	1.362	-0.943	0.011	11.751
11	0.5	45	21	1.3	263.640	170.891	3.830	0.871	2.350	3.2	-2.5	1.361	-1.064	0.014	10.591
12	0.5	45	21	1.3	263.640	170.891	5.166	1.185	3.176	3.7	-3.2	1.165	-1.008	0.019	9.112
13	0.5	45	24	1.1	188.760	146.195	3.213	1.142	2.178	2.9	-2.5	1.332	-1.148	0.015	9.310
14	0.5	45	24	1.1	188.760	146.195	3.878	1.678	2.778	3.5	-2.7	1.260	-0.972	0.019	8.243
15	0.5	45	24	1.1	188.760	146.195	5.252	2.331	3.792	4.6	-3.6	1.213	-0.949	0.026	7.056
16	0.5	45	24	1.3	263.640	180.277	2.501	0.633	1.567	2.4	-2.0	1.532	-1.276	0.009	12.971
17	0.5	45	24	1.3	263.640	180.277	3.303	0.807	2.055	3.0	-2.4	1.460	-1.168	0.011	11.327
18	0.5	45	24	1.3	263.640	180.277	4.567	1.078	2.822	3.7	-3.4	1.311	-1.205	0.016	9.665
19	0.5	55	18	1.1	188.760	131.452	4.273	0.539	2.406	2.7	-2.0	1.122	-0.831	0.018	12.650
20	0.5	55	18	1.1	188.760	131.452	4.409	0.782	2.595	3.2	-2.2	1.233	-0.848	0.020	12.179
21	0.5	55	18	1.1	188.760	131.452	4.664	1.042	2.853	4.0	-2.5	1.402	-0.876	0.022	11.616
22	0.5	55	18	1.3	263.640	160.267	2.699	0.545	1.622	2.3	-1.7	1.418	-1.048	0.010	18.209
23	0.5	55	18	1.3	263.640	160.267	3.275	0.638	1.957	2.7	-2.0	1.380	-1.022	0.012	16.578
24	0.5	55	18	1.3	263.640	160.267	4.761	1.032	2.897	3.8	-2.2	1.312	-0.759	0.018	13.625
25	0.5	55	21	1.1	188.760	139.362	3.199	0.579	1.889	2.8	-2.4	1.482	-1.271	0.014	14.276
26	0.5	55	21	1.1	188.760	139.362	3.650	0.768	2.209	3.5	-3.0	1.585	-1.358	0.016	13.202
27	0.5	55	21	1.1	188.760	139.362	5.632	1.200	3.416	4.2	-3.4	1.229	-0.995	0.025	10.616
28	0.5	55	21	1.3	263.640	170.891	4.963	0.813	2.888	4.0	-2.9	1.385	-1.004	0.017	13.645
29	0.5	55	21	1.3	263.640	170.891	4.934	1.296	3.115	4.3	-3.3	1.380	-1.059	0.018	13.138
30	0.5	55	21	1.3	263.640	170.891	5.795	1.594	3.694	5.0	-3.7	1.353	-1.002	0.022	12.065
31	0.5	55	24	1.1	188.760	146.195	5.020	1.113	3.067	3.4	-2.5	1.109	-0.815	0.021	11.204
32	0.5	55	24	1.1	188.760	146.195	5.531	1.683	3.607	4.3	-3.0	1.192	-0.832	0.025	10.331
33	0.5	55	24	1.1	188.760	146.195	6.434	2.448	4.441	4.7	-3.5	1.058	-0.788	0.030	9.311
34	0.5	55	24	1.3	263.640	180.277	2.442	0.728	1.585	2.1	-2.0	1.325	-1.262	0.009	18.420
35	0.5	55	24	1.3	263.640	180.277	3.040	0.820	1.930	2.5	-2.2	1.295	-1.140	0.011	16.691
36	0.5	55	24	1.3	263.640	180.277	3.620	1.105	2.362	3.0	-2.7	1.270	-1.143	0.013	15.088
37	0.5	65	18	1.1	188.760	131.452	3.523	0.640	2.082	2.9	-2.0	1.393	-0.961	0.016	20.421
[illegible]	[illegible]	65	18	1.1	188.760	131.452	4.214	0.829	2.522	3.3	-2.5	1.308	-0.991	0.019	18.553
[illegible]	[illegible]	65	18	1.1	188.760	131.452	4.784	1.245	2.847	3.8	-2.9	1.335	-1.019	0.022	17.461
[illegible]	[illegible]	65	18	1.3	263.640	160.267	3.473	0.713	2.093	3.1	-2.4	1.481	-1.147	0.013	24.067

No.	k	Kemiringan	d	T	L_0	L	Hmax	Hmin	Hi	Ru	Rd	Ru/Hi	Rd/Hi	Hi/L	Ir
41	0.5	65	18	1.3	263.640	160.267	3.978	0.971	2.474	3.5	-2.8	1.415	-1.132	0.015	22.137
42	0.5	65	18	1.3	263.640	160.267	4.281	1.335	2.808	4.3	-3.2	1.531	-1.140	0.018	20.779
43	0.5	65	21	1.1	188.760	139.362	3.705	0.605	2.155	3.2	-2.7	1.485	-1.253	0.015	20.071
44	0.5	65	21	1.1	188.760	139.362	3.336	0.678	2.007	3.7	-2.9	1.843	-1.445	0.014	20.796
45	0.5	65	21	1.1	188.760	139.362	3.825	1.014	2.419	4.2	-3.5	1.736	-1.447	0.017	18.943
46	0.5	65	21	1.3	263.640	170.891	3.435	0.865	2.150	3.5	-2.8	1.628	-1.302	0.013	23.747
47	0.5	65	21	1.3	263.640	170.891	4.378	1.242	2.810	4.3	-3.2	1.530	-1.139	0.016	20.773
48	0.5	65	21	1.3	263.640	170.891	5.314	1.632	3.473	4.8	-3.8	1.382	-1.094	0.020	18.684
49	0.5	65	24	1.1	188.760	146.195	3.411	0.660	2.036	3.2	-2.7	1.572	-1.326	0.014	20.650
50	0.5	65	24	1.1	188.760	146.195	4.873	0.959	2.916	4.0	-3.0	1.386	-1.029	0.020	17.254
51	0.5	65	24	1.1	188.760	146.195	5.183	1.482	3.332	4.9	-4.0	1.470	-1.200	0.023	16.140
52	0.5	65	24	1.3	263.640	180.277	2.556	0.549	1.552	2.6	-2.2	1.675	-1.417	0.009	27.947
53	0.5	65	24	1.3	263.640	180.277	3.322	0.710	2.016	3.2	-2.4	1.587	-1.191	0.011	24.525
54	0.5	65	24	1.3	263.640	180.277	4.131	1.188	2.659	3.8	-2.8	1.429	-1.053	0.015	21.352

Lampiran 3. Dokumentasi Model Struktur Bangunan Pantai

a. Model Permukaan Halus

Model K0 - 45

Model K0 - 55

Model K0 – 65

b. Model Permukaan Kasar

Model K1 - 45

Model K1 - 55

Model K1 - 65

Lampiran 4. Dokumentasi Penelitian